



SEQUENCE OF CONSTRUCTION

FOR TEMPORARY DRAINAGE, SEE MOT PLANS AND DRAINAGE DETAILS

PHASE 1

TRAFFIC:
1. TRAFFIC LOCATED ON ITS EXISTING PATTERN EXCEPT AS SHOWN IN THE PLANS CONSTRUCTION:

- 1. FOUR CROSSOVERS. FIRST WEST OF LAKEVIEW AVE, SECOND WEST OF WOOSTER RD, THIRD WEST OF ALGER RD, AND FOURTH EAST OF W 85TH ST
2. TEMPORARY PAVEMENT ON THE OUTSIDE OF RAMP HA
3. FASCIA BEAM REPAIR AT WOOSTER ROAD STRUCTURE CUY-00020-08.470

WINTER PHASE 1

- 1. ALL LANES ARE OPEN AND RESTORED TO THEIR PRE-CONSTRUCTION LOCATION EXCEPT AS DEPICTED. ALL LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE ODOT DISTRICT 12 PLCS. NO LANE CLOSURES WILL BE PERMITTED WHEN SNOW OR ICE IS FORECASTED. TEMPORARY TRAFFIC CONTROL DEVICES FOR SHORT-TERM LANE CLOSURES WILL BE REQUIRED TO BE DEMOBILIZED FROM THE SITE AT THE END OF EACH SHIFT UNLESS APPROVED TO REMAIN BY THE ENGINEER.
2. CROSSOVERS SHALL BE PROTECTED USING PORTABLE BARRIER
3. CONSTRUCT DRAINAGE OUTFALLS B, C & D AS DESCRIBED ON SHEET P.0063.

PHASE 2 STEP A

- TRAFFIC:
1. ALL RAMPS ARE OPEN EXCEPT RAMP W13
2. ONE EASTBOUND LANE IS CLOSED FROM HILLIARD BLVD TO THE WARREN RD ENTRANCE RAMP.
3. SHIFT IR 90 WESTBOUND LANES TO OUTSIDE OF IR 90 WESTBOUND SIDE BETWEEN WEST OF LAKEVIEW AVE AND EAST OF W 85TH ST UTILIZING EXISTING SHOULDER
4. CROSSOVER INSIDE IR 90 EASTBOUND LANE TO INSIDE OF IR 90 WESTBOUND SIDE WEST OF LAKEVIEW AVE
5. CROSSOVER INSIDE IR 90 EASTBOUND LANE TO INSIDE OF IR 90 WESTBOUND SIDE WEST OF ALGER RD
6. CROSSOVER TWO INSIDE IR 90 EASTBOUND LANES BACK TO IR 90 EASTBOUND SIDE EAST OF W 85TH ST
7. SHIFT TWO OUTSIDE IR 90 EASTBOUND LANES TO OUTSIDE OF IR 90 EASTBOUND SIDE BETWEEN WEST OF LAKEVIEW AVE AND EAST OF W 85TH ST

- CONSTRUCTION:
1. INSIDE PORTION OF IR 90 EASTBOUND SIDE BETWEEN EAST OF LAKEVIEW AVE AND WEST OF WEST BLVD UP TO INTERMEDIATE COURSE
2. RAMP W13 AND ADJACENT TRUNK SEWER

PHASE 2 STEP B (WILL BE COMPLETED DURING NIGHTTIMES AND WEEKENDS)

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAINS UNCHANGED
2. CLOSE CROSSOVER LANE THAT LOCATED WEST OF ALGER RD

- CONSTRUCTION:
1. REMAINING INSIDE PORTION OF IR 90 EASTBOUND SIDE AT THE SECOND CROSSOVER LOCATION UP TO INTERMEDIATE COURSE

STEPS SEQUENCE DURING PHASE 2:
- STEP B CAN BE COMPLETED ANYTIME DURING STEP A

PHASE 3 STEP A

- TRAFFIC:
1. ALL RAMPS ARE OPEN EXCEPT SHORT-TERM CLOSURE OF RAMP HA
2. TRAFFIC PATTERN FOR IR 90 WESTBOUND SIDE REMAINS UNCHANGED
3. SHIFT TWO OUTSIDE IR 90 EASTBOUND LANES TO INSIDE OF IR 90 EASTBOUND SIDE BETWEEN WEST OF LAKEVIEW AVE AND EAST OF W 85TH ST
4. SHIFT RAMP HA TRAFFIC TO OUTSIDE OF ITS PAVEMENT

- CONSTRUCTION:
1. OUTSIDE PORTION OF IR 90 EASTBOUND SIDE BETWEEN EAST OF LAKEVIEW AVE AND WEST OF WEST BLVD UP TO INTERMEDIATE COURSE
2. INSIDE PORTION OF RAMP HA
3. DRAINAGE IN FRONT OF WOOSTER ROAD REAR ABUTMENT
4. INSTALL TEMPORARY PAVEMENT MARKINGS IN PERMANENT LOCATION

PHASE 3 STEP B

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAINS UNCHANGED
2. RAMPS MD, W2A, 117-8, 117-7, AND ME ARE CLOSED
3. SHIFT RAMP HA TRAFFIC TO INSIDE OF ITS PAVEMENT

- CONSTRUCTION:
1. RAMPS MD, W2A, 117-8, 117-7, AND ME
2. OUTSIDE PORTION OF RAMP HA

PHASE 3 STEP C

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAIN UNCHANGED
2. RAMPS ME, W2, 140-4, 117-9, AND W14 ARE CLOSED

- CONSTRUCTION:
1. RAMPS ME, W2, 140-4, 117-9, AND W14
STEPS SEQUENCE DURING PHASE 3:
- STEP B CAN BE COMPLETED ANYTIME DURING STEP A
- STEP B MUST BE COMPLETED BEFORE STEP C BEGINS
- STEP C MUST BE COMPLETED AS THE LAST PART OF STEP A
RAMP CONSTRUCTION SEQUENCE DURING PHASE 3:
- RAMPS ME AND W2 MUST BE DONE AS THE LAST PART OF PHASE 3

WINTER PHASE 2

- 1. THE EASTBOUND LANE THAT WAS CLOSED IN PHASE 2 STEP A IS OPEN
2. ALL LANES ARE OPEN AND RESTORED TO THEIR PRE-CONSTRUCTION LOCATION
3. CROSSOVERS SHALL BE PROTECTED USING PORTABLE BARRIER

PHASE 4 STEP A

- TRAFFIC:
1. ALL RAMPS ARE OPEN
2. ONE EASTBOUND LANE IS CLOSED FROM HILLIARD BLVD TO THE WARREN RD ENTRANCE RAMP.
3. PATTERN REMAINS UNCHANGED FOR THE TWO OUTSIDE IR 90 WESTBOUND LANES
4. CROSSOVER INSIDE IR 90 WESTBOUND LANE TO INSIDE OF IR 90 EASTBOUND SIDE WEST OF LAKEVIEW AVE
5. SHIFT IR 90 EASTBOUND LANES TO OUTSIDE OF IR 90 EASTBOUND SIDE BETWEEN WEST OF LAKEVIEW AVE AND EAST OF W 85TH ST
6. CROSSOVER INSIDE IR 90 WESTBOUND LANE TO INSIDE OF IR 90 EASTBOUND SIDE WEST OF ALGER RD
7. CROSSOVER TWO INSIDE IR 90 WESTBOUND LANES BACK TO IR 90 WESTBOUND SIDE EAST OF W 85TH ST

- CONSTRUCTION:
1. INSIDE PORTION OF IR 90 WESTBOUND SIDE BETWEEN EAST OF LAKEVIEW AVE AND WEST OF W 85TH ST UP TO INTERMEDIATE COURSE

PHASE 4 STEP B (WILL BE COMPLETED DURING NIGHT TIMES AND WEEKENDS)

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAIN UNCHANGED
2. CLOSE CROSSOVER LANE LOCATED WEST OF WOOSTER RD

- CONSTRUCTION:
1. REMAINING INSIDE PORTION OF IR 90 WESTBOUND SIDE AT CROSSOVER LOCATION WEST OF WOOSTER RD UP TO INTERMEDIATE COURSE

STEPS SEQUENCE DURING PHASE 4:
- STEP B CAN BE COMPLETED ANYTIME DURING STEP A

PHASE 5 STEP A

- TRAFFIC:
1. ALL RAMPS ARE OPEN
2. TRAFFIC PATTERN FOR IR 90 EASTBOUND SIDE REMAINS UNCHANGED
3. SHIFT TWO OUTSIDE IR 90 WESTBOUND LANES TO INSIDE OF IR 90 WESTBOUND SIDE BETWEEN WEST OF LAKEVIEW AVE AND EAST OF W 85TH ST
4. SHIFT RAMP HB TRAFFIC TO OUTSIDE OF ITS PAVEMENT

- CONSTRUCTION:
1. OUTSIDE PORTION OF IR 90 WESTBOUND SIDE BETWEEN EAST OF LAKEVIEW AVE AND WEST OF W 85TH ST UP TO INTERMEDIATE COURSE

- 2. INSIDE PORTION OF RAMP HB AND RAMP 117-12

PHASE 5 STEP B

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAINS UNCHANGED
2. RAMPS MC, W1A, 117-5, AND 117-11 ARE CLOSED
3. SHIFT RAMP HB TRAFFIC TO INSIDE OF ITS PAVEMENT

- CONSTRUCTION:
1. RAMPS MC, W1A, 117-5, AND 117-11
2. OUTSIDE PORTION OF RAMP HB AND RAMP 117-12

PHASE 5 STEP C

- TRAFFIC:
1. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND SIDES REMAINS UNCHANGED
2. RAMPS MF, W1, 140-3, AND W13 ARE CLOSED

- CONSTRUCTION:
1. RAMPS MF, W1, 140-3 AND W13 CONNECTION

STEP SEQUENCE DURING PHASE 5:
- STEP B CAN BE COMPLETED ANYTIME DURING STEP A
- STEP B MUST BE COMPLETED BEFORE STEP C BEGINS
- STEP C MUST BE COMPLETED AS THE LAST PART OF STEP A

- RAMP CONSTRUCTION SEQUENCE DURING PHASE 5:
- RAMPS MF AND W1 MUST BE DONE AS THE LAST PART OF PHASE 5

MOT DRAINAGE CURB REMOVAL

THE CONTRACTOR SHALL REMOVE THE EXISTING OUTSIDE CURB WHERE NECESSARY TO FACILITATE DRAINAGE DURING MOT. ALL WORK SHALL BE IN ACCORDANCE WITH C&MS 202 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS. PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED AT THE UNIT PRICE BID FOR ITEM 202, CURB REMOVAL.

THE FOLLOWING IS A LIST OF LOCATIONS WHERE THE CONTRACTOR IS TO REMOVE THE EXISTING OUTSIDE CURB FOR MOT PHASES 1 AND 2:

Table with columns: BEGIN STATION, BEGINALIGNMENT, END STATION, END ALIGNMENT, SIDE, NOTES. Lists locations for curb removal during MOT Phases 1 & 2.

WINTER PHASE 3

- 1. THE EASTBOUND LANE THAT WAS CLOSED IN PHASE 4 STEP A IS OPEN
2. ALL LANES ARE OPEN AND RESTORED TO THEIR PRE-CONSTRUCTION LOCATION
3. CROSSOVERS SHALL BE PROTECTED USING PORTABLE BARRIER

PHASE 6

- TRAFFIC:
1. ALL RAMPS ARE OPEN
2. TRAFFIC PATTERN FOR IR 90 EASTBOUND AND WESTBOUND IS IN ITS PERMANENT LOCATION
3. SHOULDER CLOSURE PER SCD MT-95.45

- CONSTRUCTION:
1. MEDIAN BARRIER AT FIRST CROSSOVER WEST OF LAKEVIEW AVE
2. MEDIAN BARRIER AT SECOND CROSSOVER WEST OF WOOSTER RD
3. MEDIAN BARRIER AND TEMPORARY PAVEMENT REMOVAL AT THIRD CROSSOVER WEST OF ALGER RD
4. INSTALL SURFACE COURSE BETWEEN WEST END OF THE PROJECT AND EAST END OF PROJECT
5. INSTALL TEMPORARY AND SUBSEQUENTLY PERMANENT PAVEMENT MARKINGS IN PERMANENT LOCATION

MOT DRAINAGE TEMPORARY FILTER SOCK, FILTER FENCE, OR TEMPORARY STORAGE DITCHES

THE CONTRACTOR SHALL INSTALL TEMPORARY FILTER SOCK, FILTER FENCE, OR TEMPORARY STORAGE DITCHES BEHIND THE CURB TO SLOW THE SURFACE RUNOFF FROM THE SLOPE, OVER THE CURB, INTO THE ROADWAY DURING MOT PHASES 1 AND 2. INSTALLATION OF THESE MATERIALS SHOULD BE CONSISTENT WITH THE ODOT TEMPORARY EROSION AND SEDIMENT CONTROL MANUAL AND ALL APPLICABLE SECTIONS OF THE ODOT C&MS. THE INSTALLATION OF THESE MATERIALS SHALL BE INCIDENTAL TO THE LUMP SUM PRICE FOR 614, MAINTAINING TRAFFIC.

THE FOLLOWING IS A LIST OF LOCATIONS WHERE THE CONTRACTOR IS TO PROVIDE TEMPORARY FILTER SOCK, FILTER FENCE, OR TEMPORARY STORAGE DITCHES BEHIND THE CURB FOR MOT PHASES 1 AND 2:

Table with columns: BEGIN STATION, BEGIN ALIGNMENT, END STATION, END ALIGNMENT, SIDE. Lists locations for filter socks, filter fences, or temporary storage ditches during MOT Phases 1 & 2.

ITEM 611, (MULTIPLE ITEMS), AS PER PLAN

FOR ALL TEMPORARY DRAINAGE ITEMS LISTED IN THE TABLE ON THIS SHEET THAT WILL BE INSTALLED AND SUBSEQUENTLY REMOVED OR ABANDONED SHALL CONFORM TO ALL PROVISIONS OF C&MS 611 EXCEPT 611.04.D, TESTING ACCORDING TO SUPPLEMENT 1015 IN 611.06, AND 611.12.

TEMPORARY DRAINAGE

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE FOR ALL EXISTING STORM SEWER CONDUITS AND STRUCTURES UNLESS OTHERWISE NOTED IN THE PLANS.

CROSSOVER DRAINAGE

SLOTTED DRAINS WILL BE PLACED AT ALL MEDIAN CROSSOVER LOCATIONS DURING MOT. DETAILS FOR THE MEDIAN CROSSOVERS AND THEIR TEMPORARY DRAINAGE ARE DETAILED IN THE MOT PLANS. THESE SLOTTED DRAINS WILL BE TEMPORARILY CONNECTED TO THE CLOSEST EXISTING DRAINAGE STRUCTURE OR OUTLET TO THE EXISTING MEDIAN DITCH DEPENDING ON THE CROSSOVER LOCATION. THE OUTLET LOCATION OF THE SLOTTED DRAINS ARE SHOWN ON THE CROSSOVER DETAILS. SLOTTED DRAIN PIPE SHALL BE SLOPED TO DRAIN TO THE OUTLET LOCATION. THE MEDIAN CROSSOVERS SHOULD BE GRADED TO DRAIN EITHER TO EXISTING DRAINAGE STRUCTURES TO REMAIN, MEDIAN DITCHES, OR THE TEMPORARY SLOTTED DRAINS.

ITEM 614 MAINTAINING TRAFFIC, MISC.: TROUGHS

TEMPORARY TROUGHS WILL BE ADDED THROUGHOUT THE CORRIDOR TO CONTROL THE SPREAD FOR THE TWO-YEAR STORM DURING CONSTRUCTION. THE LOCATION AND SIZE OF THESE TROUGHS ARE SHOWN IN THE MOT PLANS. WHERE THE TROUGHS ARE PLACED WITHIN EXISTING PAVEMENT LIMITS, THE PLAN SPECIFIED DEPTH WILL BE MILLED FROM THE TROUGH AREA SHOWN IN THE PLANS. IN LOCATIONS WHERE THE TROUGHS ARE TO BE PLACED WITHIN PROPOSED PAVEMENT LIMITS, THE INTERMEDIATE COURSE WILL NOT BE PLACED WITHIN THE TROUGH AREAS UNTIL THE MOT PHASES FOR WHICH THEY ARE REQUIRED ARE COMPLETED. A 3:1 SLOPE SHALL BE MAINTAINED ON TROUGHS DEPTHS OVER 1.5". THE ABOVE WORK WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 614 MAINTAINING TRAFFIC, MISC.: TROUGHS.

TEMPORARY CONNECTIONS

TO MAINTAIN FLOW, THE EXISTING TRUNK LINE WILL REMAIN IN SERVICE WHILE THE PROPOSED IS BEING CONSTRUCTED, UNLESS REMOVAL IS REQUIRED BASED ON THE LOCATION OF THE NEW SEWER. THE TRUNK LINE DRAINING TO OUTFALL B WILL BE CONSTRUCTED IN WINTER PHASE 1, AND WILL REQUIRE REMOVAL OF THE EXISTING SEWER, AND BOTH PROPOSED AND EXISTING INLETS WILL BE CONNECTED TO THE NEW TRUNK LINE AS IT IS CONSTRUCTED. A TEMPORARY CONNECTION WILL BE REQUIRED FROM D19 TO THE EXISTING MANHOLE TO THE EAST UNTIL THE REMAINDER OF THE TRUNK LINE UNDER PAVEMENT CAN BE COMPLETED IN PHASE 3A. OUTFALL C WILL BE CONSTRUCTED IN WINTER PHASE 1 AND WILL REQUIRE TEMPORARY CONNECTIONS FOR THE INLETS ON THE NORTH SIDE OF I-90 WB, AS DESCRIBED BELOW. THE PROPOSED TRUNK LINE FOR OUTFALL D WILL BE INSTALLED DURING WINTER PHASE 1 CONSTRUCTION, WITH THE EXISTING TRUNKLINE REMAINING IN SERVICE. TEMPORARY CONNECTIONS WILL BE REQUIRED AS DESCRIBED BELOW. IN ORDER TO MAINTAIN DRAINAGE IN BOTH THE EXISTING AND PROPOSED SYSTEMS, STRUCTURE D140 WILL MAINTAIN THE EXISTING 60" CONDUIT CONNECTING FROM THE EAST UNTIL THE EXISTING SYSTEM IS NO LONGER IN USE. AT THAT TIME, THE EXISTING 60" FROM THE EAST CAN BE REMOVED/PLUGGED AT THE MANHOLE. OUTFALL M WILL BE CONSTRUCTED UP TO THE POINT WHERE IT TIES IN WITH THE EXISTING TRUNKLINE AT WEST BOULEVARD. THE NEW TRUNKLINE WILL BE CONSTRUCTED IN THE MEDIAN DURING PHASE 2. THE 54" PIPE CROSSING FROM THE MEDIAN TO THE NORTHERN INFIELD WILL BE JACK AND BORED AND THE TRUNKLINE INSTALLATION IN THE INFIELD WILL ALSO TAKE PLACE DURING PHASE 2.

TEMPORARY DRAINAGE CONNECTIONS WILL BE REQUIRED WHEN THE EXISTING BARRIER AND INLETS ARE REMOVED, AND EXISTING INLETS ON THE NORTH AND SOUTH SIDE OF THE HIGHWAY ARE NO LONGER CONNECTED TO THE EXISTING TRUNK LINE. IN GENERAL, THE PROPOSED TRUNK LINE WILL BE CONSTRUCTED DURING THE FIRST ROADWAY PAVEMENT PHASE (PHASES 1 AND 2). WHEN THE NEW TRUNK LINE IS INSTALLED, PORTIONS OF THE EXISTING SYSTEM WILL BE REMOVED AND/OR DISCONNECTED, AND EXISTING INLETS NEED TO BE TEMPORARILY CONNECTED TO MAINTAIN POSITIVE FLOW. THESE LOCATIONS ARE LISTED BELOW.

STA 530+50 EX. BARRIER INLET ALONG @ TO BE REMOVED IN PHASE 2, BLOCKING DRAINAGE FROM NORTH SIDE OF I-90 WB. CONSTRUCT TEMPORARY MANHOLE IN LINE WITH EXISTING LATERAL CONNECTION ALONG WB OUTSIDE LANES TO PROVIDE POSITIVE DRAINAGE VIA PROPOSED 18" CONDUIT NEAR INLET D88 TO BE INSTALLED IN PHASE 2 VIA JACK AND BORE OPERATION. MANHOLE ON SOUTH SIDE OF I-90 EB TO BE CONNECTED TO PROPOSED INLET D79.

STA 536+00 EX. BARRIER INLET ALONG @ TO BE ABANDONED IN PHASE 2, ALLOWING FLOW TO CONTINUE TO SOUTH SIDE OF I-90. TEMPORARY DRAINAGE STRUCTURE TO BE INSTALLED ALONG PROPOSED 30" TYPE C TO CONNECT LATERAL TO NEW TRUNK LINE. A TEMPORARY BLIND TIE OF THE EXISTING 18" PIPE TO BE INSTALLED ALONG PROPOSED 36" TO CONNECT LATERAL TO THE NEW TRUNK LINE.

STA 542+75 EX. BARRIER INLET ALONG @ REMOVED IN PHASE 2, BLOCKING DRAINAGE CONNECTIONS FROM NORTH SIDE OF I-90 WB. PLACE PROPOSED INLET D28 AS PART OF PHASE 2, IN LINE WITH EXISTING LATERAL CONNECTION ON WB SIDE OF I-90. THIS WILL REQUIRE OFF-PEAK CLOSURE OF INSIDE EXIT LANE TO HILLIARD BLVD. PROVIDE FLOW FROM INLETS ON NORTH SIDE OF I-90 WB VIA PROPOSED 24" TYPE B CONDUIT TO BE INSTALLED VIA JACK AND BORE OPERATION PERFORMED IN PHASE 2.

