CHARTER TOWNSHIP OF YPSILANTI BOARD OF TRUSTEES

Supervisor BRENDA L. STUMBO Clerk KAREN LOVEJOY ROE Treasurer LARRY J. DOE Trustees STAN ELDRIDGE HEATHER JARRELL ROE MONICA ROSS WILLIAMS JIMMIE WILSON, JR.

April 16, 2019

Work Session – 5:00 p.m. Regular Meeting – 7:00 p.m.

Ypsilanti Township Civic Center 7200 S. Huron River Drive Ypsilanti, MI 48197

DEPARTMENTAL REPORTS

CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS

Building Safety • Planning & Zoning • Ordinance Enforcement • Police Services

То:	Board of Trustees
From:	Michael Radzik, Community Standards Director Dave Bellers, Chief Building Official Charlotte Wilson, Planning & Development Coordinator Nancy Wyrybkowski, Executive Coordinator
Re:	OFFICE OF COMMUNITY STANDARDS ACTIVITY REPORT MARCH 2019
Date:	April 5, 2019

Enclosed are reports for the following areas of activity within the Office of Community Standards for the period March 1, 2019 thru March 30, 2019. During this time period staff members completed a total of **2,362 field inspections**, processed more than **1,700 applications, forms and invoices**, and attended a variety of meetings.

- 1. PLANNING & DEVELOPMENT DEPARTMENT PROJECTS
- 2. ACTIVE LAWSUITS & OTHER MISCELLANEOUS PROJECTS
- 3. BUILDING DEPARTMENT PERMITS ISSUED
- 4. BUILDING CERTIFICATES OF OCCUPANCY ISSUED
- 5. NEW RENTAL HOUSING CERTIFICATIONS
- 6. NEW VACANT STRUCTURE CERTIFICATIONS
- 7. NEW OTHER ORDINANCE CERTIFICATIONS
- 8. NEW CODE ENFORCEMENT CASES



CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS

Building Safety • Planning & Zoning • Ordinance Enforcement

Date:	April 4 th , 2019
From:	Charlotte Wilson, Planning and Development Coordinator
Re:	Planning Division (OCS) Updates March 2019

Please be advised of the following activities related to the Planning Department for March 2019.

Plans in Process

Majestic Lakes

Majestic Ponds: This development includes 37 single family detached units on 50-foot wide lots located adjacent to Textile Road. Majestic Ponds is located next to The Ponds at Lakewood which includes sixteen (16) attached multiple-family units that have already been constructed. PD Stage II plans were approved at the November 22, 2017 by the Township Board. Floor plans and elevations will come back to the Township Board for approval prior to issuance of building permits and construction for those phases. The Planning Department is reviewing elevations and legal counsel is reviewing additional legal documents. Final approval will come before the Board of Trustees. The pre-construction meeting took place on February 22nd, 2019.

The Ponds at Lakewood: Approved and constructed development of sixteen (16) attached multiple-family units located adjacent to Textile Road.

Nautica Pointe: Approved and under construction development of 142 multiple-family units located adjacent to Tuttle Hill Road.

Village at Majestic Lakes: This development includes 115 single family detached units on 60- foot wide lots located adjacent to Tuttle Hill Road. PD Stage II plans and elevations/floor plans were approved at the November 22, 2017 by the Township Board. Legal counsel is reviewing additional legal documents. Final approval will come before the Board of Trustees shortly. The preconstruction meeting for the east portion took place on February 22nd, 2019.

Majestic Lakes Estates: This development includes 81 single family detached units on 50-foot wide lots accessed through the Village of Majestic Lakes. PD Stage II plans were approved at the November 22, 2017 by the Township Board. Floor plans and elevations will come back to the Township Board for approval prior to issuance of building permits and construction for those phases. The Planning Department is reviewing elevations and legal counsel is reviewing additional legal documents. Final approval will come before the Board of Trustees shortly. The pre-construction meeting took place on February 22nd, 2019.

Lakewood Estates: Approved and under construction development of 62 single family detached units accessed through the Village of Majestic Lakes.





<u>Yankee Air Museum (YAM) – 1 Liberator Way</u>: The Yankee Air Museum proposes renovation of the existing historic Willow Run bomber plant with a building addition including a conference center. The Township is currently waiting on YAM to submit a revise PD Stage I and II for review.

<u>American Center for Mobility (ACM) – 2930 Ecorse Road</u>: Located on the site of the historic Willow Run property, the American Center for Mobility is a testing, research and certification center for the next generation of automated vehicles. With features like double overpasses, railroad crossings, highway loops, and a tunnel, the site provides a cost-effective way to replicate real-world situations in a single location. The estimated investment into the community has been stated at over \$120 million. An additional final site plan amendment is expected for the Technology Park. Phase 1A of this project has final site plan approval. The Amendment for Phase 1A Campus Build-Out preliminary site plan was approved conditionally at Planning Commission on March 13th, 2018. The final site plan was approved at the May 10th, 2018 special Planning Commission meeting. The pre-construction meeting took place on May 15th, 2018.



<u>Restaurant Depot – 1347 James L. Hart Parkway</u>: This project is a 51,234 square foot wholesale distribution building on an 11.416 acre parcel. Over 100 Restaurant Depots operate in 28 states, selling groceries, supplies and equipment to the food service industry. The facility's primary customers are restaurants, delis, caterers, pizza shops and not-for-profit institutions. The project was approved by Planning Commission on December 12, 2017. The project received administrative final site plan approval on March 21st 2018. The pre-construction meeting took place on April 3rd, 2018 and construction is currently underway. The temporary Certificate of Occupancy was issued. Landscaping and minor engineering is to be completed spring 2019.

<u>Cell Tower - 6400 Textile:</u> Cell tower was approved by the Township Board on March 6th, 2018. Final site plan was approved on April 30th, 2018. Construction started on June 18th, 2018. As of August 15th, 2018, all grading and aggregate surface placement was complete, however, placement of topsoil and restoration remained to be completed.

Kalitta Air, Brake, and Tire Expansion - 10990 Blackmore: The proposed project consists of a 12,000 square foot addition to an existing 12,000 square foot building at 10990 Blackmore Avenue. Kalitta Air uses this facility for repair, warehouse and storage. The proposed addition is for additional repair, storage, and warehousing area. The addition is located on a paved section of the existing site within a fenced area. Additionally, the applicant proposes to relocate an existing storage shed to a grassy area adjacent to the northwest corner of existing parking lot. There is no outdoor storage at this facility. The project was approved conditionally at the March 27th, 2018

Planning Commission meeting. The pre-construction meeting took place on July 27th, 2018. The project is complete (silt fence to remain until spring 2019).

<u>Meade Dental Office – 2780 Packard:</u> The Meade Dental Office is a proposed 7,095 square foot dental office building at 2780 Packard Road. The project received final site plan approval on May 2^{nd} , 2018. The first pre-construction meeting took place on June 11^{th} , 2018. Due to a change in contractors, a second pre-construction meeting was held on July 2^{rd} , 2018. Construction on the site is underway.

<u>Huron Valley PACE – 2940 Ellsworth:</u> Construction in currently underway for the UMRC Huron Valley expansion to their 23,700 square foot existing facility at 2960 Ellsworth Road. The applicant proposed to expand their existing 23,700 square foot facility by an additional 23,400 square feet, expand the parking lot, expand the drop off area, and make other general site improvements. The parking lot expansion includes construction of an additional 57 spaces, and additional 33 "landbanked" parking on the site plan. They have triggered the landbanked deferred parking due to leadership changes, employment, and expansion and will be constructing this section at this time. Senior adults are picked up by PACE transportation and driven to the facility for social, wellness, and medical care services. There are no overnight accommodations at the facility. The current facility accommodates 127 clients and 57 full time employees. With the addition, the facility will serve 156 clients and staff 98 full time employees. The temporary Certificate of Occupancy was issued. Landscaping and minor engineering is to be completed spring 2019.

<u>Round Haus Party Shoppe – 5970 Bridge Road:</u> An application has been submitted for the demolition of the existing convenience store, which is 3,290 square feet in floor area, and the construction of a new 6,000 square foot retail building along with a 4 pump island fuel station on the parcels located at 5970 Bridge Road and 10191 Textile Road. The proposed construction would take place on what are now two separate parcels, which would be combined to form one 0.83-acre parcel. A preliminary site plan and a special conditional use permit for this project were



Monthly Planning Department Report March 2019

approved with conditions by the Planning Commission on June 28, 2016. Subsequently, two dimensional variances were approved with conditions by the Zoning Board of Appeals on July 20, 2016. The special conditional use permit and variances are still valid since these approvals run with the land. The preliminary site plan approval expired since construction did not commence within one year of approval. The applicant is now reapplying for preliminary site plan approval.

<u>Sunco Quick Oil Lube - 2380 East Michigan Avenue:</u> On May 3rd, 2018 we met with the applicant and MDOT to discuss options for the driveway cut issue. At this time, there are a couple options of plan revisions and attempts to make contact with the neighbor at 2340 East Michigan Avenue. We await the fourth preliminary site plan revision to be submitted.

<u>Hampton Inn and Suites – 515 James L Hart Parkway:</u> The proposed project includes an 88room, 4-story, 54-foot tall Hampton Inn hotel. The site is currently vacant, and directly west of the strip mall that includes the Leo Coney Island, Jets Pizza, and Powerhouse Gym. This item was approved conditionally at the August 28th, 2018 Planning Commission meeting. Detailed engineering plans and final site plan were approved. The pre-construction meeting occurred on April 2nd, 2019.

<u>Electric Vehicle Charging Station – 2321 Ellsworth Road:</u> The proposed project includes the installation of six (6) electronic vehicle charging stations and accessory equipment within the Roundtree Shopping Center parking lot. This item was approved conditionally at the November 13th, 2018 Planning Commission meeting. The pre-construction meeting occurred on January 22nd, 2019.

<u>R&L Carriers – 43 Emerick Street:</u> R&L Carriers propose an expansion to the existing facility. The total building expansion is approximately an additional 56,820 square feet. The majority of the expansion is a 45,900 square foot addition to the existing easternmost building. The addition requires the relocation and additional stormwater detention facility which will be located on eastern-most parcel, which is currently zoned RM-2, Multiple Family Residential. The applicant is seeking a conditional rezoning to rezone that parcel from RM-2, Multiple Family Residential to I-1, Light Industrial. In total the site is three parcels that will need to be combined. The parcel that is currently zoned RM-2, which the applicant seeks a rezoning, will not include any buildings. Rather it will be used for a detention basin, and a small part as a temporary construction area. We await the second preliminary site plan revisions to be submitted.

<u>Wayne County Airport Authority – 830 Willow Run Airport Road:</u> The Willow Run Airport is constructing a 6,000 square foot administrative facility and an associated parking area, within the southwest portion of the existing Willow Run Airport site. The Wayne County Airport Authority states the intent of the proposed building is to support airport operations. The project requires administrative review.

<u>Chippea Tennis Club – 2525 Golfside Road:</u> The applicant proposed to expand the existing indoor tennis court facility at Chippewa Club by adding a 61' x 120' addition. The addition will house one (1) indoor clay tennis court. Chippewa club is considered both a "health club" and "indoor commercial recreational use" both of which require a special use in the B-2 District. The Chippewa Club was originally approved in 1977. At the time of approval, the use was not required to obtain a special use permit. Chippewa Club has never obtained a special use and is considered a legal non-conforming use. In order to bring them into zoning compliance and approve an addition to a special use, a special use for the entire property must be granted. The project requires full site plan review.



Plans in Process

<u>Ypsilanti Township 2040:</u> The "Master Plan Reveal" at the Library on Whittaker Road on Tuesday, April 2 at 7:00 p.m. went positively with about 40 residents in attendance. We received feedback on the plan as a whole along with the interest for catalyst projects. The excitement for each project was relatively equal.

<u>Conditional Rezoning zoning code text amendment</u>: Due to a technicality in the motion, the Planning Commission will need to amend their motion. The Board should see this in May 2019. The new zoning code language will address more detailed policies and procedures regarding conditional rezonings.

<u>Ecorse Road zoning code text amendment</u>: In the coming weeks, the Planning Commission and Township Board will consider the new zoning code language to match the 2018 Placemaking Plan recommendations. The new zoning language, once implemented, is also a condition for establishing a CIA (Corridor Improvement Authority) which may aid funding for corridor streetscape and business cohesion.

If you should have any question or comments as it relates to this report, please contact us at 734-544-3651 or by email at cwilson@ytown.org.



CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS ACTIVE LAWSUITS & OTHER MISCELLANEOUS PROJECTS

Date: April 5, 2019

Staff and legal counsel are actively engaged in working to resolve the following authorized lawsuits in Washtenaw County Circuit Court:

St#	Dir	Address	Defendant	Nature of Case	Status
1754	E	Michigan Avenue	Martha Jo & Charlie Chatfield	Multiple zoning, fire and building code violations, further inspections pending	AUTHORIZED AND FILED
2734		Peachcrest	Oscar Eden	Vacant-PM-Blight	AUTHORIZED AND FILED
1005		Emerick	Emerick GV, LLC (Robert Gault V Hull) shopping		AUTHORIZED AND FILED
2850		Appleridge	Estate of Emma Robertson	Public Nuisance	AUTHORIZED AND FILED
1196		Lester	Judy Pontius	Public Nuisance	AUTHORIZED AND FILED
1635		Wismer	Living Trust Nancy J. Sturgill	Public Nuisance	AUTHORIZED AND FILED
618		Bagley	Artur Starobiivsky	Public Nuisance	AUTHORIZED AND FILED

2355		Wiard	D&G Auto Salvage	Public Nuisance	AUTHORIZED AND FILED
924- 940		Minion	Olympia Sales Co, Crown Tumbling, Cobb Express	Zoning/Woodland Protection/Soil Erosion	AUTHORIZED AND FILED
1405		Ecorse	Elks Club	Public Nuisance	AUTHORIZED AND FILED
829	E	Michigan	Your Motel	Public Nuisance	AUTHORIZED AND FILED
1241		Rambling	Beverly Finkbeiner (Deutsch Bank Natl' Trust 04/18/18)	Public Nuisance	AUTHORIZED AND FILED
2124		Bomber	Peter Burgard	Public Nuisance	AUTHORIZED AND FILED
1478		Desoto	Sharon D. Jones	Public Nuisance	AUTHORIZED AND FILED
750		Calder	Sheila Mae Ellis	Padlock	AUTHORIZED AND FILED
167	N	Ford Blvd	Azmin Clark	Public Nuisance	AUTHORIZED AND FILED
601		Dons Drive	SIMON GHERGHEL	Public Nuisance	AUTHORIZED AND FILED
1375	N	Prospect	Nellie Fridge	Fire	AUTHORIZED AND FILED

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7586	Warwick	ASR Property, LLC	Drug Padlock	AUTHORIZED AND FILED
1503	E. Michigan	Malek& Jenias Mohammed-KH Hamami	Public Nuisance	Authorized/Pending
359	Oregon	Wilmington Savings Fund Society	Public Nuisance	AUTHORIZED AND FILED
235	Valley Drive	Nationstar Bank	Public Nuisance	AUTHORIZED AND FILED
1392	Holmes Rd	Great Arbor Properties, Inc.	Drug Padlock	AUTHORIZED AND FILED
1032	Grove Rd	Gerald McMahon	Ford Lake earth work	AUTHORIZED AND FILED
2545	Coolidge	Donna Cole	Public Nuisance	AUTHORIZED AND FILED
9822	Woodland Ct	Glada Asset Management, LLC	Public Nuisance	AUTHORIZED AND FILED
2499 E	Michigan - Greenbrier	Burton	Public Nuisance	AUTHORIZED AND FILED
1580 S	Harris	Robby & Kristi Wilton	Public Nuisance	AUTHORIZED AND FILED
670	Onandaga	Greater Faith Church	Public Nuisance	Authorized/Pending

2105	Mary Catherine	Betty Williams	Public Nuisance	AUTHORIZED AND FILED
363	Oregon	PNC Bank	Public Nuisance	AUTHORIZED AND FILED
2259	Valley Drive	Dieter, Cornelius, Lakeview Loan Servicing	Public Nuisance	AUTHORIZED AND FILED
8734	Lilly Dr	Gregory Heard	Public Nuisance	AUTHORIZED AND FILED
677	Onandaga	The Bank of New York Mellon	Public Nuisance	AUTHORIZED AND FILED
1114	Hunter	Barbara Chiweshe	Public Nuisance	AUTHORIZED AND FILED
3286	Grove Rd.	ALQH, LLC and Gianni Ketzner	Public Nuisance	AUTHORIZED AND FILED
6934	Poplar	Zachary & Lynaire Clipper	Drug Padlock	ADMIN AUTHORIZED & FILED
5900	Bridge #314	Lake Pointe- Trafalgar LTD Paretnership	Drug Padlock	PENDING

Staff are actively engaged with property owners to resolve the following building fire repair projects:

St #	Dir	Address	Responsible Party	Nature of Case	Initial Date	Escrow Funds?	Demo or Repair?	Permit Issued?
610		Woodlawn	Paul Johnson	Fire	10/10/2017	\$12,262	Repair	yes
777		Dodge Ct	Unfolding Chaos LLC	Fire	2/10/2019	NO	TBD (arson hold)	NO

Demolition Projects: OCS staff is monitoring the demolition of the Kettering and Thurston school buildings by Ypsilanti Community Schools.

Traffic Calming Devices Projects: OCS staff are engaged with the Washtenaw County Road Commission and community residents to verify petition signatures seeking to install speed humps on the following neighborhood streets:

- Nash Ave between Tyler Rd and US-12 Service Drive
 - Assisting members of the West Willow traffic safety committee to contact and seek support from landlords in the affected target area.

Law Enforcement Center

• Working with OHM and legal counsel to prepare bid package to replace the standby power generator

Community Safety Camera System

- Working with consultants and the clerk's office to install new camera sites
 - o Majestic Lakes PD area
 - Ponds at Majestic Lakes/Lakewood Ponds
 - Village at Majestic Lakes/Majestic Lakes Estates/Lakewood Estates
 - Nautica Pointe/Redwood
 - o Creekside Village South (one Comcast connection stalled)
 - Manors at Creekside Village (completed)
 - The Cliffs (consortium of 5 condominium associations on Grove Rd)

- Working with consultants and the clerk's office to correct deficient equipment at the following existing neighborhoods:
 - o Thurston
 - Parkwood/Airport Industrial camera relocation due to MDOT construction (waiting for DTE to install new pole/light)
 - o Holmes Area
 - Clark/Pageant camera relocation due to DTE unable to provide uninterrupted power supply (waiting for DTE to install new pole/light).
 *Note: new pole location will enable reduction in the number of cameras needed for the neighborhood SAD with cost reduction.

Liquor Ordinance review & evaluation

• Working with legal counsel to review and evaluate the current liquor ordinance to align with recent changes in state law.

BUILDING DEPARTMENT PERMIT ACTIVITY

MARCH 2019

NOTE: Construction value data is only collected for building permits (excludes trade permits)

Permit Type	Category	Date Issued P	ermit Number	Address Display String	Construction Value
Bike Path	Bike Path	03/06/2019 P	BP19-0004	9241 WHITE TAIL DR	\$208,015.00
Bike Path	Bike Path	03/06/2019 P	BP19-0003	9163 WHITE TAIL CT	\$258,086.00
Bike Path	Bike Path	03/19/2019 P	BP19-0005	9038 WHITE TAIL CT	\$208,419.00
Bike Path	Bike Path	03/26/2019 P	BP19-0007	8875 NATALIE CT	\$203,617.00
Bike Path	Bike Path	03/26/2019 P	BP19-0008	8845 NATALIE CT	\$0.00
Bike Path	Bike Path	03/27/2019 P	BP19-0006	9134 WHITE TAIL CT	\$222,108.00
Building	Building	03/26/2019 P	B19-0173	9570 HEREFORD DR	\$5,434.00
Building	Building	03/27/2019 P	B19-0180	240 ELMHURST ST	\$13,500.00
Building	Com Alter/Repair	03/06/2019 P	B19-0110	2940 ELLSWORTH RD	\$0.00
Building	Com Alter/Repair	03/22/2019 P	B19-0131	1266 LEFORGE RD	\$25,000.00
Building	Com Roof	03/08/2019 P	B19-0121	886 ECORSE RD	\$14,900.00
Building	Com Temp Tent	03/12/2019 P	B19-0123	3020 WASHTENAW RD	\$0.00
Building	Com Temp Tent	03/12/2019 P	B19-0124	2299 ELLSWORTH	\$0.00
Building	Demolish Structure	03/04/2019 P	B19-0100	6480 RAWSONVILLE RD	\$15,000.00
Building	Mobile Home	03/06/2019 P	B19-0109	3375 E MICHIGAN 257	\$6,000.00
Building	Res Alter/Repair	03/12/2019 P	B19-0085	1390 ARROYO DR	\$4,000.00
Building	Res Alter/Repair	03/13/2019 P	B19-0117	2425 MERRILL ST	\$38,000.00
Building	Res Alter/Repair	03/13/2019 P	B19-0116	1571 RUSSELL ST	\$28,000.00
Building	Res Alter/Repair	03/13/2019 P	B19-0115	991 DAVIS ST	\$32,000.00
Building	Res Alter/Repair	03/14/2019 P	B19-0133	1441 DESOTO AVE	\$50,000.00
Building	Res Alter/Repair	03/26/2019 P	B19-0167	2559 GROVE RD	\$0.00
Building	Res Deck	03/07/2019 P	B19-0082	7727 ROXBURY CT	\$12,475.00
Building	Res Finish Basement	03/11/2019 P	B19-0114	2124 BURNS ST	\$10,109.00
Building	Res Finish Basement	03/18/2019 P	B19-0128	7992 BERWICK DR	\$19,500.00
Building	Res Finish Basement	03/28/2019 P	B19-0161	8035 VALLEYVIEW DR	\$22,520.00
Building	Res Misc.	03/29/2019 P	B19-0191	126 N HEWITT RD	\$5,850.00
Building	Res New Roof	03/01/2019 P	B19-0097	7355 WILLOW CREEK DR	\$8,857.00
Building	Res New Roof	03/04/2019 P	B19-0101	9599 HARBOUR COVE CT	\$23,300.00
Building	Res New Roof	03/05/2019 P	B19-0103	989 HAWTHORNE AVE	\$6,790.00
Building	Res New Roof	03/06/2019 P	B19-0111	7310 SPY GLASS LN	\$5,750.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Building	Res New Roof	03/06/2019	PB19-0112	7923 BREEZEWOOD CT	\$12,600.00
Building	Res New Roof	03/08/2019	PB19-0122	1601 FOLEY AVE	\$3,580.00
Building	Res New Roof	03/11/2019	PB19-0125	6350 OAKHURST DR	\$7,450.00
Building	Res New Roof	03/14/2019	PB19-0132	2433 COLONY WAY	\$12,000.00
Building	Res New Roof	03/14/2019	PB19-0134	1571 RUSSELL ST	\$4,634.00
Building	Res New Roof	03/15/2019	PB19-0137	9607 ENDICOTT LN	\$9,436.00
Building	Res New Roof	03/15/2019	PB19-0138	621 N MIAMI AVE	\$2,200.00
Building	Res New Roof	03/15/2019	PB19-0141	10892 TEXTILE RD	\$8,567.00
Building	Res New Roof	03/15/2019	PB19-0142	202 OHIO ST	\$3,000.00
Building	Res New Roof	03/18/2019	PB19-0145	8345 MERRITT RD	\$9,462.00
Building	Res New Roof	03/18/2019	PB19-0146	1985 BURNS ST	\$13,199.00
Building	Res New Roof	03/18/2019	PB19-0149	6245 SEQUOIA DR	\$22,290.00
Building	Res New Roof	03/18/2019	PB19-0152	1426 HARRY ST	\$10,399.00
Building	Res New Roof	03/21/2019	PB19-0156	8767 LILLY DR	\$10,369.00
Building	Res New Roof	03/21/2019	PB19-0159	8870 TAMARACK LN	\$9,300.00
Building	Res New Roof	03/21/2019	PB19-0160	551 WOODLAWN AVE	\$10,011.00
Building	Res New Roof	03/25/2019	PB19-0165	720 DONS DR	\$5,575.00
Building	Res New Roof	03/25/2019	PB19-0171	802 E GRAND BLVD	\$4,900.00
Building	Res New Roof	03/26/2019	PB19-0175	1443 GROVE RD	\$12,979.00
Building	Res New Roof	03/26/2019	PB19-0176	451 BERGEN AVE	\$6,200.00
Building	Res New Roof	03/27/2019	PB19-0177	1375 RIDGE RD	\$8,500.00
Building	Res New Roof	03/27/2019	PB19-0178	609 CAMPBELL AVE	\$8,000.00
Building	Res New Roof	03/28/2019	PB19-0188	4825 MUNGER RD	\$6,980.00
Building	Res New Roof	03/28/2019	PB19-0189	7774 GREENE FARM DR	\$12,099.00
Building	Res New Roof	03/29/2019	PB19-0193	6847 LAKEWAY ST	\$14,000.00
Building	Res New Roof	03/29/2019	PB19-0194	7875 HAMPTON CT	\$7,750.00
Building	Res New Roof	03/29/2019	PB19-0195	1426 HARRY ST	\$10,380.00
Building	Res New Single Family	03/06/2019	PB19-0083	9241 WHITE TAIL DR	\$208,015.00
Building	Res New Single Family	03/06/2019	PB19-0084	9163 WHITE TAIL CT	\$258,086.00
Building	Res New Single Family	03/19/2019	PB19-0118	9038 WHITE TAIL CT	\$208,419.00
Building	Res New Single Family	03/26/2019	PB19-0155	8875 NATALIE CT	\$203,617.00
Building	Res New Single Family	03/26/2019	PB19-0157	8845 NATALIE CT	\$203,617.00
Building	Res New Single Family	03/27/2019	PB19-0129	9134 WHITE TAIL CT	\$222,108.00

Permit Type	Category	Date Issued Permit Numb	er Address Display String	Construction Value
Building	Res Windows	03/01/2019 PB19-0098	7807 PLEASANT LN	\$8,550.00
Building	Res Windows	03/04/2019 PB19-0099	955 CARVER AVE	\$6,000.00
Building	Res Windows	03/05/2019 PB19-0102	5949 WILLOWBRIDGE RD	\$10,874.00
Building	Res Windows	03/05/2019 PB19-0106	6092 COLONY PARK DR	\$19,141.00
Building	Res Windows	03/05/2019 PB19-0107	7439 WILLOW CREEK DR	\$19,705.00
Building	Res Windows	03/05/2019 PB19-0108	1350 N HURON RIVER DR	\$27,902.00
Building	Res Windows	03/06/2019 PB19-0119	3080 ROUNDTREE BLVD	\$2,941.00
Building	Res Windows	03/07/2019 PB19-0120	7969 S HURON RIVER DR	\$9,743.00
Building	Res Windows	03/12/2019 PB19-0126	611 N MIAMI AVE	\$3,937.00
Building	Res Windows	03/12/2019 PB19-0127	7876 VALLEYVIEW DR	\$1,600.00
Building	Res Windows	03/14/2019 PB19-0135	1680 CLIFFS LNDG 201 E	\$1,400.00
Building	Res Windows	03/14/2019 PB19-0136	7383 KNOLLWOOD DR	\$6,336.00
Building	Res Windows	03/15/2019 PB19-0139	828 CLIFFS DR 301 E	\$1,768.00
Building	Res Windows	03/15/2019 PB19-0140	1185 HAWTHORNE AVE	\$6,000.00
Building	Res Windows	03/18/2019 PB19-0147	766 E CLARK RD	\$1,322.00
uilding	Res Windows	03/18/2019 PB19-0150	5459 WHITTAKER RD	\$8,500.00
Building	Res Windows	03/18/2019 PB19-0151	1384 RUE WILLETTE BLVD	\$7,511.00
Building	Res Windows	03/20/2019 PB19-0153	239 ELMHURST ST	\$7,240.00
Building	Res Windows	03/22/2019 PB19-0163	7293 MAPLELAWN DR	\$18,522.00
Building	Res Windows	03/22/2019 PB19-0164	2262 WOODALE AVE	\$1,785.00
Building	Res Windows	03/26/2019 PB19-0172	5702 SUNSET TRL	\$7,571.00
Building	Res Windows	03/27/2019 PB19-0182	1480 RUE DEAUVILLE BLVD	\$1,500.00
Building	Res Windows	03/27/2019 PB19-0183	6334 OAKHURST DR	\$3,248.00
uilding	Res Windows	03/29/2019 PB19-0190	1110 RUE DEAUVILLE BLVD	\$5,396.00
ode Inspection	Code Inspection	03/06/2019 PCD19-0008	34 JOHNSON ST	\$0.00
ode Inspection	Code Inspection	03/11/2019 PCD19-0010	1811 GEORGE AVE	\$0.00
Code Inspection	Code Inspection	03/14/2019 PCD19-0009	6728 LOON HOLLOW DR	\$0.00
ode Inspection	Code Inspection	03/22/2019 PCD19-0013	8053 LAKE CREST DR	\$0.00
lectrical	Electrical	03/05/2019 PE19-0078	5596 JUSTIN CT	\$0.00
lectrical	Electrical	03/06/2019 PE19-0081	2940 ELLSWORTH RD	\$0.00
lectrical	Electrical	03/06/2019 PE19-0082	1783 LYNN CT	\$0.00
lectrical	Electrical	03/06/2019 PE19-0083	1115 PARKWOOD AVE	\$0.00
Electrical	Electrical	03/08/2019 PE19-0084	1580 S HARRIS RD	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Electrical	Electrical	03/08/2019	PE19-0085	2490 PACKARD RD	\$0.00
Electrical	Electrical	03/11/2019	PE19-0086	7350 KNOLLWOOD DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0087	6313 WATERSIDE DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0088	6319 WATERSIDE DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0089	6325 WATERSIDE DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0090	6331 WATERSIDE DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0091	6337 WATERSIDE DR	\$0.00
Electrical	Electrical	03/13/2019	PE19-0092	6343 WATERSIDE DR	\$0.00
Electrical	Electrical	03/14/2019	PE19-0093	9054 WHITE TAIL CT	\$0.00
Electrical	Electrical	03/14/2019	PE19-0094	5875 BIG PINE CT	\$0.00
Electrical	Electrical	03/15/2019	PE19-0095	3375 E MICHIGAN 257	\$0.00
Electrical	Electrical	03/15/2019	PE19-0096	1441 DESOTO AVE	\$0.00
Electrical	Electrical	03/18/2019	PE19-0097	7347 KNOLLWOOD DR	\$0.00
Electrical	Electrical	03/18/2019	PE19-0098	2528 HEARTHSIDE DR	\$0.00
Electrical	Electrical	03/18/2019	PE19-0099	7992 BERWICK DR	\$0.00
Electrical	Electrical	03/19/2019	PE19-0100	1231 S HARRIS RD 201	\$0.00
Electrical	Electrical	03/19/2019	PE19-0101	1231 S HARRIS RD 101	\$0.00
Electrical	Electrical	03/19/2019	PE19-0102	1428 VILLAGE LN B3-1415C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0103	1428 VILLAGE LN B5-1436C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0104	1428 VILLAGE LN B4-1449C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0105	1428 VILLAGE LN B4-1461C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0106	1428 VILLAGE LN B6-1452C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0107	1428 VILLAGE LN B6-1468C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0108	1428 VILLAGE LN B6-1460C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0110	1115 S HARRIS RD B1-1107C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0109	1428 VILLAGE LN B9-1508C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0111	1498 VILLAGE LN 201	\$0.00
Electrical	Electrical	03/19/2019	PE19-0112	1115 S HARRIS RD B5-1103C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0113	1498 VILLAGE LN 102	\$0.00
Electrical	Electrical	03/19/2019	PE19-0114	1115 S HARRIS RD B5-1111L	\$0.00
Electrical	Electrical	03/19/2019	PE19-0115	1428 VILLAGE LN B11-1572L	\$0.00
Electrical	Electrical	03/19/2019	PE19-0116	1115 S HARRIS RD B7-1418C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0117	1161 S HARRIS RD	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Electrical	Electrical	03/19/2019	9 PE19-0118	1115 S HARRIS RD B6-1410C	\$0.00
Electrical	Electrical	03/19/2019	PE19-0119	1169 S HARRIS RD	\$0.00
Electrical	Electrical	03/19/2019	PE19-0120	1115 S HARRIS RD B7-1416C	\$0.00
Electrical	Electrical	03/20/2019) PE19-0121	6136 ROBERT CIR 253	\$0.00
Electrical	Electrical	03/20/2019	PE19-0122	6210 RICK ST 32	\$0.00
Electrical	Electrical	03/20/2019	PE19-0123	525 HOLLIS AVE	\$0.00
Electrical	Electrical	03/21/2019) PE19-0124	8044 VALLEYVIEW DR	\$0.00
Electrical	Electrical	03/22/2019	PE19-0125	31 N CLUBVIEW DR	\$0.00
Electrical	Electrical	03/22/2019	PE19-0126	1656 DOROTHY ST	\$0.00
Electrical	Electrical	03/22/2019) PE19-0127	7283 WILLOW CREEK DR	\$0.00
Electrical	Electrical	03/26/2019	PE19-0128	2124 BURNS ST	\$0.00
Electrical	Electrical	03/27/2019	PE19-0079	1661 S HURON ST	\$0.00
Electrical	Electrical	03/27/2019	PE19-0080	1290 ANNA J STEPP	\$0.00
Fire Suppression	Fire Suppression	03/27/2019	PFS19-0001	775 JAMES L HART PKWY	\$0.00
Mechanical	Mechanical	03/04/2019	PM19-0239	7582 BAY TREE DR	\$0.00
Mechanical	Mechanical	03/04/2019	PM19-0240	205 S HARRIS RD	\$0.00
Mechanical	Mechanical	03/04/2019	PM19-0241	2450 CANYON DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0242	7095 RACHEL DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0243	1366 ANDREA ST	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0244	2970 WASHTENAW AVE 2B	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0245	7931 BRIARBROOK DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0246	9326 TALLWOOD DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0247	9320 TALLWOOD DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0248	9316 TALLWOOD DR	\$0.00
Mechanical	Mechanical	03/05/2019	PM19-0249	9310 TALLWOOD DR	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0251	2760 INTERNATIONAL DR 623C	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0252	2671 INTERNATIONAL DR 1433C	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0253	2610 INTERNATIONAL DR 910C	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0250	3375 E MICHIGAN 257	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0255	1115 PARKWOOD AVE	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0254	9229 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/06/2019	PM19-0256	9208 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/07/2019	PM19-0257	185 RUSSELL BLVD	\$0.00

Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical	Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical	03/07/2019 03/07/2019 03/07/2019 03/07/2019 03/07/2019 03/07/2019 03/07/2019	PM19-0259 PM19-0260 PM19-0261 PM19-0262	87 RUSSELL CT 92 RUSSELL CT 1336 RUSSELL ST LAUNDRY 1347 RUSSELL LAUNDRY 1211 RUSSELL LAUNDRY	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00
Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical	Mechanical Mechanical Mechanical Mechanical Mechanical Mechanical	03/07/2019 03/07/2019 03/07/2019 03/07/2019	PM19-0260 PM19-0261 PM19-0262	1336 RUSSELL ST LAUNDRY 1347 RUSSELL LAUNDRY	\$0.00 \$0.00
Mechanical Mechanical Mechanical Mechanical Mechanical	Mechanical Mechanical Mechanical Mechanical Mechanical	03/07/2019 03/07/2019 03/07/2019	PM19-0261 PM19-0262	1347 RUSSELL LAUNDRY	\$0.00
Mechanical Mechanical Mechanical Mechanical	Mechanical Mechanical Mechanical Mechanical	03/07/2019 03/07/2019	PM19-0262		
Mechanical Mechanical Mechanical	Mechanical Mechanical Mechanical	03/07/2019		1211 RUSSELL LAUNDRY	<u> </u>
Mechanical Mechanical	Mechanical Mechanical		PM19-0263		ŞU.UU
Mechanical	Mechanical	03/07/2019	11111120 02000	1346 RUSSELL LAUNDRY	\$0.00
			PM19-0264	5950 BIG PINE DR	\$0.00
		03/07/2019	PM19-0265	5666 SUNSET TRL	\$0.00
Mechanical	Mechanical	03/07/2019	PM19-0266	9208 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0267	9229 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0268	9208 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0270	8820 NATALIE CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0271	7212 NATALIE DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0272	9118 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0273	9217 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0274	9054 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0275	9198 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0276	9253 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0277	9102 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0278	9182 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0279	9218 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0280	8667 INDIGO LN	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0282	1112 DESOTO AVE	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0284	1076 WOODGLEN AVE	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0283	2490 PACKARD RD	\$0.00
Mechanical	Mechanical	03/08/2019	PM19-0285	2932 PRESCOTT	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0286	1454 ANDREA ST	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0287	6021 EAGLE TRACE DR	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0288	9182 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0289	9217 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0290	1290 ANNA J STEPP	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0291	2960 WASHTENAW AVE 2A	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0292	5439 PINEVIEW DR	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Mechanical	Mechanical	03/12/2019	PM19-0293	375 DAKOTA AVE	\$0.00
Mechanical	Mechanical	03/12/2019	PM19-0294	2971 ROUNDTREE BLVD A4	\$0.00
Mechanical	Mechanical	03/13/2019	PM19-0281	1571 RUSSELL ST	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0295	1097 WOODGLEN AVE	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0296	215 KIRK ST	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0297	87 CARRIAGE WAY	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0298	2090 CHEVROLET AVE	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0299	6988 MC KEAN 053	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0300	104 HILLCREST BLVD	\$0.00
Mechanical	Mechanical	03/14/2019	PM19-0301	7212 NATALIE DR	\$0.00
Mechanical	Mechanical	03/15/2019	PM19-0302	1274 RIDGE RD #2	\$0.00
Mechanical	Mechanical	03/15/2019	PM19-0303	9198 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/15/2019	PM19-0304	2074 MCGREGOR RD	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0305	1956 EMERSON AVE	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0306	9253 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0308	2727 BRIDGE DAM	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0307	8820 NATALIE CT	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0309	6988 MC KEAN 053	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0310	7944 VALLEYVIEW DR	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0311	1500 FOLEY AVE	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0312	1355 DESOTO AVE	\$0.00
Mechanical	Mechanical	03/18/2019	PM19-0228	5420 PINEVIEW DR	\$0.00
Mechanical	Mechanical	03/19/2019	PM19-0313	266 ELMHURST ST	\$0.00
Mechanical	Mechanical	03/19/2019	PM19-0314	2476 CARRIAGE WAY	\$0.00
Mechanical	Mechanical	03/20/2019	PM19-0315	10223 MARTZ RD	\$0.00
Mechanical	Mechanical	03/20/2019	PM19-0316	454 DEXTER AVE	\$0.00
Mechanical	Mechanical	03/21/2019	PM19-0317	7559 STREAMWOOD DR	\$0.00
Mechanical	Mechanical	03/21/2019	PM19-0318	430 BROWNING ST	\$0.00
Mechanical	Mechanical	03/21/2019	PM19-0319	6974 PAIGE LN	\$0.00
Mechanical	Mechanical	03/21/2019	PM19-0320	1291 GROVE RD	\$0.00
Mechanical	Mechanical	03/22/2019	PM19-0321	120 HILLCREST BLVD	\$0.00
Mechanical	Mechanical	03/22/2019	PM19-0322	7283 WILLOW CREEK DR	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0323	525 HOLLIS AVE	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Mechanical	Mechanical	03/25/2019	PM19-0324	304 FAIRHILLS DR	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0325	815 GEORGE PL 6	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0326	9218 WHITE TAIL DR	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0327	9198 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0328	9102 WHITE TAIL CT	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0329	7212 NATALIE DR	\$0.00
Mechanical	Mechanical	03/25/2019	PM19-0330	173 RUSSELL BLVD LAUNDRY	\$0.00
Mechanical	Mechanical	03/26/2019	PM19-0331	1423 RUE WILLETTE BLVD	\$0.00
Mechanical	Mechanical	03/26/2019	PM19-0332	31 N CLUBVIEW DR	\$0.00
Mechanical	Mechanical	03/26/2019	PM19-0333	1129 GAULT DR	\$0.00
Mechanical	Mechanical	03/26/2019	PM19-0334	735 CLUBHOUSE DR	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0335	2087 HOLMES RD	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0336	6988 MC KEAN 007	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0337	6988 MC KEAN 003	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0338	1397 CRESTWOOD AVE	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0339	588 DESOTO AVE	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0340	1015 GAULT DR	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0341	2018 CHEVROLET AVE	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0342	478 WESTLAWN ST	\$0.00
Mechanical	Mechanical	03/27/2019	PM19-0343	130 N CLUBVIEW DR	\$0.00
Mechanical	Mechanical	03/28/2019	PM19-0344	1290 ANNA J STEPP	\$0.00
Mechanical	Mechanical	03/29/2019	PM19-0345	2960 INTERNATIONAL DR BLDG 10	\$0.00
Mechanical	Mechanical	03/29/2019	PM19-0346	1131 WENDELL AVE	\$0.00
Mechanical	Mechanical	03/29/2019	PM19-0347	6988 MC KEAN 159	\$0.00
Mechanical	Mechanical	03/29/2019	PM19-0348	8059 SPRINGWATER DR	\$0.00
Mechanical	Mechanical	03/29/2019	PM19-0349	346 KANSAS AVE	\$0.00
Plumbing	Plumbing	03/01/2019	PP19-0068	7987 BRIARBROOK DR	\$0.00
Plumbing	Plumbing	03/05/2019	PP19-0070	9054 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/05/2019	PP19-0071	7557 DOVER DR	\$0.00
Plumbing	Plumbing	03/06/2019	PP19-0073	2940 ELLSWORTH RD	\$0.00
Plumbing	Plumbing	03/06/2019	PP19-0072	3375 E MICHIGAN 257	\$0.00
Plumbing	Plumbing	03/07/2019	PP19-0074	6608 LAKEWAY ST	\$0.00
Plumbing	Plumbing	03/07/2019	PP19-0075	171 HILLCREST BLVD	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Plumbing	Plumbing	03/08/2019	PP19-0076	9229 WHITE TAIL DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0077	9208 WHITE TAIL DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0079	8820 NATALIE CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0081	9118 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0082	9217 WHITE TAIL DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0083	9218 WHITE TAIL DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0084	9182 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0085	9102 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0086	9253 WHITE TAIL DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0087	9198 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0088	9054 WHITE TAIL CT	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0080	7212 NATALIE DR	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0089	1571 ANDREA ST	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0090	2340 MCKINLEY AVE	\$0.00
Plumbing	Plumbing	03/08/2019	PP19-0091	1136 SHIRLEY DR	\$0.00
Plumbing	Plumbing	03/11/2019	PP19-0092	7381 MERIDIAN DR	\$0.00
Plumbing	Plumbing	03/12/2019	PP19-0093	1014 NASH AVE	\$0.00
Plumbing	Plumbing	03/12/2019	PP19-0094	2830 ROUNDTREE BLVD	\$0.00
Plumbing	Plumbing	03/13/2019	PP19-0095	7140 RICHMOND DR	\$0.00
Plumbing	Plumbing	03/13/2019	PP19-0096	785 N HARRIS RD 2	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0097	1300 ELMWOOD DR 39	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0098	1298 ELMWOOD DR 40	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0099	1312 ELMWOOD DR 32	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0100	1282 ELMWOOD DR 47	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0101	1450 W CHESTNUT DR BLDG 17	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0102	1390 ELMWOOD DR 9	\$0.00
Plumbing	Plumbing	03/14/2019	PP19-0103	1284 ELMWOOD DR 46	\$0.00
Plumbing	Plumbing	03/15/2019	PP19-0104	592 GLENWOOD AVE	\$0.00
Plumbing	Plumbing	03/18/2019	PP19-0105	7992 BERWICK DR	\$0.00
Plumbing	Plumbing	03/18/2019	PP19-0106	1138 LEVONA ST	\$0.00
Plumbing	Plumbing	03/18/2019	PP19-0107	629 VILLA DR	\$0.00
Plumbing	Plumbing	03/19/2019	PP19-0108	525 HOLLIS AVE	\$0.00
Plumbing	Plumbing	03/20/2019	PP19-0109	2395 MERRILL ST	\$0.00

Permit Type	Category	Date Issued	Permit Number	Address Display String	Construction Value
Plumbing	Plumbing	03/20/2019	PP19-0110	1290 ANNA J STEPP	\$0.00
Plumbing	Plumbing	03/21/2019	PP19-0111	1588 MARGARITA ST	\$0.00
Plumbing	Plumbing	03/21/2019	PP19-0112	7230 ROXBURY DR	\$0.00
Plumbing	Plumbing	03/21/2019	PP19-0113	2124 BURNS ST	\$0.00
Plumbing	Plumbing	03/22/2019	PP19-0114	1571 RUSSELL ST	\$0.00
Plumbing	Plumbing	03/22/2019	PP19-0115	6286 VAIL DR	\$0.00
Plumbing	Plumbing	03/22/2019	PP19-0116	387 N HEWITT RD	\$0.00
Plumbing	Plumbing	03/26/2019	PP19-0119	551 HUDSON ST	\$0.00
Plumbing	Plumbing	03/26/2019	PP19-0120	1197 LEXINGTON PKWY	\$0.00
Plumbing	Plumbing	03/27/2019	PP19-0121	8822 TAMARACK LN	\$0.00
Plumbing	Plumbing	03/28/2019	PP19-0122	1411 WENDELL AVE	\$0.00
Sign	Com Sign	03/27/2019	PS19-0007	1661 S HURON ST	\$4,000.00
Sign	Com Sign	03/27/2019	PS19-0006	1290 ANNA J STEPP	\$2,000.00
Soil Erosion	Soil Erosion Commercial	03/11/2019	PSE18-0011	2415 GROVE RD Right of Way	\$0.00
Soil Erosion	Soil Erosion Commercial	03/18/2019	PSE19-0003	7141 DEER TRACK - ANR	\$0.00
Soil Erosion	Soil Erosion Commercial	03/18/2019	PSE19-0002	5400 TUTTLE HILL RD	\$0.00
Soil Erosion	Soil Erosion Commercial	03/18/2019	PSE19-0004	3150 E MICHIGAN AVE SESC	\$0.00
Soil Erosion	Soil Erosion Commercial	03/22/2019	PSE19-0001	5600 BON TERRE - Enbridge	\$0.00
Soil Erosion	Soil Erosion Residential	03/11/2019	PSE18-0012	7627 S HURON RIVER DR	\$0.00
Soil Erosion	Soil Erosion Residential	03/26/2019	PSE19-0006	1032 GROVE RD	\$0.00
Zoning	Fence	03/11/2019	PZP19-0002	971 DESOTO AVE	\$0.00
					\$3,191,444.00

CERTIFICATES OF OCCUPANCY ISSUED MARCH 2019

Address Display String	Name Issued To	C O Number	Date Temp Issued	Date Finaled
2828 WOODRUFF LN	HABITAT FOR HUMANITY - HURON VALLEY	OF19-0022		03/27/2019

RENTAL HOUSING CERTIFICATIONS MARCH 2019

Cert Type	Cert Number	Date Issued Address Display String	
Multi-Family Rental Inspection	CR3617-1862	03/14/2019 1240 LEFORGE RD P4	
Multi-Family Rental Inspection	CR3617-1852	03/14/2019 1246 LEFORGE RD N1	
Multi-Family Rental Inspection	CMFR-18-0739	03/14/2019 1246 LEFORGE RD N10	
Multi-Family Rental Inspection	CMFR-18-0740	03/14/2019 1246 LEFORGE RD N11	
Multi-Family Rental Inspection	CR3617-1853	03/14/2019 1246 LEFORGE RD N2	
Multi-Family Rental Inspection	CR3617-1854	03/14/2019 1246 LEFORGE RD N3	
Multi-Family Rental Inspection	CR3617-1855	03/14/2019 1246 LEFORGE RD N4	
Multi-Family Rental Inspection	CMFR-18-0734	03/14/2019 1246 LEFORGE RD N5	
Multi-Family Rental Inspection	CMFR-18-0736	03/14/2019 1246 LEFORGE RD N7	
Multi-Family Rental Inspection	CMFR-18-0738	03/14/2019 1246 LEFORGE RD N9	
Multi-Family Rental Inspection	CMFR-18-0355	03/14/2019 1250 LEFORGE RD M1	
Multi-Family Rental Inspection	CMFR-18-0364	03/14/2019 1250 LEFORGE RD M10	
Multi-Family Rental Inspection	CMFR-18-0365	03/14/2019 1250 LEFORGE RD M11	
Multi-Family Rental Inspection	CMFR-18-0356	03/14/2019 1250 LEFORGE RD M2	
Multi-Family Rental Inspection	CMFR-18-0357	03/14/2019 1250 LEFORGE RD M3	
Multi-Family Rental Inspection	CMFR-18-0358	03/14/2019 1250 LEFORGE RD M4	
Multi-Family Rental Inspection	CMFR-18-0359	03/14/2019 1250 LEFORGE RD M5	
Multi-Family Rental Inspection	CMFR-18-0360	03/14/2019 1250 LEFORGE RD M6	
Multi-Family Rental Inspection	CMFR-18-0361	03/14/2019 1250 LEFORGE RD M7	
Multi-Family Rental Inspection	CMFR-18-0362	03/14/2019 1250 LEFORGE RD M8	
Multi-Family Rental Inspection	CMFR-18-0363	03/14/2019 1250 LEFORGE RD M9	
Multi-Family Rental Inspection	CMFR-18-0385	03/14/2019 1254 LEFORGE RD L10	
Multi-Family Rental Inspection	CMFR-18-0386	03/14/2019 1254 LEFORGE RD L11	
Multi-Family Rental Inspection	CMFR-18-0377	03/14/2019 1254 LEFORGE RD L2	
Multi-Family Rental Inspection	CMFR-18-0378	03/14/2019 1254 LEFORGE RD L3	
Multi-Family Rental Inspection	CMFR-18-0379	03/14/2019 1254 LEFORGE RD L4	
Multi-Family Rental Inspection	CMFR-18-0380	03/14/2019 1254 LEFORGE RD L5	
Multi-Family Rental Inspection	CMFR-18-0381	03/14/2019 1254 LEFORGE RD L6	
Multi-Family Rental Inspection	CMFR-18-0382	03/14/2019 1254 LEFORGE RD L7	
Multi-Family Rental Inspection	CMFR-18-0383	03/14/2019 1254 LEFORGE RD L8	
Multi-Family Rental Inspection	CMFR-18-0384	03/14/2019 1254 LEFORGE RD L9	
Multi-Family Rental Inspection	CMFR-18-0313	03/01/2019 100 STEVENS DR 102	
Multi-Family Rental Inspection	CMFR-18-0314	03/01/2019 100 STEVENS DR 103	
Multi-Family Rental Inspection	CMFR-18-0315	03/01/2019 100 STEVENS DR 104	
Multi-Family Rental Inspection	CMFR-18-0316	03/01/2019 100 STEVENS DR 201	
Multi-Family Rental Inspection	CMFR-18-0317	03/01/2019 100 STEVENS DR 202	
Multi-Family Rental Inspection	CMFR-18-0318	03/01/2019 100 STEVENS DR 203	
Multi-Family Rental Inspection	CMFR-18-0331	03/01/2019 110 STEVENS DR 301	
Multi-Family Rental Inspection	CMFR-18-0561	03/01/2019 120 STEVENS DR 103	
Multi-Family Rental Inspection	CMFR-18-0753	03/14/2019 1266 LEFORGE RD R2	
Multi-Family Rental Inspection	CMFR-18-0754	03/14/2019 1266 LEFORGE RD R3	
Multi-Family Rental Inspection	CR3617-1847	03/14/2019 1292 LEFORGE RD D4	
Multi-Family Rental Inspection	CR3617-1839	03/14/2019 1294 LEFORGE RD C1	

Cert Type	Cert Number	Date Issued Address Display String
Multi-Family Rental Inspection	CR3617-1840	03/14/2019 1294 LEFORGE RD C2
Multi-Family Rental Inspection	CR3617-1841	03/14/2019 1294 LEFORGE RD C3
Multi-Family Rental Inspection	CR3617-1842	03/14/2019 1294 LEFORGE RD C4
Multi-Family Rental Inspection	CR3617-1843	03/14/2019 1294 LEFORGE RD C5
Multi-Family Rental Inspection	CR3617-1834	03/14/2019 1296 LEFORGE RD B1
Multi-Family Rental Inspection	CR3617-1835	03/14/2019 1296 LEFORGE RD B2
Multi-Family Rental Inspection	CR3617-1836	03/14/2019 1296 LEFORGE RD B3
Multi-Family Rental Inspection	CR3617-1837	03/14/2019 1296 LEFORGE RD B4
Multi-Family Rental Inspection	CR3617-1838	03/14/2019 1296 LEFORGE RD B5
Multi-Family Rental Inspection	CR3617-1829	03/14/2019 1298 LEFORGE RD A1
Multi-Family Rental Inspection	CR3617-1830	03/14/2019 1298 LEFORGE RD A2
Multi-Family Rental Inspection	CR3617-1831	03/14/2019 1298 LEFORGE RD A3
Multi-Family Rental Inspection	CR3617-1832	03/14/2019 1298 LEFORGE RD A4
Multi-Family Rental Inspection	CR3617-1833	03/14/2019 1298 LEFORGE RD A5
Multi-Family Rental Inspection	CR3617-3309	03/13/2019 130 S HEWITT RD 101
Multi-Family Rental Inspection	CR3617-3310	03/13/2019 130 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3311 CR3617-3313	03/26/2019 130 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3313	03/26/2019 130 S HEWITT RD 201
Multi-Family Rental Inspection Multi-Family Rental Inspection	CR3617-3314 CR3617-3315	03/13/2019 130 S HEWITT RD 202 03/26/2019 130 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3317	03/13/2019 130 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3320	03/26/2019 130 S HEWITT RD 303
Multi-Family Rental Inspection	CMFR-18-0290	03/01/2019 130 STEVENS DR 304
Multi-Family Rental Inspection	CR3617-0909	03/26/2019 1334 ELMWOOD DR 24
Multi-Family Rental Inspection	CR3617-0908	03/26/2019 1350 ELMWOOD DR 23
Multi-Family Rental Inspection	CR3617-0907	03/26/2019 1352 ELMWOOD DR 22
Multi-Family Rental Inspection	CR3617-0905	03/26/2019 1356 ELMWOOD DR 20
Multi-Family Rental Inspection	CR3617-0904	03/26/2019 1358 ELMWOOD DR 19
Multi-Family Rental Inspection	CR3617-0902	03/26/2019 1368 ELMWOOD DR 17
Multi-Family Rental Inspection	CR3617-0901	03/26/2019 1372 ELMWOOD DR 16
Multi-Family Rental Inspection	CR3617-0898	03/26/2019 1378 ELMWOOD DR 13
Multi-Family Rental Inspection	CR3617-0895	03/26/2019 1388 ELMWOOD DR 10
Multi-Family Rental Inspection	CR3617-0894	03/26/2019 1390 ELMWOOD DR 9
Multi-Family Rental Inspection	CMFR-18-0297	03/01/2019 140 STEVENS DR 204
Multi-Family Rental Inspection	CR3617-1073	03/26/2019 1400 CHESTNUT DR 17
Multi-Family Rental Inspection	CR3617-1077	03/26/2019 1400 ELMWOOD DR 21
Multi-Family Rental Inspection	CR3617-1080	03/26/2019 1400 ELMWOOD DR 24
Multi-Family Rental Inspection	CR3617-0889	03/26/2019 1408 ELMWOOD DR 4
Multi-Family Rental Inspection	CR3617-0888	03/26/2019 1412 ELMWOOD DR 3
Multi-Family Rental Inspection	CMFR-18-0742	03/14/2019 1258 LEFORGE RD K10
Multi-Family Rental Inspection	CMFR-18-0744	03/14/2019 1258 LEFORGE RD K2
Multi-Family Rental Inspection	CMFR-18-0745	03/14/2019 1258 LEFORGE RD K3
Multi-Family Rental Inspection	CMFR-18-0746	03/14/2019 1258 LEFORGE RD K4
Multi-Family Rental Inspection	CMFR-18-0747	03/14/2019 1258 LEFORGE RD K5
Multi-Family Rental Inspection	CMFR-18-0748	03/14/2019 1258 LEFORGE RD K6
Multi-Family Rental Inspection	CMFR-18-0749	03/14/2019 1258 LEFORGE RD K7

Cert Type	Cert Number	Date Issued Address Display String
Multi-Family Rental Inspection	CMFR-18-0750	03/14/2019 1258 LEFORGE RD K8
Multi-Family Rental Inspection	CMFR-18-0751	03/14/2019 1258 LEFORGE RD K9
Multi-Family Rental Inspection	CR3617-0915	03/26/2019 1322 ELMWOOD DR 30
Multi-Family Rental Inspection	CR3617-0914	03/26/2019 1324 ELMWOOD DR 29
Multi-Family Rental Inspection	CR3617-0913	03/26/2019 1326 ELMWOOD DR 28
Multi-Family Rental Inspection	CR3617-0912	03/26/2019 1328 ELMWOOD DR 27
Multi-Family Rental Inspection	CR3617-0886	03/26/2019 1420 ELMWOOD DR 1
Multi-Family Rental Inspection	CR3617-1132	03/26/2019 1427 CHESTNUT DR 12
Multi-Family Rental Inspection	CR3617-1133	03/26/2019 1427 CHESTNUT DR 13
Multi-Family Rental Inspection	CMFR-18-0310	03/01/2019 150 STEVENS DR 302
Multi-Family Rental Inspection	CMFR-18-0250	03/01/2019 160 STEVENS DR 104
Multi-Family Rental Inspection	CMFR-18-0256	03/01/2019 160 STEVENS DR 302
Multi-Family Rental Inspection	CR3617-4851	03/26/2019 1608 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4852	03/26/2019 1610 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4853	03/26/2019 1611 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4918	03/26/2019 1632 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-1189	03/26/2019 1638 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-4867	03/26/2019 1640 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4869	03/26/2019 1643 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4870	03/26/2019 1647 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4871	03/26/2019 1648 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4873	03/26/2019 1651 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4875	03/26/2019 1656 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4877	03/26/2019 1659 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4878	03/26/2019 1663 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-1192	03/26/2019 1665 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-1193	03/26/2019 1667 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-1195	03/26/2019 1671 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-4885	03/26/2019 1675 E LAUREL BAY DR
Multi-Family Rental Inspection	CMFR-18-0681	03/26/2019 1682 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4888	03/26/2019 1683 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4889	03/26/2019 1687 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-1213	03/26/2019 1698 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-4894	03/26/2019 1702 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4896	03/26/2019 1709 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4898	03/26/2019 1710 W LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4900	03/26/2019 1717 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-1066	03/26/2019 1434 ELMWOOD DR 11
Multi-Family Rental Inspection	CR3617-1067	03/26/2019 1434 ELMWOOD DR 12
Multi-Family Rental Inspection	CR3617-1069	03/26/2019 1434 ELMWOOD DR 14
Multi-Family Rental Inspection	CR3617-1070	03/26/2019 1434 ELMWOOD DR 15
Multi-Family Rental Inspection	CR3617-1071	03/26/2019 1434 ELMWOOD DR 16
Multi-Family Rental Inspection	CR3617-1072	03/26/2019 1434 ELMWOOD DR 9
Multi-Family Rental Inspection	CR3617-4903	03/26/2019 1725 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4904 CR3617-4906	03/26/2019 1726 W LAUREL BAY DR
Multi-Family Rental Inspection	CK301/-4900	03/26/2019 1733 E LAUREL BAY DR

Cert Type	Cert Number	Date Issued	Address Display String
Multi-Family Rental Inspection	CR3617-4909		1741 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-4915		1773 E LAUREL BAY DR
Multi-Family Rental Inspection	CR3617-1283		1773 MEADOW WOODS BLVD
Multi-Family Rental Inspection	CR3617-4917	03/26/2019	1789 E LAUREL BAY DR
Multi-Family Rental Inspection	CMFR-18-0155		201 STEVENS DR 202
Multi-Family Rental Inspection	CR3617-3408		206 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3409	03/13/2019	206 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3410	03/13/2019	206 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3411	03/13/2019	206 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3413	03/13/2019	206 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3414	03/13/2019	206 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3417	03/13/2019	206 S HEWITT RD 304
Multi-Family Rental Inspection	CR3617-3418	03/13/2019	210 S HEWITT RD 101
Multi-Family Rental Inspection	CR3617-3419	03/13/2019	210 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3420	03/13/2019	210 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3421	03/13/2019	210 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3422	03/13/2019	210 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3424	03/13/2019	210 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3425		210 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3427		210 S HEWITT RD 303
Multi-Family Rental Inspection	CR3617-3429		210 S HEWITT RD 304
Multi-Family Rental Inspection	CMFR-18-0163		211 STEVENS DR 102
Multi-Family Rental Inspection	CMFR-18-0168		211 STEVENS DR 204
Multi-Family Rental Inspection	CMFR-18-0071		212 STEVENS DR BLDG 6
Multi-Family Rental Inspection	CMFR-18-0072		212 STEVENS DR BLDG 7
Multi-Family Rental Inspection	CMFR-18-0073	• •	212 STEVENS DR BLDG 8
Multi-Family Rental Inspection	CMFR-18-0074		212 STEVENS DR BLDG 9
Multi-Family Rental Inspection	CMFR-17-7236		214 S HEWITT RD BLDG 130 L
Multi-Family Rental Inspection	CMFR-17-7248		214 S HEWITT RD BLDG 206 L
Multi-Family Rental Inspection	CMFR-17-7237		214 S HEWITT RD BLDG 210 L
Multi-Family Rental Inspection	CMFR-17-7261		214 S HEWITT RD BLDG 218 L
Multi-Family Rental Inspection	CMFR-17-7225 CMFR-17-7234		214 S HEWITT RD BLDG 222 L
Multi-Family Rental Inspection Multi-Family Rental Inspection	CMFR-17-7234 CMFR-17-7199		214 S HEWITT RD BLDG 228 L 214 S HEWITT RD BLDG 230 L
Multi-Family Rental Inspection	CMFR-17-7221		214 S HEWITT RD BLDG 230 L
Multi-Family Rental Inspection	CMFR-17-7221 CMFR-17-7228		214 S HEWITT RD BLDG 2302L 214 S HEWITT RD BLDG 2306L
Multi-Family Rental Inspection	CMFR-17-7228		214 S HEWITT RD BLDG 2300L
Multi-Family Rental Inspection	CMFR-17-7250		214 S HEWITT RD BLDG 2314L
Multi-Family Rental Inspection	CMFR-17-7252		214 S HEWITT RD BLDG 2314L
Multi-Family Rental Inspection	CMFR-17-7265		214 S HEWITT RD BLDG 2330L
Multi-Family Rental Inspection	CMFR-17-7218		214 S HEWITT RD BLDG 234 L
Multi-Family Rental Inspection	CMFR-17-7224		214 S HEWITT RD BLDG 2344L
Multi-Family Rental Inspection	CMFR-17-7269		214 S HEWITT RD BLDG 2360L
Multi-Family Rental Inspection	CMFR-17-7246		214 S HEWITT RD BLDG 2420L
Multi-Family Rental Inspection	CMFR-17-7243		214 S HEWITT RD BLDG 2444L
Multi-Family Rental Inspection	CMFR-19-0004		214 S HEWITT RD BLDG 36-LA
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Cert Type	Cert Number	Date Issued	Address Display String
Multi-Family Rental Inspection	CMFR-17-7195		214 S HEWITT RD BLDG 80 LA
Multi-Family Rental Inspection	CR3617-3430	03/26/2019	218 S HEWITT RD 101
Multi-Family Rental Inspection	CR3617-3431	03/26/2019	218 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3432	03/26/2019	218 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3433	03/26/2019	218 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3434	03/26/2019	218 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3435	03/26/2019	218 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3436	03/26/2019	218 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3437	03/26/2019	218 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3441	03/26/2019	222 S HEWITT RD 101
Multi-Family Rental Inspection	CR3617-3442	03/26/2019	222 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3444	03/26/2019	222 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3445	03/26/2019	222 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3446	03/26/2019	222 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3447	03/26/2019	222 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3448	03/26/2019	222 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3449	03/26/2019	222 S HEWITT RD 302
Multi-Family Rental Inspection	CR3617-3450	03/26/2019	222 S HEWITT RD 303
Multi-Family Rental Inspection	CR3617-3451	03/26/2019	222 S HEWITT RD 304
Multi-Family Rental Inspection	CR3617-3452	03/13/2019	228 S HEWITT RD 102
Multi-Family Rental Inspection	CR3617-3454	03/13/2019	228 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3455	03/13/2019	228 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3456	03/13/2019	228 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3458	03/13/2019	228 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3459	03/13/2019	228 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3462		228 S HEWITT RD 304
Multi-Family Rental Inspection	CR3617-3464		230 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3470	03/13/2019	230 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3472	03/13/2019	230 S HEWITT RD 302
Multi-Family Rental Inspection	CR3617-3473		230 S HEWITT RD 303
Multi-Family Rental Inspection	CR3617-3485		2302 ELLSWORTH RD 101
Multi-Family Rental Inspection	CR3617-3487		2302 ELLSWORTH RD 104
Multi-Family Rental Inspection	CR3617-3489		2302 ELLSWORTH RD 202
Multi-Family Rental Inspection	CR3617-3490		2302 ELLSWORTH RD 203
Multi-Family Rental Inspection	CR3617-3491		2302 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3492		2302 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3493		2302 ELLSWORTH RD 302
Multi-Family Rental Inspection	CR3617-3494		2302 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3495		2302 ELLSWORTH RD 304
Multi-Family Rental Inspection	CR3617-3497		2306 ELLSWORTH RD 103
Multi-Family Rental Inspection	CR3617-3498		2306 ELLSWORTH RD 104
Multi-Family Rental Inspection	CR3617-3499		2306 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3500		2306 ELLSWORTH RD 202
Multi-Family Rental Inspection	CR3617-3502		2306 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3503		2306 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3505	03/13/2019	2306 ELLSWORTH RD 302

Cert Type	Cert Number	Date Issued	Address Display String
Multi-Family Rental Inspection	CR3617-3508		2310 ELLSWORTH RD 101
Multi-Family Rental Inspection	CR3617-3509		2310 ELLSWORTH RD 103
Multi-Family Rental Inspection	CR3617-3510		2310 ELLSWORTH RD 104
Multi-Family Rental Inspection	CR3617-3511		2310 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3515		2310 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3517		2310 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3518		2310 ELLSWORTH RD 304
Multi-Family Rental Inspection	CR3617-3519		2314 ELLSWORTH RD 102
Multi-Family Rental Inspection	CR3617-3522		2314 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3524		2314 ELLSWORTH RD 203
Multi-Family Rental Inspection	CR3617-3525		2314 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3528		2314 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3530		2318 ELLSWORTH RD 102
Multi-Family Rental Inspection	CR3617-3533	03/13/2019	2318 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3536	03/13/2019	2318 ELLSWORTH RD 203
Multi-Family Rental Inspection	CR3617-3537	03/13/2019	2318 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3538	03/13/2019	2318 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3539	03/13/2019	2318 ELLSWORTH RD 302
Multi-Family Rental Inspection	CR3617-3540	03/13/2019	2318 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3541	03/26/2019	2318 ELLSWORTH RD 304
Multi-Family Rental Inspection	CR3617-3544	03/26/2019	2330 ELLSWORTH RD 104
Multi-Family Rental Inspection	CR3617-3545	03/26/2019	2330 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3547	03/26/2019	2330 ELLSWORTH RD 203
Multi-Family Rental Inspection	CR3617-3548	03/26/2019	2330 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3549	03/26/2019	2330 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3479	03/13/2019	234 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3480	03/13/2019	234 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3482	03/13/2019	234 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3483	03/13/2019	234 S HEWITT RD 302
Multi-Family Rental Inspection	CR3617-3558	03/26/2019	2344 ELLSWORTH RD 203
Multi-Family Rental Inspection	CR3617-3559	03/26/2019	2344 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3560	03/26/2019	2344 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3561	03/26/2019	2344 ELLSWORTH RD 302
Multi-Family Rental Inspection	CR3617-3562	03/26/2019	2344 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3564		2360 ELLSWORTH RD 101
Multi-Family Rental Inspection	CR3617-3566		2360 ELLSWORTH RD 103
Multi-Family Rental Inspection	CR3617-3569		2360 ELLSWORTH RD 202
Multi-Family Rental Inspection	CR3617-3571		2360 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3572		2360 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3573		2360 ELLSWORTH RD 303
Multi-Family Rental Inspection	CR3617-3574		2360 ELLSWORTH RD 304
Multi-Family Rental Inspection	CR3617-3576		2420 ELLSWORTH RD 102
Multi-Family Rental Inspection	CR3617-3577		2420 ELLSWORTH RD 103
Multi-Family Rental Inspection	CR3617-3579		2420 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3580		2420 ELLSWORTH RD 202
Multi-Family Rental Inspection	CR3617-3581	03/26/2019	2420 ELLSWORTH RD 203

