

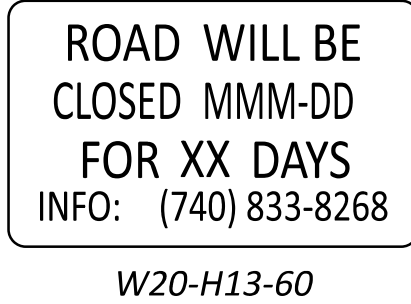
**NOTICE OF CLOSURE SIGN**

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC NEAR THE RAMP TERMINAL INTERSECTION. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURES	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.



**ESTIMATED QUANTITIES**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE WHEN THE ASPHALT SURFACE COURSE PAVEMENTS ARE PLACED BEFORE THE FINAL PAVEMENT MARKINGS ARE INSTALLED:

ITEM 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	0.29 MI
ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT	0.21 MI
ITEM 614, WORK ZONE EDGE LINE, CLASS III, 642 PAINT	0.60 MI
ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	2858 FT
ITEM 614, WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	1308 FT
ITEM 614, WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	520 FT
ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT	118 FT
ITEM 614, WORK ZONE ARROW, CLASS III, 642 PAINT	34 EACH

**PAYMENT**

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614, MAINTAINING TRAFFIC LUMP SUM

ITEM 614, DETOUR SIGNING LUMP SUM

**PLACEMENT OF ASPHALT CONCRETE**

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

**TRENCH FOR WIDENING**

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

**OVERNIGHT TRENCH CLOSING**

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 5 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

**PERMITTED LANE CLOSURE SCHEDULE (PLCS)**

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE AT: [HTTPS://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-CLOSURE](https://www.transportation.ohio.gov/wps/portal/gov/odot/working/data-tools/resources/permited-lane-closure)

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURES SHALL MATCH MONTH OF PLCS USED). LANE CLOSURES IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE PLCS SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY.

EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 53 M. GAL.

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

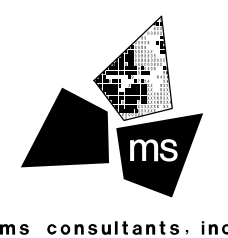
WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DESIGN AGENCY



DESIGNER

KJF

REVIEWER

JML 10/02/25

PROJECT ID


123987

SHEET TOTAL

P.15 | 122

SHEET NUMBER											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.15	P.16	P.18	P.22	P.42	P.92	P.104	P.120				01/SAF/03	EXT	TOTAL				
					1,308						1,308	807	14410	1,308	FT	<b>TRAFFIC CONTROL (CONT.)</b>	
					1						1	814	00010	1	EACH	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	
					1.43						1.43	850	10010	1.43	MILE	INTERSTATE ELONGATED ROUTE SHIELD SYMBOL MARKING, TYPE B125	
					1,308						1,308	850	10110	1,308	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
					3,497						3,497	850	10130	3,497	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
																<b>TRAFFIC SIGNALS</b>	
						4					4	625	32000	4	EACH	GROUND ROD	
						8					8	632	05006	8	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	
						8					8	632	25000	8	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
						435					435	632	30300	435	FT	MESSENGER WIRE, 7 STRAND, 3/16" DIAMETER WITH ACCESSORIES	
						435					435	632	30600	435	FT	TETHER WIRE, WITH ACCESSORIES	
						478					478	632	40700	478	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
						42					42	632	62810	42	FT	INTERCONNECT CABLE, MISC.: CAT 5E CABLE, OUTDOOR RATED	P.103
						1					1	632	62820	1	EACH	INTERCONNECT, MISC.: SPREAD SPECTRUM RADIO ASSEMBLY RELOCATED	P.103
						4					4	632	64000	4	EACH	STRAIN POLE FOUNDATION, AS PER PLAN, 20' DEEP	P.103
						4					4	632	83600	4	EACH	STRAIN POLE, MISC.:TYPE 4170, DESIGN 11	P.103
						1					1	632	90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	
						1					1	632	90400	1	EACH	SIGNALIZATION, MISC.:FOUNDATION PRE-EXCAVATION	P.103
						1					1	632	90400	1	EACH	SIGNALIZATION, MISC.:STOP LINE RADAR DETECTION	P.103
																<b>RETAINING WALLS</b>	
						LS					LS	503	21300	LS		UNCLASSIFIED EXCAVATION	
						LS					LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
						1,770					1,770	507	00200	1,770	FT	STEEL PILES HP12X53, FURNISHED	P.118
						1,136					1,136	507	00250	1,136	FT	STEEL PILES HP12X53, DRIVEN	
						175					175	507	92200	175	FT	PREBORED HOLES	P.121
						219					219	518	21200	219	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
						2,695					2,695	SPECIAL	53051010	2,695	SF	RETAINING WALL, PRECAST CONCRETE LAGGING	P.118
																<b>MISCELLANEOUS STRUCTURE</b>	
											1,638	512	10000	1,638	SY	SEALING OF CONCRETE SURFACES	
																<b>MAINTENANCE OF TRAFFIC</b>	
											1	SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL	P.20
											136	614	11110	136	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
											2,704	614	11630	2,704	FT	INCREASED BARRIER DELINEATION	
											3	614	12380	3	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
											LS	614	12420	LS		DETOUR SIGNING	
											536	614	12801	536	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	P.17
											26	614	13310	26	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
											20	614	13312	20	EACH	BARRIER REFLECTOR, TYPE 2, ONE WAY	
											90	614	13350	90	EACH	OBJECT MARKER, ONE WAY	
											28	614	18601	28	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.16
											0.19	614	20010	0.19	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
											0.29	614	20560	0.29	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
											0.17	614	21000	0.17	MILE	WORK ZONE CENTER LINE, CLASS I	
											0.21	614	21550	0.21	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
											0.25	614	22010	0.25	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
											1.22	614	22056	1.22	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
											0.6	614	22360	0.6	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
											6,857	614	23110	6,857	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
											2,858	614	23690	2,858	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
											74	614	24000	74	FT	WORK ZONE DOTTED LINE, CLASS I	
											1,308	614	24612	1,308	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
											268	614	25000	268	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I	
											520	614	25620	520	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
											81	614	26000	81	FT	WORK ZONE STOP LINE, CLASS I	
											118	614	26610	118	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	

**GENERAL SUMMARY**

DESIGN AGENCY  
  
 ms consultants, inc.

DESIGNER  
ACW

REVIEWER  
TAZ 11/30/25

PROJECT ID  
123987

SHEET TOTAL  
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SHEET NUMBER												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.15												01/SAF/03	ITEM	EXT	TOTAL			
												<b>MAINTENANCE OF TRAFFIC (CONT.)</b>						
												87	614	28000	87	FT	WORK ZONE GORE MARKING, CLASS II	
												22	614	30000	22	EACH	WORK ZONE ARROW, CLASS I	
34												34	614	30650	34	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
												81	615	20000	81	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
53												53	616	10000	53	MGAL	WATER	
												2,600	622	41100	2,600	FT	PORTABLE BARRIER, UNANCHORED	
												<b>INCIDENTALS</b>						
LS												LS	108	10000	LS		CPM PROGRESS SCHEDULE	
												LS	614	11000	LS		MAINTAINING TRAFFIC	
												9	619	16010	9	MNTH	FIELD OFFICE, TYPE B	
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



ms consultants, inc.

