

**EARTHWORK FOR MAINLINE PAVEMENT**

ITEM 203, EMBANKMENT INCLUDES CONSTRUCTION EMBANKMENTS TO PLAN LINES AND INCLUDES FURNISHING AND PLACING SUITABLE BORROW MATERIAL AS SPECIFIED IN 203. BENCHING PER SECTION 800 OF THE GEOTECHNICAL DESIGN MANUAL SHALL BE FOLLOWED AND ANY TEMPORARY FILL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

EXCAVATED SOILS ON THE PROJECT SITE MAY NOT BE SUITABLE FOR EMBANKMENT USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ANY ON-SITE SOIL USED AS EMBANKMENT MEETS THE REQUIREMENTS OF 203.

EXCAVATION SHALL INCLUDE THE FULL DEPTH ASPHALT PAVEMENT SHOULDERS AND/OR PAVEMENT LIMITS AND IS INCLUDED IN THE VOLUMES PROVIDED BELOW.

THE FOLLOWING IS A SUMMARY OF ALL EARTHWORK QUANTITIES GENERATED BY THE CROSS SECTIONS.

IR-77

203, EXCAVATION	131225 CU. YD.
203, EMBANKMENT	57020 CU. YD.

SR-176

RAMP A	203, EXCAVATION	1624 CU. YD.
	203, EMBANKMENT	337 CU. YD.
RAMP E	203, EXCAVATION	487 CU. YD.
	203, EMBANKMENT	264 CU. YD.
RAMP B	203, EXCAVATION	1489 CU. YD.
	203, EMBANKMENT	1516 CU. YD.
RAMP C	203, EXCAVATION	1805 CU. YD.
	203, EMBANKMENT	1658 CU. YD.
RAMP D	203, EXCAVATION	1766 CU. YD.
	203, EMBANKMENT	1112 CU. YD.

IR-271

RAMP A	203, EXCAVATION	661 CU. YD.
	203, EMBANKMENT	0 CU. YD.
RAMP B	203, EXCAVATION	723 CU. YD.
	203, EMBANKMENT	58 CU. YD.
RAMP C	203, EXCAVATION	576 CU. YD.
	203, EMBANKMENT	5 CU. YD.
RAMP D	203, EXCAVATION	488 CU. YD.
	203, EMBANKMENT	49 CU. YD.

SR-21

RAMP F	203, EXCAVATION	2245 CU. YD.
	203, EMBANKMENT	813 CU. YD.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO ACCOUNT FOR CAVITY AREAS CREATED IN THE FULL DEPTH ASPHALT PAVEMENT REMOVAL AREAS:

203, EXCAVATION	2247 CU. YD.
203, EMBANKMENT	2527 CU. YD.

THE FOLLOWING GRAND TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

203, EXCAVATION	145336 CU. YD.
203, EMBANKMENT	65359 CU. YD.

**RUMBLE STRIPES (ASPHALT CONCRETE)**

THE FOLLOWING ITEMS AND QUANTITIES HAVE BEEN PROVIDED TO INSTALL RUMBLE STRIPES ALONG THE FOLLOWING ROUTES:

EDGE LINE:  
IR 77 NORTHBOUND: SLM 28.75 TO SLM 32.27  
IR 77 SOUTHBOUND: SLM 28.75 TO SLM 32.27

THE LONGITUDINAL JOINT PREPARATION PAY ITEM IS ONLY PROVIDED FOR THE LOCATIONS OF THE INSTALLATION OF THE CENTERLINE RUMBLE STRIPES. IN ALL OTHER AREAS WHERE JOINTS ARE REQUIRED THE CONTRACTOR SHALL FOLLOW CMS 401.

**OBJECT MARKERS AND CONDUIT IDENTIFICATION SIGNS**

OBJECT MARKERS WILL BE PLACED ON EACH APPROACH OFF THE LEFT AND RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. ONE OM3L AND ONE OM-3R WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND SHALL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 10.5' IN LENGTH.