Cert Type	Cert Number	Date Issued Address Display String
Multi-Family Rental Inspection	CR3617-3582	03/26/2019 2420 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3583	03/26/2019 2420 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3584	03/26/2019 2420 ELLSWORTH RD 302
Multi-Family Rental Inspection	CR3617-3586	03/26/2019 2420 ELLSWORTH RD 304
Multi-Family Rental Inspection	CR3617-3587	03/26/2019 2444 ELLSWORTH RD 102
Multi-Family Rental Inspection	CR3617-3588	03/26/2019 2444 ELLSWORTH RD 103
Multi-Family Rental Inspection	CR3617-3589	03/26/2019 2444 ELLSWORTH RD 104
Multi-Family Rental Inspection	CR3617-3590	03/13/2019 2444 ELLSWORTH RD 201
Multi-Family Rental Inspection	CR3617-3591	03/13/2019 2444 ELLSWORTH RD 202
Multi-Family Rental Inspection	CR3617-3594	03/26/2019 2444 ELLSWORTH RD 204
Multi-Family Rental Inspection	CR3617-3593	03/26/2019 2444 ELLSWORTH RD 301
Multi-Family Rental Inspection	CR3617-3595	03/26/2019 2444 ELLSWORTH RD 302
Multi-Family Rental Inspection	CR3617-3597	03/26/2019 2444 ELLSWORTH RD 304
Multi-Family Rental Inspection	CMFR-18-0211	03/01/2019 251 STEVENS DR 203
Multi-Family Rental Inspection	CMFR-18-0093	03/01/2019 261 STEVENS DR 303
Multi-Family Rental Inspection	CMFR-18-0228	03/01/2019 270 STEVENS DR 102
Multi-Family Rental Inspection	CMFR-18-0104	03/01/2019 271 STEVENS DR 303
Multi-Family Rental Inspection	CMFR-18-0117	03/01/2019 291 STEVENS DR 101
Multi-Family Rental Inspection	CMFR-18-0584	03/12/2019 2960 INTERNATIONAL DR BLDG 10
Multi-Family Rental Inspection	CMFR-18-0585	03/12/2019 2960 INTERNATIONAL DR BLDG 11
Multi-Family Rental Inspection	CMFR-18-0587	03/11/2019 2960 INTERNATIONAL DR BLDG 13
Multi-Family Rental Inspection	CMFR-18-0589	03/11/2019 2960 INTERNATIONAL DR BLDG 15
Multi-Family Rental Inspection	CMFR-18-0579	03/20/2019 2960 INTERNATIONAL DR BLDG 5
Multi-Family Rental Inspection	CMFR-18-0137	03/01/2019 301 STEVENS DR 303
Multi-Family Rental Inspection	CMFR-18-0144	03/01/2019 311 STEVENS DR 203
Multi-Family Rental Inspection	CMFR-18-0150	03/01/2019 311 STEVENS DR 304
Multi-Family Rental Inspection	CR3617-3276	03/13/2019 36 S HEWITT RD 102
Multi-Family Rental Inspection	CR3617-3277	03/13/2019 36 S HEWITT RD 103
Multi-Family Rental Inspection	CR3617-3278	03/13/2019 36 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3279	03/13/2019 36 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3280	03/13/2019 36 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3281	03/13/2019 36 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3283	03/26/2019 36 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3284	03/13/2019 36 S HEWITT RD 302
Multi-Family Rental Inspection	CR3617-3285	03/13/2019 36 S HEWITT RD 303
Multi-Family Rental Inspection	CMFR-18-0106	03/01/2019 281 STEVENS DR 101
Multi-Family Rental Inspection	CMFR-18-0111	03/01/2019 281 STEVENS DR 203
Multi-Family Rental Inspection	CMFR-18-0113	03/01/2019 281 STEVENS DR 301
Multi-Family Rental Inspection	CR3617-0587	03/19/2019 760 CAMPBELL AVE #10
Multi-Family Rental Inspection	CR3617-0588	03/19/2019 760 CAMPBELL AVE #11
Multi-Family Rental Inspection	CR3617-0589 CR3617-0586	03/19/2019 760 CAMPBELL AVE #12
Multi-Family Rental Inspection Multi-Family Rental Inspection	CR3617-0586 CR3617-0574	03/19/2019 760 CAMPBELL AVE #9 03/19/2019 787 CAMPBELL AVE #22
Multi-Family Rental Inspection	CR3617-0574	03/19/2019 787 CAMPBELL AVE #22 03/19/2019 790 CAMPBELL AVE #15
Multi-Family Rental Inspection	CR3617-0568	03/19/2019 790 CAMPBELL AVE #15
Multi-Family Rental Inspection	CR3617-0569	03/18/2019 790 CAMPBELL AVE #10
	CU2017-0203	03/10/2013 / 30 CAIVIF DELL AVE #1/

Cert Type	Cert Number	Date Issued A	ddress Display String
Multi-Family Rental Inspection	CR3617-0570		90 CAMPBELL AVE #18
, Multi-Family Rental Inspection	CR3617-0571		90 CAMPBELL AVE #19
Multi-Family Rental Inspection	CR3617-3287		0 S HEWITT RD 101
Multi-Family Rental Inspection	CR3617-3289		0 S HEWITT RD 104
Multi-Family Rental Inspection	CR3617-3290		0 S HEWITT RD 201
Multi-Family Rental Inspection	CR3617-3291		0 S HEWITT RD 202
Multi-Family Rental Inspection	CR3617-3292		0 S HEWITT RD 203
Multi-Family Rental Inspection	CR3617-3293		0 S HEWITT RD 204
Multi-Family Rental Inspection	CR3617-3294		0 S HEWITT RD 301
Multi-Family Rental Inspection	CR3617-3295		0 S HEWITT RD 302
Multi-Family Rental Inspection	CR3617-3296		0 S HEWITT RD 303
Multi-Family Rental Inspection	CR3617-0559		00 CAMPBELL AVE #21
Multi-Family Rental Inspection	CR3617-0564		00 CAMPBELL AVE #26
Multi-Family Rental Inspection	CR3617-0565		00 CAMPBELL AVE #27
Multi-Family Rental Inspection	CR3617-0566		00 CAMPBELL AVE #28
Multi-Family Rental Inspection	CR3617-0552		01 CAMPBELL AVE #26
Multi-Family Rental Inspection	CR3617-0553		01 CAMPBELL AVE #27
Multi-Family Rental Inspection	CR3617-0554		01 CAMPBELL AVE #28
Multi-Family Rental Inspection	CR3617-0555		01 CAMPBELL AVE #29
Multi-Family Rental Inspection	CR3617-0557		01 CAMPBELL AVE #31
Multi-Family Rental Inspection	CR3617-0558		01 CAMPBELL AVE #32
Multi-Family Rental Inspection	CR3617-0743	03/04/2019 83	
Multi-Family Rental Inspection	CR3617-4911		749 E LAUREL BAY DR
Rental 24	CSFR-18-0895		755 KNOWLES ST
Rental 24	CSFR-18-0845		67 E FOREST AVE
Rental 24	CSFR-18-0836		85 CLIFFS DR # 304A
Rental 24	CSFR-18-0848	03/12/2019 90	
Rental 24	CSFR-18-0846	03/12/2019 90	
Rental 24	CSFR-19-0009		5 DEVONSHIRE RD
Rental 24	CSFR-18-0867		649 BAYVIEW DR # 210
Rental 24	CSFR-18-0701	03/11/2019 96	67 N TERRACE LN
Rental 24	CSFR-18-0718	03/19/2019 96	673 HARBOUR COVE CT
Rental 24	CSFR-18-0994	03/25/2019 82	20 EUGENE ST
Rental 24	CSFR-18-0993		97 DORSET AVE
Rental 24	CSFR-18-0861	03/19/2019 79	987 BRIARBROOK DR
Rental 24	CSFR-19-0078	03/29/2019 78	848 TROTTERS PARK ST
Rental 24	CSFR-18-0968		858 ROUNDTREE BLVD
Rental 24	CSFR-18-0840	03/25/2019 42	24 WOODLAWN AVE
Rental 24	CSFR-18-0947	03/14/2019 43	36 WOODLAWN AVE
Rental 24	CSFR-18-0948		75 WOODLAWN AVE
Rental 24	CSFR-18-0985		04 N MOHAWK AVE
Rental 24	CSFR-18-0898		10 N MOHAWK AVE
Rental 24	CSFR-18-0859		14 BROOKSIDE ST
Rental 24	CSFR-19-0010	03/27/2019 52	
Rental 24	CSFR-18-0995		35 CALDER AVE
Rental 24	CSFR-18-0863		496 MICHAEL DR

Cert Type	Cert Number	Date Issued Address Display String
Rental 24	CSFR-18-0762	03/15/2019 555 HUDSON ST
Rental 24	CSFR-18-0576	03/26/2019 5806 CARY DR
Rental 24	CSFR-18-0940	03/14/2019 590 KANSAS AVE
Rental 24	CSFR-19-0015	03/27/2019 592 N HARRIS RD
Rental 24	CSFR-18-0879	03/25/2019 610 KENNEDY AVE
Rental 24	CSFR-18-0919	03/01/2019 6135 BOYNE DR
Rental 24	CSFR-19-0045	03/08/2019 6236 MAPLEVIEW LN
Rental 24	CSFR-18-0896	03/01/2019 6236 S MOHAWK AVE
Rental 24	CSFR-18-0445	03/22/2019 633 NASH AVE
Rental 24	CSFR-18-1001	03/25/2019 671 EUGENE ST
Rental 24	CSFR-18-0532	03/05/2019 709 CALDER AVE
Rental 24	CSFR-19-0102	03/28/2019 715 JEROME AVE
Rental 24	CSFR-18-0479	03/28/2019 7197 ESSEX DR
Rental 24	CSFR-18-0945	03/29/2019 729 N FORD BLVD
Rental 24	CSFR-18-0963	03/05/2019 730 LAMAY AVE
Rental 24	CSFR-18-0707	03/12/2019 323 DAKOTA AVE
Rental 24	CSFR-18-0637	03/11/2019 351 GREENLAWN ST
Rental 24	CSFR-18-0875	03/26/2019 351 S MANSFIELD ST #1
Rental 24	CSFR-18-0874	03/26/2019 351 S MANSFIELD ST #2
Rental 24	CSFR-18-0785	03/11/2019 2754 AMBASSADOR DR
Rental 24	CSFR-19-0013	03/12/2019 276 KANSAS AVE
Rental 24	CSFR-18-0786	03/11/2019 2760 AMBASSADOR DR
Rental 24	CSFR-19-0012	03/12/2019 277 OREGON ST
Rental 24	CSFR-18-0970	03/25/2019 2808 ROUNDTREE BLVD
Rental 24	CSFR-18-0694	03/26/2019 2500 HOLMES RD 402
Rental 24	CSFR-18-0851	03/26/2019 241 DAKOTA AVE
Rental 24	CSFR-18-0876	03/27/2019 242 S WALLACE BLVD
Rental 24	CSFR-18-0658	03/08/2019 2292 WOODALE AVE
Rental 24	CSFR-18-0724	03/12/2019 1811 GEORGE AVE
Rental 24	CSFR-18-0835	03/01/2019 1742 GROVE RD # A-09
Rental 24	CSFR-19-0035	03/19/2019 1744 GROVE RD # A-01
Rental 24	CSFR-18-1005	03/26/2019 1445 BUD AVE
Rental 24	CSFR-18-1004	03/26/2019 1471 BLOSSOM AVE
Rental 24	CSFR-18-0922	03/26/2019 1721 CLIFFS 102 F LNDG
Rental 24	CSFR-18-0739	03/15/2019 1431 WENDELL AVE
Rental 24	CSFR-18-0904	03/12/2019 1329 HOLMES RD
Rental 24	CSFR-18-0955	03/26/2019 1324 GAULT DR
Rental 24	CSFR-19-0028	03/19/2019 1261 CLARITA ST
Rental 24	CSFR-18-0882	03/11/2019 1415 ANDREA ST
Rental 24	CSFR-18-0349	03/25/2019 1310 CANDLEWOOD LN
Rental 24	CSFR-18-0989	03/08/2019 1213 COMMONWEALTH AVE
Rental 24	CSFR-18-0841	03/25/2019 1218 DUNCAN AVE
Rental 24	CSFR-18-0477	03/21/2019 1239 RUE DEAUVILLE BLVD
Rental 24	CSFR-18-0699	03/20/2019 1112 DESOTO AVE
Rental 24	CSFR-19-0064	03/19/2019 1119 GEORGINA DR
Rental 24	CSFR-18-0854	03/27/2019 1131 HAWTHORNE AVE

Cert Type	Cert Number	Date Issued	Address Display String
Rental 24	CSFR-18-0748	03/12/2019	1172 LEXINGTON PKWY
Rental 24	CSFR-18-0665	03/11/2019	1002 NASH AVE
Rental 24	CSFR-18-0986	03/15/2019	1021 NASH AVE
Rental 24	CSFR-18-0928	03/25/2019	1041 E FOREST #2
Rental 24	CSFR-18-0927	03/25/2019	1041 E FOREST #3
Rental 24	CSFR-18-0843	03/07/2019	1073 RUE WILLETTE BLVD
Rental 24	CSFR-18-1000	03/15/2019	1098 BUICK AVE
Rental 24	CSFR-18-0791	03/15/2019	1256 RAMBLING RD

NEW VACANT BLDG CERTIFICATES MARCH 2019

Cert Type	Cert Number	Date Applied	Address Display String
Vacant Residential	CVR-19-0020	03/04/2019	5768 SUNSET TRL
Vacant Residential	CVR-19-0021	03/05/2019	582 ONANDAGA AVE
Vacant Residential	CVR-19-0022	03/07/2019	359 OREGON ST
Vacant Residential	CVR-19-0023	03/07/2019	6122 S IVANHOE AVE
Vacant Residential	CVR-19-0024	03/08/2019	1241 RAMBLING RD
Vacant Residential	CVR-19-0025	03/11/2019	804 CLIFFS DR 205 F
Vacant Residential	CVR-19-0026	03/11/2019	1635 WISMER ST
Vacant Residential	CVR-19-0027	03/11/2019	9822 WOODLAND CT
Vacant Residential	CVR-19-0028	03/11/2019	601 DONS DR
Vacant Residential	CVR-19-0029	03/11/2019	1079 E FOREST AVE
Vacant Residential	CVR-19-0030	03/11/2019	752 OSWEGO AVE
Vacant Residential	CVR-19-0031	03/15/2019	1361 HARRY ST
Vacant Residential	CVR-19-0032	03/20/2019	2259 VALLEY DR
Vacant Residential	CVR-19-0033	03/25/2019	1123 LEXINGTON PKWY

OTHER ORDINANCE CERTIFICATES ISSUED MARCH 2019

Cert Type	Cert Number	Date Issued	Address Display String	Name Occupant
Business Registration	CBR-18-0372	03/06/2019	2223 ELLSWORTH	OFF THE TOP
Business Registration	CBR-19-0005	03/06/2019	908 ECORSE RD	Loyalty Car Care

NEW CODE ENFORCEMENT CASES FILED MARCH 2019

Enforcement Number	Category	Date Filed	Subdivision	Address Display String
EN19-0583	Blight	03/28/2019	APPLERIDGE AREA	2880 APPLERIDGE ST
EN19-0447	Property Maintenance - Motor Vehicle	03/11/2019	BUD/BLOSSOM AREA	1313 BLOSSOM AVE
EN19-0396	Solid Waste	03/01/2019	BUD/BLOSSOM AREA	1353 BLOSSOM AVE
EN19-0446	Blight	03/11/2019	BUD/BLOSSOM AREA	1434 BLOSSOM AVE
EN19-0553	Multiple	03/25/2019	BUD/BLOSSOM AREA	1437 BLOSSOM AVE
EN19-0429	Solid Waste	03/06/2019	BUD/BLOSSOM AREA	1441 BLOSSOM AVE
EN19-0555	Property Maintenance	03/25/2019	BUD/BLOSSOM AREA	1441 BLOSSOM AVE
EN19-0430	Solid Waste	03/06/2019	BUD/BLOSSOM AREA	1477 BLOSSOM AVE
EN19-0439	Property Maintenance	03/07/2019	GAULT VILLAGE AREA	1261 CLARITA ST
EN19-0467	Property Maintenance	03/12/2019	GAULT VILLAGE AREA	1324 GAULT DR
EN19-0478	Property Maintenance	03/14/2019	GAULT VILLAGE AREA	1119 GEORGINA DR
EN19-0516	Property Maintenance	03/21/2019	GAULT VILLAGE AREA	1061 HULL AVE
EN19-0495	Solid Waste	03/18/2019	GAULT VILLAGE AREA	1186 JAY AVE
EN19-0493	Solid Waste	03/18/2019	GAULT VILLAGE AREA	1437 JEFFERY ST
EN19-0513	Property Maintenance	03/20/2019	GAULT VILLAGE AREA	1298 LESTER AVE
EN19-0481	Rental - Unregistered	03/15/2019	GAULT VILLAGE AREA	1460 LEVONA ST
EN19-0494	Property Maintenance - Motor Vehicle	03/18/2019	GAULT VILLAGE AREA	1211 SHARE AVE
EN19-0443	Property Maintenance	03/08/2019	HEWITT ROAD AREA	2452 CARRIAGE WAY
EN19-0435	Solid Waste	03/07/2019	HEWITT ROAD AREA	24 EDISON AVE
EN19-0434	Solid Waste	03/07/2019	HEWITT ROAD AREA	210 GREENSIDE ST
EN19-0527	Solid Waste	03/21/2019	HEWITT ROAD AREA	1976 HARDING AVE
EN19-0529	Solid Waste	03/21/2019	HEWITT ROAD AREA	1983 HARDING AVE
EN19-0526	Solid Waste	03/21/2019	HEWITT ROAD AREA	1984 HARDING AVE
EN19-0586	Multiple	03/29/2019	HEWITT ROAD AREA	211 N HEWITT RD
EN19-0464	Solid Waste	03/12/2019	HEWITT ROAD AREA	272 N HEWITT RD
EN19-0432	Property Maintenance	03/06/2019	HOLMES ROAD AREA	1213 COMMONWEALTH AVE
EN19-0405	Zoning	03/04/2019	HOLMES ROAD AREA	1519 HOLMES RD
EN19-0564	Solid Waste	03/26/2019	HOLMES ROAD AREA	942 HUNTER AVE
EN19-0458	Solid Waste	03/11/2019	HOLMES ROAD AREA	1045 HUNTER AVE
EN19-0471	Property Maintenance	03/14/2019	HOLMES ROAD AREA	1225 HUNTER AVE
EN19-0556	Property Maintenance	03/25/2019	HOLMES ROAD AREA	1123 LEXINGTON PKWY
EN19-0437	Property Maintenance - Motor Vehicle	03/07/2019	HOLMES ROAD AREA	1172 LEXINGTON PKWY
EN19-0506	Solid Waste	03/20/2019	HOLMES ROAD AREA	1220 PAGEANT AVE
EN19-0440	Property Maintenance - Motor Vehicle	03/08/2019	HOLMES ROAD AREA	909 N PROSPECT RD

Enforcement Number	Category	Date Filed	Subdivision	Address Display String
EN19-0491	Solid Waste	03/18/2019	HOLMES ROAD AREA	1192 RAMBLING RD
EN19-0479	Property Maintenance	03/14/2019	HOLMES ROAD AREA	964 RUE WILLETTE BLVD
EN19-0563	Solid Waste	03/26/2019	HOLMES ROAD AREA	1140 WENDELL AVE
EN19-0468	Blight	03/13/2019	LAKEVIEW AREA	2625 AMBASSADOR DR
EN19-0504	Property Maintenance	03/20/2019	LAKEVIEW AREA	2625 AMBASSADOR DR
EN19-0459	Property Maintenance	03/11/2019	LAKEVIEW AREA	2071 WOODALE AVE
EN19-0461	Property Maintenance - Motor Vehicle	03/11/2019	LAKEVIEW AREA	2071 WOODALE AVE
EN19-0575	Solid Waste	03/27/2019	LAKEVIEW AREA	2318 WOODALE AVE
EN19-0521	Rental - Unregistered	03/21/2019	LAY GARDENS AREA	520 BROWNING ST
EN19-0523	Multiple	03/21/2019	LAY GARDENS AREA	530 BROWNING ST
EN19-0571	Multiple	03/26/2019	LAY GARDENS AREA	658 CAMPBELL AVE
EN19-0554	Property Maintenance	03/25/2019	LAY GARDENS AREA	720 N FORD BLVD
EN19-0499	Solid Waste	03/19/2019	LAY GARDENS AREA	729 N FORD BLVD
EN19-0573	Vacant Residential House Investigation	03/27/2019	LAY GARDENS AREA	796 N FORD BLVD
EN19-0510	Multiple	03/20/2019	LAY GARDENS AREA	1396 E FOREST AVE
EN19-0419	Property Maintenance - Motor Vehicle	03/05/2019	LAY GARDENS AREA	1670 E FOREST AVE
EN19-0568	Solid Waste	03/26/2019	LAY GARDENS AREA	414 E GRAND BLVD
EN19-0514	Solid Waste	03/21/2019	LAY GARDENS AREA	534 E GRAND BLVD
EN19-0517	Solid Waste	03/21/2019	LAY GARDENS AREA	802 E GRAND BLVD
EN19-0560	Solid Waste	03/26/2019	LAY GARDENS AREA	802 E GRAND BLVD
EN19-0569	Solid Waste	03/26/2019	LAY GARDENS AREA	890 E GRAND BLVD
EN19-0457		03/11/2019	LAY GARDENS AREA	785 N HARRIS RD 2
EN19-0584	Blight	03/28/2019	LAY GARDENS AREA	554 HOLLIS AVE
EN19-0401	Solid Waste	03/04/2019	LAY GARDENS AREA	555 HOLLIS AVE
EN19-0524	Property Maintenance	03/21/2019	LAY GARDENS AREA	940 HOLMES
EN19-0433	Solid Waste	03/06/2019	LAY GARDENS AREA	544 HUNT PL
EN19-0579	Property Maintenance	03/28/2019	LAY GARDENS AREA	57 JEROME AVE
EN19-0404	Property Maintenance	03/04/2019	LAY GARDENS AREA	665 N MIAMI AVE
EN19-0547	Zoning	03/25/2019	LAY GARDENS AREA	1395 E MICHIGAN AVE
EN19-0520	Property Maintenance	03/21/2019	OAKLAWN/HAWTHORNE AREA	1360 CRESTWOOD AVE
EN19-0570	Property Maintenance	03/26/2019	OAKLAWN/HAWTHORNE AREA	1352 DAVIS ST
EN19-0502	Property Maintenance - Motor Vehicle	03/19/2019	OAKLAWN/HAWTHORNE AREA	1184 DUNCAN AVE
EN19-0550	Property Maintenance - Motor Vehicle	03/25/2019	OAKLAWN/HAWTHORNE AREA	1184 DUNCAN AVE
EN19-0480	Property Maintenance	03/15/2019	OAKLAWN/HAWTHORNE AREA	161 ECORSE RD
EN19-0519	Parking	03/21/2019	OAKLAWN/HAWTHORNE AREA	568 GLENWOOD AVE
EN19-0507	Parking	03/20/2019	OAKLAWN/HAWTHORNE AREA	599 GLENWOOD AVE
EN19-0508	Parking	03/20/2019	OAKLAWN/HAWTHORNE AREA	631 GLENWOOD AVE

Enforcement Number	Category	Date Filed	Subdivision	Address Display String
EN19-0484	Rental - Unregistered	03/15/2019	OAKLAWN/HAWTHORNE AREA	436 HAYES ST
EN19-0505	Solid Waste	03/20/2019	OAKLAWN/HAWTHORNE AREA	648 HAYES ST
EN19-0476	Blight	03/14/2019	OAKLAWN/HAWTHORNE AREA	580 KENNEDY AVE
EN19-0552	Solid Waste	03/25/2019	OAKLAWN/HAWTHORNE AREA	1019 MAPLEWOOD AVE
EN19-0422	Property Maintenance	03/05/2019	OAKLAWN/HAWTHORNE AREA	475 WOODLAWN AVE
EN19-0400	Solid Waste	03/04/2019	PINEVIEW AREA	5445 PINEVIEW DR
EN19-0472	Rental - Unregistered	03/14/2019	SHERMAN OAKS AREA	1371 SKYWAY DR
EN19-0448	Blight	03/11/2019	SOUTH DISTRICT	5620 BIG PINE DR
EN19-0486	Property Maintenance	03/18/2019	SOUTH DISTRICT	6202 CHERRYWOOD DR
EN19-0576	Property Maintenance	03/27/2019	SOUTH DISTRICT	7826 DOVER DR
EN19-0577	Property Maintenance	03/27/2019	SOUTH DISTRICT	7826 DOVER DR
EN19-0431	Solid Waste	03/06/2019	SOUTH DISTRICT	6114 EAGLE TRACE DR
EN19-0482	Rental - Unregistered	03/15/2019	SOUTH DISTRICT	6114 EAGLE TRACE DR
EN19-0533	Blight	03/22/2019	SOUTH DISTRICT	5867 HITCHINGHAM RD
EN19-0534	Blight	03/22/2019	SOUTH DISTRICT	5905 HITCHINGHAM RD
EN19-0545	Assist General	03/25/2019	SOUTH DISTRICT	7200 S HURON RIVER DR
EN19-0475	Solid Waste	03/14/2019	SOUTH DISTRICT	5605 JUSTIN CT
EN19-0465	Drainage Complaints	03/12/2019	SOUTH DISTRICT	9635 LANDSDOWNE LN
EN19-0542	Solid Waste	03/22/2019	SOUTH DISTRICT	7039 MISSION HILLS DR
EN19-0541	Solid Waste	03/22/2019	SOUTH DISTRICT	7123 MISSION HILLS DR
EN19-0559	Property Maintenance	03/26/2019	SOUTH DISTRICT	6939 MUNGER RD
EN19-0466	Solid Waste	03/12/2019	SOUTH DISTRICT	5765 NEW MEADOW DR
EN19-0587	Zoning	03/29/2019	SOUTH DISTRICT	5792 NEW MEADOW DR
EN19-0470	Solid Waste	03/13/2019	SOUTH DISTRICT	5805 NEW MEADOW DR
EN19-0544	Property Maintenance	03/25/2019	SOUTH DISTRICT	9005 PARKLAND DR
EN19-0522	Assist Other Agency	03/21/2019	SOUTH DISTRICT	6934 POPLAR DR
EN19-0423	Assist Attorney	03/06/2019	SOUTH DISTRICT	6480 RAWSONVILLE RD
EN19-0488	Property Maintenance	03/18/2019	SOUTH DISTRICT	7342 SEA MIST DR
EN19-0535	Drainage Complaints	03/22/2019	SOUTH DISTRICT	6636 E SUMMERDALE CIR
EN19-0407	Vacant Residential House Investigation	03/04/2019	SOUTH DISTRICT	5768 SUNSET TRL
EN19-0512	Multiple	03/20/2019	SOUTH DISTRICT	6869 TEXTILE RD
EN19-0414	Property Maintenance	03/04/2019	SOUTH DISTRICT	6917 TEXTILE RD
EN19-0561	Property Maintenance	03/26/2019	SOUTH DISTRICT	9749 TEXTILE RD
EN19-0580	Property Maintenance	03/28/2019	SOUTH DISTRICT	1816 WHITTAKER RD BLDG A
EN19-0424	Blight	03/06/2019	SOUTH DISTRICT	6010 WHITTAKER RD
EN19-0503	Zoning	03/20/2019	SOUTH DISTRICT	2010 WHITTAKER (KROGER)
EN19-0582	Zoning	03/28/2019	STEVENS PARK AREA	170 ELDER ST

Enforcement Number	Category	Date Filed	Subdivision	Address Display String
EN19-0509	Blight	03/20/2019	STEVENS PARK AREA	393 ELDER ST
EN19-0492	Solid Waste	03/18/2019	SUGARBROOK AREA	1322 ANDREA ST
EN19-0438	Blight	03/07/2019	SUGARBROOK AREA	1392 ANDREA ST
EN19-0538	Solid Waste	03/22/2019	SUGARBROOK AREA	1550 ANDREA ST
EN19-0500	Vacant Residential House Investigation	03/19/2019	SUGARBROOK AREA	1594 ANDREA ST
EN19-0497	Solid Waste	03/18/2019	SUGARBROOK AREA	1440 FOLEY AVE
EN19-0511	Blight	03/20/2019	SUGARBROOK AREA	1440 FOLEY AVE
EN19-0496	Property Maintenance	03/18/2019	SUGARBROOK AREA	1500 FOLEY AVE
EN19-0567	Zoning	03/26/2019	SUGARBROOK AREA	1745 HEATHERRIDGE ST
EN19-0540	Solid Waste	03/22/2019	SUGARBROOK AREA	1610 PHYLLIS ST
EN19-0581	Property Maintenance	03/28/2019	THURSTON AREA	231 DAKOTA AVE
EN19-0574	Vegetation	03/27/2019	THURSTON AREA	93 DEVONSHIRE RD
EN19-0483	Rental - Unregistered	03/15/2019	THURSTON AREA	265 DEVONSHIRE RD
EN19-0501	Multiple	03/19/2019	THURSTON AREA	205 S HARRIS RD
EN19-0490	Property Maintenance	03/18/2019	THURSTON AREA	219 KANSAS AVE
EN19-0498	Property Maintenance	03/19/2019	THURSTON AREA	37 OHIO ST
EN19-0539	Solid Waste	03/22/2019	THURSTON AREA	295 OHIO ST
EN19-0489	Property Maintenance	03/18/2019	THURSTON AREA	285 OREGON ST
EN19-0394	Property Maintenance	03/01/2019	WEST WILLOW	1965 CHEVROLET AVE
EN19-0395	Property Maintenance - Motor Vehicle	03/01/2019	WEST WILLOW	1969 CHEVROLET AVE
EN19-0530	Zoning	03/22/2019	WEST WILLOW	1969 CHEVROLET AVE
EN19-0485	Multiple	03/18/2019	West Willow	2140 CHEVROLET AVE
EN19-0537	Property Maintenance	03/22/2019	WEST WILLOW	820 DESOTO AVE
EN19-0420	Property Maintenance	03/05/2019	West Willow	1441 DESOTO AVE
EN19-0456	Blight	03/11/2019	West Willow	569 EUGENE ST
EN19-0403	Solid Waste	03/04/2019	WEST WILLOW	810 FOX AVE
EN19-0402	Solid Waste	03/04/2019	WEST WILLOW	839 FOX AVE
EN19-0558	Property Maintenance - Motor Vehicle	03/26/2019	WEST WILLOW	1439 GLENGROVE AVE
EN19-0566	Solid Waste	03/26/2019	WEST WILLOW	1966 MARY CATHERINE ST
EN19-0578	Solid Waste	03/28/2019	WEST WILLOW	1002 NASH AVE
EN19-0473	Blight	03/14/2019	WEST WILLOW	1115 NASH AVE
EN19-0515	Property Maintenance	03/21/2019	WEST WILLOW	1115 NASH AVE
EN19-0518	Property Maintenance	03/21/2019	WEST WILLOW	1137 NASH AVE
EN19-0474	Blight	03/14/2019	WEST WILLOW	1151 NASH AVE
EN19-0451	Parking	03/11/2019	WEST WILLOW	633 ONANDAGA AVE
EN19-0551	Solid Waste	03/25/2019	WEST WILLOW	743 OSWEGO AVE
EN19-0449	Multiple	03/11/2019	WEST WILLOW	1536 S PASADENA ST

Enforcement Number	Category	Date Filed	Subdivision	Address Display String
EN19-0454	Multiple	03/11/2019	WEST WILLOW	1563 S PASADENA ST
EN19-0450	Parking	03/11/2019	WEST WILLOW	1599 S PASADENA ST
EN19-0452	Multiple	03/11/2019	WEST WILLOW	1616 S PASADENA ST
EN19-0455	Multiple	03/11/2019	WEST WILLOW	1636 S PASADENA ST
EN19-0453	Multiple	03/11/2019	WEST WILLOW	1679 S PASADENA ST
EN19-0406	Blight	03/04/2019	WEST WILLOW	1068 STUDEBAKER AVE
EN19-0565	Property Maintenance	03/26/2019	WEST WILLOW	1824 TYLER RD
EN19-0460	Solid Waste	03/11/2019	WEST WILLOW	1834 TYLER RD
EN19-0463	Blight	03/11/2019	WEST WILLOW	1834 TYLER RD
EN19-0585	Property Maintenance	03/29/2019	WEST WILLOW	1955 TYLER RD
EN19-0445	Blight	03/08/2019	WEST WILLOW	1053 WOODGLEN AVE
EN19-0441	Solid Waste	03/08/2019	WEST WILLOW	1173 ZEPHYR ST
EN19-0444	Property Maintenance	03/08/2019	WESTLAWN AREA	2700 EASTLAWN AVE
EN19-0398	Stop Work Order	03/04/2019	WESTLAWN AREA	2490 PACKARD RD
EN19-0462	Property Maintenance	03/11/2019	WESTLAWN AREA	2771 SOUTHLAWN ST
EN19-0528	Property Maintenance	03/21/2019	WESTLAWN AREA	3127 SOUTHLAWN ST
EN19-0469	Rental - Unregistered	03/13/2019		936 ECORSE RD
EN19-0477	Blight	03/14/2019		979 ECORSE RD
EN19-0572	Property Maintenance	03/27/2019		1451 ECORSE RD
EN19-0417	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 102
EN19-0413	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 103
EN19-0416	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 201
EN19-0412	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 202
EN19-0410	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 203
EN19-0408	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 204
EN19-0411	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 301
EN19-0409	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 302
EN19-0415	Property Maintenance	03/04/2019		2420 ELLSWORTH RD 304
EN19-0442	Property Maintenance	03/07/2019		130 S HEWITT RD 201
EN19-0397	Property Maintenance	03/01/2019		214 S HEWITT RD OFFICE
EN19-0418	Property Maintenance	03/05/2019		214 S HEWITT RD OFFICE
EN19-0436	Property Maintenance	03/06/2019		214 S HEWITT RD OFFICE
EN19-0425	Property Maintenance	03/06/2019		222 S HEWITT RD 201
EN19-0426	Property Maintenance	03/06/2019		222 S HEWITT RD 202
EN19-0427	Property Maintenance	03/06/2019		222 S HEWITT RD 203
EN19-0421	Property Maintenance	03/05/2019		222 S HEWITT RD 303
EN19-0428	Property Maintenance	03/06/2019		222 S HEWITT RD 304

Enforcement Number	Category	Date Filed Subdivision	Address Display String
EN19-0525	Property Maintenance	03/21/2019	2500 HOLMES RD OFFICE BLD
EN19-0531	Property Maintenance	03/22/2019	1571 HOLMES
EN19-0549	Zoning	03/25/2019	8 JUNE ST
EN19-0562	Zoning	03/26/2019	2011 MCCARTNEY AVE
EN19-0399	Zoning	03/04/2019	1095 E MICHIGAN AVE
EN19-0532	Graffiti	03/22/2019	1415 E MICHIGAN AVE
EN19-0557	Multiple	03/26/2019	3375 E MICHIGAN 212
EN19-0546	Zoning	03/25/2019	2190 W MICHIGAN AVE
EN19-0548	Assist General	03/25/2019	2190 W MICHIGAN AVE
EN19-0543	Property Maintenance	03/25/2019	840 MINION ST
EN19-0588	Property Maintenance	03/29/2019	405 VILLA DR
EN19-0536	Zoning	03/22/2019	2407 WASHTENAW RD
EN19-0487	Property Maintenance	03/18/2019	3020 WASHTENAW RD

<u>YPSILANTI TOWNSHIP FIRE DEPARTMENT</u> <u>MONTHLY REPORT</u>

FEBRUARY 2019

Fire Department staffing levels are as follows:

1 Fire Chief 1 Fire Marshal 3 Shift Captains 3 Shift Lieutenants 19 Fire Fighters 1 Clerk III / Staff Support

All fire department response personnel are licensed as Emergency Medical Technicians by the State of Michigan Public Health. During the month, the fire department responded to 328 requests for assistance. Of those requests, 189 were medical emergency service calls, with the remaining 139 incidents classified as non-medical and/or fire related.

Department activities for the month of February, 2019:

- 1) The Public Education Department participated in the following events:
 - a) Smoke Alarms: 1955 Emerson (2)
 - b) Car Seat fittings for U of M Buckle Up program
- 2) Fire fighters attended 10 neighborhood watch meetings
- 3) Fire fighters received training in the following areas:
 - a) Washtenaw County Tech Rescue Team
 - b) Washtenaw County HazMat
 - c) Elevators

The Fire Marshal had these activities / events for the month of February, 2019:

- 1) Fire Investigations: 1
- 2) Suppression Inspections: 4
- 3) Site Inspections: 1
- 4) Liquor Inspections: 14
- 5) Liquor Re-Inspections: 4
- 6) Meetings: 4
- 7) Classes: 2

Monthly Report – February 2019 Page 2

The Fire Chief attended these meetings / events for the month of February, 2019:

- 1) Chippewa Hills meeting Fire Lane
- 2) 6106 McKean Site Plan Review
- 3) HGHC meeting
- 4) Negotiation prep meetings: 2
- 5) New Truck Specifications meeting with Zahnen
- 6) Photographer meeting Updated firefighter photos
- 7) Image Trend Report Writer conference call
- 8) Pipeline Safety training

There was 0 injuries and 0 deaths reported this month for civilians.

There was 0 injuries and 0 deaths reported this month for fire fighters.

This month the total fire loss, including vehicle fires, is estimated at *\$53,212.00.* All occurred at the following locations:

DATE OF LOSS	ADDRESS	ES	TIMATED LOSS
 1) 02/02/2019 2) 02/09/2019 3) 02/09/2019 4) 02/18/2019 5) 02/19/2019 6) 02/22/2019 7) 02/24/2019 	8633 Spinnaker Way 8775 Spinnaker Way #C4 777 Dodge Court 1514 Devon 1510 Gattegno 74 Riley Court 2272 S Grove #613	\$ \$ \$ \$ \$ \$ \$	0.00 (trash) 7,500.00 (building) 28,000.00 (building) 12.00 (cooking) 5,200.00 (vehicle) 500.00 (building) 0.00 (cooking)
8) 02/27/2019	180 Stevens Drive	\$	12,000.00 (cooking)

Respectfully submitted,

Rhonda Bates, Clerical Support Staff Charter Township of Ypsilanti Fire Department

Attachment: Image Trend Incident Type Report (Summary): 02/01/2019 - 02/28/2019

Elite wamaa

Ypsilanti Township - Incident Type Report (Summary)

Basic Incident Type Code And Description (FD1.21)	Total Incidents	Total Incidents Percent of Incidents	Total Property Loss	Total Content Loss	Total Loss	Total Loss Percent of Total
Incident Type Category (FD1.21): 1 - Fi	re					
100 - Fire, other	1	0.30%				
111 - Building fire	4	1.22%	35000.00	13000.00	48000.00	90.21%
113 - Cooking fire, confined to container	2	0.61%		12.00	12.00	0.02%
115 - Incinerator overload or malfunction, fire confined	1	0.30%				
118 - Trash or rubbish fire, contained	1	0.30%	0.00	0.00	0.00	0.00%
123 - Fire in portable building, fixed location	1	0.30%				
131 - Passenger vehicle fire	1	0.30%	5000.00	200.00	5200.00	9.77%
	Total: 11	Total: 3.35%	Total: 40000.00	Total: 13212.00	Total: 53212.00	Total: 100.00%
ncident Type Category (FD1.21): 3 - Re	escue & Eme	ergency Medical Service Incid	lent			
300 - Rescue, EMS incident, other	3	0.91%				
311 - Medical assist, assist EMS crew	4	1.22%				
320 - Emergency medical service, other	5	1.52%				
321 - EMS call, excluding vehicle accident with injury	161	49.09%				
322 - Motor vehicle accident with injuries	3	0.91%				
323 - Motor vehicle/pedestrian accident (MV Ped)	3	0.91%				
324 - Motor vehicle accident with no injuries.	8	2.44%				
331 - Lock-in (if lock out , use 511)	1	0.30%				
362 - Ice rescue	1	0.30%				
	Total: 189	Total: 57.62%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%
ncident Type Category (FD1.21): 4 - Ha	zardous Cor	ndition (No Fire)				
424 - Carbon monoxide incident	3	0.91%				
440 - Electrical wiring/equipment problem, other	4	1.22%				
441 - Heat from short circuit (wiring), defective/worn	1	0.30%				
442 - Overheated motor	1	0.30%				
444 - Power line down	5	1.52%				
445 - Arcing, shorted electrical equipment	2	0.61%				
	Total: 16	Total: 4.88%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%
Incident Type Category (FD1.21): 5 - Se	rvice Call					
500 - Service call, other	2	0.61%				
510 - Person in distress, other	1	0.30%				
511 - Lock-out	1	0.30%				
522 - Water or steam leak	7	2.13%				
531 - Smoke or odor removal	1	0.30%				
550 - Public service assistance, other	1	0.30%				
551 - Assist police or other governmental agency	5	1.52%				
553 - Public service	1	0.30%				
561 - Unauthorized burning	1	0.30%				
	Total: 20	Total: 6.10%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%
Incident Type Category (FD1.21): 6 - Go	ood Intent Ca	III				
611 - Dispatched and cancelled en route	68	20.73%				
621 - Wrong location	1	0.30%				
650 - Steam, other gas mistaken for smoke, other	1	0.30%				
651 - Smoke scare, odor of smoke	1	0.30%				
	Total: 71	Total: 21.65%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%

Basic Incident Type Code And Description (FD1.21)	Total Incidents	Total Incidents Percent of Incidents	Total Property Loss	Total Content Loss	Total Loss	Total Loss Percent of Total
Incident Type Category (FD1.21): 7 - Fa	Ise Alarm &	False Call				
700 - False alarm or false call, other	11	3.35%				
733 - Smoke detector activation due to malfunction	3	0.91%				
735 - Alarm system sounded due to malfunction	1	0.30%				
743 - Smoke detector activation, no fire - unintentional	3	0.91%				
745 - Alarm system activation, no fire - unintentional	1	0.30%				
746 - Carbon monoxide detector activation, no CO	1	0.30%				
	Total: 20	Total: 6.10%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%
Incident Type Category (FD1.21): 9 - Sp	pecial Incider	nt Type				
911 - Citizen complaint	1	0.30%				
	Total: 1	Total: 0.30%	Total: 0.00	Total: 0.00	Total: 0.00	Total: 0.00%
	Total: 328	Total: 100.00%	Total: 40000.00	Total: 13212.00	Total: 53212.00	Total: 100.00%

Supervisor BRENDA L. STUMBO Clerk KAREN LOVEJOY ROE Treasurer LARRY J. DOE Trustees STAN ELDRIDGE HEATHER ROE MONICA ROSS-WILLIAMS JIMMIE WILSON, JR.



Charter Township of Ypsilanti Hydro Station

7200 S. Huron River Drive Ypsilanti, MI 48197 Phone: (734) 544.3690 Fax: (734) 544.3626

www.ytown.org

Date:April 8, 2019To:Clerk's OfficeCC:Brenda Stumbo, SupervisorFrom:Michael Saranen, Hydro Operation Manager

Subject: Departmental Report (activities in March 2019)

Activities:

Ford Lake Dam

General Operation Summary:

The Hydro Station continues to operate safely and continues to get routine safety inspections and preventive maintenance. Operators had 4 after hour call-ins for February. DTE required the Hydro to discontinue generation from 3/18 to 4/2 so DTE & ITC could perform maintenance at Dayton Substation. Generation lost during March equaled an estimated 720.1 MWh and was directly related to DTE/ITC activities. DTE has agreed to adjust the annual generation calculation so the power contract is not affected.

Average precipitation for the month of March is around 2.4", this year it was about 2.1" and production for the month below average due to DTE.

The Department hired 2 new station operators, they are receiving training in operations and maintenance practices.

Regulatory:

For 2019-

- update DSSMP (waiting on Spillway Assessment)
- DSSMR, Filed
- Owners Dam Safety Program Review
- EAP Functional Exercise planning phase
- EAP annual update and test
- EAP Training
- Part 12- recommendation plan (waiting on Spillway Assessment)
- WQ Report
- Nuisance Plant Plan Report
- Wildlife Plan Report
- Historical Activity Report
- Gate Certification
- Security Review
- FERC Annual Safety inspection
- Spillway Assessment (Barr Engineering assisting)
- Annual DEQ lake Operation Monitoring Report

Projects:

Concrete Maintenance (On Hold until 2019)

Repair small areas concrete damaged from exposure to ice and road salt. Repair exterior stairs and hand railing.

River Coordination

Van Buren Twp. and French Landing Dam are considering lowering Belleville Lake in the fall of 2019. It will be important to look at the possible effects to the Hydro Station and the operations if Belleville Lake is to be lowered. VBT held a public meeting on 2/28 to discuss permitting process and activities long and shoreline that require permits. No date has been set as of yet. A feasibility study is currently be done to determine impacts of a drawdown. There is a chance the study may conclude a drawdown is not desirable.

Operation Summary

2019	March	YTD	5 Year Ave.
Precipitation total (inches) ¹	2.12	6.18	30.2
Days Online	17.2	76.2	357.1
Gross Generation MWH (estimated)	709.063	2,843.829	9,530.5
Generation MWH lost (estimated)*	720.102	720.102	422.9
After Hour Call In			
Water levels	4	9	32.4
Mechanical/Electrical	0	2	4.0
Other	0	0	4.2
Totals	4	11	41.0

Recent History	2014	2015	2016	2017	2018
Precipitation total (inches)	34.3	25.3	29.6	27.3	34.6
Days Online	355.0	345.0	359.5	362.0	364.2
Gross Generation MWH (estimated)	9,746.0	7,723.0	8,803.4	10,744.9	10,635.0
Generation MWH lost (estimated)*	643.2	419.1	229.8	269.6	552.9
After Hour Call In					
Water levels	43	32	31	26	30
Mechanical/Electrical	7	1	4	5	3
Other	15	1	2	3	0
Totals	67	34	37	34	33

¹ Preliminary totals from National Weather Service

*losses related to scheduled & unscheduled maintenance and water quality discharges.

Gate Spilling Summary:

Releasing water from the sluice gates is primary to maintain lake level when flow exceeds the powerhouse. At certain times, we can use the gates to help keep the lake mixing to maintain oxygen levels (effectiveness depends on a number of factors) at the bottom of the lake.

The water quality monitoring begins on June 1st and will end on September 30th; operators monitor the water quality conditions and take readings as outline in the WQ Plan. The hydro discharges from the bottom gates to maintain run of river and/or help with water quality in Ford Lake. The Federal License requires we pass water with a minimum of 5mg/l of dissolved oxygen all the time. Therefore, spilling from the bottom gates in the summer for improving the lake is not always possible.

Sluice Gate Usage Summary:				
Current Year	Current Year	Current Year	Current Year	Prior
Year				
2019	Days	Lost	Lost	Lost
	Spilled	KWh*	\$*	\$*
January	.4	0	0	0
February	2.3	0	0	0
March	18.5	0	0	0
April				0
May				0
June				6,466
July				3,461
August				0
September				0
October				0
November				0
December				0
Totals	21.2	0	\$ O	\$ 9,927

Sluice Gate Usage Summary:

*estimated losses from diverting water away from generators for the purpose improving WQ.

Sargent Charles Dam

This dam continues to get routine safety inspections and appropriate maintenance.

The Sargent Charles Dam received a 5 year inspection conducted by the State of Michigan. A formal report was received, the report list items to continue doing and new items to address. The department is working on addressing those items.



WASHTENAW COUNTY Office of the Sheriff



JERRY L. CLAYTON SHERIFF 2201 Hogback Road
Ann Arbor, Michigan 48105-9732
OFFICE (734) 971-8400
FAX (734) 973-4624
EMAIL sheriff@ewashtenaw.org

MARK A. PTASZEK UNDERSHERIFF

YPSILANTI TWP MONTHLY POLICE SERVICES MEETING MARCH 2019

2019 T	raffic Stops (YTD)	2018 Traffic Stops (YTD)	Percentage Change
YTD	2220	2506	11% Decrease
MONTH	1029	1037	No Change

2019	Citations (YTD)	2018 Citations (YTD)	Percentage Change
YTD	1209	1425	15% Decrease
MONTH	544	623	14.5% Decrease

2019	Drunk Driving (YTD)	2018 Drunk Driving (YTD)	Percentage Change
YTD	54	56	3.5% Decrease
MONTH	20	25	20% Decrease

	2019 (YTD)	2018 (YTD)	Percentage Change
Calls for Service (YTD)	9104	9868	7.7% Decrease
Robbery's (YTD)	8	7	14% Increase
Assaultive Crimes (YTD)	75	69	8.5% Increase
Assaultive Crimes-DV (YTD)	91	125	27% Decrease
Homes Invasions (YTD)	23	31	25.5% Decrease
Breaking and Entering (YTD)	6	11	45% Decrease
Larceny's (YTD)	58	48	20.5% Increase
Larceny From Auto	61	26	134.5% Increase
Vehicle Theft (YTD)	23	23	No Change
Traffic Crashes (YTD)	274	334	18% Decrease
Medical Assist CFS	156	160	2.5% Decrease

Animal Control Updates: (Year to date)

CALL FOR SERVICE	2019	2018	Change
Ypsilanti Twp	160	142	12.5% Increase

CEMIS	LEAR
Month:	March
Year:	2019
Print Option:	Print Both Monthly and YTD
Include Unfounded:	No
Report Offenses:	Include All (1,2,3,4)
Attempted/Completed/NA:	Includes Attempted, Completed
City:	Ypsilanti Twp-YPT

For The Month Of March

	Classification	Mar/2018	Mar/2019	%Change
09001	MURDER/NONNEGLIGENT MANSLAUGHTER (VOLUNTARY)	0	0	0%
09002	NEGLIGENT HOMICIDE/MANSLAUGHTER (INVOLUNTARY)	1	0	-100%
10001	KIDNAPPING/ABDUCTION	0	0	0%
11001	SEXUAL PENETRATION PENIS/VAGINA -CSC IST DEGREE	1	3	200%
11002	SEXUAL PENETRATION PENIS/VAGINA -CSC 3RD DEGREE	2	1	-50%
11003	SEXUAL PENETRATION ORAL/ANAL -CSC IST DEGREE	0	1	0%
11004	SEXUAL PENETRATION ORAL/ANAL -CSC 3RD DEGREE	0	0	0%
11007	SEXUAL CONTACT FORCIBLE -CSC 2ND DEGREE	1	2	100%
11008	SEXUAL CONTACT FORCIBLE -CSC 4TH DEGREE	1	1	0%
12000	ROBBERY	1	3	200%
13001	NONAGGRAVATED ASSAULT	49	31	-36.7%
13002	AGGRAVATED/FELONIOUS ASSAULT	17	16	-5.88%
13003	INTIMIDATION/STALKING	4	6	50%
20000	ARSON	0	0	0%
21000	EXTORTION	0	1	0%
22001	BURGLARY -FORCED ENTRY	14	6	-57.1%
22002	BURGLARY -ENTRY WITHOUT FORCE (Intent to Commit)	3	0	-100%
23003	LARCENY -THEFT FROM BUILDING	12	13	8.333%
23004	LARCENY -THEFT FROM COIN-OPERATED MACHINE/DEVICE	0	10	0%
23005	LARCENY -THEFT FROM MOTOR VEHICLE	8	22	175%
23006	LARCENY -THEFT OF MOTOR VEHICLE PARTS/ACCESSORIES	2	6	200%
23007	LARCENY -OTHER	8	7	-12.5%
24001	MOTOR VEHICLE THEFT	8	6	-25%
24002	MOTOR VEHICLE, AS STOLEN PROPERTY	1	1	0%
25000	FORGERY/COUNTERFEITING	1	1	0%
26001	FRAUD -FALSE PRETENSE/SWINDLE/CONFIDENCE GAME	7	9	28.57%
26002	FRAUD -CREDIT CARD/AUTOMATIC TELLER MACHINE	7	3	-57.1%
26005	FRAUD -WIRE FRAUD	1	0	-100%
26007	FRAUD - IDENTITY THEFT	12	6	-50%
27000	EMBEZZLEMENT	0	2	0%
28000	STOLEN PROPERTY	1	1	0%
29000	DAMAGE TO PROPERTY	19	19	0%
30001	RETAIL FRAUD -MISREPRESENTATION	1	0	-100%
30002	RETAIL FRAUD -THEFT	8	4	-50%
30003	RETAIL FRAUD -REFUND/EXCHANGE	0	0	0%
35001	VIOLATION OF CONTROLLED SUBSTANCE ACT	16	10	-37.5%
35002	NARCOTIC EQUIPMENT VIOLATIONS	7	3	-57.1%
52001	WEAPONS OFFENSE- CONCEALED	0	1	0%
52003	WEAPONS OFFENSE -OTHER	0	4	0%
72000	ANIMAL CRUELTY	0	0	0%
	Group A Totals	213	199	-6.57%
22003	BURGLARY - UNLAWFUL ENTRY (NO INTENT)	1	2	100%
26006	FRAUD -BAD CHECKS	1	0	-100%

For The Month Of March

4100NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS010%4200PARKING CITATIONS85-37.5%4300LICENSE / TITLE / REGISTRATION CITATIONS020%4500MISCELLANEOUS A THROUGH UUUU8912.5%4900TRAFFIC WARNINGS010%4900TRAFFIC WARNINGS010%5100ISA STATE CODE FIRE CLASSIFICATIONS000%5100ISA STATE CODE FIRE CLASSIFICATIONS000%6000MISCELLANEOUS ACTIVITIES (6000)455113.33%6100MISCELLANEOUS ACTIVITIES (6100)128124-3.12%6300CANINE ACTIVITIES (6100)87-12.5%		Classification	Mar/2018	Mar/2019	%Change
38003 FAMILY-OTHER 0 0% 44002 LIQUOR VIOLATIONS-OTHER 5 10 980% 48000 DBSTRUCTING POLICE 8 90 0% 48000 DBSTRUCTING POLICE 8 90 125% 48000 DBSTRUCTING POLICE 8 90 142% 50000 DBSTRUCTING POLICE 1 3 200% 50000 DBSTRUCTING POLICE 1 3 200% 50000 DBSTRUCTING POLICE 1 3 200% 50000 DISTRUCTING VENICE ACCIDENT 6 4 333% 50000 HEALTH AND SAFETY 1 4 300% 50000 JUSTINE RUNAVAY 8 6 20% 70000 JUSTINE CRIANAL OFFENSE 2 3 50% 70000 JUSTINE OFFENSES AND COMPLAINTS 2 16% 33% 70000 JUSTINE ORFENSES 2 16% 33% 70000 JUSTINE ORFENSES AND COMPLAINTS 2 <td< td=""><td>36004</td><td>SEX OFFENSE -OTHER</td><td>1</td><td>1</td><td>0%</td></td<>	36004	SEX OFFENSE -OTHER	1	1	0%
41002 LIQUOR VIOLATIONS-OTHER 5 1 -00% 42000 DRUNKENNESS 0 0 0% 40000 DESTRUCTING POLICE 3 12.5% 40000 DESCRAF_FLIGHT 0 1 0% 50000 DESCRAF_FLIGHT 0 0 0% 50000 DESCREPT 1 3 20% 50000 PEALTHE 0 0 0% 50001 HAIT AND SAFETY 6 4 -33.3% 50000 FEALTH AND SAFETY 1 4 000% 50001 TRESPASS 6 1 -83.3% 70000 JUVENLE RUNMARY 8 6 -25% 70000 MISCELANEOUS CRIMINAL OFFENSE 21 17 -19.0% 70000 TRAFIC CRASHES 22 3 50% 70000 MISCELANEOUS COMPLAINTS 21 17 -19.0% 2000 JUVENLE PIFLINES AND COMPLAINTS 124 161 22.8%	38001	FAMILY -ABUSE/NEGLECT NONVIOLENT	2	2	0%
42000 DRUNKENNESS 0 0% 440000 DESCAPE/FLIGHT 0 1 49000 ESCAPE/FLIGHT 0 1 50000 DRSTRUCTING SUBTCE 7 15 114.2% 50000 DISORDERLY CONDUCT 1 3 200% 50000 DISORDERLY CONDUCT 1 3 200% 50000 DESCAPE / CONDUCT 1 3 200% 50000 DESCAPE / CONDUCT 1 4 33.3% 54002 OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 20 20% 50000 HEALTH AND SAFETY 1 4 300% 00000 JUVENILE RUNWAY 6 6 25% 00000 JUVENILE RUNWAY 21 17 19.0% 2000 TRAFIC OFENSES 21 17 19.0% 2000 TRAFIC OFENSES 25 3.773% 3000 MISCELLANEOUS COMPLAINTS 116 2.83% 3000 MISCELLANEOUS COM	38003	FAMILY -OTHER	0	0	0%
48000 OBSTRUCTING POLICE 8 9 1.25% 49000 ESCAPE/FLIGHT 0 1 0% 50000 DBSTRUCTING JUSTICE 7 15 114.2% 50010 DISORDERLY CONDUCT 1 3 200% 50000 HIT and RUN MOTOR VEHICLE ACCIDENT 6 4 333% 54000 HEALTH AND SAFETY 1 4 300% 57001 TRESPASS 6 1 4.33% 70000 MISCELLANEOUS CIMINAL OFFENSE 2 3 50% 57001 TRESPASS 6 1 4.33% 70000 MISCELLANEOUS CIMINAL OFFENSE 2 3 50% 57001 TRESPASS 6 1 4.33% 57000 MISCELLANEOUS CIMINAL OFFENSE 2 3 50% 57000 MISCELLANEOUS CIMINAL OFFENSE 2 1 1.90% 3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CORFENES 112	41002	LIQUOR VIOLATIONS -OTHER	5	1	-80%
49000 ESCAPE/FLIGHT 0 1 0% 50000 OBSTRUCTING JUSTICIE 7 15 114.2% 53001 DISORDERLY CONDUCT 1 3 200% 54002 PUBLIC PEACE: OTHER 0 0 0% 54001 HIT and RUN MOTOR VEHICLE ACCIDENT 6 4 -33.3% 54002 OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 20 -20% 55000 HEALTH AND SAFETY 1 4 300% 70000 JUVENILE FUNAWAY 8 6 -25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 5% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 5% 73000 MISCELLANEOUS COMPLAINTS 21 17 -19.0% 2800 TRAFFIC OFFENSES 25 29 16% 3000 TRAFFIC CRENSES 25 373% 3773% 3000 TRAFFIC OFFENSES 35 3.773% 3000 TRAFFIC CRASHES	42000	DRUNKENNESS	0	0	0%
50000 OBSTRUCTING JUSTICE 7 15 114.2% 53001 DISORDERLY CONDUCT 1 3 200% 53002 PUBLIC PEACE-OTHER 0 0 0% 54001 HT and RUM MOTOR VEHICLE ACCIDENT 6 4 433.3% 54002 OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 20 .20% 55000 HEALTH AND SAFETY 1 4 .300% 70000 JUVENILE RUNAWAY 8 6 .25% 70000 JUVENILE RUNAWAY 8 74 72 .270% 20000 RARENTS 21 17 .19.0% 3000 WARRANTS 53 .55 .3773% 3100 TRAFFIC CORENSES 25 .29 .188 3000 WARRANTS 102 .99 .244% 3000 WARRANTS 11 0 .100% 3000 NON-CRIMINAL COMPLAINTS .611 .938 .370% 3000 SICK / INJURY C	48000	OBSTRUCTING POLICE	8	9	12.5%
53001 DISORDERLY CONDUCT 1 3 200% 53002 PUBLIC PEACE-OTHER 0 0 0% 54001 HIT and RUN MOTOR VEHICLE ACCIDENT 6 4 -33.% 54002 DFEATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 200 -20% 55000 HEALTH AND SAFETY 1 4 300% 57001 TRESPASS 6 1 -83.3% 70000 JUVENILE RUNAWAY 8 6 -25% 70000 JUVENILE RUNAWAY 8 6 -25% 70000 TREELANEOUS CRIMINAL OFFENSE 21 17 -19.0% 28000 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 29000 TRAFFIC OFFENSES 25 29 16% 30000 TRAFFIC OFFENSES 102 99 -2.94% 3100 TRAFFIC OFFENSES 102 99 -2.94% 32000 SICK / INJURY COMPLAINTS 111 111 1.90% 3000	49000	ESCAPE/FLIGHT	0	1	0%
53002 PUBLIC PEACE -OTHER 0 0 0% 54001 HIT and RUN MOTOR VEHICLE ACCIDENT 6 4 -33.3% 54002 OPERATING UNDER THE INFLIENCE OF LIQUOR OR DRUGS 25 20 -20% 55000 HEALTH AND SAFETY 1 4 300% 67001 TRESPASS 6 1 -8.3.3% 70000 JUVENILE RUNAWAY 8 6 -25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 50% 67001 TRAFFIC OFFENSES AND COMPLAINTS 21 17 -19.0% 2800 WARRANTS 53 55 3.773% 3100 TRAFFIC OFFENSES 25 29 16% 3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CRASHES 102 461 29.89% 3000 WARENTS 671 638 4.91% 3000 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3000 MISCELLA	50000	OBSTRUCTING JUSTICE	7	15	114.2%
54001 HIT and RUN MOTOR VEHICLE ACCIDENT 6 4 33.3% 54002 OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 20 .20% 55000 HEALTH AND SAFETY 1 .4 .300% 57001 TRESPASS 6 1 .83.3% 73000 HIVENLE RUNAWAY 8 6 .25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 .3 .50% 6 JUVENILE OFFENSES AND COMPLAINTS 21 .17 .19.0% 2900 TRAFFIC OFFENSES AND COMPLAINTS .21 .161 .29.3% 3100 TRAFFIC OFFENSES .25 .3.77% .316 .164 .29.3% 3100 TRAFFIC OFFENSES .26 .29 .16% .34.91% .316 .416 .29.3% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .330% .331%	53001	DISORDERLY CONDUCT	1	3	200%
54002 OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS 25 20 -20% 55000 HEALTH AND SAFETY 1 4 300% 57001 TRESPASS 6 1 -8.3.3% 70000 JUVENILE RUNAWAY 6 2 3 55% 70000 JUVENILE COMPLANCY 8 6 -25% 70000 TRAFFIC OFFENSES AND COMPLAINTS 21 17 -19.0% 2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 2900 TRAFFIC OFFENSES 25 3.773% 3000 WARRANTS 53 55.773% 3000 WARRANTS 102 99 -2.94% 3000 WARENTS 102 99 -2.94% 3000 NISCELLANEOUS COMPLAINTS 161 -2.93% 3000 NISCELLANEOUS COMPLAINTS 161 -2.94% 3000 NISCELLANEOUS TRAFFIC COMPLAINTS 161 -0.05% 3000 NISCELLANEOUS TRAFFIC COMPLAINTS 1174 1161	53002	PUBLIC PEACE -OTHER	0	0	0%
55000 HEALTH AND SAFETY 1 4 300% 57001 TRESPASS 6 1 -83.3% 70000 JUVENILE RUNAWAY 8 6 -25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 50% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 17 -119.0% 2000 JUVENILE OFFENSES AND COMPLAINTS 21 17 -119.0% 2000 TRAFFIC OFFENSES 25 29 16% 3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINTS 56 161 -29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS 11 0 -100% 3500 NON-CRIMINAL COMPLAINTS 114 112 26.33% 3600 NON-CRIMINAL COMPLAINTS 518 746 8.92% 3700 <td< td=""><td>54001</td><td>HIT and RUN MOTOR VEHICLE ACCIDENT</td><td>6</td><td>4</td><td>-33.3%</td></td<>	54001	HIT and RUN MOTOR VEHICLE ACCIDENT	6	4	-33.3%
57001 TRESPASS 6 1 -83.3% 70000 JUVENILE RUNAWAY 8 6 -25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 50% Group B Totals 74 72 -270% 2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 2800 WARRANTS 53 55 3.773% 3100 TRAFFIC OFFENSES 102 99 -2.94% 3200 WARRANTS 53 55 3.773% 3100 TRAFFIC OMPLAINT 124 161 29.83% 3200 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3300 MISCELLANEOUS COMPLAINTS 1 0 -100% 3300 MISCELLANEOUS COMPLAINTS 114 1151 -1.95% 3400 WATERCRAFT COMPLAINTS 1818 746 6.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1818 746 6.80% 3900 ALARNS 14 </td <td>54002</td> <td>OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS</td> <td>25</td> <td>20</td> <td>-20%</td>	54002	OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS	25	20	-20%
70000 JUVENILE RUNAWAY 8 6 -25% 73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 50% 73000 MISCELLANEOUS CRIMINAL OFFENSE 74 72 -2.70% 2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 1.90% 2900 TRAFFIC OFFENSES 25 29 16% 3000 TRAFFIC CRASHES 102 99 -2.94% 3000 VARRANTS 53 55 3.773% 3000 TRAFFIC CRASHES 102 99 -2.94% 3000 SICK / INJURY COMPLAINT 124 161 -2.93% 3000 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3000 WATERCRAFT COMPLAINTS 1174 1151 -1.95% 3000 NON-CRIMINAL COMPLAINTS 1174 1161 -1.95% 3000 ALARMS 114 182 26.38% 3000 ALARMS 14 182 26.38% 3000 ALARMS<	55000	HEALTH AND SAFETY	1	4	300%
73000 MISCELLANEOUS CRIMINAL OFFENSE 2 3 50% Group B Totals 74 72 2.20% 2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 2800 JUVENILE OFFENSES 26 29 16% 3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CRASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 2.983% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ALARMS 144 182 26.33% 3700 MISCELLANEOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.75% 3800 ALARMS 116 .986 .37.5% 4100 NON	57001	TRESPASS	6	1	-83.3%
Group B Totals 74 72 2.70% 2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 2900 TRAFFIC OFFENSES 25 29 16% 3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CRASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ALARMS 144 182 26.38% Group C Totals 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 2 0% 4000 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WA	70000	JUVENILE RUNAWAY	8	6	-25%
2800 JUVENILE OFFENSES AND COMPLAINTS 21 17 -19.0% 2900 TRAFFIC OFFENSES 25 29 16% 3000 WARANTS 53 55 3.773% 3100 TRAFFIC OFFENSES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS / ACCIDENTS 1174 1151 -1.95% 3600 ANIMAL COMPLAINTS 56 61 8.928% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% 3900 ALARMS 144 182 26.38% 3900 ALARMS 144 182 26.38% 4100	73000	MISCELLANEOUS CRIMINAL OFFENSE	2	3	50%
2900 TRAFFIC OFFENSES 25 29 16% 3000 WARANTS 53 55 3.773% 3100 TRAFFIC CRASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 818 746 -8.80% 3900 ALARMS 144 182 26.38% 3900 ALARMS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 1 0% 450 31.5%<		Group B Totals	74	72	-2.70%
3000 WARRANTS 53 55 3.773% 3100 TRAFFIC CRASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% Group C totals 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 28 4 -3.75% 4300 ICENS / TITLE / REGISTRATION CITATIONS 0 1 0%	2800	JUVENILE OFFENSES AND COMPLAINTS	21	17	-19.0%
3100 TRAFFIC CRASHES 102 99 -2.94% 3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% Group C Totals 3189 3139 -1.56% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 0 1 0% 4300 ICENSE / TITLE / REGISTRATION CITATIONS 0 0 12.5%	2900	TRAFFIC OFFENSES	25	29	16%
3200 SICK / INJURY COMPLAINT 124 161 29.83% 3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% Group C Totals 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 0 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 1	3000	WARRANTS	53	55	3.773%
3300 MISCELLANEOUS COMPLAINTS 671 638 -4.91% 3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS / ACCIDENTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% 3900 ALARMS 144 182 26.38% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 8 9 12.5% 4300 ILCENSE / TITLE / REGISTRATION CITATIONS 0 0 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS	3100	TRAFFIC CRASHES	102	99	-2.94%
3400 WATERCRAFT COMPLAINTS / ACCIDENTS 1 0 -100% 3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% 3900 ALARMS 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 8 9 12.5% 4300 INSCELLANEOUS A THROUGH UUUU 8 9 12.5% 4300 TRAFFIC WARNINGS 0 0 0% 6100 ISA STATE CODE FIRE CLASSIFICATIONS 0 <td>3200</td> <td>SICK / INJURY COMPLAINT</td> <td>124</td> <td>161</td> <td>29.83%</td>	3200	SICK / INJURY COMPLAINT	124	161	29.83%
3500 NON-CRIMINAL COMPLAINTS 818 746 -8.80% 3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% 3900 ALARMS 144 182 26.38% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% 6100 IBA STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6100 MISCELLANEOUS ACTIVITIES (6000) 45 51	3300	MISCELLANEOUS COMPLAINTS	671	638	-4.91%
3700 MISCELLANEOUS TRAFFIC COMPLAINTS 1174 1151 -1.95% 3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% 3900 ALARMS 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 0 0% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES (6100) 8	3400	WATERCRAFT COMPLAINTS / ACCIDENTS	1	0	-100%
3800 ANIMAL COMPLAINTS 56 61 8.928% 3900 ALARMS 144 182 26.38% Group C Totals 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 0 0 0% 6100 IBA STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6100 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 1	3500	NON-CRIMINAL COMPLAINTS	818	746	-8.80%
3900 ALARMS 144 182 26.38% Group C Totals 3189 3139 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 44 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4500 TRAFFIC WARNINGS 0 1 0% 4500 TRAFFIC WARNINGS 0 1 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4500 TRAFFIC WARNINGS 0 1 0% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12%	3700	MISCELLANEOUS TRAFFIC COMPLAINTS	1174	1151	-1.95%
Group C Totals 3189 3139 -1.56% 4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% Group D Totals 44 22 -50% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	3800	ANIMAL COMPLAINTS	56	61	8.928%
4000 HAZARDOUS TRAFFIC CITATIONS / WARNINGS 28 4 -85.7% 4100 NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS 0 1 0% 4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% Group D Totals 44 22 -50% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	3900	ALARMS	144	182	26.38%
4100NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS010%4200PARKING CITATIONS85-37.5%4300LICENSE / TITLE / REGISTRATION CITATIONS020%4500MISCELLANEOUS A THROUGH UUUU8912.5%4900TRAFFIC WARNINGS010%4900TRAFFIC WARNINGS010%5100ISA STATE CODE FIRE CLASSIFICATIONS000%5100ISA STATE CODE FIRE CLASSIFICATIONS000%6000MISCELLANEOUS ACTIVITIES (6000)455113.33%6100MISCELLANEOUS ACTIVITIES (6100)128124-3.12%6300CANINE ACTIVITIES (6100)87-12.5%		Group C Totals	3189	3139	-1.56%
4200 PARKING CITATIONS 8 5 -37.5% 4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% Group D Totals 44 22 -50% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% Group E Totals 0 0 0% 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	4000	HAZARDOUS TRAFFIC CITATIONS / WARNINGS	28	4	-85.7%
4300 LICENSE / TITLE / REGISTRATION CITATIONS 0 2 0% 4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% Group D Totals 0 1 0% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% Group E Totals 0 0 0% 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 511 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	4100	NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS	0	1	0%
4500 MISCELLANEOUS A THROUGH UUUU 8 9 12.5% 4900 TRAFFIC WARNINGS 0 1 0% Group D Totals 44 22 -50% 5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% Group E Totals 0 0 0% 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	4200	PARKING CITATIONS	8	5	-37.5%
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5100 18A STATE CODE FIRE CLASSIFICATIONS 0 0 0% Group E Totals 0 0 0% 0	4900	TRAFFIC WARNINGS	0	1	0%
Group E Totals 0 0 0% 6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%		Group D Totals	44	22	-50%
6000 MISCELLANEOUS ACTIVITIES (6000) 45 51 13.33% 6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%	5100	18A STATE CODE FIRE CLASSIFICATIONS	0	0	0%
6100 MISCELLANEOUS ACTIVITIES (6100) 128 124 -3.12% 6300 CANINE ACTIVITIES 8 7 -12.5%		Group E Totals	0	0	0%
6300 CANINE ACTIVITIES 8 7 -12.5%	6000	MISCELLANEOUS ACTIVITIES (6000)	45	51	13.33%
	6100	MISCELLANEOUS ACTIVITIES (6100)	128	124	-3.12%
6500 CRIME PREVENTION ACTIVITIES 25 7 -72%	6300	CANINE ACTIVITIES	8	7	-12.5%
	6500	CRIME PREVENTION ACTIVITIES	25	7	-72%

