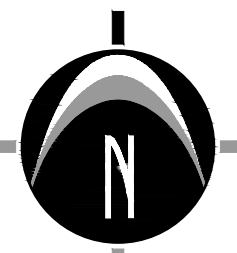
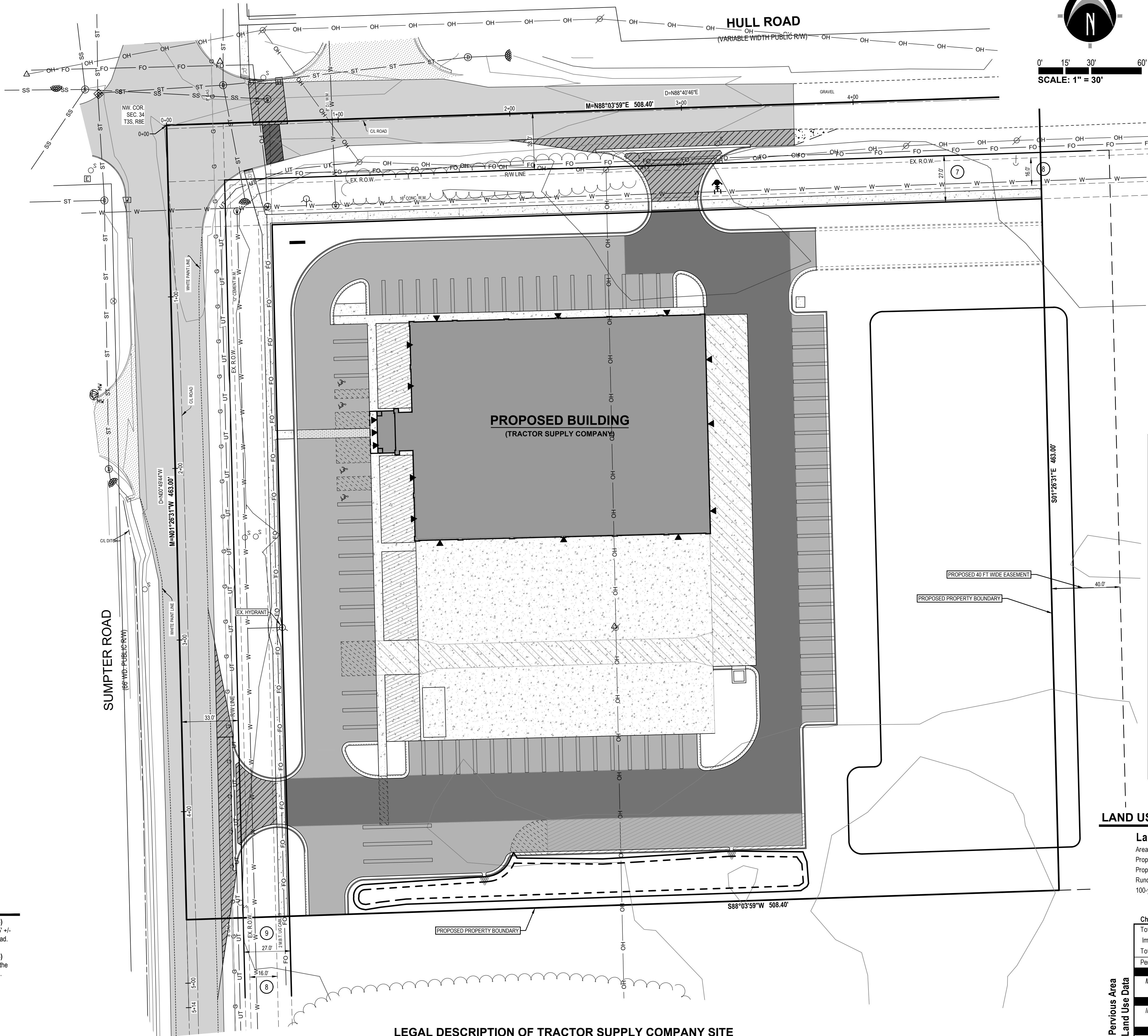


Know what's **below**.  
**CALL** before you dig.

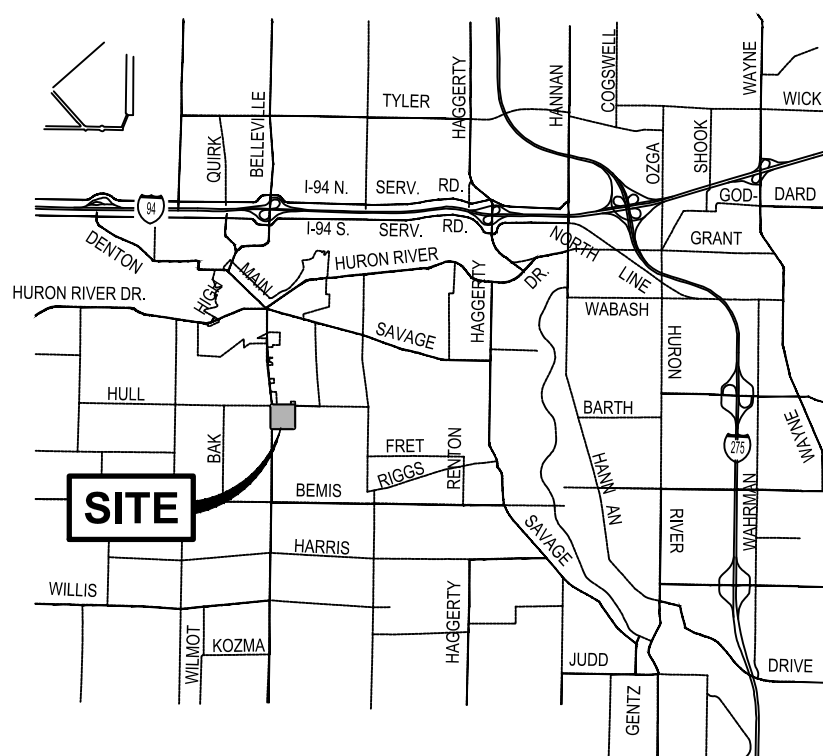
UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE  
OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE  
CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL  
UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.



0' 15' 30' 60'

SCALE: 1" = 30'



## LOCATION MAP

NOT TO SCALE



## SHEET INDEX

SHEET 1	C-200	COVER SHEET
SHEET 2	C-201	EXISTING CONDITIONS AND DEMOLITION PLAN
SHEET 3	C-205	SITE PLAN LAYOUT
SHEET 4	C-300	GRADING AND SOIL EROSION CONTROL PLAN
SHEET 5	C-400	UTILITY PLAN
SHEET 6	C-401	UTILITY PROFILES
SHEET 7	C-402	STORM OUTLET PLAN
SHEET 8	C-403	DETENTION BASIN CROSS SECTION
SHEET 9	C-404	STORM SEWER MAINTENANCE EXHIBITS
SHEET 10	C-500	DETAILS & SPECIFICATIONS (SANITARY SEWER)
SHEET 11	C-501	DETAILS & SPECIFICATIONS (STORM SEWER)
SHEET 12	C-502	DETAILS & SPECIFICATIONS (WATERMAIN)
SHEET 13	C-503	DETAILS & SPECIFICATIONS (GENERAL)
SHEET 14	T-100	LANDSCAPE PLAN
SHEET 15	C-700	RIGHT-OF-WAY IMPROVEMENT PLAN
SHEET 16	T-100	DETOUR PLAN

I HEREBY CERTIFY THAT THIS PLAN SET AND THE VALUE IN THE LAND USE SUMMARY TABLE REFLECT THE WAYNE COUNTY STORMWATER CALCULATIONS REQUIRED FOR THIS DEVELOPMENT AND THAT GEOTECHNICAL INVESTIGATIONS WERE PERFORMED THAT PROVIDE CONCLUSIVE DOCUMENTATION THAT DEMONSTRATES WHETHER INFILTRATION (IE, CPVC VOLUME CONTROL) IS PRACTICABLE .

SIGNATURE/SEAL:



MICHIGAN P.E. LICENSE NO. 620104679

CERTIFICATION DATE: AUGUST 15, 2024

NO PRIVATE UTILITIES SHALL BE PLACED OVER ANY WATER MAIN, WATER SERVICE AND/OR SANITARY SEWER LEADS. ANY PRIVATE UTILITIES WHICH ARE PLACED OVER AND/OR NEAR TO THESE SERVICES, SHALL BE RELOCATED AT THE OWNER'S EXPENSE. THIS SHALL INCLUDE, BUT NOT LIMITED TO, THE ACTUAL SERVICE LINES (ELECTRICAL, GAS, TELEPHONE AND CABLE), AS WELL AS ELECTRICAL TRANSFORMERS, TELEPHONE PEDESTALS, AIR CONDITIONING UNITS AND POWER GENERATORS. ANY PRIVATE UTILITIES OR APPURTENANCES SHALL BE RELOCATED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWNSHIP.

## LAND USE SUMMARY

## Land Use Summary

Area, A (ac)	4.29
Proposed Impervious Area (ac)	2.51
Proposed Pervious Area (ac)	1.78
Runoff Coefficient, C	0.84
100-yr peak intensity, in/hr	7.4

Characteristic	Existing Conditions	Proposed Conditions
Total Development Area (ac)	4.29	4.29
Impervious Area (ac)	-	2.51
Total Pervious Area (ac)	4.29	1.78
Pervious Area Breakdown by Cover Type		
Meadow/fallow/natural areas (non-cultivated)	0	0 acres
Predominant NRCS Soil Type (A, B, C, or D)	Type C	N/A
Improved areas (turf grass, landscape, row crops)	4.29 acres	4.29 acres
Predominant NRCS Soil Type (A, B, C, or D)	N/A	Type A / D
Wooded Areas	0 acres	0 acres
Predominant NRCS Soil Type (A, B, C, or D)	N/A	N/A
	Calculated CPVC Volume (cubic feet)	13,017
	CPVC Volume Provided (cubic feet)	14,356
	CPVC Volume Provided (cubic feet)	24,732

The Professional Engineer who signs and seals this site plan certifies that the values in this table reflect the Wayne County stormwater calculations required for this development and that geotechnical investigations were performed that provide conclusive documentation that demonstrates whether infiltration (i.e., CPVC Volume Control) is practicable.

## BENCHMARKS

**BENCHMARK #300** ELEV. = 675.30 (NAVD88)  
Benchtie on North face of power pole, located 285' +/-  
South of Hull Road & 230' +/- East of Sumpter Road.

**BENCHMARK #301** ELEV. = 677.37 (NAVD88)  
RR spike on South face of power pole, located at the  
Northwest corner of Hull Road and Sumpter Road.

NAVD88 IS 0.45 FT LOWER THAN NAVD29.  
NAVD29 IS 0.45 FT HIGHER THAN NAVD88.

**GENERAL NOTE:**

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS, SPECIFICATIONS, AND GENERAL CONDITIONS OF VANBUREN TOWNSHIP.

## LEGAL DESCRIPTION OF TRACTOR SUPPLY COMPANY SITE

PART OF THE NORTHWEST 1/4 OF SECTION 34, TOWN 3 SOUTH, RANGE 8 EAST, VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN, DESCRIBED AS: COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION AND THE POINT OF BEGINNING; THENCE N88°03'59"E 508.40 FEET ALONG THE NORTH LINE OF SAID SECTION; THENCE S01°26'31"E 463.00 FEET; THENCE S88°03'59"W 508.40 FEET; THENCE N01°26'31"W 463.00 FEET ALONG THE WEST LINE OF SAID SECTION AND THE CENTERLINE OF SUMPTER ROAD TO THE POINT OF BEGINNING, CONTAINS 5.40 ACRES. SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS, HULL ROAD RIGHT-OF-WAY AND SUMPTER ROAD RIGHT-OF-WAY.

### 40 FT EASEMENT DESCRIPTION TO EAST

An easement over part of the Northwest 1/4 of Section 34, Town 3 South, Range 8 East, Van Buren Township, Wayne County, Michigan, described as: Commencing at the Northwest corner of said Section; thence N88°03'59"E 508.40 feet along the North line of said Section to the Point of Beginning; thence continuing S88°03'59"E 40.00 feet along said North line; thence S01°26'31"E 463.00 feet; thence S88°03'59"W 40.00 feet; thence N01°26'31"W 463.00 feet to the Point of Beginning.





Know what's below.  
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UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

## SOIL BORINGS

### Soil Borings

The following soil investigation was conducted by Soils & Structures Borings were started on November 21, 2023, and completed on November 21, 2023, with a Hand Auger.

**Hand Auger ID: HA-41**  
0.0' - 1.0' Topsoil - dark brown sandy (12.0')  
1.0' - 2.0' Sand - brown fine to coarse  
2.0' - 3.0' Sand - gray fine to coarse  
3.0' - 5.0' Sand - brown fine to coarse  
5.0' End of Boring  
Groundwater at 3.4 ft at end of drilling

**Hand Auger ID: HA-42**  
0.0' - 1.0' Topsoil - dark brown sandy (12.0')  
1.0' - 2.0' Sand - brown fine to coarse  
2.0' - 3.0' Sand - gray fine to coarse  
3.0' - 5.0' Sand - brown fine to coarse  
5.0' End of Boring  
Groundwater at 3.4 ft at end of drilling

**Hand Auger ID: HA-43**  
0.0' - 1.0' Topsoil - dark brown sandy (12.0')  
1.0' - 2.0' Sand - brown fine to medium  
2.0' - 3.0' Sand - light brown fine to medium  
3.0' - 5.0' Sand - brown fine to medium  
5.0' End of Boring  
Groundwater at 3.4 ft at end of drilling

**Soil Borings**  
The following soil investigation was conducted by Soils & Structures Borings were started on January 17, 2024, and completed on January 18, 2024, with a 3.25" Hollow Stem Auger.

**Borehole ID: TB-41**  
0.0' - 1.0' Topsoil - dark brown sandy (18.0')  
1.0' - 2.0' Sand - slightly compact brown fine to medium with a trace of clay  
2.0' - 3.0' Sand - slightly compact to compact brown fine to medium  
3.0' - 5.0' Sand - slightly compact to compact brown fine to medium  
5.0' - 10.0' Sand - very compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-42**  
0.0' - 1.0' Topsoil - dark brown sandy (12.0')  
1.0' - 2.0' Sand - compact brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to coarse  
4.0' - 6.0' Sand - compact to very compact brown fine to medium  
6.0' - 14.0' Sand - very compact brown fine to medium  
14.0' - 18.0' Sand - extremely compact brown fine with a trace of silt  
18.0' - 20.0' Silt - silt brown sandy  
20.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-43**  
0.0' - 1.0' Topsoil - dark brown sandy (19.0')  
1.0' - 4.0' Sand - compact brown fine to coarse  
4.0' - 9.0' Sand - compact brown fine to medium  
9.0' - 14.0' Sand - very compact brown fine to medium  
14.0' - 20.0' Sand - compact to very compact brown fine to medium  
20.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-44**  
0.0' - 1.1' Topsoil - dark brown sandy (13.0')  
1.1' - 2.0' Sand - slightly compact brown fine to coarse  
2.0' - 4.0' Sand - slightly compact to compact brown fine to medium  
4.0' - 6.0' Sand - slightly compact to compact brown fine to medium  
6.0' - 10.0' Sand - very compact brown fine with a trace of silt  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-45**  
0.0' - 1.0' Topsoil - dark brown sandy (13.0')  
1.0' - 2.0' Sand - brown fine to medium clayey with a trace of silt  
2.0' - 4.0' Sand - very compact brown fine to coarse  
4.0' - 6.0' Sand - very compact brown fine to medium  
6.0' - 10.0' Sand - very compact brown fine to medium  
10.0' - 20.0' Sand - compact brown fine silt with lenses of silt  
20.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-46**  
0.0' - 1.1' Topsoil - dark brown sandy (13.0')  
1.1' - 4.0' Sand - very compact brown fine to coarse with clay and gravel  
4.0' - 6.0' Sand - compact brown fine to medium with a trace of clay and gravel  
6.0' - 10.0' Sand - very compact brown fine to medium with a trace of silt  
10.0' - 15.0' Sand - very compact brown fine to medium with a trace of silt  
15.0' - 20.0' Sand - very compact brown fine to medium with a trace of silt  
20.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-47**  
0.0' - 1.0' Topsoil - dark brown sandy (10.0')  
1.0' - 2.0' Sand - compact brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to coarse  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 14.0' Sand - compact brown fine to medium  
14.0' - 18.0' Sand - very compact brown fine with a trace of silt  
18.0' - 20.0' Silt - silt gray clayey with a trace of sand  
20.0' End of Boring  
Groundwater at 3.5 ft at end of drilling

**Borehole ID: TB-48**  
0.0' - 1.0' Topsoil - dark brown sandy (10.0')  
1.0' - 2.0' Sand - compact brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to coarse  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 14.0' Sand - compact brown fine to medium  
14.0' - 18.0' Sand - very compact brown fine with a trace of silt  
18.0' - 20.0' Silt - silt gray clayey with a trace of sand  
20.0' End of Boring  
Groundwater at 3.5 ft at end of drilling

**Borehole ID: TB-49**  
0.0' - 1.0' Topsoil - dark brown sandy (9.0')  
1.0' - 2.0' Sand - brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to coarse  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - compact brown fine to medium  
10.0' - 15.0' Sand - very compact brown fine to medium  
15.0' End of Boring  
Groundwater at 3.5 ft at end of drilling

**Borehole ID: TB-50**  
0.0' - 0.9' Topsoil - dark brown sandy (11.0')  
0.9' - 2.0' Sand - compact brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to medium  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - very compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

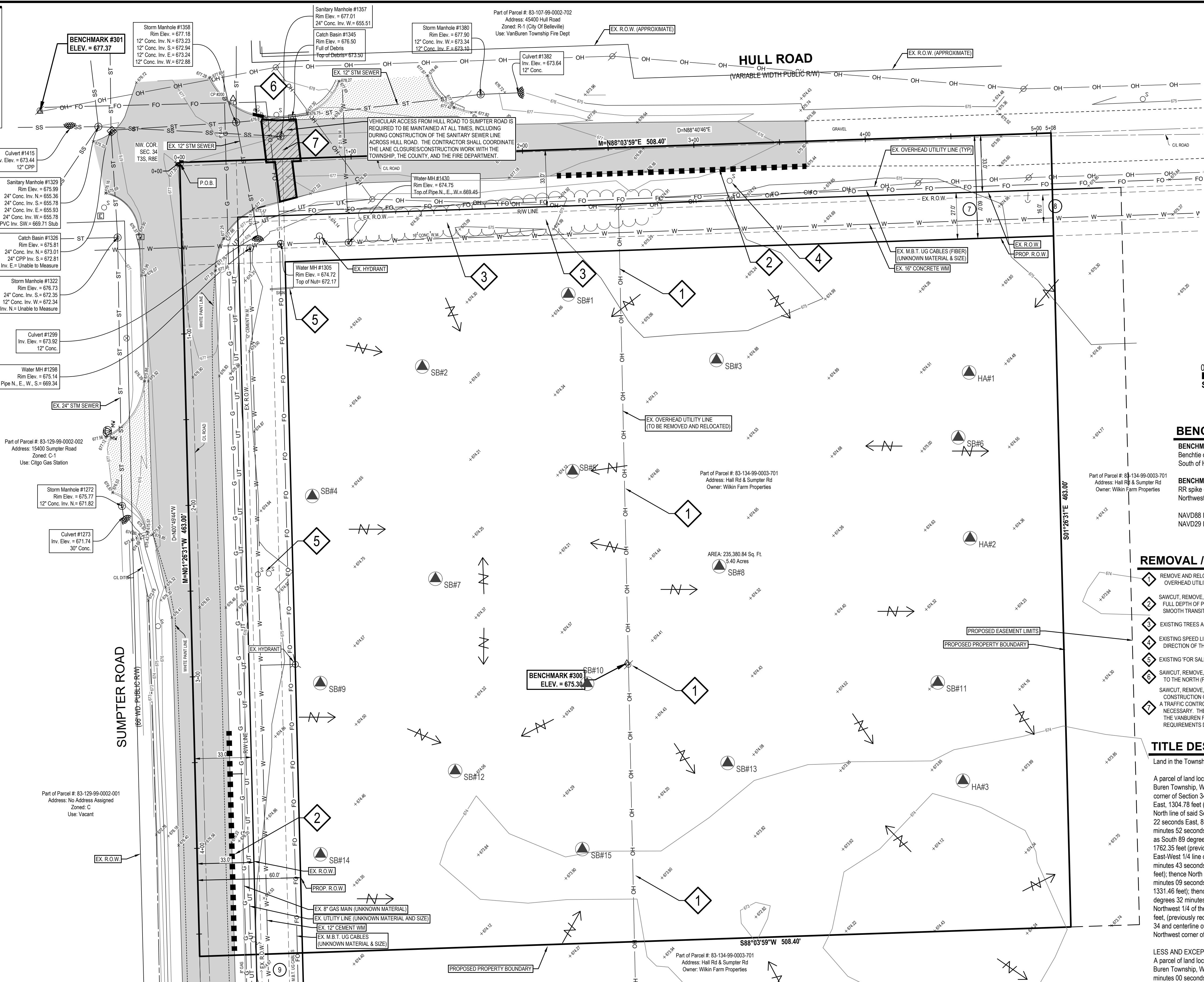
**Borehole ID: TB-51**  
0.0' - 1.0' Topsoil - dark brown sandy (10.0')  
1.0' - 4.0' Sand - compact brown fine to medium with a trace of clay and gravel  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - compact brown fine to medium  
10.0' - 15.0' Sand - compact brown fine to medium  
15.0' End of Boring  
Groundwater at 3.5 ft at end of drilling

**Borehole ID: TB-52**  
0.0' - 0.9' Topsoil - dark brown sandy (11.0')  
0.9' - 2.0' Sand - brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to medium  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - very compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-53**  
0.0' - 1.0' Topsoil - dark brown sandy (18.0')  
1.0' - 2.0' Sand - slightly compact brown fine to medium  
2.0' - 4.0' Sand - compact brown fine to medium  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - very compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-54**  
0.0' - 1.0' Topsoil - dark brown sandy (10.0')  
1.0' - 2.0' Sand - compact brown fine to medium with a trace of clay and gravel  
2.0' - 4.0' Sand - compact brown fine to medium  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling

**Borehole ID: TB-55**  
0.0' - 1.0' Topsoil - dark brown sandy gravelly (10.0')  
1.0' - 2.0' Sand - compact brown fine to medium with a trace of clay  
2.0' - 4.0' Sand - compact brown fine to medium  
4.0' - 6.0' Sand - compact brown fine to medium  
6.0' - 10.0' Sand - compact brown fine to medium  
10.0' End of Boring  
Groundwater at 3.0 ft at end of drilling



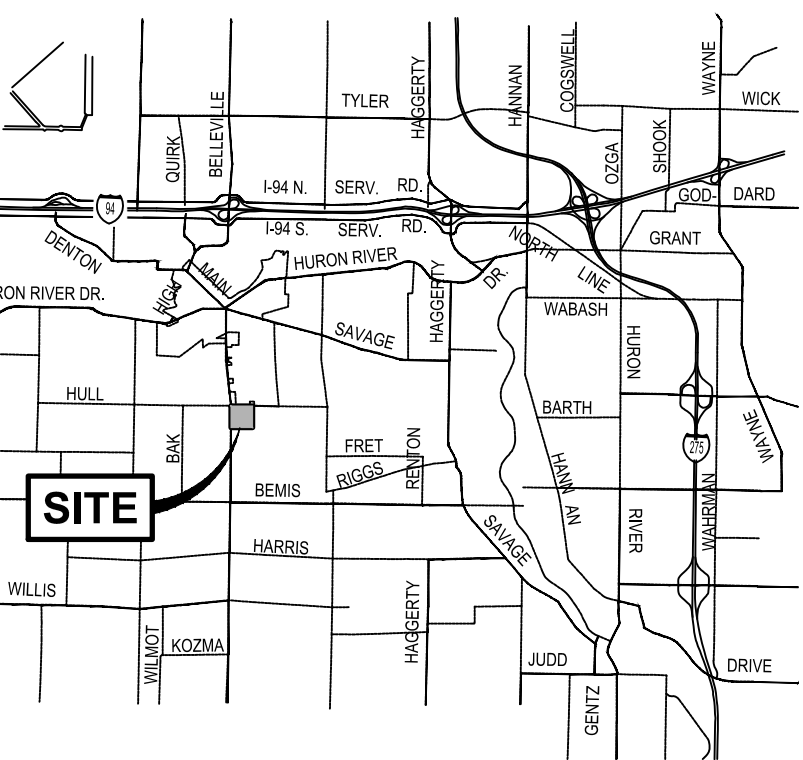
## REMOVAL / DEMOLITION NOTES

- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST THREE WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THERE ARE EXISTING UNDERGROUND UTILITIES WHICH CROSS THE PROPOSED REPLACEMENT WORK AREAS. ALTHOUGH THEIR EXACT LOCATION CANNOT BE DETERMINED, IT IS KNOWN THESE UTILITIES ARE LOCATED WHERE DIGGING IS REQUIRED. THE CONTRACTOR SHALL CONDUCT THE REQUIRED EXCAVATION IN THESE AREAS WITH EXTREME CAUTION.
- ALL EXISTING UTILITY INFORMATION TAKEN FROM EXISTING RECORDS, AND FIELD VERIFIED WHERE ACCESSIBLE ONLY, INFORMATION OBTAINED FROM EXISTING RECORDS MAY NOT BE COMPLETE OR ACCURATE. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY FOR ACCURACY, LOCATION AND CONDITION.
- BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY AND BY THE OWNER, REPRESENTATIVES OF THE CITY, THE OWNER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING UTILITIES AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS AND EXISTING VIDEO TAPES. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
- ALL EXISTING UTILITIES, SEWERS AND WATER LINES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES, MUNICIPALITIES AND AGENCIES BEFORE COMMENCING ANY WORK.
- THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING POLES, OVERHEAD WIRES, UNDERGROUND UTILITIES, GUY WIRES, GAS LINES, ETC. ALL ADJUSTMENT OR RECONSTRUCTION WORK, EXCEPT FOR THOSE STRUCTURES OTHERWISE NOTED ON THE PLANS, SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING APPURTENANCES SUCH AS UTILITY POLES AND VALVES BOX SHALL NOT BE DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES.
- ALL DEBRIS SHALL BE REMOVED FROM THE SITE, AND NO STOCKPILING ON SITE SHALL BE ALLOWED UNLESS APPROVED BY THE OWNER OR THEIR REPRESENTATIVES.
- THE CONTRACTOR SHALL LIMIT SAWCUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE REQUIRED OR AS SHOWN. ALL PAVEMENTS TO BE REMOVED SHALL BE SAWCUT AND REMOVED TO FULL DEPTH AT ALL PAVEMENT LIMITS OR EXISTING CUTS, IF ANY DAMAGE IS INCURRED TO ANY OF THE SURROUNDING PAVEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR AT NO ADDITIONAL COST TO ANYONE ELSE, INCLUDING THE CITY OR OWNER.
- ASPHALT AREAS SHOWN TO BE SAWCUT AND REMOVED FULL DEPTH ARE ACTUAL FACE OF PROPOSED CURBS. IT WILL BE NECESSARY TO MAKE OFF-SET SAWCUTS TO PROVIDE CLEARANCE FOR PROPOSED CURBS. THE CONTRACTOR SHALL DETERMINE THE AMOUNT OF OFF-SET NECESSARY TO CONSTRUCT THE PROPOSED CURBS. ADDITIONAL CUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE EXISTING PAVEMENT, BUT THERE WILL BE NO EXTRA PAYMENT FOR ADDITIONAL CUTS. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE REMAINING PAVEMENT. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL FULL DEPTH SAWCUTS AND REMOVE THE DAMAGE AREAS AS NECESSARY.
- ALL PAVEMENT REMOVAL AREAS SHALL BE FULL PAVEMENT CROSS-SECTION REMOVAL DOWN TO NATIVE SOIL LAYER IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- ALL TREES AND VEGETATION WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

## SCHEDULE B - SECTION II NOTES

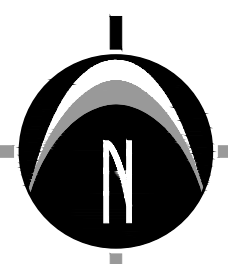
- The terms, provisions and easement(s) contained in the document entitled "Easement for Water Main" recorded as Liber 15371, Page 860 of Official Records. **The easement described in this document is shown on this survey.**
- The terms, provisions and easement(s) contained in the document entitled "Right of Way" recorded as Liber 17820, Page 295 of Official Records. **The easement described in this document is shown on this survey.**
- The terms, provisions and easement(s) contained in the document entitled "Utility Easement" recorded as Liber 19640, Page 532 of Official Records. **The easement described in this document is shown on this survey.**
- The terms and provisions contained in the document entitled "Affidavit Attesting that Qualified Agricultural Property Shall Remain Qualified Agricultural Property" recorded as Liber 50091, Page 635 of Official Records. **Not a survey matter.**
- The terms and provisions contained in the document entitled "Affidavit Attesting that Qualified Agricultural Property Shall Remain Qualified Agricultural Property" recorded as Liber 50091, Page 637 of Official Records. **Not a survey matter.**

Experience . . . the Difference



## LOCATION MAP

NOT TO SCALE



0' 15' 30' 60'  
SCALE: 1" = 30'

## BENCHMARKS

**BENCHMARK #300 ELEV. = 675.30 (NAVD88)**  
Benchite on North face of power pole, located 285' +/- South of Hull Road & 230' +/- East of Sumpter Road.

**BENCHMARK #301 ELEV. = 677.37 (NAVD88)**  
RR spike on South face of power pole, located at the Northwest corner of Hull Road and Sumpter Road.

NAVD88 IS 0.45 FT LOWER THAN NAVD29.  
NAVD29 IS 0.45 FT HIGHER THAN NAVD88.

## REMOVAL / DEMOLITION NOTES

- REMOVE AND RELOCATE EXISTING UTILITY POLE AND OVERHEAD UTILITY LINE.
- SAWCUT, REMOVE, AND REPLACE EDGE OF EX. ASPHALT AS NECESSARY TO FULL DEPTH OF PAVEMENT PER COUNTY REQUIREMENTS, TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED ASPHALT.
- EXISTING TREES AND SCRUB BRUSH TO BE REMOVED ALONG R.O.W.
- EXISTING SPEED LIMIT SIGN TO BE RELOCATED AT THE DIRECTION OF THE WAYNE COUNTY ROAD COMMISSION.
- EXISTING "FOR SALE" SIGN TO BE REMOVED.
- SAWCUT, REMOVE, AND REPLACE EX. CURB FOR SIDEWALK CONNECTION TO THE WORK AREA (PROVIDE DUB DOWN IN CURB).
- SAWCUT, REMOVE, AND REPLACE EX. HULL ROAD AS NECESSARY FOR CONSTRUCTION OF SANITARY SEWER.
- A TRAFFIC CONTROL PLAN / DETOUR PLAN SHALL BE PROVIDED AS NECESSARY. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE VAN BUREN FIRE DEPARTMENT STATION 1 TO ACCOMMODATE THEIR REQUIREMENTS DURING CONSTRUCTION.

## TITLE DESCRIPTION (OVERALL PROPERTY)

Land in the Township of Van Buren, Wayne County, MI, described as follows:

A parcel of land located in and being a part of the Northwest 1/4 of Section 34, Town 3 South, Range 8 East, Van Buren Township, Wayne County, Michigan, and being more particularly described as: Beginning at the Northwest corner of Section 34 and proceeding thence North 88 degrees 40 minutes 46 seconds East, 1304.78 feet (previously recorded as South 89 degrees 35 minutes 00 seconds East, 1304.68 feet), along the North line of said Section 34 and centerline of Hull Road (33 feet wide, 1/2 width); thence South 01 degree 20 minutes 22 seconds East, 881.90 feet (previously recorded as South 00 degrees 23 minutes 52 seconds West); thence North 88 degrees 40 minutes 46 seconds East, 656.28 feet (previously recorded as South 89 degrees 35 minutes 00 seconds East, 656.27 feet); thence South 01 degree 35 minutes 41 seconds East, 1762.35 feet (previously recorded as South 00 degrees 08 minutes 33 seconds West 1782.16 feet), to a point on the East-West 1/4 line of said Section 34; thence along the East-West 1/4 line of said Section 34, South 88 degrees 48 minutes 43 seconds West, 664.44 feet (previously recorded as North 89 degrees 29 minutes 12 seconds West, 664.21 feet); thence North 01 degree 20 minutes 22 seconds West, 1331.54 feet (previously recorded as North 00 degrees 23 minutes 52 seconds East, 1331.46 feet); thence South 88 degrees 43 minutes 46 seconds West, 1316.50 feet, (previously recorded as North 89 degrees 32 minutes 04 seconds West 1316.55 feet), along the South line of the Northwest 1/4 of the Northwest 1/4 of Section 34; thence North 00 degrees 49 minutes 44 seconds West, 1330.44 feet, (previously recorded as North 00 degrees 54 minutes 31 seconds East, 1330.38 along the West line of Section 34 and centerline of Sumpter Road (33 feet wide, 1/2 width) to the Northwest corner of said Section 34 and Point of Beginning.

LESS AND EXCEPT:

A parcel of land located in and being a part of the Northwest 1/4 of Section 34, Town 3 South, Range 8 East, Van Buren Township, Wayne County, Michigan, and being more particularly described as: Beginning North 89 degrees 35 minutes 00 seconds West, 1304.69 feet and South 00 degrees 23 minutes 52 seconds West, 881.90 feet from the North 1/4 corner of said Section 34; thence South 00 degrees 23 minutes 52 seconds West, 1781.02 feet; thence South 89 degrees 29 minutes 12 seconds East, 664.21 feet; thence North 89 degrees 35 minutes 00 seconds East, 1782.16 feet to the Point of Beginning.

## TRACTOR SUPPLY COMPANY PROPERTY DESCRIPTION

A parcel of land located in and being a part of the Northwest 1/4 of Section 34, Town 3 South, Range 8 East, Van Buren Township, Wayne County, Michigan, described as: Commencing at the Northwest corner of said Section and the Point of Beginning; thence N88°03'59"E 508.40 feet along the North line of said Section; thence S01°57'08"E 1331.46 feet; thence S88°06'56"W 1316.54 feet; thence N01°26'31"W 463.00 feet along the West line of said Section and the centerline of Sumpter Road to the Point of Beginning. Contains 5.40 acres. Subject to any and all easements, restrictions, Hull Road right-of-way and Sumpter Road right-of-way.

## REMAINDER DESCRIPTION FROM TITLE WORK DESCRIPTION THIS IS FOR THE REMAINDER OF THE SQUARE SHAPED PROPERTY

A parcel of land located in and being a part of the Northwest 1/4 of Section 34, Town 3 South, Range 8 East, Van Buren Township, Wayne County, Michigan, described as: Commencing at the Northwest corner of said Section; thence N88°03'59"E 508.40 feet along the North line of said Section to the Point of Beginning; thence continuing N88°03'59"E 796.29 feet along said North line; thence S01°57'08"E 1331.46 feet; thence S88°06'56"W 1316.54 feet; thence N01°26'31"W 463.00 feet along the West line of said Section and the centerline of Sumpter Road; thence N88°03'59"E 508.40 feet; thence N01°26'31"W 463.00 feet to the Point of Beginning. Contains 34.64 acres. Subject to any and all easements, restrictions, Hull Road right-of-way and Sumpter Road right-of-way.