STA 547+25 EX. BARRIER INLET ALONG CL REMOVED IN PHASE 2, BLOCKING DRAINAGE CONNECTION FROM NORTH SIDE OF I-90 WB. INSTALL STRUCTURE D13 AS PART OF PHASE 2. INSTALL PROPOSED 15" TYPE B CONDUIT VIA JACK AND BORE OPERATION.

STA 554+00 EX. BARRIER INLET AT 554+00 ALONG CL TO BE ABANDONED IN PHASE 2. CONSTRUCT TEMPORARY CONNECTION FROM EXISTING (ABANDONED) INLET TO D9 TO PROVIDE POSITIVE DRAINAGE FOR EXISTING INLETS ON THE OUTSIDE

TEMPORARY DRAINAGE (CONTINUED)

TEMPORARY CONNECTIONS (CONTINUED)

WB SIDE OF I-90. CONSTRUCTION OF PROPOSED TRUNK LINE ON SOUTH SIDE OF I-90 WILL REQUIRE REMOVAL OF EXISTING CURB INLET ON SOUTH SIDE OF EB LANES. REMOVE EXISTING CURB AND DIRECT FLOW TO PROPOSED INLET D8.

STA 574+17 EXISTING BARRIER INLET AT 574+17 TO BE ABANDONED. CONSTRUCT TEMPORARY CONNECTION BETWEEN EXISTING ABANDONED INLET AND D109 TO PROVIDE POSITIVE DRAINAGE FOR EXISTING STRUCTURES ON NORTH SIDE OF I90 VIA PROPOSED 15" LATERAL TO BE JACKED OR BORED DURING PHASE 2. EX. CURB INLET ON SOUTH SIDE OF I-90 TO BE TEMPORARILY CONNECTED TO MH D104.

STA 583+22 PROPOSED BARRIER INLET TO BE TEMPORARILY CONNECTED TO THE EXISTING N/S PIPE RUN UNTIL THE NORTH SIDE CB IS CONSTRUCTED.

STA 583+25 EX. BARRIER INLET TO BE ABANDONED DURING PHASE 2 CONSTRUCTION. FLOW FROM SOUTH SIDE OF I-90 TO CONTINUE THROUGH TO THE NORTH SIDE, AND EXISTING CURB INLET ON NORTH SIDE OF I-90 TO BE TEMPORARILY CONNECTED TO EXISTING MH D128.

STA 590+15 EX. BARRIER INLET AT 590+50 TO BE ABANDONED DURING PHASE 2 CONSTRUCTION. EXISTING ABANDONED INLET TO BE TEMPORARILY CONNECTED TO PROPOSED INLET D149 TO PROVIDE POSITIVE DRAINAGE FOR INLETS ON THE SOUTH SIDE OF I-90 EB.

STA 601+00 EX. BARRIER INLET AT 601+00 TO BE ABANDONED DURING PHASE 2 CONSTRUCTION. EXISTING ABANDONED INLET TO BE TEMPORARILY CONNECTED TO PROPOSED INLET D164 TO PROVIDE POSITIVE DRAINAGE FOR INLETS ON THE SOUTH SIDE OF I-90 EB.

STA 612+20 EX. BARRIER INLET TO BE ABANDONED DURING PHASE 2 CONSTRUCTION. EXISTING 15" LATERAL TO THE NORTH WILL BE OUT OF SERVICE DUE TO JACK AND BORE OPERATION FOR PROPOSED 15" LATERAL TO THE NORTH. EXISTING 15" LATERAL FROM THE SOUTH TO BE MAINTAINED INTO ABANDONED INLET AND CONNECTED TO PROPOSED INLET D189.

STA 617+00 EX. BARRIER INLET AT STA. 617+00 TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONSTRUCT TEMPORARY CONNECTION TO PROVIDE POSITIVE DRAINAGE VIA PROPOSED MEDIAN INLET D203 TO BE INSTALLED IN PHASE 2.

STA 621+56 EX. BARRIER INLET TO BE REMOVED IN PHASE 2 CONSTRUCTION. CONSTRUCT TEMPORARY CONNECTION FROM EX. CURB INLET ON THE SOUTH SIDE OF I-90 TO THE PROPOSED 30" TYPE B TO BE INSTALLED IN PHASE 2 VIA JACK AND BORE OPERATION.

TEMPORARY DRAINAGE (CONTINUED)

TEMPORARY CONNECTIONS (CONTINUED)

STA 629+58 EX. BARRIER INLET TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION, BLOCKING DRAINAGE FROM THE EXISTING 15" LATERAL TO THE SOUTH. CONSTRUCT TEMPORARY CONNECTION FROM EXISTING INLET TO PROPOSED 24" LATERAL BEING INSTALLED DURING PHASE 2 JACK AND BORE. THIS WILL REQUIRE SHORT TERM CLOSURE OF I-90 EB TO WARREN EXIT RAMP.

STA 634+75 EX. 15" LATERAL FROM THE SOUTH WILL BE SEVERED WHEN PROPOSED BARRIER INLET D277 IS INSTALLED. CONSTRUCT TEMPORARY CONNECTION OF EX. 15" LATERAL INTO PROPOSED MH D276.

STA 639+25, 20' RT EX. 15" LATERAL FROM THE SOUTH WILL BE SEVERED WHEN PROPOSED MANHOLE D280 IS INSTALLED. CONSTRUCT TEMPORARY CONNECTION FROM EX. 15" LATERAL FROM THE SOUTH TO PROVIDE POSITIVE DRAINAGE VIA PROPOSED MANHOLE D280 TO BE INSTALLED IN PHASE 2.

STA 649+25 EX. BARRIER INLETS ON EB AND WB SIDE TO BE ABANDONED DURING PHASE 2 CONSTRUCTION. EX. 15", 18" AND 24" LATERALS TO REMAIN IN PLACE TO CARRY FLOW FROM CURB INLET ON SOUTH SIDE OF I-90 EB.

STA 655+00 EX. BARRIER INLET TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. 18" TYPE B CONDUIT TO BE INSTALLED VIA CONVENTIONAL OPEN CUT METHOD, CONNECTING TO EX. 18" PIPE AT PHASE LINE. CONNECT TO MH D319.

STA. 660+50 EX. BARRIER INLET AND PORTION OF EX. 18" LATERAL TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. 15" TYPE B CONDUIT TO BE INSTALLED VIA JACK AND BORE OPERATION, CONNECTING TO EX. 18" PIPE AT PHASE LINE.

STA 666+40 TO 669+30, I-90 WB REMOVE TWO BARRIER INLET STRUCTURES AS PART OF PHASE 1 TEMP PAVEMENT CONSTRUCTION. DURING PHASE 2, THERE WILL BE NO PIPE FLOW COMING FROM THE NORTH.

STA. 674+50 TO STA. 678+00 PHASE 1 CONSTRUCTION WILL INCLUDE THE REMOVAL / ABANDONMENT OF THE EXISTING WB BARRIER, AND REMOVAL OF ASSOCIATED BARRIER INLETS. FLOW FROM WB SIDE WILL SHEET FLOW INTO MEDIAN, AND PROPOSED INLET D361 WILL BE INSTALLED AND TEMPORARILY CONNECTED TO THE ABANDONED EXISTING BARRIER INLET AT 674+50.

STA 698+75 EX. BARRIER INLET ON WB SIDE TO BE REMOVED IN PHASE 1. CONNECT EX. 15" LATERAL TO PROPOSED MH D934 TO PROVIDE FLOW FOR EXISTING CURB INLET ON THE NORTH SIDE OF I-90 WB.

TEMPORARY DRAINAGE (CONTINUED)

TEMPORARY CONNECTIONS (CONTINUED)

STA 708+75 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" AND 21" LATERALS.

STA 718+75 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" AND 21" LATERALS.

STA 728+00 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" AND 18" LATERALS.

STA 736+00 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 21" AND 24" LATERALS.

STA 744+25 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 21" AND 24" LATERALS.

STA 751+27 EX. TRUNKLINE WILL BE SEVERED BY PROPOSED TRUNKLINE. CONTRACTOR TO PROVIDE TEMPORARY CONNECTION FOR THE 54" TRUNKLINE UNTIL THE EXISTING TRUNKLINE ON THE EB LANES CAN BE TAKEN OUT OF SERVICE.

STA 754+57 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" LATERALS.

STA 755+56 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" LATERALS.

STA 756+56 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" LATERALS.

STA 763+75 EX. BARRIER INLETS TO BE REMOVED AS PART OF PHASE 2 CONSTRUCTION. CONTRACTOR TO PROVIDE TEMPORARY CONNECTIONS TO PROVIDE CONTINUOUS PIPE FLOW FOR EX. 15" LATERALS.

PAYMENT FOR ALL LABOR, TOOLS, MATERIALS AND EQUIPMENT NECESSARY TO MAINTAIN DRAINAGE AS DESCRIBED ABOVE AND ALL OTHER AREAS ON THE PROJECT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEMS IN THE TABLE BELOW.

Table with columns: SHEET NO., REFERENCE NO., LOCATION, STATION (FROM, TO), SIDE, CATCH BASIN, MANHOLE, INLET, CONDUIT (BORED OR JACKED), and various pipe sizes (15", 18", 21", 24", 42", 60"). Includes a 'TOTALS CARRIED TO GENERAL SUMMARY' row at the bottom.

R4

R7

R8

MAINTENANCE OF TRAFFIC NOTES

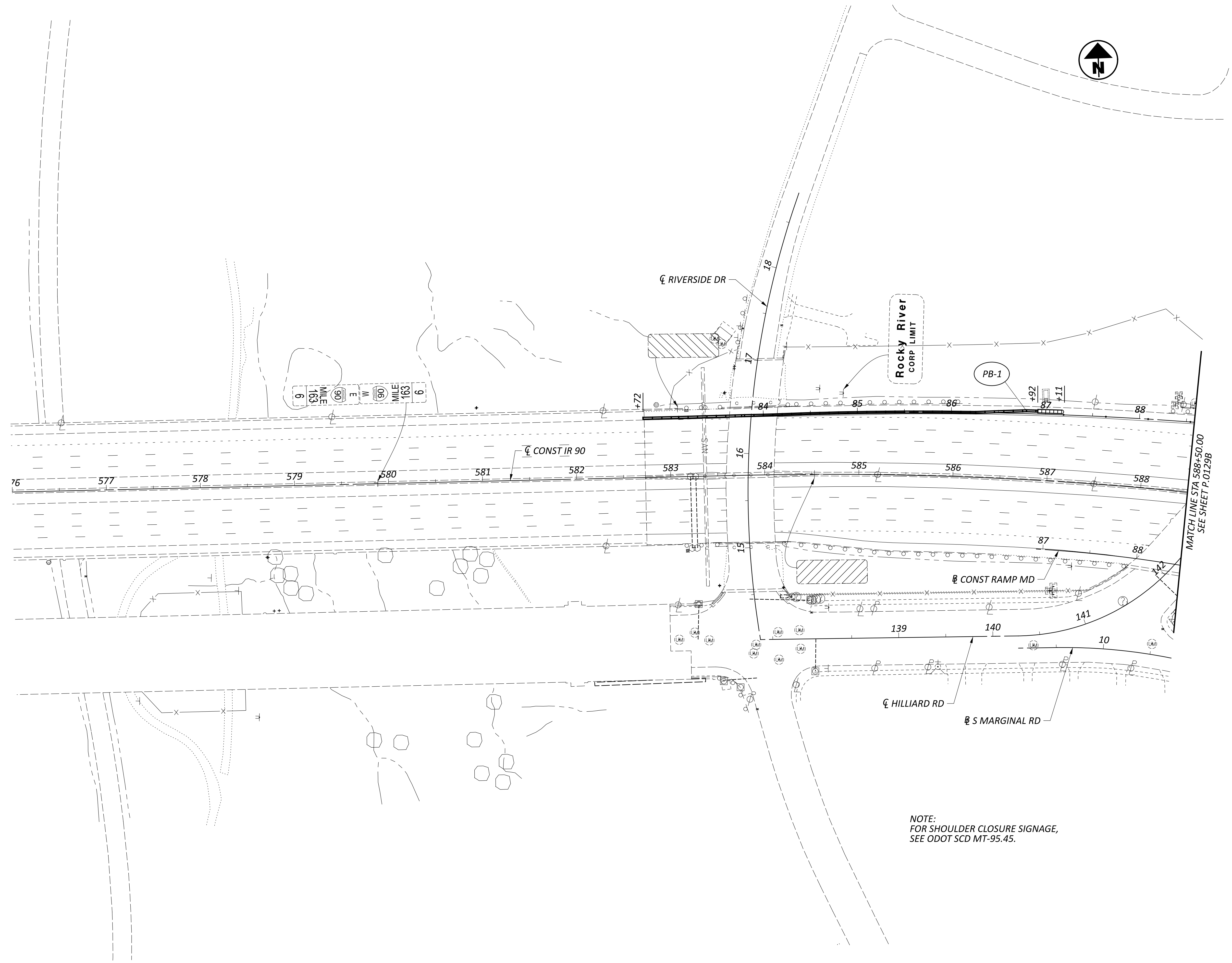
R7

DESIGN AGENCY: AMERICAN STRUCTUREPOINT, INC. DESIGNER: BER, REVIEWER: YDK, PROJECT ID: 76779, SHEET TOTAL: P.0063 | P.1587

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	PHASE	STEP	ITEM DESCRIPTION																							CY	TON	SY
			FROM	TO				611	614	614	614	614	614	614	614	614	614	614	614	614	614	615	622	622	622	622	441	617	617				
								FT	EACH	EACH	EACH	EACH	FT	MILE	MILE	MILE	FT	FT	FT	SY	FT	EACH	FT	FT									
		IR 90 WINTER MONTHS	BEGIN	END	LT-RT	1								12.04	12.04	26.97	20147	16317															
125	BK150	IR 90 CROSSOVER	334+50.00	335+75.00	RT	1/2																					8.8	28					
125	BK150	IR 90 CROSSOVER	335+75.00	337+25.00	LT	1/2																					10.6	33					
130		IR 90 EB	568+80.00	570+15.00	RT	1/2																					9.5	30					
136		IR 90 WB	586+25.00	588+10.00	LT	1/2																					13.0	41					
136-140		IR 90 WB	640+29.00	684+62.00	LT	1/2																					312.0	985					
129A	PB-1	IR 90 WB	582+72.00	586+92.00	LT	WINTER 1			1		9	9															420.00						
141-144		IR 90 WB	696+20.00	732+40.00	LT	2																					254.7	804					
146-147		IR 90 WB	759+60.00	770+15.00	LT	2																					74.2	234					
150-151	BK252	IR 90 CROSSOVER	815+55.00	816+00.00	LT	2																					52.7	166					
151	BK252	IR 90 CROSSOVER	816+00.00	816+55.00	LT	2																					3.9	12					
151	BK252	IR 90 CROSSOVER	816+55.00	817+10.00	RT	2																					3.9	12					
151	BK252	IR 90 CROSSOVER	817+45.00	819+45.00	RT	2																					14.1	44					
<b>TOTALS CARRIED TO SHEET P.0066</b>																																	
									1		9	9		12	12	27	20,147	16,317									420		757.4	2,389			

MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES

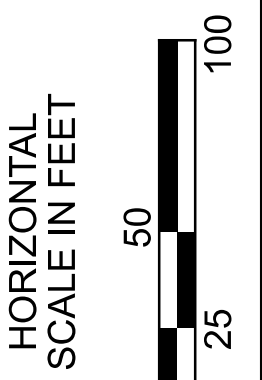
DESIGN AGENCY	<b>AMERICAN STRUCTUREPOINT INC.</b>
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0067 P.1587



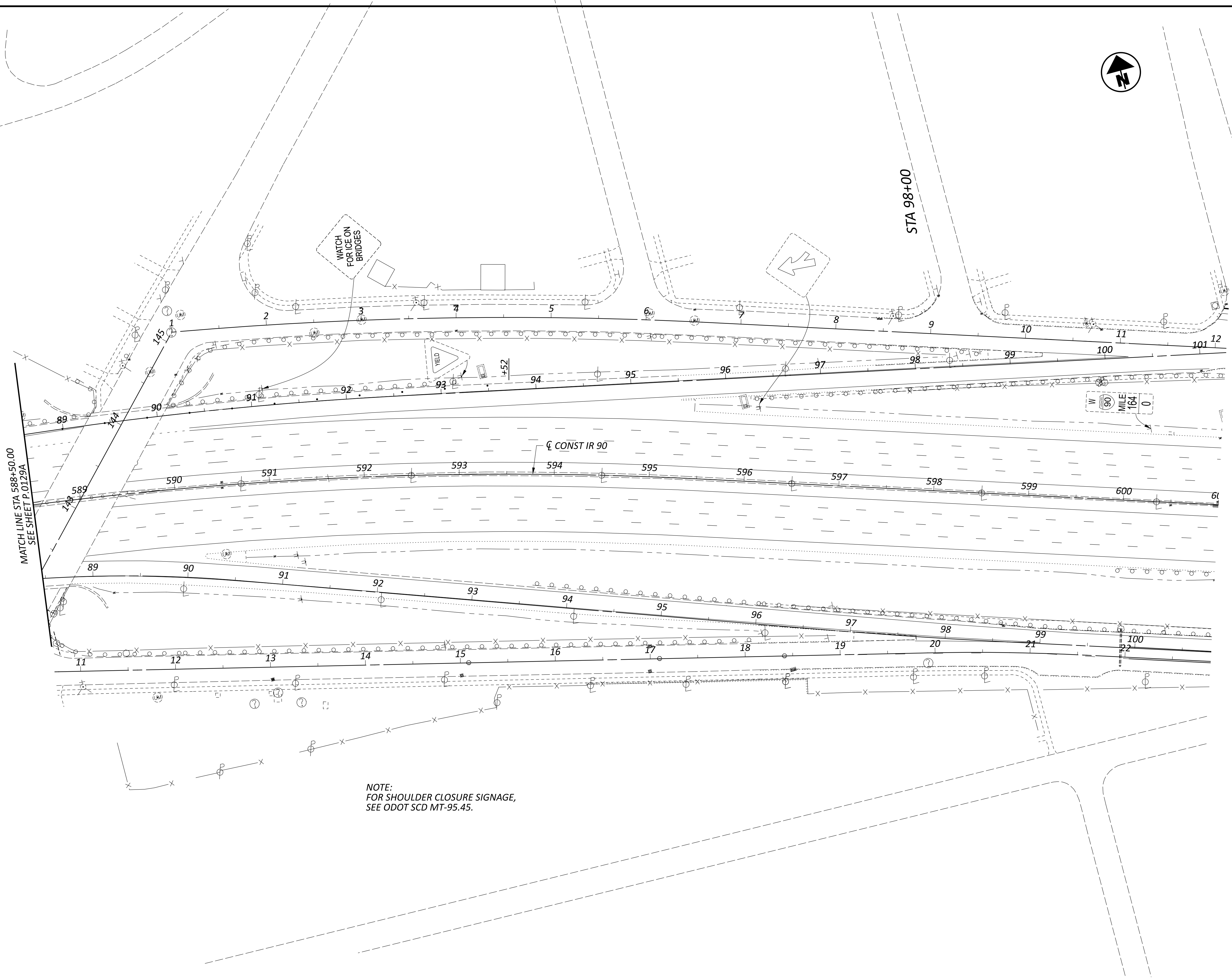
NOTE:  
FOR SHOULDER CLOSURE SIGNAGE,  
SEE ODOT SCD MT-95.45.

MAINTENANCE OF TRAFFIC WINTER PHASE 1  
STA 576+00 TO STA 588+50

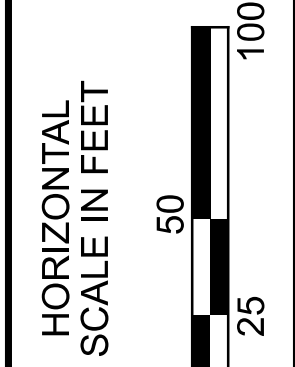
DESIGN AGENCY	
STRUCTUREPOINT INC.	
DESIGNER	
JS	
REVIEWER	
VDK 05/08/24	
PROJECT ID	
76779	
SHEET	TOTAL
P.0129A	P.1587



MATCH LINE STA 588+50.00  
SEE SHEET P.0129A



NOTE:  
FOR SHOULDER CLOSURE SIGNAGE,  
SEE ODOT SCD MT-95.45.