For The Mon	oth Of March		
Classification	Mar/2018	Mar/2019	%Change
6600 COURT / WARRANT ACTIVITIES	0	1	0%
6700 INVESTIGATIVE ACTIVITIES	7	6	-14.2%
Group F Totals	213	196	-7.98%
City : Ypsilanti Twp Totals	3733	3628	-2.81%

Year To Date Through March

	Classification	2018	2019	%Change
	Group F Totals	0	0	0%
09001	MURDER/NONNEGLIGENT MANSLAUGHTER (VOLUNTARY)	1	0	-100%
09002	NEGLIGENT HOMICIDE/MANSLAUGHTER (INVOLUNTARY)	1	0	-100%
10001	KIDNAPPING/ABDUCTION	1	1	0%
11001	SEXUAL PENETRATION PENIS/VAGINA -CSC IST DEGREE	9	5	-44.4%
11002	SEXUAL PENETRATION PENIS/VAGINA -CSC 3RD DEGREE	2	3	50%
11003	SEXUAL PENETRATION ORAL/ANAL -CSC IST DEGREE	0	1	0%
11004	SEXUAL PENETRATION ORAL/ANAL -CSC 3RD DEGREE	0	1	0%
11007	SEXUAL CONTACT FORCIBLE -CSC 2ND DEGREE	1	6	500%
11008	SEXUAL CONTACT FORCIBLE -CSC 4TH DEGREE	8	3	-62.5%
12000	ROBBERY	7	8	14.28%
13001	NONAGGRAVATED ASSAULT	125	91	-27.2%
13002	AGGRAVATED/FELONIOUS ASSAULT	46	56	21.73%
13003	INTIMIDATION/STALKING	11	17	54.54%
20000	ARSON	1	1	0%
21000	EXTORTION	0	1	0%
22001	BURGLARY -FORCED ENTRY	33	24	-27.2%
22002	BURGLARY -ENTRY WITHOUT FORCE (Intent to Commit)	9	5	-44.4%
23003	LARCENY -THEFT FROM BUILDING	29	28	-3.44%
23004	LARCENY -THEFT FROM COIN-OPERATED MACHINE/DEVICE	0	11	0%
23005	LARCENY -THEFT FROM MOTOR VEHICLE	22	53	140.9%
23006	LARCENY -THEFT OF MOTOR VEHICLE PARTS/ACCESSORIES	4	8	100%
23007	LARCENY -OTHER	19	19	0%
24001	MOTOR VEHICLE THEFT	24	22	-8.33%
24002	MOTOR VEHICLE, AS STOLEN PROPERTY	2	4	100%
25000	FORGERY/COUNTERFEITING	7	3	-57.1%
26001	FRAUD -FALSE PRETENSE/SWINDLE/CONFIDENCE GAME	23	16	-30.4%
26002	FRAUD -CREDIT CARD/AUTOMATIC TELLER MACHINE	24	17	-29.1%
26005	FRAUD -WIRE FRAUD	2	4	100%
26007	FRAUD - IDENTITY THEFT	41	16	-60.9%
27000	EMBEZZLEMENT	4	4	0%
28000	STOLEN PROPERTY	5	2	-60%
29000	DAMAGE TO PROPERTY	44	56	27.27%
30001	RETAIL FRAUD -MISREPRESENTATION	4	2	-50%
30002	RETAIL FRAUD -THEFT	46	21	-54.3%
30003	RETAIL FRAUD -REFUND/EXCHANGE	1	0	-100%
35001	VIOLATION OF CONTROLLED SUBSTANCE ACT	42	17	-59.5%
35002	NARCOTIC EQUIPMENT VIOLATIONS	15	5	-66.6%
52001	WEAPONS OFFENSE- CONCEALED	9	3	-66.6%
52003	WEAPONS OFFENSE -OTHER	2	5	150%
72000	ANIMAL CRUELTY	0	1	0%
	Group A Totals	624	540	-13.4%
	BURGLARY - UNLAWFUL ENTRY (NO INTENT)	4	5	25%

Year To Date Through March

	Classification	2018	2019	%Change
26006	FRAUD -BAD CHECKS	3	3	0%
36004	SEX OFFENSE -OTHER	1	2	100%
38001	FAMILY -ABUSE/NEGLECT NONVIOLENT	5	12	140%
38003	FAMILY -OTHER	1	0	-100%
41002	LIQUOR VIOLATIONS -OTHER	9	2	-77.7%
42000	DRUNKENNESS	0	1	0%
48000	OBSTRUCTING POLICE	30	16	-46.6%
49000	ESCAPE/FLIGHT	0	2	0%
50000	OBSTRUCTING JUSTICE	31	34	9.677%
53001	DISORDERLY CONDUCT	4	7	75%
53002	PUBLIC PEACE -OTHER	0	1	0%
54001	HIT and RUN MOTOR VEHICLE ACCIDENT	16	12	-25%
54002	OPERATING UNDER THE INFLUENCE OF LIQUOR OR DRUGS	56	54	-3.57%
55000	HEALTH AND SAFETY	6	7	16.66%
57001	TRESPASS	13	2	-84.6%
70000	JUVENILE RUNAWAY	20	16	-20%
73000	MISCELLANEOUS CRIMINAL OFFENSE	2	4	100%
	Group B Totals	201	180	-10.4%
2800	JUVENILE OFFENSES AND COMPLAINTS	50	34	-32%
2900	TRAFFIC OFFENSES	65	50	-23.0%
3000	WARRANTS	154	124	-19.4%
3100	TRAFFIC CRASHES	403	325	-19.3%
3200	SICK / INJURY COMPLAINT	413	418	1.210%
3300	MISCELLANEOUS COMPLAINTS	1991	1719	-13.6%
3400	WATERCRAFT COMPLAINTS / ACCIDENTS	1	1	0%
3500	NON-CRIMINAL COMPLAINTS	2485	2163	-12.9%
3700	MISCELLANEOUS TRAFFIC COMPLAINTS	2603	2583	-0.76%
3800	ANIMAL COMPLAINTS	140	156	11.42%
3900	ALARMS	446	476	6.726%
	Group C Totals	8751	8049	-8.02%
4000	HAZARDOUS TRAFFIC CITATIONS / WARNINGS	29	7	-75.8%
4100	NON-HAZARDOUS TRAFFIC CITATIONS / WARNINGS	1	2	100%
4200	PARKING CITATIONS	20	6	-70%
4300	LICENSE / TITLE / REGISTRATION CITATIONS	4	4	0%
4500	MISCELLANEOUS A THROUGH UUUU	15	26	73.33%
4900	TRAFFIC WARNINGS	0	2	0%
	Group D Totals	69	47	-31.8%
5100	18A STATE CODE FIRE CLASSIFICATIONS	0	1	0%
5100		0 0	1 1	
	18A STATE CODE FIRE CLASSIFICATIONS			0%
6000	18A STATE CODE FIRE CLASSIFICATIONS Group E Totals	0	1	0% 0% 8.181% -1.59%

Year To Date Through March

Classification	2018	2019	%Change
6500 CRIME PREVENTION ACTIVITIES	64	23	-64.0%
6600 COURT / WARRANT ACTIVITIES	0	3	0%
6700 INVESTIGATIVE ACTIVITIES	31	23	-25.8%
Group F Totals	536	500	-6.71%
City : Ypsilanti Twp Totals	10181	9317	-8.48%



Charter Township of Ypsilanti

7200 S. HURON RIVER DRIVE. YPSILANTI, MI 48197

SUPERVISOR BRENDA STUMBO • CLERK KAREN LOVEJOY ROE • TREASURER LARRY DOE TRUSTEES: STAN ELDRIDGE • HEATHER JARRELL ROE • MONICA ROSS WILLIAMS • JIMMIE WILSON, JR.

WORK SESSION AGENDA CHARTER TOWNSHIP OF YPSILANTI TUESDAY, APRIL 16, 2019

5:00pm

CIVIC CENTER BOARD ROOM 7200 HURON RIVER DRIVE

1.	REQUEST TO ENTER INTO CLOSED SESSION TO DISCUSS CONTR NEGOTIATIONS WITH YPSILANTI TOWNSHIP FIREFIGHTERS UNIO	
2.	AGENDA REVIEW SUF	PERVISOR STUMBO
3.	OTHER DISCUSSION	BOARD MEMBERS

Closed Session

REQUEST TO ENTER CLOSED SESSION TO DISCUSS CONTRACT NEGOTIATIONS WITH YPSILANTI TOWNSHIP FIREFIGHTERS UNION LOCAL 1830

REVIEW AGENDA

A. SUPERVISOR STUMBO WILL REVIEW BOARD MEETING AGENDA

OTHER DISCUSSION

A. BOARD MEMBERS HAVE THE OPPORTUNITY TO DISCUSS ANY OTHER PERTINENT ISSUES



Charter Township of Ypsilanti

7200 S. HURON RIVER DRIVE. YPSILANTI, MI 48197

SUPERVISOR BRENDA STUMBO • CLERK KAREN LOVEJOY ROE • TREASURER LARRY DOE TRUSTEES: STAN ELDRIDGE • HEATHER JARRELL ROE • MONICA ROSS WILLIAMS • JIMMIE WILSON, JR.

REGULAR MEETING AGENDA TUESDAY, APRIL 16, 2019 7:00 P.M.

- 1. CALL TO ORDER
- 2. PLEDGE OF ALLEGIANCE AND INVOCATION
- 3. PUBLIC COMMENTS
- 4. CONSENT AGENDA
 - A. MINUTES OF THE APRIL 2, 2019 WORK SESSION AND REGULAR MEETING
 - B. STATEMENTS AND CHECKS
 - 1. STATEMENTS AND CHECKS FOR APRIL 16, 2019 IN THE AMOUNT OF \$1,010,175.25
 - 2. CHOICE HEALTH CARE DEDUCTIBLE ACH EFT FOR MARCH 2019 IN THE AMOUNT OF \$57,067.56
 - 3. CHOICE HEALTH CARE ADMIN FEE FOR FEBRUARY 2019 IN THE AMOUNT OF \$1,112.50
 - C. APRIL 2019 TREASURER'S REPORT
- 5. ATTORNEY REPORT
 - A. GENERAL LEGAL UPDATE

NEW BUSINESS

- 1. REQUEST APPROVAL OF CONTRACT WITH YPSILANTI TOWNSHIP FIREFIGHTERS LOCAL 1830 UNION WITH A TERM ENDING DATE OF DECEMBER 31, 2019
- 2. REQUEST APPROVAL OF UPDATED SOCIAL MEDIA POLICY AND CELL PHONE POLICY TO BE INCLUDED IN THE TOWNSHIP POLICY AND PROCEDURE MANUAL
- 3. REQUEST APPROVAL OF A GRANT APPLICATION TO THE WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY FOR AN ENVIRONMENTAL ASSESSMENT GRANT IN A NOT TO EXCEED AMOUNT OF \$26,899.00 AND TO APPROVE THE WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY ENVIRONMENTAL ASSESSMENT GRANT AGREEMENT
- 4. REQUEST TO APPROVE AGREEMENT WITH TETRA TECH FOR A PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE AND HAZARDOUS BUILDING MATERIALS SURVEY FOR THE COMMUNITY CENTER IN THE AMOUNT OF \$28,701.00 TO BE BUDGETED IN LINE ITEM 212-970-000-976-008 CONTINGENT ON APPROVAL OF THE BUDGET AMENDMENT

- 5. REQUEST APPROVAL OF AGREEMENT WITH FRIENDS OF RUTHERFORD POOL IN THE AMOUNT OF \$5,000.00, BUDGETED IN LINE ITEM 101-956-000-882-004 WITH TERM ENDING SEPTEMBER 30, 2019
- REQUEST OF MIKE RADZIK, OCS DIRECTOR FOR AUTHORIZATION TO SEEK LEGAL ACTION TO ABATE PUBLIC NUISANCE DRUG HOUSES BY PADLOCKING LOCATED AT 6934 POPLAR IN THE AMOUNT OF \$10,000.00 BUDGETED IN LINE ITEM #101-950-000-801-023
- 7. REQUEST OF MIKE RADZIK, OCS DIRECTOR FOR AUTHORIZATION TO SEEK LEGAL ACTION IF NECESSARY TO ABATE PUBLIC NUISANCE FOR PROPERTY LOCATED AT 1474 ECORSE RD. IN THE AMOUNT OF \$10,000.00 BUDGETED IN LINE ITEM #101-950-000-801-023
- 8. REQUEST FOR AUTHORIZATION OF PURCHASE AGREEMENT WITH DTE FOR THE INSTALLATION OF TWO (2) NEW WOOD POLES, ONE (1) 58w LED LEOTEK FIXTURE, AND ONE 17'6" ARM TO BE LOCATED AT ONANDAGA AVE. AND THE SERVICE DR. IN THE AMOUNT OF \$2,696.06 TO BE BUDGETED IN LINE ITEM #101-956-000-926-050 CONTINGENT UPON APPROVAL OF THE BUDGET AMENDMENT
- 9. REQUEST TO SET A PUBLIC HEARING DATE OF TUESDAY, MAY 21, 2019 AT APPROXIMATELY 7:00PM – CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #074 FOR THE CLIFFS CONDOS
- 10. BUDGET AMENDMENT #7

AUTHORIZATIONS AND BIDS

1. REQUEST OF MIKE RADZIK, OCS DIRECTOR FOR APPROVAL TO SEEK SEALED BIDS FOR GENERATOR REPLACEMENT AT THE LAW ENFORCEMENT CENTER

OTHER BUSINESS

PUBLIC COMMENTS

CONSENT AGENDA

CHARTER TOWNSHIP OF YPSILANTI MINUTES OF THE TUESDAY, APRIL 2, 2019 WORK SESSION

Supervisor Stumbo called the meeting to order at approximately 5:00 p.m. in the Ypsilanti Township Civic Center Board Room, 7200 S. Huron River Drive, Ypsilanti Township.

Members Present: Supervisor Stumbo, Clerk Lovejoy-Roe and Treasurer Doe Trustees: Stan Eldridge, Heather Jarrell Roe and Jimmie Wilson Monica Ross-Williams arrived at 5:11 p.m.

Members Absent: None

Legal Counsel: Wm. Douglas Winters

1. DISCUSSION ON ATTENDANCE POLICY.....TRUSTEE ELDRIDGE

Supervisor Stumbo stated there had been a lot of information distributed regarding this subject since it was previously discussed.

Trustee Eldridge stated he didn't think he could say anything different than he had reported at the last meeting. He said it wasn't really a meeting attendance policy but rather categorized it as an offshoot about a daily work attendance policy.

He reported he had handed out a draft at the last meeting and the only person that had responded was Trustee Ross-Williams who had some questions.

He reported the expectation level was that a full time elected official for Ypsilanti Township would work the same hours that our employees work. He said the time off they accumulate would be consistent with a like employee in the Teamsters Bargaining Unit.

He continued that it simply asked that elected full time officials have a basic work schedule from 8:30 a.m. to 4:30 p.m., Monday through Friday. He stated any work done after 4:30 p.m. does not go toward those basic 40 hours.

CHARTER TOWNSHIP OF YPSILANTI MINUTES OF THE APRIL 2, 2019 WORK SESSION PAGE 2

Trustee Eldridge said the only other thing he had put into the draft was that if a full time elected official choose not to comply with a policy if it was adopted, they would not be eligible for a yearly pay raise.

Supervisor Stumbo asked if there were any questions or further discussion.

Supervisor Stumbo thanked Clerk Lovejoy Roe for providing a history as it had refreshed her memory on a lot of the issues.

Supervisor Stumbo stated the Township has a Policy and Procedures Manual that every employee is given. She reported changes and updates to the Policies and Procedures Manual were currently underway and would include full time elected and appointed officials. She said the policies had not been updated since 2008.

Supervisor Stumbo said according to legal counsel, the Township could not exceed State Law in regards to this draft or any other issue. She continued that according to Michigan Law and Employment Law this was a non-union position but there was actually a category for elected officials and we would fall under that State Law.

Trustee Eldridge reported the biggest change was the original proposal had a stipulation that deducted pay, which could not be done according to State Law. He said because the State doesn't mandate that full time elected officials come to work and do the job that's expected of them, doesn't mean something can't be done different and if you do not meet a certain standard you are not eligible for a pay raise.

Supervisor Stumbo stated that could be done now.

Trustee Eldridge said he was unsure how it could be done at this point. He said if he didn't come to work all year long and come November he didn't get a pay raise, his first argument would be that you didn't tell me what the benchmarks were that had to be met to receive a raise. He said he understood that HR was

CHARTER TOWNSHIP OF YPSILANTI MINUTES OF THE APRIL 2, 2019 WORK SESSION PAGE 3

updating the policy book but he said he wanted to put this policy on its own but if there wasn't the will to do that then he would drop the issue.

Supervisor Stumbo asked if there were any other comments.

Trustee Ross-Williams asked if schedules could be flexed.

Trustee Eldridge stated he didn't have a problem with that if other employees were allowed the same opportunity. He sated the whole premise was to ask this seven member board, some of whom had asked him to write this policy twice, to simply hold ourselves to a higher standard of accountability and responsibility.

Clerk Lovejoy Roe provided a historical overview and stated the policy started out as a Trustee/Elected Officials Policy that morphed into how to pay the Trustees salary, which ended up being per meeting with a rolling 12 months, where you can miss 3 meetings and still get paid. She said if she remembered correctly, Trustee Eldridge had withdrawn the Elected Officials portion back in 2016.

Clerk Lovejoy Roe reported in November 2016, while reviewing another draft of an Elected Officials Policy, Attorney Winters had stated the new Township Officials, along with the Park Commission and other officials had taken an oath of office to support the Constitutions of the United States, the State of Michigan and the Ypsilanti Township Ordinances that carried the responsibility to fulfill the duties, which were very specific under the laws. Clerk Lovejoy Roe said Attorney Winters stated Board Officials were elected officials not Township employees and there was nothing he could do, as Township Attorney, to say they had to do certain things that were required of a Township employee, because every four years they came up for a job performance review, and if the electors felt they were not doing their job there was an evaluation, called an election. She also reported Attorney Winters said the Township Officials had a responsibility 24/7 and worked a lot of evenings and weekends and there was no clock to punch and this was how the State of Michigan had set it up for their elected officials to conduct business.

CHARTER TOWNSHIP OF YPSILANTI MINUTES OF THE APRIL 2, 2019 WORK SESSION PAGE 4

Clerk Lovejoy Roe presented a hand out with the information from Attorney Winters. She stated the underlying premise of Trustee Elbridge's draft policy is that full time elected officials are employees and that was where the problem was. Clerk Lovejoy Roe said employees under the law, are defined in very specific legal terms according to the Michigan Labor Relations Act, FLMA, Michigan Township Association and other entities, and does not include full time elected officials. She said it took her time to understand that any full time elected official, no matter what office, was elected to that particular office for the duration of four years, 365 days a year, 24 hours per day, not just a 40 hour, 8:30 a.m. to 4:30 p.m. job. She said the jobs require much more than this and the law sets the standard requiring more.

Clerk Lovejoy Roe stated that elected officials are always elected officials for the duration of the term of office regardless of whether in the office, in the evening, on weekends and must uphold all the duties associated with their office every hour of every day, every week and even when out of town. She stated it is not possible to adopt a policy that was in conflict with state law.

Trustee Ross-Williams stated this is a new Board and she would like to have it looked over and determine what is legal and what is not.

Trustee Eldridge said he appreciated everyone's comments and the Clerk's historical reference. He went on to say his understanding of a policy was that when it was in place and you did not adhere to it then there was a penalty in place as well. Again if there is no expectation of what the work hours are, the number of hours worked, the number of days, the amount of time off, how do you tell someone at the end of the year that they are not eligible for a raise. He stated he was willing to withdraw the request. He said this was a chance for us to hold ourselves to a higher standard.

Supervisor Stumbo stated every year we adopt salaries for every position and the Trustees. She said the Trustees salary has been set at a Per Diem rate for attending meetings and the reason for that was the fact that we had a Trustee that did not come to any of the meetings and members of the community did not

think that was right to continue to pay a salary when not attending meetings. She continued she didn't know how that could be done for a full time elected official, but she said this draft proposal contained a lot more.

Trustee Eldridge responded that everyone had two weeks to think about it and he had only received one call.

Supervisor Stumbo said she thought it was supposed be discussed here, at the Work Session.

Trustee Eldridge said if there is no desire to go forth than he was okay with that and he would not bring it up again.

Treasurer Doe stated when it comes to December and we have resolutions for pay increases, it does take four members of the Board to pass the resolutions, so if four people voted not to give me a raise, he said I wouldn't get one. He continued to say that if someone thinks he was doing something he shouldn't be doing, not putting enough time in or not doing his job properly then a raise could be voted down, so he felt that opportunity was already in place.

Trustee Ross-Williams asked what are the standards for deciding as a Board to give raises to full time elected officials. She said she did not know the process of how raises were arrived at.

Supervisor Stumbo stated communities do it differently, some have a Compensation Committee, but this Board did not want to do that, so a Resolution comes before the Board every year and people vote on it.

Trustee Eldridge questioned how a Compensation Committee would change things because there were not here everyday, nor were the Trustees so they could not be aware of the hours kept by full time officials.

Trustee Wilson asked how would a Compensation Committee or anyone know the information the draft policy requires daily that could result in not receiving a

raise. He said elected officials are out in the community attending meetings on behalf of the residents.

Trustee Eldridge responded we had not gotten to that point at this time but he agreed the current full time officials were at a lot of meetings during those business hours and it was easy enough to find out, but that was not what he was speaking to. He said again there did not seem to be a will so he would withdraw the proposal to move forward.

Supervisor Stumbo stated that was not true because she had recommended it to be placed in the Policy Manual.

Trustee Eldridge said he still thought there was no will to do it because there was no will to put in parameters and without standards in a policy he didn't know how to hold someone accountable.

Supervisor Stumbo responded you would hold them accountable to same way you do other non-union employees.

Trustee Eldridge asked when an employee currently breaks a policy or doesn't adhere to a policy is there something or punishment, either verbal or something else?

Supervisor Stumbo stated there were work schedules for employees as determined by written policy and communicated to each employee, and altered work schedules shall be subject to the employees Collective Bargaining Contract and by Township policy. Every employee was expected to be regular and punctual in attendance. She stated if we could just incorporate full time elected officials in the policy manual it would at least set an expectation.

Trustee Eldridge said he agreed, if an employee does not meet that standard is there a penalty for them not coming to work on time? Do we not have supervisors that will supervise them?

Supervisor Stumbo asked who Trustee Eldridge wanted the full time officials supervisors to be?

Trustee Eldridge stated this was the debate we got into last time and we keep saying the people can choose not to re-elect you. He stated he would like to withdraw the proposal.

Trustee Ross-Williams stated she knew Trustee Eldridge was willing to withdraw his proposal but what Supervisor Stumbo suggested was a start.

Clerk Lovejoy Roe stated she felt it was really important that we have policies that are legal. She said the suggestion that we didn't want to hold people accountable was not true. She reported in terms of wages and salaries, there was a time when the economy was really bad and the entire Township Board, including the Trustees were the first people who did not take raises. She said the full time elected officials took pretty hefty wage cuts and cut their pensions drastically and stopped Health Care for the part time Trustees and all members of the Board voted unanimously to do that. She said she thought people thought it was a fair and easier way than the Compensation Committee. She said it was not accurate to say we did not want to police ourselves. She stated though she loved Ms. Kaiser attending the meetings it was the people who walked into the offices, made phone calls and emails that spoke to the issues at hand, and she felt the three full time officials prided themselves in responding to each of those situations within 24 hours. She stated that people who sent those emails and made the phone calls did so because they couldn't be here at the 9 – 5 hours and appreciated a response back outside those business hours. She continued that to her it was all about meeting the needs of the residents. She felt if you only put in the 40 hours a week from 8:30 a.m. to 4:30 p.m., you couldn't effectively meet everyone's requests and needs. Clerk Lovejoy Roe stated people had a history of what they expected out of their officials and cited the Board, under the direction of Supervisor Stumbo had gone beyond the call of duty by getting the GM property developed, other instances such as the SPARK initiative and the YMCA. She said there were a lot of things the Board had accomplished outside that traditional legal requirement of 2,080 hours of work per year. She agreed that

could be put into a policy of some kind and see what's legal before we have HR look into it.

Arloa Kaiser, Township Resident stated that she was here whenever the Trustee mentioned earlier did not show up or do anything. She stated it was all about accountability. She said Stan had done a great job and it should go into the Policy book for this Board and those in the future.

2. AGENDA REVIEW......SUPERVISOR STUMBO

A. PROCLAMATON FOR LINCOLN HIGH SCHOOL DIVISION 1 STATE BASKETBALL CHAMPIONSHIP

Supervisor Stumbo said Lincoln High School will be in attendance according to the invitation from Clerk Lovejoy Roe.

Trustee Ross-Williams interrupted to ascertain what the status of the last item of business was.

Supervisor Stumbo stated they had started implementing policies for full time elected officials and appointed officials, like cell phone usage, and she felt those expectations could be implemented in the Personnel Policy as well and would come back to the Board for approval. She stated that Stan had asked to withdraw his draft proposal but she had every intention of adding it to that Policy which had already been started.

Supervisor Stumbo explained the next order of business, the Public Hearings section, included more Public Hearings than any other meeting in the past, so possibly there would be a gap in the times allotted to each one, so we will proceed to other business on the Agenda as time allows and then return to the next scheduled Public Hearing.

B. PUBLIC HEARING

- 1) 7:00 PM RESOLUTION 2019-14, CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #214 LAKEWOOD/MAJESTIC LAKES
- 2) 7:15 PM RESOLUTION 2019-15, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #071 LAKEWOOD/MAJESTIC LAKES
- 3) 7:30 PM RESOLUTION 2019-16, CREATION OF STREET LIGHT SPECIAL ASSESSMENT DISTRICT #215 PONDS AT LAKEWOOD AND MAJESTIC PONDS
- 4) 7:45 PM RESOLUTION 2019-17, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #072 PONDS AT LAKEWOOD AND MAJESTIC PONDS
- 5) 8:00 PM RESOLUTION 2019-18, CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #216 REDWOOD/NAUTICA POINTS APARTMENTS
- 6) 8:15 PM RESOLUTION 2019-19, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #073 REDWOOD/ANUTICA POINTS APARTMENTS
- C. PUBLIC COMMENTS
- **D. CONSENT AGENDA**
 - 1) MINUTES OF THE MARCH 5, 2019 WORK SESSION AND MARCH 19, 2019 WORK SESSION AND REGULAR MEETING

Trustee Jarrell Roe thanked Mike Radzik for responding to a report that the cameras had been vandalized and he clarified the cameras had been readjusted.

Trustee Ross-Williams made a request for a correction to the minutes.

STATEMENTS AND CHECKS

- A) STATEMENTS AND CHECKS FOR APRIL 2, 2019 IN THE AMOUNT OF \$627,215.64
- E. ATTORNEY REPORT

1) GENERAL LEGAL UPDATE

Attorney Winters reported Angela King had attended the closing in regard to the Rivergrove Townhomes from the last title holder that conveyed his legal interest of 17.19 acres comprised of 75 lots to the ownership of Ypsilanti Township. He said last year the plan was to seek Requests For Proposals (RFP) to develop the property and that an adjustment may be necessary as the township moves forward now re-seeking a RFP as the land might be part of the Border to Border Connecting Communities Projects and there will be some degree of clarity needed regarding future infrastructure and maintenance. Attorney Winters said if the 75 additional condos were built similar to Phase I, it will be great housing option for Township residents and will increase attendance for Van Buren Schools.

Attorney Winters reported Angela King and Angela Verges had worked out a contract with Friends at Rutherford Pool that made sure the Township was named as an additional insured on the insurance policy.

Attorney Winters said we are the only Township in the State of Michigan that continues to be very aggressive when it comes to handling property owners of houses and apartment complexes that are being utilized to sell illegal narcotics. The CAT Team and LAWNET work hand in glove with each other and keep Mike Radzik informed. He reported raids this last week involved the seizure of fentanyl, which we have learned has been mixed in with heroin and caused a lot of drug overdoses.

Attorney Winters reported the most serious challenge involving environmental clean-up funds from MDEQ ,was for the site at 923 Ecorse Road, the former Forbes Cleaners. He said the MDEQ funds that had been committed to 923 Ecorse Rd. had been redirected for the time being. He reported the Township Officials had a conference call with MDEQ and Supervisor Stumbo had written to our State Officials wanting answers. He said Mary Miller had done an excellent job trying to spearhead that clean-up. He said if these dollars have been reallocated at this time, we have to make sure they are brought back to the Township for the October Fiscal Year State Budget.

Attorney Winters said he said he anticipated having at the next Board Meeting the One Year Contract Extension for the 2019 Township Firefighters.

Attorney Winters reported on the issue of Recreational Marijuana. He stated he has talked with numerous attorneys, especially those who specialize in the area of those who grow and sell marijuana, around the State of Michigan and until LARA has adopted their rules, as Supervisor Stumbo will share later tonight, he said he recommended that we opt out until everyone is sure of the ground rules. He said work had been done to revise the Ordinance as recommended by MTA and set forth in great detail a Resolution as to what purpose that Ordinance will detail.

Attorney Winters stated Michael Saranen had reported DTE was doing some work at North Hydro that shut down the Dam. Attorney Winters stated Michael Saranen has taken steps to ensure we don't suffer any penalty since we are able to produce electricity and DTE won't let us do so. Attorney Winters said that was all right as long as it didn't affect our \$80,000 escrow payment at the end of the year.

Trustee Ross-Williams commented on 923 Ecorse by thanking Supervisor Stumbo for a letter, and she was sad the money was reallocated and hoped with the new budget, they would put it back to remediate any ongoing issues.

F. OLD BUSINESS

- 2ND READING OF RESOLUTION 2019-07, PROPOSED ORDINANCE 2019-485, AN ORDINANCE TO AMEND THE CHARTER TOWNSHIP OF YPSILANTI CODE OF ORDINANCES, CHAPTER 42-210 ENTITLED FIREWORKS (1ST READING HELD AT THE MARCH 45, 2019 REGULAR MEETING)
- 2) 1ST READING OF PROPOSED ORDINANCE 2019-484, AN ORDINANCE PROHIBITING RECREATIONAL MARIJUANA ESTABLISHMENTS WITHIN YPSILANTI TOWNSHIP AS PROVIDED BY THE RECREATIONAL

MARIJUANA BALLOT INITIATIVE 1 OF 2018 (TABLED AT THE FEBRUARY 5, 2019 REGULAR MEETING)

Supervisor Stumbo said Attorney King had outlined a process to all the Board Members in an email. She said if it is the will of the Board, it would be necessary to remove this item from Table. She said then a motion to strike out the entire ordinance and to substitute a new resolution and new ordinance would be necessary. She said the new resolution and new ordinance was in the packet and on the Agenda under New Business. She stated if the board votes to strike out the entire ordinance and to allow the substitution then a motion would be required to approve the new resolution and the first reading of the new ordinance.

Trustee Jarrell Roe voiced her appreciation to Attorney King and Attorney Winters for all their work on this item. She felt it got the attention it deserved and she appreciated it and her fellow Board members for their patience.

Supervisor Stumbo stated it was now properly before the Board and Attorney Winters had provided an article from the Free Press stating the item was on the fast track with LARA, so it was very important for the Board to act quickly by gathering the information needed.

Supervisor Stumbo stated she had met with Superior Township regarding the decision to remove the Peninsular Dam. She reported it would affect six to eight Ypsilanti Township residents along the river, Superior Township and the City of Ypsilanti. She reported as they were meeting they mentioned they were going through the same thing regarding the Marijuana issue.

G. NEW BUSINESS

1) 1ST READING OF RESOLUTION 2019-20, PROPOSED ORDINANCE 2019-484, PROHIBITION OF RECREATIONAL MARIJUANA ESTABLISHMENTS

Supervisor Stumbo stated if they adopted the 1st Reading of the substituted Resolution and proposed Ordinance then there was no need for this item.

- 2) REQUEST TO APPOINT RYAN HUNTER TO THE ANN ARBOR AREA TRANSPORTATION AUTHORITY (AAATA) BOARD WITH TERM ENDING APRIL 30, 2024
- 3) RESOLUTION 2019-08, FEE SCHEDULE AND VALUATION DATA FOR BUILDING, ELECTRICAL, PLUMBING, MECHANICAL, SIGN AND BIKE PATH PERMITS

Supervisor Stumbo stated the request for approval was from Mike Radzik which included 2018 and 2019 and was based on fees from the surrounding area.

- 4) RESOLUTION 2019-13, PROFESSIONAL SERVICE FEES FOR TOWNSHIP, ATTORNEY, PLANNER, ENGINEER AND FIRE DEPARTMENT
- 5) REQUEST TO APPROVE AGREEMENT WITH THE WASHTENAW COUNTY ROAD COMMISSION FOR THE INSTALLATION OF NINE (9) SPEED HUMPS ON EDISON AVE. IN THE AMOUNT OF \$61,950.00 BUDGETED IN LINE ITEM #101-446-000-818-022

Supervisor Stumbo stated residents had been trying for some time and had finally succeeded in getting enough signatures for this project. She added Edison was on the list for improvements with the Washtenaw County Road Commission so the timing made perfect sense.

6) BUDGET AMENDMENT #6

Supervisor Stumbo stated this amendment had been revised to include cameras and the DTE costs from the Public Hearings.

H. AUTHORIZATIONS AND BIDS

- 1) REQUEST OF SUPRVISOR BRENDA STUMBO TO ACCEPT QUOTES FOR THE FOLLOWING EQUIPMENT
 - TORO 5910 MOWER IN THE AMOUNT OF \$111,739.20 TO BE BUDGETED IN LINE ITEM #101-774-000-977-000 CONTINGENT UPON BUDGET AMENDMENT APPROVAL
 - FORD F-550 WITH ARBORTECH 11' CHIPPER BODY IN THE AMOUNT OF \$69,969.00 TO BE BUDGETED WITH 80% CHARGED TO LINE ITEM #101-774-000-977-000 AND 20% TO LINE ITEM #226-226-000-977-000 CONTINGENT UPON APPROVAL OF THE BUDGET AMENDMENT
 - BOBCAT 36" TREE SPADE IN THE AMOUNT OF \$9,866.64 TO BE BUDGETED IN LINE ITEM #212-212-000-977-000 CONTINGENT UPON BUDGET AMENDMENT APPROVAL
- 2) REQUEST OF TRAVIS MCDUGALD, IS MANAGER TO ACCEPT THE FOLLOWING PROPOSALS:
 - REQUEST TO ACCEPT PROPOSAL FROM COMCAST FOR THE INSTALLATION OF ETHERNET NETWORK SERVICE BETWEEN NINE (9) TOWNSHIP LOCATIONSWITH INSTALLATION COSTS OF \$40,930.00 AND MONTHLY COSTS OF \$3,202.00 FOR SIXTY MONTHS (60) BUDGETED IN LINE ITEM #101-266-000-857-100
 - REQUEST TO ACCEPT PROPOSAL FROM ACD FOR INTERNET SERVICE AT THE CIVIC CENTER IN THE AMOUNT OF \$699.95 FOR SIXTY MONTHS
 - REQUEST TO ACCEPT THE LOW PROPOSAL FROM GRANITE TELECOMMUNICATIONS FOR THE PLAIN OLD TELEPHONE SERVICE (POTS) IN THE AMOUNTY OF \$281.00 PER MONTH FOR TWELVE (12) MONTHS
- 3) REQUEST OF TRAVIS MCDUGALD, IS MANAGER TO ORGANIZE A "CASH AND CARRY" EVENT TO DISPOSE OF RETIRED AND/OR

OBSOLETE EQUIPMENT AND TO DISPOSE OF ANY UNSOLD ITEMS THROUGH RESPONSIBLE RECYCLING

Trustee Jarrell Roe asked Travis McDugald if he had a date for this event and he responded that he did not yet have a date.

Trustee Jarrell Roe asked if this was something that had to have Public Notice and Supervisor Stumbo stated "Yes".

4) REQUEST OF MIKE SARANEN TO SEEK QUOTES FOR THE NEW TRUCK FOR HYDRO STATION USE

Supervisor Stumbo explained a new truck was needed since there was a new fulltime employee on board for the Hydro Station.

3. OTHER DISCUSSIONBOARD MEMBERS

Clerk Lovejoy Roe announced there would be an election on Tuesday, August 6, 2019 regarding WISD but there was no language at this time. She reported WCC had a ballot proposal slated for November but efforts were underway to have them move their proposal to the August 6, 2019 election.

Clerk Lovejoy Roe stated workers would be needed and since it would be a smaller election it would be a great opportunity to learn and train to get ready for the big election coming up next November.

Supervisor Stumbo asked when the No Reason AV would be effective.

Clerk Lovejoy Roe stated it would be effective by law for the May Election, but Ypsilanti Township would not have an election this May.

Arloa Kaiser thanked Trustee Ross-Williams for attending the Sugarbrook Neighborhood Watch meeting to provide an explanation regarding the marijuana

ordinance. She also thanked Crystal Campbell, Community Engagement Coordinator for getting the word out as well.

Trustee Ross-Williams reported she observed a gentleman picking up trash. She she thought he worked for CVS so she stopped to ask and discovered his name was Dave McCloud, a Township resident, just doing it on his own and she wanted to make sure he was recognized.

Trustee Ross-Williams reported she had spoken with Supervisor Stumbo regarding some ways the trash problem could be addressed.

Supervisor Stumbo reported the seasonal employees had started work a little earlier and were working picking up trash and the Work Program with Washtenaw County was being utilized as well anytime they were available. Supervisor Stumbo stated we also have a Professional Services Contract with Looking Good Lawns that had a vacuum they were going to use for trash before they mowed. She reminded everyone the best solution was not to litter in the first place and encouraged everyone to be involved. She recognized a gentleman who was in a wheelchair that kept Ford Boulevard clean. She reported neither MDOT nor Washtenaw County Road Commission had a program to deal with the trash problem.

Work Session ended at approximately 6:26 PM.

Respectfully Submitted,

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

CHARTER TOWNSHIP OF YPSILANTI MINUTES OF THE TUESDAY, APRIL 2, 2019 REGULAR MEETING

Supervisor Stumbo called the meeting to order at approximately 7:00 p.m. in the Ypsilanti Township Civic Center Board Room, 7200 S. Huron River Drive, Ypsilanti Township. The Pledge of Allegiance was recited followed by a moment of silent prayer.

Members Present: Supervisor Brenda Stumbo, Clerk Karen Lovejoy Roe, Treasurer Larry Doe, Trustees Stan Eldridge, Heather Jarrell Roe, Monica Ross Williams and Jimmie Wilson, Jr.

Members Absent: none

Legal Counsel: Wm. Douglas Winters

PROCLAMATION FOR LINCOLN HIGH SCHOOL DIVISION 1 STATE BASKETBALL CHAMPIONSHIP

The proclamation was read into the record and moved by Clerk Lovejoy Roe and supported by Trustee Ross Williams. The motion was supported unanimously. Congratulations were offered to the Lincoln High School Basketball Team by the Board of Trustees and each player and coaches were presented with a framed proclamation. (See Attached)

PUBLIC HEARINGS

A. PUBLIC HEARING 7:00PM – RESOLUTION 2019-14, CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #214 LAKEWOOD/MAJESTIC LAKES

Supervisor Stumbo opened the Public Hearing at 7:09pm.

Resident Cara Penyak spoke in favor of the SAD for streetlights.

Resident Cindy Ortiz also spoke in favor of the SAD.

Resident Dan Burns asked if the neighborhood streetlights were paid through his association fees or his property taxes.

Supervisor Stumbo closed the Public Hearing at 7:13pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross-Williams to Approve Resolution 2019-14, Creation of Streetlight Special Assessment District #214 Lakewood/Majestic Lakes (see attached).

Roll Call Vote:

Wilson-Yes Doe-Yes Stumbo-Yes Lovejoy Roe-Yes Ross-Williams-Yes Eldridge-Yes Jarrell Roe-Yes

Motion Carried Unanimously.

B. PUBLIC HEARING 7:15PM – RESOLUTION 2019-15, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #071 LAKEWOOD/MAJESTIC LAKES

Supervisor Stumbo opened the Public Hearing at 7:20pm.

Resident Cara Penyak spoke in favor of the SAD for neighborhood security cameras.

Supervisor Stumbo closed the Public Hearing at 7:21pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross-Williams to Approve Resolution 2019-15, Creation of Security Camera Security Camera Special Assessment District #071 Lakewood/Majestic Lakes (see attached).

Roll Call Vote:

Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

Motion Carried Unanimously.

PUBLIC COMMENTS

Taylor Kirchoff, Township resident, spoke out against proposed Ordinance 2019-484 and stated she was not in favor of the Township opting out of having recreation marijuana establishments within the Township.

Jeff Tate, Township resident, supported keeping taxes in township by having a dispensary. He said he did not support sending township residents out of community to purchase marijuana.

PUBLIC HEARING

C. PUBLIC HEARING 7:30PM – RESOLUTION 2019-16, CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #215 PONDS AT LAKEWOOD AND MAJESTIC PONDS

Supervisor Stumbo opened the Public Hearing at 7:30pm.

Supervisor Stumbo closed the Public Hearing at 7:31pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross-Williams to Approve Resolution 2019-16, Creation of Streetlight Special Assessment District #215 Ponds at Lakewood and Majestic Ponds (see attached).

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

The motion carried unanimously.

PUBLIC COMMENTS

Arloa Kaiser, Township resident, stated she was not in favor of recreational marijuana establishments located in the Township. She asked for explanation of ordinance.

Attorney Winters explained in detail the ordinance and resolution. He said it was like hitting a pause button while the Licensing and Regulatory Agency (LARA) of the State of Michigan developed the regulatory rules and procedures for obtaining a permit for the 6 categories from the State of Michigan.

Denise Kirchoff, Township resident, stated that she is in favor of the Township having recreational marijuana establishments and referenced Colorado. She was concerned about the loss of revenue to the township schools and roads if the township opted out.

Denise Dix-Taylor, Township resident, asked why a new pole being installed for a streetlight would be wood and not metal. Clerk Lovejoy Roe answered the wood pole had to be used because a camera cannot be attached to a metal pole.

PUBLIC HEARING

D. PUBLIC HEARING 7:45PM – RESOLUTION 2019-17, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #072 PONDS AT LAKEWOOD AND MAJESTIC PONDS

Supervisor Stumbo opened the Public Hearing at 7:45pm.

Supervisor Stumbo closed the Public Hearing at 7:45pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Jarrell Roe to Approve Resolution 2019-17, Creation of Security Camera Security Camera Special Assessment District #072 Ponds at Lakewood and Majestic Ponds (see attached).

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

The motion carried unanimously.

PUBLIC COMMENTS

Jeffery Tate, Township Resident, stated he understood the importance of regulating the location and having rules for marijuana businesses but wanted to make sure the township would not rule out having dispensaries.

Taylor Kirchoff, Township resident, stated that she is in favor of having recreational marijuana establishments within Ypsilanti Township. She said it was not necessary to opt out to have control over businesses.

Denise Kirchoff, Township resident, stated that she is in favor of the Township having recreational marijuana establishments. She said there would be penalties to the township if they did not opt in now including a 2-3 year waiting period if the township decided to opt in later.

CONSENT AGENDA

- A. MINUTES OF THE MARCH 5, 2019 WORK SESSION AND MARCH 19, 2019 WORK SESSION AND REGULAR MEETING
- **B. STATEMENTS AND CHECKS**
 - 1. STATEMENTS AND CHECKS FOR APRIL 2, 2019 IN THE AMOUNT OF \$627,215.64

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross Williams to Approve the Consent Agenda.

The motion carried unanimously.

ATTORNEY REPORT

A. GENERAL LEGAL UPDATE

The comprehensive attorney report was given during the work session. Attorney Winters did provide an overview of the Recreation Marijuana Ordinance and Resolution that was on the agenda. He reviewed the 6 types of businesses that LARA would be developing rules and regulations for. He cited Michigan Municipal League reports on the large number of cities that had opted out. He also referenced the Michigan Township Association and said MTA reported a large portion of townships in the state have opted out.

PUBLIC HEARING

E. PUBLIC HEARING 8:00PM – RESOLUTION 2019-18, CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #216 REDWOOD/NAUTICA POINT APARTMENTS.

Supervisor Stumbo opened the Public Hearing at 8:01pm.

Supervisor Stumbo closed the Public Hearing at 8:02pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Jarrell Roe to Approve Resolution 2019-18, Creation of Streetlight Special Assessment District #216 Redwood/Nautica Point Apartments (see attached).

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

The motion carried unanimously.

OLD BUSINESS

1. 2nd READING OF RESOLUTION 2019-07, PROPOSED ORDINANCE 2019-485, AN ORDINANCE TO AMEND THE CHARTER TOWNSHIP OF YPSILANTI CODE OF ORDINANCES, CHAPTER 42-210 ENTITLED FIREWORKS (1ST READING HELD AT THE MARCH 5, 2019 REGULAR MEETING)

A motion was made by Clerk Lovejoy Roe and Supported by Treasurer Doe to approve the 2nd Reading of Resolution 2019-07, Proposed Ordinance 2019-485, an Ordinance to Amend the Charter Township of Ypsilanti Code of Ordinances, Chapter 42-210 Entitled Fireworks (see attached)

Roll Call Vote:

Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

Motion Carried Unanimously.

PUBLIC HEARING

F. PUBLIC HEARING 8:15 - RESOLUTION 2019-19, CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #073 REDWOOD/NAUTICA POINTS APARTMENTS

Supervisor Stumbo opened the Public Hearing at 8:12pm.

Supervisor Stumbo closed the Public Hearing at 8:13pm.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross Williams to Approve Resolution 2019-19, Creation of Security Camera Special Assessment District #073 Redwood/Nautica Point Apartments (see attached).

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

Motion Carried Unanimously.

OLD BUSINESS

2. 1st READING OF PROPOSED ORDINANCE 2019-484, AN ORDINANCE PROHIBITING RECREATIONAL MARIJUANA ESTABLISHMENTS WITHIN YPSILANTI TOWNSHIP AS PROVIDED BY THE RECREATIONAL MARIJUANA BALLOT INITIATIVE 1 OF 2018 (TABLED AT THE FEBRUARY 5, 2019 REGULAR MEETING)

A motion was made by Trustee Jarrell Roe and supported by Treasurer Doe to remove the item from table.

Roll Call Vote:

Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

Motion Carried Unanimously.

A motion was made by Clerk Lovejoy Roe, supported by Treasurer Doe to strike out the entire ordinance and substitute the April 2nd ordinance, Resolution 2019-20, Proposed Ordinance 2019-484.

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

The motion carried unanimously.

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross Williams to approve the 1st Reading of Resolution 2019-20, Proposed Ordinance 2019-484, Prohibition of Recreational Marijuana Establishments (see attached).

James Kirchoff, Township resident stated he was against the proposed ordinance.

Taylor Kirchoff, Township resident, stated she did not support the Township opting out of having recreational marijuana establishments.

Supervisor Stumbo confirmed that the second reading of the ordinance would be held at the May 7, 2019 Regular Board Meeting.

Attorney Winters said there would be several public hearings, meetings and summits on the Recreational Marijuana legislation throughout the state.

Clerk Lovejoy Roe read an email from JoAnn McCullum into the record as she requested expressing her support of the Township opting out of the Recreational Marijuana business. (**see attached**)

Trustee Ross-Williams reported that 400 communities in Washtenaw and Wayne Counties have opted out of Recreational Marijuana.

Roll Call Vote: Jarrell Roe-Yes Eldridge-Yes Ross-Williams-Yes Lovejoy Roe-Yes Stumbo-Yes Doe-Yes Wilson-Yes

Motion Carried Unanimously.

NEW BUSINESS

1. 1st READING OF RESOLUTION 2019-20, PROPOSED ORDINANCE 2019-484, PROHIBITION OF RECREATIONAL MARIJUANA ESTABLISHMENTS

This item was taken care of under Old Business.

2. REQUEST TO APPOINT RYAN HUNTER TO THE ANN ARBOR AREA TRANSPORTATION AUTHORITY (AAATA) WITH TERM ENDING APRIL 30, 2024

A motion was made by Trustee Wilson, supported by Trustee Jarrell Roe to appoint Ryan Hunter to the Ann Arbor Area Transportation Authority (AAATA) with term ending April 30, 2024.

Trustee Jarrell Roe shared that she knew Ryan Hunter and he would do a great job and she praised the work Larry Kreiger had done representing the Township on the AAATA Board of Directors for many years and she wanted to thank him for his dedication.

The motion carried unanimously.

3. RESOLUTION 2019-08, FEE SCHEDULE AND VALUATION DATA FOR BUILDING, ELECTRICAL, PLUMBING, MECHANICAL, SIGN AND BIKE PATH PERMITS

A motion was made by Clerk Lovejoy Roe, supported by Trustee Ross Williams to Approve Resolution 2019-08, Fee Schedule, and Valuation Data for Building, Electrical, Plumbing, Mechanical, Sign and Bike Path Permits (see attached).

The motion carried unanimously.

4. RESOLUTION 2019-13, RESOLUTION 2019-13, PROFESSIONAL SERVICE FEES FOR TOWNSHIP, ATTORNEY, PLANNER, ENGINEER AND FIRE DEPARTMENT

A motion was made by Clerk Lovejoy Roe, supported by Treasurer Doe to approve Resolution 2019-13, Professional Service Fees for Township, Attorney, Planner, Engineer and Fire Department (see attached).

The motion carried unanimously.

5. REQUEST TO APPROVE AGREEMENT WITH THE WASHTENAW COUNTY ROAD COMMISSION FOR THE INSTALLATION OF NINE (9) SPEED HUMPS ON EDISON AVE. IN THE AMOUNT OF \$61,950.00 BUDGETED IN LINE ITEM #101-446-000-818-022

A motion was made by Clerk Lovejoy Roe, supported by Trustee Wilson to approve the agreement with the Washtenaw County Road Commission for the installation of nine (9) speed humps on Edison Ave. in the amount of \$61,950.00 budgeted in line item #101-446-000-818-022 (see attached).

The motion carried unanimously.

6. BUDGET AMENDMENT #6

A motion was made by Clerk Lovejoy Roe, supported by Treasurer Doe, to approve budget amendment #6 (see attached).

The motion carried unanimously.

AUTHORIZATIONS AND BIDS

- 2. REQUEST OF SUPERVISOR BRENDA STUMBO TO ACCEPT QUOTES FOR THE FOLLOWING EQUIPMENT:
 - TORO 5910 MOWER IN THE AMOUNT OF \$111,739.20 TO BE BUDGETED LINE ITEM #101-774-000-977-000 CONTINGENT UPON BUDGET AMENDMENT APPROVAL
 - FORD F-550 WITH ARBORTECH 11' CHIPPER BODY IN THE AMOUNT OF \$69,969.00 TO BE BUDGETED WITH 80% CHARGED TO LINE ITEM #101-774-000-977-000 AND 20% TO LINE ITEM #226-226-000-977-000 CONTINGENT UPON APPROVAL OF THE BUDGET AMENDMENT
 - BOBCAT 36" TREE SPADE IN THE AMOUNT OF \$9,866.64 TO BE BUDGETED IN LINE ITEM #212-212-000-977-000 CONTINGENT UPON BUDGET AMENDMENT APPROVAL

A motion was made by Treasurer Doe, supported by Clerk Lovejoy Roe to accept the quotes for the following equipment:

- TORO 5910 mower in the amount of \$111,739.20 to be budgeted in line item #101-774-000-977-000 contingent upon budget amendment approval
- Ford F-550 with Arbortech 11" chipper body in the amount of \$69,969.00 to be budgeted with 80% charged to line item #101-774-000-977-000 and 20% to line item #226-226-000-977-000 contingent upon approval of the budget amendment
- Bobcat 36" tree spade in the amount of \$9,866.64 to be budgeted in line item #212-212-000-977-000 contingent upon Budget Amendment Approval

The motion carried unanimously.

- 3. REQUEST OF TRAVIS MCDUGALD, IS MANAGER TO ACCEPT THE FOLLOWING PROPOSALS:
 - REQUEST TO ACCEPT PROPOSAL FROM COMCAST FOR THE INSTALLATION OF ETHERNET NETWORK CABLE BETWEEN NINE (9) TOWNSHIP LOCATIONS WITH INSTALLATION COSTS OF \$40,930.00 AND MONTHLY COSTS OF \$3,202.00 FOR SIXTY (60) MONTHS BUDGETED IN LINE ITEM #101-266-000-857-100
 - REQUEST TO ACCEPT PROPOSAL FROM ACD FOR INTERNET SERVICE AT THE CIVIC CENTER IN THE AMOUNT OF \$699.95 FOR SIXTY (60) MONTHS
 - REQUEST TO ACCEPT THE LOW PROPOSAL FROM NEXT INTERNATIONAL FOR SERVER HARDWARE IN THE AMOUNT OF \$61,600.00 BUDGETED IN LINE ITEM #101-266-000-977-000
 - REQUEST TO ACCEPT THE PROPOSAL FROM GRANITE TELECOMMUNICATIONS FOR PLAIN OLD TELEPHONE SERVICE (POTS) IN THE AMOUNT OF \$281.00 PER MONTH FOR TWELVE (12) MONTHS

A motion was made by Clerk Lovejoy Roe, supported by Trustee Wilson to accept the following proposals:

- Request to accept proposal from Comcast for the installation of ethernet network service between nine (9) Township locations with installation costs of \$40,930.00 and monthly costs of \$3,202.00 for sixty (60) months budgeted in line item #101-266-000-857-100
- Request to accept proposal from ACD for internet service at the Civic Center in the amount of \$699.95 for sixty (60) months
- Request to accept the low proposal from Next International for server hardware in the amount of \$61,600.00 budgeted in line item #101-266-000-977-000

• Request to accept the proposal from Granite Telecommunications for Plain Old Telephone Service (POTS) in the amount of \$281.00 per month for twelve (12) months

The motion carried unanimously.

4. REQUEST OF TRAVIS MCDUGALD, IS MANAGER TO ORGANIZE A "CASH AND CARRY" EVENT TO DISPOSE OF RETIRED AND/OR OBSOLETE EQUIPMENT AND TO DISPOSE OF ANY UNSOLD EQUIPMENT THROUGH RESPONSIBLE RECYCLING

A motion was made by Clerk Lovejoy Roe, supported by Trustee Jarrell Roe to approve the request of Travis McDugald, IS Manager to organize a "Cash and Carry" Event to dispose of retired and/or obsolete equipment and to dispose of any unsold equipment through responsible recycling.

Trustee Jarrell Roe requested the date of the "Cash and Carry" event to be advertised to the public.

The motion carried unanimously.

5. REQUEST OF MIKE SARANEN TO SEEK QUOTES FOR A NEW TRUCK FOR THE HYDRO STATION

A motion was made by Clerk Lovejoy Roe, supported by Trustee Jarrell Roe to approve the request of Mike Saranen to seek quotes for a new truck for the Hydro Station.

The motion carried unanimously.

OTHER BUSINESS

There was no other business discussed.

A motion was made by Treasurer Doe, supported by Wilson to Adjourn.

The motion carried unanimously.

The meeting was adjourned at approximately 8:51pm.

Respectfully Submitted,

Brenda L. Stumbo, Supervisor Charter Township of Ypsilanti Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Charter Township of Ypsilanti

RESOLUTION NO. 2019-14

CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #214 LAKEWOOD/MAJESTIC LAKES

WHEREAS, the Township Board of Trustees approved the Planned Development Agreement with Diverse Real Estate for Lakewood/Majestic Lakes, which requires the installation of a streetlight and camera at the entrance to the development. One streetlight will be constructed at the intersection of Tuttlehill Rd. and Fawn Dr. It is being requested of the Board of Trustees for the creation and establishment of special assessment district #214 for the purpose of defraying said cost of street lighting by special assessments against the property especially benefited; and

WHEREAS, the Township Clerk requested of Detroit Edison, proposed plans describing the street lighting improvement and the location of said improvements with an estimate of said costs; and

WHEREAS, on January 11, 2019 Brandon Faron of Detroit Edison Community Lighting Group prepared and submitted proposed plans to install street lighting for Lakewood/Majestic Lakes, Ypsilanti Township, consisting of 197 parcels, which said plans included, *inter alia*, the installation of "one (1) new wood pole and one (1) Code 48 support arm with one (1) 135w Led light" with the cost of said improvements being approximately:

Total Estimate Construction Cost:	\$3,004.89
Total Lamp Charge For Three (3) Years:	\$518.94
Contribution (Cost minus 3 years revenue):	\$2,485.95
Total Annual Lamp Charges:	\$ 172.98

WHEREAS, on February 11, 2019 the Township Clerk received notification from the Township Assessor that the cost of providing a street light for Lakewood/ Majestic Lakes, Ypsilanti Township, consisting of 197 parcels, which said plans included, *inter alia*, the installation of "one (1) new wood pole and one (1) Code **48 support arm with one (1) 135w Led light**" (construction costs of \$2,485.95 for the installation will not be included in the special assessment district and has been paid by Diversified Real Estate) will be **\$.88** per parcel for a 3-year period; thereafter, said costs shall be estimated at **\$.88** per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

WHEREAS, the Township Clerk has given notice to each record owner of or party in interest in property to be assessed, by first class mail, addressed to the record owner or party in interest at the address shown on the tax records, at least 10 (ten) days before the April 2, 2019 public hearing, setting forth the district affected in said petition, place and purpose of said public hearing to allow any interested person an opportunity to voice any objection which may be offered against creating said district; and

WHEREAS, the Township Clerk has also published in a newspaper of general circulation the time, place and purpose of said public hearing and the district affected thereto; and

WHEREAS, on April 2, 2019, the Charter Township of Ypsilanti held a public hearing to hear any objections which may be offered against creating said special assessment district.

NOW THEREFORE, BE IT RESOLVED, that special assessment district #214 be created for the purpose of providing one (1) streetlight for Lakewood/Majestic Lakes, consisting of 197 parcels.

BE IT FURTHER RESOLVED, that the Township Board accepts the plans and estimate of costs as presented by Detroit Edison for Lakewood/Majestic Lakes, consisting of 197 parcels, which said plans included, *inter alia,* the installation of *"one (1) new wood pole and one (1) Code 48 support arm with one (1) 135w Led light*" (construction costs of \$2,485.95 for the installation will not be included in the special assessment district and has been paid by Diverse Real Estate) will be **\$.88** per parcel for a 3-year period; thereafter, said costs shall be estimated at **\$.88** per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

BE IT FURTHER RESOLVED, that the Township Supervisor shall make a special assessment upon all the lands and premises contained herein to defray the expenses of lighting said streets.

BE IT FURTHER RESOLVED, that the Township Board shall hereinafter annually determine on or before September 30 of each year, the amount to be assessed in said district for lighting said streets and shall direct the Township Assessor to levy such amounts therein.

BE IT FURTHER RESOLVED, that when the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.

BE IT FURTHER RESOLVED, that the Township Board shall give notice of said hearing and filing of the assessment roll in the manner prescribed by statute.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-14 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

CHARTER TOWNSHIP OF YPSILANTI

RESOLUTION 2019-15

CREATION OF NEIGHBORHOOD CAMERA SPECIAL ASSESSMENT DISTRICT #071 LAKEWOOD/MAJESTIC LAKES

WHEREAS, as a requirement of the Planned Development Agreement between Ypsilanti Township and Diverse Real Estate, the Township Board of the Charter Township of Ypsilanti proposes to install a security camera at the intersection of Tuttlehill Rd. and Fawn Dr.; and

WHEREAS, Diverse Real Estate has paid for the purchase and installation of the security camera; and

WHEREAS, the Township Board proposes the creation of a special assessment district consisting of 197 parcels known as Lakewood/Majestic Lakes, which will be benefited to defray the operation and maintenance cost of the security cameras; and

WHEREAS, the Township Board has solicited *Requests for Proposals* for the proposed project describing the security camera improvements, the proposed location of said improvements and estimated costs; and

WHEREAS, Conti Corporation, a video security company, licensed by the State of Michigan, prepared and submitted proposed plans to install, operate and maintain security cameras in public areas located within the boundaries of Lakewood and Majestic Ponds, which consists of 197 parcels with the following estimated costs:

 Costs for purchase and installation of 1 security camera (paid for by Diverse Real Estate): 	\$4	,908.09
 Total Annual Residents' Cost for maintenance and operation of security cameras: (First three years) 	\$6	,900.72
 Annual cost per parcel 	\$	11.68
 Monthly cost per parcel 	\$.97

WHEREAS, the plans, estimates of cost and proposed special assessment district were filed with the Township Clerk for public examination and notice of the public hearing upon the same was published and mailed in accordance with the law and statute provided as shown by affidavits pertaining thereto on file with the Township Clerk; and

WHEREAS, in accordance with the aforesaid notices, a hearing was held on the <u>2nd</u> day of <u>April</u>, <u>2019</u> commencing at approximately <u>7:15pm</u> and all persons given the opportunity to be heard in the matter; and

WHEREAS, as a result of the foregoing, the Township Board believes the project to be in the best interests of the Township and of the district proposed to be established therefore;

NOW, THEREFORE, BE IT HEREBY RESOLVED as follows:

- That this Township Board does hereby approve the plans for public security cameras as prepared and presented by the Township's licensed security system contractor and its annual estimate of costs for the operation and maintenance thereof.
- 2. That this Township Board creates a special assessment district located within the boundaries of Lakewood/Majestic Lakes with the district to be known as Lakewood/Majestic Lakes Neighborhood Camera Special Assessment District No. 071 within which the costs of the operation and maintenance of the security cameras shall be assessed according to benefits.
- 3. That on the basis of the foregoing, this Township Board does hereby direct the Supervisor and Assessing Officer to make a special assessment roll in which shall be entered and described all the parcels of land to be assessed with the names of the respective owners thereof if known, and a total amount to be assessed against each parcel of land which

amount shall be the relative portion of the whole sum to be levied against the parcels of land in the special assessment district as the benefit to the parcel of land bears to the total benefit to all the parcels of land in the special assessment district. When the same has been completed, the Supervisor or Assessing Officer shall affix thereto her certificate stating that it was made pursuant to this resolution and that in making such assessment roll, she has, according to her best judgment, conformed in all respects to the directions contained in this resolution and the applicable state statutes.

- 4. When the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.
- 5. If the special assessment roll is confirmed, the Township Board intends to hold a public hearing once each year in future years, on or before September 30, to reassess property in the special assessment district for the costs in the next year, and will provide notice of such hearing in such a manner as prescribed by law.
- That all resolutions and parts of resolutions insofar as they conflict with the provisions of the within resolution be and the same are hereby rescinded.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-15 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Charter Township of Ypsilanti

RESOLUTION NO. 2019-16

CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #215 PONDS AT LAKEWOOD AND MAJESTIC PONDS

WHEREAS, the Township Board of Trustees approved the Planned Development Agreement with Diverse Real Estate for Ponds at Lakewood and Majestic Ponds, which requires the installation of a streetlight and camera at the entrance to the development. One streetlight will be constructed at the intersection of Textile Rd. and Huron River Lane. It is being requested of the Board of Trustees for the creation and establishment of special assessment district #215 for the purpose of defraying said cost of street lighting by special assessments against the property especially benefited; and

WHEREAS, the Township Clerk requested of Detroit Edison, proposed plans describing the street lighting improvement and the location of said improvements with an estimate of said costs; and

WHEREAS, on January 11, 2019 Brandon Faron of Detroit Edison Community Lighting Group prepared and submitted proposed plans to install street lighting for the Ponds at Lakewood and Majestic Ponds, Ypsilanti Township, consisting of 53 parcels, which said plans included, *inter alia*, the installation of "one (1) new wood pole and one (1) Code 48 support arm with one (1) 135w Led light" with the cost of said improvements being approximately:

Total Estimate Construction Cost:	\$2,398.23
Total Lamp Charge For Three (3) Years:	\$518.94
Contribution (Cost minus 3 years revenue):	\$1,879.29
Total Annual Lamp Charges:	\$ 172.98

WHEREAS, on February 11, 2019 the Township Clerk received notification from the Township Assessor that the cost of providing a street light for Ponds at Lakewood and Majestic Ponds, Ypsilanti Township, consisting of 53 parcels, which said plans included, *inter alia*, the installation "one (1) new wood pole and one (1) Code 48 support arm with one (1) 135w Led light" (construction costs of \$1,879.29 for the installation will not be included in the special assessment district and has been paid by Diverse Real Estate) will be \$3.26 per parcel for a 3-year period; thereafter, said costs shall be estimated at \$3.26 per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

WHEREAS, the Township Clerk has given notice to each record owner of or party in interest in property to be assessed, by first class mail, addressed to the record owner or party in interest at the address shown on the tax records, at least 10 (ten) days before the April 2, 2019 public hearing, setting forth the district affected in said petition, place and purpose of said public hearing to allow any interested person an opportunity to voice any objection which may be offered against creating said district; and

WHEREAS, the Township Clerk has also published in a newspaper of general circulation the time, place and purpose of said public hearing and the district affected thereto; and

WHEREAS, on April 2, 2019, the Charter Township of Ypsilanti held a public hearing to hear any objections which may be offered against creating said special assessment district.