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND. INSTALL SIGNS FOR THE FOLLOWING CONDUITS (CFN#):

CFN #	ENDS	CFN #	ENDS	CFN #	ENDS	CFN #	ENDS
1809158	1	1830176	2	1989936	1	1989970	1
1820914	2	1830178	2	1989937	1	1989971	1
1820915	2	1830179	2	1989938	1	1989972	1
1820920	2	1847706	2	1989950	1	1989973	1
1820921	2	1847707	2	1989960	1	1989974	1
1822009	2	1847709	2	1989961	1	1989975	1
1822010	1	1847711	2	1989962	1	1989976	1
1830170	2	1989922	1	1989963	1	1989977	1
1830171	1	1989923	1	1989964	1	1990047	1
1830172	2	1989924	2	1989965	1	1990048	1
1830174	2	1989925	1	1989969	1		

THE FOLLOWING QUANTITIES ARE FOR EACH APPROACH END:

- ITEM 630 – SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 – SIGN, FLAT SHEET, 6 SQ FT
- ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT
- ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 3 EACH
- ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 2 EACH

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 630 – SIGN, FLAT SHEET, 730.20	59 SQ FT
ITEM 630 – SIGN, FLAT SHEET	354 SQ FT
ITEM 630 – GROUND MOUNTED SUPPORT, NO. 2 POST	1239 FT
ITEM 630 – REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	177 EACH
ITEM 630 – REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	118 EACH

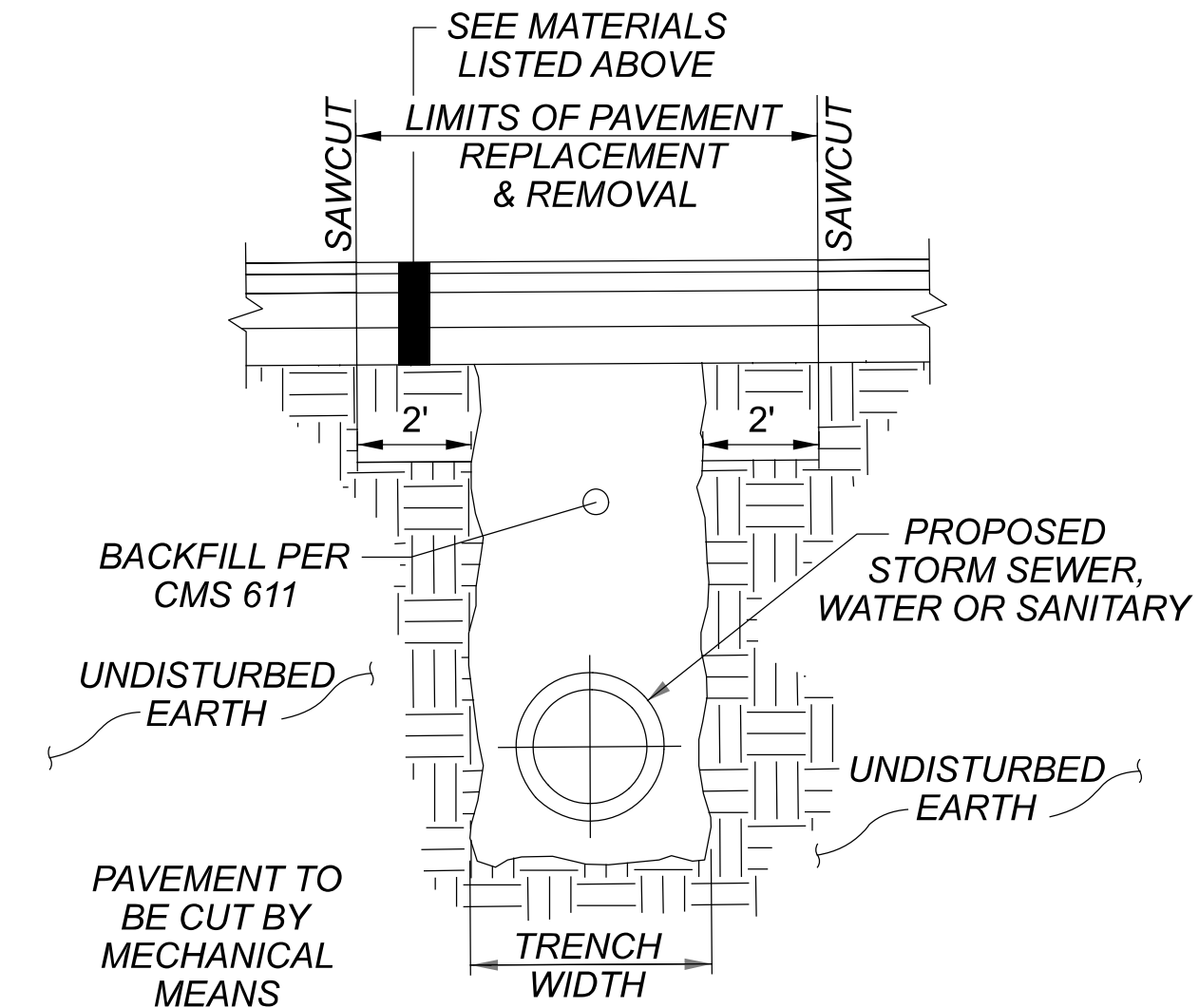
**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVAL OF PIPES**