DESIGNER  
ACW

REVIEWER  
TAZ 11/30/25

PROJECT ID  
123987

SHEET TOTAL  
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**DESIGN SPECIFICATIONS**

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

**DESIGN DATA**

CONCRETE CLASS QC1:  
 COMPRESSIVE STRENGTH 4.0 KSI (PRECAST CONCRETE LAGGING)

CONCRETE REINFORCEMENT:  
 EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI (PRECAST CONCRETE LAGGING)

STRUCTURAL STEEL:  
 STEEL H-PILES - ASTM A572 - GRADE 50 - YIELD STRENGTH 50-KSI

**DOMESTIC STEEL REQUIREMENT**

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN SECTION 153.011 OF THE REVISED CODE APPLY TO THIS PROJECT. COPIES OF SECTION 153.011 OF THE CODE CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES.

**ITEM 507 - STEEL PILES HP12x53, FURNISHED**

FURNISH STEEL PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50 AND CMS 711.01.

MEASUREMENT FOR PAYMENT WILL BE THE FURNISHED LENGTH OR THE DISTANCE BETWEEN THE TOP OF PILE ELEVATION AND THE PILE TIP ELEVATION, IF GREATER THAN FURNISHED LENGTH, AS DETERMINED BY THE ENGINEER. PAYMENT FOR FURNISHED PILE AND COMPLETING ALL INCIDENTALS WILL BE AT THE CONTRACT UNIT PRICE PER FOOT OF ITEM 507 - STEEL PILES HP12X53, FURNISHED.

**PILE SPLICES**

IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN CMS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION  
 8 WOOD HOLLOW RD. PLAZA 1  
 PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

**ITEM 530 SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING**

THIS WORK CONSISTS OF FURNISHING AND PLACING PRECAST REINFORCED CONCRETE PANELS BETWEEN THE SOLDIER PILES TO FUNCTION AS LAGGING FOR THE RETAINING WALL. PROVIDE PRECAST CONCRETE LAGGING FROM A PRECAST CONCRETE MANUFACTURER CERTIFIED UNDER SUPPLEMENT 1073. PROVIDE CONCRETE WITH A 28-DAY DESIGN STRENGTH OF AT LEAST 4000 PSI AND AIR ENTRAINMENT OF 5 TO 9 PERCENT ACCORDING TO CMS 499. PROVIDE EPOXY COATED REINFORCING STEEL ACCORDING TO CMS 709.00.

THE REINFORCING STEEL FOR CONCRETE LAGGING SHALL BE INCLUDED WITH ITEM 530 SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING, FOR PAYMENT.

PERMANENTLY MARK EACH PANEL TO INDICATE THE FACE TO BE PLACED AGAINST THE SOIL. PLACE THE PANEL BETWEEN THE FLANGES OF THE SOLDIER PILES AND BEARING AGAINST THE FLANGES ON THE EXPOSED SIDE OF THE WALL.

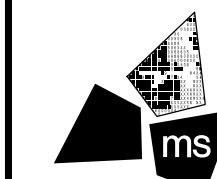
WHEN INSTALLING THE PRECAST CONCRETE LAGGING PANELS, PLACE HARDWOOD WEDGES TO HOLD THE LAGGING PANELS AGAINST THE FRONT INSIDE FLANGE OF THE STEEL PILES AS DETAILED IN THE PLANS. 1/2" PREFORMED EXPANSION JOINT FILLER AS PER CMS 516 SHALL BE PLACED IN BETWEEN THE STEEL PILE AND CONCRETE.

EXCAVATION LIMITS AND ALL WORK ASSOCIATED WITH THE INSTALLATION OF THE DRILLED SHAFTS AND LAGGING SHALL BE CONTAINED WITHIN THE EXISTING RIGHT-OF-WAY LIMITS.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO FABRICATE, TRANSPORT, AND INSTALL THE PRECAST CONCRETE LAGGING SECTIONS AS SHOWN IN THE PLANS SHALL BE MADE UNDER:

ITEM 530 SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ATM

REVIEWER

YSJ 12-03-25

PROJECT ID

123987

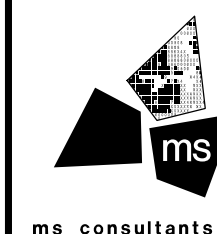
SHEET TOTAL

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SOLDIER PILE WALL DATA									
PILE NO.	STATION	TOP/PILE ELEV.	PILE TIP ELEV.	PILE LENGTH	PILE NO.	STATION	TOP/PILE ELEV.	PILE TIP ELEV.	PILE LENGTH
1	1+02.00	762.50	745.75	16.75	41	3+46.00	766.50	749.75	16.75
2	1+08.00	764.50	742.75	21.75	42	3+52.00	765.50	748.75	16.75
3	1+18.00	764.50	742.75	21.75	43	3+58.00	765.50	748.75	16.75
4	1+24.00	764.50	747.75	16.75	44	3+64.00	765.50	748.75	16.75
5	1+30.00	766.00	749.25	16.75	45	3+70.00	765.50	748.75	16.75
6	1+36.00	766.00	749.25	16.75	46	3+76.00	765.50	743.75	21.75
7	1+42.00	766.00	749.25	16.75	47	3+86.00	765.50	743.75	21.75
8	1+48.00	766.50	749.75	16.75	48	3+92.00	764.50	747.75	16.75
9	1+54.00	766.50	749.75	16.75	49 *	3+98.00	764.50	747.75	16.75
10	1+60.00	768.50	751.75	16.75	50 *	4+04.00	764.50	747.75	16.75
11	1+66.00	768.50	751.75	16.75	51 *	4+10.00	764.50	747.75	16.75
12	1+72.00	768.50	751.75	16.75	52 *	4+16.00	764.50	747.75	16.75
13	1+78.00	768.50	751.75	16.75	53 *	4+22.00	763.50	746.75	16.75
14	1+84.00	768.50	751.75	16.75	54 *	4+28.00	763.50	746.75	16.75
15	1+90.00	768.50	751.75	16.75	55 *	4+34.00	763.50	746.75	16.75
16	1+96.00	768.50	751.75	16.75	56 *	4+40.00	763.50	746.75	16.75
17	2+02.00	768.50	751.75	16.75	57 *	4+46.00	763.50	746.75	16.75
18	2+08.00	768.50	751.75	16.75	58 *	4+52.00	763.50	746.75	16.75
19	2+14.00	768.50	751.75	16.75	59 *	4+58.00	763.50	746.75	16.75
20	2+20.00	768.50	751.75	16.75	60 *	4+64.00	763.50	746.75	16.75
21	2+26.00	766.50	749.75	16.75	61 *	4+70.00	763.50	746.75	16.75
22	2+32.00	766.50	749.75	16.75	62 *	4+76.00	763.50	746.75	16.75
23	2+38.00	766.50	749.75	16.75	63	4+82.00	763.50	746.75	16.75
24	2+44.00	766.50	749.75	16.75	64	4+88.00	763.50	746.75	16.75
25	2+50.00	766.50	749.75	16.75	65	4+94.00	763.50	746.75	16.75
26	2+56.00	766.50	749.75	16.75	66	5+00.00	763.50	746.75	16.75
27	2+62.00	766.50	749.75	16.75	67	5+06.00	762.50	745.75	16.75
28	2+68.00	766.50	749.75	16.75	68	5+12.00	762.50	745.75	16.75
29	2+74.00	766.50	749.75	16.75	69	5+18.00	762.50	745.75	16.75
30	2+80.00	766.50	749.75	16.75	70	5+24.00	762.50	745.75	16.75
31	2+86.00	766.50	749.75	16.75	71	5+30.00	762.50	740.75	21.75
32	2+92.00	766.50	749.75	16.75	72	5+40.00	762.50	740.75	21.75
33	2+98.00	766.50	749.75	16.75	73	5+46.00	762.50	745.75	16.75
34	3+04.00	766.50	749.75	16.75	74	5+52.00	762.50	745.75	16.75
35	3+10.00	766.50	749.75	16.75	75	5+58.00	762.50	745.75	16.75
36	3+16.00	766.50	749.75	16.75	76	5+64.00	762.50	745.75	16.75
37	3+22.00	766.50	749.75	16.75	77	5+70.00	762.50	745.75	16.75
38	3+28.00	766.50	749.75	16.75	78	5+76.00	762.50	745.75	16.75
39	3+34.00	766.50	749.75	16.75	79	5+82.00	762.50	745.75	16.75
40	3+40.00	766.50	749.75	16.75	80	5+88.00	762.50	745.75	16.75