NOW THEREFORE, BE IT RESOLVED, that special assessment district #215 be created for the purpose of providing one (1) streetlight for Ponds at Lakewood and Majestic Ponds, consisting of 53 parcels.

BE IT FURTHER RESOLVED, that the Township Board accepts the plans and estimate of costs as presented by Detroit Edison for Ponds at Lakewood and Majestic Ponds, consisting of 53 parcels, which said plans included, *inter alia*, the installation of *"one (1) new wood pole and one (1) Code 48 support arm with one (1) 135w Led light*" (construction costs of \$1,879.29 for the installation will not be included in the special assessment district and has been paid by Diverse Real Estate) will be \$3.26 per parcel for a 3-year period; thereafter, said costs shall be estimated at \$3.26 per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

BE IT FURTHER RESOLVED, that the Township Supervisor shall make a special assessment upon all the lands and premises contained herein to defray the expenses of lighting said streets.

BE IT FURTHER RESOLVED, that the Township Board shall hereinafter annually determine on or before September 30 of each year, the amount to be assessed in said district for lighting said streets and shall direct the Township Assessor to levy such amounts therein.

BE IT FURTHER RESOLVED, that when the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.

BE IT FURTHER RESOLVED, that the Township Board shall give notice of said hearing and filing of the assessment roll in the manner prescribed by statute.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-16 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

CHARTER TOWNSHIP OF YPSILANTI

RESOLUTION 2019-17

CREATION OF NEIGHBORHOOD CAMERA SPECIAL ASSESSMENT DISTRICT #072 PONDS AT LAKEWOOD AND MAJESTIC PONDS

WHEREAS, as a requirement of the Planned Development Agreement between Ypsilanti Township and Diverse Real Estate, the Township Board of the Charter Township of Ypsilanti proposes to install a security cameras at the intersection of Textile Rd. and Huron River Lane; and

WHEREAS, Diverse Real Estate has paid for the purchase and installation of the security cameras; and

WHEREAS, the Township Board proposes the creation of a special assessment district consisting of 53 parcels known as Ponds at Lakewood and Majestic Ponds, which will be benefited to defray the operation and maintenance cost of the security cameras; and

WHEREAS, the Township Board has solicited *Requests for Proposals* for the proposed project describing the security camera improvements, the proposed location of said improvements and estimated costs; and

WHEREAS, Conti Corporation, a video security company, licensed by the State of Michigan, prepared and submitted proposed plans to install, operate and maintain security cameras in public areas located within the boundaries of Ponds at Lakewood and Majestic Ponds, which consists of 53 parcels with the following estimated costs:

 Costs for purchase and installation of 1 security camera (paid for by Lombardo Homes): 	\$4,908.09
 Total Annual Residents' Cost for maintenance and operation of security cameras: (First three years) 	\$6,900.72
 Annual cost per parcel 	\$ 43.40

WHEREAS, the plans, estimates of cost and proposed special assessment district were filed with the Township Clerk for public examination and notice of the public hearing upon the same was published and mailed in accordance with the law and statute provided as shown by affidavits pertaining thereto on file with the Township Clerk; and

WHEREAS, in accordance with the aforesaid notices, a hearing was held on the <u>2nd</u> day of <u>April</u>, <u>2019</u> commencing at approximately <u>7:45pm</u> and all persons given the opportunity to be heard in the matter; and

WHEREAS, as a result of the foregoing, the Township Board believes the project to be in the best interests of the Township and of the district proposed to be established therefore;

NOW, THEREFORE, BE IT HEREBY RESOLVED as follows:

- That this Township Board does hereby approve the plans for public security cameras as prepared and presented by the Township's licensed security system contractor and its annual estimate of costs for the operation and maintenance thereof.
- 2. That this Township Board creates a special assessment district located within the boundaries of Ponds at Lakewood and Majestic Ponds with the district to be known as Ponds at Lakewood and Majestic Ponds Neighborhood Camera Special Assessment District No. 072 within which the costs of the operation and maintenance of the security cameras shall be assessed according to benefits.
- 3. That on the basis of the foregoing, this Township Board does hereby direct the Supervisor and Assessing Officer to make a special assessment roll in which shall be entered and described all the parcels of land to be assessed with the names of the respective owners thereof if known, and a total

amount to be assessed against each parcel of land which amount shall be the relative portion of the whole sum to be levied against the parcels of land in the special assessment district as the benefit to the parcel of land bears to the total benefit to all the parcels of land in the special assessment district. When the same has been completed, the Supervisor or Assessing Officer shall affix thereto her certificate stating that it was made pursuant to this resolution and that in making such assessment roll, she has, according to her best judgment, conformed in all respects to the directions contained in this resolution and the applicable state statutes.

- 4. When the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.
- 5. If the special assessment roll is confirmed, the Township Board intends to hold a public hearing once each year in future years, on or before September 30, to reassess property in the special assessment district for the costs in the next year, and will provide notice of such hearing in such a manner as prescribed by law.
- That all resolutions and parts of resolutions insofar as they conflict with the provisions of the within resolution be and the same are hereby rescinded.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-17 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Charter Township of Ypsilanti

RESOLUTION NO. 2019-18

CREATION OF STREETLIGHT SPECIAL ASSESSMENT DISTRICT #216 REDWOOD/NAUTICA POINT APARTMENTS

WHEREAS, the Township Board of Trustees approved the Planned Development Agreement with Nautica Point One LLC for Redwood/Nautica Point Apartments, which requires the installation of a streetlight and camera at the entrance to the development. One streetlight will be constructed at the intersection of Tuttlehill Rd. and White Wing Dr. It is being requested of the Board of Trustees for the creation and establishment of special assessment district #216 for the purpose of defraying said cost of street lighting by special assessments against the property especially benefited; and

WHEREAS, the Township Clerk requested of Detroit Edison, proposed plans describing the street lighting improvement and the location of said improvements with an estimate of said costs; and

WHEREAS, on January 11, 2019 Brandon Faron of Detroit Edison Community Lighting Group prepared and submitted proposed plans to install street lighting for Redwood/Nautica Point Apartments, Ypsilanti Township, consisting of 1 parcel, which said plans included, *inter alia*, the installation of "two (2) new wood poles with one (1) Code 48 support arm with one (1) 135w Led light" with the cost of said improvements being approximately:

Total Estimate Construction Cost:	\$3,493.84
Total Lamp Charge For Three (3) Years:	\$518.94
Contribution (Cost minus 3 years revenue):	
Total Annual Lamp Charges:	\$ 172.98

WHEREAS, on February 11, 2019 the Township Clerk received notification from the Township Assessor that the cost of providing a streetlight for Redwood/Nautica Point Apartments, Ypsilanti Township, consisting of 1 parcel, which said plans included, *inter alia*, the installation *"two (2) new wood poles with one (1) Code 48 support arm with one (1) 135w Led light*" (construction costs of \$2,974.90 for the installation will not be included in the special assessment district and has been paid by Nautica Point One LLC Homes) will be \$172.98 per parcel for a 3-year period; thereafter, said costs shall be estimated at \$172.98 per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

WHEREAS, the Township Clerk has given notice to each record owner of or party in interest in property to be assessed, by first class mail, addressed to the record owner or party in interest at the address shown on the tax records, at least 10 (ten) days before the April 2, 2019 public hearing, setting forth the district affected in said petition, place and purpose of said public hearing to allow any interested person an opportunity to voice any objection which may be offered against creating said district; and

WHEREAS, the Township Clerk has also published in a newspaper of general circulation the time, place and purpose of said public hearing and the district affected thereto; and

WHEREAS, on April 2, 2019, the Charter Township of Ypsilanti held a public hearing to hear any objections which may be offered against creating said special assessment district.

NOW THEREFORE, BE IT RESOLVED, that special assessment district #216 be created for the purpose of providing one (1) streetlight for Redwood/Nautica Point Apartments, consisting of 1 parcels.

BE IT FURTHER RESOLVED, that the Township Board accepts the plans and estimate of costs as presented by Detroit Edison for Redwood/Nautica Point Apartments, consisting of 1 parcel, which said plans included, *inter alia,* the installation of *"two (2) new wood poles and one (1) Code 48 support arm with one (1) 135w Led light*" (construction costs of \$2,974.90 for the installation will not be included in the special assessment district and has been paid by Nautica Point One LLC) will be \$172.98 per parcel for a 3-year period; thereafter, said costs shall be estimated at \$172.98 per parcel for street lighting, reflective of the current rates set by DTE as well as current electrical usage for the year,

BE IT FURTHER RESOLVED, that the Township Supervisor shall make a special assessment upon all the lands and premises contained herein to defray the expenses of lighting said streets.

BE IT FURTHER RESOLVED, that the Township Board shall hereinafter annually determine on or before September 30 of each year, the amount to be assessed in said district for lighting said streets and shall direct the Township Assessor to levy such amounts therein.

BE IT FURTHER RESOLVED, that when the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.

BE IT FURTHER RESOLVED, that the Township Board shall give notice of said hearing and filing of the assessment roll in the manner prescribed by statute.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-18 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Charter Township of Ypsilanti

RESOLUTION 2019-07 (In Reference to Ordinance 2019-485)

Amending the Township Code of Ordinances, Chapter 42 Section 210, Regulating the Days and Hours Fireworks May Be Used

Whereas, in 2013, the Michigan Legislature enacted a law which permitted the use of consumer fireworks during specified National Holidays, including the day before and the day after the specified National Holiday: and ;

Whereas, under the State law adopted in 2013 the specified National Holidays were: New Year's Day (January 1); Martin Luther King Jr's Birthday (the third Monday in January); Washington's Birthday (the third Monday in February); Memorial Day (the last Monday in May); Independence day (July 4); Labor Day (the first Monday in September); Columbus Day (the second Monday in October); Veterans Day (November 11); Thanksgiving Day (the fourth Thursday in November); and Christmas Day (December 25).

Whereas, the 2013 State law **expressly** prohibited local municipalities from adopting ordinances regulating the use of fireworks during the National Holidays specified in the law (including the day before and the day after the National Holidays);

Whereas, the Michigan Legislature, on December 28, 2018, in response to citizen complaints regarding the use of fireworks during the 30 days identified as National Holidays, without any local control over the hours or days, adopted Public Act 634 of 2018;

Whereas, under Public Act 634, the Township has the right to prohibit the use of fireworks on any day of the year **except** for the following days of the year: December 31 until 1:00 am on January 1; and the Saturday and Sunday immediately preceding Memorial Day until 11:45 PM on each day; June 29 to July 4 until 11:45 pm on each of those days; July 5 if that date is a Friday or Saturday until 11:45 pm; and the Saturday and Sunday immediately preceding Labor day until 11:45 pm on each day. *Whereas,* under Public Act 634, the Township also has the right to prohibit fireworks **before** 11:00 am; and

Whereas, the Township Board has received numerous complaints from residents concerning the disturbances caused to their families, persons suffering from PTSD, and pets when fireworks are ignited late at night and into the early morning during the 30 National holidays identified in the 2013 State Law; and

Whereas, the Township Board believes that adoption of Ordinance 2019-485 restricting fireworks during specified days and times, permitted under Public Act 634, is in the best interest of the Township and its residents,

Now Therefore, Be it resolved, that Ordinance No. 2019-485 is hereby adopted by reference.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-07 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

CHARTER TOWNSHIP OF YPSILANTI

PROPOSED ORDINANCE NO. 2019-485

An Ordinance to Amend the Charter Township of Ypsilanti Code of Ordinances, Chapter 42-210 entitled Fireworks

The Charter Township of Ypsilanti hereby ordains that the Charter Township of Ypsilanti Code of Ordinances, Chapter 42-210 entitled Fireworks, is amended as follows:

Delete: In its entirety, Section 42-210 entitled Fireworks and

Add: The following new Fireworks provisions to Chapter 42.

- (a) *Definitions:* As used in this section;
 - (1) Consumer fireworks means fireworks devices that are designed to produce visible effects by combustion, that are required to comply with the construction, chemical composition, and labeling regulations promulgated by the United States Consumer Produce Safety Commission under 16 CFR parts 1500 and 1507, and that are listed in APA standard 87-1, 3.1.2, 3.1.3, or 3.5. Consumer fireworks does not include low-impact fireworks
 - (2) Firework or fireworks means any composition or device, except for a starting pistol, a flare gun, or a flare, designated for the purpose of producing a visible or audible effect by combustion, deflagration, or detonation. Fireworks consist of consumer fireworks, low-impact fireworks, articles pyrotechnic, display fireworks, and special effects.
 - (3) *Low-impact fireworks* means ground and handheld sparking devices as that phrase is defined under APA standard 87-1, 3.3, 3.1.1.1 to 3.1.1.8 and 3.5
 - (4) *Novelties* means that term as defined under APA standard 87-1, 3.2, 3.2.1, 3.2.2, 3.2.3, 3.2.4, and 3.2.5 and all of the following:
 - a. Toy plastic or paper caps for toy pistols in sheets, strips, rolls, or individual caps containing not more than .25 or a grain of explosive content per cap, in packages labeled to indicate the maximum explosive content per cap.
 - b. Toy pistols, toy cannons, toy canes, toy trick noisemakers, and toy guns in which toy caps as described in subparagraph (a) are use, that are constructed so that the hand cannot come in contact with the cap when in place for the explosion, and that are not designed to break apart or be separated so as to form a missile by the explosion.
 - c. Flitter sparklers in paper tubes no exceeding one-eighth-inch in diameter.

(b) *Prohibition on use of consumer fireworks:* A person shall not ignite, discharge or use consumer fireworks within the township on any day of the year, except for the following days after 11:00 a.m.

- (1) December 31 until 1 a.m. on January 1.
- (2) The Saturday and Sunday immediately preceding Memorial Day until 11:45 p.m. on each of those days.
- (3) June 29 to July 4 until 11:45 p.m. on each of those days.

- (4) July 5, if that date is a Friday or Saturday, until 11:45 p.m.
- (5) The Saturday and Sunday immediately preceding Labor Day until 11:45 p.m. on each of those days.

Violation – Civil Infraction

Violation of this ordinance constitutes a municipal civil infraction with a civil fine of \$1,000 for each violation and no other fine or sanction. The local law enforcement agency responsible for enforcement of this ordinance shall be entitled \$500 of the civil fine collected from violations.

Severability

Should any provision or part of the within Ordinance be declared by any court of competent jurisdiction to be invalid or enforceable, the same shall not affect the validity or enforceability of the balance of this Ordinance which shall remain in full force and effect.

Effective Date and Repeal of Conflicting Ordinances

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

This ordinance shall take effect after publication in a newspaper of general circulation as required by law.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify adoption of Ordinance No. 2019-485 by the Charter Township of Ypsilanti Board of Trustees assembled at a Regular Meeting held on April 2, 2019 after first being introduced at a Regular Meeting held on March 5, 2019. The motion to approve was made by member Roe and seconded by Doe YES: Stumbo, Roe, Doe, Eldridge, Ross Williams, Wilson, Jarrell Roe ABSENT: None NO: None. ABSTAIN: None.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Published: Thursday, April 11, 2019

CHARTER TOWNSHIP OF YPSILANTI

RESOLUTION 2019-19

CREATION OF NEIGHBORHOOD CAMERA SPECIAL ASSESSMENT DISTRICT #073 REDWOOD/NAUTICA POINT APARTMENTS

WHEREAS, as a requirement of the Planned Development Agreement between Ypsilanti Township and Nautica Point One LLC, the Township Board of the Charter Township of Ypsilanti proposes to install a security camera at the intersection of Tuttlehill Dr. and White Wing Dr; and

WHEREAS, Nautica Point One LLC has paid for the purchase and installation of the security camera; and

WHEREAS, the Township Board proposes the creation of a special assessment district consisting of 1 parcel known as Redwood/Nautica Point Apartments, which will be benefited to defray the operation and maintenance cost of the security cameras; and

WHEREAS, the Township Board has solicited *Requests for Proposals* for the proposed project describing the security camera improvements, the proposed location of said improvements and estimated costs; and

WHEREAS, Conti Corporation, a video security company, licensed by the State of Michigan, prepared and submitted proposed plans to install, operate and maintain security cameras in public areas located within the boundaries of Redwood/Nautica Point Apartments, which consists of 1 parcel with the following estimated costs:

 Costs for purchase and installation of 1 security camera (paid for by Lombardo Homes): 	\$4,908.09
 Total Annual Residents' Cost for maintenance and operation of security cameras: (First three years) 	\$6,900.72
 Annual cost per parcel 	\$2,300.24
 Monthly cost per parcel 	\$ 191.69

WHEREAS, the plans, estimates of cost and proposed special assessment district were filed with the Township Clerk for public examination and notice of the public hearing upon the same was published and mailed in accordance with the law and statute provided as shown by affidavits pertaining thereto on file with the Township Clerk; and

WHEREAS, in accordance with the aforesaid notices, a hearing was held on the <u>2nd</u> day of <u>April</u>, <u>2019</u> commencing at approximately <u>8:15pm</u> and all persons given the opportunity to be heard in the matter; and

WHEREAS, as a result of the foregoing, the Township Board believes the project to be in the best interests of the Township and of the district proposed to be established therefore;

NOW, THEREFORE, BE IT HEREBY RESOLVED as follows:

- That this Township Board does hereby approve the plans for public security cameras as prepared and presented by the Township's licensed security system contractor and its annual estimate of costs for the operation and maintenance thereof.
- 2. That this Township Board creates a special assessment district located within the boundaries of Redwood/Nautica Point Apartments with the district to be known as Redwood/Nautica Point Apartments Neighborhood Camera Special Assessment District No. 073 within which the costs of the operation and maintenance of the security cameras shall be assessed according to benefits.
- 3. That on the basis of the foregoing, this Township Board does hereby direct the Supervisor and Assessing Officer to make a special assessment roll in which shall be entered and described all the parcels of land to be assessed with the names of the respective owners thereof if known, and a total amount to be assessed against each parcel of land which

amount shall be the relative portion of the whole sum to be levied against the parcels of land in the special assessment district as the benefit to the parcel of land bears to the total benefit to all the parcels of land in the special assessment district. When the same has been completed, the Supervisor or Assessing Officer shall affix thereto her certificate stating that it was made pursuant to this resolution and that in making such assessment roll, she has, according to her best judgment, conformed in all respects to the directions contained in this resolution and the applicable state statutes.

- 4. When the special assessment roll has been prepared and filed in the office of the Township Clerk, before said assessment roll has been confirmed, the Township Board shall appoint a time and place when it will meet, review and hear any objections to the assessment roll.
- 5. If the special assessment roll is confirmed, the Township Board intends to hold a public hearing once each year in future years, on or before September 30, to reassess property in the special assessment district for the costs in the next year, and will provide notice of such hearing in such a manner as prescribed by law.
- That all resolutions and parts of resolutions insofar as they conflict with the provisions of the within resolution be and the same are hereby rescinded.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-19 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

aren C

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

RESOLUTION 2019-20 (In Reference to Ordinance 2019-484)

Prohibition Of Recreational Marihuana Establishments

Whereas, in November of 2018, Michigan voters approved the legalization of recreational marihuana hereinafter referred to as the *2018 Michigan Regulation and Taxation of Marihuana Act*; and

Whereas, prior to the approval of the 2018 Michigan Regulation and Taxation of Marihuana Act Michigan voters and the Michigan legislature approved two (2) separate and independent statutes which govern medical marihuana only, to-wit: the Michigan Medical Marihuana Act, Initiated Law 1 of 2008 legalizing medical marihuana and the Michigan Medical Marihuana Facilities Licensing Act of 2016; and

Whereas, proposed Township Ordinance 2019-484 entitled *Prohibition of Recreational Marihuana Establishments* applies only to commercial recreational marihuana businesses authorized by the **2018 Michigan**

Regulation and Taxation of Marihuana Act; and

Whereas, proposed Township Ordinance 2019-484 does not affect medical marihuana patients' rights or medical marihuana caregivers' rights under the *2008 Medical Marihuana Ballot Initiative*, including an individual medical marihuana patient's right to grow up to twelve (12) marihuana plants for personal use or a medical marihuana caregivers right to grow up to seventy-two (72) plants for their patients and themselves, and;

Whereas, the focal point of proposed Township Ordinance 2019-484 concerns potential recreational marihuana businesses that could be located within the boundaries of the Charter Township of Ypsilanti ; and

Whereas, under the 2018 *Michigan Regulation and Taxation of Marihuana Act*, a recreational marihuana business includes a number of different types of commercial enterprises which are as follows:

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- (1) Recreational marihuana growers and sellers of up to 2,000 marihuana plants;
- (2) Recreational marihuana safety compliance
 facilities (defined as testing facilities for potency and presence of contaminants);
- (3) Recreational marihuana processors (preparation of marihuana plants by compounding, blending, extracting, and infusing marihuana);
- (4) Recreational marihuana microbusinesses (cultivates, processes, and packages up to 150 marihuana plants);
 and
- (5) Recreational marihuana retailer (retail sale of marihuana)
- (6) Recreational marihuana transporters (transports marihuana to and from other marihuana establishments); and

Whereas, under the 2018 *Michigan Regulation and Taxation of Marihuana Act* the Michigan Department of Licensing and Regulatory Affairs (LARA) is responsible for adopting rules and regulations applicable to commercial recreational marihuana businesses; and

Whereas, LARA's initial meeting regarding the drafting of rules and regulations to govern recreational marihuana businesses pursuant to the *2018 Michigan Regulation and Taxation of Marihuana Act* was scheduled to convene during the week of *March 25, 2019*; and

Whereas, under Governor Gretchen Whitmer's recent executive order, a new State agency is expected to oversee the licensing of recreational marihuana businesses pursuant to the *2018 Michigan Regulation and Taxation of Marihuana Act* once the governing the rules and regulations have been properly promulgated and approved as required by the Act; and

Whereas, Municipalities have the right, under the **2018** *Michigan Regulation and Taxation of Marihuana Act*, to decide whether commercial recreational marihuana businesses are permitted within their communities and if they are permitted, the type or types of businesses so allowed, the zoning districts in which said businesses would be permitted as well as the enactment of other local regulations and requirements that would be deemed to be in the best interests of the community; and

Whereas, before the Ypsilanti Township Board of Trustees can consider the salient issues of whether commercial recreational marihuana businesses are in the best interests of the Township, and if so, the types of businesses that may be suited to the Township based upon the zoning district(s) for such businesses and whether other local regulations and requirements should be adopted, the Township Board needs to be fully apprised prior thereto of all of the rules and regulations that will be promulgated and adopted by LARA governing commercial recreational marihuana businesses pursuant to the *2018 Michigan Regulation and Taxation of Marihuana Act*,; and

Whereas, pursuant to the 2018 Michigan Regulation and Taxation of Marihuana Act, if the Township does not adopt an Ordinance prohibiting commercial recreational marihuana businesses, any commercial recreational marihuana business licensed by the State, is automatically allowed to operate within Ypsilanti Township; and

Whereas, in order to avoid a situation where a commercial recreational marihuana business is licensed by the State to operate within the Township, before the Township Board has carefully considered whether to allow the businesses to operate within the Township, the Township Board hereby determines that it is in the best interest of the Township to maintain the status quo until the State of Michigan by and through LARA adopts the required rules and regulations applicable to commercial recreational marihuana businesses so as to allow the Township Board an opportunity to carefully review the same;

Now Therefore,

Be it resolved, that Ordinance No. 2019- 484 prohibiting recreational marihuana establishments (businesses) within Ypsilanti Township as set forth in

3

the 2018 Michigan Regulation and Taxation of Marihuana Act is hereby

adopted by reference.

CHARTER TOWNSHIP OF YPSILANTI

COUNTY OF WASHTENAW, STATE OF MICHIGAN

PROPOSED ORDINANCE 2019-484

Prohibition of Recreational Marihuana Establishments Ordinance

An ordinance to provide a title for the ordinance; to define words; to

prohibit marihuana establishments within the boundaries of the Charter Township

of Ypsilanti pursuant to Initiated Law 1 of 2018, MCL 333.27951 et seq as may

be amended; to provide penalties for violation of this ordinance; to provide for

severability; to repeal all ordinances or parts of ordinances in conflict therewith;

and to provide an effective date.

CHARTER TOWNSHIP OF YPSILANTI COUNTY OF WASHTENAW, STATE OF MICHIGAN

ORDAINS:

<u>Section I</u> <u>Title</u>

This ordinance shall be known as and be cited as the Charter Township of Ypsilanti Prohibition of Marihuana Establishments Ordinance.

<u>Section II</u> Definitions

Words used herein shall have the definitions as provided for in *Initiated*

Law 1 of 2018, MCL 333.27951 et seq, as may be amended.

Section III No Marihuana Establishments

The Charter Township of Ypsilanti hereby prohibits all marihuana

establishments within the boundaries of the Township pursuant to Initiated Law

1 of 2018, MCL 333.27951 et seq as may be amended.

Section IV Violations and Penalties

- Any person who disobeys, neglects or refuses to comply with any provision of this ordinance or who causes, allows or consents to any of the same shall be deemed to be responsible for the violation of this ordinance. A violation of this ordinance is deemed to be a nuisance per se.
- 2. A violation of this ordinance is a municipal civil infraction, for which the fines shall not be less than One Hundred and No/100 (\$100.00) Dollars nor more than Five Hundred and No/100 (\$500.00) Dollars, in the discretion of the Court. The foregoing sanctions shall be in addition to the rights of the Township to proceed at law or equity with other appropriate and proper remedies. Additionally, the violator shall pay costs which may include all expenses, direct and indirect, which the Township incurs in connection with the municipal civil infraction.
- Each day during which any violation continues shall be deemed a separate offense.
- In addition, the Township may seek injunctive relief against persons alleged to be in violation of this ordinance, and such other relief as may be provided by law.
- 5. This ordinance shall be administered and enforced by the Ordinance Enforcement Officer of the Township or such other person(s) as designated by the Township Board from time to time.

<u>Section V</u> Severability

The provisions of this ordinance are hereby declared to be severable. If any clause, sentence, word, section or provision is hereafter declared void or unenforceable for any reason by a Court of competent jurisdiction, it shall not affect the remainder of such ordinance which shall continue in full force and effect.

Section VI <u>Repeal</u>

All ordinance or parts of ordinances in conflict herewith are hereby repealed.

Section VII Effective Date

This ordinance shall become effective upon publication in a newspaper of general circulation as required by law.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify approval of the first reading of Proposed Ordinance No. 2019-484 by the Charter Township of Ypsilanti Board of Trustees assembled at a regular meeting held on April 2, 2019. The second reading is scheduled to be heard on May 7, 2019.

Karen Dauejo

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Zimbra

lstanfield@ytown.org

Fwd: Marijuana ordinance

From : Karen Lovejoy Roe Mon, Apr 01, 2019 10:37 PM <klovejoyroe@ytown.org> **Subject :** Fwd: Marijuana ordinance **To**: Ruby Walker <rwalker@ytown.org> Cc: Lisa Stanfield <lstanfield@ytown.org>, Janis Riley <iriley@ytown.org> Please file with public comments for meeting minutes (as an attachment under public comments) ---- Forwarded Message -----From: "Brenda Stumbo" <bstumbo@ytown.org> To: "Karen Lovejoy Roe" <klovejoyroe@ytown.org> Sent: Monday, April 1, 2019 4:54:27 PM Subject: Fwd: Marijuana ordinance ---- Forwarded Message -----From: "Joann Mccollum" <joannmccllm@aol.com> To: "Brenda Stumbo" <bstumbo@ytown.org> Sent: Monday, April 1, 2019 12:16:36 PM Subject: Marijuana ordinance Good morning Supervisor Brenda Stumbo, I will

not be able to make the meeting Tuesday so I would like this read and put in the records please. I am against allowing marijuana

dispensaries in Ypsilanti Township. This is not in the best interest of the Township to not adopt an ordinance prohibiting commercial recreational marijuana business. I think the Township Board should maintain the status quo until the state of Michigan by and through LARA adopts the required rules and regulations applicable to commercial recreational marijuana business so as to allow the Township Board an opportunity to carefully review the same. Thank you Jo Ann McCollum1900 Tyler RD, Ypsi MI 48198 _ _ Brenda L. Stumbo Ypsilanti Township Supervisor (734)481 - 0617_ _ Karen Lovejoy Roe Clerk Charter Township of Ypsilanti 7200 S. Huron River Dr. Ypsilanti, MI 48197 734,484,4700 [mailto:klovejoyroe@ytown.org | klovejoyroe@ytown.org] For Ypsilanti Township News go to [http://ytown.org/ | ytown.org] Obstacles are meant to be hurdled--

"And let us not grow weary while doing good, for in due season we shall reap if we do not lose heart" Galatians 6:9

CHARTER TOWNSHIP OF YPSILANTI RESOLUTION NO. 2019-08

FEE SCHEDULE AND VALUATION DATA FOR BUILDING, ELECTRICAL, PLUMBING, MECHANICAL, SIGN AND BIKE PATH PERMITS

WHEREAS, Section 6 and 22 of Act 230 of the Public Acts of 1972, being the State Construction Code Act of 1972 provides for the establishment and collection of fees; and

WHEREAS, Article II of the Buildings and Building Regulations Code of the Charter Township of Ypsilanti assures responsibility for the administration and enforcement within the township of the State Construction Code Act of 1972 as amended, and the building, plumbing, mechanical, and electrical codes promulgated thereunder, as amended; and

WHEREAS, the Township Board has established other permits to be administered by the Building Department and establishes fees for said permits; and

WHEREAS, the Township Board last reviewed Building, Mechanical, Electrical and Plumbing permit fees in December of 2016.

NOW, THEREFORE, BE IT RESOLVED that the attached said fees, valuation data and inspection policy are hereby established.

BE IT FURTHER RESOLVED that all previous resolutions regarding fees or valuation date for building, electrical, plumbing, mechanical, sign or bike path permit fees are hereby revoked.

BE IT FURTHER RESOLVED that Resolution No. 2019-08 shall become effective May 6, 2019.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-08 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

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Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

BUILDING PERMIT FEES

Administration Fee (non-refundable) - \$25 Minimum Permit Fee (not including administration fee) - \$50 Permit Cancelation Fee - \$25 or 25% (whichever is greater)

DECSCRIPTION	FEE	DESCRIPTON	FEE		
SPECIAL INSPECTION		TEMPORARY CERTIFICATE OF O	TEMPORARY CERTIFICATE OF OCCUPANCY		
Special Inspection	\$50	One and Two Family Residential	\$75		
After Hours Inspections (per hr 2 hr. min)	\$55	Multi-Family, Commercial & Industrial	\$250		
FEE BASED ON IMPROVEMENT COST	5	RE-OCCUPANCY (NON-RESID	ENTIAL)		
\$1.00 - \$3,000	\$50	Inspection and Certificate	\$75		
Each \$1,000 (or part of) over \$3,000	\$10	BIKE PATH (One time cha	rge)		
EXCEPTIONS	IS \$501 - \$10,000		\$35		
Deck Valuation Cost per Square Foot - Wood	\$20	\$10,001 - \$50,000			
Deck Valuation Cost per Square Foot - Composite	\$40	\$30 + \$5 for each \$1,000 or part thereof over \$10,000			
Basement Finish Valuation per Square Foot	\$30	\$50,001 - \$100,000			
Roofing Valuation Cost Per Square (100 sq. ft.)	\$300	\$50 + \$3.50 for each \$1,000 or part thereof over \$50,000			
Siding Valuation Cost per Square (100 sq. ft.)	\$350	\$100,001 and above			
PLAN REVIEW		\$67.50 + \$1 for each \$1,000 or part ther	eof over \$100,000		
New Single Family Residential	\$50	OTHER			
All Other Residential Projects	\$25	Zoning Permit - \$50 minimum			
Multi-Family, Commercial, Industrial	\$300	Sign face change, fences, driveways and sheds of 100 sq. ft.			
(or 25% of building permit fee, whichever is greater)		Code Inspection - \$50 minimum			
· · · · · ·		(per each trade inspection)			

Improvement cost shall be determined by applying the following building valuation data. The most recent International Code Council Building Valuation Date may be view at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/building-valuation-data/

All other item not provided for in the Building Valuation Data shall bear reasonable costs to actual value (not material costs) and are subject to the review and possible adjustment of the Building Official

Section 6 and 22 of Act 230 of the Public Acts of 1972, being the State Construction Code Act of 1972 provides for the establishment and collection of fees.

Article II of the Buildings and Building Regulations Code of the Charter Township of Ypsilanti assures responsibility for the administration and enforcement within the township of the State Construction Code Act of 1972 as amended, and the building, plumbing, mechanical, and electrical codes promulgated thereunder, as amended.

FIRE SUPPRESSION PERMIT FEES

Administration Fee (non-refundable) - \$25 Minimum Permit Fee (not including administration fee) - \$50

Permit Cancelation Fee - \$25 or 25% (whichever is greater)

DESCRIPTION	FEE			
FIRE SUPPRESSION				
Fire Sprinkler Plan Review	\$400			
Fire Sprinkler Inspection (up to 20 heads)	\$100			
Fire Sprinkler Inspection (over 20 heads)	\$100 + \$.75 ea.			
Fire Sprinkler Hydrostat Test	\$100			
Kitchen Hood System Plan Review & Wet Test	\$150			
Paint Booth Plan Review and Test	\$150			
Inspection Fee (Wet Test / Paint Booth)	\$50 ea.			

FIRE	ALARM	
Adminis	tration Fee (
Minimum Permit	Fee (not incl	
Permit Cancelation Fee - \$25		
DESCRIPTION	FEE	
FIRE ALARMS		
Fire Alarms / 1 - 10 Devices	\$50	
Fire Alarms / 11 - 20 Devices \$100		
Fire Alarms / more than 20 Devices\$100 + \$5 ea.		
Fire Alarm Plan Review \$100		
Fire Alarm Test (Bldg., Fire, Elec.) \$150		

ELECTRICAL PERMIT FEES Administration Fee (non-refundable) - \$25 Minimum Permit Fee (not including administration fee) - \$50			
Permit Cancela	tion Fee - \$25	or 25% (whichever is greater)	
DESCRIPTION FEE DESCRIPTION FE			FEE
1. A/C Residential	\$20	18. Power Units - Up to 10 hp kva	\$8
A/C Interruptible meter	\$20	(Motor / > 10 - 20 hp/kva	\$12
2. A/C Commercial, GEO Thermal		Transformers) > 20 - 40 hp/kva	\$15
up to 5 ton	\$22	> 40 - 60 hp/kva	\$20
over 5 ton - up to 40 ton	\$40	> 60 - 75 hp/kva	\$40
over 40 ton	\$60	> 75 - 100 hp/kva	\$60
3. Ceiling Fan / Exhaust Fan	\$8	> 100 hp/kva	\$80
4. Circuits 1 to 60 (EACH)	\$11	19. Pump (sump & fire)	\$8
61 & up (EACH)	\$3	20. Re-Inspection	\$50
5. Dishwasher	\$10	Renewal	\$50
6. Disposal	\$10	21. Rough Inspection	\$25
7. Electric Dryer / Range / Oven		3 Roughs	\$60
220 / 240 Pwr Unit, Water Heater (1st unit)	\$17	4-5 Roughs	\$75
Additional Units each	\$15	Each addition rough over 5	\$15
8. Electrical Space Heating / First Room	\$17	22. Service New, 100 amp or less	\$20
Each Additional Room	\$15	(service ent cables) >100 - 200 amp	\$27
9. Each Feeder up to 100 ft. (Busway)	\$38 ea.	>200-400 amp	\$50
Over 100 ft., ea. 100 ft. increment up to 1000 ft.	\$18 ea.	>400-800 amp	\$70
Over 1000 ft., ea. 100 ft. increment	\$4 ea.	>800	\$100
10. Fixtures - 25 lamps or tubes		Temporary Serviceamp	\$50
(1000 wt. floodlights, cluster of floodlights,		Commercial Service Relocate/Chg. Ser amp	\$80
clusters of floodlights=1000 wt., neon type	\$15 each set	23. ***Smoke Detectors - First 5 = \$20 and	***
gas tube lamp - lamp shall be considered as		each add'l 4 or faction thereof = \$7	
one power unit)		24. Special Inspection - general	\$50
11. Furnace	\$12	Carnivals, circus, road shows	\$100
12. Garage Door Opener	\$8	25. Standby Generator 0-5 kw/kva	\$40
13. General Repair	\$40	Load Calculations required 5-30 kw/kva	\$60
14. Hot Tub / Spa	\$30	for whole house generators Over 30 kw/kva	\$60
Hydro massage Tub	\$15	26. Other - call for fees	\$40
15. Low Volt Burglar CCTV	A	27. Annual Maintenance Permit	
Data Phone Security	\$40 each system	Commercial / Industrial < 25,000 sq. ft.	\$75
Commercial requires 1 Rough-Minimum	system	25,001 to 50,000 sq. ft.	\$100
16. Pool Wiring - Above & In ground		50,001 to 100,000 sq. ft.	\$150
With one motor	\$43	over 100,000 sq. ft. call for fees	
Each additional motor	\$4	28. Solar Panel (each)-Needs Plan Review	¢10
17. Office / Modular / Furniture		and Building Permit	\$10
Each cubical or work up to 50	\$8		
Each cubical or work up to 50	\$5		
Each power pole	\$8		

М	ECHANICA	L PERMIT FEES	
Ad	ministration Fee	(non-refundable) - \$25	
		cluding administration fee) - \$50	
	-	or 25% (whichever is greater)	
DESCRIPTION	FEE	DESCRIPTION	FEE
1. Appurtenances-Humidifiers, Air Cleaners	5	13. Duct Smoke Detectors	
with furnace	\$13	First 5 detectors or less (each unit)	\$20
Without furnace	\$25	Each additional detector	\$7
2. Make-Air Unit / Air Handlers	\$40	14. Exhaust Fans - Residential	
 Boiler (Res-see gas fired equipment) 	· ·	Kitchen/bath (etc.) fans	\$20
 Chimney, Factory built/liner 	\$30	14. (a) Commercial Bath Fans	\$20
Installed with new furnace	\$15	15. Fuel-Oil Fired Equipment (burners,	
Each add'l at same occupancy	\$12	tanks) & solid fuel appliances) Room	
5. Commercial kitchen hoods, dip tanks,		Heaters (stoves/portable & wood	\$40
spray booths, ind furn. Ea. sys	\$50	burning fireplace)	
6. Commercial hood plan review	\$150	All other under 5 GPH	\$35
+\$25 per page	\$25 ea.	All other over 5 GPH	\$50
7. Compressor (see Refrigeration)		Alterations to existing	\$30
8. Dampers - Automatic & fixed vent	¢20	16. Gas Fired Appliance - Burners	Make:
dampers with furnace	\$20	Model #	BTU:
9. Dampers only	\$30	Less that 75,000 BTU	\$50
10. Dampers Fire/Smoke (Commercial)		75,001 to 500,000 BTU	\$60
First 5 units - each unit	\$10	Over 500,000 BTU	\$70
Each additional unit (same location)	\$4	(call if over 5 units at same location)	
11. Duct/pipe alteration-comm minor	\$50	17. Gas Piping - Residential	\$30
Complete-commercial	\$75	Commercial Under 2" each 60'	\$40
VAV boxes each	\$20	Commercial Over 2" each 60'	\$60
12. Duct/pipe alteration (Residential)	\$25	Pressure Test - Residential	\$30
Complete residential and/or over 2	\$50	Pressure Test - Commercial (each)	\$30
branch ducts or registers	000	Not Ready/Disapproved (res/comm)	\$50
18. Generator	\$35	20. Re-inspection	\$50
19. Refrigeration Installation	Make:	21. Renewal or Transfer	\$50
Model #	H/P	22. Water Heater - Replacement Only	\$30
Remote systems activated by motors of	\$30	23. GENERAL REPAIRS	\$40
5hp or less	000	24. Extra Rough Inspections (each)	\$40
Systems activated by motors or engines	\$60	25. Special Inspections, Geo Thermal	\$50
over 5hp to 30 hp	÷00	Systems or Mini Splits	200
Over 30hp	\$120	26. Plan Review (if applicable)	

PLUMBING PERMIT FEES					
	Administ	tration Fee (non-refundable) - \$25	5	
	Minimum Permit	Fee (not inc	luding administration	fee) - \$50	
	Permit Cancelat	ion Fee - \$25	or 25% (whichever is	greater)	
DESCRIPTION		FEE	DESCRIPTION		FEE
1. Air Admit Valve		\$12	24. Underground Irrigatio	n	\$50
2. Bathtubs		\$12	with backf	low device	
3. Backflow Preventers **		\$20	25. Underground Inspecti	on	\$30
4. Catch Basins / Manhole	S	\$15	26. Urinals		\$12
5. Dishwashing Machine		\$12	27. Water Closet (Toilet)		\$12
6. Drinking Fountains		\$12	28. Water Heater (Not Ta	nkless)	\$25
7. Floor Drain Traps		\$12	29. Water Heater Comme	ercial	\$50
8. Garbage Disposal		\$12	30. Water Heater (Tankless	5)	\$25
9. Hose Bibbs		\$12	31. Water Dist Size	Water Service	
10. Laundry Trays		\$12	Per 100 ft. each	Per 50 ft.	
11. Lavatories (bathroom s	sink)	\$12	1/2"	3/4"	\$20
12. Medical Gas System	12. Medical Gas System		3/4"	1"	\$22
More than 1 system at same time		\$20 ea.	1"	1 1/4"	\$25
13. Medical Pressure Test		\$30	1 1/4"	1 1/2"	\$35
14. Passive Radon System		\$12	1 1/2"	2"	\$50
15. Pump / Waterlift / Ejeo	tor	\$12	2"	2 1/2"	\$65
16. Reinspection fee		\$45	2 1/2"	3"	\$80
Renewal fee		\$50	3"	4"	\$100
17. Replacement Piping (sa	ame size)	\$30	Exceeding 4"	Exceeding 4"	\$180
18. Showers		\$12	32. Water Treatment Device		\$12
19. Sinks		\$12	33. Additional Rough		\$25
20. Special Equip - humidif	ier/beverage mach.	Call	34. General Repairs		\$40
21. Stacks (new alteration)	(soil, waste, vent)	\$12	35. Other (call for fee)		
22. Subsoil drains		\$30	** Certification test report required for main & bypass		ss devices. If part
23. Sump / Interceptors		\$12	of Fire Suppression, per	m or admin fee.	
	The following	can be pulled by	excavators, etc. (Exterior On	ly)	
Sanitary Sewer	Storm Sewer		Sanitary Sewer Repair - Up	o to 10 ft.	\$30
NEW Each 60 ft.	Each 60 ft.	Over 10' up to 50'		\$50	
Up to 6"	Up to 6"	\$50	Each add'l 50' or faction thereof at the		\$30
8" \$60 same time		,			
10"	10"	\$70	Manholes / Catch Basins (e	Manholes / Catch Basins (each)	
12"	12"	\$80	Crock to iron / Lead Conne	ction	\$30
14"	14"	\$100	Cap off of Sewer / Open P	iping	\$30
16" \$120 Water Service Connection - see Water					
Over 16"	Over 16"	\$150	Distribution for price		



Building Valuation Data – FEBRUARY 2019

The International Code Council is pleased to provide the following Building Valuation Data (BVD) for its members. The BVD will be updated at six-month intervals, with the next update in August 2019. ICC strongly recommends that all jurisdictions and other interested parties actively evaluate and assess the impact of this BVD table before utilizing it in their current code enforcement related activities.

The BVD table provides the "average" construction costs per square foot, which can be used in determining permit fees for a jurisdiction. Permit fee schedules are addressed in Section 109.2 of the 2018 *International Building Code* (IBC) whereas Section 109.3 addresses building permit valuations. The permit fees can be established by using the BVD table and a Permit Fee Multiplier, which is based on the total construction value within the jurisdiction for the past year. The Square Foot Construction Cost table presents factors that reflect relative value of one construction classification/occupancy group to another so that more expensive construction.

ICC has developed this data to aid jurisdictions in determining permit fees. It is important to note that while this BVD table does determine an estimated value of a building (i.e., Gross Area x Square Foot Construction Cost), this data is only intended to assist jurisdictions in determining their permit fees. This data table is not intended to be used as an estimating guide because the data only reflects average costs and is not representative of specific construction.

This degree of precision is sufficient for the intended purpose, which is to help establish permit fees so as to fund code compliance activities. This BVD table provides jurisdictions with a simplified way to determine the estimated value of a building that does not rely on the permit applicant to determine the cost of construction. Therefore, the bidding process for a particular job and other associated factors do not affect the value of a building for determining the permit fee. Whether a specific project is bid at a cost above or below the computed value of construction does not affect the permit fee because the cost of related code enforcement activities is not directly affected by the bid process and results.

Building Valuation

The following building valuation data represents average valuations for most buildings. In conjunction with IBC Section 109.3, this data is offered as an aid for the building official to determine if the permit valuation is underestimated. Again it should be noted that, when using this data, these are "average" costs based on typical construction methods for each occupancy group and type of construction. The average costs include foundation work, structural and nonstructural

building components, electrical, plumbing, mechanical and interior finish material. The data is a national average and does not take into account any regional cost differences. As such, the use of Regional Cost Modifiers is subject to the authority having jurisdiction.

Permit Fee Multiplier

Determine the Permit Fee Multiplier:

- 1. Based on historical records, determine the total annual construction value which has occurred within the jurisdiction for the past year.
- 2. Determine the percentage (%) of the building department budget expected to be provided by building permit revenue.

Permit Fee Multiplier =

Bldg. Dept. Budget x (%)

Total Annual Construction Value

Example

3.

The building department operates on a \$300,000 budget, and it expects to cover 75 percent of that from building permit fees. The total annual construction value which occurred within the jurisdiction in the previous year is \$30,000,000.

Permit Fee

The permit fee is determined using the building gross area, the Square Foot Construction Cost and the Permit Fee Multiplier.

Permit Fee = Gross Area x Square Foot Construction Cost X Permit Fee Multiplier

Example

Type of Construction: IIB

- Area: 1st story = 8,000 sq. ft.
- 2nd story = 8,000 sq. ft.

Height: 2 stories

Permit Fee Multiplier = 0.0075

Use Group: B

- 1. Gross area: Business = 2 stories x 8,000 sq. ft. = 16,000 sq. ft.
- 2. Square Foot Construction Cost: B/IIB = \$175.70/sq. ft.
- 3. Permit Fee: Business = 16,000 sq. ft. x 175.70/sq. ft x 0.0075 = 21,084

Important Points

- The BVD is not intended to apply to alterations or repairs to existing buildings. Because the scope of alterations or repairs to an existing building varies so greatly, the Square Foot Construction Costs table does not reflect accurate values for that purpose. However, the Square Foot Construction Costs table can be used to determine the cost of an addition that is basically a stand-alone building which happens to be attached to an existing building. In the case of such additions, the only alterations to the existing building would involve the attachment of the addition to the existing building and the openings between the addition and the existing building.
- For purposes of establishing the Permit Fee Multiplier, the estimated total annual construction value for a given time period (1 year) is the sum of each building's value (Gross Area x Square Foot Construction Cost) for that time period (e.g., 1 year).
- The Square Foot Construction Cost does not include the price of the land on which the building is built. The Square Foot Construction Cost takes into account everything from foundation work to the roof structure and coverings but does not include the price of the land. The cost of the land does not affect the cost of related code enforcement activities and is not included in the Square Foot Construction Cost.

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	246.61	238.50	232.82	223.18	209.86	203.80	216.12	191.69	184.50
A-1 Assembly, theaters, without stage	225.65	217.54	211.85	202.22	189.15	183.09	195.16	170.98	163.79
A-2 Assembly, nightclubs	191.96	186.56	182.12	174.70	164.94	160.39	168.64	149.29	144.33
A-2 Assembly, restaurants, bars, banquet halls	190.96	185.56	180.12	173.70	162.94	159.39	167.64	147.29	143.33
A-3 Assembly, churches	226.69	218.58	212.89	203.26	191.60	185.54	196.20	173.43	166.24
A-3 Assembly, general, community halls, libraries, museums	190.63	182.52	175.84	167.20	153.09	148.07	160.14	134.97	128.78
A-4 Assembly, arenas	224.65	216.54	209.85	201.22	187.15	182.09	194.16	168.98	162.79
B Business	197.81	190.62	184.70	175.70	160.65	154.63	168.95	141.15	134.99
E Educational	209.43	202.23	196.97	188.01	175.28	166.43	181.55	153.08	148.70
F-1 Factory and industrial, moderate hazard	117.60	112.19	105.97	101.84	91.54	87.26	97.61	75.29	70.95
F-2 Factory and industrial, low hazard	116.60	111.19	105.97	100.84	91.54	86.26	96.61	75.29	69.95
H-1 High Hazard, explosives	109.99	104.58	99.35	94.22	85.14	79.87	89.99	68.89	N.P.
H234 High Hazard	109.99	104.58	99.35	94.22	85.14	79.87	89.99	68.89	63.56
H-5 HPM	197.81	190.62	184.70	175.70	160.65	154.63	168.95	141.15	134.99
I-1 Institutional, supervised environment	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
I-2 Institutional, hospitals	330.92	323.73	317.81	308.81	292.72	N.P.	302.06	273.22	N.P.
I-2 Institutional, nursing homes	229.68	222.49	216.58	207.57	193.53	N.P.	200.83	174.02	N.P.
I-3 Institutional, restrained	224.86	217.67	211.75	202.75	188.96	181.94	196.00	169.45	161.29
I-4 Institutional, day care facilities	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
M Mercantile	142.95	137.54	132.11	125.68	115.38	111.83	119.62	99.73	95.77
R-1 Residential, hotels	199.70	192.92	186.99	179.78	164.90	160.43	179.93	148.60	143.96
R-2 Residential, multiple family	167.27	160.49	154.56	147.35	133.71	129.23	147.50	117.40	112.76
R-3 Residential, one- and two-family ^d	155.84	151.61	147.83	144.09	138.94	135.27	141.72	130.04	122.46
R-4 Residential, care/assisted living facilities	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
S-1 Storage, moderate hazard	108.99	103.58	97.35	93.22	83.14	78.87	88.99	66.89	62.56
S-2 Storage, low hazard	107.99	102.58	97.35	92.22	83.14	77.87	87.99	66.89	61.56
U Utility, miscellaneous	85.30	80.55	75.51	71.75	64.72	60.49	68.56	51.18	48.73

Square Foot Construction Costs a, b, c

a. Private Garages use Utility, miscellaneous

b. For shell only buildings deduct 20 percent

c. N.P. = not permitted

d. Unfinished basements (Group R-3) = \$22.45 per sq. ft.

CHARTER TOWNSHIP OF YPSILANTI Resolution No. 2019-13

Professional Service Fees for Township, Attorney, Planner, Engineer and Fire Department

WHEREAS, on April 17, 2018 the Charter Township of Ypsilanti adopted Resolution No. 2018-10 Professional Service Fees for Township, Attorney, Planner, Engineer and Fire Department, which fee schedule has from time to time been amended; and

WHEREAS, the Charter Township of Ypsilanti wishes to amend Resolution No. 2018-10, Professional Service Fees for Township, Attorney, Planner, Engineer and Fire Department inclusive of all subsequent fee resolution amendments approved since adoption of Resolution No. 2018-10; and

WHEREAS, the attached Professional Services Fees for Township, Attorney, Planner, Engineer and Fire Department incorporate all of these changes.

NOW THEREFORE BE IT RESOLVED that the Charter Township of Ypsilanti specifically adopts and incorporates by reference the attached Professional Services Fees for Township, Attorney, Planner, Engineer and Fire Department with hourly rate exhibits in its entirety.

BE IT FURTHER RESOLVED that any previous Professional Service Fees not in conformity with those contained in the attached fee schedule shall be repealed.

BE IT FURTHER RESOLVED that the Professional Service Fees for Township, Attorney, Planner, Engineer and Fire Department shall become effective immediately.

I, Karen Lovejoy Roe, Clerk of the Charter Township of Ypsilanti, County of Washtenaw, State of Michigan hereby certify the above resolution is a true and exact copy of Resolution No. 2019-13 approved by the Charter Township of Ypsilanti, Board of Trustees assembled at a Regular Meeting held on April 2, 2019.

aren Daucion R

Karen Lovejoy Roe, Clerk Charter Township of Ypsilanti

Professional Services Fees for Township, Attorney, Planner, Engineer and Fire Department

Effective April 2, 2019

- Fee Schedule	1-8
- Hourly Rate Schedules	
 Carlisle Wortman Associates 	9
 OHM Advisors 	10
 Stantec Consulting 	11
 Township Staff & 	
Attorney	12

2019 Fee Schedule

Pre-Application Meeting			
Non-Refundable Fee Refundable Deposit			
Pre-Application Meeting	\$700	N/A	

		Rezoning
	Non-Refundable Fee	Refundable Deposit
Rezoning	\$1,500	\$1,500

Preliminary Site Plan Review			
	Non-Refundable Fee	Refundable Deposit	
	Full \$500	less than one (1) acre: \$3,000	
Full		one (1) acre to five (5) acres: \$4,000	
1 dii	\$300	over five (5) acres to ten (10) acres: \$5,500	
		greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres	
		less than one (1) acre: \$1,500	
Sketch	\$500	one (1) acre to five (5) acres: \$2,000	
Sketch	\$300	over five (5) acres to ten (10) acres: \$2,500	
		greater than ten (10) acres: \$2,500 + \$50 per acre over ten (10) acres	
		less than one (1) acre: \$1,000	
Administrative	\$100	one (1) acre to five (5) acres: \$1,200	
Administrative	\$100	over five (5) acres to ten (10) acres: \$1,500	
		greater than ten (10) acres: \$1,500 + \$50 per acre over ten (10) acres	
		less than one (1) acre: \$3,000	
Planned Development	\$1,500 + \$20 per acre	one (1) acre to five (5) acres: \$4,000	
Stage I and Rezoning		over five (5) acres to ten (10) acres: \$5,500	
		greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres	

Special Land Use/Uses Subject to Special Conditions		
	Non-Refundable Fee	Refundable Deposit
Special Land Use/Uses Subject to Special	\$1,000	\$1,000
Conditions (other than group day care home)	1 /	
Group day care home	\$100	N/A

Zoning Board of Appeals Application		
Non-Refundable Fee Refundable Deposit		
Residential	\$125	N/A
Non-Residential	\$500	N/A

Zoning Board of Appeals Meeting		
Non-Refundable Fee Refundable Deposit		
Regular Meeting	N/A	N/A
Special Meeting	\$1,100	N/A

Planning Commission Meeting		
Non-Refundable Fee Refundable Deposit		
Regular Meeting	N/A	N/A
Special Meeting	\$1,100	N/A

Detailed Engineering Review*

*Fees cover two (2) detailed engineering reviews. A mandatory meeting will be scheduled to review design specifics after the 2nd detailed engineering review (if not approved) before submittal of a 3rd detailed engineering review. Township engineer, Township staff representative(s), developer, and project engineer must be in attendance for the mandatory meeting.

	Non-Refundable Fee	Refundable Deposit
Full	\$500	1.5% of cost for infrastructure improvements including water, sanitary, storm, retention/detention basins, grading, earth balance and paving (minimum \$2,000). With costs over \$2,000,000 the engineer may reduce the rate through estimated hourly review cost. A mandatory meeting shall be scheduled after the 2nd review (if not approved) before submittal of 3rd review.
Sketch	\$500	1.5% of cost for infrastructure improvements including water, sanitary, storm, retention/detention basins, grading, earth balance and paving (minimum \$2,000). With costs over \$2,000,000 the engineer may reduce the rate through estimated hourly review cost. A mandatory meeting shall be scheduled after the 2nd review (if not approved) before submittal of 3rd review.
Administrative	\$100	1.5% of cost for infrastructure improvements including water, sanitary, storm, retention/detention basins, grading, earth balance and paving (minimum \$2,000). With costs over \$2,000,000 the engineer may reduce the rate through estimated hourly review cost. A mandatory meeting shall be scheduled after the 2nd review (if not approved) before submittal of 3rd review.
Planned Development	\$500	1.5% of cost for infrastructure improvements including water, sanitary, storm, retention/detention basins, grading, earth balance and paving (minimum \$2,000). With costs over \$2,000,000 the engineer may reduce the rate through estimated hourly review cost. A mandatory meeting shall be scheduled after the 2nd review (if not approved) before submittal of 3rd review.

Soil Erosion and Sedimentation Control Review and Inspections		
	Non-Refundable Fee	Refundable Deposit
		less than two (2) acres: \$1,000
Soil Erosion and		two (2) acre to ten (10) acres: \$1,500
Sedimentation Control	\$100	over ten (10) acres to forty (40) acres: \$2,500
Review		over forty (40) acres to 100 acres: \$3,500
		greater than 100 acres: \$3,500 + \$30 per acre over 100 acres
		less than two (2) acres: \$2,000
Soil Erosion and		two (2) acre to ten (10) acres: \$2,500
Sedimentation Control	N/A	over ten (10) acres to forty (40) acres: \$3,500
Inspections		over forty (40) acres to 100 acres: \$5,000
		greater than 100 acres: \$5,000 + \$30 per acre over 100 acres

Final Site Plan Review		
	Non-Refundable Fee	Refundable Deposit
		less than one (1) acre: \$3,000
Full	\$500	one (1) acre to five (5) acres: \$4,000
T dii	\$500	over five (5) acres to ten (10) acres: \$5,500
		greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres
		less than one (1) acre: \$1,500
Sketch	\$500	one (1) acre to five (5) acres: \$2,000
SKetch		over five (5) acres to ten (10) acres: \$2,500
		greater than ten (10) acres: \$2,500 + \$50 per acre over ten (10) acres
	\$100	less than one (1) acre: \$1,000
Administrative		one (1) acre to five (5) acres: \$1,200
Administrative		over five (5) acres to ten (10) acres: \$1,500
		greater than ten (10) acres: \$1,500 + \$50 per acre over ten (10) acres
	\$1,000 + \$20 per acre	less than one (1) acre: \$3,000
Planned Development		one (1) acre to five (5) acres: \$4,000
Stage II		over five (5) acres to ten (10) acres: \$5,500
		greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres

Development Agreement		
Non-Refundable Fee Refundable Deposit		
Full	N/A	\$2,500
Sketch	N/A	\$2,500
Administrative	N/A	\$2,500
Planned Development	N/A	\$2,500

Pre-Construction Requirements and Meeting		
Non-Refundable Fee Refundable Deposit		
Pre-Construction Meeting	\$575	\$500

Earth Balancing and Excavation		
Non-Refundable Fee Refundable Deposit		
Earth Balancing and Excavation	\$300 + \$20 per acre	\$500

Private Road		
	Non-Refundable Fee	Refundable Deposit
Private Road Review	\$500	\$2,000
Private Road Inspection	N/A	\$1,000

Future Land Use Map/Master Plan Amendment		
	Non-Refundable Fee	Refundable Deposit
Future Land Use		
Map/Master Plan	\$1,500	\$1,500
Amendment		

Miscellaneous Administrative Review		
	Non-Refundable Fee	Refundable Deposit
Miscellaneous	\$100	\$1,000
Administrative Review	\$100	\$1,000

Miscellaneous Engineering Review (Structural/Traffic/ect.)		
	Non-Refundable Fee	Refundable Deposit
Miscellaneous Engineering Review	\$100	\$1,000

Landscape, Bike Path/Sidewalk, Open Space Site Inspections		
	Non-Refundable Fee	Refundable Deposit
Landscape, Bike Path/Sidewalk, Open Space Site Inspections	\$150 per inspection	N/A

Miscellaneous Inspection		
	Non-Refundable Fee	Refundable Deposit
Miscellaneous Inspection	\$50 per inspection	N/A

Zoning Verification Letter		
	Non-Refundable Fee	Refundable Deposit
Residential	\$50	N/A
Non-Residential	\$100	N/A

Zoning Permit		
	Non-Refundable Fee	Refundable Deposit
Zoning Permit	\$50	N/A

Sign Permit		
	Non-Refundable Fee	Refundable Deposit
Sign Permit	\$25 + \$50 per sign face	N/A

Woodlands		
	Non-Refundable Fee	Refundable Deposit
Woodlands	\$100	\$1,000

Wetlands		
	Non-Refundable Fee	Refundable Deposit
Wetlands	\$100	\$1,000

Addressing		
	Non-Refundable Fee	Refundable Deposit
Single Address	\$50 per lot (1 or 2 addresses)	N/A
Residential Development	\$25 per lot (3 or more addresses)	N/A
Re-Addressing Development	\$475 + \$25 per lot	N/A

Land Division, Combination, and/or Boundary Change		
	Non-Refundable Fee	Refundable Deposit
Land Division, Combination, and/or Boundary Change	S25 per lot	N/A

Collection Box Permit		
	Non-Refundable Fee	Refundable Deposit
Collection Box Application Fee	\$200	N/A
Cash Surety	\$250	N/A
Annual Permit Renewal Fee	\$50	N/A
Code Violation Response Fee	\$75	N/A

Junk Yard Permit			
	Non-Refundable Fee	Refundable Deposit	
Junk Yard License	\$150	N/A	
Application Fee	\$150	N/A	
Junk Yard Annual	\$150	N/A	
Inspections	\$150	N/A	
Junk Yard Re-Inspections	\$50 per inspection	N/A	

Liquor License Inspection			
	Non-Refundable Fee Refundable Deposit		
Liquor Annual Inspections	\$150	N/A	
Liquor Re-Inspections	\$50 per inspection	N/A	

Smoking Lounge Permit			
	Non-Refundable Fee	Refundable Deposit	
Smoking Lounge Application Fee	\$200	N/A	
Smoking Lounge Annual Inspections	\$150	N/A	
Smoking Lounge Re- Inspections	\$50 per inspection	N/A	
Smoking Lounge Zoning Compliance	N/A	\$180	

Business License		
Non-Refundable Fee		Refundable Deposit
Business License Fee	\$200	N/A

Fees shall be paid prior to processing applications and/or permits.

Outstanding fees, bills, and deposits shall be paid prior to advancing project in the development review process.

Site plan review fees paid are for one (1) review by Township, Planning, Engineering and Fire unless otherwise noted.

Effective Date: 2-24-92 Amended: 3-21-95; 6-30-95; 2-1-97; 2-4-97; 2-28-97; 6-17-97; 9-15-98; 7-22-99; 5-18-00; 12-18-01; 12-12-02; 3-10-04; 5-1-05; 12-8-05; 12-20-05; 4-4-06; 01-08; 1-5-09; 2-14-14; 1-5-15; 9-1-16; 04-17-18; 04-02-19



117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

MUNICIPAL CONSULTATION 2019

Personnel	Hourly Rate
Principal (R. Carlisle)	\$135
Principal (B. Carlisle)	\$110
Senior Associate	\$100
Graphics (GIS) Technician	\$75
Support Staff	\$65



117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

RATE SCHEDULE A MUNICIPAL CONSULTATION

Personnel	<u>Hourly Rate</u>
Principal	\$135.00
Senior Associate	\$120.00
Associate	\$110.00
Community Planner/Landscape Archite	ect \$100.00
Graphics (GIS) Technician	\$85.00
Support Staff	\$70.00
<u>Expenses</u>	<u>Rate</u>
AutoCAD Operation Mileage Supplies, Prints, Mailing	\$30/hr 52¢/mi. cost + 20%

Schedule A Effective: 1-1-2018



OHM ADVISORS 2019 HOURLY RATE SCHEDULE

Professional Engineer IV/Architect IV	\$175.00
Professional Engineer III/Architect III	\$158.00
Professional Engineer II/Architect II	\$145.00
Professional Engineer I/Architect I	\$133.00
Graduate Engineer IV	\$138.00
Graduate Engineer III	\$130.00
Graduate Engineer II	\$125.00
Graduate Engineer I	\$115.00
Graduate Architect III/Landscape Architect III	\$125.00
Graduate Architect II/Landscape Architect II	\$105.00
Graduate Architect I/Landscape Architect I	\$95.00
Technician IV	\$132.00
Technician III	\$115.00
Technician II	\$98.00
Technician I	\$78.00
Engineering/Architectural Aide	\$62.00
Professional Surveyor III	\$158.00
Professional Surveyor II	\$145.00
Professional Surveyor I	\$132.00
Graduate Surveyor	\$113.00
Surveyor III	\$110.00
Surveyor II	\$102.00
Surveyor I	\$82.00
Surveyor Aide	\$60.00
Planner IV	\$158.00
Planner III	\$135.00
Planner II	\$115.00
Planner I	\$90.00
Planner Aide	\$62.00
Graphic Designer	\$108.00
Administrative Support	\$68.00
Clerical Aide	\$55.00
Principal	\$200.00
Principal Sr. Associate	\$200.00 \$190.00

Rates as reflected subject to review and adjustment on an annual basis.



OHM ADVISORS 2018 HOURLY RATE SCHEDULE

1		
	1	

Professional Engineer IV/Architect IV	\$170.00
Professional Engineer III/Architect III	\$155.00
Professional Engineer II/Architect II	\$140.00
Professional Engineer I/Architect I	\$130.00
Graduate Engineer IV	\$135.00
Graduate Engineer III	\$125.00
Graduate Engineer II	\$120.00
Graduate Engineer I	\$110.00
Graduate Architect III/Landscape Architect III	\$120.00
Graduate Architect II/Landscape Architect II	\$100.00
Graduate Architect I/Landscape Architect I	\$90.00
Technician IV	\$130.00
Technician III	\$115.00
Technician II	\$100.00
Technician I	\$78.00
Engineering/Architectural Aide	\$60.00
Professional Surveyor III	\$155.00
Professional Surveyor II	\$140.00
Professional Surveyor I	\$130.00
Graduate Surveyor	\$110.00
Surveyor III	\$107.00
Surveyor II	\$100.00
Surveyor I	\$80.00
Surveyor Aide	\$60.00
Planner IV	\$155.00
Planner III	\$135.00
Planner II	\$120.00
Planner I	\$80.00
Planner Aide	\$60.00
Graphic Designer	\$105.00
Data Base Developer	\$185.00
Administrative Support	\$65.00
Clerical Aide	\$50.00
Principal	\$195.00
Sr. Associate	\$185.00
Associate	\$175.00

Rates as reflected subject to review and adjustment on an annual basis.

2018 Public Rates 17-1120



Title	Hourly Rate	Description
Construction Technician CAD Technician	\$87 - \$105	 Junior-level position Independently carries out assignments of limited scope using standard procedures, methods, and techniques Assists senior staff in carrying out more advanced procedures Completed work is reviewed for feasibility and soundness of judgment Graduate from an appropriate post-secondary program or equivalent Generally, four years' work experience
Engineering Assistant Engineer-In-Training Construction Technician	\$110 - \$121	 Fully qualified professional position Carries out assignments requiring general familiarity within a broad field of the respective profession Makes decisions by using a combination of standard methods and techniques Actively participates in planning to ensure the achievement of objectives Works independently to interpret information and resolve difficulties Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, six years experience
CAD Manager Designer Process Designer Project Engineer Senior Project Engineer Survey Manager Construction Technician Senior Civil Engineer Environmental Engineer Survey Crew Chief	\$131- \$147	 First level supervisor of first complete level of specialization Provides applied professional knowledge and initiative in planning and coordinating work programs Adapts established guidelines as necessary to address unusual issues Decisions accepted as technically accurate, however may on occasion be reviewed for soundness of judgment Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, nine years' experience
Associate Senior Associate Project Manager Field Services Manager Landscape Architect	\$151 - \$166	 Highly-specialized technical professional or supervisor of groups of professionals Provides multidiscipline knowledge to deliver innovative solutions in related field of expertise Participates in short and long range planning to ensure the achievement of objectives Makes responsible decisions on all matters, including policy recommendations, work methods, and financial controls associated with large expenditures Reviews and evaluates technical work Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, ten years' experience with extensive, broad experience
Principal	\$184 - \$227	 Senior level consultant or management function Recognized as an authority in a specific field with qualifications of significant value Provides multidiscipline knowledge to deliver innovative solutions in related field of expertise Independently conceives programs and problems for investigation Participates in discussions to ensure the achievement of program and/or project objectives Makes responsible decisions on expenditures, including large sums or implementation of major programs and/or projects Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, fifteen years' experience with extensive professional and management experience
Survey Crew	\$160 \$225	1 person crew 2 person crew



Title	Hourly Rate	Description
Construction Technician CAD Technician	\$80 - \$95	 Junior-level position Independently carries out assignments of limited scope using standard procedures, methods, and techniques Assists senior staff in carrying out more advanced procedures Completed work is reviewed for feasibility and soundness of judgment Graduate from an appropriate post-secondary program or equivalent Generally, four years' work experience
Engineering Assistant Engineer-In-Training Construction Technician	\$102 - \$115	 Fully qualified professional position Carries out assignments requiring general familiarity within a broad field of the respective profession Makes decisions by using a combination of standard methods and techniques Actively participates in planning to ensure the achievement of objectives Works independently to interpret information and resolve difficulties Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, six years experience
CAD Manager Designer Process Designer Project Engineer Senior Project Engineer Survey Manager Construction Technician Senior Civil Engineer Environmental Engineer Survey Crew Chief	\$121- \$137	 First level supervisor of first complete level of specialization Provides applied professional knowledge and initiative in planning and coordinating work programs Adapts established guidelines as necessary to address unusual issues Decisions accepted as technically accurate, however may on occasion be reviewed for soundness of judgment Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, nine years' experience
Associate Senior Associate Project Manager Field Services Manager Landscape Architect	\$144 - \$180	 Highly-specialized technical professional or supervisor of groups of professionals Provides multidiscipline knowledge to deliver innovative solutions in related field of expertise Participates in short and long range planning to ensure the achievement of objectives Makes responsible decisions on all matters, including policy recommendations, work methods, and financial controls associated with large expenditures Reviews and evaluates technical work Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, ten years' experience with extensive, broad experience
Principal	\$180 - \$210	 Senior level consultant or management function Recognized as an authority in a specific field with qualifications of significant value Provides multidiscipline knowledge to deliver innovative solutions in related field of expertise Independently conceives programs and problems for investigation Participates in discussions to ensure the achievement of program and/or project objectives Makes responsible decisions on expenditures, including large sums or implementation of major programs and/or projects Graduate from an appropriate post-secondary program, with credentials or equivalent Generally, fifteen years' experience with extensive professional and management experience
Survey Crew	\$150 \$220	1 person crew 2 person crew

2019

YPSILANTI TOWNSHIP

HOURLY COST RECOVERY RATES

Fire Marshal	\$60
Planning & Development Coordinator	\$43
Clerical Support	\$35
Ordinance Officer	\$30
Ordinance Administrator	\$54
Building Inspector	\$47
Chief Building Official	\$63
Community Standards Director	\$58
Township Attorney (development agreement rate)	\$200

AGREEMENT BETWEEN CHARTER TOWNSHIP OF YPSILANTI AND THE WASHTENAW COUNTY ROAD COMMISSION

THIS AGREEMENT, made and entered into this <u>3rd</u> day of <u>April</u>, 2019 between the Board of the Charter Township of Ypsilanti (the "Township") and the Board of Washtenaw County Road Commissioners (the "Road Commission").