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING THE INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 202 - PAVEMENT REMOVED	32 SY
ITEM 441 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), PG64-22, AS PER PLAN	2 CY
ITEM 407 - NON-TRACKING TACK COAT (0.055 GAL/SY)	2 GAL
ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (449)	2 CY
ITEM 301 - 4" ASPHALT CONCRETE BASE, (449), PG64-22	4 CY
ITEM 304 - 4" AGGREGATE BASE	4 CY

THE ABOVE QUANTITIES ARE BASED ON A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.



**PAVEMENT REPLACEMENT DETAIL  
N.T.S.**

**ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN**

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE PAVED SHOULDERS WITHOUT GUARDRAIL, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:  
SIEVE TOTAL PERCENT PASSING  
1- 1/2 " 100  
3/4 " 50-100  
NO. 4 35-70  
NO. 30 9-33  
NO. 200 0-13

AN ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR THIS WORK.

**ITEM 408 - PRIME COAT, AS PER PLAN**

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.



OC	SHEET NUMBER													FUNDING			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
	20	21	22	23	24	33	187	194	195	575	648	650	654	01/I/MS/04	02/I/MS/03	05/S>2/04							
	LS													LUMP				ROADWAY					
129635					32									35		1	201	11000	LS	CLEARING AND GRUBBING			
														129667			202	20010	36	EACH	HEADWALL REMOVED		
														1135			202	23000	129667	SY	PAVEMENT REMOVED		
														1135			202	30700	1135	FT	CONCRETE BARRIER REMOVED		
														85			202	32000	85	FT	CURB REMOVED		
														3427		199	202	35100	3427	FT	PIPE REMOVED, 24" AND UNDER		
														230			202	35200	230	FT	PIPE REMOVED, OVER 24"		
														16391			202	38000	16391	FT	GUARDRAIL REMOVED		
														3			202	58000	3	EACH	MANHOLE REMOVED		
														30	37	1	202	58100	67	EACH	CATCH BASIN REMOVED		
														1952			SPECIAL	20270000	1952	FT	FILL AND PLUG EXISTING CONDUIT	22	
														40824			202	75000	40824	FT	FENCE REMOVED		
		2												2			202	98100	2	EACH	REMOVAL MISC.: INSPECTION WELL	21	
		200												200			202	98200	200	FT	REMOVAL MISC.: CONDUIT	21	
														145336	631		203	10000	145967	CY	EXCAVATION		
														65359			203	20000	65359	CY	EMBANKMENT		
														17	8		203	20001	25	CY	EMBANKMENT, AS PER PLAN	21	
		25												2662	1328		204	13000	3990	CY	EXCAVATION OF SUBGRADE		
		3990												2662	1328		204	30010	3990	CY	GRANULAR MATERIAL, TYPE B		
		3990												7984	3986		204	50000	11970	SY	GEOTEXTILE FABRIC		
		11970																					
6814														4543	2271		206	10500	6814	TON	CEMENT		
261835														174557	87278		206	11000	261835	SY	CURING COAT		
257430														171620	85810		206	15010	257430	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP		