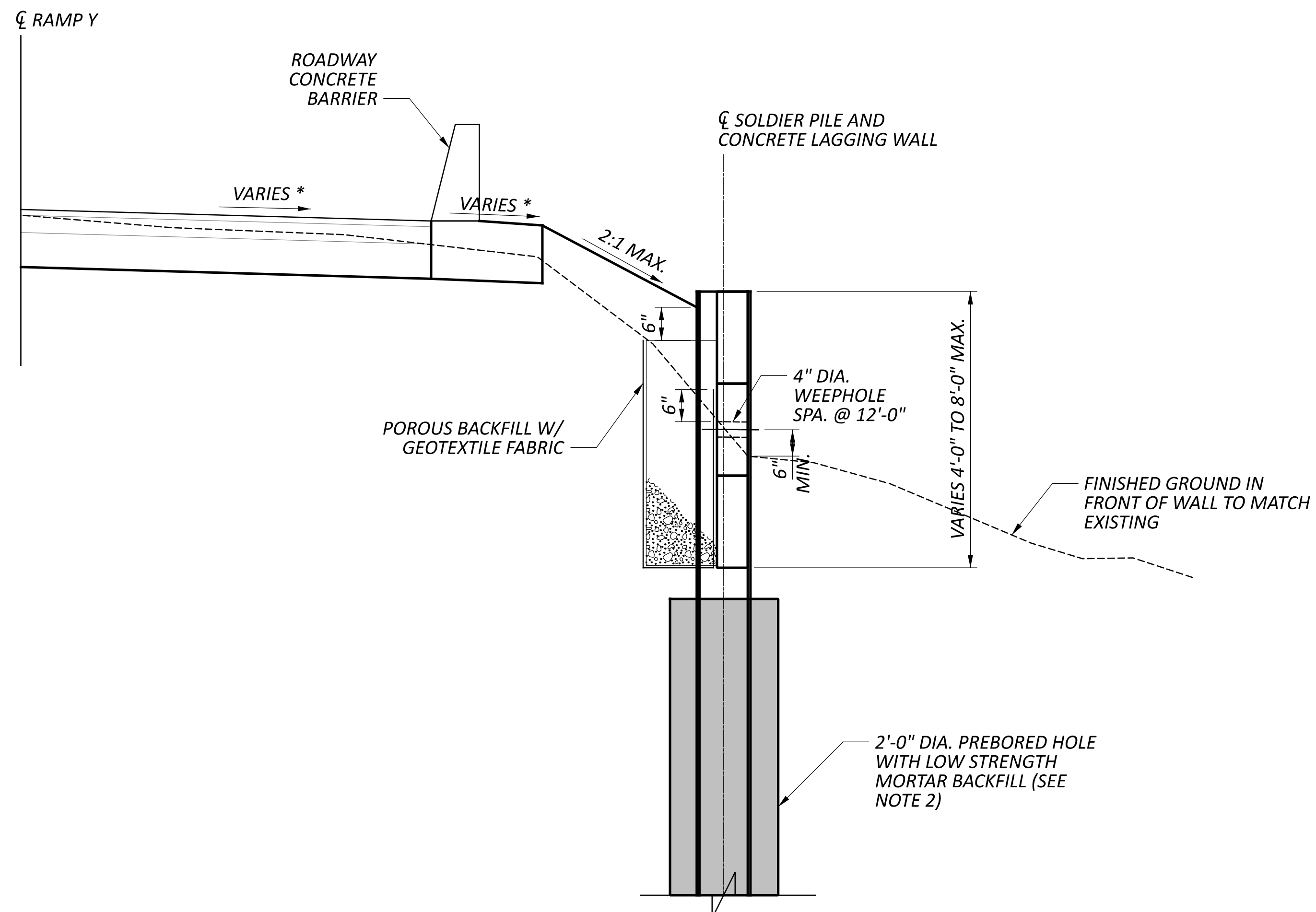
\* INDICATES PILE IS BELOW BRIDGE FRA-71-1716 (MAIN STREET). THESE PILES MAY BE SPLICED ACCORDING TO THE PILE SPLICES NOTE. SPLICES ARE INCIDENTAL TO ITEM 507 - STEEL PILES HP12x53, FURNISHED. THESE PILES SHALL BE PREBORED AND BACKFILLED WITH LOW STRENGTH MORTAR PER DETAIL AND NOTES ON P.121.

