

## City of Muskegon 2024 Road & Utility Construction Project Summary

**Project Name:** Southern from Lakeshore to Seaway

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

**Contractor:** To Be Determined

**City Neighborhood(s):** Nims

**Project Summary:** The pavement in Southern has reached the end of its life. In order to replace it, the entire street from sidewalk to sidewalk 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). You'll need to allow extra time to get to and from your home this spring and summer, and at times you will need to park on a street that may be a block or two away from your home. Your water will need to be shut off for short periods of time and you will always have notice of when this will happen.

**Changes to Expect:** The road will look very similar to how it looks today, but everything on the surface and many things underground will be new. Many trees will need to be removed, but they will be replaced in the year following the project.

**Timeline/Timeframe:** The contractor has the option to build the project at any time during the construction season but is required to complete the work within about 4 months once they start. The project could start as early as March or finish as late as November. Once the contractor has identified a start date, information will be sent to the residents along the project.

**Lane, Road or Intersection Shutdown:** Southern may be closed for the whole project, only residents will be allowed to enter the construction zone. Side streets may also be closed for most of the project. Lakeshore and Seaway will remain open but they could be congested.

### Project Contact Information:

Joel Brookens  
Assistant City Engineer  
[Joel.brookens@shorelinecity.com](mailto: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 do all the trees in the streets need to be removed?** The sewers and water mains that are being replaced are far underground, in some cases as deep as 12 feet down. In order to safely dig down that far, the trees need to be removed. Replacement trees will be planted the year after the project.

**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.

**STANDARD PLANS**

- R-1-G DRAINAGE STRUCTURES
- R-7-F COVER B
- R-9-D COVER D
- R-11-E MONUMENT BOXES
- R-15-G COVER K
- R-28-J CURB RAMP AND DETECTABLE WARNING DETAILS
- R-29-I DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS
- R-30-G CONCRETE CURB & GUTTER
- R-39-K TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)
- R-41-H LONGITUDINAL PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)
- R-42-F TYPICAL JOINT LAYOUTS FOR CONCRETE PAVEMENT
- \*R-43-J LOCATION OF TRANSVERSE JOINTS IN PLAIN CONCRETE PAVEMENT
- R-83-C UTILITY TRENCHES
- R-96-E SOIL EROSION & SEDIMENTATION CONTROL MEASURES

\* INDICATES SPECIAL DETAIL INCLUDED IN PROPOSAL

**CITY OF MUSKEGON  
IN COOPERATION WITH  
MICHIGAN DEPARTMENT OF TRANSPORTATION,  
AND  
FEDERAL HIGHWAY ADMINISTRATION  
SOUTHERN AVENUE**

**FROM LAKE SHORE DRIVE TO SEAWAY DRIVE (BUS US 31)**

**CONTROL SECTION: STUL 61000**

**JOB NUMBER: 205415A**

**INDEX TO SHEETS**

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1	TITLE SHEET
2	CROSS SECTION-DETAIL SHEET
3	CROSS SECTION-DETAIL SHEET
4	STA 11+10 (P.O.B.) TO STA 20+00 REMOVAL PLAN
5	STA 20+00 TO STA 29+00 REMOVAL PLAN
6	STA 29+00 TO STA 31+33 (P.O.E.) REMOVAL PLAN
7	STA 11+10 (P.O.B.) TO STA 15+50 ROAD PLAN AND PROFILE
8	STA 15+50 TO STA 20+00 ROAD PLAN AND PROFILE
9	STA 20+00 TO STA 24+50 ROAD PLAN AND PROFILE
10	STA 24+50 TO STA 29+00 ROAD PLAN AND PROFILE
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22	PERMANENT PAVEMENT MARKING AND PAVEMENT GAPPING DETAILS

**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) 727-1134 (OFFICE)  
(231) 726-0290 (CELL)

**GAS**

TONY FERRIER  
DTE ENERGY  
2359 OLTHOFF DRIVE  
MUSKEGON MI 49444  
(231) 726-0943

**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 2011 AASHTO GUIDELINES.

**SPOTHERN AVE. TRAFFIC DATA**

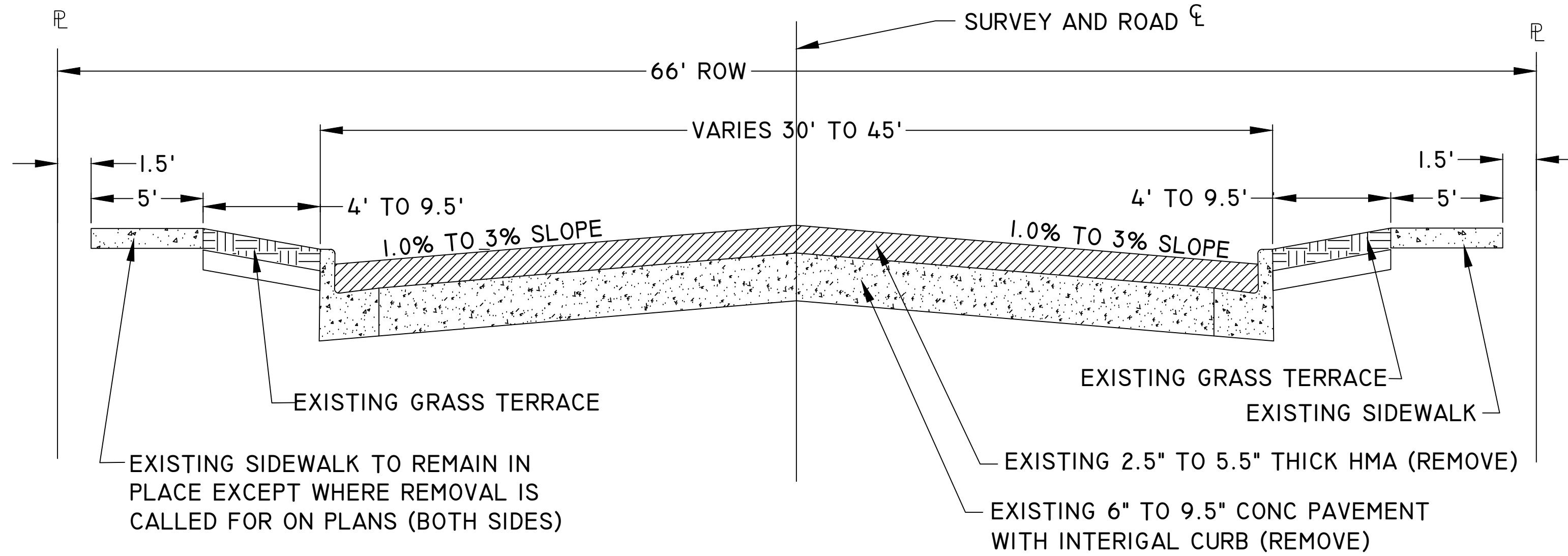
2021 PRESENT ADT	2700
2021 COMMERCIAL	4%
2041 FUTURE ADT	4900
2041 COMMERCIAL	4%
DESIGN SPEED	25 MPH
POSTED SPEED	30 MPH

0.72 MI OF PAVEMENT RECONSTRUCTION INCLUDES PAVEMENT REMOVAL, SANITARY SEWER, STORM SEWER, WATERMAIN, WATER SERVICES, CONCRETE CURB AND GUTTER, GRADING, AGGREGATE BASE, HMA PAVEMENT AND PAVEMENT MARKINGS ON SHERMAN BLVD. FROM LAKE SHORE DRIVE TO SEAWAY DRIVE (BUS US 31) IN THE CITY OF MUSKEGON, MUSKEGON COUNTY.

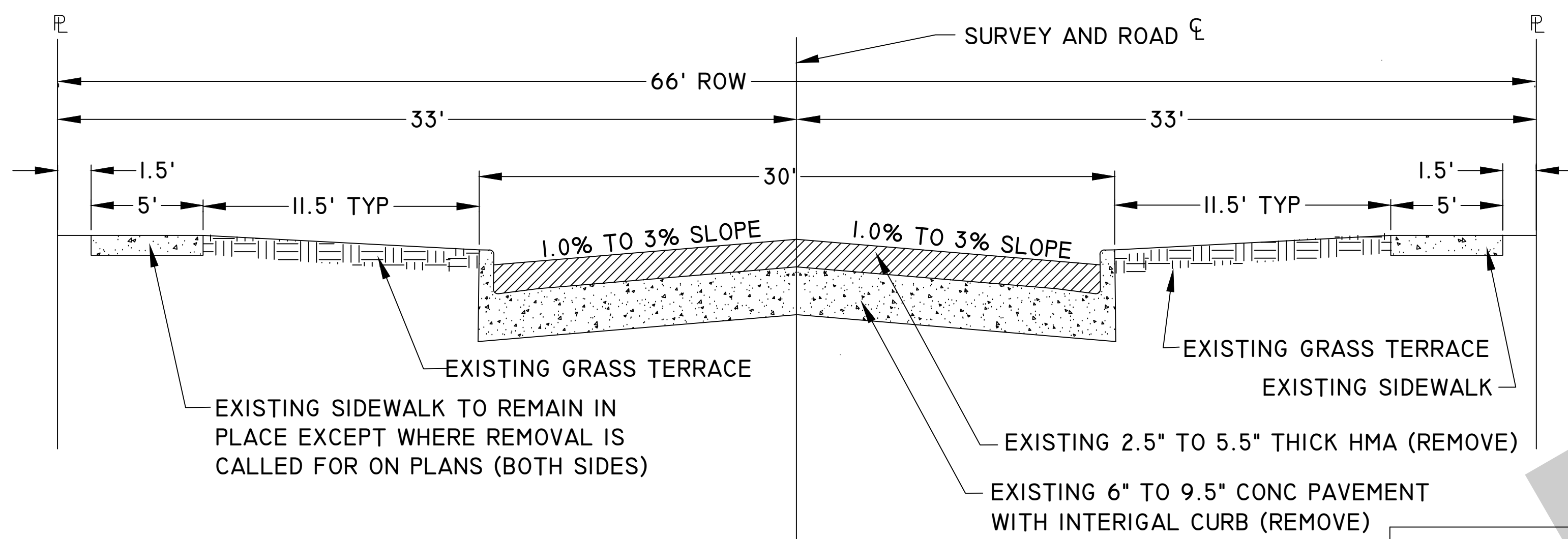
CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKE SHORE DRIVE TO SEAWAY DRIVE	
DRAWN	C WIGGINS JAN 23	REVISION	
CHECKED		AS-BUILT	
APPROVED			
		SURVEY WEST SHORE	11/22
		H-92004	
		PROJECT NO	
		SHEET NO 1 OF 22	

# TYPICAL EXISTING CROSS SECTIONS AND DETAIL SHEET

**TYPICAL EXISTING CROSS SECTION  
STATION 41+00 TO POE 44+00**



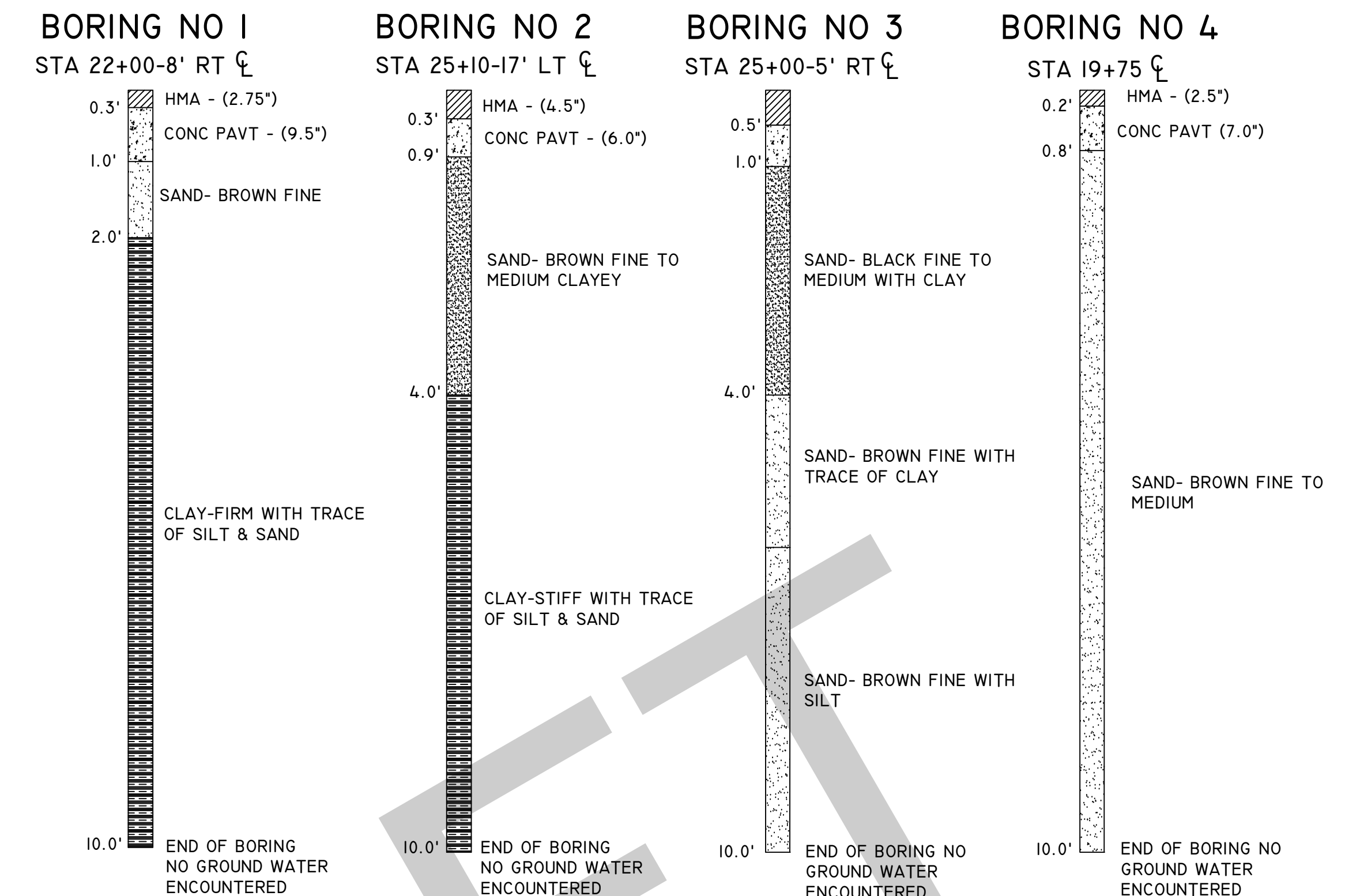
**TYPICAL EXISTING CROSS SECTION  
STATION 0+50 POB TO 5+50**



PAVT, REM, MODIFIED NOTE:  
EXISTING PAVEMENT CONSIST OF APPROXIMATELY 6" TO 9.5" CONC WITH A 2.5" TO 5.5" OVERLAY OF HMA. ONLY ONE PAVEMENT REMOVAL ITEM WILL BE CONSIDERED, REGARDLESS OF PAVEMENT THICKNESS OR MATERIALS. PAYMENT FOR CURB OR CURB AND GUTTER REMOVAL WILL BE PAID AS PAVT, REM, MODIFIED. THERE WILL BE NO SEPERATE PAY ITEM FOR CURB AND GUTTER REMOVAL.

MICALNEOUS QUANTIES THIS PROJECT		
UNDER GROUND SPRINKLING SYSTEM RESTORE	\$10,000	DOLLARS

## PAVEMENT CORE AND SOIL BORING LOGS



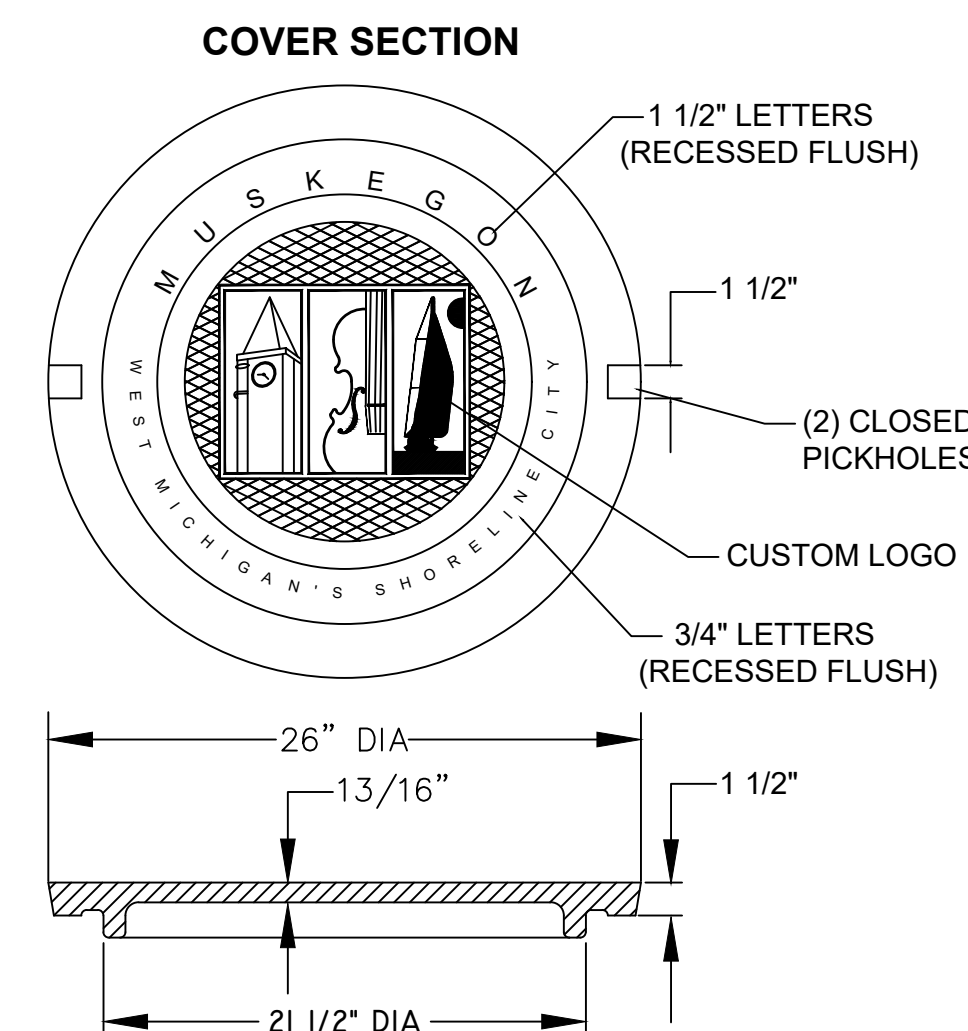
### GENERAL NOTES:

- 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) THAT ARE ENCOUNTERED WITHIN THE WORK AREA THEY SHALL BE ADJUSTED AT NO COST TO THE DEPARTMENT. THE DEPARTMENT WILL CONSIDER THE COST OF THIS WORK TO BE INCLUDED IN THE CONTRACT UNIT PRICES FOR OTHER RELEVANT PAY ITEMS.
- FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG, 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 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 TRAF 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.
- IRRIGATION SYSTEMS AS MARKED OR STAKED, AND ARE DAMAGED THROUGH CARELESS WORK BY THE CONTRACTOR WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE CITY OF MUSKEGON. THE CITY OF MUSKEGON WILL PAY FOR RELOCATION OF IRRIGATION SYSTEMS DUE TO WIDENING OF ROAD OR IN CONFLICT WITH THE CONSTRUCTION OF UNDERGROUND WORK. A COST NEGOTIATED BETWEEN THE ENGINEER AND THE CONTRACTOR FOR IRRIGATION REPAIRS WILL BE ESTABLISHED AND PAID FOR WITH THE CONTRACT PAY ITEM "UNDER GROUND SPRINKLING SYSTEM RESTORE". IT SHALL BE AT THE ENGINEER'S DISCRETION AS TO WHAT IRRIGATION REPAIR AND/OR RELOCATION IS THE RESULT OF CARELESS WORK BY THE CONTRACTOR OR THAT WHICH NECESSARY TO THE CONSTRUCTION OF ROAD OR UTILITY WORK.
- THE CONTRACTOR SHALL PREVENT EROSION AND CONTROL SEDIMENTATION ASSOCIATED WITH THE PROJECT. KEEP SEDIMENTATION WITHIN THE RIGHT OF WAY AND OUT OF SURFACE WATERS. CONSTRUCT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS TO INCLUDE EROSION CONTROL, INLET PROTECTION, FABRIC DROPS, ON ALL INLET STRUCTURES, NEW AND EXISTING, AND INSTALL TEMPORARY EROSION, SEDIMENTATION CONTROLS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REMOVE ON A DAILY BASIS SOIL TRACKED ONTO EXISTING PAVED ROADS, (VACUUM METHODS ARE PREFERRED BUT BROOM SWEEPING IS ACCEPTABLE IF THE MATERIAL IS REMOVED) THE CONTRACTOR SHALL INSPECT ALL SOIL EROSION / SEDIMENTATION CONTROL MEASURES ON A WEEKLY BASIS OR AFTER EACH RAIN FALL EVENT, CLEAN REPAIR, OR REPLACE, AS NECESSARY, TO ENSURE PROPER FUNCTION. ALL SOIL EROSION / SEDIMENTATION CONTROLS SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL SOIL EROSION / SEDIMENTATION CONTROL, EXCEPT FOR THE EROSION CONTROL, INLET PROTECTION, FABRIC DROP, SHALL BE INCLUDED WITH THE PAY ITEM PROJECT CLEAN UP NO OTHER PAYMENT SHALL BE MADE.
- CONCRETE SIDEWALK PLACED FOR BUS STOPS MUST BE A MINIMUM 5 FEET WIDE AS MEASURED ALONG BACK OF CURB AND 8 FEET DEEP AS MEASURED FROM BACK OF CURB.