4407														2939	1468		206	15020	4407	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		
150														100	50		206	20000	150	HOUR	TEST ROLLING		
														LUMP			206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		
														292			209	60201	292	STA	LINEAR GRADING, AS PER PLAN	22	
														25924			606	15050	25924	FT	GUARDRAIL, TYPE MGS		
														300			606	15550	300	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS		
														37			606	26150	37	EACH	ANCHOR ASSEMBLY, MGS TYPE E MASH 2016		
														27			606	26550	27	EACH	ANCHOR ASSEMBLY, MGS TYPE T		
														21			606	35002	21	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
														9			606	35102	9	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		
														10214			SPECIAL	60655010	10214	FT	CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	23	
														12			SPECIAL	60655150	12	EACH	CABLE BARRIER, ANCHOR ASSEMBLY	23	
														116			SPECIAL	60655190	116	EACH	CABLE BARRIER, POST REFLECTOR	23	
														41678			607	15000	41678	FT	FENCE, TYPE 47		
														63			607	40500	63	EACH	GATE, TYPE 47		
														713			622	24000	713	FT	CONCRETE BARRIER, TYPE D		
														20			622	25000	20	EACH	CONCRETE BARRIER END SECTION, TYPE D		
														24			622	25050	24	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		
														LUMP			623	11000	LS		PROVIDING ELECTRONIC INSTRUMENTATION		
4														4			623	40520	4	EACH	RIGHT-OF-WAY MONUMENT, TYPE B		
6														6			SPECIAL	69098000	6	EACH	VERTICAL CLEARANCE	20	
					LS									LUMP			SPECIAL	69098400	LS		AS-BUILT CONSTRUCTION RECORD DRAWINGS	23	
	LS													LUMP			SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	20	
																					<b>EROSION CONTROL</b>		
														87		6	601	11000	93	SY	RIPRAP, TYPE D		
				25										93			601	21050	93	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
														301			601	21060	301	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		
														778			601	32004	778	CY	ROCK CHANNEL PROTECTION, TYPE A WITH GEOTEXTILE FABRIC		
														74			601	32104	74	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC		
														46		6	601	32204	46	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC		
														2			659	00100	2	EACH	SOIL ANALYSIS TEST		
														26935			659	00300	26935	CY	TOPSOIL		
														190487			659	10000	190487	SY	SEEDING AND MULCHING		
														9525			659	14000	9525	SY	REPAIR SEEDING AND MULCHING		
														9525			659	15000	9525	SY	INTER-SEEDING		

GENERAL SUMMARY

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231  
 DESIGNER  
**TQD**  
 REVIEWER  
 DRJ 10/04/22  
 PROJECT ID  
 111405  
 SHEET TOTAL  
 181 | 927