SOLDIER PILE WALL PANEL DATA					
PANEL NO.	TOP/WALL ELEV.	BOT./WALL ELEV.	PANEL NO.	TOP/WALL ELEV.	BOT./WALL ELEV.
1	762.50	758.50	41	765.50	759.50
2	764.50	758.50	42	765.50	759.50
3	764.50	759.50	43	765.50	759.50
4	764.50	759.50	44	765.50	759.50
5	766.00	761.00	45	765.50	759.50
6	766.00	761.00	46	765.50	759.50
7	766.00	761.00	47	764.50	758.50
8	766.50	760.50	48	764.50	758.50
9	766.50	760.50	49	764.50	758.50
10	768.50	760.50	50	764.50	758.50
11	768.50	760.50	51	764.50	758.50
12	768.50	760.50	52	763.50	758.50
13	768.50	760.50	53	763.50	758.50
14	768.50	760.50	54	763.50	758.50
15	768.50	760.50	55	763.50	758.50
16	768.50	760.50	56	763.50	758.50
17	768.50	761.50	57	763.50	758.50
18	768.50	761.50	58	763.50	758.50
19	768.50	761.50	59	763.50	758.50
20	766.50	761.50	60	763.50	758.50
21	766.50	761.50	61	763.50	758.50
22	766.50	761.50	62	763.50	758.50
23	766.50	761.50	63	763.50	758.50
24	766.50	761.50	64	763.50	758.50
25	766.50	761.50	65	763.50	758.50
26	766.50	761.50	66	762.50	758.50
27	766.50	761.50	67	762.50	758.50
28	766.50	761.50	68	762.50	758.50
29	766.50	761.50	69	762.50	758.50
30	766.50	760.50	70	762.50	757.50
31	766.50	760.50	71	762.50	757.50
32	766.50	760.50	72	762.50	757.50
33	766.50	760.50	73	762.50	757.50
34	766.50	760.50	74	762.50	757.50
35	766.50	760.50	75	762.50	758.50
36	766.50	760.50	76	762.50	758.50
37	766.50	760.50	77	762.50	758.50
38	766.50	760.50	78	762.50	758.50
39	766.50	760.50	79	762.50	758.50
40	766.50	760.50			



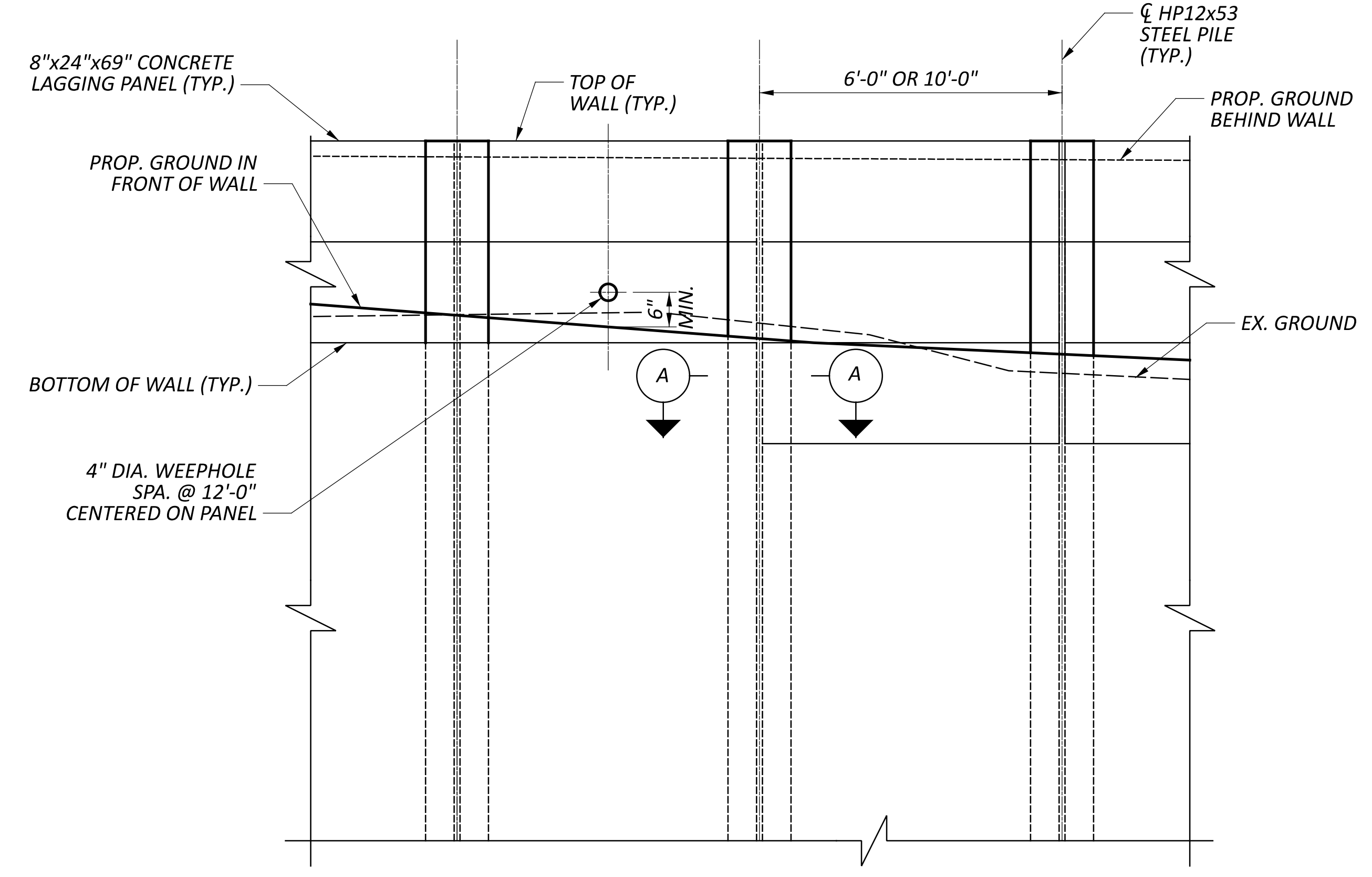
CALC	ATM	DATE	12/2/25		
CHECK	YSJ	DATE	12/3/25		
ESTIMATED QUANTITIES					
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SHEET REF.
503	21300		LS	UNCLASSIFIED EXCAVATION	
505	11100		LS	PILE DRIVING EQUIPMENT MOBILIZATION	
507	08200	1,770	FT	STEEL PILES HP12X53, FURNISHED	P.118
507	00250	1,136	FT	STEEL PILES HP12X53, DRIVEN	
507	92200	175	FT	PREBORED HOLES	P.121
518	21200	219	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
SPECIAL	530E51010	2,695	SF	SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING	P.118