## DRAINAGE STRUCTURE COVERS

TYPE	CASTING DESCRIPTION	QTY
COVER B, MODIFIED	MANHOLE CASTING EAST JORDAN #1045 OR EQUAL TYPE A - SOLID COVER AS DETAILED BELOW	12
COVER K, MODIFIED	CATCH BASIN CASTING EAST JORDAN #7045 OR EQUAL	9
COVER D, MODIFIED	CATCH BASIN CASTING EAST JORDAN #5105 OR EQUAL	1

### DETAIL FOR COVER B 1040 A LOGO MANHOLE COVER



## EXISTING CROSS SECTIONS & DETAIL SHEET

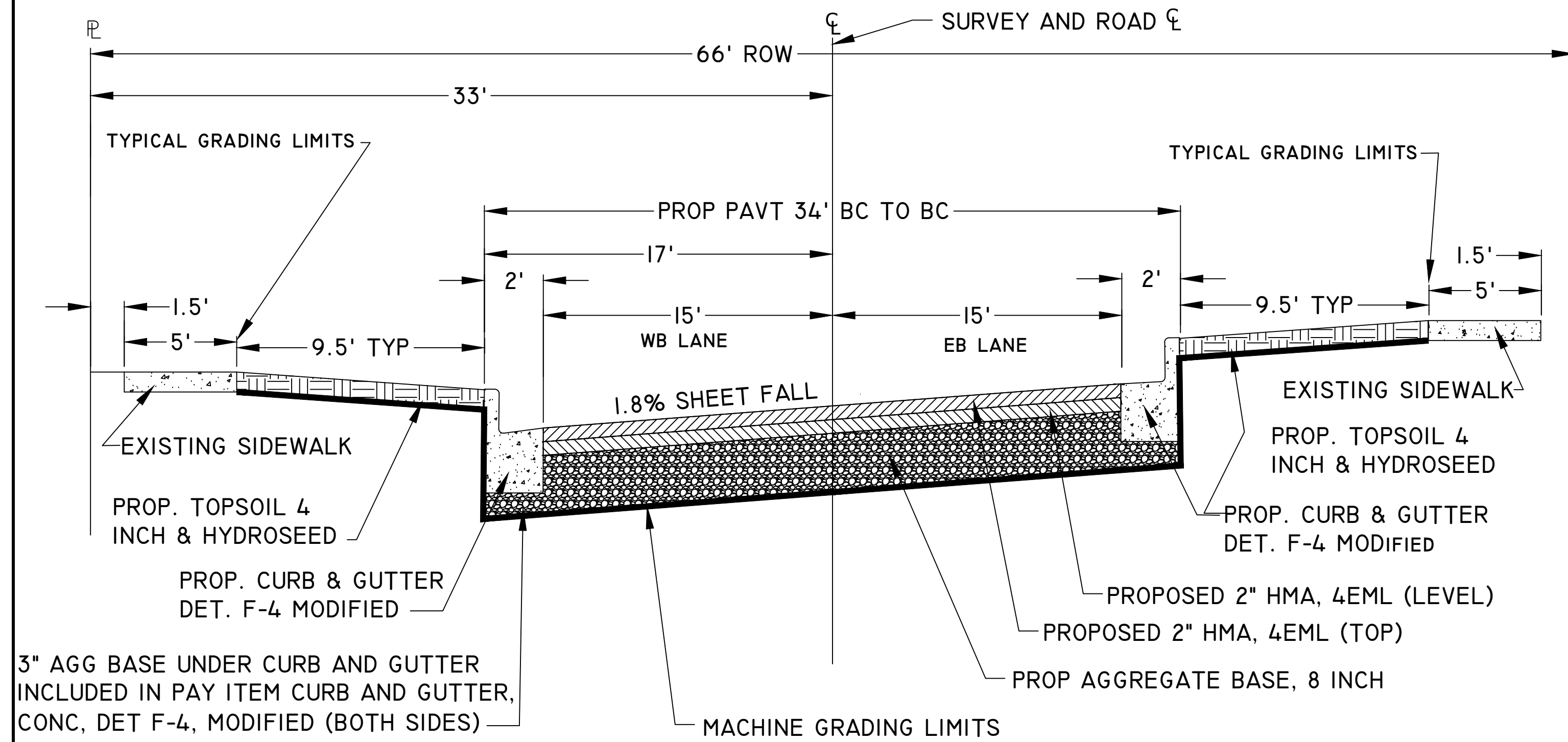
CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER		SOUTHERN AVE LAKE SHORE DR TO SEAWAY	
DRAWN C. WIGGINS 2/23	REVISION	SURVEY WEST SHORE 11/22	H-92004
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED	REVISION	SCALE	SHEET NO 2 OF 17



# TYPICAL PROPOSED CROSS SECTIONS

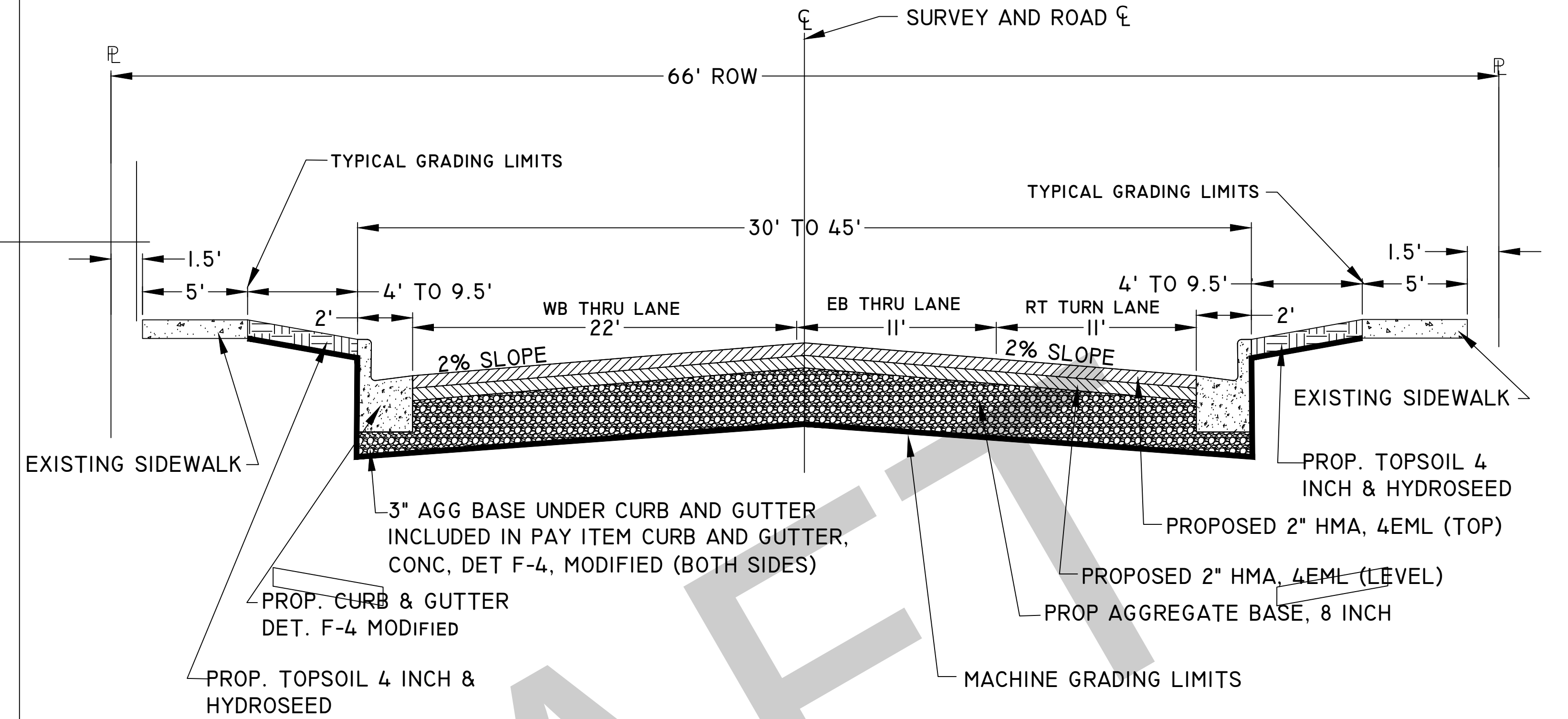
## TYPICAL PROPOSED CROSS SECTION

STATION 6+50 TO 14+50  
 STATION 14+50 TO 15+50 TRANSITION FROM SHEET FALL TO CROWN  
 STATION 14+50 TO 15+50 TRANSITION FROM SHEET FALL TO CROWN



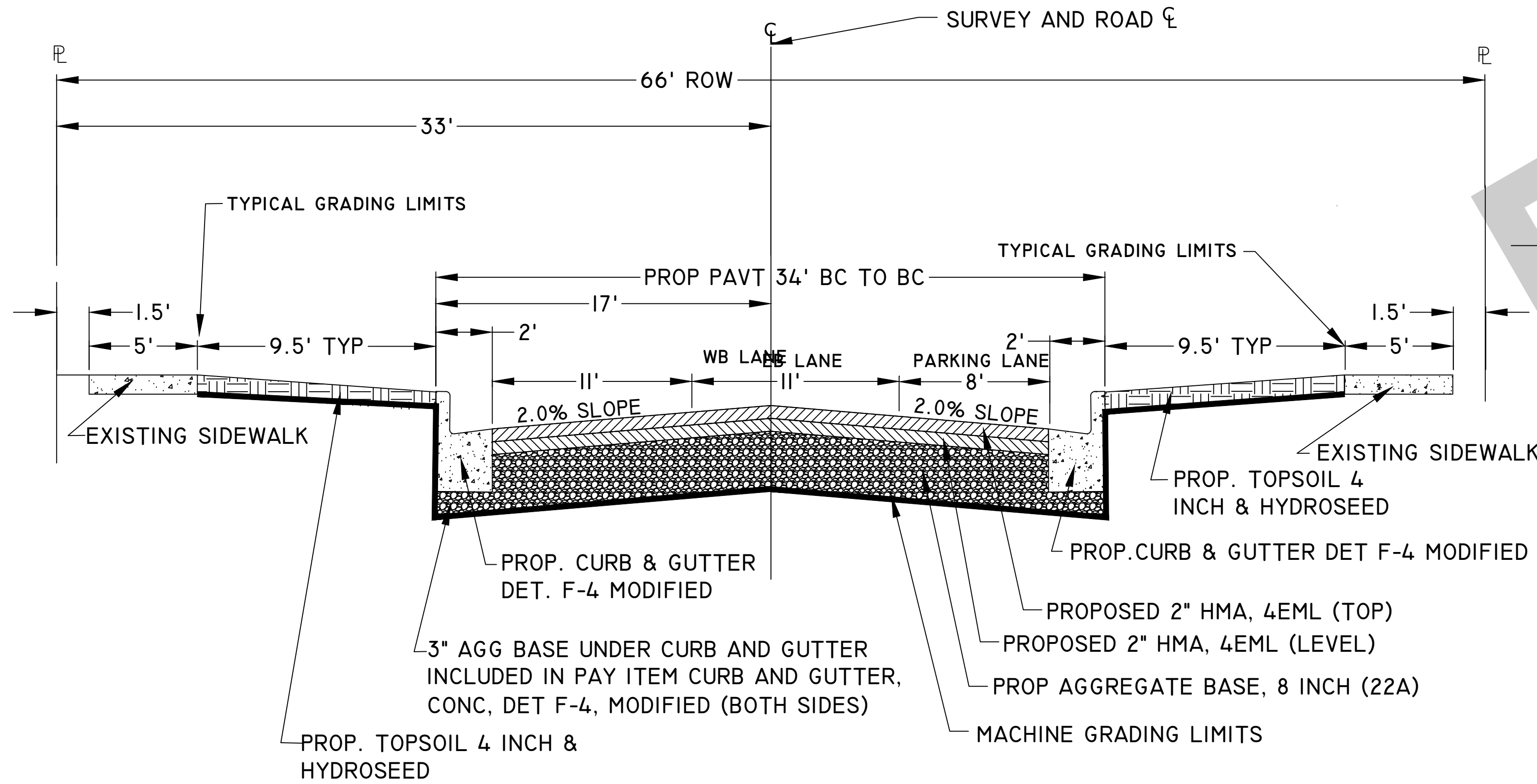
## TYPICAL PROPOSED CROSS SECTIONS

STATION 41+00 TO 44+00 POE



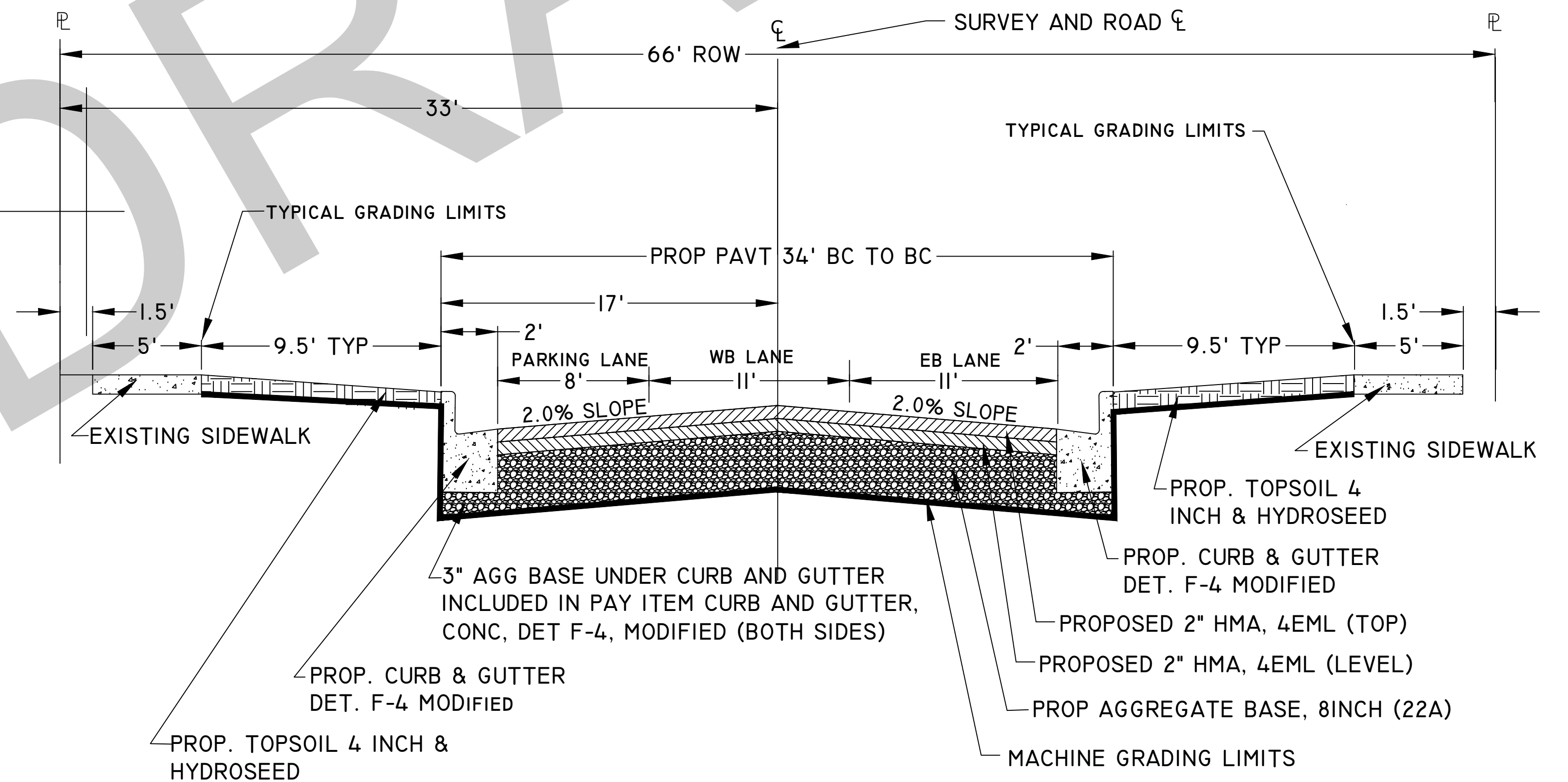
## TYPICAL PROPOSED CROSS SECTION

STATION 0+50 POB TO 5+50



## TYPICAL PROPOSED CROSS SECTIONS

STATION 0+50 POB TO 5+50



### SOUTHERN AVE. HMA APPLICATION TABLE

DESCRIPTION	RATE	PERFORMANCE GRADE	REMARKS
HMA, 4EML (TOP)	220#/SYD	70-28 P	2 INCHES - 1 LIFT AWI 260 MIN
HMA, 4EML (LEVEL)	220#/SYD	64-28	2 INCHES - 1 LIFT
HAND PATCHING	220#/SYD	64-28	2 INCHES - 1 LIFT

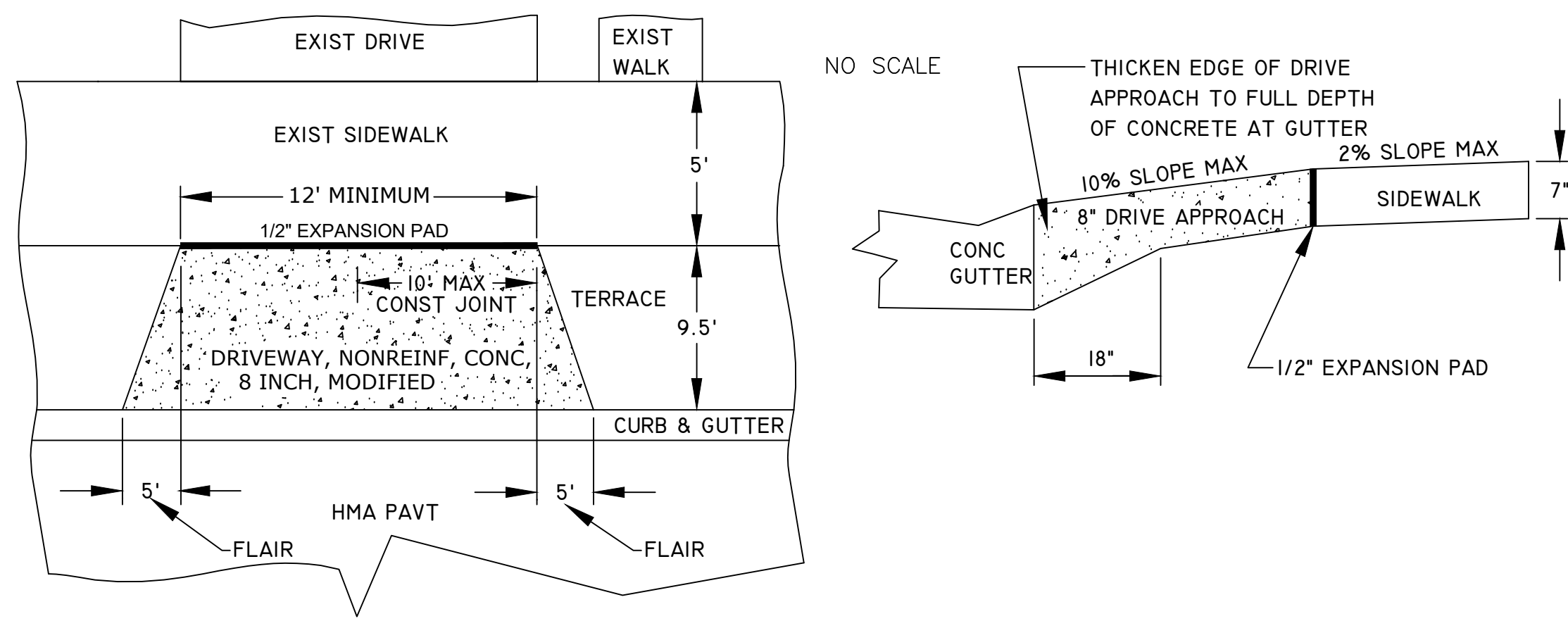
HMA BOND COAT, SS-IH, AT 0.05 TO 0.10 GAL/SYD, SHALL BE PLACED BETWEEN EACH LIFT. THE COST IS INCLUDED WITH THE HMA PAY ITEMS.

MACHINE GRADING, MODIFIED NOTE:  
 THERE WILL BE APPROXIMATELY 2000 CU.YD. LM. EXCAVATION ON THIS PROJECT, OF WHICH APPROXIMATELY 350 CU. YD. WILL BE USED FOR EMBANKMENT. THE REMAINING 1650 CU. YD. OF EXCAVATION WILL BE REMOVED FROM THE JOB SITE AND BECOME PROPERTY OF THE CONTRACTOR. THE REMOVAL OF THIS EXCAVATION WILL BE INCLUDED IN PAYMENT FOR THE MACHINE GRADING, MODIFIED PAY ITEM.

### PROPOSED CROSS SECTIONS

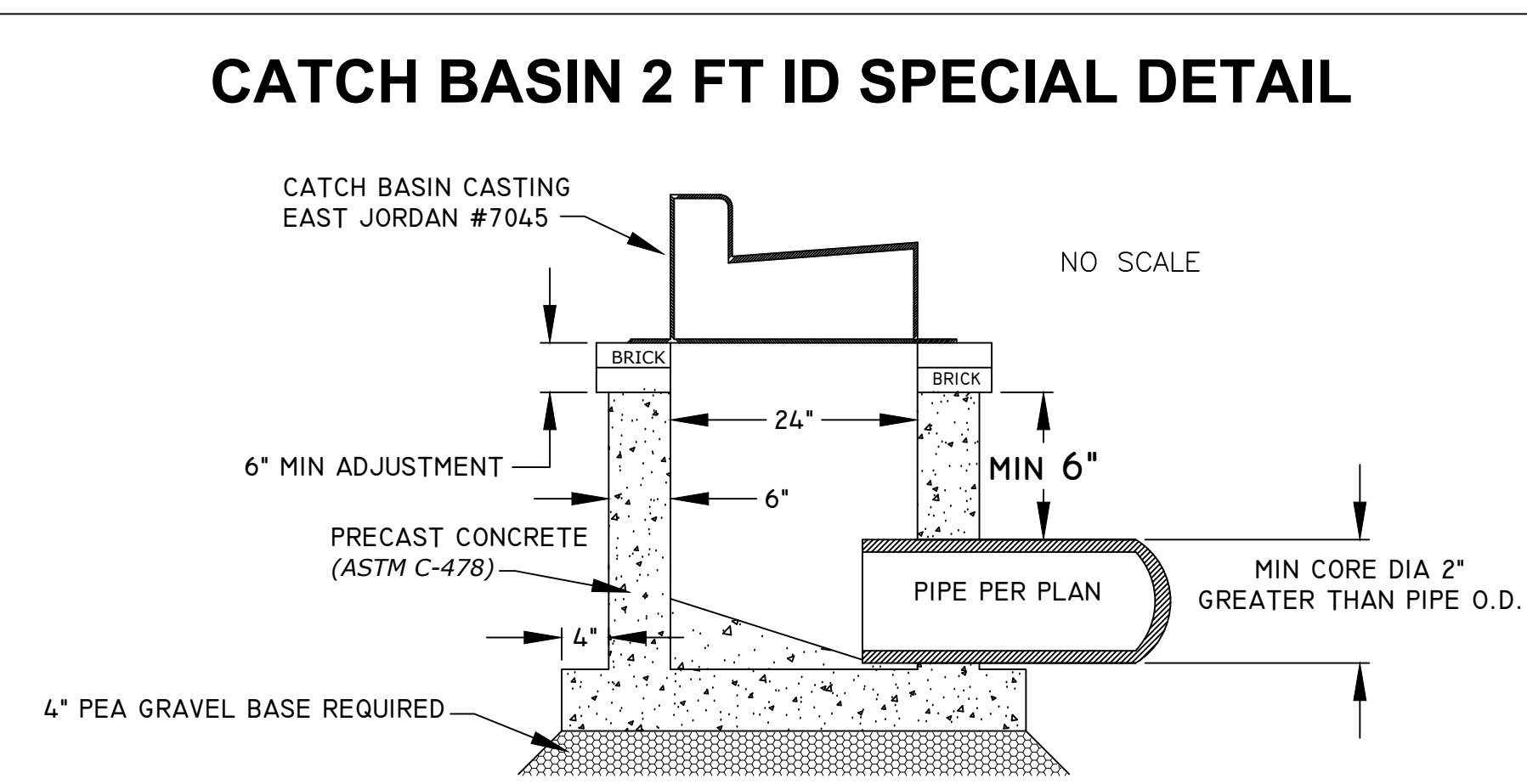
CITY OF MUSKEGON		SOUTHERN AVE	
OFFICE OF THE CITY ENGINEER		LAKE SHORE DR TO SEAWAY	
DRAWN C. WIGGINS 2/23	REVISION	SURVEY WEST SHORE 11/22	H-92004
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED	REVISION	SCALE	SHEET NO 2 OF 17

### TYPICAL DRIVE APPROACH DETAIL

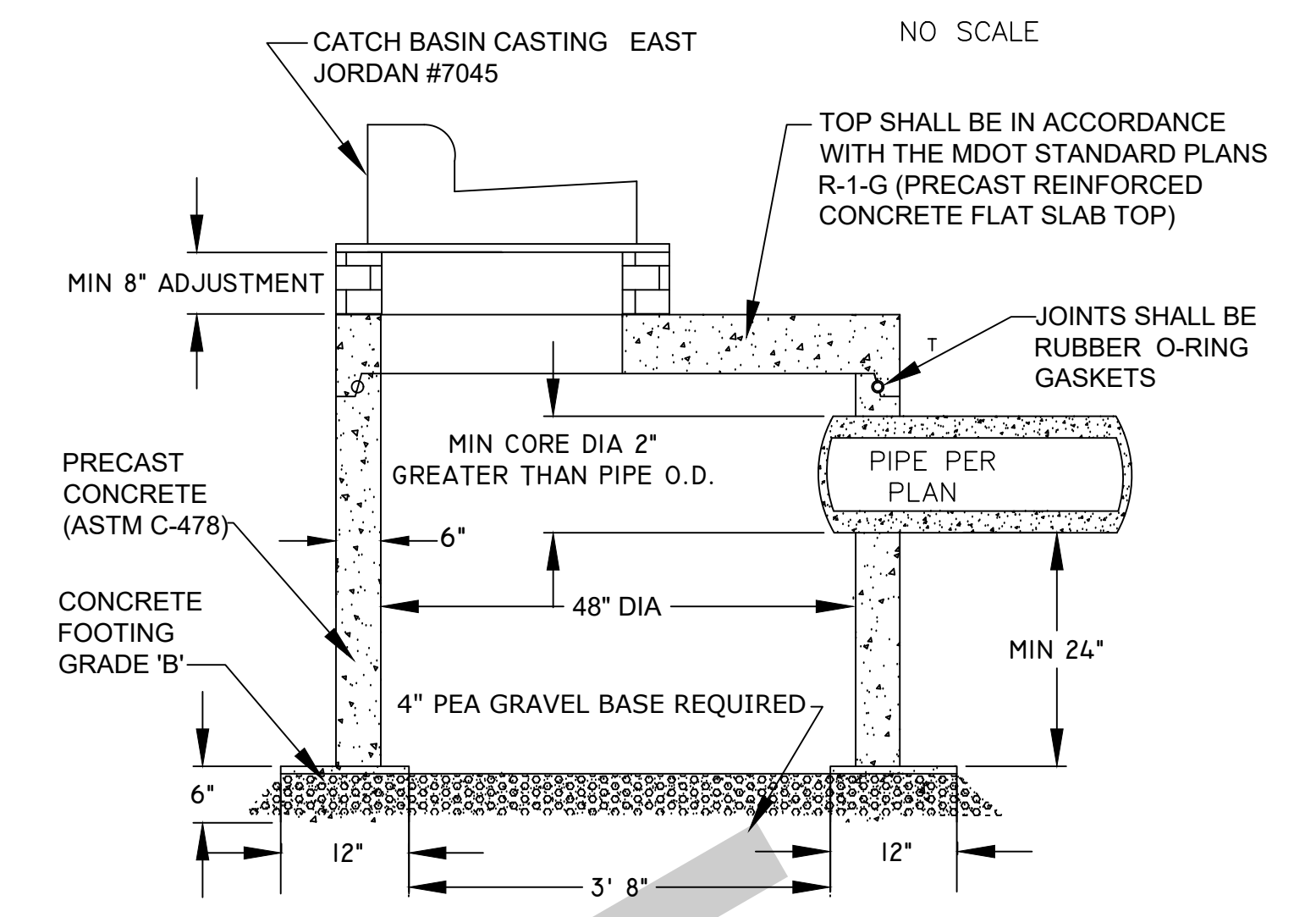


### DETAIL SHEET

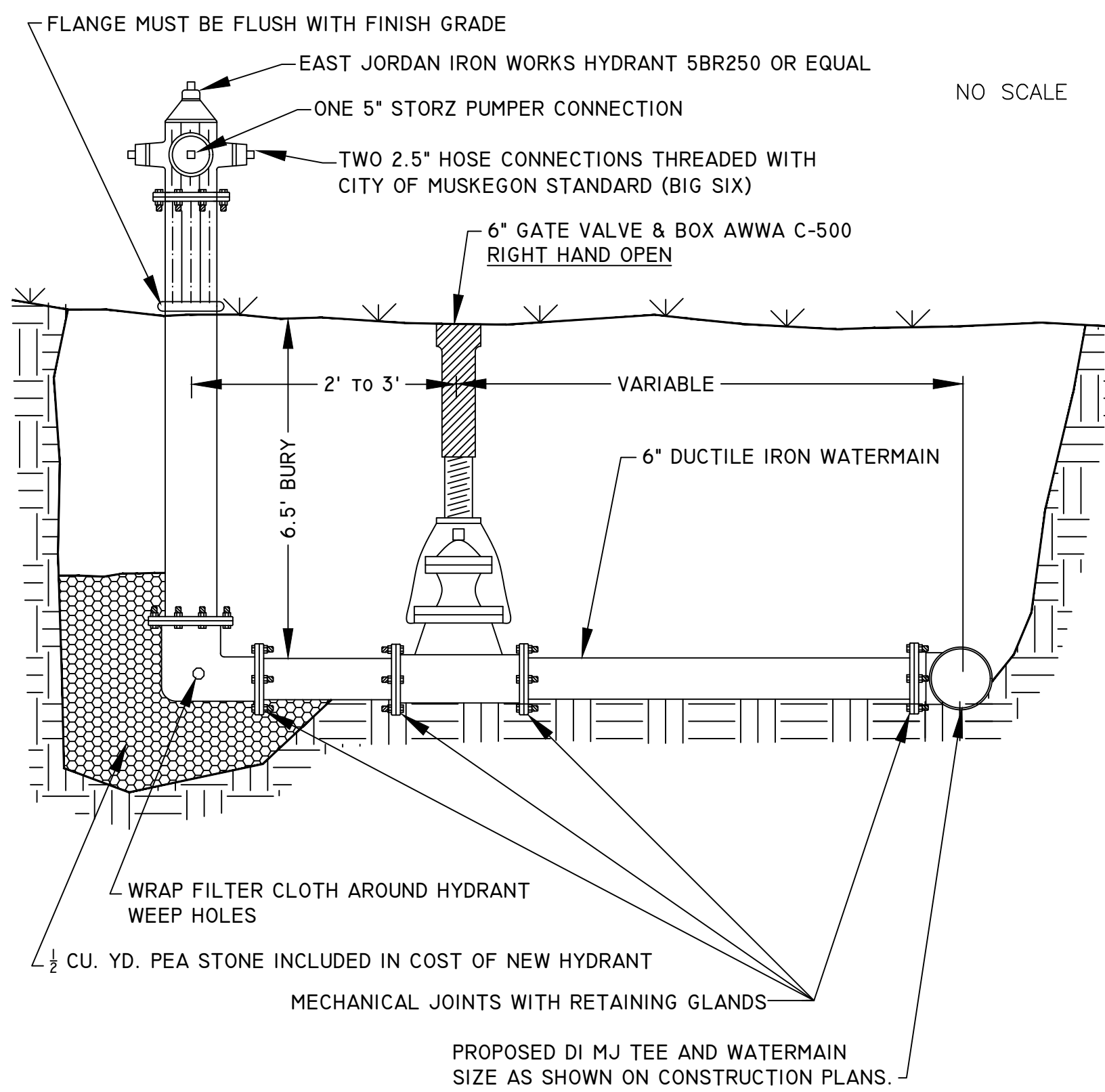
#### CATCH BASIN 2 FT ID SPECIAL DETAIL



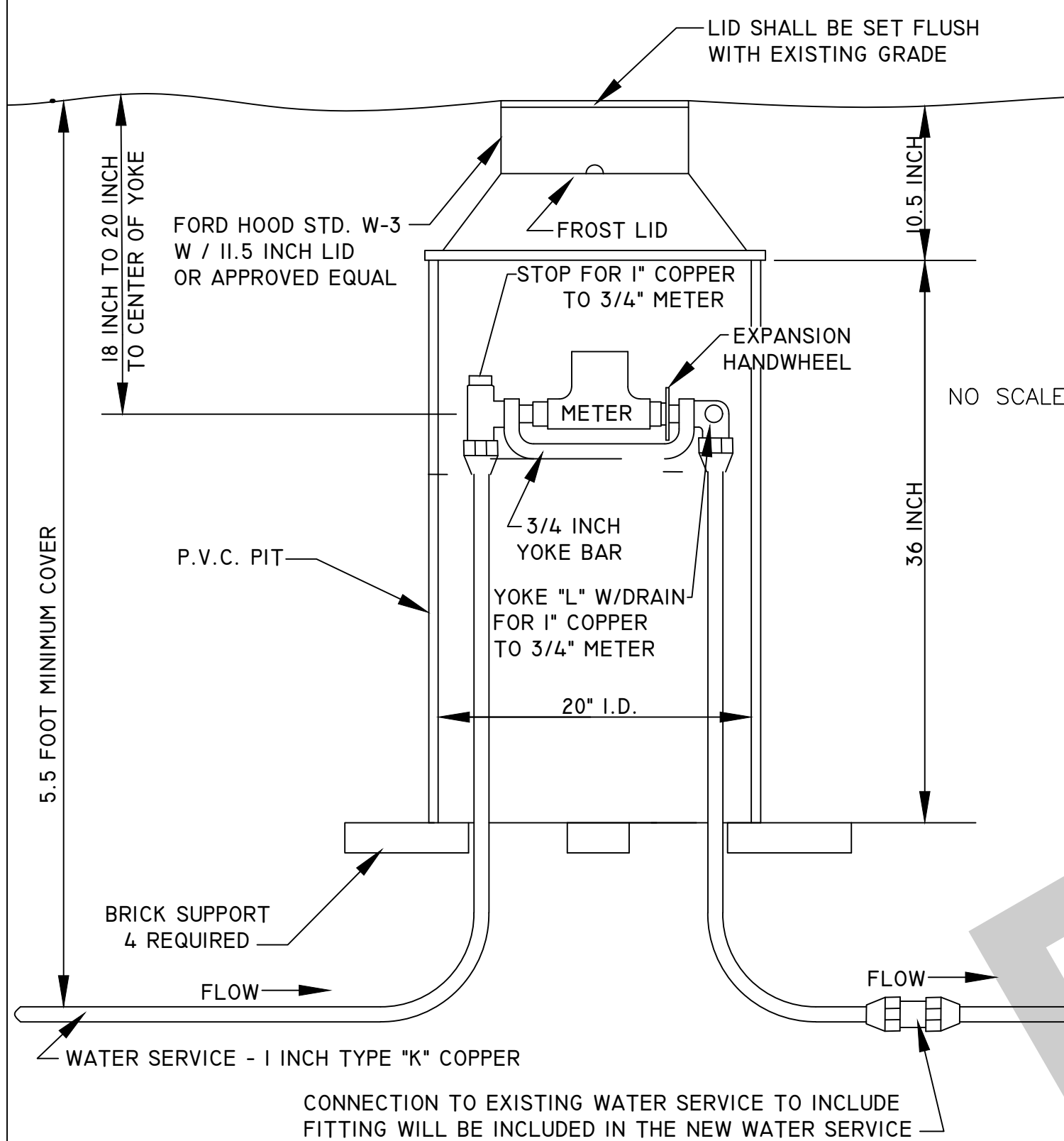
#### CATCH BASIN SPECIAL DETAIL



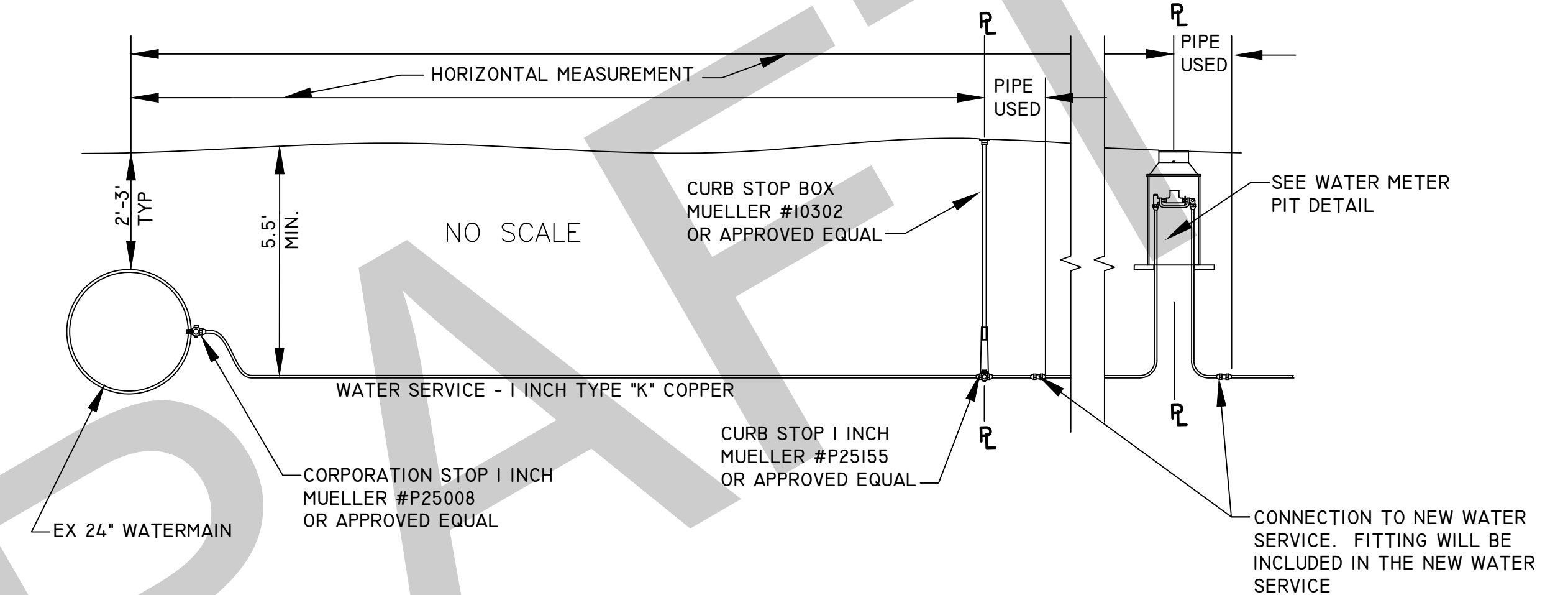
#### HYDRANT DETAIL



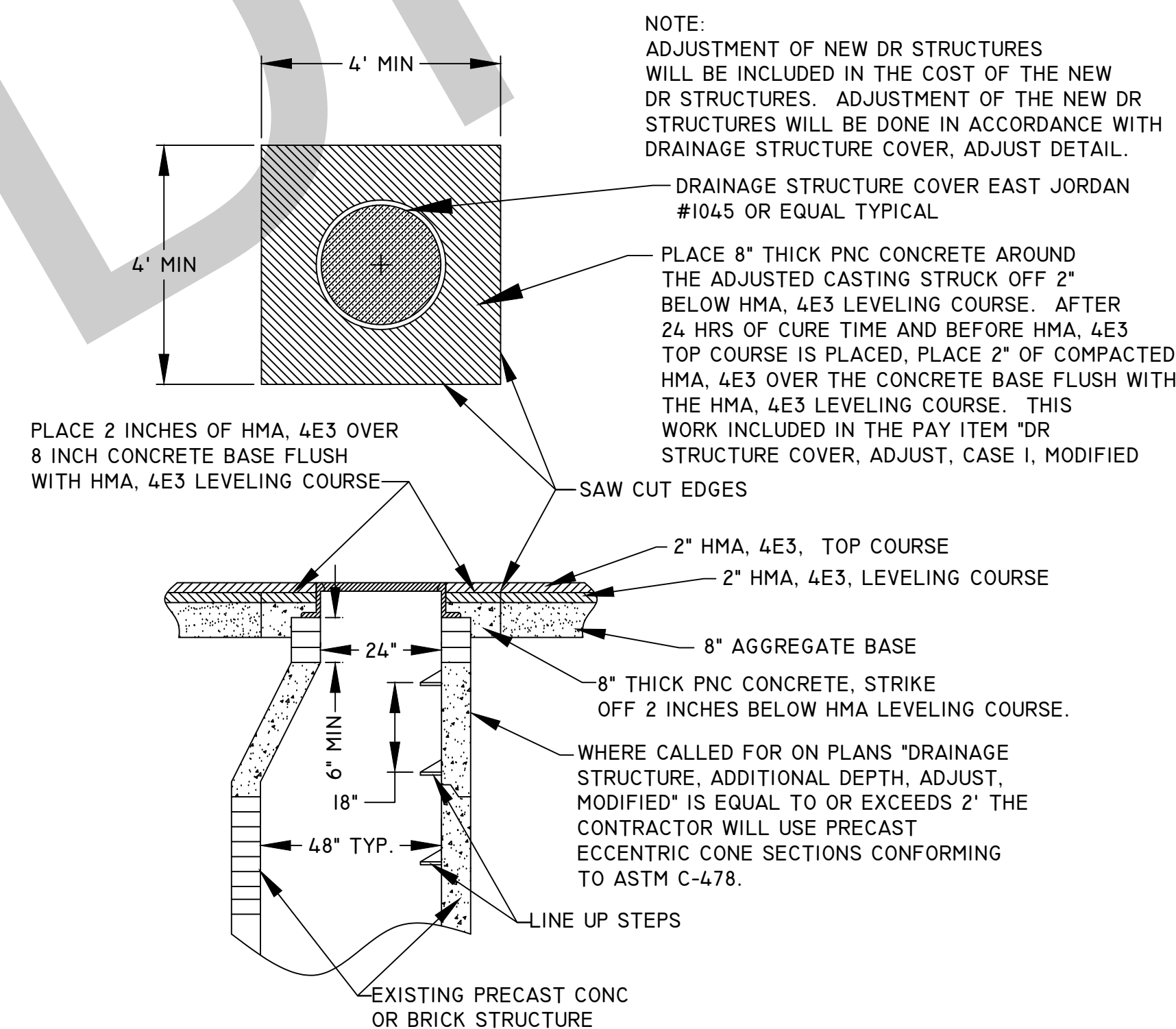
#### DETAIL FOR METER PIT COMPLETE



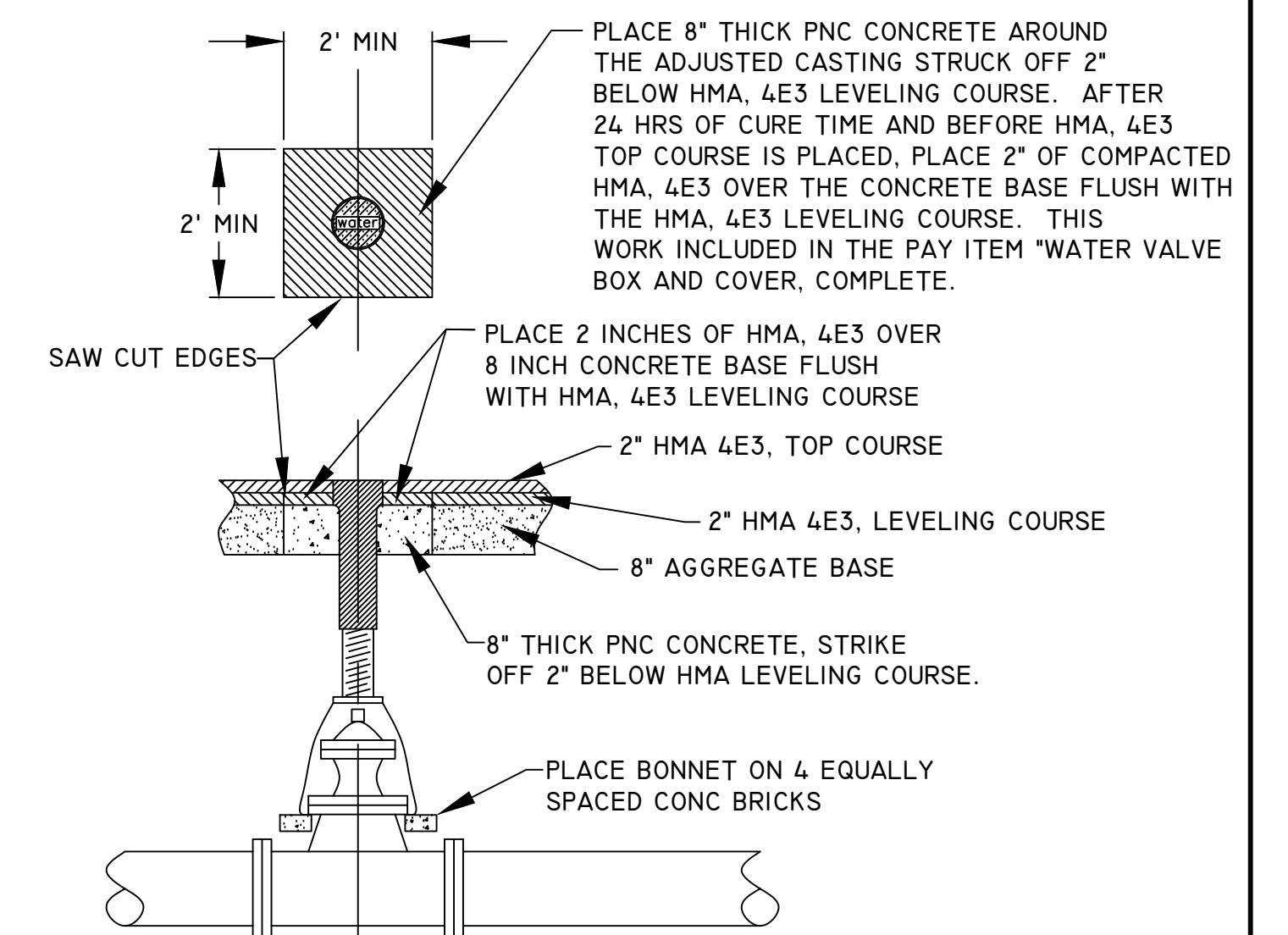
#### DETAIL FOR TYPICAL 1" WATER SERVICE



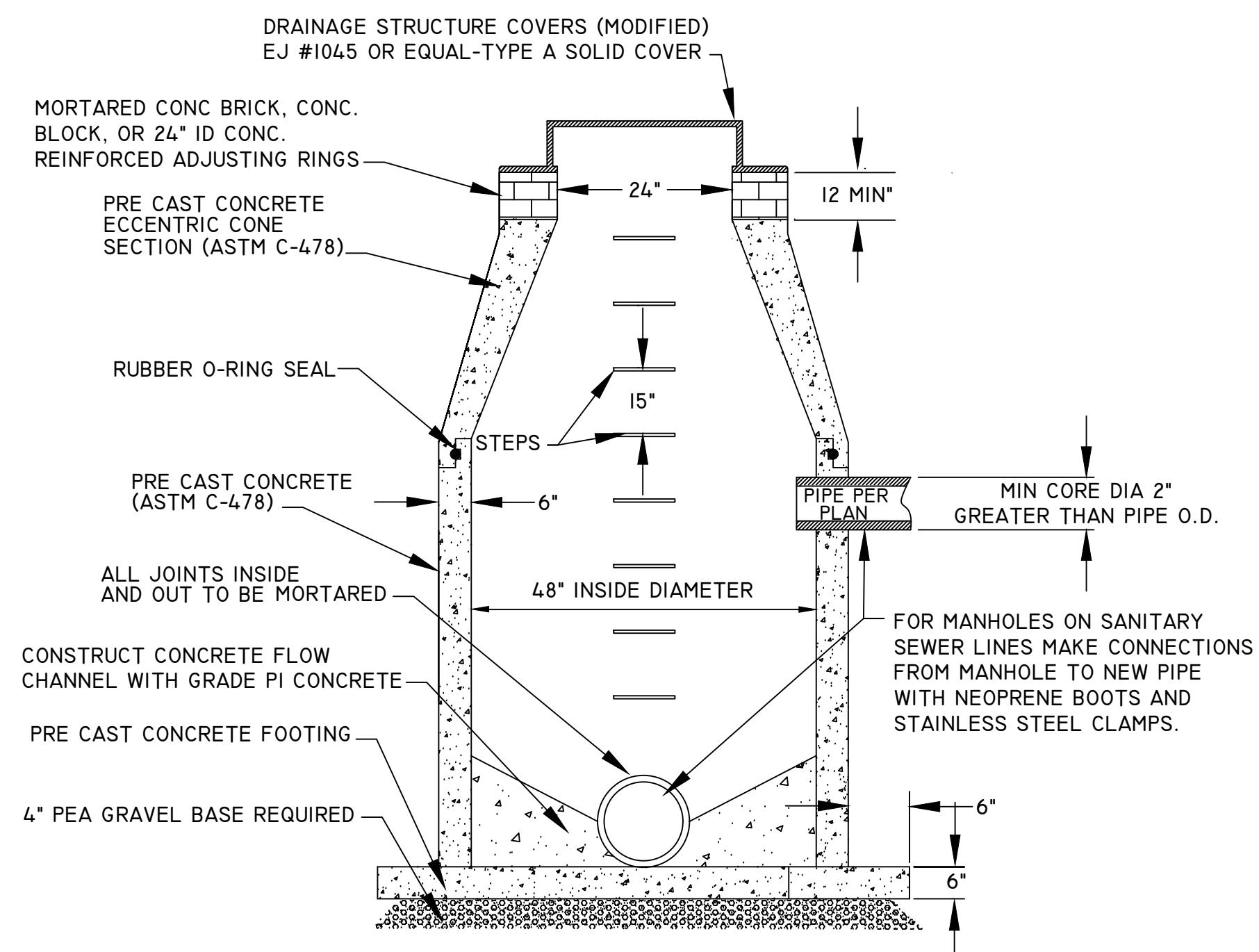
#### DRAINAGE STRUCTURE COVER, ADJUST DETAIL



#### WATER VALVE BOX AND COVER, COMPLETE DETAIL



#### SANITARY MANHOLE SPECIAL DETAIL



#### DETAIL SHEET

CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER		SOUTHERN AVE LAKE SHORE DR TO SEAWAY	
DRAWN C. WIGGINS 2/23	REVISION	SURVEY WEST SHORE 11/22	H-92004
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED	REVISION	SCALE	SHEET NO 2 OF 17

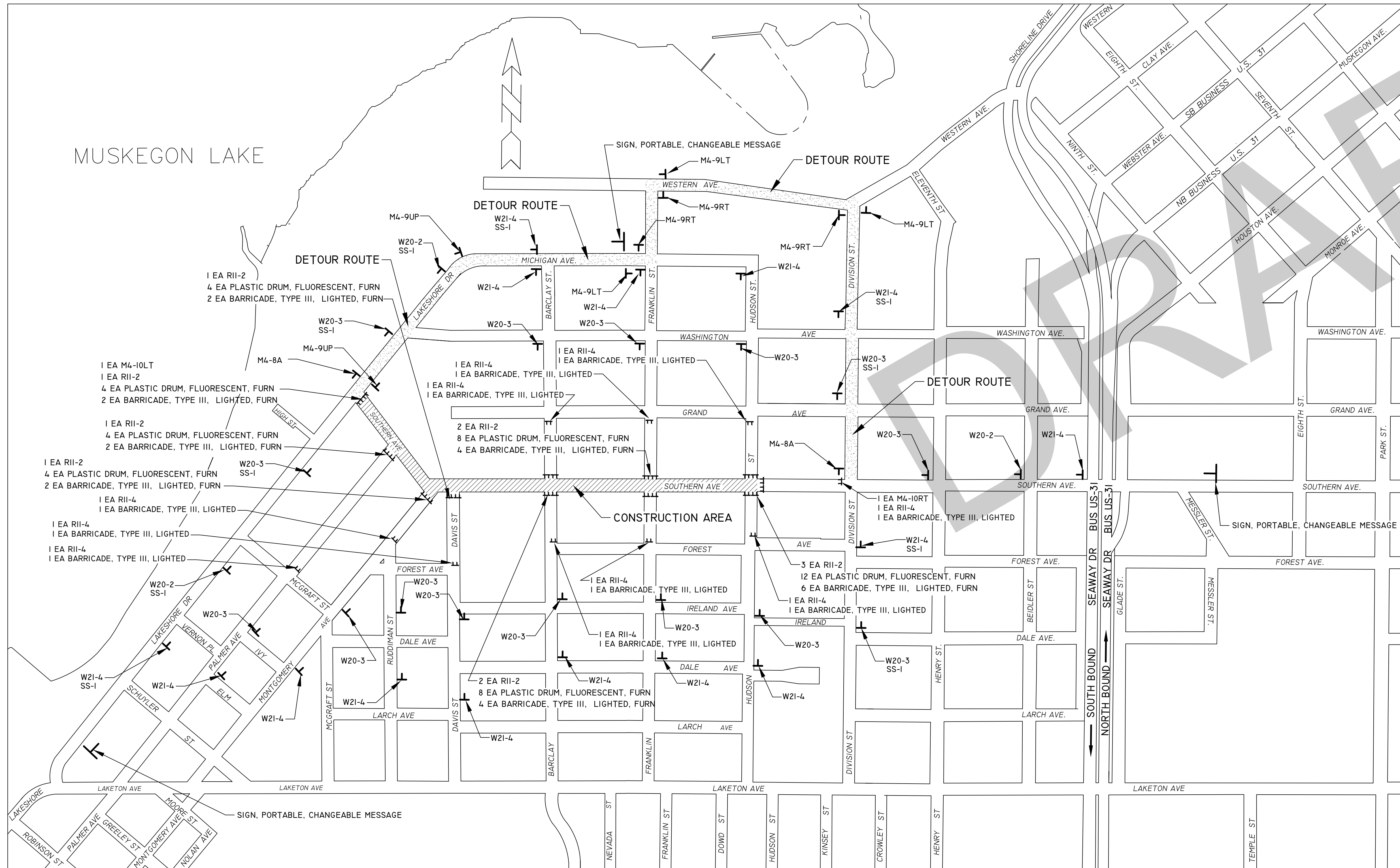


# TRAFFIC CONTROL DETAIL PHASE I

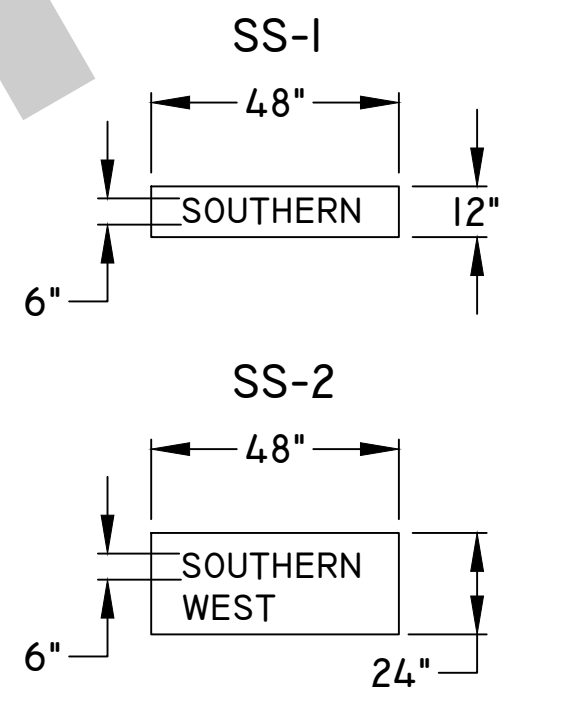
ESTIMATED PHASE I TRAFFIC CONTROL DEVICES		
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN	32	EA
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER	32	EA
PLASTIC DRUM, FLUORESCENT, FURN	94	EA
PLASTIC DRUM, FLUORESCENT, OPER	94	EA
SIGN, TYPE B TEMP, PRISMATIC, FURN	822	SFT
SIGN, TYPE B TEMP, PRISMATIC, OPER	822	SFT
SIGN, TYPE B TEMP, PRISMATIC, SPECIAL, FURN	40	SFT
SIGN, TYPE B TEMP, PRISMATIC, SPECIAL, OPER	40	SFT
MINOR TRAFFIC DEVICES	1	LS
MAINTENANCE GRAVEL, LM	300	CYD
SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN	3	EA
SIGN, PORTABLE, CHANGEABLE MESSAGE, OPER	3	EA
SIGN COVER	5	EA

PHASE I ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
R11-2	ROAD CLOSED	11	10 SFT	110 SFT
R11-4	ROAD CLOSED TO THRU TRAFFIC	10	12.5 SFT	125 SFT
M4-9LT	DETOUR LEFT	3	5 SFT	15 SFT
M4-9RT	DETOUR RIGHT	3	5 SFT	15 SFT
M4-9UP	DETOUR UP	2	5 SFT	10 SFT
M4-8A	DETOUR ENDS	2	4 SFT	8 SFT
M4-10RT	DETOUR ARROW RT	1	6 SFT	6 SFT
M4-10LT	DETOUR ARROW LT	1	6 SFT	6 SFT
W20-2	DETOUR AHEAD	3	16 SFT	48 SFT
W20-3	ROAD CLOSED AHEAD	15	16 SFT	240 SFT
W21-4	ROAD WORK AHEAD	15	16 SFT	240 SFT
TOTAL				823 SFT

PHASE I ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY, SPECIAL				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
SS-1	SOUTHERN	10	4	40 SFT
TOTAL				40 SFT



## SPECIAL SIGNS



## TRAFFIC CONTROL PHASES

THE FIRST PHASE OF CONSTRUCTION SHALL CONSIST OF CONSTRUCTING SOUTHERN AVE. FROM LAKE SHORE DR. THRU THE INTERSECTION OF HUDSON ST. CONTRACTOR WILL COMPLETE WORK ON PHASE ONE UP THRU HMA TOP COURSE, TOP SOILING, HYDROSEEDING, CLEAN UP AND PERMANENT WATERBORNE PAVEMENT MARKINGS BEFORE PROCEEDING TO PHASE 2.

THE SECOND PHASE OF CONSTRUCTION SHALL CONSIST OF CONSTRUCTING SOUTHERN AVE. FROM HUDSON ST TO SEAWAY DR. CONTRACTOR WILL COMPLETE WORK AS DISCRIBED ABOVE IN PHASE 1 BEFORE STARTING PHASE 2

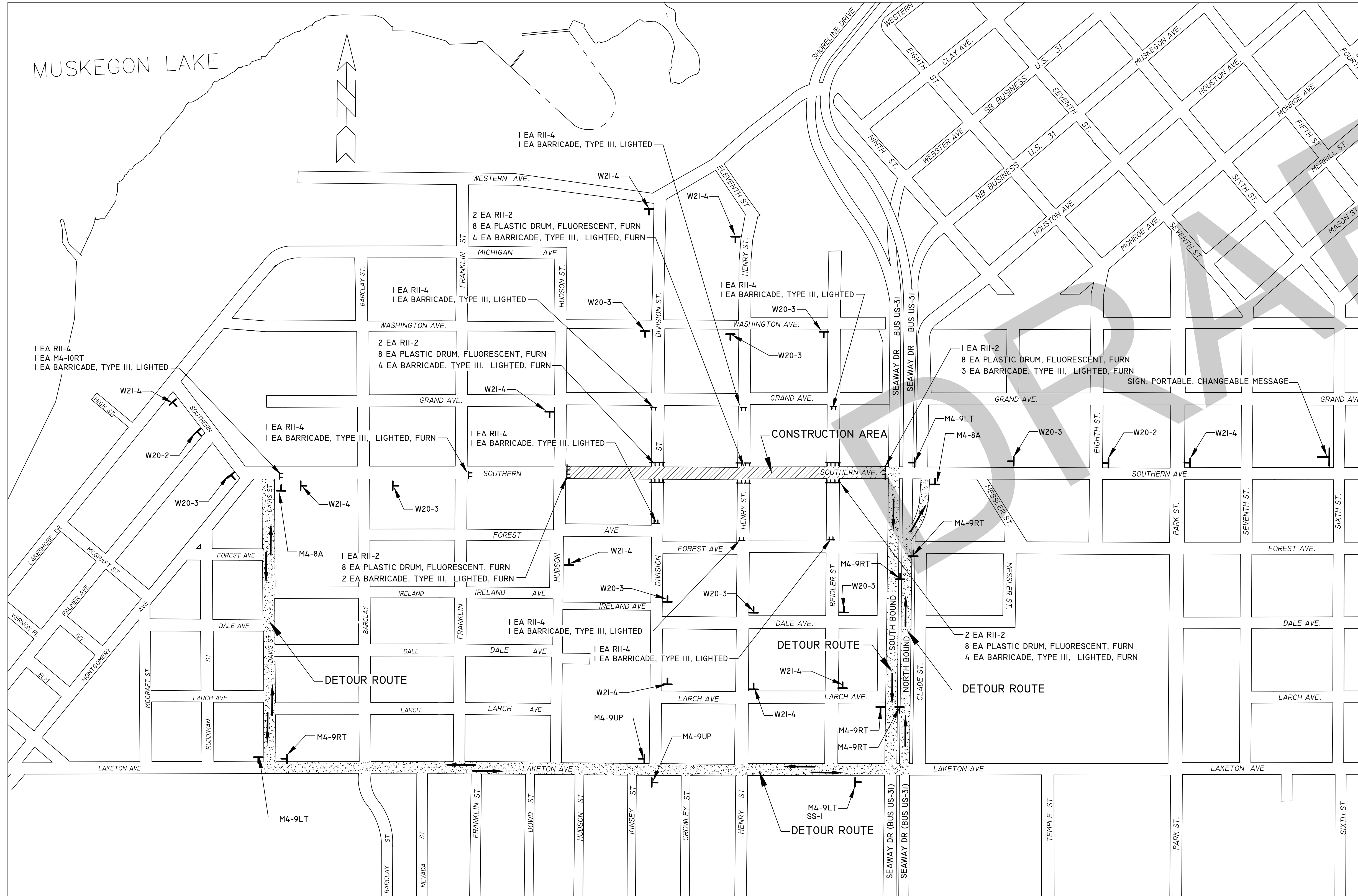
TRAFFIC CONTROL DETAIL			
CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKE SHORE DRIVE TO SEAWAY DRIVE	
DRAWN C WIGGINS JAN 23	REVISION	SURVEY WEST SHORE 11/22	H-92004
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED			SHEET NO 1 OF 22

# TRAFFIC CONTROL DETAIL PHASE 2

ESTIMATED PHASE 2 TRAFFIC CONTROL DEVICES		
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN	24	EA
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER	24	EA
PLASTIC DRUM, FLUORESCENT, FURN	94	EA
PLASTIC DRUM, FLUORESCENT, OPER	94	EA
SIGN, TYPE B TEMP, PRISMATIC, FURN	828	SFT
SIGN, TYPE B TEMP, PRISMATIC, OPER	828	SFT
SIGN, TYPE B TEMP, PRISMATIC, SPECIAL, FURN	16	SFT
SIGN, TYPE B TEMP, PRISMATIC, SPECIAL, OPER	16	SFT
MINOR TRAFFIC DEVICES	1	LS
MAINTENANCE GRAVEL, LM	300	CYD
SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN	3	EA
SIGN, PORTABLE, CHANGEABLE MESSAGE, OPER	3	EA
SIGN COVER	5	EA

PHASE 2 ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
R11-2	ROAD CLOSED	8	10 SFT	80 SFT
R11-4	ROAD CLOSED TO THRU TRAFFIC	8	12.5 SFT	100 SFT
M4-9LT	DETOUR LEFT	2	5 SFT	10 SFT
M4-9RT	DETOUR RIGHT	4	5 SFT	20 SFT
M4-9UP	DETOUR UP	2	5 SFT	10 SFT
M4-8A	DETOUR ENDS	2	4 SFT	8 SFT
M4-10RT	DETOUR ARROW RT	1	6 SFT	6 SFT
M4-10LT	DETOUR ARROW LT	1	6 SFT	6 SFT
W20-2	DETOUR AHEAD	2	16 SFT	32 SFT
W20-3	ROAD CLOSED AHEAD	9	16 SFT	144 SFT
W21-4	ROAD WORK AHEAD	11	16 SFT	176 SFT
TOTAL				592

PHASE 2 ESTIMATED QUANTITIES SIGN, TYPE B TEMPORARY, SPECIAL				
SIGN	DESCRIPTION	QUANTITY	AREA	TOTAL AREA
SS-2	SOUTHERN	2	8	16 SFT
TOTAL				16 SFT



<b>TRAFFIC CONTROL DETAIL</b>	
<b>CITY OF MUSKEGON</b>	<b>SOUTHERN AVE.</b>
OFFICE OF THE CITY ENGINEER	LAKE SHORE DRIVE TO SEAWAY DRIVE
DRAWN C WIGGINS JAN 23	REVISION
CHECKED	REVISION
APPROVED	REVISION
SURVEY WEST SHORE 11/22	<b>H-92004</b>
AS-BUILT	PROJECT NO
	SHEET NO 1 OF 22

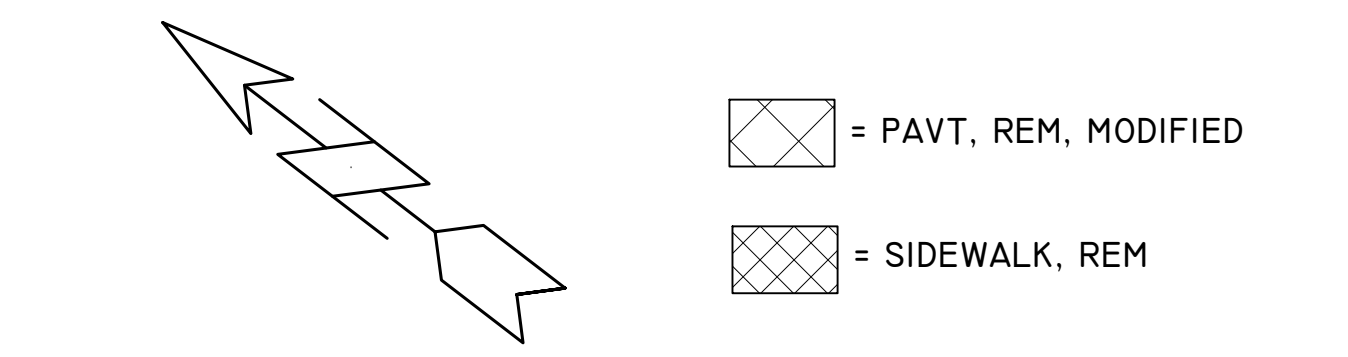


BM ELEVATION 630.55  
FLANGE BOLT UNDER "E" IN  
EJW ON HYDRANT NE COR LSD &  
SOUTHERN

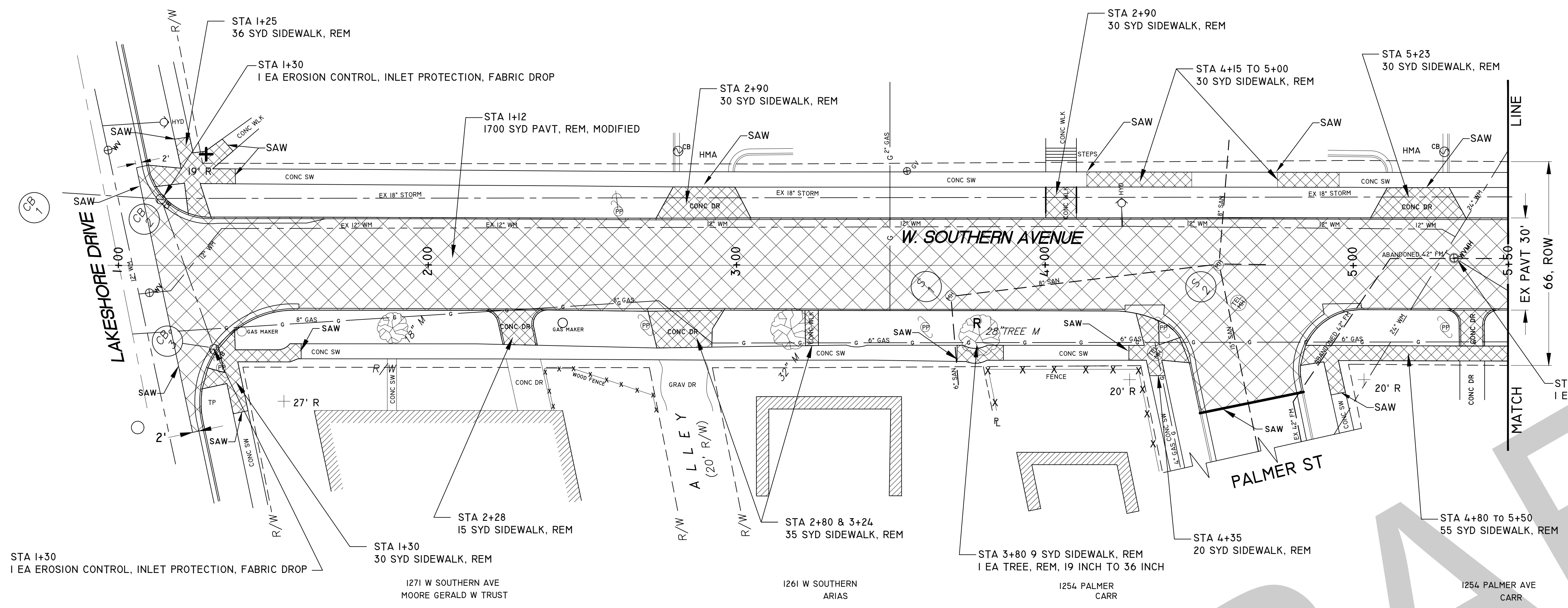
1190 W SOUTHERN AVE  
HUME HOME

BM ELEVATION 631.54  
FLANGE BOLT UNDER "R" IN  
TRAVERS ON HYDRANT STA  
4+25 LT

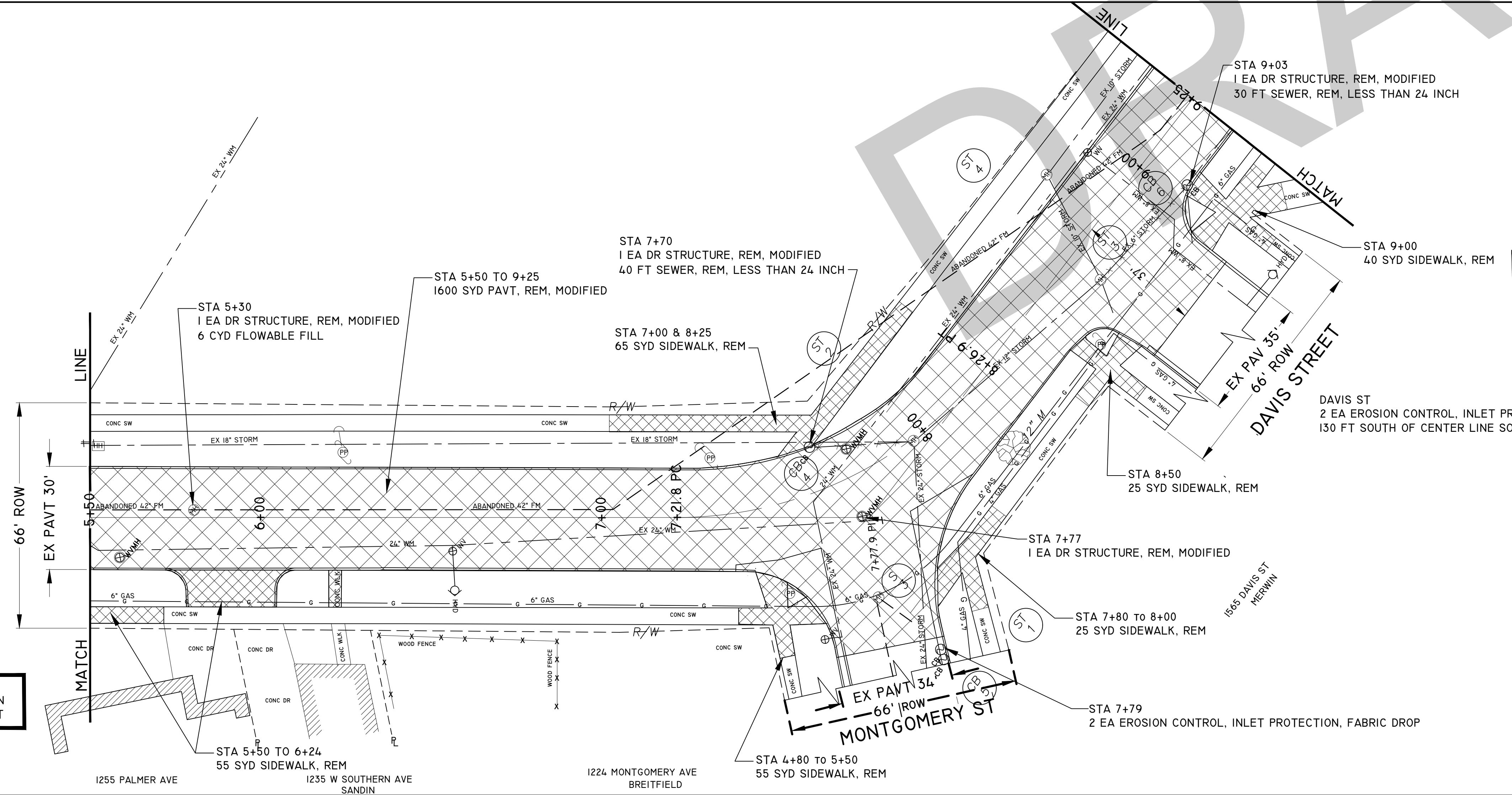
1190 W SOUTHERN AVE  
HUME HOME



QUANTITIES THIS SECTION		
TREE, REM. 6 INCH TO 18 INCH	0	EA
TREE, REM. 19 INCH TO 36 INCH	1	EA
TREE, REM. 37 INCH OR LARGER	0	EA
SEWER, REM. LESS THAN 24 INCH	0	FT
DR STRUCTURE, REM. MODIFIED	1	EA
SIDEWALK, REM	400	SYD
PAVT. REM. MODIFIED	1700	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA



QUANTITIES THIS SECTION		
TREE, REM. 6 INCH TO 18 INCH	0	EA
TREE, REM. 19 INCH TO 36 INCH	0	EA
TREE, REM. 37 INCH OR LARGER	0	EA
SEWER, REM. LESS THAN 24 INCH	70	FT
DR STRUCTURE, REM. MODIFIED	1	EA
SIDEWALK, REM	300	SYD
PAVT. REM. MODIFIED	1600	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	4	EA
FLOWABLE FILL	6	CYD



BM ELEVATION 634.78  
FLANGE BOLT UNDER "E" IN  
EAST ON HYDRANT SE CORNER  
OF DAVIS & SOUTHERN

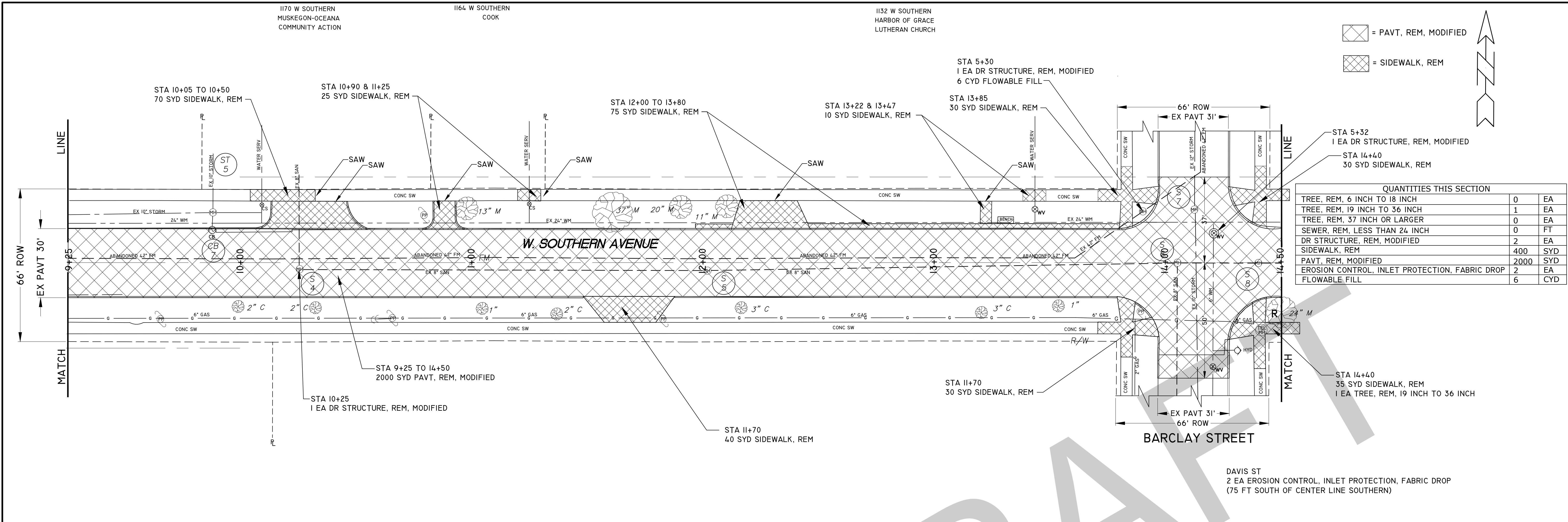
BM ELEVATION 632.90  
FLANGE BOLT UNDER "M" IN  
MICH ON HYDRANT 6+58 RT

**REMOVAL PLANS**

**CITY OF MUSKEGON**      **SOUTHERN AVE.**

OFFICE OF THE CITY ENGINEER      LAKESHORE DR. TO SEAWAY DR. (BUS31)

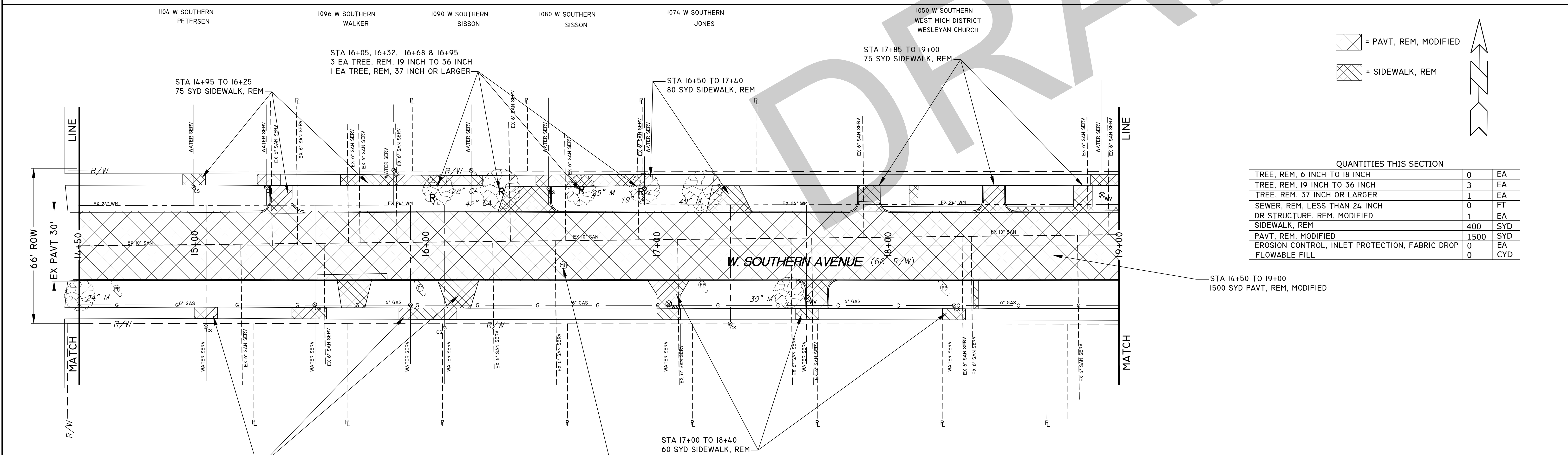
DRAWN C WIGGINS DEC 23	REVISION	SURVEY WESTSHORE MAY 23	H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO
		SCALE 1" = 20'	SHEET NO 4 OF 11



= PAVT, REM, MODIFIED  
 = SIDEWALK, REM

QUANTITIES THIS SECTION

TREE, REM, 6 INCH TO 18 INCH	0	EA
TREE, REM, 19 INCH TO 36 INCH	1	EA
TREE, REM, 37 INCH OR LARGER	0	EA
SEWER, REM, LESS THAN 24 INCH	0	FT
DR STRUCTURE, REM, MODIFIED	2	EA
SIDEWALK, REM	400	SYD
PAVT, REM, MODIFIED	2000	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA
FLOWABLE FILL	6	CYD

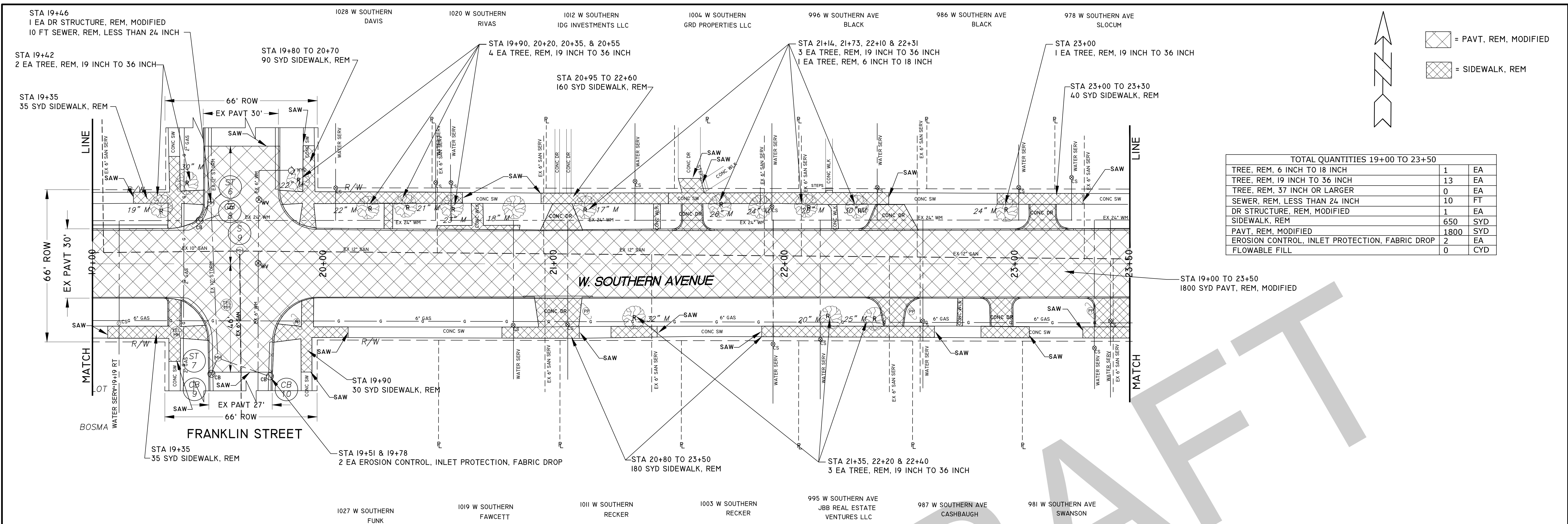


= PAVT, REM, MODIFIED  
 = SIDEWALK, REM

QUANTITIES THIS SECTION

TREE, REM, 6 INCH TO 18 INCH	0	EA
TREE, REM, 19 INCH TO 36 INCH	3	EA
TREE, REM, 37 INCH OR LARGER	1	EA
SEWER, REM, LESS THAN 24 INCH	0	FT
DR STRUCTURE, REM, MODIFIED	1	EA
SIDEWALK, REM	400	SYD
PAVT, REM, MODIFIED	1500	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	0	EA
FLOWABLE FILL	0	CYD

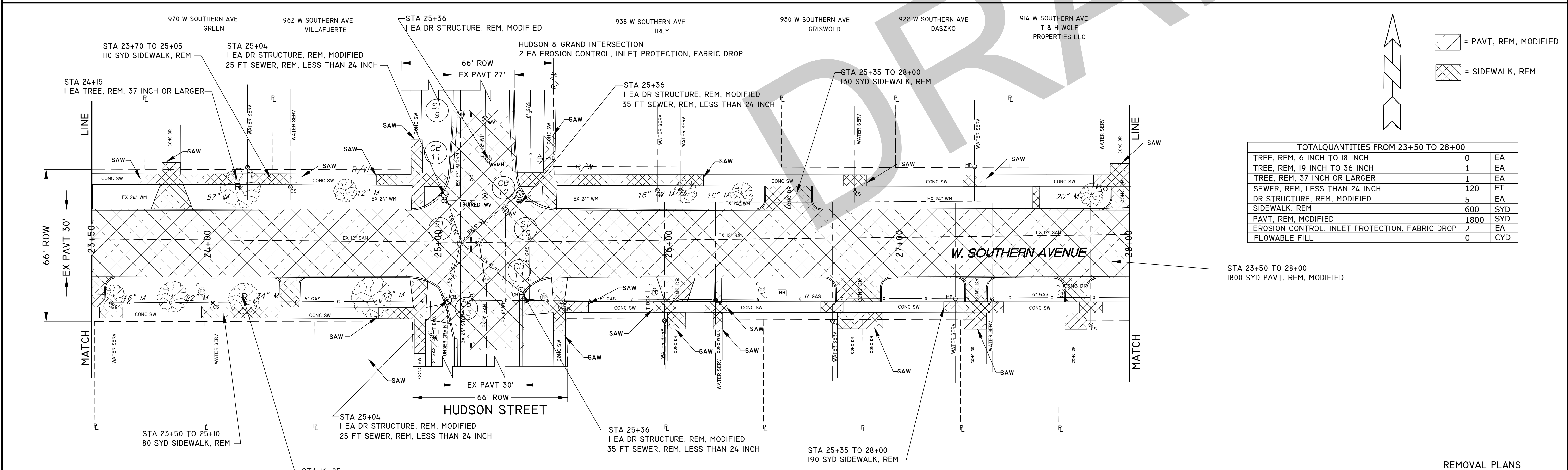




TOTAL QUANTITIES 19+00 TO 23+50

TREE, REM, 6 INCH TO 18 INCH	1	EA
TREE, REM, 19 INCH TO 36 INCH	13	EA
TREE, REM, 37 INCH OR LARGER	0	EA
SEWER, REM, LESS THAN 24 INCH	10	FT
DR STRUCTURE, REM, MODIFIED	1	EA
SIDEWALK, REM	650	SYD
PAVT, REM, MODIFIED	1800	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA
FLOWABLE FILL	0	CYD

STA 19+00 TO 23+50  
1800 SYD PAVT, REM, MODIFIED



TOTAL QUANTITIES FROM 23+50 TO 28+00

TREE, REM, 6 INCH TO 18 INCH	0	EA
TREE, REM, 19 INCH TO 36 INCH	1	EA
TREE, REM, 37 INCH OR LARGER	1	EA
SEWER, REM, LESS THAN 24 INCH	120	FT
DR STRUCTURE, REM, MODIFIED	5	EA
SIDEWALK, REM	600	SYD
PAVT, REM, MODIFIED	1800	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	2	EA
FLOWABLE FILL	0	CYD

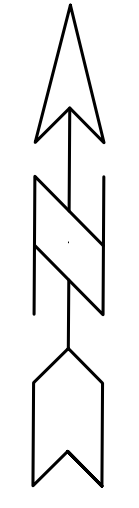
STA 23+50 TO 28+00  
1800 SYD PAVT, REM, MODIFIED

REMOVAL PLANS

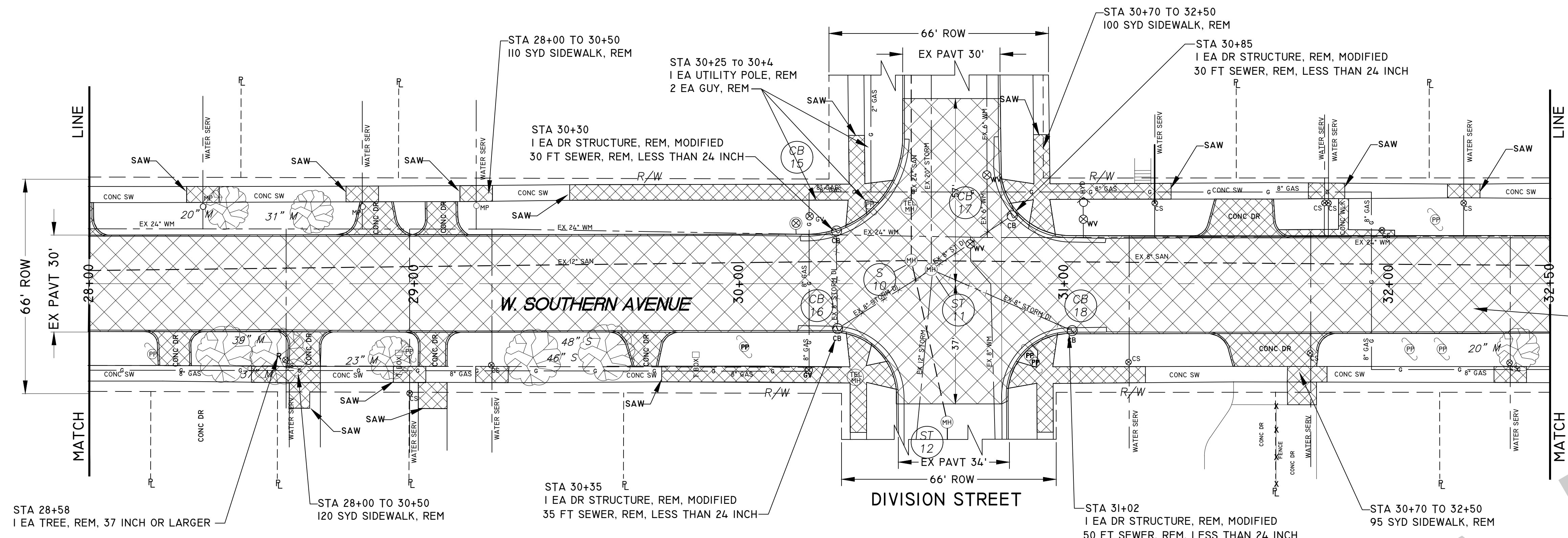
<b>CITY OF MUSKEGON</b>		<b>SOUTHERN AVE.</b>	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS	DEC 23	REVISION	SURVEY WESTSHORE MAY 23
CHECKED		REVISION	AS-BUILT
		SCALE 1" = 20'	PROJECT NO H-92218
			SHEET NO 4 OF 11



908 W SOUTHERN AVE SHEFFER    902 W SOUTHERN AVE KOZLOWSKI    890 W SOUTHERN AVE CATO    862 W SOUTHERN AVE PARKER    852 W SOUTHERN AVE RUELAS    846 W SOUTHERN AVE CAMPBELL



⊠ = PAVT. REM, MODIFIED  
 ⊞ = SIDEWALK, REM

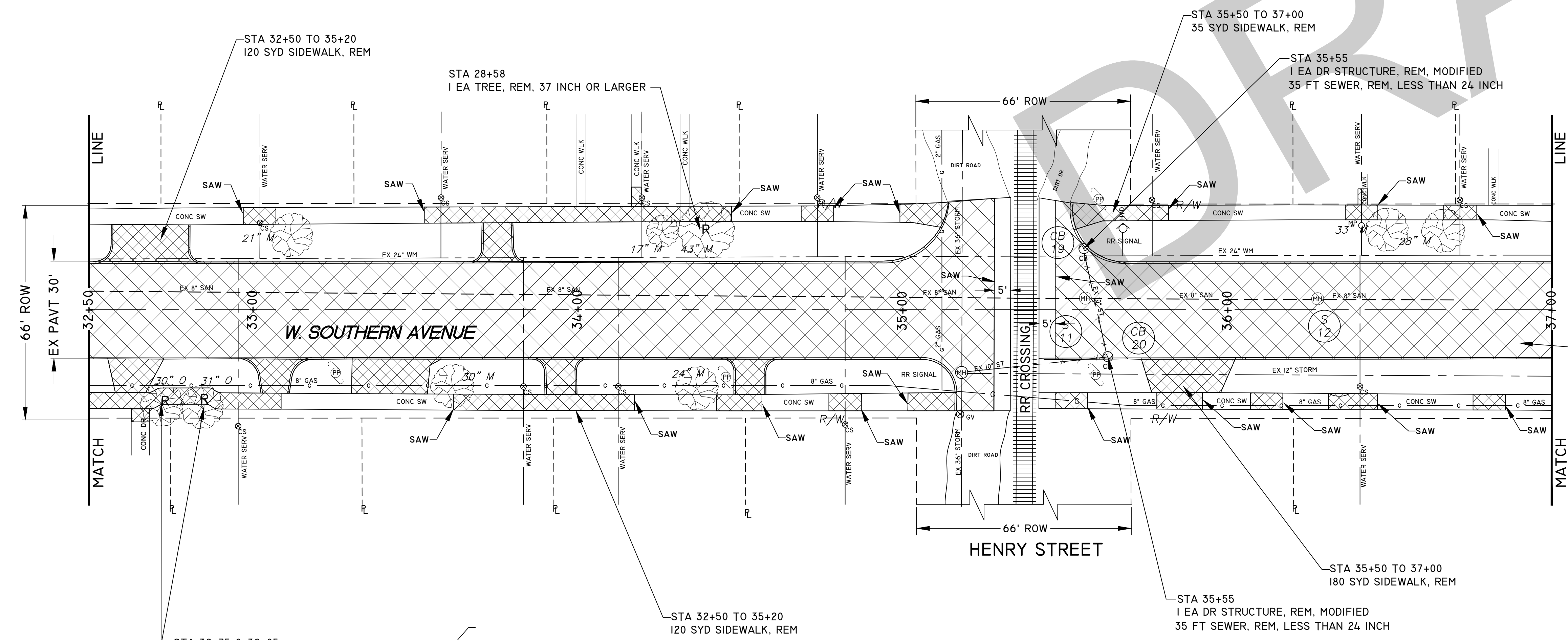


TOTAL QUANTITIES FROM 28+00 TO 32+50

TREE, REM, 6 INCH TO 18 INCH	0	EA
TREE, REM, 19 INCH TO 36 INCH	0	EA
TREE, REM, 37 INCH OR LARGER	1	EA
SEWER, REM, LESS THAN 24 INCH	145	FT
DR STRUCTURE, REM, MODIFIED	5	EA
SIDEWALK, REM	500	SYD
PAVT, REM, MODIFIED	1800	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	3	EA
UTILITY POLE, REM	1	EA
GUY, REM	2	EA

905 W SOUTHERN MURPHY    899 W SOUTHERN ARREOLA    889 W SOUTHERN MIDTOWN RESIDENTIAL PROPERTIES LLC    1571 DIVISION ST CASTANON    130 FT SOUTH CENTERLINE OF SOUTHERN ON WEST SIDE DIVISION 3 EA EROSION CONTROL, INLET PROTECTION, FABRIC DROP    861 W SOUTHERN AVE SALAZAR    853 W SOUTHERN LARSON    843 W SOUTHERN LEWIS

GXV PRO LC 834 W SOUTHERN AVE    828 W SOUTHERN AVE MUSKEGON COUNTY LAND BANK    820 W SOUTHERN AVE BOLEMA CONSTRUCTION CO    810 W SOUTHERN AVE BOLEMA CONSTRUCTION CO    790 W SOUTHERN AVE KOZLOWSKI    782 W SOUTHERN AVE HUTCHINS    776 W SOUTHERN AVE YOUNG



TOTAL QUANTITIES FROM 28+00 TO 32+50

TREE, REM, 6 INCH TO 18 INCH	0	EA
TREE, REM, 19 INCH TO 36 INCH	2	EA
TREE, REM, 37 INCH OR LARGER	1	EA
SEWER, REM, LESS THAN 24 INCH	50	FT
DR STRUCTURE, REM, MODIFIED	2	EA
SIDEWALK, REM	500	SYD
PAVT, REM, MODIFIED	1600	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	0	EA

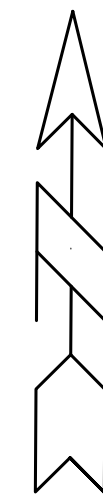
837 W SOUTHERN OLSON    827 W SOUTHERN MOSELER    817 W SOUTHERN AVE MOSELER    809 W SOUTHERN RIVER CITY PROPERTIES LLC    791 W SOUTHERN CITY OF MUSKEGON    781 W SOUTHERN OHANESSIAN

REMOVAL PLANS  
**CITY OF MUSKEGON**  
 OFFICE OF THE CITY ENGINEER

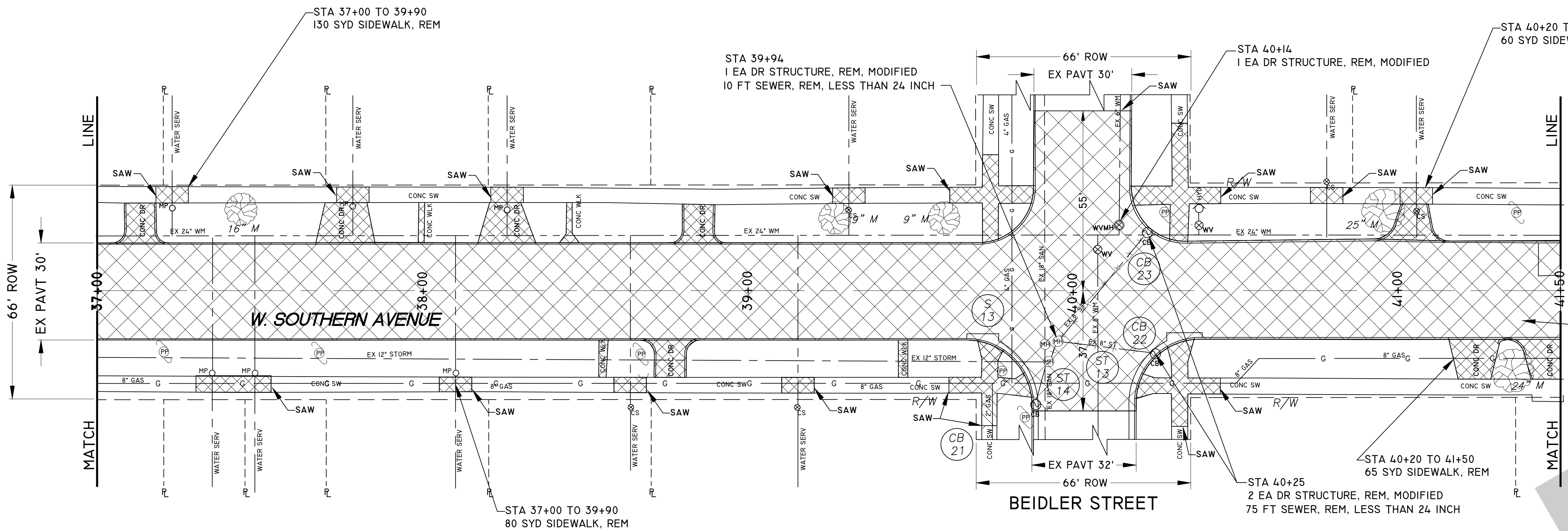
**SOUTHERN AVE.**  
 LAKESHORE DR. TO SEAWAY DR. (BUS31)

REVISION	SURVEY WESTSHORE	MAY 23	H-92218
REVISION	AS-BUILT		PROJECT NO
SCALE 1" = 20'			SHEET NO 4 OF 11

766 W SOUTHERN AVE CITY OF MUSKEGON  
 758 W SOUTHERN AVE PADILLA  
 750 W SOUTHERN AVE ADVANTA  
 1543 BEIDLER ST BURTON CAPITAL LLC  
 1542 BEIDLER ST WEST MICHIGAN PREMIER PROPERTIES  
 696 W SOUTHERN AVE WALKER



▨ = PAVT. REM. MODIFIED  
 ▨ = SIDEWALK, REM



TOTAL QUANTITIES FROM 28+00 TO 32+50

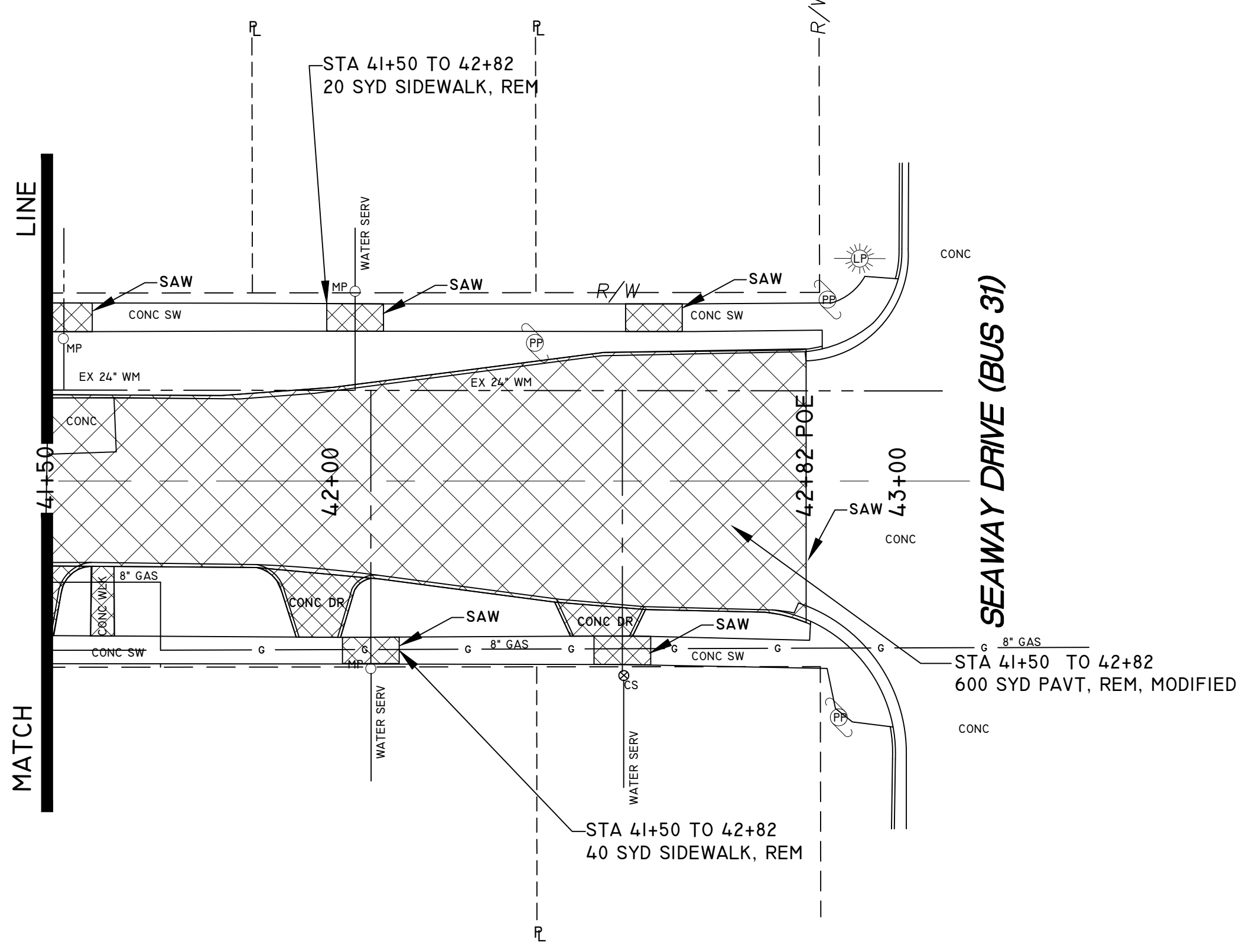
TREE, REM. 6 INCH TO 18 INCH	0	EA
TREE, REM. 19 INCH TO 36 INCH	0	EA
TREE, REM. 37 INCH OR LARGER	0	EA
SEWER, REM. LESS THAN 24 INCH	75	FT
DR STRUCTURE, REM. MODIFIED	4	EA
SIDEWALK, REM	400	SYD
PAVT. REM. MODIFIED	1800	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	0	EA

STA 37+00 TO 41+50  
 1800 SYD PAVT. REM. MODIFIED

767 W SOUTHERN ANDERSON  
 763 W SOUTHERN KEEFE  
 690 W SOUTHERN AVE OLEJARCZYK  
 759 W SOUTHERN RIVAS  
 682 W SOUTHERN AVE CITY OF MUSKEGON  
 749 W SOUTHERN S HOMES LLC  
 1561 BEIDLER ST MULL  
 1560 BEIDLER ST PARADIGM INVESTMENTS LLC

TOTAL QUANTITIES FROM 28+00 TO 32+50

TREE, REM. 6 INCH TO 18 INCH	0	EA
TREE, REM. 19 INCH TO 36 INCH	0	EA
TREE, REM. 37 INCH OR LARGER	0	EA
SEWER, REM. LESS THAN 24 INCH	0	FT
DR STRUCTURE, REM. MODIFIED	0	EA
SIDEWALK, REM	60	SYD
PAVT. REM. MODIFIED	600	SYD
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	0	EA



687 W SOUTHERN FLEMING  
 679 W SOUTHERN AVE FLEMING

REMOVAL PLANS  
**CITY OF MUSKEGON**  
 OFFICE OF THE CITY ENGINEER  
**SOUTHERN AVE.**  
 LAKESHORE DR. TO SEAWAY DR. (BUS31)

REVISION	SURVEY WESTSHORE	MAY 23	H-92218
REVISION	AS-BUILT		PROJECT NO
SCALE	1" = 20'		SHEET NO 4 OF 11





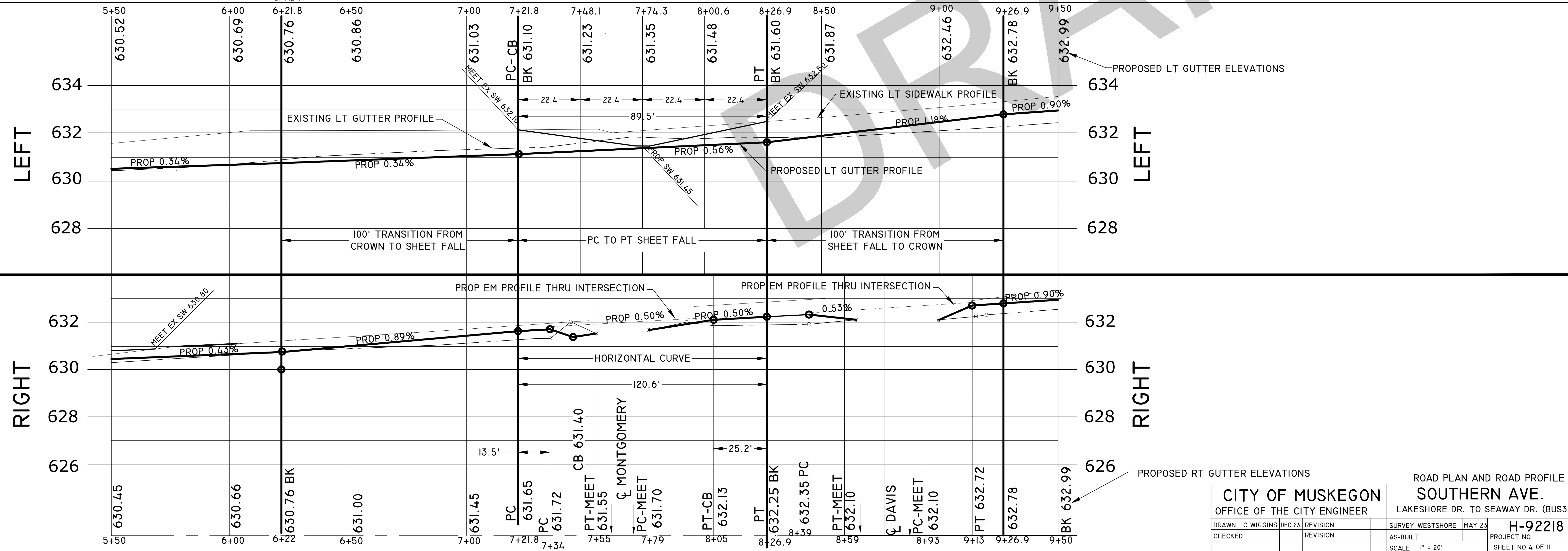
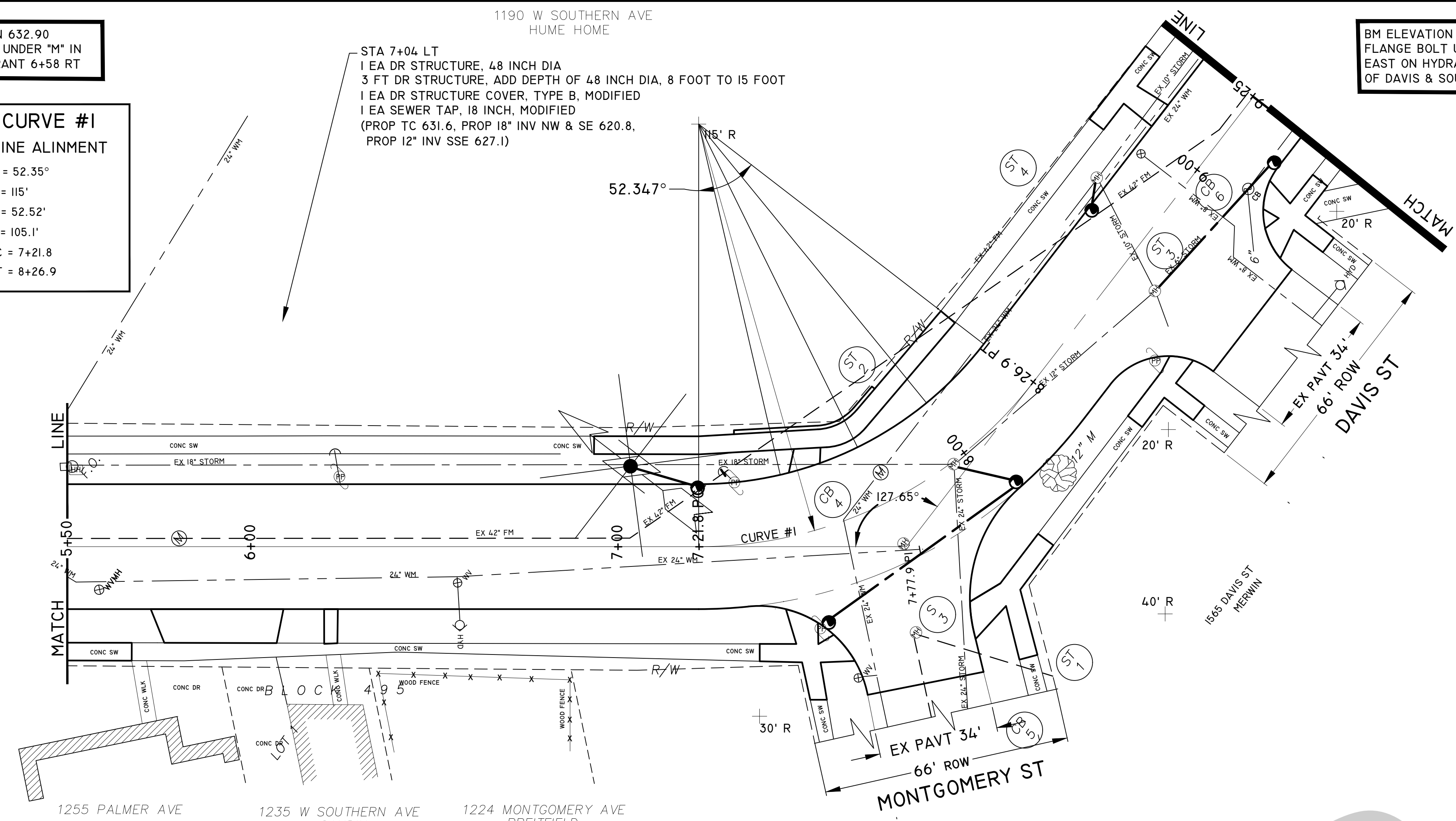


BM ELEVATION 632.90  
FLANGE BOLT UNDER "M" IN  
MICH ON HYDRANT 6+58 RT

**PROP CURVE #1**  
CENTER LINE ALIGNMENT  
 $\Delta = 52.35^\circ$   
 $R = 115'$   
 $T = 52.52'$   
 $L = 105.1'$   
 $PC = 7+21.8$   
 $PT = 8+26.9$

STA 7+04 LT  
 1 EA DR STRUCTURE, 48 INCH DIA  
 3 FT DR STRUCTURE, ADD DEPTH OF 48 INCH DIA, 8 FOOT TO 15 FOOT  
 1 EA DR STRUCTURE COVER, TYPE B, MODIFIED  
 1 EA SEWER TAP, 18 INCH, MODIFIED  
 (PROP TC 631.6, PROP 18" INV NW & SE 620.8,  
 PROP 12" INV SSE 627.1)

BM ELEVATION 634.78  
FLANGE BOLT UNDER "E" IN  
EAST ON HYDRANT SE CORNER  
OF DAVIS & SOUTHERN

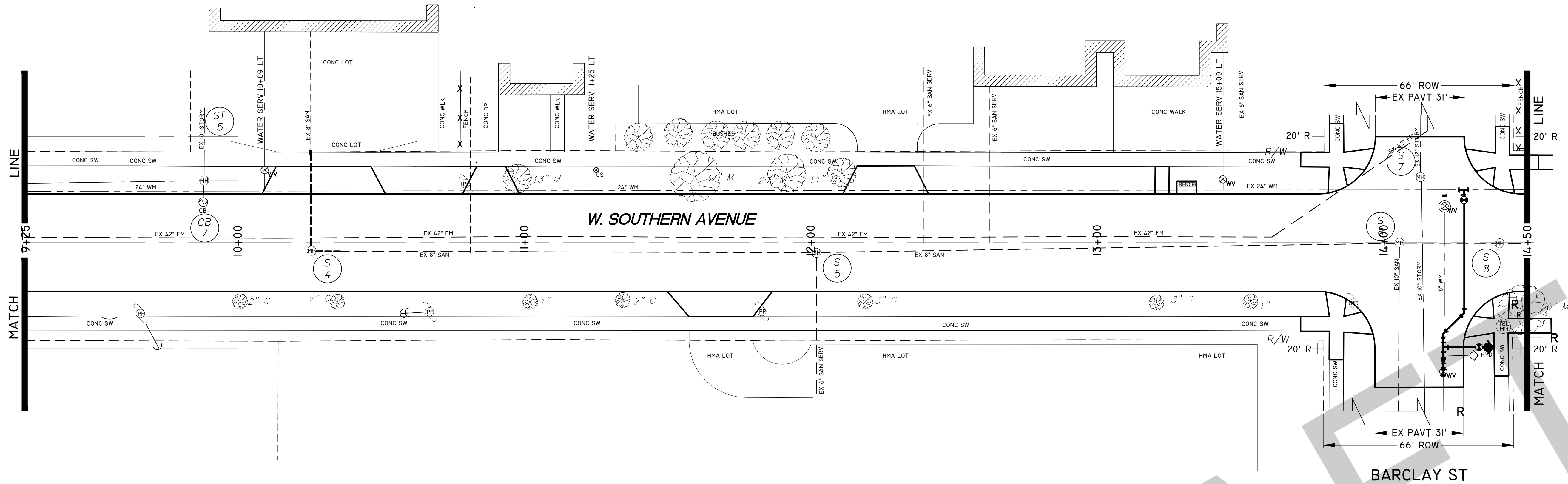


CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS	DEC 23	REVISION	SURVEY WESTSHORE MAY 23
CHECKED		REVISION	AS-BUILT
SCALE 1" = 20'		PROJECT NO H-92218	
		SHEET NO 4 OF 11	

1170 W SOUTHERN  
MUSKEGON-OCEANA  
COMMUNITY ACTION

1164 W SOUTHERN  
COOK

1132 W SOUTHERN  
HARBOR OF GRACE  
LUTHERAN CHURCH



BM ELEVATION 637.45  
FLANGE BOLT UNDER "R" ON  
HYDRANT SE CORNER  
OF BARCLAY & SOUTHERN

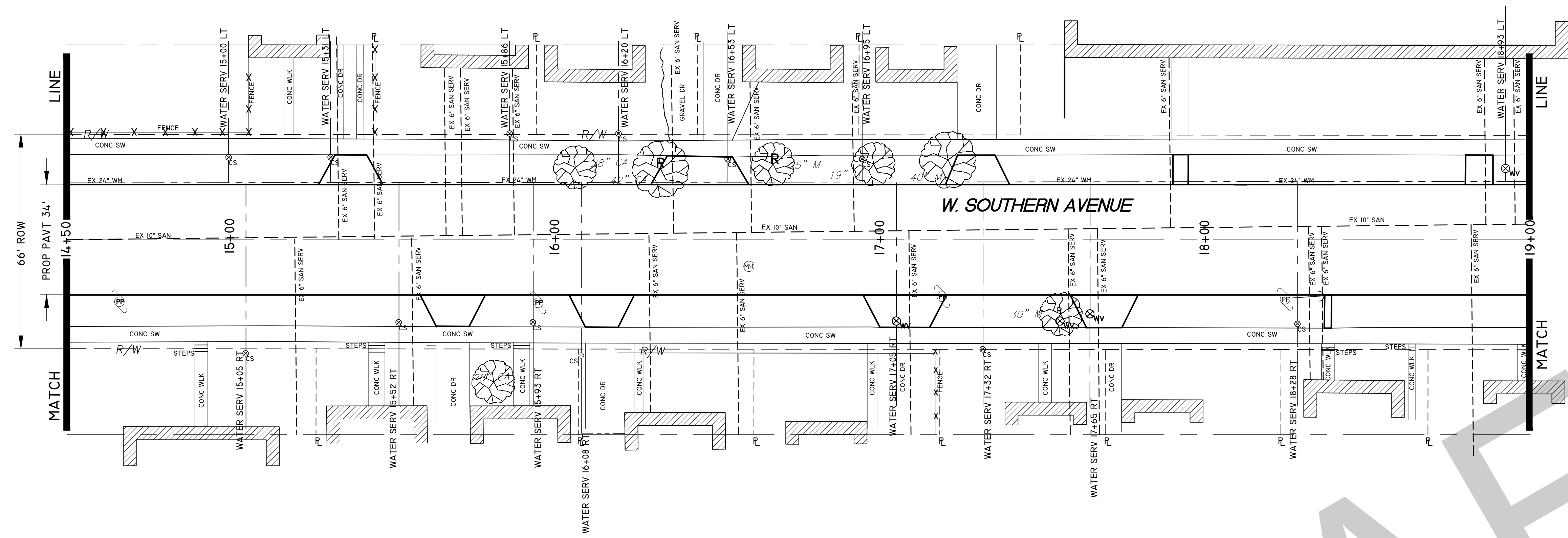
SOUTHERN AVE  
CITY OF MUSKEGON

1161 W SOUTHERN  
AVASURE PROPERTIES LLC

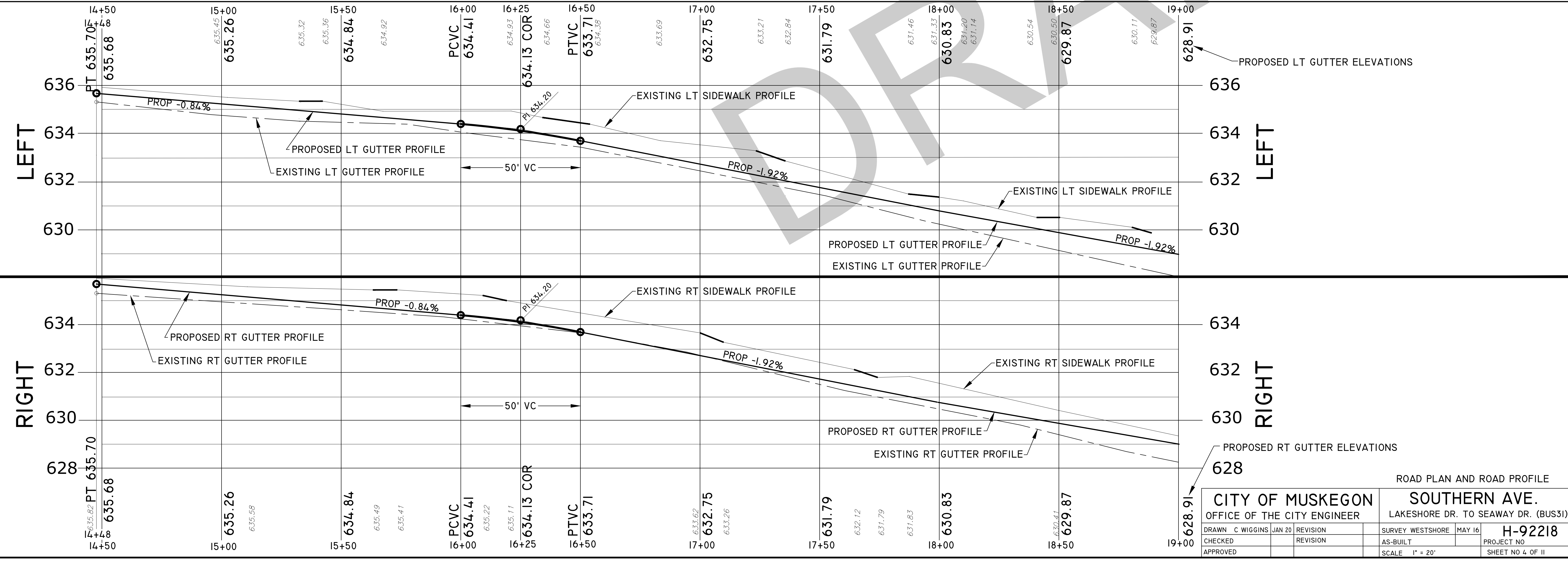


CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS	DEC 23	REVISION	SURVEY WESTSHORE MAY 23
CHECKED		REVISION	AS-BUILT
SCALE 1" = 20'		PROJECT NO H-92218	
		SHEET NO 4 OF 11	

1104 W SOUTHERN PETERSEN    1096 W SOUTHERN WALKER    1090 W SOUTHERN SISSON    1080 W SOUTHERN SISSON    1074 W SOUTHERN JONES    1050 W SOUTHERN WEST MICH DISTRICT WESLEYAN CHURCH



1103 W SOUTHERN BOWMAN    1097 W SOUTHERN GAINES    1093 W SOUTHERN AVE EMERSON ST PROPERTIES LLC    1087 W SOUTHERN MOORE    1079 W SOUTHERN CONKLIN    1069 W SOUTHERN EDLUND    1063 W SOUTHERN MCCAULEY    1055 W SOUTHERN PATTERSON    1047 W SOUTHERN

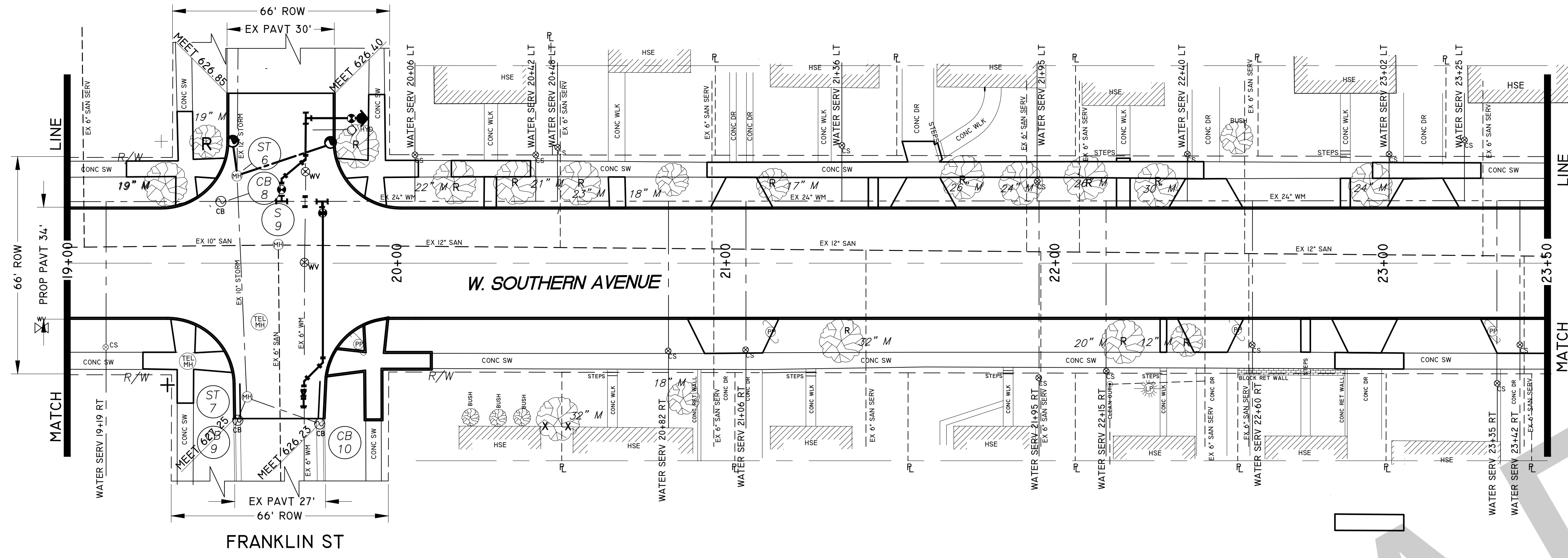


ROAD PLAN AND ROAD PROFILE			
CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS	JAN 20	REVISION	SURVEY WESTSHORE MAY 16
CHECKED		REVISION	AS-BUILT
APPROVED			SCALE 1" = 20'
			PROJECT NO. H-92218
			SHEET NO 4 OF 11

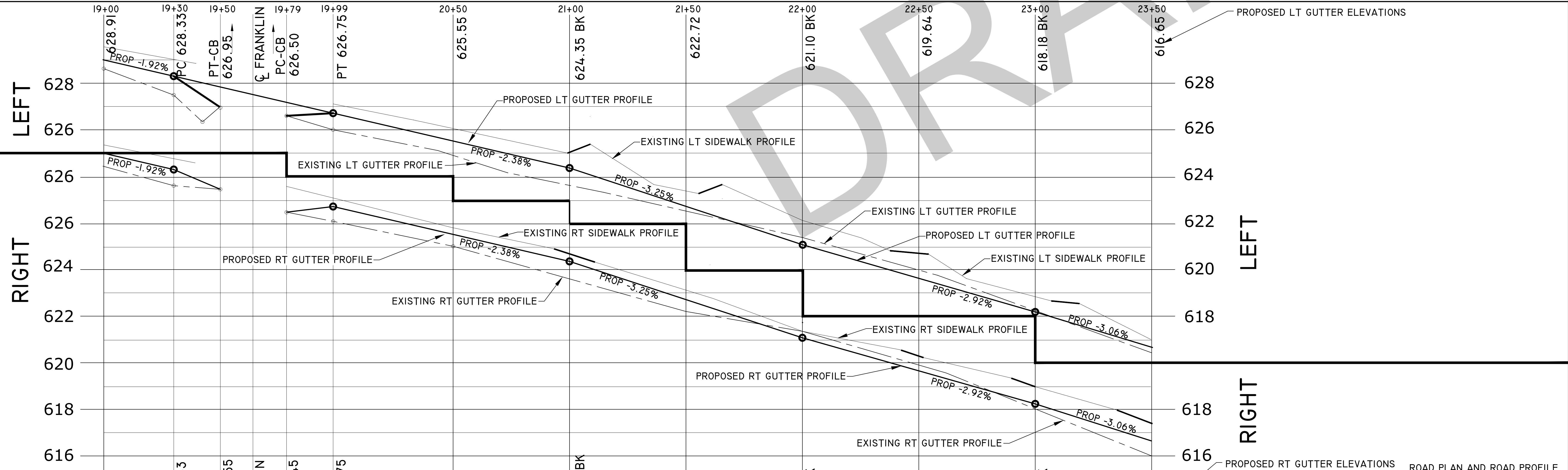


BM ELEVATION 629.16  
FLANGE BOLT UNDER "E" IN  
EAST ON HYDRANT NE COR  
OF FRANKLIN & SOUTHERN

1028 W SOUTHERN DAVIS 1020 W SOUTHERN RIVAS 1012 W SOUTHERN IDG INVESTMENTS LLC 1004 W SOUTHERN GRD PROPERTIES LLC 996 W SOUTHERN AVE BLACK 986 W SOUTHERN AVE BLACK 978 W SOUTHERN AVE SLOCUM



1027 W SOUTHERN FUNK 1019 W SOUTHERN FAWCETT 1011 W SOUTHERN RECKER 1003 W SOUTHERN RECKER 995 W SOUTHERN AVE JBB REAL ESTATE VENTURES LLC 987 W SOUTHERN AVE CASHBAUGH 981 W SOUTHERN AVE SWANSON

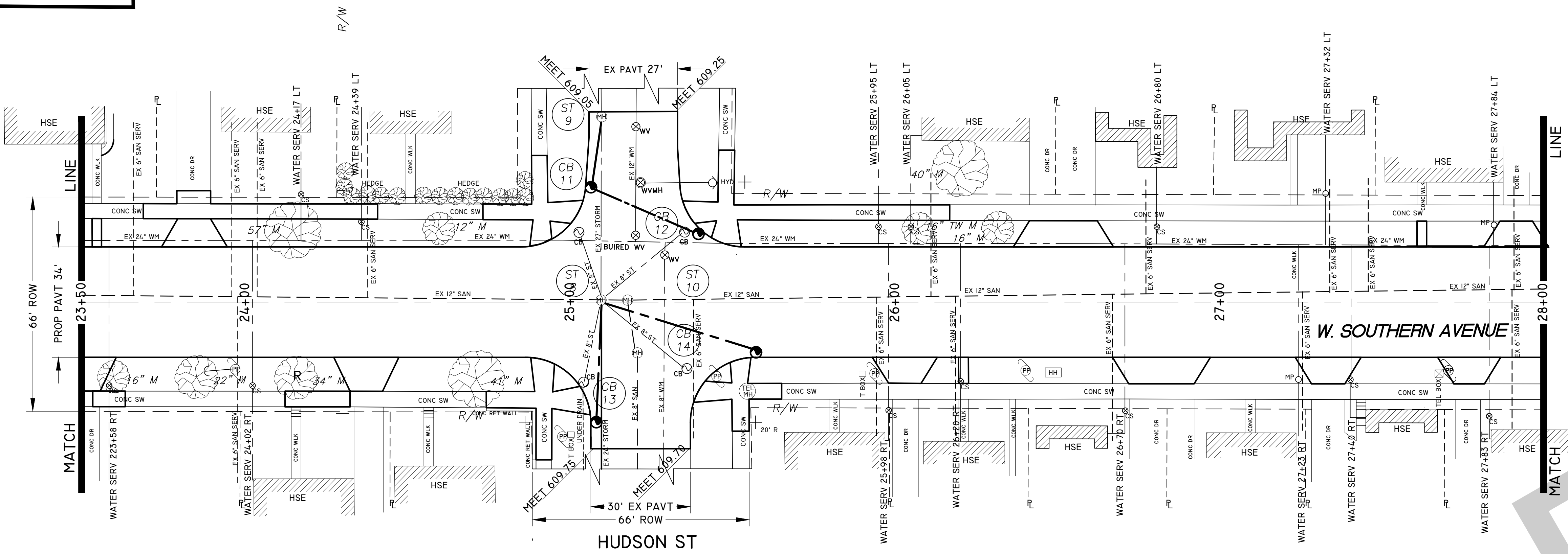


ROAD PLAN AND ROAD PROFILE

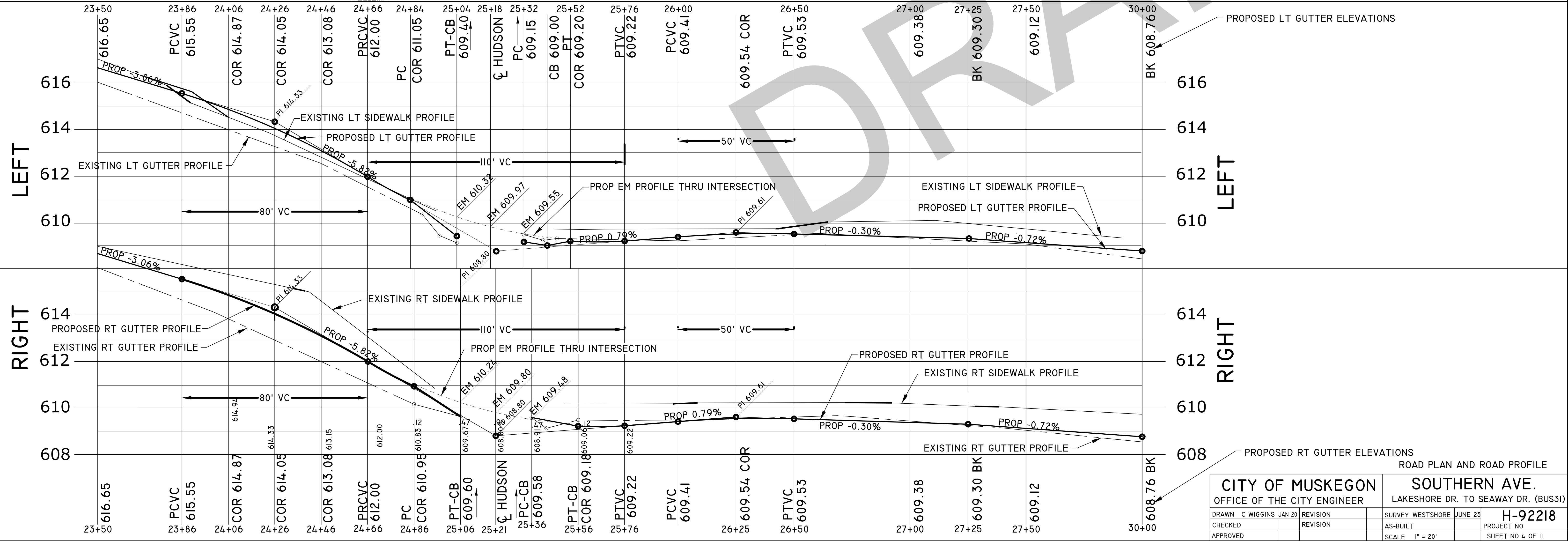
CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE MAY 16	H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED		SCALE 1" = 20'	SHEET NO 4 OF 11

BM ELEVATION 611.26  
FLANGE BOLT UNDER "1" ON  
HYDRANT NE COR OF HUDSON &  
SOUTHERN

970 W SOUTHERN AVE GREEN  
962 W SOUTHERN AVE VILLAFUERTE  
938 W SOUTHERN AVE IREY  
930 W SOUTHERN AVE GRISWOLD  
922 W SOUTHERN AVE DASZKO  
914 W SOUTHERN AVE T & H WOLF PROPERTIES LLC



977 W SOUTHERN AVE MILNAMOW  
969 W SOUTHERN AVE CUNNINGHAM  
963 W SOUTHERN AVE MELLEMA  
943 W SOUTHERN CURRIER  
935 W SOUTHERN OLSEN  
933 W SOUTHERN JBB REAL ESTATE VENTURES LLC  
923 W SOUTHERN KOZLOWSKI  
917 W SOUTHERN GRIGORIAN  
911 W SOUTHERN WARE

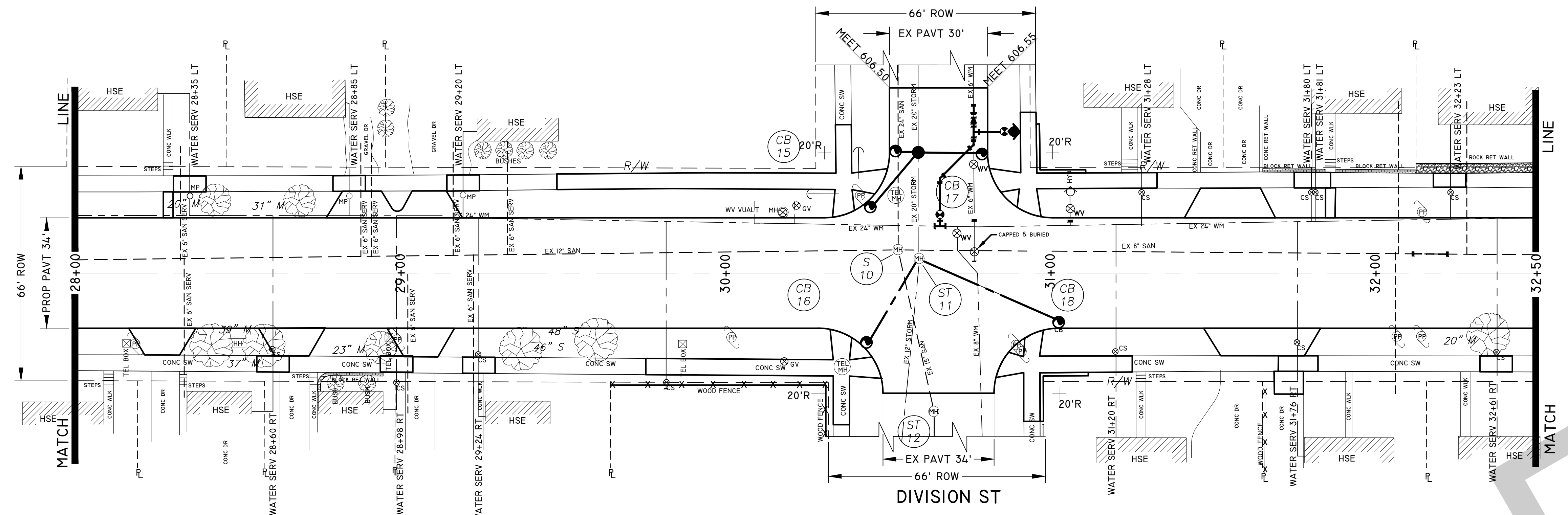


<b>CITY OF MUSKEGON</b>		<b>SOUTHERN AVE.</b>	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE JUNE 23	H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO.
APPROVED		SCALE 1" = 20'	SHEET NO 4 OF 11

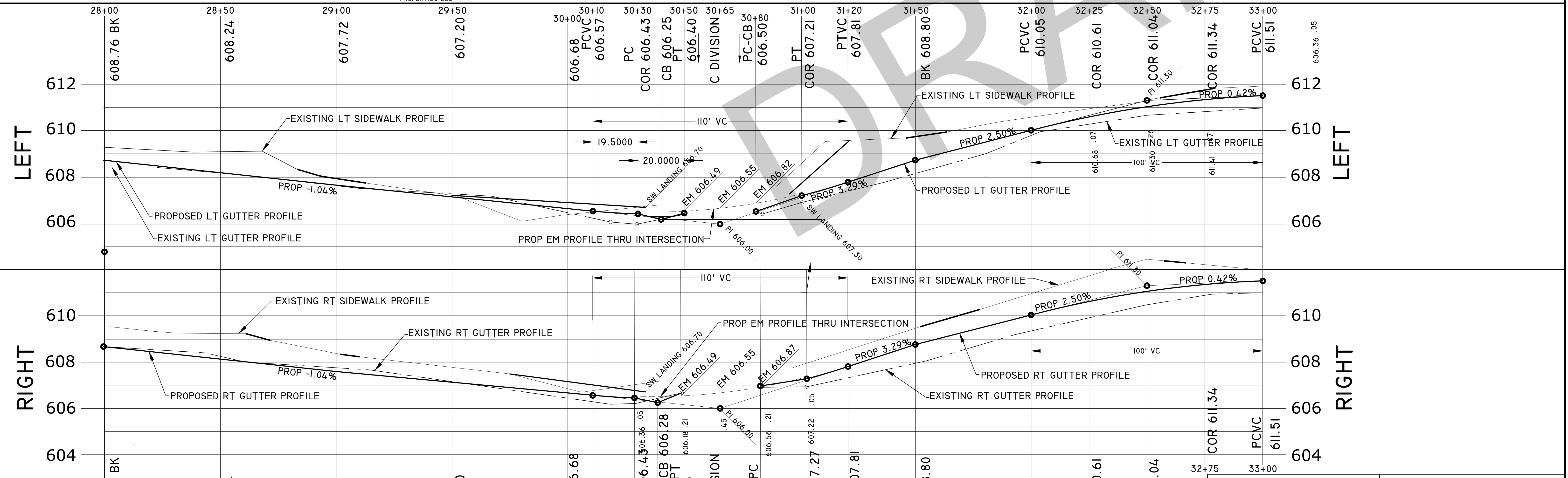


908 W SOUTHERN AVE SHEFFER 902 W SOUTHERN AVE KOZLOWSKI 890 W SOUTHERN AVE CATO 862 W SOUTHERN AVE PARKER 852 W SOUTHERN AVE RUELAS 846 W SOUTHERN AVE

BM ELEVATION 610.83  
FLANGE BOLT UNDER "I" ON  
HYDRANT NE COR OF DIVISION &  
SOUTHERN



905 W SOUTHERN MURPHY 899 W SOUTHERN ARREOLA 889 W SOUTHERN MIDTOWN RESIDENTIAL PROPERTIES LLC 1571 DIVISION ST CASTANON 861 W SOUTHERN AVE SALAZAR 853 W SOUTHERN LARSON 843 W SOUTHERN LEWIS



CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE JUNE 23	H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED		SCALE 1" = 20'	SHEET NO 4 OF 11



834 W SOUTHERN AVE  
GXV PRO LC

828 W SOUTHERN AVE  
MUSKEGON COUNTY  
LAND BANK

820 W SOUTHERN AVE  
BOLEMA CONSTRUCTION CO

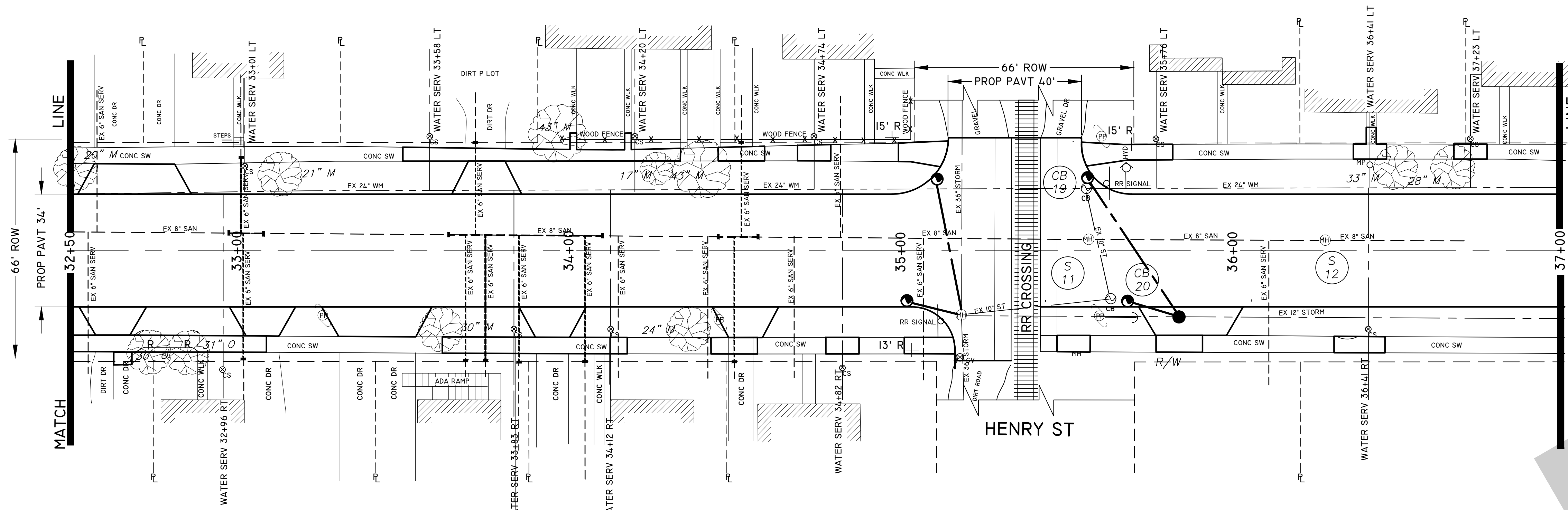
810 W SOUTHERN AVE  
BOLEMA CONSTRUCTION CO

790 W SOUTHERN AVE  
KOZLOWSKI

782 W SOUTHERN AVE  
HUTCHINS

776 W SOUTHERN AVE  
YOUNG

BM ELEVATION 614.58  
FLANGE BOLT UNDER "S" ON  
HYDRANT NE COR OF HENRY &  
SOUTHERN



837 W SOUTHERN  
OLSON

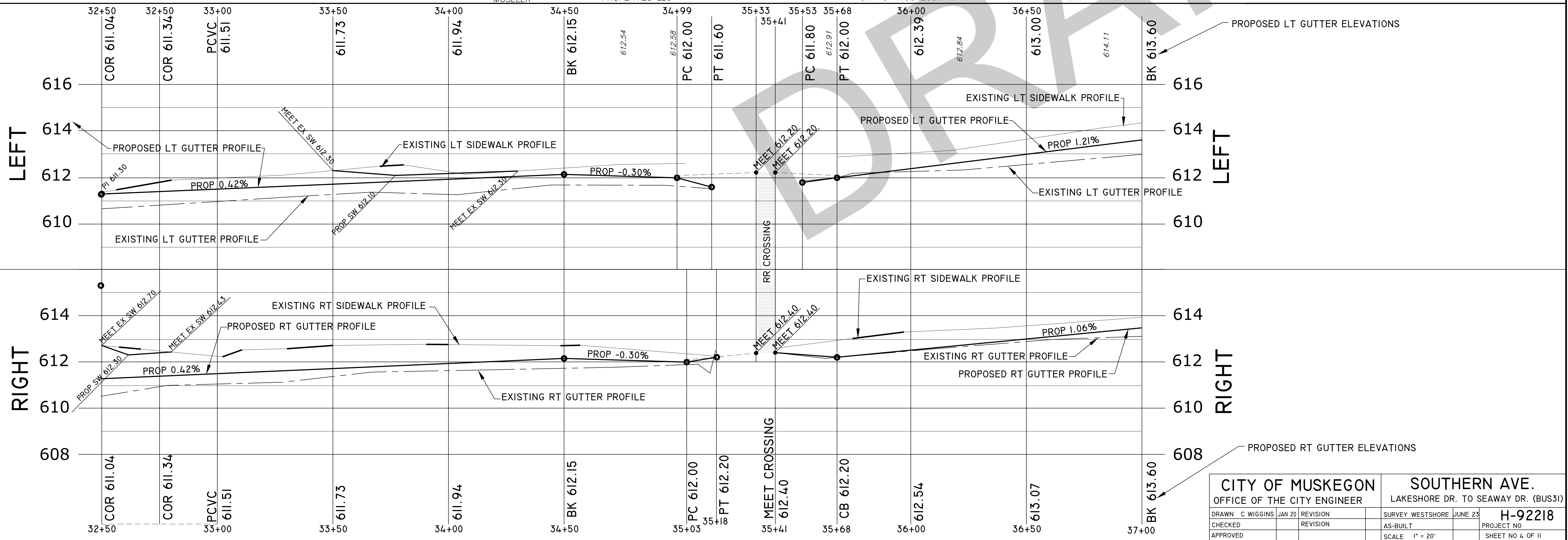
827 W SOUTHERN  
MOSELER

817 W  
SOUTHERN AVE  
MOSELER

809 W SOUTHERN  
RIVER CITY  
PROPERTIES LLC

791 W SOUTHERN  
CITY OF MUSKEGON

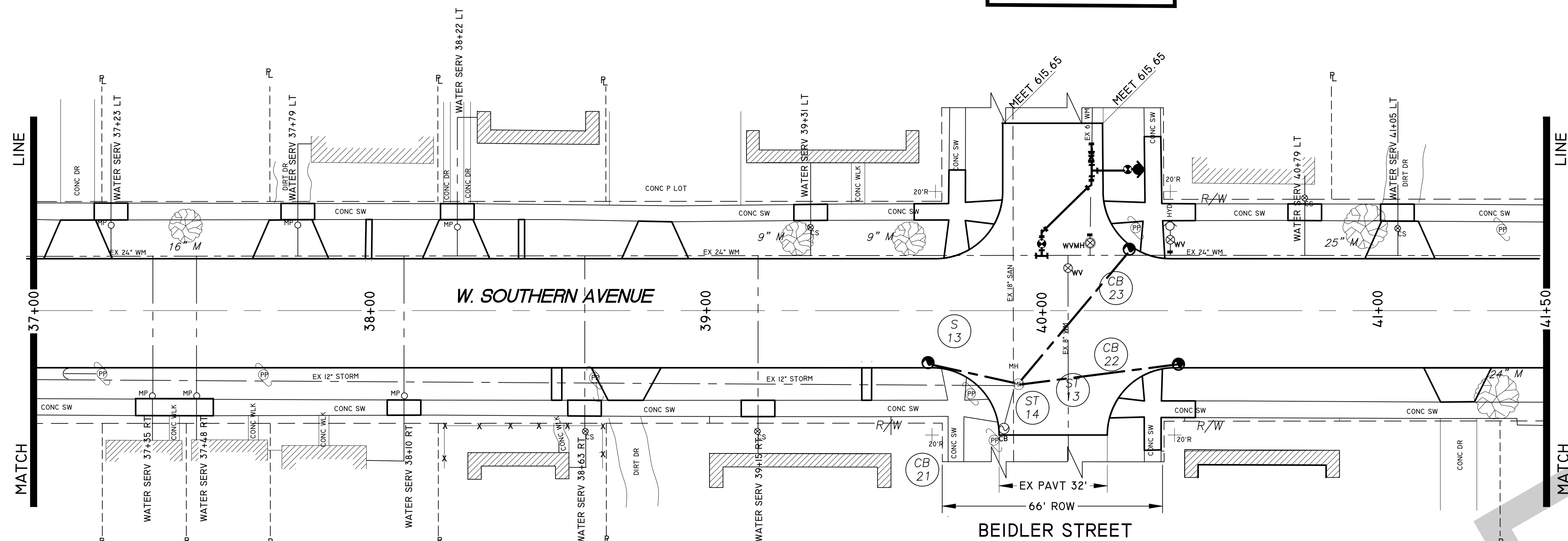
781 W SOUTHERN  
OHANESSIAN



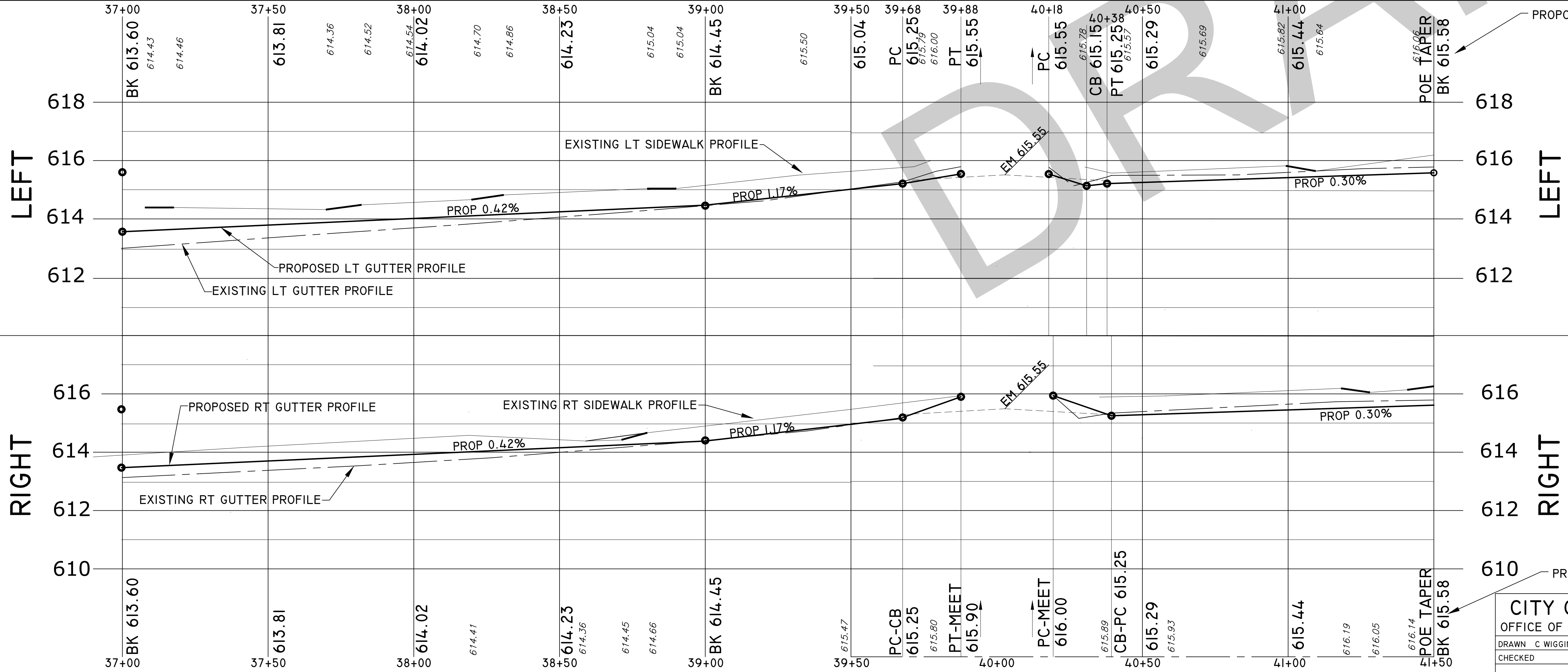
CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE JUNE 23	H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO
APPROVED		SCALE 1" = 20'	SHEET NO 4 OF 11

766 W SOUTHERN AVE CITY OF MUSKEGON    758 W SOUTHERN AVE PADILLA    750 W SOUTHERN AVE ADVANTA    1543 BEIDLER ST BURTON CAPITAL LLC    1542 BEIDLER ST WEST MICHIGAN PREMIER PROPERTIES LLC    696 W SOUTHERN AVE WALKER

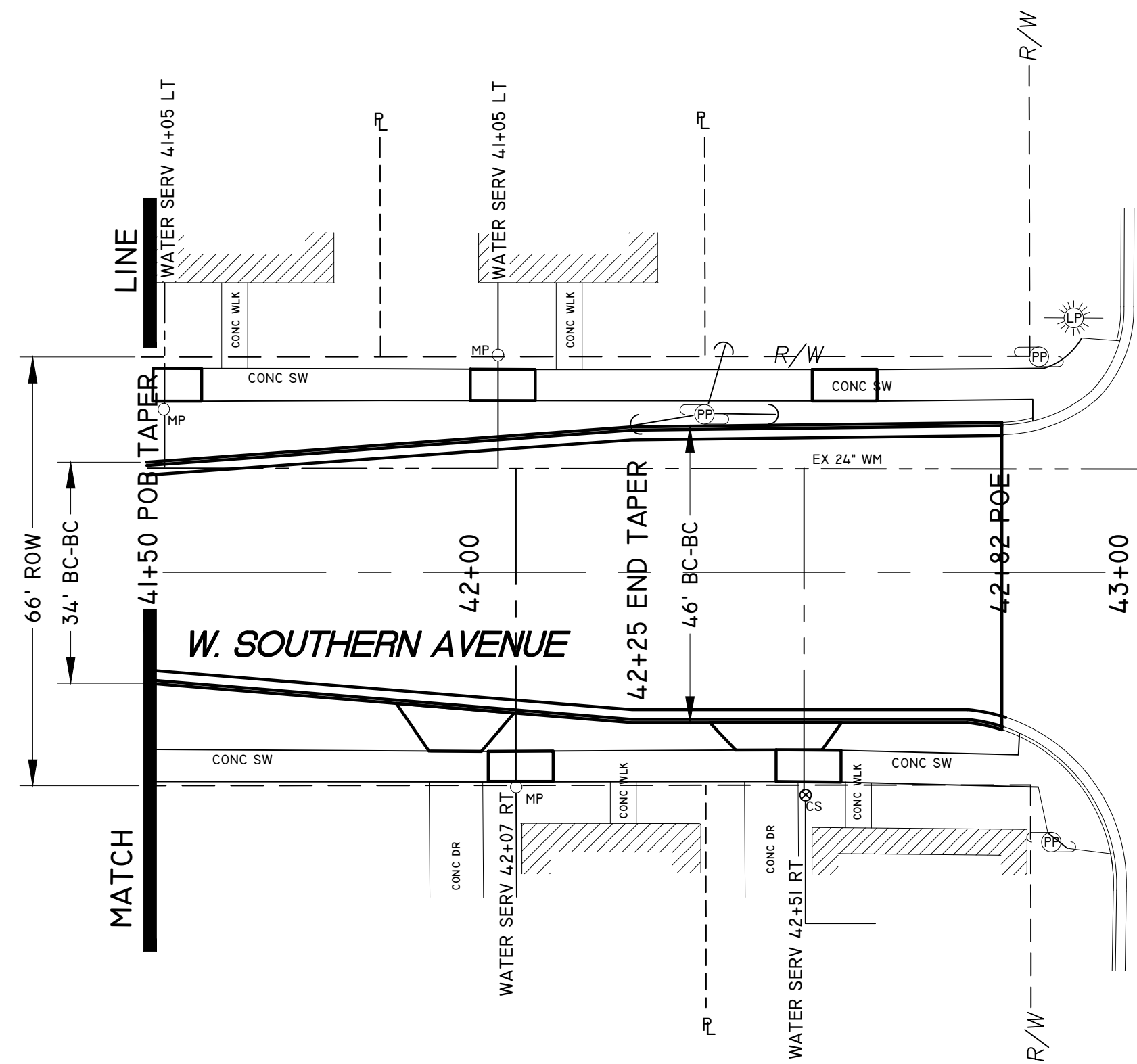
BM ELEVATION 616.41  
FLANGE BOLT UNDER "5" ON  
HYDRANT NE COR OF BEIDLER &  
SOUTHERN



767 W SOUTHERN ANDERSON    763 W SOUTHERN KEEFE    759 W SOUTHERN RIVAS    749 W SOUTHERN 5 HOMES LLC    1561 BEIDLER ST MULL    1560 BEIDLER ST PARADIGM INVESTMENTS LLC

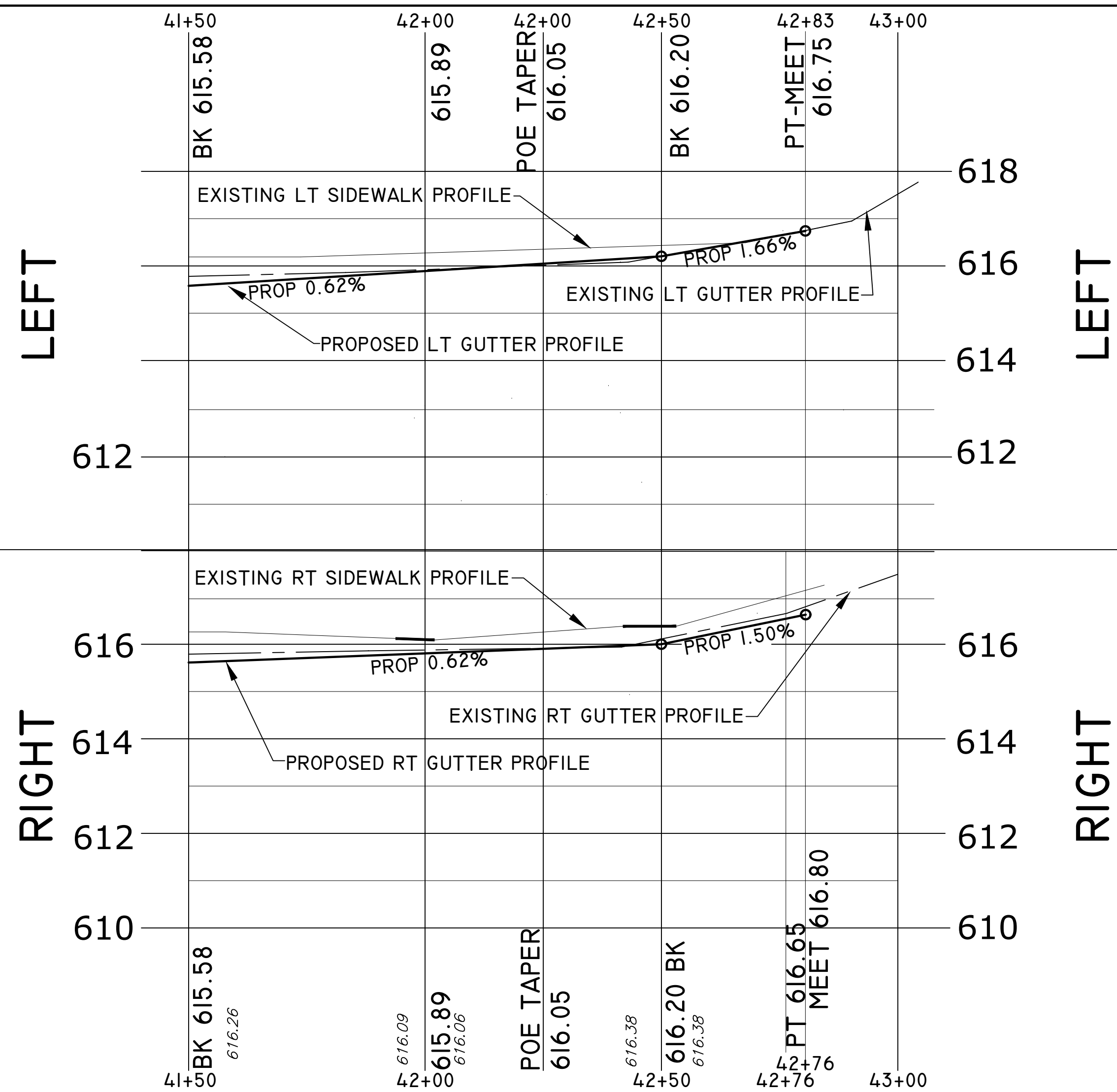


CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE JUNE 23	PROJECT NO H-92218
CHECKED	REVISION	AS-BUILT	PROJECT NO
SCALE 1" = 20'		SHEET NO 4 OF 11	



BM ELEVATION 618.33  
 TOP OF NORTH BOLT ON STRAIN  
 POLE BASE SW COR SEAWAY AND  
 SOUTHERN

687 W SOUTHERN FLEMING  
 679 W SOUTHERN AVE FLEMING



DRAFT

CITY OF MUSKEGON		SOUTHERN AVE.	
OFFICE OF THE CITY ENGINEER		LAKESHORE DR. TO SEAWAY DR. (BUS31)	
DRAWN C WIGGINS JAN 20	REVISION	SURVEY WESTSHORE JUNE 23	PROJECT NO H-92218
CHECKED	REVISION	AS-BUILT	SHEET NO 4 OF 11
		SCALE 1" = 20'	