

City of Muskegon 2024 Road & Utility Construction Project Summary

Project Name: Edgewater Street from Lakeshore to Thompson

Project Type: Complete reconstruction including some new storm sewers, water service lines replaced to the meter, new road and new driveways.

Contractor: To be determined

City Neighborhood(s): Beachwood-Bluffton

Project Summary: The pavement in Edgewater has reached the end of its life. In order to replace it, the entire street including the driveway approaches will need to be dug up and replaced. The project includes replacing your water service line all the way to the meter, so the contractor will need to enter your basement (or the area where your water service enters your home or business). You'll need to allow extra time to get to and from your home or business, and at times you may need to park on the street and walk to your home. Your water will need to be shut off for short periods of time and you will have notice of when this will happen.

Changes to Expect: The intersection of Edgewater and Lakeshore will be changed to eliminate the "slip-lane" that allows traffic to go straight from westbound Lakeshore to westbound Edgewater. Edgewater will turn and intersect Lakeshore in a traditional intersection design. Some driveway changes will be necessary as a result.

Timeline/Timeframe: Late summer or fall. The project will take about two months to complete when started. Once the contractor has identified a start date, information will be sent to the residents along the project.

Lane, Road or Intersection Shutdown: Edgewater will be closed during construction and open only to the residents and businesses on the street. Edgewater may also experience some traffic impacts from another project in the Bluffton area, but the road will remain open to residents and businesses.

Contractor Project Update Link: To be determined

Project Contact Information:

Joel Brookens
Assistant City Engineer
Joel.brookens@shorelinecity.com

(231) 724-6900

FAQs:

How will my trash get picked up? The contractor will work with the City and Republic Waste to make sure your trash is picked up. You may have to bring your trash can to a different location than normal.

Why does the contractor need to get inside my house? A small portion of your water service pipe (the pipe that brings water into your home) is made of lead. The city is working to replace all water service pipes that have that small piece of lead, and the time has come for your service line to be replaced. The state requires the pipe be replaced all the way to your water meter, which is probably inside your home. The contractor will need to get to your water meter and work in that area as part of the replacement. In the meantime, your water is safe to drink. If you have any questions about this or about lead in your water, reach out to the project contacts listed above.

INDEX TO SHEETS

SHEET	DESCRIPTION
1	TITLE SHEET
2	CROSS SECTION AND DETAIL SHEET
3	STA 1+11.5 (P.O.B.) TO STA 5+10 ROAD PLAN AND PROFILE
4	STA 5+10 TO STA 9+63.15 (P.O.E.) ROAD PLAN AND PROFILE
5	TRAFFIC CONTROL

CITY OF MUSKEGON

EDGEWATER ST.

FROM THOMPSON AVE TO LAKESHORE DR.

TRAFFIC, SAFETY STANDARD PLANS

WZD-100-A GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS
 WZD-125-E TEMPORARY TRAFFIC CONTROL DEVICES

*STANDARD PLANS INCLUDED IN PROPOSAL

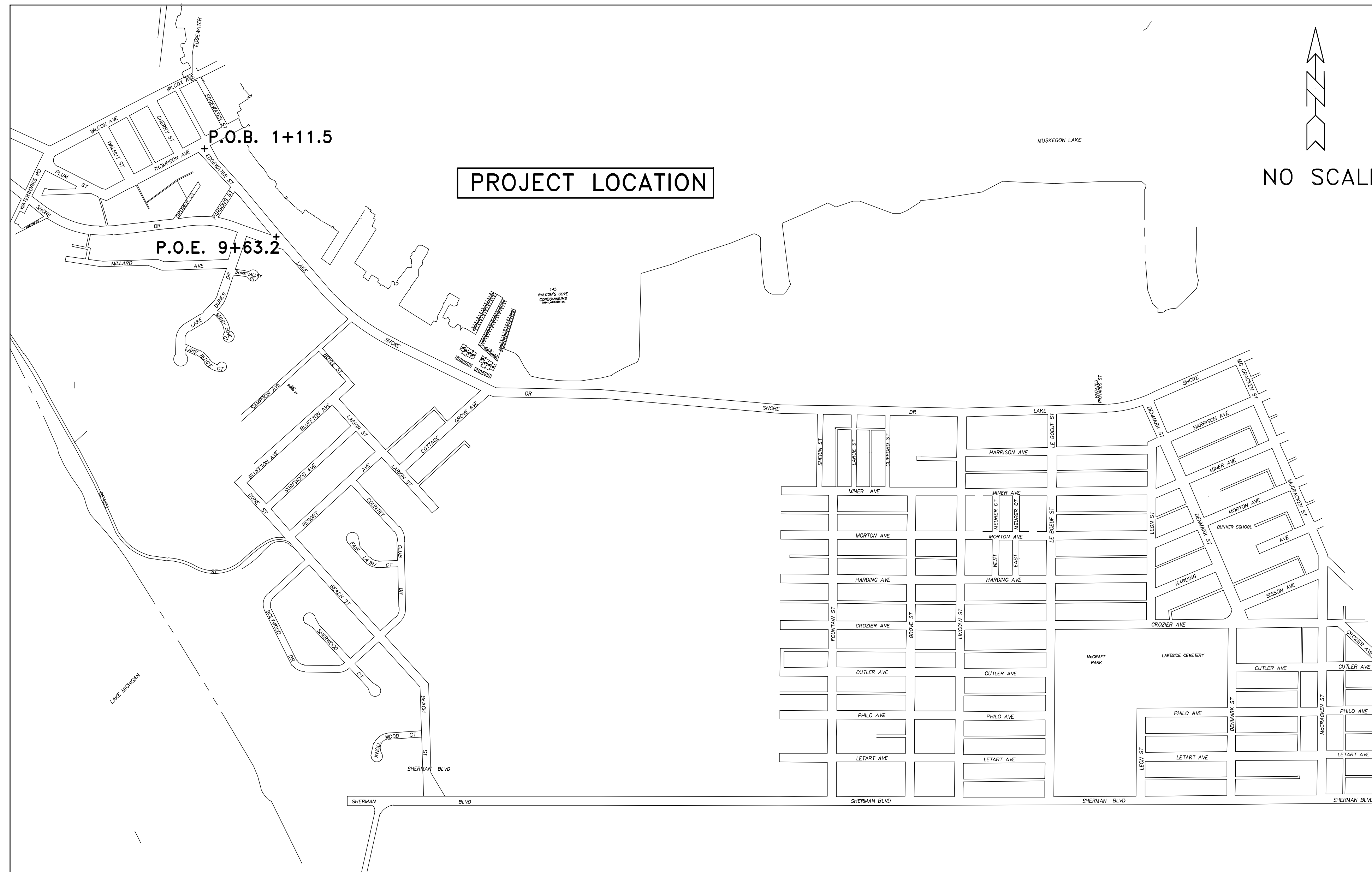
STANDARD PLANS

- R-1-G DRAINAGE STRUCTURES
- R-28-K CURB RAMP AND DETECTABLE WARNING DETAILS
- R-29-J DRIVEWAY OPENINGS & APPROACHES & CONCRETE SIDEWALKS
- R-30-G CONCRETE CURB AND CONCRETE CURB & GUTTER
- R-83-C UTILITY TRENCHES
- R-96-E SOIL EROSION & SEDIMENTATION CONTROL MEASURES
- R-7-F COVER B
- R-15-G COVER K

NOTE: STANDARD PLANS INCLUDED IN PROPOSAL

UTILITIES

- ELECTRIC**
 JOEL BROWN
 CONSUMERS ENERGY
 700 E STERNBERG ROAD
 NORTON SHORES, MI 49441
 (231) 557-8762
- TELEPHONE**
 CINDY WHITEMAN
 FRONTIER COMMUNICATIONS
 860 TERRACE STREET
 MUSKEGON MI 49440
 (231) 727-0290
- GAS**
 TONY FERRIER
 DTE ENERGY
 2359 OLTHOFF DRIVE
 MUSKEGON MI 49444
 (231) 726-0943 (CELL)
- CABLE**
 JIM STITZEL
 COMCAST
 700 W BROADWAY AVENUE
 MUSKEGON, MI 49441
 (810) 217-1642
- WATER & SEWER**
 DAVE BAKER
 CITY OF MUSKEGON DPW
 1350 E KEATING AVENUE
 MUSKEGON MI 49442
 (231) 724-4100



NOTE:
 THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THESE IMPROVEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2018 AASHTO GUIDELINES.

CONSTRUCTION INCLUDES 0.52 MILES OF HMA PAVEMENT RECONSTRUCTION; INCLUDING HMA REMOVAL, HMA PAVEMENT, STORM SEWER, CONCRETE SIDEWALKS, CURB RAMP, CURB & GUTTER, AND PAVEMENT MARKINGS ON EDGEWATER ST. IN THE CITY OF MUSKEGON, MUSKEGON COUNTY.