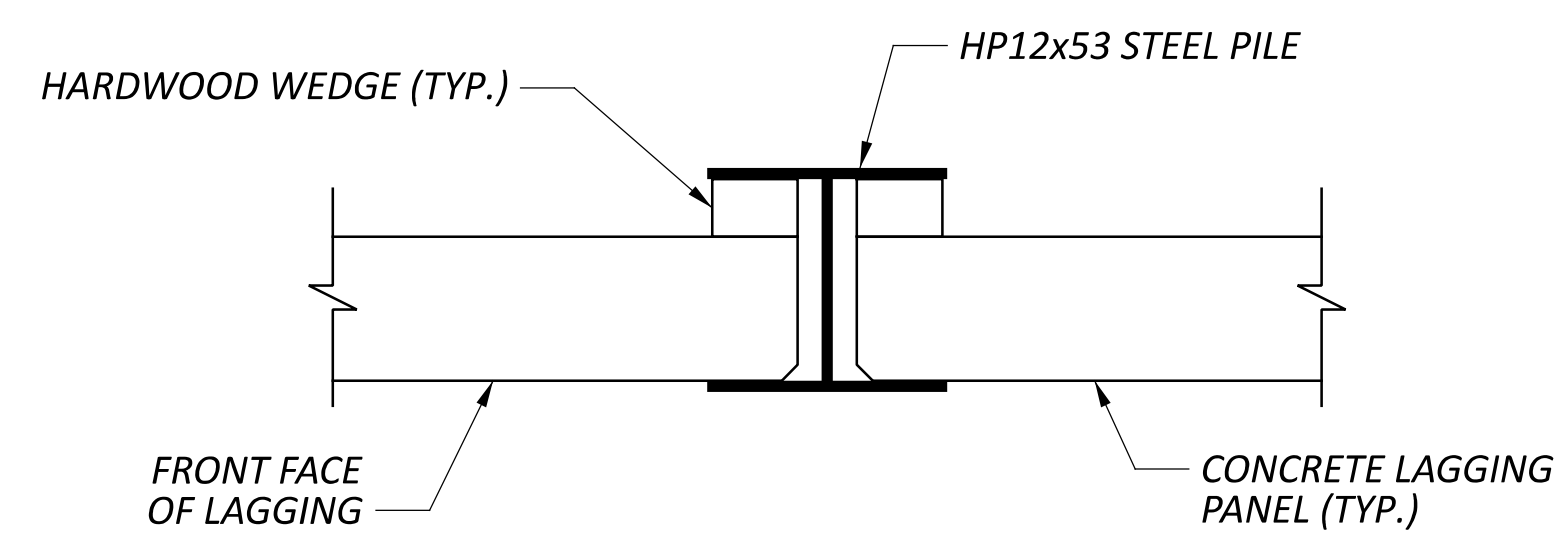


**PROPOSED TYPICAL SECTION**

\* SEE ROADWAY CROSS SECTIONS



**SOLDIER PILE WALL DETAILS**



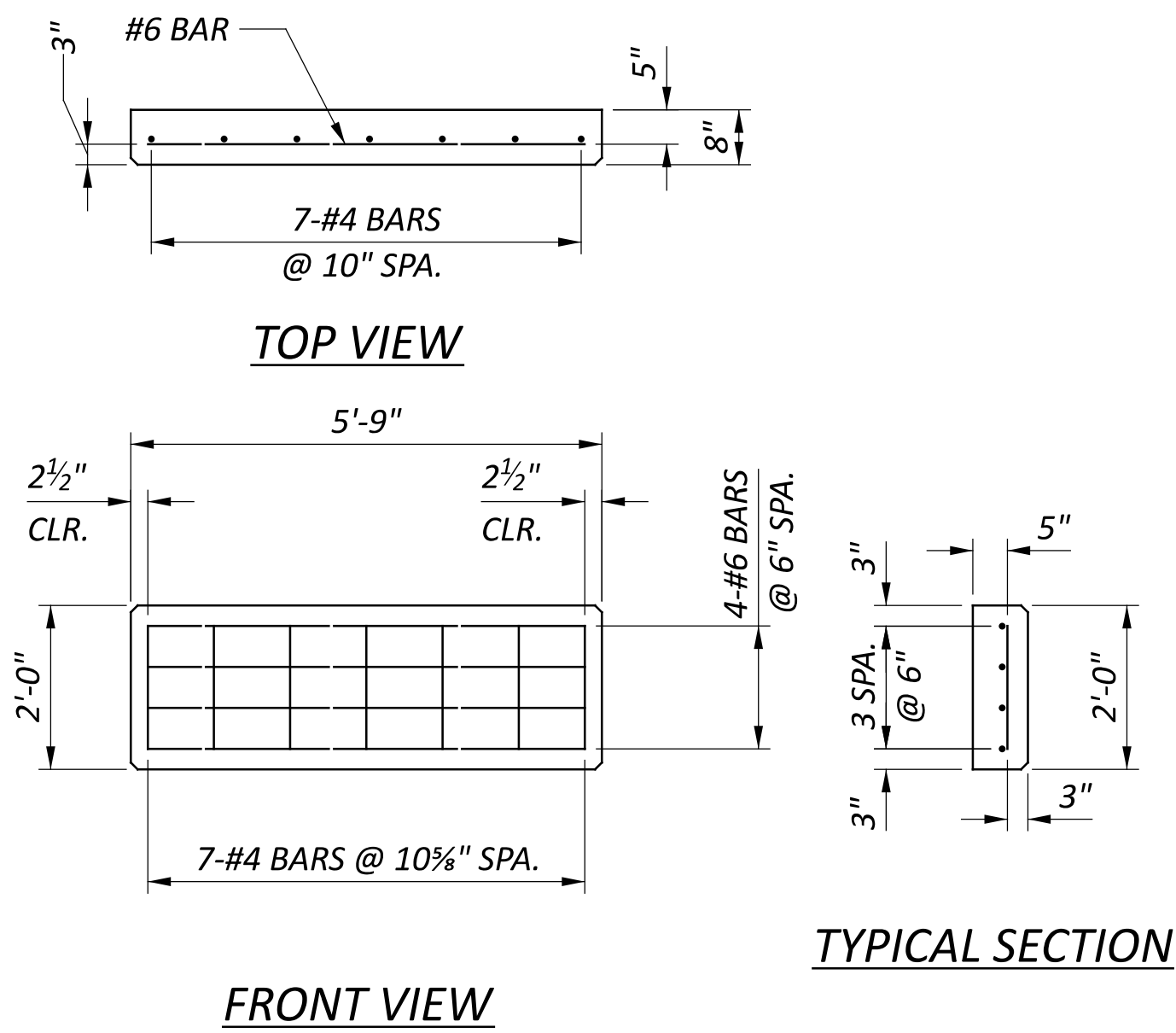
**SECTION A-A  
(NOT TO SCALE)**

**LEGEND:**  
 LIMITS OF LOW STRENGTH MORTAR BACKFILL

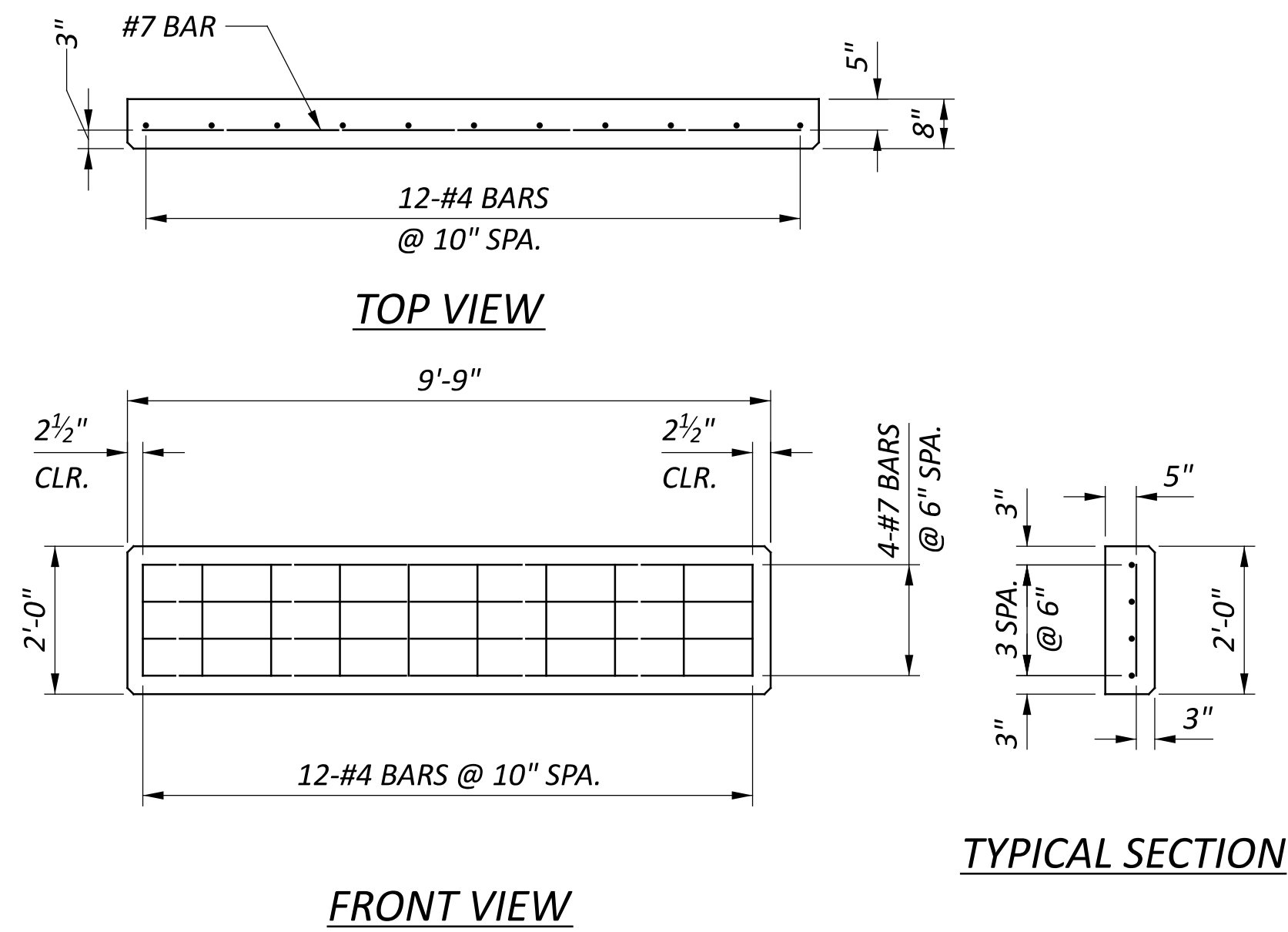
**NOTES:**

- FOR CONCRETE LAGGING REINFORCING DETAILS SEE SHEET P.122