WHEREAS, the Charter Township of Ypsilanti desires to install nine (9) speed humps on Edison Avenue between Packard Road and Greenside Avenue (the "Project"); and

WHEREAS, proper authority is provided to the parties of this Agreement under the provisions of Act 51 of Public Acts of 1951 as amended; and

WHEREAS, the Road Commission will prepare bid documents for the Project, including plan preparation and project bidding; and

WHEREAS, the Township shall promptly reimburse the Road Commission upon receipt of any invoices for all costs and expenses attributed to the Project;

THEREFORE, BE IT AGREED that the Township will pay the Road Commission for all actual costs incurred associated with the construction of the Project estimated to be \$61,950.00.

IT IS FURTHER UNDERSTOOD that the Charter Township of Ypsilanti will be a named insured on the Washtenaw County Road Commission's coverage for liability for the activities described above. The Road Commission will submit a certificate of insurance evidencing such coverage to the Township Clerk prior to implementation of services under the contract. Each party to this contract shall be responsible for the acts and omissions of its employees and agents.

AGREEMENT SUMMARY

Estimated Cost

Installation of nine speed humps on Edison Avenue

\$61,950.00.

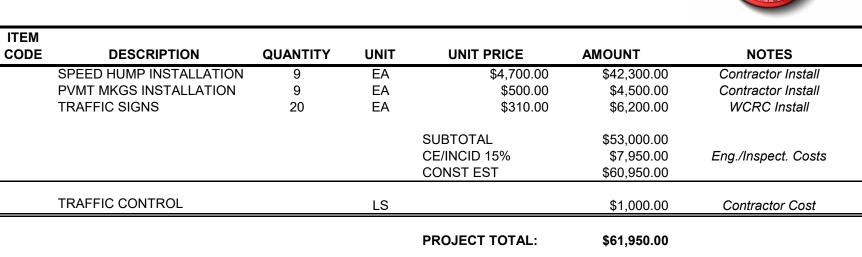
Witness

FOR YPSILANTI TOWNSHIP: hea & the Vitness Brenda L. Stumbo, Supervisor April 3, 2019 Karen Lovejoy Roe, Clerk 3,2019 FOR WASHTENAW COUNTY ROAD COMMISSION: Witness Douglas E. Fuller, Chair

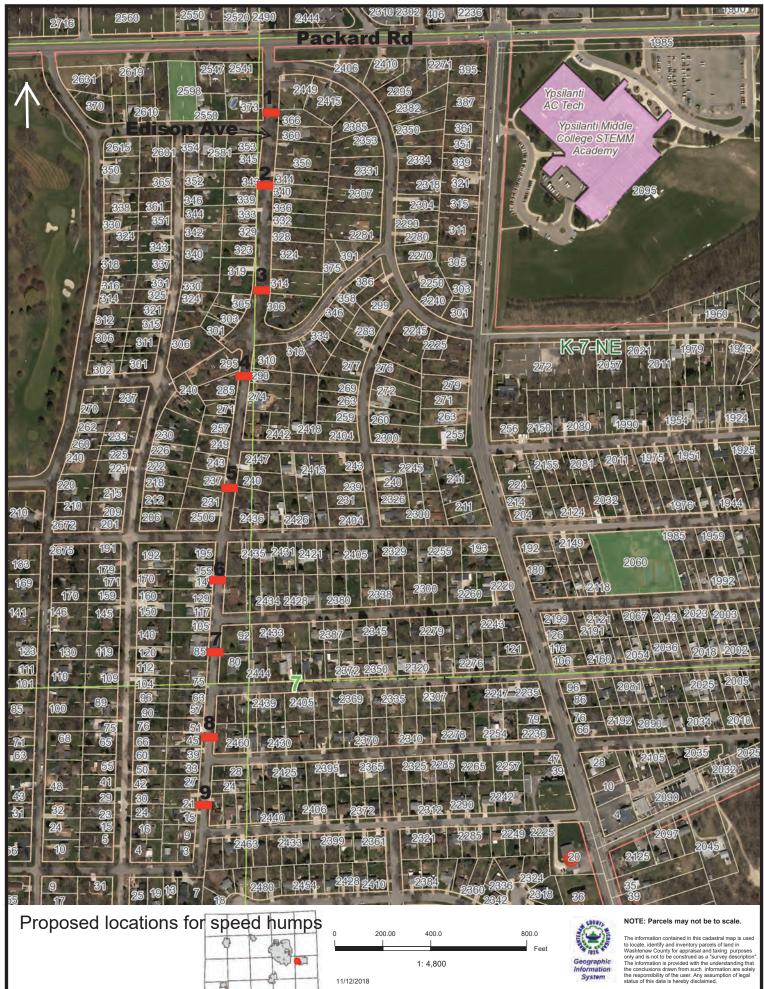
Sheryl Soderholm Siddall, Managing Director

PRELIMINARY ENGINEER'S ESTIMATE

Project:Speed Hump InstallationLocation:Edison Ave, Ypsilanti TwpDate:03/25/2019



Washtenaw Commission



© 2013 Washtenaw County

THIS MAP REPRESENTS PARCELS ATTHE TIME OF PRINTING. THE OFFICIAL PARCEL TAX MAPS ARE MAINTAINED SOLELY BY THE WASHTENAW COUNTY EQUALIZATION DEPARTMENT AND CAN BE OBTAINED BY CONTACTING THAT OFFICE AT 734-222-6662.

CHARTER TOWNSHIP OF YPSILANTI 2019 BUDGET AMENDMENT #6 REVISED

April 2, 2019

AMOUNTS ROUNDED UP TO THE NEAREST DOLLAR

101 - GENERAL OPERATIONS FUND

Request to increase budget for PTO payout at 75% of the hours requested. This will be funded by an Appropriation of Prior Year Fund Balance.

Revenues:	Prior Year Fund Balance	101-000-000-699.000	\$947.00
		Net Revenues	\$947.00
Expenditures:	Salaries Pay Out - PTO & Sick	101-253-000-708.004	\$880.00
	FICA	101-253-000-715.000	\$67.00
		Net Expenditures	\$947.00

Request to increase budget for the purchase of a Toro Groundsmaster 5910 mower for parks and grounds. This will be funded by an Appropriation of Prior Year Fund Balance.

Revenues:	Prior Year Fund Balance	101-000-000-699.000	\$111,740.00
		Net Revenues	\$111,740.00
Expenditures:	Equipment	101-774-000-977.000	\$111,740.00
		Net Expenditures	\$111,740.00

Request to increase budget for the purchase of a Ford F550 and Arbortech 11' Chipper Body that will be used in parks/grounds and as a back up for Environmental Services. The \$69,969 purchase will be shared 80% (\$55,975) General Fund - Parks & Grounds and 20% (\$13,994) Environmental Services Fund. The 80% will be funded by an Appropriation of Prior Year Fund Balance from the General Fund.

Revenues:	Prior Year Fund Balance	101-000-000-699.000	\$55,975.00
		Net Revenues	\$55,975.00
Expenditures:	Equipment	101-774-000-977.000	\$55,975.00
		Net Expenditures	\$55,975.00

* Request to increase budget for the purchase and installation of streetlights and cameras paid by developers at Ponds at Lakewood and Majestic Ponds, Lakewood-Majestic Lakes, and Redwood/Nautica Point Apartments. There will be a special assessment district set up to pay for annual operations and maintenance. The purchase and installation will be funded by funds received from the developers.

Revenues:	Contributions for Streetlights/Cameras	101-000-000-675.002	\$22,065.00
		Net Revenues	\$22,065.00
Expenditures:	Streetlight - Construction	101-956-000-926.050	\$7,340.00
	Neighborhood Camera System	101-970-000-972.000	\$14,725.00
		Net Expenditures	\$22,065.00

Total Increase \$190,727.00

CHARTER TOWNSHIP OF YPSILANTI 2019 BUDGET AMENDMENT #6 REVISED

April 2, 2019

212 - BIKE, SIDEW	ALK, REC, ROADS GENERAL F	UND (BSRII)	Total Increase	\$9,867.00
•	e the budget for the purchase of a B rior Year Fund Balance.	obcat 36" convertible tree spade. This wil	l be funded by an	
Revenues:	Prior Year Fund Balance	212-000-000-699.000	\$9,867.00	
		Net Revenues	\$9,867.00	
Expenditures:	Equipment	212-212-000-977.000	\$9,867.00	
		Net Expenditures	\$9,867.00	

226 - ENVIRONMENTAL SERVICES FUND

Total Increase \$13,994.00

Request to increase budget for the purchase of a Ford F550 and Arbortech 11' Chipper Body that will be used in parks/grounds and as a back up for Environmental Services. The \$69,969 purchase will be shared 80% (\$55,975) General Fund - Parks & Grounds and 20% (\$13,994) Environmental Services Fund. The 20% will be funded by an Appropriation of Prior Year Fund Balance from Environmental Service Fund.

Revenues:	Prior Year Fund Balance	226-000-000-699.000	\$13,994.00
		Net Revenues	\$13,994.00
Expenditures:	Equipment	226-226-000-977.000	\$13,994.00
		Net Expenditures	\$13,994.00

* Revision Requested by Clerk Roe

Motion to Amend the 2019 Budget (#6) REVISED

Move to increase the General Fund budget by \$190,727 to \$9,728,282 and approve the department line item changes as outlined.

Move to increase the Bike, Sidewalk, Rec, Roads, General Fund II budget by \$9,867 to \$1,635,412 and approve the department line item changes as outlined.

Move to increase the Environmental Service Fund budget by \$13,994 to \$3,031,023 and approve the department line item changes as outlined.

Supervisor BRENDA L. STUMBO Clerk KAREN LOVEJOY ROE Treasurer LARRY J. DOE Trustees STAN ELDRIDGE HEATHER ROE MONICA ROSS-WILLIAMS JIMMIE WILSON



Charter Township of Ypsilanti

ACCOUNTING DEPT

7200 S. Huron River Drive Ypsilanti, MI 48197 Phone: (734) 484-3702 Fax: (734) 484-5154

STATEMENTS AND CHECKS

APRIL 16, 2019 BOARD MEETING

GRAND TOTAL -	\$	1,010,175.25
CREDIT CARD PURCHASES-	\$_	4,937.38
HAND CHECKS -	\$	300,230.73
ACCOUNTS PAYABLE CHECKS	- \$	705,007.14

Clarity Health Care Deductible -

ACH EFT - \$ 57,067.56 (MAR) ADMIN FEE - \$ 1,112.50 (FEB)

Check Date	Check	Vendor Name HAND ON	CICS Amount
Bank AP AP	1000	, , , , ,	
03/27/2019	181639	B & B CONTRACTORS	3,003.75
03/27/2019	181640	BLUE CROSS BLUE SHIELD OF MI	178,094.32
3/27/2019	181641	BLUE CROSS BLUE SHIELD OF MI	33,898.92
3/27/2019	181642	COMCAST CABLE	126.37
3/27/2019	181643	COMCAST CABLE	156.85
3/27/2019	181644	COMCAST CABLE	214.90
3/27/2019	181645	DEARBORN NATIONAL LIFE INSURANCE	4,926.84
3/27/2019	181646	DELTA DENTAL PLAN OF MICHIGAN	13,070.43
3/27/2019	181647	KALITTA AIR LLC	46,300.00
3/27/2019	181648	LAVERNE CORTNEY	4,000.00 V
3/27/2019	181649	U.S. POSTAL SERVICE*	609.36
3/27/2019	181650	VISION SERVICE PLAN	3,189.19
3/27/2019	181651	WEX BANK	1,058.01
3/27/2019	181652	WINDSTREAM	435.03
3/28/2019	181653	PM TECHNOLOGIES, LLC	315.00
3/28/2019	181654	AT & T	30.58
3/28/2019	181655	AT & T	177.63
3/28/2019	181656	COMCAST CABLE	181.61
3/28/2019	181657	WASTE MANAGEMENT	300.00
4/02/2019	181658	COMCAST BUSINESS	1,239.00
4/02/2019	181659	COMCAST CABLE	106.85
4/02/2019	181660	LAVERN COURTNEY	4,000.00
4/04/2019	181661	CLEAR RATE COMMUNICATIONS, INC	861.00
4/04/2019	181662	COMCAST CABLE	39.98
4/04/2019	181663	COMCAST CABLE	116.85
4/04/2019	181664	COMCAST CABLE	136.85
4/04/2019	181665	GUARDIAN ALARM	2,308.89
4/04/2019	181666	GUARDIAN ALARM	1,008.00
4/04/2019	181667	VERIZON WIRELESS	256.83
4/04/2019	181668	VERIZON WIRELESS	3,188.20
4/04/2019	181669	WASTE MANAGEMENT	727.70
4/04/2019	181670	WASTE MANAGEMENT	11.89
4/04/2019	181671	WASTE MANAGEMENT	139,90
AP TOTALS:			
otal of 33 Che	cks:		304,230.73
less 1 Void Che			4,000.00
Total of 32 Dis	bursements:		300,230.73

DB: ipsilanti-Twp					
Check Date	Check	Vendor Name	AIP	Checks	Amount
Bank AP AP			1		
04/16/2019	181672 181673	AARON SIEGFRIED AHEAD			210.00 579.28

04/16/2019	181673	AHEAD AL WALTERS HEATING AND COOLING ALL SEASONS LANDSCAPING CO. AMAZON CAPITAL SERVICES ANN ARBOR CLEANING SUPPLY ANN ARBOR WELDING SUPPLY CO ANNETTE GONTARSKI APOLLO FIRE EQUIPMENT CO. ASSOCIATED FENCE AUTO VALUE YESILANTI BARR ENGINEERING COMPANY BRIDGESTONE GOLF INC CGS SAFETY TRAINING, INC. CHARLES POPE CHARLOTTE WILSON CHARTER TOWNSHIP OF SUPERIOR CHELSEA BRODFUEHRER CLADDIA SETTLE CLEAR ENERGY BROKERAGE & CONSULTING CLEVELAND GOLF STIXON CRYSTAL FLASH, INC. DANIEL MEDROW DAYLAN JACKSON DELUX RENTAL ELITE TECHNICAL SERVICES GROUP EMERGENT HEALTH PARTNERS FASTENAL GABRIEL, ROEDER, SMITH & COMPANY GMIS INTERNATIONAL HEADQUARTERS GORDON FOOD SERVICE INC. GOVEENMENTAL CONSULTANT SERVICES GRAINGER HOME DEPOT JOHN DOUGLASS LARDNER ELEVATOR COMPANY LARRY BOGGS LOWE'S LSQ FUNDING GROUP, L.C. MAIL FINANCE MARK HAMILTON MARK NELSON MCLAIN AND WINTERS MCMASTER-CARR MENARDS, INC. MESSENGER FRINTING MICHIGAN LINEN SERVICE, INC, MILTON ANDREWS MSC INDUSTRIAL SUPPLY NYGEL HARGRAVE OFFICE EXPRESS OKINAWAN KARATE CLUB ORCHARD, HILTZ & MCCLIMENT INC PARKWAY SERVICES, INC. PITTSFIELD CHARTER TOWNSHIP	579.28
04/16/2019	181674	AL WALTERS HEATING AND COOLING	6,895.00
04/16/2019	181675	ALL SEASONS LANDSCAPING CO.	145.02
04/16/2019	181676	AMAZON CAPITAL SERVICES	3,247.46
04/16/2019	181677	ANN ARBOR CLEANING SUPPLY	348.62
04/16/2019	181678	ANN ARBOR WELDING SUPPLY CO	147.01
04/16/2019	181679	ANNETTE GONTARSKI	286.20
04/16/2019	181680	APOLLO FIRE EQUIPMENT CO.	153.36
04/16/2019	181681	ASSOCIATED FENCE	950.00
04/16/2019	181682	AUTO VALUE YPSILANTI	144.55
04/16/2019	181683	BARR ENGINEERING COMPANY	8,642.28
04/16/2019	181684	BRIDGESTONE GOLF INC	1,365.55
04/16/2019	181685	CGS SAFETY TRAINING, INC.	1,800.00
04/16/2019	181686	CHARLES POPE	307.83
04/16/2019	181687	CHARLOTTE WILSON	150.00
04/16/2019	181688	CHARTER TOWNSHIP OF SUPERIOR	1 240 22
04/16/2019	181689	CHELSEA BRODEUEHRER	1,749.22
04/16/2019	181690	CLAUDIA SETTLE	283.30
04/16/2019	181691	CLEAR ENERGY BROKERAGE & CONSULTING	07.30
04/16/2019	181692	CLEVELAND GOLF SRIXON	2 361 10
04/16/2019	181693	CRISTAL FLASH, INC.	100.00
04/16/2019	181694 181695	DANIEL MEDROW	88.00
		DATLAN JACKSON	121 00
04/16/2019	181696	DELUX KENTAL FITTE TECUNICAL CEDUICES COOLD	2 695 50
04/16/2019	181697	PMEDCENT DEALTH DADTNERS	6 447 35
04/16/2019	181698	EMERGENI DEMITI PARIMERO	34.01
04/16/2019	181699	CARDER PORDER CMITTLE COMDANY	6,000,00
04/16/2019	181700	CATE INTERNATIONAL URADOUADTERS	200.00
04/16/2019	181700 181701 181702 181703	CORDON FOOD SERVICE INC	185.50
04/16/2019 04/16/2019	101702	COVERNMENTAL CONSULTANT SERVICES	3,023,50
04/16/2019	181702 181703 181704 181705	CRAINGER	501.41
04/16/2019	181705	HOME DEPOT	327.05
04/16/2019	181706	JOHN DOUGLASS	245.00
04/16/2019	181707	LARDNER ELEVATOR COMPANY	225.00
04/16/2019	181708	LARRY BOGGS	84.79
04/16/2019	181709	LOWE'S	183.15
04/16/2019	181710	LSQ FUNDING GROUP, L.C.	988.94
04/16/2019	181711	MAIL FINANCE	1,058.70
04/16/2019	181712	MARK HAMILTON	1,750.00
04/16/2019	181713	MARK NELSON	29.55
04/16/2019	181714	MCLAIN AND WINTERS	135,858.44
04/16/2019	181715	MCMASTER-CARR	44.53
04/16/2019	181716	MENARDS, INC.	39.97
04/16/2019	181717	MESSENGER PRINTING	1,033.30
04/16/2019	181718	MI-GMIS	1 153 90
04/16/2019	181719 181720	MICHIGAN DINER SERVICE, INC.	595.00
04/16/2019		MIDION ANDREWS	749.30
04/16/2019 04/16/2019	181721 181722	NYGEL HARGRAVE	88.00
04/16/2019	181723	OFFICE EXPRESS	75.69
04/16/2019	181724	OKTNAWAN KABATE CLUB	101.50
04/16/2019	181725	ORCHARD, HILTZ & MCCLIMENT INC	227,50
04/16/2019	181726	PARKWAY SERVICES, INC.	130.00
04/16/2019	181727	PITTSFIELD CHARTER TOWNSHIP	1,505.00
04/16/2019	181728	PM TECHNOLOGIES, LLC	375.65
04/16/2019	181729	PNC EQUIPMENT FINANCE, LLC	2,384.85
04/16/2019	181730	PRIORITY ONE EMERGENCY	781.91
04/16/2019	181731	RAYMOND FRISBIE	100.00
04/16/2019	181732	RESIDEX, LLC	511.90
04/16/2019	181733	RHETT REYES	2,223.00
04/16/2019	181734	RICHARD WILKIE	100.00
04/16/2019	181735	RON BLEVINS	50.00
04/16/2019	181736	S & S ASSOCIATES, INC	81.90
04/16/2019	181737	SAM'S CLUB DIRECT	923.37
04/16/2019	181738	SAM'S CLUB DIRECT	30.00
04/16/2019	181739	SOUTHERN COMPUTER WAREHOUSE	1,803.75
04/16/2019	181740	SPARTAN DISTRIBUTORS	25,00 327.25
04/16/2019	181741	STADIUM TROPHY	290.00
04/16/2019	181742	STANDARD PRINTING	290.00
04/16/2019	181743	STERICYCLE INC TERRACE PARK CONDOS	100.00
04/16/2019	181744 181745	THEREACE FORTE	12.60
04/16/2019 04/16/2019	181746	TINA HOTCHKISS	1,500.00
04/16/2019	181747	TRACTOR SUPPLY COMPANY	99.97
04/16/2019	181748	TRACY FREIN	1,712.00
04/16/2019	181749	TRANSUNION RISK & ALTERNATIVE	75.00
I (the second sec	1.00	A structure of the second second	

DB: Ypsilanti-Twp

04/09/2019 10:03 AM CHECK REGISTER FOR CHARTER TOWNSHIP OF YPSILANTI Page: 2/2 User: mharris CHECK NUMBERS 181672 - 181764

Check Date	Check	Vendor Name	Amount
04/16/2019	181750	U.S. POSTAL SERVICE*	2,437.44
04/16/2019	181751	ULLIANCE	982.35
04/16/2019	181752	UNIFIRST CORPORATION	202.24
04/16/2019	181753	UNITED STATES POSTAL SERVICE	10,000.00
04/16/2019	181754	US ECOLOGY	4,570.00
04/16/2019	181755	VAN BUREN STEEL & FABRICATING	375.00
04/16/2019	181756	VELOCITY EHS	1,000.00
04/16/2019	181757	W.J. O'NEIL COMPANY	3,779.71
04/16/2019	181758	WASHTENAW COUNTY LEGAL NEWS	245.00
04/16/2019	181759	WASHTENAW COUNTY TREASURER#	468,562.50
04/16/2019	181760	YOUMEI LIU	30.00
04/16/2019	181761	YOUNG SUPPLY COMPANY	44.60
04/16/2019	181762	YPSILANTI ACE HARDWARE	78.87
04/16/2019	181763	YSHELU JOHNSON	307.50
04/16/2019	181764	ZERO FRICTION	205.38
AP TOTALS:			
Total of 93 Che	cks:		705,007.14
Less 0 Void Che	cks:		0.00
Total of 93 Dis	bursements:		705,007.14

04/09.	/2019	10:56	MA
User:	mhar	cis	

CHECK REGISTER FOR CHARTER TOWNSHIP OF YPSILANTI CHECK NUMBERS 43 - 43

Page: 1/1

DB: Ypsilanti-Twp Check Date Check Vendor Name Description CREDIT ARDS Amount Bank CARDS COMERICAL CARD

04/16/2019 COMERICA BANK 101 DORSET AVE CAMERA 8529102340704310 472.70 43(E) REGISTRATION FOR SARA JO SHIPLEY TO ATTE 780.00 35.00 WORKFORCE PIPELINE SUMMIT REGISTRATION FOR 16-HOUR SERVSAFE CERTIF 145.00 POSTAGE FOR PASPORTS WEEK OF 3-18-19 73.05 POSTAGE FOR PASSPORTS WEEK OF 3-11-19 44.10 PASSPORT POSTAGE FOR WEEK OF 3-4-19 175.50 905.00 PLAN ANALYST SOFTWARE FOR BELLERS PLAN ANALYST SOFTWARE FOR BUILDING INSPE 360.00 9FOLDERS MAIL APP 311.74 P&G-AMERICAN FLAGS 117.92 BLDG PLAN LABELS 46.24 299.90 FILECENTER SOFTWARE SERVSAFE MANAGER BOOK W/ANSWER SHEET FOR 78.94 ANDROID APPS 19.90 REC. GARAGE HEATER SWITCH 0.00 729.99 COMMERCIAL CHARCOAL GRILL FOR CUSTOMER E HP J9535A 20-PORT GIG-T POE+ 153.45 "ATTITUDE CHANGES EVERYTHING" BOOK BY SA 188.95 4,937.38 CARDS TOTALS: 4,937.38 Total of 1 Checks: 0.00 Less 0 Void Checks: 4,937.38 Total of 1 Disbursements:

TREASURER'S REPORT

The March 2019 Treasurer's Report will be handed out at the meeting.

ATTORNEY REPORT

GENERAL LEGAL UPDATE

NEW BUSINESS

REQUEST APPROVAL OF CONTRACT WITH YPSILANTI TOWNSHIP FIREFIGHTERS LOCAL 1830 UNION WITH A TERM ENDING DATE OF DECEMBER 31, 2019



MEMORANDUM

vtown.org

- TO: Charter Township of Ypsilanti Board of Trustees
- FROM: Karen Wallin, HR Department
- **DATE:** April 3, 2019

Request approval of the attached "Social Media Policy" and "Cell Phone Policy" as RE: part of the on-going Township Policy and Procedure Manual updates.

One goal of the Human Resource Department during 2019 is to overhaul the Township Policy and Procedure Manual. As part of this goal, a policy committee consisting of Tammie Keen, Deputy Supervisor; Crystal Campbell, Community Engagement Coordinator; Lisa Stanfield, Deputy Clerk; and myself has been formed to review the current manual, submitting updates and revisions for approval.

At this time, the committee is recommending the following two drafts: "Social Media Policy" and "Cell Phone Policy" be considered for approval. The committee has met with the full-time officials as well as representatives from the AFSCME and TEAMSTER unions; and feel that any questions or concerns brought forth regarding these two policies, have been addressed.

Your consideration in this matter is appreciated. Should you have any questions, please feel free to contact me.

Social Media Policy

The Charter Township of Ypsilanti understands that social media can be a fun and rewarding way for employees and/or elected officials to share their lives and opinions with family, friends and co-workers. Use of social media can also present certain risks and carry with it certain responsibilities. Employees and/or elected officials should adhere to the following guidelines in regards to social media:

Guidelines

Social media includes all means of communicating or posting information or content of any sort on the internet, including to one's own or someone else's web log or blog, journal or diary, personal website, social networking or affinity website, web bulletin board or chat room, as well as any other form of electronic communication. Each person is solely responsible for what he/she posts online.

I. Using Social Media During Work Hours

Personal use of social media during work hours is **not permitted** unless it is work related and authorized by a supervisor or department head. Employees and/or elected officials are not authorized to use Charter Township of Ypsilanti email addresses to register on social networks, blogs or other online tools utilized for personal use.

II. Using Social Media Outside of Work Hours

Employees and/or elected officials are required to maintain the confidentiality of the Charter Township of Ypsilanti and not post private or confidential information. No financial, sensitive or proprietary information about the Township Board, employees, residents, vendors or applicants is to be posted on any social media sites.

Any on-line conduct that adversely affects an employee, Township Board member, Township residents or the Township's business interests may result in disciplinary action, up to and including termination of employment.

Although employees are not to represent themselves as a spokesperson for the Charter Township of Ypsilanti. Township news that is deemed to be public information may be shared on personal pages.

Drafted: March 4, 2019

Cell Phone Usage Policy

The following is the Charter Township of Ypsilanti's policy regarding the use of electronic devices and applies to all employees and/or elected officials. Under this policy, the term "electronic device" is defined as any device that makes or receives phone calls, leaves messages, sends text messages, surfs the internet or downloads and allows for the reading of and responding to email. The Charter Township of Ypsilanti reserves the right to modify or update this policy at any time.

Township Issued Electronic Devices

The Charter Township of Ypsilanti may issue employees and/or elected officials an electronic device based on their position and scope of responsibilities, as well as the communication needs of the Township necessary to promote safe, productive and efficient operations of Township business. Each employee and/or elected official issued an electronic device is responsible for the condition, care and use of the device, which is primarily to be used for Township business. Occasional personal use is permitted as long as it does not interfere with daily business operations. Privacy will be governed by law.

The Charter Township of Ypsilanti has the right, at any time, to monitor and preserve communications that utilize the Township's networks in any way, including data, voicemail, telephone logs, internet use, network traffic, etc. to determine proper utilization and reserves the right to review and retain such records at its discretion to investigate any irregularities or violations of policy. Upon review, employees and/or elected officials may be requested to reimburse the Township for excessive irregularities. Employees and/or elected officials may use their Township issued electronic device(s) outside of their normal work schedule to receive and address work-related emergency calls. Use of other electronic device features outside of normal work hours requires advance authorization from the department director.

Personal Electronic Devices

Although discouraged, it's understood that personal use of electronic devices is sometimes necessary. Personal electronic devices should be silenced or set to vibrate mode during working hours so as not to disrupt the normal workflow. This includes but is not limited to: social media activity, personal phone calls and texting.

Should time-consuming personal business need to be conducted during business hours, the employee must receive prior-approval from their direct supervisor.

If personal device use causes repeated disruptions or a loss in productivity, the employee may become subject to disciplinary action.

In the event that abuse of the personal device policy become evident, this policy may be updated to further restrict use of personal devices during work hours.

Cell Phone Usage While Driving

The Charter Township of Ypsilanti is committed to ensuring the safety of employees, as well as complying with all applicable laws.

If you must make or receive a call or use an electronic device while driving, a blue-tooth or hands-free device must be utilized. Where hands-free technology is not available, employees are required to pull off to the side of the road and safely stop the vehicle.

Employees who are charged with traffic violations resulting from the use of their phone while driving will be solely responsible for all liabilities that result from such actions.

Draft: March 4, 2019



WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY

Environmental Assessment Grant Program APPLICATION FORM

The WCBRA Environmental Assessment Grant Program provides grants for conducting Department Specific Activities, as defined by Act 381, by, or on behalf of, the Brownfield Authority on prospective eligible properties to be included in a Brownfield Plan. These include, but are not limited to, Phase I and II studies, as part of Baseline Environmental Assessments, Due Care Activities and Hazardous Materials Surveys.

The program is funded using available Brownfield Administrative Funds from active brownfield projects. Sites owned by a public entity or non-profit are eligible for 100% of the cost of eligible assessment activities, up to \$15,000. Private sites are eligible for up to 50% of the cost of eligible assessment activities, up to a maximum of \$10,000 of reimbursement.

Type of Application

X Publicly-Owned or Non-Profit-Owned Property (100% grant, up to \$15,000 maximum)

Privately-Owned Property (50% grant, up to \$10,000 maximum)

Owner Information

Property Owner: Charter Township of Ypsilanti

Contact: Sara Jo Shipley, Economic Development Director

Property Address: 2025 E Clark Rd. Ypsilanti, MI 48198

Phone No.: 734.544.3733

Property Tax ID #: K-11-02-100-006

Applicant Information

Applicant Name: Charter Township of Ypsilanti

Phone No.: 734.544.3733

Address: 7200 S. Huron River Dr

Developer (Entity) Name (if different than applicant):

Project Information

Project Name: Ypsilanti Township Community Center CDBG

Project Description: Flooring replacement in Community/Senior Center



Please provide a Site Map, Aerial, and/or Site Plan for the redevelopment.

Property Information

	vnship has owned the site since the early 1970s 1943- 1966 Elementary School
Historic Property Uses.	1945- 1900 Elementary School
	1966 – 1970 Washtenaw Community College
	1970 – present Ypsilanti Township Community Center
Property Acreage: 21 a	acres

Zoning: R3 – Single Family

Surrounding Land Use: Park, golf course, vacant land, single family housing

Proposed Environmental Activities:

	Estimated Cost
X Phase I	
Phase II	
BEA Report	
Due Care Plan	
\mathbf{X} Hazardous Material Survey	

Total: \$26,899.00

Please attach a price quote from a qualified environmental firm.

Please describe Previous Environmental Assessments Completed: <u>Phase I completed in 2015 by Tetra</u> Tech

Please describe environmental conditions: Restrictive covenant on property due to a release of gasoline encountered during underground storage tank removal; property was once an apple orchard; adjacent golf course



Please provide cloud links to any relevant environmental reports.

Emailed to Nathan Voght

Please return the completed form and attachments to:

Nathan Voght Economic Development Specialist Washtenaw County Office of Community and Economic Development 415 W. Michigan Ave. Ypsilanti, MI 48197 734-544-3055 voghtn@ewashtenaw.org

WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY ENVIRONMENTAL ASSESSMENT GRANT AGREEMENT

This Environmental Assessment Grant Agreement (the "Agreement") dated May 3, 2019 is entered between the WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY (the "Authority"), an authority established pursuant to Act 381 of 1996, as amended ("Act 381"), whose address is 220 N. Main Street, P.O. Box 8645, Ann Arbor, Michigan 48107-8645 and the Charter Township of Ypsilanti, (the "Grantee"), whose address is 7200 Huron River Drive, Ypsilanti, MI 48197.

RECITALS

- A. Pursuant to Act 381, as amended, the Authority captures Brownfield Administrative Fees from Tax Increment Revenues from active brownfield projects for the purpose of carrying out brownfield redevelopment activities, including to pay for reasonable and actual administrative and operating expenses of the Authority.
- B. The Authority established the "Environmental Assessment Grant Program" in 2017, and amended it on August 2, 2018 and April 4, 2019, in order to fund eligible Department Specific Activities, pursuant to Act 381, on prospective eligible brownfield sites within member communities.
- C. The Authority intends to utilize reserves within its Administrative Fees to fund the Environmental Assessment Grant Program.
- D. At the May 2, 2019 meeting, the Authority approved the expenditure of 100% of the costs to conduct eligible Department Specific Activities, up to \$26,899, for the property known as 2025
 E. Clark Road, Ypsilanti Township Community Center, Tax ID# K-11-02-100-006, Ypsilanti, MI 48197 (the "Property").
- E. The Grantee wishes to utilize grant funds to conduct eligible Department Specific Activities, and the Authority will provide the grant fund under the Terms and Conditions herein contained.

TERMS AND CONDITIONS

Pursuant to the Recitals of this Agreement, the parties agree as follows:

<u>Grant</u> – The Authority hereby agrees to grant to the Grantee 100% of the costs, up to \$26,899, to conduct Department Specific Activities within the Property. The work to be conducted will be in accordance with the TetraTech proposal No. ______ dated _____, 2019, sent to Sara Jo Shipley. Any costs above the approved amounts will not be reimbursed.

- 2. <u>Repayment</u> The provided grant funds shall not be required to be repaid to the Authority, provided the Grantee complies with all applicable Terms and Conditions.
- 3. <u>Procurement of Eligible Activities</u> The Authority is bound to utilize Administrative fees captured in accordance with Act 381. Further, in establishing the Environmental Assessment program the Authority must be good stewards of the funds in ensuring they are utilized in the most cost-effective and efficient manner. Therefore, pursuant to the adopted Assessment Program Policy, the Grantee shall follow its own established procurement policies and procedures in arranging for the grant activities to be completed.
- 4. <u>Authority to Conduct Work on Behalf of Grantee</u> At the request of the Grantee, the Authority may conduct the grant-funded assessment work on behalf of the Grantee. The Authority will follow applicable Washtenaw County procurement procedures to contract with qualified environmental consultants to complete the work. This may include a singular request for quotes for the work to be conducted. Or, procurement may entail a periodic public release of Request for Qualifications to pre-approve, in advance of any specific work needed, qualified environmental consultants, retaining those contractors on an on-going basis in order to expedite the necessary work to be completed.
- 5. Extension of Reliance of Environmental Reports to Authority and Assignees Any and all reports, investigations, testing, and information generated wholly or partially utilizing funding through this grant program shall include the ability of the Washtenaw County Brownfield Authority and its assignees and/or designees, as determined by the Authority, to rely upon such reports, investigations, testing and information. Further, copies of any and all reports shall be provided to the Authority once completed, prior to any disbursement of grant funds.
- 6. <u>Disbursement</u> The Grant funds will be disbursed to the Grantee as approved Department Specific Activities are or have been completed, upon submittal by Grantee of a statement of costs of such activities paid or incurred from time to time, and receipt of reports, investigations, testing and information in accordance with Section 5 above, but not more frequently than monthly. Such a statement shall include a description of eligible work performed, and a copy of invoices for the work described in such statement. Within forty (40) days of a receipt of a complete statement and supporting invoices, brownfield staff shall review the statement, confirm that the work done is eligible, and disburse to Grantee the amount set forth in the statement, up to a cumulative disbursement not to exceed the amount approved by the Authority, which is 100% of all eligible costs, up to \$26,899.
- 7. <u>Unspent Grant Funds</u> If the final cost of the eligible activities conducted is below the maximum award, remaining unspent grant funds will not be reimbursed, but rather revert back to fund reserves for use on other suspected brownfield sites.
- <u>Compliance with Applicable Environmental Regulations</u> It shall be the responsibility of the Grantee to comply with all applicable local, state and federal environmental regulations, as it applies to any and all Eligible Activities funded by the Grant.

- 9. <u>Grant Expiration</u> All Eligible Activities shall be completed within one year of this Agreement, unless the Authority grants an extension.
- 10. <u>Insurance</u> The Grantee shall purchase and maintain insurance coverages as indicated at limits not less than those set forth below. Grantee shall name Washtenaw County and Washtenaw County Brownfield Redevelopment Authority as an additional insureds under all coverages listed below except Worker's Compensation. The Grantee shall maintain other insurance as it deems appropriate for its own protection.
 - a. Worker's Disability Compensation and Occupational Disease Insurance including Employers Liability Coverage in accordance with all applicable statutes of the State of Michigan.
 - b. Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and \$2,000,000 aggregate combined single limit. Coverage shall include the following:
 - i. Contractual Liability
 - ii. Products and Completed Operations
 - iii. Independent Contractors Coverage
 - iv. Broad Form General Liability Endorsement or Equivalent
 - c. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverage, with limits of liability of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles.

The Grantee shall also require each and every contractor(s) and/or subcontractor(s) engaged by the Grantee to perform services pursuant to this Agreement to purchase and maintain insurance coverages at the limits set forth below. Grantee's contractor(s) and/or subcontractor(s) shall name Washtenaw County and Washtenaw County Brownfield Redevelopment Authority as additional insureds under all coverages listed below except Worker's Compensation, Motor Vehicle Liability, and Professional Liability.

- a. Worker's Disability Compensation and Occupational Disease Insurance including Employers Liability Coverage in accordance with all applicable statutes of the State of Michigan.
- b. Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and \$2,000,000 aggregate combined single limit. Coverage shall include the following:
 - i. Contractual Liability
 - ii. Products and Completed Operations

- iii. Independent Contractors Coverage
- iv. Broad Form General Liability Endorsement or Equivalent
- Motor Vehicle Liability Insurance, including Michigan No-Fault Coverage, with limits of liability of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage.
 Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles.
- d. Professional Liability coverage with a minimum limit of \$1,000,000 each occurrence.

All insurance coverages described above shall remain in effect at all times until completion of all Eligible Activities. The Grantee shall deliver copies of certificates of insurance for each of the policies mentioned above to the Authority. If so requested, certified copies of all policies will be provided. It is understood and agreed that thirty (30) days advanced written notice of cancellation, non-renewal, reduction and/or material change in any coverage shall be sent to the Authority.

- 11. <u>Indemnification</u> To the extent permitted by Michigan law, the Grantee shall ensure its contractor shall indemnify and hold Washtenaw County and the Washtenaw County Brownfield Authority harmless from and against all actions, liabilities, demands, costs and expenses, including court costs and attorney fees, which may arise due to the Grantee's negligent, grossly negligent and/or intentional acts or omissions under this Agreement.
- 12. Freedom of Information Act Grantee understands that all communications, information, and/or documentation submitted by Grantee may be open to the public under the Freedom of Information Act, Act No. 442 of the Public Acts of 1976, being Sections 15.23 to 15.24 of the Michigan Compiled Laws and no claim of trade secrets or any other privilege or exception to the Freedom of Information Act will be claimed by Petitioners as it relates to this Agreement.
- 13. <u>Notices</u> All notices shall be given by registered or certified mail addressed to the parties at their respective addresses as shown above. Either party may change the address by written notice sent by registered or certified mail to the other party.
- 14. <u>Assignment</u> The interest of any party under this Agreement shall not be assignable without the other parties' written consent.
- 15. <u>Entire Agreement</u> This Agreement supersedes all agreements previously made between the parties relating to the subject matter. There are no other understandings or agreements between them.
- 16. <u>Non-Waiver</u> No delay or failure by either party to exercise any right under this Agreement, and no partial or single exercise of that right, shall constitute a waiver of that or any other right, unless otherwise expressly provided herein.
- 17. <u>Headings</u> Headings in this Agreement are for convenience only and shall not be used to interpret or construe its provisions.

- 18. <u>Governing Law</u> This Agreement shall be construed in accordance with and governed by the laws of the State of Michigan.
- 19. <u>Compliance with Applicable Law</u> Grantee agrees to comply all applicable federal, state, and local laws, statutes, rules, regulations, ordinances, and other legal obligations of a similar effect.
- 20. <u>Counterparts</u> This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.
- 21. <u>No Third Party Beneficiaries</u> This Agreement shall not be deemed or construed to create any rights to reimbursement or otherwise in the Consultant, Contractors, Subcontractors, or any third parties. This Agreement shall not be construed to create any third party beneficiary contract or claim, and the parties intend there to be no third party beneficiaries.
- 22. <u>Binding Effect</u> The provisions of this Agreement shall be binding upon and inure to the benefit of each of the parties and their respective heirs, legal representatives, successors, and assigns.

The parties have executed this Agreement on the dates set forth below.

WASHTENAW COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY

BY:		
Jeremy McCa	allion, WCBRA Chair	
Date:		_
Attested to:		
Ву:		
Lawrence Kest	enbaum, County Clerk/Reg	ister
Date:		
Approved As to F	Form:	
P.//		

Approve As to Form:

By:

By:___

Curtis Hedger, Corporation Counsel

 _, Grantee

ВҮ:_____

PRINT NAME:_____

ITS:					

Date:_____

Exhibits

Exhibit A – Proposal to Provide Environmental Consulting Services by TetraTech, dated

_____, 2019

EXHIBIT A

Sent via electronic mail



April 10, 2019

Ms. Karen Lovejoy Roe Ypsilanti Township Clerk Civic Center 7200 S. Huron River Dr. Ypsilanti, MI 48197

Re: Phase I Environmental Site Assessment Update and Hazardous Building Materials Survey Proposal With Optional Clearance Testing and Reporting Ypsilanti Township Community Center, Ypsilanti, Michigan

Dear Ms. Lovejoy Roe:

Tetra Tech is pleased to submit this proposal to conduct a Phase I Environmental Site Assessment (ESA) Update and Hazardous Building Materials Survey at the Ypsilanti Township Community Center located at 2025 East Clark Road in Ypsilanti, Michigan (subject property). The property parcel number is K-11-02-100-006 and comprised approximately 21 acres. Our office completed a Phase I ESA for the property in 2015, and has an understanding of the previous use, ownership, and surrounding area. Tetra Tech understands that Ypsilanti Township's Green Oaks Golf Course and Community Center is interested in replacing the floor tiles throughout the Community Center and would like to obtain community development block grant funding from Washtenaw County. To receive this funding, Housing and Urban Development (HUD) has specific guidelines for Phase I ESAs, including asbestos sampling, lead-based paint and radon sampling throughout the facility. Therefore, the Phase I ESA Update will include a Hazardous Building Materials Survey as an attachment. The Hazardous Building Materials Assessment will include an asbestos-containing materials (ACM) survey, lead based paint survey, and radon gas assessment.

As optional tasks, this proposal includes line items for clearance testing and reporting in the event that asbestos abatement is completed, lead-based paint abatement is completed, or a radon mitigation system is installed.

SCOPE OF WORK

Task 1: Phase I ESA Update and Hazardous Building Materials Survey and Report

Phase I ESA Update

To assess the potential for environmental impacts and liabilities, an environmental professional at Tetra Tech will conduct a Phase I ESA Update in general accordance with ASTM Standard E 1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". This is widely accepted as the industry standard for ensuring due diligence investigations of environmental liability and complies with final All Appropriate Inquiries (AAI) requirements as appropriated by the EPA. The purpose of the Phase I ESA Update is to identify Recognizable Environmental Conditions (RECs) at the subject property. ASTM Standard defines RECs as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." To identify RECs, Tetra Tech will interview those familiar with the current and past use of the property, conduct an onsite reconnaissance, and review local, state and federal environmental databases. Following is a description of these tasks.

Knowledgeable Site Contact

Tetra Tech will conduct interviews with persons familiar with the current and past use of the subject property. Tetra Tech assumes that you will provide us with names and contact numbers for knowledgeable site contacts. Interviews will be conducted with past and present key site managers, owners, or caretakers. An interview will also be conducted with at least one government official such as the local fire department or health agency. In addition, Tetra Tech assumes that information regarding any environmental liens on the subject property or previous environmental investigations and documentation of activities conducted at the parcel will be provided by the current owner.

Documentation of previous assessment will be reviewed to determine if any gaps in data exist and if additional assessment is necessary.

On-site Reconnaissance

The subject property will be visually surveyed for general site conditions including building construction, sewage disposal system, water supply, heating and cooling system and vegetation. We will also survey the parcels for RECs as may be evidenced by visual observation of site conditions, reports of past spills or leaks, or off-site activities. Tetra Tech assumes that access to structures will be granted and property boundaries will be clearly identified.

Records Review

Tetra Tech will arrange for a search and summary of local and government environmental databases for information that may reveal potential RECs associated with the subject property, as well as negative impacts from off-site properties. Tetra Tech will review reasonably ascertainable data and information sources to distances outlined in the ASTM Standard.

Historical information about the subject property, potential past uses, and physical characteristics will also be investigated during this phase. Sources that may be referenced include, but are not limited to:

- Historical aerial photographs
- Sanborn Fire Insurance Maps
- Topographical Maps
- City Directory Abstract
- Local government offices such as the fire department, health department, building department and the local assessor.

TETRA TECH

Task 2: Hazardous Building Materials Survey and Report

Asbestos-Containing Materials

Tetra Tech will perform a comprehensive survey of suspect ACM in accordance with currently recognized standard protocol developed under:

- The United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) promulgated under the Clean Air Act (40 CFR Part 61);
- The Asbestos Hazard Emergency Response Act (AHERA); and
- Tetra Tech standard operating procedure.

The asbestos survey will include a visual inspection, sample collection and laboratory analysis, and quantification of the ACMs. Samples will be collected from throughout the building where suspect ACM are identified. These samples may include floor and ceiling tiles, mastic, caulk, molding or other materials identified during the survey. Tetra Tech will attempt to collect samples from the roof, however roofing materials will not be penetrated to avoid roof warranty issues. The inspection will be conducted by a State of Michigan Certified Asbestos Inspector. Sampling and analysis of ACMs will be completed by USEPA recommended techniques.

Lead-Based Paint and Radon

Environmental Testing & Consulting (ETC) will complete a Lead Risk Assessment and Inspection of the interior, exterior, and playground area at the Community Center building. The Lead Risk Assessment and Inspection will be completed by and will utilize a combination of Heuresis X-Ray Fluorescense (XRF) Spectrum Analyzer and sample collection with subsequent laboratory analysis. Results will be used to determine the presence and risk of lead exposure. Samples will be collected of paint and dust. The survey will be performed by a lead-certified inspector in accordance with HUD and USEPA protocols.

ETC will also facilitate radon testing in accordance with standard industry practice. Results will be reported in the hazardous building materials report.

Laboratory Analysis

Suspect ACM samples will be submitted for analysis by Polarized Light Microscopy (PLM) using EPA Method 600/R-93/116. The laboratory maintains current National Institute for Standards and Technology (NIST, formerly the National Bureau of Standards) accreditation through the National Voluntary Laboratory Accreditation Program (NVLAP). For budgetary purposes, it has been assumed that 300 bulk sample analyses (layers) will be required to complete the survey.

Should floor tile or other non-friable or bituminous material be found not to contain asbestos by PLM, additional analysis by Transmission Electron Microscopy (TEM) can be completed as verification, but is not required. The cost of TEM analysis is an additional \$90.00/sample and are not included in this proposal.

TETRA TECH

Should analyzed samples be found to contain more than 1%, but less than 10% asbestos, the lab determination can be presumed to be correct, or a confirmatory point count analysis may be requested. Due to the unknown nature or number of samples to which this analysis may apply, costs for confirmatory point count analysis have not been included in this proposal. Confirmatory point count analysis would be an additional \$50.00/sample.

Paint chip samples will be analyzed for lead using flame ionization or ICP methods for all negative XRF results to verify the absence of lead.

Hazardous Building Materials Survey Report

Upon receipt of laboratory results, a single comprehensive report will be prepared for the hazardous building materials survey. The report will include the following:

- A description of field activities;
- Sample collection and laboratory analytical methods,
- A summary of material descriptions, locations, condition, and laboratory results; and
- Findings and conclusions.

Task 3: Optional Clearance Testing and Reporting

Asbestos-Containing Materials Clearance Testing and Reporting

Identified ACM may be abated following completion of the asbestos survey. In the event that asbestos abatement is completed, third party air monitoring will be performed to confirm asbestos fibers are not released into the atmosphere and that all ACM has been removed. The cost for abatement and third party air monitoring are not included in this proposal. Tetra Tech will review the data generated during abatement and prepare a letter report that documents the asbestos abatement and results of third party air monitoring and clearance testing.

Lead-Based Paint Clearance Testing and Reporting

Identified lead-based paint may be abated following completion of the Lead Risk Assessment and Inspection report. In the event that lead-based paint is abated, ETC will re-mobilize to the subject property to conduct clearance testing. Random samples will be collected from abated and non-abated areas to determine if a risk of lead exposure remains. The cost for lead abatement is not included in this proposal. Tetra Tech will prepare a letter report that documents the lead abatement and results of the clearance testing.

Radon Gas Clearance Testing and Reporting

A radon gas mitigation system may be installed following completion of the radon gas testing. In the event that a radon gas mitigation system is installed, ETC will facilitate re-mobilization to the subject property to conduct clearance testing. A timed sample will be collected in areas where radon gas was previously detected at elevated levels. The cost for radon gas system installation is not included in this proposal. Tetra Tech will prepare a letter report that documents system installation and results of clearance testing.

Ms. Lovejoy Roe April 10, 2019 Page 5 of 6

LIMITATIONS AND STANDARD OF CARE

The proposed scope of work should not be construed as an effort to completely characterize overall environmental regulatory compliance, or conditions above or below grade. Tetra Tech assumes that the information sources to be used for this investigation will provide accurate information; however, regulatory files are often difficult to access and incomplete, particularly regarding historical data. Any reliance by Ypsilanti Township shall be consistent and in keeping with these limitations, as well as those contained in the ASTM Standard E1527-13.

Work will be performed consistent with the standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

PROJECT TEAM

Tetra Tech will utilize professional staff from our Ann Arbor, Michigan office to perform the proposed scope of work. Mr. Daniel Sopoci will provide senior technical oversight. Mr. Sopoci is a Certified Hazardous Materials Manager (#15065), Registered Environmental Manager (#12295), and State of Michigan Asbestos Inspector (#A40698). Tetra Tech Senior Project Scientist Alison Rauss will serve as Project Manager with technical support from other Ann Arbor Tetra Tech staff as required.

PROJECT SCHEDULE

Tetra Tech is prepared to begin work upon your authorization and will complete a report in approximately four weeks of receiving all laboratory analyses. It is assumed field staff will be onsite for three days to complete the Phase I ESA Update site walk and the asbestos, lead based paint and radon sampling. It is our goal to schedule the sampling professionals during the same timeframe to reduce disruption at the Community Center.

COST ESTIMATE

Our cost to perform the Phase I ESA Update and Hazardous Building Materials Survey as described as Task 1 and Task 2 is **\$22,721**, which will be invoiced on a time and materials basis in accordance with our standard terms and conditions. Optional clearance testing and reporting described as Task 3 will be completed only as directed by Ypsilanti Township. The estimated cost for clearance testing and reporting is as follows:

- Asbestos clearance and reporting: \$736
- Lead clearance and reporting: \$3,442
- Radon clearance and reporting: \$1,802

Therefore, the maximum value of the proposed scope of work would be up to \$28,701.

This cost is based on the following assumptions:

- Property access will be granted within a reasonable timeframe.
- A 50-year chain-of-title and environmental lien search is not required.
- An assessment of building integrity and building systems is not required.

TETRA TECH

Ms. Lovejoy Roe April 10, 2019 Page 6 of 6

- A wetland assessment is not required.
- Sampling for mold is not required.

If acceptable, please contact us to discuss contracting. We look forward to working with you. Please contact me at daniel.sopoci@tetreatech.com or (734) 213-4073.

Sincerely,

Carial Seguin

Daniel Sopoci, CHMM Associate Scientist

alinon Raun

Alison Rauss Senior Project Scientist



CONSULTING SERVICES AGREEMENT

THIS AGREEMENT is made this day of 20 , by and between:

Tetra Tech, Inc.

,

(hereinafter referred to as the "Consultant") and:

Charter Township of Ypsilanti,

(hereinafter referred to as the "Client")

WHEREAS the Client requires that certain Services (the "Services") be provided by consultant as set forth in Work Authorization(s) signed by Client (a sample of which is attached hereto as Exhibit A). To the extent a Work Authorization conflicts with the terms of this Agreement, this Agreement shall control.

WHEREAS the Consultant possesses the necessary skills and experience to provide the required Services;

NOW THEREFORE the Client and the Consultant hereby agree as follows:

ARTICLE 1 CONTRACT DOCUMENTS

The Contract (and the Contract Documents) shall be deemed to include:

- 1. Consulting Services Agreement
- 2. General Terms and Conditions of the Consulting Services Agreement
- 3. Consultant's Proposal
- 4. Work Authorization

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all.

ARTICLE 2 <u>SCOPE OF SERVICES</u>

The Scope of Services under this Agreement shall be as set out in the Consultant's Proposal(s) and subsequent Work Order(s), or as otherwise mutually agreed to by the Consultant and the Client in writing. It is the intention of this Agreement that the Consultant furnish all labor, materials, equipment, supplies, services, facilities, and all other things necessary to provide the required Services, except those items specifically stated as being furnished by the Client.

ARTICLE 3 <u>SCHEDULE</u>

The Consultant shall commence work promptly upon receipt of authorization to proceed, and shall proceed diligently and continuously to provide the Services in accordance with the schedule set out in the Consultant's proposal or otherwise mutually agreed to by the Consultant and the Client.

If any of the Services described in Article 2 hereof shall have been performed prior to execution of this Agreement by all parties hereto, and at the direction of the Client, then in such event, this Agreement shall take effect as of the date such Services actually commenced, and Consultant shall be reimbursed for all such costs incurred at the direction of the Client.

ARTICLE 4 COMPENSATION

In consideration of the performance of the Services described herein and the fulfillment of all covenants and conditions applicable thereto, the Client hereby agrees to make payment to the Consultant for Services actually provided at the Consultant's rates set forth in the Consultant's proposal and in accordance with the Terms and Conditions of the Consulting Services Agreement attached hereto.

IN WITNESS WHEREOF, the duly authorized officers or representatives of the following parties hereto have executed this Agreement as of the effective date first written above.

Tetra Tech, Inc.	Client:
Ву:	Ву:
Name:	Name:
Title:	Title:
Date:	Date:
	Telephone:

GENERAL TERMS AND CONDITIONS OF THE CONSULTING SERVICES AGREEMENT

The following provisions shall be incorporated into and be deemed to be a part of the Agreement between Tetra Tech, Inc. (the "Consultant") and (the "Client"), wherein the Consultant is required to provide professional consulting services to the Client.

1. STANDARD OF CARE – LIMITED WARRANTY

The Consultant will provide professional consulting services, as defined in the Scope of Work or otherwise mutually agreed to between the Consultant and the Client, and in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants performing comparable services under comparable circumstances at the time services are performed under this Agreement. No other representations are made to the Client, express or implied, and no warranty or guarantee not expressly stated herein is included or intended in this Agreement or in the Consultant's proposals, contracts, reports, opinions, designs or documents.

The remedies set forth in this paragraph are exclusive.

2. RELATIONSHIP OF THE PARTIES

A. If all or any part of the Scope of Work is to be performed in the general vicinity of an existing operating plant or facility owned or operated by the Client or in an area where dust, fumes, gas, noise, vibrations and other particulate or non-particulate matter is in the atmosphere where it raises a potential or possible health hazard or nuisance to employees working in the area, or to others working in the general vicinity of the work area, the Client shall notify the Consultant of such nuisance or health hazard and thereafter the Consultant and all subcontractors shall take reasonable measures to protect their employees against such possible nuisances or health hazards.

B. Consultant and its employees, agents, affiliates and subcontractors shall act solely as independent contractors in performing Services under this Agreement. Except as specifically provided in this Agreement Consultant shall have no right or authority to act for Client and will not enter into any contract or other agreement, or incur any debt, liability or obligation of any nature in the name of, or on behalf of, Client. Consultant, its employees, agents, affiliates and subcontractors shall not be considered agents or employees of Client. Reliance upon the Services provided under this Agreement is limited to Client and any third party reliance that may be available is contingent upon written agreement executed by Consultant and upon the full execution by the third party of a letter of understanding provided by Consultant. Client acknowledges that the Services provided under this Agreement shall in no way be construed, designed or intended to be relied upon as legal advice or interpretation.

3. CLIENT RESPONSIBILITIES

A. Client shall: (1) provide Consultant, in writing, all information relating to Client's requirements for the project; (2) correctly identify the location of subsurface structures, horizontally and vertically, such as pipes, tanks, cables, utilities or other man made obstructions; (3) notify Consultant of any potential hazardous substances or other health and safety hazard or condition known to the Client existing on or near the project site; (4) give Consultant prompt written notice of any suspected deficiency in the Services; and (5) with reasonable promptness, provide required approvals and decisions.

B. The Client shall furnish right-of-entry and equipment access for the Consultant and its subcontractors to make borings, surveys and/or explorations. While the Consultant will operate with reasonable care so as not to damage property or improvements, cost of repairing any unavoidable damage shall not be the responsibility of the Consultant, unless otherwise stated herein. The Consultant shall not be liable for damage to or injury arising from damage to subterranean structures or infrastructure (pipes, tanks, cables, etc.) which are not called to the attention of the Consultant and correctly shown on the plans furnished to the Consultant, in connection with Services provided under this Agreement.

4. SITE CONDITIONS

A. The Client acknowledges that environmental, geologic, and geotechnical conditions can vary from those encountered at the times and locations where data are obtained by the Consultant. Because the available data are limited,

the Client acknowledges that there is some level of uncertainty with respect to the interpretation of these environmental, geologic, and geotechnical conditions, despite the professional care and skill applied by the Consultant.

B. Consultant acknowledges that Client has notified Consultant of all such hazardous substances which it knows or which it reasonably suspects are or may be present at or contiguous to the site or which may otherwise affect the Services known to Client. Client shall notify Consultant as soon as practicable if Client discovers either the presence of hazardous substances or facts or information which causes Client to reasonably suspect the presence of any such hazardous substances. Hazardous substances shall include, but not be limited to, any substance which poses or may pose a present or potential hazard to human health or the environment, whether contained in a product, material, by-product, waste or sample and whether it exists in a solid, liquid, semi-solid or gaseous form. As Consultant has been advised of such conditions at the site known to Client, Consultant shall assume responsibility to advise its employees, agents, affiliates, subcontractors and any third parties invited by Consultant to the site of the same conditions and additional conditions known to Consultant.

C. Consultant acknowledges that Client has notified Consultant whether all or any part of the work to Client's knowledge, is to be performed in the general vicinity of an area where asbestos, dust, fumes, gas, noise, vibrations or other particulate or non-particulate matter is in the atmosphere where it raises a potential health hazard or nuisance to those working in the area. Consultant is authorized by Client to take all reasonable measures Consultant deems necessary to protect its employees against such possible health hazards or nuisance. If Consultant is required to upgrade to Personal Protection Levels B or A, the reasonable direct cost of such measures shall be borne by Client.

D. If any previously undisclosed hazardous substances or conditions are discovered or reasonably suspected by Consultant during performance of the Services, Consultant may, at its discretion, suspend the Services until reasonable measures have been taken to protect Consultant's employees from such hazardous substances or conditions. Whether or not Consultant suspends the Services, in whole or in part, Client and Consultant agree that the scope of the Services, terms and conditions, schedule and the estimated fee or budget shall be adjusted in accordance with the disclosed information or condition or Consultant or Client may, at their discretion, terminate the Agreement.

5. MONITORING

The Client recognizes that a satisfactorily designed, installed, and maintained monitoring system may assist in the early detection of environmental changes, and if detrimental changes are detected, permit prompt development and implementation of mitigating or remedial measures. Unless it is specifically included in the Scope of Work under this Agreement, the Consultant will not perform such monitoring, and any such monitoring shall be the sole responsibility of the Client.

6. PERMITS

Consultant shall assist the Client in applying for permits and approvals required by law, or more specifically specified in this Agreement. Consultant shall not be responsible for any delays due to the actions or inactions of the Client or any third party.

7. REUSE OF DOCUMENTS

A. The Client shall have the right to use the reports, reproductions thereof, drawings and specifications resulting from the Consultant's efforts under the Agreement (the "Materials") only for those purposes expressly contemplated in the Agreement. The Materials shall not be used by Client for other projects, for additions to the subject project, for any portions of the project following any termination of the Consultant, or for completion of the project by others (unless the Consultant is in material breach of this Agreement), except by agreement in writing.

B. In the event that the Client agrees to, permits or authorizes changes in the drawings, specifications, reports and documents prepared by the Consultant pursuant to this Agreement, which changes are not consented to in writing by the Consultant, the Client acknowledges that the changes and any effects arising there from are not and shall not be the responsibility of the Consultant and the Client agrees to release the Consultant from all liability arising from the use of such changed documents. The Client further agrees to defend, indemnify and hold harmless the Consultant, its affiliates and their respective directors, officers, employees, agents and subcontractors from and against all claims, demands, damages

or costs arising from such unauthorized changes and their effects.

8. PRESERVATION OF SAMPLES

The Consultant shall not be obligated to preserve samples of soil, rock, or water obtained from the project site(s) for longer than thirty (30) days after the issuance of any document that includes, but is not limited to, the data obtained from those samples. The Client agrees to receive any such sample material for its sole, lawful storage, treatment, or disposal at any time after expiration of the 30-day term.

9. GOVERNMENT RELATIONS

The Consultant shall act only as an advisor in all governmental relations.

10. INFORMATION PROVIDED BY OTHERS

The Consultant shall provide the required Services based upon information available at the time, including information provided by the Client and others upon which the Consultant shall reasonably be entitled to rely. The Consultant shall not be liable for any errors, omissions, or inaccuracies which result from the Consultant's reliance on such information provided by others, provided however that the Consultant shall be obliged to review such information for appropriateness, prior to its use, and shall promptly notify the Client of any apparent errors, omissions or inaccuracies.

11. COMPENSATION

A. The Consultant shall be compensated for all labor, material, equipment, subcontract and related charges (including all applicable taxes) incurred in connection with providing the required professional consulting services, including such activities as investigations, research, design development, preparation of reports, drawings and specifications, and construction management or site inspections / construction oversight, as well as for word processing, graphics, report production, and other clerical activities associated with the Services.

B. Time spent traveling, when in the interest of the project, will be charged to the Client at hourly rates. No more than eight (8) hours of travel time will be charged in any day.

C. The estimated budget or maximum fee set forth in the Consultant's Proposal is for the Scope of Work described therein. The price and schedule proposed are based on Consultant's best judgment of the requirements known at the time of the proposal. Additional work due to changes in the Scope of Work requested by the Client, as well as additional work due to changed field conditions, shall constitute additional services for which additional compensation shall be paid in accordance with the Schedule of Charges. Should it be determined that work is required which does not fall under the original Scope of Work, Consultant will notify the Client and will submit a revised price to cover the out of scope work. Client must approve out of scope work before Consultant will proceed with work.

D. Unless specified otherwise, the proposed billing rates, included in each individual proposal under this Agreement, are effective through the Consultant's fiscal year (ending 9/30) and shall be subject to review and adjustment, as necessary to reflect annual increases in wages and operating expenses.

E. Expert Testimony. Expert witness testimony or participation at hearings or depositions, including necessary preparation time, will be charged at 200% of the rate quoted.

F. Other Direct Costs – Time and Material Projects. Charges for Other Direct Costs and facilities furnished by Consultant are computed on the basis of actual cost plus fifteen percent. This override covers the costs associated with cost of money, the risks associated with our responsibility for delivery on behalf of subcontractors, assorted administrative time, etc. Examples of such items which are directly attributable to the project include: shipping charges; printing; special fees; permits; special insurance and licenses; subcontracts; reproduction; equipment rental; and miscellaneous materials. Travel and travel-related expense are also computed on the basis of actual cost plus fifteen percent. A charge equal to 4.5% of total labor will be included on each invoice in place of itemized billing for the following in-house expenses: office supplies, in-office and cellular telephone calls, facsimiles, postage, in-house photocopying, and immaterial overnight express charges.

12. INVOICES AND TERMS OF PAYMENT

A. Invoices for Services provided by the Consultant will be rendered monthly. Such invoices will clearly delineate: the task(s) worked on; the respective quantities of each task completed or the time and expenses incurred; the applicable unit rate(s); the arithmetic extensions of the amounts invoiced; and such additional information as may be appropriate in support of the invoice. The Client hereby agrees that the periodic invoices rendered by the Consultant are correct, conclusive, and binding on the Client unless the Client notifies the Consultant in writing, within ten (10) days from the date of receipt of such invoices, of alleged inaccuracies, discrepancies, or errors.

B. Client agrees to pay all undisputed invoice amounts no later than thirty (30) days after receipt of invoice. Should the Client fail to make payment on an undisputed invoice within thirty (30) days after receipt of such invoice, a late payment charge of 1-1/2% per month, or a monthly charge not to exceed the maximum rate allowed by law, will be payable on any outstanding balance. Should the client fail to make payment on any invoice within sixty (60) days of the date of receipt of such invoice, the Consultant shall have the right to consider such default in payment a material breach of this Agreement and may, upon giving seven (7) days written notice, suspend any or all services in connection with the Project until all outstanding amounts are paid in full. Any attorneys' fees or other costs incurred in collecting any delinquent account shall be paid by the Client. The Client shall remit payment by check or wire transfer to the remittance address reflected on the Consultant's monthly invoices.

C. If payment for services rendered is to be made to the Consultant by a third-party lender, on behalf of the Client, the Client agrees that the Consultant shall not be required to indemnify the third-party lender, in the form of an endorsement or otherwise, as a condition of receiving payment for services.

13. CREDIT REVIEW

The provision of Services under this Agreement is subject to Consultant' initial and continuing credit review of Client. If requested by Consultant, Client shall furnish financial information to Consultant for the purpose of determining Client's creditworthiness. Any financial information furnished to Consultant shall be treated by Consultant as Confidential Information. Consultant may also rely on information obtained from independent parties (e.g., Dunn & Bradstreet). If Consultant determines that a financial security is warranted, Consultant reserves the right to require that Client provide a financial guarantee in a form reasonably acceptable to Consultant (e.g., Letter of Credit, Payment Bond, retainer, monthly pre-payment, etc.). If Client fails to provide the requested guarantee within fifteen (15) business days following such request, Consultant shall have the right to decline to accept any new Work, and to suspend the provision of Services until the day such guarantee is provided to Consultant. Client's continued failure to provide the requested guarantee may result in the termination of the Agreement.

14. LIMITATION OF LIABILITY

Neither party hereto, nor its affiliates, its subcontractors, or vendors of any tier, shall be liable to the other party or its affiliates in any action or claim for loss of profit, revenue, loss of product, loss of use or for any other indirect, consequential or special damages, even if caused by the sole or concurrent negligence of such party and even if advised of the possibility thereof. Client agrees that in consideration of the contract price and the comparative levels of risk taken, all claims for indemnification or contribution from Consultant shall be limited, in the aggregate, to the amount paid Consultant as total compensation for the applicable Services less amounts paid to its subcontractors or others in connection with the performance of the Services or a total amount of \$50,000, whichever is less. All claims against Consultant shall be deemed waived unless made by Client in writing and received by Consultant within six months after Consultant has completed that portion of the Services with respect to which the claim is made. Any limitation on or exculpation from liability afforded Consultant by this Agreement shall be applicable regardless of whether the action or claim is based in contract, tort (including negligence and professional errors and omissions), statute, strict liability, breach of contract, breach of warranty, or otherwise, and shall likewise limit the liability of Consultant's affiliates, subcontractors and vendors of any tier and their respective officers, agents and employees. For purposes of this Article an "affiliate" of a party includes any parent, subsidiary or affiliated corporation, partnership or other legal entity, and its and their officers, agents, employees and insurers. There are no third party beneficiaries of this Agreement and no third party may rely upon the obligations herein or upon the findings of any report produced hereby. This Agreement does not create or confer any legal claim or cause of action in favor of any party not a signatory to this Agreement and the obligations and legal duties imposed on any party by this Agreement are owed exclusively to the other party or parties and are not owed to any party not a signatory to this Agreement.

15. INDEMNIFICATION

A. The Consultant shall indemnify the Client from and against all liabilities, claims, penalties, fines, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorney's fees), which the Client hereafter may incur, become responsible for, or pay out as a result of death or bodily injury to any person, destruction or damage to any property, or any violation or alleged violation of governmental laws, regulations or orders to the extent that the Client proves such death, injury or damage was caused by (1) the gross negligence or willful misconduct of the Consultant, its directors, officers, employees, agents, or representatives in performance of this Agreement; or (2) the Consultant's breach of any term or provision of this Agreement; except to the extent such liabilities or losses are attributable to the gross negligence or willful misconduct of the Client.

B. The Client acknowledges that in seeking the professional services of the Consultant, the Client may be requesting the Consultant to undertake, for the Client's benefit, activities involving the presence or potential presence of hazardous, toxic or polluted substances of which the Consultant has not created or generated or contributed to the creation of any preexisting conditions at the Site. The Client shall indemnify, defend, and hold harmless the Consultant and its directors, officers, employees, agents and subcontractors, from and against all liabilities, claims, penalties, fines, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable expert witness and attorney fees), which the Consultant hereafter may incur, become responsible for, or pay out as a result of death or bodily injury to any person, destruction or damage to any property, or any violation or alleged violation of governmental laws, regulations or orders as a result of or in connection with (1) any actual or potential environmental pollution or contamination, including, without limitation, any actual or threatened release of toxic or hazardous materials, or failure to detect or properly evaluate the presence of such substances; (2) any action taken by the Consultant, its directors, officers, employees, agents, or representatives as Client's agent under the section entitled REPORTING AND DISPOSAL REQUIREMENTS; or (3) any action arising from or relating to Client's noncompliance with the obligations set forth in Article 3.

C. In the event that a claim is made by one party or parties against the other party or parties, at law or otherwise, for any alleged error, omission, or other act arising out of the performance of professional services, or any breach of this Agreement, and the claiming party fails to prove such claim, then the claiming party shall pay any and all costs incurred by the defending party in defending itself against the claim, including, but not limited to, attorneys' fees, expert witness fees, and court costs. The claiming party agrees that such payment shall be made immediately following dismissal of the case or upon entry of final, non-appealable judgment.

16. INSURANCE

A. The Consultant will maintain, throughout the term of this Agreement, insurance of the kinds and having the limits of liability and coverage as set forth below:

1.	Worker's Compensation - Coverage A Employer's Liability - Coverage B	Statutory \$1,000,000 each occurrence
2.	Commercial General and Contractual Liability Bodily Injury	\$1,000,000 each occurrence \$1,000,000 aggregate
	Property Damage	\$1,000,000 each occurrence \$1,000,000 aggregate
3.	Comprehensive Automobile Liability Combined Single Limit	\$1,000,000
4.	Professional Liability	\$2,000,000 each occurrence \$2,000,000 aggregate

7

B. Upon request by the Client, the Consultant shall provide a Certificate of Insurance evidencing such coverage and shall not cancel, reduce, restrict or change in any way the insurance coverage provided, without giving at least thirty (30)

days prior written notice to the Client.

17. NON-DISCLOSURE OF CONFIDENTIAL INFORMATION

The Consultant agrees not to disclose to third parties, without the Client's prior written permission, confidential or proprietary information or trade secrets provided to the Consultant or its employees, agents, or subcontractors, which have not been previously disclosed to the Consultant by outside third parties, or which are not in the public domain, except to the extent that such information is required by law or by the professional obligations of the Consultant to be disclosed. The Consultant will use its reasonable efforts to safeguard from unauthorized disclosure to third parties any such information given to it. The Client agrees not to disclose to third parties confidential or proprietary information provided to it by the Consultant without prior written permission.

Ownership of intellectual property in any drawings, documents, information, samples, models, patterns, or any other tangible or intangible thing existing prior to the date of execution of this Agreement and any developments or improvements to that intellectual property and any intellectual property created or developed otherwise than in connection with the Services at any time remains with Consultant.

Notwithstanding the foregoing, Client agrees that Consultant may include the Client's name and a general description of the Services provided, including both narrative and photographic representations of the Services, in general informational presentations made by Client for the promotion of its expertise and experience.

18. REPORTING AND DISPOSAL REQUIREMENTS

A. Nothing contained in this Agreement shall be construed or interpreted as requiring the Consultant to assume the status of an owner, operator, generator, transporter, storer, treater, disposer or person who arranges for disposal, as those terms, or any other terms, appear within any federal or state statute governing the treatment, storage and disposal of hazardous or toxic substances or wastes. The Client shall be solely responsible for notifying all appropriate federal, state, municipal or other governmental agencies of the existence of any hazardous, toxic or dangerous materials located on or in the project site(s), or discovered during the performance of the Services under this Agreement.

B. The Client shall be solely responsible for making and paying for all necessary arrangements to lawfully store, treat, recycle, dispose of, or otherwise handle hazardous or toxic substances or wastes, including, but not limited to, used or unused samples, drill cuttings, or water from well development, sampling and/or testing left on the project site(s) by the Consultant. The Client agrees to be the signatory as generator for any manifests required for such materials. The Consultant may, in its sole discretion, agree to make such arrangements on behalf of the Client, as the Client's agent, however, no agreement by the Consultant to make such arrangements on behalf of the Client on any such occasion shall confer any responsibility or liability upon the Consultant or be construed to be an agreement to make such arrangements on any preceding or succeeding occasions.

19. DISPUTES

In the event of a dispute between the parties regarding performance of any obligation arising under this Agreement, the parties shall attempt in good faith to resolve the dispute through negotiation. If the dispute cannot be settled through negotiation within 14 days after written notice of the dispute is given by one party to the other, then upon service of a written demand by either party, the parties agree to try in good faith to settle the dispute by mediation under the Commercial Mediation Rules of the American Arbitration Association. Mediation shall take place in the Commonwealth of Virginia, and the costs of mediation shall be borne equally by the parties. If within 30 days after service of a written demand by either party, any unresolved dispute shall be decided by arbitration in the Commonwealth of Virginia, by a single arbitrator, in accordance with the Commercial Arbitration Rules of the American Arbitration Arbitration Association, and utilizing the substantive law of the Commonwealth of Virginia. The arbitrator will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

8

20. TERMINATION

A. If either party (1) commits a breach of any material obligation under this Agreement; or (2) becomes insolvent or unable to meet its financial obligation; or (3) be adjudicated bankrupt the other party may notify the failing party in writing that it is in default of its contractual obligations and instruct it to immediately correct the fault. If the default is not immediately corrected, the notifying party may, without prejudice to any other right or remedy it may have, terminate the Agreement. This Agreement may also be terminated for convenience by the mutual written consent of both parties with 30 days prior written notice.

B. Upon termination of the Agreement, the Client shall immediately compensate the Consultant for work completed and Services rendered. In addition, an equitable adjustment shall be made to provide for termination costs arising from commitments which had become firm before termination, and for the winding down and protection of the work. If the Consultant is in default, the Client shall be entitled to deduct from the monies owing to the Consultant the amount of any incremental costs reasonably incurred in correcting the default, provided that such incremental costs are certified to the Consultant. There shall be no payment for loss of anticipated profits or consequential damages.

C. All provisions of the Agreement under the headings TERMS AND CONDITIONS, LIMITATION OF LIABILITY, INDEMNIFICATION and REPORTING AND DISPOSAL REQUIREMENTS shall survive the termination, suspension or completion of this Agreement.

21. UNFORESEEN CIRCUMSTANCES

If, during the performance of Services under this Agreement, any unforeseen conditions or occurrences, including without limitation unforeseen hazardous substances or waste, are encountered which, in Consultant's sole judgment, may significantly affect the Services, the risk involved in providing the Services, or the Scope of Services, Client will agree with Consultant to modify the Scope of Services and Consultant will provide an estimate of additional charges to include provisions for the previously unforeseen circumstances. Such estimate, when executed by Client and Consultant will be a valid change order in accordance with the provisions of Section 10 of this Agreement. As an alternative, Consultant may terminate Services under this Agreement in writing effective on the date specified by Consultant, in which event Client shall pay Consultant for services performed to the date of termination, plus reasonable expenses of termination.

22. DELAYS

Consultant shall not be held liable for any delay or failure in performance of any part of this Agreement by reason of any cause beyond its reasonable control, or any delays resulting from the Client or any other third parties actions or inactions.

23. FORCE MAJEURE

Consultant shall not be liable to Client for any loss, liability, cost, damage or expense arising out of the delay or failure to render Services under this Agreement where such delay or failure arises by reason of legislative, administrative or government prohibition, fire, weather conditions, earthquakes, or any other natural disasters, hostilities, civil disturbances, labor or industrial disputes, acts of God or any other event beyond the reasonable control of Consultant, in which event either party may terminate that portion of the Services under this Agreement not yet completed, and Consultant shall have no further liability to Client therefore. A change authorization extending the time to perform and stating an appropriate fee adjustment may be elected by mutual agreement of the parties hereto.

24. ETHICS AND BUSINESS PRACTICES

Both parties shall comply with all applicable local, state, and federal regulations and laws, ordinances, rules, and regulations, as well as the U.S. Foreign Corrupt Practices Act, UK Bribery Act, or other law as the may apply.

25. NOTICES

Any notices or other communications required hereunder shall be in writing and shall be deemed given when delivered in person or when mailed, by certified or registered first class mail, postage prepaid, return receipt requested, addressed to

the parties at their addresses specified below their respective signatures or to such other addresses of which a party shall have notified the other in accordance with the provisions of this Section.

26. WAIVER.

Any waiver by either party of any provision or condition of this Agreement shall not be construed or deemed to be a waiver of any other provision or condition of this Agreement, nor a waiver of a subsequent breach of the same provision or condition, unless such waiver is expressed in writing by the party to be bound.

27. SEVERABILITY

If any provision or portion of this Agreement shall be finally determined to be invalid or unenforceable in whole or part, the remaining provisions hereof shall remain in full force and effect and be binding upon the parties hereto.

28. ASSIGNMENT OF AGREEMENT

Neither the Client nor the Consultant shall assign any rights or obligations under this Agreement without the prior written consent of the other.

29. GOVERNING LAW

The validity, interpretation, and performance of this Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to conflict of law provisions.

30. ENTIRE AGREEMENT

The written Agreement constitutes the entire Agreement between the Client and the Consultant. It supersedes all prior written or oral agreements, or contemporaneous communications with respect to the subject matter thereof, and has not been induced by any representation, statements, or agreements other than those herein expressed.

31. MODIFICATION OF AGREEMENT

The conditions of this Agreement may not be modified except by written agreement between the Consultant and the Client, and no amendment to this Agreement shall be binding on either party unless reduced to writing, and signed by an officer or duly authorized representative of the party sought to be bound thereby.



Exhibit A

WORK AUTHORIZATION

TO: Tetra Tech, Inc.

FROM: Enter Client's Name

WORK AUTHORIZATION NO.: Enter Number

PROJECT TITLE: Enter short title by which the project can be identified

PROJECT LOCATION: Enter project address or other location description

Pursuant to the terms and conditions of the Consulting Services Agreement dated (*enter MSA date*), this Work Authorization hereby authorizes Tetra Tech, Inc. to perform the specific services and under the particular conditions set forth herein:

- 1. **SCOPE OF WORK:** Per the Scope of Work attachment hereto.
- 2. **COMPENSATION:** Enter agreed method or basis of payment, such as unit price, time and materials, etc. and the project value per the Consultant's proposal which should be attached and reference here.
- 3. BILLING SCHEDULE: Enter period of billing, such as monthly
- 4. TIME FOR COMMENCEMENT: Enter latest start date for work
- 5. TIME FOR COMPLETION: Enter latest finish date for work
- 6. **REPORTING REQUIREMENTS:** Enter what information is to be reported by Tetra Tech and in what format

7. **OTHER PROVISIONS:** Any special provisions of project-specific agreements reached between the Client and Tetra Tech

Upon execution of this Work Authorization, Client and Tetra Tech agree to bound by and comply with all the terms and conditions contained in the above referenced Consulting Services Agreement, except as modified by the specific terms and conditions, if any, contained herein.

APPROVED AND ACCEPTED BY:

Tetra Tech, Inc. (Consultant)	<i>Client's Name</i> (Client)
Signed:	Signed:
Name:	Name:
Title:	Title:
Date:	Date:

11

AGREEMENT BETWEEN THE FRIENDS OF RUTHERFORD POOL AND THE CHARTER TOWNSHIP OF YPSILANTI

The Charter Township of Ypsilanti (hereinafter "Township") and the Friends of Rutherford Pool, non-profit organization recognized by the IRS as a 501 (c) (3) public charity, (hereinafter "Friends"), agree as follows:

- A. The length of this Agreement between the Township and the Friends shall extend through September 30, 2019.
- B. The Friends agree that the fee structure for pool admission, swimming classes, adult water exercise classes, baby bubbles program, swim team program, season passes and daily fees for Ypsilanti Township residents shall be the same as the fee structure for Ypsilanti City residents.
- C. The Friends agree to permit Township Day Camps to use the pool facilities during normal pool admission hours subject to standard daily pool admission fees.
- D. The Friends agree to grant full and partial scholarships to Township residents for swimming programs based upon financial need.

- E. The Township agrees to provide funding in the amount of \$5,000 to the Friends to provide support for the operation and capital improvement of Rutherford Pool.
- F. The Friends agree to add the Township as an additional insured to its liability insurance policy associated with the Rutherford Pool operation during the term of this Agreement.

Signed: John K. Weiss

Brenda Stumbo

Ypsilanti Township Supervisor

Karen Lovejoy Roe

Ypsilanti Township Clerk

CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS

Building Safety • Planning & Zoning • Ordinance Enforcement • Police Services

То:	Karen Lovejoy Roe, Clerk
From:	Michael Radzik, OCS Director
Re:	Request to authorize circuit court litigation to a abate public nuisance by padlocking at 6934 Poplar Dr in the amount of \$10,000 funded in account 101-950.000-801.023
Сору:	McLain & Winters, Township Attorneys
Date:	April 8, 2019

The Office of Community Standards has investigated a public nuisance at the following location and authorization is requested to engage legal services to abate said nuisance by padlocking.

6934 POPLAR DR

This single family house in the Rosewind subdivision was the focal point of a narcotics trafficking investigation involving a member of the owner's family who resides there. The investigation by the Washtenaw County Sheriff's Office Community Action Team witnessed the suspect repeatedly sell suspected fentanyl to persons at the house and elsewhere in the community originating from the house. The investigation culminated in the suspect's arrest, execution of a search warrant at the property, and seizure of suspected fentanyl, cash and distribution materials from the house on March 21, 2019. Administrative approval to initiate legal action was granted and a lawsuit was filed against the property and its owner on April 5, 2019. Formal authorization is now requested to abate the public nuisance by padlocking the house for a period of up to one year or a negotiated alternative that protects the community.

Fentanyl is a synthetic opioid that is 80-100 times stronger than morphine. Fentanyl is added to heroin to increase its potency, or be disguised as highly potent heroin. Many users believe that they are purchasing heroin and actually don't know that they are purchasing fentanyl – which often results in overdose deaths. There were 80 opioid related overdose deaths in Washtenaw County in 2018 according to the Washtenaw County Health Department.



7200 S. Huron River Drive • Ypsilanti, MI 48197 • (734) 485-4393



CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS

Building Safety • Planning & Zoning • Ordinance Enforcement • Police Services

То:	Karen Lovejoy Roe, Clerk
From:	Michael Radzik, OCS Director
Re:	Request to authorize circuit court litigation to a abate public nuisance at 1474 Ecorse Rd in the amount of \$10,000 funded in account 101-950.000-801.023
Сору:	McLain & Winters, Township Attorneys
Date:	April 8, 2019

The Office of Community Standards has investigated a public nuisance at the following location and authorization is requested to engage legal services to abate said nuisance.

1474 ECORSE RD

This three-level commercial building has been vacant for several years and was first inspected with an administrative warrant on January 22, 2016 after its owner failed to register the vacant building. At that time, numerous code violations were documented, a damaged sign structure was abated, and the building exterior was blight-free and secure. Over time the building has deteriorated and has sustained water infiltration due to cessation of maintenance. On April 1, 2019 the vacant building certificate was renewed and the inspection resulted in the Certificate of Occupancy being suspended and the building condemned due to being a fire hazard and unsafe to occupy. The property owner, Hallak Ypsi, LLC and John McCormick of Detroit was issued a Notice of Violation and the structure ordered to be brought into code compliance. Authorization is requested to engage with the owner to abate the code violations by repair or demolition.



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Purchase Agreement

This Purchase Agreement (this "<u>Agreement</u>") is dated as of April 9, 2019 between DTE Electric Company ("<u>Company</u>") and Charter Township of Ypsilanti ("<u>Customer</u>").

This Agreement is a "Purchase Agreement" as referenced in the Master Agreement for Municipal Street Lighting dated May 7, 2018 (the "<u>Master Agreement</u>") between Company and Customer. All of the terms of the Master Agreement are incorporated herein by reference. In the event of an inconsistency between this Agreement and the Master Agreement, the terms of this Agreement shall control.

Customer requests the Company to furnish, install, operate and maintain street lighting equipment as set forth below:

1. DTE Work Order	53654310		
Number:	If this is a conversion or replacement, indicate the Work Order Number for current installed equipment: N/A		
2. Location where Equipment will be installed:	[Onandaga Ave @ Service Dr], as more fully described on the map attached hereto as <u>Attachment 1</u> .		
3. Total number of lights to be installed:	1		
4. Description of Equipment to be installed (the " <u>Equipment</u> "):	Install two (2) new wood poles, one (1) 58w LED and one (1)17'6" arm.	Leotek fixture,	
5. Estimated Total Annual Lamp Charges	\$141.58		
 Computation of Contribution in aid of 	Total estimated construction cost, including labor, materials, and overhead:	\$3,120.80	
Construction (" <u>CIAC</u>	Credit for 3 years of lamp charges:	\$424.74	
		Ψ121.71	
Amount")	CIAC Amount (cost minus revenue)	\$2,696.06	
		•	
Amount") 7. Payment of CIAC	CIAC Amount (cost minus revenue)	\$2,696.06 preement shall red by mutual	
Amount") 7. Payment of CIAC Amount:	CIAC Amount (cost minus revenue) Due promptly upon execution of this Agreement 5 years. Upon expiration of the initial term, this Agreement continue on a month-to-month basis until terminat written consent of the parties or by either party with	\$2,696.06 greement shall red by mutual th thirty (30) lge that the	

11. Special Order Material Terms:

All or a portion of the Equipment consists of special order material: (check one) YES NO

If "Yes" is checked, Customer and Company agree to the following additional terms.

A. Customer acknowledges that all or a portion of the Equipment is special order materials (<u>"SOM</u>") and not Company's standard stock. Customer will purchase and stock replacement SOM and spare parts. When replacement equipment or spare parts are installed from Customer's inventory, the Company will credit Customer in the amount of the then current material cost of Company standard street lighting equipment.

B. Customer will maintain an initial inventory of at least <u>0</u> posts and <u>0</u> luminaires and any other materials agreed to by Company and Customer, and will replenish the stock as the same are drawn from inventory. Costs of initial inventory are included in this Agreement. The Customer agrees to work with the Company to adjust inventory levels from time to time to correspond to actual replacement material needs. If Customer fails to maintain the required inventory, Company, after 30 days' notice to Customer, may (but is not required to) order replacement SOM and Customer will reimburse Company for such costs. Customer's acknowledges that failure to maintain required inventory could result in extended outages due to SOM lead times.

C. The inventory will be stored at <u>N/A</u>. Access to the Customers inventory site must be provided between the hours of 9:00 am to 4:00 pm, Monday through Friday with the exceptions of federal Holidays. Customer shall name an authorized representative to contact regarding inventory: levels, access, usage, transactions, and provide the following contact information to the Company:

Name:	<u>N/A</u>	Title:	<u>N/A</u>
Phone Number:	<u>N/A</u>	Email:	<u>N/A</u>

The Customer will notify the Company of any changes in the Authorized Customer Representative. The Customer must comply with SOM manufacturer's recommended inventory storage guidelines and practices. Damaged SOM will not be installed by the Company.

D. In the event that SOM is damaged by a third party, the Company may (but is not required to) pursue a damage claim against such third party for collection of all labor and stock replacement value associated with the damage claim. Company will promptly notify Customer as to whether Company will pursue such claim.

E. In the event that SOM becomes obsolete or no longer manufactured, the Customer will be allowed to select new alternate SOM that is compatible with the Company's existing infrastructure.

F. Should the Customer experience excessive LED equipment failures, not supported by LED manufacturer warrantees, the Company will replace the LED equipment with other Company supported Solid State or High Intensity Discharge luminaires at the Company's discretion. The full cost to complete these replacements to standard street lighting equipment will be the responsibility of the Customer.

Company and Customer have executed this Purchase Agreement as of the date first written above.

Company:	Customer:	
DTE Electric Company	Charter Township of Ypsilanti	
Ву:	Ву:	SIGN HERE
Name:	Name:	
Title:	Title:	

Attachment 1 to Purchase Agreement

Map of Location

[To be attached]

Aley School of the second

SAL INDUSTRIAL DR

R

US 12

fcorat ap

CHARDEN BERNELLER

1 and 1

0

Install wood pole

Solo Mileo

Install new pole, 58w LED, code 48 arm.



SET PUBLIC HEARING DATE

A. SET PUBLIC HEARING DATE OF TUESDAY, MAY 21, 2019 AT APPROXIMATELY 7:00PM -CREATION OF SECURITY CAMERA SPECIAL ASSESSMENT DISTRICT #074 FOR CLIFFS CONDOS

CHARTER TOWNSHIP OF YPSILANTI 2019 BUDGET AMENDMENT #7 REVISED 4/16/19

April 16, 2019

AMOUNTS ROUNDED UP TO THE NEAREST DOLLAR

101 - GENERAL OPERATIONS FUND

Request to increase budget for PTO payouts at 75% of the hours requested. This will be funded by an Appropriation of Prior Year Fund Balance.

Revenues:	Prior Year Fund Balance	101-000-000-699.000	\$2,810.00
		Net Revenues	\$2,810.00
Expenditures:	Salaries Pay Out - PTO & Sick	101-201-000-708.004	\$2,610.00
	FICA	101-201-000-715.000	\$200.00
		Net Expenditures	\$2,810.00

Request to increase budget for the purchase and installation of streetlight near Onandaga Avenue and the Service Drive intersection. This will be funded by an Appropriation of Prior Year Fund Balance.

Revenues:	Prior Year Fund Balance	101-000-000-699.000	\$2,697.00
		Net Revenues	\$2,697.00
Expenditures:	Streetlight - Construction	101-956-000-926.050	\$2,697.00
		Net Expenditures	\$2,697.00

212 - BIKE, SIDEWALK, REC, ROADS GENERAL FUND (BSRII)

Total Increase \$28,701.00

Request to increase the budget \$28,688 for the professional services of Tetra Tech to perform Environmental
 Phase I Testing to complete lead test, radon test, and asbestos test at the Community Center. This testing is required in order to receive future HUD CDBG grant funds for flooring replacement. An amount of \$15,000 will be funded by reimbursement from an Environmental Assessment Grant provided by the Washtenaw County Brownfield Redevelopment Authority and \$13,701 will be funded by an Appropriation of Prior Year Fund Balance.

Revenues:	County Grant	212-000-000-540.000 212-000-000-699.000	\$15,000.00 \$13,701.00
		Net Revenues	\$28,701.00
Expenditures:	Community Center - Improvement	212-970-000-976.008	\$28,701.00
		Net Expenditures	\$28,701.00

* Revision #2 - amount requested by Clerk 4/16/19

Total Increase \$5,507.00

Motion to Amend the 2019 Budget (#7) – REVISED 4/16/19

Move to increase the General Fund budget by \$5,507 to \$9,733,789 and approve the department line item changes as outlined.

Move to increase the Bike, Sidewalk, Rec, Roads, General Fund II budget by \$28,701 to \$1,664,113 and approve the department line item changes as outlined.

AUTHORIZATIONS AND BIDS

CHARTER TOWNSHIP OF YPSILANTI

OFFICE OF COMMUNITY STANDARDS

Building Safety • Planning & Zoning • Ordinance Enforcement • Police Services

To: Karen Lovejoy Roe, Clerk

From: Michael Radzik, OCS Director

Re: Request to approve contract documents for procurement and delivery of a 300KW diesel standby power generator and associated appurtenances for the Law Enforcement Center and to authorize advertising for sealed bids in compliance with Township Ordinance Chapter 2 Administration, Article VI Finance contingent upon final review and approval by legal counsel.

Copy: McLain & Winters, Township Attorneys

Date: April 5, 2019

The Board of Trustees previously authorized OHM Advisors to assist the Office of Community Standards Director with development of design specifications to replace the power generator at the Law Enforcement Center with an upgraded diesel machine capable of handling the power demands of this renovated essential services facility with capacity for future expansion. OHM Advisors has submitted a contract documents bid book for procurement and delivery of the machine. Legal counsel is reviewing relevant sections of the book to verify compliance with insurance and financial guarantee requirements. Upon final legal approval, the document will be advertised seeking sealed bids in compliance with the Township's Finance ordinance. A bid summary and recommendation will be submitted for Board approval at a future date, along with a second set of bid specifications for construction and installation of the generator by a separate contractor.

For information, the Planning Department was consulted and the generator specifications meet sound decibel restrictions at the lot line nearest placement of the generator. The adjacent parcel is currently undeveloped and holds potential for a wide variety of future uses.

Please contact me with questions or to discuss details.

Enclosures: OHM Suporting Memorandum Bid Book (draft status pending final legal review)



7200 S. Huron River Drive • Ypsilanti, MI 48197 • (734) 485-4393



memorandum

Date: March 21, 2019

- To: Ypsilanti Township Board
- From: Matt Parks, OHM Advisors

Re: Law Enforcement Center Generator Replacement

It has been brought to the Township Board's attention that the generator at the Law Enforcement Center at 1501 S. Huron St. is in need of replacement. The existing generator has been the back-up power for the building since it was constructed in the 1970s, and it cannot no longer service the facility properly. With the facility currently occupied by the Sherriff's Office electrical needs have changed from when it was occupied by the State Police and recently, the Township (who maintains the facility) has had difficulty finding replacement parts due to its age.

The Township has been working with OHM Advisors to assist in determining the current and future electrical needs of the building in regard to a back-up generator and prepare two (2) comprehensive bidding packages for generator procurement and generator installation. It was decided by the Township to bid out purchasing the generator separate from installation, which will result in two (2) contracts: one with the generator supplier and the other with an electrical/ general contractor for installation and site work.

Prior to design, electrical and civil engineers from OHM Advisors visited the Law Enforcement Center with Township Staff and a Generator representative to go over the needs of the of the project and the desires of the Township. The Township (and YCUA) has had success using Cummins products in the past and found value in the representative's attendance and input



in regards to this product. It was determined that a 300KW diesel Cummins generator with an outdoor enclosure would meet the needs of the building and the requirements of the Township. OHM Advisors incorporated this equipment into the project specifications and specified "Cummins Power Generation or engineered approved equal" for the manufacturer. This will ensure the Township receives a product that meets (or exceeds) their needs, while allowing bidders to propose a different product that will still meet all requirements for materials, quality, durability, appearance, strength, and design characteristics. The equipment must reliably perform and function at least equally as well as a Cummins generator, and achieve the same results imposed by the design concept of the completed project. By bidding this separate, it allows time for the procurement process (estimated at 8-10 weeks) and to specifically modify the installation contract to the specific model the Township awards.

OHM Advisors estimates cost for the generator procurement contract at \$155,000 - \$170,000 and an additional \$100,000 - \$130,000 for the generator installation (this number will be refined once a generator is awarded).

It is anticipated that generator procurement will be advertised for bid in April 2019 and a contractor will be awarded with signed contract books in May 2019. Once a contract has been signed for the generator procurement, the generator installation will be advertised for bid and awarded later this summer. It is estimated that this project will be completed by late October early November.

Encl: Example Generator with Outdoor Enclosure Image



*Image shown for reference of size and material only. Actual purchased unit may not look like this.

CONTRACT DOCUMENTS FOR LAW ENFORCEMENT CENTER – GENERATOR REPLACEMENT

CHARTER TOWNSHIP OF YPSILANTI WASHTENAW COUNTY, MI

OHM ADVISORS

34000 Plymouth Rd. Livonia, MI 48150 0098-18-0060

03/05/2019

TABLE OF CONTENTS

BIDDING REQUIREMENTS

00 11 13	ADVERTISEMENT FOR BIDS	
	INSTRUCTIONS TO BIDDERS	_
	BID FORM	=
	BID BOND	
00 43 36	SUBCONTRACTOR LISTING	
00 45 13	QUALIFICATIONS STATEMENT	
00 45 14	IRAN LINKED BUSINESS CERTIFICATION	

CONTRACT FORMS

00 51 0	00	NOTICE OF AWARD	00 51 00_1
00 52 1	13	AGREEMENT BETWEEN OWNER AND CONTRACTOR F	OR CONSTRUCTION
		CONTRACT	
00 55 0	00	NOTICE TO PROCEED	00 55 00_1
00 61 1	13.13	PERFORMANCE BOND	
00 61 1	3.16	PAYMENT BOND	
00 62 7	76	CONTRACTOR'S APPLICATION FOR PAYMENT C-620	
00 63 6	63	C-941 CHANGE ORDER 2013	00 63 63_1-4
00 65 1	6	CERTIFICATE OF SUBSTANTIAL COMPLETION C-625	00 65 16_1
00 65 1	9	CONTRACTORS AFFIDAVIT	00 65 19_1

CONDITIONS OF THE CONTRACT

00 72 00	STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT 1-4	9
00 73 00	SUPPLEMENTARY CONDITIONS	9

TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

01 10 00	SUMMARY	01 10 00_1-3
01 12 00	MULTIPLE CONTRACT SUMMARY	
01 25 00	SUBSTITUTION PROCEDURES	01 25 00_1-3
01 26 00	CONTRACT MODIFICATION PROCEDURES	
01 29 00	PAYMENT PROCEDURES	
01 31 00	PROJECT MANAGEMENT AND COORDINATION	01 31 00_1-6
01 32 00	CONSTRUCTION PROGRESS DOCUMENTATION	01 32 00_1-3
01 33 00	SUBMITTAL PROCEDURES	01 33 00_1-7
01 40 00	QUALITY REQUIREMENTS	
01 42 00	REFERENCES	01 42 00_1-4
01 60 00	PRODUCT REQUIREMENTS	
01 73 00	EXECUTION	01 73 00_1-2
01 77 00	CLOSEOUT PROCEDURES	
01 78 23	OPERATION AND MAINTENANCE DATA	01 78 23_1-4
01 79 00	DEMONSTRATION AND TRAINING	01 79 00_1

DIVISION 26 - ELECTRICAL

26 32 13	ENGINE GENERATORS	26 32 13_1	-9
26 36 00	TRANSFER SWITCHES		

APPENDIX A – SUPPLEMENTAL TECHNICAL ELECTRICAL SPECIFICATIONS FOR REFERENCE

26 05 19	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES	26 (05 1	9_	1-5
26 05 23	CONTROL-VOLTAGE ELECTRICAL POWER CABLES	26 (05 2	23_	1-5
26 05 26	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	26 (05 2	26_	1-3
26 05 29	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	26 (05 2	29_	1-5
26 05 33	RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS	26 (05 3	33_	1-5
26 05 43	UNDERGROUND DUCTS AND RACEWAYS FOR ELEC SYSTEMS	26 (05 4	3_	1-5
26 05 44	SLEEVES AND SLEEVE SEALS FOR ELEC RACEWAYS AND CABLE	26 (05 4	4_	1-4
26 05 53	IDENTIFICATION FOR ELECTRICAL SYSTEMS	26 (05 5	53_	1-7

ADVERTISEMENT FOR BIDS

LAW ENFORCEMENT CENTER – GENERATOR REPLACEMENT Charter Township of Ypsilanti Ypsilanti, MI

Sealed Bids for the construction of the Law Enforcement Center – Generator Replacement will be received by Charter Township of Ypsilanti, at the Clerk's Office at 7200 S. Huron River Drive, Ypsilanti, MI 48197 until 11:00 AM local time on 05/13/2019, at which time the Bids received will be publicly opened and read.

The Project consists of procurement and delivery of a 300KW diesel generator and associated appurtenances for the Law Enforcement Center.

The Issuing Office for the Bidding Documents is the office of Engineer, Orchard, Hiltz, & McCliment, Inc. (d.b.a. OHM Advisors), 34000 Plymouth Rd., Livonia MI 48150.

Bidding Documents may be examined at the following locations after 04/17/2019 at 10:00 AM:

- The office of the ENGINEER
- Dodge Data & Analytics, www.dodgeproducts.constuction.com
- The Construction Association of Michigan (CAM),www.cam-online.com
- CMD Group, www.cmdgroup.com
- Charter Township of Ypsilanti, 7200 S. Huron River Drive, Ypsilanti, MI 48197.

Bidding Documents may be obtained after 04/17/2019 at 10:00 AM from the Issuing Office on BidNet Direct website (formerly MITN). Neither Owner nor ENGINEER will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office. Bidders should direct correspondence to the ENGINEER.

Bid security shall be furnished in accordance with the Instructions to Bidders. Bid security in the form of a Bid Bond for a sum no less than 5 % of the amount of the Bid will be required with each Bid. Bids shall be enclosed in sealed envelopes plainly marked with the project name and the name of the bidder.

No bid may be withdrawn for a period of **60** calendar days after the scheduled closing time for receipt of the Bids. This time period may be extended by mutual agreement of the Owner and any Bidder or Bidders. The OWNER reserves the right to accept any or all Bids and award the contract to other than the lowest bidder, to waive any irregularities or informalities or both; to reject any or all Bids; and in general to make the award of the Contract in any manner deemed by the OWNER, in its sole discretion, to be in the best interest of the OWNER.

Michael Radzik Director Office of Community Standards Charter Township of Ypsilanti

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.1 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
 - A. Issuing Office The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.1 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.
- 2.2 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.3 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.1 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within five days of Owner's request, Bidder shall submit (a) written evidence establishing its qualification such as financial data, previous experience, and present commitments, and (b) the following additional information:
 - A. Evidence of Bidder's authority to do business in the state where the Project is located.
 - B. Bidder's state or other contractor license number, if applicable.
 - C. A statement detailing other equipment Contractor provided and is in operation for municipal use in Ypsilanti Township and Ypsilanti Community Utility Authority.
- 3.2 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.3 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.4 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

- 4.1 Site and Other areas
 - A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional

lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

- 4.2 Existing Site Conditions
 - A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 - 1. The Supplementary Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
 - B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
 - C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.
- 4.3 Site Visit and Testing by Bidders
 - A. Bidder may schedule a site visit by contacting Mike Radzik.
 - B. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
 - C. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operation, security, liability insurance, and applicable safety programs.

- D. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.
- 4.4 Owner's Safety Program
 - A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.
- 4.5 Other Work at the Site
 - A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

- 5.1 It is the responsibility of each Bidder before submitting Bid to:
 - A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
 - B. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
 - C. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; and the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
 - D. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - E. become aware of the general nature of the work to be performed by Owner and others at the Sire that relates to the Works as indicated in the Bidding Documents;
 - F. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
 - G. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work, and;
 - H. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid

and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.1 A pre-bid conference will not be held.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.1 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarification will be without legal effect.
- 7.2 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 - BID SECURITY

- 8.1 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid Bond (on the form included in the Bidding Documents) issued by a surety meeting in the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.2 The Bid Security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.3 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 60 plus one days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.4 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

9.1 The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.1 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

11.1 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of the post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.1 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.2 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 12.3 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.1 The Bid Form is included with the Bidding Documents.
 - A. All blanks in the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, the Bidder may enter the words "No Bid" or "Not Applicable."
- 13.2 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 13.3 A Bid by an individual shall show the Bidder's name and official address.
- 13.4 A Bid by a joint venture shall be executed by an authorized representative of each joint venture in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.

- 13.5 All name shall be printed in ink below the signatures.
- 13.6 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.7 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.8 The Bid shall contain evidence of Bidder's authority and qualifications to do business in the state where the Project is located, or Bidder shall covenant in wiring to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

14.1 Lump Sum

A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

ARTICLE 15 – SUBMITTAL OF BID

- 15.1 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.2 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Clerk, Charter Township of Ypsilanti, 7200 S. Huron River Dr., Ypsilanti, MI 48197.
- 15.3 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.1 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.2 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.3 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a

material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

17.1 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternatives, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.1 All Bids will remain subject to acceptance for the period of the stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 - EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.1 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 19.2 Evaluation of Bids
 - A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.3 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.4 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 - BONDS AND INSURANCE

20.1 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.1 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified

in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter. Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – SALES AND USE TAXES

22.1 Owner is exempt from Michigan state sales and use taxes on materials and equipment to be incorporated in the Work. (Exemption No. 38-6007433). Said taxes shall not be included in the Bid. Refer to Paragraph SC-7.09 of the Supplementary Conditions for additional information.

ARTICLE 23 – CONTRACTS TO BE ASSIGNED – NOT USED

ARTICLE 24 – WAGE RATES

- 24.1 The Charter Township of Ypsilanti wages apply to contractors and subcontractors performing on contracts with the Township.
- 24.2 Contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the wages and fringe benefits detailed in the Ypsilanti Charter Township, Michigan Code of Ordinances (Code 1975, § 13-1; Ord. No. 99-213, §§ 2-8, 5-4-99).

END OF SECTION 00 21 13

BID FORM Law Enforcement Center – Generator Replacement #0098-18-0060

ARTICLE 1 – BID RECIPIENT

1.1 This Bid is submitted to:

Clerk's Office, Charter Township of Ypsilanti, 7200 S. Huron River Dr., Ypsilanti, MI 48197

1.2 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.1 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.1 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date

- B. Bidder is familiar with the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

- E. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- G. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- I. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

- 4.1 Bidder certifies that:
 - A. The Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
 - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
 - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.1.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (C) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.1 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Lump Sum Bid Price	\$
\$ Total of All Lump Sums	_

ARTICLE 6 – TIME OF COMPLETION

- 6.1 Bidder agrees that the Work will be substantially complete on or before <u>July 1, 2019</u>, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before <u>August 30, 2019</u>.
- 6.1 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.1 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. List of Project References;
 - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
 - F. Required Bidder Qualification Statement with supporting data; and
 - G. A statement detailing other equipment Contractor provided and is in operation for municipal use in Ypsilanti Township and Ypsilanti Community Utility Authority.

ARTICLE 8 – DEFINED TERMS

8.1 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 - BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]

By:
[Signature]
[Printed name] (If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest: [Signature]
[Printed name]
Title:
Submittal Date:
Address for giving notices:
Telephone Number:
Fax Number:
Contact Name and e-mail address:
Bidder's License No.: (where applicable)

END OF SECTION 00 41 00

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (Name and Address):

SURETY (Name, and Address of Principal Place of Business):

Cha 150 Yps BID	t (Name and Address): arter Township of Ypsilanti 11 S Huron St. silanti, MI 48197 Due Date: 05/13/2019		
	scription: Law Enforcement Center – Generator F	Replacem	ent
Dat	nd Number: e: nal sum		\$
1 01	(Words)		(Figures)
	nd Bidder, intending to be legally bound hereby, be duly executed by an authorized officer, agent		o the terms set forth below, do each cause this Bid sentative. Y
	(Seal)		(Seal)
Bidder's	Name and Corporate Seal	Surety's	Name and Corporate Seal
By:		By:	
29.	Signature		Signature (Attach Power of Attorney)
	Print Name	-	Print Name
	Tial	_	T:0.
	Title		Title
Attest:		Attest:	
	Signature		Signature
	Title		Title
NI.4. A.			

Note: Addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

- 1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond, Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
 - a. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - b. All Bids are rejected by Owner, or
 - c. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

SUBCONTRACTOR LISTING

Bidder submits to use the following subcontractors for performance of the work in accordance with Article 12 of the Instructions to Bidders.

Note to Bidder: List all work you propose to sublet on this Contract. Include each subcontractors name, address, phone, fax and e-mail address. Also include a description of work to be performed by subcontractor. For example: restoration, landscaping, lighting, signage, bore and jack, etc. List approximate dollar value of the subcontract.

NAME, ADDRESS & PHONE NO. OF SUBCONTRACTOR	DESCRIPTION OF WORK	APPROXIMATE DOLLAR VALUE OF SUBCONTRACT
		\$
Phone:		
FAX:		
E-mail		
		\$
Phone:		
FAX:		
E-mail		

		\$
	-	
	-	
Phone:	-	
FAX:	-	
E-mail		
	-	
		\$
	-	
	-	
Phone:	-	
FAX:	_	
E-mail		
	-	
		\$
	-	
	-	
Phone:	-	
FAX:	_	
E-mail		

QUALIFICATIONS STATEMENT

THE INFORMATION SUPPLIED IN THIS DOCUMENT IS CONFIDENTIAL TO THE EXTENT PERMITTED BY LAWS AND REGULATIONS				
1.	SUBMITTED BY:			
	Official Name of Firm:			
	Address:			
2.	SUBMITTED TO:			
3.	SUBMITTED FOR:			
	Owner:			
	Project Name:			
	TYPE OF WORK:			
4.	CONTRACTOR'S CONTACT IN	FORMATION		
	Contact Person:			
	Title:			
	Phone:			
	Email:			
5.	AFFILIATED COMPANIES:			
	Name:			
	Address:			

6. TYPE OF ORGANIZATION:

SOLE PROPRIETORSHIP

Name of Owner:

Doing Business As:

Date of Organization:

PARTNERSHIP

Date of Organization:

Type of Partnership:

Name of General Partner(s):

CORPORATION

State of Organization:

Date of Organization:

Executive Officers:

- President:

- Vice President(s):

- Treasurer:

- Secretary:

LIMITED LIABILITY COMPANY

State of Organization:

Date of Organization:

Members:

JOINT VENTURE

Sate of Organization:	
Date of Organization:	
Form of Organization:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	
LICENSING	
Jurisdiction:	
Type of License:	
License Number:	
Jurisdiction:	
Type of License:	
License Number:	

8. CERTIFICATIONS

7.

Disadvantage Business Enterprise:

Minority Business Enterprise:

CERTIFIED BY:

	Woman Owned Enterprise:		
	Small Business Enterprise:		
	Other ():	
9.	BONDING INFORMATION		
	Bonding Company:		
	Address:		
	Bonding Agent:		
	Address:		
	Contact Name:		
	Phone:		
	Aggregate Bonding Capacity		
	Available Bonding Capacity a	s of date of this subr	nittal:

10. CONSTRUCTION EXPERIENCE:

Current Experience:

List on **Schedule A** all uncompleted projects currently under contract (If Joint Venture list each participant's projects separately).

Previous Experience:

List on **Schedule B** all projects completed within the last 5 Years (If Joint Venture list each participant's projects separately).

Has firm listed in Section 1 ever failed to complete a construction contract awarded to it?

□YES □NO

If YES, attach as an Attachment details including Project Owner's contact information.

Has any Corporate Officer, Partner, Joint Venture participant or Proprietor ever failed to complete a construction contract awarded to them in their name or when acting as a principal of another entity?

□ YES □ NO

If YES, attach as an Attachment details including Project Owner's contact information.

Are there any judgments, claims, disputes or litigation pending or outstanding involving the firm listed in Section 1 or any of its officers (or any of its partners if a partnership or any of the individual entities if a joint venture)?

□YES □NO

If YES, attach as an Attachment details including Project Owner's contact information.

11. EQUIPMENT:

MAJOR EQUIPMENT:

List on Schedule C all pieces of major equipment available for use on Owner's Project.

I HEREBY CERTIFY THAT THE INFORMATION SUBMITTED HEREWITH, INCLUDING ANY ATTACHMENTS, IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NAME OF ORGANIZATION:

BY:				
	BY:			

TITLE:

DATED:

NOTARY ATTEST:

SUBSCRIBED AND SWORN TO BEFORE ME

THIS ______ DAY OF _____, 20____

NOTARY PUBLIC - STATE OF _____

MY COMMISSION EXPIRES:

REQUIRED ATTACHMENTS

- 1. Schedule A (Current Experience).
- 2. Schedule B (Previous Experience).
- 3. Schedule C (Major Equipment).
- 4. Evidence of authority for individuals listed in Section 7 to bind organization to an agreement.
- 5. Additional items as pertinent.

SCHEDULE A

CURRENT EXPERIENCE

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

SCHEDULE B

PREVIOUS EXPERIENCE ((Include ALL Pro	jects Completed within	last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

SCHEDULE B

PREVIOUS EXPERIENCE (In	nclude ALL Projec	cts Completed	within last 5 y	/ears)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
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	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

SCHEDULE C - LIST OF MAJOR EQUIPMENT AVAILABLE

ITEM	PURCHASE DATE	CONDITION	ACQUIRED VALUE

IRAN LINKED BUSINESS CERTIFICATION

Pursuant to Michigan Public Act 517 of 2012, any Bidder that submits a bid on a request for proposal with the Charter Township of Ypsilanti shall certify that Bidder is not an Iran linked business. An Iran linked business is not eligible to submit a bid on a request for proposal with the Charter Township of Ypsilanti. See attached definitions regarding this certification.

The undersigned Bidder does hereby certify, pursuant to Michigan Public Act 517 of 2012, that:

Bidder is not a person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran, or

Bidder is not a financial institution that extends credit to another person if that person will use the credit to engage in investment activities in the energy sector of Iran.

Date:

By:_____

Its:

Subscribed and sworn to before me, a Notary Public on this _____ day of ______, ____.

Notary Public

_____ County, Michigan

My Commission Expires:

DEFINITIONS

- (A) "Energy sector of Iran" means activities to develop petroleum or natural gas resources or nuclear power in Iran.
- (B) "Investment" means 1 or more of the following:
 - i. A commitment or contribution of funds or property.
 - ii. A loan or other extension of credit.
 - iii. The entry into or renewal of a contract for goods or services.
- (C) "Investment activity" means 1 or more of the following:
 - i. A person who has an investment of \$20,000,000.00 or more in the energy sector of Iran.
 - ii. A financial institution that exceeds \$20,000,000.00 or more in credit to another person, for 45 days or more, if that person will use the credit for investment in the energy sector of Iran.
- (D) "Iran" means any agency or instrumentality of Iran.
- (E) "Iran linked business" means either of the following:
 - i. A person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.
 - ii. A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.
- (F) "Person" means any of the following:
 - i. An individual, corporation, company, limited liability company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group.
 - ii. Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in section 1701(c) (3) of the international financial institutional act, 22 USC 262r(c) (3).
 - iii. Any successor, subunit, parent company, or subsidiary of, or company under common ownership or control with, any entity described in subparagraph (i) or (ii).
- (G) "Public entity" means this state or an agency or authority of this state, school district, community college district, intermediate school district, city, village, township, county, public authority, or public airport authority.

NOTICE OF AWARD

Date of Issuance:

Owner:Charter Township of YpsilantiEngineer:OHM AdvisorsProject:Law Enforcement Center –

Generator Replacement

Owner's Contract No.: Engineer's Project No.: 0098-18-0060 Contract Name:

Bidder:

Bidder's Address:

TO BIDDER:

[describe Work, alternates, or sections of Work awarded]

The Contract Price of the awarded Contract is: \$_____[note if subject to unit prices, or cost-plus]

[] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically. *[revise if multiple copies accompany the Notice of Award]*

a set of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

- 1. Deliver to Owner [____] counterparts of the Agreement, fully executed by Bidder.
- 2. Deliver with the executed Agreement(s) the Contract security [e.g., performance and payment bonds] and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
- 3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner:

Authorized Signature

By:

Title:

Copy: Engineer

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between	Charter Township of Ypsilanti	("Owner") and
		("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.1 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: Procurement and delivery of a 300KW diesel generator and associated appurtenances for the Law Enforcement Center

ARTICLE 2 – THE PROJECT

2.1 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Law Enforcement Center – Generator Replacement.

ARTICLE 3 – ENGINEER

- 3.1 The Project was designed by OHM Advisors.
- 3.2 The Owner has retained OHM Advisors ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

- 4.1 *Time of the Essence*
 - A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.2 Contract Times: Dates
 - A. The Work will be substantially completed on or before July 1, 2019, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before August 30, 2019
- 4.2 *Liquidated Damages*
 - A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.1 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.2 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the

actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

- 1. Substantial Completion: Contractor shall pay Owner **\$_____** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.2.A above for Substantial Completion until the Work is substantially complete.
- 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$______ for each day that expires after such time until the Work is completed and ready for final payment.
- 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

ARTICLE 5 – CONTRACT PRICE

- 5.1 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
 - A. A lump sum of: \$_____
 - B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

- 6.1 Submittal and Processing of Payments
 - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions
- 6.2 Progress Payments; Retainage
 - A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on a monthly schedule during performance of the Work, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
- 6.3 Final Payment
 - A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – CONTRACTOR'S REPRESENTATIONS

- 7.1 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited Site, conducted a thorough, alert visual examination of the Site and adjacent area, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to the existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
 - E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
 - F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 - J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 8 – CONTRACT DOCUMENTS

- 8.1 Contents
 - A. The Contract Documents consist of the following:

- 1. This Agreement (pages 1 to _____, inclusive).
- 2. Performance bond (pages 1 to 3, inclusive).
- 3. Payment bond (pages 1 to 3, inclusive).
- 4. Maintenance and Guarantee bond (pages 1 to 3, inclusive).
- 5. Other bonds.
 - a. ____ (pages ____ to ____, inclusive).
- 6. General Conditions (pages 1 to 65, inclusive).
- 7. Supplementary Conditions (pages _____ to ____, inclusive).
- 8. Specifications as listed in the table of contents of the Project Manual.
- 9. Drawings (not attached but incorporated by reference) consisting of _____ sheets with each sheet bearing the following general title: _____ [or] the Drawings listed on the attached sheet index.
- 10. Addenda (numbers _____ to ____, inclusive).
- 11. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages <u>to</u>, inclusive).
- 12. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 8.1.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 8.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 9 – MISCELLANEOUS

- 9.1 *Terms*
 - A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

9.2 Assignment of Contract

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interest in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.3 Successors and Assigns

A. Owner and Contractor each binds itself, its successors. Assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.4 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.5 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 9.5:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:	CONTRACTOR:
Charter Township of Ypsilanti	
Ву:	Ву:
Title:	Title:
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
7200 S Huron River Dr.	
Ypsilanti, MI 48197	
	License No.:
	(where applicable)
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or	

other documents authorizing execution of this

Agreement.)

NOTICE TO PROCEED

Owner:	Charter Township of Ypsilanti	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	OHM Advisors	Engineer's Project No.:	0098-18-0060
,	Law Enforcement Center – Generator Replacement	Contract Name:	
		Effective Date of Contract:	

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on ______, 20___]. [see Paragraph 4.01 of the General Conditions]

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, [the date of Substantial Completion is <u>July</u> <u>1, 2019</u>, and the date of readiness for final payment is <u>August 30, 2019</u>.

Before starting any Work at the Site, Contractor must comply with the following:

[Note any access limitations, security procedures, or other restrictions]

Owner:

Authorized Signa	ature
------------------	-------

By:

Title: Date Issued:

Copy: Engineer

PERFORMANCE BOND

CONTRACTOR (name and address):	SURETY (name and address of principal place of business):
OWNER (name and address):	
CONSTRUCTION CONTRACT	
Effective Date of the Agreement:	
Amount:	
Description (name and location):	
BOND	
Bond Number:	
Date (not earlier than the Effective Date of the Agreement of the Con Amount:	struction Contract):
Modifications to this Bond Form: None S	ee Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY
(sea	al) (seal) (seal) Surety's Name and Corporate Seal
By:Signature	By:
Print Name	Print Name
Title	Title
Attest: Signature	Attest: Signature
Title	Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and

provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR (name and address):	SURETY (name and address of principal place of business):
OWNER (name and address):	
CONSTRUCTION CONTRACT	
Effective Date of the Agreement:	
Amount: Description <i>(name and location)</i> :	
BOND	
Bond Number:	
Date (not earlier than the Effective Date of the Agreement of the Con Amount:	struction Contract):
Modifications to this Bond Form: None Se	ee Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

(sea	l) (seal)			
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal			
Ву:	Ву:			
Signature	Signature (attach power of attorney)			
Print Name	Print Name			
Title	 Title			
Attest:	Attest:			
Signature	Signature			
Title	Title			

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

- The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
- 2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
- 4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
- 5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of nonpayment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to

the Surety (at the address described in Paragraph 13).

- 6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
- 7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
- 8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

- 11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
- 14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
 - 1. The name of the Claimant;
 - 2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 4. A brief description of the labor, materials, or equipment furnished;
 - 5. The date on which the Claimant last performed labor or last furnished materials or

equipment for use in the performance of the Construction Contract;

- The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
- 7. The total amount of previous payments received by the Claimant; and
- 8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4 **Owner Default**: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.
- 17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
- 18. Modifications to this Bond are as follows:

EJCDC	Contractor's Applie	cation for Payment No.
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE	Application Period:	Application Date:
Το	From (Contractor):	Via (Engineer):
(Owner):		
Project:	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No :

Application For Payment

approved Change Orders			1. ORIGINAL CONTRACT PRICE \$
Number	Additions	Deductions	2. Net change by Change Orders \$
			3. Current Contract Price (Line 1 ± 2) \$
			4. TOTAL COMPLETED AND STORED TO DATE
			(Column F total on Progress Estimates)
			5. RETAINAGE:
			2. X Work Completed \$
			b. X Stored Material S
			c. Total Retainage (Line 5.a + Line 5.b) S
			6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c) \$
TOTALS			7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application) \$
NET CHANGE BY			8. AMOUNT DUE THIS APPLICATION \$
CHANGE ORDERS			9. BALANCE TO FINISH, PLUS RETAINAGE
-poster-			(Column G total on Progress Estimates + Line 5.c above)

Contractor's Certification					
have been applied on account to discharge	ved from Owner on account of Work done under the Contract ge Contractor's legitimate obligations incurred in connection with	Payment of:	\$	(Line 8 or other - attach explanation of the	other amount
covered by this Application for Payment. Liens, security interests, and encumbrand indemnifying Owner against any such Li	for Payment; oment incorporated in said Work, or otherwise listed in or , will pass to Owner at time of payment free and clear of all ces (except such as are covered by a bond acceptable to Owner ens, security interest, or encumbrances); and tion for Payment is in accordance with the Contract Documents	is recommended by:	-	(Engineer)	(Dat
and is not defective,		Payment of:	\$	(Line 8 or other - attach explanation of the	other amount
		is approved by:	4	(Owner)	(Dat
Contractor Signature					
By:	Date:	Approved by:	-		
		4		Funding or Financing Entity (if applicable)	(Dat

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.....

Contractor's Certification The undersigned Contractor certifies, to the best

By:

Progress Estimate - Lump Sum Work

Contractor's Application

Application Date: E Application Date: B C D Mont Completed F Schooland Value (s) From Previous Application Table Prevently Total Completed (F) % Schooland Value (s) From Previous Application This Pecied Monted (host is C or D) (F) % Schooland Value (s) From Previous Application This Pecied (F) % (F) % Schooland Value (s) From Previous Application This Pecied (F) % (F) %	For (Contract):				Application Number:				
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Description Entrance (value () From (value () Read (or () () Read (or () () Read (or () Read (A	B	C	D	Materials Presently	Total Completed		Balance to Finish
	Specification Section No		Scheduled Value (\$)	From Previous Application (C+D)		Stored (not in C or D)	and Stored to Date (C + D + E)	% (F/B)	(B - F)
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Progress Estimate - Unit Price Work

Contractor's Application

For (Contract):								Application Number:			
Application Period:								Application Date:			
	A				В	U	D	ш	ц		
	Item		Con	Contract Information	6		Value of Work		Total Completed		
Bid Item No.	Description	Item Quantity	Units	Unit Price	Total Value of Item (\$)	Quantity Installed	Installed to Date	Materials Presently Stored (not in C)	and Stored to Date (D+E)	% (F/B)	Balance to Finish (B - F)
-											
	Totals										

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Stored Material Summary

Contractor's Application

For (C	For (Contract):						Application Number:	Jer.		
Applic	Application Period:						Application Date:			
	A	B		U	D	ш	Current A Totosta			Ð
Bid Item No.	Supplier Invoice No	Submittal No (with Specification Section No.)	Storage Location	Description of Materials or Equipment Stored	Stored Previously Date Placed Amount into Storage (\$)	Dunt Amount Stored this Month (\$)	(S) (D + E)	Incorporated Date (Month/ Year)	in Wark Amount (S)	Materials Remaining in Storage (\$) (D + E - F)
		front tiothood								
									T	
									T	
							-			
				Totals		_				

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License Agreement

Before you use this EJCDC document:

- 1. Read this License Agreement in its entirety. As purchaser, you agree to comply with and are bound by the License Agreement's terms, conditions, and instructions when you use the attached EJCDC document. Commencement of use of the attached document indicates your acceptance of these terms, conditions, and instructions. If you do not agree to them, you should promptly return the materials to the vendor.
- 2. This License Agreement applies to the attached document only. Other licensing terms and instructions may apply to other EJCDC documents.
- 3. The Engineers Joint Contract Documents Committee ("EJCDC") provides EJCDC Design and Construction Related Documents (including but not limited to the EJCDC document that is attached, and all other documents in the EJCDC Construction Series, Engineering Series, Design-Build Series, Remediation Series, Procurement Series, and Narrative Series) and licenses their use worldwide. You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from EJCDC Design and Construction Related Documents.
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Change Order No.

Date of Issuance:	Effective Date:
Owner:	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer:	Engineer's Project No.:
Project:	Contract Name:

The Contract is modified as follows upon execution of this Change Order: Description:

Attachments: [List documents supporting change]

CHANGE IN CONTRACT PRIC	E	-	-	N CONTRACT TIMES
		-	-	Milestones if applicable]
Original Contract Price:		Original Contract		
\$		Ready for Final Pa	yment:	
				days or dates
[Increase] [Decrease] from previously appr	roved Change		-	m previously approved Change
Orders No:		Orders No to		
\$		Ready for Final Pa	yment:	
				days
Contract Price prior to this Change Order:				his Change Order:
\$		Ready for Final Pa	yment:	
				days or dates
[Increase] [Decrease] of this Change Order	:		-	his Change Order:
\$		Ready for Final Pa	yment:	
				days or dates
Contract Price incorporating this Change O	rder:			pproved Change Orders:
\$		Ready for Final Pa	yment:	
				days or dates
RECOMMENDED:	ACCE	PTED:		ACCEPTED:
By: By			By:	
Engineer (if required)		horized Signature)		Contractor (Authorized Signature)
	tle		Title	
Date: Date	ate		Date	
Approved by Funding Agency (if applicable)				
By:		Date:		
Title:				

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Charter Township of Ypsilanti	Owner's Contract No.:	
Contractor:		Contractor's Project No .:	
Engineer:	OHM Advisors	Engineer's Project No .:	0098-18-0060
Project:	Law Enforcement Center – Generator Replacement	Contract Name:	

This [preliminary] [final] Certificate of Substantial Completion applies to:

All Work

The following specified portions of the Work:

July 1, 2019 Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: [Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]

Amendments responsibilities:	 Owner's	□ None
		As follows
Amendments to responsibilities:	 ntractor's	🗌 None
		As follows:

The following documents are attached to and made a part of this Certificate: [punch list; others]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:		RECEI	VED:	RECEIVED:				
By:		By:		By:				
(.	Authorized signature)		Owner (Authorized Signature)		Contractor (Authorized Signature)			
Title:		Title:		Title:				
Date:		Date:		Date:				

CONTRACTOR'S AFFIDAVIT

STATE OF Michigan)
)SS.
COUNTY OF)
The undersigned,	(contractor name) hereby
represents that on, 20	_ he (it) was awarded a Contract by Charter Township of
Ypsilanti hereinafter called the OWNER, to co	nstruct Law Enfoecment Center – Generator Replacement
in accordance with the terms and conditions of	of Contract No. 0098-18-0060, and the undersigned further
	een accomplished and the said Contract has now been
completed.	

The undersigned hereby warrants and certifies that all of his (its) indebtedness arising by reason of said Contract has been fully or satisfactorily secured, and that all claims from subcontractors and others for labor and material used in accomplishing the said project, as well as all other claims arising from performance of said Contract, have been fully paid or satisfactorily secured. The undersigned further agrees that if any such claim should hereafter arise, he (it) shall assume responsibility for same immediately upon request to do so by the OWNER.

The undersigned, for a valuable consideration, receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material used in accomplishing said project owned by the OWNER.

This	affidavit i	s freely	and	voluntarily	given	with	full	knowledge	of	the	facts	on	this		day	of
------	-------------	----------	-----	-------------	-------	------	------	-----------	----	-----	-------	----	------	--	-----	----

_____, 20_____.

	Contractor
	Ву:
Subscribed and sworn to before me, a Notary Public in and for	Title
, 20	Notary Public:
	My Commission expires:

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



American Council of Engineering Companies





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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

		Page
	- Definitions and Terminology	
1.01		
1.02		
Article 2 –	- Preliminary Matters	6
2.01	Delivery of Bonds and Evidence of Insurance	6
2.02	Copies of Documents	6
2.03	Before Starting Construction	6
2.04	Preconstruction Conference; Designation of Authorized Representatives	7
2.05	Initial Acceptance of Schedules	7
2.06	Electronic Transmittals	7
Article 3 –	- Documents: Intent, Requirements, Reuse	8
3.01	Intent	8
3.02	Reference Standards	8
3.03	Reporting and Resolving Discrepancies	8
3.04	Requirements of the Contract Documents	9
3.05	Reuse of Documents	10
Article 4 –	- Commencement and Progress of the Work	10
4.01	Commencement of Contract Times; Notice to Proceed	
4.02	Starting the Work	10
4.03	Reference Points	
4.04	Progress Schedule	
4.05	Delays in Contractor's Progress	11
	 Availability of Lands; Subsurface and Physical Conditions; Hazardous Environr s 	
5.01	Availability of Lands	
5.02	Use of Site and Other Areas	
5.03	Subsurface and Physical Conditions	13
5.04	Differing Subsurface or Physical Conditions	14
5.05	Underground Facilities	15
5.06	Hazardous Environmental Conditions at Site	

Article	6 – Bo	onds and Insurance	19
6	.01	Performance, Payment, and Other Bonds	19
6	.02	Insurance—General Provisions	19
6	.03	Contractor's Insurance	20
6	.04	Owner's Liability Insurance	23
6	.05	Property Insurance	23
6	.06	Waiver of Rights	25
6	.07	Receipt and Application of Property Insurance Proceeds	25
Article	7 – Co	ontractor's Responsibilities	26
7	.01	Supervision and Superintendence	26
7	.02	Labor; Working Hours	26
7	.03	Services, Materials, and Equipment	26
7	.04	"Or Equals"	27
7	.05	Substitutes	28
7	.06	Concerning Subcontractors, Suppliers, and Others	29
7	.07	Patent Fees and Royalties	31
7	.08	Permits	31
7	.09	Taxes	32
7	.10	Laws and Regulations	32
7	.11	Record Documents	32
7	.12	Safety and Protection	32
7	.13	Safety Representative	33
7	.14	Hazard Communication Programs	33
7	.15	Emergencies	34
7	.16	Shop Drawings, Samples, and Other Submittals	34
7	.17	Contractor's General Warranty and Guarantee	36
7	.18	Indemnification	37
7	.19	Delegation of Professional Design Services	37
Article	8 – Ot	ther Work at the Site	38
8	.01	Other Work	38
8	.02	Coordination	39
8	.03	Legal Relationships	39
Article	9 – 0	wner's Responsibilities	40
9	.01	Communications to Contractor	40

	9.02	Replacement of Engineer	.40
	9.03	Furnish Data	. 40
	9.04	Pay When Due	. 40
	9.05	Lands and Easements; Reports, Tests, and Drawings	. 40
	9.06	Insurance	. 40
	9.07	Change Orders	. 40
	9.08	Inspections, Tests, and Approvals	.41
	9.09	Limitations on Owner's Responsibilities	. 41
	9.10	Undisclosed Hazardous Environmental Condition	. 41
	9.11	Evidence of Financial Arrangements	. 41
	9.12	Safety Programs	. 41
Artic	e 10 – I	Engineer's Status During Construction	. 41
	10.01	Owner's Representative	.41
	10.02	Visits to Site	.41
	10.03	Project Representative	. 42
	10.04	Rejecting Defective Work	. 42
	10.05	Shop Drawings, Change Orders and Payments	. 42
	10.06	Determinations for Unit Price Work	. 42
	10.07	Decisions on Requirements of Contract Documents and Acceptability of Work	. 42
	10.08	Limitations on Engineer's Authority and Responsibilities	. 42
	10.09	Compliance with Safety Program	. 43
Artic	e 11 – /	Amending the Contract Documents; Changes in the Work	. 43
	11.01	Amending and Supplementing Contract Documents	. 43
	11.02	Owner-Authorized Changes in the Work	. 44
	11.03	Unauthorized Changes in the Work	. 44
	11.04	Change of Contract Price	. 44
	11.05	Change of Contract Times	. 45
	11.06	Change Proposals	. 45
	11.07	Execution of Change Orders	. 46
	11.08	Notification to Surety	. 47
Artic	e 12 – 0	Claims	. 47
	12.01	Claims	. 47
Artic	e 13 – (Cost of the Work; Allowances; Unit Price Work	. 48
	13.01	Cost of the Work	. 48

13.02	Allowances
13.03	Unit Price Work
Article 14 –	Tests and Inspections; Correction, Removal or Acceptance of Defective Work 52
14.01	Access to Work
14.02	Tests, Inspections, and Approvals52
14.03	Defective Work53
14.04	Acceptance of Defective Work53
14.05	Uncovering Work
14.06	Owner May Stop the Work54
14.07	Owner May Correct Defective Work54
Article 15 –	Payments to Contractor; Set-Offs; Completion; Correction Period
15.01	Progress Payments
15.02	Contractor's Warranty of Title
15.03	Substantial Completion
15.04	Partial Use or Occupancy59
15.05	Final Inspection
15.06	Final Payment59
15.07	Waiver of Claims61
15.08	Correction Period61
Article 16 –	Suspension of Work and Termination
16.01	Owner May Suspend Work62
16.02	Owner May Terminate for Cause62
16.03	Owner May Terminate For Convenience63
16.04	Contractor May Stop Work or Terminate63
Article 17 –	Final Resolution of Disputes
17.01	Methods and Procedures64
Article 18 –	Miscellaneous
18.01	Giving Notice
18.02	Computation of Times64
18.03	Cumulative Remedies64
18.04	Limitation of Damages65
18.05	No Waiver65
18.06	Survival of Obligations65
18.07	Controlling Law65

18.08	Headings	65	5
-------	----------	----	---

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
 - 1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 - 2. Agreement—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 - 3. Application for Payment—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 - 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - 5. Bidder—An individual or entity that submits a Bid to Owner.
 - 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 - 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 - 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 - 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 - 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer's decision

has declined to address. A demand for money or services by a third party is not a Claim.

- 11. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
- 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
- 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
- 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
- 17. *Cost of the Work*—See Paragraph 13.01 for definition.
- 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
- 20. Engineer—The individual or entity named as such in the Agreement.
- 21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 22. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
- 23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

- 24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
- 25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
- 26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 27. Notice to Proceed—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
- 28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
- 29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
- 32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
- 33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 34. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
- 35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

- 37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
- 38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- 40. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
- 42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
- 43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- 44. Technical Data—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- 45. Underground Facilities—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

- 48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.
- 1.02 Terminology
 - A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
 - B. Intent of Certain Terms or Adjectives:
 - 1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
 - C. Day:
 - 1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.
 - D. Defective:
 - 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
 - E. Furnish, Install, Perform, Provide:
 - 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a wellknown technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

- 2.01 Delivery of Bonds and Evidence of Insurance
 - A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
 - B. *Evidence of Contractor's Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
 - C. *Evidence of Owner's Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.
- 2.02 *Copies of Documents*
 - A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
 - B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.
- 2.03 Before Starting Construction
 - A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 Initial Acceptance of Schedules

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- 3.02 *Reference Standards*
 - A. Standards Specifications, Codes, Laws and Regulations
 - Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

- A. *Reporting Discrepancies*:
 - 1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

- 2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.
- B. *Resolving Discrepancies*:
 - 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

- 4.01 Commencement of Contract Times; Notice to Proceed
 - A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.
- 4.02 *Starting the Work*
 - A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.
- 4.03 *Reference Points*
 - A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions;
 - acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- 5.02 Use of Site and Other Areas
 - A. Limitation on Use of Site and Other Areas:
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - If a damage or injury claim is made by the owner or occupant of any such land or area 2. because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part

by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading of Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.
- 5.03 Subsurface and Physical Conditions
 - A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
 - B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
 - 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Drawings or Specifications; or
 - 3. differs materially from that shown or indicated in the Contract Documents; or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Possible Price and Times Adjustments:
 - Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 Underground Facilities

- A. *Contractor's Responsibilities*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. Engineer's Review: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. Owner's Statement to Contractor Regarding Underground Facility: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments*:
 - Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 Hazardous Environmental Conditions at Site

- A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 - 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.
- 6.03 *Contractor's Insurance*
 - A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

- 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
 - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 - 2. claims for damages insured by reasonably available personal injury liability coverage.
 - 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
 - 1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 - 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 - 3. Broad form property damage coverage.
 - 4. Severability of interest.
 - 5. Underground, explosion, and collapse coverage.
 - 6. Personal injury coverage.
 - Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 - 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. Automobile liability: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. Umbrella or excess liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result

of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

- G. Additional insureds: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

- 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
- 6. extend to cover damage or loss to insured property while in transit.
- 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
- 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
- 10. not include a co-insurance clause.
- 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
- 12. include performance/hot testing and start-up.
- 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. Notice of Cancellation or Change: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 Waiver of Rights

- All policies purchased in accordance with Paragraph 6.05, expressly including the builder's Α. risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 Receipt and Application of Property Insurance Proceeds

A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 Supervision and Superintendence

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.
- 7.02 Labor; Working Hours
 - A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
 - B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.
- 7.03 Services, Materials, and Equipment
 - A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
 - B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and

- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. Reimbursement of Engineer's Cost: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 Concerning Subcontractors, Suppliers, and Others

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 Permits

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 Safety Representative

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- 7.14 Hazard Communication Programs
 - A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or

exchanged between or among employers at the Site in accordance with Laws or Regulations.

- 7.15 Emergencies
 - A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.
- 7.16 Shop Drawings, Samples, and Other Submittals
 - A. Shop Drawing and Sample Submittal Requirements:
 - 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
 - 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
 - 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
 - B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
 - 1. Shop Drawings:
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to

provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

- 2. Samples:
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
- 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals*: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. Engineer's Review:
 - 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 - 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 - 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 - 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 - 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 - 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 - 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

- 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. Resubmittal Procedures:
 - 1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
 - 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 - 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.
- 7.17 Contractor's General Warranty and Guarantee
 - A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
 - B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
 - C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by Engineer;
 - 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. use or occupancy of the Work or any part thereof by Owner;
 - 5. any review and approval of a Shop Drawing or Sample submittal;
 - 6. the issuance of a notice of acceptability by Engineer;
 - 7. any inspection, test, or approval by others; or
 - 8. any correction of defective Work by Owner.

D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

- 8.01 Other Work
 - A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
 - B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
 - C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
 - D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

- If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's Α. employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

- 9.01 *Communications to Contractor*
 - A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.
- 9.02 Replacement of Engineer
 - A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.
- 9.03 Furnish Data
 - A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 9.04 Pay When Due
 - A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 Lands and Easements; Reports, Tests, and Drawings
 - A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 Insurance
 - A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 Change Orders
 - A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

- 9.08 Inspections, Tests, and Approvals
 - A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
 - A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 Undisclosed Hazardous Environmental Condition
 - A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 Evidence of Financial Arrangements
 - A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).
- 9.12 Safety Programs
 - A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
 - B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

- 10.01 Owner's Representative
 - A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.
- 10.02 Visits to Site
 - A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
 - B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Project Representative

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 Rejecting Defective Work

- A. Engineer has the authority to reject Work in accordance with Article 14.
- 10.05 Shop Drawings, Change Orders and Payments
 - A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
 - B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
 - C. Engineer's authority as to Change Orders is set forth in Article 11.
 - D. Engineer's authority as to Applications for Payment is set forth in Article 15.
- 10.06 Determinations for Unit Price Work
 - A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.
- 10.07 Decisions on Requirements of Contract Documents and Acceptability of Work
 - A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 Limitations on Engineer's Authority and Responsibilities

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.
- 10.09 Compliance with Safety Program
 - A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

- 11.01 Amending and Supplementing Contract Documents
 - A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. Change Orders:
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. Work Change Directives: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 Owner-Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 Unauthorized Changes in the Work

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.
- 11.04 Change of Contract Price
 - A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
 - B. An adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 Change Proposals

A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

- 1. *Procedures*: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal.
- 2. Engineer's Action: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
- 3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.
- 11.08 Notification to Surety
 - A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

- 12.01 Claims
 - A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
 - B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
 - C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
 - D. Mediation:
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

- 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

- 13.01 *Cost of the Work*
 - A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
 - B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work. Payroll costs of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded*: The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. Cash Allowances: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

- 14.01 Access to Work
 - A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.
- 14.02 Tests, Inspections, and Approvals
 - A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
 - B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
 - C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
 - D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 Uncovering Work

A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.
- 14.07 *Owner May Correct Defective Work*
 - A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
 - B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
 - C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

- 15.01 *Progress Payments*
 - A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
 - B. Applications for Payments:
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
 - C. *Review of Applications*:
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 - 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
- b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
- 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. Payment Becomes Due:
 - 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. Reductions in Payment by Owner:
 - 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - I. there are other items entitling Owner to a set off against the amount recommended.
 - 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

- A. Application for Payment:
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of

inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Application and Acceptance:
 - If, on the basis of Engineer's observation of the Work during construction and final 1. inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 Waiver of Claims

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 Correction Period

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

- 16.01 Owner May Suspend Work
 - A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses,

and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.
- 16.03 Owner May Terminate For Convenience
 - A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
 - B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

- 18.01 *Giving Notice*
 - A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.
- 18.03 Cumulative Remedies
 - A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.
- 18.06 Survival of Obligations
 - A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.
- 18.08 Headings
 - A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SECTION 00 73 00 - SUPPLEMENTARY GENERAL CONDITIONS

These Supplementary General Conditions amend or supplement the Standard General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary General Conditions is the same as the address system in the General Conditions; with the prefix "SC" added thereto.

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

SC-1.01.A. Defined Terms

Delete the period at the end of paragraph 1.01.A and add the following language:

; except where the terms "Architect," "Engineer," and "Contractor" are proceeded by an adjective, the term shall then be understood to refer to the entity described by the combination of the two words.

SC-1.01.A.8. Change Order

Add the following language at the end of the last sentence of Paragraph 1.01.A.8:

The Change Order form to be used on this Project is EJCDC C-941. Agency approval is required before Change Orders are effective.

SC-1.01.A.48. Add the following language at the end of the last sentence of Paragraph 1.01.A.48:

The term "Work Change Directive" shall be understood to refer to a "Work Order". A Work Change Directive cannot change Contract Price or Contract Times without a subsequent Change Order.

- SC-1.01.A.49. Add the following new Paragraph after Paragraph 1.01.A.48:
 - 49. Abnormal Weather Conditions Conditions of extreme or unusual weather for a given region, elevation or season as determined by Engineer. Extreme or unusual weather that is typical for a given region, elevation or season should not be considered Abnormal Weather Conditions.
 - 50. Architect The individual or entity named as Architect or Engineer in the Agreement
 - 51. General Contractor The Contractor as defined in Paragraph 1.01.A.16.
 - 52. Manufacturer An individual or entity that manufactures, assembles or fabricates products.
 - 53. Products Systems, materials, manufactured units, equipment, components and accessories used in the Work.

ARTICLE 2 – PRELIMINARY MATTERS

SC-2.01 Delivery of Bonds and Evidence of Insurance

Add the following language at the end of the last sentence of Paragraph 2.01.A:

Contractor shall not start any work at the Site prior to Contractor delivering the required certificates and other evidence of insurance.

SC-2.01 Evidence of Contractor's Insurance

Add the following language at the end of the last sentence of Paragraph 2.01.B:

Facsimile, telegraphic, oral or other electronically transmitted Bond will not be considered. Attorneys-in-fact who execute the Bonds on behalf of the Surety shall affix to each Bond a certified and current copy of the power of attorney.

SC-2.01 Evidence of Owner's Insurance

Add the following language at the end of the last sentence of Paragraph 2.01.C:

Contractor shall not start any work at the Site prior to Owner delivering the required certificates and other evidence of insurance.

SC-2.02 Copies of Documents

Delete Paragraph 2.02.A in its entirety and insert the following in its place:

Engineer (Acting as Owner's agent) shall furnish to Contractor one set of Drawings and Project Manual in electronic portable document format. Hard copies will be furnished upon request at the cost of preparation, reproduction and shipping.

SC-2.03 *Preliminary Schedules*

Add the following language at the end of the last sentence of Paragraph 2.03.A.1:

; identifying the critical path for completing the Work, and identifying when all Subcontractors will be utilized, and taking into consideration any limitations on Working Hours;

SC-2.03 Delete Paragraph 2.03.A.3 in its entirety and insert the following in its place:

a preliminary schedule of values for all of the Work, subdivided into component parts in sufficient detail to serve as the basis for progress payments during construction. The schedule of values shall be broken out by trade and split between materials and labor. Prices shall include an appropriate amount of overhead and profit applicable to each item of Work.

ARTICLE 3 - DOCUMENTS: INTENT, REQUIREMENTS, REUSE

SC-3.04 Add the following new paragraph immediately after paragraph 3.04.B:

Owner shall be entitled to deduct from the Contract Price amounts paid to Engineer for Engineer to evaluate and respond to Contractor's requests for information, where such information was available to Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

SC-4.03 Add the following paragraph immediately after paragraph 4.03.A:

During the progress of the work, the Contractor may encounter section line, fractional section line, and property controlling corner monuments. Insofar as is known, such public land survey corners and property monuments have been indicated on the plans. The Contractor shall be responsible for complying with the requirements of Michigan Public Act 34. Specifically, he shall be responsible for notifying the county surveyor before removing a public land survey corner monument for construction activities. In addition, if construction time constraints will result in the public land survey corner monument being removed for more than one year, then the Contractor shall arrange to have a temporary corner monument set until the permanent one can be re-established. The costs of removing and replacing public land survey corner monuments, as well as setting temporary corner monuments shall be the responsibility of the Contractor unless pay items are provided in the bid form for these tasks. The Contractor shall not remove any such monument until the Engineer has witness points as reference for resetting of such monuments. After referencing has been done and suitable permanent sketches prepared, the Engineer will give permission to the Contractor for removal of the monument. Monuments and monument boxes shall be reset only after all backfilling has fully settled.

The Contractor shall protect and preserve all monument points, property corners, grade stakes, line and reference points. Where stakes and markers are disturbed or removed due to operations under this Contract, the Contractor shall be charged at invoice cost by the Engineer for replacing the points. Care shall be exercised by the Contractor when operating near the markers, as any carelessness in operations will also cause a time delay to the schedule due to additional stakeout time required to replace reference points, lines, etc.

The Contractor shall accurately locate the work from reference points established by the Engineer along the surface of the ground and line of work.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.01 Add the following new paragraph immediately after paragraph 5.01A:

Prior to the start of construction, the Contractor shall verify with the Owner that any required easements have been obtained. The Contractor shall keep his work operations within these easements and shall be responsible for complying with any easement conditions that are shown on the plans or stated in the Contract documents.

SC-5.02 Add the following paragraph immediately after paragraph 5.02.A:

The Contractor's operations in public streets or alleys shall be confined to as small a space as practicable, so as not to cause undue inconvenience to the public or abutting properties, and shall be subject to the approval of the Engineer.

Where the Contractor wishes to work on or stockpile materials on nearby properties, it will be his responsibility to contact the property owner for permission. Upon request, the Contractor shall provide a copy of written permission from any affected property owner. The Owner will not become involved with any such agreements and will not be held responsible for any damages that the Contractor may cause to private property. The

Contractor shall not be compensated for restoration of private properties and stockpile areas unless said areas were within the original project limits.

- SC-5.03 Add the following new paragraph immediately after paragraph 5.03.B:
 - C Any geotechnical information that was prepared for this project is included in Document 00 31 32 – Geotechnical Data. This information, if provided, is given to bidders as an aid in determining the character of the soil and groundwater conditions. The Owner does not guarantee that the ground encountered during construction will conform to the borings. Bidders should secure such other information as they consider necessary to check and supplement the above data.
- SC-5.05 Add the following paragraph to 5.05.A:
 - 3. If a public line and/or customer service line is damaged by Contractor, Contractor shall give verbal notice within one (1) hour and written notice within 24 hours to the Owner and Engineer.

ARTICLE 6 - BONDS AND INSURANCE

SC-6.01 Performance, Payment, and Other Bonds:

Revise the following paragraph in 6.01.A:

- A. Contractor shall furnish a performance bond and a payment bond. The performance bond shall be furnished in the amount at least equal to fifty (50) percent of the Contract Price. The payment bond shall be furnished in the amount at least equal to the Contract Price. Contractor's bonds are furnished as security for the faithful performance and payment of all of Contractor's obligations under Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Section 15.08, whichever is later, except as provided otherwise by Laws and Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- SC-6.02 Insurance –General Provisions:

Add the following new paragraphs immediately after paragraph 6.02.B:

- C. All Bonds and insurance required by the Contract Documents to be purchased and maintained by Contractor shall be obtained from surety or insurance companies that are authorized to transact business in Michigan and are classified at not lower than the following:
 - 1. Best's Key Rating Guide, current edition:
 - a. Rating Classification:
 - b. Financial Size Category: Class IX

B+

D. OWNER may require the surety to obtain reinsurance for any portion of the risk that exceeds 10% of the surety's capital and surplus. For bonds exceeding \$100,000, the surety must also hold a certificate of authority from the U.S. Secretary of the Treasury or have obtained reinsurance from a reinsurer that is authorized as a reinsurer in Michigan and holds a certificate of authority from the U.S. Secretary of the Treasury.

SC-6.03 Contractor's Liability Insurance

Add the following to the end of paragraph 6.03 G:

Additional insureds under this paragraph shall include the following:

- a. The Charter Township of Ypsilanti and its employees and agents;
- b. Orchard, Hiltz & McCliment, Inc. and its owners, agents, and employees.

Delete paragraph 6.03.1.4 in its entirety and insert the following in its place:

6. remain in effect at least until the end of the correction period and at all times thereafter when Contractor may be correcting removing or replacing defective Work in accordance with paragraph 15.08; and

Add the following new paragraphs immediately after paragraph 6.03.1.5:

- 8. not be written on a claims-made basis
- 9. be issued by insurers who endorse the policies to reflect that, in the event of payment of any loss or damages, subrogation rights under these Contract Documents will be waived by the insurer with respect to claims against Owner or Engineer.

Add the following new paragraphs immediately after paragraph 6.03:

The limits of liability for the insurance required by paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater required by Laws or Regulations:

- 1. Workers' Compensation, and related coverage under paragraphs 6.03 of the General Conditions:
 - a. State:

Statutory	
\$100,000	Each accident
\$500,000	Disease – Policy Limit
\$100,000	Disease – Each Employee

- 2. Contractor's General Liability under paragraph 6.03 of the General Conditions, which shall include completed operations and product liability coverage and eliminate any exclusion with respect to property under the care, custody and control of Contractor:
 - a. General Aggregate \$2,000,000
 - b. Each Occurrence

b. Employer's Liability:

- c. (Bodily Injury and Property Damage) \$1,000,000
- d. Property Damage liability insurance shall provide Explosion, Collapse and Underground (XCU) coverage where applicable.
- e. Contractual liability coverage shall be included in accordance with paragraph 6.03 of the General Conditions.
- 3. Automobile Liability under paragraph 6.03 of the General Conditions (including hired and non-owned vehicles):

a.	Bodily Injury:	
	Each Person	\$1,000,000
	Each Accident	\$1,000,000
b.	Property Damage: Each Accident	\$1,000,000

c. Combined Single Limit:	
Each Accident	\$1,000,000
	. , ,

- d. MCS 90 Endorsement on Vehicle Insurance: Statutory
- 4. Provide Umbrella Liability coverage under the following conditions, providing coverage for not less than the indicated amounts:
 - a. The carrier shall agree to the underlying policies
 - b. Coverage shall be at least as broad as that in the covered policies
 - c. Shall cover Contractor's Liability Insurance and Automobile Liability Insurance

d.	Coverage Limit:	
	Each Occurrence:	\$3,000,000
	Products Completed Operations Aggregate	\$3,000,000
	Other Aggregate	\$3,000,000

Limits are for the term of the program. Products Completed Operations Aggregate limits apply as a single limit for the full term.

5. Provide Owner's and Contractor's Protective (OCP) Liability Insurance in the principal name of Owner to protect against claims for damages because of bodily injury or death, and for property damage caused by the Contractor, Subcontractors, and anyone engaged, employed, or contracted with on their behalf, including coverage for costs of defense from all such claims, with limits of liability for bodily injury including death not less than \$1,000,000 per occurrence and \$3,000,000 aggregate limit. Limits of liability for property damage shall not be less than \$1,000,000 per occurrence and \$3,000,000 aggregate limit. The named insured shall be Owner, its board members, individual employees and agents, the Engineer and its owners, agents, and employees. The Township must be provided copies of the actual policies of insurance described in the certificate and the OCP binder.

SC-6.05 Property Insurance Add the following language at the end of paragraph 6.05.A.1:

Additional insureds under this paragraph shall include the following: a. Orchard, Hiltz & McCliment, Inc.

Add the following language immediately after paragraph 6.05.A.2

and shall also include flood, start-up and testing, offsite storage, and boiler and machinery insurance;

Add the following new paragraph immediately after paragraph 6.05.A.13:

- 8. be issued by an insurer who endorses the policy to reflect that, in the event of payment of any loss or damages, subrogation rights under these Contract Documents will be waived by the insurer with respect to claims against the Owner or Engineer.
- SC-6.06 Waiver of Rights Delete paragraph 6.06.B in its entirety. Delete paragraph 6.06.C in its entirety

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

- SC-7.06 Add the following subsection P:
 - P. Contractor shall pay each Subcontractor under this Contract for satisfactory performance of its contract no later than ten (10) Calendar Days from the Contractor's receipt of payment from Owner. Contractor shall return retainage payments to each Subcontractor within 10 Calendar Days after the Subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval from Owner.
- SC-7.08 Add the following language at the end of paragraph 7.08.A:

Additional provisions regarding permits and licenses are included in the General Requirements.

- SC-7.08 Add the following paragraph immediately following paragraph 7.08.A:
 - B. The Contractor is responsible for obtaining all permits, including making all arrangements for inspection and payment of all governmental charges and inspection fees necessary for the commencement of Work as indicated by the following. Owner will assist with permit coordination when necessary; however, will not be responsible for any charges unless indicated below.
 - 1. Charter Township of Ypsilanti Building Department permit
 - a. For structural, building, mechanical, and electrical permits
 - b. Contractor to pay permit fees and post bonds and insurance
 - 2. Charter Township of Ypsilanti Engineering Department permit
 - a. For utility and site permits
 - b. Contractor to pay permit fees and post bonds and insurance
- SC-7.10 Delete the last sentence of paragraph 7.10
- SC-7.13 Add the following language to the end of paragraph 7.13.A:

At a minimum, the safety representative will be certified in personal protective equipment, hazard communication, demolition and blasting, excavation, hand and power tools, welding and cutting, cranes, derricks, hoists, conveyors, scaffolding, confined space, CPR and first aid.

Add the following subsection B:

In the event there is an accident involving injury to any individual or damage to any property on or near the Work, Contractor shall provide to Owner and Engineer verbal notification within one hour and written notification within twenty-four hours of the event and shall be responsible for recording the location of the event and the circumstances surrounding the event through photographs, interviewing witnesses, obtaining medical reports, police accident reports and other documentation that describes the event. Copies of such documentation shall be provided to Owner and Engineer, within forty-eight hours of the event.

SC-7.17 Add the following new paragraph immediately after Paragraph 7.17.A:

The Contractor, as a condition precedent to final payment, shall execute a guarantee to the Owner warranting for a period of two (2) years from date of final payment to keep in good order and repair any defect in all the work done under the Agreement, either by the Contractor, his subcontractors, or material suppliers, that may develop during said period due to improper materials, defective equipment, improper materials workmanship, or arrangements, and any other work affected in making good such imperfections shall also be made good, all without expense to the Owner, and Contractor shall execute, in favor of the Owner the attached Maintenance and Guarantee Bond. When specifications call for a guarantee period greater than one (1) year, Contractor shall provide such longer guarantee period.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

- SC-11.01 Add the following new paragraph 4 after 11.01 A.3:
 - 4. upon receipt of a change order, Contractor shall promptly proceed with the change in the Work involved.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

- SC-13.03 Add the following paragraph immediately after paragraph 13.03.E.1:
 - 2. Contractor's overhead, profit, and related costs for products and equipment order by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum.
- SC-13.03 Delete paragraph 13.03.E.1 in its entirety and insert the following in its place:
 - the total cost of a particular item of Unit Price Work amounts to 10% or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 25% from the estimated quantity of such item indicated in the Agreement;

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION CORRECTION PERIOD

- SC-15.01. Add the following paragraph immediately after paragraph 15.01.B.3:
 - 4. Contractor shall indicate on the Application for Payment the amounts which are due to Owner from Contractor in accordance with the Contract Documents and which amounts Owner may deduct from the progress payment
- SC-15.01.D Delete paragraph 15.01.D.1 and replace with the following:
 - 1. Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 15.01.C) become due, and when due will be paid by Owner to Contractor.
- SC-15.01.CAdd the following new paragraphs immediately after 15.01.C.6.e:f. Contractor has incurred liability for other costs in accordance with Contract Documentsg. Contractor's failure to maintain record documents in accordance with paragraph 7.11

ARTICLE 16- SUSPENSION OF WORK AND TERMINATION

SC-16.04 Modify paragraph 16.04.B by deleting the phrase "Owner has failed for 30 days to pay Contractor any sum finally determined to be due." and replace with "Owner fails for 60 days to pay Contractor any sum finally determined to be due."

ARTICLE 18 – MISCELLANEOUS

SC-18.10 Add paragraph 18.10:

SC-18.10 – Liquidated Damages

- A. If the Contractor fails to Substantially Complete the Work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for liquidated damages as specified in the Agreement for each calendar day that the Contractor is in default after the time stipulated in the Contract Documents. The liquidated damages charged shall be deducted from the Contractor's progress payments and/or retained amount.
- B. The Contractor will not be charged with liquidated damages or any excess cost when the delay in Substantial Completion of the Work is due to the following and the Contractor has given written notice of such delay within seven (7) calendar days to the Owner or Engineer.
 - 1. To any preference, priority or allocation order duly issued by the Owner;
 - 2. To unforeseeable causes beyond the control and without fault or negligence of the Contractor, including but not limited to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a Contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather and;
 - 3. To any delays of Subcontractors occasioned by any of the causes specified in Items A and B of this Article.

END OF SECTION 00 73 00

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Work under separate contracts.
 - 4. Access to site.
 - 5. Coordination with occupants.
 - 6. Work restrictions.
 - 7. Specification and drawing conventions.
 - 8. Miscellaneous provisions.
- B. Related Requirements:
 - 1. Section 01 12 00 "Multiple Contract Summary".
 - 2. Section 01 29 00 "Payment Procedures".

1.2 PROJECT INFORMATION

- A. Project Identification: Law Enforcement Center Generator Replacement
 1. Project Location: 1501 S Huron St, Ypsilanti, MI 48197 48197-9112
- B. Owner: Charter Township of Ypsilanti, 7200 S Huron River Dr., Ypsilanti. MI
 1. Owner's Representative: Michael Radzik, Police Administrator/ Director
- C. Engineer OHM Advisors, 34000 Plymouth Rd., Livonia, MI 48150 Phone Number: 734-522-6711.
 - 1. A contractor has been engaged for this Project to provide and deliver a generator that meets the specifications detailed in the contract documents and to serve as the Project's supplier of equipment.
- D. Project Coordinator for Multiple Contracts: Matt Parks P.E., matt.parks@ohm-advisors.com, has been appointed by Owner to serve as Project coordinator.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. Procurement of a 300KW diesel generator and associated appurtenances for the Law Enforcement Center.
- B. Type of Contract.
 - The generator will be purchased under "Law Enforcement Center Generator Replacement" contract. The generator will be installed under a separate, coordinated, concurrent contract. See Section 01 12 00 "Multiple Contract Summary" for a description of work included under each of the multiple contracts and for the responsibilities of Project coordinator.

1.4 WORK UNDER SEPARATE CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.
- B. Subsequent Work: Owner will award a separate contract for the construction and installation of the generator and associated appurtenances following the delivery of the materials supplied under this Contract. Completion of that work will depend on successful completion of preparatory work under this Contract.
- C. Refer to Section 01 12 00 Multiple Contract Summary.

1.5 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to the Law Enforcement Center.
 - 2. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Contractor shall not operate heavy equipment on any side street within the project area without permission from the Engineer, Owner, and authority having jurisdiction.

1.6 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise indicated.

1.8 SUGGESTED SEQUENCE OF WORK

- A. In general, it is the intention and understanding that the Contractor shall have control over the sequence and order of execution of the Work to be done under the Contract and over the method(s) accomplishing the results. Engineer may make such reasonable requirements as necessary for the proper and effective protection of work partially or wholly completed, and to these requirements, Contractor shall conform.
- B. Refer to Section 01 29 00 Payment Procedures for project milestone eligible for payment.
- C. Refer to Section 01 12 00 Multiple Contract Summary for coordination between Contracts.

1.9 SPECIFICATION CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
 - 3. Electrical Technical Specifications provided in Appendix A are for reference only. The technical specifications provided in Appendix A are in reference to the Contract that will be entered into by the Owner and another Contractor to install the generator and associated appurtenances.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

1.10 MISCELLANEOUS PROVISIONS

A. Contractor shall provide delivery and storage that does not jeopardize the quality and performance of the materials being supplied under this contract, as the installation of these materials will be coordinated with another Contractor under a separate Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes a summary of each contract, including responsibilities for coordination and temporary facilities and controls.
- B. Specific requirements for Work of each contract are also indicated in individual Specification Sections and on Drawings.
- C. Related Requirements:
 - 1. Section 011000 "Summary" for the Work covered by the Contract Documents, restrictions on use of Project site, coordination with occupants, and work restrictions.
 - 2. Section 013100 "Project Management and Coordination" for general coordination requirements.

1.3 DEFINITIONS

- A. Permanent Enclosure: As determined by Engineer, the condition at which roofing is insulated and weathertight; exterior walls are insulated and watertight; and openings are closed with permanent construction or substantial temporary closures equivalent in weather protection to permanent construction.
- B. Generator Procurement Contract: Refers to the "Law Enforcement Center Generator Replacement #0098-18-0060" contract specified herein. Procurement and delivery of the generator for the Law Enforcement Center.
- C. Generator Installation Contract: Refers to the Contract that will be entered into by the Township with a Contractor to install the generator and associated appurtenances following the procurement of the generator.

1.4 PROJECT COORDINATOR

- A. Project coordinator shall be responsible for coordination between the Generator Procurement Contract and Generator Installation Contract.
- B. Scheduling Consultant: Owner has retained the following scheduling consultant to coordinate the scheduling activities of the multiple contracts, to prepare overall Project schedule, and to monitor and update Project schedule periodically; each Contractor shall cooperate with and coordinate its scheduling activities with Owner's scheduling consultant:

1. Matt Parks, P.E., email: <u>matt.parks@ohm-advisors.com</u>, phone: (248) 444-8984

1.5 PROJECT COORDINATOR RESPONSIBILITIES

- A. Project coordinator shall perform Project coordination activities for the two (2) contracts, including, but not limited to, the following:
 - 1. Provide typical overall coordination of the Work.
 - 2. Coordinate product selections for compatibility.
 - 3. Provide overall coordination of temporary facilities and controls.
 - 4. Coordinate, schedule, and approve delivery of equipment in accordance with the installation schedule.
 - 5. Coordinate construction and operations of the Work with work performed by each Contract.
 - 6. Prepare coordination drawings in collaboration with each contractor to coordinate work by more than one contract.
 - 7. Coordinate sequencing and scheduling of the Work.
 - 8. Provide quality-assurance and quality-control services specified in Section 014000 "Quality Requirements."
 - 9. Coordinate completion of interrelated punch list items.
 - 10. Collect record Specification Sections from contractors, collate Sections into numeric order, and submit complete set.
 - 11. Coordinate preparation of operation and maintenance manuals if information from more than one contractor is to be integrated with information from other contractors to form one combined record.

1.6 GENERAL REQUIREMENTS OF CONTRACTS

- A. Extent of Contract: Unless the Agreement contains a more specific description of the Work of each Contract, requirements indicated on Drawings and in Specification Sections determine which contract includes a specific element of Project.
 - 1. Unless otherwise indicated, the work described in this Section for each contract shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
 - 2. Supplying the generator, associated appurtenances, and all other work specified in the contract documents shall be the work under the Generator Procurement Contract.
 - 3. Installing the generator, associated appurtenances, and all other work specified in the contract documents shall be the work under the Generator Installation Contract.
- B. Substitutions: Each contractor shall cooperate with other contractors involved to coordinate approved substitutions with remainder of the work.
 - 1. Project Coordinator shall coordinate substitutions.

1.7 GENERATOR PROCUREMENT CONTRACT

- A. Work of the Generator Procurement Contract includes, but is not limited to, the following:
 - 1. Supply the materials specified in the contract documents, including but not limited to: engine generator, diesel engine, unit-mounted cooling system, unit-mounted control and monitoring, outdoor enclosure, and associated appurtenances.
 - 2. Delivery of materials to the Project site.

- 3. Storage and protection of materials, if necessary.
- 4. Operation and maintenance documentation for supplied materials.

1.8 GENERATOR INSTALLATION CONTRACT

- A. Work of the Generator Installation Contract includes, but is not limited to, the following:
 - 1. Remaining work not identified as work under other contracts.
 - 2. Construction and installation of materials specified in the contract documents, including but not limited to: installation of generator and associated appurtenances.
 - 3. Site work as specified in the contract documents.
 - 4. Site conduit installation.
 - 5. Construction of a concrete pad and driveway.
 - 6. Testing and system start-up.
 - 7. Landscape.
 - 8. Turf restoration.
 - 9. Pavement restoration.
 - 10. Operation and maintenance manual assembly.
 - 11. Record drawings.
- B. Temporary facilities and controls in the Generator Installation Contract include, but are not limited to, the following:
 - 1. Temporary toilet fixtures, wash facilities, and drinking water facilities.
 - 2. Plumbing and electrical connections to existing systems and temporary facilities and controls furnished.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 12 00

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 60 00 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of engineers and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - I. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.

- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. Engineer will notify Contractor of acceptance or rejection of proposed substitution within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.
- 4. Design Professional may determine in each case which of the revision forms in "Forms of Acceptance" Subparagraph below is appropriate for incorporating a Contractor's substitution requests into the Contract Documents. See the Evaluations in Section 01 26 00 "Contract Modification Procedures" for discussion of contract modification methods and forms.
 - a. Forms of Acceptance: Change Order, Work Change Directive, or Field Order.
 - b. Use product specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than fifteen (15) days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Requested substitution will not adversely affect Contractor's construction schedule.
 - c. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - d. Requested substitution is compatible with other portions of the Work.
 - e. Requested substitution has been coordinated with other portions of the Work.
 - f. Requested substitution provides specified warranty.
 - g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Engineer will consider requests for substitution if received within 60 days after commencement of the Work.
 - 1. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to the Contract Documents.

- c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- d. Requested substitution will not adversely affect Contractor's construction schedule.
- e. Requested substitution has received necessary approvals of authorities having jurisdiction.
- f. Requested substitution is compatible with other portions of the Work.
- g. Requested substitution has been coordinated with other portions of the Work.
- h. Requested substitution provides specified warranty.
- i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

A. Engineer will issue Field Orders, authorizing changes in the Work, not involving adjustment to the Contract Sum or the Contract Time

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 10 days, when not otherwise specified after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail." or forms acceptable to Engineer.
- B. Contractor-Initiated Work Change Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Engineer.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- 6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
- 7. Work Change Proposal Request Form: Use CSI Form 13.6A, "Change Order Request (Proposal)," with attachments CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail." or a form acceptable to Engineer.
- 1.4 CHANGE ORDER PROCEDURES
 - A. On Owner's approval of a Work Changes Proposal Request, Engineer will issue a Change Order for signatures of Owner and Contractor on a Change Order form provided by the Engineer.
- 1.5 WORK CHANGE DIRECTIVE
 - A. Work Change Directive: Engineer may issue a Work Change Directive on EJCDC Document C-940. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
 - B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Section 01 26 00 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's schedule for hitting milestones.
 - 1. 25% of Contract price will be paid upon approval of cut sheets and authorization for manufacturing.
 - 2. 50% of Contract price will be paid at Substantial Completion; upon delivery of equipment and materials.
 - 3. 25% of Contract price will be paid at Final Completion; upon successful start-up of the system and all operation and maintenance manuals have been received.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Engineer.
 - c. Engineer's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Provide three (3) line items for 25% payment upon approval of cut sheets and authorization for manufacturing, 50% payment upon delivery, and 25% payment upon successful start-up of the system and operation and maintenance documentation has been provided. Percentage paid for each milestone is of the lump sum Contract amount.
 - 3. Total shall equal the Contract Sum.
 - 4. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum. Change Orders shall be a new line item on the Application for Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Engineer and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Submit Application for Payment when applicable milestones are reached: approval of cut sheets and authorization for manufacturing, delivery of all equipment, and successful system start-up and submittal of all operation and maintenance documentation.

- C. Contractor's Declaration Form: Each application shall be accompanied by a Contractor's Declaration on the form provided in the project manual.
- D. Application for Payment Forms: Use EJCDC Document C-620 as form for Applications for Payment.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
 - 1. Provide three (3) line items for 25% payment upon approval of cut sheets and authorization for manufacturing, 50% payment upon delivery, and 25% payment upon successful start-up of the system and operation and maintenance documentation has been provided. Percentage paid for each milestone is of the lump sum Contract amount
 - 2. Include amounts of Change Orders, Work Change Directives and Construction Change Directives issued before last day of construction period covered by application.
- F. Transmittal: Submit one signed and notarized original copy of the Application for Payment to Engineer by a method ensuring receipt within 24 hours. Shall include waivers of lien and similar attachments if required.
 - 1. Transmit with a transmittal form listing attachments and recording appropriate information about application.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Contractor's schedule (preliminary if not final).
 - 3. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
- H. Application for Payment at Substantial Completion: After Engineer issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. Evidence that claims have been settled.
 - 5. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 - 6. Final liquidated damages settlement statement.
 - 7. Releases from the public agencies from which permits have been obtained for Work under this agreement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.

B. Related Requirements:

- 1. Section 01 73 00 "Execution" for procedures for coordinating general installation and fieldengineering services, including establishment of benchmarks and control points.
- 2. Section 01 12 00 "Multiple Contract Summary" for coordination of installation of the materials.

1.2 DEFINITIONS

A. RFI: Request from Contractor seeking information required by or clarifications of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design with five (5) days of receipt of bids.
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.4 GENERAL COORDINATION PROCEDURES

- A. Refer to Section 01 12 00 "Multiple Contract Summary" for more information on coordination between contractors.
- B. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly delivery and installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper delivery and installation.
 - 1. Schedule delivery and storage operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

1.5 REQUESTS FOR INFORMATION (RFIs)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

- 1. Engineer will return RFIs submitted to Engineer by other entities controlled by Contractor with no response.
- 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Engineer
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - 14. Space for Engineer's response.
- C. RFI Forms: AIA Document G716 or soft-ware generated form with substantially the same content as indicated above, acceptable to Engineer.
- D. Engineer's Action: Engineer will review each RFI, determine action required, and respond. Allow seven working days for Engineer's response for each RFI. RFIs received by Engineer after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Engineer's actions on submittals.
 - f. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Engineer's action may include a request for additional information, in which case Engineer's time for response will date from time of receipt of additional information.
 - 3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 26 00 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing within 10 days of receipt of the RFI response.
 - 4. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Engineer of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.

- 3. Minutes: record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Engineer, within three days of the meeting.
- B. Progress Meetings: Conduct progress meetings as-needed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
 - 1. Section 01 78 23 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
 - 2. Section 01 79 00 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTALS SCHEDULE

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer and additional time for handling and reviewing submittals required by those corrections.
- 1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS
 - A. Engineer's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will not be provided by Engineer for Contractor's use in preparing submittals.
 - B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
 - C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.

- 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
- 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use Specification Section number followed by a decimal point and then a sequential number (e.g., Submittal 06 10 00.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., Submittal 06 10 00.01.A).
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Engineer.
 - 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Engineer.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - I. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
 - 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- E. Options: Identify options requiring selection by Engineer.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.

- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit four paper copies of each submittal unless otherwise indicated. Engineer will return one copy.
 - 3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Engineer will not return copies.
 - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before or concurrent with Samples.
 - 6. Submit Product Data in the following format:
 - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

- a. Identification of products.
- b. Schedules.
- c. Compliance with specified standards.
- d. Notation of coordination requirements.
- e. Notation of dimensions established by field measurement.
- f. Relationship and attachment to adjoining construction clearly indicated.
- g. Seal and signature of professional engineer if specified.
- 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches. Text shall be readable on the size of the drawing provided.
- 3. Submit Shop Drawings in the following format:
 - a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 - 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 - 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Engineer will return submittal with options selected.
 - 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Engineer will retain two Sample sets; remainder will be returned.
 - 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Submit product schedule in the following format:
 - a. PDF electronic file.

- F. Coordination Drawings Submittals: Comply with requirements specified in Section 01 31 00 "Project Management and Coordination."
- G. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 29 00 "Payment Procedures.
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 01 40 00 "Quality Requirements."
- I. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 77 00 "Closeout Procedures."
- J. Maintenance Data: Comply with requirements specified in Section 01 78 23 "Operation and Maintenance Data."
- K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Engineer s and owners, and other information specified.
- L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- M. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- N. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- O. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- P. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- Q. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- R. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- S. Schedule of Tests and Inspections: Comply with requirements specified in Section 01 40 00 "Quality Requirements."

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 01 77 00 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 DESIGN PROFESSIONAL'S ACTION

- A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows:
 - 1. Approved.
 - 2. Rejected.
 - 3. Approved as Noted
 - 4. Revise and Resubmit.
 - 5. Submit Specified Item.
 - 6. Acknowledge Receipt.
- C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded or returned to Contractor marked "Not Required For Review."

END OF SECTION 01 33 00

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other qualityassurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and -control services required by Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
 - 3. Specific test and inspection requirements are not specified in this Section.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Engineer.
- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 1. Laboratory Mockups: Full-size physical assemblies constructed at testing facility to verify performance characteristics.
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 REGULATORY

A. Public Agency Requirements: It is the intention of these specifications to construct all work in accordance with the applicable requirements of the Owner, the contract specifications, and the contract drawings. Where there is a conflict between any of the aforementioned specifications, and the permit requirements for the agency having jurisdiction, the more restrictive shall govern.

1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Engineer for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer for a decision before proceeding.

1.5 INFORMATIONAL SUBMITTALS

A. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

1.6 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.

- 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 5. Other required items indicated in individual Specification Sections.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.7 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- E. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- F. Manufacturer's Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

- G. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - d. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Engineer, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- H. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Engineer.
 - 2. Notify Engineer seven days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Engineer's approval of mockups before starting work, fabrication, or construction. a. Allow seven days for initial review and each re-review of each mockup.
 - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
- I. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Specification Sections.

1.8 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a manufacturer's representative to observe and inspect the Work. Manufacturer's representative's services include examination of substrates and conditions, verification of materials, inspection of completed portions of the Work, and submittal of written reports.

- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 40 00

SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Engineer. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
 - 1. AABC Associated Air Balance Council; <u>www.aabc.com</u>.
 - 2. AAMA American Architectural Manufacturers Association; <u>www.aamanet.org</u>.
 - 3. AAPFCO Association of American Plant Food Control Officials; www.aapfco.org.
 - 4. AASHTO American Association of State Highway and Transportation Officials; <u>www.transportation.org</u>.
 - 5. AATCC American Association of Textile Chemists and Colorists; www.aatcc.org.
 - 6. ABMA American Bearing Manufacturers Association; www.americanbearings.org.
 - 7. ABMA American Boiler Manufacturers Association; <u>www.abma.com</u>.
 - 8. ACI American Concrete Institute; (Formerly: ACI International); <u>www.abma.com</u>.
 - 9. ACPA American Concrete Pipe Association; <u>www.concrete-pipe.org</u>.
 - 10. AEIC Association of Edison Illuminating Companies, Inc. (The); <u>www.aeic.org</u>.
 - 11. AF&PA American Forest & Paper Association; <u>www.afandpa.org</u>.
 - 12. AGA American Gas Association; <u>www.aga.org</u>.
 - 13. AHAM Association of Home Appliance Manufacturers; <u>www.aham.org</u>.
 - 14. AHRI Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
 - 15. AI Asphalt Institute; <u>www.asphaltinstitute.org</u>.
 - 16. AIA American Institute of Architects (The); <u>www.aia.org</u>.
 - 17. AISC American Institute of Steel Construction; www.aisc.org.
 - 18. AISI American Iron and Steel Institute; <u>www.steel.org</u>.
 - 19. AITC American Institute of Timber Construction; www.aitc-glulam.org.
 - 20. AMCA Air Movement and Control Association International, Inc.; www.amca.org.
 - 21. ANSI American National Standards Institute; www.ansi.org.
 - 22. AOSA Association of Official Seed Analysts, Inc.; www.aosaseed.com.
 - 23. APA APA The Engineered Wood Association; www.apawood.org.
 - 24. APA Architectural Precast Association; www.archprecast.org.
 - 25. API American Petroleum Institute; www.api.org.
 - 26. ARI Air-Conditioning & Refrigeration Institute; (See AHRI).
 - 27. ARI American Refrigeration Institute; (See AHRI).
 - 28. ARMA Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
 - 29. ASCE American Society of Civil Engineers; www.asce.org.
 - 30. ASCE/SEI American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
 - 31. ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers; <u>www.ashrae.org</u>.
 - 32. ASME ASME International; (American Society of Mechanical Engineers); www.asme.org.
 - 33. ASSE American Society of Safety Engineers (The); www.asse.org.
 - 34. ASSE American Society of Sanitary Engineering; www.asse-plumbing.org.
 - 35. ASTM ASTM International; www.astm.org.
 - 36. ATIS Alliance for Telecommunications Industry Solutions; www.atis.org.
 - 37. AWEA American Wind Energy Association; www.awea.org.
 - 38. AWI Architectural Woodwork Institute; <u>www.awinet.org</u>.
 - 39. AWMAC Architectural Woodwork Manufacturers Association of Canada; <u>www.awmac.com</u>.
 - 40. AWPA American Wood Protection Association; www.awpa.com.
 - 41. AWS American Welding Society; <u>www.aws.org</u>.
 - 42. AWWA American Water Works Association; <u>www.awwa.org</u>.
 - 43. BHMA Builders Hardware Manufacturers Association; www.buildershardware.com.

- 44. BIA Brick Industry Association (The); www.gobrick.com.
- 45. BICSI BICSI, Inc.; www.bicsi.org.
- 46. BIFMA BIFMA International; (Business and Institutional Furniture Manufacturer's Association); <u>www.bifma.org</u>.
- 47. BISSC Baking Industry Sanitation Standards Committee; www.bissc.org.
- 48. BWF Badminton World Federation; (Formerly: International Badminton Federation); <u>www.bissc.org</u>.
- 49. CDA Copper Development Association; <u>www.copper.org</u>.
- 50. CEA Canadian Electricity Association; <u>www.electricity.ca</u>.
- 51. CEA Consumer Electronics Association; www.ce.org.
- 52. CFFA Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
- 53. CFSEI Cold-Formed Steel Engineers Institute; <u>www.cfsei.org</u>.
- 54. CGA Compressed Gas Association; www.cganet.com.
- 55. CIMA Cellulose Insulation Manufacturers Association; www.cellulose.org.
- 56. CISCA Ceilings & Interior Systems Construction Association; www.cisca.org.
- 57. CISPI Cast Iron Soil Pipe Institute; <u>www.cispi.org</u>.
- 58. CLFMI Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
- 59. CPA Composite Panel Association; <u>www.pbmdf.com</u>.
- 60. CRI Carpet and Rug Institute (The); <u>www.carpet-rug.org</u>.
- 61. CRRC Cool Roof Rating Council; <u>www.coolroofs.org</u>.
- 62. CRSI Concrete Reinforcing Steel Institute; <u>www.crsi.org</u>.
- 63. CSA Canadian Standards Association; <u>www.csa.ca</u>.
- 64. CSA CSA International; (Formerly: IAS International Approval Services); <u>www.csa-international.org</u>.
- 65. CSI Construction Specifications Institute (The); www.csinet.org.
- 66. CSSB Cedar Shake & Shingle Bureau; www.cedarbureau.org.
- 67. CTI Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
- 68. CWC Composite Wood Council; (See CPA).
- 69. DASMA Door and Access Systems Manufacturers Association; <u>www.dasma.com</u>.
- 70. DHI Door and Hardware Institute; www.dhi.org.
- 71. ECA Electronic Components Association; (See ECIA).
- 72. ECAMA Electronic Components Assemblies & Materials Association; (See ECIA).
- 73. ECIA Electronic Components Industry Association; www.eciaonline.org.
- 74. EIA Electronic Industries Alliance; (See TIA).
- 75. EIMA EIFS Industry Members Association; <u>www.eima.com</u>.
- 76. EJMA Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
- 77. ESD ESD Association; (Electrostatic Discharge Association); www.esda.org.
- 78. ESTA Entertainment Services and Technology Association; (See PLASA).
- 79. EVO Efficiency Valuation Organization; www.evo-world.org.
- 80. FCI Fluid Controls Institute; <u>www.fluidcontrolsinstitute.org</u>.
- 81. FIBA Federation Internationale de Basketball; (The International Basketball Federation); <u>www.fiba.com</u>.
- 82. FIVB Federation Internationale de Volleyball; (The International Volleyball Federation); <u>www.fivb.org</u>.
- 83. FM Approvals FM Approvals LLC; www.fmglobal.com.
- 84. FM Global FM Global; (Formerly: FMG FM Global); www.fmglobal.com.
- 85. FRSA Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; <u>www.floridaroof.com</u>.
- 86. FSA Fluid Sealing Association; www.fluidsealing.com.
- 87. FSC Forest Stewardship Council U.S.; www.fscus.org.
- 88. GA Gypsum Association; www.gypsum.org.
- 89. GANA Glass Association of North America; www.glasswebsite.com.
- 90. GS Green Seal; <u>www.greenseal.org</u>.
- 91. HI Hydraulic Institute; www.pumps.org.
- 92. HI/GAMA Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
- 93. HMMA Hollow Metal Manufacturers Association; (See NAAMM).

- 94. HPVA Hardwood Plywood & Veneer Association; www.hpva.org.
- 95. HPW H. P. White Laboratory, Inc.; www.hpwhite.com.
- 96. IAPSC International Association of Professional Security Consultants; www.iapsc.org.
- 97. IAS International Accreditation Service; <u>www.iasonline.org</u>.
- 98. IAS International Approval Services; (See CSA).
- 99. ICBO International Conference of Building Officials; (See ICC).
- 100. ICC International Code Council; <u>www.iccsafe.org</u>.
- 101. ICEA Insulated Cable Engineers Association, Inc.; www.icea.net.
- 102. ICPA International Cast Polymer Alliance; www.icpa-hq.org.
- 103. ICRI International Concrete Repair Institute, Inc.; <u>www.icri.org</u>.
- 104. IEC International Electrotechnical Commission; <u>www.iec.ch</u>.
- 105. IEEE Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
- 106. IES Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); <u>www.ies.org</u>.
- 107. IESNA Illuminating Engineering Society of North America; (See IES).
- 108. IEST Institute of Environmental Sciences and Technology; <u>www.iest.org</u>.
- 109. IGMA Insulating Glass Manufacturers Alliance; www.igmaonline.org.
- 110. IGSHPA International Ground Source Heat Pump Association; <u>www.igshpa.okstate.edu</u>.
- 111. ILI Indiana Limestone Institute of America, Inc.; www.iliai.com.
- 112. Intertek Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
- 113. ISA International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); <u>www.isa.org</u>.
- 114. ISAS Instrumentation, Systems, and Automation Society (The); (See ISA).
- 115. ISFA International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); <u>www.isfanow.org</u>.
- 116. ISO International Organization for Standardization; www.iso.org.
- 117. ISSFA International Solid Surface Fabricators Association; (See ISFA).
- 118. ITU International Telecommunication Union; <u>www.itu.int/home</u>.
- 119. KCMA Kitchen Cabinet Manufacturers Association; www.kcma.org.
- 120. LMA Laminating Materials Association; (See CPA).
- 121. LPI Lightning Protection Institute; <u>www.lightning.org</u>.
- 122. MBMA Metal Building Manufacturers Association; <u>www.mbma.com</u>.
- 123. MCA Metal Construction Association; www.metalconstruction.org.
- 124. MFMA Maple Flooring Manufacturers Association, Inc.; <u>www.maplefloor.org</u>.
- 125. MFMA Metal Framing Manufacturers Association, Inc.; <u>www.metalframingmfg.org</u>.
- 126. MHIA Material Handling Industry of America; www.mhia.org.
- 127. MIA Marble Institute of America; www.marble-institute.com.
- 128. MMPA Moulding & Millwork Producers Association; <u>www.wmmpa.com</u>.
- 129. MPI Master Painters Institute; <u>www.paintinfo.com</u>.
- 130. MSS Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; <u>www.mss-hq.org</u>.
- 131. NAAMM National Association of Architectural Metal Manufacturers; www.naamm.org.
- 132. NACE NACE International; (National Association of Corrosion Engineers International); www.nace.org.
- 133. NADCA National Air Duct Cleaners Association; www.nadca.com.
- 134. NAIMA North American Insulation Manufacturers Association; www.naima.org.
- 135. NBGQA National Building Granite Quarries Association, Inc.; <u>www.nbgqa.com</u>.
- 136. NBI New Buildings Institute; <u>www.newbuildings.org</u>.
- 137. NCAA National Collegiate Athletic Association (The); <u>www.ncaa.org</u>.
- 138. NCMA National Concrete Masonry Association; <u>www.ncma.org</u>.
- 139. NEBB National Environmental Balancing Bureau; www.nebb.org.
- 140. NECA National Electrical Contractors Association; www.necanet.org.
- 141. NeLMA Northeastern Lumber Manufacturers Association; www.nelma.org.
- 142. NEMA National Electrical Manufacturers Association; www.nema.org.
- 143. NETA InterNational Electrical Testing Association; www.netaworld.org.

- 144. NFHS National Federation of State High School Associations; www.nfhs.org.
- 145. NFPA National Fire Protection Association; <u>www.nfpa.org</u>.
- 146. NFPA NFPA International; (See NFPA).
- 147. NFRC National Fenestration Rating Council; <u>www.nfrc.org</u>.
- 148. NHLA National Hardwood Lumber Association; www.nhla.com.
- 149. NLGA National Lumber Grades Authority; <u>www.nlga.org</u>.
- 150. NOFMA National Oak Flooring Manufacturers Association; (See NWFA).
- 151. NOMMA National Ornamental & Miscellaneous Metals Association; www.nomma.org.
- 152. NRCA National Roofing Contractors Association; <u>www.nrca.net</u>.
- 153. NRMCA National Ready Mixed Concrete Association; www.nrmca.org.
- 154. NSF NSF International; <u>www.nsf.org</u>.
- 155. NSPE National Society of Professional Engineers; www.nspe.org.
- 156. NSSGA National Stone, Sand & Gravel Association; www.nssga.org.
- 157. NTMA National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
- 158. NWFA National Wood Flooring Association; www.nwfa.org.
- 159. PCI Precast/Prestressed Concrete Institute; <u>www.pci.org</u>.
- 160. PDI Plumbing & Drainage Institute; <u>www.pdionline.org</u>.
- 161. PLASA PLASA; (Formerly: ESTA Entertainment Services and Technology Association); <u>www.plasa.org</u>.
- 162. RCSC Research Council on Structural Connections; <u>www.boltcouncil.org</u>.
- 163. RFCI Resilient Floor Covering Institute; www.rfci.com.
- 164. RIS Redwood Inspection Service; <u>www.redwoodinspection.com</u>.
- 165. SAE SAE International; <u>www.sae.org</u>.
- 166. SCTE Society of Cable Telecommunications Engineers; www.scte.org.
- 167. SDI Steel Deck Institute; www.sdi.org.
- 168. SDI Steel Door Institute; <u>www.steeldoor.org</u>.
- 169. SEFA Scientific Equipment and Furniture Association (The); www.sefalabs.com.
- 170. SEI/ASCE Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
- 171. SIA Security Industry Association; www.siaonline.org.
- 172. SJI Steel Joist Institute; www.steeljoist.org.
- 173. SMA Screen Manufacturers Association; <u>www.smainfo.org</u>.
- 174. SMACNA Sheet Metal and Air Conditioning Contractors' National Association; <u>www.smacna.org</u>.
- 175. SMPTE Society of Motion Picture and Television Engineers; www.smpte.org.
- 176. SPFA Spray Polyurethane Foam Alliance; www.sprayfoam.org.
- 177. SPIB Southern Pine Inspection Bureau; <u>www.spib.org</u>.
- 178. SPRI Single Ply Roofing Industry; <u>www.spri.org</u>.
- 179. SRCC Solar Rating & Certification Corporation; www.solar-rating.org.
- 180. SSINA Specialty Steel Industry of North America; www.ssina.com.
- 181. SSPC SSPC: The Society for Protective Coatings; www.sspc.org.
- 182. STI Steel Tank Institute; www.steeltank.com.
- 183. SWI Steel Window Institute; www.steelwindows.com.
- 184. SWPA Submersible Wastewater Pump Association; www.swpa.org.
- 185. TCA Tilt-Up Concrete Association; www.tilt-up.org.
- 186. TCNA Tile Council of North America, Inc.; <u>www.tileusa.com</u>.
- 187. TEMA Tubular Exchanger Manufacturers Association, Inc.; <u>www.tema.org</u>.
- 188. TIA Telecommunications Industry Association (The); (Formerly: TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
- 189. TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
- 190. TMS The Masonry Society; www.masonrysociety.org.
- 191. TPI Truss Plate Institute; www.tpinst.org.
- 192. TPI Turfgrass Producers International; <u>www.turfgrasssod.org</u>.
- 193. TRI Tile Roofing Institute; <u>www.tileroofing.org</u>.
- 194. UL Underwriters Laboratories Inc.; <u>www.ul.com</u>.

- 195. UNI Uni-Bell PVC Pipe Association; <u>www.uni-bell.org</u>.
- 196. USAV USA Volleyball; <u>www.usavolleyball.org</u>.
- 197. USGBC U.S. Green Building Council; <u>www.usgbc.org</u>.
- 198. USITT United States Institute for Theatre Technology, Inc.; <u>www.usitt.org</u>.
- 199. WASTEC Waste Equipment Technology Association; www.wastec.org.
- 200. WCLIB West Coast Lumber Inspection Bureau; www.wclib.org.
- 201. WCMA Window Covering Manufacturers Association; www.wcmanet.org.
- 202. WDMA Window & Door Manufacturers Association; www.wdma.com.
- 203. WI Woodwork Institute; <u>www.wicnet.org</u>.
- 204. WSRCA Western States Roofing Contractors Association; www.wsrca.com.
- 205. WWPA Western Wood Products Association; <u>www.wwpa.org</u>.
- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
 - 1. DIN Deutsches Institut fur Normung e.V.; <u>www.din.de</u>.
 - 2. IAPMO International Association of Plumbing and Mechanical Officials; <u>www.iapmo.org</u>.
 - 3. ICC International Code Council; <u>www.iccsafe.org</u>.
 - 4. ICC-ES ICC Evaluation Service, LLC; <u>www.icc-es.org</u>.
- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
 - 1. COE Army Corps of Engineers; <u>www.usace.army.mil</u>.
 - 2. CPSC Consumer Product Safety Commission; www.cpsc.gov.
 - 3. DOC Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
 - 4. DOD Department of Defense; www.quicksearch.dla.mil.
 - 5. DOE Department of Energy; www.energy.gov.
 - 6. EPA Environmental Protection Agency; <u>www.epa.gov</u>.
 - 7. FAA Federal Aviation Administration; <u>www.faa.gov</u>.
 - 8. FG Federal Government Publications; www.gpo.gov.
 - 9. GSA General Services Administration; <u>www.gsa.gov</u>.
 - 10. HUD Department of Housing and Urban Development; www.hud.gov.
 - 11. LBL Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; <u>www.eetd.lbl.gov</u>.
 - 12. OSHA Occupational Safety & Health Administration; www.osha.gov.
 - 13. SD Department of State; <u>www.state.gov</u>.
 - 14. TRB Transportation Research Board; National Cooperative Highway Research Program; The National Academies; <u>www.trb.org</u>.
 - 15. USDA Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; <u>www.ars.usda.gov</u>.
 - 16. USDA Department of Agriculture; Rural Utilities Service; www.usda.gov.
 - 17. USDJ Department of Justice; Office of Justice Programs; National Institute of Justice; <u>www.ojp.usdoj.gov</u>.
 - 18. USP U.S. Pharmacopeial Convention; www.usp.org.
 - 19. USPS United States Postal Service; www.usps.com.
- E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list.
 - 1. CFR Code of Federal Regulations; Available from Government Printing Office; <u>www.gpo.gov/fdsys</u>.
 - 2. DOD Department of Defense; Military Specifications and Standards; Available from DLA Document Services; <u>www.quicksearch.dla.mil</u>.
 - 3. DSCC Defense Supply Center Columbus; (See FS).
 - 4. FED-STD Federal Standard; (See FS).

- 5. FS Federal Specification; Available from DLA Document Services; <u>www.quicksearch.dla.mil</u>.
 - a. Available from Defense Standardization Program; <u>www.dsp.dla.mil</u>.
 - b. Available from General Services Administration; <u>www.gsa.gov</u>.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; <u>www.wbdg.org/ccb</u>.
- 6. MILSPEC Military Specification and Standards; (See DOD).
- 7. USAB United States Access Board; www.access-board.gov.
- 8. USATBCB U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
 - 1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; <u>www.bearhfti.ca.gov</u>.
 - 2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; <u>www.calregs.com</u>.
 - 3. CDHS; California Department of Health Services; (See CDPH).
 - 4. CDPH; California Department of Public Health; Indoor Air Quality Program; <u>www.cal-iaq.org</u>.
 - 5. CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
 - 6. MDEQ; Michigan Department of Environmental Quality; www.michigan.gov/deq
 - 7. MDOT; Michigan Department of Transportation; <u>www.michigan.gov/mdot</u>
 - 8. ODOT; Ohio Department of Transportation; <u>www.dot.state.oh.us</u>
 - 9. Ohio EPA: Ohio Environmental Protection Agency; www.epa.state.oh.us
 - 10. SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
 - 11. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; <u>www.txforestservice.tamu.edu</u>.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 25 00 "Substitution Procedures" for requests for substitutions.
 - 2. Section 01 33 00 "Submittal Procedures."
 - 3. Section 01 77 00 "Closeout Procedures."
 - 4. Section 26 32 13 "Engine Generators".
 - 5. Section 26 36 00 "Transfer Switches".

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Engineer will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Section 01 33 00 "Submittal Procedures."
 - b. Use product specified if Engineer does not issue a decision on use of a comparable product request within time allocated.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 33 00 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 6. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
 - 3. Refer to Section 26 32 13 Engine Generators.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.

- 3. Refer to other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 01 77 00 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Engineer will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:
 - 1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - b. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.
 - 4. Manufacturers:
 - a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.
 - 5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

- C. Visual Matching Specification: Where Specifications require "match Engineer's sample", provide a product that complies with requirements and matches Engineer's sample. Engineer's decision will be final on whether a proposed product matches.
 - 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 01 25 00 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Engineer from manufacturer's full range" or similar phrase, select a product that complies with requirements. Engineer will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer may return requests without action, except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of Engineer s and owners, if requested.
 - 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 73 00 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work.
- B. Related Requirements:
 - 1. Section 01 10 00 "Summary" for limits on use of Project site.
 - 2. Section 01 77 00 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in contract documents.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

3.2 PREPARATION

- A. Space Requirements: Verify space requirements and dimensions of items.
- B. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Engineer according to requirements in Section 01 31 00 "Project Management and Coordination."

3.3 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: Comply with qualification requirements in Section 01 40 00 "Quality Requirements"

END OF SECTION 01 73 00

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.

B. Related Requirements:

- 1. Section 01 78 23 "Operation and Maintenance Data" for operation and maintenance manual requirements.
- 2. Section 01 79 00 "Demonstration and Training" for requirements for instructing Owner's personnel.

1.2 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.
- 1.3 CLOSEOUT SUBMITTALS
 - A. Certificates of Release: From authorities having jurisdiction.
 - B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.
- 1.5 SUBSTANTIAL COMPLETION PROCEDURES
 - A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
 - B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Delivery of all materials ready for installation to the site.
- 1.6 FINAL COMPLETION PROCEDURES
 - A. Preliminary Procedures: Before determining final completion, complete the following:

- 1. Submit a final Application for Payment according to Section 01 29 00 "Payment Procedures."
- 2. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
- 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings and manufacturer's startup reports.
- B. Submittals Prior to Final Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Final Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including operation and maintenance materials.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Engineer. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Engineer's signature for receipt of submittals.
 - 5. Submit test/adjust/balance records.
 - 6. Submit sustainable design submittals not previously submitted.
 - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 - 8. Submit operation and maintenance data. Refer to Section 01 78 23 "Operation and Maintenance Data" for more information.
- C. Procedures Prior to Final Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Final Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Final Completion.
 - 5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.

1.7 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

- 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
- 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
- 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 77 00

SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals for materials specific to the work, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Operation manuals for systems, subsystems, and equipment.
 - 3. Product maintenance manuals.
 - 4. Systems and equipment maintenance manuals.
- B. Contractor is only required to provide operation and maintenance documentation on equipment specific to the Work specified herein. Assembly of the complete operation and maintenance manual for the facility will be the responsibility of the contractor that will install the equipment.

1.2 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Engineer will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Engineer.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.
- C. Manual Submittal: Submit each manual in prior to requesting Final Completion and at least 15 days before equipment installation or commencing demonstration and training; whichever is earliest. Engineer will return copy with comments.
 - 1. Correct or revise each manual to comply with Engineer's comments. Submit copies of each corrected manual within 15 days of receipt of Engineer's comments and prior to equipment installation or commencing demonstration and training.

PART 2 - PRODUCTS

2.1 REQUIREMENTS FOR OPERATION, AND MAINTENANCE MANUALS

- A. Directory: Prepare a single, comprehensive directory of operation and maintenance data and materials, listing items and their location to facilitate ready access to desired information.
- B. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

- C. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
 - 3. Include drawings and photographs of equipment.

2.2 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 - 2. Performance and design criteria if Contractor is delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Operating logs.
 - 6. Wiring diagrams.
 - 7. Control diagrams.
 - 8. Piped system diagrams.
 - 9. Precautions against improper use.
 - 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number. Use designations for products indicated on Contract Documents.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
 - 1. Startup procedures.
 - 2. Equipment or system break-in procedures.
 - 3. Routine and normal operating instructions.
 - 4. Regulation and control procedures.
 - 5. Instructions on stopping.
 - 6. Normal shutdown instructions.
 - 7. Seasonal and weekend operating instructions.
 - 8. Required sequences for electric or electronic systems.
 - 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.3 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.

- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION (not used)

END OF SECTION 01 78 23

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training video recordings.

1.2 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

1.3 CLOSEOUT SUBMITTALS

- A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
 - 1. At completion of training, submit complete training manual(s) for Owner's use prepared and bound in format matching operation and maintenance manuals and in PDF electronic file format on compact disc or USB.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 01 40 00 "Quality Requirements," experienced in operation and maintenance procedures and training.

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Engineer.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project record documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.
 - c. Shutdown instructions for each type of emergency.
 - d. Operating instructions for conditions outside of normal operating limits.
 - e. Sequences for electric or electronic systems.
 - f. Special operating instructions and procedures.
 - 4. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - I. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
 - 5. Adjustments: Include the following:
 - a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
 - 6. Troubleshooting: Include the following:

- a. Diagnostic instructions.
- b. Test and inspection procedures.
- 7. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
- 8. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 01 78 23 "Operation and Maintenance Data."

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1. Engineer will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
 - 2. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner, through Engineer, with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

- A. General: Engage a qualified commercial videographer to record demonstration and training. Record each training session separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
 - 1. At beginning of each training module, record each chart containing learning objective and lesson outline.

B. Video Recording Format: Provide high-quality color video recordings with menu navigation in format acceptable to Engineer.

END OF SECTION 01 79 00

SECTION 26 32 13 - ENGINE GENERATORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes packaged engine-generator sets for standby power supply with the following features:
 - 1. Diesel Engine
 - 2. Unit-mounted cooling system.
 - 3. Unit-mounted control and monitoring.
 - 4. Performance requirements for sensitive loads.
 - 5. Fuel system.
 - 6. Outdoor enclosure.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
 - 1. Include plans and elevations for engine-generator set and other components specified. Indicate access requirements affected by height of fuel tank.
 - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
- 1.3 CLOSEOUT SUBMITTALS
 - A. Operation and maintenance data.
- 1.4 QUALITY ASSURANCE
 - A. Testing Agency Qualifications: Member company of NETA or an NRTL.
 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.5 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 5 years from date of FInal Completion.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Select from the manufacturer listed
 - 1. Cummins Power Generation or engineered approved equal.
- 2.2 PERFORMANCE REQUIREMENTS
 - A. ASME Compliance: Comply with ASME B15.1.

- B. NFPA Compliance:
 - 1. Comply with NFPA 37.
 - 2. Comply with NFPA 70.
 - 3. Comply with NFPA 99.
- C. UL Compliance: Comply with UL 2200.
- D. Engine Exhaust Emissions: Comply with EPA **Tier 3** requirements and applicable state and local government requirements. Provide exhaust system for Residential/critical locations.
- E. Noise Emission: Provide sound attenuated enclosure to ensure no more than 70dB 23 feet from machine.
- F. Environmental Conditions: Engine-generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
 - 1. Ambient Temperature: 5 to 40 deg C.
 - 2. Relative Humidity: Zero to 95 percent.
 - 3. Altitude: Sea level to 1000 feet.

2.3 ASSEMBLY DESCRIPTION

- A. Factory-assembled and -tested, water-cooled engine, with brushless generator and accessories.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- C. EPSS Class: Engine-generator set shall be classified as a Class 72 in accordance with NFPA 110.
- D. Governor: Electronic isochronous, with speed sensing.
- E. Emissions: Comply with EPA Tier 3 requirements.
- F. Mounting Frame: Structural steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.
- G. Capacities and Characteristics:
 - 1. As scheduled on drawings.
- H. Generator-Set Performance:
 - 1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage from no load to full load.
 - 2. Transient Voltage Performance: Not more than 8.0 percent variation for 50 percent stepload increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
 - 3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency from no load to full load.
 - 4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.

- 5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
- 6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
- 7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of **300 percent** of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
- 8. Start Time: Comply with NFPA 110, Type 10, system requirements.

2.4 ENGINE

- A. Fuel: NO.2 Diesel Fuel.
- B. Rated Engine Speed: 1800 rpm.
- C. Lubrication System: The following items are mounted on engine or skid:
 - 1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
 - 2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
 - 3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.
- D. Jacket Coolant Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 1 equipment for heater capacity.
- E. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine-generatorset mounting frame and integral engine-driven coolant pump.
 - 1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
 - 2. Size of Radiator: Adequate to contain expansion of total system coolant from cold start to **100 percent** load condition.
 - 3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant system pressure for engine used. Equip with gage glass and petcock.
 - 4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
- F. Muffler/Silencer: Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
 - 1. Sound level measured at a distance of 23 feet horizontally and 5 feet vertically from exhaust discharge after installation is complete shall be 70 dBA or less.
- G. Air-Intake Filter: Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- H. Starting System: 24-V electric, with negative ground.
 - 1. Components: Sized so they are not damaged during a full engine-cranking cycle with ambient temperature at maximum specified in "Performance Requirements" Article.
 - 2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
 - 3. Cranking Cycle: As required by NFPA 110 for system level specified.

- 4. Battery: Lead acid, with capacity within ambient temperature range specified in "Performance Requirements" Article to provide specified cranking cycle at least three times without recharging.
- 5. Battery Stand: Factory-fabricated, two-tier metal with acid-resistant finish designed to hold the quantity of battery cells required and to maintain the arrangement to minimize lengths of battery interconnections.
- 6. Battery Charger: Current-limiting, automatic-equalizing and float-charging type designed for lead-acid batteries. Unit shall comply with UL 1236.
- 7. Batter Heater: Increases battery starting capability in lower than optimum ambient temperatures.
 - a. Heater Kit:0541-0555
 - b. Temperature range 40-degrees F / 70-degrees F Setting
 - c. Voltage: 120V
 - d. Watts: 120W
 - e. Installation Sheet: C587

2.5 FUEL SYSTEM

- A. Fuel Oil Piping/Tank: Fuel system shall be designed by one manufacturer for all items, including tank, tank fill system, monitoring system, and fuel delivery and filtering to engine.
- B. Tank capacity shall allow generator to run at 80% load for 24 hours continuously.
 - 1. U.L. 142 compliant.
 - 2. NFPA 30, 37 and 110.
 - 3. Atmospheric vent cap.
 - 4. Raised full fill.
 - 5. Fuel level gauge.
 - 6. Low fuel level switch.
 - 7. Leak detection switch.
 - 8. Sub-base, dual wall.

2.6 CONTROL AND MONITORING

- A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of generator set. When mode-selector switch is switched to the on position, generator set starts. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms.
- B. Provide minimum run time control set for 60 minutes with override only by operation of an emergency-stop switch.
- C. Comply with UL 508A.
- D. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the generator set. Mounting method shall isolate the control panel from generator-set vibration. Panel shall be powered from the engine-generator set battery.
- E. Indicating Devices : As required by NFPA 110 for Level 2 system, including the following:
 - 1. AC voltmeter.
 - 2. AC ammeter.
 - 3. AC frequency meter.

- 4. EPS supplying load indicator.
- 5. Ammeter and voltmeter phase-selector switches.
- 6. DC voltmeter (alternator battery charging).
- 7. Engine-coolant temperature gage.
- 8. Engine lubricating-oil pressure gage.
- 9. Running-time meter.
- 10. Current and Potential Transformers: Instrument accuracy class.
- F. Protective Devices and Controls in Local Control Panel: Shutdown devices and common visual alarm indication as required by NFPA 110 for Level 2 system, including the following:
 - 1. Start-stop switch.
 - 2. Overcrank shutdown device.
 - 3. Overspeed shutdown device.
 - 4. Coolant high-temperature shutdown device.
 - 5. Coolant low-level shutdown device.
 - 6. Low lube oil pressure shutdown device.
 - 7. Air shutdown damper shutdown device when used.
 - 8. Overcrank alarm.
 - 9. Overspeed alarm.
 - 10. Coolant high-temperature alarm.
 - 11. Coolant low-temperature alarm.
 - 12. Coolant low-level alarm.
 - 13. Low lube oil pressure alarm.
 - 14. Air shutdown damper alarm when used.
 - 15. Lamp test.
 - 16. Contacts for local common alarm.
 - 17. Coolant high-temperature prealarm.
 - 18. Generator-voltage adjusting rheostat.
 - 19. Run-Off-Auto switch.
 - 20. Control switch not in automatic position alarm.
 - 21. Low cranking voltage alarm.
 - 22. Battery-charger malfunction alarm.
 - 23. Battery low-voltage alarm.
 - 24. Battery high-voltage alarm.
 - 25. Generator overcurrent protective device not closed alarm.
- **G.** Supporting Items: Include sensors, transducers, terminals, relays, and other devices and Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated. **Provide remote annunciator panel that duplicates data of local control panel. Provide remote fuel tank monitor and leak detection indication for low fuel and leak monitoring. Provide RS485 modbus connection to the building control system network to monitor electrical power, engine status, engine load and low fuel level.**

2.7 GENERATOR OVERCURRENT AND FAULT PROTECTION

- A. Overcurrent protective devices for the entire EPSS shall be coordinated to optimize selective tripping when a short circuit occurs.
 - 1. Overcurrent protective devices for the EPSS shall be accessible only to authorized personnel.
- B. Generator Circuit Breaker: Molded-case, electronic-trip type; 100 percent rated; complying with UL 489.
 - 1. Tripping Characteristics: Adjustable long-time and short-time delay and instantaneous.
 - 2. Trip Settings: Selected to coordinate with generator thermal damage curve.

- 3. Shunt Trip: Connected to trip breaker when generator set is shut down by other protective devices.
- 4. Mounting: Adjacent to or integrated with control and monitoring panel.

2.8 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

- A. Comply with NEMA MG 1.
- B. Generator shall be Separately Excited by PMG attached to generator shaft.
- C. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.
- D. Electrical Insulation: Class H.
- E. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required. Provide six lead alternator.
- F. Range: Provide limited range of output voltage by adjusting the excitation level.
- G. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.
- H. Enclosure: Weather protective, sound attenuated.
- I. Instrument Transformers: Mounted within generator enclosure.
- J. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.
 - 1. Adjusting Control and Monitoring Panel: Provide plus or minus 5 percent adjustment of output-voltage operating band.
- K. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.
- L. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.
- M. Subtransient Reactance: 12 percent, maximum.

2.9 OUTDOOR GENERATOR-SET ENCLOSURE

- A. Description: Vandal-resistant, sound-attenuating per requirements of 2.2.E above, weather protective steel housing, wind resistant up to 90-mph. Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.
- B. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at **100 percent** of rated load for 2 hours with ambient temperature at top of range specified in system service conditions.
 - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
 - 2. Ventilation: Provide temperature-controlled exhaust fan interlocked to prevent operation when engine is running.

- C. Convenience Outlets: Factory wired, GFCI. Arrange for external electrical connection.
- 2.10 FINISHES
 - A. Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.
- 2.11 SOURCE QUALITY CONTROL
 - A. Prototype Testing: Factory test engine-generator set using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.
 1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with packaged engine-generator manufacturers' written installation and alignment instructions and with NFPA 110.
- B. Equipment Mounting:
 - Install packaged engine generators on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in Section 03 30 00 "Cast-in-Place Concrete."
 - 2. Coordinate size and location of concrete bases for packaged engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.
- C. Install packaged engine-generator to provide access, without removing connections or accessories, for periodic maintenance.
- D. Install packaged engine-generator with elastomeric isolator pads having a minimum deflection of 1 inch on 4-inch-high concrete base. Secure sets to anchor bolts installed in concrete bases.
- E. Install condensate drain piping to muffler drain outlet full size of drain connection with a shutoff valve, stainless-steel flexible connector, and Schedule 40, black steel pipe with welded joints.
- F. Install complete fuel system including tank fill system, tank, and fuel delivery piping and filter system.
- G. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

3.2 CONNECTIONS

- A. Connect cooling-system water piping to engine-generator set and heat exchanger with flexible connectors.
- B. Connect engine exhaust pipe to engine with flexible connector.
- C. Connect fuel piping to engines with a gate valve and union and flexible connector.
- D. Ground equipment according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."

- E. Connect wiring according to Section 26 05 19 "Low-Voltage Electrical Power Conductors and Cables." Provide a minimum of one 90 degree bend in flexible conduit routed to the generator set from a stationary element.
- F. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

3.3 IDENTIFICATION

- A. Identify system components according to Section 23 05 53 "Identification for HVAC Piping and Equipment" and Section 26 05 53 "Identification for Electrical Systems."
- B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

3.4 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections.
- B. Tests and Inspections:
 - 1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in the first two subparagraphs as specified in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - a. Visual and Mechanical Inspection
 - 1) Compare equipment nameplate data with drawings and specifications.
 - 2) Inspect physical and mechanical condition.
 - 3) Inspect anchorage, alignment, and grounding.
 - 4) Verify the unit is clean.
 - b. Electrical and Mechanical Tests
 - 1) Perform insulation-resistance tests in accordance with IEEE 43.
 - a) Machines larger than 200 horsepower. Test duration shall be 10 minutes. Calculate polarization index.
 - b) Machines 200 horsepower or less. Test duration shall be one minute. Calculate the dielectric-absorption ratio.
 - 2) Test protective relay devices.
 - 3) Verify phase rotation, phasing, and synchronized operation as required by the application.
 - 4) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
 - 5) Conduct performance test in accordance with NFPA 110.
 - 6) Verify correct functioning of the governor and regulator.
 - 2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
 - 3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.
 - a. Measure charging voltage and voltages between available battery terminals for fullcharging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
 - b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
 - c. Verify acceptance of charge for each element of the battery after discharge.
 - d. Verify that measurements are within manufacturer's specifications.
 - 4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and floatcharging conditions.

- 5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine-generator system before and during system operation. Check for air, exhaust, and fluid leaks.
- 6. Exhaust-System Back-Pressure Test: Use a manometer with a scale exceeding 40-inch wg. Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
- 7. Exhaust Emissions Test: Comply with applicable government test criteria.
- 8. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
- 9. Harmonic-Content Tests: Measure harmonic content of output voltage at 25 percent and 100 percent of rated linear load. Verify that harmonic content is within specified limits.
- 10. Noise Level Tests: Measure A-weighted level of noise emanating from generator-set installation, including engine exhaust and cooling-air intake and discharge, at four locations 25 feet from edge of the generator enclosure, and compare measured levels with required values.
- C. Coordinate tests with tests for transfer switches and run them concurrently.
- D. Test instruments shall have been calibrated within the last 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.
- E. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.
- F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.
- G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- H. Remove and replace malfunctioning units and retest as specified above.
- I. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.
- J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

END OF SECTION 26 32 13

SECTION 26 36 00 - TRANSFER SWITCHES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes automatic transfer switches rated 600 V and less, including the following:
 1. Microprocessor annunciator and control system.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for transfer switches.
- 2. Include rated capacities, operating characteristics, electrical characteristics, and accessories.

B. Shop Drawings:

- 1. Include plans, elevations, sections, details showing minimum clearances, conductor entry provisions, gutter space, and installed features and devices.
- 2. Include material lists for each switch specified.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer-authorized service representative.
- B. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals.
 - 1. In addition to items specified in Section 01 78 23 "Operation and Maintenance Data," include the following:
 - a. Features and operating sequences, both automatic and manual.
 - b. List of all factory settings of relays; provide relay-setting and calibration instructions, including software, where applicable.

1.6 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Member company of NETA.
 - a. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.7 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of transfer switch or transfer switch components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

- 2.1 PERFORMANCE REQUIREMENTS
 - A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - B. Comply with NEMA ICS 10.
 - C. Comply with NFPA 110.
 - D. Comply with UL 1008 unless requirements of these Specifications are stricter.
 - E. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer.
 - F. Tested Fault-Current Closing and Short-Circuit Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing according to UL 1008.
 - 1. Switch shall have AIC Rating of 65KA Symmetrical.
 - 2. Short-time withstand capability for 30 cycles.
 - G. Repetitive Accuracy of Solid-State Controls: All settings shall be plus or minus 2 percent or better over an operating temperature range of minus 20 to plus 70 deg C.
 - H. Resistance to Damage by Voltage Transients: Components shall meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.62. Components shall meet or exceed voltage-impulse withstand test of NEMA ICS 1.
 - I. Electrical Operation: Accomplish by a nonfused, momentarily energized solenoid or electricmotor-operated mechanism. Switches for emergency or standby purposes shall be mechanically and electrically interlocked in both directions to prevent simultaneous connection to both power sources unless closed transition.
 - J. Service-Rated Transfer Switch:
 - 1. Comply with UL 869A and UL 489.
 - 2. Provide terminals for bonding the grounding electrode conductor to the grounded service conductor.
 - 3. Provide removable link for temporary separation of the service and load grounded conductors.
 - 4. Surge Protective Device: Service rated.
 - 5. Service Disconnecting Means: Externally operated, manual electrically actuated.
 - K. Neutral Terminal: Solid and fully rated.
 - L. Annunciation, Control, and Programming Interface Components: Devices at transfer switches for communicating with remote programming devices, annunciators, or annunciator and control panels shall have communication capability matched with remote device.
 - M. Factory Wiring: Train and bundle factory wiring and label, consistent with Shop Drawings, by color-code or by numbered or lettered wire and cable shrinkable sleeve markers at terminations.

Color-coding and wire and cable markers are specified in Section 26 05 53 "Identification for Electrical Systems."

- 1. Designated Terminals: Pressure type, suitable for types and sizes of field wiring indicated.
- 2. Power-Terminal Arrangement and Field-Wiring Space: Suitable for top, side, or bottom entrance of feeder conductors as indicated.
- 3. Control Wiring: Equipped with lugs suitable for connection to terminal strips.
- 4. Accessible via front access.
- N. Enclosures: Type 3R dual door with seal gasket outer door and drain holes. The transfer switch and control are wall-mounted in a key-locking enclosure. Wire bend space complies with 2011 NEC.

2.2 CONTACTOR-TYPE AUTOMATIC TRANSFER SWITCHES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Cummins Power Generation.
- B. Comply with Level 1 equipment according to NFPA 110.
- C. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.
 - 1. Limitation: Switches using molded-case switches or circuit breakers or insulated-case circuit-breaker components are unacceptable.
 - 2. Switch Action: Double throw; mechanically held in both directions.
 - 3. Contacts: Silver composition or silver alloy for load-current switching. Contactor-style automatic transfer-switch units, rated 600 A and higher, shall have separate arcing contacts.
 - 4. Conductor Connectors: Suitable for use with conductor material and sizes.
 - 5. Material: Hard-drawn copper, 98 percent conductivity.
 - 6. Main and Neutral Lugs: Mechanical type.
 - 7. Ground Lugs and Bus-Configured Terminators: Mechanical type.
 - 8. Ground bar.
 - 9. Connectors shall be marked for conductor size and type according to UL 1008.
- D. Automatic Open-Transition Transfer Switches: Interlocked to prevent the load from being closed on both sources at the same time.
 - 1. Sources shall be mechanically and electrically interlocked to prevent closing both sources on the load at the same time.
- E. Automatic Delayed-Transition Transfer Switches: Pauses or stops in intermediate position to momentarily disconnect both sources, with transition controlled by programming in the automatic transfer-switch controller. Interlocked to prevent the load from being closed on both sources at the same time.
 - 1. Adjustable Time Delay: For override of normal-source voltage sensing to delay transfer and engine start signals for alternative source. Adjustable from zero to six seconds, and factory set for one second.
 - 2. Sources shall be mechanically and electrically interlocked to prevent closing both sources on the load at the same time.
 - 3. Fully automatic break-before-make operation with transfer when two sources have near zero phase difference.

- F. Manual Switch Operation: Under load, with door closed and with either or both sources energized. Transfer time is same as for electrical operation. Control circuit automatically disconnects from electrical operator during manual operation.
- G. Manual Switch Operation: Unloaded. Control circuit automatically disconnects from electrical operator during manual operation.
- H. Electric Nonautomatic Switch Operation: Electrically actuated by push buttons designated "Normal Source" and "Alternative Source." Switch shall be capable of transferring load in either direction with either or both sources energized.
- I. Signal-Before-Transfer Contacts: A set of normally open/normally closed dry contacts operates in advance of retransfer to normal source. Interval shall be adjustable from 1 to 30 seconds.
- J. Digital Communication Interface: Matched to capability of remote annunciator or annunciator and control panel.
- K. Automatic Transfer-Switch Controller Features:
 - 1. Controller operates through a period of loss of control power.
 - Undervoltage Sensing for Each Phase of NormalSource: Sense low phase-to-ground voltage on each phase. Pickup voltage shall be adjustable from 85 to 100 percent of nominal, and dropout voltage shall be adjustable from 75 to 98 percent of pickup value. Factory set for pickup at 90 percent and dropout at 85 percent.
 - 3. Voltage/Frequency Lockout Relay: Prevent premature transfer to generator. Pickup voltage shall be adjustable from 85 to 100 percent of nominal. Factory set for pickup at 90 percent. Pickup frequency shall be adjustable from 90 to 100 percent of nominal. Factory set for pickup at 95 percent.
 - 4. Time Delay for Retransfer to Normal Source: Adjustable from zero to 30 minutes, and factory set for 10 minutes. Override shall automatically defeat delay on loss of voltage or sustained undervoltage of emergency source, provided normal supply has been restored.
 - 5. Test Switch: Simulate normal-source failure.
 - 6. Switch-Position Pilot Lights: Indicate source to which load is connected.
 - 7. Source-Available Indicating Lights: Supervise sources via transfer-switch normal- and emergency-source sensing circuits.
 - a. Normal Power Supervision: Green light with nameplate engraved "Normal Source Available."
 - b. Emergency Power Supervision: Red light with nameplate engraved "Emergency Source Available."
 - 8. Unassigned Auxiliary Contacts: Two normally open, single-pole, double-throw contacts for each switch position, rated 10 A at 240-V ac.
 - 9. Transfer Override Switch: Overrides automatic retransfer control so transfer switch will remain connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.
 - 10. Engine Starting Contacts: One isolated and normally closed, and one isolated and normally open; rated 10 A at 32-V dc minimum.
 - 11. Engine Shutdown Contacts: Instantaneous; shall initiate shutdown sequence at remote engine-generator controls after retransfer of load to normal source.
 - 12. Engine Shutdown Contacts: Time delay adjustable from zero to five minutes, and factory set for five minutes. Contacts shall initiate shutdown at remote engine-generator controls after retransfer of load to normal source.
 - 13. Engine-Generator Exerciser: Solid-state, programmable-time switch starts engine generator and transfers load to it from normal source for a preset time, then retransfers and shuts down engine after a preset cool-down period. Initiates exercise cycle at preset intervals adjustable from 7 to 30 days. Running periods shall be adjustable from 10 to 30 minutes. Factory settings shall be for 7-day exercise cycle, 20-minute running period, and 5-minute cool-down period. Exerciser features include the following:

- a. Exerciser Transfer Selector Switch: Permits selection of exercise with and without load transfer.
- b. Push-button programming control with digital display of settings.
- c. Integral battery operation of time switch when normal control power is unavailable.

2.3 SOURCE QUALITY CONTROL

- A. Factory Tests: Test and inspect components, assembled switches, and associated equipment according to UL 1008. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements. Perform dielectric strength test complying with NEMA ICS 1.
- B. Prepare test and inspection reports.
 - 1. For each of the tests required by UL 1008, performed on representative devices, for emergency systems. Include results of test for the following conditions:
 - a. Overvoltage.
 - b. Undervoltage.
 - c. Loss of supply voltage.
 - d. Reduction of supply voltage.
 - e. Alternative supply voltage or frequency is at minimum acceptable values.
 - f. Temperature rise.
 - g. Dielectric voltage-withstand; before and after short-circuit test.
 - h. Overload.
 - i. Contact opening.
 - j. Endurance.
 - k. Short circuit.
 - I. Short-time current capability.
 - m. Receptacle withstand capability.
 - n. Insulating base and supports damage.

PART 3 - EXECUTION

- 3.1 INSTALLATION
 - A. Wall-Mounting Switch: Anchor to exterior wall by bolting.
 - 1. Provide workspace and clearances required by NFPA 70.
 - B. Identify components according to Section 26 05 53 "Identification for Electrical Systems."
 - C. Set field-adjustable intervals and delays, relays, and engine exerciser clock.
 - D. Comply with NECA 10.

3.2 CONNECTIONS

- A. Wiring to Remote Components: Match type and number of cables and conductors to generator sets, motor controls, and communication requirements of transfer switches as recommended by manufacturer. Increase raceway sizes at no additional cost to Owner if necessary to accommodate required wiring.
- B. Wiring Method: Install cables in raceways except within electrical enclosures. Conceal raceway and cables except in unfinished spaces.
 - 1. Comply with requirements for raceways and boxes specified in Section 26 05 33 "Raceways and Boxes for Electrical Systems."

- C. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.
- D. Ground equipment according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- E. Connect wiring according to Section 26 05 19 "Low-Voltage Electrical Power Conductors and Cables."
- F. Route and brace conductors according to manufacturer's written instructions and Section 26 05 29 "Hangers and Supports for Electrical Systems." Do not obscure manufacturer's markings and labels.
- G. Brace and support equipment according to Section 26 05 48.16 "Seismic Controls for Electrical Systems."

3.3 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. After installing equipment, test for compliance with requirements according to NETA ATS.
 - 2. Visual and Mechanical Inspection:
 - a. Compare equipment nameplate data with Drawings and Specifications.
 - b. Inspect physical and mechanical condition.
 - c. Inspect anchorage, alignment, grounding, and required clearances.
 - d. Verify that the unit is clean.
 - e. Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
 - f. Verify that manual transfer warnings are attached and visible.
 - g. Verify tightness of all control connections.
 - h. Inspect bolted electrical connections for high resistance using one of the following methods, or both:
 - 1) Use of low-resistance ohmmeter.
 - 2) Verify tightness of accessible bolted electrical connections by calibrated torquewrench method according to manufacturer's published data.
 - i. Perform manual transfer operation.
 - j. Verify positive mechanical interlocking between normal and alternate sources.
 - k. Perform visual and mechanical inspection of surge arresters.
 - I. Inspect control power transformers.
 - 1) Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
 - 2) Verify that primary and secondary fuse or circuit-breaker ratings match Drawings.
 - 3) Verify correct functioning of drawout disconnecting contacts, grounding contacts, and interlocks.
 - 3. Electrical Tests:
 - a. Perform insulation-resistance tests on all control wiring with respect to ground.
 - b. Perform a contact/pole-resistance test. Compare measured values with manufacturer's acceptable values.
 - c. Verify settings and operation of control devices.
 - d. Calibrate and set all relays and timers.
 - e. Verify phase rotation, phasing, and synchronized operation.
 - f. Perform automatic transfer tests.
 - g. Verify correct operation and timing of the following functions:
 - 1) Normal source voltage-sensing and frequency-sensing relays.
 - 2) Engine start sequence.
 - 3) Time delay on transfer.

- 4) Alternative source voltage-sensing and frequency-sensing relays.
- 5) Automatic transfer operation.
- 6) Interlocks and limit switch function.
- 7) Time delay and retransfer on normal power restoration.
- 8) Engine cool-down and shutdown feature.
- 4. Measure insulation resistance phase-to-phase and phase-to-ground with insulationresistance tester. Include external annunciation and control circuits. Use test voltages and procedure recommended by manufacturer. Comply with manufacturer's specified minimum resistance.
 - a. Check for electrical continuity of circuits and for short circuits.
 - b. Inspect for physical damage, proper installation and connection, and integrity of barriers, covers, and safety features.
 - c. Verify that manual transfer warnings are properly placed.
 - d. Perform manual transfer operation.
- 5. After energizing circuits, perform each electrical test for transfer switches stated in NETA ATS and demonstrate interlocking sequence and operational function for each switch at least three times.
 - a. Simulate power failures of normal source to automatic transfer switches and retransfer from emergency source with normal source available.
 - b. Simulate loss of phase-to-ground voltage for each phase of normal source.
 - c. Verify time-delay settings.
 - d. Verify pickup and dropout voltages by data readout or inspection of control settings.
 - e. Test bypass/isolation unit functional modes and related automatic transfer-switch operations.
 - f. Perform contact-resistance test across main contacts and correct values exceeding 500 microhms and values for one pole deviating by more than 50 percent from other poles.
 - g. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cool-down and shutdown.
- 6. Ground-Fault Tests: Coordinate with testing of ground-fault protective devices for power delivery from both sources.
 - a. Verify grounding connections and locations and ratings of sensors.
- B. Coordinate tests with tests of generator and run them concurrently.
- C. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- D. Transfer switches will be considered defective if they do not pass tests and inspections.
- E. Remove and replace malfunctioning units and retest as specified above.
- F. Prepare test and inspection reports.
- G. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each switch. Remove all access panels so joints and connections are accessible to portable scanner.
 - 1. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - 2. Record of Infrared Scanning: Prepare a certified report that identifies switches checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.
 - 3. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switch 11 months after date of Substantial Completion.

3.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment.
- B. Coordinate this training with that for generator equipment.

END OF SECTION 26 36 00

APPENDIX A

SECTION 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Connectors, splices, and terminations rated 600 V and less.
 - 3. Sleeves and sleeve seals for cables.
 - 4. Division 26 Section "Control Voltage Electrical Power Cables" for cabling used for control circuits.

1.03 DEFINITIONS

- A. EPDM: Ethylene-propylene-diene monomer rubber.
- B. NBR: Acrylonitrile-butadiene rubber.

1.04 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For testing agency.
- C. Field quality-control test reports.

1.05 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.01 CONDUCTORS AND CABLES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Alcan Products Corporation; Alcan Cable Division.
 - 2. American Insulated Wire Corp.; a Leviton Company.
 - 3. General Cable Corporation.
 - 4. Senator Wire & Cable Company.
 - 5. Southwire Company.
 - 6. Other acceptable manufacturers as approved by the Engineer.
- 2.02 Aluminum and Copper Conductors
 - A. Comply with NEMA WC 70/ICEA S-95-658.
 - B. Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN or XHHW.

2.03 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Hubbell Power Systems, Inc.
 - 3. O-Z/Gedney; EGS Electrical Group LLC.
 - 4. 3M; Electrical Products Division.
 - 5. Tyco Electronics Corp.
 - 6. Other acceptable manufacturers as approved by the Engineer
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.
- C. Lugs: One piece, seamless, designed to terminate conductors specified in this Section.
 - 1. Material: Tin plated copper.
 - 2. Type: One hole up through 4/0, Two hole for conductors larger, all with long barrels.
 - 3. Termination: Compression

2.04 SLEEVES SEALS

A. See specification 26 05 44 – Sleeves and Sleeve Seals for Electrical raceways and cables.

PART 3 - EXECUTION

3.01 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper; stranded.
- B. Branch Circuits: Copper; stranded.
- 3.02 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS
 - A. Service Entrance: Type XHHW-2, single conductors in raceway.
 - B. Exposed Feeders: Type XHHW-2, single conductors in raceway.
 - C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type XHHW-2, single conductors in raceway.
 - D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type XHHW-2, single conductors in raceway.
 - E. Exposed Branch Circuits, Including in Crawlspaces: Type XHHW-2, single conductors in raceway.
 - F. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN or XHHW-2, single conductors in raceway.
 - G. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type XHHW-2, single conductors in raceway.
 - H. Class 1 Control Circuits: Type THHN-THWN or XHHW, in raceway.
 - I. Class 2 Control Circuits: Type THHN-THWN or XHHW, in raceway or Power-limited tray cable, in raceway.

3.03 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal conduits within the main building in finished walls, ceilings, and floors, unless otherwise indicated. Exterior conduits shall be buried except around areas of concrete tanks.
- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

- E. Support cables according to Division 26 Section "Hangers and Supports for Electrical Systems."
- F. Identify and color-code conductors and cables according to Division 26 Section "Identification for Electrical Systems."

3.04 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
- B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.

3.05 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."
- B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- D. Rectangular Sleeve Minimum Metal Thickness:
 - 1. For sleeve rectangle perimeter less than 50 inchesand no side greater than 16 inches thickness shall be 0.052inch
 - 2. For sleeve rectangle perimeter equal to, or greater than, 50 inchesand 1 or more sides equal to, or greater than, 16 inches thickness shall be 0.138inch
- E. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.
- F. Cut sleeves to length for mounting flush with both wall surfaces.
- G. Extend sleeves installed in floors 2 inches above finished floor level.
- H. Size pipe sleeves to provide 1/4-inchannular clear space between sleeve and cable unless sleeve seal is to be installed
- I. Seal space outside of sleeves with grout for penetrations of concrete and masonry and with approved joint compound for gypsum board assemblies.
- J. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and cable, using joint sealant appropriate for size, depth, and location of joint according to Division 07 Section "Joint Sealants."

- K. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at cable penetrations. Install sleeves and seal with firestop materials according to Division 07 Section "Penetration Firestopping."
- L. Aboveground Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Size sleeves to allow for 1-inchannular clear space between pipe and sleeve for installing mechanical sleeve seals.
- M. Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inchannular clear space between cable and sleeve for installing mechanical sleeve seals.

3.06 SLEEVE-SEAL INSTALLATION

- A. Install to seal underground exterior-wall penetrations.
- B. Use type and number of sealing elements recommended by manufacturer for cable material and size. Position cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.07 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Division 07 Section "Penetration Firestopping."

END OF SECTION 26 05 19

SECTION 26 05 23 - CONTROL-VOLTAGE ELECTRICAL POWER CABLES

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
 - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Low-voltage control cabling.
 - 2. Control-circuit conductors.
 - 3. RS-485 cabling.
 - 4. Identification products.

1.3 DEFINITIONS

- A. EMI: Electromagnetic interference.
- B. IDC: Insulation displacement connector.
- C. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control and signaling power-limited circuits.
- D. Open Cabling: Passing telecommunications cabling through open space (e.g., between the studs of a wall cavity).
- E. RCDD: Registered Communications Distribution Designer.
- F. UTP: Unshielded twisted pair.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For qualified layout technician, installation supervisor, and field inspector.
- C. Source quality-control reports.
- D. Field quality-control reports.
- E. Maintenance Data: For wire and cable to include in maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 50 or less.

- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- 1.6 DELIVERY, STORAGE, AND HANDLING
 - A. Test cables upon receipt at Project site.
- PART 2 PRODUCTS

2.1 PATHWAYS

- A. Conduit and Boxes: Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems." Flexible metal conduit shall not be used. Sealtight conduit may be used for final connections to devices where flexibility is required.
 - 1. Outlet boxes shall be no smaller than 2 inches wide, 3 inches high, and 2-1/2 inches deep.

2.2 LOW-VOLTAGE CONTROL CABLE

- A. Paired Cable: NFPA 70, Type CMG.
 - 1. One pair, twisted, No. 16 AWG, stranded (19x29) tinned-copper conductors.
 - 2. PVC insulation.
 - 3. Shielded.
 - 4. PVC jacket.
 - 5. Flame Resistance: Comply with UL 1581.
- B. Paired Cable: NFPA 70, Type CMG.
 - 1. One pair, twisted, No. 18 AWG, stranded (19x30) tinned-copper conductors.
 - 2. PVC insulation.
 - 3. Shielded.
 - 4. PVC jacket.
 - 5. Flame Resistance: Comply with UL 1581.
- C. Multi-Pair Cable
 - 1. 1 Pair, 16 AWG
 - 2. 19x29 Strands
 - 3. Tinned Copper
 - 4. Twisted Pair
 - 5. PE Insulation
 - 6. PVC Jacket

2.3 RS-485 CABLE

- A. Standard Cable: NFPA 70, Type CMG.
 - 1. Paired, [one pair] [two pairs], twisted, No. 22 AWG, stranded (7x30) tinned-copper conductors.
 - 2. PVC insulation.
 - 3. Unshielded.
 - 4. PVC jacket.
 - 5. Flame Resistance: Comply with UL 1685.

- B. Plenum-Rated Cable: NFPA 70, Type CMP.
 - 1. Paired, [one pair] [two pairs], No. 22 AWG, stranded (7x30) tinned-copper conductors.
 - 2. Fluorinated ethylene propylene insulation.
 - 3. Unshielded.
 - 4. Fluorinated ethylene propylene jacket.
 - 5. Flame Resistance: NFPA 262. <Double click to insert sustainable design text for lead content.>

2.4 CONTROL-CIRCUIT CONDUCTORS

- A. Class 1 Control Circuits: Stranded copper, Type THHN-THWN or Type XHHN, in raceway, complying with UL 83 or UL 44.
- B. Class 2 Control Circuits: Stranded copper, Type THHN-THWN, in raceway or Type XHHN, in raceway, complying with UL 83 or UL 44.
- C. Class 3 Remote-Control and Signal Circuits: Stranded copper, Type TW or Type TF, complying with UL 83.

2.5 IDENTIFICATION PRODUCTS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Brady Corporation.
 - 2. HellermannTyton.
 - 3. Kroy LLC.
 - 4. Panduit Corp.
- B. Comply with UL 969 for a system of labeling materials, including label stocks, laminating adhesives, and inks used by label printers.
- C. Comply with requirements in Division 26 Section "Identification for Electrical Systems."

2.6 SOURCE QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to evaluate cables.
- B. Cable will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 INSTALLATION OF PATHWAYS

- A. Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems" for installation of conduits and wireways.
- B. Install manufactured conduit sweeps and long-radius elbows if possible.
- C. Pathway Installation in Equipment Rooms:
 - 1. Install metal conduits with grounding bushings and connect with grounding conductor to grounding system.

3.2 INSTALLATION OF CONDUCTORS AND CABLES

A. Comply with NECA 1.

B. General Requirements for Cabling:

- 1. Terminate all conductors; no cable shall contain un-terminated elements. Make terminations only at indicated outlets, terminals, and cross-connect and patch panels.
- 2. Cables may not be spliced. Secure and support cables at intervals not exceeding 30 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
- 3. Bundle, lace, and train conductors to terminal points without exceeding manufacturer's limitations on bending radii, but not less than radii specified in BICSI ITSIM, "Cabling Termination Practices" Chapter. Install lacing bars and distribution spools.
- 4. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
- 5. Cold-Weather Installation: Bring cable to room temperature before de-reeling. Heat lamps shall not be used for heating.
- 6. Pulling Cable: Comply with BICSI ITSIM, Ch. 4, "Pulling Cable." Monitor cable pull tensions.
- C. Installation of Control-Circuit Conductors:
 - 1. Install wiring in raceways. Comply with requirements specified in Division 26 Section "Raceway and Boxes for Electrical Systems."
- D. Separation from EMI Sources:
 - 1. Separation between open communications cables or cables in nonmetallic raceways and unshielded power conductors and electrical equipment shall be as follows:
 - a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 5 inches.
 - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 12 inches.
 - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 24 inches.
 - 2. Separation between communications cables in grounded metallic raceways and unshielded power lines or electrical equipment shall be as follows:
 - a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 2-1/2 inches.
 - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 6 inches.
 - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 12 inches.
 - 3. Separation between communications cables in grounded metallic raceways and power lines and electrical equipment located in grounded metallic conduits or enclosures shall be as follows:
 - a. Electrical Equipment Rating Less Than 2 kVA: No requirement.
 - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 3 inches.
 - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 6 inches.
 - 4. Separation between Cables and Electrical Motors and Transformers, 5 kVA or HP and Larger: A minimum of 48 inches.
 - 5. Separation between Cables and Fluorescent Fixtures: A minimum of 5 inches.

3.3 CONTROL-CIRCUIT CONDUCTORS

- A. Minimum Conductor Sizes:
 - 1. Class 1 remote-control and signal circuits, No 14 AWG.
 - 2. Class 2 low-energy, remote-control, and signal circuits, No. 16 AWG.
 - 3. Class 3 low-energy, remote-control, alarm, and signal circuits, No 12 AWG.

3.4 GROUNDING

A. For low-voltage wiring and cabling, comply with requirements in Division 26 Section "Grounding and Bonding for Electrical Systems."

3.5 IDENTIFICATION

- A. Identify system components, wiring, and cabling according to TIA/EIA-606-A. Comply with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."
- 3.6 FIELD QUALITY CONTROL
 - A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
 - B. Perform tests and inspections.
 - C. Tests and Inspections:
 - 1. Visually inspect cable placement, cable termination, grounding and bonding, equipment and patch cords, and labeling of all components.
 - D. Document data for each measurement. Print data for submittals in a summary report that is formatted using Table 10.1 in BICSI TDMM as a guide, or transfer the data from the instrument to the computer, save as text files, print, and submit.
 - E. End-to-end cabling will be considered defective if it does not pass tests and inspections.
 - F. Prepare test and inspection reports.

END OF SECTION 26 05 23

SECTION 26 05 26 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes grounding and bonding systems and equipment.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency and testing agency's field supervisor.
- B. Field quality-control reports.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: Certified by NETA.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with UL 467 for grounding and bonding materials and equipment.

2.2 CONDUCTORS

- A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
 - 1. Stranded Conductors: ASTM B 8.
 - 2. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.

Charter Township of Ypsilanti Law Enforcement Center #0098-18-0060 3. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.

2.3 CONNECTORS

- A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.
- B. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.
- C. Bus-Bar Connectors: Mechanical type, cast silicon bronze, solderless compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.
- D. Beam Clamps: Mechanical type, terminal, ground wire access from four directions, with dual, tin-plated or silicon bronze bolts.
- E. Cable-to-Cable Connectors: Compression type, copper or copper alloy.
- F. Conduit Hubs: Mechanical type, terminal with threaded hub.
- G. Straps: Solid copper, copper lugs. Rated for 600 A.
- H. Tower Ground Clamps: Mechanical type, copper or copper alloy, terminal two-piece clamp.
- I. U-Bolt Clamps: Mechanical type, copper or copper alloy, terminal listed for direct burial.

2.4 GROUNDING ELECTRODES

- A. Ground Rods: Copper-clad steel; 5/8 by 96 inches.
- B. Ground Plates: 1/4 inch thick, hot-dip galvanized.

PART 3 - EXECUTION

3.1 APPLICATIONS

- A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.
- B. Conductor Terminations and Connections:
 - 1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
 - 2. Connections to Structural Steel: Welded connectors.

3.2 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

- B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:
 - 1. Feeders and branch circuits.
 - 2. Three-phase motor and appliance branch circuits.
 - 3. Flexible raceway runs.

3.3 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
 - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
 - 2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- B. Tests and Inspections:
 - 1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
 - 2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
- C. Grounding system will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.
- E. Report measured ground resistances that exceed the following values:
 - 1. Power and Lighting Equipment or System with Capacity of 500 kVA and Less: 10 ohms.
 - 2. Power and Lighting Equipment or System with Capacity of 500 to 1000 kVA: 5 ohms.
 - 3. Power and Lighting Equipment or System with Capacity More Than 1000 kVA: 3 ohms.
 - 4. Power Distribution Units or Panelboards Serving Electronic Equipment: 1 ohm(s).
 - 5. Substations and Pad-Mounted Equipment: 5 ohms.
- F. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION 26 05 26

SECTION 26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Hangers and supports for electrical equipment and systems.

1.03 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. IMC: Intermediate metal conduit.
- C. RMC: Rigid metal conduit.

1.04 PERFORMANCE REQUIREMENTS

- A. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.
- B. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.
- C. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of three times the applied force.

1.05 SUBMITTALS

- A. Product Data: For the following:
 - 1. Steel support systems.
 - 2. Nonmetallic support systems.
- B. Shop Drawings: Show fabrication and installation details and include calculations for the following:
 - 1. Conduit hangers.
 - 2. Trapeze hangers. Include Product Data for components.

- 3. Steel slotted channel systems. Include Product Data for components.
- 4. Nonmetallic slotted channel systems. Include Product Data for components.
- 5. Equipment supports.

1.06 QUALITY ASSURANCE

- A. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code Steel."
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

- 2.01 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS
 - A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Allied Tube & Conduit.
 - b. Cooper B-Line, Inc.; a division of Cooper Industries.
 - c. ERICO International Corporation.
 - d. GS Metals Corp.
 - e. Thomas & Betts Corporation.
 - f. Unistrut; Tyco International, Ltd.
 - g. Wesanco, Inc.
 - 2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
 - 3. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.
 - 4. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
 - 5. Channel Dimensions: Selected for applicable load criteria.
 - B. Nonmetallic Slotted Support Systems: Structural-grade, factory-formed, glass-fiber-resin channels and angles with 9/16-inchdiameter holes at a maximum of 8 inches o.c., in at least 1 surface.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Allied Tube & Conduit.
 - b. Cooper B-Line, Inc.; a division of Cooper Industries.
 - c. Fabco Plastics Wholesale Limited.
 - d. Seasafe, Inc.
 - 2. Fittings and Accessories: Products of channel and angle manufacturer and designed for use with those items.
 - 3. Fitting and Accessory Materials: Same as channels and angles, except metal items may be stainless steel.
 - 4. Rated Strength: Selected to suit applicable load criteria.

- C. Raceway and Cable Supports: As described in NECA 1 and NECA 101.
- D. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- E. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for non-armored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be malleable iron.
- F. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; hot dip galvanized.
- G. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
 - 1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Hilti Inc.
 - 2) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 3) MKT Fastening, LLC.
 - 4) Simpson Strong-Tie Co., Inc.; Masterset Fastening Systems Unit.
 - 2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Cooper B-Line, Inc.; a division of Cooper Industries.
 - 2) Empire Tool and Manufacturing Co., Inc.
 - 3) Hilti Inc.
 - 4) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 5) MKT Fastening, LLC.
 - 3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
 - 4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
 - 5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
 - 6. Toggle Bolts: All-steel springhead type.
 - 7. Hanger Rods: Threaded steel.

2.02 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

PART 3 - EXECUTION

3.01 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.
- B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT, IMC, and RMC as required by NFPA 70. Minimum rod size shall be 1/4-inchin diameter.
- C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted or other support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
 - 1. Secure raceways and cables to these supports with two-bolt conduit clamps.
- D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2inchand smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.02 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.
- B. Raceway Support Methods: In addition to methods described in NECA 1, EMT, IMC, and RMC may be supported by openings through structure members, as permitted in NFPA 70.
- C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lbs
- D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
 - 1. To Wood: Fasten with lag screws or through bolts.
 - 2. To New Concrete: Bolt to concrete inserts.
 - 3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
 - 4. To Existing Concrete: Expansion anchor fasteners.
 - 5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
 - 6. To Steel: Welded threaded studs complying with AWS D1.1/D1.1M, with lock washers and nuts or Beam clamps (MSS Type 19, 21, 23, 25, or 27) complying with MSS SP-69 or Spring-tension clamps.
 - 7. To Light Steel: Sheet metal screws.
 - 8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panel boards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.

E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.03 INSTALLATION OF FABRICATED METAL SUPPORTS

- A. Comply with installation requirements in Division 05 Section "Metal Fabrications" for sitefabricated metal supports.
- B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- C. Field Welding: Comply with AWS D1.1/D1.1M.

3.04 CONCRETE BASES

- A. Construct concrete bases of dimensions indicated but not less than 4 inches larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.
- B. Use 3000-psi 28-day compressive-strength concrete. Concrete materials, reinforcement, and placement requirements are specified in Division 03 Section "Cast-in-Place Concrete."
- C. Anchor equipment to concrete base.
 - 1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 2. Install anchor bolts to elevations required for proper attachment to supported equipment.
 - 3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

3.05 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils
- B. Touchup: Comply with requirements in Division 09 painting Sections for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.
- C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

SECTION 26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
 - A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

1.3 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. ENT: Electrical nonmetallic tubing.
- C. EPDM: Ethylene-propylene-diene monomer rubber.
- D. FMC: Flexible metal conduit.
- E. IMC: Intermediate metal conduit.
- F. LFMC: Liquidtight flexible metal conduit.
- G. LFNC: Liquidtight flexible nonmetallic conduit.
- H. NBR: Acrylonitrile-butadiene rubber.
- I. RNC: Rigid nonmetallic conduit.
- 1.4 SUBMITTALS
 - A. Product Data: For conduit, fittings, boxes, hinged-cover enclosures, and cabinets.
 - B. Shop Drawings: For the following raceway components. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Custom enclosures and cabinets.
 - C. Coordination Drawings: Conduit routing plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
 - 1. Structural members in the paths of conduit groups with common supports.
 - 2. Process piping items and structural features in the paths of conduit groups with common supports.
 - D. Qualification Data: For professional engineer and testing agency.
 - E. Source quality-control test reports.

1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

- 2.1 METAL CONDUIT AND TUBING
 - A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Alflex Inc.
 - 3. Allied Tube & Conduit; a Tyco International Ltd. Co.
 - 4. Anamet Electrical, Inc.; Anaconda Metal Hose.
 - 5. Electri-Flex Co.
 - 6. Manhattan/CDT/Cole-Flex.
 - 7. Maverick Tube Corporation.
 - 8. O-Z Gedney; a unit of General Signal.
 - 9. Wheatland Tube Company.
 - B. Rigid Steel Conduit: ANSI C80.1.
 - C. Aluminum Rigid Conduit: ANSI C80.5.
 - D. IMC: ANSI C80.6.
 - E. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit
 - 1. Comply with NEMA RN 1.
 - 2. Coating Thickness: 0.040-inch minimum.
 - F. EMT: ANSI C80.3.
 - G. FMC: Zinc-coated steel, Aluminum, Zinc-coated steel or aluminum.
 - H. LFMC: Flexible steel conduit with PVC jacket.
 - I. Fittings for Conduit (Including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
 - 1. Fittings for EMT: Steel, set-screw type.
 - 2. Coating for Fittings for PVC-Coated Conduit: Minimum thickness, 0.040-inch with overlapping sleeves protecting threaded joints.
 - J. Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

2.2 NONMETALLIC CONDUIT AND TUBING

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Anamet Electrical, Inc.; Anaconda Metal Hose.
 - 3. Arnco Corporation.
 - 4. CANTEX Inc.
 - 5. CertainTeed Corp.; Pipe & Plastics Group.
 - 6. Condux International, Inc.
 - 7. ElecSYS, Inc.
 - 8. Electri-Flex Co.
 - 9. Lamson & Sessions; Carlon Electrical Products.
 - 10. Manhattan/CDT/Cole-Flex.
 - 11. RACO; a Hubbell Company.
 - 12. Thomas & Betts Corporation.
- B. RNC: NEMA TC 2, Type EPC-40-PVC, unless otherwise indicated.
- C. Fittings for RNC: NEMA TC 3; match to conduit or tubing type and material.

2.3 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
 - 2. EGS/Appleton Electric.
 - 3. Erickson Electrical Equipment Company.
 - 4. Hoffman.
 - 5. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 6. O-Z/Gedney; a unit of General Signal.
 - 7. RACO; a Hubbell Company.
 - 8. Robroy Industries, Inc.; Enclosure Division.
 - 9. Scott Fetzer Co.; Adalet Division.
 - 10. Spring City Electrical Manufacturing Company.
 - 11. Thomas & Betts Corporation.
 - 12. Walker Systems, Inc.; Wiremold Company (The).
 - 13. Woodhead, Daniel Company; Woodhead Industries, Inc. Subsidiary.
- B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.
- C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.
- D. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- E. Cast-Metal Access, Pull, and Junction Boxes: NEMA FB 1, galvanized, cast iron with gasketed cover.
- F. Hinged-Cover Enclosures: NEMA 250, Type 1 Gasketed, with continuous-hinge cover with flush latch, unless otherwise indicated.
 - 1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.

- 2. Nonmetallic Enclosures: Plastic.
- G. Cabinets:
 - 1. NEMA 250, Type 1 gasketed, galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
 - 2. Hinged door in front cover with flush latch and concealed hinge.
 - 3. Key latch to match panelboards.
 - 4. Metal barriers to separate wiring of different systems and voltage.
 - 5. Accessory feet where required for freestanding equipment.

PART 3 - EXECUTION

- 3.1 RACEWAY APPLICATION
 - A. Comply with the following indoor applications, unless otherwise indicated:
 - 1. Exposed, dry, Not Subject to Physical Damage: Rigid galvanized steel conduit.
 - 2. Exposed and Subject to Physical Damage: Rigid galvanized steel conduit.
 - 3. Concealed in Ceilings and Interior Walls and Partitions: Rigid steel conduit, IMC, or EMT.
 - 4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
 - 5. Damp or Wet Locations: PVC coated rigid galvanized steel conduit.
 - 6. Corrosive environment: Use only non-metallic boxes, raceways and fittings EPC-40-PVC, with stainless fasteners.
 - 7. Underground within buildings: Use only EPC-40-PVC.
 - 8. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4X, stainless steel in damp or wet locations.
 - B. Minimum Raceway Size: 3/4-inchtrade size.
 - C. Raceway Fittings: Compatible with raceways and suitable for use and location.
 - 1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings, unless otherwise indicated.
 - 2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with that material. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer.
 - D. Install nonferrous conduit or tubing for circuits operating above 60 Hz. Where aluminum raceways are installed for such circuits and pass through concrete, install in nonmetallic sleeve.
 - E. Do not install aluminum conduits in contact with concrete.

3.2 INSTALLATION

- A. Comply with NECA 1 for installation requirements applicable to products specified in Part 2 except where requirements on Drawings or in this Article are stricter.
- B. Install conduit parallel or perpendicular to building structural members. Raceways above radius corridors shall follow the path of the corridor.
- C. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.

- D. Complete raceway installation before starting conductor installation.
- E. Support raceways as specified in Division 26 Section "Hangers and Supports for Electrical Systems."
- F. Install no more than the equivalent of three 90-degree bends in any conduit run except for communications conduits, for which fewer bends are allowed.
- G. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- H. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors, including conductors smaller than No. 4 AWG.
- I. Install raceway sealing fittings at suitable, approved, and accessible locations and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings at the following points:
 - 1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
 - 2. Where otherwise required by NFPA 70.
 - 3. Retain paragraph and subparagraphs below unless locations for expansion fittings for PVC conduits are indicated on Drawings.
 - 4. Install fitting(s) that provide expansion and contraction for at least 0.00041-inch per foot of length of straight run per degree F of temperature change.
 - 5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at the time of installation.
- J. Flexible Conduit Connections: Use maximum of 72 inches of flexible conduit for recessed and semi-recessed lighting fixtures, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
 - 1. Use LFMC in damp or wet locations subject to severe physical damage.
 - 2. Use LFMC or LFNC in damp or wet locations not subject to severe physical damage.

3.3 PROTECTION

- A. Provide final protection and maintain conditions that ensure coatings, finishes, and cabinets are without damage or deterioration at time of Substantial Completion.
 - 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 2. Repair damage to PVC or paint finishes with matching touchup coating recommended by manufacturer.

SECTION 26 05 43 - UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Rigid nonmetallic duct.
- 2. Flexible nonmetallic duct.

1.3 DEFINITIONS

- A. Direct Buried: Duct or a duct bank that is buried in the ground, without any additional casing materials such as concrete.
- B. Duct: A single duct or multiple ducts. Duct may be either installed singly or as component of a duct bank.
- C. GRC: Galvanized rigid (steel) conduit.
- D. Trafficways: Locations where vehicular or pedestrian traffic is a normal course of events.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include duct, conduits, and their accessories, including elbows, end bells, bends, fittings, and solvent cement.
 - 2. Include underground-line warning tape.
- B. Shop Drawings:
 - 1. Precast or Factory-Fabricated Underground Utility Structures:
 - a. Include plans, elevations, sections, details, attachments to other work, and accessories.
 - b. Include duct entry provisions, including locations and duct sizes.
 - c. Include reinforcement details.
 - d. Include grounding details.
 - e. Include joint details.

2. Factory-Fabricated Handholes and Boxes Other Than Precast Concrete:

a. Include duct entry provisions, including locations and duct sizes.

- b. Include cover design.
- c. Include grounding details.

1.5 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For concrete and steel used in precast concrete handholes, as required by ASTM C 858.
- B. Source quality-control reports.
- C. Field quality-control reports.

1.6 FIELD CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions, and then only after arranging to provide temporary electrical service according to requirements indicated:
 - 1. Notify Engineer and Owner no fewer than five days in advance of proposed interruption of electrical service.
 - 2. Do not proceed with interruption of electrical service without Engineer's and Owner's written permission.
- B. Ground Water: Assume ground-water level is 36 inches below ground surface unless a higher water table is noted on Drawings.

PART 2 - PRODUCTS

2.1 RIGID NONMETALLIC DUCT

- A. Underground Plastic Utilities Duct: Type EPC-40-PVC RNC, complying with NEMA TC 2 and UL 651, with matching fittings complying with NEMA TC 3 by same manufacturer as duct.
- B. Listed and labeled as defined in NFPA 70, by a nationally recognized testing laboratory, and marked for intended location and application.
- C. Solvents and Adhesives: As recommended by conduit manufacturer.

2.2 FLEXIBLE NONMETALLIC DUCTS

- A. HDPE Duct: Type EPEC-40 HDPE, complying with NEMA TC 7 and UL 651A.
 - 1. Listed and labeled as defined in NFPA 70, by a nationally recognized testing laboratory, and marked for intended location and application.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate layout and installation of duct, duct bank, manholes, handholes, and boxes with final arrangement of other utilities, site grading, surface features as determined in the field with the owner. Notify Engineer if there is a conflict between areas of excavation and existing structures or archaeological sites to remain.
- B. Clear and grub vegetation to be removed, and protect vegetation to remain according to Section 31 10 00 "Site Clearing." Remove and stockpile topsoil for reapplication according to Section 31 10 00 "Site Clearing."

3.2 UNDERGROUND DUCT APPLICATION

A. Stub-ups: EPC-40-PVC RNC, bellow grade, transitioned to rigid galvanized steel above grade.

3.3 UNDERGROUND ENCLOSURE APPLICATION

- A. Handholes and Boxes for 600 V and Less:
 - 1. Units in Roadways and Other Deliberate Traffic Paths: Precast concrete. AASHTO HB 17, H-20 structural load rating.
 - 2. Units in Driveway, Parking Lot, and Off-Roadway Locations, Subject to Occasional, Nondeliberate Loading by Heavy Vehicles: Polymer concrete, Tier 15 structural load rating.
 - 3. Cover design load shall not exceed the design load of the handhole or box.

3.4 EARTHWORK

- A. Excavation and Backfill: Comply with Section 31 20 00 "Earth Moving," but do not use heavyduty, hydraulic-operated, compaction equipment.
- B. Restoration: Replace area after construction vehicle traffic in immediate area is complete.
- C. Restore surface features at areas disturbed by excavation, and re-establish original grades unless otherwise indicated. Replace removed sod immediately after backfilling is completed.

3.5 DUCT AND DUCT-BANK INSTALLATION

- A. Sealing: Provide temporary closure at terminations of duct with pulled cables. Seal spare duct at terminations. Use sealing compound and plugs to withstand at least 15-psig hydrostatic pressure.
- B. Pulling Cord: Install 200-lbf-test nylon cord in empty ducts.
- C. Direct-Buried Duct and Duct Bank:1. Where open cut trenching is approved, the following requirements apply.

- a. Excavate trench bottom to provide firm and uniform support for duct. Comply with requirements in Section 31 20 00 "Earth Moving" for preparation of trench bottoms for pipes less than 6 inches in nominal diameter.
- b. Width: Excavate trench a maximum of 12" wide.
- c. Depth: Install top of duct at least 36 inches below finished grade unless otherwise indicated.
- d. Install duct with a minimum of 3 inches between ducts for like services and 6 inches between power and communications duct.
- 2. Elbows: Install manufactured duct elbows for stub-ups, at building entrances, and at changes of direction in duct direction unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
 - a. Couple RNC duct to GRC with adapters designed for this purpose, and encase coupling with 3 inches of concrete.
 - b. Stub-ups to Outdoor Equipment: Extend concrete-encased GRC horizontally a minimum of 60 inches from edge of base. Install insulated grounding bushings on terminations at equipment.
 - 1) Stub-ups shall be flush with finished floor and minimum 3 inches from conduit side to edge of slab.
- D. Underground-Line Warning Tape: Bury nonconducting underground line specified in Section 26 05 53 "Identification for Electrical Systems" no less than 12 inches above all concrete-encased duct and duct banks and approximately 12 inches below grade. Align tape parallel to and within 3 inches of centerline of duct bank. Provide an additional warning tape for each 12-inch increment of duct-bank width over a nominal 18 inches. Space additional tapes 12 inches apart, horizontally.

3.6 INSTALLATION OF HANDHOLES AND BOXES OTHER THAN PRECAST CONCRETE

- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting duct, to minimize bends and deflections required for proper entrances. Use box extension if required to match depths of duct, and seal joint between box and extension as recommended by manufacturer.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas and trafficways, set cover flush with finished grade. Set covers of other hand holes 1 inch above finished grade.
- D. Install hand holes and boxes with bottom below frost line, 42" below grade.
- E. Field cut openings for duct according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

3.7 GROUNDING

A. Ground underground ducts and utility structures according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."

3.8 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Demonstrate capability and compliance with requirements on completion of installation of underground duct, duct bank, and utility structures.
- B. Correct deficiencies and retest as specified above to demonstrate compliance.
- C. Prepare test and inspection reports.

3.9 CLEANING

A. Pull leather-washer-type duct cleaner, with graduated washer sizes, through full length of duct until duct cleaner indicates that duct is clear of dirt and debris. Follow with rubber duct swab for final cleaning and to assist in spreading lubricant throughout ducts.

SECTION 26 05 44 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Sleeves for raceway and cable penetration of non-fire-rated construction walls and floors.
 - 2. Sleeve-seal systems.
 - 3. Sleeve-seal fittings.
 - 4. Grout.
 - 5. Silicone sealants.
- B. Related Requirements:
 - 1. Section 07 84 13 "Penetration Firestopping" for penetration firestopping installed in fireresistance-rated walls, horizontal assemblies, and smoke barriers, with and without penetrating items.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 SLEEVES

- A. Wall Sleeves:
 - 1. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, zinc coated, plain ends.
- B. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies: Galvanized-steel sheet; 0.0239-inchminimum thickness; round tube closed with welded longitudinal joint, with tabs for screw-fastening the sleeve to the board.
- C. Sleeves for Rectangular Openings:
 - 1. Material: Galvanized sheet steel.
 - 2. Minimum Metal Thickness:
 - a. For sleeve cross-section rectangle perimeter less than 50 inches and with no side larger than 16 inches thickness shall be 0.052 inch
 - b. For sleeve cross-section rectangle perimeter 50 inches or more and one or more sides larger than 16 inches thickness shall be 0.138 inch

2.2 SLEEVE-SEAL SYSTEMS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Advance Products & Systems, Inc.
 - b. CALPICO, Inc.
 - c. Metraflex Company (The).
 - d. Pipeline Seal and Insulator, Inc.
 - e. Proco Products, Inc.
 - 2. Sealing Elements: EPDM rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
 - 3. Pressure Plates: Carbon steel.
 - 4. Connecting Bolts and Nuts: Carbon steel, with corrosion-resistant coating, of length required to secure pressure plates to sealing elements.

2.3 SLEEVE-SEAL FITTINGS

- A. Description: Manufactured plastic, sleeve-type, waterstop assembly made for embedding in concrete slab or wall. Unit shall have plastic or rubber waterstop collar with center opening to match piping OD.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Presealed Systems.

2.4 GROUT

- A. Description: Nonshrink; recommended for interior and exterior sealing openings in non-firerated walls or floors.
- B. Standard: ASTM C 1107/C 1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- C. Design Mix: 5000-psi 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

2.5 SILICONE SEALANTS

- A. Silicone Sealants: Single-component, silicone-based, neutral-curing elastomeric sealants of grade indicated below.
 - 1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces that are not fire rated.

B. Silicone Foams: Multicomponent, silicone-based liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam.

PART 3 - EXECUTION

3.1 SLEEVE INSTALLATION FOR NON-FIRE-RATED ELECTRICAL PENETRATIONS

- A. Comply with NECA 1.
- B. Comply with NEMA VE 2 for cable tray and cable penetrations.
- C. Sleeves for Conduits Penetrating Above-Grade Non-Fire-Rated Concrete and Masonry-Unit Floors and Walls:
 - 1. Interior Penetrations of Non-Fire-Rated Walls and Floors:
 - a. Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint. Comply with requirements in Section 07 92 00 "Joint Sealants."
 - b. Seal space outside of sleeves with mortar or grout. Pack sealing material solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect material while curing.
 - 2. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 3. Size pipe sleeves to provide 1/4-inchannular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
 - 4. Install sleeves for wall penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of walls. Cut sleeves to length for mounting flush with both surfaces of walls. Deburr after cutting.
 - 5. Install sleeves for floor penetrations. Extend sleeves installed in floors 2 inches above finished floor level. Install sleeves during erection of floors.
- D. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies:
 - 1. Use circular metal sleeves unless penetration arrangement requires rectangular sleeved opening.
 - 2. Seal space outside of sleeves with approved joint compound for gypsum board assemblies.
- E. Aboveground, Exterior-Wall Penetrations: Seal penetrations using steel pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inchannular clear space between pipe and sleeve for installing mechanical sleeve seals.
- F. Underground, Exterior-Wall and Floor Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inchannular clear space between raceway or cable and sleeve for installing sleeve-seal system.

3.2 SLEEVE-SEAL-SYSTEM INSTALLATION

A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at raceway entries into building.

B. Install type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.3 SLEEVE-SEAL-FITTING INSTALLATION

- A. Install sleeve-seal fittings in new walls and slabs as they are constructed.
- B. Assemble fitting components of length to be flush with both surfaces of concrete slabs and walls. Position waterstop flange to be centered in concrete slab or wall.
- C. Secure nailing flanges to concrete forms.
- D. Using grout, seal the space around outside of sleeve-seal fittings.

SECTION 26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Identification for raceways.
 - 2. Identification of power and control cables.
 - 3. Identification for conductors.
 - 4. Warning labels and signs.
 - 5. Instruction signs.
 - 6. Equipment identification labels.
 - 7. Miscellaneous identification products.

1.03 SUBMITTALS

- A. Product Data: For each electrical identification product indicated.
- B. Identification Schedule: An index of nomenclature of electrical equipment and system components used in identification signs and labels.
- 1.04 QUALITY ASSURANCE
 - A. Comply with ANSI A13.1 and IEEE C2.
 - B. Comply with NFPA 70.
 - C. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.
 - D. Comply with ANSI Z535.4 for safety signs and labels.
 - E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

1.05 COORDINATION

A. Coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual; and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.

- B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- C. Coordinate installation of identifying devices with location of access panels and doors.
- D. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS

2.01 POWER RACEWAY IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway size.
- B. Colors for Raceways Carrying Circuits at 600 V or Less:
 - 1. Black letters on an orange field.
 - 2. Legend: Indicate voltage and system or service type.
- C. Self-Adhesive Vinyl Labels for Raceways Carrying Circuits at 600 V or Less: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.
- D. Metal Tags: Brass or aluminum, 2 by 2 by 0.05-inch with stamped legend, punched for use with self-locking cable tie fastener.
- E. Write-On Tags: Polyester tag, 0.015-inchthick, with corrosion-resistant grommet and cable tie for attachment to conductor or cable.
 - 1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.
 - 2. Marker for Tags: Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.

2.02 POWER AND CONTROL CABLE IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.
- B. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.

2.03 CONDUCTOR IDENTIFICATION MATERIALS

- A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide.
- B. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.

- C. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
- D. Write-On Tags: Polyester tag, 0.015-inchthick, with corrosion-resistant grommet and cable tie for attachment to conductor or cable.
 - 1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.
 - 2. Marker for Tags: Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.
- 2.04 FLOOR MARKING TAPE
 - A. 2-inchwide, 5-milpressure-sensitive vinyl tape, with black and white stripes and clear vinyl overlay.
- 2.05 WARNING LABELS AND SIGNS
 - A. Comply with NFPA 70 and 29 CFR 1910.145.
 - B. Self-Adhesive Warning Labels: Factory-printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment unless otherwise indicated.
 - C. Baked-Enamel Warning Signs:
 - 1. Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for application.
 - 2. 1/4-inchgrommets in corners for mounting.
 - 3. Nominal size, 7 by 10 inches
 - D. Metal-Backed, Butyrate Warning Signs:
 - 1. Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs with 0.0396inchgalvanized-steel backing; and with colors, legend, and size required for application.
 - 2. 1/4-inchgrommets in corners for mounting.
 - 3. Nominal size, 10 by 14 inches
 - E. Warning label and sign shall include, but are not limited to, the following legends:
 - 1. Multiple Power Source Warning: "DANGER ELECTRICAL SHOCK HAZARD EQUIPMENT HAS MULTIPLE POWER SOURCES."
 - 2. Workspace Clearance Warning: "WARNING OSHA REGULATION AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES"

2.06 INSTRUCTION SIGNS

- A. Engraved, laminated acrylic or melamine plastic, minimum 1/16-inchthick for signs up to 20 sq. inches and 1/8-inchthick for larger sizes.
 - 1. Engraved legend with black letters on white face.

- 2. Punched or drilled for mechanical fasteners.
- 3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.
- B. Adhesive Film Label: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8-inch
- C. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8-inch Overlay shall provide a weatherproof and UV-resistant seal for label.

2.07 EQUIPMENT IDENTIFICATION LABELS

- A. Adhesive Film Label: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8-inch
- B. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8-inch Overlay shall provide a weatherproof and UV-resistant seal for label.
- C. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8-inch
- D. Engraved, Laminated Acrylic or Melamine Label: Punched or drilled for screw mounting. White letters on a dark-gray background. Minimum letter height shall be-3/8-inch

2.08 CABLE TIES

- A. General-Purpose Cable Ties: Fungus inert, self extinguishing, one piece, self locking, Type 6/6 nylon.
 - 1. Minimum Width: 3/16-inch
 - 2. Tensile Strength at 73 degree F According to ASTM D 638: 12,000 psi
 - 3. Temperature Range: Minus 40 to plus 185 degree F
 - 4. Color: Black except where used for color-coding.
- B. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self extinguishing, one piece, self locking, Type 6/6 nylon.
 - 1. Minimum Width: 3/16-inch
 - 2. Tensile Strength at 73 degree F According to ASTM D 638: 12,000 psi
 - 3. Temperature Range: Minus 40 to plus 185 degree F
 - 4. Color: Black.
- C. Plenum-Rated Cable Ties: Self extinguishing, UV stabilized, one piece, self locking.
 - 1. Minimum Width: 3/16-inch
 - 2. Tensile Strength at 73 degree F According to ASTM D 638: 7000 psi
 - 3. UL 94 Flame Rating: 94V-0.
 - 4. Temperature Range: Minus 50 to plus 284 degree F
 - 5. Color: Black.

2.09 MISCELLANEOUS IDENTIFICATION PRODUCTS

- A. Paint: Comply with requirements in Division 09 painting Sections for paint materials and application requirements. Select paint system applicable for surface material and location (exterior or interior).
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Verify identity of each item before installing identification products.
- B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
- C. Apply identification devices to surfaces that require finish after completing finish work.
- D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
- E. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
- F. System Identification Color-Coding Bands for Raceways and Cables: Each color-coding band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-footmaximum intervals in straight runs, and at 25-footmaximum intervals in congested areas.
- G. Aluminum Wraparound Marker Labels and Metal Tags: Secure tight to surface of conductor or cable at a location with high visibility and accessibility.
- H. Cable Ties: For attaching tags. Use general-purpose type.
- I. Painted Identification: Comply with requirements in Division 09 painting Sections for surface preparation and paint application.

3.02 IDENTIFICATION SCHEDULE

- A. Accessible Raceways and Cables within Buildings: Identify the covers of each junction and pull box of the following systems with self-adhesive vinyl labels with the wiring system legend and system voltage. System legends shall be as follows:
 - 1. Power.
 - 2. UPS.
- B. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and hand holes, use color-coding conductor tape to identify the phase.
 - 1. Color-Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded feeder and branch-circuit conductors.

- a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
- b. Colors for 208/120-V Circuits:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Phase C: Blue.
- c. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.
- C. Install instructional sign including the color-code for grounded and ungrounded conductors using adhesive-film-type labels.
- D. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.
 - 1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
 - 2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
 - 3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual.
- E. Workspace Indication: Install floor marking tape to show working clearances in the direction of access to live parts. Workspace shall be as required by NFPA 70 and 29 CFR 1926.403 unless otherwise indicated.
- F. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Selfadhesive warning labels.
 - 1. Comply with 29 CFR 1910.145.
 - 2. Identify system voltage with black letters on an orange background.
 - 3. Apply to exterior of door, cover, or other access.
 - 4. For equipment with multiple power or control sources, apply to door or cover of equipment including, but not limited to, the following:
 - a. Controls with external control power connections.
- G. Operating Instruction Signs: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.
- H. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and the Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.
 - 1. Labeling Instructions:
 - a. Indoor Equipment: Engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inchhigh letters on 1-1/2-inchhigh label; where two lines of text are required, use labels 2 inches high.

- b. Unless provided with self-adhesive means of attachment, fasten labels with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.
- 2. Equipment to Be Labeled:
 - a. Enclosures and electrical cabinets.
 - b. Automatic transfer switches.
 - c. Enclosed switches.
 - d. Enclosed controllers.
 - e. Push-button stations.
 - f. Monitoring and control equipment.

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