PREPARED UNDER THE SUPERVISION OF:

DAN VANDERHEIDE, P.E.
 CITY ENGINEER

CITY OF MUSKEGON
 ENGINEERING DEPARTMENT
 1350 E KEATING AVE
 MUSKEGON MI 49442

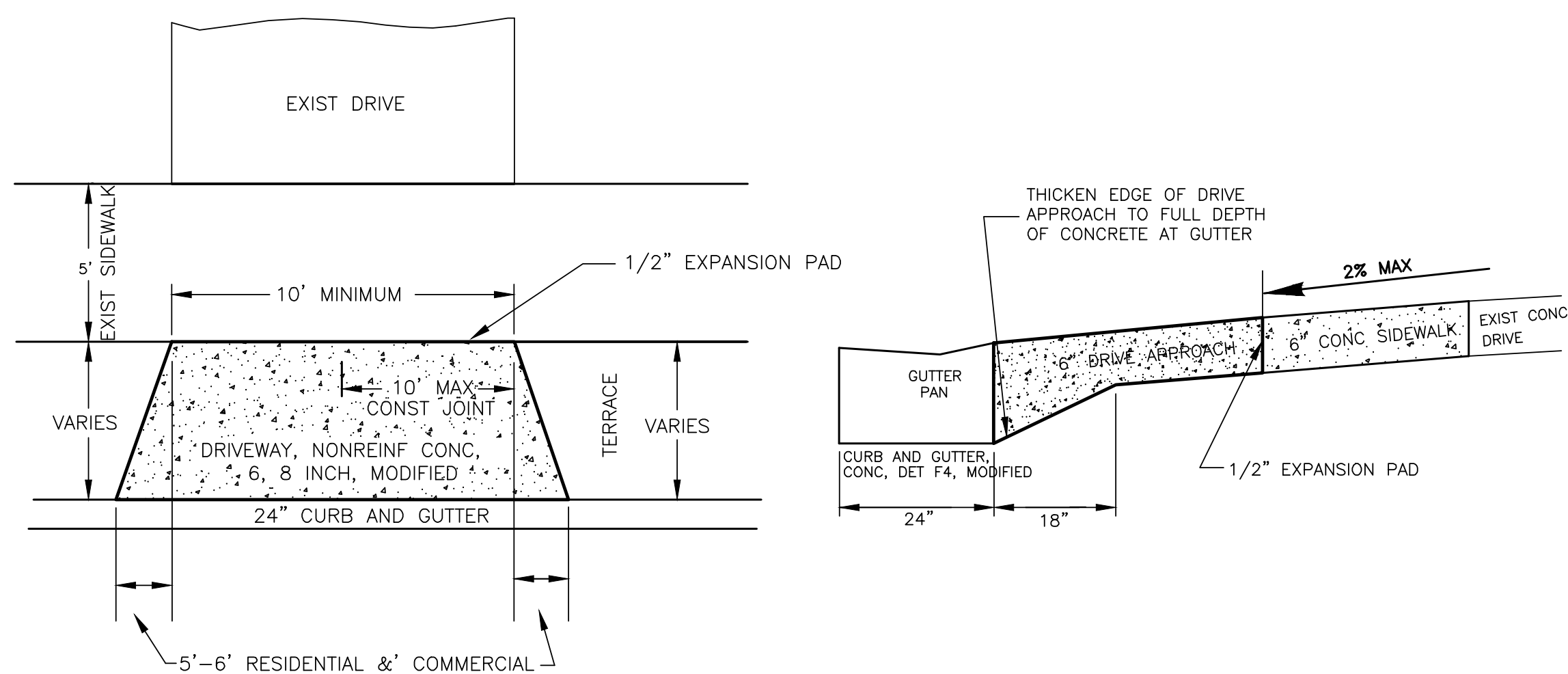
XXXXX
 REGISTRATION NUMBER

CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER | EDGEWATER STREET THOMPSON AVE TO LAKESHORE DR.

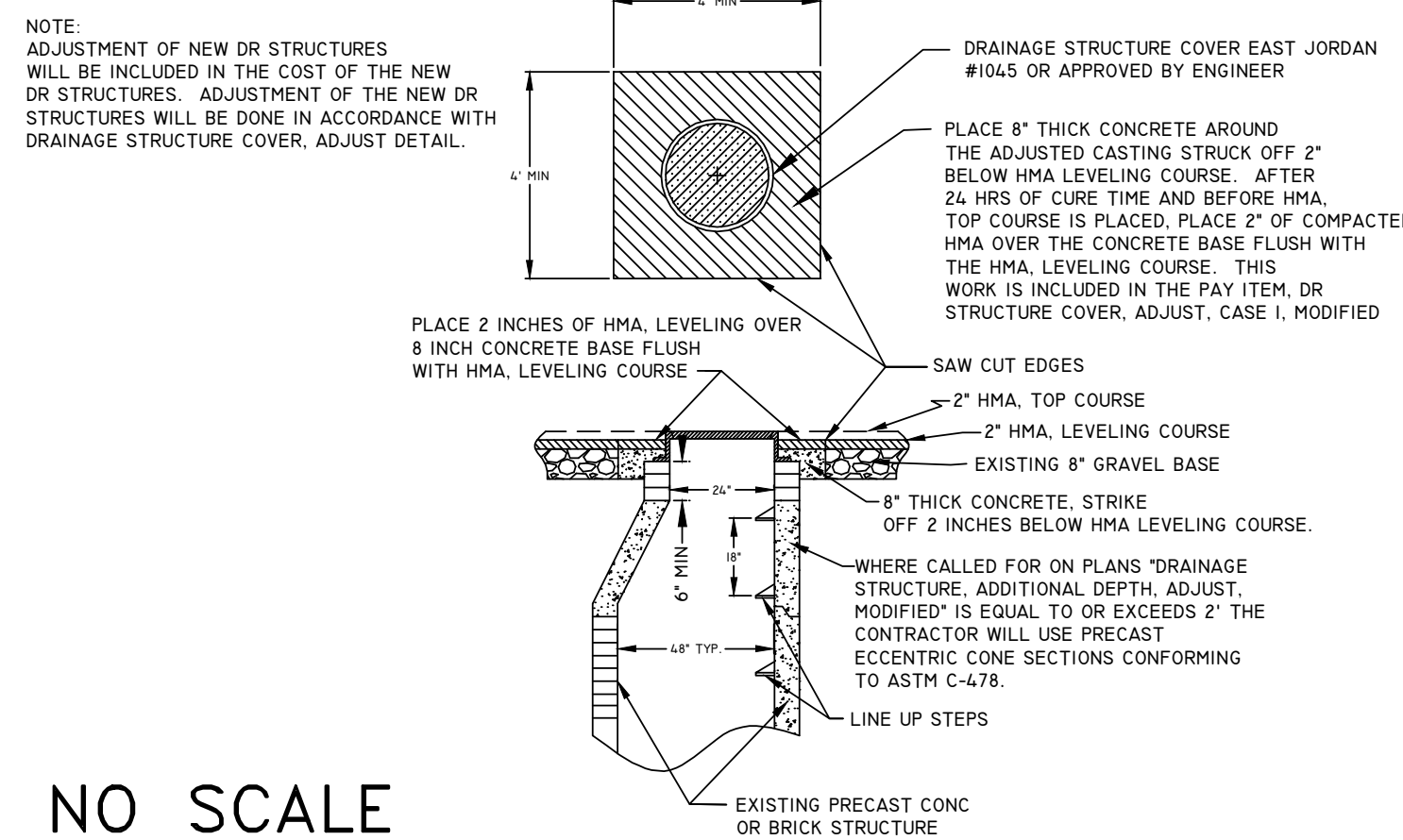
DRAWN	F. PEASE	DEC 2023	REVISION	SURVEY	F.P. J.L.	2023	H-92344
CHECKED			REVISION	AS-BUILT			PROJECT NO
APPROVED			REVISION	SCALE	NO SCALE		SHEET NO 1 OF 5