MAINTENANCE OF TRAFFIC WINTER PHASE 1  
STA 588+50 TO STA 601+00

DESIGN AGENCY	
STRUCTUREPOINT INC.	
DESIGNER	
JS	
REVIEWER	
VDK 05/08/24	
PROJECT ID	
76779	
SHEET	TOTAL
P.0129B	P.1587

SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	45	46	47	332	337	338	340	341	346	01/IMS/04	02/IMS/13	03/IMS/13						
	LS									LS			201	11000	LS	CLEARING AND GRUBBING		
				420,404						420,404			202	23000	420,404	SY	PAVEMENT REMOVED	
				37,701		6,343				6,343			202	30000	6,343	SF	WALK REMOVED	
				2,234						37,701			202	30700	37,701	FT	CONCRETE BARRIER REMOVED	
				54,446						2,234			202	30800	2,234	SY	TRAFFIC ISLAND REMOVED	
										54,446			202	32000	54,446	FT	CURB REMOVED	
													204	32800	204	SY	CONCRETE SLOPE PROTECTION REMOVED	
										9,654			202	35100	9,654	FT	PIPE REMOVED, 24" AND UNDER	
										10,157			202	35200	10,157	FT	PIPE REMOVED, OVER 24"	
										12,989			202	38000	12,989	FT	GUARDRAIL REMOVED	
										39			202	42010	39	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
										25			202	42040	25	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
										33			202	47000	33	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
										2			202	47800	2	EACH	IMPACT ATTENUATOR REMOVED	
										37			202	58000	37	EACH	MANHOLE REMOVED	
										101			202	58100	101	EACH	CATCH BASIN REMOVED	
										150			202	58200	150	EACH	INLET REMOVED	
										4,248			SPECIAL	20270000	4,248	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P.0048
										578			SPECIAL	20270000	578	FT	FILL AND PLUG EXISTING CONDUIT, 18"	P.0048
										654			SPECIAL	20270000	654	FT	FILL AND PLUG EXISTING CONDUIT, 21"	P.0048
										1,264			SPECIAL	20270000	1,264	FT	FILL AND PLUG EXISTING CONDUIT, 24"	P.0048
										247			SPECIAL	20270000	247	FT	FILL AND PLUG EXISTING CONDUIT, 30"	P.0048
										575			SPECIAL	20270000	575	FT	FILL AND PLUG EXISTING CONDUIT, 36"	P.0048
										670			SPECIAL	20270000	670	FT	FILL AND PLUG EXISTING CONDUIT, 42"	P.0048
										773			SPECIAL	20270000	773	FT	FILL AND PLUG EXISTING CONDUIT, 48"	P.0048
										2,021			SPECIAL	20270000	2,021	FT	FILL AND PLUG EXISTING CONDUIT, 54"	P.0048
										1,806			SPECIAL	20270000	1,806	FT	FILL AND PLUG EXISTING CONDUIT, 60"	P.0048
										145			SPECIAL	20270110	645	FT	PIPE CLEANOUT, 24" AND UNDER	P.0047
										190			SPECIAL	20270120	690	FT	PIPE CLEANOUT, 27" TO 48"	P.0047
										500			SPECIAL	20270130	500	FT	PIPE CLEANOUT OVER 48"	P.0047
										41,942			202	75000	41,942	FT	FENCE REMOVED	
										LS			202	98000	LS	LS	REMOVAL MISC.: TRAFFIC MONITORING EQUIPMENT	P.1268
										252,249			203	10001	252,249	CY	EXCAVATION, AS PER PLAN	P.0049
										9,830			203	20001	9,830	CY	EMBANKMENT, AS PER PLAN	P.0049
										24			203	98600	24	EACH	ROADWAY, MISC.: TEST HOLE	P.0046
										37,166			204	13001	37,166	CY	EXCAVATION OF SUBGRADE, AS PER PLAN	P.0046
										71			204	45000	71	HOUR	PROOF ROLLING	
										5,786			206	10500	5,786	TON	CEMENT	
										221,079			206	11000	221,079	SY	CURING COAT	
										204,209			206	15010	204,209	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
										16,870			206	15020	16,870	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
										LS			206	30000	LS	LS	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
										0.25			209	15051	0.25	MILE	RESHAPING UNDER GUARDRAIL, AS PER PLAN	P.0049
										20,246			606	15051	20,246	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	P.0046
										125			606	15151	125	FT	GUARDRAIL, TYPE MGS HALF POST SPACING, AS PER PLAN	P.0046
										62.5			606	15251	62.5	FT	GUARDRAIL, TYPE MGS QUARTER POST SPACING, AS PER PLAN	P.0046
										57			606	26150	57	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
										35			606	26550	35	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
										42			606	35002	42	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
										20			606	35102	20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
										41,913			607	23000	41,913	FT	FENCE, TYPE CLT	
										41,913			607	70000	41,913	FT	FENCELINE SEEDING AND MULCHING	

GENERAL SUMMARY

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0316   P.1587

SHEET NUM.

PART.

ITEM

ITEM EXT

GRAND TOTAL

UNIT

DESCRIPTION

SEE SHEET NO.

48	63	346	347	01/IMS/04	02/IMS/13	03/IMS/13	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		1,885					611	06100	1,885	FT	15" CONDUIT, TYPE C	
		73					611	06700	273	FT	15" CONDUIT, TYPE F	
		382					611	07400	382	FT	18" CONDUIT, TYPE B	
	247	40					611	07401	247	FT	18" CONDUIT, TYPE B, AS PER PLAN	P.0063
		225					611	07600	40	FT	18" CONDUIT, TYPE C	
		232					611	08901	225	FT	21" CONDUIT, TYPE B, AS PER PLAN	P.0063
		197					611	10400	232	FT	24" CONDUIT, TYPE B	
		1,265					611	10401	197	FT	24" CONDUIT, TYPE B, AS PER PLAN	P.0063
							611	10600	1,265	FT	24" CONDUIT, TYPE C	
		527					611	13600	527	FT	30" CONDUIT, TYPE C	
		677					611	16400	677	FT	36" CONDUIT, TYPE B	
		247					611	16600	677	FT	36" CONDUIT, TYPE C	
	15	493					611	19400	247	FT	42" CONDUIT, TYPE B	
		2,845					611	19600	508	FT	42" CONDUIT, TYPE C	
		472					611	22600	2,845	FT	54" CONDUIT, TYPE C	
		10					611	23800	472	FT	60" CONDUIT, TYPE B	
		3,516					611	24000	10	FT	60" CONDUIT, TYPE C	
		1,245					611	96600	3,516	FT	CONDUIT, BORED OR JACKED, 15", TYPE B	
		1,387					611	96600	1,245	FT	CONDUIT, BORED OR JACKED, 18", TYPE B	
		114					611	96600	1,387	FT	CONDUIT, BORED OR JACKED, 24", TYPE B	
		150					611	96600	114	FT	CONDUIT, BORED OR JACKED, 30", TYPE B	
		254					611	96600	150	FT	CONDUIT, BORED OR JACKED, 36", TYPE B	
		143					611	96600	254	FT	CONDUIT, BORED OR JACKED, 36", TYPE C	
		102					611	96600	143	FT	CONDUIT, BORED OR JACKED, 42", TYPE B	
		88					611	96600	102	FT	CONDUIT, BORED OR JACKED, 48", TYPE B	
		455					611	96600	88	FT	CONDUIT, BORED OR JACKED, 54", TYPE B	
		122					611	96600	455	FT	CONDUIT, BORED OR JACKED, 60", TYPE B	
	74						611	96601	122	FT	CONDUIT, BORED OR JACKED, 66", TYPE B	
	15						611	96601	74	FT	CONDUIT, BORED OR JACKED, AS PER PLAN, 15", TYPE B	P.0063
							611	96601	15	FT	CONDUIT, BORED OR JACKED, AS PER PLAN, 18", TYPE B	P.0063
							611	96601	110	FT	CONDUIT, BORED OR JACKED, AS PER PLAN, 24", TYPE B	P.0063
		24					611	97400	24	FT	CONDUIT, MISC.: 12" CONDUIT, TYPE B, ROCK CUT	P.0049
							611	97400	26	FT	CONDUIT, MISC.: 12" CONDUIT, TYPE C, ROCK CUT	P.0049
		8,505					611	97400	8,505	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE B, ROCK CUT	P.0049
		1,933					611	97400	1,933	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE C, ROCK CUT	P.0049
		85					611	97400	85	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE F, ROCK CUT	P.0049
		1,754					611	97400	1,754	FT	CONDUIT, MISC.: 18" CONDUIT, TYPE B, ROCK CUT	P.0049
		1,019					611	97400	1,019	FT	CONDUIT, MISC.: 18" CONDUIT, TYPE C, ROCK CUT	P.0049
		501					611	97400	501	FT	CONDUIT, MISC.: 24" CONDUIT, TYPE B, ROCK CUT	P.0049
		469					611	97400	469	FT	CONDUIT, MISC.: 24" CONDUIT, TYPE C, ROCK CUT	P.0049
		76					611	97400	76	FT	CONDUIT, MISC.: 27" CONDUIT, TYPE C, ROCK CUT	P.0049
		6					611	97400	6	FT	CONDUIT, MISC.: 30" CONDUIT, TYPE B, ROCK CUT	P.0049
		1,394					611	97400	1,394	FT	CONDUIT, MISC.: 30" CONDUIT, TYPE C, ROCK CUT	P.0049
		248					611	97400	248	FT	CONDUIT, MISC.: 36" CONDUIT, TYPE B, ROCK CUT	P.0049
		332					611	97400	332	FT	CONDUIT, MISC.: 36" CONDUIT, TYPE C, ROCK CUT	P.0049
		262					611	97400	262	FT	CONDUIT, MISC.: 42" CONDUIT, TYPE B, ROCK CUT	P.0049
		1,180					611	97400	1,180	FT	CONDUIT, MISC.: 42" CONDUIT, TYPE C, ROCK CUT	P.0049
		2,467					611	97400	2,467	FT	CONDUIT, MISC.: 48" CONDUIT, TYPE B, ROCK CUT	P.0049
		368					611	97400	368	FT	CONDUIT, MISC.: 54" CONDUIT, TYPE B, ROCK CUT	P.0049
		608					611	97400	608	FT	CONDUIT, MISC.: 54" CONDUIT, TYPE C, ROCK CUT	P.0049
		555					611	97400	555	FT	CONDUIT, MISC.: 60" CONDUIT, TYPE B, ROCK CUT	P.0049
		2,085					611	97400	2,085	FT	CONDUIT, MISC.: 66" CONDUIT, TYPE B, ROCK CUT	P.0049
		182					611	97400	182	FT	CONDUIT, MISC.: 66" CONDUIT, TYPE C, ROCK CUT	P.0049
		38					611	98150	38	EACH	CATCH BASIN, NO. 3	
		1					611	98151	1	EACH	CATCH BASIN, NO. 3, AS PER PLAN	P.0048
		15					611	98180	15	EACH	CATCH BASIN, NO. 3A	
		63					611	98300	63	EACH	CATCH BASIN, NO. 5	
		1					611	98301	1	EACH	CATCH BASIN, NO. 5, AS PER PLAN	P.0048
	1						611	98301	1	EACH	CATCH BASIN, NO. 5, AS PER PLAN (2)	P.0063
		7					611	98370	7	EACH	CATCH BASIN, NO. 6	
	1						611	98371	1	EACH	CATCH BASIN, NO. 6, AS PER PLAN	P.0063
		1					611	98510	1	EACH	CATCH BASIN, NO. 2-3	
		15					611	98690	15	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND CB-1 CATCH BASIN	P.0048
		7					611	98800	7	EACH	INLET, NO. 3B	
		7					611	98810	7	EACH	INLET, NO. 3C	
		7					611	98820	7	EACH	INLET, NO. 3D	

GENERAL SUMMARY

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0318   P.1587

CUY-90-6.69

MODEL: Sheet 3 PAPER SIZE: 34x22 (in.) DATE: 5/6/2024 TIME: 4:26:59 PM USER: brieder  
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SHEET NUM.							PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	49	50	63	337	347	1290	01/IMS/04	02/IMS/13	03/IMS/13						
					49					611	98840	49	EACH	<b>DRAINAGE CONT.</b> INLET, NO. 2-A-6	
			1							611	98841	1	EACH	INLET, NO. 2-A-6, AS PER PLAN	P.0063
					35					611	98850	35	EACH	INLET, NO. 2-A-8	
					24					611	98860	24	EACH	INLET, NO. 2-A-10	
					12					611	98870	12	EACH	INLET, NO. 2-A-12	
					9					611	98880	9	EACH	INLET, NO. 2-A-14	
					1					611	98890	1	EACH	INLET, NO. 2-A-16	
					1					611	99000	1	EACH	INLET, NO. 2-A-18	
					73					611	99574	73	EACH	MANHOLE, NO. 3	
					33					611	99575	33	EACH	MANHOLE, NO. 3, AS PER PLAN	P.0048
					1					611	99575	1	EACH	MANHOLE, NO. 3, AS PER PLAN (2)	P.0048
			3							611	99575	3	EACH	MANHOLE, NO. 3, AS PER PLAN (3)	P.0063
					2					611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
					1					611	99690	1	EACH	MANHOLE, MISC.: MH-3 MODIFIED	P.0048
														<b>PAVEMENT</b>	
756		2,000								251	01020	2,756	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)	
16,985										254	01000	16,985	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
89,922										302	56001	89,922	CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG 64-22	P.0049
111,594										304	20000	111,594	CY	AGGREGATE BASE	
63,691										407	10000	63,691	GAL	TACK COAT	
677										441	10101	677	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG 70-22M	P.0049
					724					441	70801	724	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	P.0049
18,367										442	10080	18,367	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
15,807										442	10301	15,807	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG 76-22M	P.0050
42										442	22101	42	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG 76-22M	P.0050
49,422										452	14122	49,422	SY	11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
159										609	14000	159	FT	CURB, TYPE 2-A	
34										609	23001	34	FT	COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN	P.0046
18,952										609	24000	18,952	FT	CURB, TYPE 4-A	
31,848										609	24510	31,848	FT	CURB, TYPE 4-C	
637										609	50000	637	SY	4" CONCRETE TRAFFIC ISLAND	
	13.79									618	40601	13.79	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	P.0050
														<b>LIGHTING</b>	
					423					625	00450	423	EACH	CONNECTION, FUSED PULL APART	
					207					625	00480	207	EACH	CONNECTION, UNFUSED PERMANENT	
					58					625	10494	58	EACH	LIGHT POLE, LOW MAST, ALM50	
					142					625	10494	142	EACH	LIGHT POLE, LOW MAST, ATLM50	
					40					625	10614	40	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	
					1					625	14000	1	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
					142					625	14200	142	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP	
					48					625	14306	48	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP	
					75,825					625	23200	75,825	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
					30,150					625	23400	30,150	FT	NO. 10 AWG POLE AND BRACKET CABLE	
					43,650					625	24320	43,650	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
					749					625	25300	749	FT	CONDUIT, 1-1/2", 725.04	
					950					625	25304	950	FT	CONDUIT, 1-1/2", 725.051	
					3,729					625	25408	3,729	FT	CONDUIT, 2", 725.051	
					9,855					625	25604	9,855	FT	CONDUIT, 4", 725.051	
					3,746					625	25902	3,746	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
					200					625	26273	200	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN, 480V	P.1310
					11					625	27503	11	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, 480V	P.1310
					4					625	27503	4	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, CPP FIXTURE	P.1310
					32,376					625	29000	32,376	FT	TRENCH	

GENERAL SUMMARY

DESIGN AGENCY	
<b>AMERICAN STRUCTUREPOINT</b>	
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET	P.0319
TOTAL	P.1587

SHEET NUM.								PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
1397	1402	1407	1411					01/IMS/04	02/IMS/13	03/IMS/13						
<b>STRUCTURE OVER 20 FOOT SPAN (CUY-00090-08.490)</b>																
94								94			202	32800	94	SY	CONCRETE SLOPE PROTECTION REMOVED	
28								28			512	10100	28	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
30								30			512	10600	30	FT	CONCRETE REPAIR BY EPOXY INJECTION	
32								32			SPECIAL	51271500	32	SY	URETHANE TOP COAT SEALER	P.1349
5								5			516	46701	5	EACH	RESET BEARING, AS PER PLAN	P.1349
LS								LS			516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	P.1349
285								285			SPECIAL	51900100	285	SF	COMPOSITE FIBER WRAP SYSTEM	P.1350
338								338			519	11101	338	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1350
94								94			601	21000	94	SY	CONCRETE SLOPE PROTECTION	
<b>STRUCTURE OVER 20 FOOT SPAN (CUY-00090-08.920)</b>																
	31							31			512	10100	31	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	5							5			513	21001	5	EACH	TRIMMING OF BEAM END, AS PER PLAN	P.1349
	LS							LS			518	63300	LS		STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS	P.1350
	276							276			519	11101	276	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1350
<b>STRUCTURE OVER 20 FOOT SPAN (CUY-00090-09.090)</b>																
		6						6			503	21100	6	CY	UNCLASSIFIED EXCAVATION	
		47						47			512	10100	47	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
		9						9			512	10600	9	FT	CONCRETE REPAIR BY EPOXY INJECTION	
		77						77			SPECIAL	51271500	77	SY	URETHANE TOP COAT SEALER	P.1349
		LS						LS			518	63300	LS		STRUCTURE DRAINAGE, MISC.: REPLACE PORTION OF DRAINAGE SYSTEM	P.1349
		LS						LS			518	63300	LS		STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS	P.1350
		685						685			SPECIAL	51900100	685	SF	COMPOSITE FIBER WRAP SYSTEM	P.1350
		440						440			519	11101	440	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1350
<b>STRUCTURE OVER 20 FOOT SPAN (CUY-00090-09.470 L)</b>																
		LS						LS			202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	P.1348
		267						267			202	22900	267	SY	APPROACH SLAB REMOVED	
		73,112						73,112			509	10000	73,112	LB	EPOXY COATED STEEL REINFORCEMENT	
		5,983						5,983			509	30020	5,983	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
		249						249			510	10000	249	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
		156						156			511	34412	156	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	
		63						63			511	34450	63	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
		1,524						1,524			512	10050	1,524	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
		414						414			512	10100	414	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
		165						165			512	10300	165	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
		143						143			516	10010	143	FT	ARMORLESS PREFORMED JOINT SEAL	
		49						49			519	11101	49	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1412
		390						390			526	25010	390	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")	
		143						143			526	90030	143	FT	TYPE C INSTALLATION	
		310						310			607	39900	310	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	
		1,134						1,134			848	10201	1,134	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN, 3 3/4" INCH THICK	P.1350
		1,134						1,134			848	20000	1,134	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
		3						3			848	30200	3	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
		5						5			848	50000	5	SY	HAND CHIPPING	
		LS						LS			848	50100	LS		TEST SLAB	
		1,134						1,134			848	50320	1,134	SY	EXISTING CONCRETE OVERLAY REMOVED, 3 1/2" NOMINAL THICKNESS	
		50						50			848	50340	50	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	

GENERAL SUMMARY

DESIGN AGENCY  
**AMERICAN STRUCTUREPOINT INC.**

DESIGNER  
**BER**

REVIEWER  
VDK 08/09/23

PROJECT ID  
76779

SHEET TOTAL  
P.0324 P.1587

SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
OFFICE CALCS	51	52	56	57	58	60	61	66		01/IMS/04	02/IMS/13	03/IMS/13							
							200	799		999			441	50101	999	CY	MAINTENANCE OF TRAFFIC ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	P.0061	
								1,332		1,332			611	97010	1,332	FT	SLOTTED DRAIN, TYPE 2, 15"		
						321,300	2,000			2,000			614	11110	2,000	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
										321,300			614	11630	321,300	FT	INCREASED BARRIER DELINEATION		
								50		50			614	12380	50	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)		
			LS							LS			614	12420	LS		DETOUR SIGNING		
				49						49			614	18601	49	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.0058	
				17						17			614	12484	17	EACH	WORK ZONE INCREASED PENALTIES SIGN		
					50					50			614	12500	50	EACH	REPLACEMENT SIGN		
3										3			614	12756	3	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM		
								7,108		7,108			614	12801	7,108	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	P.0060	
								7,452		7,452			614	13310	7,452	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY		
								19,960		19,960			614	13350	19,960	EACH	OBJECT MARKER, ONE WAY		
								20,811		20,811			614	18030	20,811	FT	MAINTAINING TRAFFIC, MISC.: TROUGH	P.0063	
				2.2						2.2			614	20560	2.2	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT		
								72.24		72.24			614	22110	72.24	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT		
					1.7					1.7			614	22360	1.7	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT		
								114.96		114.96			614	20056	114.96	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT		
								80.91		80.91			614	20110	80.91	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT		
								142.52		142.52			614	22056	142.52	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT		
								118,848		118,848			614	23110	118,848	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT		
								60,441		60,441			614	23210	60,441	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT		
								82,125		82,125			614	24102	82,125	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT		
								48,951		48,951			614	24202	48,951	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT		
								212		212			614	25000	212	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I		
LS							4,000	28,389		32,389			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC		
										32,389			615	20000	32,389	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		
			353							353			616	10000	353	MGAL	WATER		
								1,069		1,069			617	11100	1,069	TON	COMPACTED AGGREGATE		
								3,372		3,372			617	20000	3,372	SY	SHOULDER PREPARATION		
								62,120		62,120			622	41011	62,120	FT	PORTABLE BARRIER, 50", AS PER PLAN	P.0057	
								7		7			622	41060	7	EACH	DUAL PORTABLE BARRIER TRANSITION/TERMINATION		
								140,093		140,093			622	41100	140,093	FT	PORTABLE BARRIER, UNANCHORED	P.0057	
								16,631		16,631			622	41111	16,631	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN		
				180						180			808	18700	180	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY		
							38			38			829	00100	38	SNMT	WORK ZONE EGRESS WARNING SYSTEM		
							480			480			896	00010	480	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I		
							120			120			896	00021	120	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.0061	
540,000											540,000		900	00100	540,000	EACH	RAILROAD FLAGGING SERVICES	P.1351	
LS										LS			108	10000	LS		CPM PROGRESS SCHEDULE		
			LS							LS			614	11000	LS		MAINTAINING TRAFFIC		
								38		38			619	16021	38	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN	P.0051	
			LS							LS			623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	P.0052	
LS										LS			624	10000	LS		MOBILIZATION		
			LS							LS			SPECIAL	69091000	LS		AS-BUILT CONSTRUCTION PLANS	P.0051	
			LS							LS			SPECIAL	69098400	LS		PERMITS		

GENERAL SUMMARY

DESIGN AGENCY  
**STRUCTUREPOINT**  
 INC.  
 DESIGNER  
 BER  
 REVIEWER  
 VDK 08/09/23  
 PROJECT ID  
 76779  
 SHEET TOTAL  
 P.0327 P.1587

ESTIMATED QUANTITIES

CUY-90-6.69

MODEL: Sheet 1 PAPER: 34x22 (in.) DATE: 5/8/2024 TIME: 3:33:40 PM USER: breider  
 p:\structurepoint-pw\benley.com\structurepoint-pw\01\Documents\Projects\202000062\76779\400-Engineering\Drainage\Sheets\76779\_DS001.dgn