- INCLUDE LOW STRENGTH MORTAR BACKFILL WITH PAYMENT FOR ITEM 507 - PREBORED HOLES. FOR LOCATIONS OF PROPOSED PREBORED HOLES UNDER EXISTING BRIDGE, SEE SHEET P.119. PAYMENT FOR PLACING THE FURNISHED PILES IN THE PREBORED HOLES IS INCLUDED IN ITEM 507 - PREBORED HOLES.

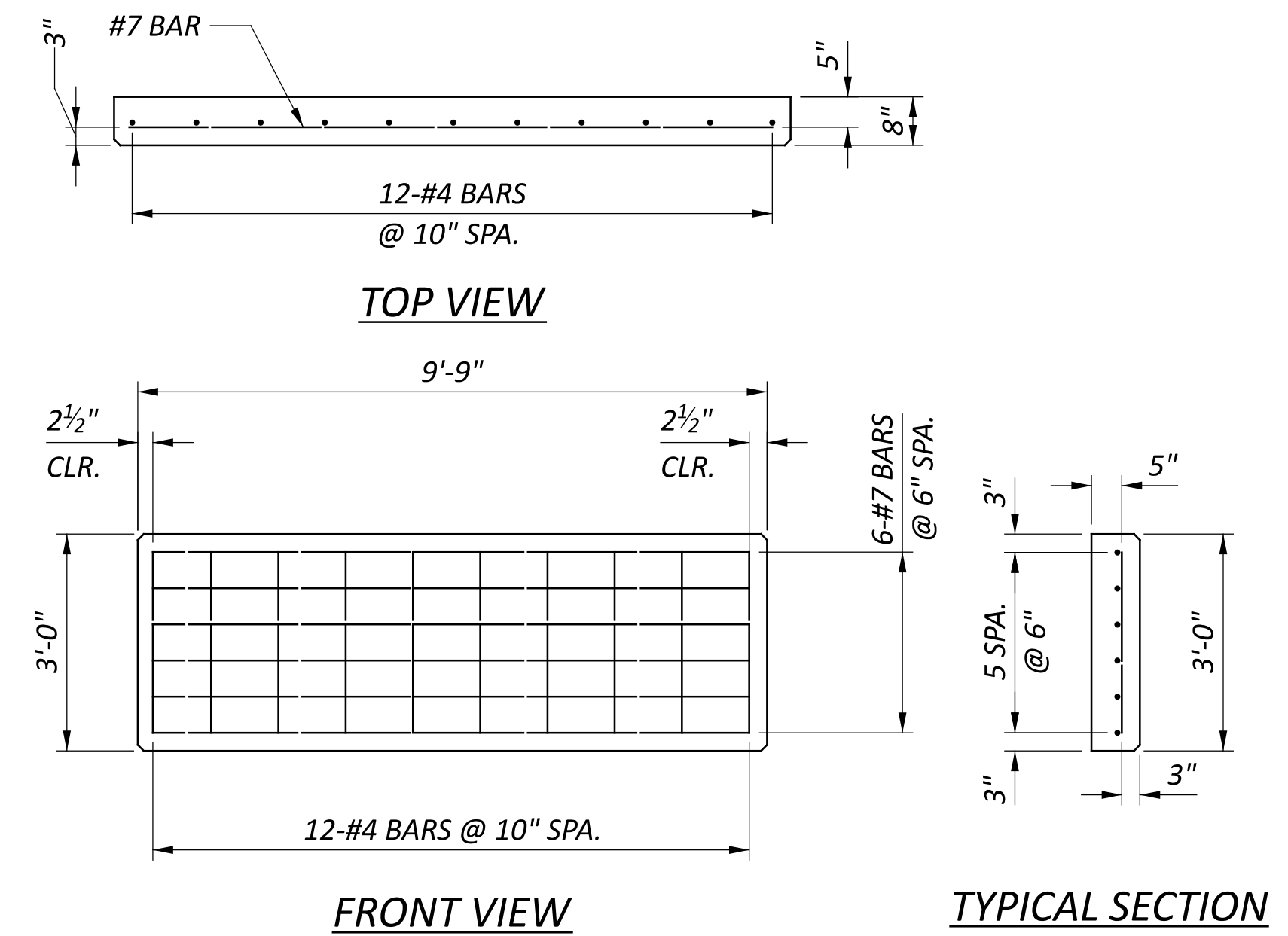
DESIGN AGENCY	
DESIGNER	ATM
REVIEWER	YSJ
PROJECT ID	123987
SHEET	P.121
TOTAL	122