EDGEWATER STREET, THOMPSON AVE TO LSD CROSS SECTION AND DETAIL SHEET

TYPICAL DRIVE APPROACH DETAIL

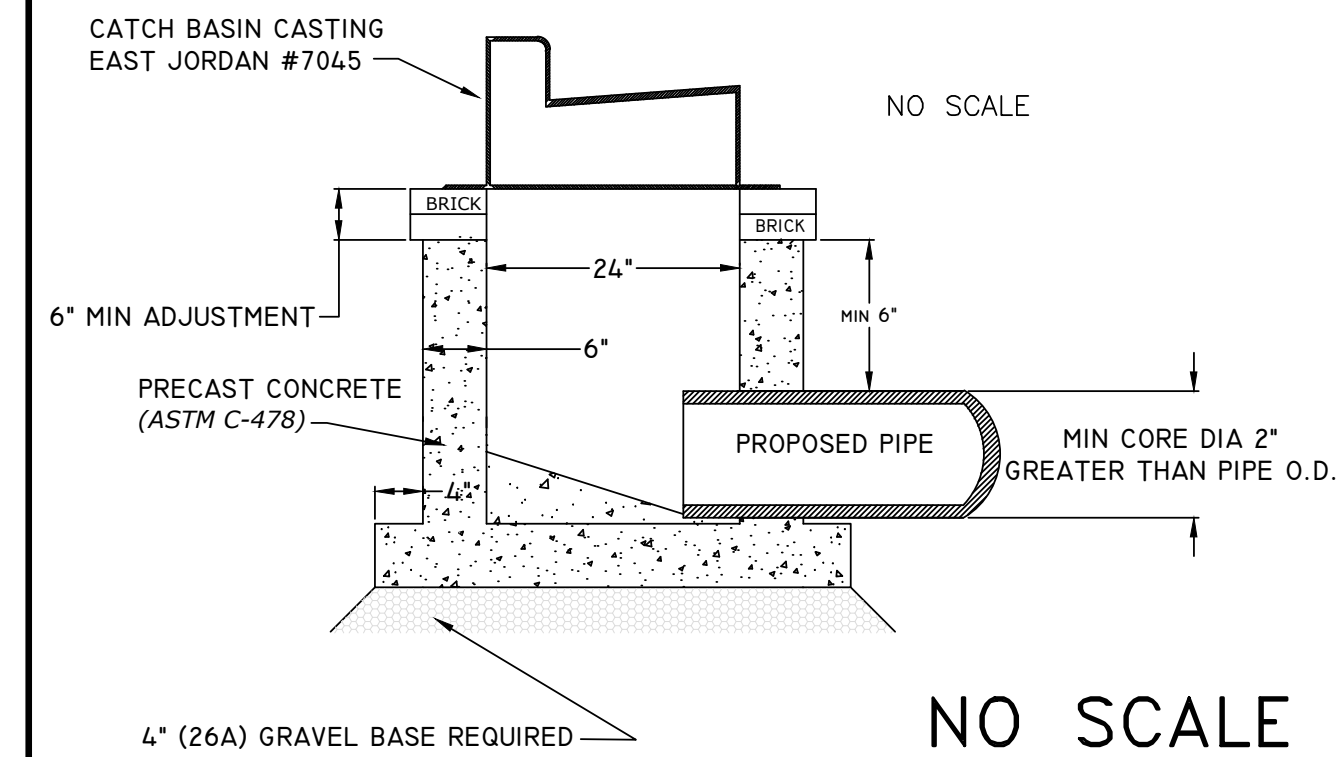


DRAINAGE STRUCTURE COVER, ADJUST DETAIL



NO SCALE

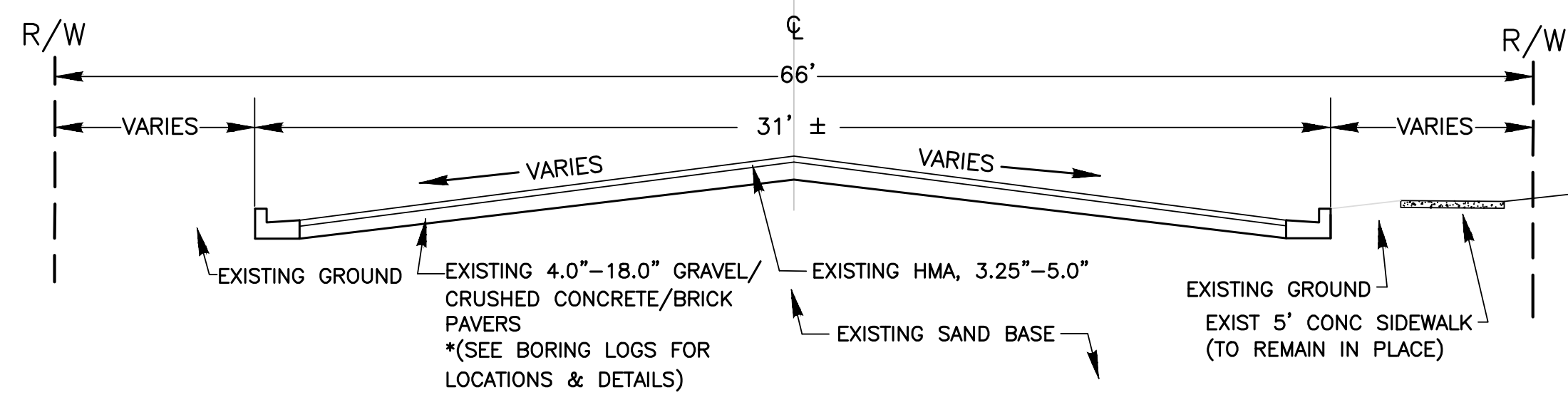
DETAIL FOR: CATCH BASIN 2 FT DIA, SPECIAL DETAIL



GENERAL NOTES:

- UPON REQUEST AND APPROVAL, THE CONTRACTOR MAY OBTAIN A WATER SUPPLY FROM THE CITY OF MUSKEGON FIRE HYDRANTS AT NO COST, PROVIDED THAT THEY FOLLOW THE CONDITIONS OF THE CITY WATER DEPARTMENT.
- WHENEVER SMALL CASTINGS (STOP BOXES, METER PITS, MONITORING WELLS) ARE ENCOUNTERED WITHIN THE WORK AREA THEY SHALL BE ADJUSTED AT NO COST TO THE CITY. PAYMENT SHALL BE INCLUDED WITH THE LINE ITEM OF WORK BEING PERFORMED.
- FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG, (811) 1-800-482-7171, A MINIMUM OF 3 WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF ALL UTILITY LINES. ALL MISS DIG PARTICIPATING MEMBERS WILL BE NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING OWNERS WHO MAY NOT BE PART OF THE MISS DIG ALERT SYSTEM.
- PUBLIC UTILITIES OF ALL TYPES HAVE BEEN SHOWN ON THE PLAN USING AVAILABLE INFORMATION, BUT ARE NOT GUARANTEED AS ACCURATE, OR THAT UTILITIES OTHER THAN THOSE SHOWN ARE NOT PRESENT. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS (EXCLUDING SAT., SUN., AND HOLIDAYS) BEFORE DIGGING (1-800-482-7171).
- EXISTING TRAFFIC CONTROL SIGNS THAT NEED TO BE REMOVED TO ALLOW THE CONTRACTOR TO WORK WILL BE REMOVED BY THE CONTRACTOR AND STORED IN A SAFE PLACE TO AVOID DAMAGE. THE CONTRACTOR SHALL THEN REINSTALL THE SIGNS IN THEIR ORIGINAL LOCATION OR AS DIRECTED BY THE ENGINEER. REMOVAL AND REPLACEMENT OF THE SIGNS WILL BE INCLUDED IN THE ITEM OF MINOR TRAFFIC DEVICES. SIGNS THAT ARE DAMAGED BY THE CONTRACTOR WILL BE REPLACED BY CITY FORCES, AND THE CONTRACTOR WILL PAY THE CITY FOR THE COST OF REPLACEMENT.
- THE CONTRACTOR SHALL SAW CUT ALL MEETS RELATIVE TO SIDEWALK OR PAVEMENT CONSTRUCTION UNLESS WAIVED BY THE ENGINEER. PAYMENT FOR SAW CUTTING SHALL BE INCLUDED IN THE PAYMENT FOR THE PAY ITEMS PAVT, REM, MODIFIED, CURB AND GUTTER, REM, HMA SURFACE, REM AND SIDEWALK, REM. NO ADDITIONAL PAYMENT WILL ALLOWED FOR SAW CUTTING.