Sheet 348	Sheet 349	Sheet 350	Sheet 351	Sheet 352	Sheet 353	Sheet 354	Sheet 355	Sheet 356	Sheet 357	Sheet 358	Sheet 359	Sheet 368	ITEM	EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
2717	4490	2447											202	35100	9,654	FT	PIPE REMOVED, 24" AND UNDER	
1960	4276	3921											202	35200	10,157	FT	PIPE REMOVED, OVER 24"	
17	11	9											202	58000	37	EACH	MANHOLE REMOVED	
40	30	31											202	58100	101	EACH	CATCH BASIN REMOVED	
33	65	52											202	58200	150	EACH	INLET REMOVED	
522	1455	2271											202	70000	4,248	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 15"	P.0046
215	162	201											202	70000	578	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 18"	P.0046
31	235	388											202	70000	654	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 21"	P.0046
527	68	669											202	70000	1,264	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 24"	P.0046
247													202	70000	247	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 30"	P.0046
	300	275											202	70000	575	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 36"	P.0046
73	310	287											202	70000	670	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 42"	P.0046
		773											202	70000	773	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 48"	P.0046
738	643	640											202	70000	2,021	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 54"	P.0046
1431		375											202	70000	1,806	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 60"	P.0046
				145									202	70110	145	FT	SPECIAL - PIPE CLEANOUT, 24" AND UNDER	
				190									202	70120	190	FT	SPECIAL - PIPE CLEANOUT, 27" TO 48"	
												7.12	601	21050	7.12	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
												124329	605	11110	124,329	FT	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
												102604	605	14021	102,604	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	P.0046
												5889	611	00510	5,889	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
												4	611	99710	4	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		46	11										611	04400	68	FT	12" CONDUIT, TYPE B	
													611	04600	68	FT	12" CONDUIT, TYPE C	
		976	73					1534	940				611	05900	4,518	FT	15" CONDUIT, TYPE B	
		261	249					616	28	595	136		611	06100	1,885	FT	15" CONDUIT, TYPE C	
								73					611	06700	73	FT	15" CONDUIT, TYPE F	
									180	202			611	07400	382	FT	18" CONDUIT, TYPE B	
								6			34		611	07600	40	FT	18" CONDUIT, TYPE C	
				194					38				611	10400	232	FT	24" CONDUIT, TYPE B	
								916	17				611	10600	1,265	FT	24" CONDUIT, TYPE C	
								527					611	13600	527	FT	30" CONDUIT, TYPE C	
													611	16400		FT	36" CONDUIT, TYPE B	
													611	16600	677	FT	36" CONDUIT, TYPE C	
													611	19400	247	FT	42" CONDUIT, TYPE B	
													611	19600	493	FT	42" CONDUIT, TYPE C	
								640	2205				611	22600	2,845	FT	54" CONDUIT, TYPE C	
													611	23800	472	FT	60" CONDUIT, TYPE B	
								171	1112	512	332		611	96600	3,516	FT	CONDUIT, BORED OR JACKED, 15", TYPE B	
								136	127				611	96600	1,245	FT	CONDUIT, BORED OR JACKED, 18", TYPE B	
													611	96600	1,387	FT	CONDUIT, BORED OR JACKED, 24", TYPE B	
													611	96600	114	FT	CONDUIT, BORED OR JACKED, 30", TYPE B	
													611	96600	150	FT	CONDUIT, BORED OR JACKED, 36", TYPE B	
													611	96600	254	FT	CONDUIT, BORED OR JACKED, 36", TYPE C	
													611	96600	143	FT	CONDUIT, BORED OR JACKED, 42", TYPE B	
													611	96600	102	FT	CONDUIT, BORED OR JACKED, 48", TYPE B	
													611	96600	88	FT	CONDUIT, BORED OR JACKED, 54", TYPE B	
													611	96600	455	FT	CONDUIT, BORED OR JACKED, 60", TYPE B	
													611	96600	122	FT	CONDUIT, BORED OR JACKED, 66", TYPE B	
													611	97400	24	FT	CONDUIT, MISC.: 12" CONDUIT, TYPE B, ROCK CUT	P.0047

DRAINAGE SUB-SUMMARY

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0346   P.1587

ESTIMATED QUANTITIES

Sheet 351	Sheet 352	Sheet 353	Sheet 354	Sheet 355	Sheet 356	Sheet 357	Sheet 358	Sheet 359	Sheet 370	ITEM	EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
										611	97400	26	FT	CONDUIT, MISC.: 12" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	8,505	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	1,933	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	85	FT	CONDUIT, MISC.: 15" CONDUIT, TYPE F, ROCK CUT	P.0047
										611	97400	1,754	FT	CONDUIT, MISC.: 18" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	1,019	FT	CONDUIT, MISC.: 18" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	501	FT	CONDUIT, MISC.: 24" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	469	FT	CONDUIT, MISC.: 24" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	76	FT	CONDUIT, MISC.: 27" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	6	FT	CONDUIT, MISC.: 30" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	1,394	FT	CONDUIT, MISC.: 30" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	248	FT	CONDUIT, MISC.: 36" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	332	FT	CONDUIT, MISC.: 36" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	262	FT	CONDUIT, MISC.: 42" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	1,180	FT	CONDUIT, MISC.: 42" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	2,467	FT	CONDUIT, MISC.: 48" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	368	FT	CONDUIT, MISC.: 54" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	608	FT	CONDUIT, MISC.: 54" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	97400	555	FT	CONDUIT, MISC.: 60" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	2,085	FT	CONDUIT, MISC.: 66" CONDUIT, TYPE B, ROCK CUT	P.0047
										611	97400	182	FT	CONDUIT, MISC.: 66" CONDUIT, TYPE C, ROCK CUT	P.0047
										611	98150	38	EACH	CATCH BASIN, NO. 3	
										611	98151	1	EACH	CATCH BASIN, NO. 3, AS PER PLAN	P.0048
										611	98180	15	EACH	CATCH BASIN, NO. 3A	
										611	98300	63	EACH	CATCH BASIN, NO. 5	
										611	98301	1	EACH	CATCH BASIN, NO. 5, AS PER PLAN	P.0048
										611	98370	7	EACH	CATCH BASIN, NO. 6	
										611	98510	1	EACH	CATCH BASIN, NO. 2-3	
										611	98690	1	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND CB-1 CATCH BASIN	P.0048
										611	98800	15	EACH	INLET, NO. 3B	
										611	98810	7	EACH	INLET, NO. 3C	
										611	98820	7	EACH	INLET, NO. 3D	
										611	98840	49	EACH	INLET, NO. 2-A-6	
										611	98850	35	EACH	INLET, NO. 2-A-8	
										611	98860	24	EACH	INLET, NO. 2-A-10	
										611	98870	12	EACH	INLET, NO. 2-A-12	
										611	98880	9	EACH	INLET, NO. 2-A-14	
										611	98890	1	EACH	INLET, NO. 2-A-16	
										611	99000	1	EACH	INLET, NO. 2-A-18	
										611	99574	73	EACH	MANHOLE, NO. 3	
										611	99575	33	EACH	MANHOLE, NO. 3, AS PER PLAN	P.0048
										611	99575	1	EACH	MANHOLE, NO. 3, AS PER PLAN (2)	P.0048
										611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
										633	99690	1	EACH	MANHOLE, MISC.: MH-3 MODIFIED	P.0048
									1608	659	00300	1,608	CY	TOPSOIL	
									14216	670	00500	14,216	SY	SLOPE EROSION PROTECTION	
									11691	670	00720	11,691	SY	DITCH EROSION PROTECTION MAT, TYPE B	
									444	836	10000	444	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	

DRAINAGE SUB-SUMMARY

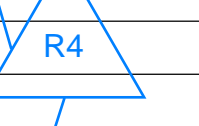
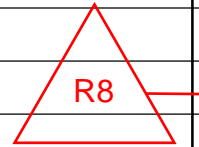
DESIGN AGENCY  
**AMERICAN STRUCTUREPOINT INC.**  
 DESIGNER  
 BER  
 REVIEWER  
 VDK 08/09/23  
 PROJECT ID  
 76779  
 SHEET TOTAL  
 P.0347 | P.1587

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	202										FOR INFORMATION ONLY					
			FROM	TO		PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	MANHOLE REMOVED	CATCH BASIN REMOVED	INLET REMOVED	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 15"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 18"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 21"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 24"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 30"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 42"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 54"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 60"	MAX SIZE	APPROXIMATE MAXIMUM DEPTH	
						FT	FT	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	INCHES	FT	
1047	DR-1	RAMP HB	30+69.99	30+71.38	LT	6			1										12	5.00'	
1048	DR-2	HILLIARD BLVD	82+10.38	82+16.20	LT	15			1										12	3.00'	
1047	DR-3	IR 90	529+97.58	531+01.05	LT	52			1	2									15	5.50'	
1047	DR-4	IR 90	530+49.20	530+49.46	LT	9			1										12	4.00'	
1047	DR-5	IR 90	530+49.46	530+49.96	LT	57													21	6.50'	
1047	DR-6	IR 90	529+99.40	531+00.00	C/L	114				3									15	5.25'	
1047	DR-7	IR 90	529+98.44	531+02.17	RT	48			1	2		46							15	5.00'	
1047	DR-8	IR 90	530+49.96	530+49.99	RT	54		1						54					24	10.00'	
1047	DR-9	IR 90	530+49.99	533+49.86	RT	10	296	1	1										30	SEE IR 90 PROFILES	
1048	DR-10	IR 90	533+40.71	533+49.86	RT	88			1										15	3.3'	
1048	DR-11	IR 90	533+49.86	536+00.87	RT												247		N/A	NO PIPE REMOVAL	
1048	DR-12	IR 90	535+85.73	536+00.00	LT	64			1										15	4.00'	
1048	DR-13	IR 90	536+00.00	536+00.87	RT					1			74						N/A	NO PIPE REMOVAL	
1048	DR-14	IR 90	536+00.87	538+50.87	RT		247	1											33	SEE IR 90 PROFILES	
1048	DR-15	IR 90	535+19.21	536+00.87	RT				1			91							N/A	NO PIPE REMOVAL	
1048	DR-16	RAMP HA	35+61.87	535+19.21	LT/RT	88			1										15	4.00'	
1048	DR-17	IR 90	538+50.87	540+41.17	RT		192	1											33	SEE IR 90 PROFILES	
1048	DR-18	IR 90	539+89.55	540+92.48	RT	101			2	2									15	4.25'	
1048	DR-19	IR 90	540+41.17	542+86.65	RT		242		1										36	SEE IR 90 PROFILES	
1048	DR-20	IR 90	542+76.44	542+86.65	RT	8			1										21	3.25'	
1048	DR-21	IR 90	541+67.74	542+72.53	LT	99				1									15	4.25'	
1048	DR-22	IR 90	5427+58.24	543+75.24	LT	95			2										15	5.00'	
1048	DR-23	IR 90	542+72.53	543+29.94	LT	72		1	1										18	7.00'	
1048	DR-24	IR 90	542+72.53	542+86.65	LT/RT	167			1	1									21	8.00'	
1048	DR-25	IR 90	542+86.65	545+25.29	RT		235		1										42	SEE IR 90 PROFILES	
1049	DR-26	IR 90	545+25.29	547+24.66	RT		234		1										42	SEE IR 90 PROFILES	
1049	DR-27	IR 90	547+24.66	547+44.00	LT/RT	91			1	1									15	6.00'	
1049	DR-28	IR 90	546+92.77	547+24.66	RT	23	10	1	1	1							73		15	5.25'	
1049	DR-29	IR 90	547+24.66	551+80.86	RT			1						460					60	SEE IR 90 PROFILES	
1049	DR-30	IR 90	551+80.86	554+00.92	RT	216													24	8.00'	
1049	DR-31	IR 90	554+00.14	554+00.92	LT/RT	17		1	2	3									24	8.00'	
1051	DR-32	IR 90	571+99.84	572+00.00	RT	6				1									18	4.00'	
1051	DR-33	IR 90	572+00.00	574+25.00	LT/RT	370		2	4	4			72						18	5.00'	
1051	DR-34	IR 90	574+25.00	574+92.46	RT		61	1											27	SEE IR 90 PROFILES	
1052	DR-35	IR 90	582+86.41	586+93.90	LT		413	1											60	SEE IR 90 PROFILES	
1052	DR-36	IR 90	582+86.41	583+16.39	LT/RT	160	30		2	3									27	6.00'	
1052	DR-37	IR 90	586+93.90	593+24.03	LT			1									655		N/A	NO PIPE REMOVAL	
1052	DR-38	IR 90	589+24.64	590+48.88	LT/RT	192		1	1	1				31					21	10.00'	
1052	DR-39	IR 90	590+48.88	591+00.00	RT	49			1										12	3.00'	
1052	DR-40	IR 90	590+56.69	590+55.18	LT	56			1										12	16.75'	
1053	DR-41	IR 90	593+24.03	594+50.71	LT				2			163							N/A	NO PIPE REMOVAL	
1053	DR-42	IR 90	593+24.03	595+96.47	LT				1									275	N/A	NO PIPE REMOVAL	
1053	DR-43	IR 90	595+96.47	601+01.65	LT				1									501	N/A	NO PIPE REMOVAL	
1053	DR-44	IR 90	600+48.70	601+25.84	LT					2		75							N/A	NO PIPE REMOVAL	
1053	DR-45	IR 90	600+52.95	601+50.99	RT	50				2		46							15	3.50'	
1053	DR-46	IR 90	600+49.88	601+48.32	C/L	49				2		49							15	5.75'	
1053	DR-47	IR 90	600+99.93	601+01.65	LT/RT	86			4	1			69		13				24	5.75'	
1053	DR-48	IR 90	601+01.65	604+99.78	LT			1											N/A	NO PIPE REMOVAL	
1053	DR-49	IR 90	604+98.11	604+99.78	LT/RT	205			1										N/A	NO PIPE REMOVAL	
1054	DR-50	IR 90	604+99.78	608+42.25	LT														N/A	NO PIPE REMOVAL	
<b>TOTALS CARRIED TO SHEET 346</b>						2717	1960	17	40	33		522	215	31	527	247	73	738	1431		

DRAINAGE REMOVAL ESTIMATED QUANTITIES

DESIGN AGENCY	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0348 P.1587

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	202	202	202	202	202	202	202	202	202	202	202	202	202	FOR INFORMATION ONLY				
			PIPE REMOVED, 24" UNDER	PIPE REMOVED, OVER 24"		MANHOLE REMOVED	CATCH BASIN REMOVED	INLET REMOVED	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 15"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 18"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 21"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 24"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 36"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 42"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 54"	MAX SIZE	APPROXIMATE MAXIMUM DEPTH						
			FROM	TO		FT	FT	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	INCHES	FT			
1054	DR-51	IR 90	608+42.25	611+74.68	LT														323	N/A	NO PIPE REMOVAL		
1054	DR-52	IR 90	610+20.73	611+74.68	LT/RT	167			3	1	209									15	4.00'		
1054	DR-53	IR 90	611+74.68	612+89.67	LT	114			1	1										15	7.00'		
1054	DR-54	IR 90	611+74.68	613+41.30	LT		166	1												54	SEE IR 90 PROFILES		
1054	DR-55	IR 90	613+41.30	616+69.15	LT			1												N/A	NO PIPE REMOVAL		
1054	DR-56	IR 90	616+69.15	617+02.50	LT/RT	116			4	1				87						15	4.25'		
1054	DR-57	IR 90	616+20.41	617+25.11	LT	103				2										15	3.75'		
1054	DR-58	IR 90	616+50.00	617+48.61	C/L	99				2										15	5.75'		
1054	DR-59	IR 90	616+69.15	616+99.14	LT		227	1												54	SEE IR 90 PROFILES		
1055	DR-60	IR 90	616+99.12	616+99.14	LT/RT					1	88									N/A	NO PIPE REMOVAL		
1055	DR-61	IR 90	616+99.14	620+61.54	LT		362			1										36	SEE IR 90 PROFILES		
1055	DR-62	IR 90	620+61.54	621+57.47	LT		96	1												54	SEE IR 90 PROFILES		
1055	DR-63	IR 90	619+01.66	621+58.00	RT	270			2	1										21	10.00'		
1055	DR-64	IR 90	621+58.00	626+51.39	RT	495				2										18	6.50'		
1055	DR-65	IR 90	621+57.47	621+58.00	LT/RT	89	81	1		1										27	8.50'		
1055	DR-66	IR 90	621+57.47	624+71.90	LT		314			1										54	SEE IR 90 PROFILES		
1055	DR-67	IR 90	624+71.90	627+99.08	LT		327			1										54	SEE IR 90 PROFILES		
1055	DR-68	IR 90	627+99.08	629+54.08	LT		155			1										48	SEE IR 90 PROFILES		
1056	DR-69	IR 90	629+46.38	629+54.08	LT/RT	73			1	3	37	94								15	5.25'		
1056	DR-70	IR 90	629+50.94	630+02.25	RT	52				1										15	4.25'		
1056	DR-71	IR 90	629+54.08	631+24.97	LT		171	1												48	SEE IR 90 PROFILES		
1056	DR-72	IR 90	631+24.97	634+49.92	LT	6	325			1										48	SEE IR 90 PROFILES		
1056	DR-73	IR 90	634+47.10	634+49.92	LT	7				1											6.25'		
1056	DR-74	IR 90	634+49.92	634+75.00	LT			1									33			N/A	NO PIPE REMOVAL		
1056	DR-75	IR 90	634+71.12	634+75.00	LT/RT	197			1	1										15	6.25'		
1056	DR-76	IR 90	634+71.70	637+51.73	RT	282			1											15	5.00'		
1056	DR-77	IR 90	634+75.00	636+57.89	LT		183	1												48	SEE IR 90 PROFILES		
1056	DR-78	IR 90	636+57.89	639+21.41	LT		264			1										48	SEE IR 90 PROFILES		
1056	DR-79	IR 90	639+21.41	639+25.26	LT/RT	89			1	3			80							21	8.00'		
1056	DR-80	IR 90	639+21.41	642+75.04	LT		354			1										48	SEE IR 90 PROFILES		
1057	DR-81	IR 90	642+75.04	645+99.96	LT		325			1										42	SEE IR 90 PROFILES		
1057	DR-82	IR 90	645+99.96	649+23.52	LT	8	324			1										42	SEE IR 90 PROFILES		
1057	DR-83	IR 90	649+23.52	649+26.95	LT/RT	74			1	3	68			68							8.00'		
1057	DR-84	IR 90	649+26.95	651+97.82	LT	6	275			1										36	SEE IR 90 PROFILES		
1057	DR-85	IR 90	651+97.82	653+23.61	LT/RT	154			1	1	126										5.00'		
1058	DR-86	IR 90	651+97.82	654+97.09	LT					1						300				N/A	NO PIPE REMOVAL		
1058	DR-87	IR 90	654+97.09	654+89.43	LT/RT	305			2	2										21	10.00'		
1058	DR-88	IR 90	654+97.09	657+75.44	LT	290				1										24	12.50'		
1058	DR-89	IR 90/RAMP W1A	657+75.44	658+83.39	LT	154			1	2										15	7.75'		
1058	DR-90	IR 90	657+75.44	660+48.91	LT	274				1										21	12.25'		
1058	DR-91	IR 90/RAMP W2A	660+48.91	661+50.50	LT/RT	246		2	4	5	80	68	68							21	12.25'		
1058	DR-92	RAMP W1A	60+38.31	62+39.76	LT	201				2	48									15	4.00'		
1059	DR-93	IR 90	666+49.65	666+69.10	LT/RT	43			1	3	187									15	5.75'		
1059	DR-94	IR 90	668+99.49	669+21.41	LT/RT	83				3	140									15	6.25'		
1059	DR-95	IR 90/RAMP 140-4	674+50.13	677+52.73	LT/RT	112	260		2	5	190										SEE IR 90 PROFILES		
1060	DR-96	IR 90	677+49.35	677+52.73	LT/RT	39			1	3	122									1.25			
1060	DR-97	IR 90	677+52.73	678+28.62	LT/RT		67	1													SEE IR 90 PROFILES		
1061	DR-98	IR 90	695+00.00	695+03.02	LT/RT	7			2		160									1.5			
1061	DR-99	IR 90	698+74.99	698+75.04	LT/RT	119			1	1										1.25	4.75'		
1061	DR-100	IR 90	698+75.04	700+50.43	LT/RT	216				1											SEE IR 90 PROFILES		
<b>TOTALS CARRIED TO SHEET 346</b>						4490	4276	11	30	65	1455	162	235	68	300	310	643						



DRAINAGE REMOVAL ESTIMATED QUANTITIES

DESIGN AGENCY  
**STRUCTUREPOINT**  
 INC.  
 DESIGNER  
 BER  
 REVIEWER  
 VDK 08/09/23  
 PROJECT ID  
 76779  
 SHEET TOTAL  
 P.0349 P.1587