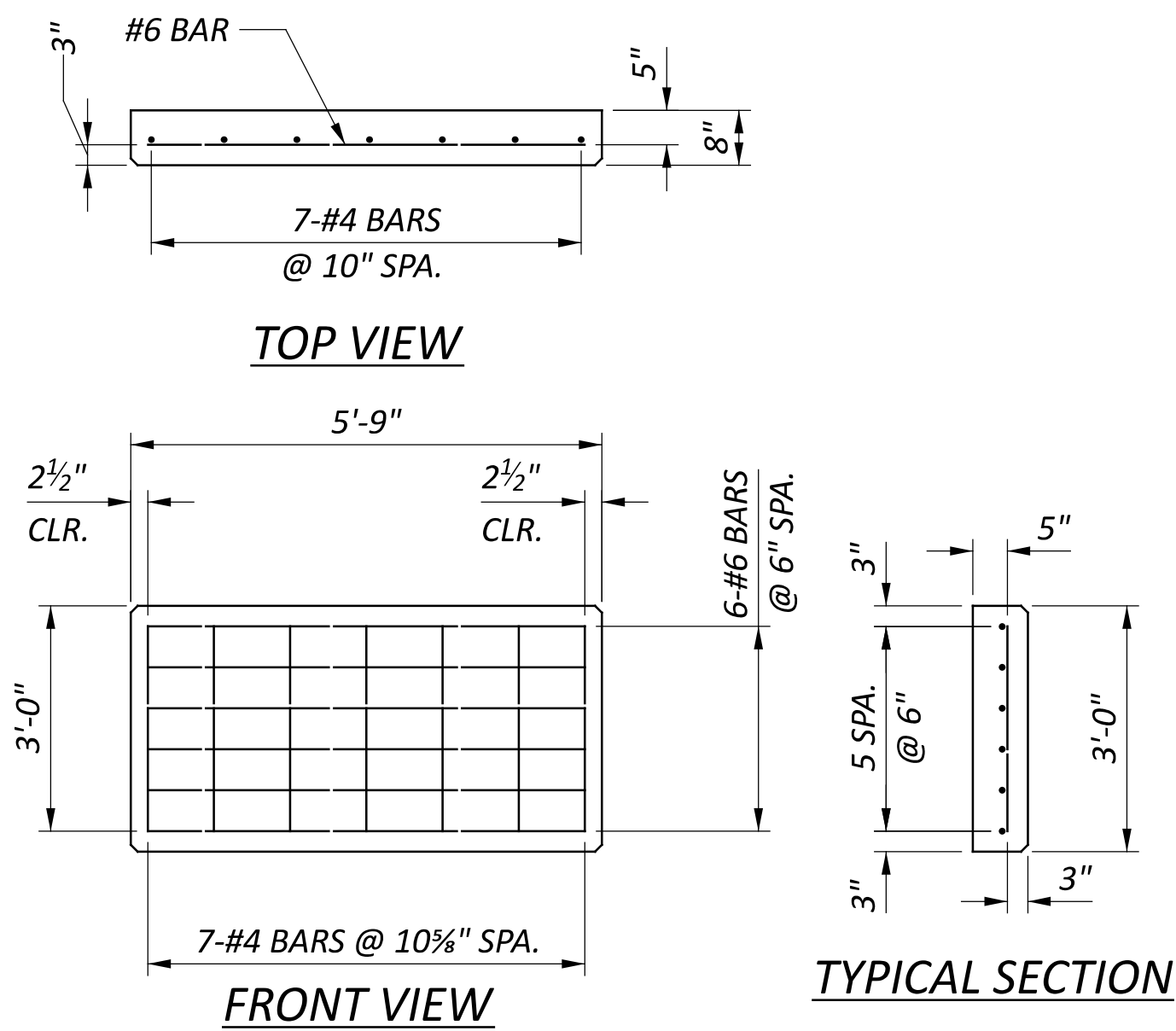
**TYPICAL PRECAST CONCRETE LAGGING DETAILS**  
 8" x 24" x 69" CONCRETE PANEL  
 (WITHOUT WEEPHOLE, 85 LAGGING PANELS)



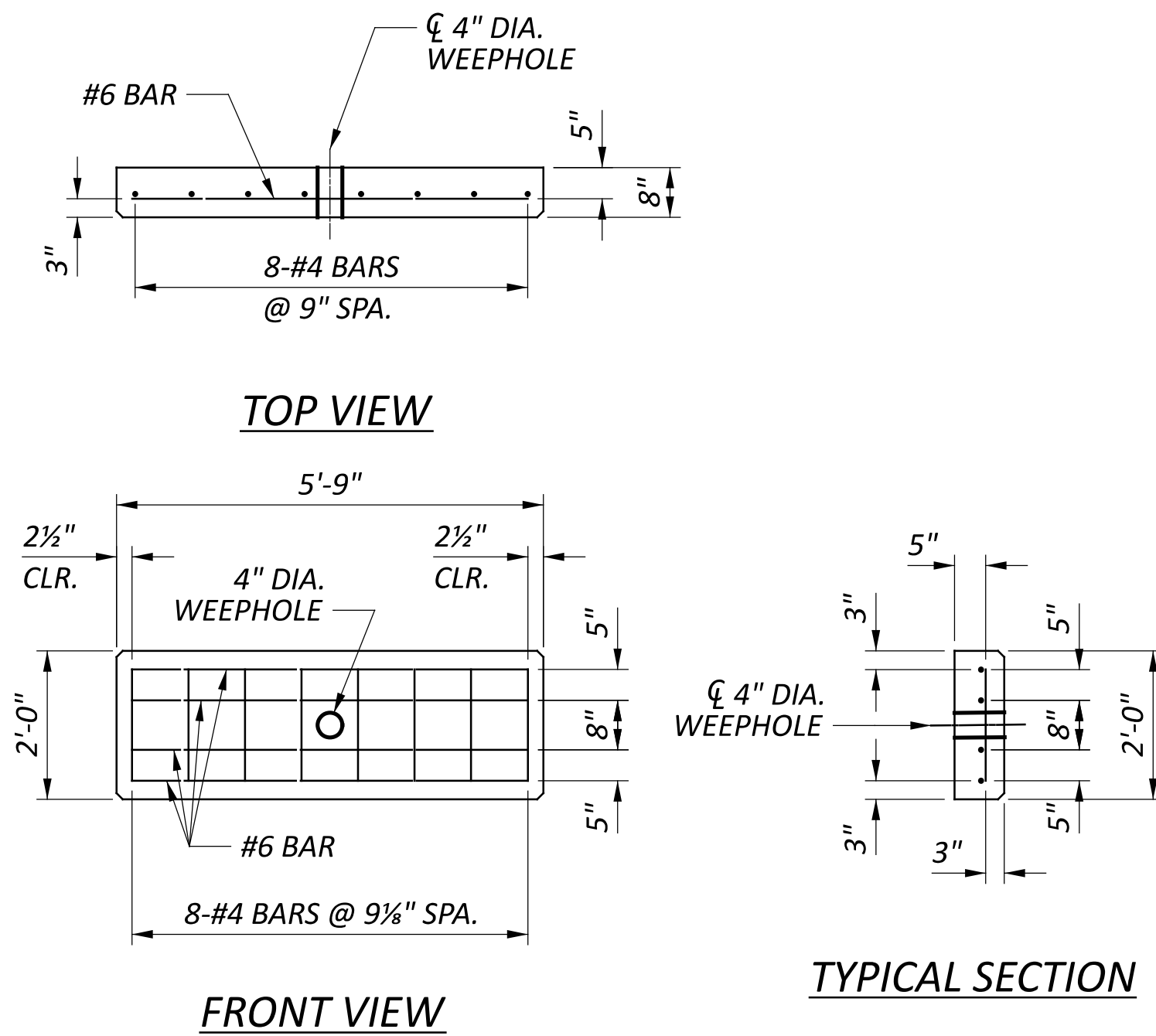
**TYPICAL PRECAST CONCRETE LAGGING DETAILS**  
 8" x 24" x 117" CONCRETE PANEL  
 (WITHOUT WEEPHOLE, 1 LAGGING PANEL)