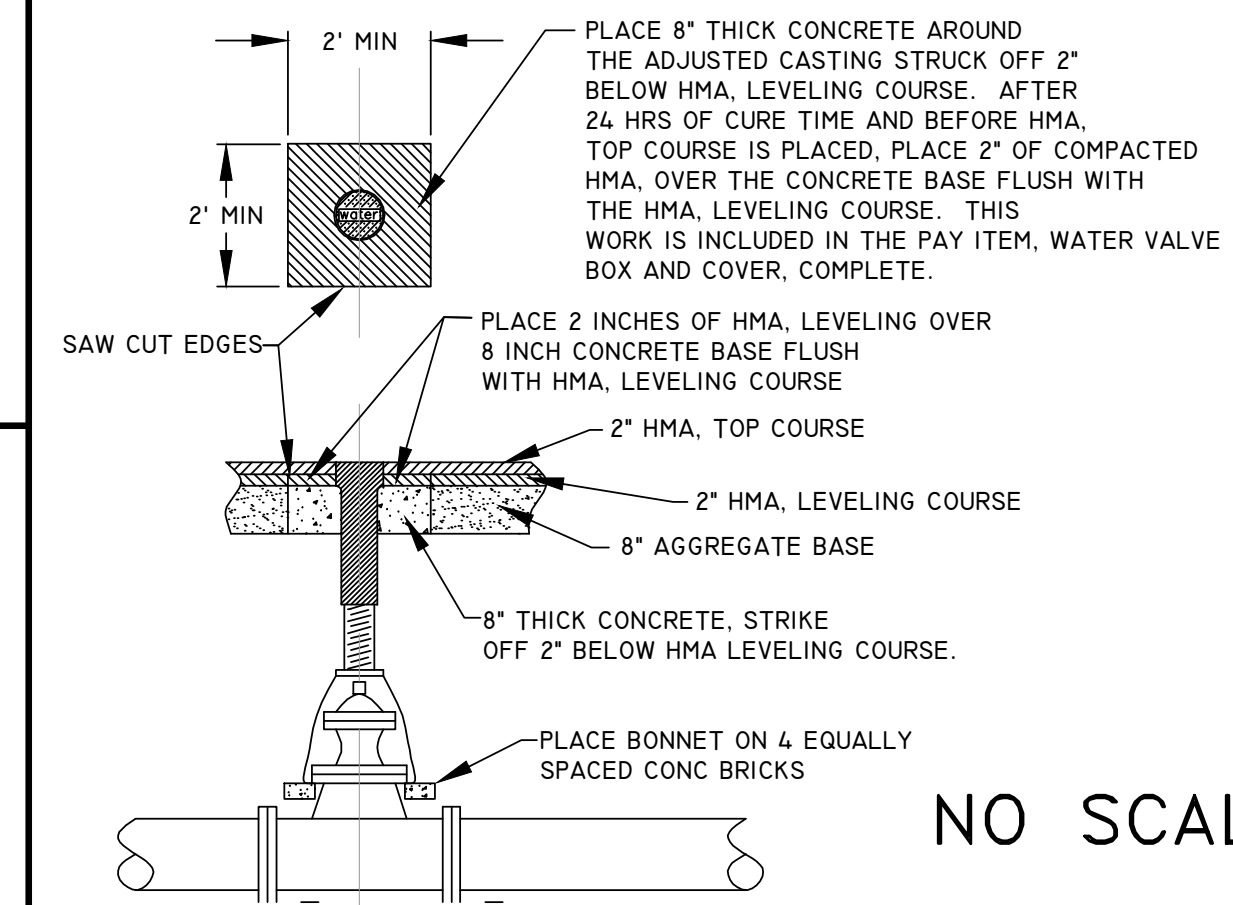
NOT TO SCALE
TYPICAL EXISTING X-SECTION
STATION 1+11.5-8+87 (31' +/-)
STATION 8+87-9+83.37 (VARIES)



DRAINAGE STRUCTURE COVERS

QUANTITY	DETAIL TYPE	CASTING DESCRIPTION	UNIT WEIGHT	TOTAL WEIGHT
25 EA	K	CATCH BASIN CASTING EAST JORDAN #7045 OR EQUAL	490#	2,450#
2 EA	B	MANHOLE CASTING EAST JORDAN #1045 OR EQUAL TYPE A - SOLID COVER	330#	660#

WATER VALVE BOX AND COVER, COMPLETE DETAIL



EDGEWATER ST. HMA APPLICATION

HMA MIX	RATE	PERFORMANCE GRADE	LIFT
HMA 4EML (TOP COURSE)	220# / SYD	70-28(P)	2 INCH-LIFT AWI 260, MIN
HMA 4EML (LEVEL COURSE)	220# / SYD	64-28	2 INCH-LIFT
HMA HAND PATCHING (HMA 4EML)	220# / SYD	64-28	2 INCH-LIFT

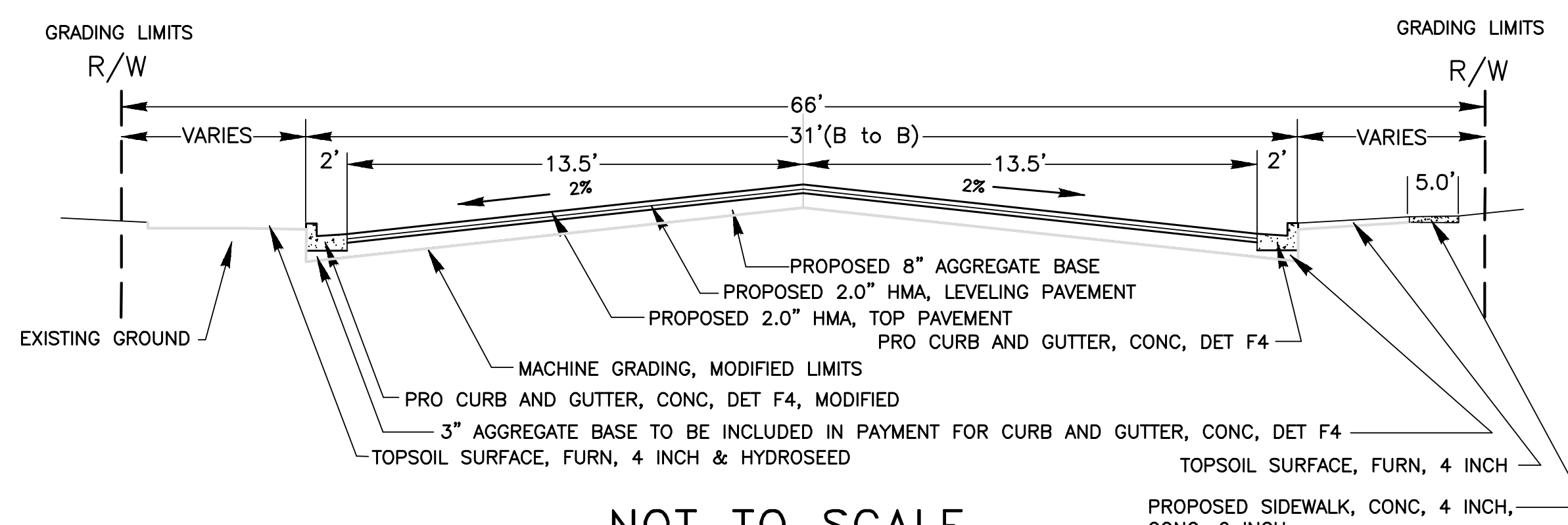
HMA BOND COAT, SS-HI, AT 0.05 TO 0.1 IS GAL/SY, SHALL BE PLACED BETWEEN EACH LIFT. THE COST IS INCLUDED WITH THE HMA PAY ITEM.

SUMMARY OF PAVEMENT CORING

CORE #	STATION #	HMA THICKNESS	GRAVEL THICKNESS	SOIL TYPE TO I-10" BELOW PAVT	NOTE
TB-01	5+55 RT	7.0"	N/A	SAND: BROWN FINE TO MEDIUM	NOTE: NO GROUND WATER ENCOUNTERED
TB-02	8+34 RT	7.5"	N/A	SAND: BROWN FINE TO MEDIUM	NOTE: NO GROUND WATER ENCOUNTERED

