



ZONING BOARD OF APPEALS
Regular Meeting Agenda
Wednesday August 6, 2025
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@ypsitownship.org or 734-544-4000 ext. 1.

1. Call Meeting to Order
2. Roll Call – Determination of a quorum
3. Approval of Agenda
4. Approval of July 2, 2025, Regular Meeting Minutes
5. Public Hearing

Applicant: Zippy Auto Wash
Location: 1822 W Michigan Avenue, Ypsilanti, MI 48197
Parcel ID: K-11-39-252-022
Request: Article 5 – Sec. 503.4, Building Form A.2: Request for variance to locate the building further back on the site than the required 10-foot build-to-line along E. Ellsworth Rd.

Article 5 – Sec. 503.4, Building Form A.2: Request to locate parking within the front yard along E. Ellsworth Rd.

Article 13 – Sec. 1302.2.C: Request to locate a trash receptacle screen in the E. Ellsworth front yard of the site, and adjacent to a street.

6. Open discussion for issues not on the agenda
 - a. Planning Department report
 - b. Correspondence received
 - c. Zoning Board of Appeals members
 - d. Members of the audience and public
7. Any other business that may come before the Zoning Board of Appeals
8. Adjournment

(THERE IS NO WORK SESSION)

CHARTER TOWNSHIP OF YPSILANTI
ZONING BOARD OF APPEALS
Wednesday, July 2, 2025
6:30 pm

COMMISSIONERS PRESENT

Elizabeth El-Assadi
Stan Eldridge
Edward Burnett
David Marshall
Ericka Vonyea (Arrived at 6:32 pm)

STAFF AND CONSULTANTS

Mark Yandrick – Township Planning Director
Sally Elmiger - Carlisle Wortman

- **CALL TO ORDER/ESTABLISH QUORUM**

MOTION: Ms. El-Assadi called the meeting to order at 6:31 p.m. Ms. El-Assadi completed the roll call and confirmed a quorum was established.

- **APPROVAL OF AGENDA**

MOTION: Mr. Eldridge **MOVED** to approve the agenda as presented. The **MOTION** was **SECONDED** by Mr. Burnett and **PASSED** by unanimous consent.

- **APPROVAL OF JUNE 4, 2025, REGULAR MEETING MINUTES**

MOTION: Mr. Eldridge **MOVED** to approve June 4, 2025, Regular Meeting Minutes as presented. The **MOTION** was **SECONDED** by Mr. Marshall and **PASSED** by unanimous consent.

- **PUBLIC HEARING**

Applicant: Bank of America

Location: 2250 W Michigan Avenue, Ypsilanti, MI 48197

Parcel ID: K-11-18-100-024

Request: Article 13 – Sec. 1303.3 (A & B): Site Design Standards Uses: Request for variance to permit lighting levels along the western property line to exceed the maximum allowable illumination of 0.5 footcandles.

Sally Elmiger informed the Zoning Board that the applicant made their original request for two lighting variances to the Zoning Board of Appeals (ZBA) at their February 5, 2025, meeting. The Board members asked the applicant to see if they could reduce the proposed lighting levels along the west property line and under the ATM canopy. The applicant has revised the plans and has returned to the ZBA to reconsider the request.

There were two previous two variances. One variance exceeded the maximum allowable footcandle reading on the site, and the applicant has eliminated the need for that variance by reducing the lighting levels below the maximum allowed, which is 20-footcandles. The second variance was the request for 13-footcandles along the west property line, which is adjacent to a residential property. The applicant's revised plans show a reduction to 4.2-footcandles. The maximum allowed along a property line that is shared between commercial and residential use is 0.5 feet. Even though it is still above the 0.5-foot lighting levels, it is substantially less than what was previously requested.

The planning staff have reviewed the revised plan against the criteria in the ordinance, and the staff have considered the proposal to meet all the criteria.

Sally Elmiger shared with the Zoning Board that the property has exceptional circumstances. The bank has been in the same location for years, with its drive-through located on the west side of the building adjacent to a residential property. Moving the drive-through to meet the ordinance would be overly burdensome. The ordinance's lighting standards are intended to minimize potential impacts on nearby residences; however, the ordinance also intends to allow lighting levels that will provide a safe environment for night-time use of a site.

Tyler Wilson, a contractor for PCI-Dailey Company representing Bank of America, informed the ZBA that the Bank of America policy upgrade requires the elevation of lighting for security purposes. The lighting level is slightly above the requirements of the ZBA. The applicant hopes that by lowering the amount of variance, the proposal will be approved. Mr. Wilson informed the ZBA that the footcandles are down to zero within 35 feet of the property line, and the residential neighborhood is 210 feet from the property line.

PUBLIC HEARING OPENED AT 6:37 PM

(Hearing no comments)

PUBLIC HEARING CLOSED AT 6:37 PM

MOTION: Mr. Marshall **MOVED** to approve the variance request at 2250 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-18-100-024 to the lighting requirements of Article 13, Section 1303.3 (A & B) of the Township Zoning Ordinance, as shown on the plans submitted with the Zoning Board of Appeals Packet identified as V3 250307. Granting the requested variance meets the criteria for a non-use variance in Section 1704 (D) of the Zoning Ordinance. Specifically, the approval is based on the following findings of fact:

- The location of the ATMs next to the residential property to the west represents unique circumstances that do not apply to other properties in this zoning district, creating practical difficulty.
- Without an adequately lit night-time environment, the bank's use of this site is greatly diminished. Therefore, the variance is needed for the safe, continued operation of the ATMs
- The maximum lighting levels at the property line are 4.2 footcandles, but they fade to almost zero, which is approximately 35 feet into the residentially used property. The residential building is approximately 210 feet from the property line. It is unlikely that the proposed light levels will negatively impact the residential use of the neighboring property.
- The need for adequate lighting is heightened given that the land use is a bank, and that their customers use ATMs at night. The proposed lighting levels have been substantially reduced to reach a balance between this property's need to create a safe environment for its customers and minimizing light spill onto the residential property next door. The need for variance is not self-created.
- The request has reduced the number of variances from two to one, and the amount of the variance has also been substantially reduced, minimizing the needed variance to achieve adequate site lighting.

The **MOTION** was **SECONDED** by Mr. Burnett.

Roll Call Vote: Mr. Stan Eldridge (Yes); Mr. David Marshall (Yes); Ericka Vonyea (Yes); Mr. Burnett (Yes); Ms. Elizabeth El-Assadi (Yes);

MOTION PASSED.

- **OPEN DISCUSSION FOR ISSUES NOT ON AGENDA**

- **PLANNING DEPARTMENT REPORT**

Sally Elmiger introduced the new Township Planning Director, Mark Yandrick to the Zoning Board.

Mark Yandrick shared with the ZBA that he hails from Pittsburgh, Pennsylvania and he previously worked with Pontiac, Michigan. Mark Yandrick expressed his interest in working with the Planning Department and Carlisle Wortman.

- **CORRESPONDENCE RECEIVED**

None to Report.

- **ZONING BOARD OF APPEALS MEMBERS**

None to Report.

- **MEMBERS OF THE AUDIENCE/PUBLIC**

Jan Curry (West Michigan Avenue) shared with the ZBA the major improvements at the residential site adjacent to Bank of America. During her visit to the bank, she asked about a few additional projects and processes.

- **OTHER BUSINESS THAT MAY COME BEFORE THE ZONING BOARD**

None to Report.

- **ADJOURNMENT**

MOTION: Mr. Eldridge **MOVED** to adjourn at 6:44 p.m. The **MOTION** was **SECONDED** by Ms. Vonyea and **PASSED** by unanimous consent.

Respectfully submitted by Minutes Services



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: July 23, 2025

**Zoning Board of Appeals – Variance Analysis
For
Ypsilanti Township, Michigan**

Applicant:	Zippy Auto Wash
Project Name:	Zippy Auto Wash
Plan Date:	June 2, 2025
Location:	1822 W. Michigan Ave. (W. Michigan Ave. and Ellsworth intersection)
Zoning:	RC, Regional Corridor – Form Based District
Action Requested:	The applicant is requesting the following variances: 1. Article 5 – Sec. 503.4, Building Form A.2: Request for variance to locate the building further back on the site than the required 10-foot build-to-line along E. Ellsworth Rd. 2. Article 5 – Sec. 503.4, Building Form A.2: Request to locate parking within the front yard along E. Ellsworth Rd. 3. Article XIII – Sec. 1302.2.C: Request to locate a trash receptacle screen in the E. Ellsworth front yard of the site, and adjacent to a street.

PROJECT DESCRIPTION

The applicant is proposing to build a 4,900 s.f. automated tunnel auto wash with two pay terminals and 12 vacuum stations/parking spaces. The parking lot will also offer five (5) employee parking spaces. This site was previously used as an auto wash.

This project was presented for a Public Hearing at the July 22, 2025, Planning Commission meeting. No public comments were expressed, and the Planning Commission postponed any decision on the Special

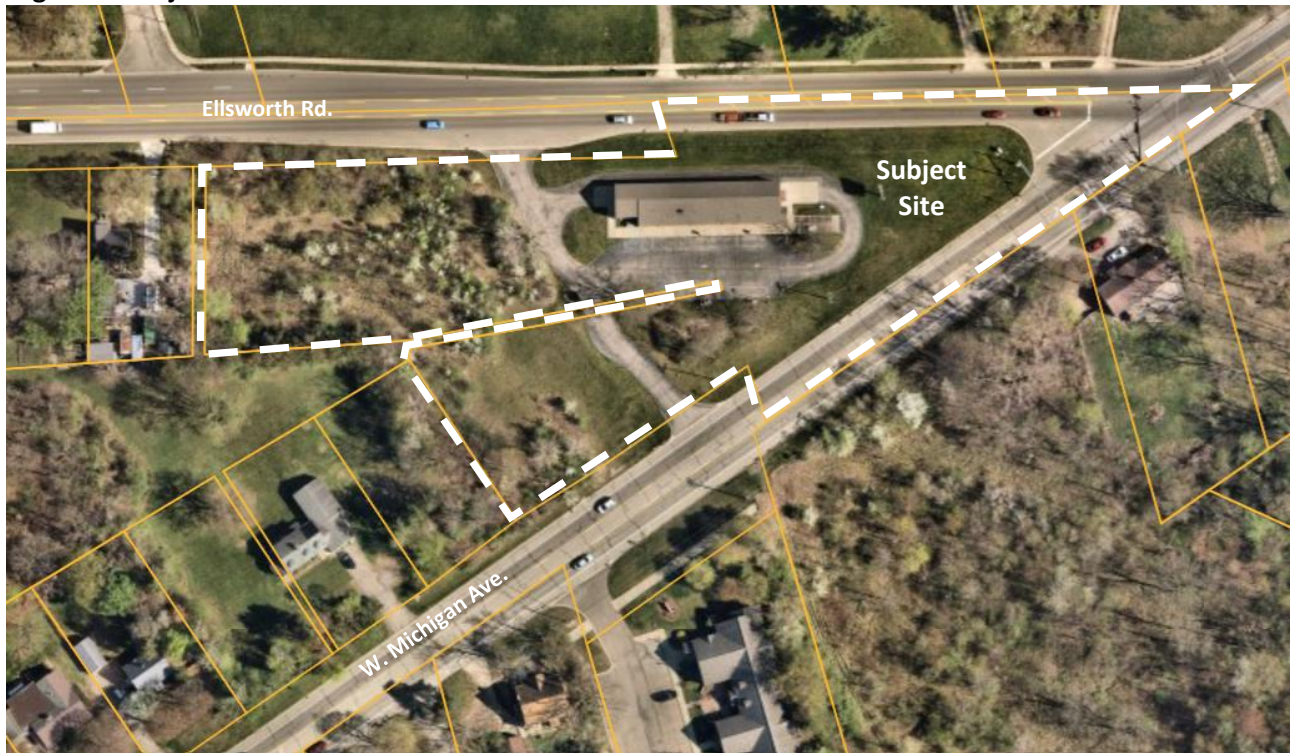
Benjamin R. Carlisle, *President* John L. Enos, *Vice President*
Paul Montagno, *Principal* Megan Masson-Minock, *Principal* Laura Kreps, *Principal* Brent Strong, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* Craig Strong, *Principal* Douglas J. Lewan, *Principal*
Richard K. Carlisle, *Past President/Senior Principal* R. Donald Wortman, *Past Principal*

July 23, 2025

Land Use/Site Plan Review to allow the applicant time to request the needed variances for the proposed site layout.

An aerial photo of the subject site is provided in Figure 1. below:

Figure 1: Subject Site



Source: Near Map (Captured April 17, 2025)

APPEAL AND DEMONSTRATION OF PRACTICAL DIFFICULTY

The Zoning Board of Appeals must use the following factors to determine if the variance requests constitute a practical difficulty, in accordance with Section 1704(2)(D). This section of our review will evaluate the requested variances and provide comments following each factor.

(1) That there are exceptional or extraordinary circumstances or conditions applying to the property in question that do not apply generally to other properties or classes of uses in the same zoning district. Exceptional or extraordinary circumstances or conditions include but may not be limited to:

- a. exceptional narrowness, shallowness, or shape of a specific property;***
- b. exceptional topographic conditions;***
- c. any other physical situation on the land, building or structure deemed by the Zoning Board of Appeals to be extraordinary; or,***
- d. development characteristics of land immediately adjoining the property in question that creates an exceptional constraint.***

CWA Comment: The unusual shape of the subject site creates two front yards. This shape does not generally occur on other properties in this zoning district. Typically, roads meet at a 90-degree angle. In this case, Ellsworth Rd. and W. Michigan Ave. meet at a much smaller angle, creating a uniquely shaped parcel. The shape of the parcel is the main reason why the property cannot reasonably meet the following requirements, and needs variances:

- A. The applicant is locating the building on the 10-foot “build-to-line” along Michigan Ave., vs. Ellsworth. In reviewing the site plan, it is our opinion that W. Michigan Ave. is the dominant corridor, based on the Township’s Master Plan and descriptions of this corridor. Therefore, we recommended that the building be placed on the W. Michigan Ave. build-to-line. This then means that the building cannot also be located on the Ellsworth Rd. build-to-line. The shape of the lot and the fact that it has two front yards in an arrow-head configuration create a practical difficulty in locating any building on this site without a variance.
- B. Due to the unusual shape of the lot and two front yards, the parking must be located in a front yard, as there is no other place to put it. Since the building must be located on the build-to-line, any property behind the building (due to Ellsworth) is considered a front yard. Again, the shape of the lot creates two front yards, creating a practical difficulty in siting the parking outside of a front yard.
- C. The same analysis in “B” above also applies to the location of the dumpster screen.

(2) That a variance is necessary for the preservation and enjoyment of a substantial property right possessed by other properties in the same zoning district and in the vicinity;

CWA Comment: Any development of this property that is allowed within the RC, Regional Corridor zoning district will be presented with the issues created by the odd shape of this site. The variances will allow development to proceed, and preserve the property rights that others in the zoning district possess.

(3) That the authorizing of such variance will not be a substantial detriment to adjacent property, will not be harmful to or alter the essential character of the area, and will not materially impair the purposes of this ordinance or the public interest;

CWA Comment: The proposed project will redevelop an underutilized property along one of the Township’s main corridors. Its redevelopment into a viable business will benefit adjacent property owners. Also, the constructed part of this project is located away from the residential properties to the west, preserving significant existing vegetation that can help screen the nearby homes from the activity, noise, and lights of this proposal. Lastly, the hours of operation for this use are 7am-8pm, M – Sat., and 8am-8pm, Sun., which limits activity on the site and impacts to adjacent neighbors. (Note that vacuums are not available for use outside of regular business hours.)

In the Master Plan, the Township has planned the W. Michigan Ave. corridor as follows:

MIXED USE CORRIDORS: Mixed Use Corridors are developed transportation arteries, with a mixture of residential, commercial, office and employment uses. The intent is to

improve the function, investment value and aesthetics of corridor. There are two types of Mixed Use Corridors: Neighborhood and Regional.

The intent of the RC, Regional Corridor Zoning District is described as follows:

Regional: Regional Mixed-Use Corridors areas are located along the busiest corridors, which support a high volume of both local and regional traffic. This area may include large national chains, regional retailers, and auto-oriented uses that draw customers both regionally and locally.

In our opinion, the proposed use meets this criterion, as it will not be a substantial detriment to adjacent property owners, and is consistent with the Master Plan and the RC, Regional Corridor zoning district. The project will redevelop the site into a viable commercial business, improving the character of the area with a new, attractive building and significant landscaping. The use is also an “auto-oriented” use that will draw customers both regionally and locally. The variances will allow the business to locate here, and contribute to the goals listed in the Master Plan and Regional Corridor zoning district.

- (4) The problem and resulting need for the variance has not been self-created by any action of the applicant or the applicant's predecessors; and***

CWA Comment: The applicant, nor his predecessors, created the unusual shape of this site, which creates the need for the requested variances.

- (5) The proposed variance will be the minimum necessary and no variance shall be granted where a different solution not requiring a variance would be possible.***

CWA Comment: As mentioned above, the unusual shape of the lot and resulting two front yards makes siting a compliant building, parking, and dumpster screen very challenging. Choices had to be made in the site design, and regardless of which street was chosen, variances for the building, parking, and dumpster screen locations would be necessary. We consider the proposed variances to be the minimum necessary for reasonable use of the property.

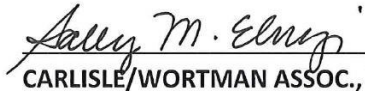
RECOMMENDATIONS

In our opinion, the proposal meets the criteria for the requested building, parking, and dumpster screen location variances.

If the Zoning Board of Appeals agrees with this analysis, we would recommend granting the variances.

Zippy Auto Wash Variance Analysis

July 23, 2025



CARLISLE/WORTMAN ASSOC., INC.

Sally M. Elmiger, AICP, LEED AP

Principal

Draft Motions

The following draft motions and conditions are provided to assist the Zoning Board of Appeals in making a complete and appropriate motion for this application. The ZBA may utilize, add, or reject any portion of the motion or any conditions suggested herein, as deemed appropriate.

Postpone:

I move to postpone the following variance requests from the Township Zoning Ordinance, at 1822 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-39-252-022:

1. From Article 5 – Sec. 503.4, Building Form A.2 to locate the building further back on the site than the required 10-foot build-to-line along E. Ellsworth Rd., and
2. From Article 5 – Sec. 503.4, Building Form A.2 to locate parking within the front yard along E. Ellsworth Rd., and
3. From Article XIII – Sec. 1302.2.C to locate a trash receptacle screen in the E. Ellsworth front yard of the site, and adjacent to a street,

as shown on the plans submitted with the Zoning Board of Appeals Packet dated June 2, 2025. This postponement is to provide the applicant an opportunity to address the comments made at this evening's meeting and return with a revised proposal that reflects those comments.

Approve:

I move to approve the following variance requests from the Township Zoning Ordinance, at 1822 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-39-252-022:

1. From Article 5 – Sec. 503.4, Building Form A.2 to locate the building further back on the site than the required 10-foot build-to-line along E. Ellsworth Rd., and
2. From Article 5 – Sec. 503.4, Building Form A.2 to locate parking within the front yard along E. Ellsworth Rd., and
3. From Article XIII – Sec. 1302.2.C to locate a trash receptacle screen in the E. Ellsworth front yard of the site, and adjacent to a street,

as shown on the plans submitted with the Zoning Board of Appeals Packet dated June 2, 2025. Granting the requested variances meets the criteria for a non-use variance in Section 1704(2)(D) of the Zoning Ordinance. Specifically, the approval is based on the following findings:

- A. The applicant has demonstrated the presence of extraordinary circumstances applying to the property that prevent compliance with the setback and locational zoning requirements. The unusual shape of the property, and the fact that the shape creates two front yards, are conditions that are atypical of other corner lots within the zoning district.
- B. The request is necessary for the preservation of a substantial property right. Any redevelopment of the property would require variances, given the odd shape and two front yards. The variances will allow development to proceed, and preserve the property rights that others in the zoning district possess

July 23, 2025

- C. The proposed development will create a viable business on an underutilized property, benefiting adjacent property owners. The plan will preserve significant vegetation between the business and neighboring residential properties, helping to screen activity, noise and light. Lastly, the proposal will help to improve the character of both corridors with an attractive building and significant landscaping.
- D. The need for the variance is not self-created, as the applicant did not create the odd shaped lot or two front yards.
- E. The variance requested is the minimum necessary to redevelop the property into a viable business at this location.

Deny:

I move to deny the following variance requests from the Township Zoning Ordinance, at 1822 W. Michigan Avenue, Ypsilanti, MI 48197, Parcel K-11-39-252-022:

- 1. From Article 5 – Sec. 503.4, Building Form A.2 to locate the building further back on the site than the required 10-foot build-to-line along E. Ellsworth Rd., and
- 2. From Article 5 – Sec. 503.4, Building Form A.2 to locate parking within the front yard along E. Ellsworth Rd., and
- 3. From Article XIII – Sec. 1302.2.C to locate a trash receptacle screen in the E. Ellsworth front yard of the site, and adjacent to a street,

as shown on the plans submitted with the Zoning Board of Appeals Packet dated June 2, 2025. The requested variances do not meet the criteria for a non-use variance in Section 1704(2)(D) of the Zoning Ordinance. Specifically, the denial is based on the following findings:

- A. The applicant has not demonstrated the presence of extraordinary circumstances applying to the property that prevent compliance with the setback and locational requirements. The property conditions are typical of other commercial properties adjacent to residential areas within the zoning district.
- B. The request is not necessary for the preservation of a substantial property right, as other similarly situated properties in the zoning district comply with the ordinance requirements without requiring a variance.
- C. The proposed development will likely result in adverse impacts to the adjacent residential properties, contrary to the purpose of the building, parking, and trash receptacle screen location requirements.
- D. The need for the variance appears to be self-created, as the applicant has not provided a valid justification as to why the plan cannot be modified to comply with the ordinance.
- E. The variance requested does not appear to be the minimum necessary to redevelop the property.

RECEIVED

BY

JUL 15 2025

ZONING BOARD OF APPEALS APPLICATION

I. APPLICATION TYPE

- ☒ Variance
☐ Exceptions and Special Approvals (Includes: Temporary Uses and Structures)
☐ Administrative Review Appeal

YPSILANTI TOWNSHIP
OCS

II. PROJECT LOCATION

Address: 1822 W Michigan Ave Parcel ID #: K-11-39-252-022 Zoning RC
Lot Number: Subdivision:

III. APPLICANT INFORMATION

Applicant: Zippy Auto Wash Phone: 734-904-3869
Address: P.O. Box 550 City: Saline State: MI Zip: 48176
Fax: Email: mrweaver@comcast.net
Property Owner: Phone:
Address: City: State: Zip:
Fax: Email:

IV. COST AND FEES

Total: \$ Breakdown of fee: Residential: \$ 125.00
Non-residential: \$ 500.00

V. APPLICANT SIGNATURE

The undersigned Corey Weaver represents Zippy Auto Wash:
Applicant Property Owner

1. That Zippy Auto Wash is/are the owner(s) of lot(s) located in the
Property Owner Lot Subdivision
Subdivision, Ypsilanti Township, Michigan, otherwise known as 1822 W Michigan Ave and the property is
Address
zoned RC
Zoning District
2. That the petitioner hereby request Variance under Section 503.4 Article 5 of the Ypsilanti Township
Zoning Ordinance. Variance/Temporary Use Section Article
/Regular Meeting 1302.2.C X111
3. The petitioner further state that CW have/has read and understands the provisions of said zoning ordinance as it
Applicant Initial
applies to this petition.
4. That the following is submitted in support of the petition (attach all pertinent data to support the request).

Corey Weaver 7/15/25
Applicant Signature Print Name Date



Charter Township of Ypsilanti

Office of Community Standards

7200 S. Huron Drive, Ypsilanti, MI 48197

Phone: (734) 544-4000 ext. #1

Website: <https://ypsitownship.org>

RECEIVED

BY

OFFICE USE ONLY

2020 JUN 11 10:05

THURSDAY MAY 14 2020

200

All Zoning Board of Appeals Applications

- | | |
|--|---|
| <ul style="list-style-type: none">☐ The application is filled out in its entirety.☐ If the applicant is not the property owner, written and signed permission from the property owner is required.☐ Fees☐ Letter of interest of the applicant in the property | <ul style="list-style-type: none">☐ Plot plan or lot survey to scale showing the following:<ul style="list-style-type: none">☐ All property lines and dimensions☐ All existing and proposed structures and dimensions☐ Lot area calculations necessary to show compliance with regulations☐ Easements and dimensions, if applicable☐ Location of drives, sidewalks, and other paved areas on the property and on the adjacent streets.☐ Location and dimensions of the nearest structures on adjacent properties. |
|--|---|



SITE PLAN

ZIPPY AUTO WASH

1822 W Michigan Avenue

Ypsilanti Township, Michigan

ABBREVIATIONS

A	A.F.F.	ABOVE FINISH FLOOR
	AC	ACRE
	A/C	AIR CONDITION
	ALUM.	ALUMINUM
	ASPH.	ASPHALT
B	B.F.F.	BELOW FINISH FLOOR
	BIT.	BITUMINOUS
	BLDG.	BUILDING
C	CB	CATCH BASIN
	C.O.	CLEAN OUT
	COMP.	COMPRESSOR
	CONC.	CONCRETE
	CMU	CONCRETE MASONRY UNIT
	C.J.	CONTROL JOINT
D	DIA.	DIAMETER
	DIM.	DIMENSION
	DWG.	DRAWING
	D.I.	DUCTILE IRON
E	EA.	EACH
	ELEC.	ELECTRIC
	EL. / ELEV.	ELEVATION
	EQ.	EQUAL
	EXIST. / EX.	EXISTING
	EXP.	EXPANSION
	E.J.	EXPANSION JOINT
	EXT.	EXTERIOR
F	FT.	FEET
	F.F.	FINISH FLOOR
	F.H.	FIRE HYDRANT
	FIXT.	FIXTURE
	FLR.	FLOOR
	F.A.R.	FLOOR/AREA RATIO
G	GA.	GAUGE
	GALV.	GALVANIZED
	GL.	GLASS
H	HT.	HEIGHT
	H.P.	HIGH POINT
	H.M.	HOLLOW METAL
	HORIZ.	HORIZONTAL
I	I.D.	INSIDE DIAMETER
	INT.	INTERIOR
	INV.	INVERT
J	JT.	JOINT
L	L.L.	LIVE LOAD
	L.L.H.	LONG LEG HORIZONTAL
	L.L.V.	LONG LEG VERTICAL
	L.P.	LOW POINT
M	MFR.	MANUFACTURER
	MH.	MANHOLE
	MAS.	MASONRY
	M.O.	MASONRY OPENING
	MAX.	MAXIMUM
	MIL.	MILLIMETER
	MIN.	MINIMUM
	MTD.	MOUNTED
N	NOM.	NOMINAL
	N.I.C.	NOT IN CONTRACT
	NO.	NUMBER
O	O.C.	ON CENTER
	O.D.	OUTSIDE DIAMETER
	O.H.	OVERHEAD
	OE	OVERHEAD ELECTRIC
	OTE	OVERHEAD TELEPHONE & ELECTRIC
P	PTD.	PAINTED
	PSF	POUNDS PER SQUARE FOOT
	PSI	POUNDS PER SQUARE INCH
	PEMB	PRE-ENGINEERED METAL BUILDING
	PREFAB.	PREFABRICATED
R	RAD.	RADIUS
	REV.	REVISED
	R.O.W.	RIGHT OF WAY
	RTU	ROOF TOP UNIT
	RM.	ROOM
S	SAN.	SANITARY
	SCHED./SCH.	SCHEDULE
	SM.	SIMILAR
	S.P.A.	SITE PLAN APPROVAL
	SQ. FT./ S.F.	SQUARE FEET
	STD.	STANDARD
	ST. MH.	STORM MANHOLE
T	TVAS	TAPPING VALVE & SLEEVE
	T/C	TOP OF CURB
	T/GR	TOP OF GRADE
	T/P	TOP OF PAVEMENT
	T/W	TOP OF WALK
	TBR	TO BE REMOVED
	TYP.	TYPICAL
U	UE	UNDERGROUND ELECTRICAL
	UTE	UNDERGROUND TELEPHONE & ELECTRICAL
	U.N.O.	UNLESS NOTED OTHERWISE
	U.P.	UTILITY POLE
V	VERT.	VERTICAL
W	W/	WITH
	W/O	WITHOUT

LEGAL DESCRIPTION

PROPERTY TAX ID: K-11-39-252-022
PROPERTY DESCRIPTION PER AMERICAN TITLE COMPANY OF WASHTENAW, ISSUED FOR STEWART TITLE GUARANTY COMPANY,
COMMITMENT NO: 116879, WITH AN EFFECTIVE DATE OF APRIL 11, 2025 AT 5:00 P.M.:
Land in the Township of Ypsilanti, County of Washtenaw, Michigan, described as:
Lots 19 through 24, inclusive, TRIANGLE PARK SUBDIVISION, a part of French Claim No. 690, Washtenaw County, Michigan, as recorded in Liber 7 of Plats, Page 26, Washtenaw County Records.
Also, the vacated walkway between Lots 19, 20, 21 and 22 of said Subdivision.
Also, beginning in the centerline of Chicago Road (now Michigan Avenue) at a point which is South 20°06'00" East 51.20 feet from the Southeast corner of Triangle Park Subdivision, as recorded in Liber 7 of Plats, Page 26, Washtenaw County Records; thence North 20°06'00" West 280.87 feet; thence South 88°40'00" East 491.95 feet to the center of Chicago Road (now Michigan Avenue); thence South 57°27'00" West 468.95 feet to the PLACE OF BEGINNING, being part of French Claim No. 690, Town 3 South, Range 7 East, Ypsilanti Township, Washtenaw County, Michigan.

PROJECT DESCRIPTION

The proposed use is a modern express exterior auto wash – defined as a conveyORIZED wash with automated pay terminals, unlimited plans, free vacuums and other complimentary services. The proposed site plan is substantially similar to other operational Zippy Auto Wash sites in the nearby Ann Arbor / Ypsilanti area. The proposed site plan consists of a 4900 square foot building, including a 150 foot automated wash process with high power, heated mechanical drying, 2 automated pay terminals located behind the building, ample stacking spaces located on site, 12 vacuum stations and customer & employee parking, located adjacent to the building. The entrance & exit slabs adjacent to the building shall be heated to prevent freezing; areas beyond the slabs shall be deiced regularly to prevent freezing.

GENERAL NOTES:

- All site work shall meet all applicable codes, laws and regulations including Michigan Barrier-Free Design Requirements and ADA Accessibility Guidelines (ADAAG).
- Verify existing conditions on site. Notify architect/engineer of discrepancies prior to proceeding with construction.
- Provide signs per Michigan Barrier-Free Requirements at handicapped spaces. Van spaces shall have an additional sign, "VAN ACCESSIBLE" per ADAAG requirements.
- All work in R.O.W. shall conform to MDOT and/or County Standards and permitting guidelines.
- All roads leading to the site are designated Class A for all season travel.
- All work done shall be performed in accordance with the Township's current ordinances, standards and regulations.
- Existing utility information and locations are per existing records and may or may not have been field verified.

UTILITY NOTES

The existing utilities shown on the drawings represent the best information available as obtained by field surveys and from existing records. This information does not relieve the contractor of the responsibility to contact Miss Dig or to satisfy himself as to the accuracy of the location shown.

SEWER AND WATER

YCUA
2777 State Road
Ypsilanti, MI 48198
(734)484-4600

ELECTRIC

DTE
8001 Haggerty Road
Belleville, MI 48111
(734) 397-4321

TELEPHONE

AT&T
5500 South Maple Road
Ann Arbor, Michigan 48103
(734) 996-5351

GAS

DTE Gas
17150 Allen Rd.
Melvindale, MI 48122
(800) 338-0178

For protection of underground utilities, the contractor shall notify the Miss Dig Utility Location Service a minimum of 72 hours prior to excavation.

The improvements covered by these plans shall be done in accordance with the City of Saline's standards and supplemental specifications.

SITE INFORMATION

CURRENT ZONING: RC – Regional Corridor, SITE TYPE C, BUILDING TYPE A.2
SITE AREA: GROSS/NET = 143,072 SF/108,535 SF NET – 3.28 AC./ 2.49 AC. NET
EXISTING USE: Car Wash
PROPOSED BUILDING USE: Automatic Car Wash
PROPOSED BUILDING AREA: 4,900 SF – 1 Story

	REQUIRED	PROPOSED
MIN. LOT AREA	24,000 SF	Net 108,535 SF/2.49 Acres
MIN. LOT WIDTH	150'	493'
LOT COVERAGE		4.5%
IMP AREA COVERAGE	80%	4.5%
MAX. BUILDING HEIGHT	14' Min., 1 story	18', 1 story
MAX. BUILDING HEIGHT	30' max., 2 stories	18', 1 story
FRONT BUILD TO LINE (MICHIGAN AVE)	10'	10'
FRONT BUILD TO LINE (ELLSWORTH RD)	10'	83.5'
REAR YARD SETBACK	10'	178'
RESIDENTIAL USE SETBACK	27'	178'

PARKING & LOADING:

Parking Spaces Required:

Vehicle Wash: 1 space for each (1) employee.
3-5 employees

Total Required Parking Spaces: 5 spaces

Parking Spaces Provided:

12 vacuum spaces are provided with 5 employee spaces,
Including 1 barrier-free space

Loading Spaces:

1 Loading Spaces Provided.

Stacking Spaces:

Required: Auto Washes: Entry 8 – Exit 2
Provided: 10+ each

SOILS INFORMATION:

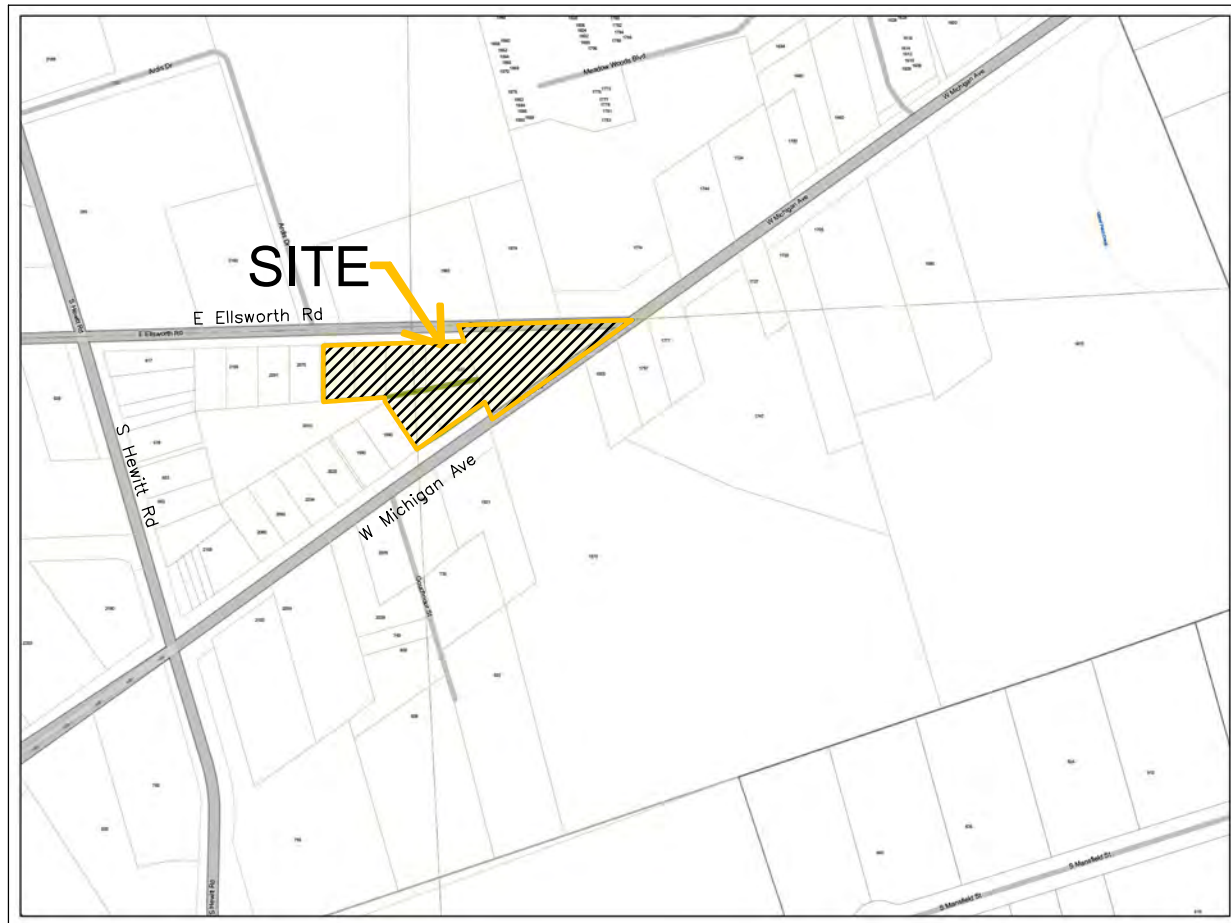
MoC Morley loam, 6 to 12 percent slopes Soil Group C
StB St Clair clay loam, 2 to 6 percent slopes Group D

NATURAL FEATURES:

The site is contains an existing car wash facility with paving utilities landscape and detention which shall be removed for the new development. Trees along western property lines shall be maintained to the extent possible for construction.

SANITARY SEWER BASIS OF DESIGN

THE AVERAGE FLOW RATE DURING HOURS OF OPERATION IS 0.025 CFS WITH A PEAK RATE OF 0.065 CFS. ESTIMATED AT 5000 GPD



LOCATION MAP

SCALE: 1" = 500'-0"

GENERAL INFORMATION

PROPERTY LOCATION:

1822 W Michigan Ave
Ypsilanti, Michigan 48197

DEVELOPER/OWNER:

Zippy Real Estate, LLC
P.O. Box 550
Saline, Michigan 48176
734-904-3869

SITE PLANNER/ENGINEER/CONTRACTOR:

Vanston/O'Brien, Inc.
8150 Jackson Road, Ste. A
Ann Arbor, MI 48103
(734) 424-0661

DRAWING INDEX:

C-1	TITLE SHEET
C-2	EXISTING CONDITIONS PLAN
C-3	SITE PLAN
C-4	GRADING PLAN
C-5	DRAINAGE & SESC PLAN
C-6	LANDSCAPE PLAN
C-7	LIGHTING PLAN
C-8	DETAIL SHEET
C-9	STORM WATER CALCULATIONS
C-10	ADS STORMTECH DETAILS

A-1	FLOOR PLAN & ELEVATIONS
A-2	SITE & BUILDING RENDERING

BOUNDARY & TOPOLOGICAL
SURVEY (by others)



DESIGNERS
Vanston/O'Brien, Inc.
BUILDERS

8150 Jackson Road, Ste. A
Ann Arbor, MI 48103
Tel: (734) 424-0661
Fax: (734) 424-0677
e-mail: dsig@vanston.com • www.vanston.com

Zippy Auto Wash
1822 W Michigan Ave
Ypsilanti Township, Michigan

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ISSUED FOR: DATE:
PRELIMINARY 6-2-25

DRAWN BY: GAH

JOB NO.: ---

TITLE SHEET

SHEET NO.

C-1





SITE PLAN

SCALE: 1" = 30'-0"

LEGEND			
---	---	PROPERTY LINE	
---	---	SETBACK	
---	---	EASEMENT	
-R-	-R-	PROPOSED STORM	
-W-	-W-	PROPOSED WATER	
-UE-	-UE-	PROPOSED ELECTRIC	
-G-	-G-	PROPOSED GAS	
-S-	-S-	PROPOSED SANITARY	
-S-	-S-	EXISTING STORM	
-w-	-w-	EXISTING WATER	
-oh-	-oh-	EXISTING OVERHEAD	
-ue-	-ue-	EXISTING ELECTRIC	
-C-	-C-	EXISTING CABLE	
-G-	-G-	EXISTING GAS	
-s-	-s-	EXISTING SANITARY	
- - -	- - -	EXISTING DITCH	
- - -	- - -	EXISTING CONTOUR	
- - -	- - -	PROPOSED CONTOUR	
- - -	- - -	LINE OF SILT FENCE	
- - -	- - -	DRAINAGE AREA	
		EXISTING LIGHT FIXTURE	
		NEW BUILDING MOUNTED LIGHTING	
		NEW POLE-MOUNTED LIGHT	
		EXISTING UTILITY POLE	
		EXISTING CATCH BASIN/MANHOLE	
		EXISTING CLEAN OUT	
		NEW SANITARY MANHOLE	
		NEW CATCH BASIN	
		NEW GATE VALVE	
		EXISTING FIRE HYDRANT	
		NEW FIRE HYDRANT	
		EXISTING ELEVATION	
		PROPOSED ELEVATION	
		EXISTING BUILDING	
		EXISTING ASPHALT PAVING	
		EXISTING ASPHALT PAVING TO BE REMOVED	
		PROPOSED BUILDING	
		PROPOSED ASPHALT PAVING	
		PROPOSED CONCRETE	



SCALE: 1" = 30'-0"

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ISSUED FOR:	DATE:
PRELIMINARY	6-2-25

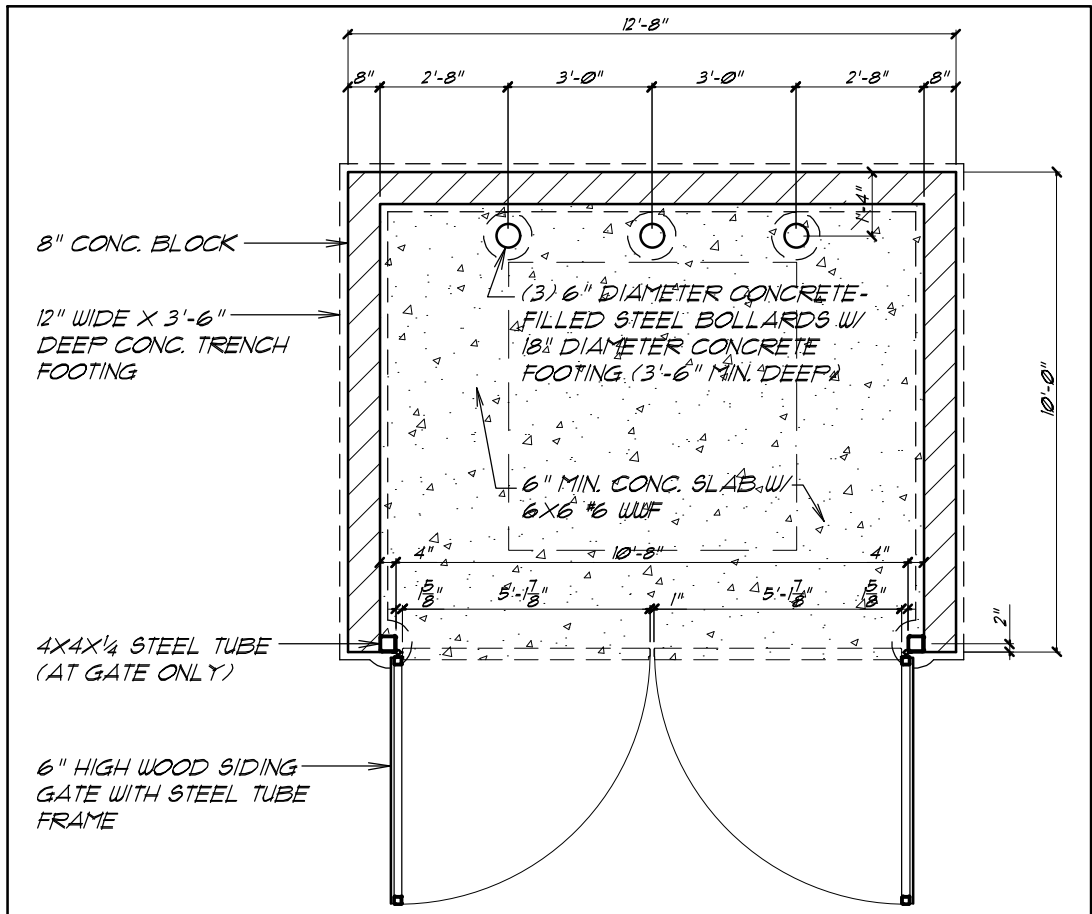
DRAWN BY: GAH
JOB NO.: ---

GRADING PLAN

SHEET NO.

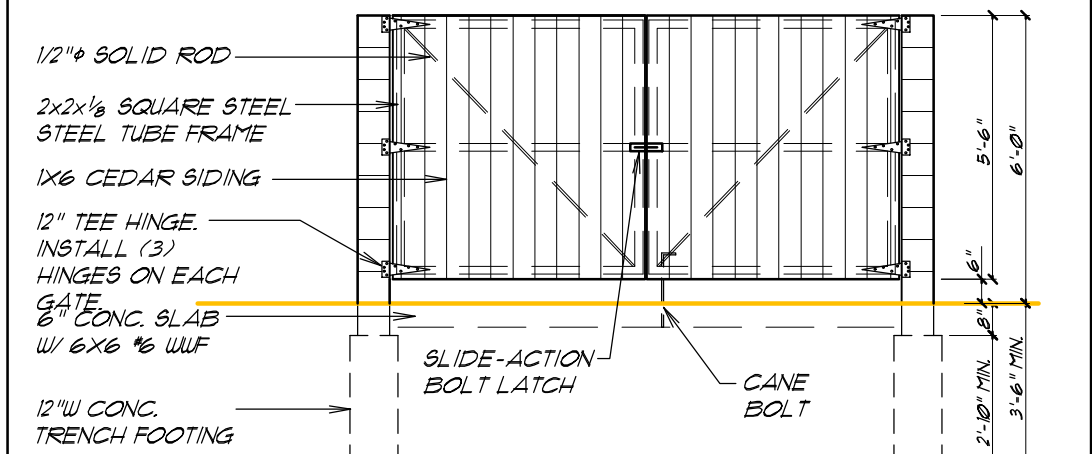
C-4

Zippy Auto Wash
1822 W Michigan Ave
Ypsilanti Township, Michigan



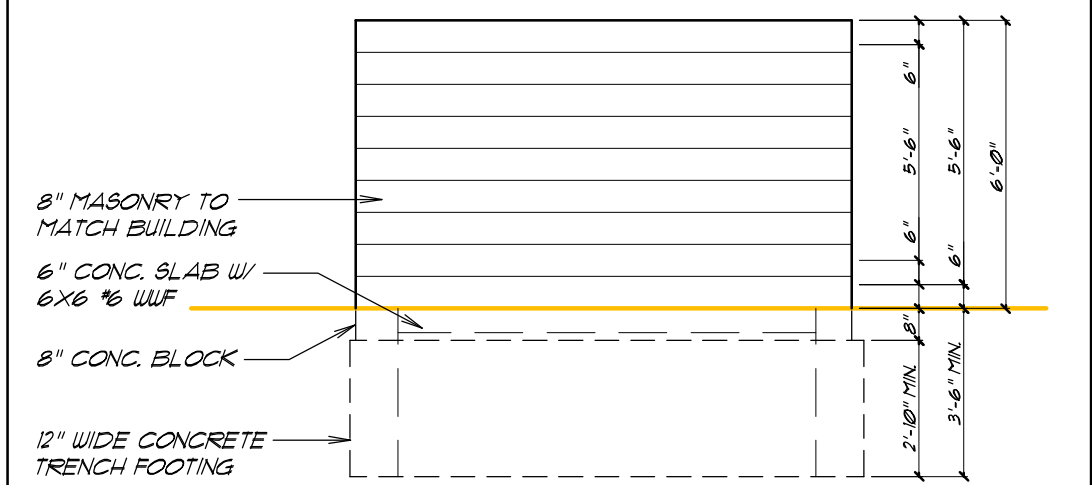
REFUSE STATION PLAN

SCALE: NONE



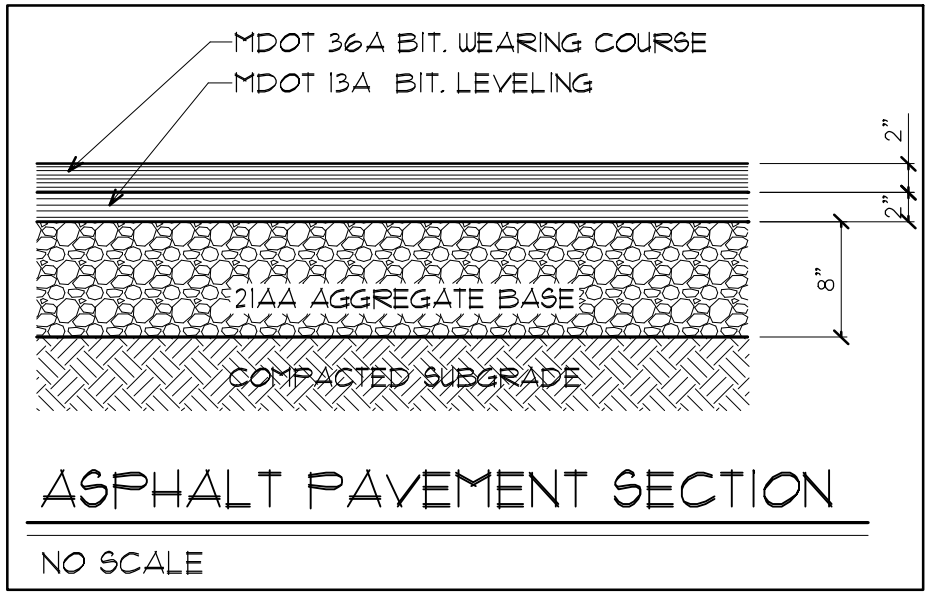
FRONT ELEVATION

SCALE: NONE



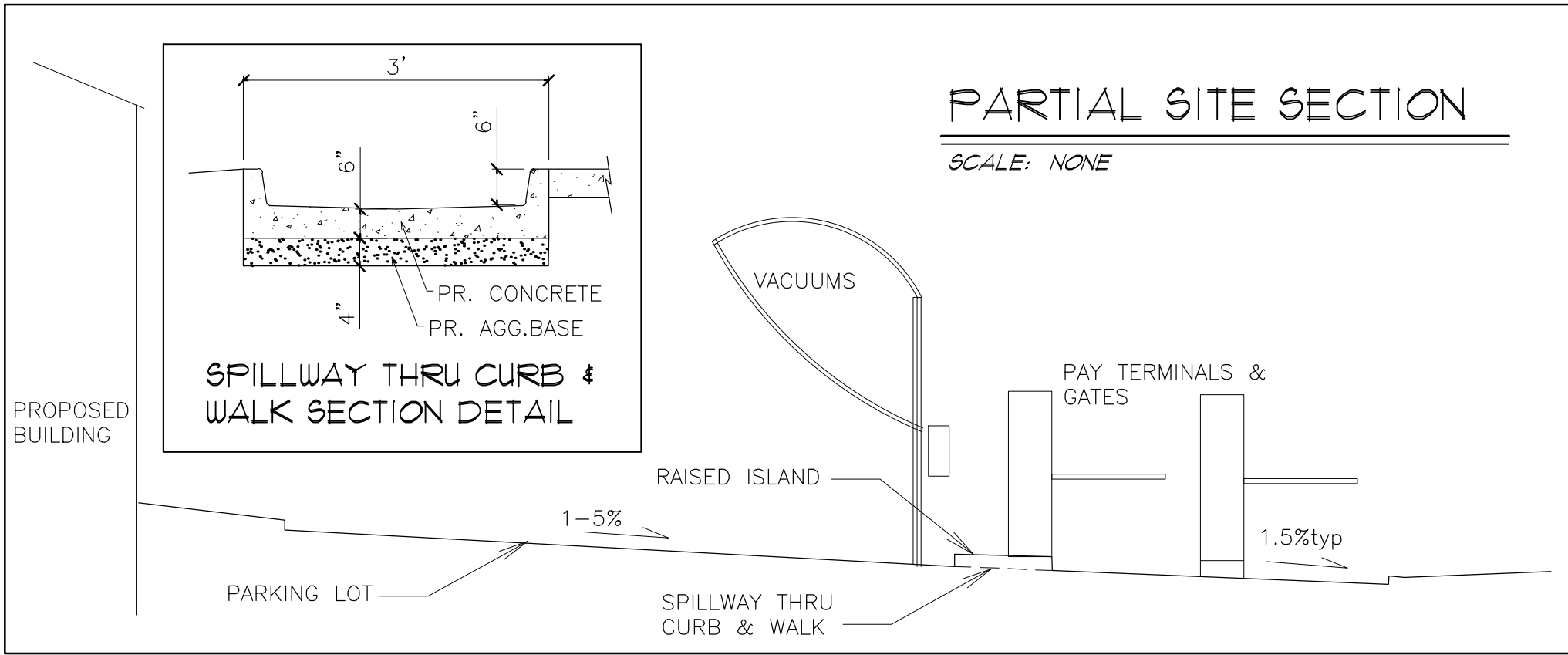
SIDE ELEVATION

SCALE: NONE



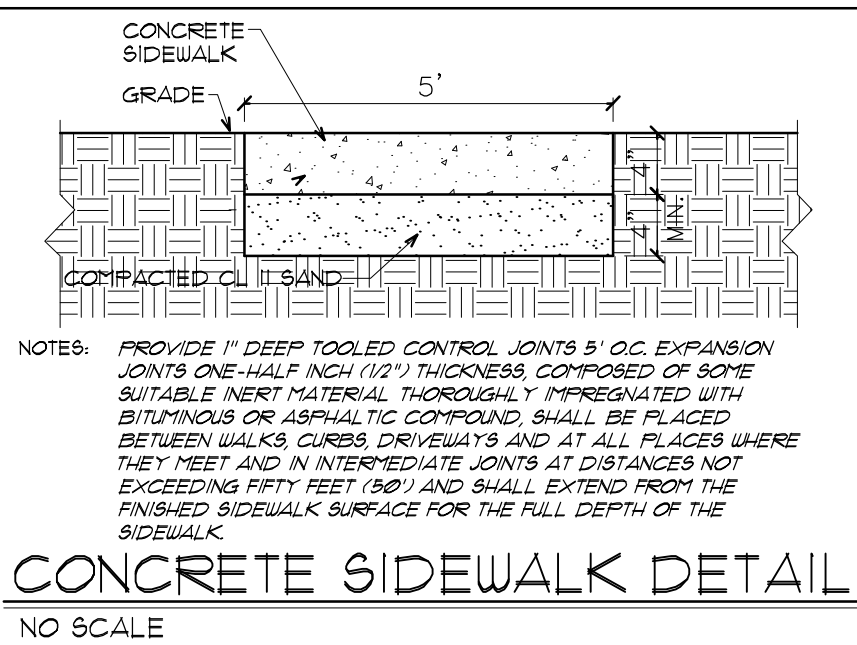
ASPHALT PAVEMENT SECTION

NO SCALE



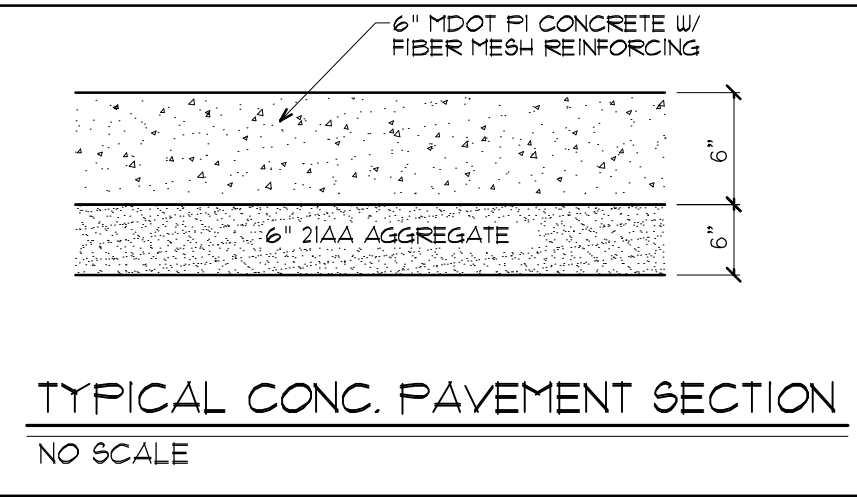
PARTIAL SITE SECTION

SCALE: NONE



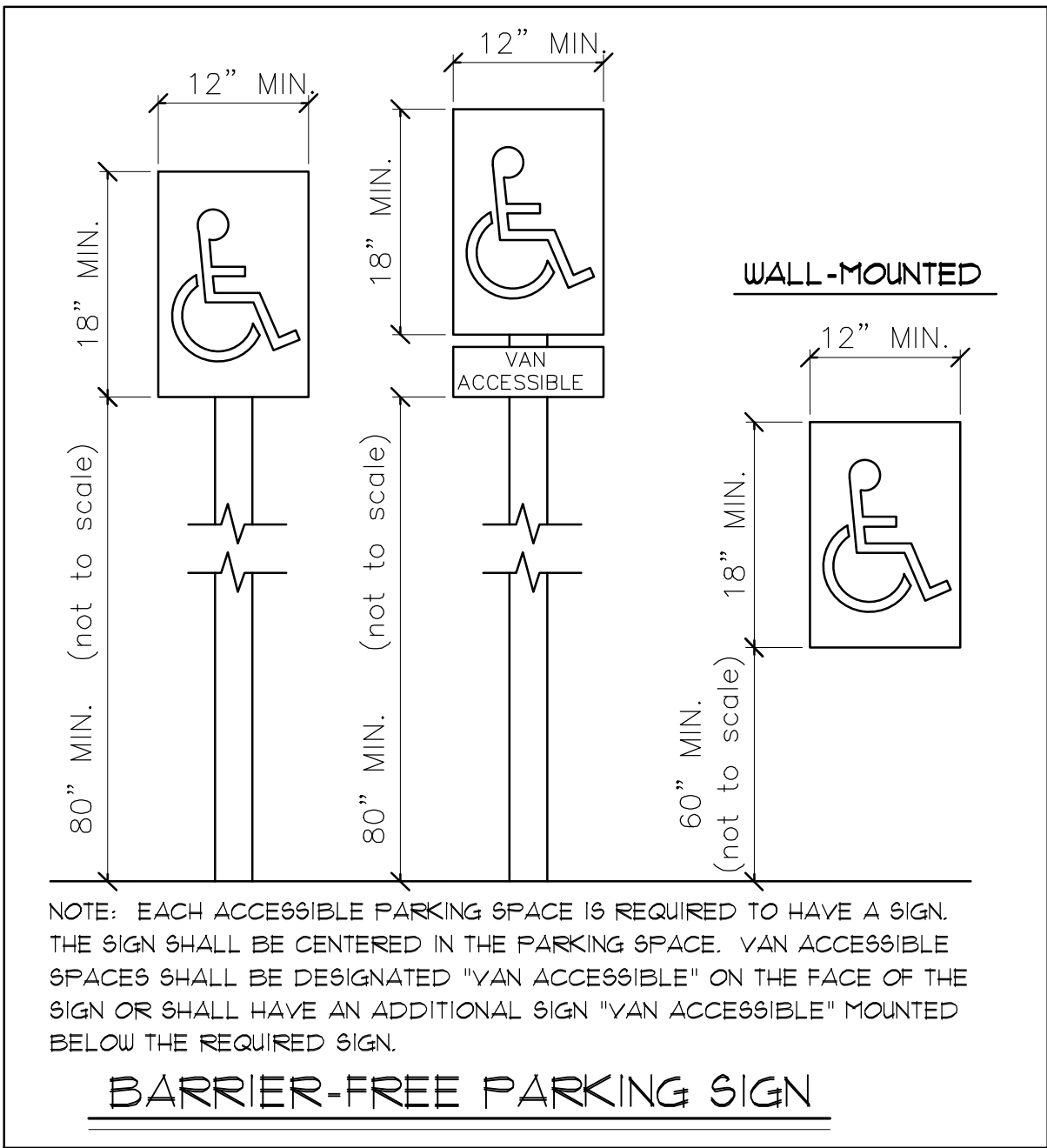
CONCRETE SIDEWALK DETAIL

NO SCALE



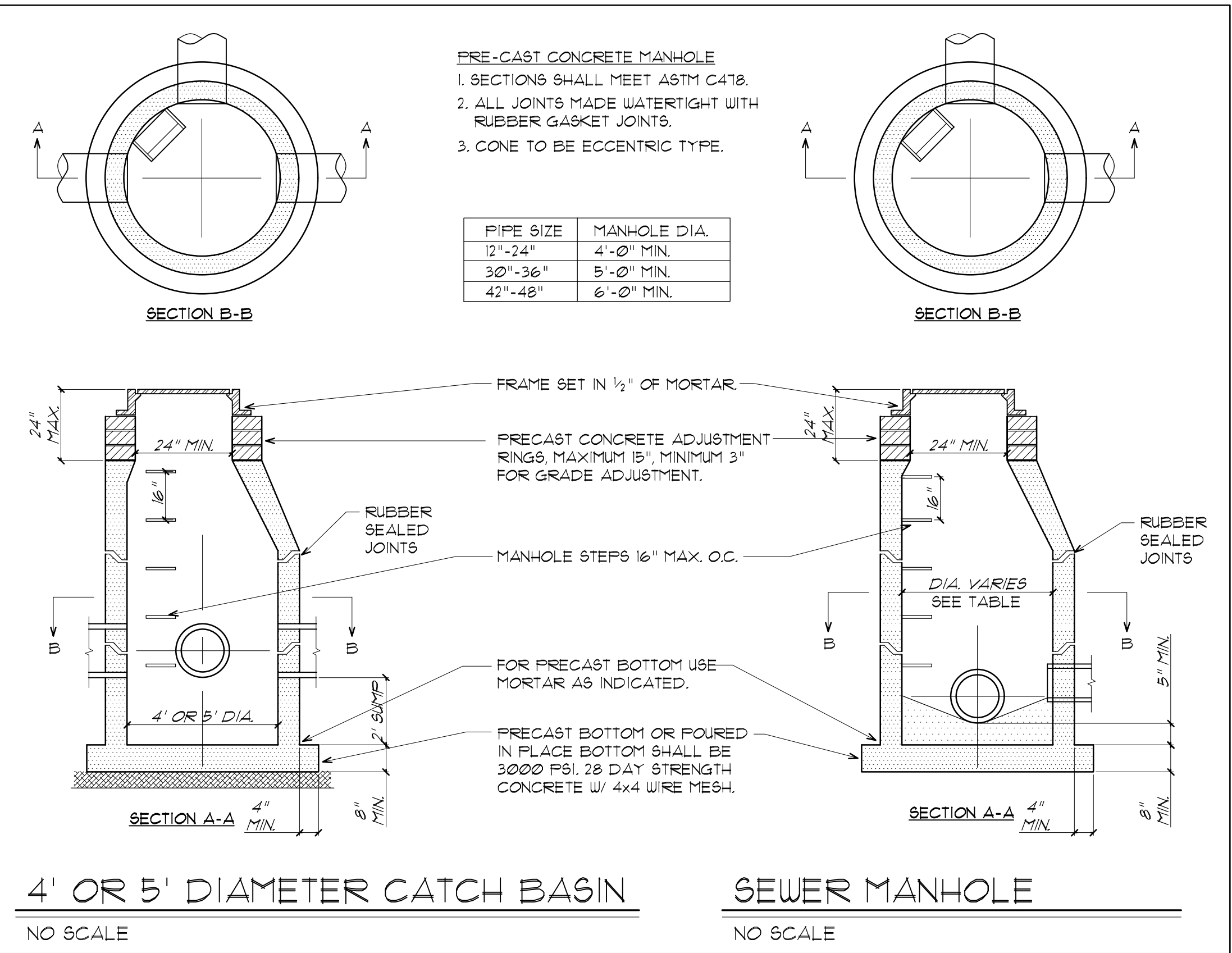
TYPICAL CONC. PAVEMENT SECTION

NO SCALE



BARRIER-FREE PARKING SIGN

NOTE: EACH ACCESSIBLE PARKING SPACE IS REQUIRED TO HAVE A SIGN. THE SIGN SHALL BE CENTERED IN THE PARKING SPACE. VAN ACCESSIBLE SPACES SHALL BE DESIGNATED "VAN ACCESSIBLE" ON THE FACE OF THE SIGN OR SHALL HAVE AN ADDITIONAL SIGN "VAN ACCESSIBLE" MOUNTED BELOW THE REQUIRED SIGN.

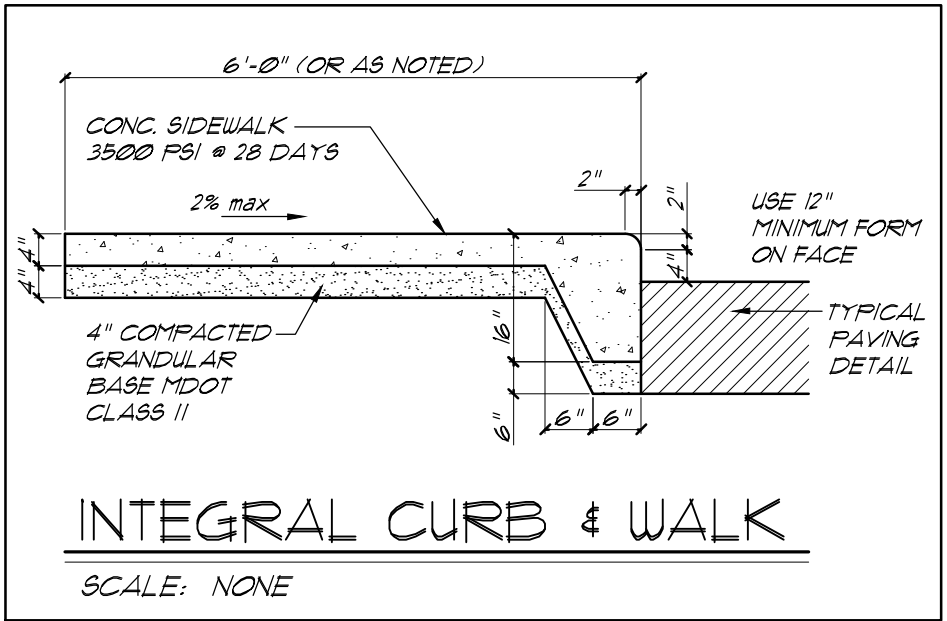


4' OR 5' DIAMETER CATCH BASIN

NO SCALE

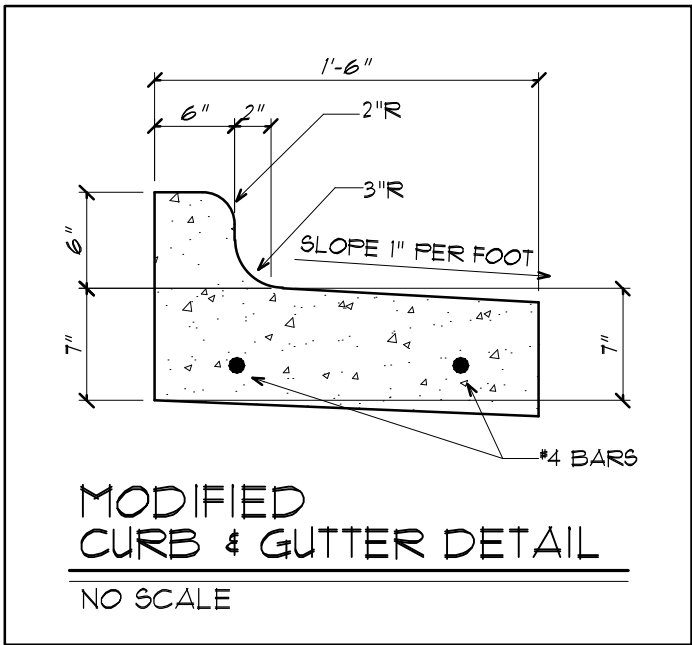
SEWER MANHOLE

NO SCALE



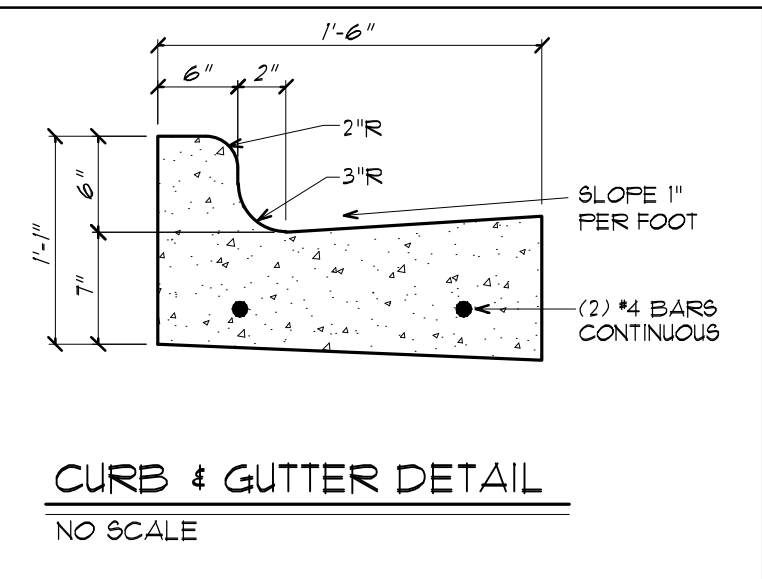
INTEGRAL CURB & WALK

SCALE: NONE



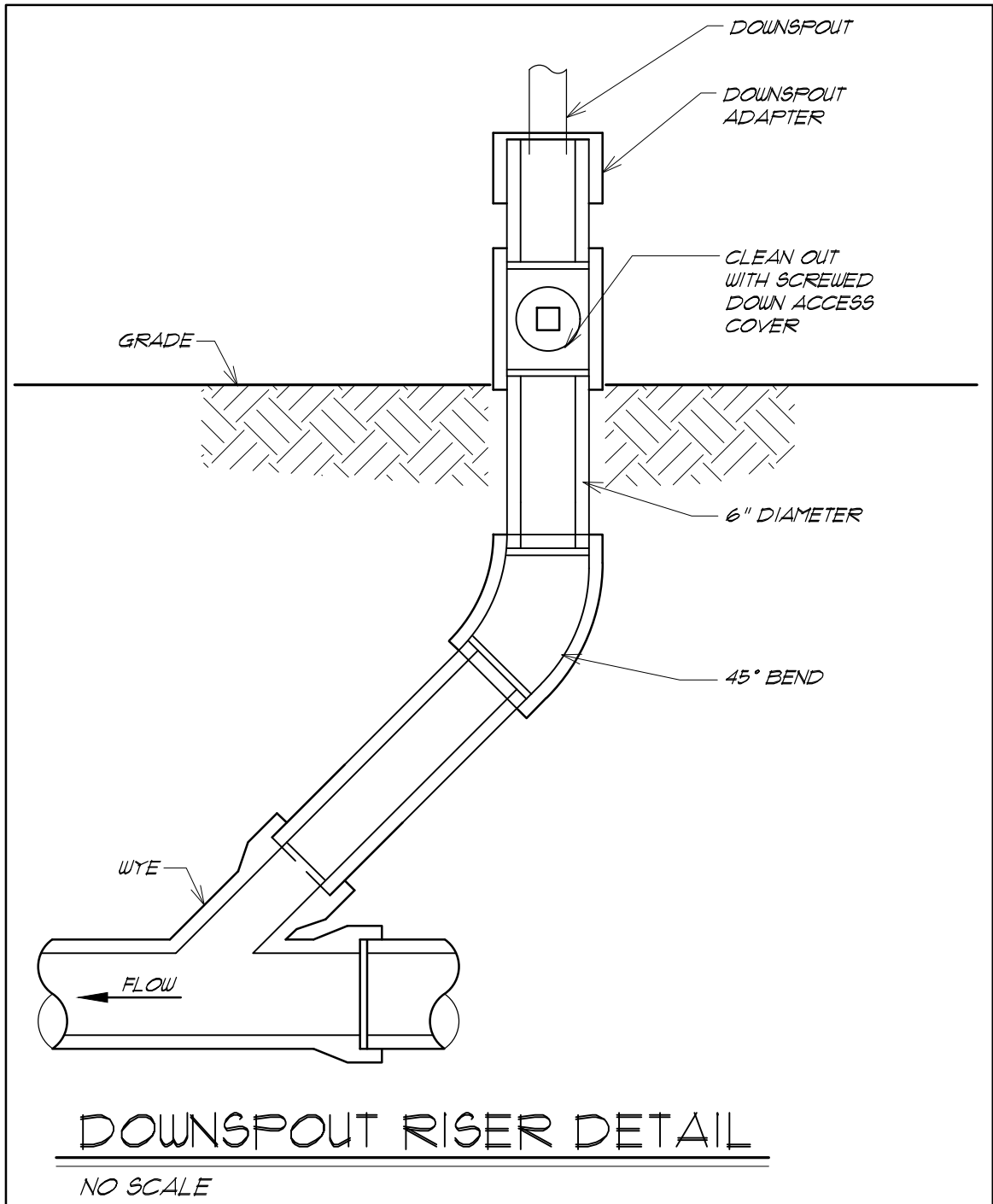
MODIFIED CURB & GUTTER DETAIL

NO SCALE



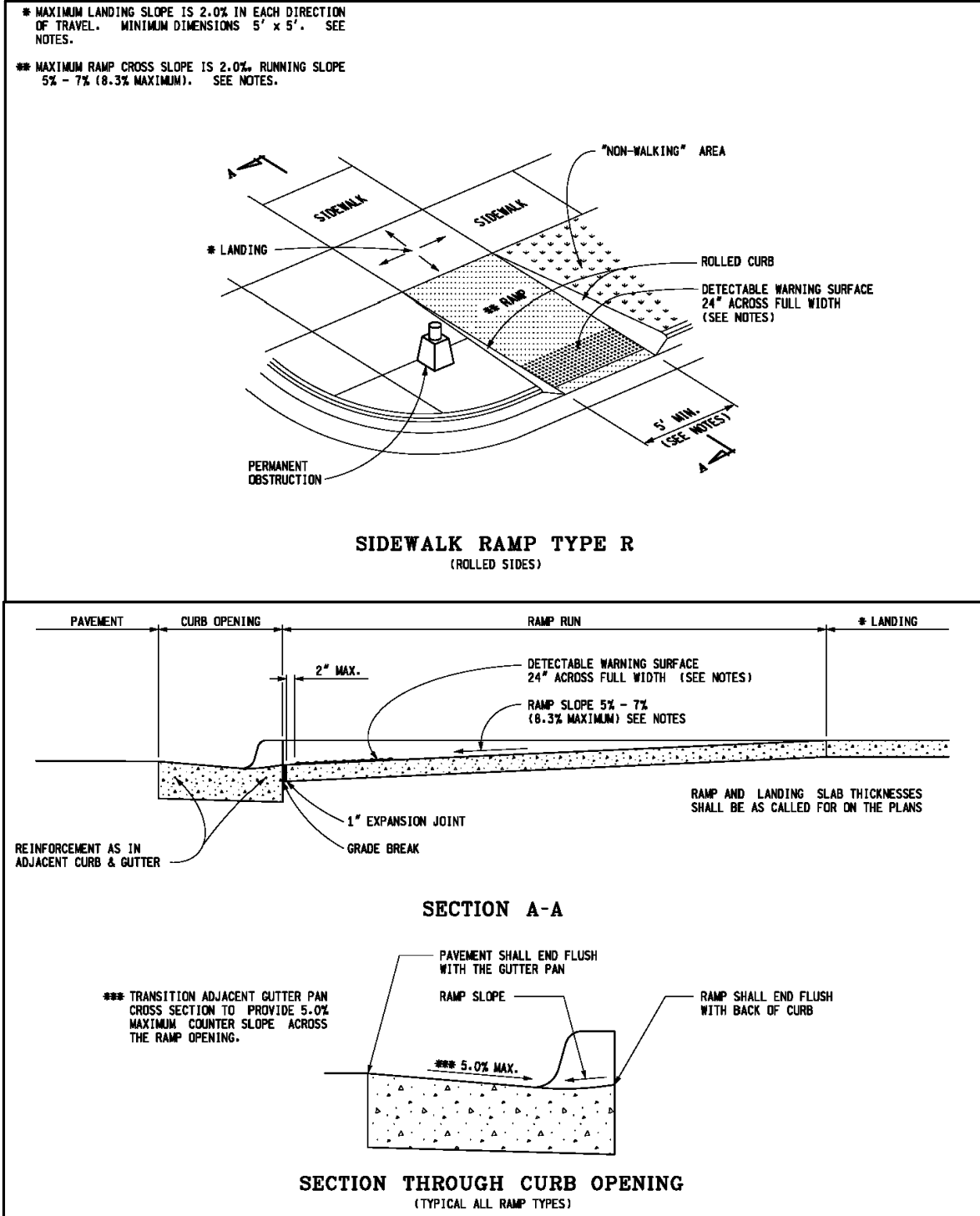
CURB & GUTTER DETAIL

NO SCALE



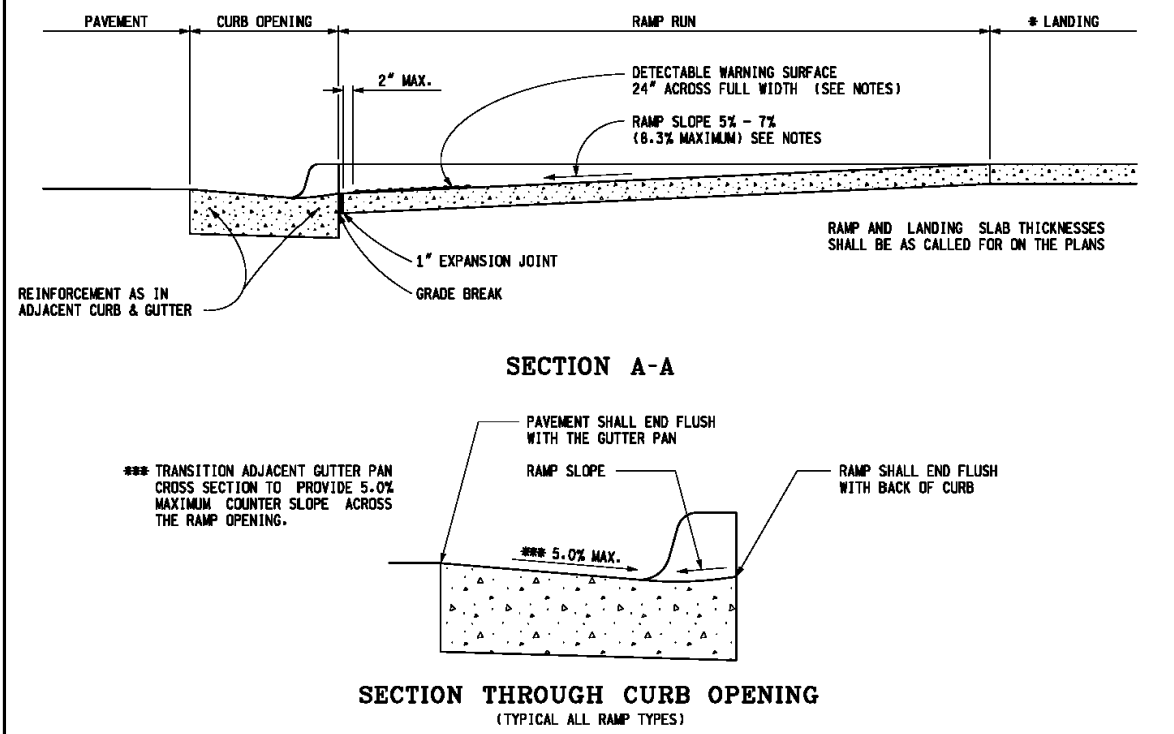
DOWNSPOUT RISER DETAIL

NO SCALE



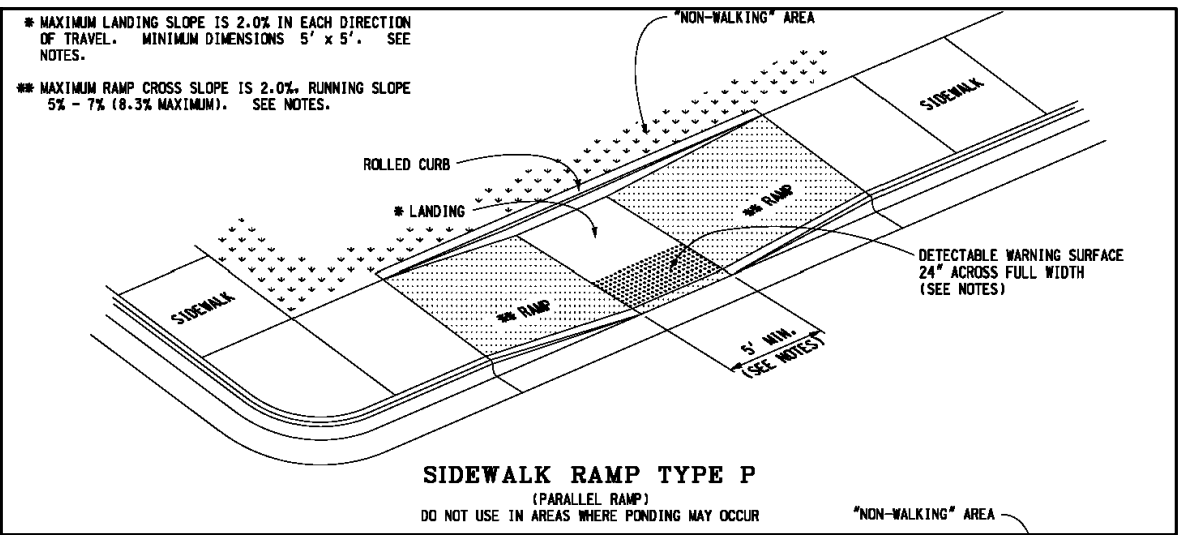
SIDEWALK RAMP TYPE R

(ROLLED SIDES)



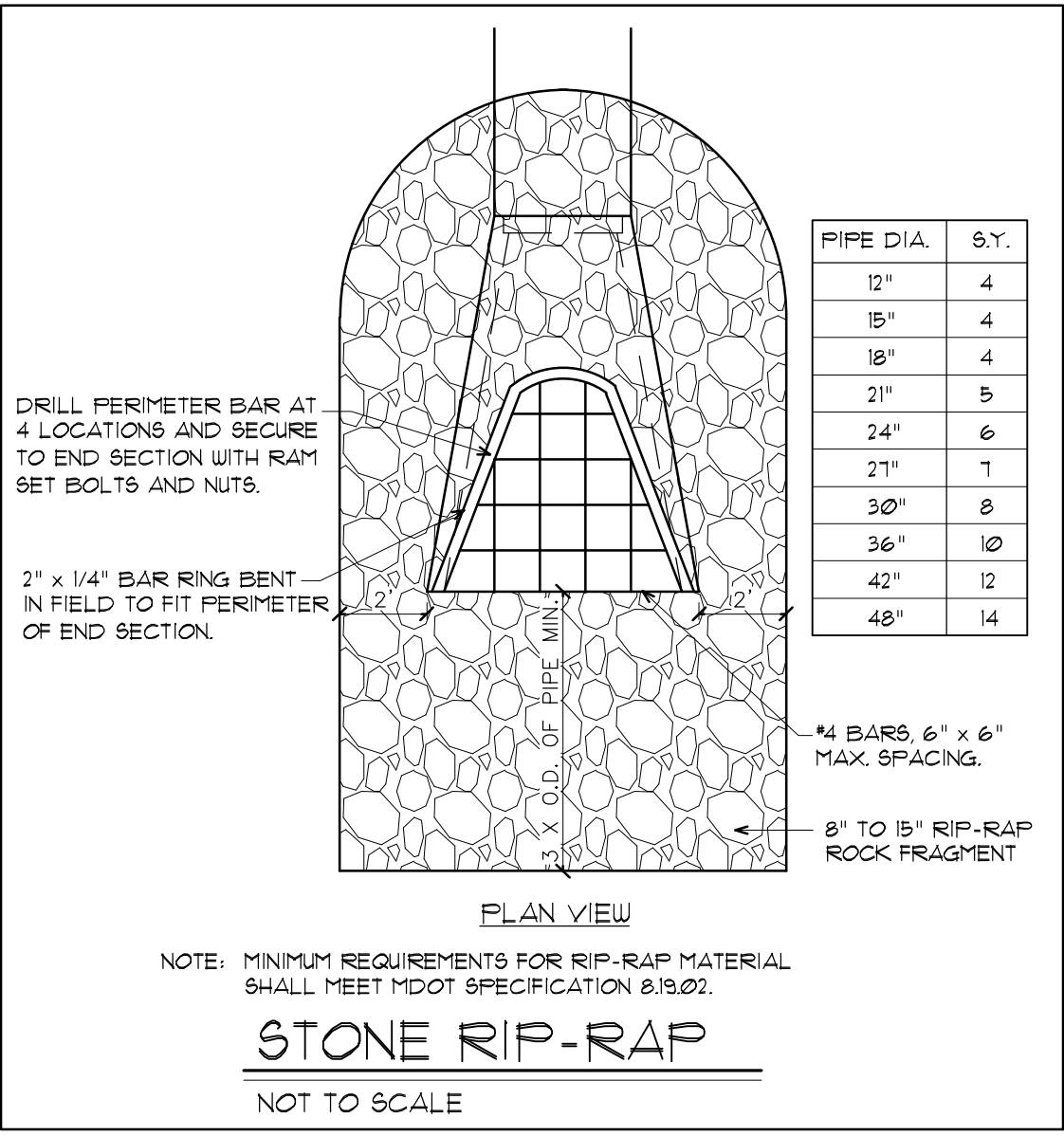
SECTION A-A

(TYPICAL ALL RAMP TYPES)



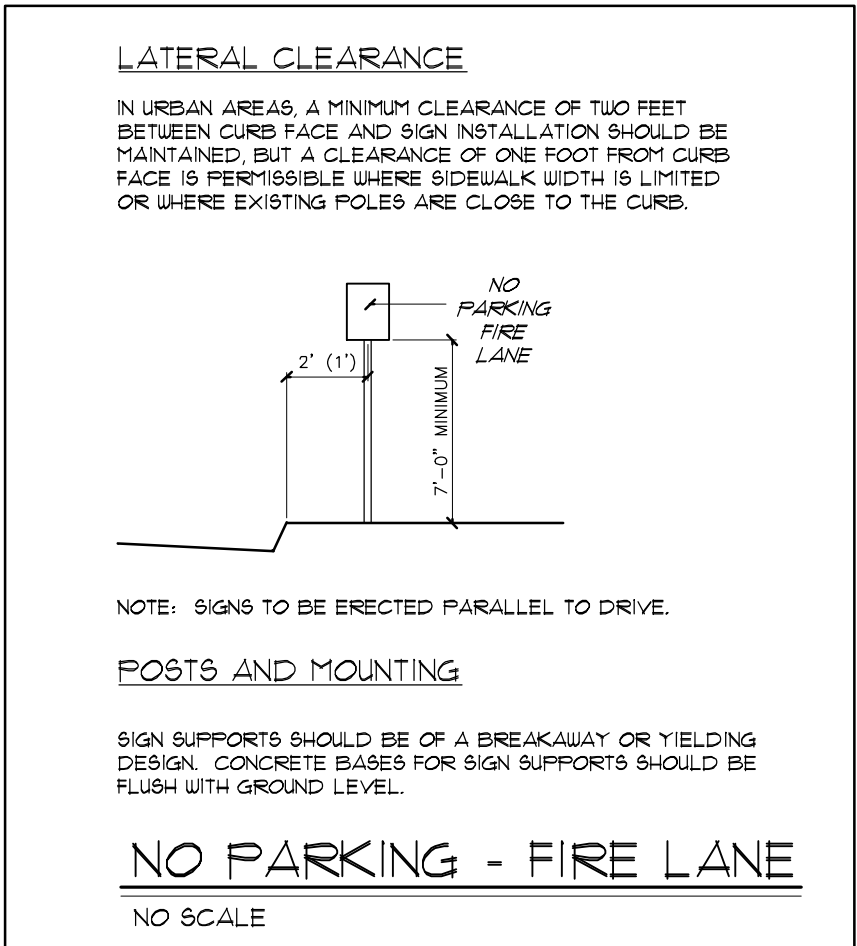
SIDEWALK RAMP TYPE P

DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



STONE RIP-RAP

NOT TO SCALE



LATERAL CLEARANCE

NO SCALE

POSTS AND MOUNTING

NO SCALE

NO PARKING - FIRE LANE

NO SCALE

ZIPPER AUTO WASH

DESIGNERS

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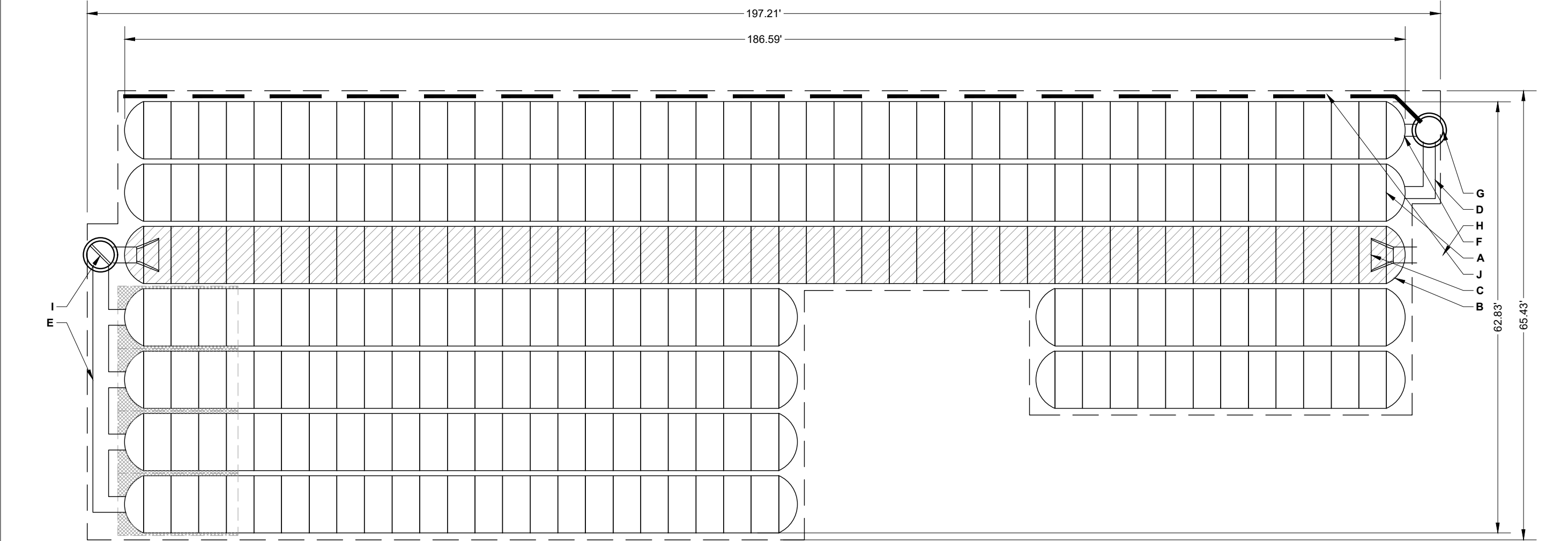
DRAWN BY: GAH

JOB NO.: ---

DETAIL SHEET

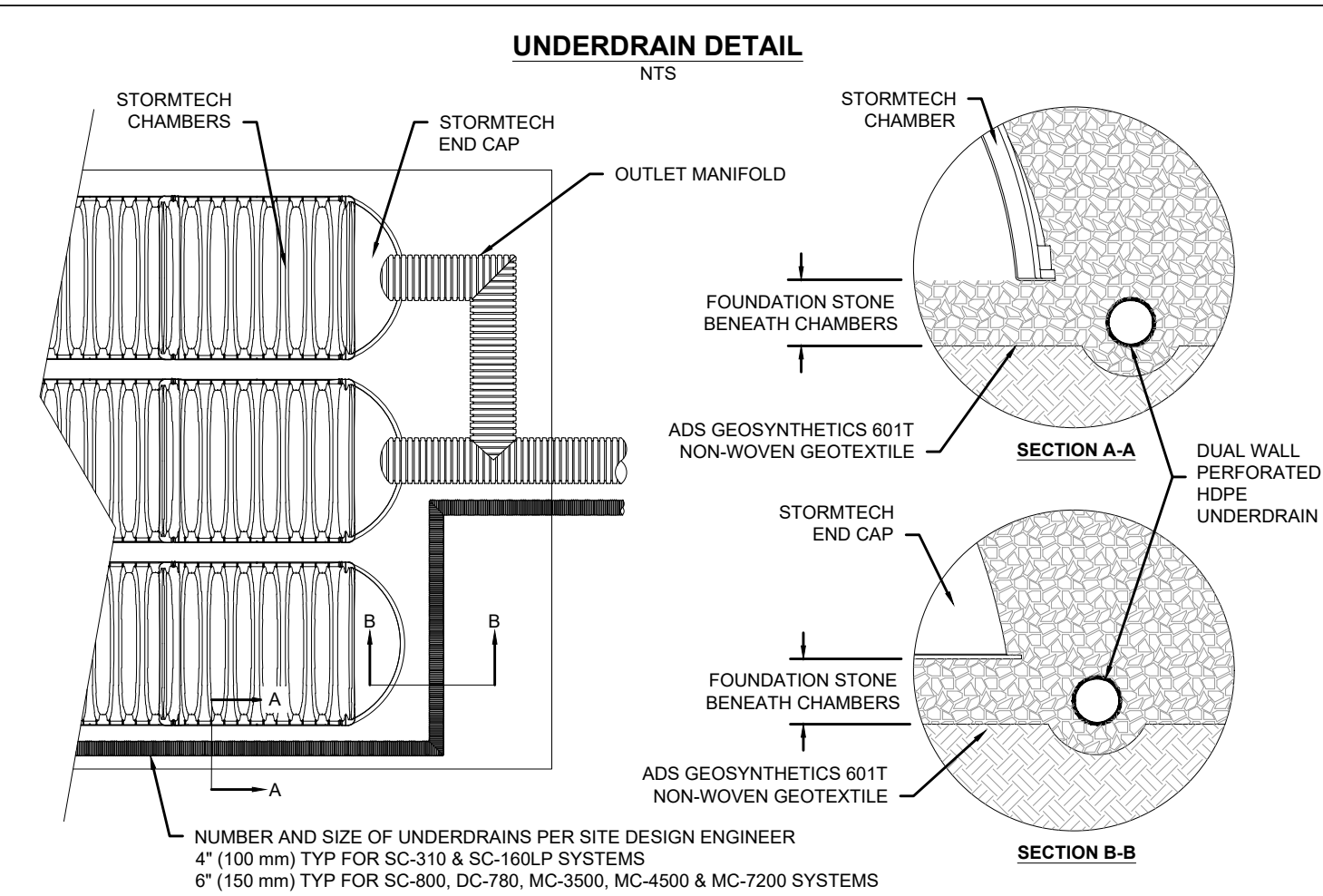
SHEET NO. C-8

PROPOSED LAYOUT			PROPOSED ELEVATIONS			PART TYPE			ITEM ON LAYOUT			DESCRIPTION			*INVERT ABOVE BASE OF CHAMBER		
251	STORMTECH MC-4500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT UNPAVED):	786.50	PREFABRICATED END CAP	A	15" TOP PARTIAL CUT END CAP, PART#: MC4500IEPP15T / TYP OF ALL 15" TOP CONNECTIONS	32.72"										
18	STORMTECH MC-4500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	782.00	PREFABRICATED END CAP	B	24" BOTTOM PARTIAL CUT END CAP, PART#: MC4500IEPP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.20"										
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	781.50	PREFABRICATED END CAP													
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	781.50	PREFABRICATED END CAP													
30	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	781.50	PREFABRICATED END CAP													
40408	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE	779.50														
10245	SYSTEM AREA (SF)	TOP OF MC-4500 CHAMBER	777.23	FLAMP	E	15" x 15" TOP MANIFOLD, ADS N-12	32.72"										
423.1	SYSTEM PERIMETER (ft)	15" x 15" BOTTOM MANIFOLD INVERT:	774.64	MANIFOLD	F	15" x 15" BOTTOM MANIFOLD, ADS N-12	1.70"										
		15" BOTTOM CONNECTION INVERT:	774.64	PIPE CONNECTION	G	15" BOTTOM CONNECTION	1.70"										
		BOTTOM OF MC-4500 CHAMBER:	774.50	CONCRETE STRUCTURE	H	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)											
		UNDERDRAIN INVERT:	773.75	CONCRETE STRUCTURE	I	QCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)											
		BOTTOM OF STONE:	773.75	UNDERDRAIN	J	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN											



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 17.50' OF ADSPLUS12S WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

- NOTES**
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
 - NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.



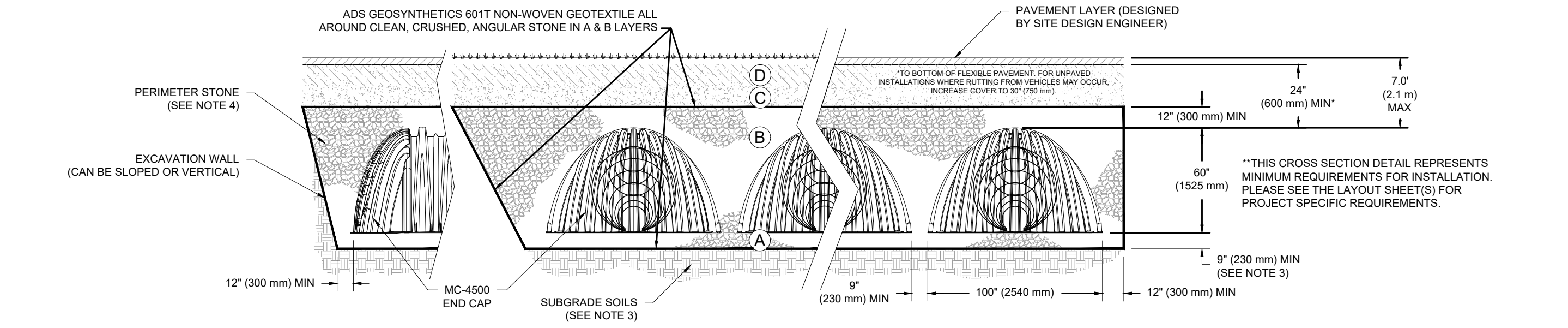
4 UNDERDRAIN DETAIL

MC-4500 TECHNICAL SPECIFICATION		
NTS		
STIFFENING RIB LOWER JOINT CORRUGATION CREST WEB UPPER JOINT CORRUGATION CREST STIFFENING RIB FOOT		
BUILD ROW IN THIS DIRECTION		
48.3" (1227 mm) INSTALLED		
52.0" (1321 mm) INSTALLED		
32.8" (833 mm) INSTALLED		
38.0" (965 mm)		
NOMINAL CHAMBER SPECIFICATIONS		
SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m ³)
MINIMUM INSTALLED STORAGE*	162.8 CUBIC FEET	(4.60 m ³)
WEIGHT (NOMINAL)	125.0 lbs	(56.7 kg)
NOMINAL END CAP SPECIFICATIONS		
SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m ³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m ³)
WEIGHT (NOMINAL)	60 lbs	(27.2 kg)
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.		
PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T" END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"		
CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-4500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.		
PART #		
MC4500IEPP06T	6" (150 mm)	42.54" (1081 mm)
MC4500IEPP08B	8" (200 mm)	40.50" (1029 mm)
MC4500IEPP08T	8" (200 mm)	40.50" (1029 mm)
MC4500IEPP08B	8" (200 mm)	40.50" (1029 mm)
MC4500IEPP10T	10" (250 mm)	38.37" (975 mm)
MC4500IEPP10B	10" (250 mm)	38.37" (975 mm)
MC4500IEPP12T	12" (300 mm)	35.69" (907 mm)
MC4500IEPP12B	12" (300 mm)	35.69" (907 mm)
MC4500IEPP15T	15" (375 mm)	32.72" (831 mm)
MC4500IEPP15B	15" (375 mm)	32.72" (831 mm)
MC4500IEPP18T	18" (450 mm)	29.36" (746 mm)
MC4500IEPP18TW	18" (450 mm)	29.36" (746 mm)
MC4500IEPP18B	18" (450 mm)	29.36" (746 mm)
MC4500IEPP18BW	18" (450 mm)	29.36" (746 mm)
MC4500IEPP24T	24" (600 mm)	23.05" (585 mm)
MC4500IEPP24TW	24" (600 mm)	23.05" (585 mm)
MC4500IEPP24B	24" (600 mm)	23.05" (585 mm)
MC4500IEPP24BW	24" (600 mm)	23.05" (585 mm)
MC4500IEPP30BW	30" (750 mm)	2.95" (75 mm)
MC4500IEPP36BW	36" (900 mm)	3.25" (83 mm)
MC4500IEPP42BW	42" (1050 mm)	3.55" (90 mm)
NOTE: ALL DIMENSIONS ARE NOMINAL.		

2 MC-4500 TECHNICAL SPECIFICATION

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS			
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

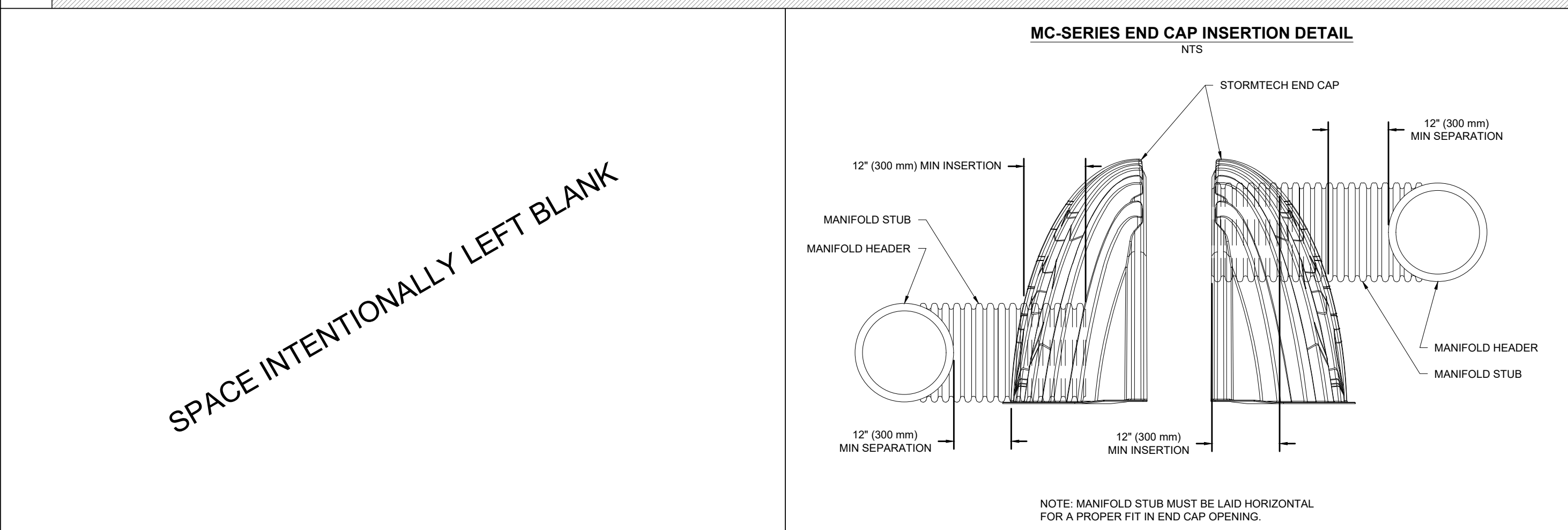
- PLEASE NOTE:**
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 'RECYCLED CONCRETE STRUCTURAL BACKFILL'.



- NOTES:**
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". CHAMBER CLASSIFICATION 60x101.
 - MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
 - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 - REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT², THE ASC IS DEFINED IN SECTION 8.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-4500 CROSS SECTION DETAIL

3 MC-4500 ISOLATOR ROW PLUS DETAIL



5 MC-SERIES END CAP INSERTION DETAIL

DATE: 05/30/2025

PROJECT #:

NOT TO SCALE

DRAWN: GH

CHECKED: N/A

REV:

ZIPPY YPSI COPY

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SHEET 1 OF 1

DESIGNERS

Vanston/O'Brien, Inc.

BUILDERS

8150 Jackson Road, Ste. A
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Tel: (734) 424-0661
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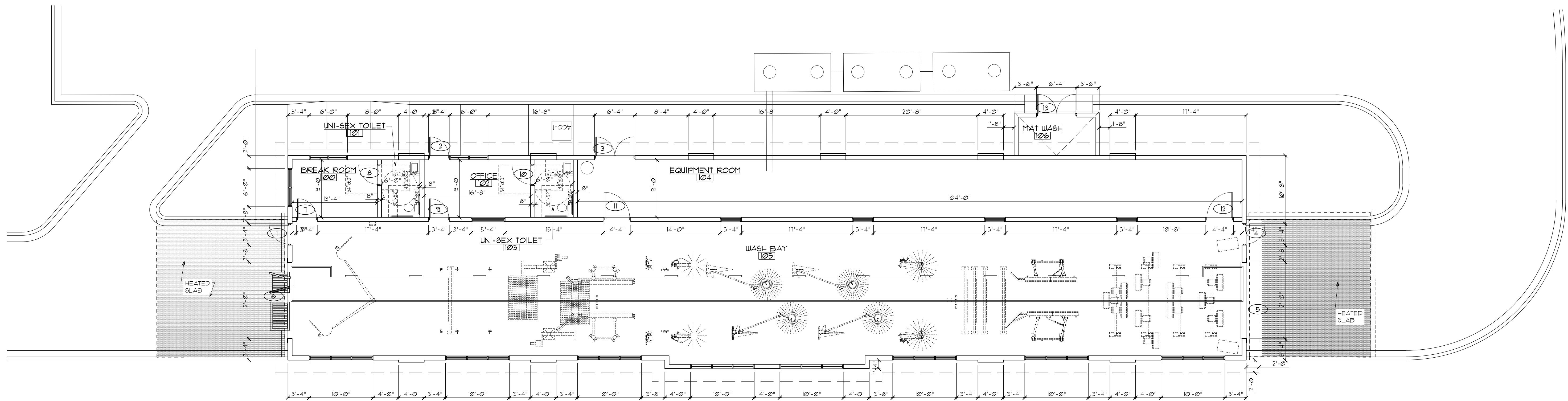
ISSUED FOR: DATE: PRELIMINARY 6-2-25

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JOB NO.:

DETAIL SHEET

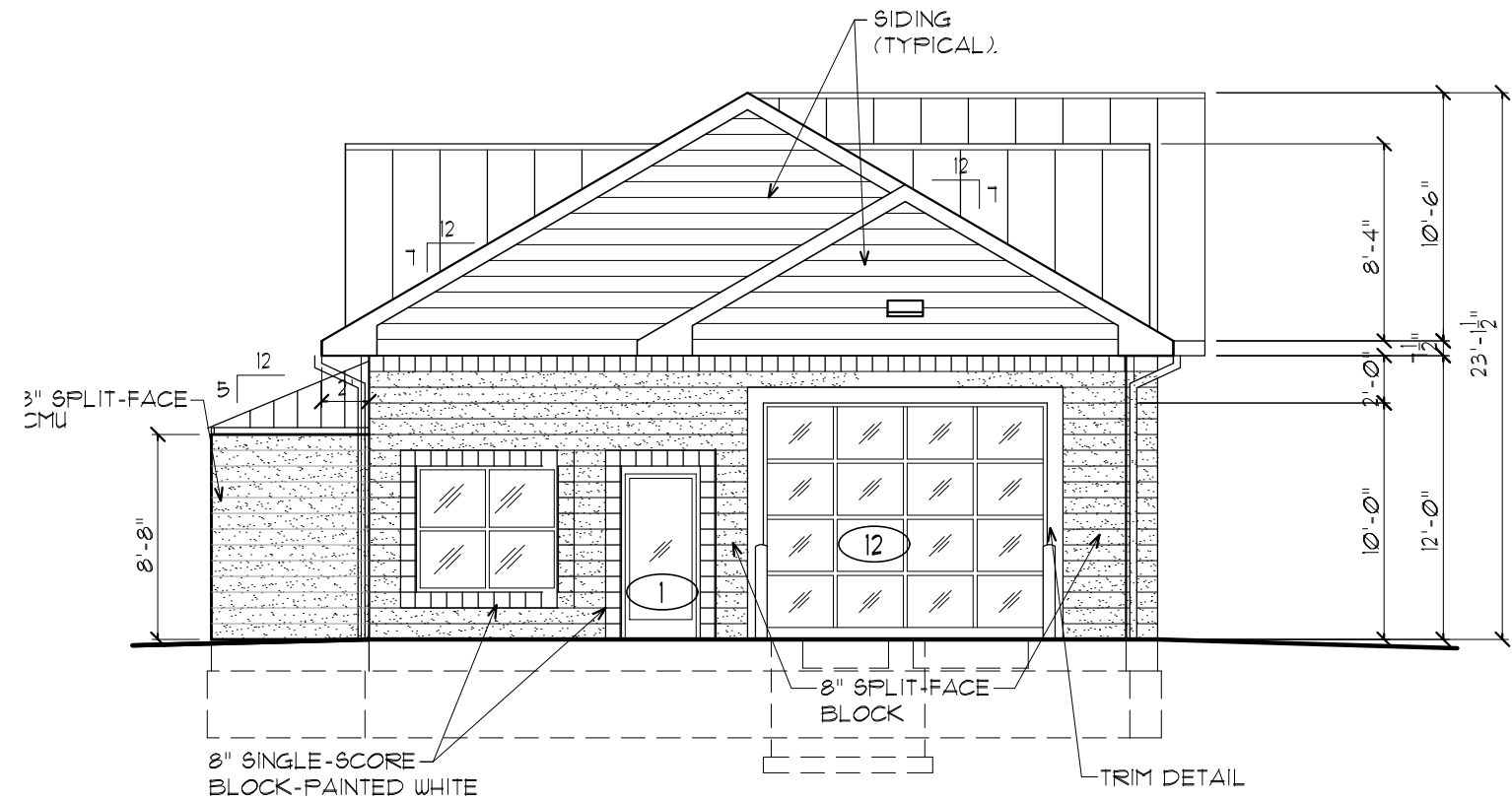
SHEET NO.
C-10

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FLOOR PLAN

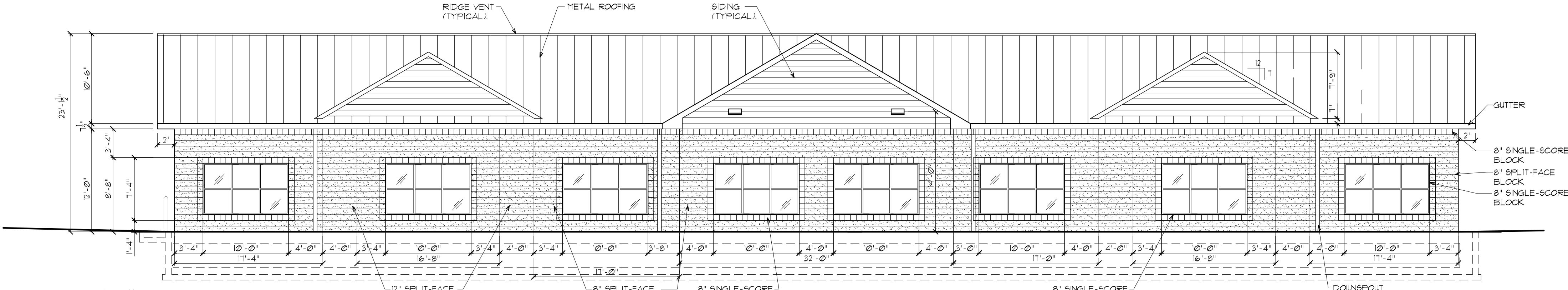
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SIDE: 6'x40' = 240
130% = 12 SQFT
32'x12' +15' = 119 OK

WEST ELEVATION

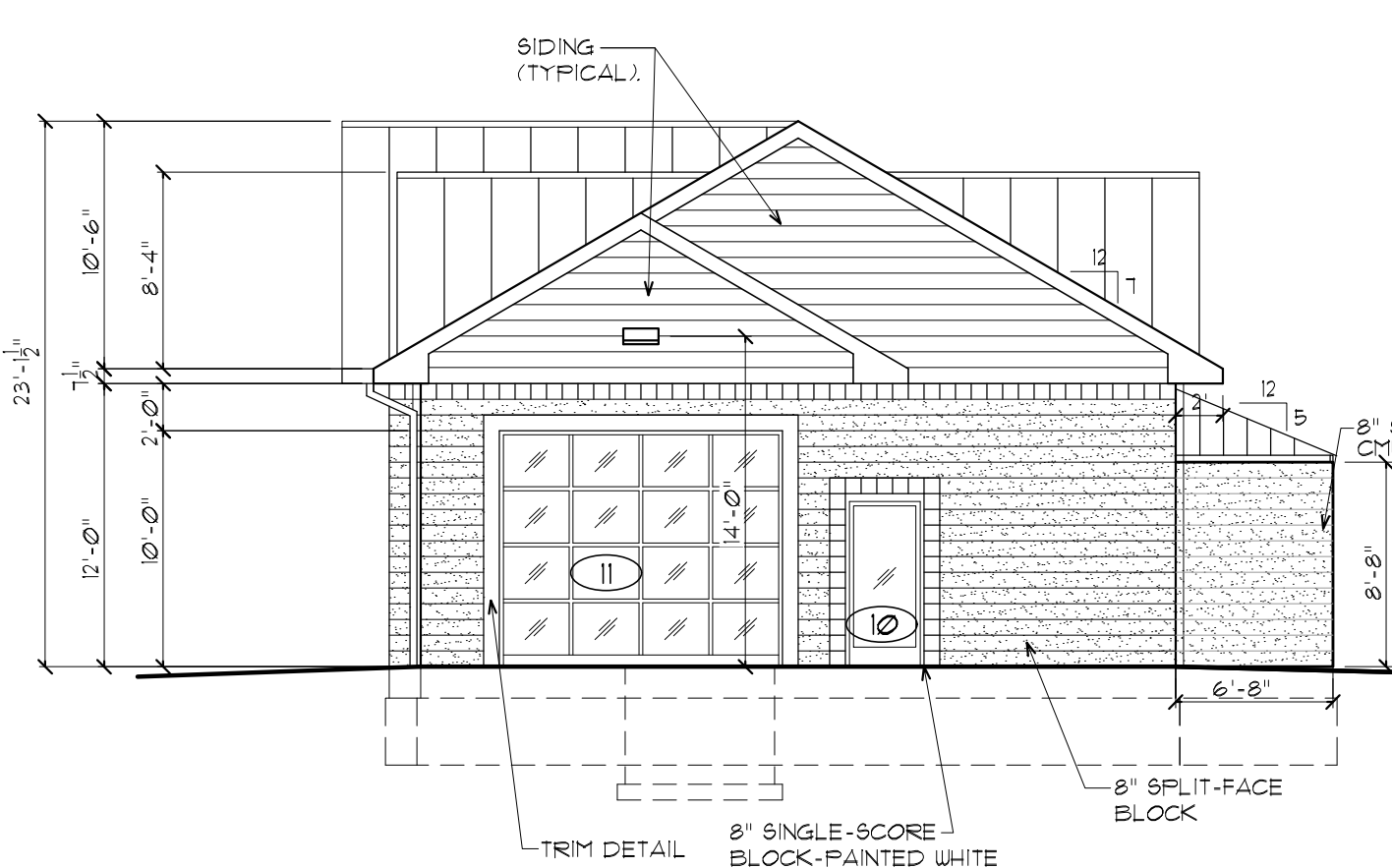
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FRONT:
6'x150' = 900
150% = 450 SQFT
60'x8' = 480 OK

SOUTH ELEVATION

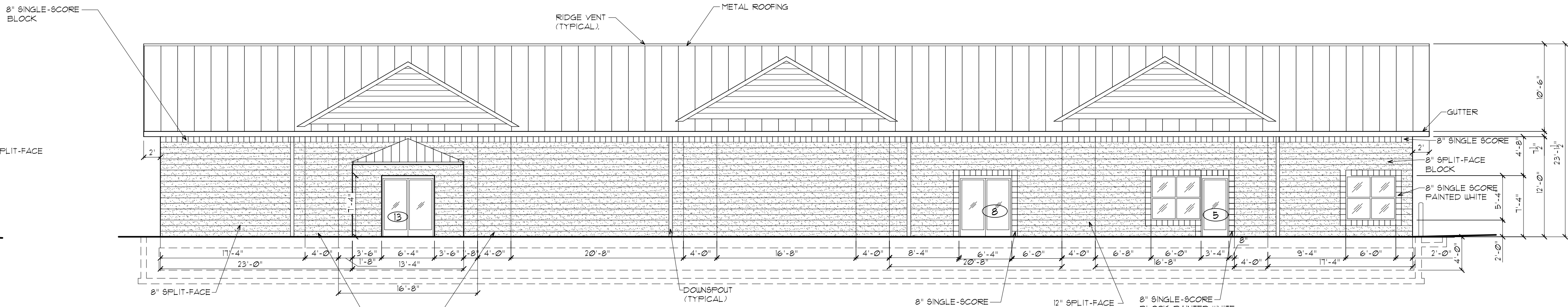
SCALE: 1/8" = 1'-0"



SIDE: 6'x40'150' = 240
130% = 12 SQFT
12' +15' = 81 OK

EAST ELEVATION

SCALE: 1/8" = 1'-0"

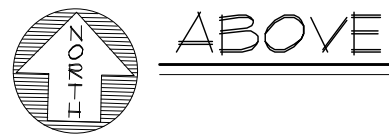


PARKING:
6'x150' = 900
15% = 135 SF
34'x12' + 32'x12' + 15' = 141 OK

NORTH ELEVATION

SCALE: 1/8" = 1'-0"

NOTES: TRIM DETAIL
OVER-HEAD DOORS,
URAP ENTRANCE JAM AND
CASING WITH 1X8 DIMENSIONAL
PLASTIC LUMBER. INSTALL WITH
GRADE 410 STAINLESS STEEL,
COUNTERSUNK HEAD TAPCONS



MICHIGAN AVE NE



MICHIGAN AVE NW



ELLSWORTH AVE SE



ELLSWORTH SW

BOUNDARY & TOPOGRAPHICAL SURVEY

PROPERTY DESCRIPTION PER WASHTENAW COUNTY TAX ROLL:

BEG IN THE CENT LINE OF CHICAGO ROAD AT A POINT WHICH IS S 20°06'00" E 51.20 FT FROM THE SE COR OF TRIANGLE PARK SUBDIVISION, A RECORDED PLAT; TH N 20°06'00" W 280.87 FT; TH S 88°40'00" E 491.95 FT TO THE CENT OF CHICAGO ROAD; TH S 57°27'00" W 468.95 FT TO THE PL OF BEG. ALSO INCLUDING LOTS 19 THROUGH 24 TRIANGLE PARK SUB. BEING A PART OF FRENCH CLAIM 690 CONT. 3.24 +/- AC T3S-R7E, WASHTENAW COUNTY EXCEPT THAT PT TAKEN FOR MICHIGAN AVE WIDENING.

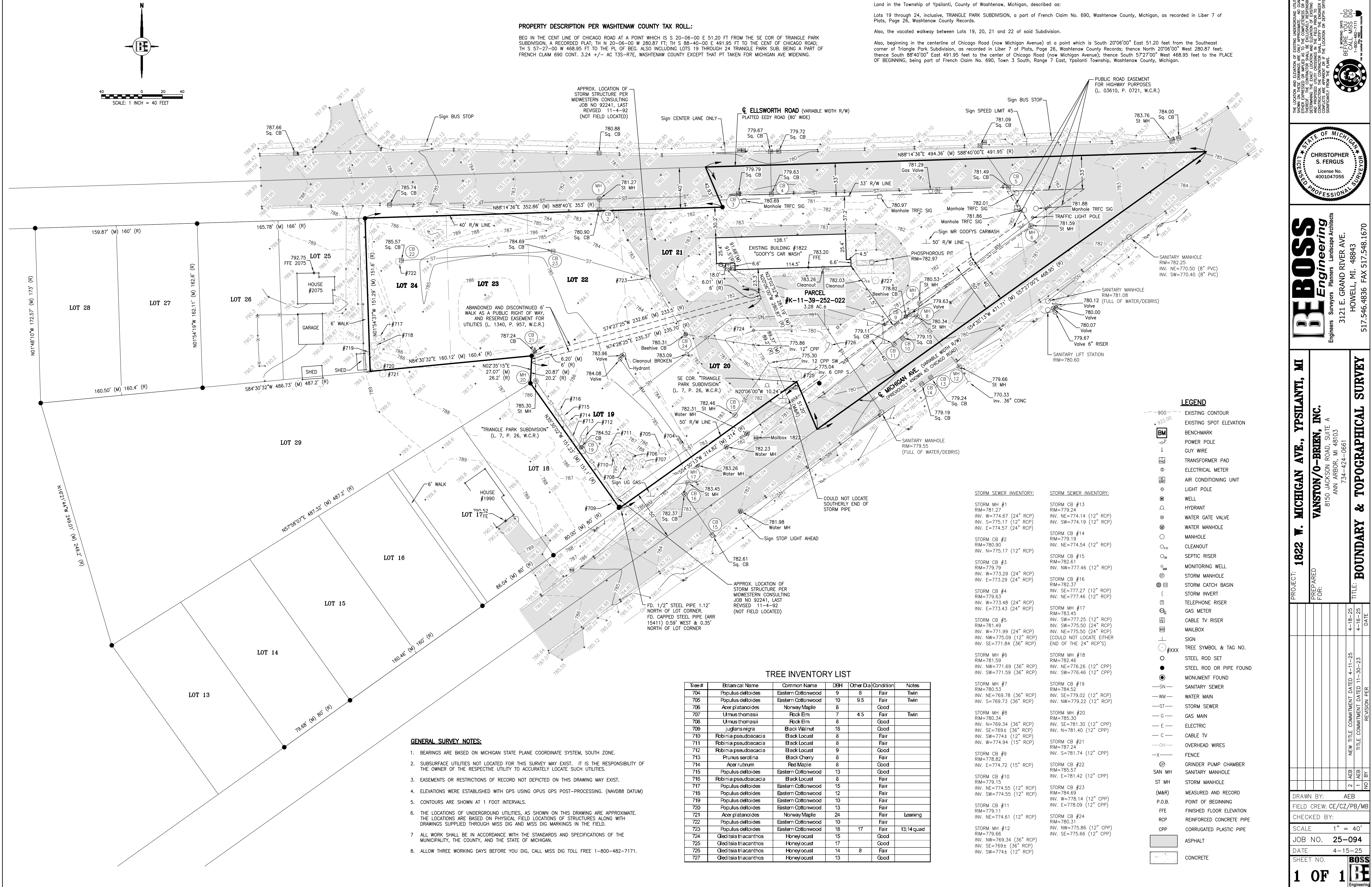
PROPERTY DESCRIPTION PER AMERICAN TITLE COMPANY OF WASHTENAW, ISSUED FOR STEWART TITLE GUARANTY COMPANY, COMMITMENT NO: 116879, WITH AN EFFECTIVE DATE OF APRIL 11, 2025 AT 5:00 P.M.:

Land in the Township of Ypsilanti, County of Washtenaw, Michigan, described as:

Lots 19 through 24, inclusive, TRIANGLE PARK SUBDIVISION, a part of French Claim No. 690, Washtenaw County, Michigan, as recorded in Liber 7 of Plots, Page 26, Washtenaw County Records.

Also, the vacated walkway between Lots 19, 20, 21 and 22 of said Subdivision.

Also, beginning in the centerline of Chicago Road (now Michigan Avenue) at a point which is South 20°06'00" East 51.20 feet from the Southeast corner of Triangle Park Subdivision, as recorded in Liber 7 of Plots, Page 26, Washtenaw County Records; thence North 20°06'00" West 280.87 feet; thence South 88°40'00" East 491.95 feet to the center of Chicago Road (now Michigan Avenue); thence South 57°27'00" West 468.95 feet to the PLACE OF BEGINNING, being part of French Claim No. 690, Town 3 South, Range 7 East, Ypsilanti Township, Washtenaw County, Michigan.



THE MISS DIG AND MISS DIG MARKINGS ARE NOT TO BE USED FOR ANY OTHER PURPOSES. NO GUARANTEE IS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE.

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PROJECT: 1822 W. MICHIGAN AVE., YPSILANTI, MI
PREPARED FOR: VANTON/O-BRIEN, INC.
8150 JACKSON ROAD, SUITE A
ANN ARBOR, MI 48103
734-424-0661

TITLE: BOUNDARY & TOPOGRAPHICAL SURVEY

NO	BY	REVISION PER	DATE
2	AEB	NEW TITLE COMMITMENT DATED 4-11-25	4-18-25
1	AEB	TITLE COMMITMENT DATED 11-30-23	4-18-25

DRAWN BY: AEB
FIELD CREW: CE/CZ/PB/MB
CHECKED BY:
SCALE 1" = 40'
JOB NO. 25-094
DATE 4-15-25
SHEET NO. 1 OF 1

MISS DIG
Engineering