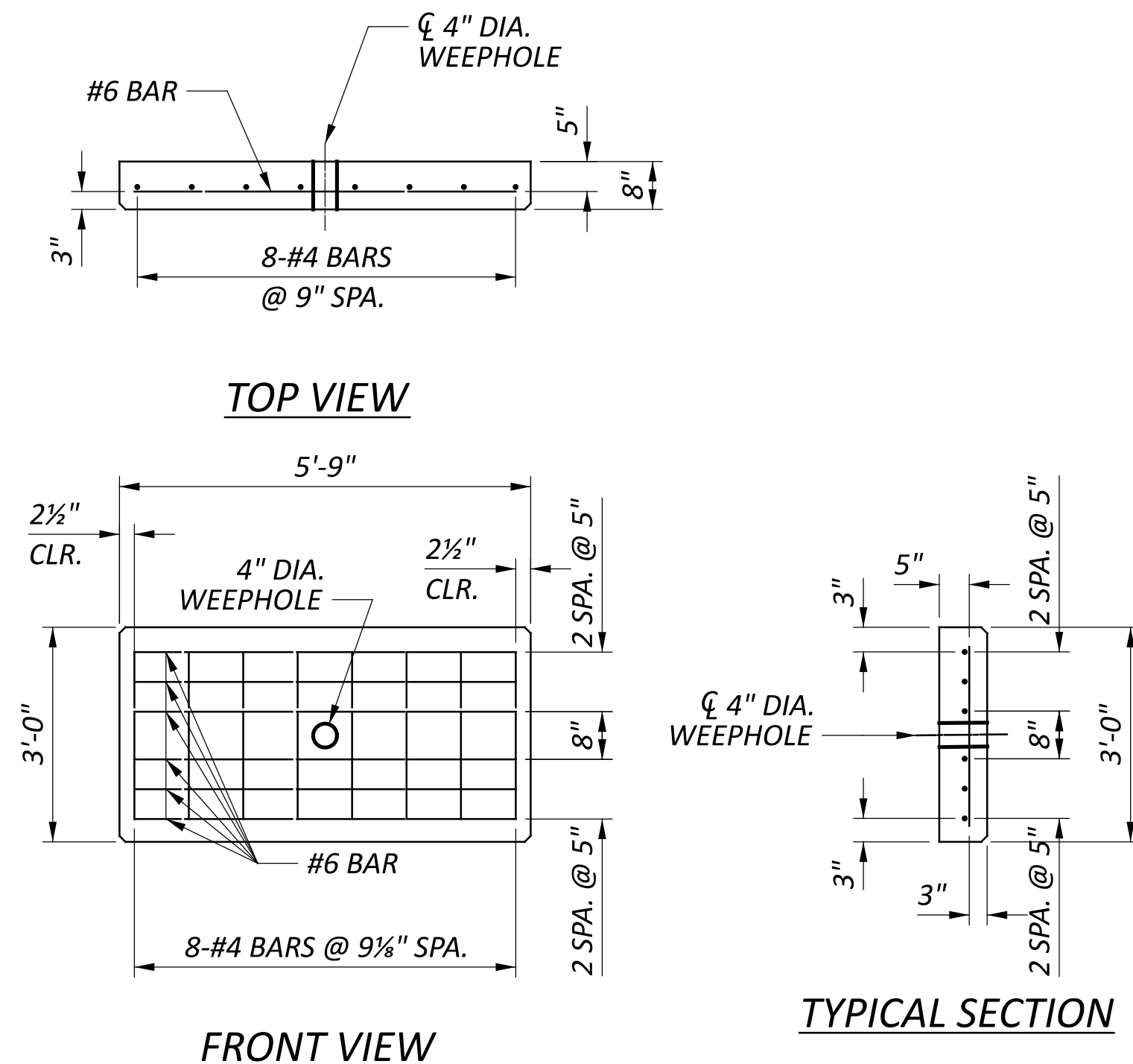
**TYPICAL PRECAST CONCRETE LAGGING DETAILS**  
 8" x 36" x 117" CONCRETE PANEL  
 (WITHOUT WEEPHOLE, 5 LAGGING PANELS)



**TYPICAL PRECAST CONCRETE LAGGING DETAILS**  
 8" x 36" x 69" CONCRETE PANEL  
 (WITHOUT WEEPHOLE, 48 LAGGING PANELS)



**PRECAST CONCRETE LAGGING WITH 4" DIA. WEEPHOLE DETAILS**  
 8" x 24" x 69" CONCRETE PANEL  
 (WITH WEEPHOLE, 8 LAGGING PANELS)



**PRECAST CONCRETE LAGGING WITH 4" DIA. WEEPHOLE DETAILS**  
 8" x 36" x 69" CONCRETE PANEL  
 (WITH WEEPHOLE, 30 LAGGING PANELS)

**NOTES:**  
 1. THE 4" DIA. WEEPHOLES AND EPOXY COATED REINFORCING STEEL FOR CONCRETE LAGGING IS INCLUDED WITH ITEM 530 SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING.