

**ITEM 614 - MAINTAINING TRAFFIC**

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.

LENGTH AND DURATION OF LANE CLOSURE AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

IF IT IS NECESSARY TO STOP ALL TRAFFIC FOR THE ERECTION OF SPAN WIRE, THE WORK SHALL BE SO ARRANGED THAT THE STOPPAGE IS LESS THAN TEN (10) MINUTES IN ANY ONE (1) THIRTY (30) MINUTE PERIOD. TOTAL STOPPAGE OF TRAFFIC SHALL BE LIMITED BETWEEN THE HOURS OF 10:00pm AND 5:00am. NO STOPPAGE OF TRAFFIC SHALL OCCUR FOR THE ERECTION OF SIGNAL SUPPORTS, CUTTING AND INSTALLING LOOP DETECTOR WIRE, OR HANGING SPAN WIRE AND SIGNAL HEADS, WITHOUT A LAW ENFORCEMENT OFFICER WITH A PATROL CAR AT THE SITE FOR ASSISTANCE IN CONTROLLING TRAFFIC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE SERVICES AND SCHEDULING OF SAID LAW ENFORCEMENT OFFICER WITH PATROL CAR.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL FLAGS, FLAGGERS, WATCHERS, BARRICADES, SIGNS, SIGN SUPPORTS AND INCIDENTALS RELATED TO TRAFFIC CONTROL.

SIGNS FURNISHED SHALL BE IN NEW OR LIKE NEW CONDITIONS. LIKE NEW SIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE PROJECT ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PROVIDING AND MAINTAINING LIGHTS, SIGNS, AND BARRICADES FOR THE MAINTENANCE OF TRAFFIC AND SAFETY OF HIS/HER WORK AT THE LOCATIONS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER.

NO LANE CLOSURE SHALL BE IMPLEMENTED DURING THE HOURS OF 6:00am TO 9:00am OR 4:00pm TO 6:00pm WEEKDAYS. ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHEN THEY ARE NOT APPLICABLE, AS DETERMINED BY THE ENGINEER. FOR WORK WHICH IS CONFINED TO THE SHOULDER, TRAFFIC CONTROL SHALL CONFORM TO PLATES 6H-1, 6H-3 AND 6H-4 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS AND PROVISIONS OF THE OMUTCD AND THE FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY	CANTON FOOTBALL
NEW YEAR'S EVE	LABOR DAY	HALL-OF-FAME WEEK
MEMORIAL DAY	THANKSGIVING	STARK CO. FAIR

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY/EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

**ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)**

DAY OF HOLIDAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$240 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

ANTICIPATED SHORT DURATION ROAD AND/OR LANE CLOSURES SHALL BE STAGGERED TO THE EXTENT PRACTICABLE TO MINIMIZE DISRUPTION TO THE TRAVELING PUBLIC. ALL SHORT DURATION ROAD AND/OR LANE CLOSURES SHALL BE COORDINATED WITH AND APPROVED BY THE PROJECT ENGINEER.

WEEKEND CLOSURES AND LANE RESTRICTIONS SHALL NOT OCCUR DURING CANTON FOOTBALL HALL-OF-FAME WEEK AND DURING THE STARK COUNTY FAIR.

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

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMPS & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

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

**WINTER TIME LIMITATIONS**

TWO LANES IN EACH DIRECTION, INCLUDING RAMPS, SHALL BE OPEN AND AVAILABLE TO TRAFFIC BETWEEN NOVEMBER 15 TO APRIL 1. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$4,000 PER CALENDAR DAY.

**ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)**

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

- GIBBS AVENUE NE NORTH OF US 62
- ST ELMO AVENUE NE AT 31 ST STREET NE
- GROSS AVENUE NE NORTH OF US 62
- MAPLE AVENUE NE SOUTH OF 31 ST STREET NE
- ROWLAND AVENUE NE SOUTH OF 31 STREET NE
- MAPLE AVENUE NE SOUTH OF US 62
- ST ELMO AVENUE NE NORTH OF MILFORD PLACE NE

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

**DISINCENTIVES**

DISINCENTIVES SHALL BE ASSESSED IN THE AMOUNT SHOWN FOR THE TIME DURATIONS FOR EACH CRITICAL SECTION AND/OR PHASE WORK OPERATION ARE OVERRAN. CRITICAL SECTIONS AND PHASE WORK OPERATIONS AND THEIR RESPECTIVE TIME DURATIONS ARE DEFINED IN VARIOUS PLAN NOTES.

US 62 - \$240 PER MINUTE  
ROWLAND/ST. ELMO/MAPLE - \$120 PER MINUTE

**DETOUR NOTIFICATION**

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148), CITY OF CANTON (330-489-3381), AND PLAIN TOWNSHIP (330-492-3423) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

**STORM DRAIN CONSTRUCTION**

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE THROUGHOUT CONSTRUCTION BY UTILIZING EXISTING, PERMANENT, AND TEMPORARY DRAINAGE STRUCTURES AND CONDUIT. FOR PROPOSED STORM PIPE RUNS THAT NEEDS TO BE INSTALLED IN SEPARATE PHASES AND STUBBED, TEMPORARILY PLUG THE PROTRUDING CONDUIT WITH A MANUFACTURED CAP. ANY LANE CLOSURES REQUIRED FOR DRAINAGE CONSTRUCTION, IN ADDITION TO THOSE PROVIDED IN THE PLANS, SHALL BE IMPLEMENTED AS PER THE CURRENT EDITION OF THE OMUTCD AND THE CURRENT STANDARD CONSTRUCTION DRAWINGS, AND SHALL REQUIRE FINAL WRITTEN APPROVAL BY THE ENGINEER. ANY TRAFFIC LANES REQUIRING TEMPORARY CLOSURE SHALL BE REOPENED AT THE END OF THE WORK DAY.

THE USE OF TEMPORARY PAVEMENT, OTHER THAN THE TEMPORARY PAVEMENT SHOWN IN THE PLAN SHEETS, IS NOT ANTICIPATED FOR THE CONSTRUCTION OF STORM SEWER SYSTEMS. ADDITIONAL TEMPORARY PAVEMENT, IF USED, IS THE RESPONSIBILITY OF THE CONTRACTOR.

TEMPORARY DRAINAGE CONNECTIONS ARE SHOWN IN THE PLANS FOR USE BY THE CONTRACTOR DURING CONSTRUCTION BASED UPON THE MAINTENANCE OF TRAFFIC PLANS. THE CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES TO ADEQUATELY DRAIN THE WORK SITE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL REFER TO PLAN SHEETS FOR DISPOSITION OF DRAINAGE FACILITIES AFFECTED BY TEMPORARY PAVEMENT INSTALLED AS PART OF THE MOT PHASING. ANY TEMPORARY DRAINAGE WORK NOT SEPARATELY ITEMIZED IN THE PLANS SHALL BE INCLUDED UNDER ITEM 614 - MAINTAINING TRAFFIC.

**MAINTENANCE OF TRAFFIC**

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

- A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
- THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
- ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-9AM AND 4-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
- A QUANTITY OF 15 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
- PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

US 62 MAY BE REDUCED TO A SINGLE LANE DURING CERTAIN PHASES AS SHOWN IN THE PLANS FOR STORM SEWER INSTALLATIONS/CONNECTIONS, WORK AREAS THAT REQUIRE ADDITIONAL BUFFER, OR TO COMPLETE MINOR WORK AREAS FOR USE IN SUBSEQUENT PHASES. LENGTH AND DURATION OF LANE CLOSURE AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. THE FOLLOWING NUMBER OF LANES AND WIDTH SHALL BE MAINTAINED AT ALL TIMES, EXCEPT AS ALLOWED BY THE PERMITTED LANE CLOSURE TIMES NOTE OR AS OTHERWISE SHOWN IN THE PLANS, BY USE OF EXISTING, COMPLETED PERMANENT AND TEMPORARY PAVEMENT.

ROAD:	# OF LANES	LANE WIDTH
US 62 EASTBOUND	2/DIRECTION*	10-FOOT (MIN)
US 62 WESTBOUND	2/DIRECTION*	10-FOOT (MIN)
ALL OTHER ROADS	2 ◇	10-FOOT (MIN)

\* EXCEPT DURING PERMITTED LANE CLOSURE HOURS AND WHEN SHOWN ON PLANS AS A SINGLE LANE  
◇ OR SINGLE LANE W/ FLAGGER PER SCD

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED MSW	CHECKED GAH
24	25	26	28	40	129	139	143	144	155	421	01/S>2/PV	02/S>2/OT/CANT	03/S>2/ CV								
	LS										LS			201	11000	LS	CLEARING AND GRUBBING				
					43,008						43,008			202	23000	43,008	SY	PAVEMENT REMOVED			
					574						574			202	23500	574	SY	WEARING COURSE REMOVED			
					17,629						17,629			202	30000	17,629	SF	WALK REMOVED			
					7						7			202	30200	7	FT	STEPS REMOVED			
					5,857						5,857			202	32000	5,857	FT	CURB REMOVED			
				386	2,688						3,074			202	35100	3,074	FT	PIPE REMOVED, 24" AND UNDER			
					1,286						1,286			202	38000	1,286	FT	GUARDRAIL REMOVED			
					1						1			202	38700	1	EACH	GUARDRAIL POST REMOVED			
					5						5			202	58000	5	EACH	MANHOLE REMOVED			
				5	43						48			202	58100	48	EACH	CATCH BASIN REMOVED			
					4						4			202	58500	4	EACH	CATCH BASIN ABANDONED			
					4						4			202	58700	4	EACH	MANHOLE ABANDONED			
				57	2,061						2,118			SPECIAL	20270000	2,118	FT	FILL AND PLUG EXISTING CONDUIT (12" - 24")		28	
		2,090									2,090			SPECIAL	20270110	2,090	FT	PIPE CLEANOUT, 24" AND UNDER		28	
					2,053						2,053			202	75000	2,053	FT	FENCE REMOVED			
					3						3			202	98100	3	EACH	REMOVAL MISC.: PRIVATE SIGN (A)		25	
					5						5			202	98100	5	EACH	REMOVAL MISC.: PRIVATE SIGN (B)		25	
					14						14			202	98100	14	EACH	REMOVAL MISC.: BOULDER		27	
			1								1			202	98100	1	EACH	REMOVAL MISC.: INSPECTION WELL		28	
					6						6			202	98100	6	EACH	REMOVAL MISC.: CONCRETE BOLLARD		26	
			20								20			202	98200	20	FT	REMOVAL MISC.: CONDUIT		28	
					30						30			202	98200	30	FT	REMOVAL MISC.: RETAINING WALL		26	
		390									390			202	98400	390	SF	REMOVAL MISC.: PARCEL 89 BLOCK RETAINING WALL		26	
								25,066			25,066			203	10000	25,066	CY	EXCAVATION			
								9,774			9,774			203	20000	9,774	CY	EMBANKMENT			
				50							50			203	20001	50	CY	EMBANKMENT, AS PER PLAN		28	
										57,773	57,773			204	10000	57,773	SY	SUBGRADE COMPACTION			
1,264										7,976	9,240			204	13000	9,240	CY	EXCAVATION OF SUBGRADE (12" UNSTABLE SUBGRADE)			
										616	616			204	13000	616	CY	EXCAVATION OF SUBGRADE (24" UNSUITABLE ROCK)			
100										616	716			204	20000	716	CY	EMBANKMENT			
1,164										7,976	9,140			204	30010	9,140	CY	GRANULAR MATERIAL, TYPE B			
	41										41			204	45000	41	hour	PROOF ROLLING			
										24,850	24,850			204	50000	24,850	SY	GEOTEXTILE FABRIC			
					1,050						1,050			606	15050	1,050	FT	GUARDRAIL, TYPE MGS			
					4						4			606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)			
					4						4			606	26550	4	EACH	ANCHOR ASSEMBLY, MGS TYPE T			
					4						4			606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1			
					2						2			606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2			
					2						2			606	60028	2	EACH	IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL) [45 MPH, 24" WIDTH]			
					9,581						9,581			608	12000	9,581	SF	5" CONCRETE WALK			
					5						5			608	41000	5	FT	CONCRETE STEPS, TYPE B			
					982						982			608	52000	982	SF	CURB RAMP			
							422				422			622	10060	422	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B			
							436				436			622	10100	436	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1			
							674				674			622	10140	674	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1			
							1,501				1,501			622	10160	1,501	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D			
											1			622	24840	1	EACH	CONCRETE BARRIER END SECTION, TYPE B			
											1			622	24860	1	EACH	CONCRETE BARRIER END SECTION, TYPE C1			
											5			622	25000	5	EACH	CONCRETE BARRIER END SECTION, TYPE D			
											6			622	25004	6	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B			
											1			622	25005	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B, AS PER PLAN		25	
											1			622	25006	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1			
											11			622	25014	11	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1			
											9			622	25050	9	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D			
											1			622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN		25	
										14	14			623	38500	14	EACH	MONUMENT ASSEMBLY			

GENERAL SUMMARY

STA - 062 - 24.14

122

500

ESTIMATED QUANTITIES SHEET NO.	202	202	202	202	202	202	202	202	202	202	202	202	202	202	SPECIAL	202	202	202	202	202	202
	PAVEMENT REMOVED (CONCRETE) SY	PAVEMENT REMOVED (ASPHALT) SY	WEARING COURSE REMOVED SY	WALK REMOVED SF	STEPS REMOVED FT	CURB REMOVED FT	PIPE REMOVED, 24" AND UNDER FT	GUARDRAIL REMOVED FT	GUARDRAIL POST REMOVED EACH	MAILBOX REMOVED EACH	MANHOLE REMOVED EACH	CATCH BASIN REMOVED EACH	CATCH BASIN ABANDONED EACH	MANHOLE ABANDONED EACH	FILL AND PLUG EXISTING CONDUIT (12" - 24") FT	FENCE REMOVED FT	REMOVAL MISC: PRIVATE SIGN (A) EACH	REMOVAL MISC: PRIVATE SIGN (B) EACH	REMOVAL MISC.: BOULDER EACH	REMOVAL MISC.: CONCRETE BOLLARD EACH	REMOVAL MISC.: RETAINING WALL FT
130		12,433.0	401.2			741.9	572.8				1	1		184.0	435.5						
131	2,982.8	4,079.1		2,343.5		417.0	972.5				8	2		258.0	343.7						
132	6,258.2	51.9		3,520.5		789.0	255.0				8				442.1						
133	4,090.3	202.3	172.5	2,182.4		1,515.1	568.6	403.0	1	4	9	1			112.7			13			
134	3,785.9	987.9		1,208.8		1,282.0	365.0	310.0			5		4	1,168.0				1			
135	2,513.5			1,460.8		731.0	313.7				6			7.0		1	1	1			
136	1,815.4	35.8		1,229.9		63.0	189.7			1	5				112.2			2			
137	536.7	1,071.1		5,006.6	7.1	291.4									471.7	2				6	21.1
138	132.4	2,031.9		676.4		27.0	23.6				1			444.0	135.3			1			9.2
<b>SUBTOTALS THIS SHEETS</b>																					
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>																					

ROADWAY REMOVAL SUBSUMMARIES	CALCULATED
	MSW CHECKED GAH
<b>STA - 062 - 24.14</b>	
129 500	

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SHEET NO.	REFERENCE NO.	ALIGNMENT	STATION		SIDE	202	202	202	202	202		202	SPECIAL	202	202	202	202	202		
			BEGIN	END		FROM	TO	PAVEMENT REMOVED (CONCRETE)	PAVEMENT REMOVED (ASPHALT)	WEARING COURSE REMOVED	WALK REMOVED	CURB REMOVED		PIPE REMOVED, 24" AND UNDER	FILL AND PLUG EXISTING CONDUIT (12" - 24")	GUARDRAIL REMOVED	REMOVAL MISC: PRIVATE SIGN (A)	REMOVAL MISC: PRIVATE SIGN (B)	CATCH BASIN ABANDONED	CATCH BASIN REMOVED
						SY	SY	SY	SF	FT		FT	FT	FT	EACH	EACH	EACH	EACH	FT	
165		R-62	US-62	182+56.65	182+87.12	LT													32.0	
165		R-63	US-62	182+03.23	182+85.69	LT			929.1											
165	166	R-64	US-62	185+64.34	186+22.85	RT			218.4											
165		R-65	US-62	183+73.04		RT											1			
165		R-66	US-62	182+44.61		RT										1				
165		R-67	US-62	181+43.93		LT										1				
165		R-68	US-62	183+73.04	183+98.31	RT						22.5								
165		R-69	US-62	181+65.90	184+00.80	RT						240.0								
165		R-70	US-62	184+00.80		RT												1		
		R-71		NOT USED																
165		R-72	US-62	185+99.34		RT												1		
165		R-73	US-62	181+43.93	182+44.61	RT							102.0							
165		R-74	US-62	185+41.42	185+48.38	LT													72.0	
165		R-75	US-62	182+80.78	183+09.32	LT						21.5								
165		R-76	US-62	183+60.42	183+88.37	RT						22.7								
165		R-77	US-62	184+21.72	184+49.59	LT						36.2								
		R-78		NOT USED																
		R-79		NOT USED																
165		R-80	US-62	182+44.61	183+98.31	RT							156.0							
165		R-81	US-62	184+00.79	185+99.33	RT						194.0								
		R-82	US-62	184+49.59	185+21.00	RT														
165		R-83	US-62	185+21.00	185+64.27	RT						274.6								
		R-84		NOT USED								43.5								
166		R-85	US-62	186+00.00	191+00.00	RT						3680.7								
		R-86		NOT USED																
		R-87		NOT USED																
166		R-88	US-62	188+89.51		RT												1		
166		R-89	US-62	189+02.32		RT												1		
166		R-90	US-62	189+18.58		RT												1		
166		R-91	US-62	189+46.06	189+66.97	LT													57.7	
		R-92		NOT USED																
166		R-93	US-62	190+43.65	190+43.43	LT/RT													69.0	
		R-94		NOT USED																
166		R-95	US-62	186+00.00	189+07.57	RT						337.6								
		R-96		NOT USED																
		R-97		NOT USED																
		R-98		NOT USED																
166	167	R-99	US-62	190+96.45	191+34.98	LT													50.0	
166		R-100	US-62	190+37.92	190+63.84	RT			22.3											
166		R-101	US-62	188+89.51	191+00.00	RT							209.0							
166		R-102	US-62	190+83.93	191+11.58	RT			26.5											
166		R-103	US-62	189+41.84	189+02.00	RT							37.0							
166		R-104	US-62	189+45.79	189+89.80	RT														
166		R-105	US-62	189+02.00	188+89.51	RT							11.0							
166		R-106	US-62	186+46.75	190+86.56							1,196.1								
166		R-107	US-62	186+20.56	186+47.53	RT			25.0											
166		R-108	US-62	186+77.51	187+05.70	RT			22.9											
166		R-109	US-62	187+34.22	187+62.86	RT			21.1											
166		R-110	US-62	187+87.43	188+08.26	RT			22.2											
		R-111		NOT USED																
166		R-112	US-62	189+90.37	190+17.40	RT			34.0											
		R-113	US-62	194+16.49	194+63.19	LT													63.0	
		R-114		NOT USED																
		R-115		NOT USED																
167		R-116	US-62	191+00.00	195+50.00	RT			2808.8											
167		R-117	US-62	191+22.17		RT												1		
167		R-118	US-62	191+22.16	193+06.13	RT							184.0							
167		R-119	US-62	193+06.13		RT												1		
167		R-120	US-62	193+06.13	193+29.57	RT														
167		R-121	US-62	191+00.00	191+22.16	RT														
TOTALS CARRIED TO SHEET 129							2,982.8	4,079.1		2,343.5	417.0		972.5	258.0				2	8	343.7

<b>REMOVAL ESTIMATED QUANTITIES</b>	<b>STA - 062 - 24.14</b>	CALCULATED MSW CHECKED GAH
<div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <span style="font-size: 8px;">131</span>  <span style="font-size: 8px;">500</span> </div>		

...\\Roadway\Sheets\100824GS001.dgn 12/2/2021 9:52:48 AM rjgreve

SHEET NO.	REFERENCE NO.	ALIGNMENT	STATION		SIDE	202	202	202	202	202		202	SPECIAL	202	202	202	202	202	202	
			BEGIN	END		FROM	TO	PAVEMENT REMOVED (CONCRETE) SY	PAVEMENT REMOVED (ASPHALT) SY	WEARING COURSE REMOVED SY	WALK REMOVED SF	CURB REMOVED FT		PIPE REMOVED, 24" AND UNDER FT	FILL AND PLUG EXISTING CONDUIT (12" - 24") FT	GUARDRAIL REMOVED FT	REMOVAL MISC: PRIVATE SIGN (A) EACH	REMOVAL MISC: PRIVATE SIGN (B) EACH	CATCH BASIN ABANDONED EACH	CATCH BASIN REMOVED EACH
167		R-122	US-62	192+31.58	192+80.81	LT														161.9
167		R-123	US-62	191+83.40	192+30.69	LT														64.0
167		R-124	US-62	195+11.80	195+11.97	LT/RT														50.0
167		R-125	US-62	191+00.00	195+50.00					270.0										
		R-126		NOT USED																
167		R-127	US-62	191+33.68	191+54.51	RT		17.2												
167		R-128	US-62	191+77.47	192+05.04	RT	25.8													
167		R-129	US-62	192+22.29	192+49.34	RT	141.8													
167		R-130	US-62	192+79.07	192+99.74	RT	23.4													
167		R-131	US-62	193+17.34	193+46.79	RT	27.2													
167		R-132	US-62	193+66.24	193+96.06	RT		34.7												
167		R-133	US-62	194+13.04	194+41.52	RT	54.7													
167		R-134	US-62	194+93.12	195+15.31	RT	103.7													
167		R-135	US-62	195+15.31	195+34.97	RT	17.1													
167		R-136	US-62	191+00.00	195+50.00	LT/RT			970.0											
167		R-137	US-62	192+78.36	193+26.15	LT														58.0
167		R-138	US-62	193+26.15	193+68.83	LT														61.0
		R-139		NOT USED																
		R-140		NOT USED																
		R-141		NOT USED																
168		R-142	US-62	197+94.28		RT												1		
168		R-143	US-62	197+94.28	197+98.41	RT					42.0									
168		R-144	US-62	198+00.81		RT												1		
168		R-145	US-62	199+77.97		RT												1		
168		R-146	US-62	198+00.81	197+98.41	RT					7.0								1	
168		R-147	US-62	199+58.61	199+63.45	RT					8.0								1	
168		R-148	US-62	199+51.89		RT													1	
168		R-149	US-62	199+51.89	199+63.45	RT					44.0									
168		R-150	US-62	200+07.72		RT													1	
168		R-151	US-62	197+09.70	197+25.44	LT/RT														47.2
168		R-152	US-62	200+07.72	199+77.97	RT						27.0								
168		R-153	US-62	199+77.97	199+51.89	RT						29.0								
168		R-154	US-62	199+36.32	199+77.72	RT				51.0										
168	169	R-155	US-62	199+96.32	200+68.20	LT				158.0										
168	188	R-156	US-62	199+70.72	41+39.77	LT				96.0										
168		R-157	US-62	196+47.75	197+08.06	LT/RT				138.0										
		R-158		NOT USED																
168		R-159	US-62	195+50.00	200+50.00	RT	3657.9													
		R-160		NOT USED																
		R-161		NOT USED																
		R-162		NOT USED																
		R-163		NOT USED																
		R-164	US-62	196+44.94	196+46.73	LT	147.0													
		R-165	US-62	197+08.11	197+32.94	LT/RT	24.6													
		R-166	US-62	197+59.35	197+86.11	LT/RT	21.4													
		R-167	US-62	198+52.69	198.70.08	LT/RT	46.3													
		R-168		NOT USED																
168		R-169	US-62	198+55.54	198+85.81	RT	16.1													
168		R-170	US-62	195+50.00	200+50.00	RT			1,389.0											
168	169	R-171	US-62	200+07.36	201+08.93	LT/RT	1,065.6													
168		R-172	US-62	196+64.12	200+50.00	RT			1,161.5											
169		R-173	US-62	200+50.00	201+90.31	RT	885.5													
169		R-174	US-62	201+70.42		LT													1	
169		R-175	US-62	201+70.42	201+45.86	LT					37.0									
169		R-176	US-62	201+23.55		LT													1	
169		R-177	US-62	201+23.55	201+45.86	LT					27.0									
169	172	R-178	US-62	201+14.50	201+90.31	RT			76.0											
169		R-179	US-62	201+55.96	201+90.31	RT					34.0									
		R-180		NOT USED		LT														
TOTALS CARRIED TO SHEET 129							6,258.2	51.9		3,520.5	789.0		255.0					8	442.1	

CALCULATED MSW CHECKED GAH	<b>REMOVAL ESTIMATED QUANTITIES</b>	<b>STA - 062 - 24.14</b>	132 500
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...Roadway\Sheets\100824GS001.dgn 12/2/2021 9:52:55 AM rjgreve

SHEET NO.	REFERENCE NO.	ALIGNMENT	STATION		SIDE	202	202	202	202	202	202	SPECIAL	202	202	202	202	202	202	202	
			BEGIN	END		FROM	TO	PAVEMENT REMOVED (CONCRETE) SY	PAVEMENT REMOVED (ASPHALT) SY	WEARING COURSE REMOVED SY	WALK REMOVED SF	CURB REMOVED FT	MANHOLE REMOVED EACH	FILL AND PLUG EXISTING CONDUIT (12" - 24") FT	PIPE REMOVED, 24" AND UNDER FT	GUARDRAIL POST REMOVED EACH	GUARDRAIL REMOVED FT	REMOVAL MISC: PRIVATE SIGN (A) EACH	CATCH BASIN ABANDONED EACH	CATCH BASIN REMOVED EACH
169	R-181	US-62	201+21.89	201+23.55	LT								10.0							
169	R-182	US-62	201+12.51	201+25.81	LT														112.7	
169	R-183	US-62	201+45.86	201+55.96	RT								40.0							
169	R-184	US-62	201+09.71	201+38.16	LT	18.1														
169	R-185	US-62	201+56.28	201+97.03	LT	24.1														
169	R-186	US-62	201+45.86		RT													1		
169	R-187	US-62	200+50.00	201+90.31	LT/RT				613.4											
169	R-188	US 62	200+50.00	201+90.31	RT				402.0											
169	R-189	US-62	201+07.90											1						
	R-190		NOT USED																	
	R-191		NOT USED																	
	R-192		NOT USED																	
170	R-193	US-62 WB(2)	201+90.31	207+00.00	LT					464.0										
	R-194	US-62 WB(2)	202+39.28	203+08.74	LT			172.5												
170	R-195	US-62 WB(2)	205+24.39		LT															13
170	R-196	US-62 WB(2)	203+78.98		LT													1		
170	R-197	US-62 WB(2)	203+71.84		LT													1		
170	R-198	US-62 WB(2)	203+78.98	203+71.84	LT								15.0							
170	R-199	US-62 WB(2)	203+71.84	203+50.29	RT								48.0							
170	R-200	US-62 WB(2)	205+54.36	205+73.22	LT								27.0							
170	R-201	US-62 WB(2)	205+73.22		LT														1	
170	R-202	US-62 WB(2)	206+52.63		LT														1	
170	171 R-203	US-62 WB(2)	206+28.55	207+03.56	LT		202.3													
	R-204		NOT USED																	
	-		NOT USED																	
	R-207		NOT USED																	
170	R-208	US-62 WB(2)	205+73.22	205+74.76	LT/RT								64.0							
170	R-209	US-62 WB(2)	206+52.63	206+48.43	LT/RT								38.0							
170	R-210	US-62 WB(2)	203+29.04	203+57.12	LT	80.1														
170	R-211	US-62 WB(2)	203+78.42	204+06.38	LT	85.2														
170	R-212	US-62 WB(2)	201+90.31	207+00.00	LT/RT	2124.1														
170	R-213	US-62 WB(2)	201+90.31	206+54.31	LT/RT				1,167.0											
170	R-214	US-62 WB(2)	206+46.21	211+67.65	RT								511.0							
170	R-215	US-62 WB(2)	206+30.27	207+00.00	LT								85.9							
	R-216		NOT USED																	
	-		NOT USED																	
	R-219		NOT USED																	
171	R-220	US-62 WB(2)	207+00.00	211+67.65	LT/RT	1656.4														
171	R-221	US-62 WB(2)	207+00.00	211+67.65	LT					454.2										
171	R-222	US-62 WB(2)	207+53.90	211+57.50	LT									403.0						
171	R-223	US-62 WB(2)	208+49.59	208+47.91	LT								44.7							
171	R-224	US-62 WB(2)	208+49.59		LT													1		
171	R-225	US-62 WB(2)	208+47.91		RT												1			
171	R-226	US-62 WB(2)	209+06.00		LT													1		
171	R-227	US-62 WB(2)	210+56.76		LT													1		
171	R-228	US-62 WB(2)	210+56.76	210+56.67	LT								3.0							
171	R-229	US-62 WB(2)	211+41.66		LT													1		
171	R-230	US-62 WB(2)	207+03.56	207+53.54	LT	102.2														
171	R-231	US-62 WB(2)	208+49.34		LT															
171	R-232	US-62 WB(2)	211+35.88		LT									7.0						
171	R-233	US-62 WB(2)	209+06.18		LT															
171	R-234	US-62 WB(2)	208+85.08		LT								55.9							
171	R-235	US-62 WB(2)	209+13.57		LT								146.0							
171	R-236	US-62 WB(2)	210+83.87		LT								70.0							
171	R-237	US-62 WB(2)	210+56.67		LT															
171	R-238	US-62 WB(2)	211+31.16		LT															
	R-239		NOT USED																	
	-		NOT USED																	
	R-244		NOT USED																	
TOTALS CARRIED TO SHEET 129						4,090.3	202.3	172.5	2,182.4	1,515.1	4		568.6	1	403.0		1	9	112.7	13

<p><b>REMOVAL ESTIMATED QUANTITIES</b></p>	<p><b>STA - 062 - 24.14</b></p>
<p>CALCULATED MSW CHECKED GAH</p>	<p>133 500</p>

...\\Roadway\Sheets\100824CS002.dgn 12/2/2021 9:54:56 AM ghmassie

SHEET NO.	REFERENCE NO.	ALIGNMENT	STATION		SIDE	202	202	202	202	202	202	202	SPECIAL	202	202	202	202	202						
			PAVEMENT REMOVED (CONCRETE)	PAVEMENT REMOVED (ASPHALT)		WALK REMOVED	STEPS REMOVED	CURB REMOVED	PIPE REMOVED, 24" AND UNDER	MAILBOX REMOVED	CATCH BASIN REMOVED	FILL AND PLUG EXISTING CONDUIT (12" - 24")	FENCE REMOVED	REMOVAL MISC: PRIVATE SIGN (A)	REMOVAL MISC: PRIVATE SIGN (B)	REMOVAL MISC.: CONCRETE BOLLARD	REMOVAL MISC.: RETAINING WALL							
			SY	SY		SF	FT	FT	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	FT							
FROM	TO																							
182	R-700	30TH ST. NE	8+18.83	8+36.80	LT	18.6																		
182	R-701	30TH ST. NE	8+62.18	8+70.20	LT																			
182	R-702	30TH ST. NE	8+18.01	9+04.97	LT/RT		483.7															21.1		
182	R-703	30TH ST. NE	8+53.29	9+08.73	LT/RT					78.4														
182	R-704	30TH ST. NE	8+55.67	8+70.90	RT	22.9																		
182	R-705	30TH ST. NE	8+70.90	9+36.68	RT	0.9																		
182	R-706	30TH ST. NE	8+84.05	9+32.73	RT																			
182	R-707	30TH ST. NE	9+14.39	9+24.86	RT			9.8																
182	R-708	30TH ST. NE	9+33.41	9+55.67	RT			64.6																
182	R-709	30TH ST. NE	8+83.08	10+26.75	LT/RT			692.4																
182	R-712	30TH ST. NE	9+29.93	9+90.63	LT/RT									192.0										
182	R-713	30TH ST. NE	10+24.38	10+41.19	LT	9.2																		
182	R-714	30TH ST. NE	10+26.66	10+65.87	LT/RT		223.4																	
182	R-715	30TH ST. NE	10+38.41	10+76.13	LT/RT			255.4																
182	R-716	30TH ST. NE	10+71.91	10+93.46	LT/RT	12.0																		
182	R-717	30TH ST. NE	10+76.13	10+90.46	LT/RT		40.6																	
182	R-718	30TH ST. NE	10+90.46	11+28.38	LT/RT			110.9																
182	R-719	30TH ST. NE	11+05.70	11+08.54	RT				1.7															
182	R-720	30TH ST. NE	11+01.00	11+08.98	RT			67.2																
182	R-721	30TH ST. NE	11+23.98	11+50.45	RT	33.1																		
182 - 183	R-722	30TH ST. NE	11+43.75	16+01.20	RT			2761.4																
182	R-723	30TH ST. NE	11+51.50	11+56.66	RT				5.4															
182	R-724	30TH ST. NE	11+50.90	11+56.69	RT			8.0																
182 - 183	R-725	30TH ST. NE	11+82.97	13+37.50	RT	226.3																		
183	R-726	30TH ST. NE	12+59.73	-	RT										1									
183	R-727	30TH ST. NE	12+56.92	12+62.33	RT												6							
183	R-728	30TH ST. NE	13+38.36	14+45.35	RT									130.7										
183	R-729	30TH ST. NE	13+37.50	15+96.57	RT		323.5																	
183	R-730	30TH ST. NE	14+68.95	15+76.79	RT									107.9										
183	R-731	30TH ST. NE	14+74.06	15+31.74	RT					58.0														
183	R-732	30TH ST. NE	15+05.19	-	RT										1									
183	R-733	30TH ST. NE	15+90.45	16+07.94	RT					28.7														
183	R-734	30TH ST. NE	16+36.90	16+52.26	RT					51.5														
	R-735	NOT USED																						
183	R-736	30TH ST. NE	16+44.81	17+29.91	RT			339.6																
183	R-737	30TH ST. NE	17+24.15	17+51.29	RT	14.4																		
183 - 184	R-738	30TH ST. NE	17+46.45	17+76.71	RT			108.7																
184	R-739	30TH ST. NE	17+71.23	17+98.73	RT	14.1																		
184	R-740	30TH ST. NE	17+90.95	18+24.96	RT			103.8																
184	R-741	30TH ST. NE	18+18.12	18+58.54	RT	33.1																		
184	R-742	30TH ST. NE	18+53.29	18+88.89	RT			119.0																
184	R-743	30TH ST. NE	18+86.37	19+13.66	RT	45.0																		
184	R-744	30TH ST. NE	19+09.00	19+51.77	RT			151.2																
184	R-745	30TH ST. NE	19+45.17	19+73.12	RT	21.0																		
184	R-746	30TH ST. NE	19+68.85	20+12.37	RT			140.0																
184	R-747	30TH ST. NE	20+07.88	20+36.04	LT/RT	86.2																		
184	R-748	30TH ST. NE	20+33.65	20+55.61	RT			74.6																
184	R-749	30TH ST. NE	20+35.88	20+72.07	RT									41.1										
<b>TOTALS CARRIED TO SHEET 129</b>						536.7	1071.1	5006.6	7.1	291.4				471.7	2		6	21.1						

REMOVAL ESTIMATED QUANTITIES

STA - 062 - 24.14

CALCULATED  
MLV  
CHECKED  
GAH

137  
500

LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

STA. 181+36.46 US 62 =  
 STA. 2181+35.18 US 62 EB(1) =  
 STA. 3181+36.46 US 62 WB(1)

**BARRIER LEGEND**

- △ END SECTION, TYPE D
- END ANCHORAGE, TYPE B
- END SECTION, TYPE C1
- Σ END ANCHORAGE, TYPE C1
- ⊗ END ANCHORAGE, TYPE D
- ⊕ END ANCHORAGE, TYPE B1
- \* INLET, NO. 3 FOR SINGLE SLOPE BARRIER

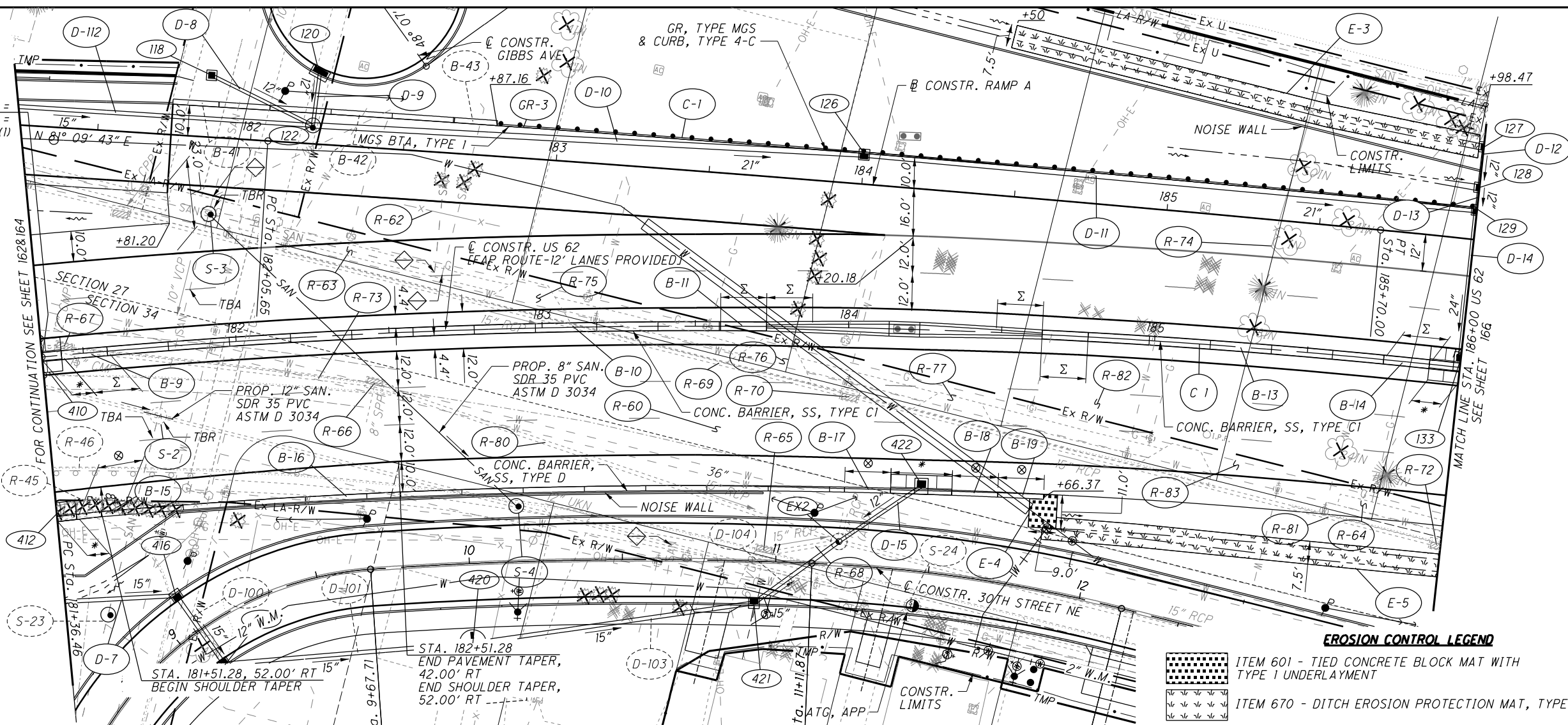
**LEGEND**

- ◇ DISCONNECT SANITARY SERVICE

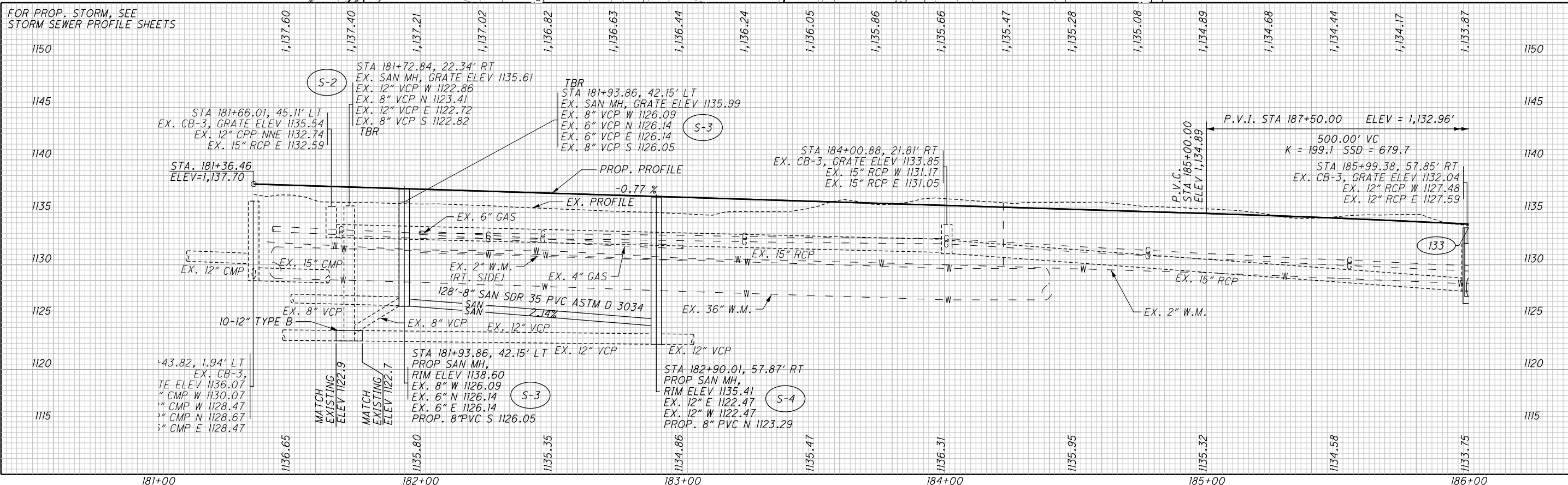
CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.

**CURVE DATA**

- C1
- ⊕ CONSTR. US 62
- P.I. Sta. 185+31.36
- Δ = 19° 33' 11" (RT)
- Dc = 2° 30' 00"
- R = 2,291.83'
- T = 394.90'
- L = 782.12'
- E = 33.77'
- e<sub>max</sub> = 4.00%
- PC Sta. 181+36.46
- PT Sta. 189+18.58



- EROSION CONTROL LEGEND**
- ITEM 601 - TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT
  - ITEM 670 - DITCH EROSION PROTECTION MAT, TYPE B



CALCULATED  
 SNIP  
 CHECKED  
 GAH

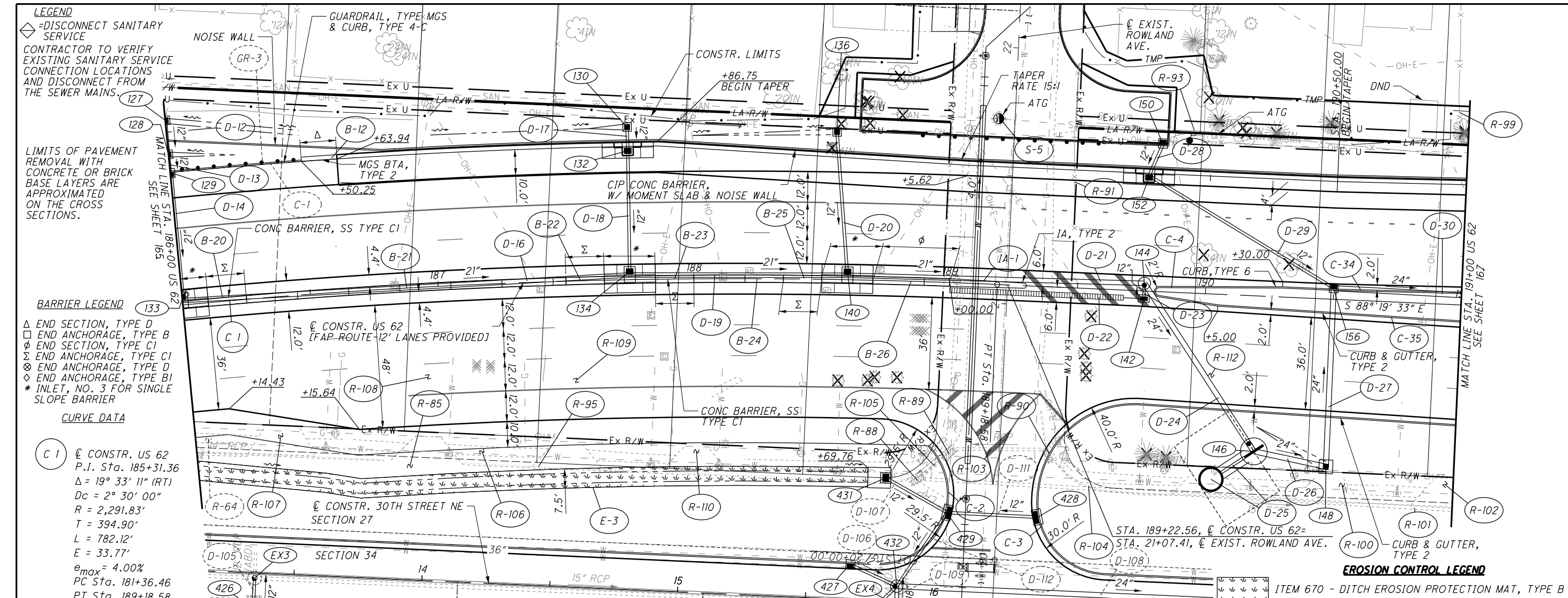
PLAN AND PROFILE - US 62  
 STA 181+36.46 TO STA 186+00

STA-062-24.14

165  
 500

...Roadway\Sheets\008246P00.dgn 12/2/2021 9:47:57 AM r\_jgreve



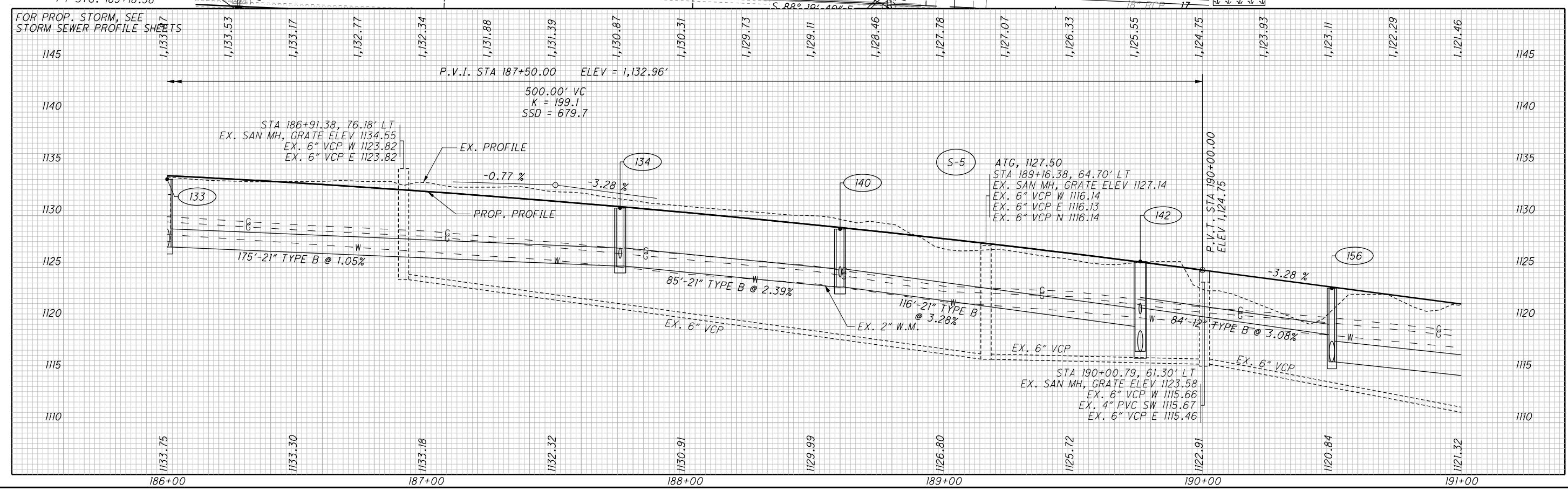


**LEGEND**  
 ◇ DISCONNECT SANITARY SERVICE  
 CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.

LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

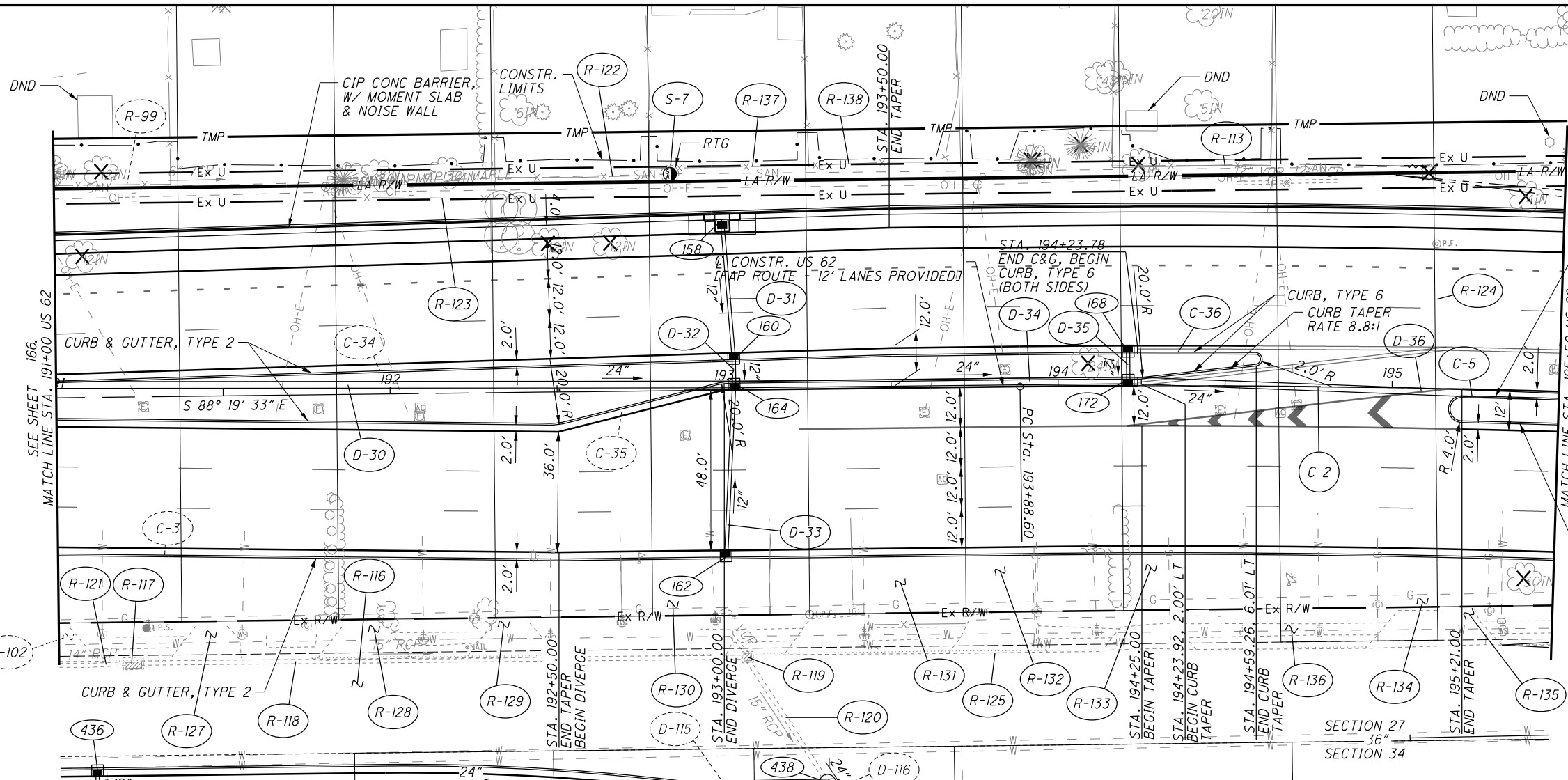
**BARRIER LEGEND**  
 Δ END SECTION, TYPE D  
 □ END ANCHORAGE, TYPE B  
 ⊕ END SECTION, TYPE C1  
 ⊗ END ANCHORAGE, TYPE C1  
 ⊙ END ANCHORAGE, TYPE D  
 ⊕ END ANCHORAGE, TYPE B1  
 \* INLET, NO. 3 FOR SINGLE SLOPE BARRIER

**CURVE DATA**  
 C1 @ CONSTR. US 62  
 P.I. Sta. 185+31.36  
 $\Delta = 19^\circ 33' 11''$  (RT)  
 $D_c = 2^\circ 30' 00''$   
 $R = 2,291.83'$   
 $T = 394.90'$   
 $L = 782.12'$   
 $E = 33.77'$   
 $e_{max} = 4.00\%$   
 PC Sta. 181+36.46  
 PT Sta. 189+18.58



PLAN AND PROFILE - US 62  
 STA 186+00 TO STA 191+00  
 STA-062-24.14  
 166  
 500

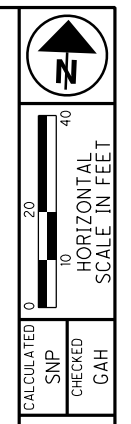
...Roadway\Sheets\008246P002.dgn 12/2/2021 9:48:04 AM rjgreve



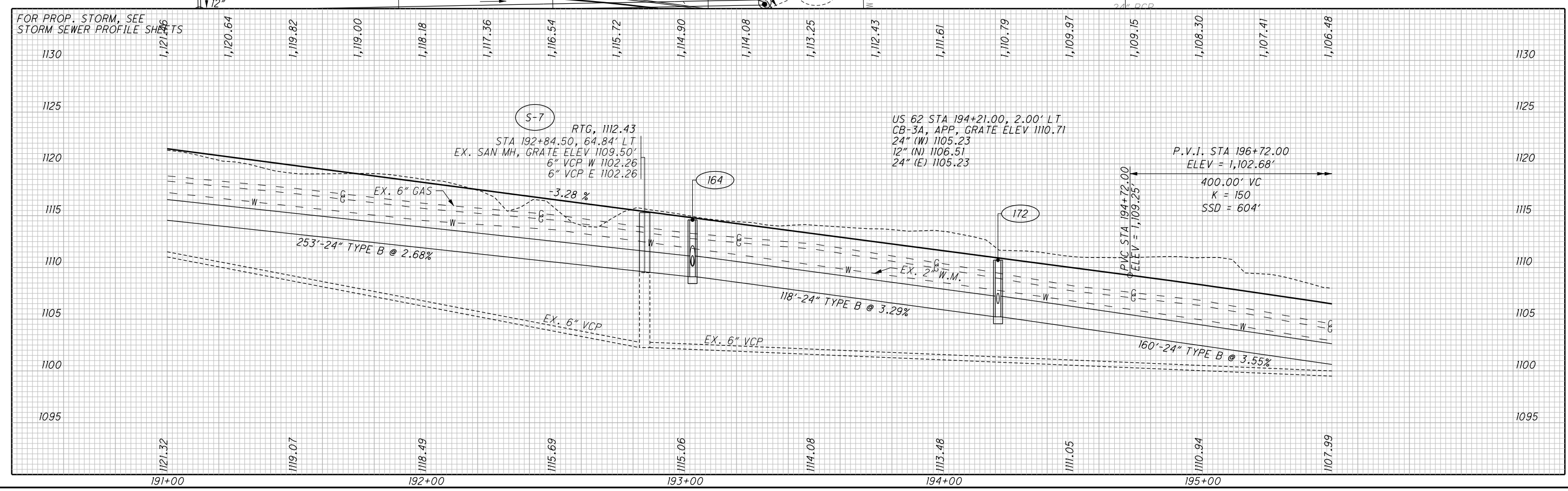
**LEGEND**  
 ◊ = DISCONNECT SANITARY SERVICE  
 CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.

LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

**CURVE DATA**  
 C 2 P.I. Sta. 196+37.55  
 $\Delta = 7^\circ 27' 29''$  (RT)  
 $D_c = 1^\circ 30' 00''$   
 $T = 3,819.72'$   
 $L = 497.21'$   
 $E = 8.10'$   
 $e_{max} = NC$   
 PC Sta. 193+88.60  
 PT Sta. 198+85.81

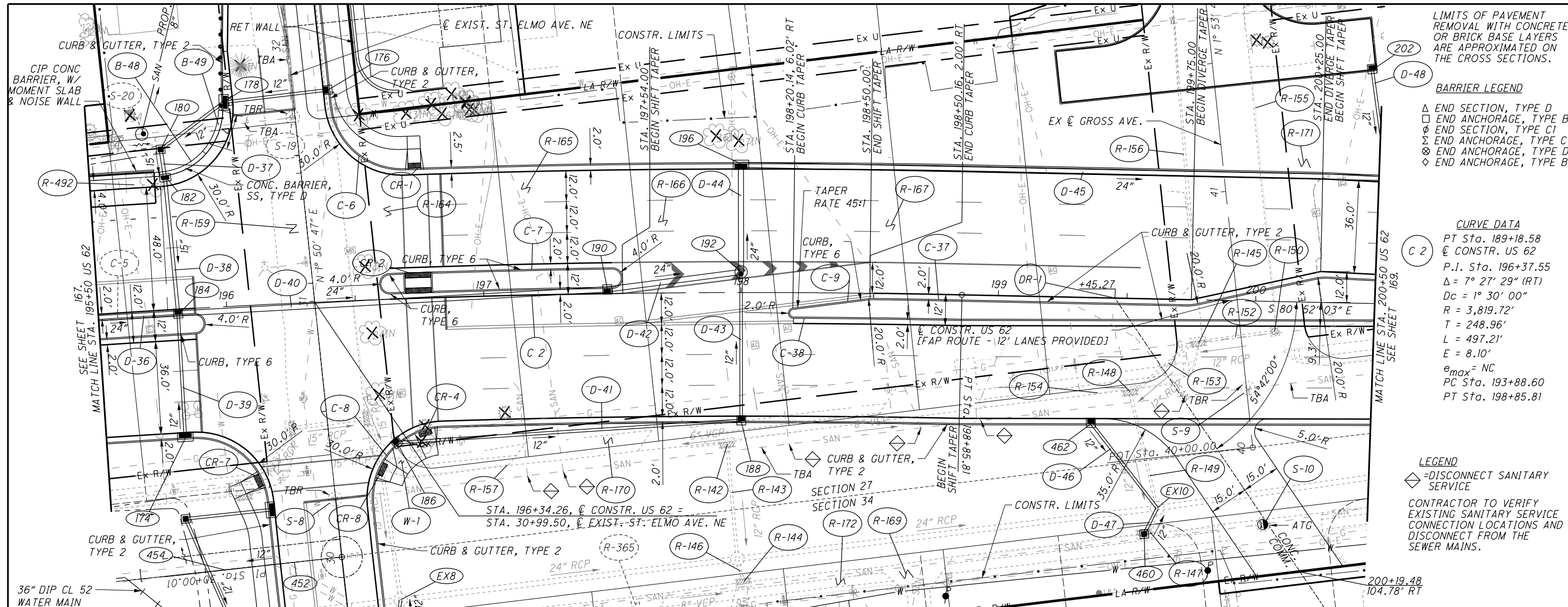


**PLAN AND PROFILE - US 62**  
**STA 191+00 TO STA 195+50**



**STA-062-24.14**  
 167  
 500

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LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

**BARRIER LEGEND**

- △ END SECTION, TYPE D
- END ANCHORAGE, TYPE B
- ⊕ END SECTION, TYPE C1
- Σ END ANCHORAGE, TYPE C1
- ⊗ END ANCHORAGE, TYPE D
- ◇ END ANCHORAGE, TYPE B1

**CURVE DATA**

PT Sta. 189+18.58  
 @ CONSTR. US 62  
 P.I. Sta. 196+37.55  
 $\Delta = 7^\circ 27' 29''$  (RT)  
 $D_c = 1^\circ 30' 00''$   
 $R = 3,819.72'$   
 $T = 248.96'$   
 $L = 497.21'$   
 $E = 8.10'$   
 $e_{max} = NC$   
 PC Sta. 193+88.60  
 PT Sta. 198+85.81

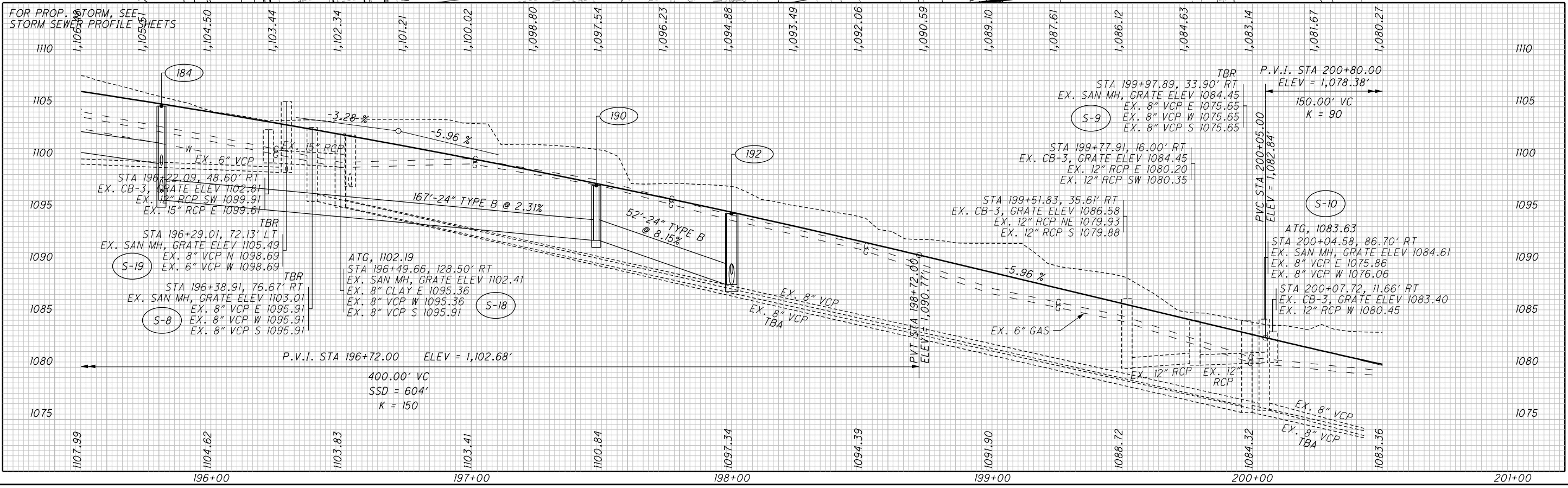
**LEGEND**

◇ = DISCONNECT SANITARY SERVICE

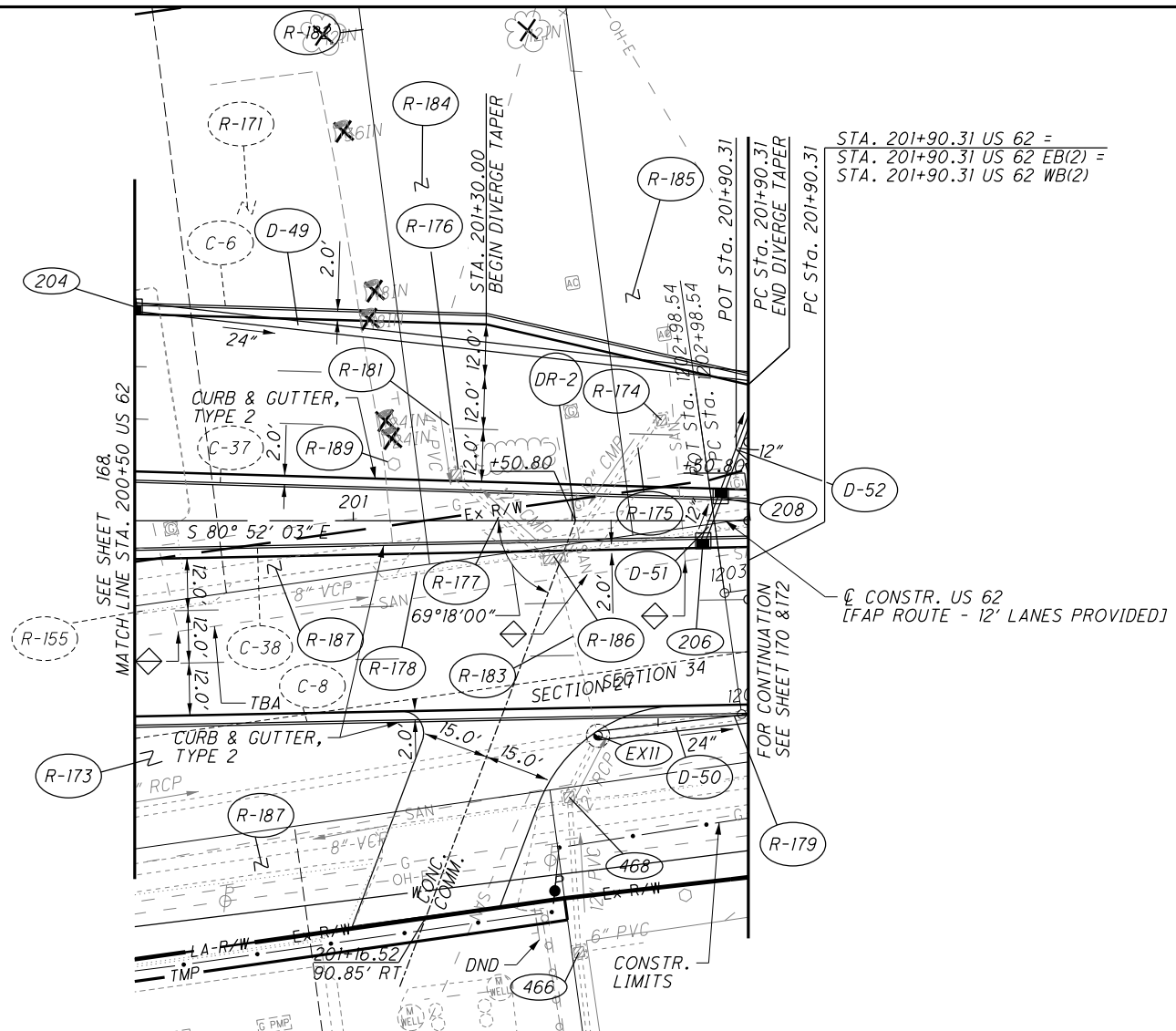
CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.



PLAN AND PROFILE - US 62  
 STA 195+50 TO STA 200+50

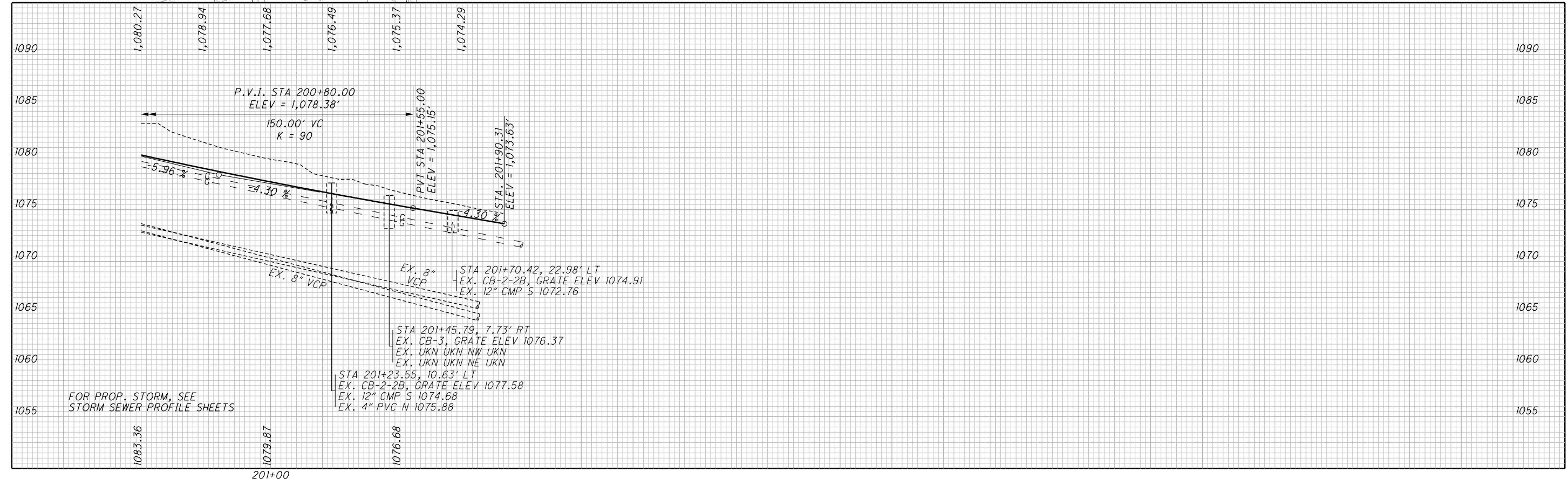


STA-062-24.14

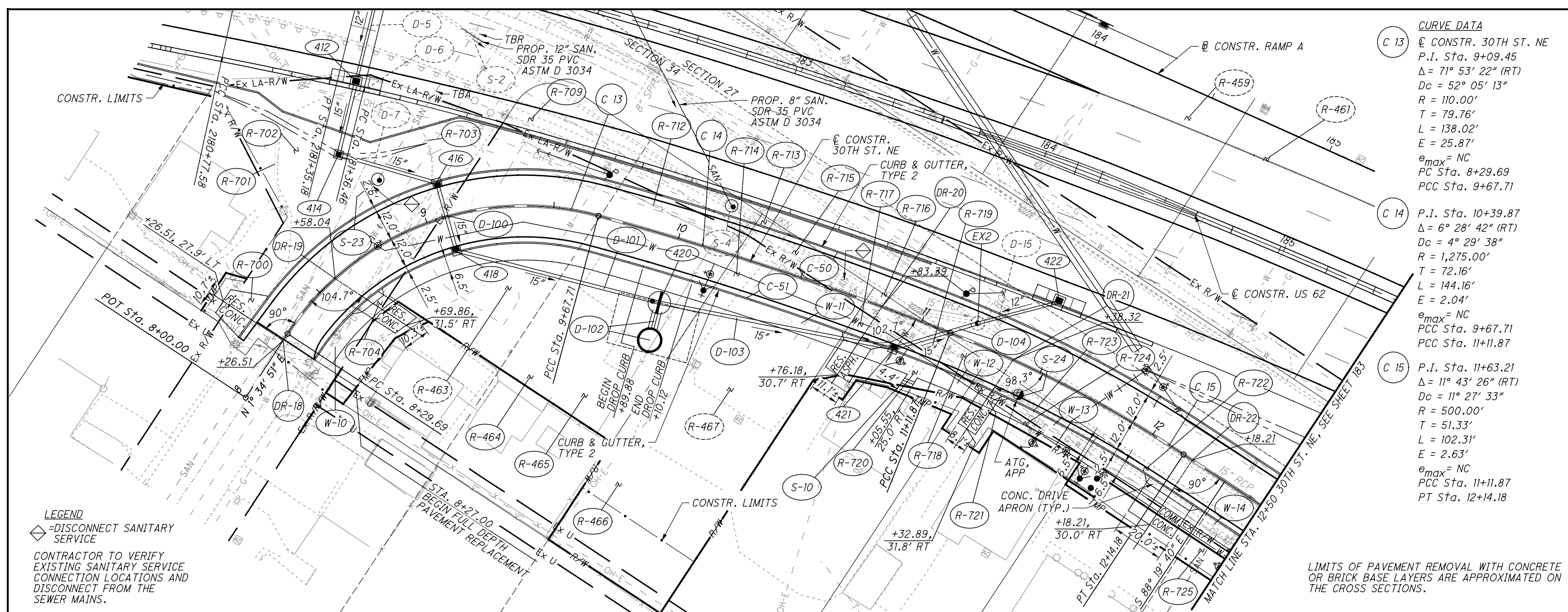


LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

**LEGEND**  
 ◊ = DISCONNECT SANITARY SERVICE  
 CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.



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**CURVE DATA**

**C 13** @ CONSTR. 30TH ST. NE  
 P.I. Sta. 9+09.45  
 $\Delta = 71^\circ 53' 22''$  (RT)  
 $D_c = 52^\circ 05' 13''$   
 $R = 110.00'$   
 $T = 79.76'$   
 $L = 138.02'$   
 $E = 25.87'$   
 $e_{max} = NC$   
 PC Sta. 8+29.69  
 PCC Sta. 9+67.71

**C 14**  
 P.I. Sta. 10+39.87  
 $\Delta = 6^\circ 28' 42''$  (RT)  
 $D_c = 4^\circ 29' 38''$   
 $R = 1,275.00'$   
 $T = 72.16'$   
 $L = 144.16'$   
 $E = 2.04'$   
 $e_{max} = NC$   
 PCC Sta. 9+67.71  
 PCC Sta. 11+11.87

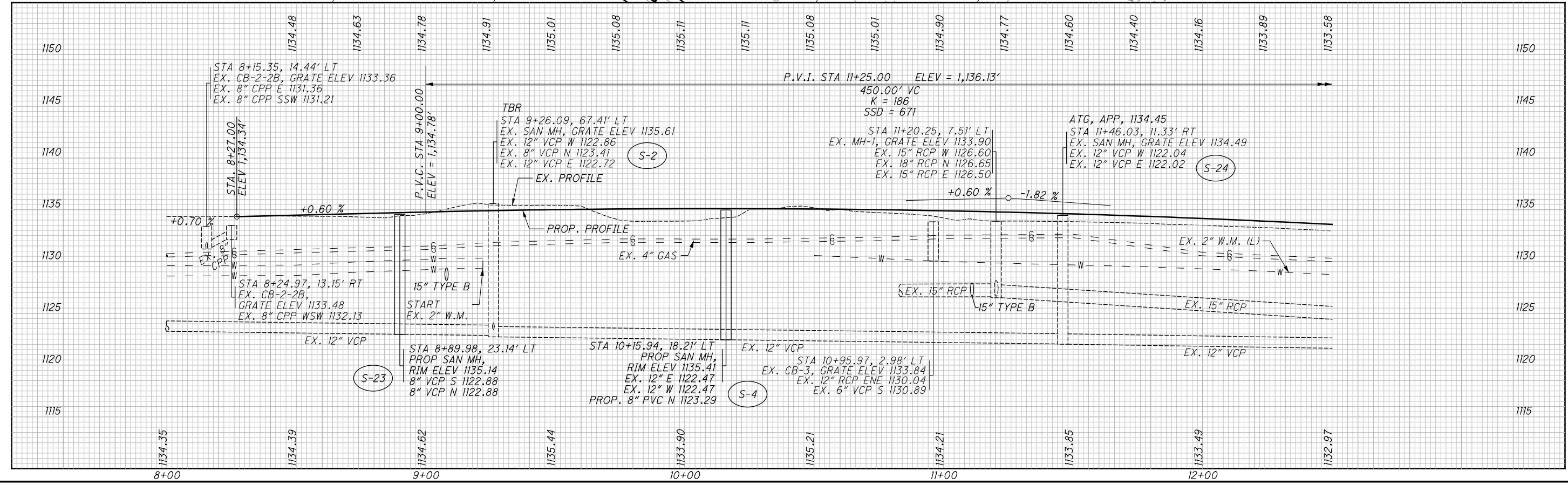
**C 15**  
 P.I. Sta. 11+63.21  
 $\Delta = 11^\circ 43' 26''$  (RT)  
 $D_c = 11^\circ 27' 33''$   
 $R = 500.00'$   
 $T = 51.33'$   
 $L = 102.31'$   
 $E = 2.63'$   
 $e_{max} = NC$   
 PCC Sta. 11+11.87  
 PT Sta. 12+14.18

**LEGEND**

◇ = DISCONNECT SANITARY SERVICE

CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.

LIMITS OF PAVEMENT REMOVAL WITH CONCRETE OR BRICK BASE LAYERS ARE APPROXIMATED ON THE CROSS SECTIONS.

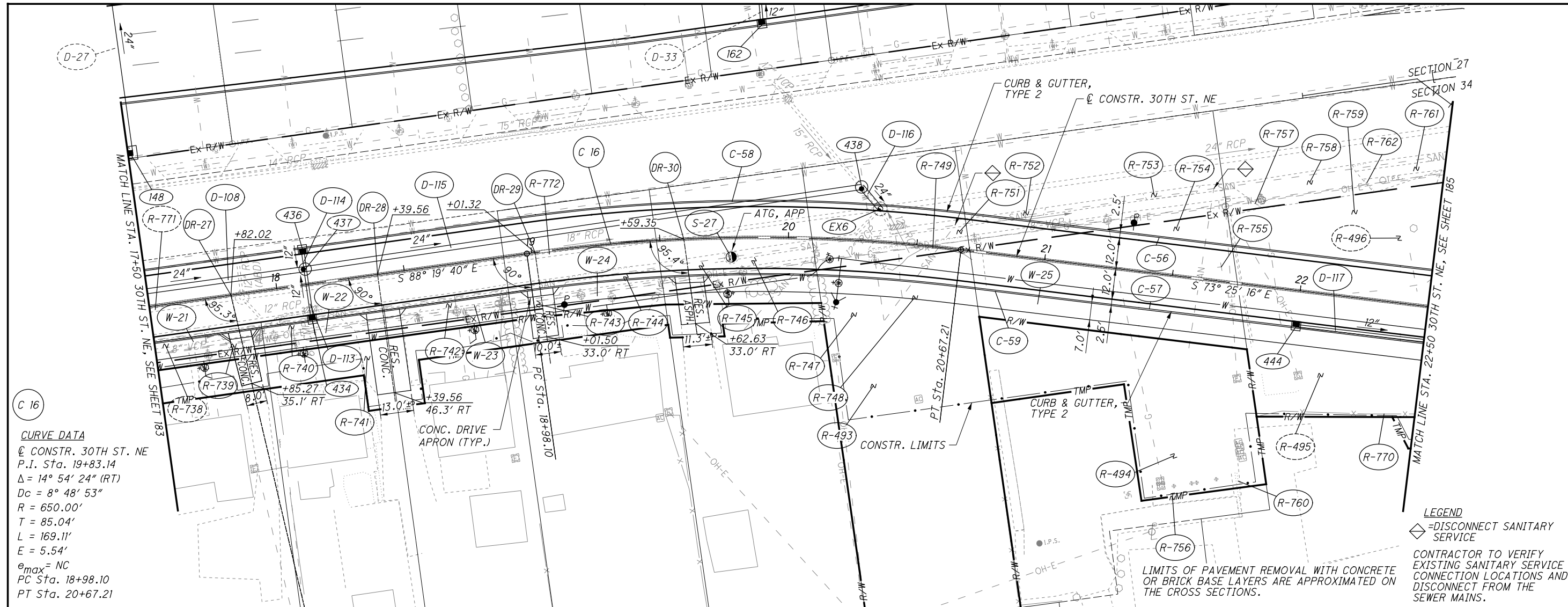


PLAN AND PROFILE - 30TH ST. NE  
 STA 8+27 TO STA 12+50  
 STA-062-24.14  
 182  
 500



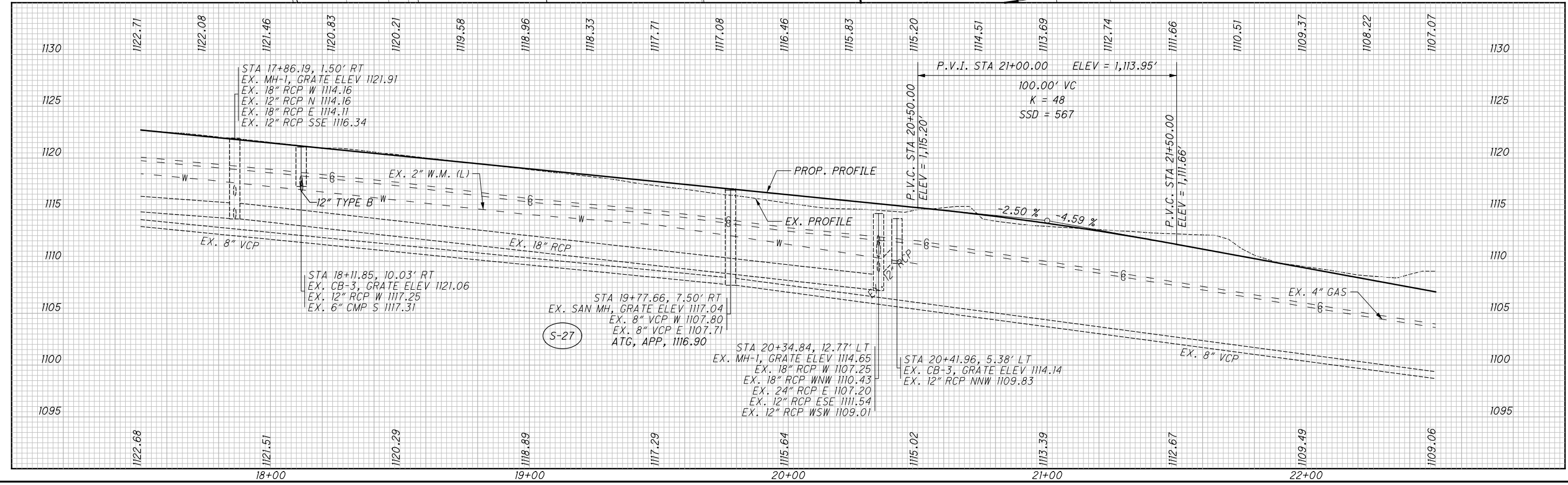
CALCULATED MLV CHECKED JML  
**PLAN AND PROFILE - 30TH ST. NE**  
**STA 17+50 TO STA 22+50**

**STA-062-24.14**  
 184  
 500

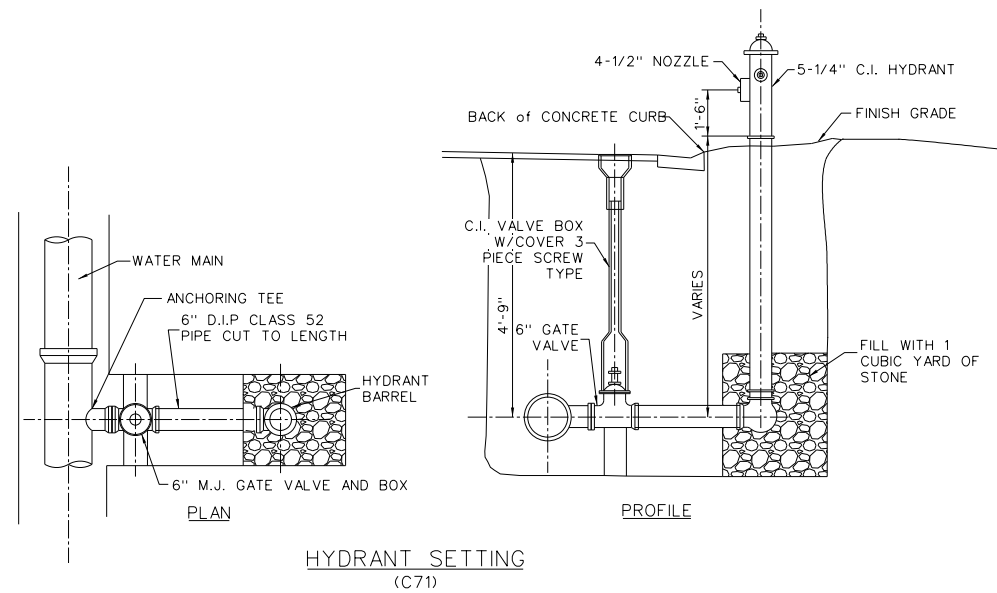


**CURVE DATA**  
 @ CONSTR. 30TH ST. NE  
 P.I. Sta. 19+83.14  
 $\Delta = 14^\circ 54' 24''$  (RT)  
 $D_c = 8^\circ 48' 53''$   
 $R = 650.00'$   
 $T = 85.04'$   
 $L = 169.11'$   
 $E = 5.54'$   
 $e_{max} = NC$   
 PC Sta. 18+98.10  
 PT Sta. 20+67.21

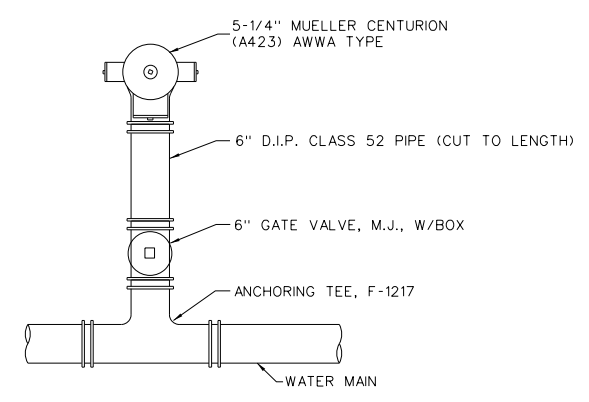
**LEGEND**  
 ◊ = DISCONNECT SANITARY SERVICE  
 CONTRACTOR TO VERIFY EXISTING SANITARY SERVICE CONNECTION LOCATIONS AND DISCONNECT FROM THE SEWER MAINS.



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HYDRANT SETTING  
(C71)



HYDRANT SETTINGS CONSIST OF HYDRANT, VALVE, VALVE BOX, FITTINGS AND MATERIALS SHOWN OR SPECIFIED WHICH ARE NEEDED FOR PROPER INSTALLATION.

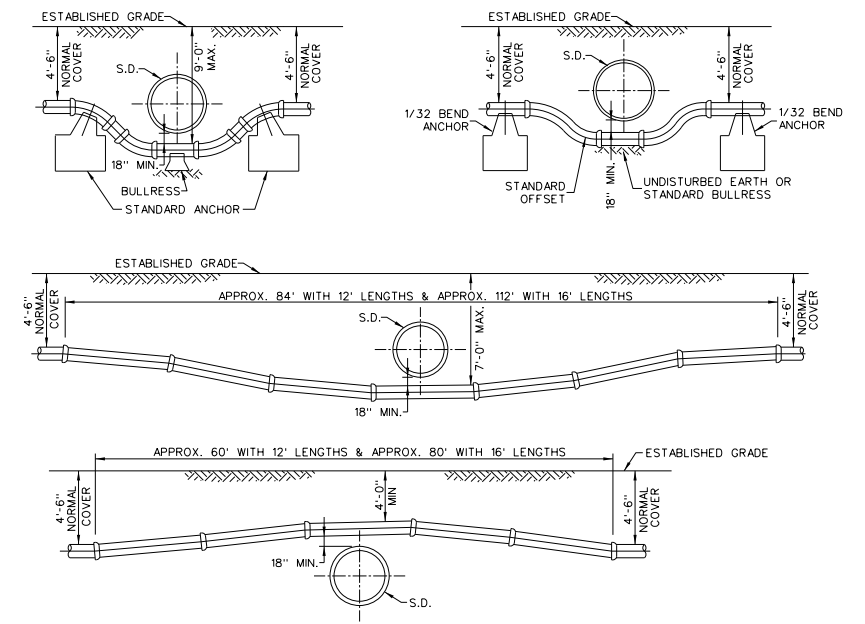
SEE SPECIFICATIONS FOR MORE INFORMATION ABOUT MATERIALS, SETTING HYDRANTS AND DRAINAGE REQUIREMENTS.

IF RESTRAINED JOINT FITTINGS CANNOT BE USED, (2) TIE RODS AND (4) EYE BOLTS WITH NUTS AND WASHERS MUST BE USED.

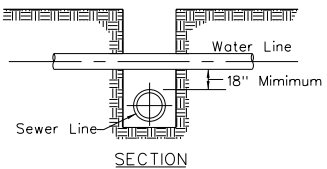
FIGURES SUCH AS F-1217 INDICATE CLOW CORPORATION STYLES. USE THIS BRAND OR APPROVED EQUAL.

ALL HYDRANTS ARE TO BE INSTALLED WITH THE PUMPER NOZZLE FACING THE STREET.

HYDRANT CONNECTION  
(C70)



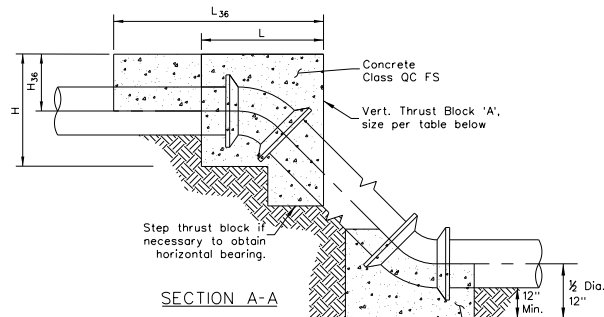
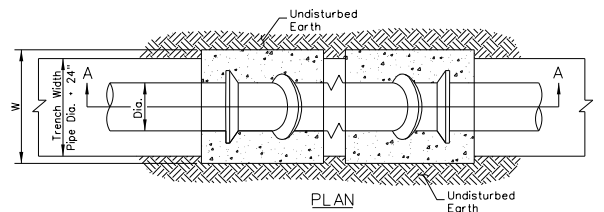
WATER MAIN CROSSING STORM DRAIN  
(C187)



NOTES:

- If joint on water main is within limits of sewer trench, install mechanical bell joint clamp
- If clearance is less than 18":
  - For Storm sewers, concrete encase the storm sewer pipe, 6 ft. on each side of water main.
  - For Sanitary sewers, replace the sanitary sewer pipe with PVC C900 pipe, 10 ft. on each side of water main. Approved couplings shall be used to tie onto the existing sewer. Cost for the above shall be included in the unit prices bid for all items in the proposal.
- In no case shall the sewer pipe contact any water main, service line or appurtenance.

VERTICAL WATER MAIN CLEARANCE  
(C186)



NOTES:

Pipe, bolts, nuts and fittings shall be wrapped with polyethylene film to prevent corrosion and concrete adhesion.

Thrust blocks to be centered on bend horizontally, except for the 36", 45" bend.

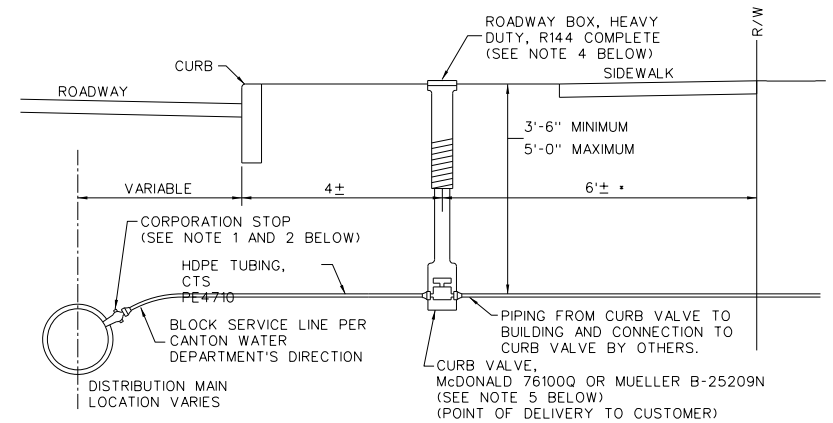
Thrust block 'A' shall be off centered on bend vertically to shift the majority of the block above the fitting.

All joints to be Megalugged.

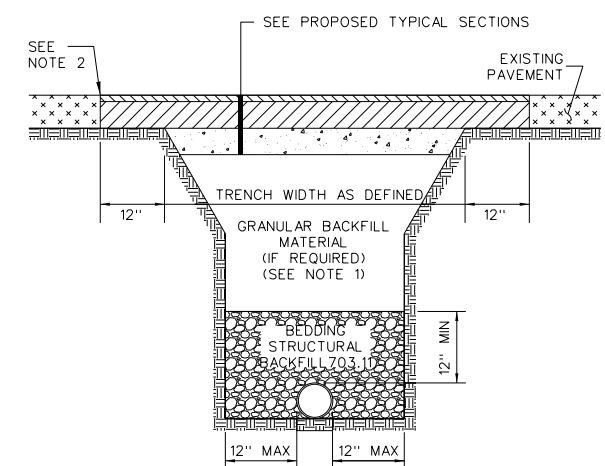
\* \* The dimensions and volumes listed for the 36" pipe are only valid for this project, in conjunction with the use of D.I., TR-Flex pipe.

SIZE OF PIPE	DEGREE OF BEND											
	11 1/4°				22 1/2°				45°			
	L	W	H	V (cy)	L	W	H	V (cy)	L	W	H	V (cy)
6"	12	48	18	0.2	15	43	36	0.5	28	55	24	0.8
8"	12	63	24	0.4	18	57	34	0.7	36	57	33	1.4
12"	20	54	36	0.8	37	62	37	1.7	48	62	51	3.1
16"	31	65	38	1.6	55	65	39	3.0	65	65	65	5.6
20"	40	56	50	2.4	57	66	59	4.8	82	74	68	8.8
24"	48	60	60	3.5	67	72	66	6.9	91	91	72	12.7
36"	N/A				N/A				N/A			
				0				0	L <sub>36</sub>	W	H <sub>36</sub>	V (cy)
									324	84	36	16

CONCRETE THRUST BLOCKS FOR VERTICAL BENDS ON WATER MAINS  
(C147)



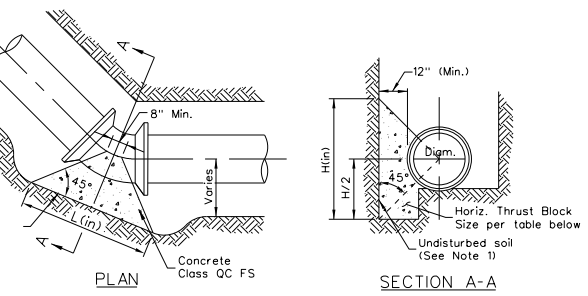
TYPICAL WATER SERVICE  
(C94)  
REV 4/12/2021



NOTES:

- CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION WITHIN THE RIGHT-OF-WAY REGARDING BACKFILL REQUIREMENTS.
- SAW CUT EXISTING PAVEMENT, SEAL JOINT PER ODOT ITEM 423 - CRACK SEALING, TYPE IV. INCLUDE COST IN BID PRICE FOR THE PROPOSED PAVEMENT.
- IF ADJACENT PAVEMENT IS DAMAGED OR UNDERMINED DURING CONSTRUCTION, ADDITIONAL PAVEMENT SHALL BE SAW CUT AND REMOVED IN ORDER TO PROVIDE A SOUND PAVEMENT EDGE.

PAY LIMITS - TRENCH & ROADWAY DETAIL FOR D.I.P.  
(C175)



NOTES:

- Thrust blocks shall be placed against undisturbed soil. Where it is not possible, the fill between the bearing surface and undisturbed soil must be compacted to at least 90% Standard Proctor density.
- Pipe, bolts, nuts and fittings shall be wrapped with polyethylene film to prevent corrosion and concrete adhesion.
- All joints to be Megalugged and/or restrained.

SIZE OF PIPE	DEGREE OF BEND							
	11 1/4°		22 1/2°		45°		90°	
	L	H	L	H	L	H	L	H
6"	16	8	16	10	24	14	32	18
8"	16	10	21	14	31	18	44	24
12"	21	16	32	20	48	26	66	36
16"	29	20	42	28	66	34	90	46
20"	37	24	50	36	73	48	107	60
24"	46	28	64	40	93	54	128	72
36"	53	36	80	48	114	66	-	-

HORIZONTAL THRUST BLOCKS  
(C130)

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