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202	FOR INFORMATION ONLY		
			PIPE REMOVED, 24" UNDER	PIPE REMOVED, OVER 24"		MANHOLE REMOVED	CATCH BASIN REMOVED	INLET REMOVED	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 15"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 18"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 21"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 24"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 36"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 42"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 48"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 54"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 60"	MAX SIZE	APPROXIMATE MAXIMUM DEPTH				
			FROM	TO		FT	FT	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	INCHES	FT	
1062	DR-101	IR 90	700+50.43	703+99.51	RT	369				1												SEE IR 90 PROFILES	
1062	DR-102	IR 90	703+99.51	708+77.82	RT					1												NO PIPE REMOVAL	
1062	DR-103	IR 90	708+75.34	708+77.82	LT/RT	52				3	70			70							498	1.75	
1062	DR-104	IR 90	708+77.82	711+02.81	RT		227			1												SEE IR 90 PROFILES	
1062	DR-105	IR 90	711+02.81	713+77.57	RT					1												NO PIPE REMOVAL	
1063	DR-106	IR 90	713+77.57	716+54.97	RT		278			1												SEE IR 90 PROFILES	
1063	DR-107	IR 90	716+54.97	718+70.89	RT		216			1												SEE IR 90 PROFILES	
1063	DR-108	IR 90	718+70.89	718+74.55	LT/RT				1	3	79	51	79									NO PIPE REMOVAL	
1063	DR-109	IR 90	718+70.89	720+28.01	RT		158			1												SEE IR 90 PROFILES	
1063	DR-110	IR 90	720+28.01	722+28.08	RT		200			1												SEE IR 90 PROFILES	
1063	DR-111	IR 90	722+28.08	25+23.63	RT		293			1												SEE IR 90 PROFILES	
1064	DR-112	RAMP 117-8	25+23.63	26+49.69	RT		125			1												SEE IR 90 PROFILES	
1064	DR-113	RAMP 117-8	26+49.69	27+24.33	RT	74			1													1.25	
1064	DR-114	RAMP 117-8	27+24.33	27+86.06	RT	62				1												3.75'	
1064	DR-115	RAMP 117-8	26+49.69	727+98.22	LT/RT		196			1												SEE IR 90 PROFILES	
1064	DR-116	IR 90	726+96.12	727+98.22	LT/RT	102			2	4	175	68										1.25	
1064	DR-117	IR 90	727+98.22	729+40.39	RT					1												NO PIPE REMOVAL	
1064	DR-118	IR 90/RAMP 117-7	729+40.39	26+77.81	LT/RT	68				2	268											1.25	
1064	DR-119	RAMP 117-8	32+93.45	33+61.74	LT	69				1												1	
1064	DR-120	IR 90	729+40.39	730+79.77	RT					1												NO PIPE REMOVAL	
1064	DR-121	IR 90	730+41.48	731+64.96	RT					1	184											NO PIPE REMOVAL	
1064	DR-122	IR 90	730+79.77	736+00.00	RT					1												NO PIPE REMOVAL	
1064	DR-123	IR 90	732+38.25	735+91.68	LT	136		1	1	2	243											521	
1065	DR-124	IR 90	735+91.68	736+00.00	LT/RT	87			2	3				122	81							2	
1065	DR-125	RAMP 117-12	33+55.64	33+65.00	RT	10			1													81.00'	
1065	DR-126	RAMP 117-12/IR 90	34+67.93	735+91.68	LT/RT	260			1	2	200											1	
1065	DR-127	IR 90	736+00.00	738+50.41	RT			1														1.25	
1065	DR-128	IR 90	738+50.41	740+55.53	RT		206			1												NO PIPE REMOVAL	
1065	DR-129	IR 90	739+89.27	741+66.51	RT	116			1	1	73											SEE IR 90 PROFILES	
1065	DR-130	IR 90	740+55.53	744+25.33	RT		370															1.25	
1065	DR-131	RAMP 117-12/IR 90	39+52.65	744+25.33	LT/RT	167			3	4	240	55	117	90								SEE IR 90 PROFILES	
1065	DR-132	IR 90	744+25.33	749+62.02	RT		537	1														90.00'	
1066	DR-133	IR 90	749+62.02	751+57.00	LT/RT		238			1												SEE IR 90 PROFILES	
1066	DR-134	IR 90	749+48.51	751+57.00	LT	222				1												SEE IR 90 PROFILES	
1066	DR-135	IR 90	751+57.00	757+98.00	LT			4														1.5	
1066	DR-136	IR 90	754+00.38	754+72.84	LT/RT	38				2	120											NO PIPE REMOVAL	
1066	DR-137	IR 90	754+75.01	755+76.34	LT/RT	111				3	129											1.25	
1066	DR-138	IR 90	755+49.97	756+75.70	LT/RT	259				2												1.25	
1066	DR-139	IR 90	757+74.99	757+98.00	LT	78				1												1.25	
1066	DR-140	IR 90	757+98.00	759+93.76	LT		209	1														SEE IR 90 PROFILES	
1067	DR-141	IR 90	759+93.76	763+79.22	LT				1													375	
1067	DR-142	IR 90	763+79.22	764+00.00	LT/RT	28				3	203	27										NO PIPE REMOVAL	
1067	DR-143	IR 90	763+79.22	765+57.77	LT					1	169											1.25	
1067	DR-144	IR 90/RAMP W13	763+79.22	70+95.62	LT	57	668			2	30											NO PIPE REMOVAL	
1067	DR-145	RAMP W14	68+75.42	69+57.26	RT					1	88											SEE IR 90 PROFILES	
1067	DR-146	RAMP W14	69+50.62	69+57.26	LT/RT	82				1												NO PIPE REMOVAL	
TOTALS CARRIED TO SHEET 346						2447	3921	9	31	52	2271	201	388	669	275	287	773	640	375				

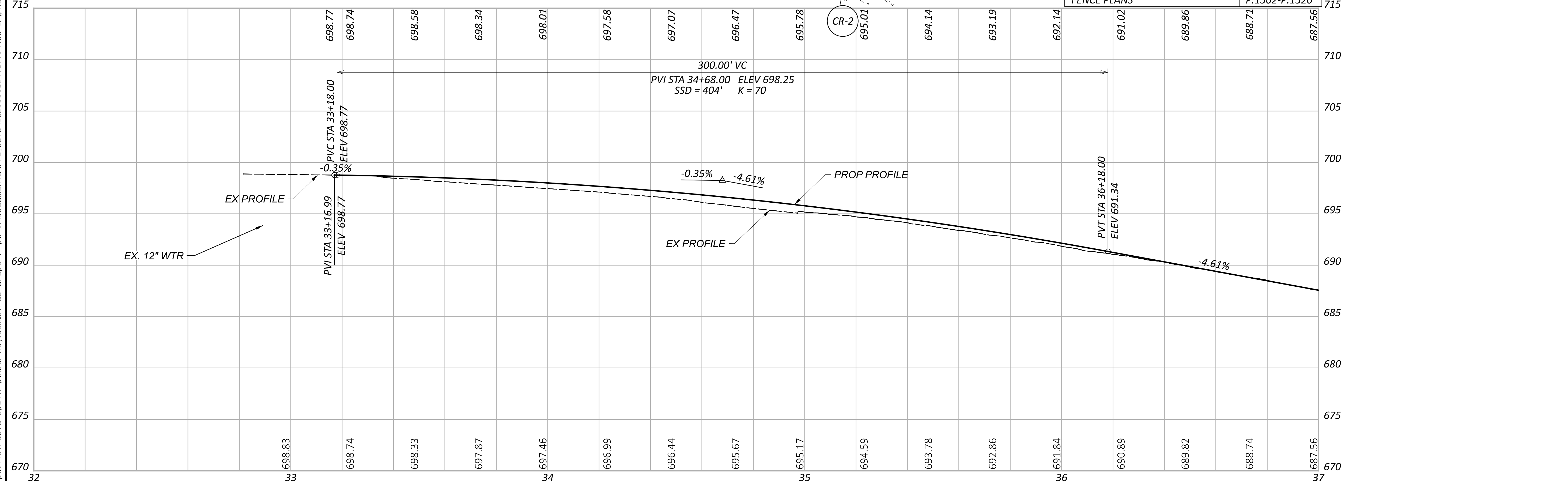
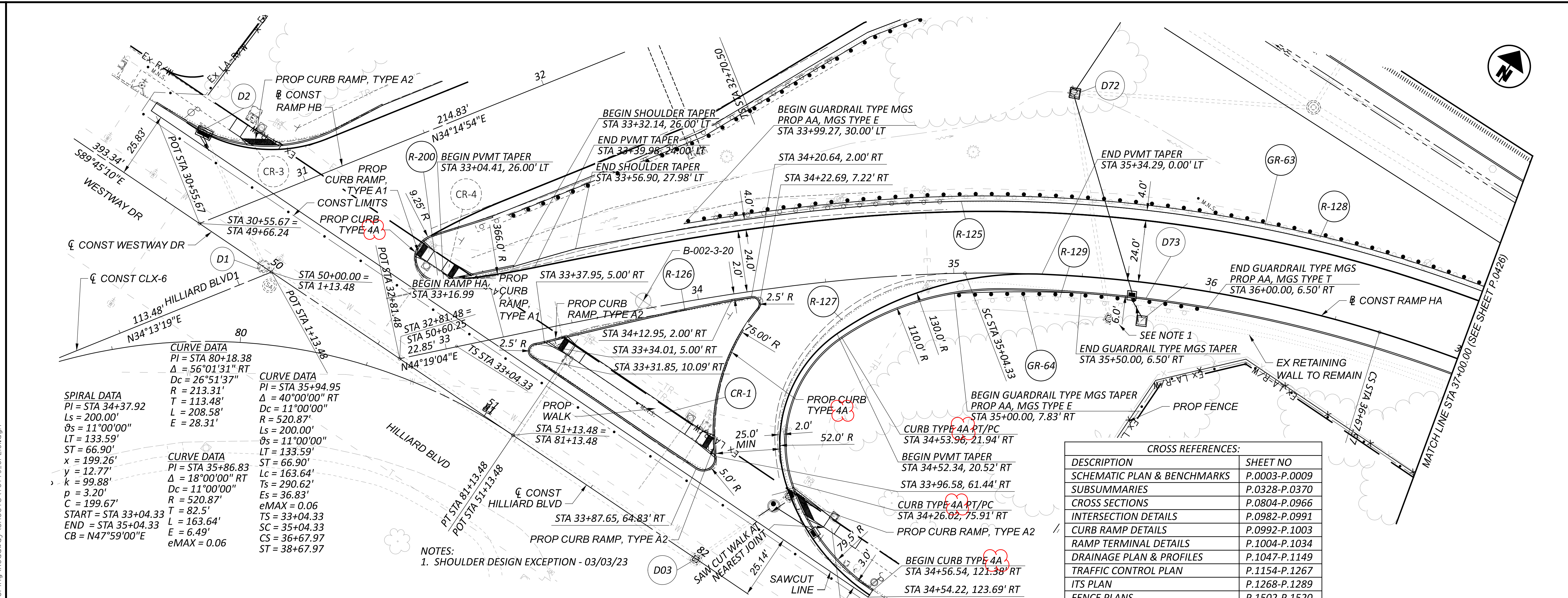
DRAINAGE REMOVAL ESTIMATED QUANTITIES

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	BER
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.0350 P.1587

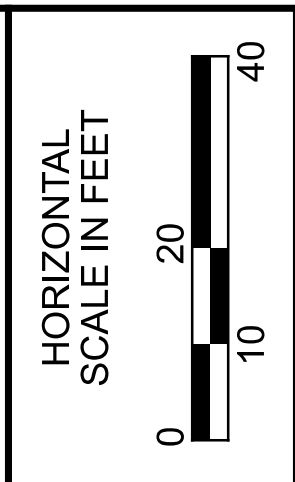








CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520



PLAN AND PROFILE - RAMP HA (HILLIARD BLVD TO IR 90 EB)  
 STA 32+81.48 TO STA 37+00.00

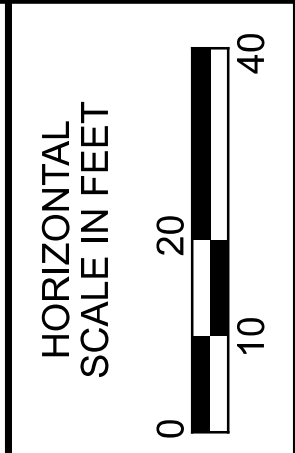
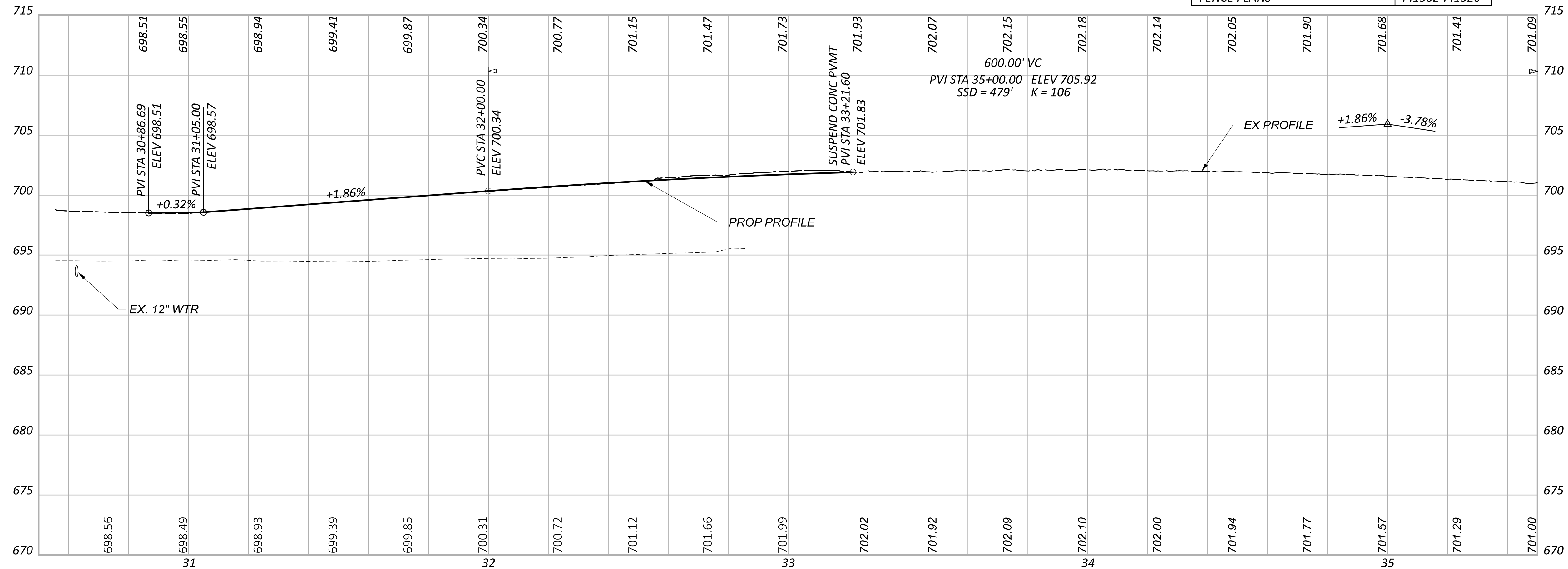
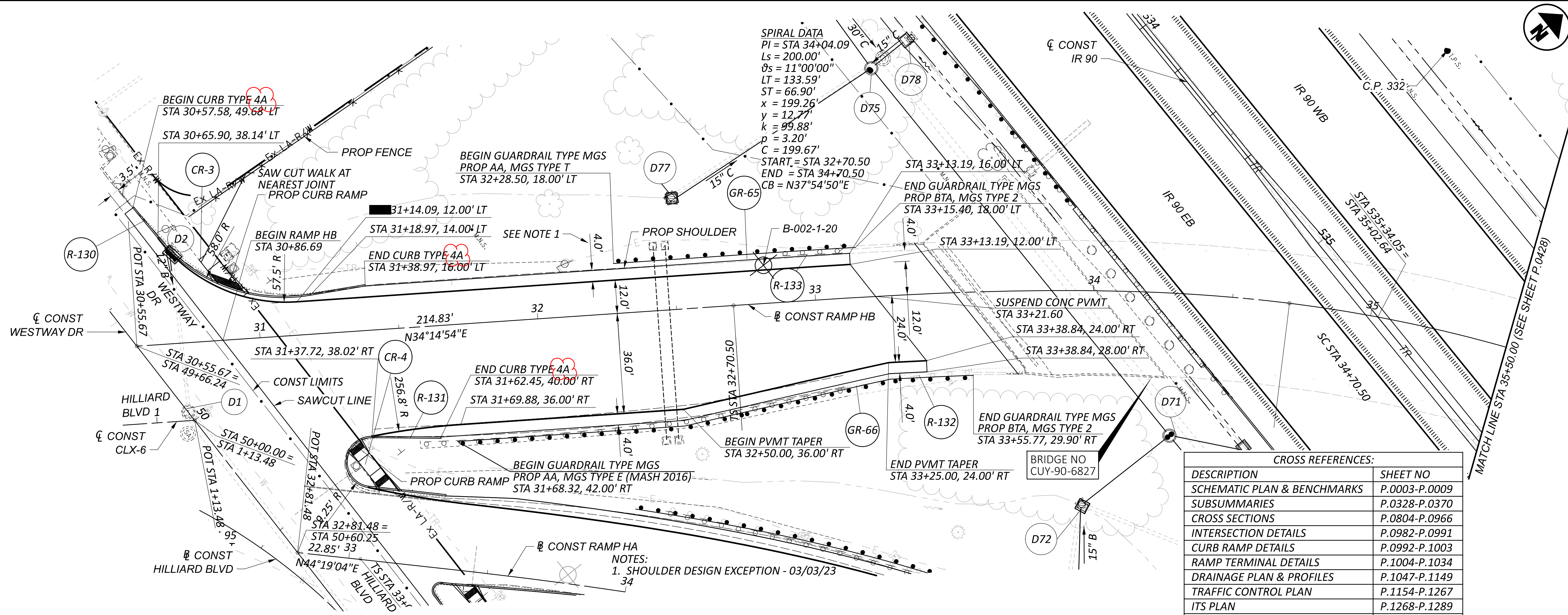
DESIGN AGENCY  
 300 HUNTER STREET  
 SUITE 200  
 COLUMBUS, OHIO 43215  
 P: 614.260.8999  
 MOODY ENGINEERING

DESIGNER  
 CNK

REVIEWER  
 VDK 08/09/23

PROJECT ID  
 76779

SHEET TOTAL  
 P.0425 | P.1587



PLAN AND PROFILE - RAMP HB (IR 90 WB TO HILLIARD BLVD)  
 STA 30+55.67 TO STA 35+50.00

DESIGN AGENCY  
 300 BRIDGE STREET  
 SUITE 200  
 COLUMBUS, OHIO 43215  
 P: 614-360-1888  
**MOODY**  
 ENGINEERS

DESIGNER  
**CNK**

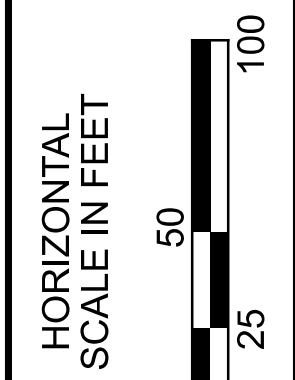
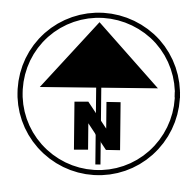
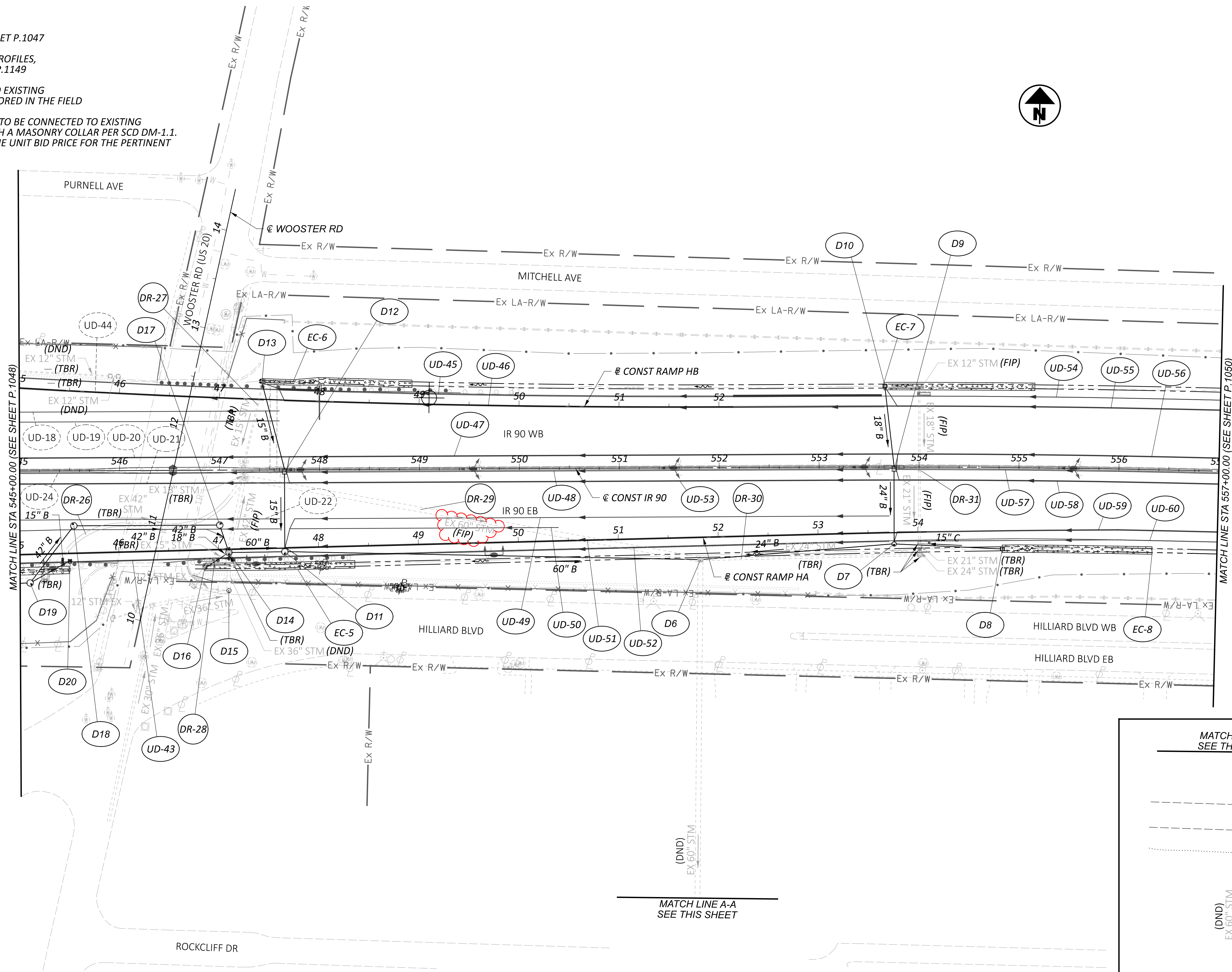
REVIEWER  
**VDK 08/09/23**

PROJECT ID  
**76779**

SHEET TOTAL  
**P.0427 | P.1587**

NOTES:

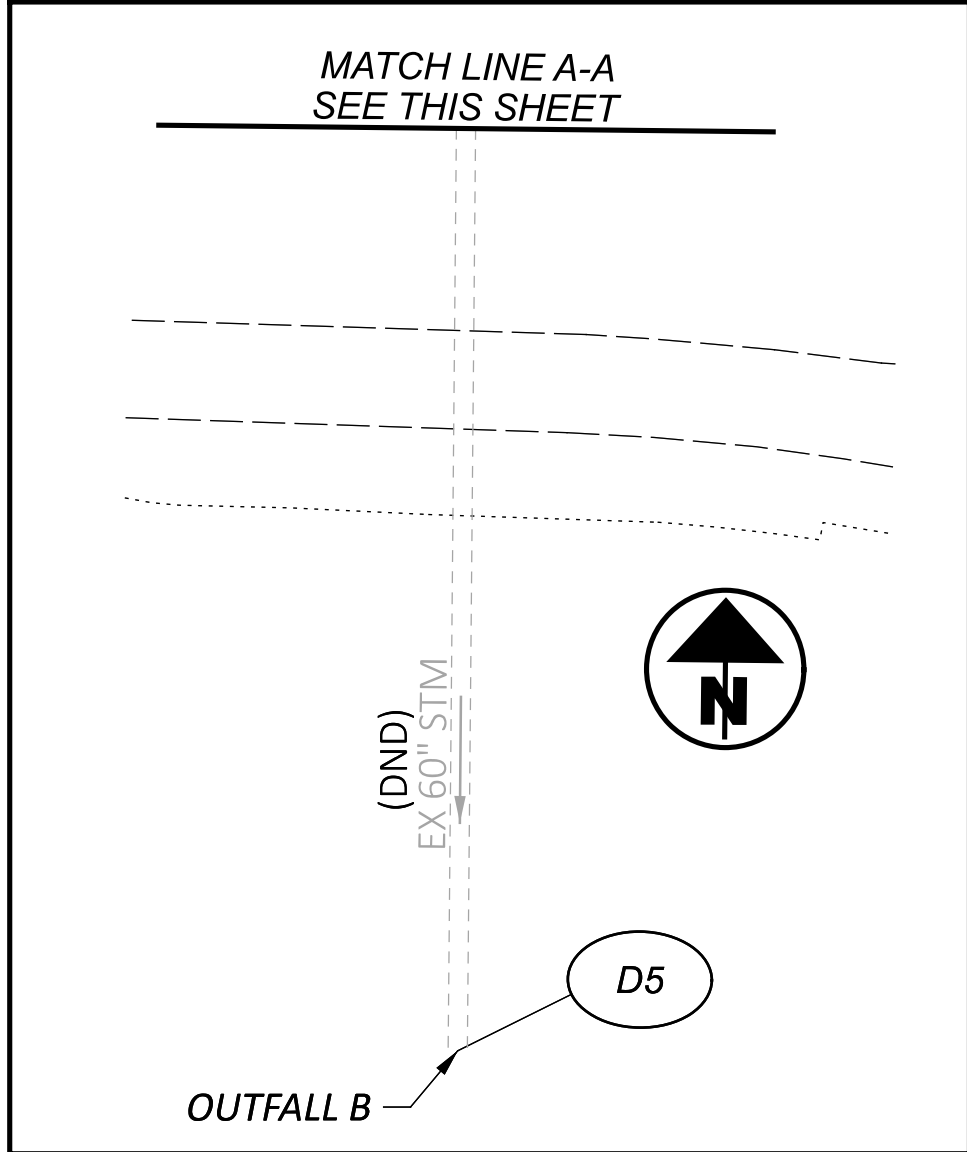
- 1. FOR LEGEND, SEE SHEET P.1047
- 2. FOR STORM SEWER PROFILES, SEE SHEETS P.1068 - P.1149
- 3. ALL CONNECTIONS TO EXISTING STRUCTURES TO BE CORED IN THE FIELD
- 4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM



MATCH LINE STA 545+00.00 (SEE SHEET P.1048)

MATCH LINE STA 557+00.00 (SEE SHEET P.1050)

MATCH LINE A-A SEE THIS SHEET



**DRAINAGE PLAN SHEET - IR 90**  
**STA 545+00.00 TO STA 557+00.00**

DESIGN AGENCY

**STRUCTUREPOINT**

DESIGNER

AJO

REVIEWER

KEM 08/09/23

PROJECT ID

76779

SHEET

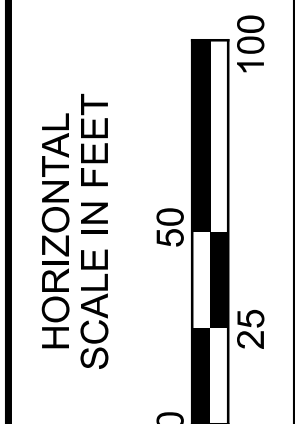
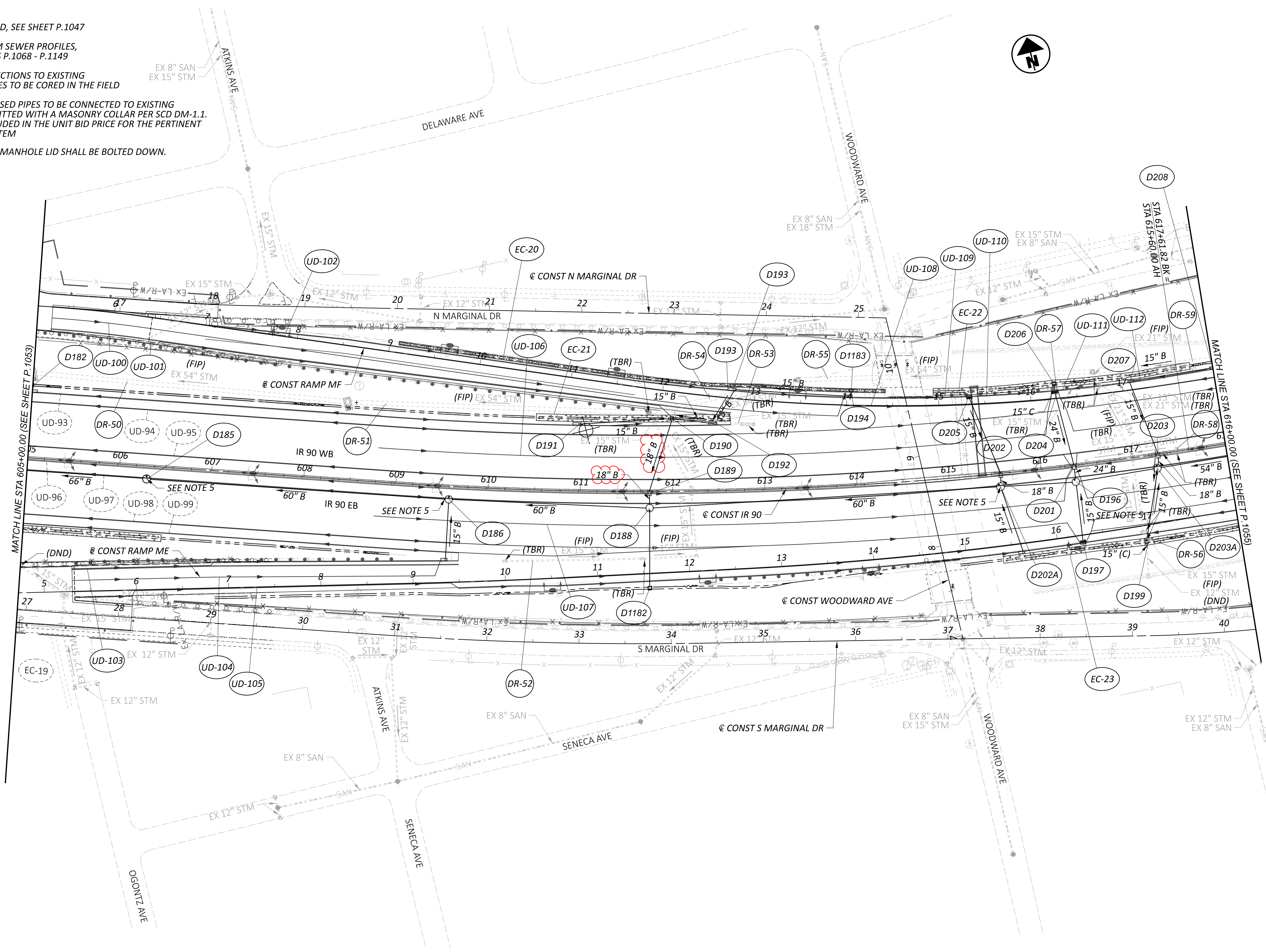
P.1049

TOTAL

P.1587

NOTES:

1. FOR LEGEND, SEE SHEET P.1047
2. FOR STORM SEWER PROFILES, SEE SHEETS P.1068 - P.1149
3. ALL CONNECTIONS TO EXISTING STRUCTURES TO BE CORED IN THE FIELD
4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM
5. PROPOSED MANHOLE LID SHALL BE BOLTED DOWN.



**DRAINAGE PLAN SHEET - IR 90**  
**STA 605+00.00 TO STA 616+00.00**

DESIGN AGENCY	STRUCTUREPOINT INC.
DESIGNER	AJO
REVIEWER	KEM 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.1054 P.1587

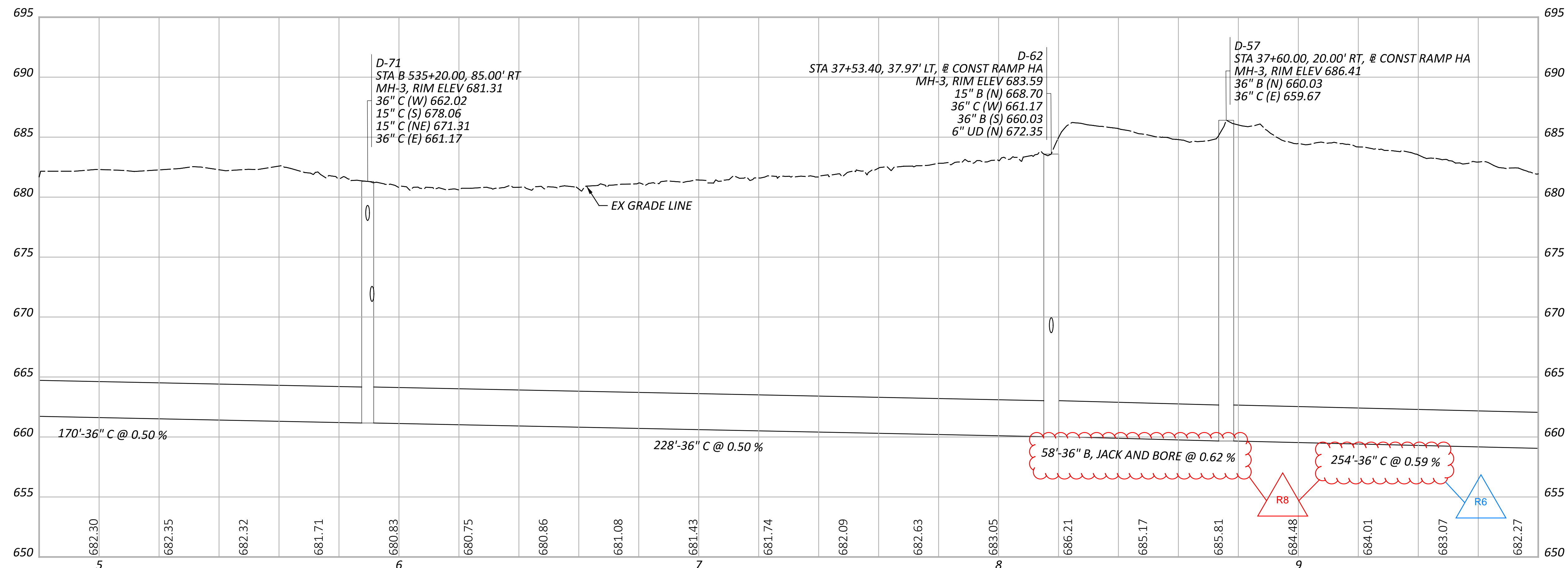
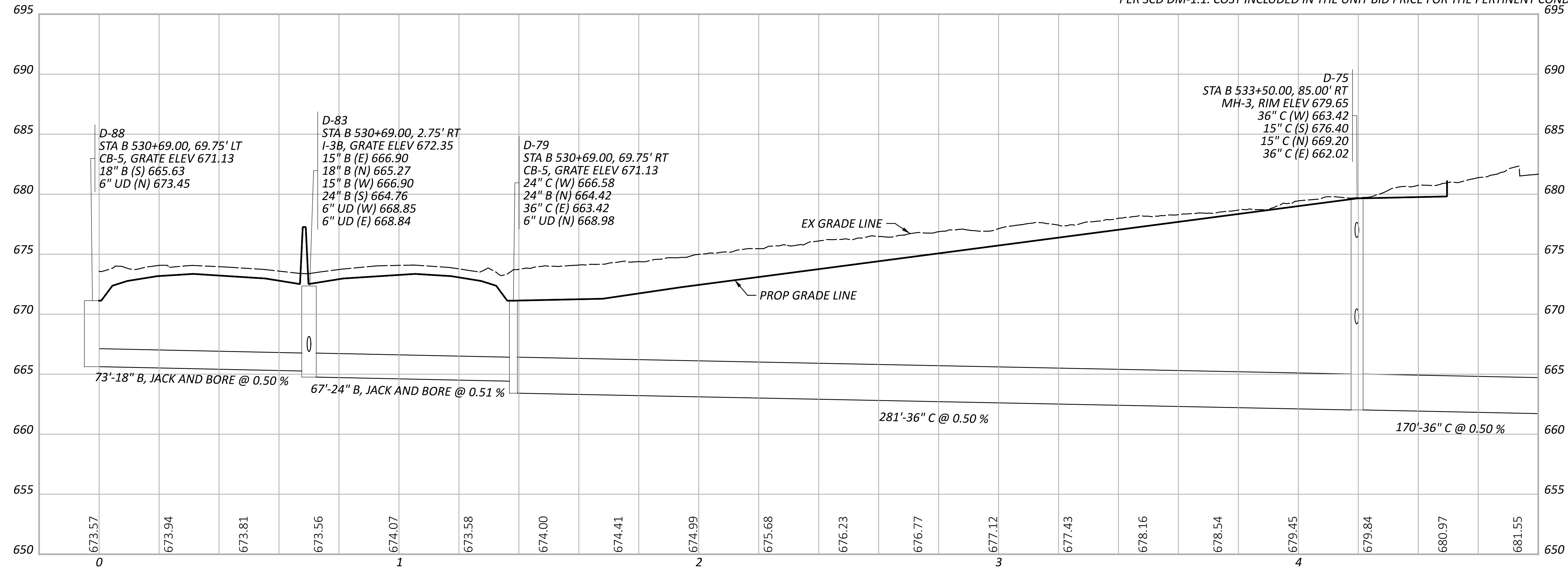
NOTES:

1. ALL STATIONING TAKEN FROM @ CONST IR 90 UNLESS OTHERWISE NOTED

2. FOR DRAINAGE PLAN SHEETS, SEE SHEET P.1047 - P.1067

3. ALL EXISTING CONNECTIONS TO BE CORED IN THE FIELD

4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM



CUY-90-6.69

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STORM SEWER PROFILES  
OUTFALL B

DESIGN AGENCY	STRUCTUREPOINT INC.
DESIGNER	AJO
REVIEWER	KEM 08/09/23
PROJECT ID	76779
SHEET	TOTAL
P.1070	P.1587

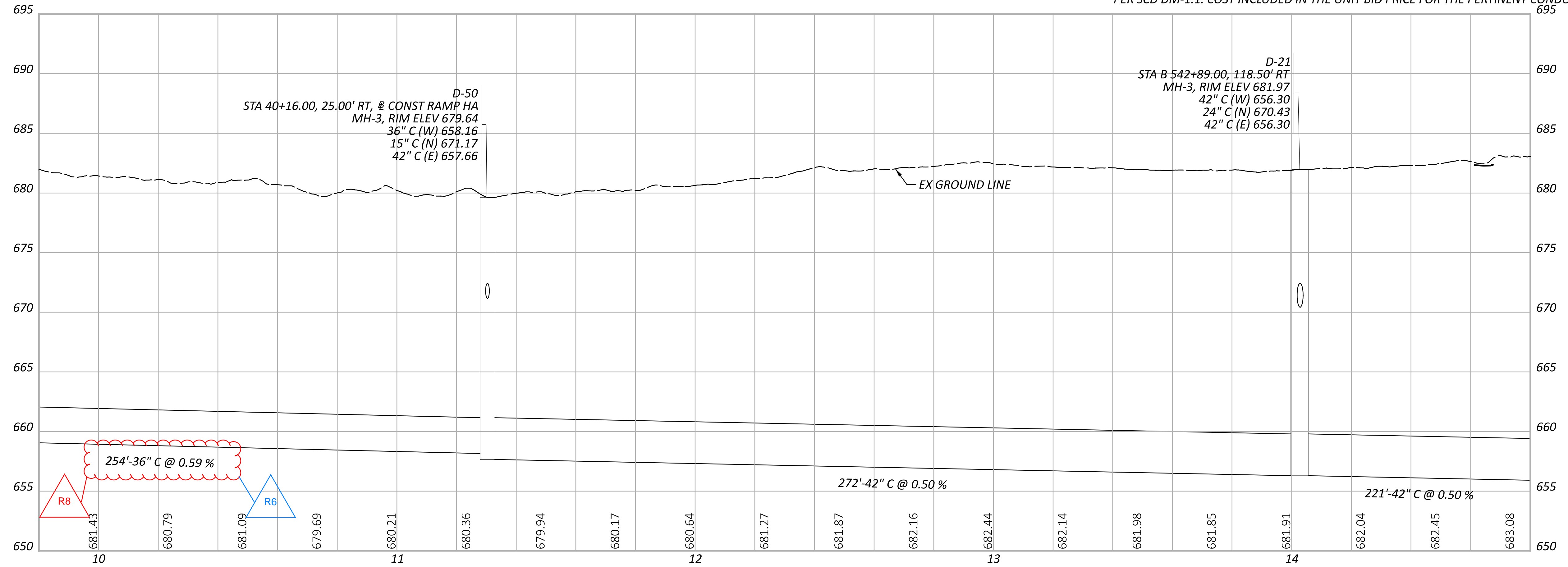
NOTES:

1. ALL STATIONING TAKEN FROM @ CONST IR 90 UNLESS OTHERWISE NOTED

2. FOR DRAINAGE PLAN SHEETS, SEE SHEET P.1047 - P.1067

3. ALL EXISTING CONNECTIONS TO BE CORED IN THE FIELD

4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM



CUY-90-6.69

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STORM SEWER PROFILES  
OUTFALL B

DESIGN AGENCY  
**STRUCTUREPOINT**  
INC.

DESIGNER  
AJO

REVIEWER  
KEM 08/09/23

PROJECT ID  
76779

SHEET TOTAL  
P.1071 P.1587



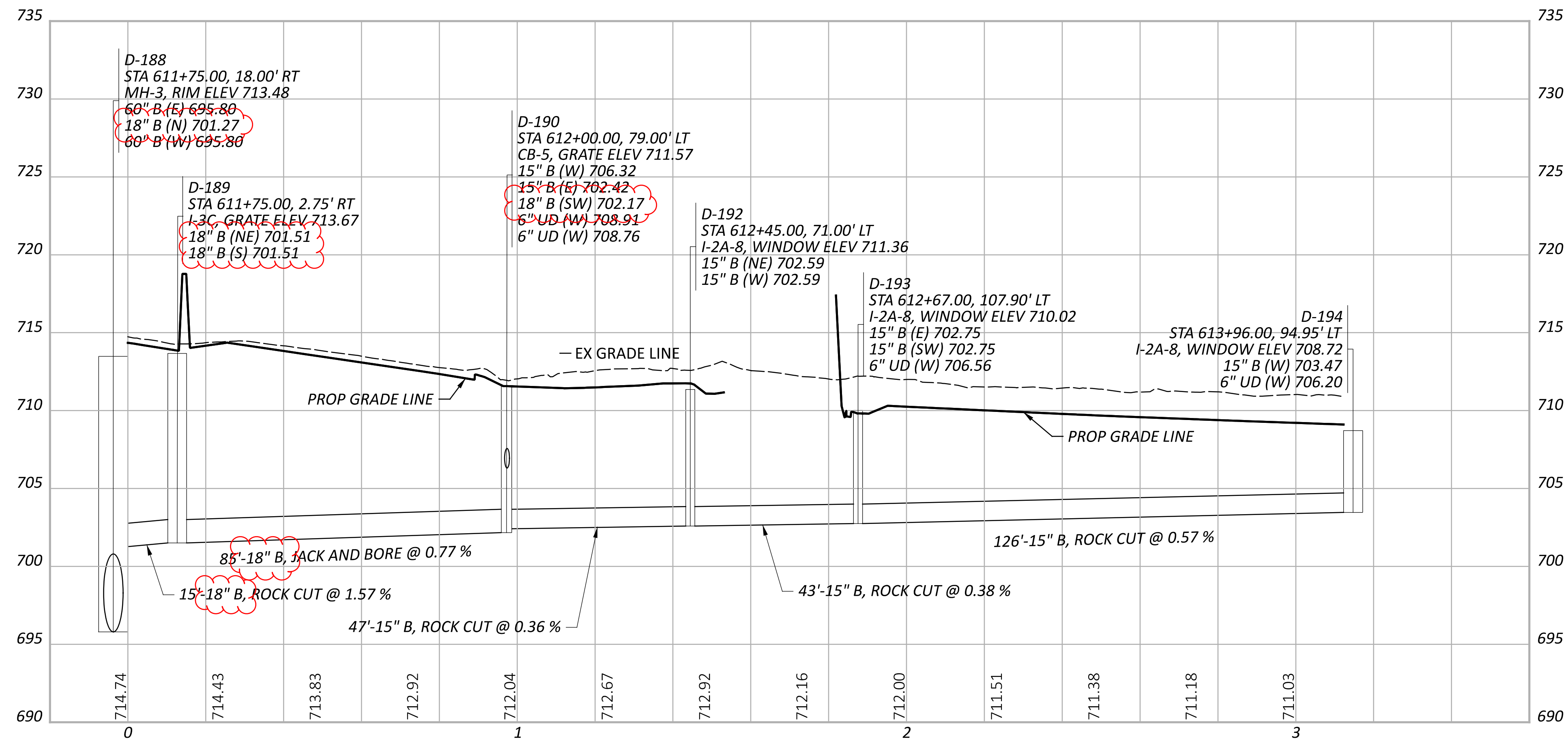
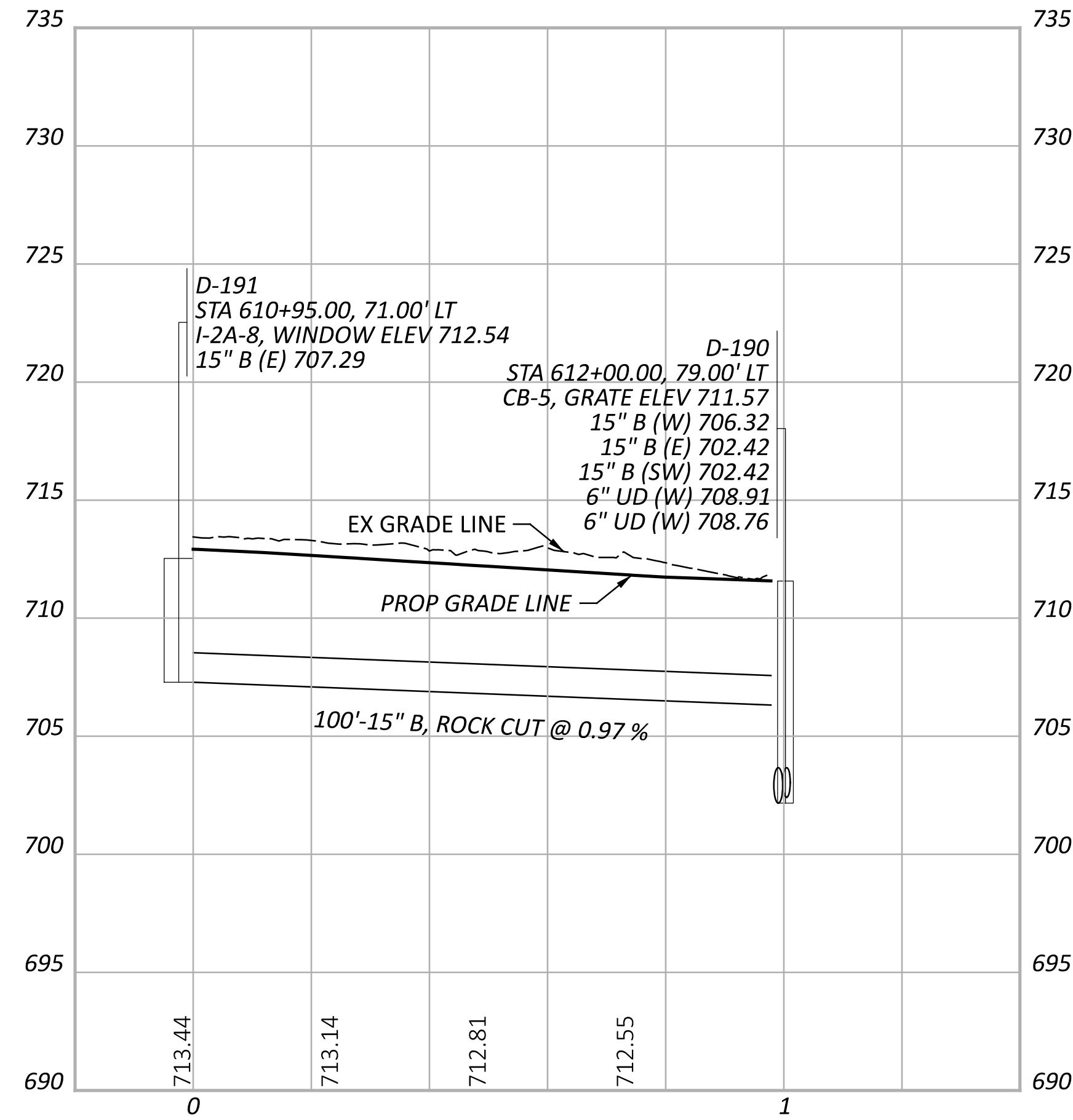
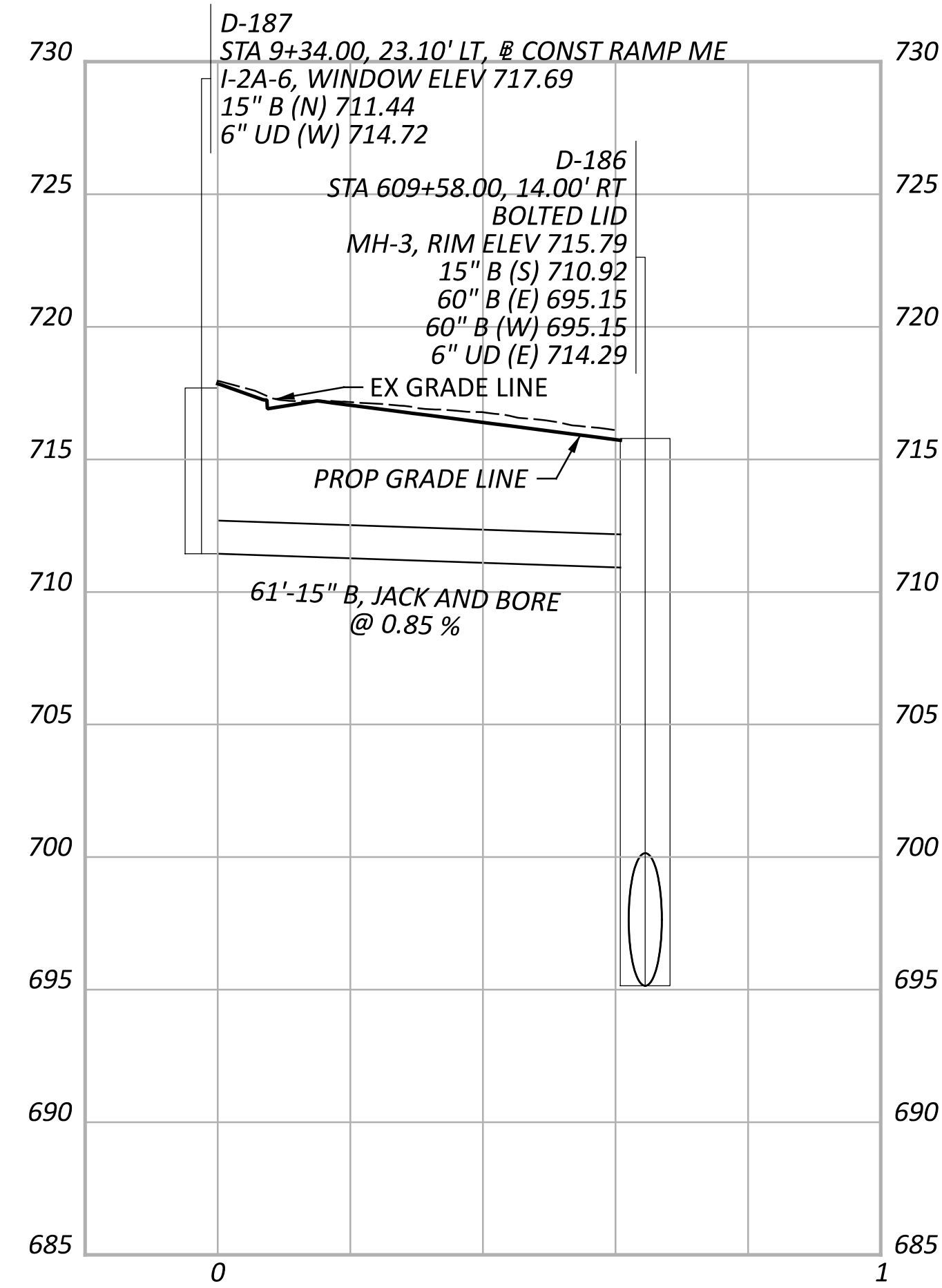
NOTES:

1. ALL STATIONING TAKEN FROM @ CONST IR 90 UNLESS OTHERWISE NOTED

2. FOR DRAINAGE PLAN SHEETS, SEE SHEET P.1047 - P.1067

3. ALL EXISTING CONNECTIONS TO BE CORED IN THE FIELD

4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM



CUY-90-6.69

MODEL: PR\_D\_012 - Profile [Sheet] PAPER SIZE: 34x22 (In.) DATE: 5/8/2024 TIME: 3:49:25 PM USER: kmorton  
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STORM SEWER PROFILES  
OUTFALL D

DESIGN AGENCY	AMERICAN STRUCTUREPOINT INC.
DESIGNER	AJO
REVIEWER	KEM 08/09/23
PROJECT ID	76779
SHEET TOTAL	P.1098 P.1587

**ITEM 518 - STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS**

THIS ITEM SHALL CONSIST OF REMOVING ALL DIRT AND DEBRIS FROM THE SCUPPER DRAINAGE SYSTEMS AT LOCATIONS SHOWN IN THE PLANS. THE LIMIT OF CLEANUP SHALL EXTEND TO INCLUDE THE DRAINAGE SYSTEM CATCH BASIN.

AFTER ALL DIRT AND DEBRIS ARE REMOVED, THE SYSTEM SHALL BE FLUSHED WITH CLEAN WATER MAKING CERTAIN THE WATER FLOWS SMOOTHLY THROUGH THE ENTIRE DRAINAGE SYSTEM WITH NO OVERFLOW CAUSED BLOCKAGES. THIS ITEM ALSO INCLUDES ALL EQUIPMENT AND MAN POWER NECESSARY TO PROVIDE ACCESS FOR THE ENGINEER TO INSPECT ENTIRE DRAINAGE SYSTEM BEFORE AND AFTER CLEANING.

ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT ON A LUMP SUM BASIS UNDER ITEM 518 - STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS.

**ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN**

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED STEEL REINFORCEMENT. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING. IN ADDITION, NEW PATCHED SURFACES SHALL MATCH EXISTING SURFACE TEXTURES. INCLUDE WITH ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN FOR PAYMENT.

**ITEM 607 - FENCE REMOVED AND REBUILT, AS PER PLAN**

THE WORK INCLUDES THE REMOVAL AND SALVAGE OF EXISTING FENCE FABRIC; THE REMOVAL OF EXISTING FENCE POSTS, LINE RAILS, AND ALL EXISTING HARDWARE (INCLUDING COVER PLATE ASSEMBLIES AT THE LIGHT POLES); THE INSTALLATION OF NEW FENCE POSTS, LINE RAILS, AND ALL NEW HARDWARE (INCLUDING COVER PLATE ASSEMBLIES AT LIGHT POLES); AND THE REINSTALLATION OF THE EXISTING FENCE FABRIC. AT THE CONTRACTOR'S OPTION, NEW BLACK (FEDERAL COLOR 595B-17038) FENCE FABRIC MAY BE FURNISHED IN LIEU OF SALVAGING AND REINSTALLING THE EXISTING FENCE FABRIC. THE CONTRACTOR SHALL EXERCISE CARE IN THE REMOVAL OF EXISTING FENCE POSTS TO NOT DAMAGE THE EXISTING EMBEDDED ANCHOR BOLTS.

THE CONTRACTOR SHALL FIELD MEASURE THE EXISTING POST SPACINGS AND MATCH THEM WITH THE NEW FENCE INSTALLATION. THE CONTRACTOR SHALL ALSO FIELD VERIFY DIMENSIONS OF THE EXISTING FENCE POST BASE PLATE ASSEMBLIES. THE ANCHOR BOLT HOLE PATTERN OF THE NEW FENCE POST BASE PLATE ASSEMBLIES SHALL MATCH THAT OF THE EXISTING FENCE IN ORDER TO REUSE THE EXISTING ANCHOR BOLTS. ALL OTHER DETAILS OF THE NEW FENCE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING VPF-1-90, POST SECTION PS-4 WITH BP-1 BASE PLATES. THE NEW HARDWARE SHALL BE PAINTED BLACK (FEDERAL COLOR 595B-17038).

THE CONTRACTOR SHALL CLOSE THE SIDEWALK AND DETOUR PEDESTRIANS TO THE OPPOSITE SIDE OF THE STREET WHILE PERFORMING FENCE REPLACEMENT WORK. THE CONTRACTOR SHALL PERFORM THE WORK IN SUCH A MANNER THAT THE FENCING IS IN PLACE AND SECURE AT THE COMPLETION OF EACH WORK DAY.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID PER FOOT FOR ITEM 607 - FENCE REMOVED AND REBUILT, AS PER PLAN, AND SHALL INCLUDE LABOR, EQUIPMENT, MATERIALS, DISPOSALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

**ITEM SPECIAL - STRUCTURES, TIMBER SUBDECK**

THIS ITEMS IS SPECIFIC TO SFN 1808273 (CUY-00090-10.940) AND INCLUDES THE FOLLOWING:

**DESCRIPTION:**

THIS ITEM SHALL CONSIST OF FURNISHING, CUTTING, FITTING, PLACING AND ERECTING OF TIMBER, AND THE FURNISHING AND INSTALLING OF ALL NECESSARY HARDWARE AS SPECIFIED OVER THE TRAVELED LANES, AS WELL AS PAVED SHOULDERS, AS INDICATED IN THE PLANS.

**MATERIALS:**

TIMBER BEAMS SHALL CONFORM TO CMS 711.26 AND SHALL BE DOUGLAS FIR LARCH GRADE 2 OR BETTER. PRESERVATIVE TREATMENT FOR TIMBER BEAMS SHALL CONFORM TO CMS 712.06.

THE TIMBER PLYWOOD SHEETING SHALL BE CDX - 3/4" THICK DOUGLAS FIR PLYWOOD OR BETTER. ALL TRANSVERSE EDGES OF THE PLYWOOD SHALL BE SUPPORTED BY THE TIMBER BEAMS. THE BOLTS SHALL BE ASTM A449 - TYPE 1 OR SAE J429 - GRADE 5, 3/8" DIAMETER GALVANIZED BOLTS WITH GALVANIZED FENDER WASHERS AND LOCK NUTS. SPACING OF THE BOLTS SHALL BE A MAXIMUM OF 2 FOOT SPACING.

WOOD SCREWS SHALL BE GALVANIZED 3" LONG #10 FASTENERS SPACED AT 2 FOOT MAXIMUM, UNLESS OTHERWISE NOTED.

**GENERAL:**

FIELD MEASUREMENTS SHALL BE TAKEN BEFORE ANY FABRICATION IS PERFORMED.

**METHOD OF MEASUREMENT:**

THE PAYMENT FOR THIS ITEM SHALL BE SQUARE FOOTAGE IN PLACE AND ACCEPTED. THIS ITEM SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE TIMBER SUBDECKS. PAYMENT SHALL BE MADE UNDER ITEM SPECIAL - STRUCTURES, TIMBER SUBDECK. ALL COSTS FOR MAINTAINING TRAFFIC REQUIRED FOR THE SUBDECK INSTALLATION SHALL BE INCLUDED FOR PAYMENT WITH ITEM 614.

**ITEM 625 - STRUCTURE GROUNDING SYSTEM, AS PER PLAN**

THIS ITEM IS SPECIFIC TO SFN 1808540 (CUY-00090-07.450), SFN 1808621 (CUY-00090-08.100) AND SFN 1808478 (CUY-00090-12.010). THIS WORK INCLUDES THE FOLLOWING:

PERFORM ALL WORK PER ITEM 625 WITH THE FOLLOWING EXCEPTIONS. THIS ITEM IS INTENDED TO RE-GROUND THE STRUCTURE USING THE EXISTING GROUNDING SYSTEM WHICH HAS BECOME DETACHED FROM THE EXISTING PIER/ABUTMENT. WHERE POSSIBLE AND WITH THE APPROVAL OF THE ENGINEER RE-USE THE EXISTING SYSTEM AND REATTACH IT TO THE PIER COLUMN. IF THE EXISTING SYSTEM IS DEEMED UNUSABLE BY THE ENGINEER REMOVE AND REPLACE IT IN KIND AT NO ADDITIONAL COST TO THE STATE. ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT AT THE CONTRACT PRICE FOR EACH UNDER ITEM 625 - STRUCTURE GROUNDING SYSTEM, AS PER PLAN.

**ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM**

THIS ITEM IS SPECIFIC TO ALL STRUCTURES RECEIVING FIBER WRAPPING. PERFORM ALL WORK PER PN 519 07/21/2017 - COMPOSITE FIBER WRAP SYSTEM AND PER THE MANUFACTURER'S REQUIREMENTS. REMOVAL OF ALL EXISTING BOND-INHIBITING MATERIALS, INCLUDING EXISTING CONCRETE SEALER, IS CONSIDERED INCIDENTAL TO THIS ITEM.

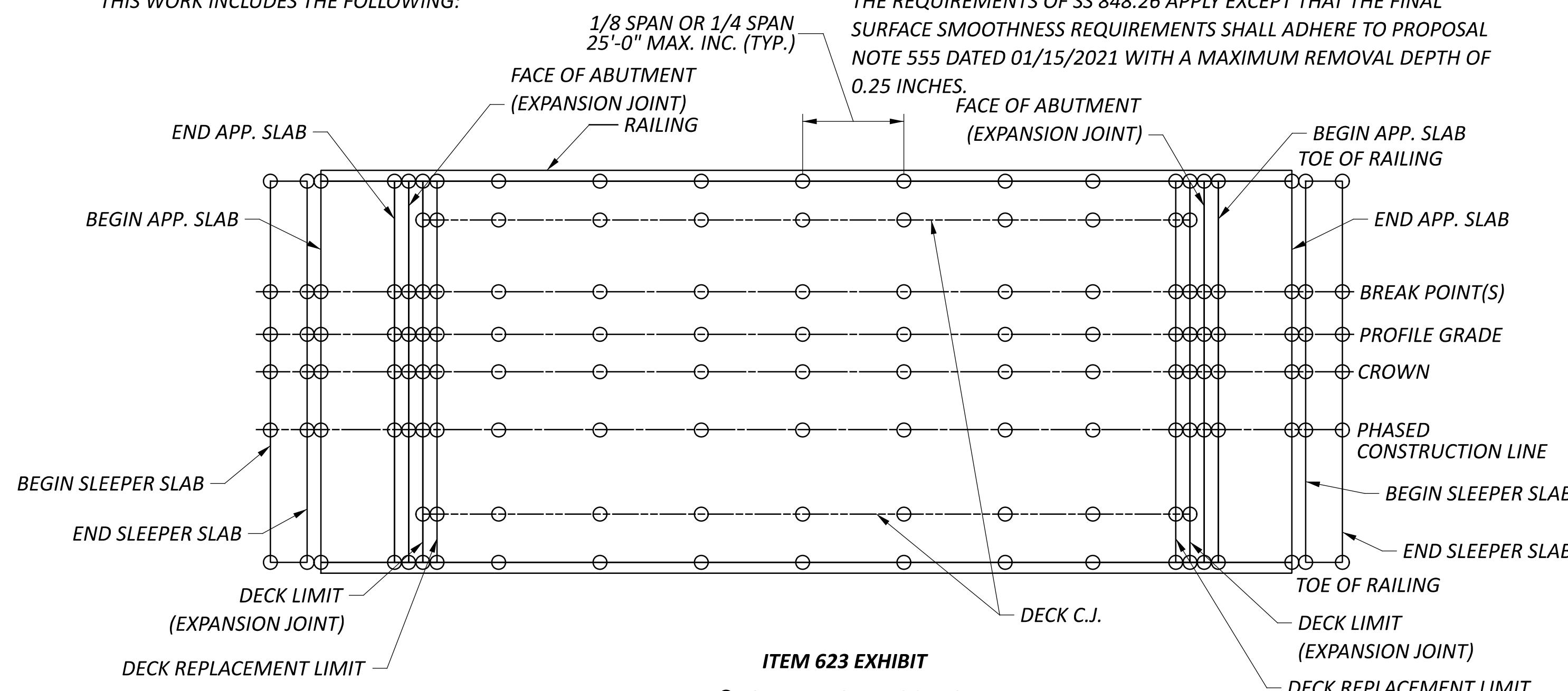
FOR THE FIXED PIER LOCATIONS AT THE FOLLOWING STRUCTURES, THE CONFINING STRESS DUE TO THE FRP JACKET SHALL BE 0.15 KSI FOR THE ENTIRE HEIGHT OF THE COLUMN FROM TOP OF FOOTING TO THE BOTTOM OF THE PIER CAP.

- SFN 1808516, CUY-00020-0847
- SFN 1808540, CUY-00090-0754
- SFN 1808656, CUY-00090-0834
- SFN 1808060, CUY-00090-0849
- SFN 1808249, CUY-00090-1062
- SFN 1808265, CUY-00090-1082
- SFN 1808273, CUY-00090-1094
- SFN 1808303, CUY-00090-1110

COATING SYSTEM APPLICATION: A FINAL URETHANE TOP COATING IS REQUIRED. THE URETHANE TOP COAT WILL BE PAID FOR UNDER ITEM SPECIAL - URETHANE TOP COAT SEALER.

**ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (1 1/2", 2 1/4", 2 1/2" OR 3 3/4") THICK, AS PER PLAN**

THE REQUIREMENTS OF SS 848.26 APPLY EXCEPT THAT THE FINAL SURFACE SMOOTHNESS REQUIREMENTS SHALL ADHERE TO PROPOSAL NOTE 555 DATED 01/15/2021 WITH A MAXIMUM REMOVAL DEPTH OF 0.25 INCHES.



NOTE: EXHIBIT NOT REPRESENTATIVE OF ALL LOCATIONS. BRIDGES HAVE VARYING CROWN POSITIONS AND NUMBERS OF BREAK POINTS.

**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS IN ITEM 623 AND ITEM 623 GENERAL NOTE ON SHEET P.0052, THE FOLLOWING REQUIREMENTS APPLY:

BRIDGES NO. CUY-00090-07.580, CUY-00090-09.700 L/R, CUY-00090-09.910 L/R:

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL EXISTING PAVEMENT ELEVATIONS THROUGH THE BRIDGE AND APPROACH SLAB LIMITS AS REQUIRED IN THE PLANS. BRIDGE DECKS SHALL BE SURVEYED AT 1/8 SPAN AND/OR 1/4 SPAN INCREMENTS, NOT TO EXCEED 25' AND AT CRITICAL POINTS, INCLUDING, BUT NOT LIMITED TO: BEGIN/END SLEEPER SLABS (TYPE C ONLY), BEGIN/END ABUTMENT SLABS, BEGIN/END APPROACH SLABS AND EXPANSION JOINTS. ELEVATIONS SHALL BE TAKEN ALONG TOES OF RAILINGS, PAVEMENT CROWN, DECK CONSTRUCTION JOINTS, PROFILE GRADE, BREAK POINTS AND AT PHASED CONSTRUCTION LINES. THE CONTRACTOR SHALL ESTABLISH THE STATIONS AND OFFSETS OF THE CRITICAL POINTS FOR EACH APPROACH SLAB, SLEEPER SLAB, AND SPAN. REFER TO EXHIBIT ON THIS SHEET AND FINISHED DECK AND SCREED ELEVATION SHEETS. PRIOR TO ITEM 202/848 REMOVALS AND FABRICATION FOR ITEM 516 - STRUCTURAL STEEL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, THE CONTRACTOR SHALL SUBMIT PARTIALLY COMPLETED TABLES WITH STATION, OFFSET AND SURVEYED ELEVATION DATA. ITEM 202/848 REMOVALS AND FABRICATION FOR ITEM 516 - STRUCTURAL STEEL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER. ALLOW FIVE (5) BUSINESS DAYS FOR THIS REVIEW IN THE SCHEDULE. PROPOSED TOP OF PAVEMENT ELEVATIONS SHALL MATCH FIELD MEASUREMENTS OR AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED IN THE PLANS.

BRIDGE NO. CUY-0090-09.470 L/R:

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN BOTTOM OF BEAM ELEVATIONS, ALL EXISTING PAVEMENT ELEVATIONS THROUGH THE BRIDGE AND APPROACH SLAB LIMITS AS REQUIRED IN THE PLANS. BRIDGE DECKS SHALL BE SURVEYED AT 1/8 SPAN AND/OR 1/4 SPAN INCREMENTS, NOT TO EXCEED 25' AND AT CRITICAL POINTS, INCLUDING, BUT NOT LIMITED TO: BEGIN/END SLEEPER SLABS (TYPE C ONLY), BEGIN/END ABUTMENT SLABS, BEGIN/END APPROACH SLABS AND EXPANSION JOINTS. ELEVATIONS SHALL BE TAKEN ALONG TOES OF RAILINGS, PAVEMENT CROWN, DECK CONSTRUCTION JOINTS, PROFILE GRADE, BREAK POINTS AND AT PHASED CONSTRUCTION LINES. BOTTOM OF BEAM ELEVATIONS SHALL BE TAKEN AT 1/8 SPAN AND/OR 1/4 SPAN INCREMENTS, MATCHING TOP OF DECK LOCATIONS. THE CONTRACTOR SHALL ESTABLISH THE STATIONS AND OFFSETS OF THE CRITICAL POINTS FOR EACH APPROACH SLAB, SLEEPER SLAB, AND SPAN. REFER TO EXHIBIT ON THIS SHEET AND FINISHED DECK AND SCREED ELEVATION SHEETS. PRIOR TO ITEM 202 DECK REMOVALS, THE CONTRACTOR SHALL SUBMIT PARTIALLY COMPLETED TABLES WITH STATION, OFFSET AND SURVEYED ELEVATION DATA. ITEM 202 DECK REMOVALS SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER. ALLOW FIVE (5) BUSINESS DAYS FOR THIS REVIEW IN THE SCHEDULE. FOLLOWING ITEM 202 DECK REMOVALS, THE CONTRACTOR SHALL AGAIN SUBMIT PARTIALLY COMPLETED TABLES WITH MEASURED REBOUNDS AND PROPOSED SCREED ELEVATIONS. ALLOW FIVE (5) BUSINESS DAYS FOR THIS REVIEW IN THE SCHEDULE. ITEM 511 DECK PLACEMENTS SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER. UPON PLACEMENT OF NEW DECK AS DETAILED IN THE PLANS, SURVEY FINAL DECK ELEVATIONS AT CRITICAL LOCATIONS. SUBMIT PARTIALLY COMPLETED TABLES WITH FINAL DECK ELEVATIONS. ALLOW FIVE (5) BUSINESS DAYS FOR THIS REVIEW IN THE SCHEDULE. ITEM 848 REMOVALS AND OVERLAY PLACEMENT SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER. PROPOSED TOP OF PAVEMENT ELEVATIONS SHALL MATCH FIELD MEASUREMENTS OR AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED IN THE PLANS.

CONTRACTOR SHALL BE AWARE THAT THERE ARE VARYING CURVATURES AND SKEWS ON MOST OF THE MAINLINE STRUCTURES. THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS AND INCIDENTALS TO PROVIDE SURVEY AS NOTED HEREIN AND SUFFICIENT DOCUMENTATION TO RECREATE ELEVATIONS AND COMPLETE THE FINISHED DECK AND SCREED ELEVATION TABLES FOR PROPOSED WORK. WORK SHALL BE PAID FOR UNDER ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER MKB

REVIEWER

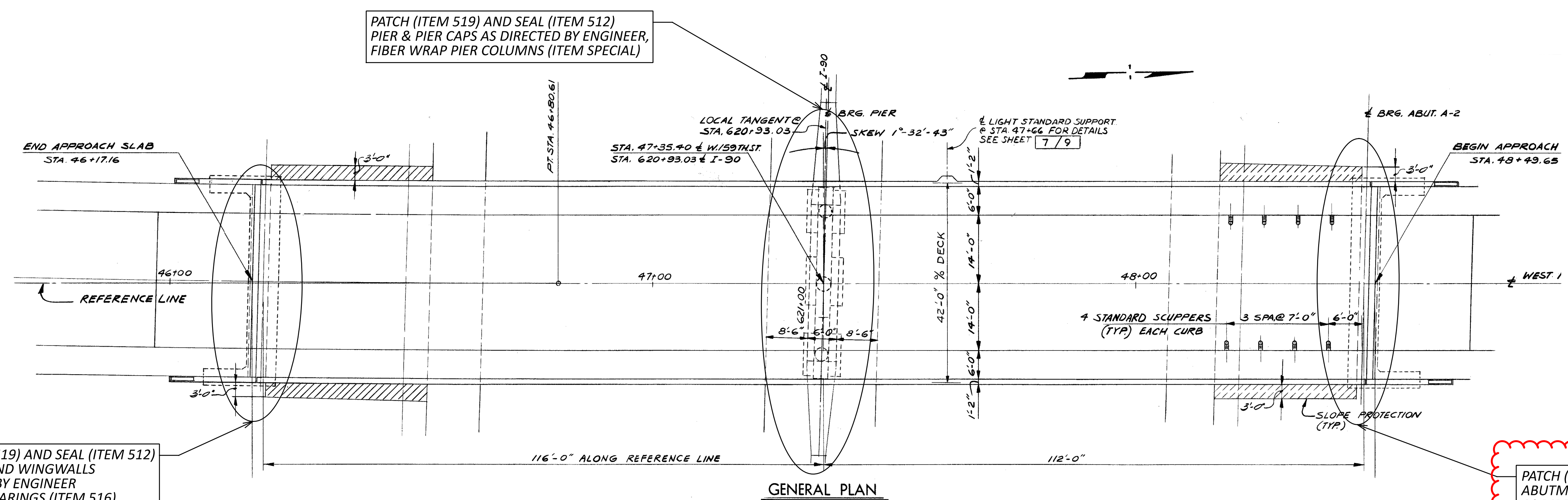
CDC 04/07/23

PROJECT ID

76779

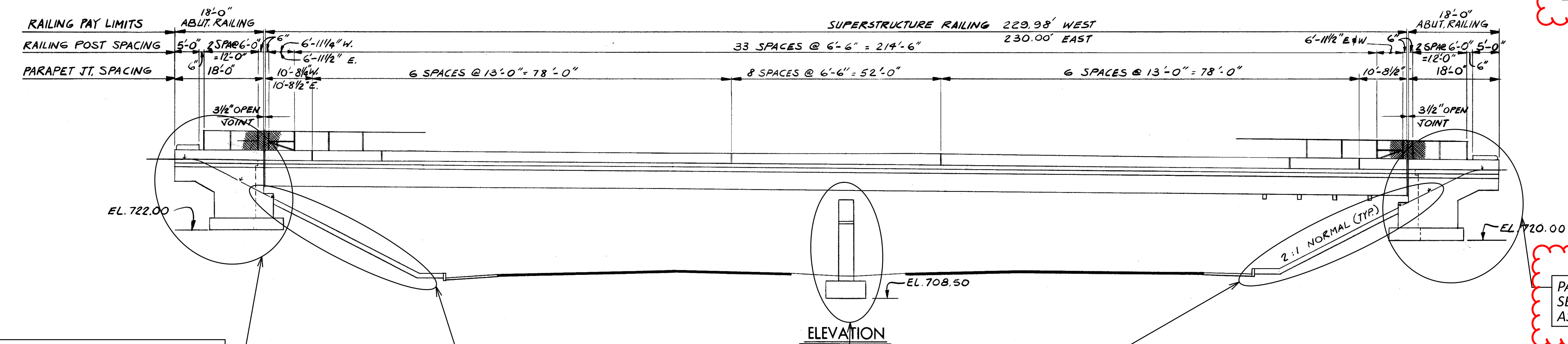
SHEET TOTAL

P.1350 P.1587



PATCH (ITEM 519) AND SEAL (ITEM 512) ABUTMENT AND WINGWALLS AS DIRECTED BY ENGINEER AND RESET BEARINGS (ITEM 516)

PATCH (ITEM 519) AND SEAL (ITEM 512) ABUTMENT AND WINGWALLS AS DIRECTED BY ENGINEER



PATCH (ITEM 519) AND SEAL (ITEM 512) ABUTMENT AND WINGWALLS AS DIRECTED BY ENGINEER AND RESET BEARINGS (ITEM 516)

PATCH (ITEM 519), CRACK REPAIR (ITEM 512) AND SEAL (ITEM 512) ABUTMENT AND WINGWALLS, AS DIRECTED BY ENGINEER

PATCH (ITEM 519) AND SEAL (ITEM 512) PIER & PIER CAPS AS DIRECTED BY ENGINEER, FIBER WRAP PIER COLUMNS (ITEM SPECIAL)

REPAIR SLOPE PROTECTION (ITEM 202/ITEM 601) AS DIRECTED BY ENGINEER

- PROPOSED WORK NOTE:**
- REMOVE AND REPLACE PORTIONS OF CONCRETE SLOPE PROTECTION AS DIRECTED BY THE ENGINEER.
  - PATCH ABUTMENTS AS DIRECTED BY THE ENGINEER.
  - PATCH PIER COLUMNS AND CAPS AS DIRECTED BY THE ENGINEER PRIOR TO APPLYING FIBER WRAPPING.
  - FIBER WRAP PIER COLUMNS AS INDICATED IN THESE PLANS.
  - SEAL AREAS OF ABUTMENTS AND PIER CAP CONCRETE SURFACES THAT HAVE BEEN PATCHED. APPLY URETHANE TOP COAT TO AREAS OF PIERS THAT HAVE BEEN FIBER WRAPPED.
  - RESET BEARINGS AT LOCATIONS INDICATED.
  - SEE LIGHTING PLANS FOR ADDITIONAL DETAILS.

**EXISTING STRUCTURE**

**TYPE:** CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.

**SKEW:** 1°-32'-43" LEFT FWD.

**SPANS:** 116'-0", 112'-0" C/C BRGS. ALONG REF. LINE

**ROADWAY:** 28'-0" F/F CURBS WITH 6'-0" SIDEWALKS.

**LOADING:** HS 20-44

**WEARING SURFACE:** 1 1/2" ASPHALT CONCRETE

**APPROACH SLABS:** 20' LONG (AS-1-67)

**ALIGNMENT:** 1°-00'-00" CURVE LEFT & TANGENT

**SUPERELEVATION:** NONE

**SLOPE PROTECTION:** CONCRETE

**TRAFFIC:** MAINLINE - 106,240 ADT - 1990  
 W. 159 ST. - 3,500 ADT - 1990

- NOTES:**
- DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD ONLY BE USED FOR INFORMATIONAL PURPOSES ONLY.
  - PERFORM ONLY THE WORK INDICATED IN THE FRAMED TEXT AND/OR DESCRIBED IN GENERAL NOTES.

SFN	1808060
DESIGNER	BIM
CHECKER	JAH
REVIEWER	MUR
DATE	04/14/23
PROJECT ID	76779
SUBSET	TOTAL
1	5
SHEET	TOTAL
P.1396	P.1587

ESTIMATED QUANTITIES FOR SFN 1808060

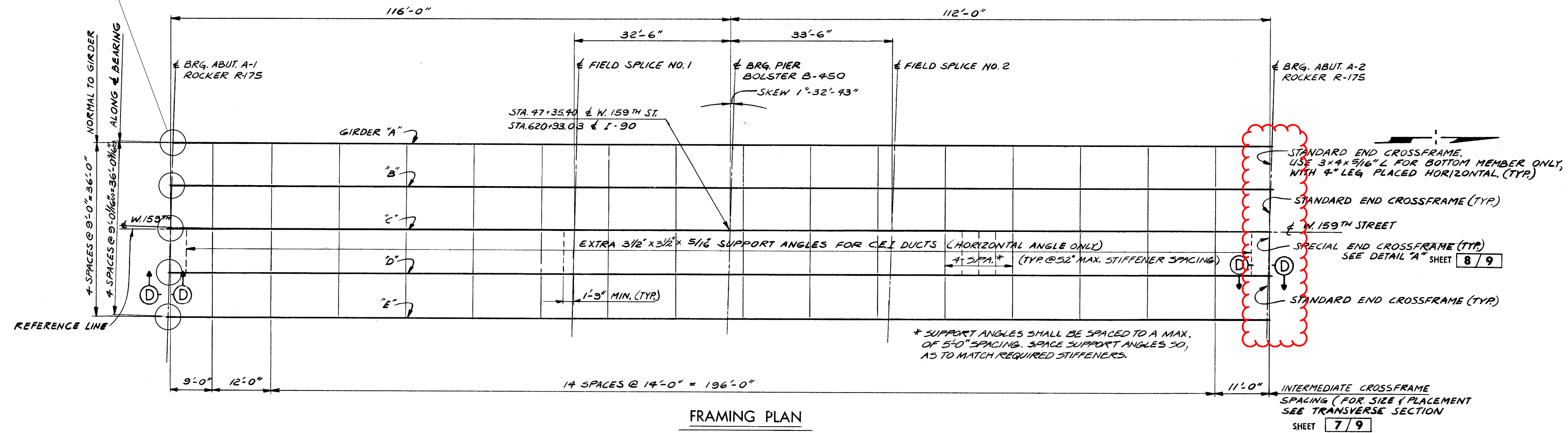
PARTICIPATION	ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REAR ABUTMENT	PIERS	FORWARD ABUTMENT	SUPER.	GENERAL	SHEET REF.
02/IMS/13	202	32800	94	SY	CONCRETE SLOPE PROTECTION REMOVED	47		47			
02/IMS/13	512	10100	28	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1	24	3			
02/IMS/13	512	10600	30	FT	CONCRETE REPAIR BY EPOXY INJECTION	12		18			
02/IMS/13	SPECIAL	512E71500	32	SY	SPECIAL - URETHANE TOP COAT SEALER		32				1349
02/IMS/13	516	46701	5	EACH	RESET BEARING, AS PER PLAN	5					1349
02/IMS/13	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN					LS	1349
02/IMS/13	SPECIAL	519E00100	285	SF	SPECIAL - COMPOSITE FIBER WRAP SYSTEM		285				1350
02/IMS/13	519	11101	338	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	9	304	25			1350
02/IMS/13	601	21000	94	SY	CONCRETE SLOPE PROTECTION	47		47			

CALCULATED BY: BIM DATE: 8/4/2023  
 CHECKED BY: RTF/JAH DATE: 8/5/2023

ESTIMATED QUANTITIES  
 BRIDGE NO.: CUY-00090-08.490  
 IR 90 UNDER W 159TH

SFN	1808060
DESIGN AGENCY	<b>2LMN</b>
DESIGNER	BIM
CHECKER	JAH
REVIEWER	MUR 04/14/23
PROJECT ID	76779
SUBSET	2
TOTAL	5
SHEET	P.1397
TOTAL	P.1587

RESET ALL R-175 BEARINGS (TYP.)



**PROCEDURE FOR RESETTING ROCKER BEARINGS**

1. REMOVE WELDS AT BEAM BOTTOM FLANGE FROM SOLE PLATE.
2. RAISE ENTIRE SUPERSTRUCTURE AT ABUTMENT HIGH ENOUGH TO REMOVE THE ROCKER BEARING AND BASE PLATE. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL THEIR PLAN FOR JACKING, BRACING, SHORING FOR RESETTING THE BEARING. THE BRIDGE SHALL REMAIN CLOSED TO TRAFFIC DURING THE CONSTRUCTION.
3. RE-INSTALL AND RESET THE ROCKER BEARING. REFER TO ARCHIVED STANDARD DRAWING RB-1-55 FOR DOWEL AND ITS SLOT LOCATIONS IN THE BASE PLATE.
4. GRADUALLY LOWER THE SUPERSTRUCTURE DOWN TO REST ON THE SET BEARING.

SUPERSTRUCTURE DETAILS  
 BRIDGE NO.: CUY-00090-08.490  
 IR 90 UNDER W 159TH

SFN	1808060
DESIGN AGENCY	2LMN
DESIGNER	RTF
CHECKER	JAH
REVIEWER	MUR 04/14/23
PROJECT ID	76779
SUBSET	5
TOTAL	5
SHEET	P.1400
TOTAL	P.1587

ESTIMATED QUANTITIES FOR SFN 1808117

PARTICIPATION	ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REAR ABUTMENT	PIERS	FORWARD ABUTMENT	SUPER.	GENERAL	SHEET REF.
02/IMS/13	512	10100	31	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1	13	17			
02/IMS/13	513	21001	5	EACH	TRIMMING BEAM END, AS PER PLAN	5					1349
02/IMS/13	518	63300	LS		STRUCTURE DRAINAGE MISC.: CLEAN OUT EXISTING SCUPPERS					LS	1350
02/IMS/13	519	11101	276	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	9	116	151			1350

CALCULATED BY: BIM DATE: 8/4/2023

CHECKED BY: RTF/JAH DATE: 8/5/2023

ESTIMATED QUANTITIES  
 BRIDGE NO.: CUY-00090-08.920  
 IR 90 UNDER ALGER RD

SFN	1808117
DESIGN AGENCY	<b>2LMN</b>
DESIGNER	BIM
CHECKER	JAH
REVIEWER	MUR 04/14/23
PROJECT ID	76779
SUBSET	2
TOTAL	5
SHEET	P.1402
TOTAL	P.1587

CALCULATED BY: DAF DATE: 04/05/23  
 CHECKED BY: CDC DATE: 04/05/23

PARTICIPATION		ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REAR ABUTMENT	PIERS	FORWARD ABUTMENT	SUPER.	GENERAL	SHEET REF.
02/IMS/13	03/IMS/13											
LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LS	3, 4, 11, 12, 1348 / 1587
1146		202	22900	1146	SY	APPROACH SLAB REMOVED					1146	
139044		509	10000	139044	LB	EPOXY COATED STEEL REINFORCEMENT				139044		
43262		509	30020	43262	FT	NO. 4 DEFORMED GFRP REINFORCEMENT				43262		
212		510	10000	212	EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	184		28			
227		511	34412	227	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE				227		
444		511	34450	444	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)				410	34	
23		511	45710	23	CY	CLASS QC1 CONCRETE, ABUTMENT	12		11			
12909		512	10050	12909	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)				11949	960	
2981		512	10100	2981	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)				2776	205	
794		512	10300	794	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN				732	62	
17050		513	21501	17050	LB	REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN				17050		5, 6
2474		514	00060	2474	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, INTERMEDIATE COAT				2474		
2474		514	00066	2474	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, FINISH COAT				2474		
LS		514	27800	LS		FIELD PAINTING, MISC.: COATING SYSTEM REPAIR				LS		
323		516	11210	323	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL				323		
LS		518	63300	LS		STRUCTURE DRAINAGE MISC.: CLEAN EXISTING SCUPPERS					LS	
476		526	25010	476	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")					476	
482		526	30010	482	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")					482	
323		526	90010	323	FT	TYPE A INSTALLATION					323	
2580		607	39900	2580	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC				2580		
11949		848	10201	11949	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION 3 3/4" INCH THICK, AS PER PLAN				11949		1350 / 1587
11949		848	20000	11949	SY	SURFACE PREPARATION USING HYDRODEMOLITION				11949		
7		848	30200	7	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY				7		
13		848	50000	13	SY	HAND CHIPPING				13		
LS		848	50100	LS		TEST SLAB					LS	
11949		848	50320	11949	SY	EXISTING CONCRETE OVERLAY REMOVED, 3 1/2" NOMINAL THICKNESS				11949		
100		848	50340	100	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY				100		

ESTIMATED QUANTITIES  
 BRIDGE NO.: CUY-00090-09.700 L/R  
 IR 90 OVER JOSLYN RD, NORFOLK SOUTHERN, AND GCRTA

SFN 1808141

SFN 1808206

DESIGN AGENCY

**Michael Baker**  
INTERNATIONAL

DESIGNER CHECKER  
DAF MKB

REVIEWER  
CDC 04/07/23

PROJECT ID  
76779

SUBSET TOTAL  
2 25

SHEET TOTAL  
P.1432 P.1587