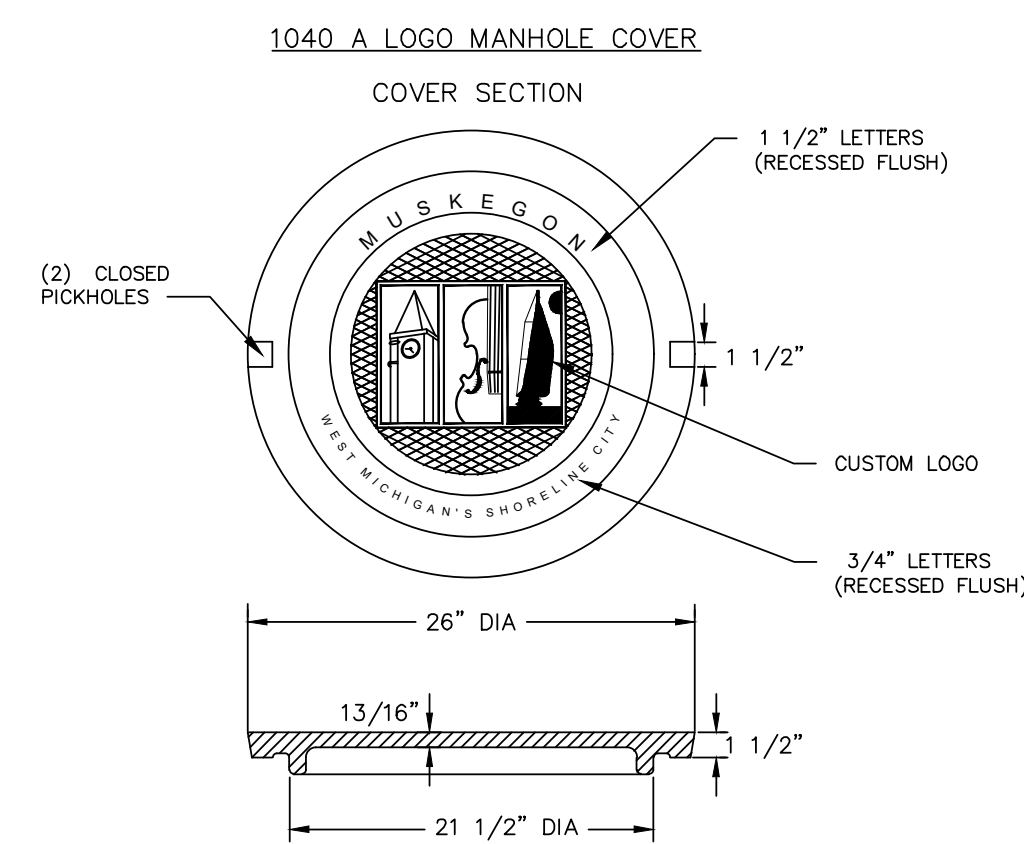
*SEE SOIL BORING LOGS IN CONTRACT DOCUMENTS

TYPICAL PROPOSED X-SECTION
STATION 1+11.5-9+63.2 (31' B-B)



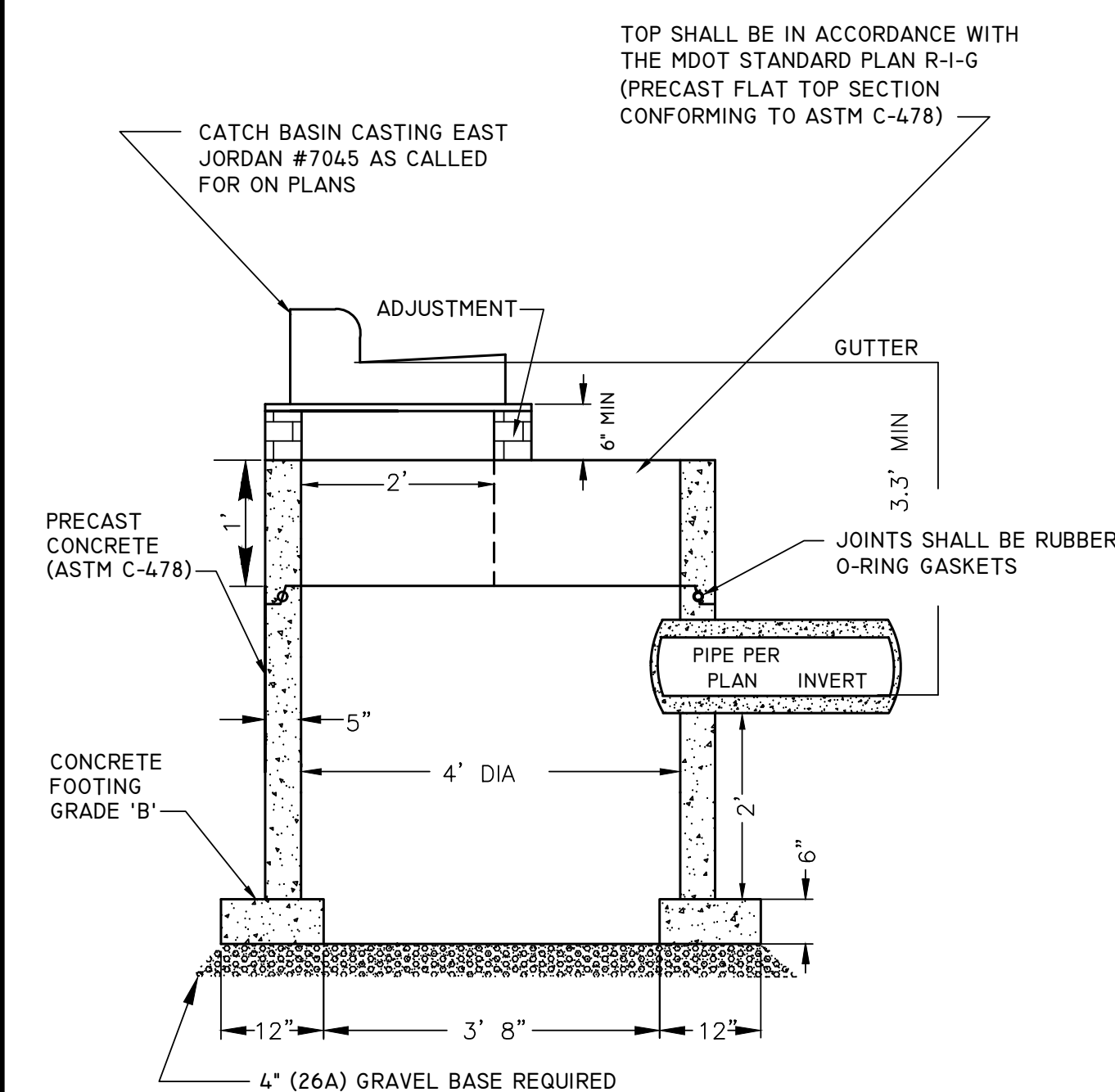
NOT TO SCALE

DETAIL FOR: COVER B

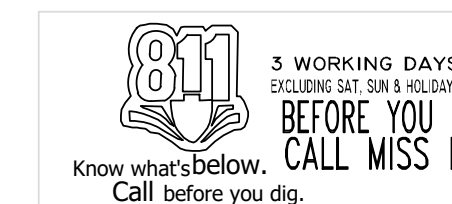


NO SCALE

DETAIL FOR: CATCH BASIN 4 FT DIA, SPECIAL DETAIL

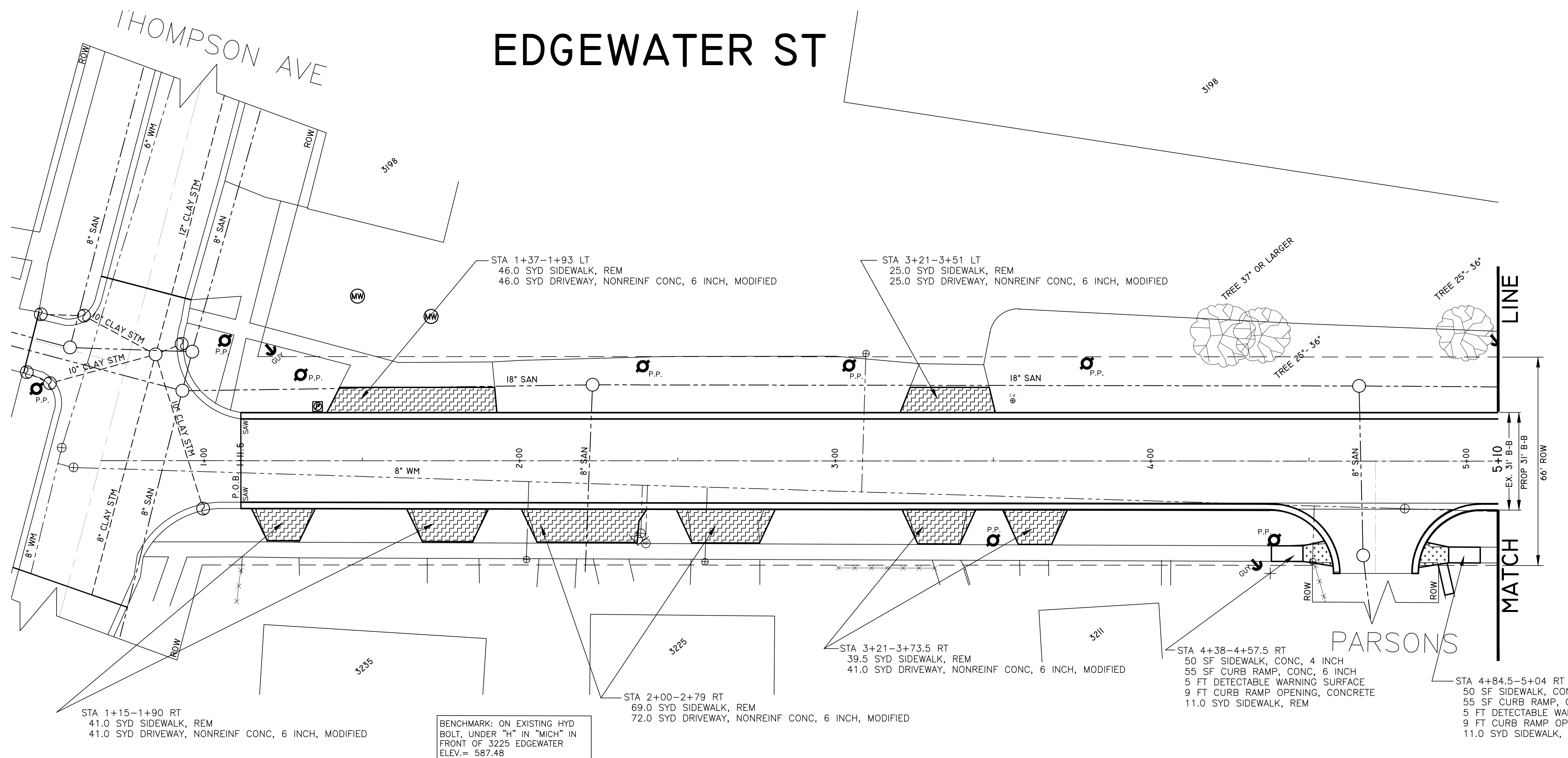
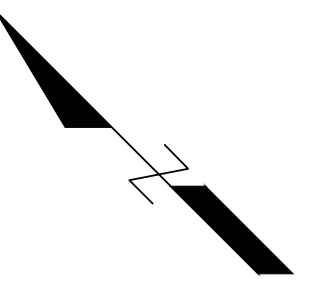


NO SCALE



CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER		EDGEWATER ST. THOMPSON TO LAKESHORE DR.	
DRAWN F. PEASE	DEC 23	REVISION	SURVEY F.P. J.L. 2023
CHECKED		REVISION	AS-BUILT
APPROVED		REVISION	SCALE NO SCALE SHEET NO 2 OF 5

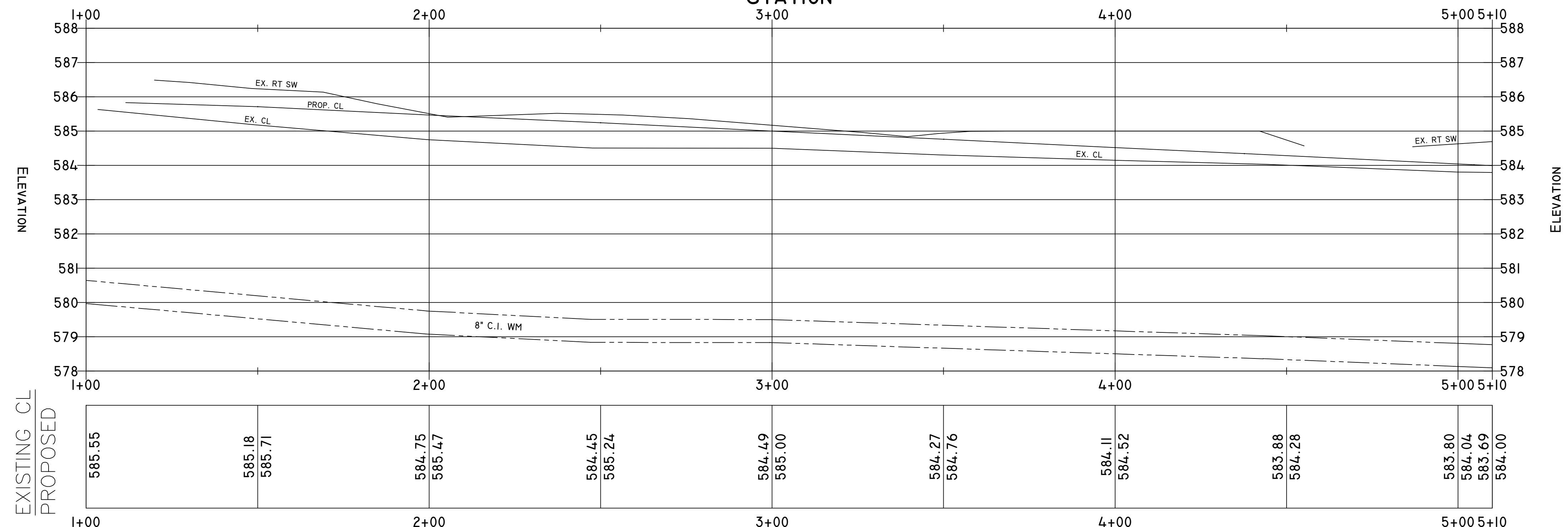
EDGEWATER ST

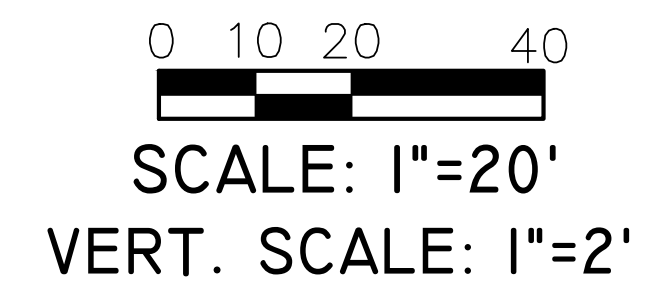


ADDITIONAL QUANTITIES THIS SHEET STA 1+00 TO 5+10		
DESCRIPTION	QUANTITIES	UNIT
MACHINE GRADING, MODIFIED	4	STA
AGGREGATE BASE, 8 INCH	1261	SYD
CURB AND GUTTER, CONC, DET F4	800	FT
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA
HMA, LEVELING	148	TON
HMA, TOP	148	TON
HYDROSEEDING	576	SYD
PAVT, REM, MODIFIED	1433	SYD
TOPSOIL SURFACE, FURN, 4 INCH	576	SYD
DR STRUCTURE COVER, ADJ, CASE 1, MODIFIED	1	EA
DR STRUCTURE COVER, TYPE B, MODIFIED	1	EA
WATER VALVE BOX AND COVER COMPLETE	1	EA
SIDEWALK, CONC, 6 INCH	50	SFT

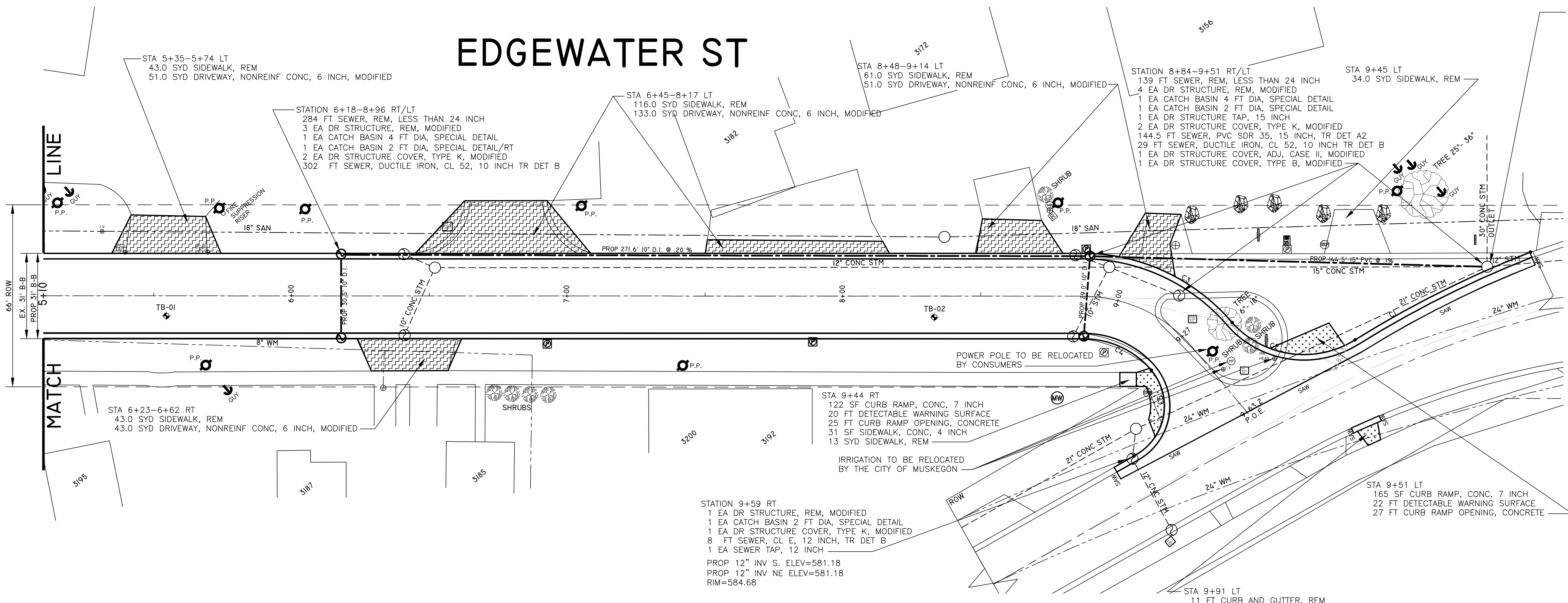
TOTAL QUANTITIES THIS SHEET		
DESCRIPTION	QUANTITIES	UNIT
MACHINE GRADING, MODIFIED	4	STA
AGGREGATE BASE, 8 INCH	1261	SYD
CURB AND GUTTER, CONC, DET F4	800	FT
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA
HMA, LEVELING	148	TON
HMA, TOP	148	TON
HYDROSEEDING	576	SYD
PAVT, REM, MODIFIED	1433	SYD
TOPSOIL SURFACE, FURN, 4 INCH	576	SYD
DR STRUCTURE COVER, ADJ, CASE 1, MODIFIED	1	EA
DR STRUCTURE COVER, TYPE B, MODIFIED	1	EA
WATER VALVE BOX AND COVER COMPLETE	1	EA
SIDEWALK, CONC, 4 INCH	100	SF
CURB RAMP, CONC, 6 INCH	110	SF
DETECTABLE WARNING SURFACE	10	FT
CURB RAMP OPENING, CONCRETE	18	FT
SIDEWALK, REM	22	SYD
DRIVEWAY, NONREINF CONC, 6 INCH, MODIFIED	225	SYD

PROFILE VIEW OF EDGEWATER STATION





EDGEWATER ST

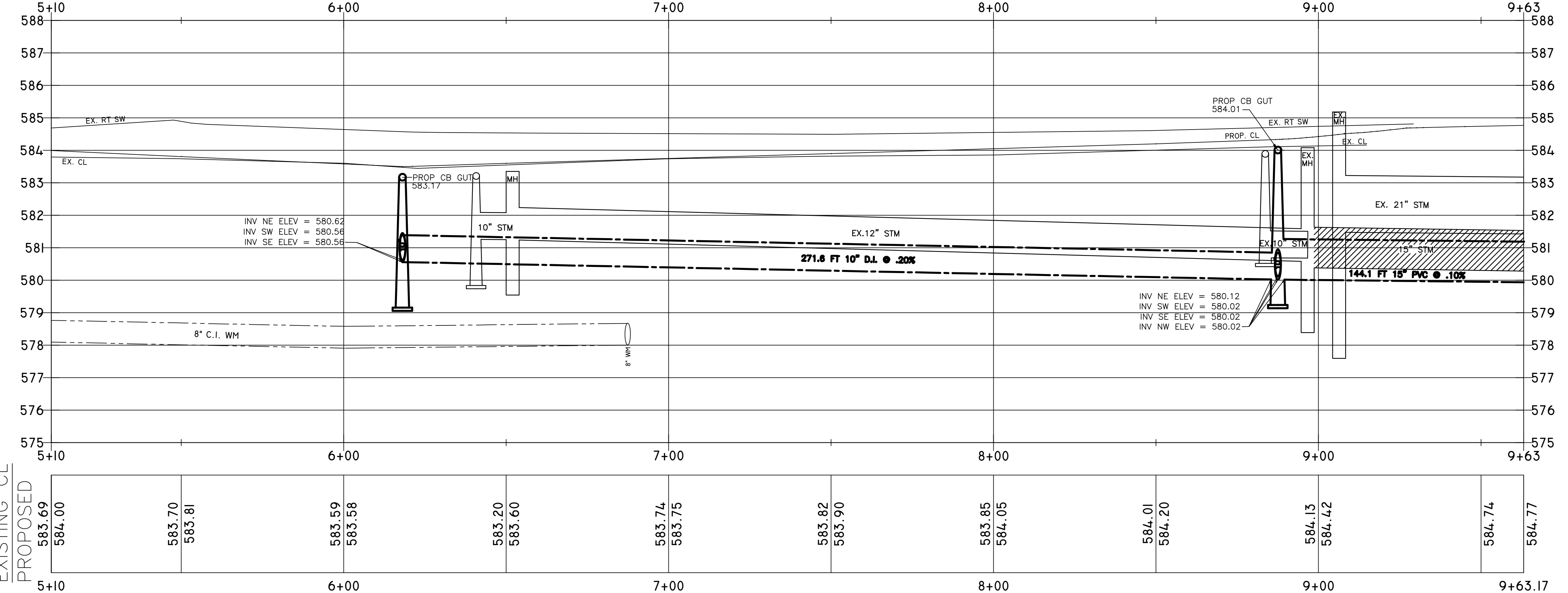


NOTE: 30" INV NE ELEV. = 579.88
FIELD VERIFY 30" INV BEFORE STARTING STORM. MAY NEED TO RAISE PROP CB INV'S 0.3 FT
PROP 15" INV NW ELEV=579.88 RIM=584.90

ADDITIONAL QUANTITIES THIS SHEET STA 5+10 TO 9+63.15		
DESCRIPTION	QUANTITIES	UNIT
MACHINE GRADING, MODIFIED	4.5	STA
AGGREGATE BASE, 8 INCH	1455	SYD
CURB AND GUTTER, CONC, DET F4	1015	FT
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	6	EA
HAND PATCHING	10	TON
HMA, LEVELING	168	TON
HMA, TOP	168	TON
HYDROSEEDING	965	SYD
PAVT, REM, MODIFIED	1887	SYD
TOPSOIL SURFACE, FURN, 4 INCH	965	SYD
TREE, REM, 6 INCH TO 18 INCH	1	EA
WATER VALVE BOX AND COVER COMPLETE	1	EA
SIDEWALK, CONC, 6 INCH	50	SFT

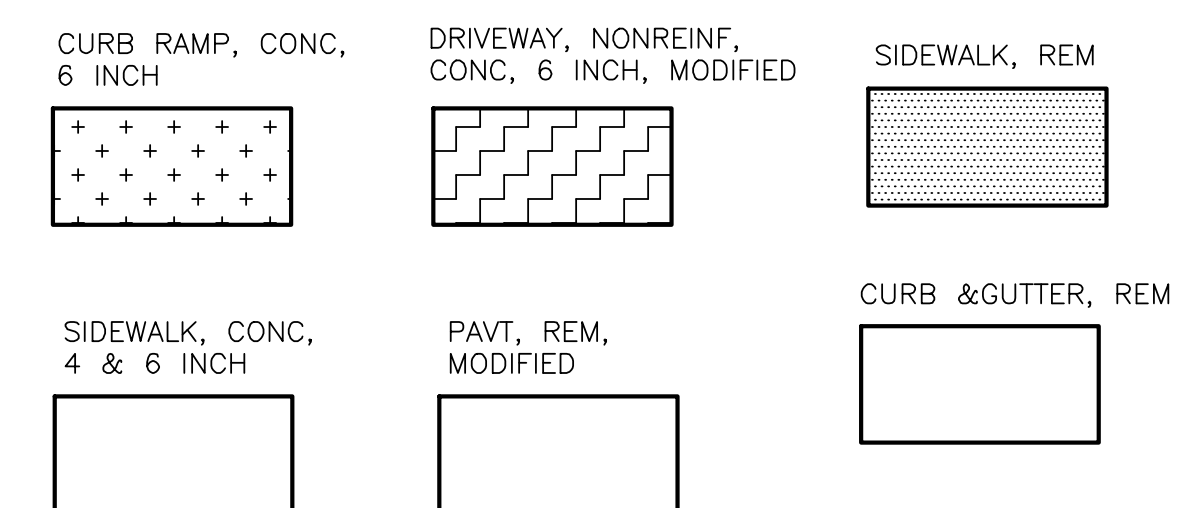
TOTAL QUANTITIES THIS SHEET		
DESCRIPTION	QUANTITIES	UNIT
MACHINE GRADING, MODIFIED	4.5	STA
AGGREGATE BASE, 8 INCH	1455	SYD
CURB AND GUTTER, CONC, DET F4	1026	FT
CURB AND GUTTER, REM	11	FT
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	6	EA
HAND PATCHING	10	TON
HMA, LEVELING	168	TON
HMA, TOP	168	TON
HYDROSEEDING	965	SYD
PAVT, REM, MODIFIED	1887	SYD
TOPSOIL SURFACE, FURN, 4 INCH	965	SYD
DR STRUCTURE COVER, ADJ, CASE II, MODIFIED	1	EA
DR STRUCTURE COVER, TYPE B, MODIFIED	1	EA
WATER VALVE BOX AND COVER COMPLETE	1	EA
SIDEWALK, CONC, 4 INCH	31	SF
CURB RAMP, CONC, 7 INCH	287	SF
CURB RAMP, CONC, 6 INCH	41	SF
DETECTABLE WARNING SURFACE	47	FT
CURB RAMP OPENING, CONCRETE	59	FT
SIDEWALK, REM	310	SYD
DRIVEWAY, NONREINF CONC, 6 INCH, MODIFIED	278	SYD
SEWER, REM, LESS THAN 24 INCH	423	FT
DR STRUCTURE, REM, MODIFIED	8	EA
CATCH BASIN 4 FT DIA, SPECIAL DETAIL	2	EA
CATCH BASIN 2 FT DIA, SPECIAL DETAIL	3	EA
DR STRUCTURE COVER, TYPE K, MODIFIED	5	EA
SEWER, DUCTILE IRON, CL 52, 10 INCH, TR DET B	331	FT
DR STRUCTURE, TAP, 15 INCH	1	EA
SEWER, PVC SDR 35, 15 INCH, TR DET A2	144.5	FT
SEWER, CL E, 12 INCH, TR DET B	8	FT
SEWER TAP, 12 INCH	1	EA

PROFILE VIEW OF EDGEWATER STATION



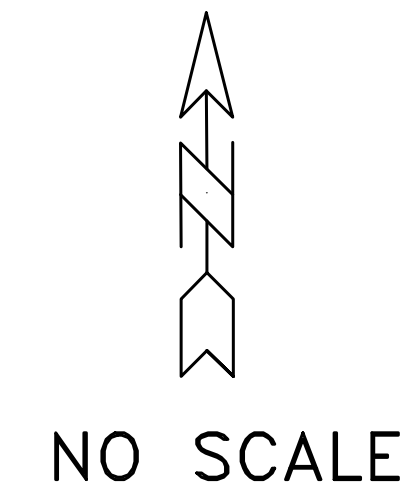
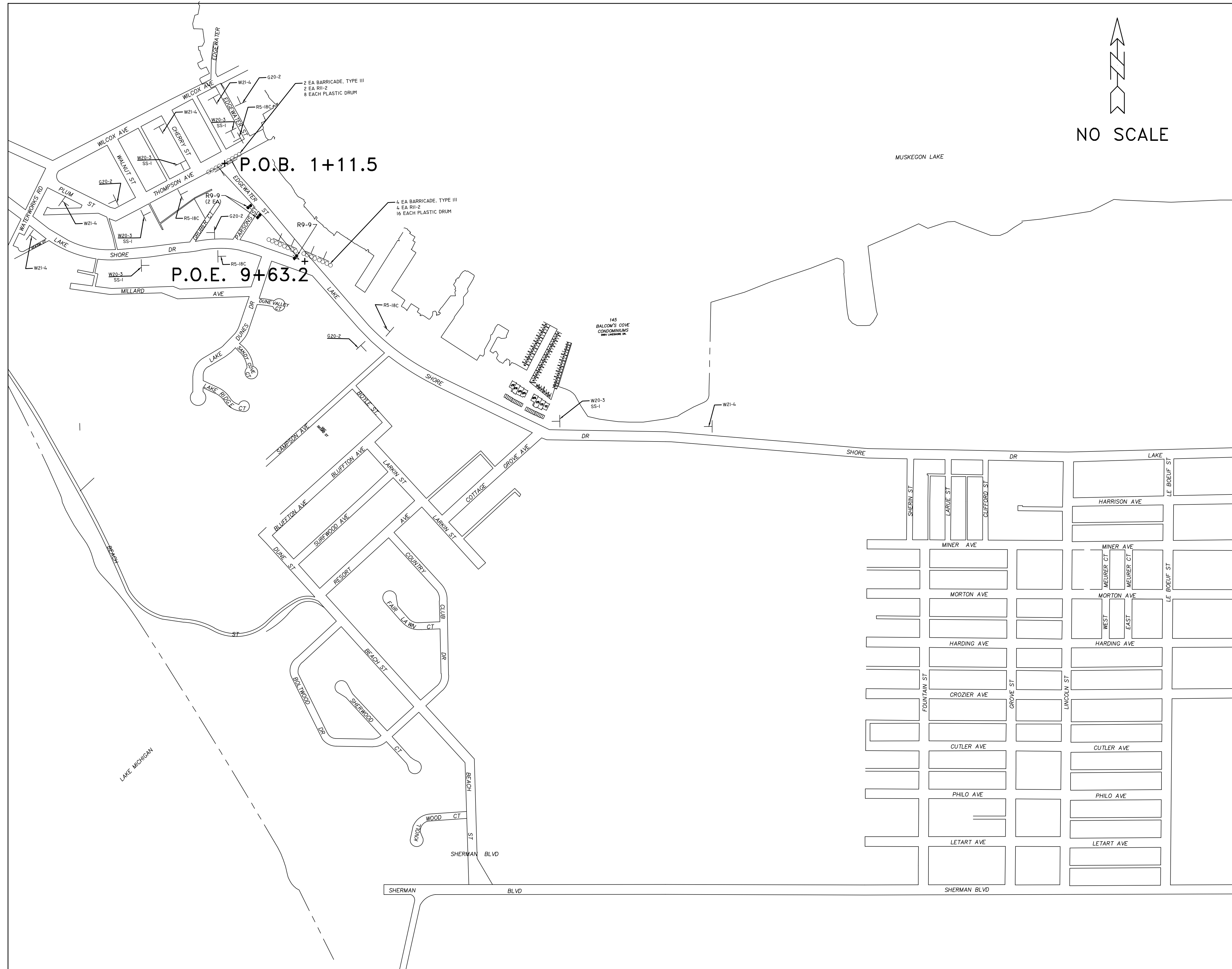
BENCHMARK: CHISLED "X" ON STEP NE COR BLDG, @ 3192 LAKESHORE DR ELEV.= 585.64

ROADWAY CURVE TABLE					
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD
C1	10°43'2"	380.8'	35.72'	71.24	71.13
C2	79°55'40"	35'	29.33'	48.83	44.96
C3	47°10'33"	71.7'	31.32'	59.05'	57.40'
C4	49°44'34"	32.0'	14.83'	27.78'	26.92'
C5	103°7'55"	20.2'	25.51'	36.44'	31.71'



0 10 20 40
SCALE: 1"=20'
VERT. SCALE: 1"=2'

TRAFFIC CONTROL DETAILS



ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
G20-2	END ROAD WORK	4	8 SFT	32 SFT
R5-18C	WORK ZONE BEGINS	4	16 SFT	64 SFT
R11-2	ROAD CLOSED	6	10 SFT	60 SFT
R9-9	SIDEWALK CLOSED	3	12.5 SFT	37.5 SFT
W20-3	ROAD CLOSED AHEAD	5	16 SFT	80 SFT
W21-4	ROAD WORK AHEAD	5	16 SFT	80 SFT
		TOTAL		353.5 SFT

ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY, SPECIAL				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
SS-1	EDGEWATER ST.	5	8 SFT	40 SFT
		TOTAL		40 SFT

ESTIMATED TRAFFIC CONTROL DEVICES		
MINOR TRAFFIC DEVICES		
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN	1	LS
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER	6	EA
PLASTIC DRUM, FLUORESCENT, FURN	6	EA
PLASTIC DRUM, FLUORESCENT, OPER	24	EA
SIGN, TYPE B, TEMP, PRISMATIC, FURN	353.5	SFT
SIGN, TYPE B, TEMP, PRISMATIC, OPER	353.5	SFT
SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, FURN	40	SFT
SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, OPER	40	SFT
MAINTENANCE GRAVEL, LM	100	CYD
DUST PALLIATIVE, APPLIED	30	TON
PEDESTRIAN TYPE II BARRICADE, TEMP	3	EA

TRAFFIC CONTROL NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES, RESIDENCES, AND CROSS STREETS WITH MAINTENANCE GRAVEL AS DIRECTED BY THE ENGINEER. CONTRACTOR MAY USE THE EXISTING AGGREGATE BASE FOR MAINTENANCE GRAVEL OR HMA MILLINGS. AGGREGATE OR HMA MILLINGS USED TO MAINTAIN TRAFFIC WILL BE PAID AT THE BID PROPOSAL UNIT PRICE FOR MAINTENANCE GRAVEL.
2. IN ADDITION TO THE 24 PLASTIC BARRELS USED FOR CHANNELING DEVICES AND ROAD CLOSURES, THE CONTRACTOR WILL SUPPLY AN ADDITIONAL 20 PLASTIC BARRELS FOR MARKING TEMPORARY DRIVES, BLOCKING EXISTING DRIVES, AND SIDEWALKS, ETC. AS DIRECTED BY THE ENGINEER.
3. PLEASE KEEP THE SIDEWALK RAMPS MAINTAINED AT EDGEWATER AND LAKESHORE DR. AND PARSONS AND EDGEWATER BY USING MAINTENANCE GRAVEL AS NECESSARY TO ACCOMMODATE PEDESTRIAN TRAFFIC.

SPECIAL SIGNS

