

Trustees
John Newman II
Gloria Peterson
Debbie Swanson
Ryan Hunter

REGULAR MEETING AGENDA

Tuesday, February 28, 2022 6:30 P.M.

If you need any assistance due to a disability please contact the Planning Department at least 48 hours in advance of the meeting at planning@ytown.org or 734-485-3943.

- 1. Call to order
- 2. Roll call
- 3. Approval of the January 10, 2023 regular meeting minutes
- 4. Approval of agenda
- 5. Public hearings
- 6. Old business
- 7. New business
 - A. **7130 Rawsonville Road Parcel K-11-36-100-033** Sketch Plan Review Snider Electric Consider request to construct a 1,950 sq. ft. building expansion, construct a new 6,000 sq. ft. building, and the construction of the associated parking areas, driveways, utilities, storm water management system, and landscaping.
- 8. Open Discussion for issues not on the agenda
 - A. Correspondence received
 - B. Planning Commission members
 - C. Members of the audience
- 9. Township Board representative report
- 10. Zoning Board of Appeals representative report
- 11. Township attorney report
- 12. Planning Department report
- 13. Other business



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14. Adjournment

CHARTER TOWNSHIP OF YPSILANTI PLANNING COMMISSION MEETING Tuesday, January 10, 2023 6:30 pm

COMMISSIONERS PRESENT

Bill Sinkule Gloria Peterson Elizabeth El-Assadi Larry Doe Ryan Hunter Muddasar Tawakkul

STAFF AND CONSULTANTS

Jason Iacoangeli, Planning Director Amy Steffens, Director of Code Compliance Megan Masson Minock, Carlisle Wortman Associates

i. CALL TO ORDER/ESTABLISH QUORUM

MOTION: Mr. Sinkule called the meeting to order at 6:30 pm.

ii. <u>APPROVAL OF NOVEMBER 22, 2022 and DECEMBER 13, 2022 REGULAR MEETING</u> MINUTES

MOTION: Mr. El-Assadi **MOVED** to approve the November 22, 2022 Board Meeting Minutes. The **MOTION** was **SECONDED** by Ms. Peterson and **PASSED** by unanimous consent.

MOTION: Mr. El-Assadi **MOVED** to approve the previous Board Meeting Minutes. The **MOTION** was **SECONDED** by Mr. Doe and **PASSED** by unanimous consent.

iii. APPROVAL OF AGENDA

MOTION: Ms. El-Assadi **MOVED** to approve the amended agenda. The **MOTION** was **SECONDED** by Ms. Peterson and **PASSED** by unanimous consent.

iv. PUBLIC HEARINGS

Applicant: Laronda Campbell **Address:** 600 Woodlawn Avenue

Parcel: K-11-11-362-020

Request: To consider the special land use review application of Laronda Campbell to permit a group daycare home, providing care for up to twelve (12) children, for a site zoned R5, one-

family residential.

Mr. Iacoangeli presented the application for a childcare, foster care, group daycare home for Ms. Campbell at 600 Woodlawn Avenue. The Michigan Zoning and Enabling Act speaks to this particular type of land use. Both the Township Zoning Ordinance and the State of Michigan define a family daycare home as a private home with at least 1 but less than 7 children. This is for a group daycare home which is more than 6 but no more than 12 children. The standards that need to be met are outlined in the Staff Report.

The site had not previously been used as a family daycare home. The applicant is seeking approval for seven (7) to twelve (12) children which is a group daycare home. The Zoning Enabling Act stipulates that a group childcare home shall be issued a special use permit, conditional use permit, or similar permit if the group childcare home meets all the following standards. For a county or township, it must not be closer than 1,500 ft to the following:

- 1) another licensed group childcare home
- 2) foster care, small group home, or large group home
- 3) a facility offering substance use disorder services
- 4) a community corrections center

This property meets all of the aforementioned standards.

The property also has to have the appropriate fencing for safety, as determined by the local unit of government. State regulations do not require an outdoor play structure on the property. Per the application submitted by Ms. Campbell, the rear yard is fenced with a 4 ft tall chain link fence. A childcare home shall provide a free, safe, or hazard-free outdoor play area on the premises or within a reasonable walking distance. Play area size must be one of the following:

- 1) Not less than 400 sq ft for a family childcare home
- 2) Not less than 600 sq ft for a group childcare home.

The applicant will utilize the rear area as a play area and the area is 1,200 sq ft.

The property must maintain visible characteristics of the neighborhood. The applicant has not proposed any changes to the exterior of the home and it is consistent with the neighboring homes so this criterion is met.

The business must not exceed 16 hours of operation during a 24-hour period. The applicant stated in their application they would operate 5 days a week, Monday through Friday, from 6 a.m. to 6 p.m. for only a 12-hour operation, meeting the standard.

The business must meet regulation of the Governing Sign Ordinance. There are no signs proposed for the property, making it in compliance.

The property must meet the regulations, if any, requiring a group childcare home operate to provide off-street parking. The township zoning ordinance requires 1 space provided for 6 clients plus 1 employee space at the time of peak shift. The applicant will have 2 caregivers. The subject property complies with 2 off-street parking spaces on the driveway and 2 on-street parking spaces.

The Township Zoning Ordinances also provides additional requirements for the state license of residential child and adult foster care. Such uses have to meet the following regulations:

- 1) The facilities, except for adult and child family daycare homes, have to be registered with Ypsilanti Community Development Department and are required to have on file the documentation of a valid license
- 2) The facilities will be brought into compliance with all state building and fire codes.
- 3) Off-street parking will be provided.
- 4) If located in a single-family residential district, the building should have an appearance that is not intrusive.

The applicant will register the daycare with the Ypsilanti Community Development Department and get the appropriate State of Michigan inspections of the home prior to being issued a license by the state of Michigan.

Documentation of adequate indoor classroom space must be provided. Said documentation of the layout of the home and designated areas to be used had been provided in the application.

Sufficient outdoor play areas must meet state regulations. The yard is enclosed by a 4ft chain link fence around a lot that exceeds the requirement.

After review, the Planning Commission can look at the particular circumstances and facts with use and terms and standards with respect to additional standards the Commission may set, it was requested to pass the suggested motions.

Mr. Hunter asked about the proximity of the establishment to another daycare location and why it is mandated in that way. Mr. Iacoangeli stated the reason that regulation is included is likely because the state is wishing to make sure that locations such as these do not stack and become disruptive to a neighborhood as daycares or serve as halfway homes.

Ms. El-Assadi asked if the rental agreement would come into play. Mr. lacoangeli stated it would be up to the property owner for insurances and liabilities. It was noted the property owner is aware of the intention to open the daycare.

Mr. Doe stated that 1,500 ft used to be required before Covid. He asked if, in the future, someone made a request for a daycare, if it was possible to waive a requirement. Mr. lacoangeli stated they could not. He provided an example of an individual wanting to open a daycare but they could not because their neighbor had an active license that they weren't using. The individual had to wait for their neighbor's license to expire to get their own. If it is a state ordinance, they cannot override it.

The public hearing was opened and closed at 6:44 p.m.

Mr. Tawakkul thanked Ms. Campbell for making the commitment to open a daycare, as there is a shortage in the area.

Ms. Peterson also thanked Ms. Campbell. Ms. Peterson asked that operations would be 6 am to 6 pm. Ms. Campbell stated that was correct. Ms. Peterson asked if Ms. Campbell had had her own daycare before. Ms. Campbell stated that she had been employed at a daycare. After which, she went to people's homes as a licensed exempt provider. Now she is looking to start a daycare at home for up to 12 kids. Ms. Peterson asked how many employees there would be. Ms. Campbell stated 2, so 6 kids to each adult.

Ms. Campbell stated she was unaware there was a shortage of childcare and it is something she enjoys which is why she wants to provide a safe and caring place for children.

Mr. Hunter applauded her effort, as he had also spent a lot of time in daycare.

MOTION: Mr. Tawakkul **MOVED** to approve the special land use review application of Laronda Campbell to permit a group daycare home, providing care for up to twelve (12) children, for a site zoned R5, one-family residential at 600 Woodlawn Avenue, Parcel K-11-11-362-020 with the following conditions: the applicant shall agree to enter into a special conditional use agreement under the following conditions: prior to consideration to a group daycare home, the applicant shall supply a daycare application to the Office of Community Standards and additional documentation including but not limited to scaled and accurate surveyed drawings correlated with legal descriptions of all existing buildings, drives and other improvements, a copy of state license, a copy of inspection reports, drawings of pictures of the house layout showing the rooms that will be utilized with the daycare. Subject site shall be brought into compliance with all state building and fire codes pursuant of state licensing, shall comply with

township sign ordinance, required off-street parking shall be provided during hours of operation, outdoor play area shall be provided pursuant of state licensing rules. For the safety of all occupants and upon sufficient notice, the applicant shall permit, prior to operation of a group daycare home, the dwelling to be inspected by the Township Building Official and/or Fire Marshal to ensure compliance with the adopted property maintenance code. Ms. El-Assadi **SECONDED** the motion. The motion **PASSED** with unanimous consent.

v. OLD BUSINESS

None to report.

vi. NEW BUSINESS

Applicant: Children's Healing Center **Address:** 1441/1481 S. Huron Street

Parcel: K-11-16-360-005

Request: To consider the request for Preliminary Site Plan approval to construct an 11,000 sq ft building which will be used as a year-round recreation center for children with weak immune

systems for a site zoned TC, Town Center, with a Site Type B.

Mr. Iacoangeli shared a preliminary site plan for the Children's Healing Center. The 11,000 sq ft building will serve as a recreation center for children who are immunocompromised. The project was put out for review, to which the Planning Office and associates suggested approval.

The overall parcel that the building will be placed on will be split into 3 separate parcels and the Children's Healing Center will be placed on Parcel A. The drive for the Sheriff's Substation is anticipated to be relocated and connect into this commercial drive. The intersection of the new connection is expected to have a light signal.

Mr. Tawakkul asked if Aldi would be connected to the main road in a similar way to the Children's Health Center. Mr. Iacoangeli stated that they would likely be connected in a similar way and Aldi would be responsible for their own roadway.

Mr. Doe asked if roundabouts were being considered to keep the flow of traffic moving, noting that rush hour gets hectic in that area. Mr. Iacoangeli stated they will likely go with lights rather than a roundabout and they will coordinate the lights to turn green around the same time to flush out traffic.

Mr. Iacoangeli stated the master plan with the development is consistent with the land use being proposed. Height and bulk standards were met and comply. The natural features of the parcel are non-significant, as it is flat and few trees are on the parcel. The site access would be off of a private road with one point of access off of Heron. The applicant will need to get permits from the Washanaw County Road Commission as a part of the development. Parking standards were met, and exterior lighting is consistent with the ordinance requirements and standards. Landscape standards apply to the township's ordinances. The applicant provided a dumpster screening but it is not detailed.

Mr. lacoangeli shared the feedback provided by the Planning Commission's associates.

Carlisle Wartman & Associates recommended approval by the Planning Commission on December 20, 2022 with 4 conditions:

- A woodland protection table being added to the plan.
- A private road be constructed to private road standards.
- Bicycle parking be added.
- Dumpster screening detail being included on the plan sheet.

OHM Engineering recommended approval for this state of the process on December 21, 2022 provided preliminary detailed engineering comments related to drainage and stormwater that will need to be addressed at the time of final site plan and detailed engineering.

YCUA also recommended preliminary site plan approval on December 15, 2022.

Fire Marshal Steve Wallgren recommended preliminary site plan approval on December 16, 2022 on the condition it complies with the international fire code of 2018. A dedicated hydrant needs to be included that is no closer than 40 ft and no farther than 100 ft, and that the radius be 250 ft so they can cover the entire building.

Washtenaw County Water Resources had no comments but the applicant is working with them on their stormwater plan that will be put together as a part of the design.

Washtenaw County Road Commission shared comments by email on December 22, 2022 regarding the private commercial drive that will be installed as a part of the process. Donation of ROW along Heron Street for 75 ft width was requested, a segment of sidewalk to be removed, a cost estimate for work within the Heron Street ROW be submitted, and review fees to further review the plan.

Mr. Sinkule noted that one of the recommendations was that a public hearing be held to consider the site reclassification and asked if it would be done during this meeting. Mr. lacoangeli stated the zoning in the area was consistent, but when the parcel splits, the planning Commission has the ability to hold a public hearing and recommend the site type classifications for the new parcels being created.

Ms. El-Assadi asked what the timeline was. Mr. Iacoangeli stated they are hoping to break ground in the Spring and be open by Winter 2023 or Spring of 2024, noting more information would come from the applicant.

Mr. Hunter asked if it was a non-profit organization. Mr. lacoangeli stated that was correct.

Mr. Hunter stated Heron Street was previously discussed as a district and several other businesses came in. He asked if they would take a similar approach and be off of the primary road. Mr. Iacoangeli stated he would have to look, but he believed this project would be included in the special assessment.

The applicant, Ms. Sarah Beleky, Manager of Designing Construction for the Children's Healing Center, shared that they are a non-profit based in Grand Rapids and expanding to the SE side of the state. They are the first facility of their kind that is a year-round recreation facility for kids with weak immune systems due to cancer, organ transplants, autoimmune diseases, etc. It provides a safe space without worrying about getting sick. This allows kids to come together and play and have fun. Their members are 0-18 plus a young adult program that goes through the age of 26. They provide counseling, fitness classes, preschool classes, art classes, etc. They are open 4 days a week plus some weekends, evenings after school, and a preschool program to help kids catch up and go to school like regular kids. Currently, the West Michigan site serves the entire state and people come all the way from the Southeast. The property on South Heron is off the expressway allowing people to access it easily, along with hotels or food. The new location will broaden their reach to this side of the state.

Mr. Jason van Renort for Natervalle, the Civil Engineers, Surveyors, and Landscape Architects for the project. He noted that John Stevens is the Architect and Construction Manager. He asked the Commission if they had any questions.

Mr. John Stevens stated they are still in design development. The goal was to create a modern and playful structure including different colored panels and some areas having higher ceilings to make the areas more inviting. He shared several renderings of the structure. Mr. Stevens noted there was a clearing overlooking the golf course and Ford Lake, creating a beautiful view, which is where the tall windows were placed. The trees on the lot were existing trees. The overall floorplan was presented to the Commission, including a check-in area, a meeting room, a locker area, restrooms, and an airlock system entering into the main area. In the main area, there is a T&AYA, parent relax room, a multipurpose room, active fitness, art room, exploratory play area, a board room, single occupant restrooms with small and normal toilets, storage areas, and faculty and staff areas. The staff have their own entrance with a similar check-in to enter the center. Exterior elevations were presented with building materials. He asked the Commission if they have any questions.

Mr. Tawakkul asked if there would be physicians at the facility. Ms. Beleky stated that there are not physicians on staff but there are medical advisors on the Board that assist with the cleaning and check-in procedures needed for the kids. Mr. Tawakkul asked how many kids they are looking to accept at the facility. Ms. Beleky stated that at their current facility, which is 7,000-8,000 sq ft., the morning preschool class has 10-12 kids and the evening programs has about 12-15. On the weekends there may be more, and during a movie night it may be 15-20. Mr.

Tawakkul asked what the age range was. Ms. Beleky stated generally it is 3-12 by they offer 0-26.

Ms. Peterson stated they are open 4 days a week, and asked the hours. Ms. Beleky stated that the staff comes in at 8 a.m. M-F. Kids come M-W, Friday, and some Saturdays. Generally, they are open until about 8:30 p.m. to cover after school, so there are typically no kids between 12-4. Ms. Peterson asked how many people would be on staff every day. Ms. Beleky stated there will be about 4-5 every day and 4-5 volunteers come in for morning shift and afternoon shift. Ms. Peterson asked if the only other location was in Grand Rapids. Ms. Beleky stated that was correct.

Ms. Peterson asked if studies were run in the area to understand how many people would use the service. Ms. Beleky stated that studies were run with the larger staff but she was not sure on the exact numbers. Ms. Peterson asked if parents make appointments or if they are scheduled certain days. Ms. Beleky stated doctors recommend the patients to the center based on a certain number of criteria. After which, the individual and their families can come whenever they want to any of the programs. They ask for families to call in advance so they can hit on all age groups and all genders through different events.

Ms. Peterson asked who would be denied and what for. Ms. Beleky stated a doctor has to recommend them based on an autoimmune issue. She stated at the other location, they partnered with facilities and doctors that recommend to the center specifically. The goal is to make similar connections to the facilities in the area.

Mr. Tawakkul left the meeting at 7:15.

Ms. El-Assadi asked what the timeline was. Ms. Beleky stated they hope to break ground in April. 8-9 months of construction is expected. Programming is expected to begin in January or February of 2024.

Mr. Hunter commended the work being done and stated the building looks beautiful. He stated it is great to offer normalcy to families who need it.

MOTION: Ms. El-Assadi **MOVED** to approve the Preliminary Site Plan approval to construct an 11,000 sq ft building which will be used as a year-round recreation center for children with weak immune systems for a site zoned TC, Town Center, with a Site Type B for 1441/1481 S. Huron Street, Parcel K-11-16-360-005. Mr. Hunter **SECONDED** the motion. The motion **PASSED** unanimously.

vii. OPEN DISCUSSION FOR ISSUES NOT ON THE AGENDA

A. CORRESPONDENCE RECEIVED - None

B.	PLANNING	COMMISSION	MEMBERS -	- None
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C. MEMBERS OF THE AUDIENCE- None

viii. TOWNSHIP BOARD REPRESENTATIVE REPORT

None to Report.

ix. ZONING BOARD OF APPEALS REPRESENTATIVE REPORT

None to Report.

x. TOWNSHIP ATTORNEY REPORT

None to Report.

xi. PLANNING DEPARTMENT REPORT

None to Report.

xii. OTHER BUSINESS

None to Report.

xiii. ADJOURNMENT

MOTION: Ms. El-Assadi **MOVED** to adjourn at 7:22 pm. The **MOTION** was **SECONDED** by Mr. Hunter and **PASSED** by unanimous consent.

Respectfully Submitted by: Minutes Services



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Staff Report Snider Electric: Office / Contractors Yard 7130 Rawsonville Road, Belleville, MI 48111 Preliminary Site Plan

February 28, 2023

Applicant: George Snider

Project Name: Snider Electric, LLC

Plan Date: 01-20-2023

Location: 7130 Rawsonville Road, Belleville, MI 48111 Parcel #K-11-36-100-033

Zoning: I-T – Innovation and Technology

Action Requested: Preliminary Site Plan Approval

Case Location and Summary

The Office of Community Standards is in receipt of a Preliminary Site Plan Application from Mr. Snider representing Snider Electric, LLC requesting authorization for the construction of a 1,950 sq. ft. building expansion, construction of a new 6,000 sq. ft. building, and the construction of the associated parking areas, driveways, utilities, storm water management system, and landscaping.

Cross References

- Article 4, District Regulations
- Article 9, Site Plan Review
- Article 11, Specific Provisions
- Article 12, Access, Parking, Loading
- Article 13, Site Design Standards

Subject Site Use, Zoning and Comprehensive Plan

The Charter Township of Ypsilanti 2040 Master Plan designates this site for Innovation & Employment District, a designation intended to be the major employment area of the Township. The area is targeted for companies at the cutting edge of innovation with a combination of technology, office, and craft manufacturing or light industrial uses. The



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site is currently zoned I-T – Innovation and Technology which is in compliance with the Master Plan designation.

Aerial Photograph - 2020



Adjacent Uses, Zoning and Comprehensive Plan

Direction	Use	Zoning	Master Plan
North	Vacant / Rail Road	I-T – Innovation and Technology	Innovation & Employment District
South	Residential	I-T – Innovation and Technology	Open Space, Neighborhood Preservation, & Cluster Development
East	Van Buren Twp	Van Buren Twp	Van Buren Twp
West	Residential	R-3 One Family Residential	Open Space, Neighborhood Preservation, & Cluster Development

Natural Features

Topography: The subject parcel is relatively flat.



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Woodlands: The site has woodlands to the west of the property. The proposed development does not contemplate the removal of any woodlands. The woodlands present will be preserved.

Wetlands: There are wetlands on the subject property. According to FEMA MAP 26161C0445E, Dated April 3, 2021, the site is located in an area of minimal flood hazard.

Soils: Unknown

Analysis

Sec. 414 - Innovation and Technology District:

Sec. 414 – Innovatioi	Tana Teennology Di		Complies with Sec.
	Required / Allowed	Provided	414 – Innovation and technology District
Lot Area	None	4.998 Acres	Complies
Lot Width	None	165 Feet	Complies
Front Yard Setback (Rawsonville)	20'	131.84'	Complies
Side Yard Setback (Northern Lot Line)	20'	20'	Complies
Side Yard Setback (Southern Lot Line)	20'	24.63'	Complies
Rear Yard Setback (Western Lot Line)	20'	Approximately 900'	Complies
Building Height for New Building (Feet)	40'	38'	Complies
Building Height for Building Addition (Feet)	40'	15'-7''	Complies
Maximum Lot Coverage (All Buildings)	None	11,811 sq. ft.	Complies



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Sec. 420 - Residential Use Table

Proposed Use	Complies with Sec. 420 Residential Use Table		
Outdoor Storage and Contractors / Landscapers Yard	Complies		
Warehouse and Storage	Complies		

Sec. 1157. – Outdoor Storage and Contractors/Landscapers Yard:

Outdoor storage of goods, materials, and equipment shall be prohibited unless otherwise specifically permitted in this Section. For those uses where the outdoor storage of goods, materials, and equipment is permitted either by right or through a special land use, the following conditions shall apply:

General Regulations:

- A. Such storage shall be strictly and clearly incidental to the principal use and only products and materials owned or produced by the principal business, and equipment owned and operated by the principal use shall be permitted for storage under the subsection.
 - Standards are met. Fleet Vehicles, employee vehicles, and equipment are all incidental to the principal use (Electrical Contracting Company)

B. Location and Size

- The location and size of areas for such storage, nature of items to be stored therein, and details of the enclosure, including description of materials, height, and typical elevation of the enclosure shall be provided as part of the special land use permit application and indicated on a site plan, as set forth in Article 10 and Article 9.
 - Standards are met.
- Such storage shall not be located within the area between the front face of the building, as extended across the entire width of the lot, and to the rightof-way; in any required side or rear yard; or in any required transition strip.
 - Standards are met. All storage will be conducted in the rear yard which is screened by landscaping and a fence.
- Such storage shall not be located in any required parking or loading space.
 - Standard is met. All storage is located in the rear yard away from required parking / loading space.
- C. Screening. The area for such storage shall be screened from view on all sides. Screening shall be constructed of wood or masonry materials. Wire fences with inserted strips of metal, plastic and similar materials shall not be substituted for the required screening. The screen shall not be less than the maximum height of the product being stored.



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Standard is met. The applicant intends on enclosing the property with a 6' tall chain-link fence on all sides. The applicant does not intend on store materials outside. Materials will be stored in an enclosed building.

Contractors/Landscapers Yard:

- A. The contractor's office building shall be of permanent construction.
 - Standard is met. The office building is an existing permanent structure.
- B. Outdoor storage shall be accessory to the contractor's principal office use of the property. Such outdoor storage shall not be located within the front yard and shall be enclosed by an opaque fence up to eight (8) feet in height and/or landscape screening meeting the standards set forth in Section 1301.3.H.
 - n/a
- C. All travel surfaces shall be paved as a condition of approval.
 - Applicant is removing existing driveway (closest to railroad track) and paving the southern driveway with concrete and adding 5 paved / concrete parking spaces, one of which is ADA accessible.
- D. Cranes, booms or other extensions on equipment, trucks or other vehicles parked on site shall be stored in the lowest possible configuration.
 - Standard is met.

Article 12, Access, Parking, Loading

Industrial or Research Establishments and Related Accessory Offices:

Required: Five (5) plus one (1) for every one and a half (1 $\frac{1}{2}$) employees in the largest working shift, or one (1) for every five hundred-fifty (550) square feet of usable floor space, whichever is greater.

Office Building = 1,461 sq. ft. -1,461/550 = 3 Parking Spaces.

The Applicant is proposing five (5) 9' x 18' parking spaces, one of which is ADA compliant. The minimum parking standards are met.

Article 13, Site Design Standards

Sec. 1301 – 3.C. – Street Yard Landscaping

Street yard landscaping. Whenever, in this Ordinance, a landscaped setback is required between a public or private street and a parking or building setback, all such yards shall be landscaped in accordance with the following:



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- 1. A minimum of one (1) large deciduous tree shall be planted for each forty (40) lineal feet of frontage, or portion thereof, plus
 - a. There is 164 ft. of frontage. 164 / 40 = 4.1 = 5 trees. Applicant is proposing to add five (5) trees.
- 2. A minimum of one (1) ornamental tree shall be planted for each one hundred (100) lineal feet of frontage or portion thereof, plus
 - a. There is 164 ft. of frontage. 164 / 100 = 1.6 = two (2) trees. Applicant is proposing to add two (2) trees.
- 3. A minimum of one (1) shrub shall be planted for each ten (10) lineal feet of frontage, or portion thereof.
 - a. There is 164 ft. of frontage. 164 / 10 = 16.4 shrubs. Applicant is proposing to add 17 shrubs.
- 4. Creative placement of the trees, such as staggering, clustering, and/or other methods, is encouraged in an effort to eventually achieve a canopy.
- 5. Access drives from public rights-of-way through required greenbelts shall be permitted, but such drives shall not be subtracted from the lineal dimension used to determine the minimum number of trees.

Sec. 1301 – 3.G. Detention Pond Landscaping

Detention/retention pond landscaping

- 1. Landscape plans shall be submitted for all detention/retention ponds. Storm water management systems that replicate a natural design and appearance is required.
- 2. Detention/retention ponds shall be landscaped to provide a natural setting in open space areas. Where possible, ponds or basins shall be "free form" following the natural shape of the land to the greatest practical extent.
- 3. Side slopes shall not exceed one (1) foot vertical for every five (5) feet horizontal.
- 4. Berms may be incorporated into the landscape but should be used to enhance the natural forms and not create artificial bumps and ridges.
- 5. The minimum requirements for the landscaping of detention/retention ponds shall be as follows:
 - a. One (1) deciduous shade or evergreen tree and ten (10) shrubs shall be planted for every fifty (50) lineal feet of pond perimeter as measured along the top of the bank elevation.
 - i. Standard is met. The perimeter of the pond is 500 ft. 500 / 50 = 10 trees. Applicant will provide 10 trees around the pond.
 - b. The required trees and shrubs shall be planted in a random pattern or in groupings. The placement of required landscaping is not limited to the top of the pond bank.
 - i. Standard is met. The perimeter of the pond is $500 \text{ ft.} 500 / 50 \times 10 \text{ shrubs} = 70 \text{ shrubs.}$ Applicant will provide 70 shrubs around retention pond.



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- 6. Detention and retention ponds in close proximity to residential, commercial, and industrial properties shall be landscaped in character with properties and shall be required to provide lawn areas, shrubs, and trees to accomplish a suitable appearance compatible with development on the property and on nearby properties. Landscaping shall be required on all areas disturbed by grading to establish detention/retention ponds.
- To assure that water quality is maintained, ponds shall be designed to continuously circulate either by surface water movement, ground water movement or some form of artificial aeration.
- 8. Maintenance of detention/retention ponds and the landscaping thereof shall be the responsibility of the property owner or of the development association whichever is appropriate and shall be conducted in a manner acceptable to the Township. Should maintenance not be carried out in an acceptable manner the Township may carry out such maintenance and assess the developer and/or property owners for such maintenance.

<u>Suggested motions:</u> The following suggest motions and conditions are provided to assist the Planning Commission in making the most appropriate motion for this application. The Commission may utilize, add or reject any conditions suggested herein, as they deem appropriate.

Motion to Table:

"I move to table the Preliminary Site Plan of Mr. Snider representing Snider Electric to permit the construction of a 6,000 sq. ft. building, 1,950 sq. ft. building addition, and referenced site improvements located at 7130 Rawsonville Road, Belleville, MI 48111 Parcel #K-11-36-100-033 in order to further consider the comments made during this meeting."

Motion to Approve:

"I move to approve the Preliminary Site Plan of Mr. Snider representing Snider Electric to permit the construction of a 6,000 sq. ft. building, 1,950 sq. ft. building addition, and referenced site improvements located at 7130 Rawsonville Road, Belleville, MI 48111 Parcel #K-11-36-100-033. This motion is further made with the following conditions:

- 1. Applicant shall address all outstanding comments from reviewing agencies prior to Final Site Plan approval.
- 2. Applicant shall obtain all applicable internal and outside agency permits prior to construction.

Motion to Deny:

"I move to deny the Preliminary Site Plan of Mr. Snider representing Snider Electric to permit the construction of a 6,000 sq. ft. building, 1,950 sq. ft. building addition, and



Trustees John Newman II Gloria Peterson Debbie Swanson Ryan Hunter

referenced site improvements located at 7130 Rawsonville Road, Belleville, MI 48111 Parcel #K-11-36-100-033 due to the following reasons:"

Respectfully submitted,

Fletcher Reyher, Planning & Development Coordinator Charter Township of Ypsilanti Planning Department

Planning Director's Report

	Project Nan	ne: Snider Electric					
	Location:	7130 Rawsonville Road, Belleville, MI 48111					
	Date:	02-17-2023					
Full Preliminary Site Plan Review #					Plat ent Stage I		
Conta	Congultanta Departmenta				See email/letter attached or comments below		
	icoangeli, g Director	Township Planning Department		⟨ ✓			See comments below
	/Wortman	Planning Consultant				\checkmark	
OHM /	Stantec	Engineering Consultant		✓			See letter dated 02-16-2023
Steven Fire Ma	Wallgren, rshal	Township Fire Department		✓			See letter dated 02-16-2023
Dave B Building	ellers, g Official	Township Building Department				\checkmark	
Brian McCleery, Deputy Assessor		Township Assessing Department				\checkmark	
Enginee	estover, ering Manager	Ypsilanti Community Utilities Authority				\checkmark	See email dated 02-16-2023
Manage	reight, Project er Marsik,	Washtenaw County Road Commission Washtenaw County Water				✓	
Stormw	ater Engineer	Resources Commission				lacksquare	
James I Agent	Drury, Permit	Michigan Department of Transportation				\checkmark	

Planning Director's Recommended Action:

At this time, Snider Electric is eligible for Consideration for Preliminary Site Plan approval by the Planning Commission. This project is being placed on the Planning Commission agenda for Tuesday, February 28, 2023 at the regularly scheduled meeting. It would be the Planning Department recommendation that the Planning Commission grant Preliminary Site Plan approval as this project meets the conditions of the Township Zoning Ordinance for a development of this type. The approval should be contingent on the applicant addressing the remaining engineering and Fire Department comments. In addition, the Applicant must seek approval from the following agencies: WCRC, WCDPH, WCWRC, and YCUA as required as part of the Final Site Plan / Detailed Engineering review. Lastly, the approval should be contingent on the applicant addressing the conditions of approval presented in the Planning Departments Staff Report / Planning Commission Meeting.



ARCHITECTS. ENGINEERS. PLANNERS.

February 16, 2023

Mr. Jason Iacoangeli Township Planning Director Charter Township of Ypsilanti 7200 S. Huron River Drive Ypsilanti, MI 48197

RE: Snider Electric (7130 Rawsonville Rd)

Site Plan Review #1

Dear Mr. Iacoangeli:

We have completed the first site plan review of the plans dated January 20, 2023 and stamped received by OHM Advisors on February 1, 2023.

At this time, the plans are <u>recommended</u> for approval for the Planning Commission's consideration, contingent on the following comments being addressed prior to the next plan submittal. Preliminary detailed engineering comments have been provided to the applicant as a courtesy and shall be addressed prior to submitting detailed engineering plans for review.

A brief description of the project has been provided below (Section A), followed by our comments (Section B and C) and a list of anticipated required permits and approvals (Section D). Comments in Section C are detailed in nature, do not influence the overall site layout, and can be addressed during the detailed engineering drawing submittal.

A. PROJECT AND SITE DESCRIPTION

The proposed project is located at 7130 Rawsonville Rd, just south of the train tracks. The project includes a 6,000 square-foot building and a 1,950 square-foot building addition to an existing building. Also included are associated parking, landscaping, and utility improvements. The existing parcel is zoned I-T, Innovation and Technology District. Water is provided to the site from an existing tap to the 12-inch public water main on the west side of Rawsonville Road. The sanitary service is proposed to be provided by an on-site septic system, including an 1,867 square-foot drain field. Stormwater management will be provided by the addition of a detention pond on the west end of the site, as well as proposed swales.

B. SITE PLAN COMMENTS

Stormwater Management

1. The applicant shall verify Worksheet 1 of the stormwater management calculations (Sheet 08) as it currently appears the gravel cover type was classified incorrectly. Gravel should be considered an impervious surface. The applicant shall review and revise Worksheet 1 and all subsequent calculations accordingly as this may impact the proposed size and/or layout of the proposed detention pond.

Site Utilities

2. This office defers to the Ypsilanti Township Fire Department on the review and approval of hydrant coverage as it currently appears inadequate coverage may be provided.



3. The applicant shall clarify if additional water and sanitary sewer services will be provided for the new and existing buildings. If so, their locations shall be provided on the plans.

Site Layout

- 4. The applicant shall provide truck turning templates for the largest vehicle proposed to access the site (i.e. fire truck, garbage truck, etc.). This office defers to the Ypsilanti Township Fire Department on the review and approval of site accessibility.
- 5. The applicant shall verify the method of trash collection and provide a dumpster enclosure if necessary. If a dumpster enclosure is proposed, it's location and a standard detail shall be provided on the plans.
- 6. The applicant shall clarify if a loading zone will be provided. If so, its location shall be shown on the plans and a truck turning template shall be provided.
- 7. The applicant shall clarify if the existing and proposed buildings will have public access. If so, the applicant shall provide an ADA accessible route to them.

C. PRELIMINARY DETAILED ENGINEERING PLAN COMMENTS

The following comments shall be addressed by the applicant during the detailed engineering drawing submittal, and do not affect the recommendation for approval to the Township of Ypsilanti Planning Commission. It should be noted that this is not an all-inclusive list and additional comments may be generated as new information is presented.

- 1. The applicant shall provide additional spot elevations at all four (4) corners of the proposed barrier-free parking space and access aisle, as well as along the proposed sidewalk to verify ADA compliance. The applicant shall note the cross-slope shall note exceed 2%, per ADA Standards.
- 2. The applicant shall clarify if the proposed access aisle is flush with the proposed sidewalk.
- 3. The applicant shall provide a stormwater narrative on the plans clarifying how the existing and proposed stormwater runoff will be managed.
- 4. The applicant shall provide a Certificate of Outlet, signed and sealed by a registered engineer in the State of Michigan, on the plans.
- 5. The applicant shall clarify if soil borings have been performed on-site. If so, their logs and locations shall be provided on the plans and a copy of the geotechnical report shall be provided to this office.
- 6. The applicant shall clarify how storm water runoff will be managed around the building (i.e., roof drains).
- 7. The applicant shall note that trees shall not be placed directly above any existing or proposed utilities. The applicant shall review and revise accordingly.
- 8. The applicant shall provide a cross-section detail for the proposed asphalt pavement.
- 9. The applicant shall provide a minimum of two (2) NAVD 88 benchmarks on the plans, per Township Standards. It currently appears only one (1) has been provided.
- 10. The applicant shall provide a quantity table on the Cover Sheet for all proposed utilities, delineated by existing or proposed road ROW or easement.



11. The applicant shall provide the applicable Ypsilanti Township or YCUA Standard Detail Sheets within the plan set, including the SESC Detail Sheet. The detail sheets can be obtained by emailing stacie.monte@ohm-advisors.com.

D. REQUIRED PERMITS & APPROVALS

The following outside agency reviews and permits will be required for the project. Copies of any correspondence between the applicant and the review agencies, as well as the permit or waiver, shall be sent to both the Township and OHM Advisors (email: stacie.monte@ohm-advisors.com).

- ▼ **Ypsilanti Community Utilities Authority (YCUA):** Review and approval is required of all proposed changes to the water main, including proposed services.
- **▼ Ypsilanti Township Fire Department:** Review and approval is required.
- Washtenaw County Water Resources Commissioner's Office (WCWRC): Review and approval is required.
- Washtenaw County Road Commission (WCRC): Review and approval of all proposed work within the Rawsonville Road ROW is required.
- Washtenaw County Department of Public Health (WCDPH): Review and approval of the proposed septic/drain field will be required.
- Washtenaw County Building Department: Review and approval of the proposed septic/drain field will be required.
- ▼ **Ypsilanti Township Office of Community Standards:** A Soil Erosion and Sedimentation Control permit shall be secured from the Ypsilanti Township Office of Community Standards.
- ▼ The Township's Planner will inspect the landscaping for this site.
- If dewatering should be needed, the contractor/applicant shall be responsible for obtaining necessary approvals from the Township and the Township Engineer, permission from all impacted adjacent properties and/or permits from MDOT, WCWRC's Office, or the WCRC.
- ▼ Record plans shall be provided to the Township Engineer following the completion of construction.

Should you have any questions regarding this matter, please contact this office at (734) 466-4580.

Sincerely, OHM Advisors

Matthew D. Parks, P.E.

Stacie L. Monte

MDP/SLM

cc: Fletcher Reyher, Township Staff Planner Doug Winters, Township Attorney Steven Wallgren, Township Fire Marshall File

P:\0000_0100\SITE_YpsilantiTwp\2023\0098231000_7130 Rawsonville_Snider Electric\MUNI\01_SITE\SP#1\Snider Electric_PSP#1_2023-02-16.docx

CHARTER TOWNSHIP OF YPSILANTI FIRE DEPARTMENT

BUREAU OF FIRE PREVENTION

222 South Ford Boulevard, Ypsilanti, MI 48198

February 16, 2023

Jason Iacoangeli, Planning Director Charter Township of Ypsilanti 7200 S. Huron River Drive Ypsilanti, MI 48197

RE: Preliminary (non-residential) Site Plan Review #1

Project Name: Snider Electric

Project Location: 7130 Rawsonville Road Ypsilanti, MI 48111

Plan Date: 1/20/2023 Project Number: 1051-22-11390 Applicable Codes: IFC 2018

Engineer: Andrew R. Walters MCA

Status of Review

Status of review: Approved as Submitted

All pages were reviewed

Site Access

Comments: A Knox Box will be required upon C of O. Contact the Fire Marshal's office for location details.

Sincerely,

Steve Wallgren, Fire Marshal

Charter Township of Ypsilanti Fire Department

734-544-4107 CFPS, CFI I February 16, 2023 10:21 AM

⊕ Preliminary Site Plan #1 - Snider Electric - 7130 Rawsonville



From: ("Scott Westover" < SWestover@ycua.org>

To: | "Fletcher Reyher" <freyher@ypsitownship.org>

Cc: ("Jason lacoangeli" <jiacoangeli@ytown.org>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

There is no proposed water supply or wastewater work. YCUA has no comment or objections to the plans.

SCOTT WESTOVER | Director of Engineering Telephone: (734) 484-4600 ext. 220

swestover@ycua.org

2777 State Road | Ypsilanti, Michigan USA 48198-9112 **Ypsilanti Community Utilities Authority** www.ycua.org

name of the sender or anything else in this message is intended to constitute an electronic signature for purposes of the Uniform Electronic Transactions Act or the Electronic Signatures in Global and National Commerce immediately, and do not use this message or any attachments for any purpose, or distribute or otherwise disclose its contents to any person, or copy or store it in any medium. Neither this information block, the typed This Internet message and any attachments may contain information that is confidential and/or legally privileged. It is intended for use only by the named recipients. If you are not a named recipient, please notify me Act ("E-Sign"). The recipient should check this email and any attachments for the presence of viruses. YCUA accepts no liability for any damage caused by any virus transmitted by this email. Thank you,

Charter Township of Ypsilanti Office of Community Standards 7200 S. Huron Drive, Ypsilanti, MI 48197 Phone: (734) 485-3943 Website: https://ytown.org

RECEIVED BY

FEB 0 1 2023

SITE PLAN REVIEW **APPLICATION**

YPSILANTI TOWNSHIP

I. APPLICATION/DEVELOPMENT TYPE	
Development:	Application:
☐ Subdivision ☐ Multi-family/Condominium ☐ Site Condominium ☐ Planned Development ☐ Non-residential	Administrative Site Plan Review Sketch Site Plan Review Full Site Plan Review Revisions to approved plan Tentative Preliminary Plat Final Preliminary Plat Final Plat Process Stage I (for Planned Development) Stage II (for Planned Development)
II. PROJECT LOCATION Address:	City: Belleville State: MJ Zip: 4811 (sing ELECTRIC LLC Building
Describe Proposed Project (including buildings/str Fotore Site USE McLuding 1 NEU Building To Bc Built &	New Lean To on Existing out Building
Address:	Phone: 734-790-6059 City: Belleville State:/MI Zip: 4811(Phone:
Engineer:	Phone:
Address:	City: State: Zip:
ax tilidii	

Charter Township of Ypsilanti Office of Community Standards 7200 S. Huron Drive, Ypsilanti, MI 48197 Phone: (734) 485-3943 Website: https://ytown.org

SITE PLAN REVIEW **APPLICATION**

S _____ FEE TOTAL

VI. SCHEDULE OF FEES

		Preliminary Site Plan Review
	Non-refundable fee	Refundable deposit
		Less than one (1) acre: \$2,000
Full	\$500	One (1) acre to five acres: \$4,000
ruii	\$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	¢E00	One (1) acre to five acres: \$2,000
Sketch	\$500	Over five (5) acres to ten (10) acres: \$2,500
		Greater than ten (10) acres: 25,500 + \$50 per acre over ten (10) acres
		Less than one (1) acre: \$1,000
A -l ! ! t +!	¢100	One (1) acre to five 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
DI I		Less than one (1) acre: \$3,000
Planned	\$1,500 + \$20 per acre	One (1) acre to five acres: \$4,000
Development Stage		Over five (5) acres to ten (10) acres: \$5,500
I and Rezoning		Greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres
	•	Final Site Plan Review
	Non-refundable fee	Refundable deposit
		Less than one (1) acre: \$3,000
Full	\$500	One (1) acre to five acres: \$4,000
ruii		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 acres: \$2,000
Skettii	\$500.	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 acres: \$1,200
	\$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
Planned		Less than one (1) acre: \$3,000
	\$1,500 + \$20 per	One (1) acre to five acres: \$4,000
Development Stage	acre	Over five (5) acres to ten (10) acres: \$5,500
I and Rezoning		Greater than ten (10) acres: \$5,500 + \$50 per acre over ten (10) acres

SECTION AND ADDRESS OF SECTION ADDRESS OF		
V. APPLICANT SIGNATURE	C	7 / 77
100	GeorgeMSMIDER	d-1-0
Ápplicant Signature	Print Name	Date

Charter Township of Ypsilanti Office of Community Standards 7200 S. Huron Drive, Ypsilanti, MI 48197 Phone: (734) 485-3943 Website: https://ytown.org

SITE PLAN REVIEW **APPLICATION**

Site Plan Review	v applications
The application is filled out in its entirety and includes the signature of the applicant and, if different than the applicant, the property owner. Fees Check made out to Ypsilanti Township with appropriate fees. Please note: The same preliminary site plan review fee will be charged for each subsequent submittal Fees paid separately to Ypsilanti Community Utilities Authority Fees paid separately to Washtenaw County Road Commission and Water Resources Commissioner's Office Additional Documents: Woodland Protection application or the No Tree Affidavit, if applicable Traffic Impact Questionnaire Appropriate application and plans submitted to the Washtenaw County Road Commission and Water Resources Commission and Water Resources Commissioner's Office	Proposed Plans One (1) signed and sealed copies (24"x36") of the proposed plan One (1) copy (11"x17") of the proposed plan One (1) PDF digital copy of the proposed plan All contents detailed on the next pages for administrative, sketch, and full site plans.

7130 RAWSONVILLE ROAD SITE PLAN

7130 RAWSONVILLE ROAD, YPSILANTI TWP., WASHTENAW COUNTY, MI

PROJECT CONTACTS

PLANNING & BUILDING

CHARTER TOWNSHIP OF YPSILANTI 7200 S. HURON DRIVE YPSILANTI, MI 48197 PHONE: 734.485.3943

STORM WATER / SESC

WASHTENAW COUNTY WATER RESOURCES COMMISSION 705 NORTH ZEEB ROAD P.O. BOX 8645 ANN ARBOR, MI 48107-8645 PHONE: 734.222.6860 FAX: 734.222.6803

RIGHT-OF-WAY PERMITTING

WASHTENAW COUNTY ROAD COMMISSION 555 NORTH ZEEB ROAD ANN ARBOR, MI 48103 PHONE: 734.761.1500 FAX: 734.3239

OWNER / APPLICANT

SNIDER ELECTRIC COMPANY CONTACT: GEORGE SNIDER 43425 HULL ROAD BELLEVILLE, MI 48111 PHONE: 734-260-0113 EMAIL: SNIDERELECTRIC@ATT.NET

SURVEYOR / ENGINEER

METRO CONSULTING ASSOCIATES CONTACT: ANDREW WALTERS, PE 45345 FIVE MILE ROAD PLYMOUTH, MI 48170 PHONE: 800.525.6016 EMAIL: AWALTERS@METROCA.NET

ARCHITECT

DANGEROUS ARCHITECTS
CONTACT: SCOTT MCELRATH
104 S. MAIN STREET
CHELSEA, MI 48118
PHONE: 734-475-3660
EMAIL:
SMCELRATH@DANGEROUSARCHITECTS.COM



OVERALL AREA MAP
SCALE 1" = 150"

LAND DEVELOPMENT SUMMARY

MCA, ON BEHALF OF SNIDER ELECTRIC, IS RESPECTFULLY REQUESTING THE NECESSARY APPROVALS AND PERMITS TO CONSTRUCT A 1,950 SF ADDITION TO AN EXISTING ACCESSORY BUILDING AND A 6,000 SF NEW ACCESSORY BUILDING AT 7130 RAWSONVILLE ROAD IN THE TOWNSHIP OF YPSILANTI, WASHTENAW COUNTY, MICHIGAN. THE NEW AND EXISTING BUILDINGS WILL BE USED AS A CONTRACTORS YARD.

THE EXISTING PARCEL IS 5.0 ACRES IN SIZE AND HAD PREVIOUSLY BEEN USED FOR TRUCK RENTAL. THE SITE IS ZONED I—T: INNOVATION AND TECHNOLOGY DISTRICT AND THE PROPOSED USE IS A PERMITTED USE. THE PROPOSED PROJECT WILL INCLUDE A ±1,950 SF BUILDING EXPANSION AND NEW 6,000 SF BUILDING, AS WELL AS THE ASSOCIATED PARKING AREA, UTILITIES, STORM WATER MANAGEMENT SYSTEM, AND LANDSCAPING. ALL WORK INTERNAL TO THE SITE AND WITHIN THE RAWSONVILLE ROAD RIGHT—OF—WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE WASHTENAW COUNTY ROAD COMMISSION.

WATER: WATER IS PROVIDED TO THE SITE FROM AN EXISTING TAP TO THE 12" PUBLIC WATER MAIN ON THE WEST SIDE OF RAWSONVILLE ROAD.

SANITARY: SANITARY SERVICE WILL BE PROVIDED BY AN ON-SITE SEPTIC SYSTEM IN ACCORDANCE WITH THE WASHTENAW COUNTY HEALTH DEPARTMENT REQUIREMENTS.

STORMWATER: DRAINAGE FROM THE SITE WILL DRAIN TO AN ON-SITE RETENTION POND. THE STORM WATER MANAGEMENT SYSTEM WILL MEET THE REQUIREMENTS OF WASHTENAW COUNTY WATER RESOURCE COMMISSION.

FLOODPLAIN: ACCORDING TO FEMA FIRM MAP 26161C0445E, DATED APRIL 3, 2012, THE SITE IS LOCATED IN AN AREA OF MINIMAL FLOOD HAZARD (ZONE X).

RIGHT-OF-WAY: ALL WORK WITHIN THE RAWSONVILLE ROAD RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE WASHTENAW COUNTY ROAD COMMISSION STANDARDS AND SPECIFICATIONS. A PERMIT FROM THE WASHTENAW COUNTY ROAD COMMISSION WILL BE REQUIRED.

ALL SIGNING AND TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE

SOIL EROSION CONTROL: A SOIL EROSION PERMIT FROM THE WASHTENAW COUNTY WATER RESOURCES COMMISIONER'S OFFICE WILL BE REQUIRED.

SITE

W. HURON RIVER DE

JEWETT DRAIN

BOG RD.

HULL RD.

WARTZ RD.

BEMIS RD.

VICINITY MAP

SHEET INDEX

- 01 COVER SHEET
- 02 EXISTING CONDITIONS & DEMOLITION PLAN03 LAYOUT PLAN
- 04 GRADING AND UTILITY PLAN
- 05 SEPTIC SYSTEM PLAN AND CALCULATIONS
- O6 SOIL EROSION AND SEDIMENTATION CONTROL PLANO7 SOIL EROSION AND SEDIMENTATION CONTROL DETAILS
- 08 STORMWATER MANAGEMENT CALCULATIONS
- 09 LANDSCAPE PLAN
- T1 ARCHITECTURAL LAYOUT
- PM1 PHOTOMETRIC PLAN
- A1 FIRST FLOOR PLAN
- A4 EXTERIOR ELEVATIONS
- A5 BUILDING SECTIONS
 A1A BARN PLAN & ELEVATIONS

LEGAL DESCRIPTION

(FROM RECORD SURVEY)

Beginning at a point in the east line of Section 36, T3S, R7E, Ypsilanti Township, Washtenaw County, Michigan, which point is situated south 1°-30' West 654.8 feet from the northeast corner of said section; running thence north 89°-00' west 1330.6 feet to a point; thence south 1°-28'-15" west 163.7 feet to a point; thence south 89°-00' east 1329.97 feet to a point in the east line of said section; thence north 1°-30' east along said east line, 163.7 feet to the point of beginning; containing 5.0 acres of land more or less.

PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THI WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

Revisions

Revisions



JNDERGROUND UTILITIES ARE SHOWN N AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL

FAILURE TO EXACTLY LOCATE AND

 Project Number
 Date

 1051-22-11390
 1/20/2023

 P.M.
 Checked by ARW
 Drawn by ARW
 Crew/Book N/A

Client
SNIDER ELECTRIC

Project
7130 RAWSONVILLE ROAD

Site Address 7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

WASHTENAW YPSILANTI TWP.

Township Range Section
3 S 7 E 36

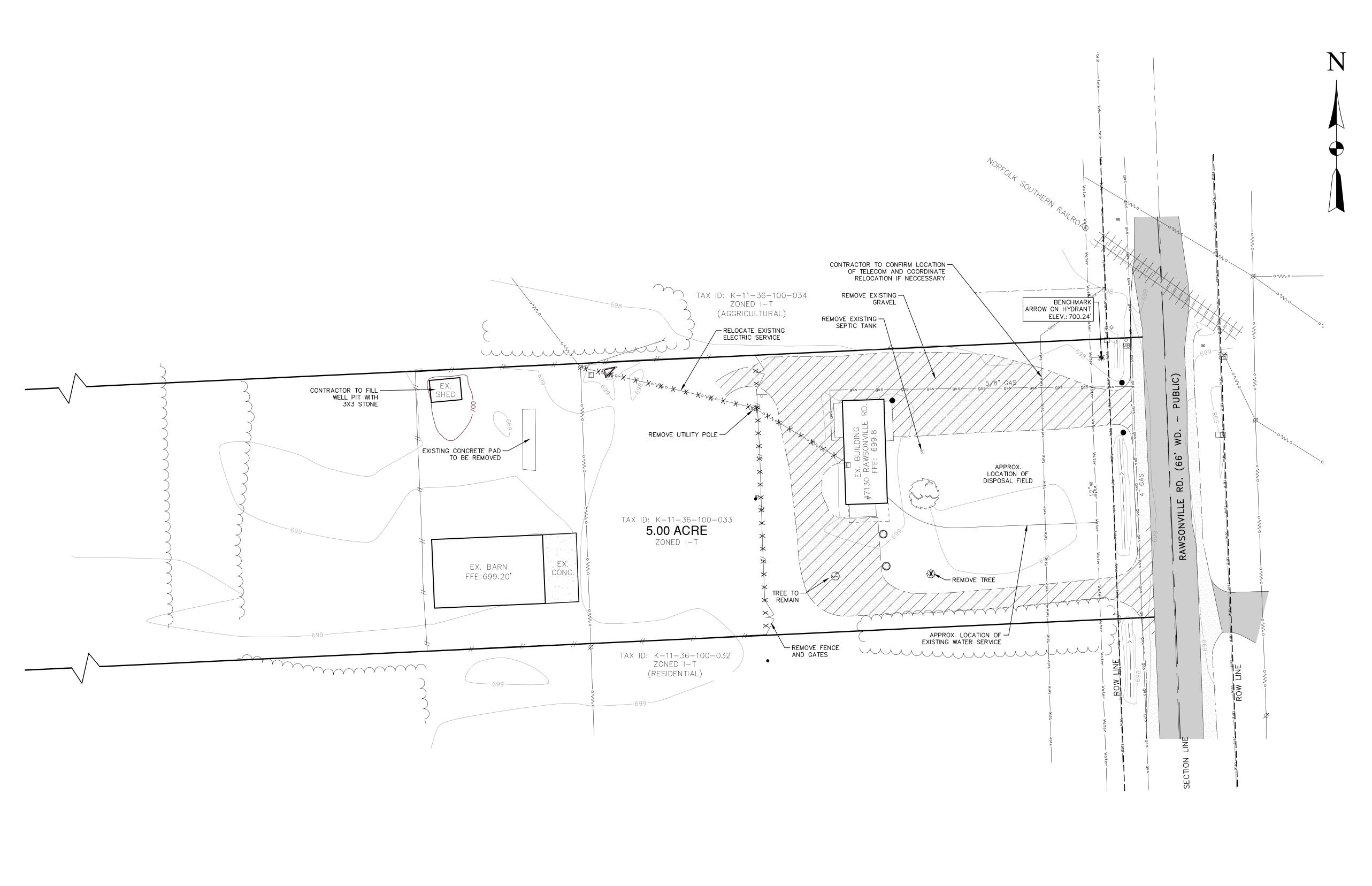


Professional Name Date
ANDREW R. WALTERS, PE 1/20/23

SITE PLAN
COVER SHEET

ng Scale St

COPYRIGHT © 2023 METRO CONSULTING ASSOCIATES; ALL RIGHTS RESERVED.



LEGEND:

652	EX. CONTOUR
	EX. PROPERTY LINE
	EX. ADJACENT PROPERTY LINE
	EX. SECTION LINE
	EX. CURB/PAVEMENT
	EX. FENCE
	EX. GRAVEL
	EX. Q DITCH
	EX. TREELINE
-0	EX. SIGN
[MB]	EX. MAILBOX
	EX. WATER MAIN
₩ ×	EX. WATER VALVE
**	EX. HYDRANT
	EX. STORM SEWER
СВ	EX. STORM INLET/CATCH BASIN
(37)	EX. STORM MANHOLE
	EX. STORM END SECTION
	EX. SANITARY SEWER
\$	EX. SANITARY MANHOLE
	EX. UNDERGROUND GAS
G	
	EX. OVERHEAD ELECTRIC
	EX. UNDERGROUND ELECTRIC
	EX. UNDERGROUND CABLE
Т	EX. TELEPHONE PEDESTAL
C	EX. CABLE PEDESTAL
E	EX. ELECTRIC EQUIPMENT
G	EX. GAS METER
E © ↓ \ \ \ \	EX. LIGHT POLE
× .	EX. UTILITY POLE
$\stackrel{\searrow}{\longrightarrow}$	EX. GUY WIRE
^	SECTION CORNER
$lackbox{f \Psi}$	SECTION CORNER

UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

Know what's below.
Call before you dig.

THE LOCATIONS OF EXISTING

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER

PERSONS.

EXISTING CONDITION NOTES:

- 1. BASIS OF BEARINGS: NAD83 MICHIGAN STATE PLANE COORDINATE SYSTEM, MI83—SIF, SOUTH ZONE, INTERNATIONAL SURVEY FOOT
- 2. DATUM OF ELEVATION: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- 3. SOME FEATURES SHOWN ON SURVEY MAY BE OUT OF SCALE FOR CLARITY.
- 4. DATE OF SURVEY: NOVEMBER 16, 2022
- 5. DIMENSIONS ON THIS SURVEY ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED.
- 6. UTILITY LOCATIONS SHOWN ARE APPROXIMATE PER FIELD OBSERVATIONS AND PROVIDED UTILITY MAPS
- 7. THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A REPLACEMENT OR ORIGINAL BOUNDARY SURVEY A ROUTE SURVEY, OR A SURVEYOR LOCATION REPORT.
- 8. ACCORDING TO FEMA FIRM MAP 26161C0445E, DATED APRIL 3, 2012, THE SITE IS LOCATED IN AN AREA OF MINIMAL FLOOD HAZARD (ZONE X).

DEMOLITION NOTES:

- 1. THE CONTRACTOR SHALL CALL 811 MISS-DIG AT LEAST THREE WORKING DAYS PRIOR TO CONSTRUCTION.
- 2. A SOIL EROSION CONTROL PERMIT FROM THE AUTHORITY HAVING JURISDICTION IS REQUIRED AND SOIL EROSION CONTROL BMP'S SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF DEMOLITION ACTIVITIES.
- 3. THE CONTRACTOR SHALL INDEPENDENTLY VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO DEMOLISH OR RELOCATE ANY SITE FEATURES AS ACCORDING TO PLAN AND/OR AS APPROPRIATE TO FACILITATE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- 5. PRIOR TO REMOVING, RELOCATING, OR PERFORMING ANY WORK ON A UTILITY, THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY OWNER.
- 6. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGALLY DESIGNATED DISPOSAL AREA. PERMITS AND FEES FOR DISPOSAL OF DEMOLITION MATERIAL SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
- 7. COORDINATE WITH THE UTILITY PLAN REGARDING DEMOLITION OR RELOCATION OF EXISTING UTILITIES.
- 8. REMOVE BUILDING FOOTINGS TO A MINIMUM OF TWO FEET BELOW FINISHED GRADE AND, WHERE UNDER PROPOSED BUILDINGS OF PAVED AREAS, BACKFILL WITH ENGINEERED
- 9. REMOVAL OF EXISTING LIGHT POLES SHALL INCLUDE THE REMOVAL OF THE POLE BASE AND CONDUIT BETWEEN LIGHTS.
- 10. REMOVAL OF CONCRETE SIDEWALK AND/OR CURB SHALL BE TO THE NEAREST JOINT UNLESS OTHERWISE NOTED.
- 11. PAVEMENTS TO BE REMOVED SHALL BE SAW CUT TO THE FULL DEPTH OF THE PAVEMENT. THE CONTRACTOR SHALL TAKE CARE TO MAINTAIN A CLEAN EDGE OF PAVEMENT.



1051-22-11390 1/20/2023 | Checked by Drawn by Crew/Book ARW ARW ARW N/A

SNIDER ELECTRIC

7130 RAWSONVILLE ROAD

7130 RAWSONVILLE ROAD

YPSILANTI TWP., MI 48111

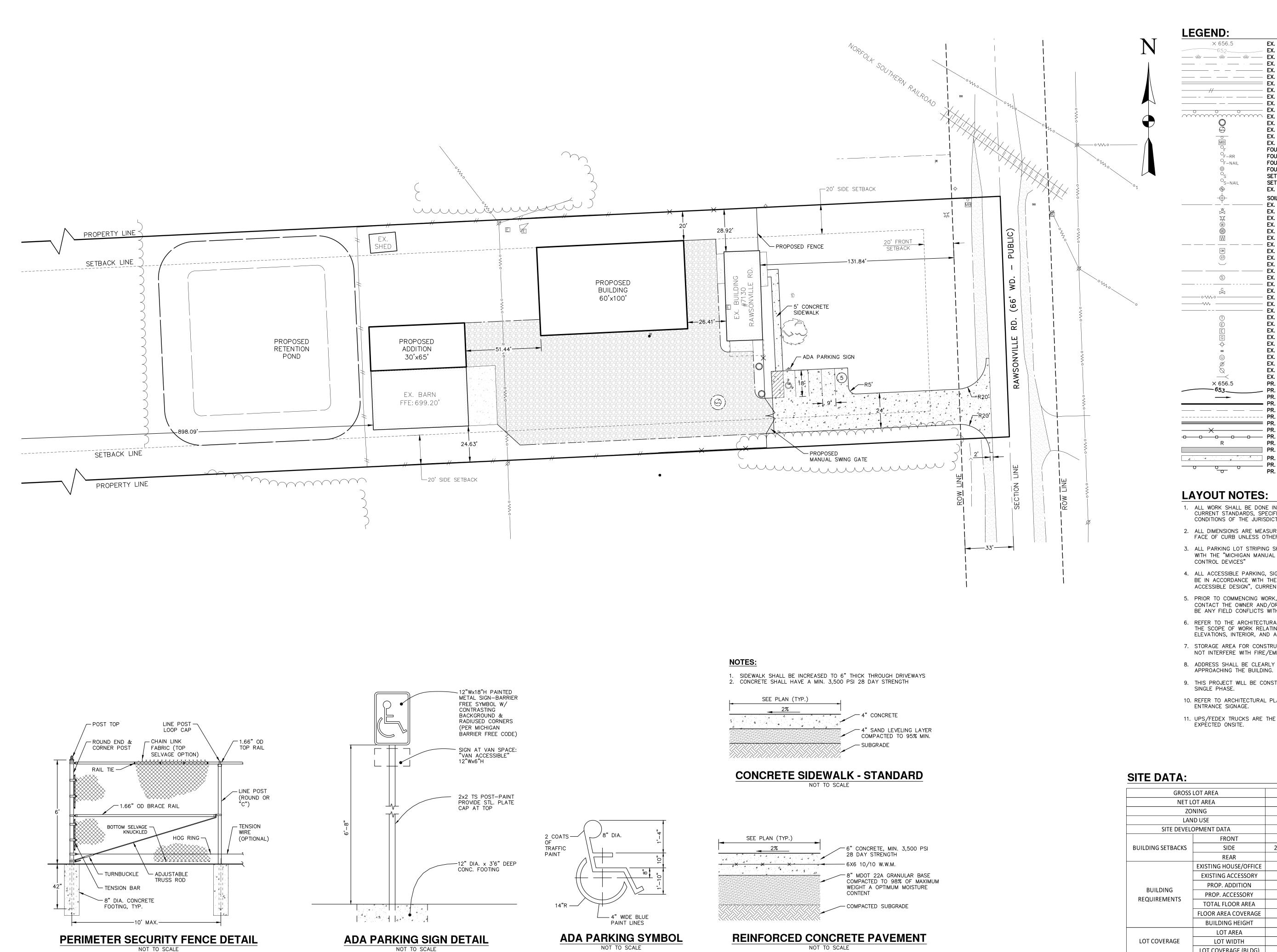
WASHTENAW YPSILANTI TWP. 3 S 7 E 36

ANDREW R. WALTERS, PE 1/20/23

SITE PLAN

EXISTING CONDITIONS & DEMOLITION PLAN

Sheet Number





LEGEND:	
× 656.5	EX. SPOT ELEVATION
652-	EX. CONTOUR
\lu \lu \lu \lu	EX. WETLAND LIMITS
· · ·	EX. ADJACENT PROPERTY LINE
	EX. SECTION LINE
	EX. EASEMENT LINE
	EX. CURB/PAVEMENT
	EX. FENCE EX. GRAVEL
	EX. © DITCH
	EX. GUARDRAIL
	EX. TREELINE
O	EX. TREE (CONIFEROUS)
Ö	EX. TREE (DECIDUOUS)
— <u>O</u> MB	EX. SIGN
<u>мв</u>] О _F	EX. MAILBOX
F	FOUND IRON PIPE
O F-RR O	FOUND IRON ROD
O _{F-NAIL}	FOUND PK NAIL FOUND CONC. MONUMENT
© O _S O _{S-NAIL}	SET IRON ROD
OS-NAII	SET MAG NAIL
*	EX. SECTION CORNER
	SOIL BORING
·	EX. WATER MAIN
₩ ⊠	EX. WATER VALVE
	EX. HYDRANT
<u>@</u>	EX. WATER MANHOLE
(EX. WELL
$\overline{\mathbb{W}}$	EX. WATER METER
	EX. STORM SEWER
CB C	EX. STORM INLET/CATCH BASII
(ST)	EX. STORM MANHOLE
	EX. STORM END SECTION EX. SANITARY SEWER
(S)	EX. SANITARY MANHOLE
	EX. UNDERGROUND GAS
G⊠	EX. GAS VALVE
owo-	EX. OVERHEAD ELECTRIC
	EX. UNDERGROUND ELECTRIC
	EX. UNDERGROUND CABLE
\bigcirc	EX. TELEPHONE MANHOLE
Ē	EX. ELECTRIC MANHOLE
E	EX. ELECTRIC METER EX. GAS METER
G ☆	EX. LIGHT POLE
-¢- ■ (i)	EX. TRAFFIC SIGNAL BOX
— (i)	EX. UNIDENTIFIED MANHOLE
Ø	EX. TRAFFIC SIGNAL POLE
8	EX. UTILITY POLE
<u> </u>	EX. GUY WIRE
× 656.5	PR. SPOT ELEVATION
653	PR. CONTOUR
	PR. DRAINAGE ARROW
	PR. SITE PROPERTY LINE PR. EASEMENT LINE
	PR. SETBACK LINE
	PR. CURB/PAVEMENT
X	PR. FENCE
	PR. DECORATIVE FENCE
R	PR. SIDEWALK RAMP
	PR. ASPHALT PAVEMENT
4 4	PR. CONCRETE
0 0 0	PR. GUARDRAIL
<u> </u>	PR. SIGN

LAYOUT NOTES:

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS, SPECIFICATION, AND GENERAL CONDITIONS OF THE JURISDICTION HAVING AUTHORITY.
- 2. ALL DIMENSIONS ARE MEASURED TO THE PAINT LINE OR FACE OF CURB UNLESS OTHERWISE NOTED.
- 3. ALL PARKING LOT STRIPING SHALL BE IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"
- 4. ALL ACCESSIBLE PARKING, SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE "ADA STANDARDS FOR ACCESSIBLE DESIGN", CURRENT EDITION.
- 5. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE OWNER AND/OR ENGINEER SHOULD THERE BE ANY FIELD CONFLICTS WITH THE DESIGN INTENT.
- 6. REFER TO THE ARCHITECTURAL PLANS FOR COORDINATING THE SCOPE OF WORK RELATING TO THE BUILDING ELEVATIONS, INTERIOR, AND APPURTENANCES.
- 7. STORAGE AREA FOR CONSTRUCTION MATERIALS SHALL NOT INTERFERE WITH FIRE/EMERGENCY SITE ACCESS.
- 8. ADDRESS SHALL BE CLEARLY VISIBLE WHEN
- 9. THIS PROJECT WILL BE CONSTRUCTED/COMPLETED IN A
- 10. REFER TO ARCHITECTURAL PLANS FOR PROPOSED
- ENTRANCE SIGNAGE. 11. UPS/FEDEX TRUCKS ARE THE ONLY DELIVERY VEHICLES

GROSS LOT AREA		217,716 SF/5.0 AC		
NET L	OT AREA	212,315 SF/4.87 AC		
ZC	NING	ı	-T	
LAN	ND USE	CONTRAC	CONTRACTOR'S YARD	
SITE DEVEL	OPMENT DATA	REQUIRED	REQUIRED PROPOSED	
	FRONT	20 FT	131.8 FT	
BUILDING SETBACKS	SIDE	20 FT / 70 FT	20 FT/24.6 F	
	REAR	50 FT	898.09	
	EXISTING HOUSE/OFFICE	N/A	1,470	
	EXISTING ACCESSORY	N/A	2,600	
DUUDING	PROP. ADDITION	N/A	1,950	
BUILDING	PROP. ACCESSORY	N/A	5,600	
REQUIREMENTS	TOTAL FLOOR AREA	N/A	11,620	
	FLOOR AREA COVERAGE	N/A	5.5%	
	BUILDING HEIGHT	40 FT	19.5 FT (EX), 38	
	LOT AREA	NONE	212,315	
LOT COVERAGE	LOT WIDTH	NONE	163.7	
	LOT COVERAGE (BLDG)	NONE	5.5%	
	TOTAL SPACES		5	
	LENGTH	18 FT	18 FT	
PARKING	WIDTH	9 FT	9 FT	
	AISLE	24 FT	24 FT	
	ADA SPACES	1	1	



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

Dynamic. Daring. Diverse.**DIFFERENT**

1051-22-11390 1/20/2023 | Checked by | Drawn by | Crew/Book ARW ARW ARW N/A

SNIDER ELECTRIC

7130 RAWSONVILLE ROAD

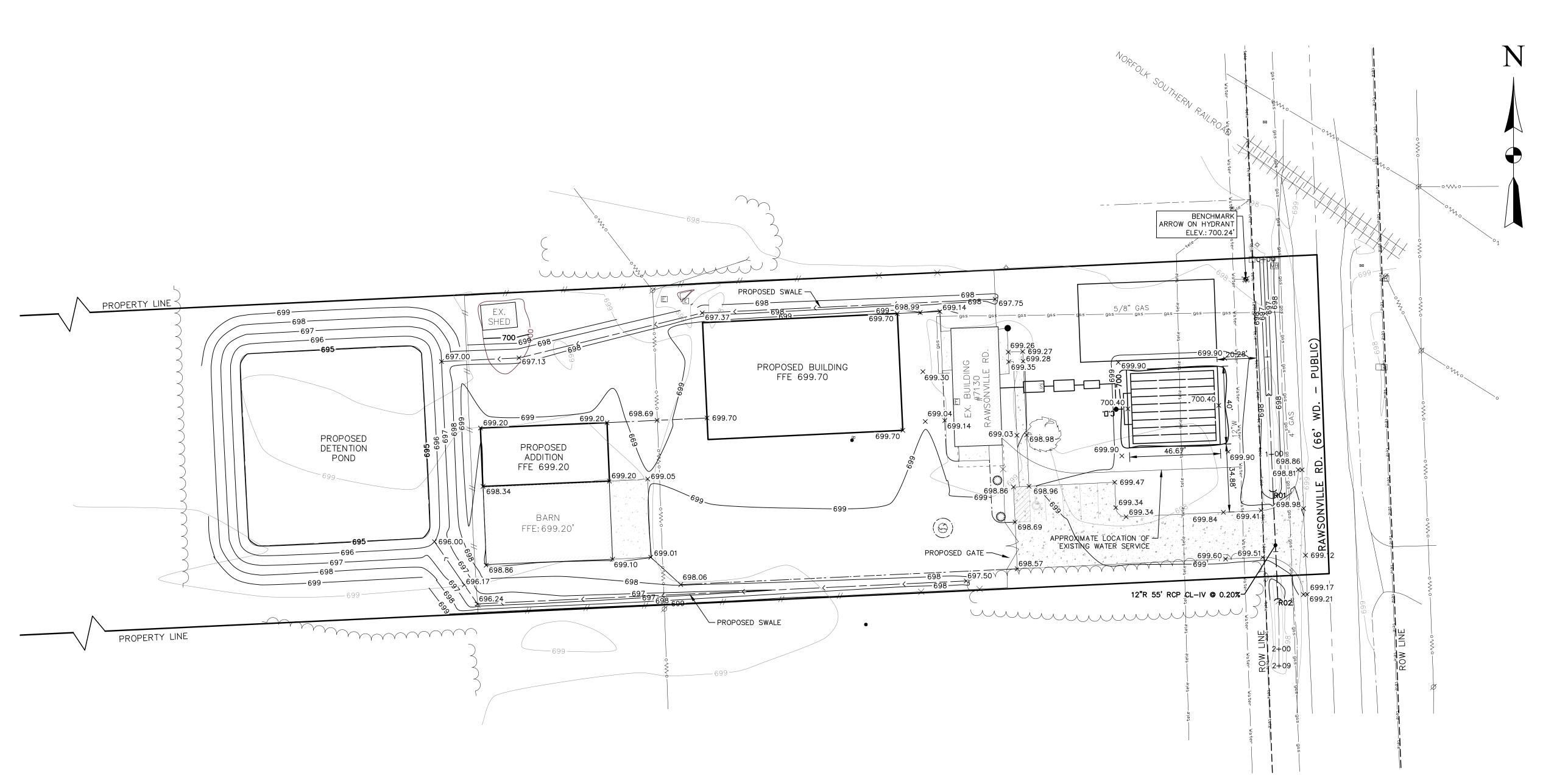
7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

WASHTENAW YPSILANTI TWP. Township Range Section 3 S 7 E 36

ANDREW R. WALTERS, PE 1/20/23

SITE PLAN LAYOUT PLAN

Sheet Number



I FGEND.

LEGEND:	
× 656.5	EX. SPOT ELEVATION EX. CONTOUR
652	EX. CONTOUR
	EX. ADJACENT PROPERTY LINE EX. SECTION LINE
	FX FASFMENT LINE
=======================================	EX. EASEMENT LINE EX. CURB/PAVEMENT
	EX. FENCE
	EX. GRAVEL
	EX. Q DITCH
	EX. GUARDRAIL
	EX. TREELINE EX. TREE (CONIFEROUS)
	EX. TREE (DECIDUOUS)
	EX. SIGN
MB MB	EX. MAILBOX
O _F	FOUND IRON PIPE
O F – RR O	FOUND IRON ROD
	FOUND CONC. MONIMENT
o _s	FOUND CONC. MONUMENT SET IRON ROD
O _{S-NAIL}	SET MAG NAIL
⊕	EX. SECTION CORNER
-	SOIL BORING
	EX. WATER MAIN
.₩	EX. WATER VALVE
(W) (W) (W)	EX. HYDRANT
(W)	EX. WATER MANHOLE EX. WELL
W	EX. WATER METER
	EX. STORM SEWER
СВ	EX. STORM INLET/CATCH BASIN
S T	EX. STORM MANHOLE
	EX. STORM END SECTION
	EX. SANITARY SEWER
<u> </u>	EX. SANITARY MANHOLE EX. UNDERGROUND GAS
G	EX. GAS VALVE
	EX. OVERHEAD ELECTRIC
	EX. UNDERGROUND ELECTRIC
	EX. UNDERGROUND CABLE
(T) (E)	EX. TELEPHONE MANHOLE EX. ELECTRIC MANHOLE
E	EX. ELECTRIC METER
G	EX. GAS METER
- -	EX. LIGHT POLE
⊠	EX. TRAFFIC SIGNAL BOX
<u>()</u>	EX. UNIDENTIFIED MANHOLE EX. TRAFFIC SIGNAL POLE
8	EX. UTILITY POLE
$\stackrel{\sim}{\longrightarrow}$	EX. GUY WIRE
	PR. WATER MAIN
\bigotimes	PR. WATER VALVE
	PR. HYDRANT
	PR. WATER VALVE IN MANHOLE PR. WELL
$\overset{\bullet}{\triangleright}$	PR. REDUCER
	PR. STORM SEWER
	PR. STORM INLET/CATCH BASIN
	PR. STORM MANHOLE
	PR. STORM END SECTION PR. SANITARY SEWER
	PR. SANITARY MANHOLE
• C.□.	PR. CLEANOUT
Q 1	PR. UTILITY CROSSING LOCATION
	PR. UNDERGROUND GAS
S. ⊣	PR. GAS VALVE
\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	PR. LIGHT POLE
	PR. WATER EASEMENT
	PR. CURB/PAVEMENT PR. FENCE
4 4 4	PR. CONCRETE
0	PR. SIGN



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1051-22-11390 1/20/2023 Checked by Drawn by Crew/Book ARW ARW ARW N/A

7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

3 S 7 E 36

PLAN

SNIDER ELECTRIC

7130 RAWSONVILLE ROAD

WASHTENAW YPSILANTI TWP.

ANDREW R. WALTERS, PE 1/20/23

SITE PLAN GRADING AND UTILITY

Sheet Number

GRADING NOTES:

1. A SOIL EROSION CONTROL PERMIT FROM THE AUTHORITY HAVING JURISDICTION IS REQUIRED PRIOR TO THE COMMENCEMENT OF GRADING

2. ALL PROPOSED SPOT GRADES SHOWN AT THE TOP PAVEMENT, UNLESS OTHERWISE NOTED. NOTATION CODES ARE AS FOLLOWS: FF=FINISHED FLOOR, FG=FINISHED GRADE, TC=TOP OF CURB, RIM=TOP OF GRATE OR MANHOLE, TW=TOP OF WALK, TWALL=TOP OF WALL, BWALL=BOTTOM OF WALL, EM=EDGE

3. THE PROPOSED SLOPES ARE APPROXIMATE AS SHOWN.

4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE IN THE POST CONSTRUCTION CONDITIONS AND NO ADVERSE IMPACTS TO NEIGHBORING PROPERTIES DURING AND AFTER COMPLETION OF CONSTRUCTION.

5. WHEN PAVED AREAS ARE EXCAVATED, ASPHALT AREAS SHALL BE SAW-CUT AND REMOVED TO A DISTANCE EQUAL TO THE DEPTH OF EXCAVATION. CONCRETE SHALL BE REMOVED TO THE FIRST JOINT PAST THE DISTANCE EQUAL TO THE DEPTH OF EXCAVATION. COMPACTED SAND BACKFILL IS REQUIRED IN ALL EXCAVATIONS WITHIN A 1:1 SLOPE OF EXISTING OR PROPOSED PAVEMENT.

6. ALL SIDEWALK PLANNED TO BE ACCESSIBLE SHALL BE CONSTRUCTED WITH CROSS SLOPES LESS THAN 2% AND LONGITUDINAL SLOPES LESS THAN 5%.

7. ALL SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED PER THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION DETAILS AND IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT.

8. CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE AND/OR CATCH BASIN CASTINGS AFFECTED BY THE PROPOSED WORK. WHERE NECESSARY, DUE TO EXCESSIVE CHANGE IN ELEVATION, CONTRACTOR SHALL RECONSTRUCT THE STRUCTURE TO ACHIEVE THE PROPOSED GRADES.

GENERAL UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL REQUIRED STATE AND LOCAL PERMITS PRIOR TO THE START OF CONSTRUCTION. COPIES OF THE REQUIRED PERMITS SHALL BE KEPT ON-SITE AT ALL TIMES.

2. WHERE THESE PLANS MAY CONFLICT WITH THE REQUIREMENTS OF THE LOCAL JURISDICTION, THE LOCAL JURISDICTIONAL REQUIREMENTS SHALL GOVERN

3. ALL PROPOSED UTILITY MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF THE AUTHORITY HAVING JURISDICTION.

REGARDING UTILITY TRENCH BEDDING AND BACKFILL REQUIREMENTS. 5. REFER TO THE STANDARD DETAILS OF THE AUTHORITY HAVING JURISDICTION

4. REFER TO THE STANDARD DETAILS OF THE AUTHORITY HAVING JURISDICTION

REGARDING REQUIRED MANHOLE AND CASTING DETAILS AND TYPES. 6. UTILITY TESTING AS REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE CURRENT STATE AND LOCAL REQUIREMENTS.

7. A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN CROSSING UTILITIES, UNLESS OTHERWISE APPROVED.

8. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN SANITARY AND STORM SEWER LINES AND POTABLE WATER LINES.

9. THE CONTRACTOR SHALL CALL 811 AT LEAST THREE WORKING DAYS PRIOR

10. CONTRACTOR SHALL INDEPENDENTLY VERIFY EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION.

11. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ALL UTILITY CONNECTIONS TO THE BUILDING(S). CONTRACTOR SHALL CONFIRM ALL BUILDING CONNECTION LOCATIONS AND ELEVATIONS AND NOTIFY THE PROJECT TEAM OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

12. PRIVATE UTILITIES (INCLUDING ELECTRIC, GAS, PHONE, AND CABLE) SHOWN FOR SCHEMATIC PURPOSES ONLY. ALL PRIVATE UTILITY ROUTING AND INSTALLATION SHALL BE COORDINATED BY THE RESPECTIVE UTILITY COMPANY AND/OR THE CONTRACTOR.

13. IF REINSTALLING EXISTING HYDRANT IN NEW LOCATION, IT SHALL BE EQUIPPED WITH A STORZ CONNECTION.

14. THE EXISTING WATER & SANITARY SERVICE LINES SHALL BE ABANDONED AT THE EXISTING CONNECTIONS TO THE PUBLIC MAINS PRIOR TO THE INSTALLATION OF NEW SERVICE LINES.

700

695

2+30

2+00

(R01)

1+00

STRM R01-R02

1"=30' HORIZONTA 1"=3' VERTICAL

12" RCP CL-IV @ (

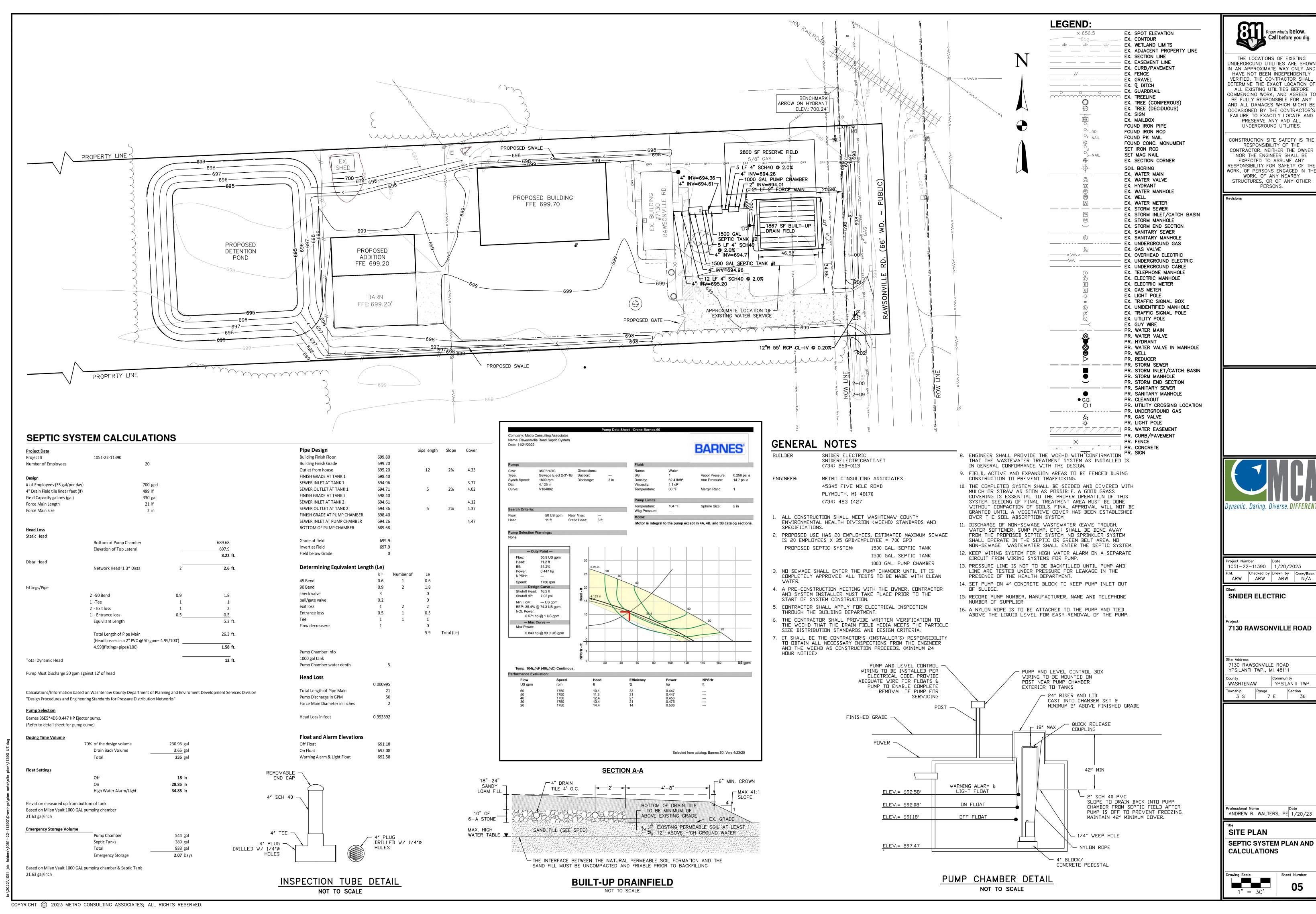
GROUND

0+00

PROPOSED

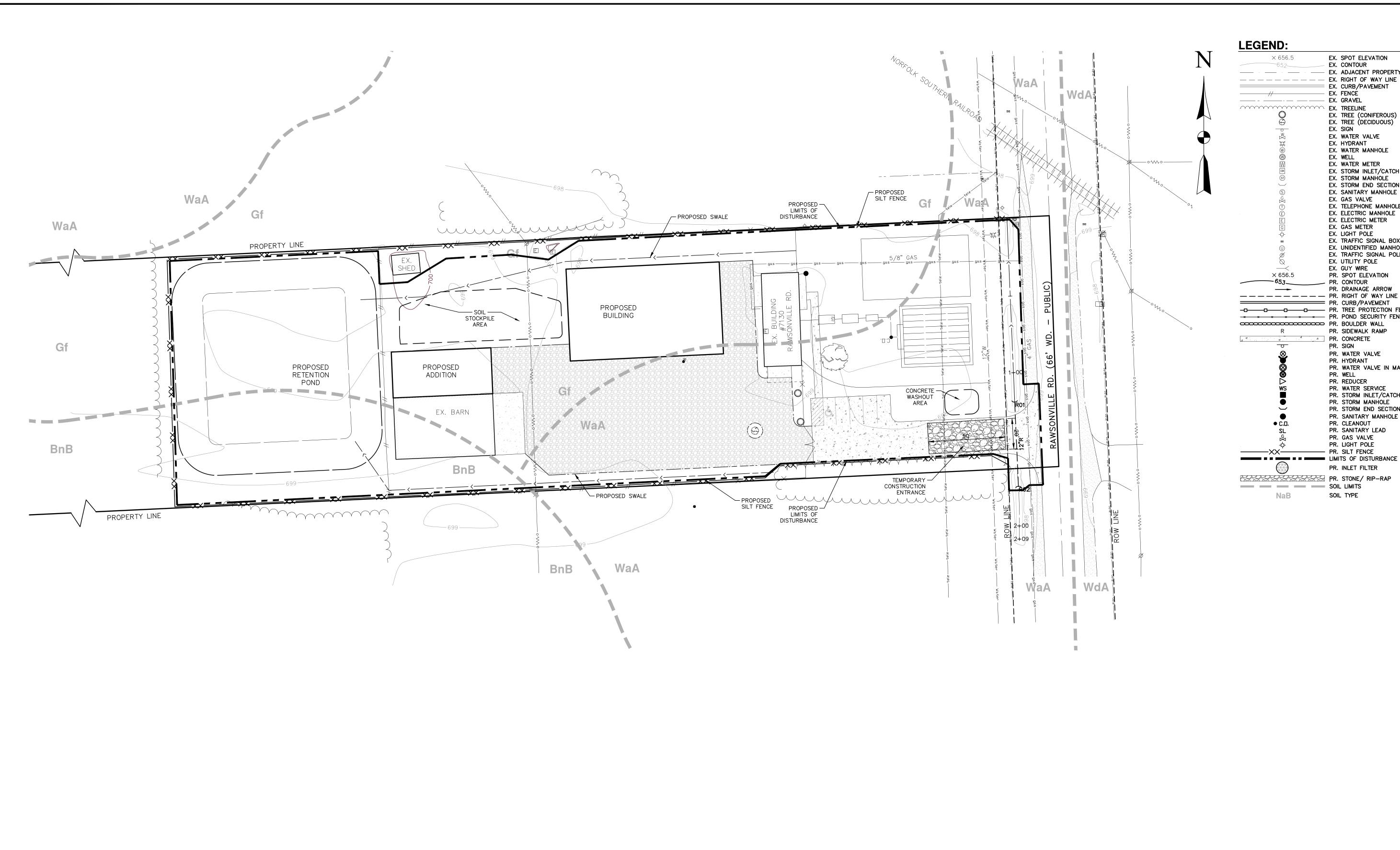
GRADE

700



| Checked by | Drawn by | Crew/Book

YPSILANTI TWP. 3 S 7 E 36



	EX. SPOT ELEVATION
652—	
	EX. ADJACENT PROPERTY LINE
	EX. RIGHT OF WAY LINE
	EX. CURB/PAVEMENT EX. FENCE
	EX. GRAVEL
	EX. TREELINE
<u></u>	EX. TREE (CONIFEROUS)
	EX. TREE (DECIDUOUS)
-	EX. SIGN
——— ₩	EX. WATER VALVE
<u>@</u>	EX. HYDRANT
W	EX. WATER MANHOLE
	EX. WELL
	EX. WATER METER
CB (ST)	EX. STORM INLET/CATCH BASINEX. STORM MANHOLE
$\stackrel{\smile}{\smile}$	EX. STORM END SECTION
\$	EX. SANITARY MANHOLE
_G	EX. GAS VALVE
(T)	EX. TELEPHONE MANHOLE
· Ē	EX. ELECTRIC MANHOLE
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ੋ* ≅	EX. TRAFFIC SIGNAL BOX
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~~ .v.c.c.c.e.	EX. GUY WIRE
× 656.5	PR. SPOT ELEVATION PR. CONTOUR
	PR. DRAINAGE ARROW
	PR. RIGHT OF WAY LINE
	PR. CURB/PAVEMENT
-0 0 0 0 0 	PR. TREE PROTECTION FENCE
	PR. POND SECURITY FENCE
R	PR. SIDEWALK RAMP
<u>O</u>	PR. CONCRETE PR. SIGN
	PR. WATER VALVE
*	PR. HYDRANT
	PR. WATER VALVE IN MANHOLE
Ø	PR. WELL
\triangleright	PR. REDUCER
ws	PR. WATER SERVICE
	PR. STORM INLET/CATCH BASI
	PR. STORM MANHOLE PR. STORM END SECTION
_	PR. SANITARY MANHOLE
● C.□.	PR. CLEANOUT
SL	PR. SANITARY LEAD
SG∑	PR. GAS VALVE
- ф	PR. LIGHT POLE
	PR. SILT FENCE

SOIL TYPE



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Project Number | Date | 1/20/2023 P.M. | Checked by | Drawn by | Crew/Book | ARW | ARW | ARW | N/A

SNIDER ELECTRIC

7130 RAWSONVILLE ROAD

7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

County Community YPSILANTI TWP.

Township Range Section 3 S 7 E 36

Professional Name Date
ANDREW R. WALTERS, PE 1/20/23

SITE PLAN

SOIL EROSION AND SEDIMENTATION CONTROL PLAN

SITE LOCATION: SECTION 36, TOWNSHIP 3S, RANGE 7E; (YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN)

RECEIVING WATER: NORTH BRANCH BIG SWAN CREEK

SITE SOILS INFORMATION:

BnB BOYER LOAMY SAND, 1 to 6 % SLOPES Gf GILFORD SANDY LOAM, TILL PLAIN, 0 TO 2% SLOPES

WaA WASEPI SANDY LOAM, 0 TO 4% SLOPES

PER THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS) SOIL SURVEY

APPROXIMATE AREA OF DISTURBANCE: 1.98 ACRES

PERSON RESPONSIBLE FOR ON-SITE SOIL EROSION CONTROL CONTRACTOR: TBD PHONE: TBD FAX: TBD

APPROXIMATE CONSTRUCTION SCHEDULE IS AS FOLLOWS:

02/2023 PROJECT START DATE 02/2023 TEMPORARY EROSION CONTROL MEASURES INSTALLED

03/2023 GRAVEL CONSTRUCTION ENTRANCE INSTALLED 03/2023 DETENTION FACILITIES INSTALLED

04/2023 UTILITIES / STORM SEWER / INLETS FILTERS INSTALLED 04/2023 FIRST COARSE OF PAVEMENT, CURB AND GUTTER INSTALLED

04/2023 BUILDING CONSTRUCTION

05/2023 FINAL COARSE PAVING INSTALLED

05/2023 FINAL GRADING / SEEDING 06/2023 CATCH BASINS CLEANED

06/2023 PERMANENT EROSION CONTROL MEASURES IN PLACE 07/2023 TEMPORARY EROSION CONTROL MEASURES REMOVED

07/2023 PROJECT END DATE

TEMPORARY STABILIZATION							
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS						
ANY DISTURBED AREASE WITHIN 50 FEET OF A STREAM	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF						
AND NOT AT FINAL GRADE	THE AREA WILL REMAIN IDLE FOR MORE THAN 21 DAYS						
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE						
AREAS THAT WILL BE DORMANT FOR MORE THAN 21 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A	WITHIN THE AREA						
STREAM	FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS						
	MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO THE						
	TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL						
	LOT(S)						
DISTURBED AREAS THAT WILL BE IDLE OVER THE WINTER	PRIOR TO THE ONSET OF WINTER WEATHER						
PERMANENT	STABLIZATION						
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS						
ANY AREAS THAT WILL LIE DORMANT FOR ON YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE						
ANY AREAS WITHIN 50 FEET OF A STREAM AND AT FINAL	WITHIN TWO DAYS OF REACHING FINAL GRADE						

THAT AREA

WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN

STABILIZATION SPECIFICATIONS

MULCH (ONLY): (STRAW OR HAY)

RATES OF APPLICATION OF ITEM 659:

MULCH: (STRAW OR HAY)

WOODEN POST DRIVEN INTO -

GROUND A MINIMUM OF 12".

MAX. OF 6.5' SPACING O.C.

WRAP END POSTS TOGETHER

WHEN SPLICING SECTIONS OF

AT LEAST ONE REVOLUTION

SILTFENCE.

DIRECTION

GROUND

SHEET FLOW-

"TEMPORARY SEEDING" NO AREA FOR WHICH GRADING HAS BEEN COMPLETED SHALL BE LEFT UNSEEDED OR UNMULCHED FOR LONGER THAN 21 DAYS. IF PERMANENT SEED IS NOT APPLIED AT THIS TIME, TEMPORARY SEEDING SHALL BE DONE AT THE FOLLOWING RATES.

MARCH 1 TO AUGUST 15 SEED: OATS 2 LBS./1,000 SQ.FT. FERTILIZER: (12:12:12) 12 1/2 LBS./1,000 SQ.FT. MULCH: (STRAW OR HAY) 2 TONS/ACRE AUGUST 15 TO NOVEMBER 1 SEED: ANNUAL RYE 2 LBS./1,000 SQ.FT. FERTILIZER: (12:12:12) 12 1/2 LBS./1,000 SQ.FT. MULCH: (STRAW OR HAY) 2 TONS/ACRE NOVEMBER 1 TO MARCH 1

"PERMANENT SEEDING" SHALL BE DONE BETWEEN MARCH 15 AND OCTOBER 15. IF SEEDING IS DONE BETWEEN OCTOBER 15 AND MARCH 15, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING" PERMANET SEED SHALL BE 40% KENTUCKY BLUEGRASS, 40% CREEPING RED FESCUE, 20% ANNUAL RYEGRASS. PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING RATES INDICATED UNDER ITEM 659. SEEDING SHALL BE APPLIED WITHIN TWO DAYS AFTER FINAL GRADING OR FOLLOWING SEED BED PREPARATION.

2 TONS/ACRE

2 TONS/ACRE

SILT FENCE GEOTEXTILE

FASTENED TO POSTS ON

UPHILL SIDE TOWARDS

EARTH DISTURBANCE.

FILTER FABRIC TO

BACKFILLED WITH

COMPACTED EARTH.

 $_{-}6$ " \times 6" ANCHOR TRENCH.

EXTEND ACROSS BOTTOM OF TRENCH AND THEN

- CONCRETE WASHOUT

FABRIC SECURELY

4 LBS./1,000 SQ.FT. FERTILIZER: (12:12:12) 20 LBS./1,000 SQ.FT.

DURING CONSTRUCTION

TO BE PERFORMED BY CONTRACTOR

INSPECT FOR SEDIMENT ACCUMULATION

REMOVAL OF SEDIMENT ACCUMULATION

INSPECT FOR FLOATABLES AND DEBRIS

CLEAN DRIVES AND PARKING LOTS

INSPECTION FOR EROSION

CLEANING FOR FLOATABLES AND DEBRIS

AND COMPARE TO AS-BUILT PLANS (BY A

REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES

WATER DISTURBED AREAS TO PROVIDE DUST CONTROL

INSPECT STRUCTURAL ELEMENTS DURING WET WEATHER

ROFESSIONAL ENGINEER REPORTING TO THE OWNER)

MAKE ADJUSTMENTS OR REPLACEMENTS AS DETERMINED

LONG TERM STORM WATER MAINTENANCE PLAN & BUDGET

* "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMUM OF ONE FOOT DEPTH

SOIL EROSION CONTROL MAINTENANCE TASKS AND SCHEDULE

SCHEDULE

QUARTERLY

L DISTURBED AREAS OF SITE AS NEEDED

X X X AS NEEDED

WEEKLY

AS NEEDED* AND PRIOR TO TURNOVER

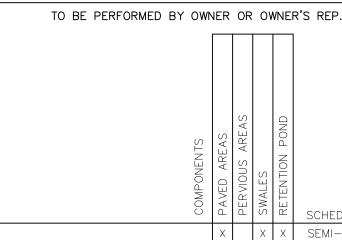
AS NEEDED* AND PRIOR TO TURNOVER

WEEKLY OR AS DETERMINED BY PERMITTING AGENC

QUARTERLY AND AT TURNOVER

ANNUALLY AND AT TURNOVER

WFFKLY



	COMPONENT	ERVIOL	S	RETENTION		
TASKS	<u>ာ</u>		S	œ	SCHEDULE	ANNUAL COST
INSPECT FOR SEDIMENT ACCUMULATION	Х		X	Х	SEMI-ANUALLY/AS NEEDED*	\$100.00
REMOVAL OF SEDIMENT ACCUMULATION	X		X	Х	5-10 YRS/AS NEEDED*	\$200.00
INSPECT FOR FLOATABLES AND DEBRIS			X	X	ANNUALLY	\$100.00
CLEANING FOR FLOATABLES AND DEBRIS			X	Х	ANNUALLY	\$300.00
INSPECTION FOR EROSION		X	Х	Х	ANNUALLY/AFTER MAJOR STORMS	\$100.00
REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES		X	X	X	AS NEEDED	\$300.00
CLEAN DRIVES AND PARKING LOTS	X				ANNUALLY	\$500.00
MOWING		Х			0-2 TIMES PER YEAR	\$400.00
INSPECT STRUCTURAL ELEMENTS DURING WET WEATHER AND COMPARE TO AS—BUILT PLANS (BY A PROFESSIONAL ENGINEER REPORTING TO THE OWNER)			×	×	ANNUALLY	\$100.00
MAKE ADJUSTMENTS OR REPLACEMENTS AS DETERMINED BY ANNUAL WET WEATHER INSPECTION			Х	Х	AS NEEDED	\$100.00
INSPECTION OF BIORETENTION & SUBSURFACE INFILTRATION SYSTEM					FOLLOWING STORMS OF 1" OR MORE	\$100.00
KEEP RECORDS OF ALL INSPECTIONS AND MAINTENANCE ACTIVITIES AND TO PROPERTY OWNER	REPO	RT			ANNUALLY	\$50.00
KEEP RECORDS OF ALL COSTS FOR INSPECTIONS, MAINTENANCE AND REF REPORT TO PROPERTY OWNER	AIRS.				ANNUALLY	\$50.00
PROPERTY OWNER REVIEWS COST EFFECTIVENESS OF THE PREVENTATIVE MAINTENANCE PROGRAM AND MAKES NECESSARY ADJUSTMENTS					ANNUALLY	\$50.00
OWNER TO HAVE A PROFESSIONAL ENGINEER CARRY OUT EMERGENCY INSPECTIONS UPON IDENTIFICATION OF SEVERE PROBLEMS					AS NEEDED	\$150.00
* "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMI	IM OF	- 01	JE E	-00	T DEPTH	

* "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMUM OF ONE FOOT DEPTH

GENERAL SOIL EROSION CONTROL NOTES:

- 1. THE CONTRACTOR SHALL CONFORM TO PART 91 OF ACT 451 OF THE PUBLIC ACTS OF 1994; EROSION AND SEDIMENT CONTROL OF RUNOFF DURING CONSTRUCTION (AS AMENDED) AND CURRENT LOCAL ORDINANCES FOR EROSION AND SEDIMENTATION CONTROL
- 2. PRIOR TO ANY EARTH CHANGE, THE DEVELOPER SHALL SUBMIT A DETAILED EROSION CONTROL PLAN, COMPLETED APPLICATION AND CHECKLIST FORMS, PAY ALL FEES AND POST AN EROSION CONTROL PERFORMANCE BOND, AS REQUESTED.
- 3. CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING
- 4. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 5. CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
- 6. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGE FROM THE CONSTRUCTION ACTIVITIES IS REQUIRED PRIOR TO ANY EARTH CHANGE ONSITE WITH DISTURBANCE GREATER THAN 5 ACRES.
- 7. THE CONTRACTOR IS REQUIRED TO KEEP A COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND PERMIT AT THE CONSTRUCTION SITE.
- 8. ALL SOIL EROSION CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL SUCH MEASURES ARE PERMANENTLY STABILIZED AS DETERMINED BY THE SOIL EROSION INSPECTOR.
- 9. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLANS SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE LOCAL JURISDICTION OR THE SOIL EROSION INSPECTOR.
- 10. TEMPORARY AND PERMANENT STABILIZATION SHALL BE CONDUCTED PER THE TABLE BELOW.
- 11. TRENCH AND GROUND WATER MUST PASS THROUGH A SEDIMENT POND, FILTER BAG OR OTHER COMPARABLE METHOD PRIOR TO DISCHARGING FROM THE SITE. IF USING A FILTER BAG, IT SHOULD BE PLACED ON FLAT GROUND TO ENSURE EFFICIENCY. THE FILTER BAG SHOULD BE LOCATED A SUFFICIENT DISTANCE FROM THE EXISTING WATERCOURSE OR WETLAND TO ALLOW PROPER SETTLING OR FILTERING THROUGH NATURAL VEGETATION. DEWATERING DISCHARGE SHALL BE MONITORED FOR ANY EROSIVE CONDITIONS. IF EROSION OCCURS, DEWATERING OPERATIONS MUST CEASE AND THE ERODED AREA MUST BE STABILIZED IMMEDIATELY, AND MAY RESUME ONLY AFTER STABILIZATION IS COMPLETE.
- 12. ANY TEMPORARY SOILS STOCKPILE SHALL OCCUR WITHIN THE LIMITS OF THE SILT FENCE. STOCKPILES TO BE GRADED TO A MAXIMUM OF 3:1 SIDE SLOPE.
- 13. A CONCRETE WASHOUT AREA SHALL BE DESIGNATED AND UTILIZED AS NECESSARY. CONCRETE TRUCKS ARE NOT PERMITTED TO WASH OUT DIRECTLY INTO STORM SEWERS, STREAMS, OR
- 14. GRADING SHALL BE DONE AS TO NOT DISRUPT THE STORM WATER FROM ADJACENT
- 15. NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS OR THEIR PACKAGING, SHALL DISCHARGE INTO STORM WATER RUN OFF.
- 16. CONTAMINATED SOILS WHERE CONSTRUCTION SITE CHEMICALS HAVE BEEN SPILLED MUST BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

MAINTENANCE REQUIREMENTS:

- 1. ALL BMPS MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UPSLOPE AREAS THEY CONTROL ARE PERMANENTLY RESTABILIZED.
- 2. QUALIFIED PERSONNEL (PROVIDED BY THE DEVELOPER) MUST INSPECT ALL BMPS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL WITHIN ANY 24-HOUR PERIOD AND DETERMINE IF THE SWP3 HAS BEEN PROPERLY IMPLEMENTED.
- 3. WRITTEN REPORTS SUMMARIZING INSPECTION RESULTS MUST BE MADE AVAILABLE UPON REQUEST. REPORTS MUST INCLUDE: DATE OF INSPECTION, NAME AND QUALIFICATIONS OF THE INSPECTOR, WEATHER CONDITIONS, LOCATIONS WHERE IN-STREAM OR OFF-SITE SEDIMENTATION WAS OBSERVED, LOCATION OF BMPS NEEDING MAINTENANCE, LOCATIONS OF BMPS FAILING TO OPERATE CORRECTLY OR PROVIDE ADEQUATE PROTECTION, OR LOCATION OF AREAS IN NEED OF ADDITIONAL BMPS NOT IN PLACE AT THE TIME OF INSPECTION.
- 4. THE REPORTS MUST IDENTIFY INCIDENTS OF NON-COMPLIANCE WITH THE NPDES PERMIT. WHERE A REPORT DOES NOT IDENTIFY INCIDENTS OF NON-COMPLIANCE, THE REPORT MUST CONTAIN A CERTIFICATION THAT THE SITE IS IN COMPLIANCE AT THE TIME OF INSPECTION.
- 5. MAINTENANCE OR REPAIR OF BMPS MUST BE COMPLETED WITHIN 3 DAYS OF THE DATE OF THE INSPECTION THAT REVEALED THEY WERE DEFICIENT. FOR SEDIMENT PONDS, REPAIR OR MAINTENANCE IS REQUIRED WITHIN 10 DAYS OF THE INSPECTION.
- 6. WHEN INSPECTIONS REVEAL THAT A BMP IS NOT EFFECTIVE AND THAT ANOTHER, MORE APPROPRIATE BMP IS REQUIRED, THE SWP3 MUST BE AMENDED AND THE MORE APPROPRIATE BMP MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION THAT REVEALED THE DEFICIENCY.
- 7. WHEN THE INSPECTION REVEALS THAT A BMP DEPICTED ON THE SWP3 HAS NOT BEEN INSTALLED, BUT IS REQUIRED TO PROVIDE ADEQUATE CONTROL AT THE SITE, IT MUST BE INSTALLED PRIOR TO THE NEXT STORM EVENT, WHICH PRODUCES RUNOFF, BUT IN NO CASE LATER THAN 10 DAYS FROM THE DATE OF INSPECTION, WHICH REVEALED THE
- 8. THE REPORTS MUST BE MAINTAINED FOR THREE (3) YEARS FOLLOWING THE SUBMITTAL OF A NOTICE OF TERMINATION.

MAINTENANCE NOTES:

ANY OTHER AREAS AT FINAL GRADE

- 1. ALL DIRT AND MUD TRACKED ONTO ROADS DUE TO CONSTRUCTION
- 2. SHOULD DUST BECOME A PROBLEM AT THE SITE, THE CONTRACTOR SHALL PROVIDE WATERING OR OTHER METHOD OF DUST CONTROL ACCEPTABLE TO THE WASHTENAW COUNTY WATER RESOURCES COMMISSIONER.

SHALL BE REMOVED ON A DAILY BASIS BY THE CONTRACTOR.

- 3. TEMPORARY CONSTRUCTION ENTRANCE:
- 3.1. CRUSHED LIMESTONE BASE SHALL BE PLACED ON A GEOTEXTILE FILTER CLOTH OR APPROVED ALTERNATIVE.
- 3.2. ADDITIONAL LAYERS OF STONE OR CRUSHED LIMESTONE BASE SHALL BE ADDED IN LAYERS AND COMPACTED. 3.3. STEPS SHALL BE TAKEN TO REPAIR IF RUTS OR POOLING WATER

- 4.1. BUILT UP SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT
- 4.2. IF SILT FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE PROMPTLY REPLACED.

COMPACTED BERM AROUND THE PERIMETER - UNDISTURBED OR COMPACTED SOIL 8 x 8 MIN.

CONCRETE WASHOUT AREA PLAN

8 x 8 MIN.

GEOTEXTILE SILT FENCE

CWA INSTALLATION NOTES

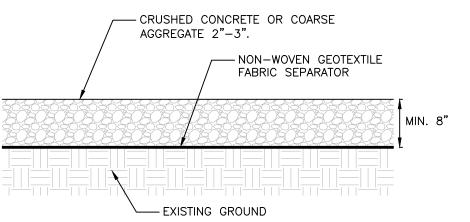
- 1. SEE PLAN VIEW FOR: INSTALLATION LOCATION.
- 2. DO NOT LOCATE ANY UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE AREA SHOULD BE USED.

SECTION A

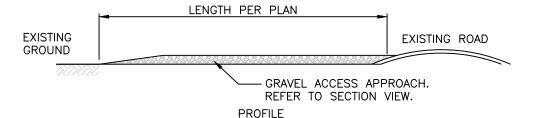
- 3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- 4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8'. SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT
- 5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE A MINIMUM HEIGHT OF 1'.
- 6. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 7. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA

NOT TO SCALE



INSTALL AT CONSTRUCTION VEHICLE ENTRANCE/EXIT AS SPECIFIED PER PLAN. MINIMUM 15' WIDE X 50' LONG.



- 1. THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY
- MEASURES USED TO TRAP SEDIMENT. 2. SUPPLY WATER TO WASH TIRES IF NECESSARY, WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED AGGREGATE THAT DRAINS INTO AN APPROVED SEDIMENT

TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

TRAP OR SEDIMENT BASIN.

Know what's **below**. Call before you dig.

THE LOCATIONS OF EXISTING JNDERGROUND UTILITIES ARE SHOWN N AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION O ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES T BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S

FAILURE TO EXACTLY LOCATE AND

PRESERVE ANY AND ALL

UNDERGROUND UTILITIES.

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF TH WORK, OF PERSONS ENGAGED IN THI WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

rnamic. Daring. Diverse.**DIFFEREN**

1051-22-11390 1/20/2023 Checked by Drawn by Crew/Boo

ARW ARW ARW N/A

SNIDER ELECTRIC

7130 RAWSONVILLE ROAD

7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

YPSILANTI TWP. WASHTENAW 3 S 7 E 36

ANDREW R. WALTERS, PE 1/20/23

SITE PLAN

SOIL EROSION AND SEDIMENTATION CONTROL **DETAILS**

Sheet Number

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TOTAL SITE Area Eva	uding "Self-Creditin	g" BMPs =	72238 72238			acres acres ₁		Impervious (Cover Post-Development Bankfull Runoff Calculations (V	bf-imp-post)	Determine Time	e of Concentration	n fe
Total Site Alea Exc	uding Sen-Creditin	RATIONAL METH			<u>1.00</u>	<u>y</u> acres ₁		A.			Flow Type	К	
Cover Type	Soil Type	Area (sf)	Area (Ac)	Runoff Coefficient, c	C*A				2 year/24 hour storm event (in)	P= 2.35	Sheet Flow*	0.48	7
Grass/Lawn	B, 2% to 6%	40911 15404	0.94	0.30	0.28						Waterway	1.2	7
avement/Roof	B, 2% to 6% B, 2% to 6%	15923	0.37	0.85	0.35			В.	Impervious Cover CN From Worksheet 1	CN= 98	Waterway Waterway	1.2	+
Vater Surface	B, 2% to 6%		0.00	1 Total-∑C*A=	0.00 0.93						Waterway	1.2	7
			Weigh	Area Total- \sum ac = ated C - \sum C*A/ \sum ac =	1.66 0.56			C.	S=1000/CN-10	S(in)= 0.20	Waterway Waterway	1.2 1.2	\pm
		NRCS VAR	RIABLES ₂			7					Waterway Waterway	1.2	+
Pervious Cover	C-II Tom-			Curve Number	CNI*A			D.			Waterway	1.2	1
Type Grass/Lawn	Soil Type B, 2% to 6%	Area (sf) 40911	Area (Ac) 0.94	(CN) 69	CN*A 64.80				Q=(P-0.2S)^2/(P+0.8S)	Q(in)= 2.12	Waterway Waterway	1.2	$\frac{1}{1}$
Gravel Pavement/Roof	B, 2% to 6% B, 2% to 6%	15404	0.35	85 98	30.06 0.00			E.			Waterway	1.2	#
Water Surface	B, 2% to 6%		0.00	98 Total-∑CN*A=	0.00 94.86				Impervious Cover Area from Worksheet 1	A(sf)= 15923	Small Tributary	2.1	1
			Weighted	 Area Total-∑ac = I CN - ∑CN*A/∑ac =	1.29 73			F			Small Tributary Small Tributary	2.1	$\frac{1}{1}$
						٦		F.	Vbf-imp-post = Q(1/12)Area	Vbf-imp-post (cf)= 2815.28	Small Tributary	2.1	1
mpervious Cover		NRCS VAR		Curve Number				W6	DETENTION BASIN 1		Small Tributary Small Tributary	2.1	+
Type Grass/Lawn	Soil Type B, 2% to 6%	Area (sf)	Area (Ac) 0.00	(CN) 69	CN*A 0.00			STANDARD	METHOD RUNOFF VOLUME CALCULATIONS		Small Tributary	2.1	#
Gravel Pavement/Roof	B, 2% to 6% B, 2% to 6%	15923	0.00	85 98	0.00			Pervious Cov	ver Post-Development 100-Year Storm Runoff Calculatio	ins (V100-ner-nost)	Small Tributary Small Tributary	2.1	+
Water Surface	B, 2% to 6%	0	0.00	98	0.00				ter rest bevelopment by real sterm numer calculation	15 (V100 per post)	Small Tributary	2.1	#
		runoff calculations		Total-∑CN*A= Area Total-∑ac =	35.82 0.37			A.	100-year storm event (in)	P= 5.11	Small Tributary *Sheet flow can	2.1 nnot exceed 300 f	_L eet
Required for first t Required for bank	lush calculations full and 100-year ru	noff calculations	Weighted	i CN - ∑CN*A/∑ac =	98				,	. 5.22	considered wate		
W2	DETENTION B							В.			W9	DETENTION BA	
		F VOLUME CALC	CULATIONS						Pervious Cover CN From Worksheet 1	CN= 73.3765249	STANDARD M	ETHOD RUNOF	FV
First Flush Runof	f Calculations							C.			Runoff Summary	y & Onsite Infiltra	tio
		No-tro	NAD 5	alla e d					S=1000/CN-10	S(in)= 3.63	A.	Runoff Summa	ry f
	· · · · · · · · · · · · · · · · · · ·	"Self-Crediting" B rom Worksheet 1		(sheet 1 =			1.66 0.56					First Flush Volu	
_								D.	Q=(P-0.2S)^2/(P+0.8S)	Q(in)= 2.40		Pre-Developm	ent
٨.								_	Z (* 3.23) 2, (* 3.33)			Pervious Cover	Po
/ff= (1")(1'/12")(43560sf/1ac)*A*	С			Vff (cf) = 337	74.46		E.	Pervious Cover Area from Worksheet 1	A(sf)= 56315			
W3	DETENTION B	ASIN 1										Impervious Cov	er
		F VOLUME CALC	CULATIONS					F.				Total BF Volum	ie (
Pro-dovolonmon	t Rankfull Punoff	Calculations (Vhf	-pro)						V100-per-post = $Q(1/12)$ Area	V100-per-post (cf)= 11258.29		Pervious Cover	Ро
re-uevelopmen	t patiktuli KUNOTT	Calculations (Vbf	- þi <i>c)</i>					W7	DETENTION BASIN 1			Impervious Cov	
A.	2 vear/24 hou	r storm event (in)			P= 2.3	:5		STANDARD	METHOD RUNOFF VOLUME CALCULATIONS			impervious cov	еі
	2 yeur/24 nou	i storiii event (iii)			1 - 2.3	.5		Impervious (Cover Post-Development100-Year Storm Runoff Calculation	tions (V100-imp-post)		Total 100-Year	Vo
В.								A.			В.	Determine Ons	
	•	oment land cover			CN= 58				100-year storm event (in)	P= 5.11		Subtract the Pe	r-C
		adow. Determine up for the entire s										Total Post-Dev	elo
	number	•						В.	Impervious Cover CN From Worksheet 1	CN= 98		Pre-Developme	nt؛
C.												Bankfull Volum	٦ م
	S=1000/CN-10)			S(in)= 7.2	4		C.	S=1000/CN-10	S(in)= 0.20			
												Compare the B Infiltration Req	
).	Q=(P-0.2S)^2/	(P+U 86)			Q(in)= 0.1	0		D.					
	u-(r-U.23)^2/	₍₁ ±0.03)			رراin)= U.1	.0			Q=(P-0.2S)^2/(P+0.8S)	Q(in)= 4.87	\A/4 \	Onsite Infiltrati	
Ξ.	Total Site Area	a (sf) excluding "Se	elf-Craditing" P	MPs	A(sf)= 722	738		E.			W10	DETENTION BA	
	rotal Site Afea	a (31) excluding SE	on Crediting Bi	vii J	m(31)= 122				Impervious Cover Area from Worksheet 1	A(sf)= 15923			
= .								-			Detention/Reter	ntion Requiremen	t
	Vbf-pre = Q(1,	′12)Area		Vbf-pre	(cf)= 602	1.09		F.	V100-imp-post = Q(1/12)Area	V100-imp-post (cf)= 6466.07	Detention		
W4	DETENTION B	ASIN 1								, ,	Α.	Peak of the Uni	ιH
TANDARD ME	THOD RUNOFI	VOLUME CALC	CULATIONS									Tc From Works	
Pervious Cover P	ost-Developmen	t Bankfull Runoff (Calculations (Vb	of-per-post)								Qp=238.6*Tc^(٠Ū.
A .											В.	Total Site Area	lar
	2 year/24 hou	r storm event (in)			P= 2.35	5						rotal Site Aled	,a C
											C.	Q100-per from	W۱
3.	Pondous C	r CNI Eram M/!	200t 1		CN 72.2	2765240						Q100-imp from	W
	rervious Cove	r CN From Worksh	ieel 1		CN= 73.3	0705249						Q100 = Q100-p	r -
	S=1000/CN-10	ı			S(in)= 3.63	3					D.	Peak Flour (DF)	_ 11
	2-1000/CN-16				J(III)- 3.03	,						Peak Flow (PF) :	٠ رر
											E.	Δ = PF - 0.15*A	
	0-(0.0.35)43/	(P+0.8S)			Q(in)= 0.50)						7 - LL - 0.12 A	
	Q=(P-0.2S)^2/												
	Q=(P-0.25)^2/										F.		
		r Area from Works	sheet 1		A(sf)= 563	15					F.	Vdet = (Δ/PF)*V	'10
		r Area from Work:	sheet 1		A(sf)= 563	15					F. Retention	Vdet = (Δ/PF)*V	'10
D. E.			sheet 1	Whf no-	A(sf)= 563 post (cf)= 235							Vdet = (Δ/PF)*V Vret = 2*V100	′10(

W8	DETENTION BASIN 1
STANDARD M	ETHOD RUNOFF VOLUME CALCULATIONS

		Change in					
Flow Type	K	Elevation (ft)	Length (ft)	Slope %	٧S	V=K*√S	Tc=L/(V*3600)
Sheet Flow*	0.48			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Waterway	1.2			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
Small Tributary	2.1			0.00	0.00	0.00	0.00
*Sheet flow cannot	exceed 300 t	feet. Anything beyo	nd this is	Total	Time of Concent	tration (Tc-hrs)=	0.10

considered w	aterway.	
W9	DETENTION BASIN 1	
STANDARD	METHOD RUNOFF VOLUME CALCULATIONS	
Runoff Summ	ary & Onsite Infiltration Requirement	
A.	Runoff Summary from Previous Worksheets	
	First Flush Volume (Vff)	3,374.46 cf
	Pre-Development Bankfull Runoff Volume (Vbf-pre)	601.09 cf

Pervious Cover Post-Development Bankfull Volume (Vbf-per-post)

Impervious Cover Post-Development Bankfull Volume (Vbf-imp-post)

	Total BF Volume (Vbf-post)	5,172.57 c
	Pervious Cover Post-Development 100-Year Volume (V100-per-post)	11,258.29 c
	Impervious Cover Post-Development 100-Year Volume (V100-imp-post)	6,466.07 c
	Total 100-Year Volume (V100-post)	17,724.36 c
В.	Determine Onsite Infiltration Requirement Subtract the Per-Development Bankfull from the Post-Development Bankfull Volu	me.
	Total Post-Development Bankfull Volume (Vbf-post)	5,172.57 c
	Pre-Development Bankfull Runoff Volume (Vbf-pre)	601.09 c
	Bankfull Volume Difference	4,571.48 c
	Compare the Bankfull Volume Difference with the First Flush Volume. The greater Infiltration Requirement.	of the two is the On

W10	DETENTION BASIN 1
STANDARD I	METHOD RUNOFF VOLUME CALCULATIONS

Onsite Infiltration Requirement (Vinf)

C. Q100-per from Worksheet 6 Q100-per (in) Q100-imp from Worksheet 7 Q100-imp (in) Q100 = Q100-per + Q100-imp Q100 (in) Q100 $= Q100 - Per + Q100 - Per + Q100 - Per + Q100 - Per + Q100 - Q100 (in)$ D. Peak Flow (PF) = $(Qp + Q100 + A)/640$ PF (cfs) E. $\Delta = PF - 0.15 + A$ Δ (cfs)	
$Qp=238.6*Tc^{(-0.82)} \qquad Qp(cfs/in-mi^{-2})$ B. Total Site Area (ac) excluding "Self-Crediting" BMPs $Q100-per food Worksheet 6 \qquad Q100-per (in) \\ Q100-imp from Worksheet 7 \qquad Q100-imp (in) \\ Q100 = Q100-per + Q100-imp \qquad Q100 (in)$ D. $Peak Flow (PF) = (Qp*Q100*A)/640 \qquad PF (cfs)$ E. $\Delta = PF - 0.15*A \qquad \Delta (cfs)$ F.) = 0.10
C. Q100-per from Worksheet 6 Q100-per (in) Q100-imp from Worksheet 7 Q100-imp (in) Q100 = Q100-per + Q100-imp Q100 (in) Q100 $= Q100 - Per + Q100 - Per + Q100 - Per + Q100 - Per + Q100 - Q100 (in)$ D. Peak Flow (PF) = $(Qp + Q100 + A)/640$ PF (cfs) E. $\Delta = PF - 0.15 + A$ Δ (cfs)	
Q100-imp from Worksheet 7 Q100-imp (in) Q100 = Q100-per + Q100-imp Q100 (in) Q100 (in) Q100 = Q100-per + Q100*A)/640 PF (cfs) E. $\Delta = PF - 0.15*A \qquad \Delta \text{ (cfs)}$ F.)= 1.66
Q100-imp from Worksheet 7 Q100-imp (in) Q100 = Q100-per + Q100-imp Q100 (in) Q100 (in) Q100 = Q100-per + Q100*A)/640 PF (cfs) E. $\Delta = PF - 0.15*A \qquad \Delta \text{ (cfs)}$ F.	
Q100 = Q100-per + Q100-imp Q100 (in) D. Peak Flow (PF) = (Qp*Q100*A)/640 PF (cfs) E. Δ = PF - 0.15*A Δ (cfs)) = 2.40
D. Peak Flow (PF) = $(Qp*Q100*A)/640$ PF (cfs) E. $\Delta = PF - 0.15*A$ Δ (cfs)) = 4.87
E. $\Delta = PF - 0.15*A \qquad \qquad \Delta \text{ (cfs)}$ F.	= 7.27
F.) = 29.70
F.	
) = 29.46
$Vdet = (\Delta/PF)*V100$ Vdet (cf)	
) = 17,575.
Retention	

W11 **DETENTION BASIN 1** STANDARD METHOD RUNOFF VOLUME CALCULATIONS

	Determine Applicable BMPs and Associat	ed Volume Credits				
=L/(V*3600)				Ave. Design		
0.00			Storage Volume₂	Infiltration Rate	Infiltration Volume	Total Volume
	Proposed BMP₁	Area (sf)	(cf)	(in/hr)	During Storm₃ (cf)	Reduction₄ (cf)
0.00	Porous Pavement w/ Infiltration Bed					
0.00	Infiltration Basin				0	0.00
0.00	Subsurface Infiltration Bed					
0.00	Infiltration Trench					
0.00	Rain Garden/Bioretention					
0.00	Dry Well					
0.00	Vegitated Filter Strip					
0.00	Green Roof					
0.00		To	tal Volume Reduction	Credit by Proposed S	Structural BMPs (cf) =	0.00
	I and the second			, , , , , , , ,	· \ ' /	

Runoff Volume Infiltration Requirement (Vinf) from Worksheet 9 = 4,571.48 Total Volume Reduction Credit by Proposed Structural BMPs (cf) = -4571.48

¹Complete checklist from Chapter VI for each Structural BMP type ₂Storage volume as defined in individual BMP write-ups

₃Approximated as the average design infiltration rate over 6 hours multiplied by the BMP area:

Infiltration Rate x 6 hours x BMP Area x Unit Conversions = Infiltration Volume (cf) ⁴Total Volume Reduction Credit is the sum of the Storage Volume and the Infiltration Volume During Storm W11-A **DETENTION BASIN 1**

Retention Volume Provided

35,448.72 cf Required Retention Volume

ond volume provided					
ev.	Area	Avg. Area	Height	Volume	
	695	9164		0	
			10141	1	
	696	11118		10141	
			12173	1	
	697	13228		22314	
			14362	1	
	698	15496		36676	
			16500	1	

W12 **DETENTION BASIN 1**

699

NATURAL FEATURES INVENTORY

2,357.29 cf

2,815.28 cf

4,571.48 cf

Vret (cf) = 35,448.72

₁Provide Natural Resources Map. This Map should identify waterbodies, floodplains, riparian areas, wetlands, woodlands, natural drainage ways, steep slopes, and other natural features.

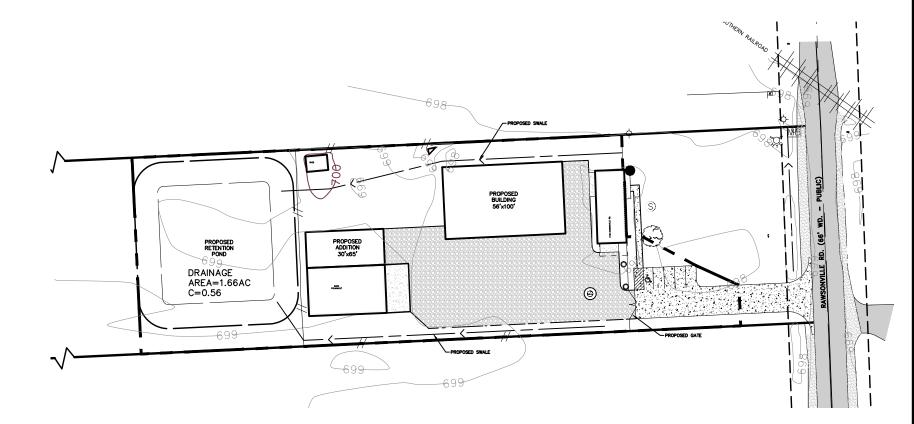
17504

²Summarize the existing extent of each natural resource in the Existing Natural Resources Table.

₃Summarize total proposed Protected/Undisturbed Area.

₄Do not count any area twice. For example, an area that is both a floodplain and a wetland may only be considered once (include as either floodplain or wetland, not both).

	MAPPED (YES, NO,		PROTECTED/UNDISTURBED AREA
EXISTING NATURAL RESOURCES	N/A)	TOTAL AREA (AC)	(AC)
WATERBODIES	N/A	0	0
FLOODPLAINS	N/A	0	0
RIPARIAN AREAS	N/A	0	0
WETLANDS	N/A	0	0
WOODLANDS	N/A	0	0
NATURAL DRAINAGE AREA	N/A	0	0
STEEP SLOPES, 15% - 25%	N/A	0	0
STEEP SLOPES, OVER 25%	N/A	0	0
SPECIAL HABITAT AREAS	N/A	0	0
OTHER	N/A	0	0
TOTAL EXISTING (AC)		0	0





THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN
IN AN APPROXIMATE WAY ONLY AND
HAVE NOT BEEN INDEPENDENTLY
VERIFIED. THE CONTRACTOR SHALL
DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S
FAILURE TO EXACTLY LOCATE AND
PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CONSTRUCTION SITE SAFETY IS THE
RESPONSIBILITY OF THE
CONTRACTOR. NEITHER THE OWNER
NOR THE ENGINEER SHALL BE
EXPECTED TO ASSUME ANY
RESPONSIBILITY FOR SAFETY OF THE
WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

53176

P.M. | Checked by | Drawn by | Crew/Book | ARW | ARW | N/A

SNIDER ELECTRIC

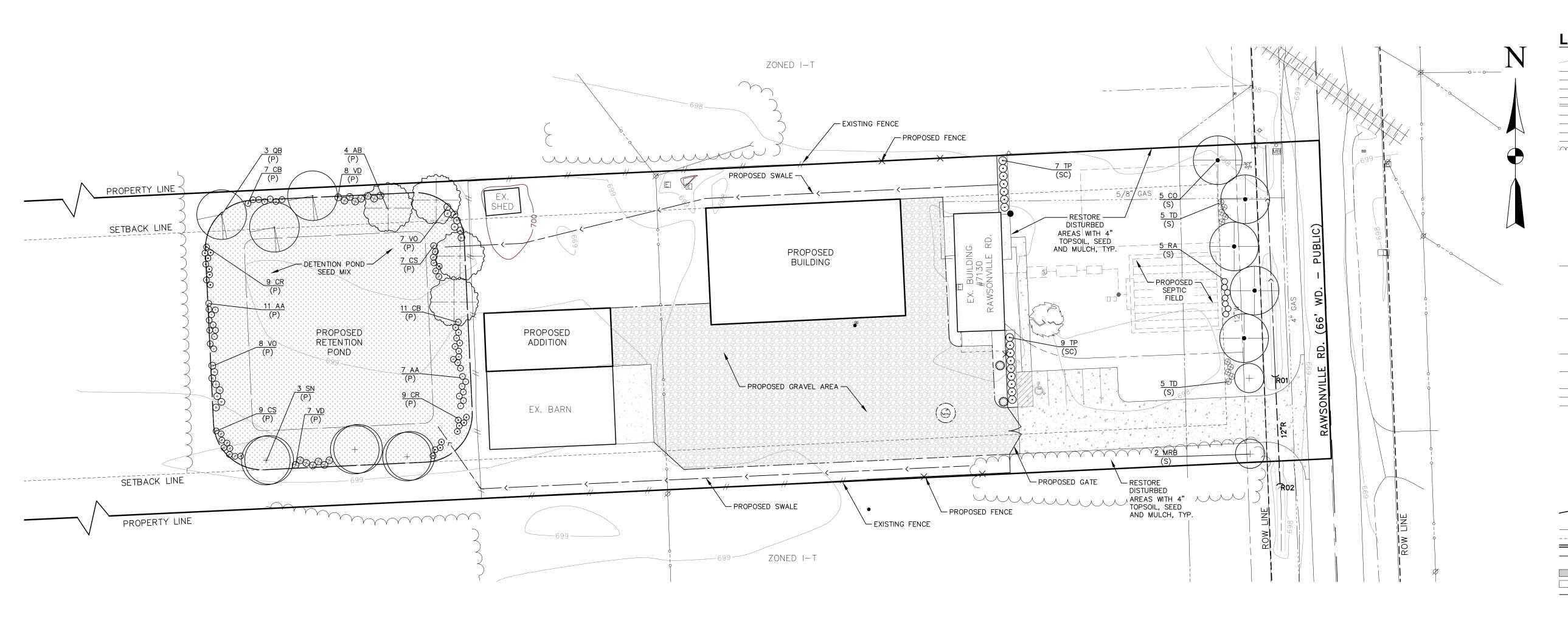
7130 RAWSONVILLE ROAD

7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111

WASHTENAW YPSILANTI TWP. Township Range Section 3 S 7 E 36

Professional Name Date
ANDREW R. WALTERS, PE 1/20/23

SITE PLAN **STORMWATER** MANAGEMENT CALCULATIONS



LEGEND:

LEGEND:	
× 656.5	FX SPOT FLEVATION
× 050.5	EX. SPOT ELEVATION EX. CONTOUR
052	EX. CONTOUR
\llu \llu \llu	
· · ·	EX. ADJACENT PROPERTY LINE
	EX. SECTION LINE
	EX. EASEMENT LINE EX. CURB/PAVEMENT
	FY CURR /PAVEMENT
	EX. CONDYPAVEMENT
	EX. FENCE
	EX. GRAVEL
	EX. & DITCH
	EX. GUARDRAIL
	EX. TREELINE
	EX. TREE (CONIFEROUS)
<i>€</i>	EX. TREE (DECIDUOUS)
MB O _F	EX. SIGN
MB	EX. MAILBOX
<u> </u>	FOUND IRON PIPE
°F-RR	
F-KK	FOUND IRON ROD
F-NAIL	FOUND PK NAIL
©	FOUND CONC. MONUMENT
O _S	SET IRON ROD
OS-NAIL	SET MAG NAIL
3-NAIL	
\$	EX. SECTION CORNER
	SOIL BORING
	EX. WATER MAIN
×	EX. WATER VALVE
× ×	
꾰.	EX. HYDRANT
(W)	EX. WATER MANHOLE
(W) (W) (W)	EX. WELL
W	EX. WATER METER
	EX. STORM SEWER
CB	EX. STORM INLET/CATCH BASIN
(ST)	EX. STORM MANHOLE
(3)	
	EX. STORM END SECTION
	EX. SANITARY SEWER
<u>(S)</u>	EX. SANITARY MANHOLE
	EX. UNDERGROUND GAS
G	EX. GAS VALVE
	EX. OVERHEAD ELECTRIC
	EX. UNDERGROUND ELECTRIC
	EX. UNDERGROUND CABLE
	EX. TELEPHONE MANHOLE
①	EX. ELECTRIC MANHOLE
E	
E	EX. ELECTRIC METER
E G	EX. GAS METER
- - - ■ (() Ø	EX. LIGHT POLE
<u>'</u>	EX. TRAFFIC SIGNAL BOX
\bigcirc	EX. UNIDENTIFIED MANHOLE
<u> </u>	EX. TRAFFIC SIGNAL POLE
×	EX. UTILITY POLE
Q	
	EX. GUY WIRE
× 656.5	PR. SPOT ELEVATION
653	PR. CONTOUR
	PR. DRAINAGE ARROW
	PR. EASEMENT LINE
	PR. SETBACK LINE
	PR. CURB/PAVEMENT
——————————————————————————————————————	PR. FENCE
R	PR. SIDEWALK RAMP
	PR. ASPHALT PAVEMENT
Δ	PR. CONCRETE
	PR. GUARDRAIL
	PR. SIGN

LANDSCAPE NOTES:

DETENTION POND SEED MIX

River Bulrush

Crested Oval Sedge

Bottlebrush Sedge

Brown Fox Sedge

Virginia Wild Rye

Fowl Manna Grass

Common Rush

Rice Cut Grass

Switch Grass

Great Bulrush

Wool Grass

Common Oat

Annual Rye

Common Water Plantain

Common Water Horehound

Sweet Black-Eyed Susan

Swamp Milkweed

Common Boneset

Bidens Species

Sneezeweed

Monkey Flower

Ditch Stonecrop

Pinkweed Species

Brown-Eyed Susan

Common Arrowhead

New England Aster

Purple Meadow Rue

Wild Senna

1. THE SEED MIXES SHALL BE APPLIED AT THE SPECIFIED RATE FOR EACH MIX.

2. THE SEED MIXES MUST BE INSTALLED TO MANUFACTURER SPECIFICATION AND

Panicled Aster

Blue Flag

Dark Green Rush

Stormwater Seed Mix

Bolboschoenus fluviatilis

Permanent Grasses/Sedges/Rushes:

<u>Botanical Name</u>

Carex cristatella

Carex vulpinoidea

Elymus virginicus

Glyceria striata

Juncus effusus

Leersia oryzoides

Panicum virgatum

Scirpus atrovirens

Scirpus cyperinus

Temporary Cover:

Lolium multiflorum

Forbs & Shrubs:

Bidens spp.

Alisma subcordatum

Asclepias incamata

Eupatorium perfoliatum

Helenium autumnale

Iris virginica v. shrevei

Lycopus americanus

Penthorum sedoides

Rudbeckia subtomentosa

Symphyotrichum lanceolatum

Symphyotrichum novae-angliae

128 SUNSET DRIVE

PHONE: 574-586-2412

FAX: 574-586-2718

3. SEED MANUFACTURER (OR APPROVED EQUAL)

CARDNO NATIVE PLANT NURSERY

EMAIL: NURSERYSALES@CARDNO.COM

WALKERTON, INDIANA, 46574

Thalictrum dasycarpum

REQUIREMENTS.

Mimulus ringens

Persicaria spp.

Rudbeckia triloba

Sagittaria latifolia

Senna hebecarpa

Avena sativa

Schoenoplectus tabemaemontani

Carex Iurida

2.5" Cal.

2.5" Cal.

B&B

- 1. THIS PLAN IS FOR PLANTING LOCATIONS ONLY.
- 3. IN THE EVENT THE PLANT LIST DOES NOT MATCH THE PLAN, THE PLAN SHALL TAKE PRECEDENCE.
- NEAT, HEALTHY AND WEED-FREE CONDITION, FREE FROM REFUSE AND DEBRIS. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIAL IS TO BE REPLACED WITHIN SIX MONTHS, OR THE NEXT APPROPRIATE PLANTING PERIOD, WHICHEVER COMES FIRST.
- DURING CONSTRUCTION SHALL BE REPLACED BY THE
- 6. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. PLANT MATERIAL IS TO BE LOCATED SUCH THAT IT WILL NOT INTERFERE WITH ANY UNDERGROUND OR OVERHEAD UTILITIES. PLANTINGS WITHIN 15 FEET OF A FIRE HYDRANT SHALL NOT EXCEED
- 7. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN IN THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS IN LEVEL AREAS HIGHER, APPROXIMATELY 1/4 OF THE ROOT BALL ABOVE THE GRADE.
- 8. REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. PEEL BACK THE TOP 1/3 OF BURLAP FROM EARTH BALLS
- 9. ALL LANDSCAPE AREAS SHALL BE EXCAVATED OF ALL BUILDING / CONSTRUCTION MATERIAL AND POOR SOILS TO A DEPTH OF 18"-24" AND BACKFILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL.
- 10. ALL DISTURBED UNPAVED AREAS ARE TO BE SPREAD WITH A MINIMUM 4 INCHES OF TOPSOIL, SEED AND
- 11. AREAS OF INDIVIDUAL TREES AND LANDSCAPE BEDS ARE TO BE MULCHED WITH A MINIMUM OF 4 INCHES OF IN A 5-FOOT DIAMETER CIRCLE AROUND THE BASE OF SOIL AROUND THE TRUNK OF THE TREE. ALL AREAS OUTSIDE OF THE MULCH RINGS SHALL BE SEEDED AND MULCHED.
- 13. RECOMMENDED PLANTING DATES ARE MARCH 1 TO MAY 15 FOR ALL MATERIALS AND OCTOBER 15 TO DECEMBER 15 FOR DECIDUOUS MATERIALS. PLANTINGS OUTSIDE THESE DATES SHALL HAVE PRIOR YPSILANTI TWP. APPROVAL, AND MAY REQUIRE SPECIAL TREATMENT, SUCH AS EXTRA WATERING OR MULCHING, TO INCREASE SURVIVAL POTENTIAL.

PLS

Ounces/Acre

1.00

0.50

3.00

2.00

24.00

1.00

1.00

1.00

2.00

3.00

2.00

1.00

41.50

360.00

100.00

460.00

2.50

2.00

2.00

1.00

2.00

4.00

0.50

1.00

0.50

2.00

1.00

1.50

1.00

2.00

0.50

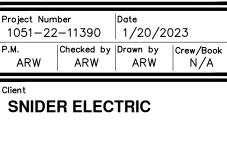
0.50

2.00

26.00

- 2. SIZES SPECIFIED ARE MINIMUM SIZES TO BE INSTALLED.
- 4. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH YPSILANTI TWP. STANDARDS IN A
- 5. ALL EXISTING TREES TO REMAIN THAT ARE DAMAGED
- END OF THE FOLLOWING PLANTING SEASON.
- 6 INCHES IN HEIGHT.
- AND REMOVE ANY BURLAP AROUND TREE TRUNKS.

- SHREDDED HARDWOOD BARK. MULCH SHALL BE SPREAD EACH TREE, LEAVING A 6-INCH RADIUS CIRCLE OF BARE
- 12. IF AN APPROVED SPECIES IS NO LONGER ACCEPTABLE DUE TO SUCH THINGS AS INFESTATION OR DISEASE, A SUITABLE SIMILAR SPECIES SHALL BE USED AS REPLACEMENT. ANY PLANT SUBSTITUTIONS SHALL HAVE YPSILANTI TWP. APPROVAL PRIOR TO INSTALLATION.



ynamic. Daring. Diverse.**DIFFEREN**'i

Call before you dig.

THE LOCATIONS OF EXISTING JNDERGROUND UTILITIES ARE SHOW

N AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION (ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES T BE FULLY RESPONSIBLE FOR ANY

AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S

FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL

UNDERGROUND UTILITIES.

CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF TH

WORK, OF PERSONS ENGAGED IN TH

WORK, OF ANY NEARBY

STRUCTURES, OR OF ANY OTHER

PERSONS.

CONSTRUCTION SITE SAFETY IS RESPONSIBILITY OF THE

7130 RAWSONVILLE ROAD

7130 RAWSONVILLE ROAD YPSILANTI TWP., MI 48111 WASHTENAW YPSILANTI TWP.

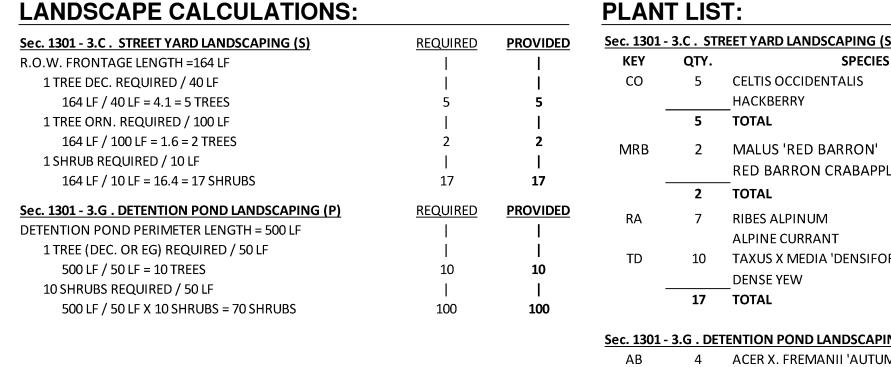
3 S 7 E 36



ANDREW R. WALTERS, PE 1/20/23

SITE PLAN LANDSCAPE PLAN

Sheet Number



PRUNE BRANCHES TO THIN OR MATCH. RETAIN NORMAL

SHRUBS SHALL BEAR THE SAME RELATIONSHIP TO FINISH

KNIFE SLIT SIDE OF ROOT BALL 6 TIMES, 1" DEEP EACH

__ 3" DEEP SHREDDED BARK -

DO NOT BURY CROWN OF

PLANT, PROVIDE A 4"

DIAMETER CLEAR AREA

AROUND PLANT CROWN

-REMOVE ALL OF BURLAP

FROM ROOTBALL

REMOVE ALL FIBER, PLASTIC OR METAL CONTAINERS.

PLANT SHAPE. PRUNE DEAD BRANCHES.

MOUND TO -

FORM SAUCER

- FORM SOIL

SAUCER WITH

CONTINUOUS

RIM AROUND

PLANT BED

12"MIN

GRADE AS THEY BORE TO ORIGINAL GRADE.

- FASTEN TREE TO STAKE

WITH TREE RING (DOUBLE

WIRE & TWO PIECES OF

STAKE ABOVE FIRST

NECESSARY FOR FIRM

(3) 2"X2" HARDWOOD

STAKES DRIVEN (MIN. 18")

FIRMLY INTO SUBGRADE

PRIOR TO BACKFILLING.

REMOVE AFTER 1 YEAR.

MULCH LEAVE 6" DIA.

TRUNK BASE

-3" DEEP SHREDDED BARK

CIRCLE OF BARE SOIL AT

TRUNK - DO NOT BURY

FORM 3" HT. SAUCER AT

FOR TREES OVER 4" CAL.,

REATED STAKES TOP OF

SPECIFICATION REQUIREMENTS,

STAKE 6" ABOVE GROUND

IF NO SPECS, COMPACTED

TO REMOVE AIR POCKETS

UNDISTURBED SUBSOIL

TOPSOIL, WATER AND TAMP

- AMEND SOIL PER

(3) 2"X4"X24" PRESSURE

EDGE OF PLANT PIT

BRANCHES OR AS

SUPPORT

1/2" DIA. RUBBER HOSE)

STRAND #12 GAUGE TWISTED

TOTAL 30-36" HT. & SPR. CONT. RIBES ALPINUM **ALPINE CURRANT** 30-36" HT. & SPR. CONT. TAXUS X MEDIA 'DENSIFORMIS' **DENSE YEW** 17 TOTAL Sec. 1301 - 3.G. DETENTION POND LANDSCAPING (P) 4 ACER X. FREMANII 'AUTUMN BLAZE' 2.5" Cal. **AUTUMN BLAZE MAPLE** QUERCUS BICOLOR 2.5" Cal. SWAMP WHITE OAK B&B SALIX ALBA 'NIOBE' 2.5" Cal. GOLDEN WEEPING WILLOW TOTAL ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA' 30-36" HT. & SPR. CONT. RED CHOKEBERRY 30-36" HT. & SPR. CONT. CHEPHALACANTHUS OCCIDENTALIS BUTTONBUSH 30-36" HT. & SPR. CONT. **CORNUS SERICEA RED OSIER DOGWOOD** CORNUS RACEMOSA 30-36" HT. & SPR. CONT. 18 GREY DOGWOOD VIBURNUM DENTATUM 30-36" HT. & SPR. CONT. VD 15 ARROWOOD VIBURNUM 30-36" HT. & SPR. CONT. 15 VIBURNUM OPULUS EUROPEAN CRANBERRY BUSH 100 TOTAL

5 CELTIS OCCIDENTALIS

MALUS 'RED BARRON'

RED BARRON CRABAPPLE

HACKBERRY

TOTAL

Sec. 1157 - 1.C. OUTDOOR STORAGE AND CONTRACTORS YARD (SC) THUJA PLICATA 7'-8' HT. **WEST COAST ARBORVITAE** - AMEND SOIL PER SPECIFICATION REQUIREMENTS.

IF NO SPECS, COMPACTED TOPSOIL. WATER AND TAMP TO REMOVE AIR POCKETS -18" MIN. DEPTH OR DEPTH OF ROOT BALL. - UNDISTURBED SUBSOIL

SHRUB PLANTING DETAIL

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STAKE ALL TREES UNDER 4"

OR DAMAGED BRANCHES

NEVER CUT THE LEADER

STAKING

PLAN VIEW

REMOVE $\pm 4"-8"$ OF -

SOIL FROM TOP OF

ROOT BALL TO EXPOSE

ROOT FLARE. SOIL CAN

REMOVE ALL BASKET

BE USED IN PLANT MIX.

TIMES, 1" DEEP

GUY ALL TREES 4" AND OVER

PLANT SO TOP OF ROOT FLARE

IS EVEN WITH THE FINISH GRADE

KNIFE SLIT SIDE OF ROOT BALL 6

PRUNE ONLY TO REMOVE BROKEN

2 x ROOT BALL DIA.

3 X ROOT BALL DIA.

DECIDUOUS TREE PLANTING DETAIL NOT TO SCALE

FUTURE SINGLE FLOOR BUILDING, 100'X60', SLAB ON GRADE WITH PARTIAL STORAGE LOFT EXTG. OFFICE BUILDING NEW SINGLE FLOOR ADDITION, 65'X30', SLAB ON GRADE EXISTING SINGLE FLOOR BUILDING, 65'X40', SLAB ON GRADE - PROPERTY LINE

NOTES: 1. CALL MISS DIG TO LOCATE UNDERGROUND UTILITIES PRIOR TO EXCAVATION.

ANGLE CENTER LINE DIAMETER, ROUND NUMBER, POUNDS ACT. ACOUSTICAL ACT. ACOUSTICAL CEILING TILE ADJ. ADJACENT A.F.F. ABOVE FINISHED FLOOR ALT ALTERNATE ALT ALTERNATE ALUM ALUMINUM MDF. BOARD BEARING BEARING BASEMENT BITUMINOUS MH. MANHOLE MANUALE MFR. MANUFACTUR(ER) M.O. MASONRY OPENING MAX. MAXIMUM MECH. MECHANICAL BLOCK BLOCKING BOTTOM OF TRUSS BOTTOM BUILDING MIN. MINIMUM MISC. MISCELLANEOUS NO. NUMBER N. NORTH N.I.C. NOT IN C.J. CONTROL JOINT, CONSTRUCTION JOINT CLR. CLEAR CAB. CABINET CPT. CARPET(ED) C.B. CATCH BASIN N.T.S. NOT TO SCALE O.S.B. ORIENTED STRAN BOARD O.C. ON CENTER CEILING CERAMIC TILE COLUMN CONCRETE CONCRETE MASONRY UNIT COL. CONC. C.M.U. OPNG. OPENING O.H. OVERHEAD PNT. PAINT PLAM. PLASTIC LAMINATE PLWD. PLYWOOD PTD. PAINTED PVC. POLYVINYL CHLORIDE Q.T. QUARRY TILE R, RAD. RADIUS R.A. RETURN AIR REF. REFERENCE CONST. CONSTRUCTION CONT. CONTINUE, (ED), (OUS) CONTR. CONTRACT(OR) DIA. DIAMETER DWG. DRAWING DOWNSPOUT DETAIL DOUBLE DOOR EGRESS EXHAUST FAN EVERY OTHER ETHYLENE PROPYLENE RQD. REQUIRED R.O.W. RIGHT OF WAY R.D. ROOF DRAIN RM ROOM R.O. ROUGH OPENING DIENE MONOMER ELECTRIC(AL) ELEVATOR SK SINK SHT SHEET EXHAUSI EXPANSION JOINT EXTERIOR EXTERIOR INSULATION FINISHING SYSTEM EXISTING FINISH(ED) SIM. SIMILAR SPEC. SPECIFICATION(S) SQ. SQUARE SHTG. SHEATHING S.S. STAINLESS STEEL FIBERGLASS FIRE ALARM FURNISHED BY OWNER FIRE EXTINGUISHER FURN. FURNISH(ED) FLR. FLOOR(ING) F.D. FLOOR DRAIN FTG. FOOTING FND. FOUNDATION CONCRETE TYP. TYPICAL UNDERGROUND UNDERWRITERS LABORATORIES INC. VOLT GENERAL CONTRACTOR GLASS, GLAZING GYPSUM BOARD CONTRACTOR GL. GLASS, GLAZING V. VOLT GPBD. GYPSUM BOARD VB VINYL BASE HDR. HEADER V.C.T. HDWD. HARDWOOD HDWE. HARDWARE HTG. HEATING VERT. VERTICAL VENTILATION, AIR W.C. WATER CLOSET CONDITIONING W.W.M. WELDED WIRE HT. HEIGHT MESH H.M. HOLLOW METAL WD. WOOD CODE REVIEW: BUILDING DATA: WITH STORAGE LOFT **BUILDING CODE:**

NEW LEAN TO ADDITION -65'X30' SLAB ON GRADE, SINGLE FLOOR FUTURE NEW BUILDING -100'X60' SLAB ON GRADE, SINGLE FLOOR

MICHIGAN BUILDING CODE 2015

<u>USE GROUP:</u> STORAGE S1, LOW HAZARD

<u>GENERAL LIMITS:</u>

TYPE VB CONSTRUCTION S1 TABULAR AREA=9,000 SF FLOOR AREA LEAN TO IS 1,950 SF FLOOR AREA FUTURE BUILDING IS 6,000 SF

FIRE RATING OF CONSTRUCTION: PRIMARY STRUCTURAL FRAME=0 BEARING WALLS=0 NON BEARING WALLS=0 ROOF CONSTRUCTION=0

FIRE EXTINGUISHERS: 1 IN LEAN TO ADDITION 2 IN FUTURE BUILDING

OCCUPANT LOAD: LEAN TO= $\frac{1}{300}$ SF=7 FUTURE BUILDING= $\frac{1}{300}$ SF = 20

REQUIRED EXITS: LEAN TO =1 FUTURE BUILDING=2

GENERAL NOTES:

INSULATION JOINT

MEDIUM DENSITY FIBERBOARD

CONTRACT

OPPOSITE OUTSIDE DIAMETER

SOUTH

SCHEDULE SERVICE SINK

STEEL STRUCTURAL

A. THE CONTRACTOR SHALL ADHERE TO THE DRAWINGS AND SPECIFICATIONS HEREIN. DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS MUST BE APPROVED IN WRITING. THE ARCHITECT WILL NOT BE HELD LIABLE FOR DAMAGES RESULTING FROM UNAUTHORIZED DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS.

B. VERIFY PROPERTY AND SETBACK LINES PRIOR TO STAKING OUT NEW WORK.

C. DO NOT SCALE OFF FROM THE DRAWINGS. IF DIMENSIONAL QUESTIONS ARISE, CONTACT THE ARCHITECT.

O. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH THE 2018 MICHIGAN RESIDENTIAL CODE.

. ALL ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH THE 2015 MICHIGAN BUILDING CODE. . ALL PLUMBING WORK SHALL BE IN

COMPLIANCE WITH THE 2015 MICHIGAN BUILDING CODE. G. A FULL LIST OF BUILDING, ELECTRICAL, MECHANICAL, AND PLUMBING CODES CAN BE

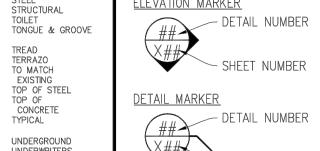
REFERENCED IN THE 2015 MICHIGAN BUILDING CODE. H. VERIFY ALL EXISTING CONDITIONS PRIOR TO PROVIDING QUOTATIONS, OR

CALL MISS DIG TO LOCATE UTILITIES PRIOR TO EXCAVATION.

ORDERING MATERIALS.

ALL DIMENSIONS ARE TO FACE OF STUDS, FACE OF C.M.U., AND CENTERLINE OF DOORS / WINDOWS, AND POSTS, UNLESS NOTED OTHERWISE.





SHEET NUMBER DRAWING TITLE __ DETAIL NUMBER

##Drawing 2 SCALE:

SHEET NUMBER WALL SECTION MARKER

DETAIL NUMBER

X## SHEET NUMBER

MARKER

DETAIL NUMBER

X##

DOOR TAG DOOR NUMBER

ROOM TAG #### ROOM NUMBER

WINDOW TAG

WINDOW NUMBER

SHEET INDEX:

T-1 SITE LAYOUT AND SYMBOL KEYS

PM1 PHOTOMETRIC PLAN

F1—FOUNDATION PLAN AND DETAILS

A1 FIRST FLOOR PLAN A2 REFLECTED CEILING PLAN

A3-ROOF FRAMING PLAN

A4 EXTERIOR ELEVATIONS

A5 BUILDING SECTIONS

A6-DETAILS

A7 WALL SECTIONS AND DETAILS SP1—SPECIFICATIONS

A1A FUTURE BARN PLAN AND ELEVATIONS

ROAD

PROJECT ID

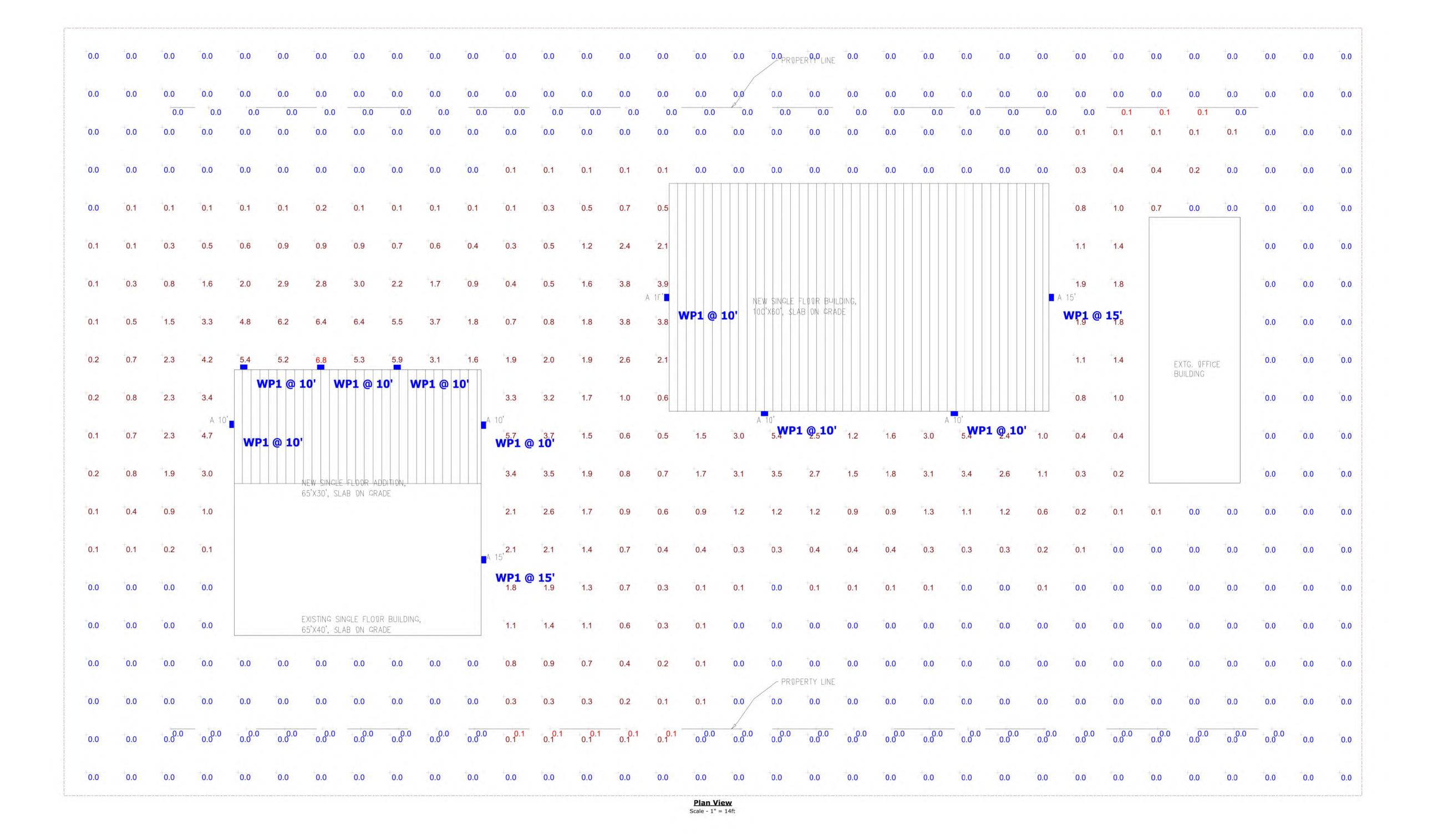
ND. PERMIT

REVIEW

SHEET NUMBER

nitect

DANGEROUS
104 South Main S
Chelsea, Ml. 48118
734.475.3660
www.DANGEROUSARCHITECTS.COM



General Note

- 1. SEE DRAWING FOR LUMINAIRE MOUNTING HEIGHT.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' 0"
 LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

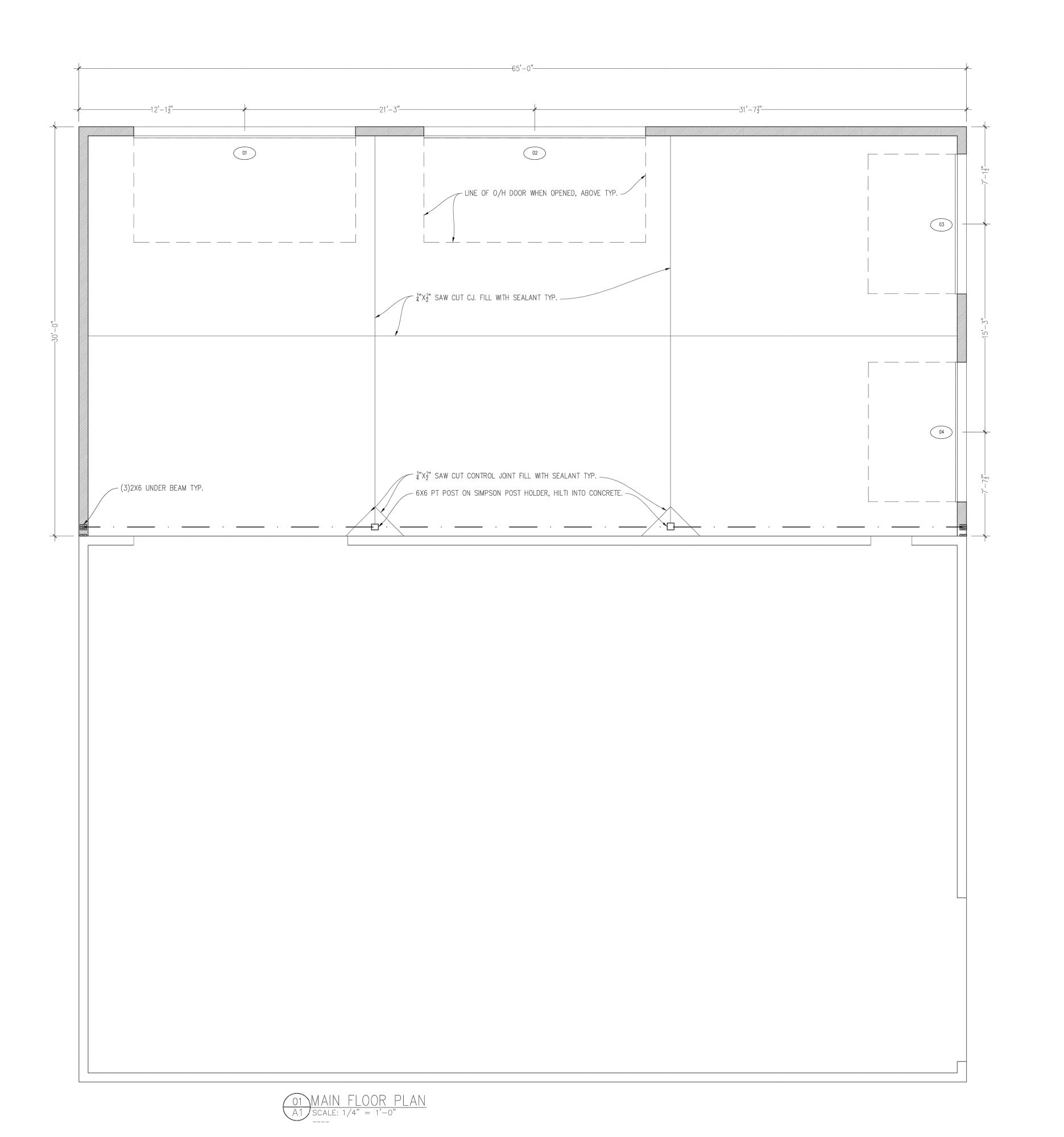
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

Statistics									
Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min			
Property Line Bottom	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A			
Property Line Top	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A			
Overall	+	0.6 fc	6.8 fc	0.0 fc	N/A	N/A			

Schedule). 			
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	WP1	10	Lithonia Lighting	WDGE2 LED P4 40K 70CRI TFTM	WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE FORWARD THROW MEDIUM OPTIC	LED	4742	0.9	46.6589



Designer
DS
Date
01/19/2023
Scale
Not to Scale
Drawing No.
#QUICK CALC
1 of 1



			000	R A	ND	FRA	ME SC	HEDU	LE			
		,	D	OOR					FRAME			
DR. NO.	ROOM NAME	SIZE	TYPE	MATERIAL	HARDWARE	FINISH	GLASS	MATERIAL		FINISH	LABEL (DOOR & FRAME)	REMARKS
01	STORAGE	16'X10'	Α	MTL.	_	CLAD	-	MTL.			_	INSUL. MTL. DOOR WEATHERSTRIPPING, SLIDE LO
02	STORAGE	16'X10'	А	MTL.	-	CLAD	_	MTL.			-	INSUL. MTL. DOOR WEATHERSTRIPPING, SLIDE LO
03	STORAGE	10'X10'	Α	MTL.	-	CLAD	-	MTL.	,		_	INSUL. MTL. DOOR WEATHERSTRIPPING, SLIDE LO
04	STORAGE	10'X10'	A	MTL.	-	CLAD	_	MTL.			_	INSUL. MTL. DOOR WEATHERSTRIPPING, SLIDE LO
											-	

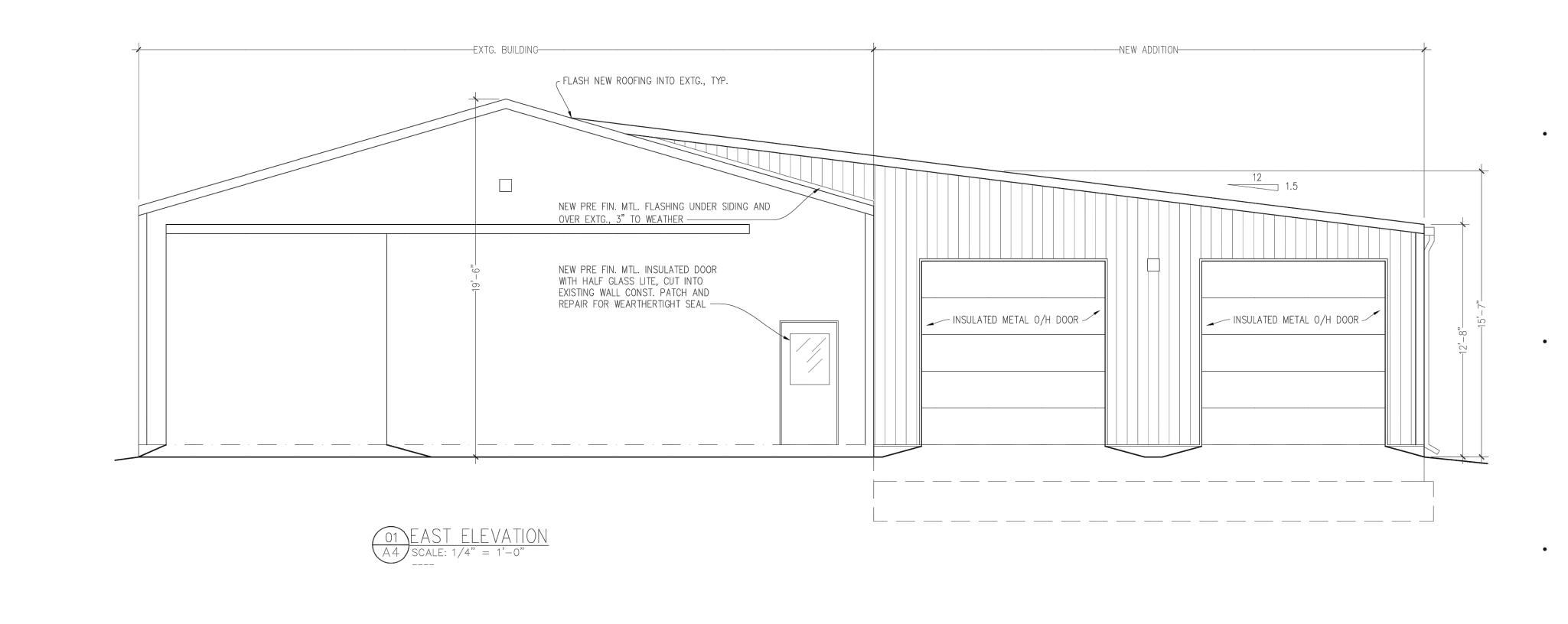
NOTES:	1.	DOORS	ARE	PRE	FINISHED	METAL	CLAD	INSULA	TED	CORE	AND	PRE	FIN.	INTERIOR	LINER

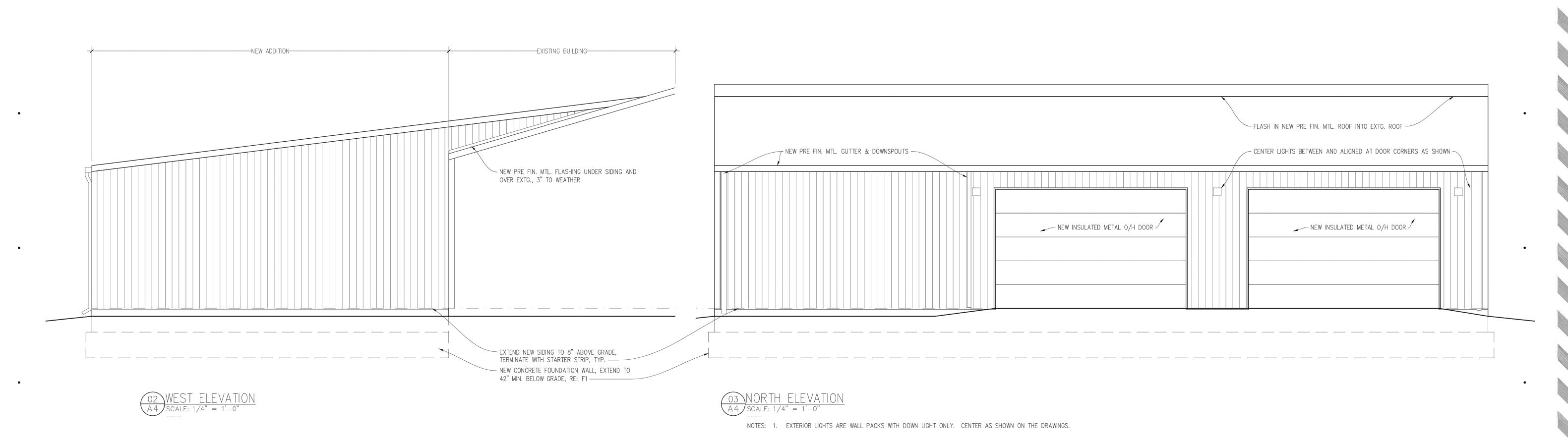
2x6 Wall	Lintel Schedule - Bearing Wall
UP TO 3'-0"	(2) 2x10 WITH 2x3 SPACERS 16" O.C. ALL GLUED & SCREWED
3'-1" TO 6'-0"	(3) 2x10 WITH 1/2' PLYWOOD @ 16" O.C. ALL GLUED & SCREWED
6'-1" TO 8'-0"	(3) 2x12 WITH 1/2" PLYWOOD SPACERS ALL GLUED & SCREWED
OVER 8'-0"	CONTACT ARCHITECT IF NOT ON DRAWINGS

2x4 Wall	Lintel Schedule — Bearing Wall
UP TO 3'-0"	(2) 2x10 WITH 1/2" PLYWOOD 16" O.C. ALL GLUED & SCREWED
3'-1" TO 6'-0"	(2) 2x12 WITH 1/2' PLYWOOD @ 16" O.C. ALL GLUED & SCREWED
6'-1" TO 8'-0"	(2) 2x12 WITH 1/2" PLYWOOD SPACERS ALL GLUED & SCREWED
OVER 8'-0"	CONTACT ARCHITECT IF NOT ON DRAWINGS

	N	
P	ROJECT	ID

PROJECT I	ID
ISSUE	DATE
PD	11.30.22
FND. PERMIT	2.20.22
DD	1.18.23
PC REVIEW	1.20.23





LEAN—TO FOUNDATION MCA
ER ELECTRIC
RAWSONVILLE ROAD
PLYMOU

PROJECT ID

DATE
11.30.22

ND. PERMIT 2.20.22

D 1.18.23

C REVIEW 1.20.23

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SHEET NUMBER

HEET NUMBER