**NEDERVELD**  
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Grand Rapids, MI 49503  
Phone: 616.575.5190  
**ANN ARBOR**  
**CHICAGO**  
**COLUMBUS**  
**HOLLAND**  
**INDIANAPOLIS**

## PREPARED FOR:

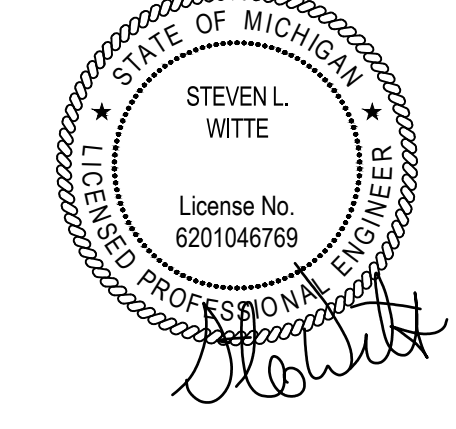
CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

## REVISIONS:

Title: Preliminary Plan	Checked: SW	Date: 11/13/23
Drawn: SW	Checked: SW	Date: 11/22/23
Title: Work in Progress - Staff Comments	Checked: SW	Date: 12/21/23
Drawn: SW	Checked: SW	Date: 03/26/24
Title: Staff Comments and Building Front	Checked: SW	Date: 03/26/24
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Drawn: SW	Checked: SW	Date: 12/19/24
Title: Modified per Wayne County DPS	Checked: SW	Date: 01/22/25
Drawn: SW	Checked: SW	Date: 02/19/25
Title: Modified per Wayne County DPS	Checked: SW	Date: 02/19/25
Drawn: SW	Checked: SW	Date: 02/19/25

**TRACTOR SUPPLY**  
**VANBUREN TOWNSHIP**  
**Existing Conditions and Demolition Plan**  
00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

## STAMP:



## PROJECT NO:

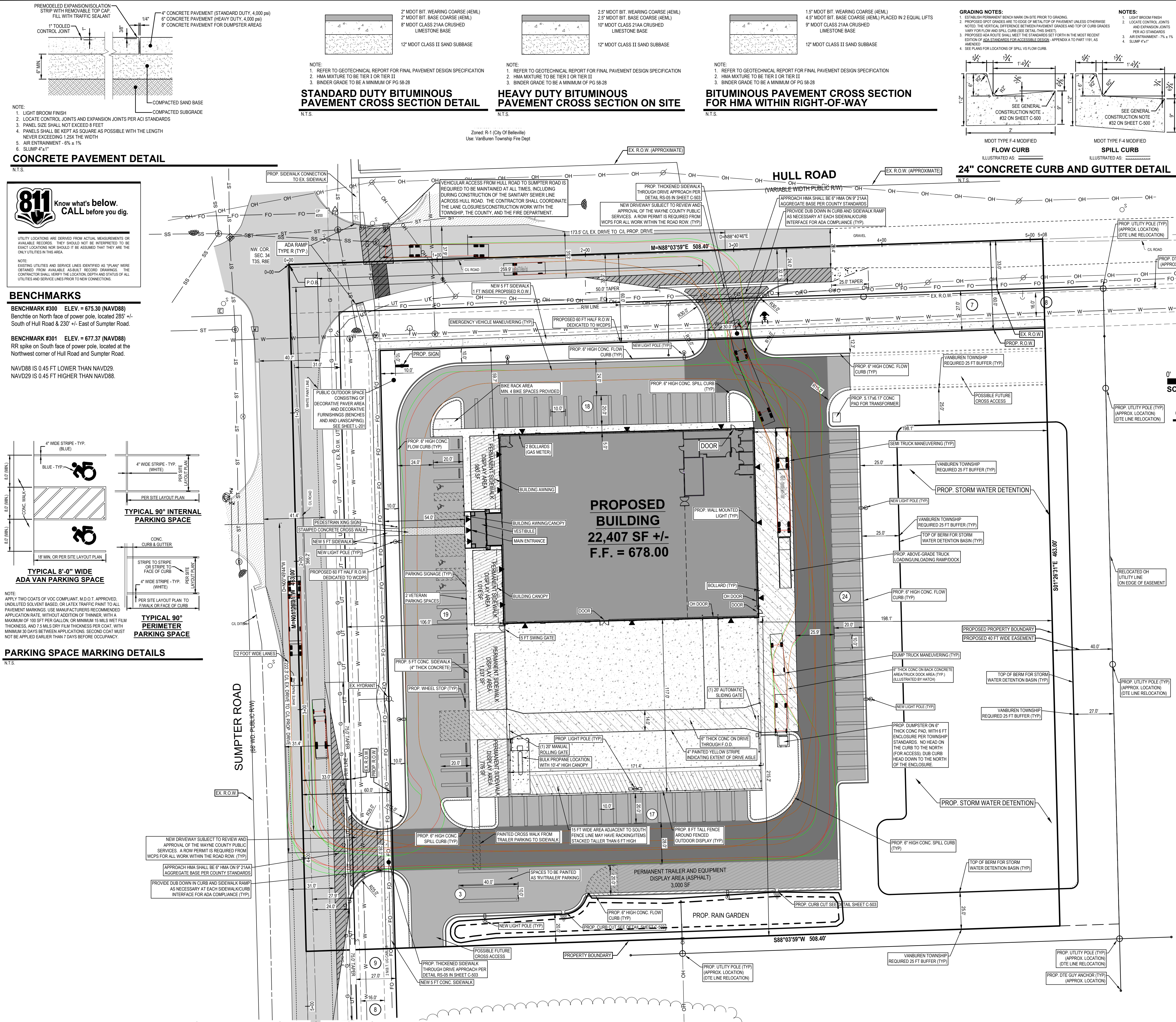
23500325

## SHEET NO:

**C-201**

SHEET: 2 OF 16









Know what's below.  
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UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

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Zoned: R-1 (City Of Belleville)  
Use: VanBuren Township Fire Dept

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HOLLAND  
INDIANAPOLIS

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CBE, LLC  
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TRACTOR SUPPLY  
VANBUREN TOWNSHIP

Grading and S.E.S.C. Plan

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PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

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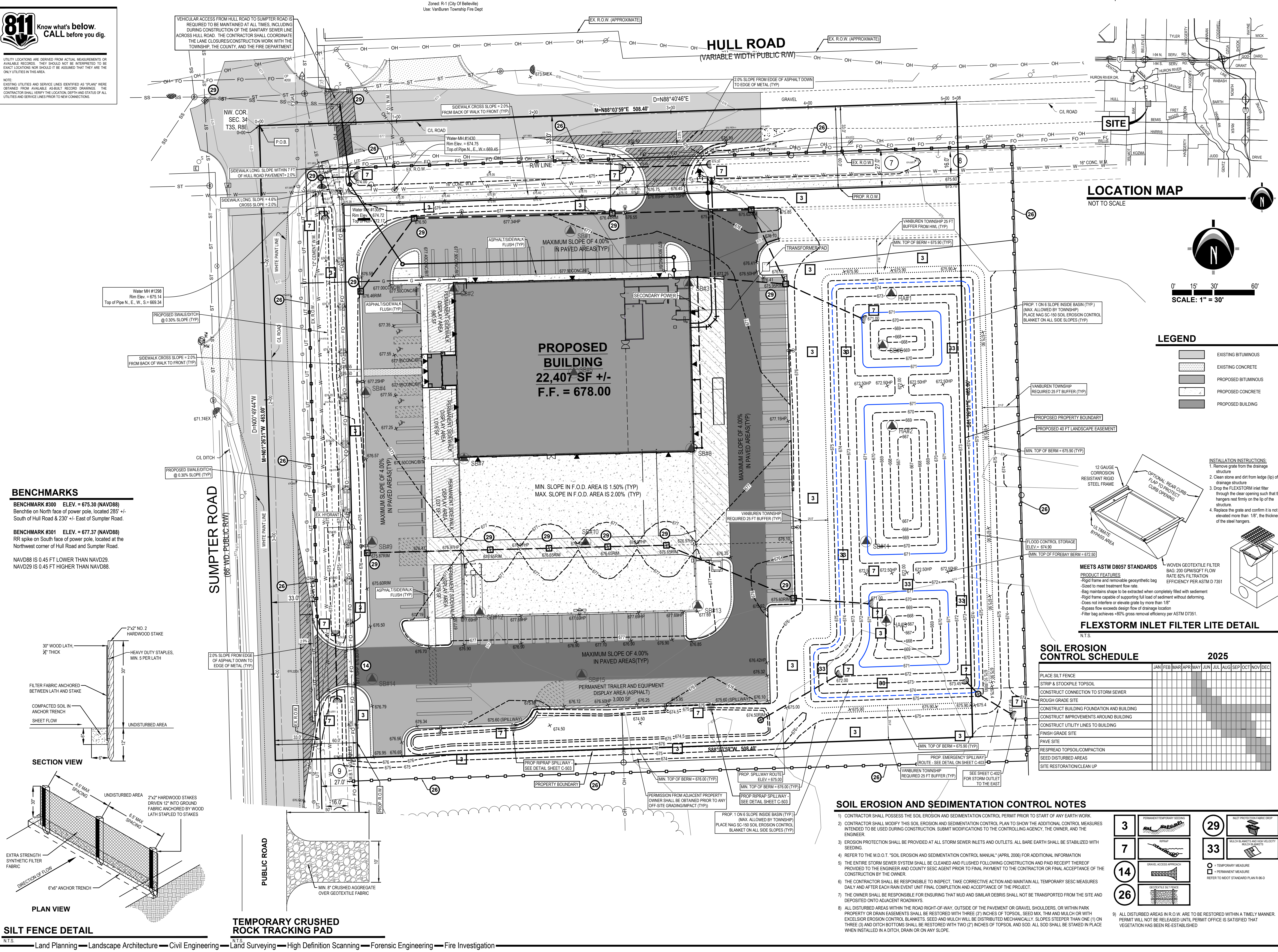
PROJECT NO:  
23500325

SHEET NO:

C-300

SHEET: 4 OF 16

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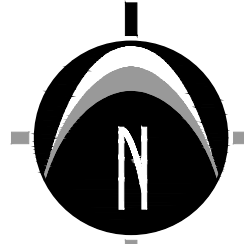
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## BENCHMARKS

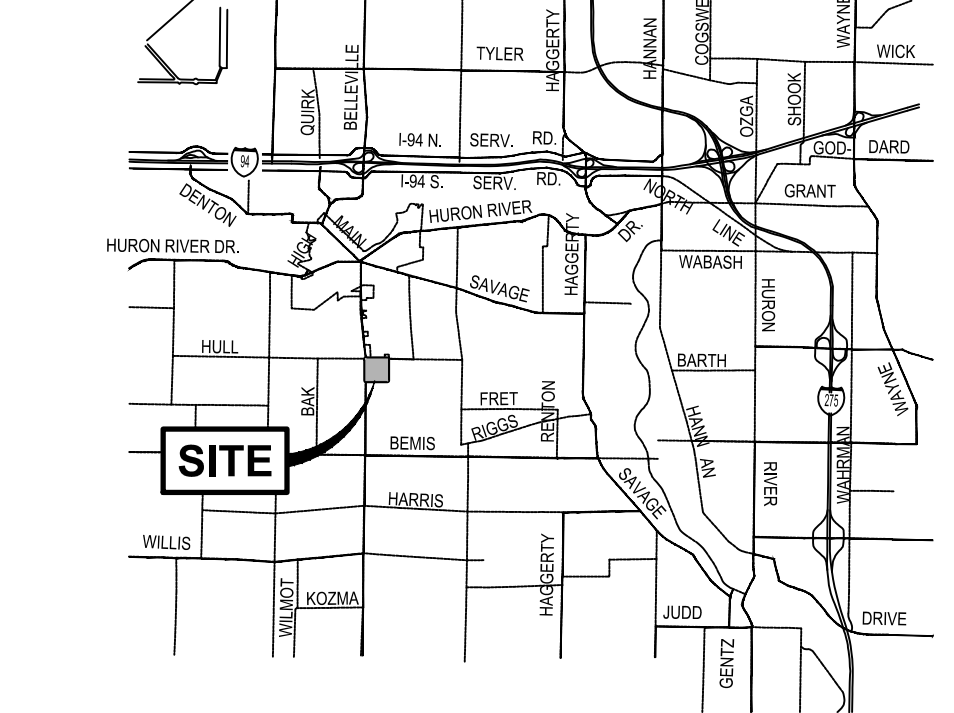
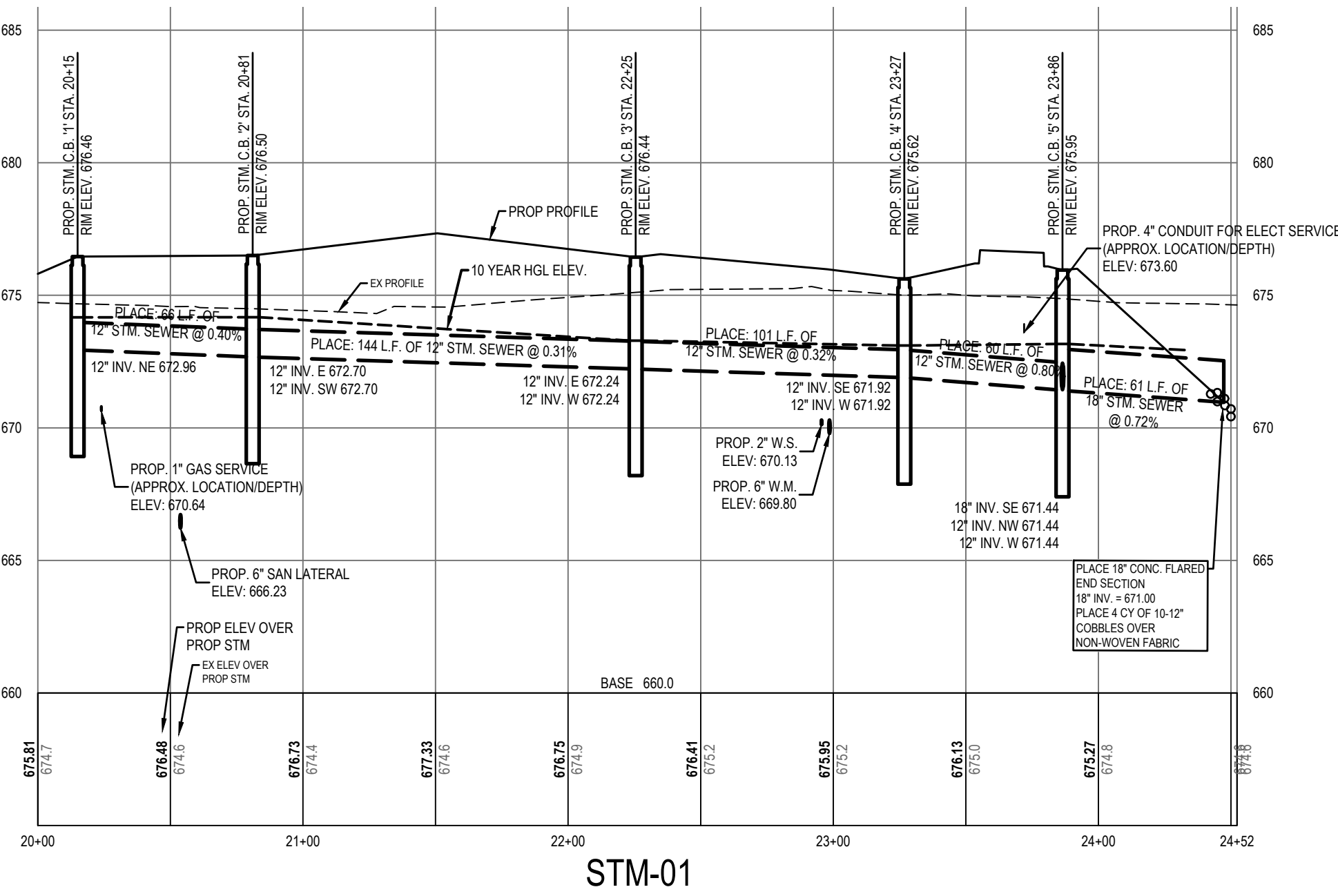
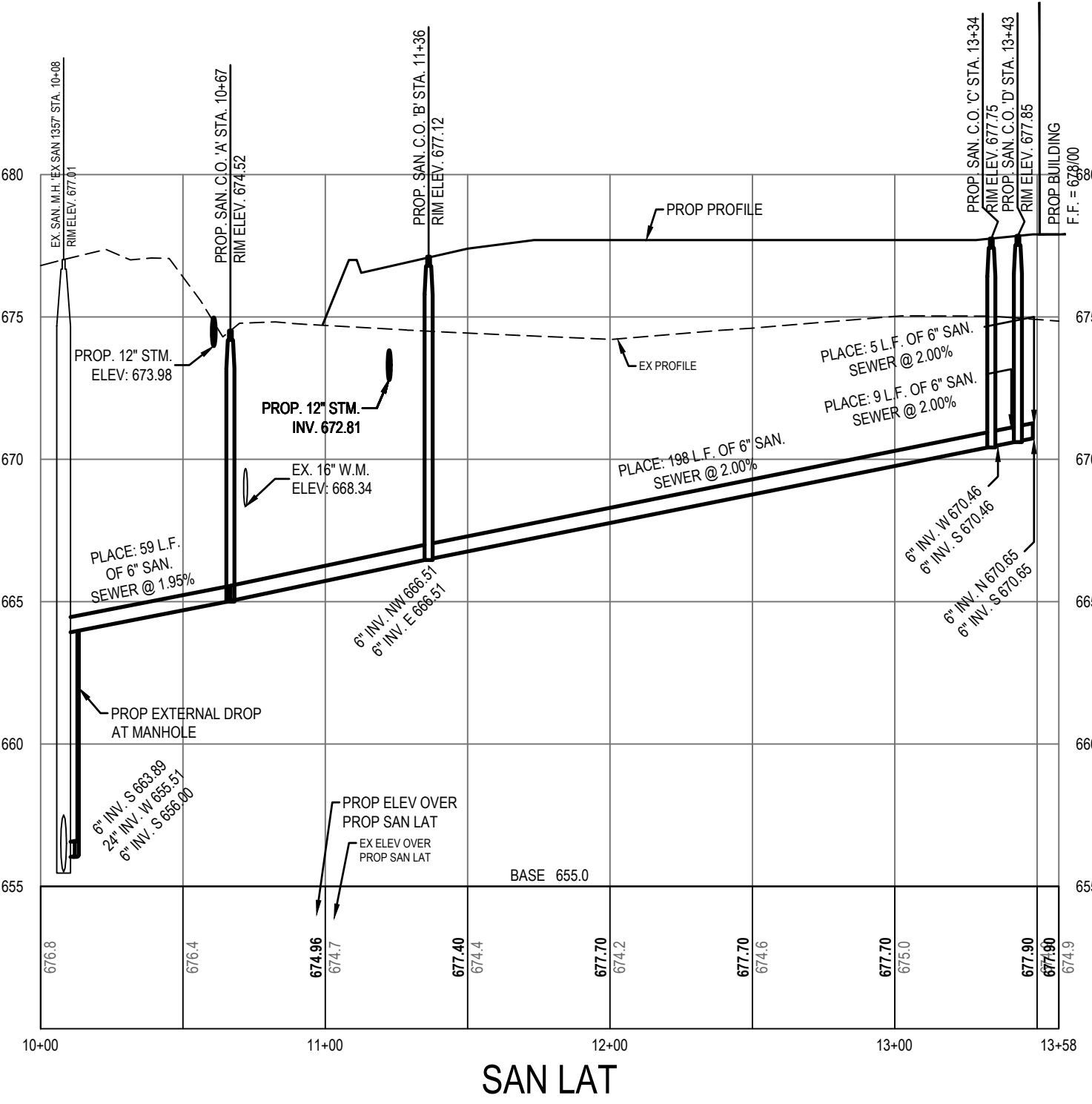
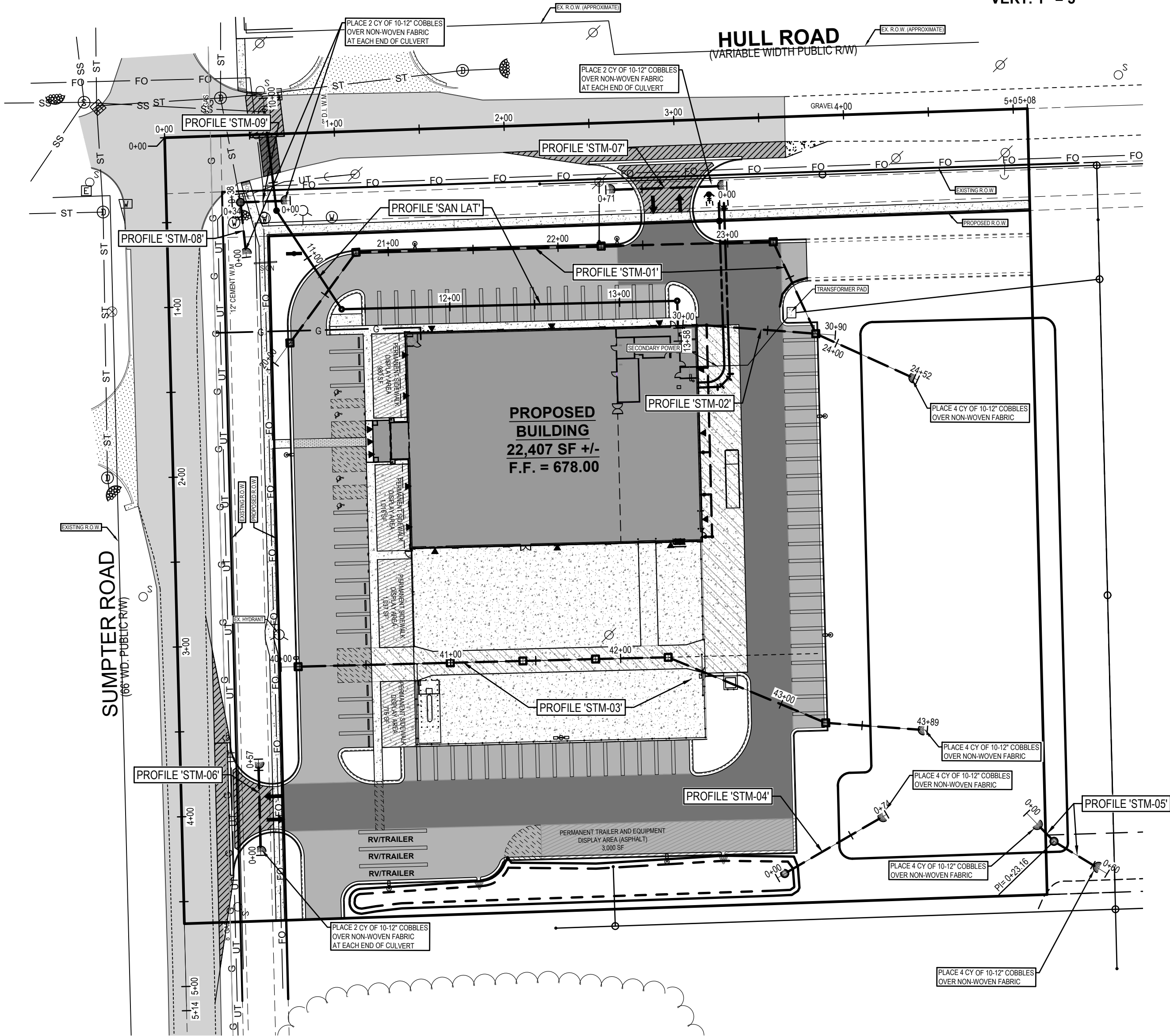
**BENCHMARK #300 ELEV. = 675.30 (NAVD88)**  
Benchtie on North face of power pole, located 285' +/- South of Hull Road & 230' +/- East of Sumpter Road.

**BENCHMARK #301 ELEV. = 677.37 (NAVD88)**  
RR spike on South face of power pole, located at the Northwest corner of Hull Road and Sumpter Road.

NAVD88 IS 0.45 FT LOWER THAN NAVD29.  
NAVD29 IS 0.45 FT HIGHER THAN NAVD88.



SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'



LOCATION MAP  
NOT TO SCALE



## PREPARED FOR:

CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
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# TRACTOR SUPPLY VANBUREN TOWNSHIP

## Utility Plan

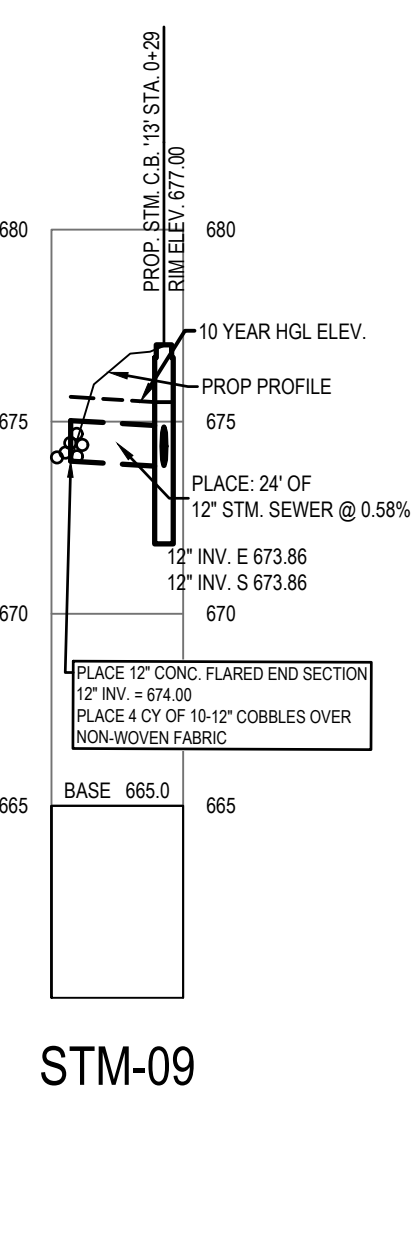
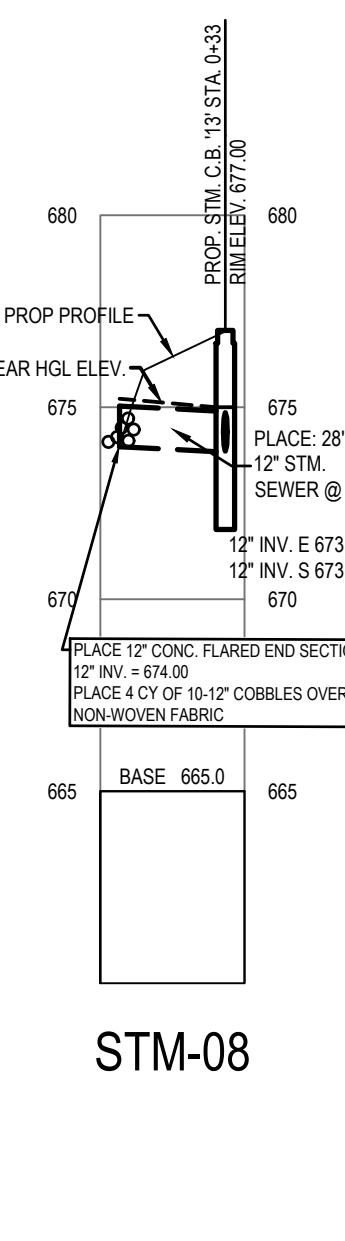
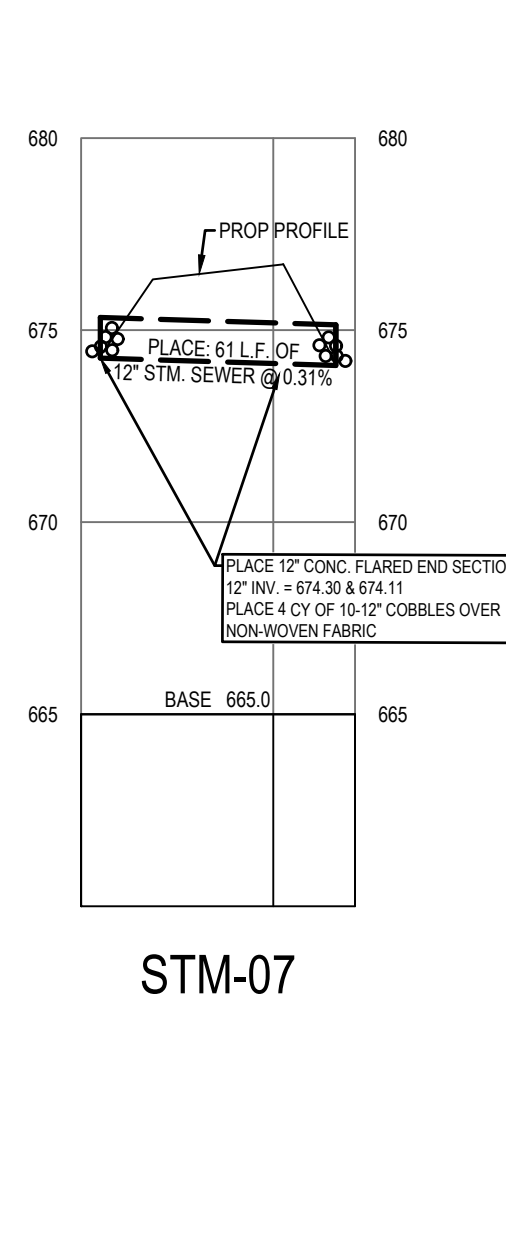
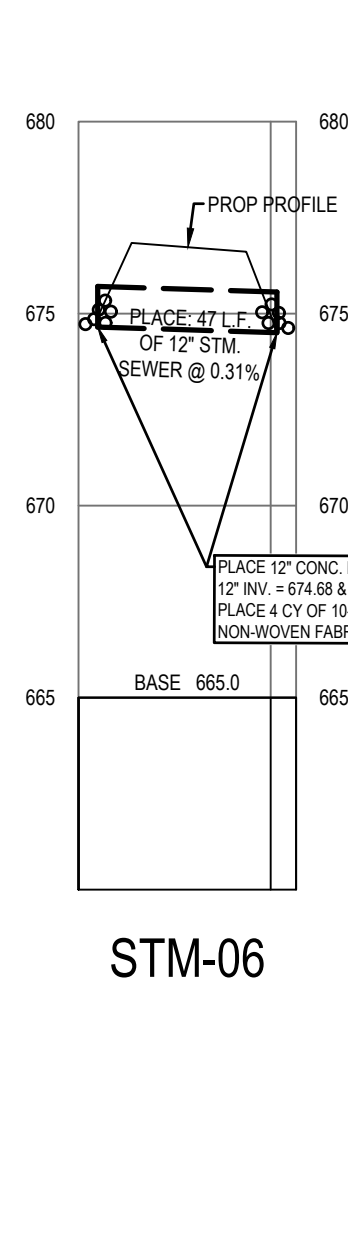
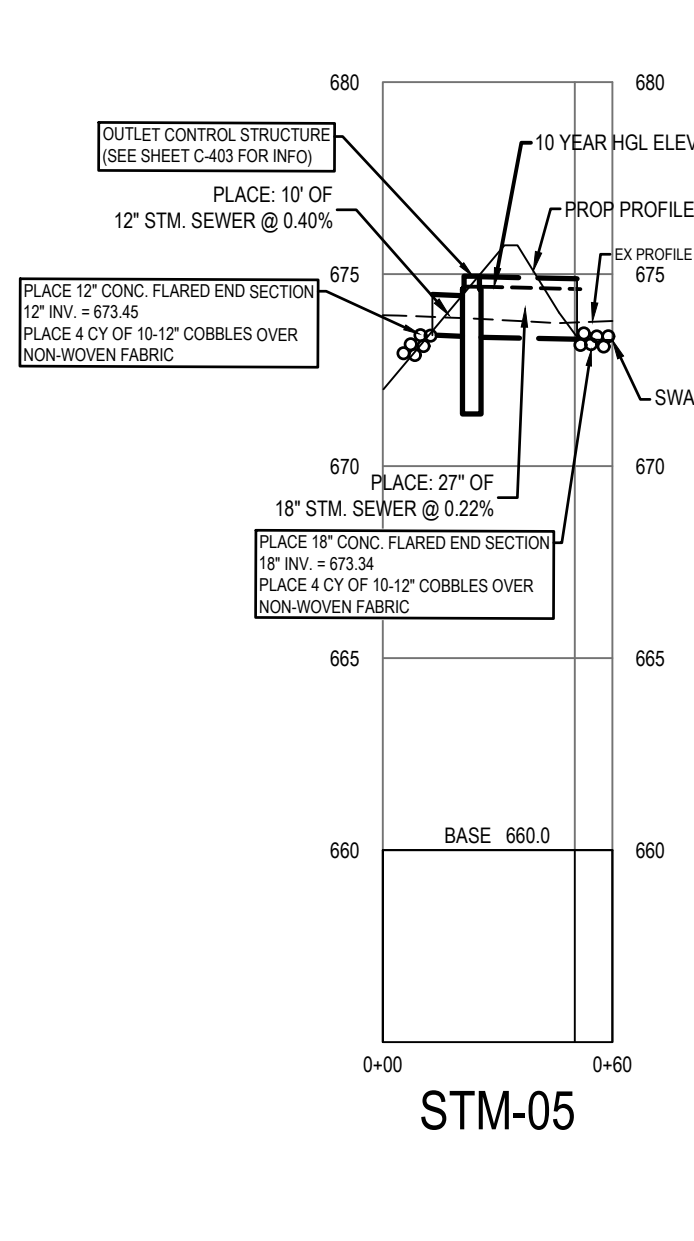
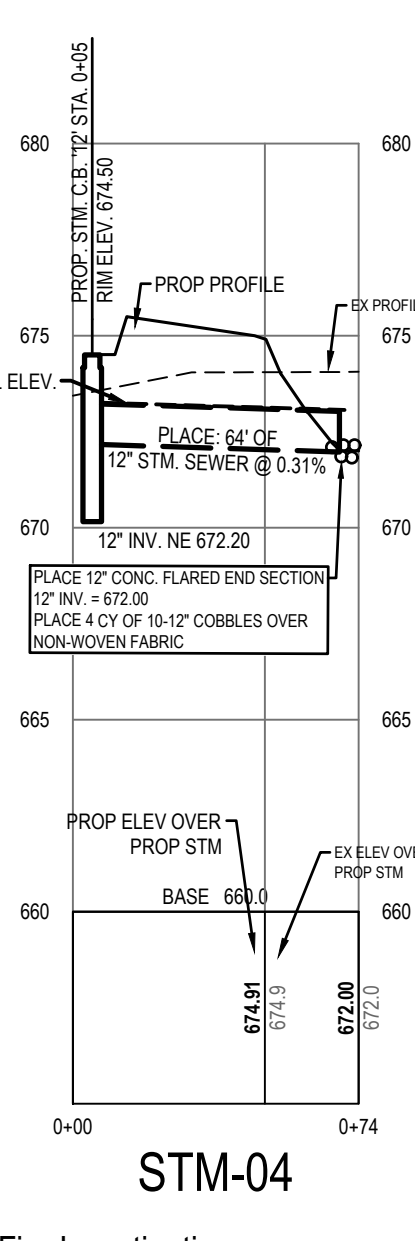
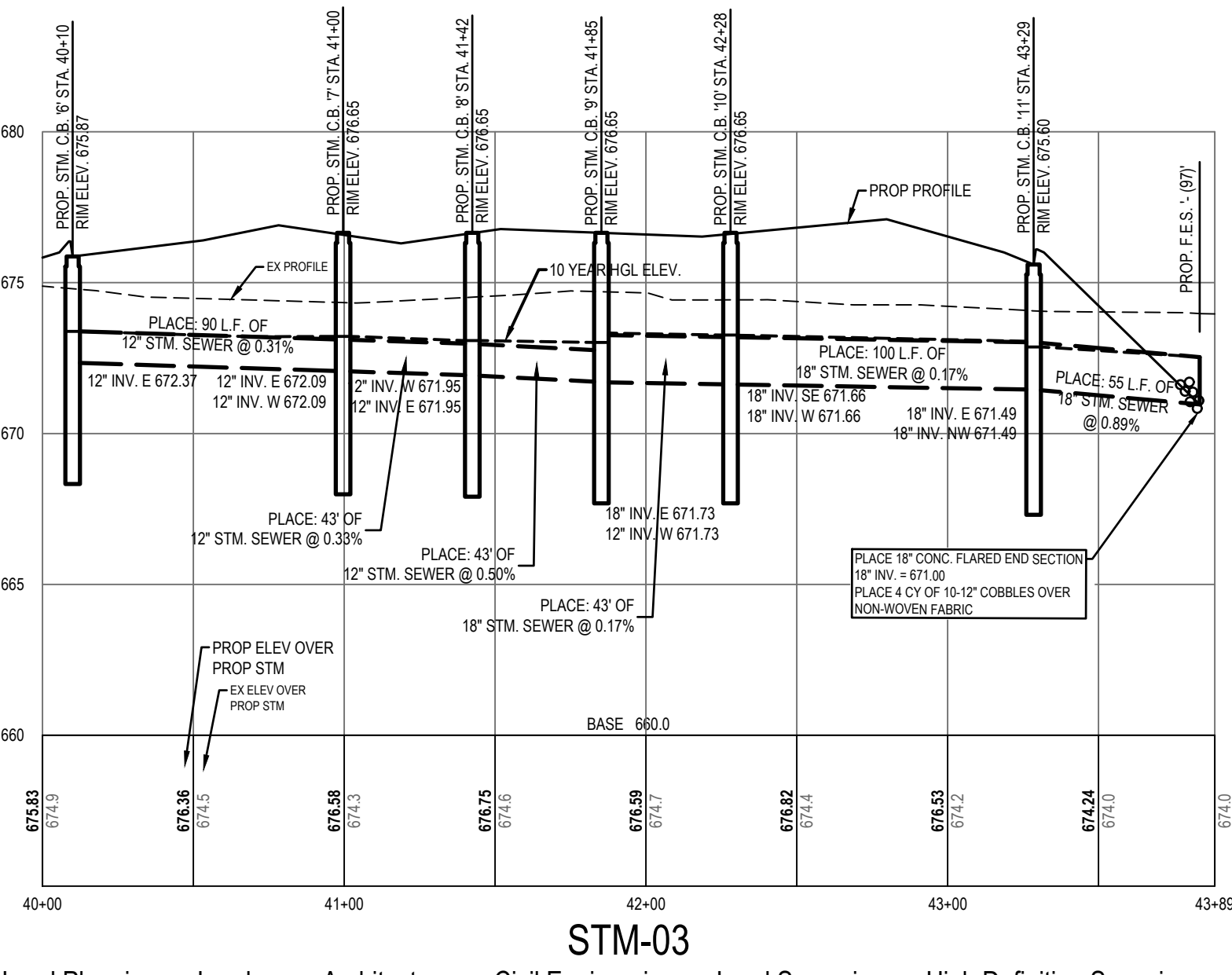
00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R9E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

## STAMP:



PROJECT NO:  
23500325

SHEET NO:  
**C-401**  
SHEET: 6 OF 16



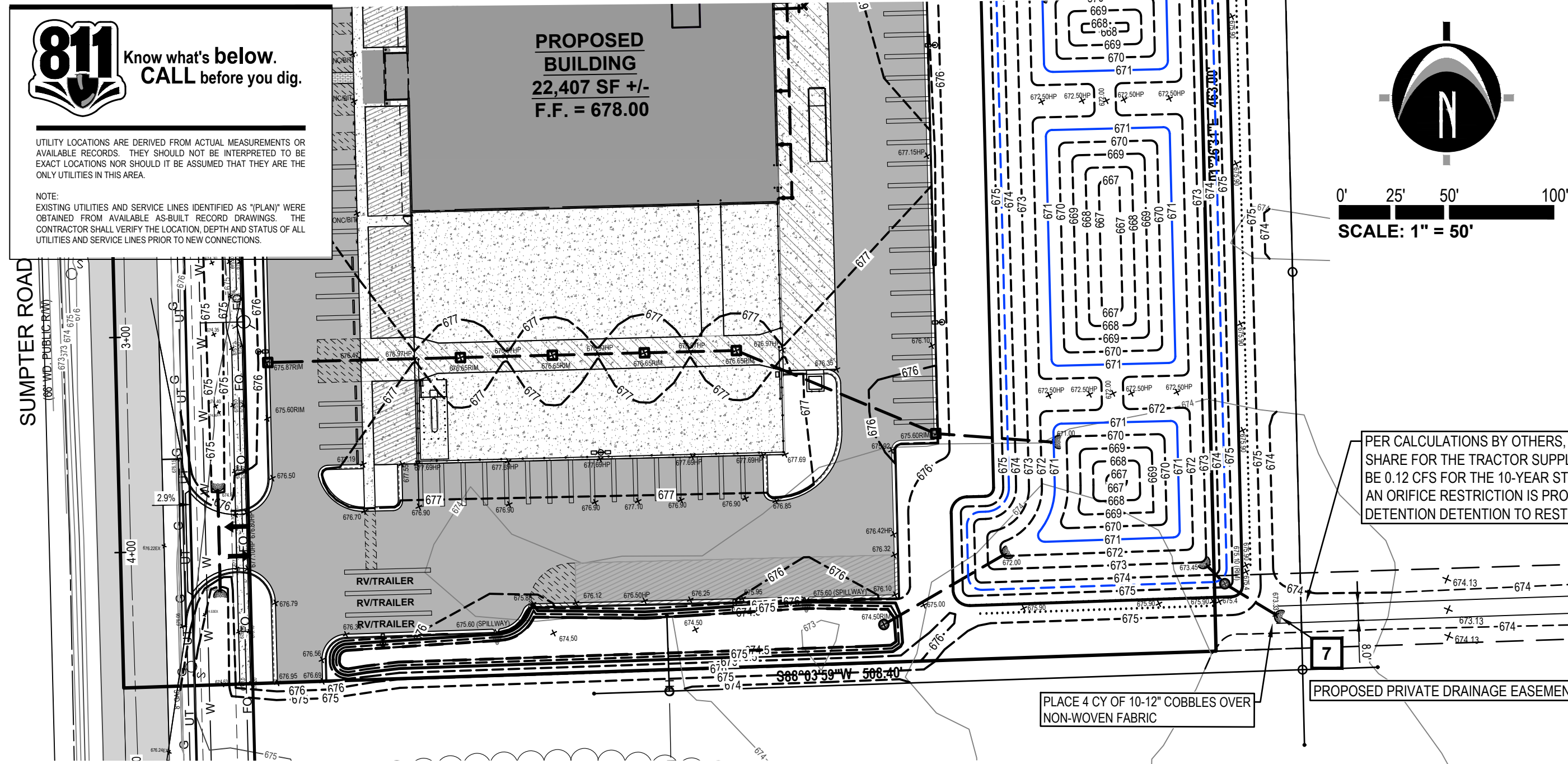


811

Know what's below.  
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SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- 1) CONTRACTOR SHALL POSSESS THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT PRIOR TO START OF ANY EARTH WORK.
- 2) CONTRACTOR SHALL MODIFY THIS SOIL EROSION AND SEDIMENTATION CONTROL PLAN TO SHOW THE ADDITIONAL CONTROL MEASURES INTENDED TO BE USED DURING CONSTRUCTION. SUBMIT MODIFICATIONS TO THE CONTROLLING AGENCY, THE OWNER, AND THE ENGINEER.
- 3) EROSION PROTECTION SHALL BE PROVIDED AT ALL STORM SEWER INLETS AND OUTLETS. ALL BARE EARTH SHALL BE STABILIZED WITH SEEDING.
- 4) REFER TO THE M.D.O.T. "SOIL EROSION AND SEDIMENTATION CONTROL MANUAL" (APRIL 2006) FOR ADDITIONAL INFORMATION.
- 5) THE ENTIRE STORM SEWER SYSTEM SHALL BE CLEANED AND FLUSHED FOLLOWING CONSTRUCTION AND PAID RECEIPT THEREOF PROVIDED TO THE ENGINEER AND COUNTY SESC AGENT PRIOR TO FINAL PAYMENT TO THE CONTRACTOR OR FINAL ACCEPTANCE OF THE CONSTRUCTION BY THE OWNER.
- 6) THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT, TAKE CORRECTIVE ACTION AND MAINTAIN ALL TEMPORARY SESC MEASURES DAILY AND AFTER EACH RAIN EVENT UNTIL FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT.
- 7) THE OWNER SHALL BE RESPONSIBLE FOR ENSURING THAT MUD AND SIMILAR DEBRIS SHALL NOT BE TRANSPORTED FROM THE SITE AND DEPOSITED ONTO ADJACENT ROADWAYS.
- 8) ALL DISTURBED AREAS WITHIN THE ROAD RIGHT-OF-WAY, OUTSIDE OF THE PAVEMENT OR GRAVEL SHOULDERS, OR WITHIN PARK PROPERTY OR DRAIN EASEMENTS SHALL BE RESTORED WITH THREE (3) INCHES OF TOPSOIL, SEED MIX, THM AND MULCH OR WITH EXCELSEIOR EROSION CONTROL BLANKETS. SEED AND MULCH WILL BE DISTRIBUTED MECHANICALLY. SLOPES STEEPER THAN ONE (1) ON THREE (3) AND DITCH BOTTOMS SHALL BE RESTORED WITH TWO (2) INCHES OF TOPSOIL AND SOD. ALL SOD SHALL BE STAKED IN PLACE WHEN INSTALLED IN A DITCH, DRAIN OR ON ANY SLOPE.
- 9) ALL DISTURBED AREAS IN R.O.W. ARE TO BE RESTORED WITHIN A TIMELY MANNER. PERMIT WILL NOT BE RELEASED UNTIL PERMIT OFFICE IS SATISFIED THAT VEGETATION HAS BEEN RE-ESTABLISHED.

7

33

TEMPORARY MEASURE

PERMANENT MEASURE

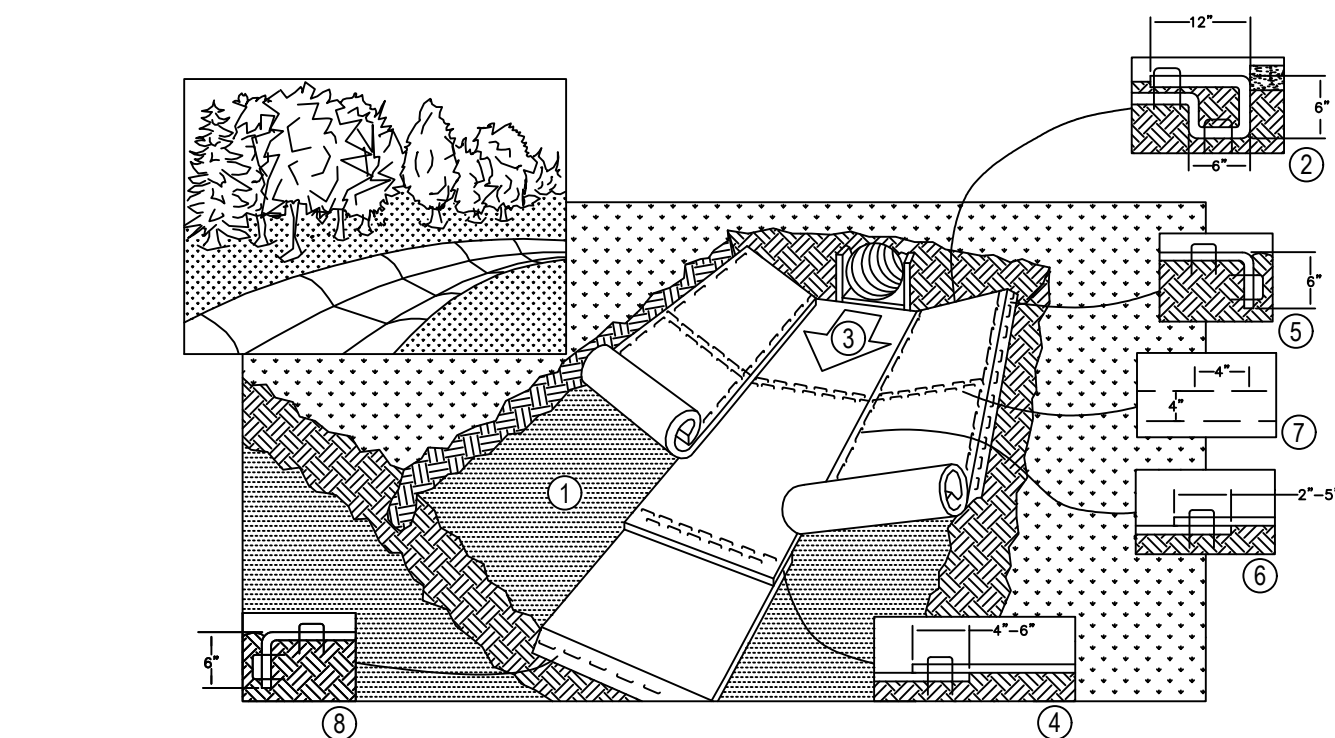
REFER TO MDOT STANDARD PLAN R-96-D

BENCHMARKS

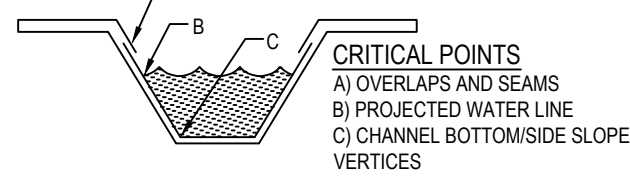
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Benchtie on North face of power pole, located 285' +/- South of Hull Road & 230' +/- East of Sumpter Road.

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RR spike on South face of power pole, located at the Northwest corner of Hull Road and Sumpter Road.

NAV88 IS 0.45 FT LOWER THAN NAVD29.  
NAVD29 IS 0.45 FT HIGHER THAN NAVD88.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4'-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2'-5" (5cm-12.5cm) (DEPENDING ON BLANKET SIZE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' (9M-12M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER THE ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



NOTE:  
\* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

\*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

MULCH BLANKET DETAIL FOR SWALE INSTALLATION

Channel Report

Hydrowflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

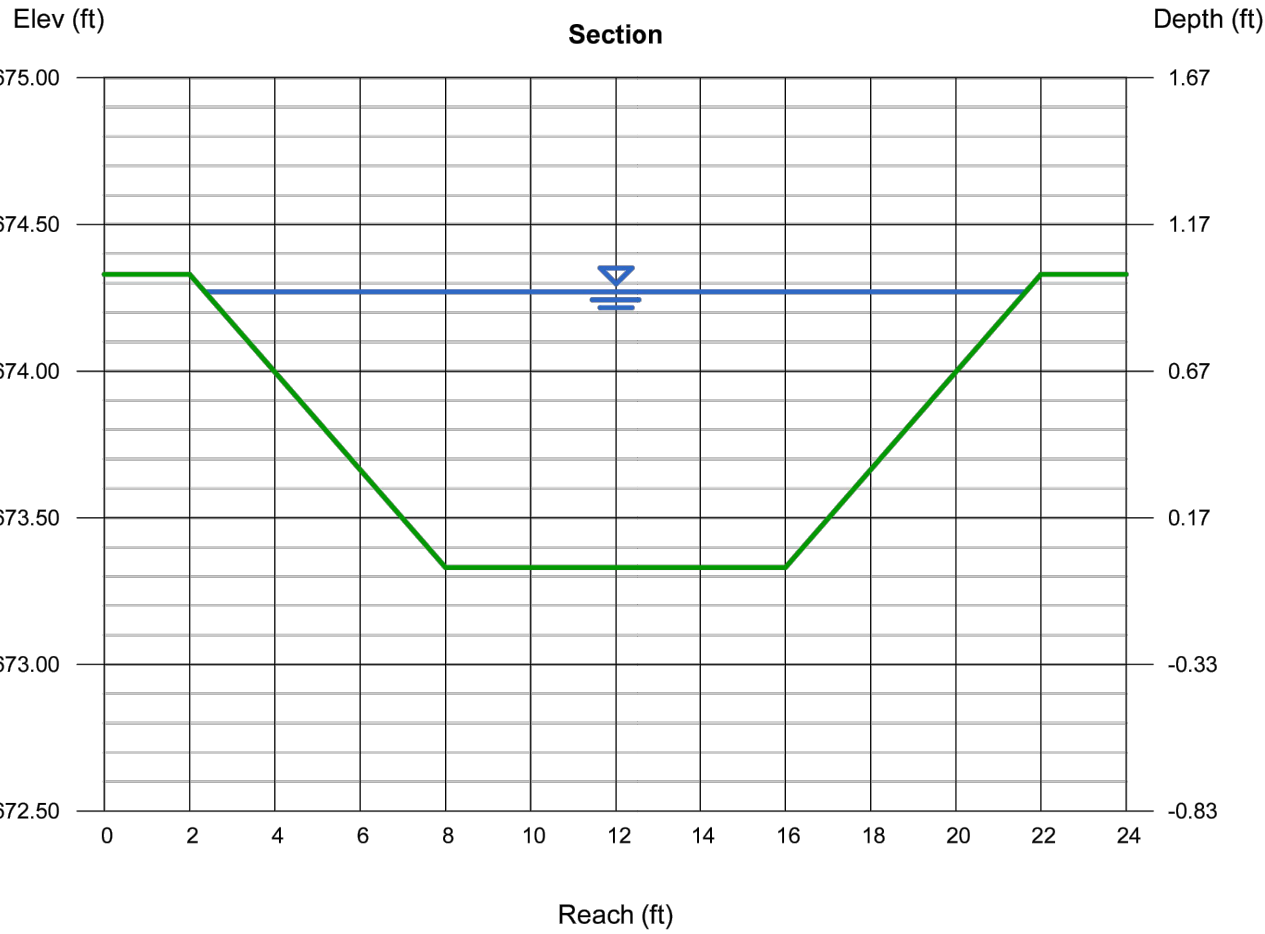
Wednesday, Dec 11 2024

<Name>

**Trapezoidal**  
Bottom Width (ft) = 8.00  
Side Slopes (z:1) = 6.00, 6.00  
Total Depth (ft) = 1.00  
Invert Elev (ft) = 673.33  
Slope (%) = 0.20  
N-Value = 0.030

**Calculations**  
Compute by:  
Known Q = 21.13

**Highlighted**  
Depth (ft) = 0.94  
Q (cfs) = 21.13  
Area (sqft) = 12.82  
Velocity (ft/s) = 1.65  
Wetted Perim (ft) = 19.44  
Crit Depth, Yc (ft) = 0.53  
Top Width (ft) = 19.28  
EGL (ft) = 0.98

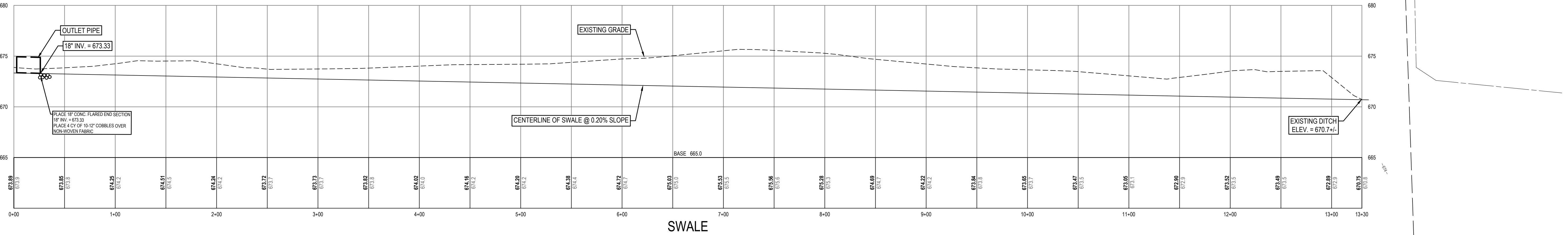
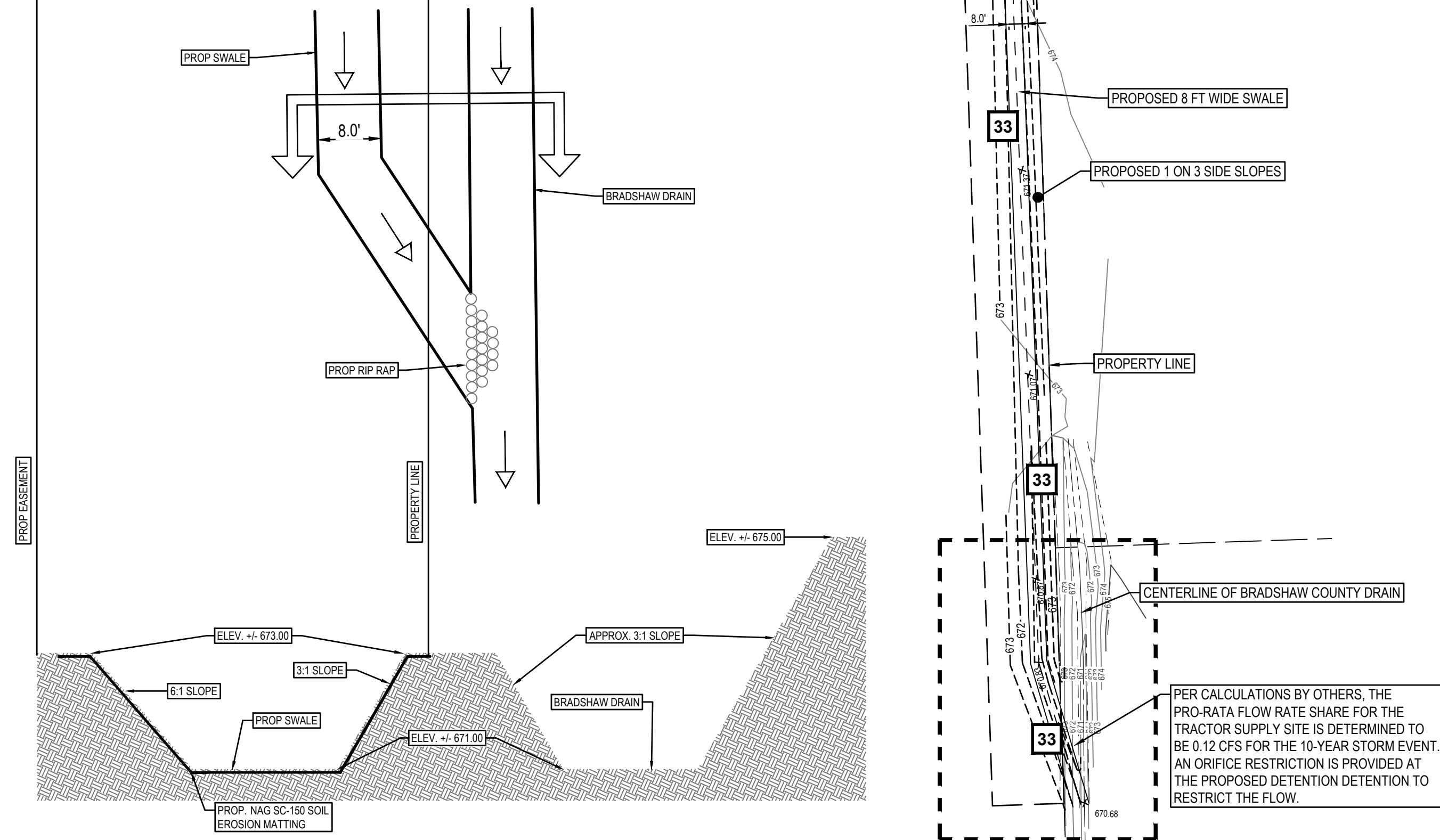


SWALE CROSS SECTION (TYP.)

N.T.S.

SWALE OUTLET TO BRADSHAW DRAIN

N.T.S.



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Grand Rapids, MI 49503  
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ANN ARBOR

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TRACTOR SUPPLY  
VANBUREN TOWNSHIP

Outlet Design

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R9E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

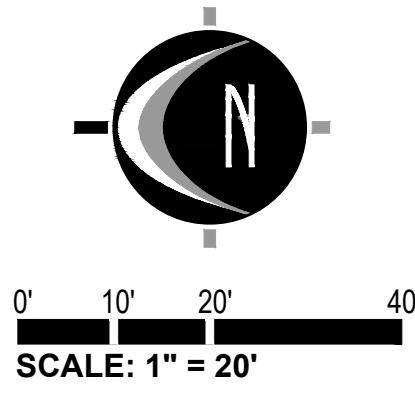
STAMP:



PROJECT NO:  
23500325

SHEET NO:  
**C-402**  
SHEET: 7 OF 16



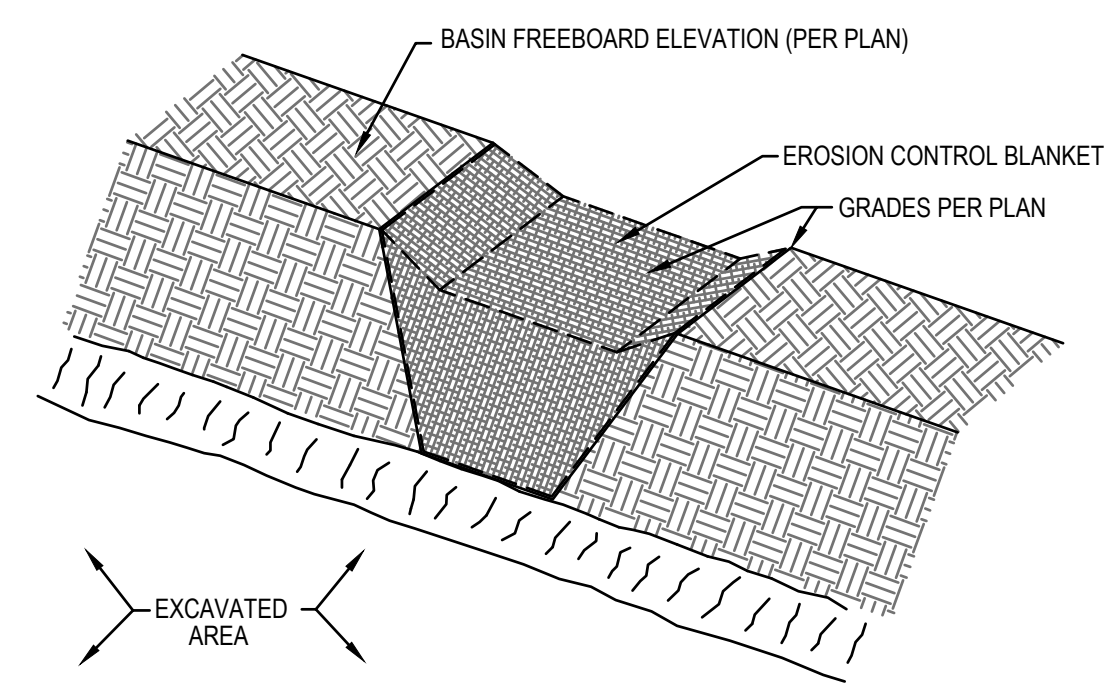
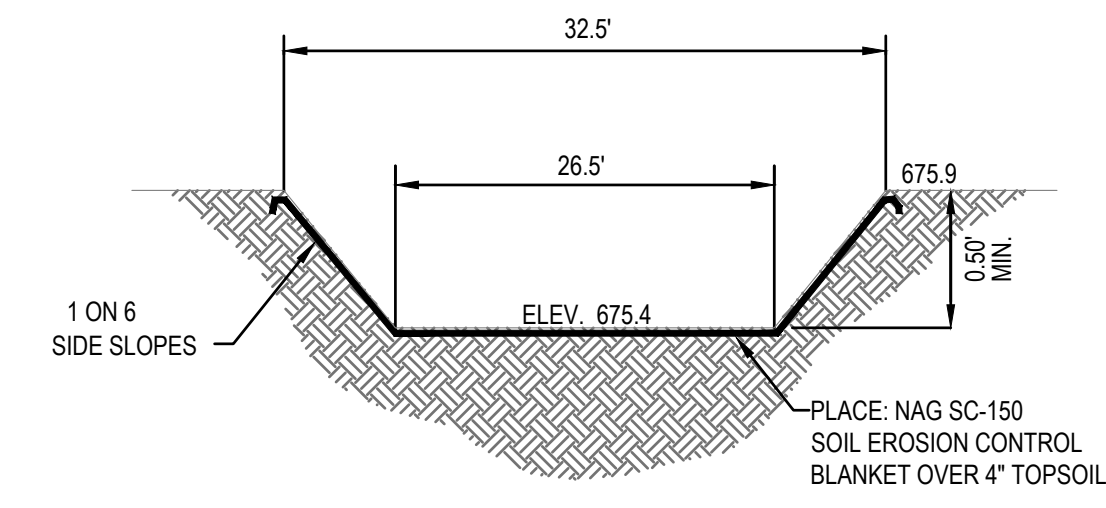


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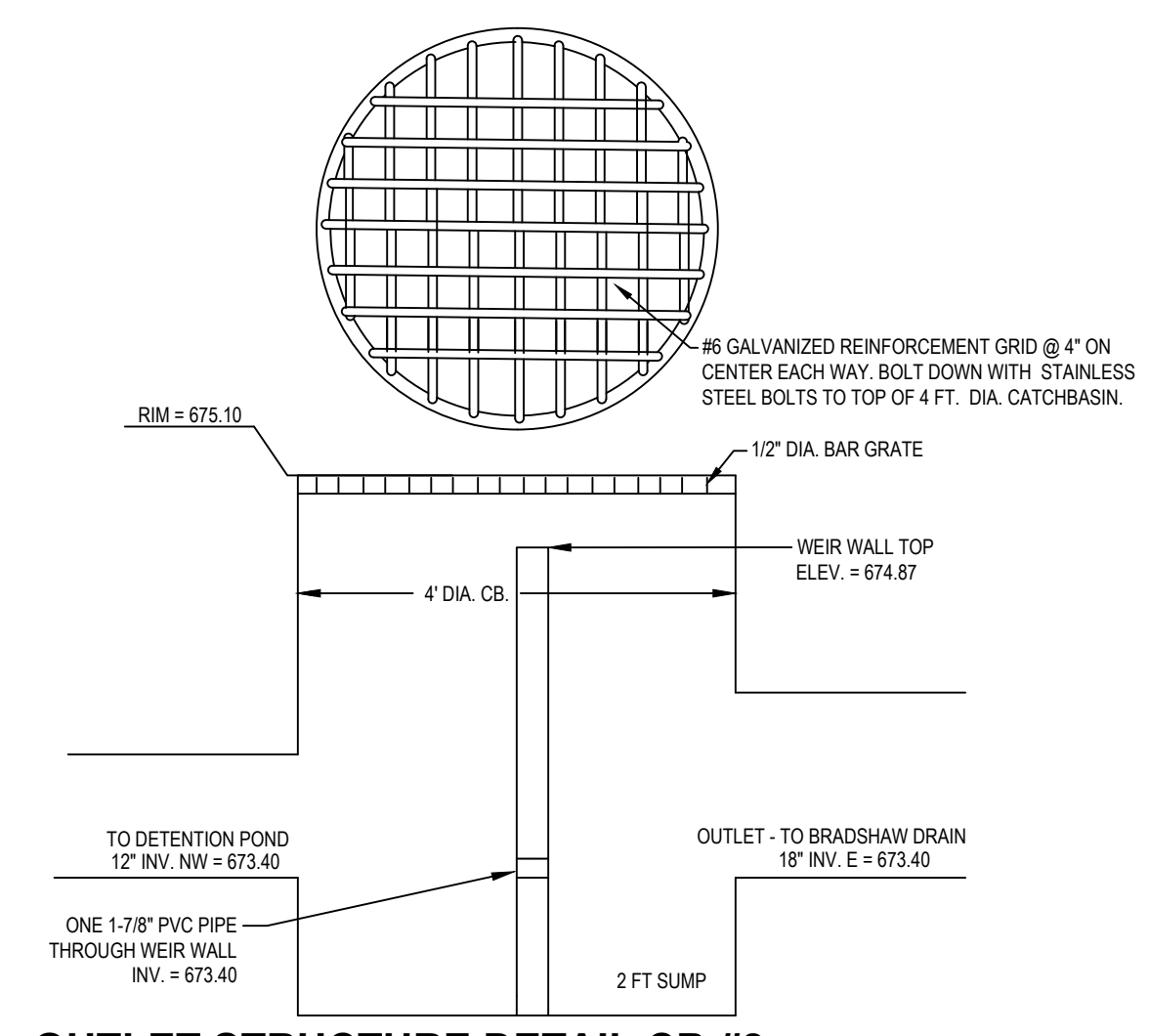
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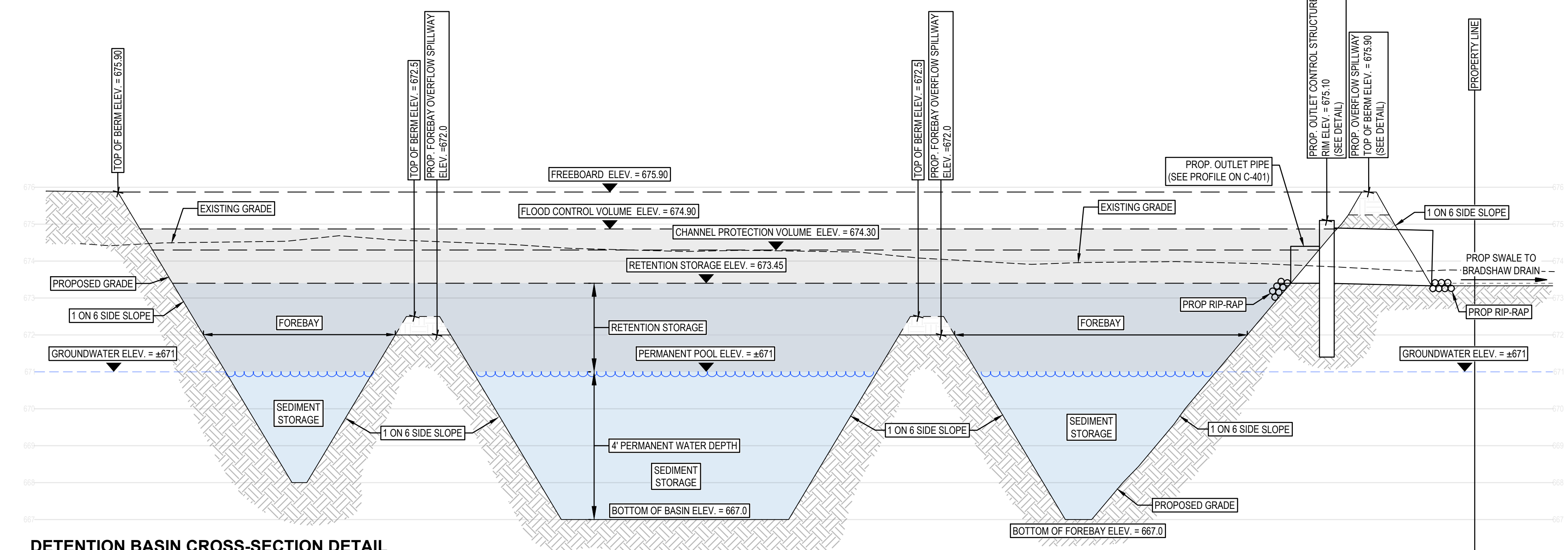
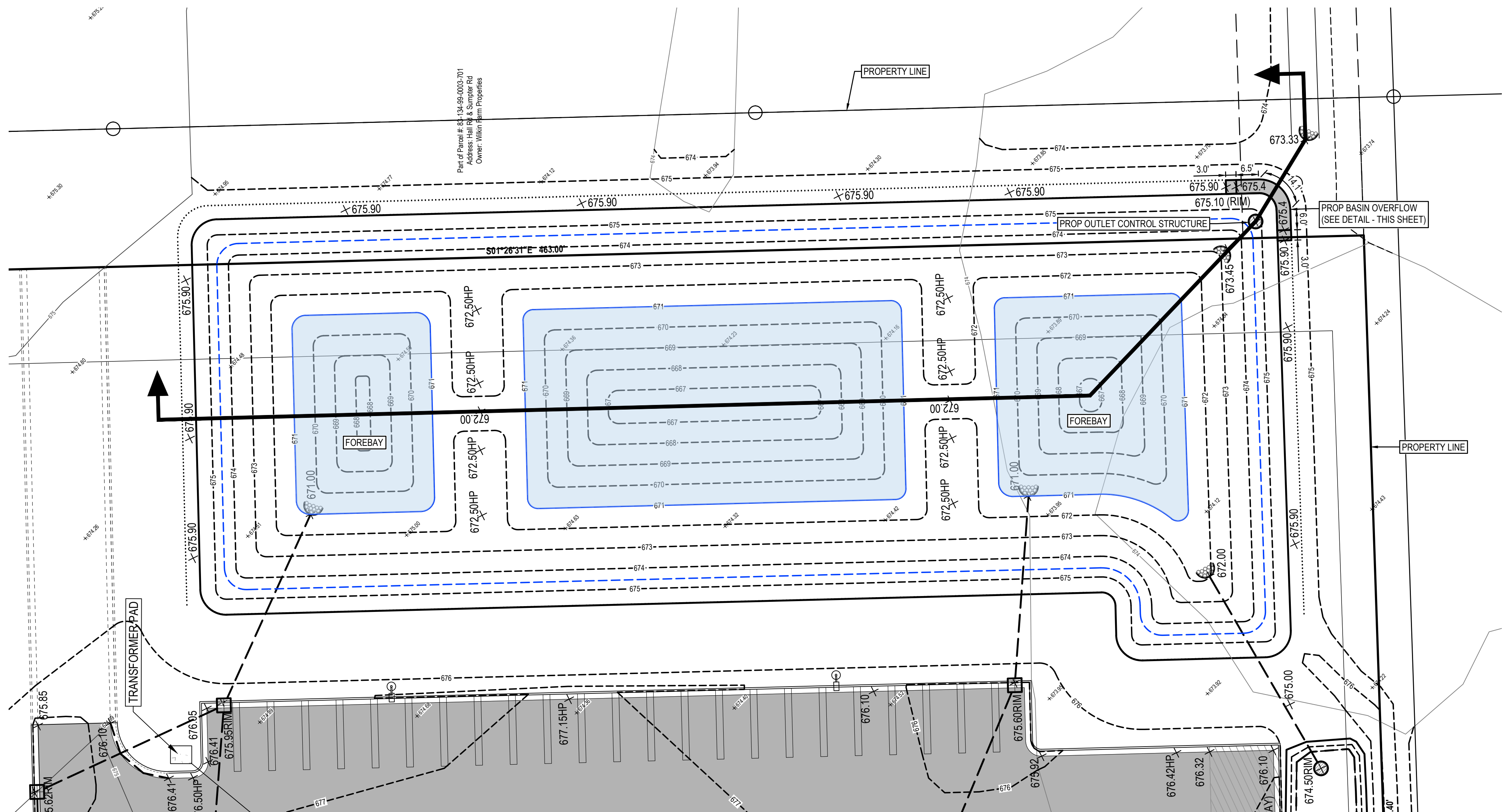
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**BASIN OVERFLOW SPILLWAY DETAIL**  
N.T.S.



**OUTLET STRUCTURE DETAIL CB #8**  
N.T.S.



**DETENTION BASIN CROSS-SECTION DETAIL**  
HORIZONTAL SCALE: 1 IN = 2 FT VERTICAL SCALE: 1 IN = 20 FT

**811** Know what's below.  
CALL before you dig.

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLANS" WERE OBTAINED FROM AVAILABLE "AS-BUILT" RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

Land Planning — Landscape Architecture — Civil Engineering — Land Surveying — High Definition Scanning — Forensic Engineering — Fire Investigation

**PROJECT NO:**  
23500325

**SHEET NO:**  
**C-403**

**SHEET: 8 OF 16**

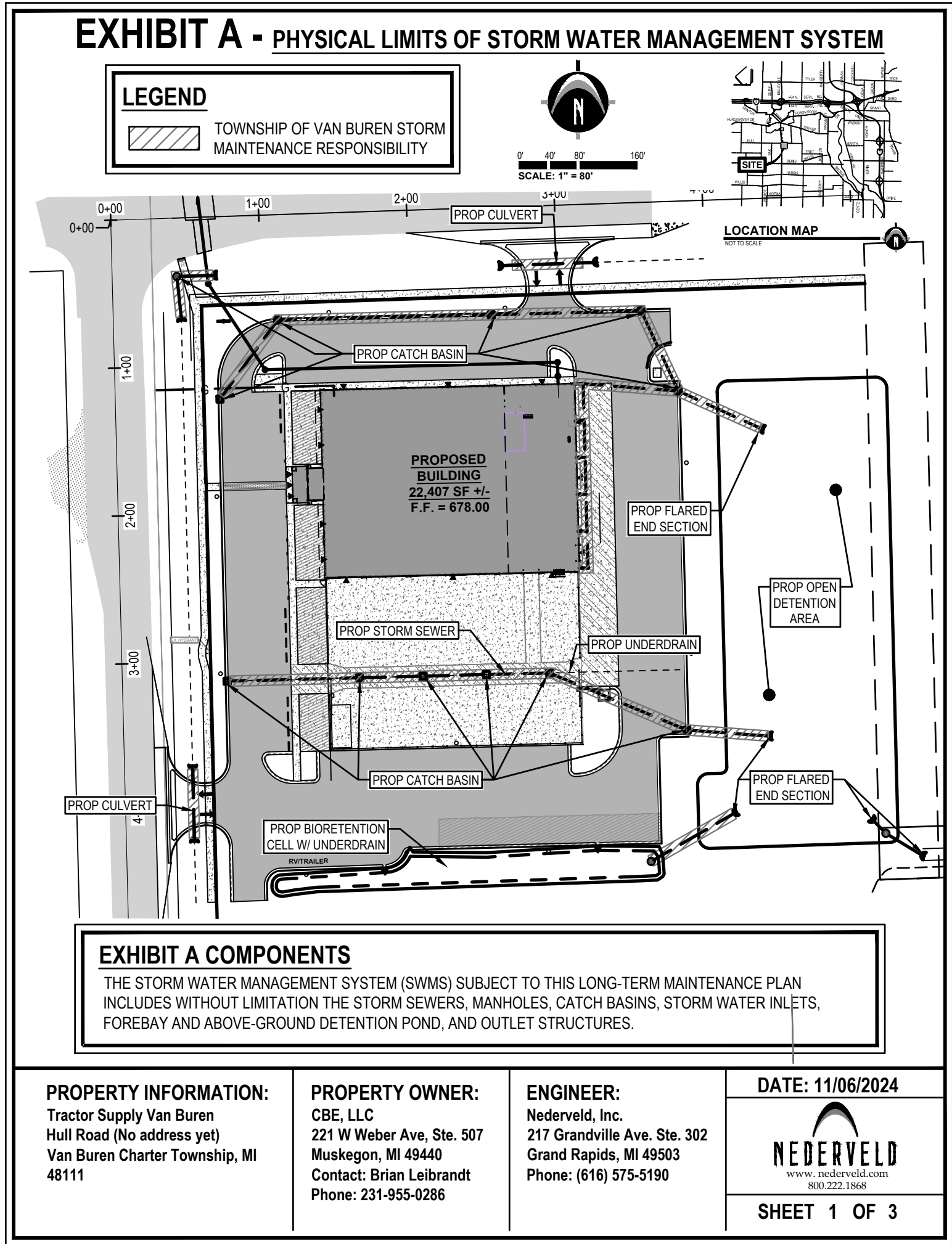




Know what's below.  
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NOTE:  
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## EXHIBIT A - PHYSICAL LIMITS OF STORM WATER MANAGEMENT SYSTEM

### PROPERTY DESCRIPTION (TAX ID: XXXX)

LAND IN THE TOWNSHIP OF VAN BUREN, WAYNE COUNTY, MI, DESCRIBED AS FOLLOWS:

A PARCEL OF LAND LOCATED IN AND BEING A PART OF THE NORTHWEST 1/4 OF SECTION 34, TOWN 3 SOUTH, RANGE 8 EAST, VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE NORTHWEST CORNER OF SECTION 34 AND PROCEEDING THENCE NORTH 88 DEGREES 40 MINUTES 46 SECONDS EAST, 1304.78 FEET (PREVIOUSLY RECORDED AS SOUTH 89 DEGREES 35 MINUTES 00 SECONDS EAST, 1304.68 FEET), ALONG THE NORTH LINE OF SAID SECTION 34 AND CENTERLINE OF HULL ROAD (33 FEET WIDE, 1/2 WIDTH); THENCE SOUTH 01 DEGREE 20 MINUTES 22 SECONDS EAST, 881.90 FEET (PREVIOUSLY RECORDED AS SOUTH 00 DEGREES 23 MINUTES 52 SECONDS WEST); THENCE NORTH 88 DEGREES 40 MINUTES 46 SECONDS EAST, 656.28 FEET (PREVIOUSLY RECORDED AS SOUTH 89 DEGREES 35 MINUTES 00 SECONDS EAST, 656.27 FEET); THENCE SOUTH 01 DEGREE 35 MINUTES 41 SECONDS EAST, 1762.35 FEET (PREVIOUSLY RECORDED AS SOUTH 00 DEGREES 08 MINUTES 33 SECONDS WEST 1782.16 FEET), TO A POINT ON THE EAST-WEST 1/4 LINE OF SAID SECTION 34; THENCE ALONG THE EAST-WEST 1/4 LINE OF SAID SECTION 34, SOUTH 88 DEGREES 48 MINUTES 43 SECONDS WEST, 664.44 FEET (PREVIOUSLY RECORDED AS NORTH 89 DEGREES 29 MINUTES 12 SECONDS WEST, 664.21 FEET); THENCE NORTH 01 DEGREE 20 MINUTES 09 SECONDS WEST, 1331.54 FEET (PREVIOUSLY RECORDED AS NORTH 00 DEGREES 23 MINUTES 52 SECONDS EAST, 1331.46 FEET); THENCE SOUTH 88 DEGREES 43 MINUTES 46 SECONDS WEST, 1316.50 FEET, (PREVIOUSLY RECORDED AS NORTH 89 DEGREES 32 MINUTES 04 SECONDS WEST 1316.55 FEET), ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 34; THENCE NORTH 00 DEGREES 49 MINUTES 44 SECONDS WEST, 1330.44 FEET, (PREVIOUSLY RECORDED AS NORTH 00 DEGREES 54 MINUTES 31 SECONDS EAST, 1330.38 ALONG THE WEST LINE OF SECTION 34 AND CENTERLINE OF SUMPTER ROAD (33 FEET WIDE, 1/2 WIDTH) TO THE NORTHWEST CORNER OF SAID SECTION 34 AND POINT OF BEGINNING.

#### LESS AND EXCEPT:

A PARCEL OF LAND LOCATED IN AND BEING A PART OF THE NORTHWEST 1/4 OF SECTION 34, TOWN 3 SOUTH, RANGE 8 EAST, VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING NORTH 89 DEGREES 35 MINUTES 00 SECONDS WEST, 1304.69 FEET AND SOUTH 00 DEGREES 23 MINUTES 52 SECONDS WEST, 881.90 FEET FROM THE NORTH 1/4 CORNER OF SAID SECTION 34; THENCE SOUTH 00 DEGREES 23 MINUTES 52 SECONDS WEST, 1781.02 FEET; THENCE SOUTH 89 DEGREES 29 MINUTES 12 SECONDS EAST, 664.21 FEET; THENCE NORTH 00 DEGREES 08 MINUTES 33 SECONDS EAST, 1782.16 FEET; THENCE NORTH 89 DEGREES 35 MINUTES 00 SECONDS WEST, 656.27 FEET TO THE POINT OF BEGINNING.

### PROPERTY INFORMATION:

Tractor Supply Van Buren  
Hull Road (No address yet)  
Van Buren Charter Township, MI 48111

### PROPERTY OWNER:

CBE, LLC  
221 W Weber Ave, Ste. 507  
Muskegon, MI 49440  
Contact: Brian Leibrandt  
Phone: 231-955-0286

### ENGINEER:

Nederveld, Inc.  
217 Grandville Ave. Ste. 302  
Grand Rapids, MI 49503  
Phone: (616) 575-5190

DATE: 11/06/2024



SHEET 1 OF 3

## EXHIBIT B - STORM WATER MANAGEMENT SYSTEM LONG-TERM MAINTENANCE PLAN

### A. Physical Limits of the Storm Water Management System

The storm water management system (SWMS) subject to this long-term maintenance plan (Plan) is depicted on Exhibit A to the permit and includes without limitation the storm sewers, catch basins, manholes, inlets, swales, buffer strip, spillways, mechanical and open forebays, underground and open detention basins, outlet control structure and outlet pipe that conveys flow from the detention basins to the Wayne County storm sewer system North of the Site. For the purposes of this plan, this storm water management system (SWMS) and all of its components as shown in Exhibit A is referred to as "TS Van Buren SWMS".

### B. Time Frame for Long-Term Maintenance Responsibility

Tractor Supply is responsible for maintaining the TS Van Buren SWMS, including complying with applicable requirements of the local or Wayne County soil erosion and sedimentation control program until Wayne County releases the construction permit. Long-term maintenance responsibility for the TS Van Buren SWMS commences when defined by the maintenance permit issued by the County. Long-term maintenance continues in perpetuity.

### C. Manner of Insuring Maintenance Responsibility

The Township of Van Buren has assumed responsibility for long-term maintenance of the TS Van Buren SWMS. The resolution by which the Township of Van Buren has assumed maintenance responsibility is attached to the permit as Exhibit C. MCWS, through a maintenance agreement with the Township of Van Buren, has agreed to perform the maintenance activities required by this plan. The Township of Van Buren retains the right to enter the property and perform the necessary maintenance of the TS Van Buren SWMS if the Township of Van Buren fails to perform the required maintenance activities. To ensure that the TS Van Buren SWMS is maintained in perpetuity, the map of the physical limits of the storm water management system (Exhibit A), this plan (Exhibit B), the resolution attached as Exhibit C, and the maintenance agreement between the Township of Van Buren and the property owner(s) will be recorded with the Wayne County Register of Deeds. Upon recording, a copy of the recorded documents will be provided to the County.

### D. Long-Term Maintenance Plan and Schedule

Table 1 identifies the maintenance activities to be performed, organized by category (monitoring/inspections, preventative maintenance and remedial actions). While performing maintenance, chemicals should not be applied to the forebay, detention basin, buffer strip, or watercourses. Table 1 also identifies site-specific work needed to ensure that the storm water management system functions properly as designed.

TABLE 1 STORM WATER MANAGEMENT SYSTEM LONG-TERM MAINTENANCE SCHEDULE									
MAINTENANCE ACTIVITIES	SYSTEM COMPONENTS							FREQUENCY	
	Storm Collection Systems (Forebays, Catch Basins, Manholes, Swales, Open) Inlets	Mechanical & Open Detention Basins	Outlet Control Structures & Outlet Pipes	Detention Basins	Spillways, Riffle Steps	Paved Areas, Others			
<b>Monitoring/Inspection</b>									
Inspect for Sediment Accumulation/Clogging of Stone Filter	X	X	X	X			Annually		
Inspect For Freeboards, Dead Vegetation & Odors	X	X	X	X			Annually & After Major Events		
Inspect For Erosion And Integrity of Banks & Storm	X	X	X	X	X		Annually & After Major Events		
Monitor Plantings/Vegetation		X	X	X			2 Times per Year		
Inspect All Components During Wet Weather & Compare to As-Built Plans	X	X	X	X	X		Annually		
Ensure Maintenance Access Remains Open/Clear	X	X	X	X	X		Annually		
<b>Preventative Maintenance</b>									
Mowing		X	X	X			As Needed, wet/dry areas only*		
Remove Accumulated sediments	X	X	X	X			As Needed**		
Remove Freeboards, Debris, Invasive & Dead Vegetation	X	X	X	X			As Needed		
Replace or Wash & Recuse items down them		X	X				Every 3 years, or as needed***		
Replace Bioretention Subsurface components				X			Every 5 years/off water ponds < 6 hours		
Sweeping of Paved Surfaces, Others						X	As Needed		
<b>Remedial Actions</b>									
Repair/Replace Areas of Erosion	X	X	X	X	X		As Needed		
Replace Dead Plantings and Trees, Reveal Bare Areas		X	X	X			As Needed		
Structural Repairs	X	X	X	X	X		As Needed		
Make Adjustments/Repairs to Ensure Proper Functioning	X	X	X	X	X	X	As Needed		

**NOTES:** \*Not to exceed the length allowed by local community ordinance. \*\*Forebays & Detention Basins to be cleaned whenever sediments accumulate to a depth of 6-12 inches, or if sediment resuspension is observed. Similarly, clean Mechanical Forebays and underground detention systems per manufacturer's recommendations\*\*\* Replace stones if they cannot be adequately cleaned.

### PROPERTY INFORMATION:

Tractor Supply Van Buren  
Hull Road (No address yet)  
Van Buren Charter Township, MI 48111

### PROPERTY OWNER:

CBE, LLC  
221 W Weber Ave, Ste. 507  
Muskegon, MI 49440  
Contact: Brian Leibrandt  
Phone: 231-955-0286

### ENGINEER:

Nederveld, Inc.  
217 Grandville Ave. Ste. 302  
Grand Rapids, MI 49503  
Phone: (616) 575-5190

DATE: 11/06/2024



SHEET 1 OF 3



### PREPARED FOR:

CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

### REVISIONS:

Title: Preliminary Plan	Drawn: SW	Checked: SW	Date: 11/13/23
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Title: Modified per Wayne County DPS	Drawn: SW	Checked: SW	Date: 02/19/25

**TRACTOR SUPPLY  
VANBUREN TOWNSHIP**

**Storm Sewer Maintenance Exhibits**

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

### STAMP:



### PROJECT NO:

23500325

### SHEET NO:

**C-404**

SHEET: 9 OF 16



CBE, LLC  
Attention: Brian Leibrand  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

Title: Preliminary Plan		
Drawn: SW	Checked: SW	Date: 11/13/23
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Title: Modified per Wayne County DPS		
Drawn: SW	Checked: SW	Date: 02/19/25

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

STEVEN L. WITTE

License No.  
6201046769

STATE OF MICHIGAN

LICENSED PROFESSIONAL ENGINEER

*Steven L. Witte*

**SHEET: 10 OF 16**



**PREPARED FOR:**

CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

**REVISIONS:**

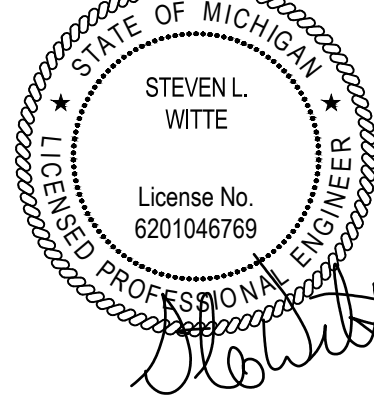
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**TRACTOR SUPPLY  
VANBUREN TOWNSHIP**

**Details & Specifications (Storm Sewer)**

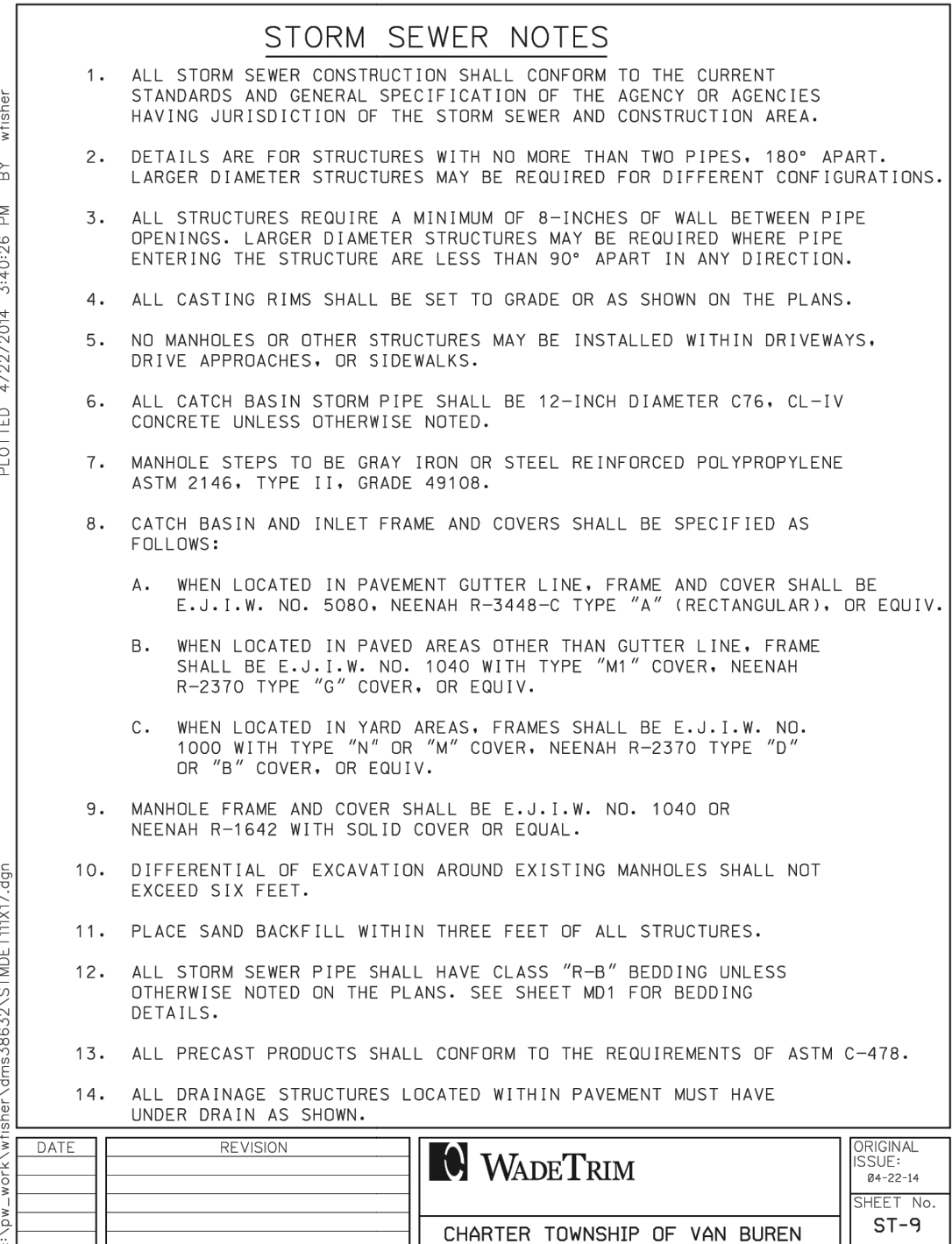
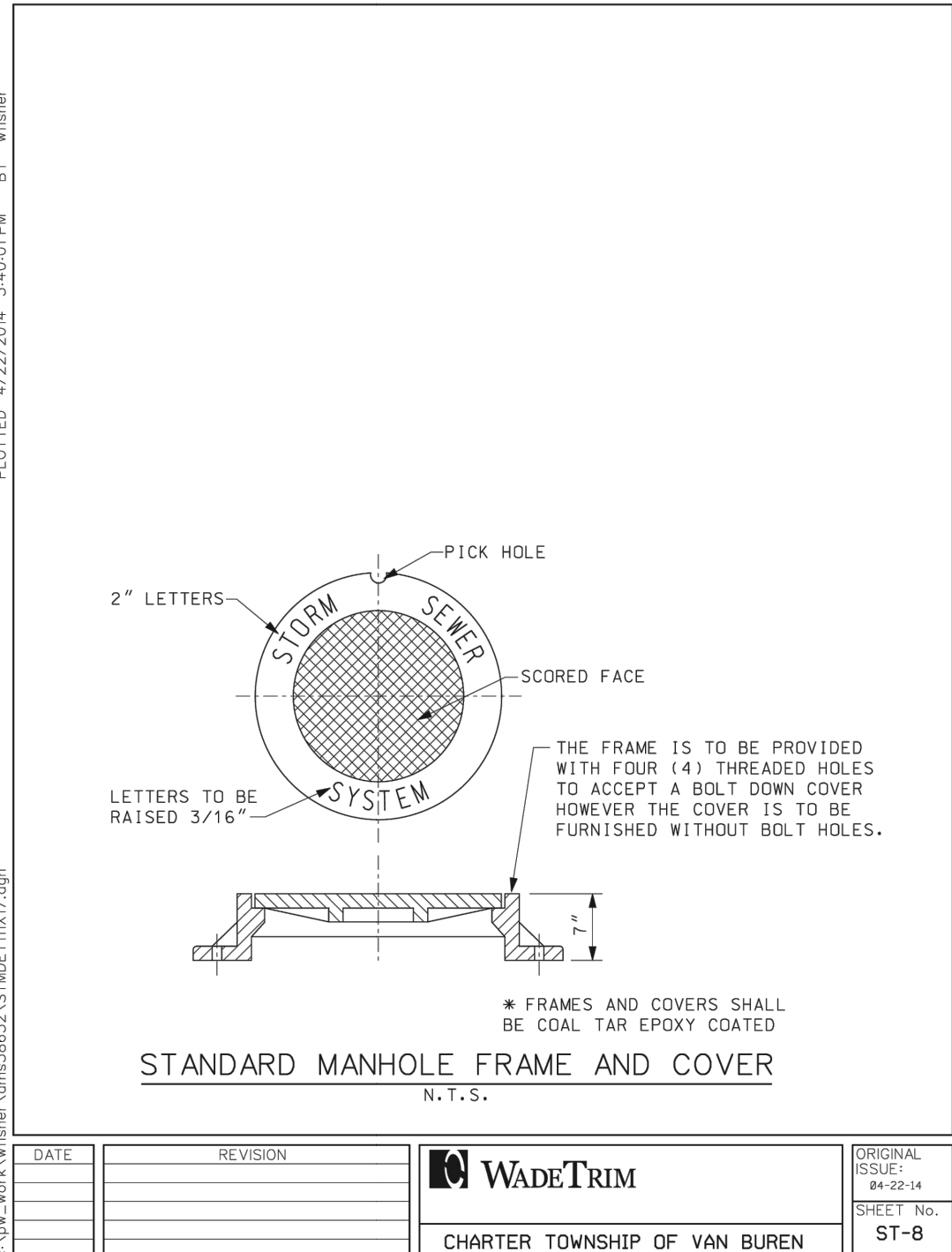
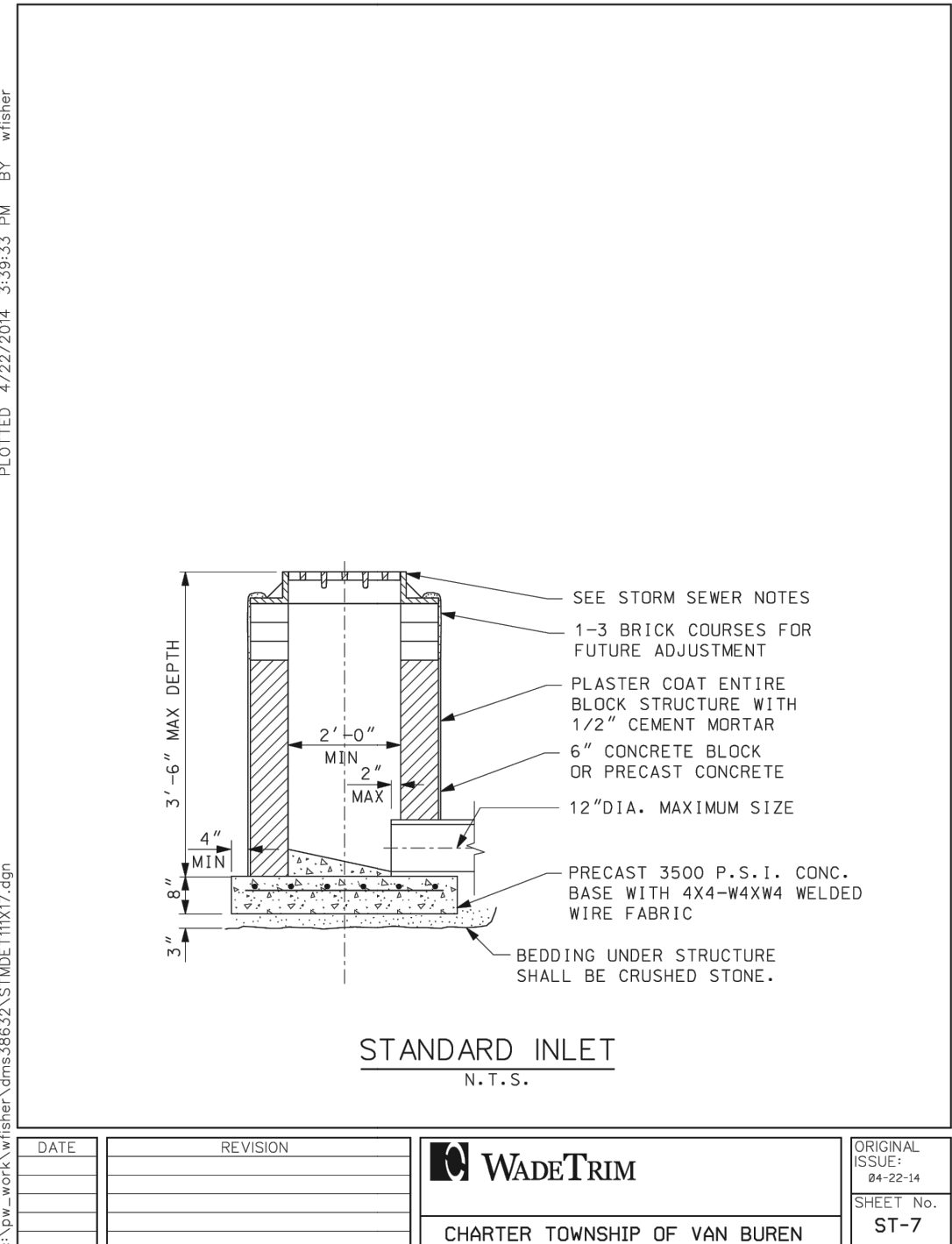
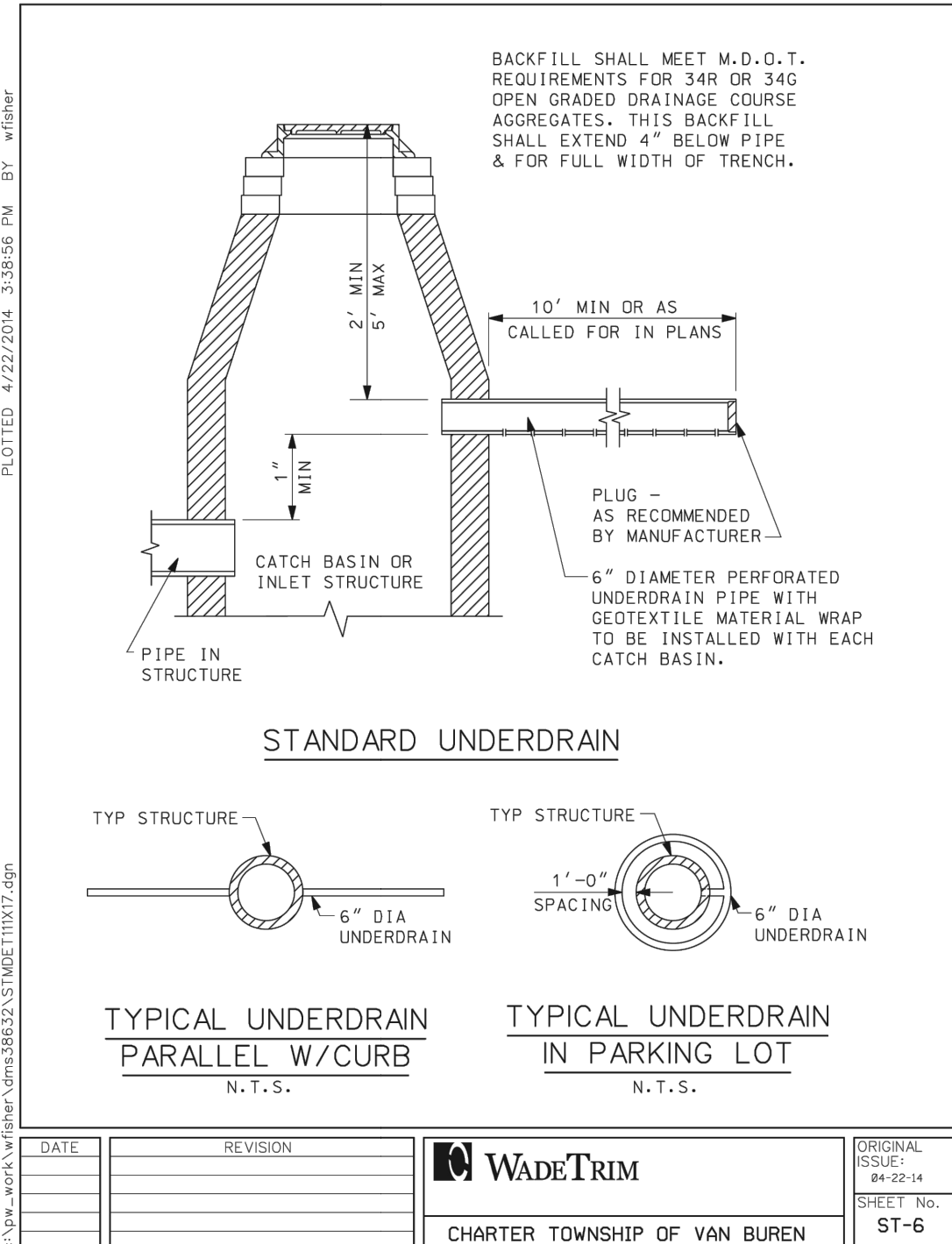
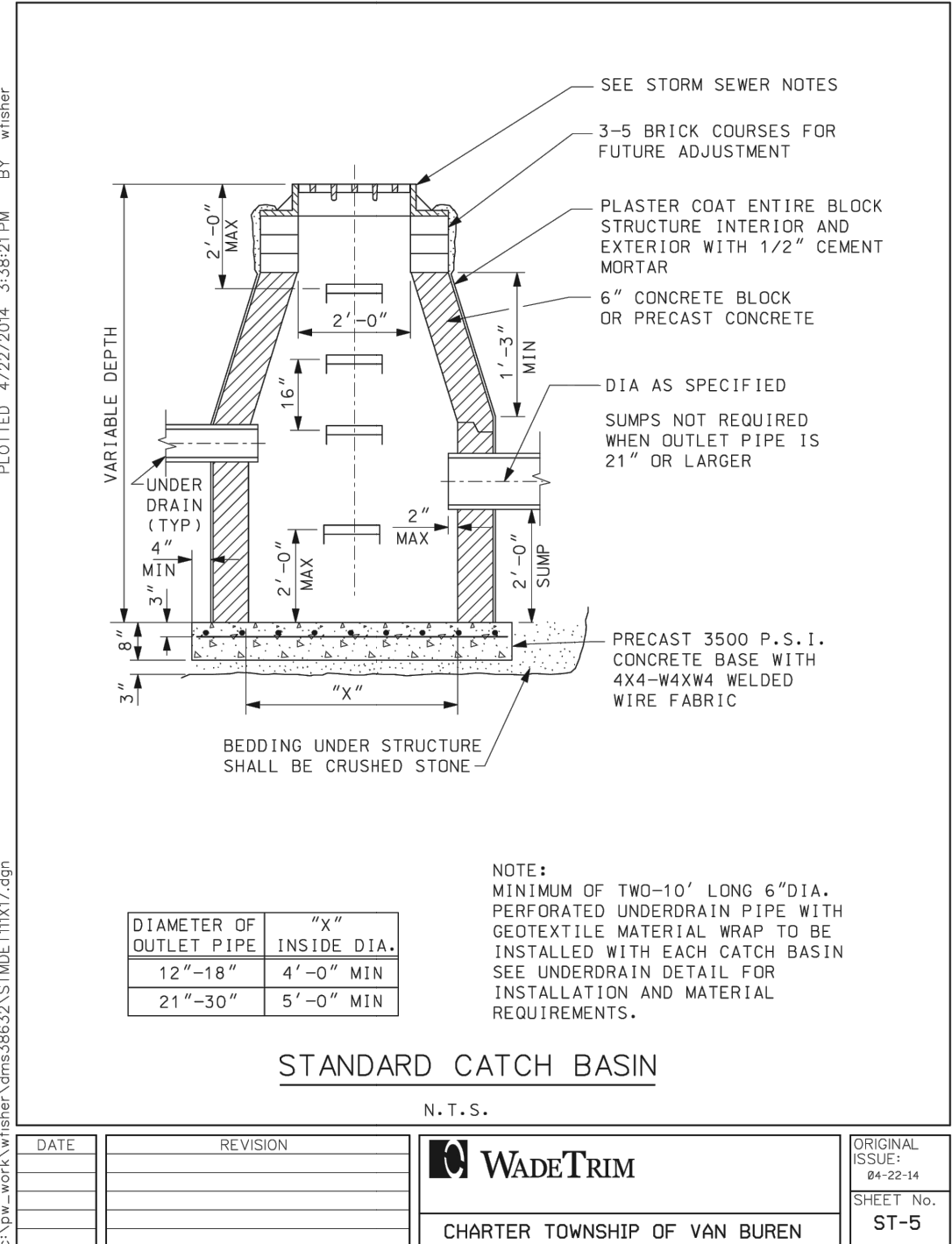
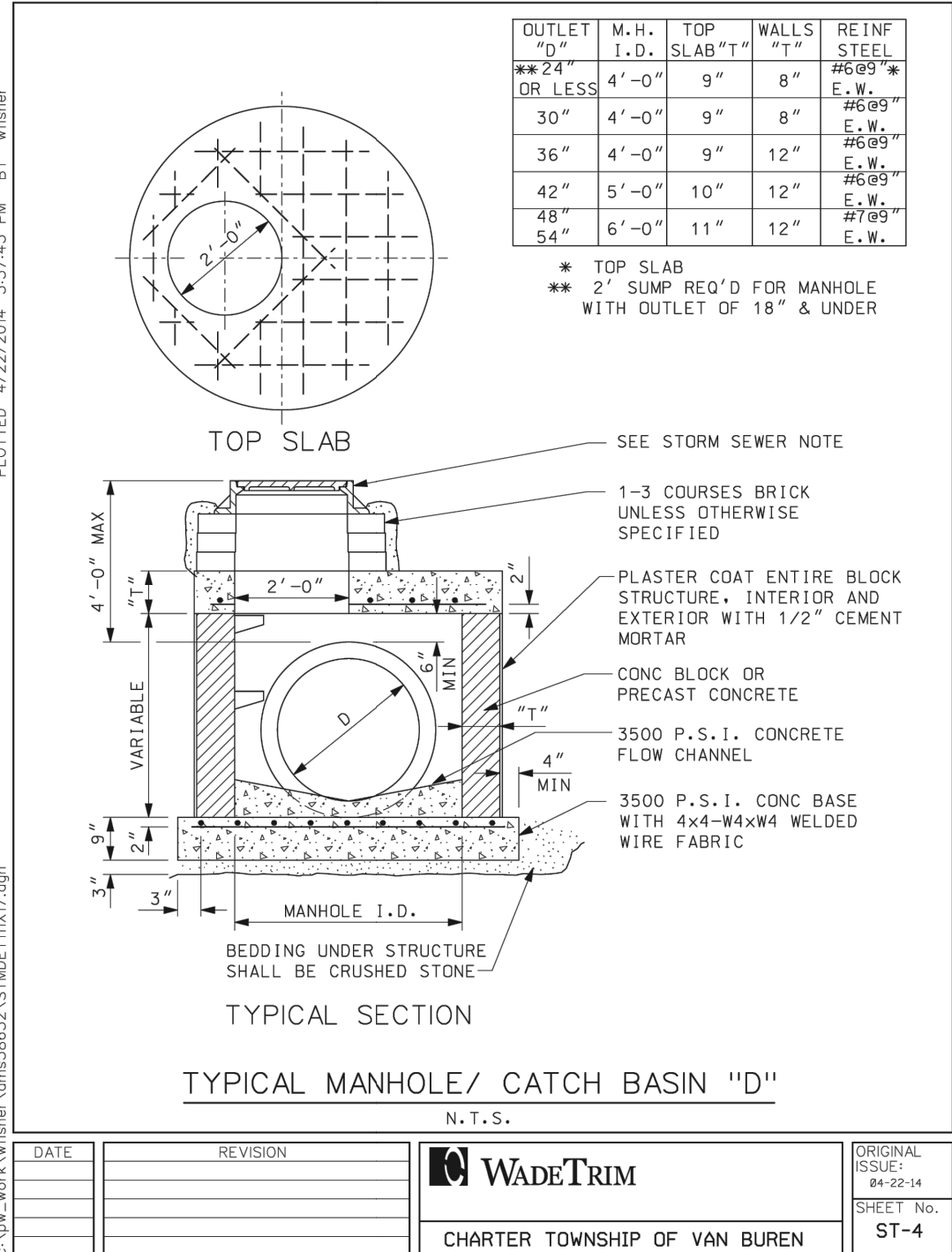
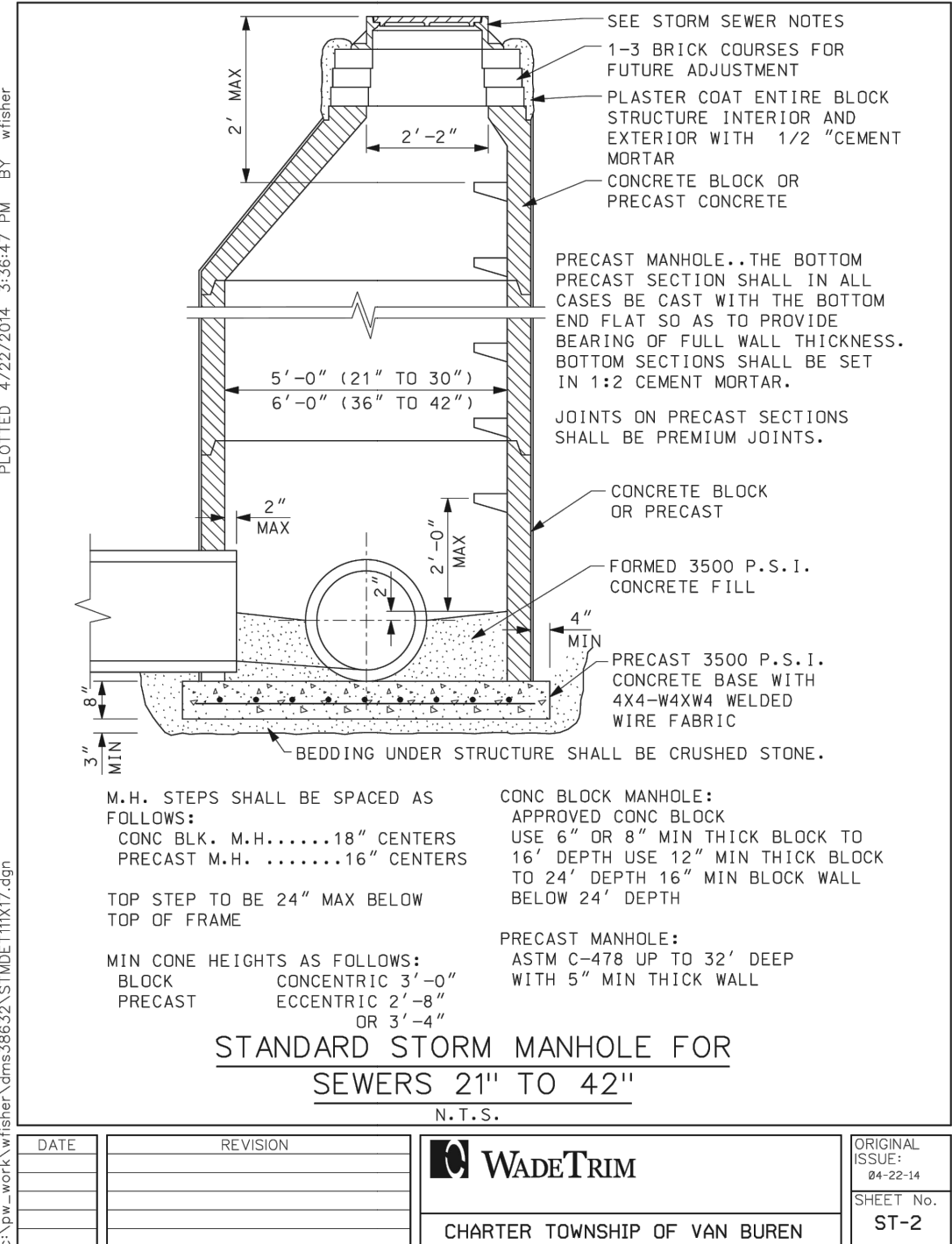
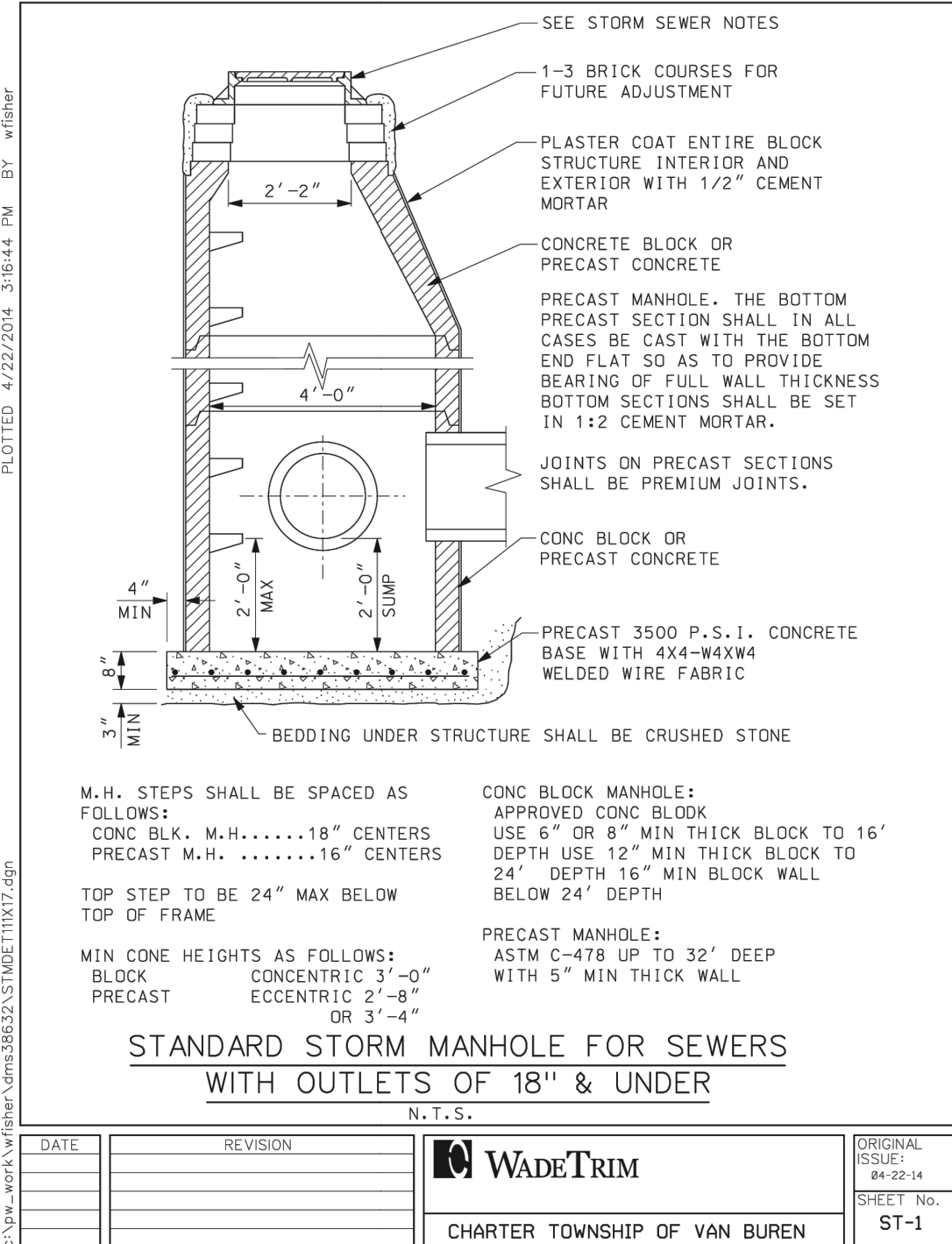
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PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R9E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

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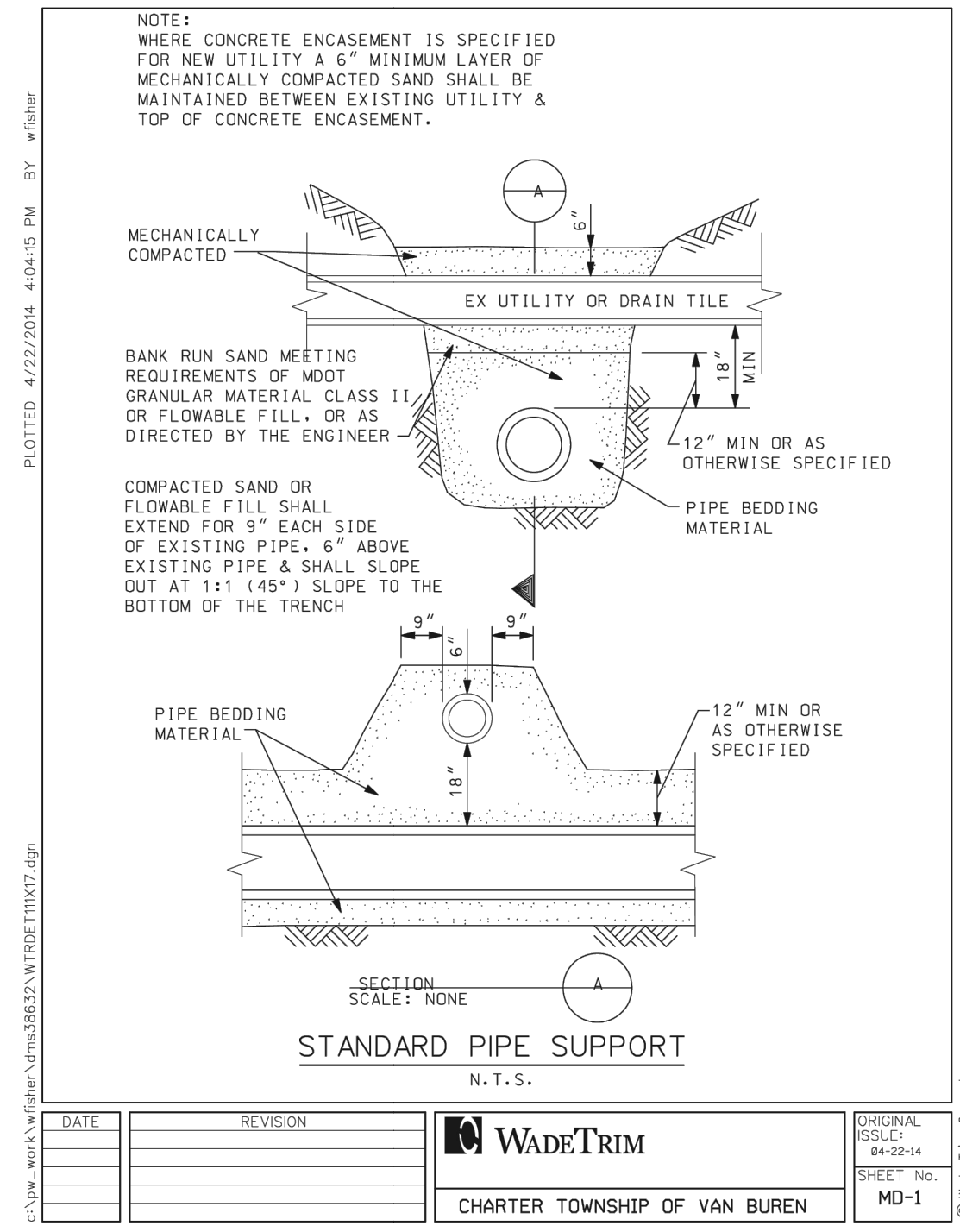
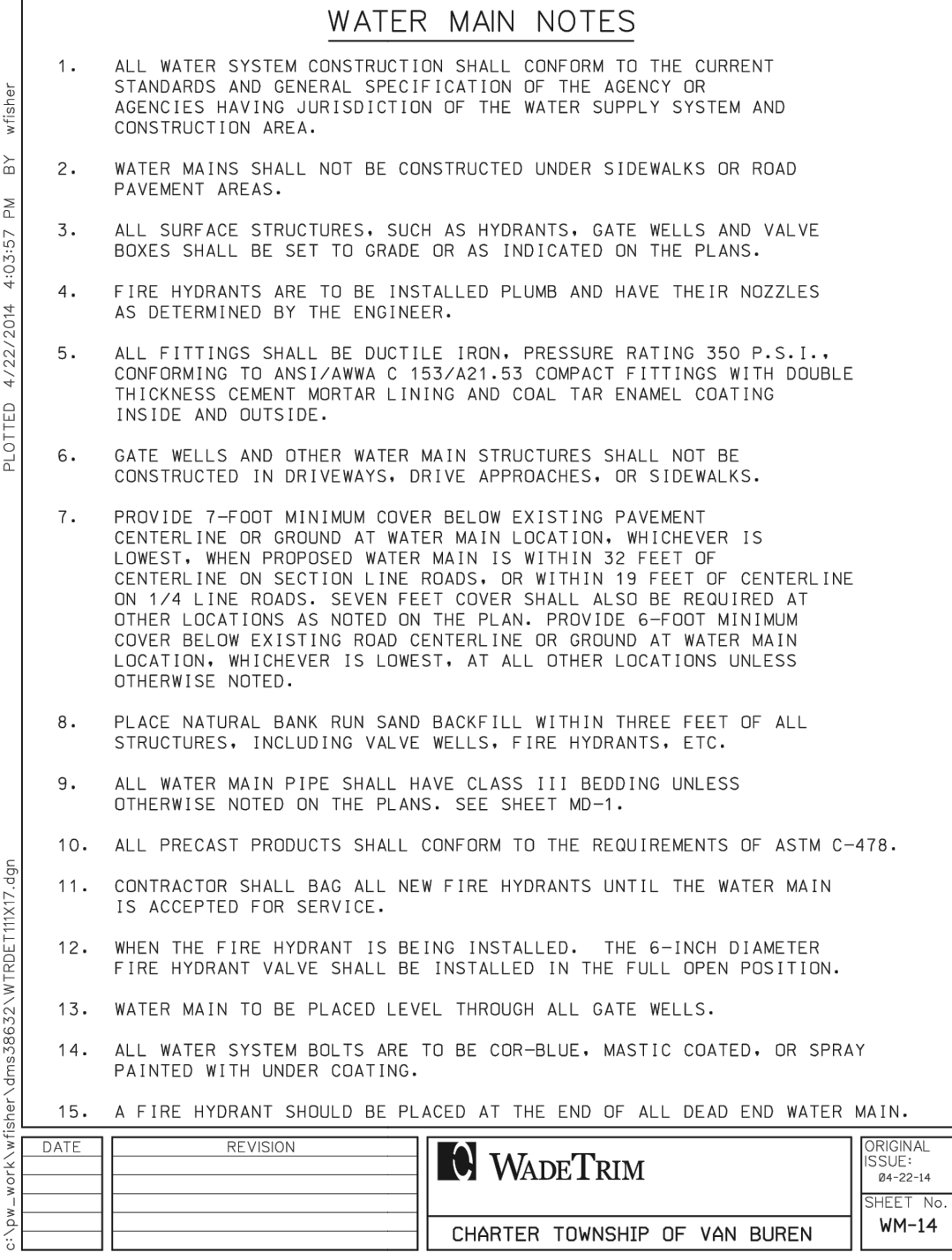
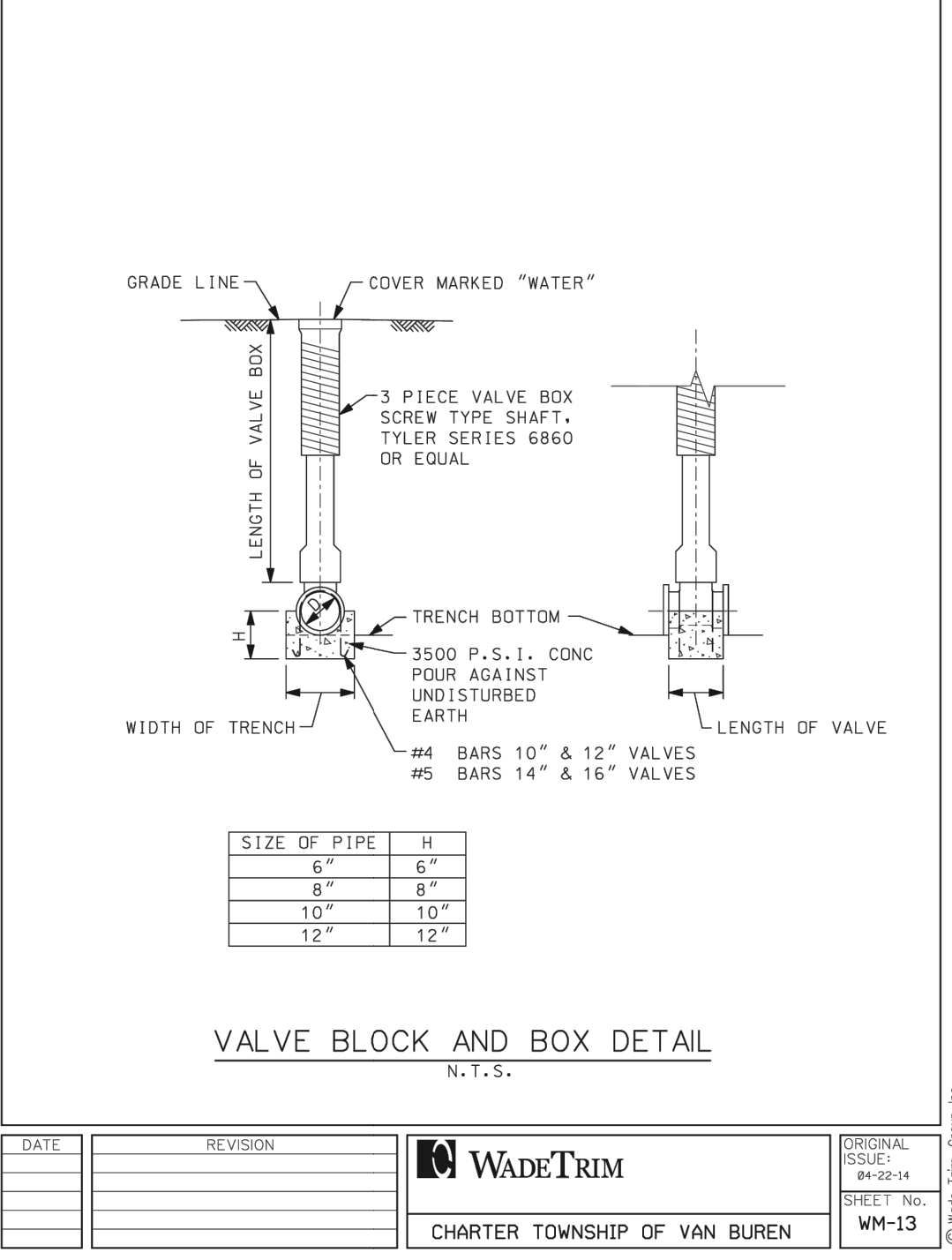
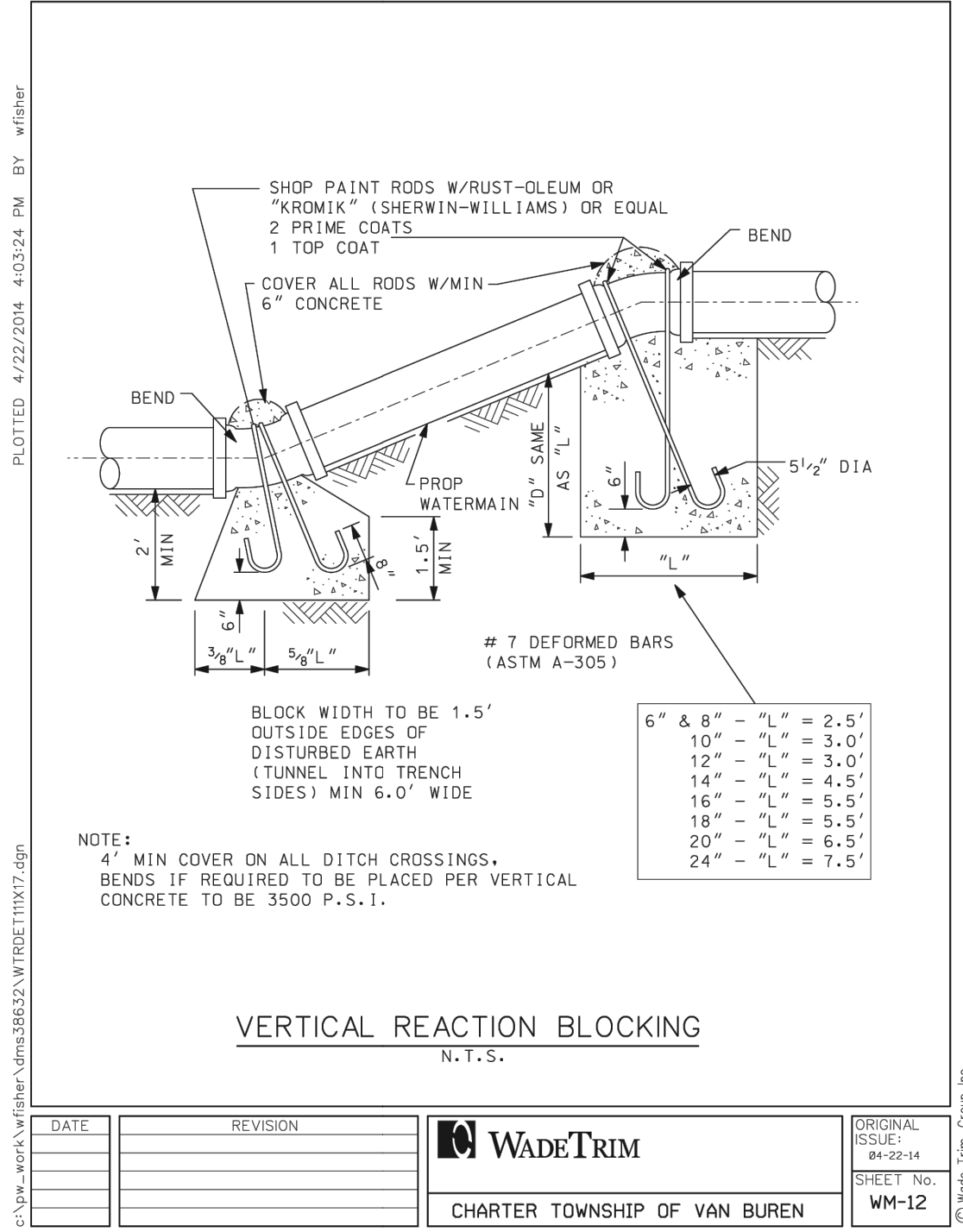
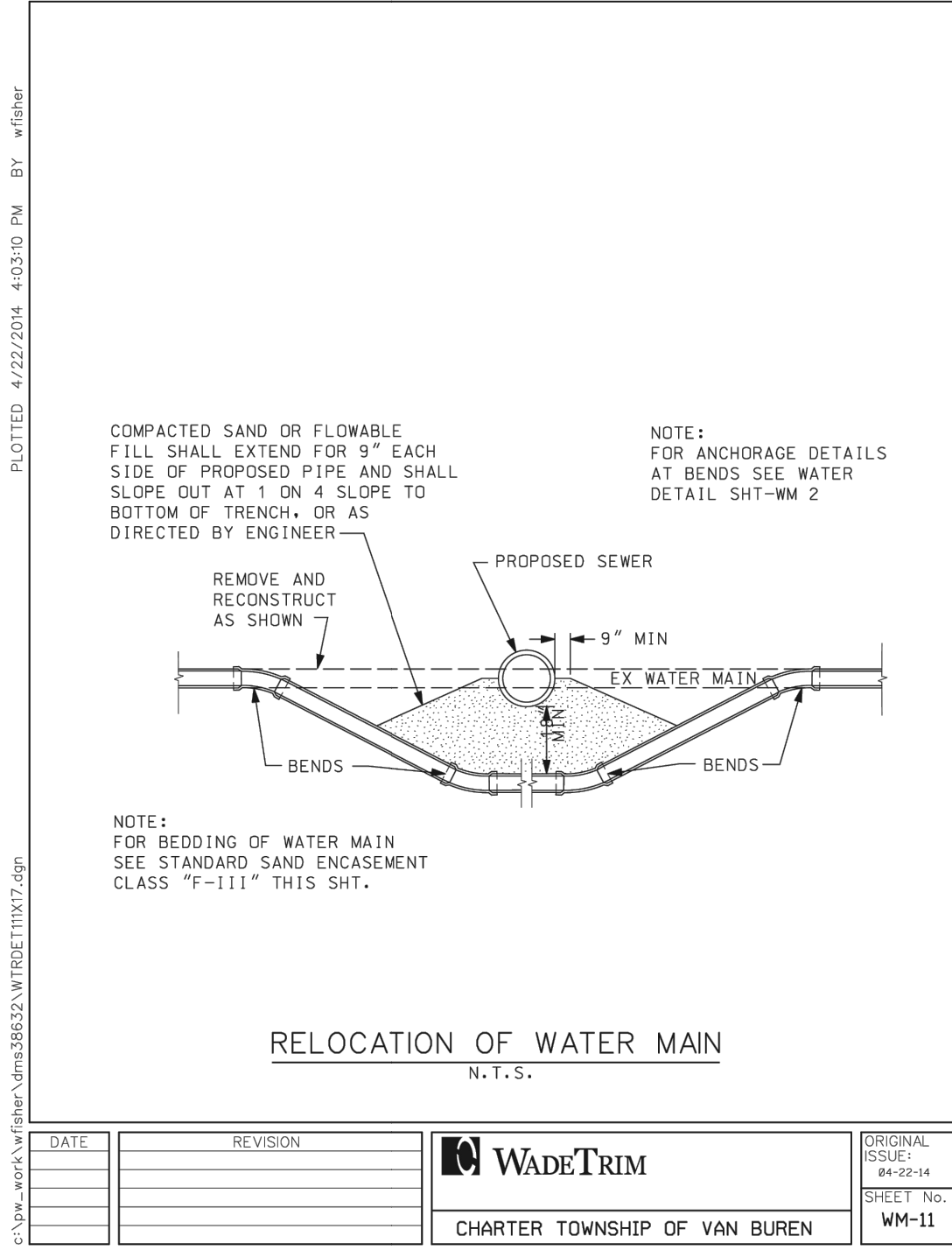
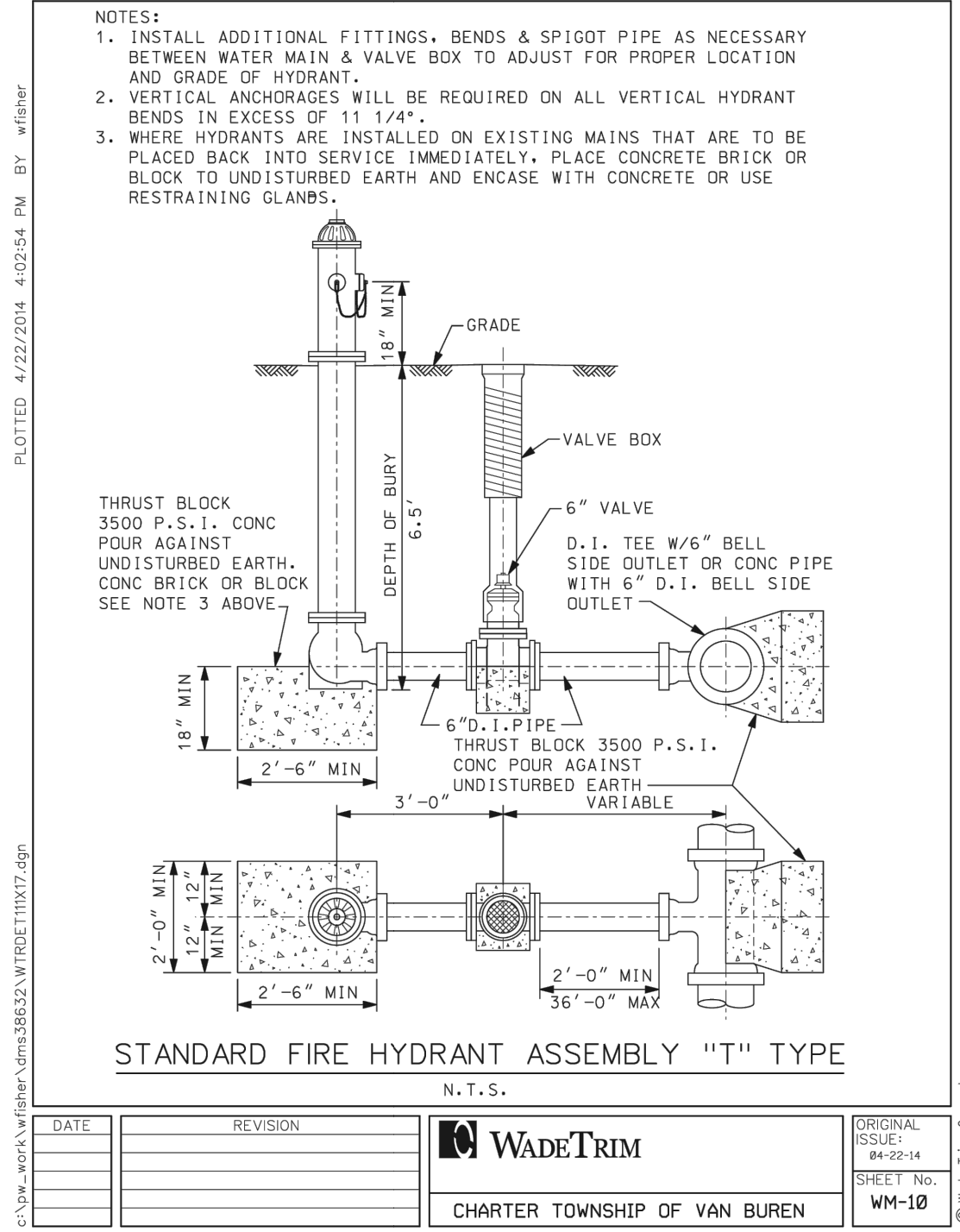
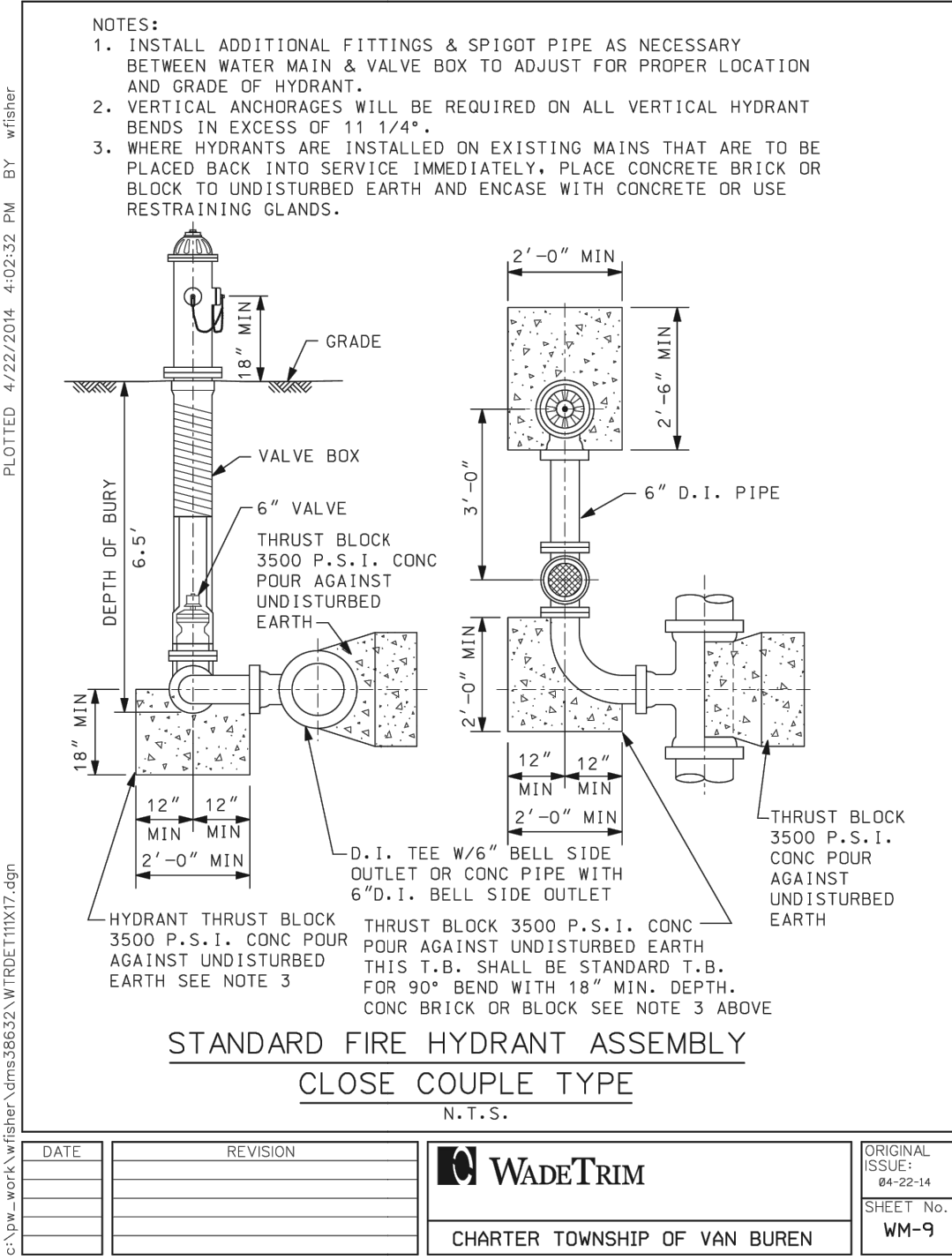
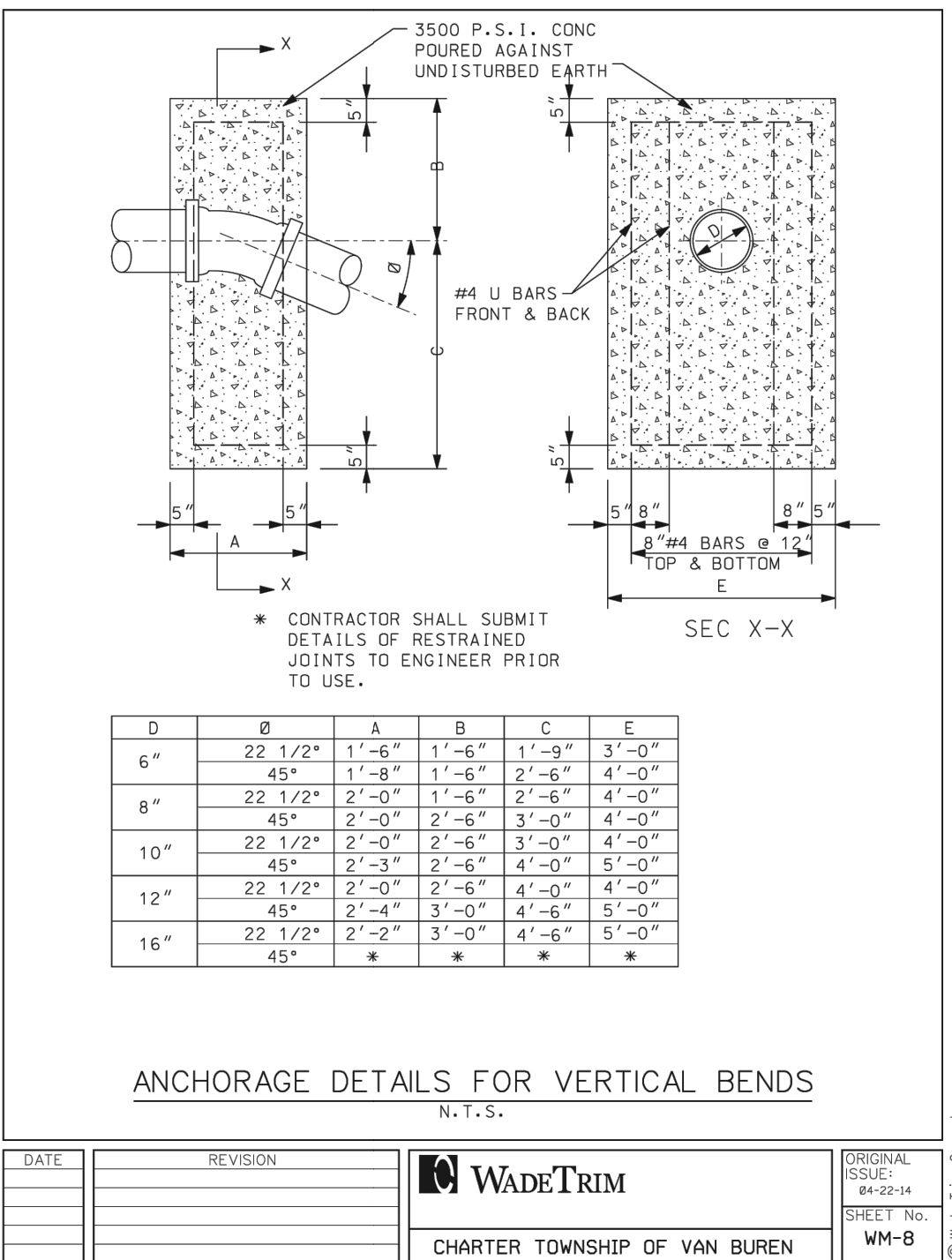
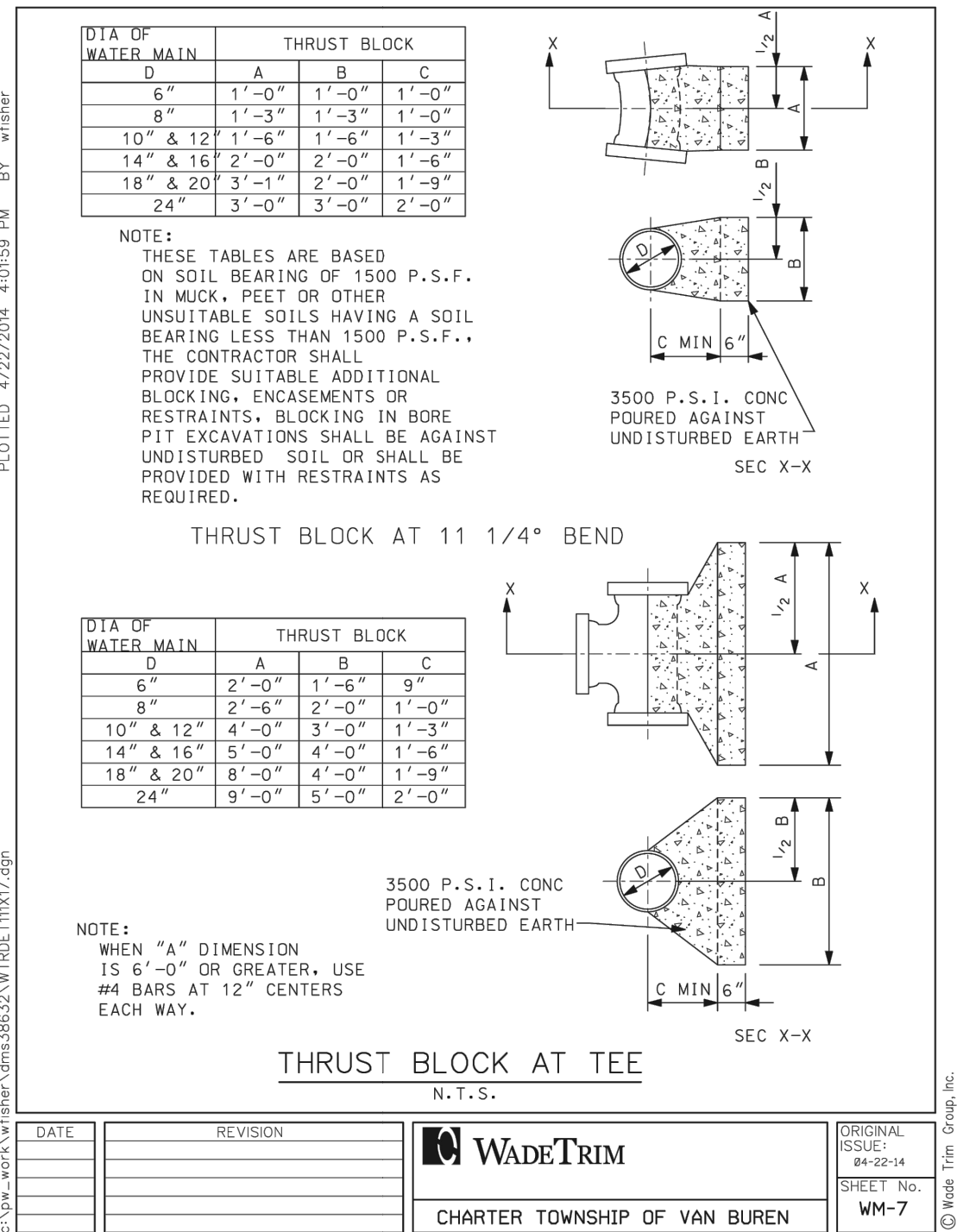
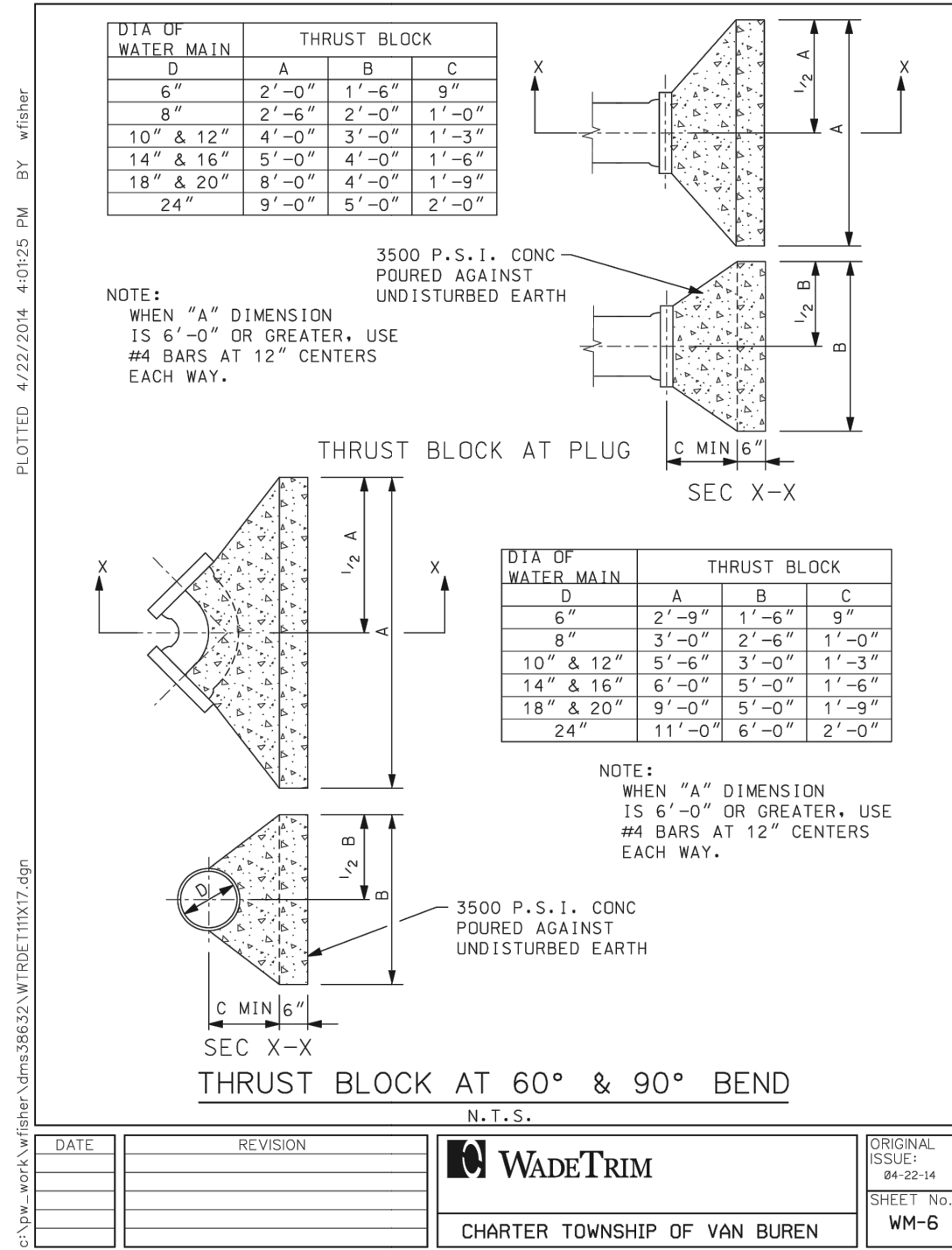
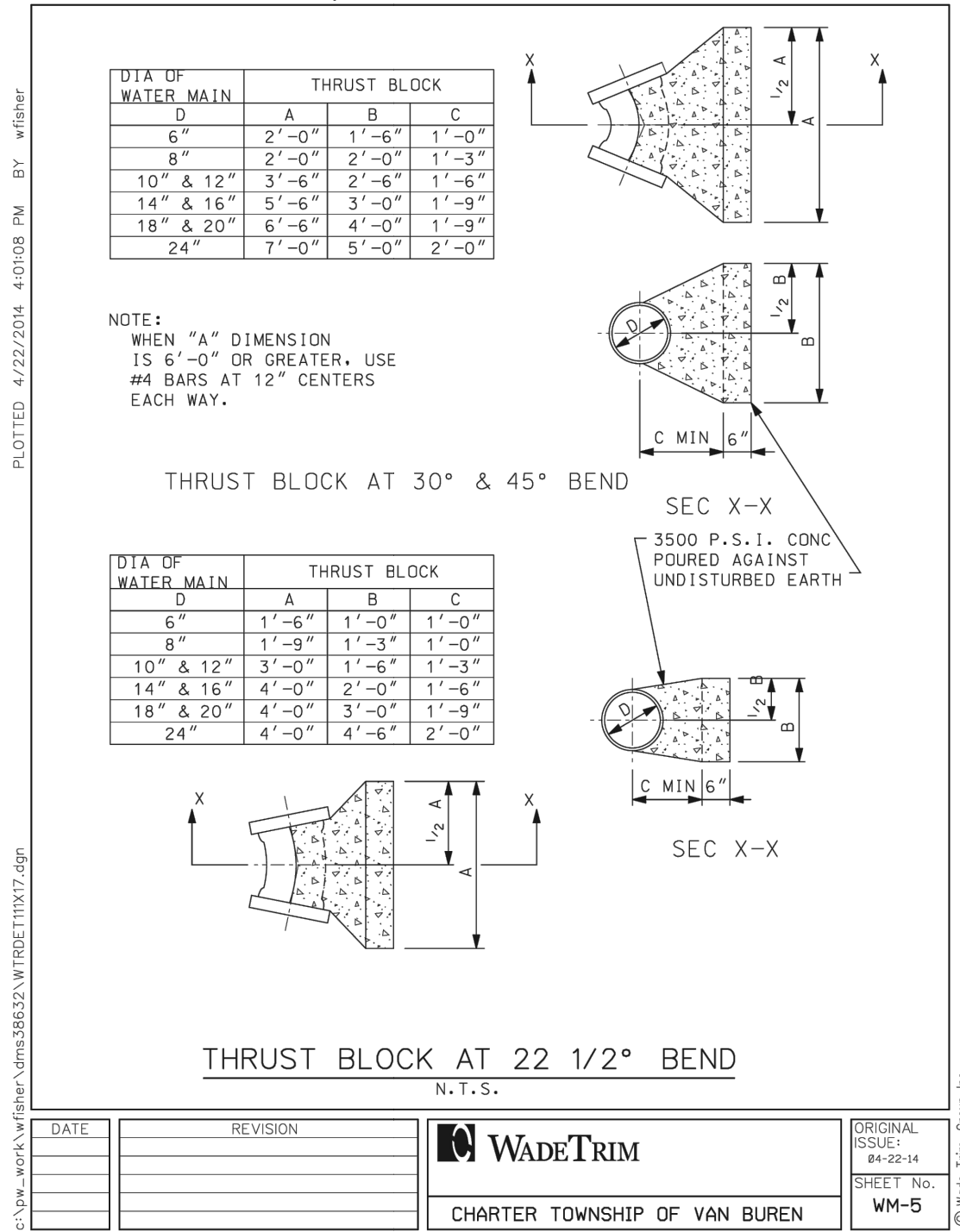
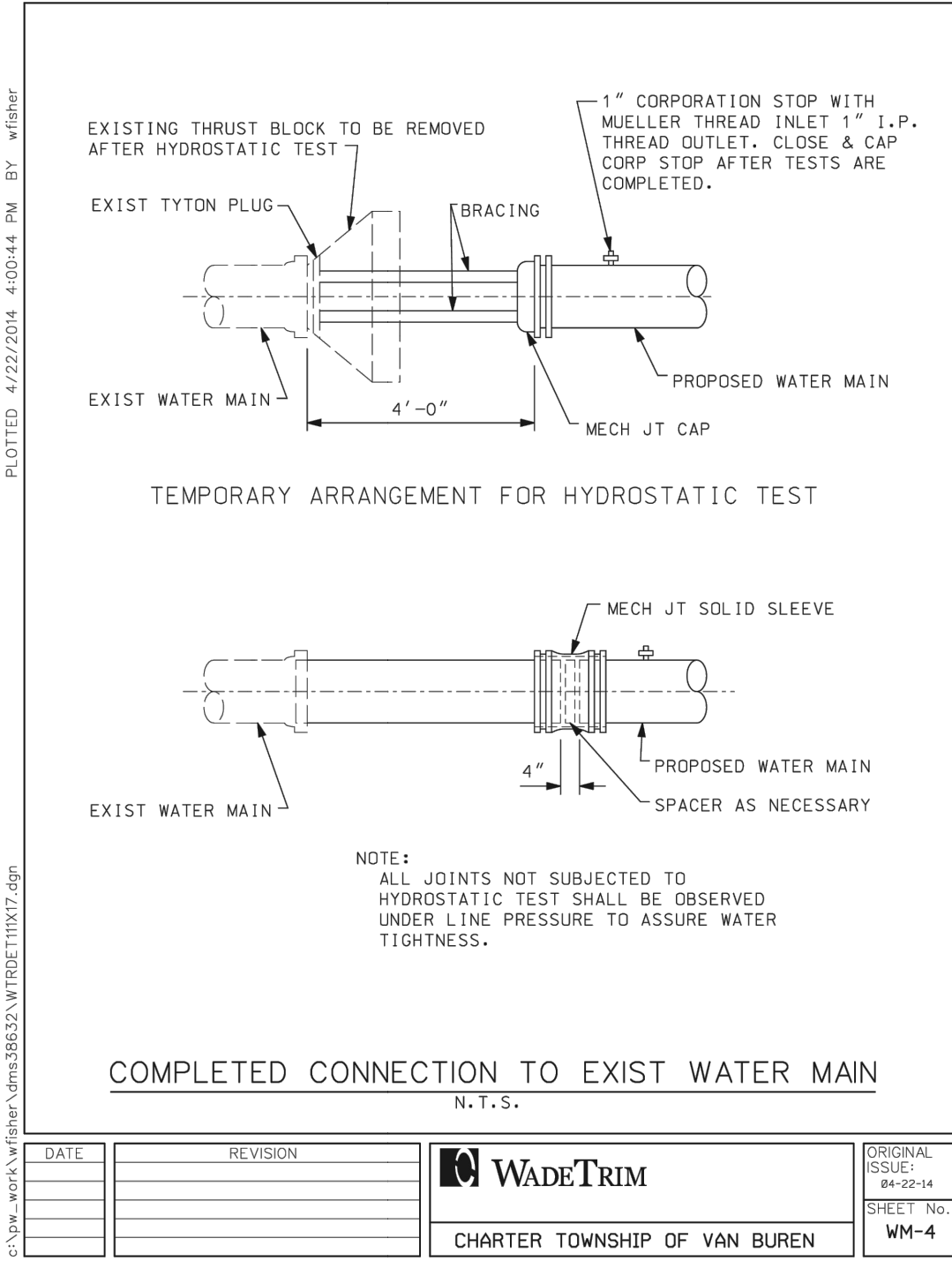
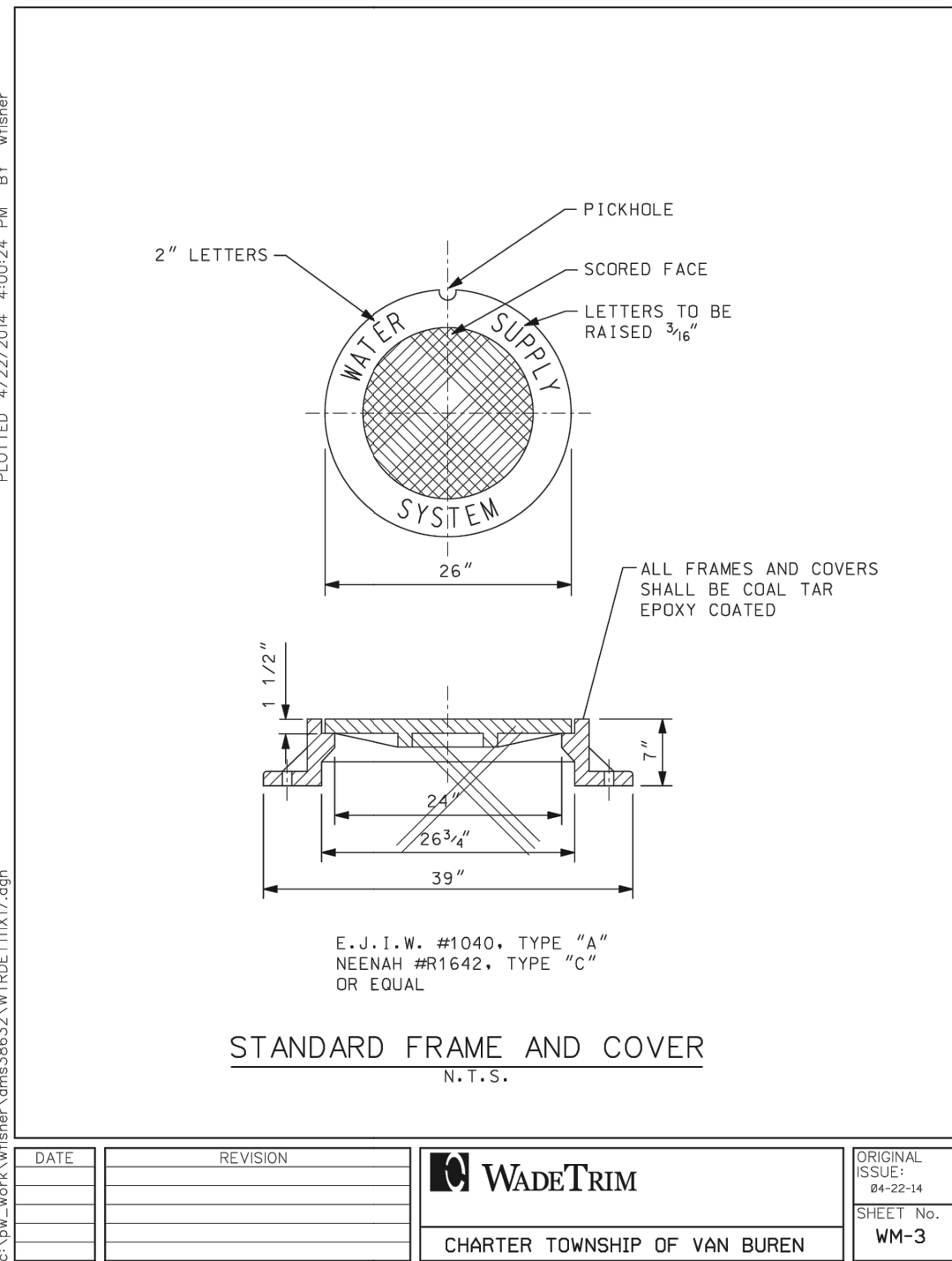
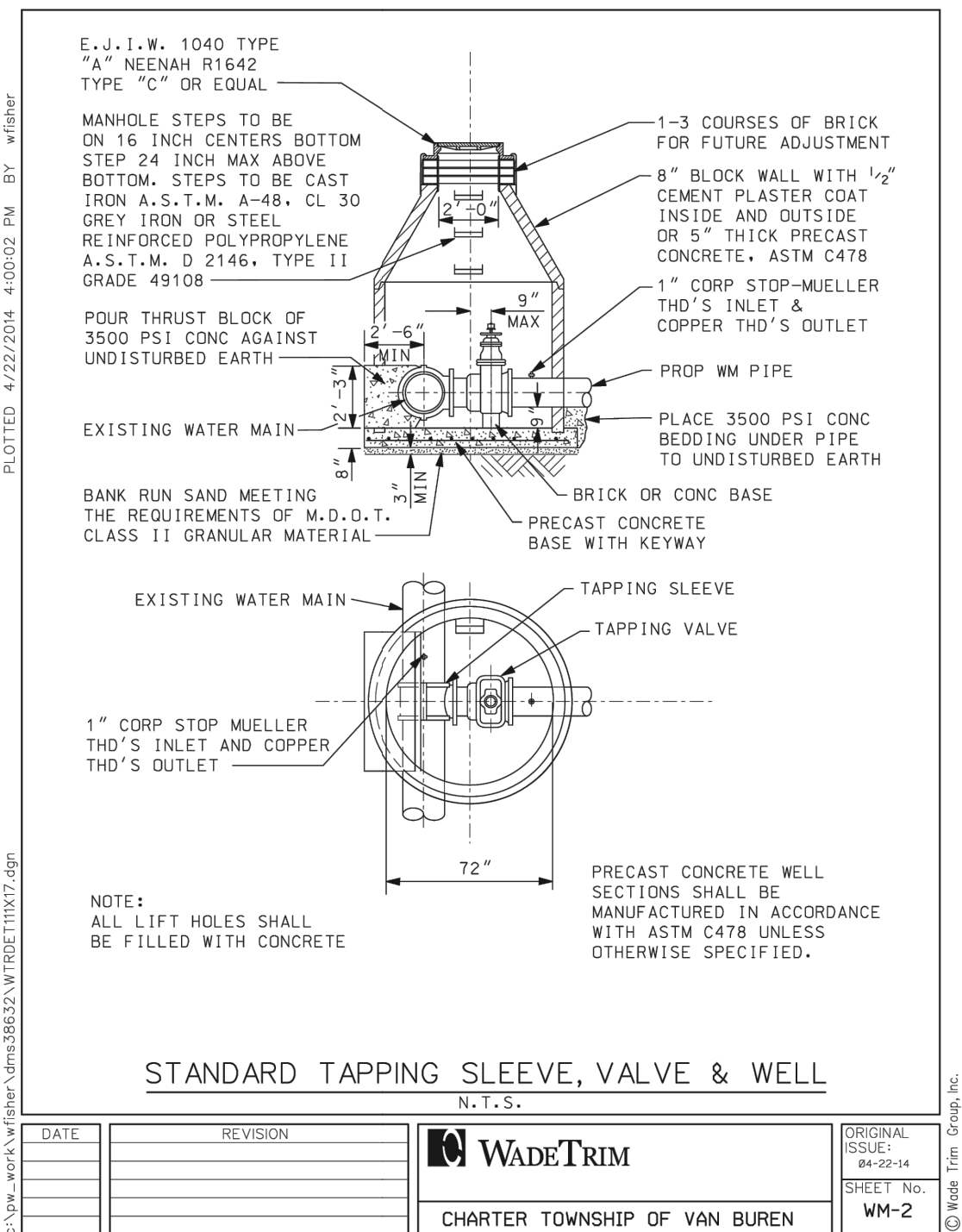
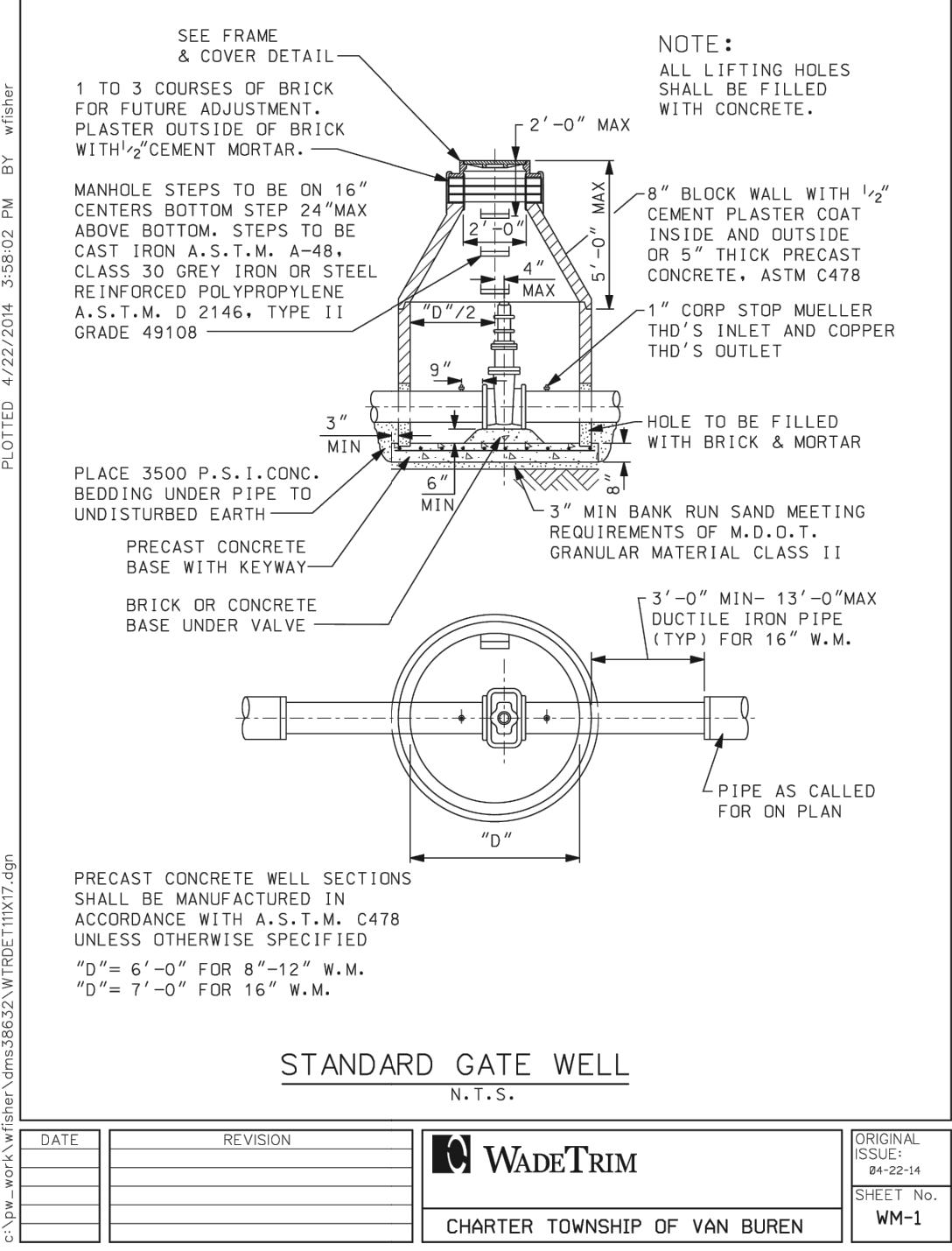


**PROJECT NO:**  
23500325

**SHEET NO:**  
**C-501**  
**SHEET: 11 OF 16**







**NEDERVELD**

www.nederveld.com  
800.222.1868

**GRAND RAPIDS**  
217 Grandville Ave., Suite 302  
Grand Rapids, MI 49503  
Phone: 616.575.5190

**ANN ARBOR**  
**CHICAGO**  
**COLUMBUS**  
**HOLLAND**  
**INDIANAPOLIS**

**PREPARED FOR:**

CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

**REVISIONS:**

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Title: Modified per Wayne County DPS	Checked SW	Date: 02/19/25
Drawn: SW	Checked SW	Date: 02/19/25

**TRACTOR SUPPLY**  
**VANBUREN TOWNSHIP**

**Details & Specifications (Watermain)**

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R9E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

**STAMP:**

STATE OF MICHIGAN  
LICENSED PROFESSIONAL ENGINEER  
STEVEN L. WITTE  
License No. 6201046769

**PROJECT NO:**  
23500325

**SHEET NO:**  
**C-502**

**SHEET: 12 OF 16**





## PREPARED FOR:

CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

## REVISIONS:

DATE	REVISION	ORIGINATOR	DATE
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	8. Title: Modified per Wayne County DPS	Checked: SW	Date: 01/22/25
	9. Title: Modified per Wayne County DPS	Checked: SW	Date: 02/19/25

# TRACTOR SUPPLY VANBUREN TOWNSHIP

## Details & Specifications (General)

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R9E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

## STAMP:



PROJECT NO:  
23500325

SHEET NO:

C-503

SHEET: 13 OF 16

## GENERAL NOTES

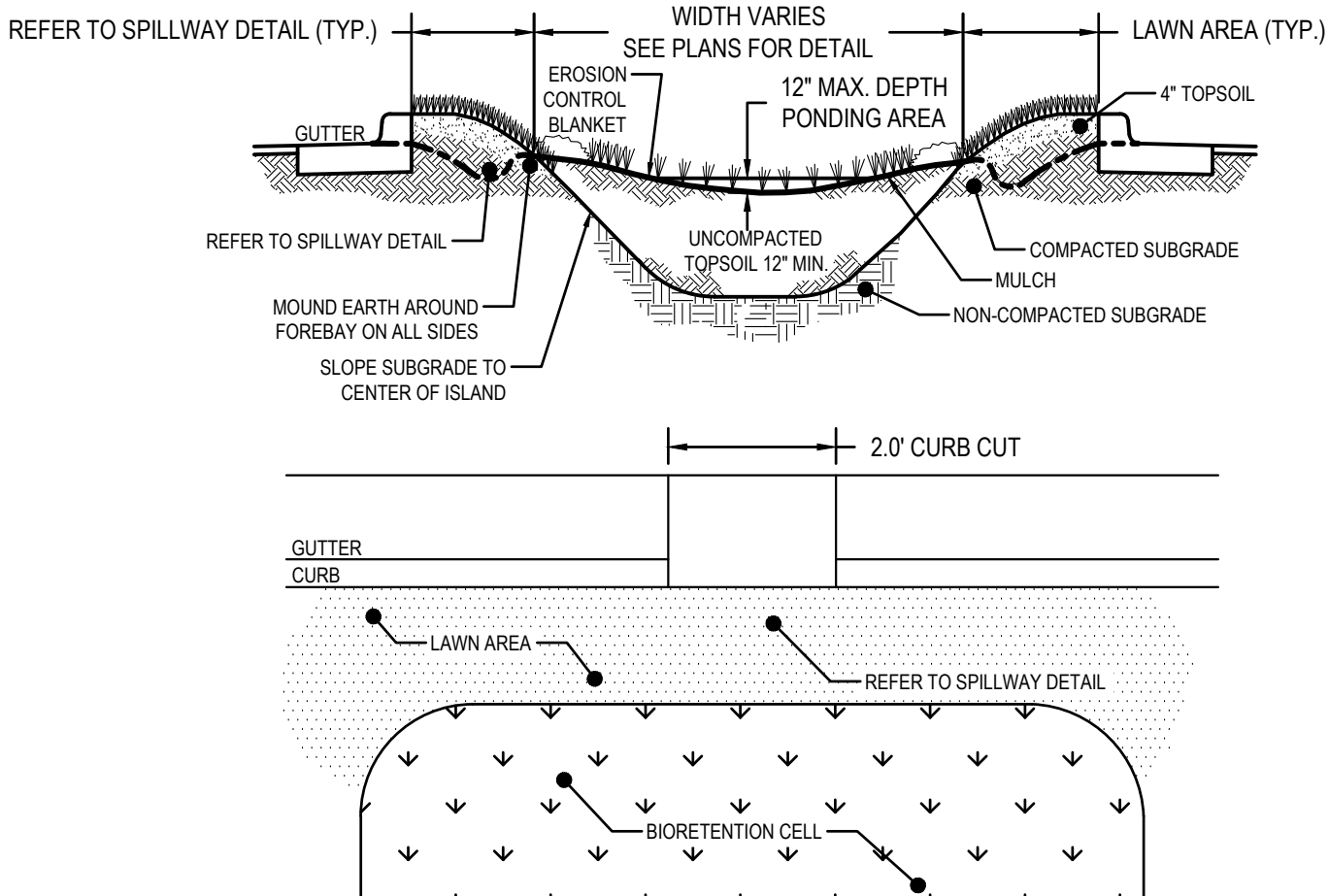
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION MEETING, AT A TIME AND PLACE AS ARRANGED BY THE COMMUNITY, IN WHICH VARIOUS UTILITY COMPANIES AND GOVERNMENTAL AGENCY REPRESENTATIVES WILL BE PRESENT.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST HAVE IN HIS POSSESSION A COPY OF ALL PERMITS NECESSARY TO CONSTRUCT A CONNECTION TO, OR AN EXTENSION OF, THE WATER SUPPLY, SANITARY SEWER, OR STORM SEWER SYSTEMS.
- THE CONTRACTOR SHALL MAINTAIN HIS CONSTRUCTION OPERATIONS WITHIN THE PRESENTLY EXISTING ROAD RIGHTS-OF-WAY AND EASEMENTS AS NOTED ON THE PLANS THROUGHOUT THE PROJECT. IN THE EVENT THAT THE CONTRACTOR DEEMS IT NECESSARY OR ADVISABLE TO OPERATE BEYOND THE LIMITS OF THE EXISTING RIGHTS-OF-WAY OR EASEMENTS, HE SHALL BE RESPONSIBLE FOR MAKING SPECIAL WRITTEN AGREEMENTS WITH THE PROPERTY OWNERS AND SHALL FURNISH SUCH COPIES OF AGREEMENTS TO THE COMMUNITY AND ENGINEER.
- THE CONTRACTOR SHALL NOTIFY "MISS DIO" (800-482-7171) 3 DAYS (NOT INCLUDING HOLIDAYS OR WEEKENDS) BEFORE STARTING CONSTRUCTION. HE SHALL MAKE ANY NECESSARY ARRANGEMENTS WITH UTILITY COMPANIES FOR RELOCATION OF EXISTING UTILITIES. THESE ARRANGEMENTS SHALL BE MADE IN SUFFICIENT TIME TO ALLOW THE RELOCATION WORK TO BE COMPLETED WITHOUT INTERFERING WITH OR DELAYING THE SEWER CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE ENGINEER 48 HOURS PRIOR TO UNDERCUTTING ANY EXISTING UTILITIES.
- ON ALL WORK WITHIN THE WAYNE COUNTY RIGHT-OF-WAY, THE COMMUNITY 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC AT ALL TIMES AS PER THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL, AT ALL TIMES PROVIDE EMERGENCY ACCESS TO PROPERTY IN THE VICINITY OF THE CONSTRUCTION FOR POLICE AND FIRE EQUIPMENT, AMBULANCES OR OTHER EMERGENCY VEHICLES TO PROTECT LIFE, HEALTH AND PROPERTY.
- THE CONTRACTOR SHALL MAINTAIN PUBLIC ROADS AFFECTED BY THE CONSTRUCTION OPERATIONS IN A PASSABLE CONDITION UNTIL SUCH TIME AS FINAL RESTORATION OF THESE IMPROVEMENTS CAN BE MADE. IF THE PUBLIC SAFETY IS IN DANGER OR THE NECESSITY EXISTS FOR MAINTAINING TRAFFIC, BACKFILLING MUST BE COMPLETED IMMEDIATELY. IN THE EVENT THAT THE NECESSARY BACKFILL MATERIAL AND EQUIPMENT ARE NOT AVAILABLE WHEN DIRECTION IS GIVEN FOR IMMEDIATE BACKFILL, THE TRENCH SHALL BE BACKFILLED WITH NATIVE MATERIAL TO PROVIDE FOR THE NECESSARY MAINTENANCE OF TRAFFIC AND SAFETY; HOWEVER, THE NATIVE MATERIAL SHALL BE REMOVED WITHIN 48 HOURS AND THE TRENCH PROPERLY BACKFILLED.

## GENERAL NOTES CONTINUED

- NO STREET, ROAD OR SECTION THEREOF SHALL BE CLOSED TO THROUGH TRAFFIC UNLESS AUTHORIZED BY THE AGENCY WITH JURISDICTION OVER THE ROADS. PRIOR TO CLOSING A STREET, ROAD, OR SECTION THEREOF, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF A DETOUR PLAN APPROVED BY THE AGENCY HAVING JURISDICTION OVER THE ROADS.
- IN THE EVENT ROADS ARE TO BE CLOSED, THE CONTRACTOR SHALL NOTIFY THE LOCAL FIRE DEPARTMENT, POLICE DEPARTMENT, LOCAL ROAD AUTHORITY, AMBULANCE AND EMERGENCY SERVICES, DEPARTMENT OF PUBLIC WORKS, PUBLIC TRANSIT AUTHORITY, PUBLIC SCHOOL SYSTEM, LOCAL TRASH PICKUP AUTHORITY, AND PUBLIC AND PRIVATE UTILITIES DAILY AS TO WHAT STREETS WILL BE PARTLY BLOCKED OR CLOSED, THE LENGTH OF TIME THE STREETS WILL BE BLOCKED OR CLOSED AND WHEN THE STREETS WILL BE REOPENED TO TRAFFIC.
- PAVED STREETS AND DRIVEWAYS SHALL BE MAINTAINED IN A REASONABLE STATE OF CLEANLINESS AND THE CONTRACTOR SHALL REMOVE ACCUMULATIONS OF DEBRIS CAUSED BY HIS OPERATIONS. THE CONTRACTOR SHALL HAVE, AS A MINIMUM, AN OPERATING SWEEPER BROOD ON THE SITE AT ALL TIMES. THE PAVEMENT SHALL BE CLEANED AT THE CLOSE OF EACH DAYS OPERATION AND AS OFTEN AS NECESSARY BEFORE THAT TIME. FAILURE TO COMPLY SHALL BE CAUSE TO STOP CONSTRUCTION. CONTRACTOR SHALL ALSO COMPLY WITH THE LOCAL AIR POLLUTION CONTROL ORDINANCE.
- ALL GRAVEL AND DIRT ROADS, STREETS OR DRIVEWAYS USED SHALL BE MAINTAINED BY GRADING, PLACING DUST PALLIATIVES, AND MAINTENANCE GRAVEL IN SUFFICIENT QUANTITIES TO ELIMINATE DUST AND MAINTAIN TRAFFIC AS DIRECTED BY THE AGENCY.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY SHEETING, SHORING, DEWATERING, BRACING, TRENCH BOXES, ETC., TO PERFORM WORK SAFELY AND PROTECT EXISTING UTILITIES AND IMPROVEMENTS.
- THE FLOW IN THE EXISTING SEWERS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. 16. CULVERTS, DITCHES, DRAIN TILES, TILE FIELD, DRAINAGE STRUCTURES, ETC., THAT ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE IMMEDIATELY RESTORED.
- ALL PROPERTY IRONS AND MONUMENTS, IF DISTURBED OR DESTROYED BY THE CONTRACTOR'S OPERATION, SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- AFTER ALL THE PIPE, STRUCTURES, ETC., HAVE BEEN LAID, CONSTRUCTED, AND BACKFILLED, THE SYSTEM SHALL BE TESTED AND FINAL INSPECTED. THE INSPECTION AND TESTING SHALL CONSIST OF A FIRST INSPECTION, TELEVISION INSPECTION (IF APPLICABLE) TESTING, AND FINAL INSPECTION AND MEASUREMENT. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SUPERVISION, LABOR, TOOLS, EQUIPMENT, AND THE MATERIALS NECESSARY FOR THE TESTS WHICH SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER. THE ENGINEER SHALL BE NOTIFIED TWO (2) WORKING DAYS IN ADVANCE OF ALL TESTING.

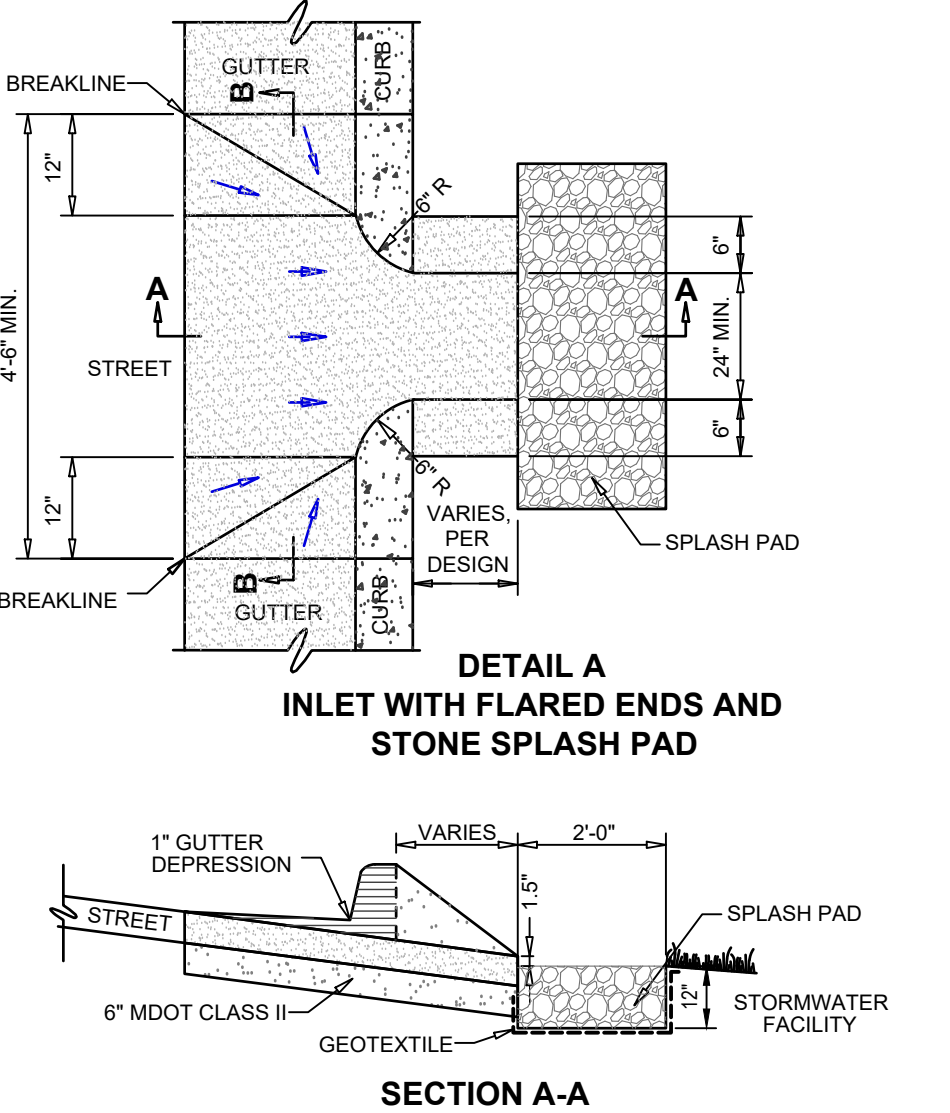
## GENERAL NOTES CONTINUED

- THE FIRST INSPECTION SHALL BE COMPLETED AND ALL REPAIRS MADE IN AMPLI TIME SO THAT THE TELEVISION INSPECTION OF THE UNDERGROUND PORTION OF THE SYSTEM CAN BE COMPLETED WITHIN FOUR (4) WEEKS OF THE COMPLETION OF THE CONSTRUCTION. WHEN RE-TELEVISION IS NECESSARY, AN ADDITIONAL TWO (2) WEEKS WILL BE ALLOWED FOR COMPLETION. TESTING OF THE SYSTEM AS HEREIN DESCRIBED SHALL IMMEDIATELY FOLLOW THE TELEVISION INSPECTION AND SHALL BE COMPLETED WITHIN A TWO (2) WEEK PERIOD.
- FAILURE TO MAINTAIN A SCHEDULE IN COMPLIANCE WITH THESE TERMS WILL AUTOMATICALLY CAUSE THE STOPPAGE OF OTHER WORK AT THE MEASURABLE SITE IN QUESTION UNTIL SUCH TIME AS THE FINAL INSPECTION OF THE COMPLETED UNDERGROUND PORTION OF THE SYSTEM HAS PROGRESSED TO ACCEPTABLE LIMITS.
- THE CONTRACTOR SHALL HAVE THE UNDERGROUND PORTION OF THE SEWER SYSTEM READY FOR THE FIRST INSPECTION WITHIN TWO (2) WEEKS AFTER THE COMPLETION OF UTILITY.
- THE FIRST INSPECTION SHALL CONSIST OF A VISIBLE AND AUDIBLE CHECK OF SEWERS, MANHOLES, GATE WELLS, AND OTHER STRUCTURES TO ASCERTAIN THAT THE STRUCTURE STEPS HAVE BEEN PLACED, ALL LIFT HOLES PLUGGED, THE CHANNELING OF THE MANHOLE BOTTOMS COMPLETED, ALL VISIBLE OR AUDIBLE LEAKS STOPPED, ALL PIPE HAS BEEN PLACED STRAIGHT AND TRUE TO THE PROPER GRADES AND ELEVATION, THE REQUIRED ADJUSTING RINGS AND FRAME AND COVER PROPERLY INSTALLED, ALL TRENCHES AND STRUCTURES BACKFILLED IN AN ACCEPTABLE MANNER AND THAT THE SYSTEM HAS BEEN THOROUGHLY CLEANED.
- THE FIRST INSPECTION SHALL BE CONSIDERED COMPLETED WHEN ALL TREE PAIRS HAVE BEEN MADE AND THE SYSTEM IS READY FOR A TELEVISION INSPECTION AND SUBSEQUENT TESTING.
- TRENCH BACKFILL UNDER ROAD SURFACES, PAVEMENTS, CURBS, DRIVEWAY, SIDEWALK AND WHERE THE TRENCH DEPTH IS WITHIN 3-FEET OF THE PAVEMENT SHALL BE TRENCH B (SAND) PER SPECIFICATIONS SECTION 312333, TRENCHING AND BACKFILLING.
- AFTER ALL TESTING, TELEVISION INSPECTION, FINAL RESTORATION AND CLEAN-UP HAS BEEN COMPLETED, A FINAL INSPECTION AND MEASUREMENT WILL BE DONE. THE FINAL INSPECTION SHALL BE REQUESTED BY THE CONTRACTOR AND CONSIST OF, BUT IS NOT LIMITED TO, CHECKING FOR PROPER ALIGNMENT, PROPER GRADE, CLEANLINESS, LEAKS, CONFORMANCE TO THE PLANS AND SPECIFICATION, PROPER STRUCTURAL AND MECHANICAL ADJUSTMENTS, AND RESTORATION. FINAL MEASUREMENT INCLUDES STRUCTURE ELEVATIONS, DISTANCES BETWEEN STRUCTURES, AND CONFIRMATION UTILITIES ARE LOCATED WITHIN EASEMENT AND RIGHT-OF-WAY AREAS.
- SUCCESSFUL COMPLETION OF ANY TEST OR INSPECTION SHALL NOT RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITY TO CORRECT ANY DEFICIENCY OR NONCONFORMANCE TO THE PLANS OR SPECIFICATIONS WHICH MAY THEREAFTER BECOME KNOWN.

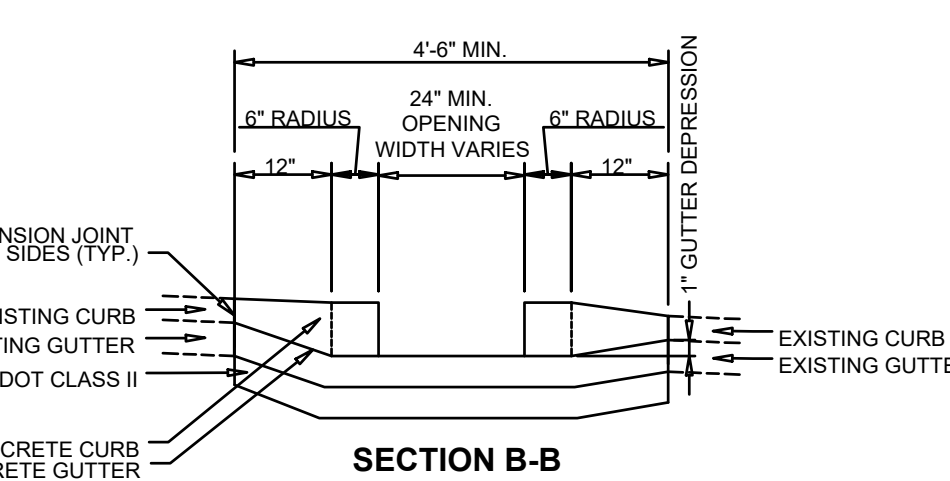


## BIO-RETENTION AREA DETAIL

N.T.S.



## SECTION A-A

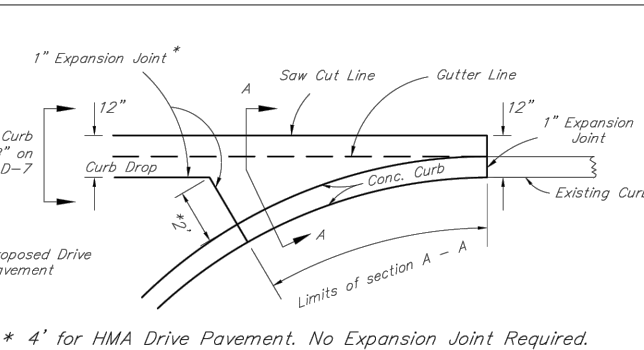


NOTE: CONCRETE THICKNESS SHALL BE 6" MINIMUM.

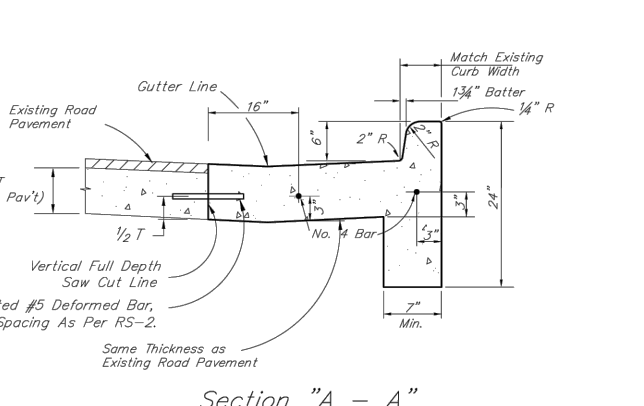
## CURB-CUT/SPILLWAY DETAIL

N.T.S.

## CURB RETURN JOINING EXISTING PAVEMENT



\* 4" FOR HMA Drive Pavement. No Expansion Joint Required.



WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1.

WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES  
ENGINEERING DIVISION/PERMIT OFFICE  
PERMIT STANDARDS  
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SHEET 65 OF 5





UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

**PLANTING NOTES:**

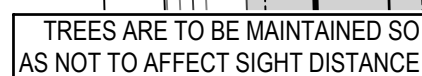
- 1) ALL PLANT MATERIAL SHALL BE LOCALLY NURSERY GROWN NO 1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL BE GUARANTEED TO BE FREE OF DISEASE AND PESTS.
- 2) NO PLANT MATERIALS UNLESS DIRECTED BY OWNER, LANDSCAPE ARCHITECT, AND/OR CONSTRUCTION MANAGER. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL FOR ANY REASON IF IT IS NOT INSTALLED.
- 3) SIZES SPECIFIED ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
- 4) ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
- 5) MAINTENANCE OF LANDSCAPING ITEMS, TREES, AND PLANTS SHALL BE PERFORMED BY THE PROPERTY OWNER OR A QUALIFIED PROFESSIONAL. ALL LANDSCAPING SHALL BE MAINTAINED TO MEET THE FOLLOWING STANDARDS:
  - A. MAINTAINED TO MEET THE FOLLOWING STANDARDS IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIALS ARE TO BE REPLACED IMMEDIATELY AFTER NOTIFIED TO DO SO.
  - B. PLANTING DETAIL SHALL BE MAINTAINED TO MEET THE FOLLOWING STANDARDS PER DETAILS. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN AT THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROX. 1/4 OF THE ROOT BALL ABOVE GRADE, AND BACKFILL.
- 6) REMOVE ALL TWINE, WIRE, NURSERY TREE GRIDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. REMOVE THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE BURLAP FROM ROOT BALLS.
- 7) FINELY SCREENED HARDWOOD BARK MULCH, NATURAL COLOR (NON-COLORED), IS REQUIRED FOR ALL PLANTINGS AND PLANTING BEDS. MULCH PER PLANTING DETAILS. MULCH IN PLANT BEDS SHALL BE 3" THICK AT TIME OF INSPECTION AND AFTER COMPLETED BY RAIN OR IRRIGATION. ALL PLANTING BEDS SHALL BE EDGED WITH 2" X 4" GRADE LUMBER.
- 8) LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. IF A CONFLICT WITH UTILITIES EXISTS, NOTIFY THE CITY OF CONSTRUCTION PRIOR TO PLANTING.
- 9) PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER PLANTING AND ACCEPTANCE.

**TOPSOIL AND TURF NOTES:**

- 1) WHEREVER GROUND IN ITS NATURAL STATE HAS BEEN DISTURBED, APPROVED LANDSCAPING OR GRASS SHALL BE FULLY INSTALLED, AND ESTABLISHED WITHIN A REASONABLE PERIOD OF TIME, BUT NO LONGER THAN ONE GROWING SEASON (UNLESS OTHERWISE NOTED AND APPROVED).
- 2) DURING EXCAVATION, GRADING, AND INSTALLATION OF REQUIRED LANDSCAPING, ALL SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS SHALL BE STRICTLY ENFORCED.
- 3) ALL LAWN AREAS SHALL RECEIVE SOO OR HYDROSEED. TURF SHALL BE INSTALLED ON TOPSOIL, UNLESS APPROVED OTHERWISE. DO NOT PLANT UNTIL ACCEPTANCE OF FINISH GRADE.
- 4) SOO SHALL BE GROWN ON TOPSOIL UNLESS APPROVED OTHERWISE. SOO SHALL BE 2 YEARS OLD AND STRONGLY ROOTED. PLACE SOO TIGHTLY WITH NO GAPS AND WITH GRAIN OR DIRECTION. SEAMS OF SOO SHALL BE STAGGERED IN A RUNNING ROW PATTERN. SOO SHALL BE WATERED IMMEDIATELY TO AVOID DRYING OUT. DO NOT INSTALL SOO UNTIL ACCEPTANCE OF FINISH GRADE AND IRRIGATION SYSTEM IS INSTALLED. SOO SHALL BE PLANTED AT A DENSITY OF 100 OTHERS PER 1000 SQ. YD. WITH A WATER FILLED LAWN ROLLER, ROLL PERPENDICULAR TO LENGTH OF SOO.
- 5) TURF SHALL BE INSTALLED IN LAY OF 3" - 4" OF LIGHTLY COMPACTED APPROVED TOPSOIL. TURF SHALL BE FERTILE, SCREENED, FRAGRANT TOPSOIL, FREE OF THINGS 1/2" IN DIA. AND LARGER, ROOTS, STICKS, OR OTHER EXTRANEIOUS MATERIAL. INCLUDING LUMPS OF SOO. TURF SHALL BE 100% OTHER THAN FINISH BROWN, ORGANIC CONTENT 3% MIN. DO NOT INSTALL TOPSOIL UNTIL APPROVED BY OWNER/M.C. TURF SHALL BE FINE GRADE TO A SMOOTH FINISH, FREE OF LUMPS AND CLUMPS.
- 6) ALL LANDSCAPE ISLANDS WITH PARKING LOTS SHALL BE BACK FILLED WITH TOPSOIL TO A DEPTH OF 18" MIN.

**IRRIGATION NOTES:**

- 1) ALL PLANTING AREAS, LAWN AREAS AND LANDSCAPE ISLANDS SHOWN ARE TO HAVE A COMPLETE IRRIGATION SYSTEM. THE G.C. SHALL BE RESPONSIBLE FOR RETAINING A QUALIFIED FIRM FOR THE DESIGN OF THE IRRIGATION SYSTEM. THE DESIGN MUST SHOW HOW THE SYSTEM TIES INTO THE BUILDING AND MUST SHOW ALL OF THE NECESSARY EQUIPMENT FOR A COMPLETE SYSTEM. THE G.C. SHALL SUBMIT THE IRRIGATION SYSTEM DESIGN TO THE ARCHITECT/OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.



### TYPICAL SHRUB / PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL

N.T.S.

### TYPICAL EVERGREEN TREE PLANTING DETAIL

N.T.S

## TYPICAL TREE PLANTING DETAIL

NTS

## LANDSCAPE CALCULATIONS

**REQUIRED LANDSCAPING:**

**FRONTAGE LANDSCAPING:**

- 1 DECIDUOUS OR EVERGREEN TREE PER 40 FT OF FRONTAGE
- 1 ORNAMENTAL TREE PER 100 FT OF FRONTAGE
- 8 SHRUBS PER 40 FT OF FRONTAGE

**PROPOSED LANDSCAPING:**

**FRONTAGE LANDSCAPING:**

SUMPTER RD FRONTAGE: 420' - 40' (ACCESS DRIVE) = 380/40= 9.5  
420' - 40' (ACCESS DRIVE) = 380/100 = 3.8

HULL RD FRONTAGE: 515' - 40' (ACCESS DRIVE) = 475/40 = 11.8  
515' - 40' (ACCESS DRIVE) = 475/100 = 4.75

**SUMPTER RD**

REQUIRED: 10 TREES, 4 ORNAMENTAL TREES, 76 SHRUBS  
PROPOSED: 10 TREES, 4 ORNAMENTAL TREES, 76 SHRUBS

**HULL RD**

REQUIRED: 12 TREES, 5 ORNAMENTAL TREES, 95 SHRUBS  
PROPOSED: 12 TREES, 5 ORNAMENTAL TREES, 95 SHRUBS

PARKING LOT LANDSCAPING:

- 5' WIDE LANDSCAPE YARD WITH 3' HEDGE
- INTERIOR LANDSCAPING SHALL ACCOUNT FOR 5% OF ALL PAVED PARKING AREAS.
- 1 TREE FOR EVERY 300 SQ. FT. REQUIRED INTERIOR LANDSCAPING

### PARKING LOT LANDSCAPING

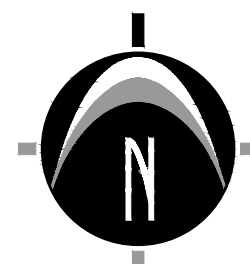
- AN EVERGREEN HEDGE IS PROVIDED ALONG ALL PARKING LOTS FRONTING A PUBLIC R.O.W.
- 65,271 SQ. FT. PAVED PARKING AREAS X 0.05 = 3,264 / 300 = 10.88  
 REQUIRED INTERIOR PARKING TREES: 11  
 PROPOSED INTERIOR PARKING TREES: 11

## PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
TREES					
	Ac (B)	12	Abies concolor	White Fir	8' hgt.min.
	Ag (F)	3	Amelanchier x grandiflora 'Autumn Brilliance' multi-stem	Autumn Brilliance Apple Serviceberry	6' hgt. min.
	Ca (F)	3	Carpinus caroliniana	American Hornbeam	2' cal. min.
	Cf (S)	5	Cornus florida	Flowering Dogwood	2' cal. min.
	Co (F)	6	Celtis occidentalis	Common Hackberry	3' cal. min.
	Cv (F)	3	Crataegus viridis 'Winter King'	Winter King Hawthorn	2' cal. min.
	Ls (P)	3	Liquidambar styraciflua	Sweet Gum	3' cal. min.
	Lt (P)	3	Liriodendron tulipifera	Tulip Poplar	3' cal. min.
	Ma (S)	7	Maackia amurensis	Amur Maackia	2' cal. min.
	Mr (S)	8	Malus x 'JFS-KWS'	Royal Raindrops® Crabapple	2' cal. min.
	Ns (F)	5	Nyssa sylvatica	Tupelo	3' cal. min.
	Pb (B)	13	Picea glauca densata	Black Hills Spruce	8' hgt.min.
	Ps (B)	15	Pinus strobus	White Pine	8' hgt.min.
	Qb (F)	8	Quercus bicolor	Swamp White Oak	3' cal. min.
	Tb (F)	3	Tilia americana 'Boulevard'	Boulevard American Linden	3' cal. min.
	Zg (P)	5	Zelkova serrata 'Green Vase'	Green Vase Japanese Zelkova	3' cal. min.
SHRUBS					
	Ap (F)	39	Aronia melanocarpa 'SMNAPMEM'	Low Spine Snowfire™ Black Chokeberry	36"/min.
	Bs (A)	45	Baptisia x 'Solar Flare'	Solar Flare Prairieblues™ False Indigo	2 gal.
	Cb (F)	36	Comus sericea 'Bailey'	Bailey's Red Twig Dogwood	18' min.
	Cf (F)	13	Comus sericea 'Flavirames'	Yellow Twig Dogwood	18' min.
	Cf (F)	19	Comus stolonifera 'Farrow'	Arcic Fire® Red Twig Dogwood	18' min.
	Cr (F)	48	Comus racemosa 'Hurzman'	Huron Gray Dogwood	18' min.
	Dn (F)	20	Deutzia gracilis 'Nikko'	Nikko Deutzia	18' min.
	Ew (F)	8	Echinacea purpurea 'PAST02917'	PowWow® Wild Berry Coneflower	1 gal.
	Jo (P)	97	Juniperus virginiana 'Grey Owl'	Grey Owl Eastern Redcedar	18' min.
	Lk (F)	6	Liatris spicata 'Kobold'	Kobold Blazing Star	1 gal.
	Ps (F)	31	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 gal.
	Pr (F)	39	Physocarpus opulifolius 'SMPT01W'	Tiny Wine® Ninebark	18' min.
	Rk (F)	9	Rudbeckia fulgida 'Blow'	Vietta's Little Suzy Coneflower	1 gal.
	Sb (F)	13	Syringa x 'SISJBP7'	Bloomerang® Dark Purple Lilac	36"/min.
	St (F)	10	Sporobolus heterolepis 'Tara'	Tara Prairie Dropseed	1 gal.

## LANDSCAPE CALCULATION LEGEND

(F) - FRONTAGE  
(P) - PARKING  
(B) - BUFFER  
(S) - STREET TREE



0' 15' 30' 60'

**SCALE: 1" = 30'**



**PREPARED FOR:**

CBE, LLC  
Attention: Brian Leibrand  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

## REVISIONS:

Title: Preliminary Plan		
Drawn: SW	Checked: SW	Date: 11/13/23
Title: Site Plan Submittal		
Drawn: SW	Checked: SW	Date: 11/22/23
Title: Work in Progress - Staff Comments		
Drawn: SW	Checked: SW	Date: 12/21/23
Title: Staff Comments and Building Front		
Drawn: SW	Checked: SW	Date: 03/26/24
Title: Final Site Plan Submittal		
Drawn: SW	Checked: SW	Date: 06/19/24
Title: Modified per Wayne County DPS		
Drawn: SW	Checked: SW	Date: 08/15/24
Title: Modified per Wayne County DPS		
Drawn: SW	Checked: SW	Date: 12/19/24
Title: Modified per Wayne County DPS		
Drawn: SW	Checked: SW	Date: 01/22/25
Title: Modified per Wayne County DPS		
Drawn: SW	Checked: SW	Date: 02/19/25

**TRACTOR SUPPLY  
VANBUREN TOWNSHIP**

# Landscape Plan

00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

**STAMP:**



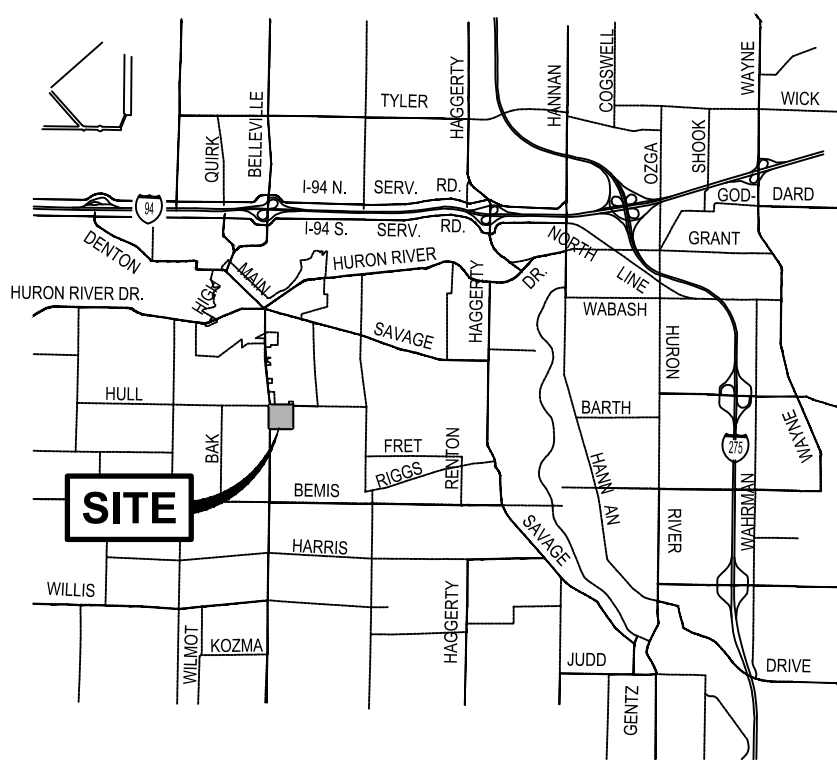
**PROJECT NO:**  
23500325

**SHEET NO:**

# L-201

**SHEET: 14 OF 16**



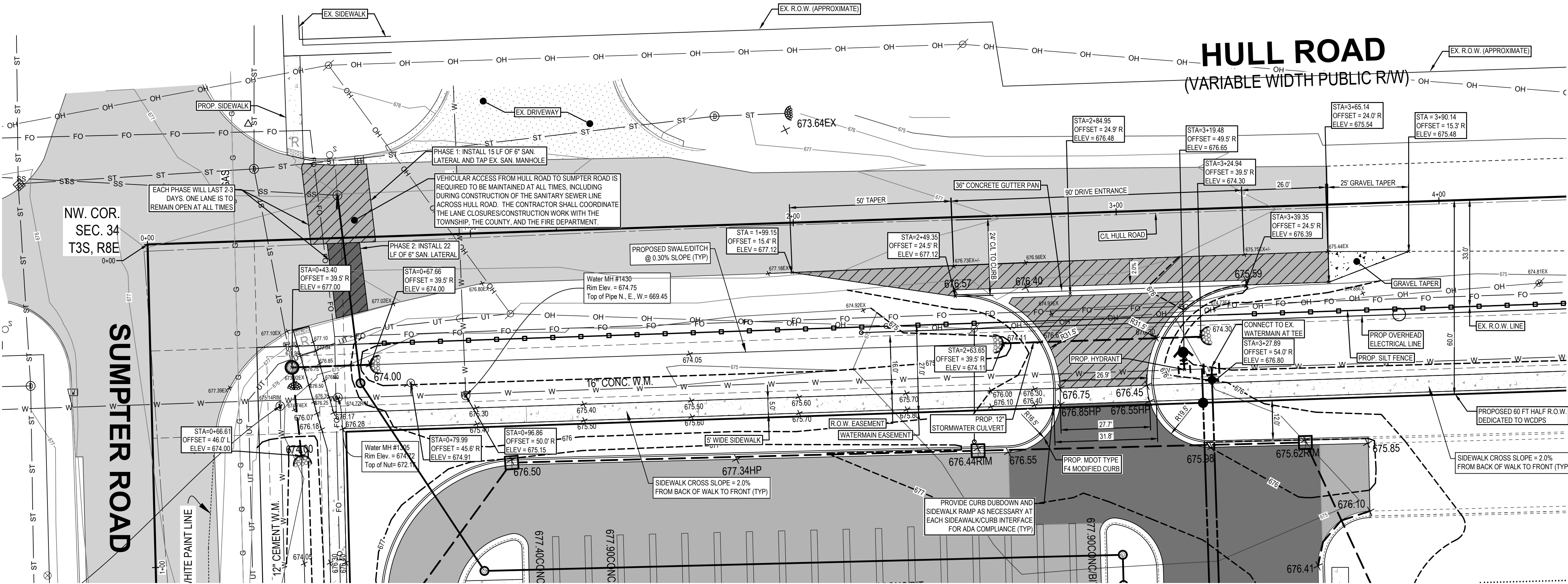
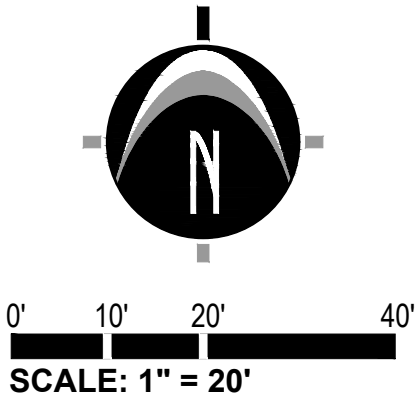


LOCATION MAP  
NOT TO SCALE

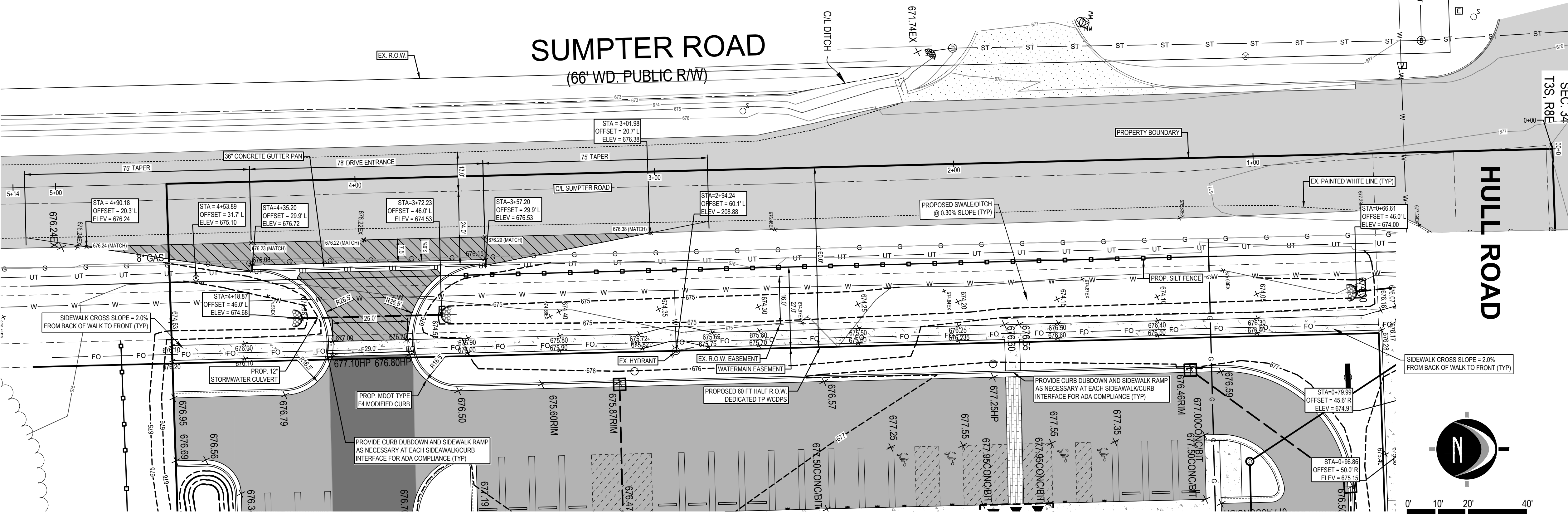


LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED STANDARD DUTY BITUMINOUS
- PROPOSED HEAVY DUTY BITUMINOUS
- PROPOSED 4" CONCRETE
- PROPOSED 6" CONCRETE



HULL ROAD RIGHT-OF-WAY IMPROVEMENT PLAN  
SCALE: 1 INCH = 20 FT



SUMPTER ROAD RIGHT-OF-WAY IMPROVEMENT PLAN  
SCALE: 1 INCH = 20 FT

**NEDERVELD**  
www.nederveld.com  
800.222.1868  
**GRAND RAPIDS**  
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Phone: 616.575.5190  
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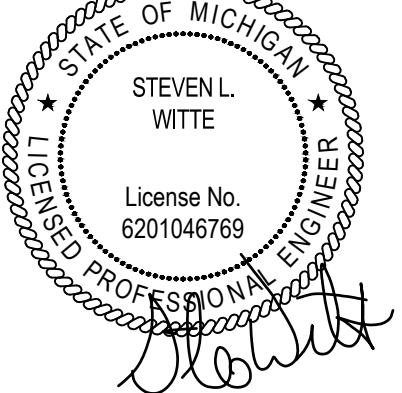
**PREPARED FOR:**  
CBE, LLC  
Attention: Brian Leibrandt  
221 W Webster Avenue  
Suite 507  
Muskegon, MI 49440  
Phone: 231.955.0286

REVISIONS:

Title: Preliminary Plan	Drawn: SW	Checked: SW	Date: 11/13/23
Title: Site Plan Submittal	Drawn: SW	Checked: SW	Date: 11/20/23
Title: Work in Progress - Staff Comments	Drawn: SW	Checked: SW	Date: 12/21/23
Title: Staff Comments and Building Front	Drawn: SW	Checked: SW	Date: 03/26/24
Title: Final Site Plan Submittal	Drawn: SW	Checked: SW	Date: 06/19/24
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Title: Modified per Wayne County DPS	Drawn: SW	Checked: SW	Date: 12/19/24
Title: Modified per Wayne County DPS	Drawn: SW	Checked: SW	Date: 01/22/25
Title: Modified per Wayne County DPS	Drawn: SW	Checked: SW	Date: 01/29/25

**TRACTOR SUPPLY  
VANBUREN TOWNSHIP**  
**Right-of-Way Improvement Plan**  
00 HULL ROAD (NO ADDRESS ASSIGNED YET)  
PART OF THE NORTHWEST 1/4 OF SECTION 34, T3S, R8E,  
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

STAMP:



**PROJECT NO:**  
23500325

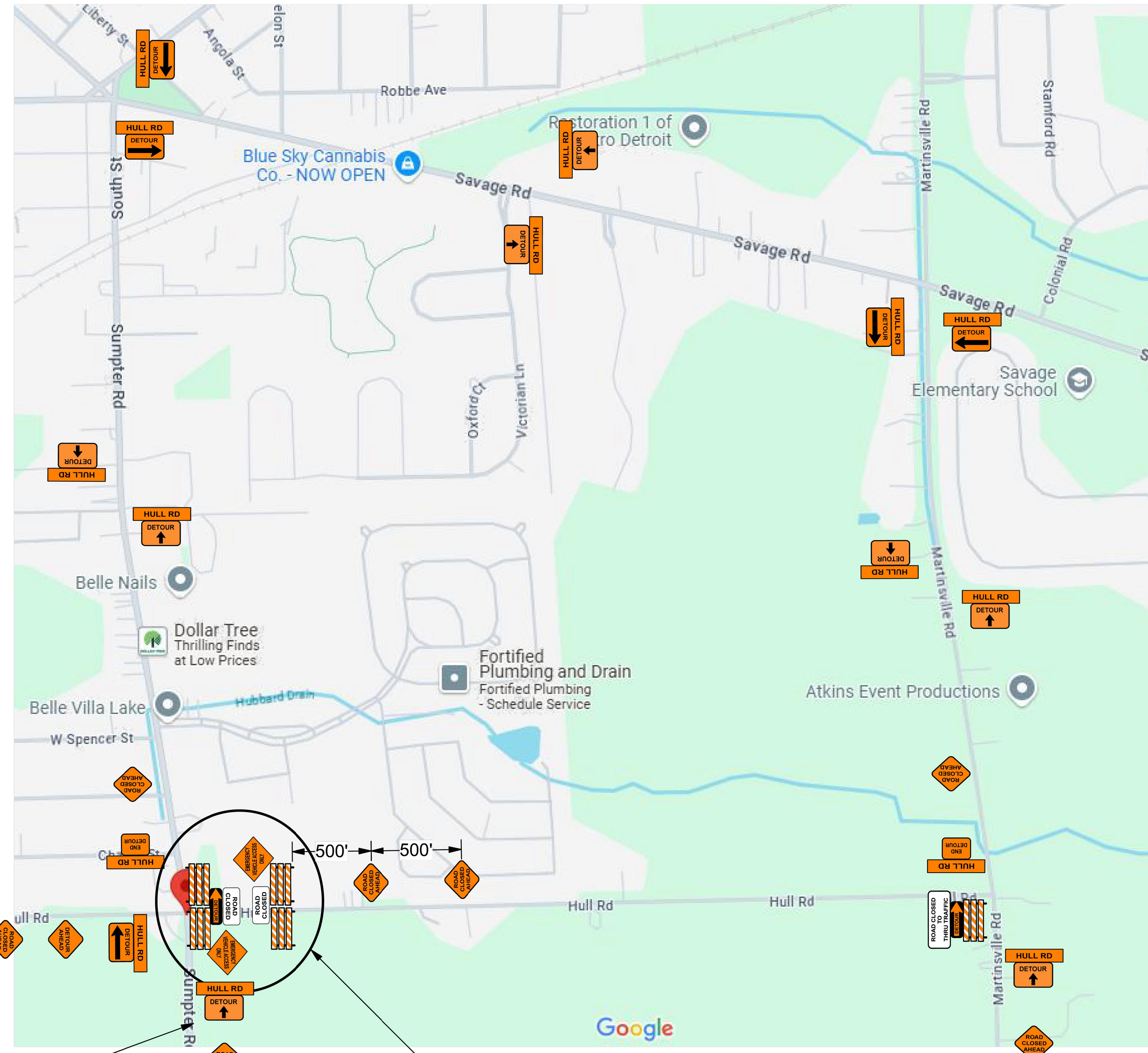
**SHEET NO:**  
**C-700**  
**SHEET: 15 OF 16**

**811** Know what's below.  
CALL before you dig.

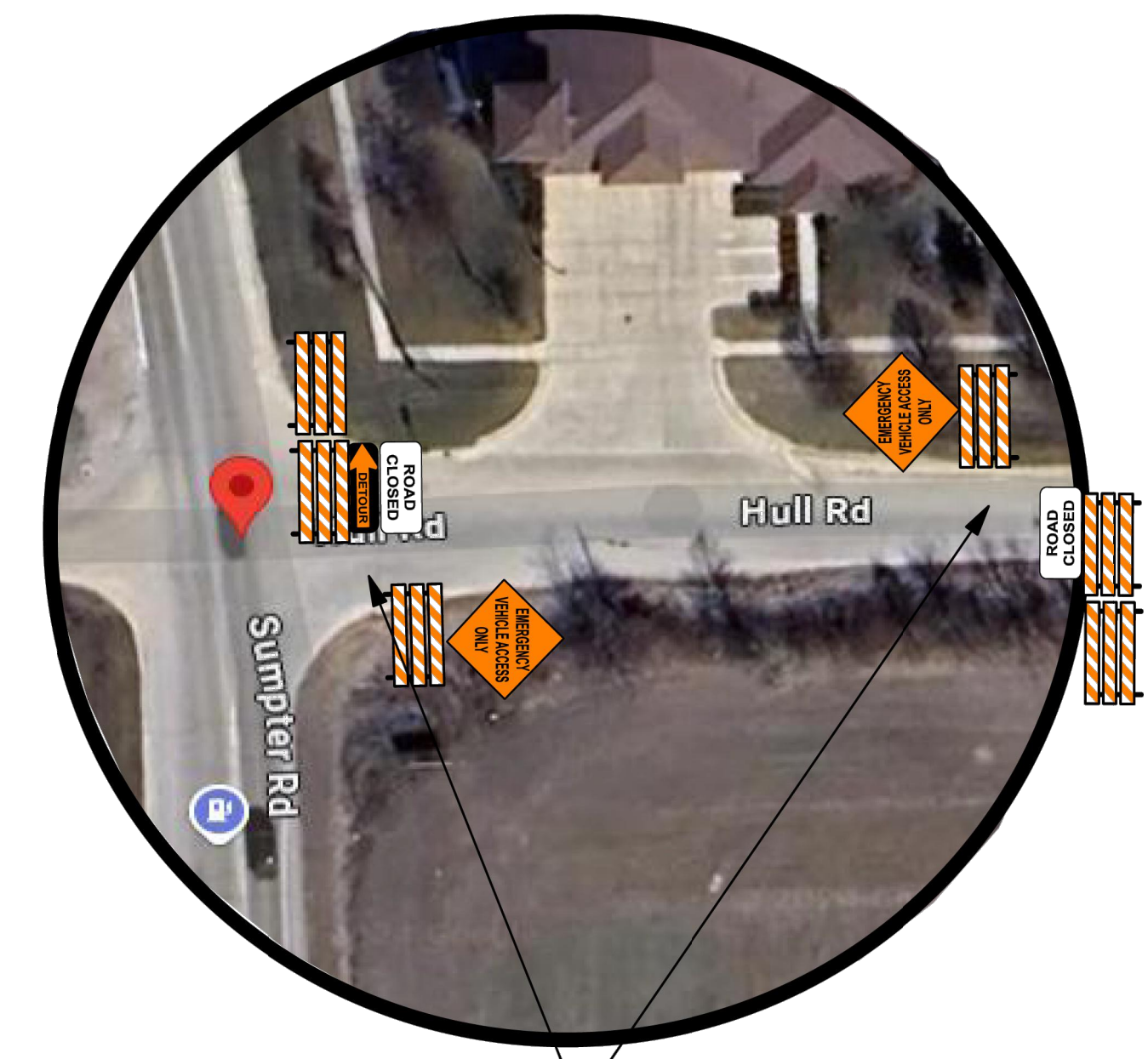
UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "UTILITY" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO ANY CONSTRUCTION.





SEE DETAIL VIEW A



STAGGER BARRICADES FOR EMERGENCY VEHICLE ACCESS

NB SHOULDER CLOSURE REQUIRED HERE (SEE MDOT TYPICAL)

SEE DETAIL VIEW A

DISTANCE BETWEEN TRAFFIC SIGNS "N"										
POSTED SPEED LIMIT (MPH PRIOR TO WORK AREA)	25	35	45	55	65	75	85	95	105	115
DISTANCES	250	300	350	400	450	500	550	600	650	700

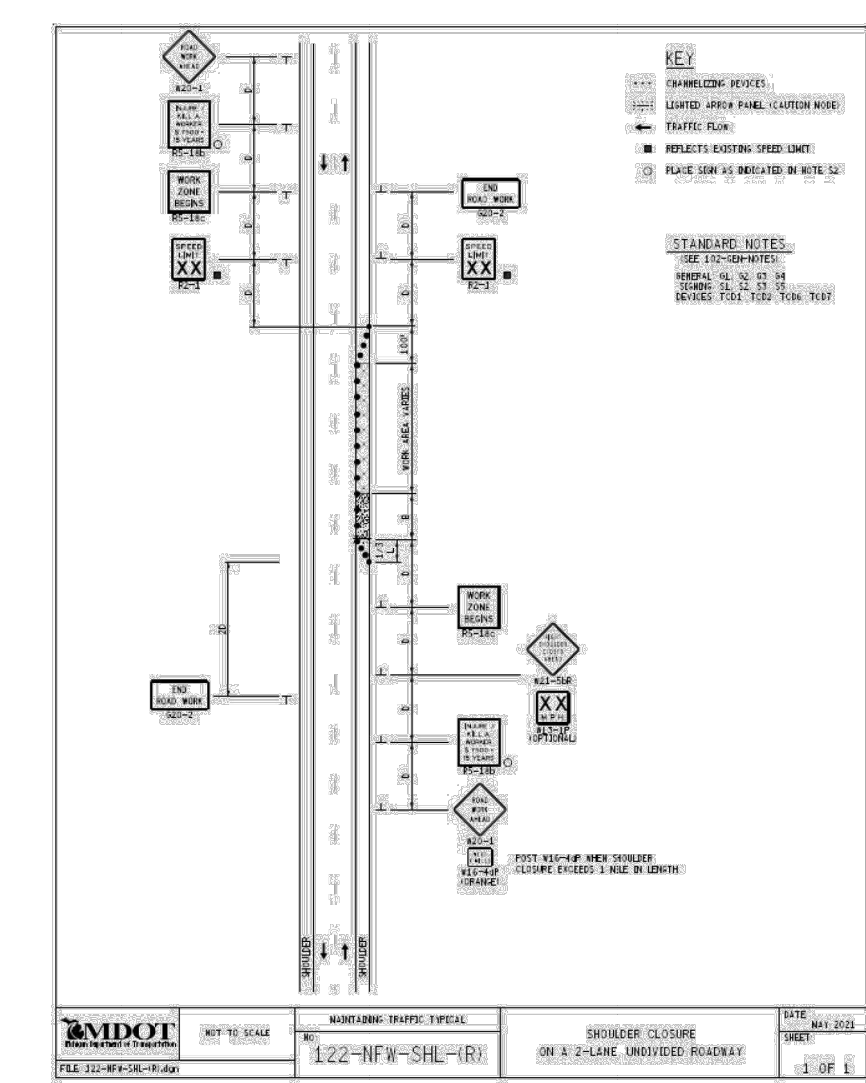
GUIDELINES FOR LENGTH OF CONSTRUCTION BUFFER SPACE "M"										
POSTED SPEED LIMIT (MPH PRIOR TO WORK AREA)	25	35	45	55	65	75	85	95	105	115
BUFFER	31	50	83	115	148	181	214	247	280	313

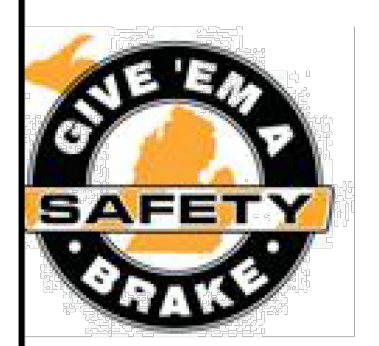
MINIMUM WARNING TAPER LENGTH "L" (FEET)										
POSTED SPEED LIMIT (MPH PRIOR TO WORK AREA)	25	35	45	55	65	75	85	95	105	115
W TAPER	11	15	22	31	40	50	59	68	77	86
R TAPER	21	30	43	54	67	80	93	106	119	132
W TAPER	42	60	86	108	135	162	189	216	243	270
R TAPER	41	60	86	107	134	161	188	215	242	269
W TAPER	61	85	124	154	189	224	259	294	329	364
R TAPER	61	83	123	161	200	238	276	314	352	390
W TAPER	71	101	143	182	221	260	299	338	377	416
R TAPER	71	93	134	173	212	251	290	329	368	407
W TAPER	91	124	184	240	295	350	405	460	515	570
R TAPER	91	114	164	214	264	314	364	414	464	514
W TAPER	111	155	225	294	363	432	501	570	639	708
R TAPER	111	141	209	274	339	404	469	534	599	664
W TAPER	127	175	255	334	413	492	571	650	729	808
R TAPER	127	159	234	309	384	459	534	609	684	759
W TAPER	143	211	294	374	454	534	614	694	774	854
R TAPER	143	205	284	364	444	524	604	684	764	844

NET 5 TO NET 10	NET 10 TO NET 15	NET 15 TO NET 20	NET 20 TO NET 25	NET 25 TO NET 30	NET 30 TO NET 35	NET 35 TO NET 40	NET 40 TO NET 45	NET 45 TO NET 50	NET 50 TO NET 55	NET 55 TO NET 60	NET 60 TO NET 65	NET 65 TO NET 70	NET 70 TO NET 75	NET 75 TO NET 80	NET 80 TO NET 85	NET 85 TO NET 90	NET 90 TO NET 95	NET 95 TO NET 100	NET 100 TO NET 105	NET 105 TO NET 110	NET 110 TO NET 115	NET 115 TO NET 120	NET 120 TO NET 125	NET 125 TO NET 130	NET 130 TO NET 135	NET 135 TO NET 140	NET 140 TO NET 145	NET 145 TO NET 150	NET 150 TO NET 155	NET 155 TO NET 160	NET 160 TO NET 165	NET 165 TO NET 170	NET 170 TO NET 175	NET 175 TO NET 180	NET 180 TO NET 185	NET 185 TO NET 190	NET 190 TO NET 195	NET 195 TO NET 200	NET 200 TO NET 205	NET 205 TO NET 210	NET 210 TO NET 215	NET 215 TO NET 220	NET 220 TO NET 225	NET 225 TO NET 230	NET 230 TO NET 235	NET 235 TO NET 240	NET 240 TO NET 245	NET 245 TO NET 250	NET 250 TO NET 255	NET 255 TO NET 260	NET 260 TO NET 265	NET 265 TO NET 270	NET 270 TO NET 275	NET 275 TO NET 280	NET 280 TO NET 285	NET 285 TO NET 290	NET 290 TO NET 295	NET 295 TO NET 300	NET 300 TO NET 305	NET 305 TO NET 310	NET 310 TO NET 315	NET 315 TO NET 320	NET 320 TO NET 325	NET 325 TO NET 330	NET 330 TO NET 335	NET 335 TO NET 340	NET 340 TO NET 345	NET 345 TO NET 350	NET 350 TO NET 355	NET 355 TO NET 360	NET 360 TO NET 365	NET 365 TO NET 370	NET 370 TO NET 375	NET 375 TO NET 380	NET 380 TO NET 385	NET 385 TO NET 390	NET 390 TO NET 395	NET 395 TO NET 400	NET 400 TO NET 405	NET 405 TO NET 410	NET 410 TO NET 415	NET 415 TO NET 420	NET 420 TO NET 425	NET 425 TO NET 430	NET 430 TO NET 435	NET 435 TO NET 440	NET 440 TO NET 445	NET 445 TO NET 450	NET 450 TO NET 455	NET 455 TO NET 460	NET 460 TO NET 465	NET 465 TO NET 470	NET 470 TO NET 475	NET 475 TO NET 480	NET 480 TO NET 485	NET 485 TO NET 490	NET 490 TO NET 495	NET 495 TO NET 500	NET 500 TO NET 505	NET 505 TO NET 510	NET 510 TO NET 515	NET 515 TO NET 520	NET 520 TO NET 525	NET 525 TO NET 530	NET 530 TO NET 535	NET 535 TO NET 540	NET 540 TO NET 545	NET 545 TO NET 550	NET 550 TO NET 555	NET 555 TO NET 560	NET 560 TO NET 565	NET 565 TO NET 570	NET 570 TO NET 575	NET 575 TO NET 580	NET 580 TO NET 585	NET 585 TO NET 590	NET 590 TO NET 595	NET 595 TO NET 600	NET 600 TO NET 605	NET 605 TO NET 610	NET 610 TO NET 615	NET 615 TO NET 620	NET 620 TO NET 625	NET 625 TO NET 630	NET 630 TO NET 635	NET 635 TO NET 640	NET 640 TO NET 645	NET 645 TO NET 650	NET 650 TO NET 655	NET 655 TO NET 660	NET 660 TO NET 665	NET 665 TO NET 670	NET 670 TO NET 675	NET 675 TO NET 680	NET 680 TO NET 685	NET 685 TO NET 690	NET 690 TO NET 695	NET 695 TO NET 700	NET 700 TO NET 705	NET 705 TO NET 710	NET 710 TO NET 715	NET 715 TO NET 720	NET 720 TO NET 725	NET 725 TO NET 730	NET 730 TO NET 735	NET 735 TO NET 740	NET 740 TO NET 745	NET 745 TO NET 750	NET 750 TO NET 755	NET 755 TO NET 760	NET 760 TO NET 765	NET 765 TO NET 770	NET 770 TO NET 775	NET 775 TO NET 780	NET 780 TO NET 785	NET 785 TO NET 790	NET 790 TO NET 795	NET 795 TO NET 800	NET 800 TO NET 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1535	NET 1535 TO NET 1540	NET 1540 TO NET 1545	NET 1545 TO NET 1550	NET 1550 TO NET 1555	NET 1555 TO NET 1560	NET 1560 TO NET 1565	NET 1565 TO NET 1570	NET 1570 TO NET 1575	NET 1575 TO NET 1580	NET 1580 TO NET 1585	NET 1585 TO NET 1590	NET 1590 TO NET 1595	NET 1595 TO NET 1600	NET 1600 TO NET 1605	NET 1605 TO NET 1610	NET 1610 TO NET 1615	NET 1615 TO NET 1620	NET 1620 TO NET 1625	NET 1625 TO NET 1630	NET 1630 TO NET 1635	NET 1635 TO NET 1640	NET 1640 TO NET 1645	NET 1645 TO NET 1650	NET 1650 TO NET 1655	NET 1655 TO NET 1660	NET 1660 TO NET 1665	NET 1665 TO NET 1670	NET 1670 TO NET 1675	NET 1675 TO NET 1680	NET 1680 TO NET 1685	NET 1685 TO NET 1690	NET 1690 TO NET 1695	NET 1695 TO NET 1700	NET 1700 TO NET 1705	NET 1705 TO NET 1710	NET 1710 TO NET 1715	NET 1715 TO NET 1720	NET 1720 TO NET 1725	NET 1725 TO NET 1730	NET 1730 TO NET 1735	NET 1735 TO NET 1740	NET 1740 TO NET 1745	NET 1745 TO NET 1750	NET 1750 TO NET 1755	NET 1755 TO NET 1760	NET 1760 TO NET 1765	NET 1765 TO NET 1770	NET 1770 TO NET 1775	NET 1775 TO NET 1780	NET 1780 TO NET 1785	NET 1785 TO NET 1790	NET 1790 TO NET 1795	NET 1795 TO NET 1800	NET 1800 TO NET 1805	NET 1805 TO NET 1810	NET 1810 TO NET 1815	NET 1815 TO NET 1820	NET 1820 TO NET 1825	NET 1825 TO NET 1830	NET 1830 TO NET 1835	NET 1835 TO NET 1840	NET 1840 TO NET 1845	NET 1845 TO NET 1850	NET 1850 TO NET 1855	NET 1855 TO NET 1860	NET 1860 TO NET 1865	NET 1865 TO NET 1870	NET 1870 TO NET 1875	NET 1875 TO NET 1880	NET 1880 TO NET 1885	NET 1885 TO NET 1890	NET 1890 TO NET 1895	NET 1895 TO NET 1900	NET 1900 TO NET 1905	NET 1905 TO NET 1910	NET 1910 TO NET 1915	NET 1915 TO NET 1920	NET 1920 TO NET 1925	NET 1925 TO NET 1930	NET 1930 TO NET 1935	NET 1935 TO NET 1940	NET 1940 TO NET 1945	NET 1945 TO NET 1950	NET 1950 TO NET 1955	NET 1955 TO NET 1960	NET 1960 TO NET 1965	NET 1965 TO NET 1970	NET 1970 TO NET 1975	NET 1975 TO NET 1980	NET 1980 TO NET 1985	NET 1985 TO NET 1990	NET 1990 TO NET 1995	NET 1995 TO NET 2000	NET 2000 TO NET 2005	NET 2005 TO NET 2010	NET 2010 TO NET 2015	NET 2015 TO NET 2020	NET 2020 TO NET 2025	NET 2025 TO NET 2030	NET 2030 TO NET 2035	NET 2035 TO NET 2040	NET 2040 TO NET 2045	NET 2045 TO NET 2050	NET 2050 TO NET 2055	NET 2055 TO NET 2060	NET 2060 TO NET 2065	NET 2065 TO NET 2070	NET 2070 TO NET 2075	NET 2075 TO NET 2080	NET 2080 TO NET 2085	NET 2085 TO NET 2090	NET 2090 TO NET 2095	NET 2095 TO NET 2100	NET 2100 TO NET 2105	NET 2105 TO NET 2110	NET 2110 TO NET 2115	NET 2115 TO NET 2120	NET 2120 TO NET 2125	NET 2125 TO NET 2130	NET 2130 TO NET 2135	NET 2135 TO NET 2140	NET 2140 TO NET 2145	NET 2145 TO NET 2150	NET 2150 TO NET 2155	NET 2155 TO NET 2160	NET 2160 TO NET 2165	NET 2165 TO NET 2170	NET 2170 TO NET 2175	NET 2175 TO NET 2180	NET 2180 TO NET 2185	NET 2185 TO NET 2190	NET 2190 TO NET 2195	NET 2195 TO NET 2200	NET 2200 TO NET 2205	NET 2205 TO NET 2210	NET 2210 TO NET 2215	NET 2215 TO NET 2220	NET 2220 TO NET 2225	NET 2225 TO NET 2230	NET 2230 TO NET 2235	NET 2235 TO NET 2240	NET 2240 TO NET 2245	NET 2245 TO NET 2250	NET 2250 TO NET 2255	NET 2255 TO NET 2260	NET 2260 TO NET 2265	NET 2265 TO NET 2270	NET 2270 TO NET 2275	NET 2275 TO NET 2280	NET 2280 TO NET 2285	NET 2285 TO NET 2290	NET 2290 TO NET 2295	NET 2295 TO NET 2300	NET 2300 TO NET 2305	NET 2305 TO NET 2310	NET 2310 TO NET 2315	NET 2315 TO NET 2320	NET 2320 TO NET 2325	NET 2325 TO NET 2330	NET 2330 TO NET 2335	NET 2335 TO NET 2340	NET 2340 TO NET 2345	NET 2345 TO NET 2350	NET 2350 TO NET 2355	NET 2355 TO NET 2360	NET 2360 TO NET 2365	NET 2365 TO NET 2370	NET 2370 TO NET 2375	NET 2375 TO NET 2380	NET 2380 TO NET 2385	NET 2385 TO NET 2390	NET 2390 TO NET 2395	NET 2395 TO NET 2400	NET 2400 TO NET 2405	NET 2405 TO NET 2410	NET 2410 TO NET 2415	NET 2415 TO NET 2420	NET 2420 TO NET 2425	NET 2425 TO NET 2430	NET 2430 TO NET 2435	NET 2435 TO NET 2440	NET 2440 TO NET 2445	NET 2445 TO NET 2450	NET 2450 TO NET 2455	NET 2455 TO NET 2460	NET 2460 TO NET 2465	NET 2465 TO NET 2470	NET 2470 TO NET 2475	NET 2475 TO NET 2480	NET 2480 TO NET 2485	NET 2485 TO NET 2490	NET 2490 TO NET 2495	NET 2495 TO NET 2500	NET 2500 TO NET 2505	NET 2505 TO NET 2510	NET 2510 TO NET 2515	NET 2515 TO NET 2520	NET 2520 TO NET 2525	NET 2525 TO NET 2530	NET 2530 TO NET 2535	NET 2535 TO NET 2540	NET 2540 TO NET 2545	NET 2545 TO NET 2550	NET 2550 TO NET 2555	NET 2555 TO NET 2560	NET 2560 TO NET 2565	NET 2565 TO NET 2570	NET 2570 TO NET 2575	NET 2575 TO NET 2580	NET 2580 TO NET 2585	NET 2585 TO NET 2590	NET 2590 TO NET 2595	NET 2595 TO NET 2600	NET 2600 TO NET 2605	NET 2605 TO NET 2610	NET 2610 TO NET 2615	NET 2615 TO NET 2620	NET 2620 TO NET 2625	NET 2625 TO NET 2630	NET 2630 TO NET 2635	NET 2635 TO NET 2640	NET 2640 TO NET 2645	NET 2645 TO NET 2650	NET 2650 TO NET 2655	NET 2655 TO NET 2660	NET 2660 TO NET 2665	NET 2665 TO NET 2670	NET 2670 TO NET 2675	NET 2675 TO NET 2680	NET 2680 TO NET 2685	NET 2685 TO NET 2690	NET 2690 TO NET 2695	NET 2695 TO NET 2700	NET 2700 TO NET 2705	NET 2705 TO NET 2710	NET 2710 TO NET 2715	NET 2715 TO NET 2720	NET 2720 TO NET 2725	NET 2725 TO NET 2730	NET 2730 TO NET 2735	NET 2735 TO NET 2740	NET 2740 TO NET 2745	NET 2745 TO NET 2750	NET 2750 TO NET 2755	NET 2755 TO NET 2760	NET 2760 TO NET 2765	NET 2765 TO NET 2770
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# PROPOSED TRAFFIC CONTROL



THIS IS A "RECOMMENDED GUIDE" FOR TRAFFIC CONTROL ONLY. THIS DOCUMENT SHALL BE APPROVED BY THE OWNER OF THE AFFECTED RIGHT OF WAY. HOLDER OF THIS DOCUMENT AGREES TO ASSUME ALL RISKS AND HOLD HARMLESS GIVE 'EM A BRAKE SAFETY AND ITS EMPLOYEES FROM ANY PROPERTY DAMAGE AND/OR PERSONAL INJURY CAUSED BY OR ARISING OUT OF USE OF THIS DOCUMENT

ALL TRAFFIC CONTROL DEVICES AND THEIR USAGE SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), 2011 EDITION. IN ADDITION TO THIS, ALL TRAFFIC CONTROL DEVICES USED ON THIS PROJECT SHALL MEET THE REQUIREMENTS OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) "QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES"-1992