SHEET NUMBER																						ITEM	ITEM. EXT.	TOTAL	UNIT	DESCRIPTION		
198	199	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	568	573						
16		2	2					1		2	2	1	2	2	2	2		1	1				202	20010	36	EACH	HEADWALL REMOVED	
3,259														8		12		90	58				202	35100	3,427	FT	PIPE REMOVED, 24" AND UNDER	
		24	40	38				12		24	24	4	24		40								202	35200	230	FT	PIPE REMOVED, OVER 24"	
2				1																			202	58000	3	EACH	MANHOLE REMOVED	
37																							202	58100	37	EACH	CATCH BASIN REMOVED	
																					631		203	10000	631	CY	EXCAVATION	
				LS																			503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, STA. 900+15.34	
LS																							503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, STA. 918+12.35	
																							503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, STA. 3890+91.22	
																							503	21100	10	CY	UNCLASSIFIED EXCAVATION	
		7	4			6	7	9		5	4	8	8	5	8	5	8	3	3				601	11000	93	SY	RIPRAP, TYPE D	
																							601	21050	68	SY	TIED CONCRETE BLOCK MAT, TYPE 1 WITH UNDERLAYMENT	
		33				20	68						16		10								601	32004	778	CY	ROCK CHANNEL PROTECTION, TYPE A WITH GEOTEXTILE FABRIC	
6			7					10		10	8	22		4			7						601	32104	74	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	
																							601	32204	46	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
42																2				2			602	20000	23.2	CY	CONCRETE MASONRY	
6.65		3.56	1.52					0.92		2.18	1.68	0.76	1.52	0.86	1.38	0.62		0.33	0.33	0.92			605	11110	38,514	FT	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
																							605	13300	1,711	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
																							605	14020	86,521	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
																							611	00510	3,753	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	
303																							611	05900	303	FT	15" CONDUIT, TYPE B	
2,025																							611	06100	2,025	FT	15" CONDUIT, TYPE C	
586																							611	06700	586	FT	15" CONDUIT, TYPE F, TYPE C 707.05, OR 707.21	
																16							611	07200	16	FT	18" CONDUIT, TYPE A, 706.02	
																		102	62				611	07400	164	FT	18" CONDUIT, TYPE B	
212																							611	07600	212	FT	18" CONDUIT, TYPE C	
785																							611	07600	785	FT	18" CONDUIT, TYPE C, 706.02	
65																							611	08200	65	FT	18" CONDUIT, TYPE F, TYPE C 707.05, OR 707.21	
														12									611	10200	12	FT	24" CONDUIT, TYPE A, 706.02	
75																							611	10400	75	FT	24" CONDUIT, TYPE B	
50																							611	11200	50	FT	24" CONDUIT, TYPE F, TYPE C 707.05, OR 707.21	
288																							611	13600	288	FT	30" CONDUIT, TYPE C	
			40									28	25		40								611	16200	40	FT	36" CONDUIT, TYPE A, 706.02	
																							611	16200	93	FT	36" CONDUIT, TYPE A, 707.01	
				38																			611	16400	38	FT	36" CONDUIT, TYPE B, 707.01	
											24												611	19200	24	FT	42" CONDUIT, TYPE A, 706.02	
								12															611	19200	12	FT	42" CONDUIT, TYPE A, 707.01	
		24								24													611	20700	24	FT	48" CONDUIT, TYPE A, 706.02	
																							611	23600	24	FT	60" CONDUIT, TYPE A, 707.02	
																							611	96600	750	FT	6" CONDUIT, BORED OR JACKED, 748.06	
986																							611	96600	986	FT	15" CONDUIT, BORED OR JACKED, 748.06	
312																							611	96600	312	FT	18" CONDUIT, BORED OR JACKED, 748.06	
198																					151		611	96600	349	FT	24" CONDUIT, BORED OR JACKED, 748.06	
406																							611	96600	406	FT	30" CONDUIT, BORED OR JACKED, 748.06	
1																							611	98150	1	EACH	CATCH BASIN, NO. 3	
21																							611	98230	21	EACH	CATCH BASIN, NO. 4	
5																							611	98300	5	EACH	CATCH BASIN, NO. 5	
2																							611	98341	2	EACH	CATCH BASIN, NO. 5A	
2																							611	98434	2	EACH	CATCH BASIN, NO. 8A	
1																							611	98510	1	EACH	CATCH BASIN, NO. 2-3	
1																							611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
1																							611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
3				1														1					611	99574	5	EACH	MANHOLE, NO. 3	
																					34		611	99710	34	EACH	PRECAST REINFORCED CONCRETE OUTLET	
																							620	00501	34	EACH	DELINEATOR, POST GROUND MOUNTED, AS PER PLAN	
		5,790																					659	00300	5,790	CY	TOPSOIL	
		52,110																					670	00500	52,110	SY	SLOPE EROSION PROTECTION	
2,500																							670	00700	2,500	SY	DITCH EROSION PROTECTION	
2,614																							670	00720	2,614	SY	DITCH EROSION PROTECTION MAT, TYPE B	

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET, SUITE 200  
 ANN ARBOR, MI 48106  
 (313) 434-1985  
 www.arcadis.com

DESIGNER  
**MAH**

REVIEWER  
**PSB 9-3-22**

PROJECT ID  
**111405**

SHEET TOTAL  
**194 | 927**

SHEET NUMBER																						ITEM	ITEM. EXT.	TOTAL	UNIT	DESCRIPTION	
198	199	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	568	573	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN
	LS																						832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS
	LS																						832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE
	935,000																						832	30000	935,000	EACH	EROSION CONTROL
	115																						836	10000	115	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1
	1,952																						SPECIAL	70000	1,952	FT	FILL AND PLUG EXISTING CONDUIT
		520																					833	10000	520	FT	CULVERT (STA. 874+70.70) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 60" DIAMETER
		520																					899	10000	520	FT	CULVERT (STA. 874+70.70) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 60" DIAMETER
			400																				833	10000	400	FT	CULVERT (STA. 880+81.58) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 36" DIAMETER
			400																				899	10000	400	FT	CULVERT (STA. 880+81.58) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 36" DIAMETER
				378																			833	10000	378	FT	CULVERT (STA. 900+15.34) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 36" DIAMETER
				378																			899	10000	378	FT	CULVERT (STA. 900+15.34) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 36" DIAMETER
					280																		833	10000	280	FT	CULVERT (STA. 905+30.72) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 48" DIAMETER
					280																		899	10000	280	FT	CULVERT (STA. 905+30.72) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 48" DIAMETER
						248																	833	10000	248	FT	CULVERT (STA. 927+31.88) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 54" DIAMETER
						248																	899	10000	248	FT	CULVERT (STA. 927+31.88) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 54" DIAMETER
							284																833	10000	284	FT	CULVERT (STA. 941+57.97) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 60" DIAMETER
							284																899	10000	284	FT	CULVERT (STA. 941+57.97) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 60" DIAMETER
								216															833	10000	216	FT	CULVERT (STA. 948+86.86) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 42" DIAMETER
								216															899	10000	216	FT	CULVERT (STA. 948+86.86) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 42" DIAMETER
									374														833	10000	374	FT	CULVERT (STA. 958+67.83) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 54" DIAMETER
									374														899	10000	374	FT	CULVERT (STA. 958+67.83) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 54" DIAMETER
										348													833	10000	348	FT	CULVERT (STA. 1019+32.03) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 36" DIAMETER
										348													899	10000	348	FT	CULVERT (STA. 1019+32.03) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 36" DIAMETER
											477												833	10000	477	FT	CULVERT (STA. 1025+21.03) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 36" DIAMETER
											477												899	10000	477	FT	CULVERT (STA. 1025+21.03) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 36" DIAMETER
												232											833	10000	232	FT	CULVERT (STA. 1054+09.98) - OPTION A: (SPRAY APPLIED STRUCTURAL LINER) CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT, 36" DIAMETER
												232											899	10000	232	FT	CULVERT (STA. 1054+09.98) - OPTION B: (CURED-IN-PLACE PIPE LINER) CURED-IN-PLACE PIPE LINER, 36" DIAMETER

DRAINAGE SUBSUMMARY

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET, SUITE 200  
 ANTON, IOWA 52438  
 (319) 434-1995  
 www.arcadis.com

DESIGNER  
**MAH**

REVIEWER  
 PSB 9-3-22

PROJECT ID  
 111405

SHEET TOTAL  
 195 927



SHEET NO.	REF. NO.	STATION		ROAD	SIDE	CFN	LOCATION																														
		FROM	TO				202	202	202	202	202	SPECIAL	503	601	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	670	670
208	D15	917+28.46		I-77	LT																																
208	D16	917+28.46		I-77	RT	2E+06																															
208	D17	917+28.46	918+12.35	I-77	RT																																
208	D18	917+39.00	916+53.00	I-77	LT																																
208	DR15	917+39.00	917+40.30	I-77	LT	2E+06																															
208	DR16	917+40.03		I-77	LT																																
208	DR17	917+40.68		I-77	RT	2E+06																															
208	DR18	917+39.63		I-77	RT																																
209	EC16	926+40.00	927+90.00	I-77	CL																																
209	D19	927+90.00		I-77	CL	2E+06																															
209	DR19	927+98.75		I-77	LT																																
209	DR20	927+98.73		I-77	RT	2E+06																															
210	EC17	937+60.00	939+10.00	I-77	CL																																
210	DR21	938+99.03		I-77	LT																																
210	DR22	938+98.56		I-77	RT																																
210	D20	939+10.00		I-77	CL																																
211	EC18	947+50.00	949+00.00	I-77	CL																																
211	D21	949+00.00		I-77	CL																																
211	DR23	949+00.05		I-77	LT																																
211	DR24	949+01.22		I-77	RT																																
211	EC19	954+75.00	956+25.00	I-77	CL																																
211	D22	956+25.00		I-77	CL																																
211	DR25	956+37.90		I-77	LT																																
212	EC20	968+50.00	970+00.00	I-77	CL																																
212	DR26	969+99.39		I-77	LT																																
212	DR27	970+00.19	977+89.40	I-77	RT																																
212	D23	970+00.00		I-77	CL																																
213	EC21	976+35.00	977+85.00	I-77	CL																																
213	D24	977+85.00		I-77	LT	2E+06																															
213	DR28	977+89.49		I-77	LT																																
213	DR29	977+89.40		I-77	RT	2E+06																															
214	EC22	987+40.00	988+90.00	I-77	CL																																
214	D25	988+90.00		I-77	CL	2E+06																															
214	DR30	988+99.56		I-77	LT	2E+06																															
214	EC23	994+50.00	996+00.00	I-77	CL																																
214	D26	996+00.00	1002+00.00	I-77	CL																																
215	EC24	1000+60.00	1002+10.00	I-77	CL																																
215	DR31	1001+98.82		I-77	LT																																
215	DR32	1001+98.67		I-77	RT	2E+06																															
215	D27	1002+10.00		I-77	CL	2E+06																															
215	EC25	1003+50.00	1005+00.00	I-77	CL																																
215	D28	1005+00.00		I-77	CL	2E+06																															
215	DR33	1005+20.52		I-77	CL	2E+06																															
215	DR34	1007+53.41		I-77	CL	2E+06																															
215	D29	1007+65.00		I-77	LT	2E+06																															
215	EC26	1007+65.00	1009+15.00	I-77	CL																																
SUB-TOTALS CARRIED TO SHEET							198	6	870		1	19	1482			18	2.74	35	696	379	65		785			288	303	189	108	72							

ESTIMATED QUANTITIES

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET, SUITE 200  
 ARKANSAS, MISSOURI 64408  
 PH: (336) 434-1965  
 www.arcadis.com

DESIGNER  
**MAH**

REVIEWER  
**PSB** 9-3-22

PROJECT ID  
**111405**

SHEET TOTAL  
 197 927

**SUM-77-28.75**

MODEL: DS506-3 PAPER SIZE: 17x11 (in.) DATE: 8/14/2023 TIME: 2:05:34 PM USER: MHHebebrand pww\jnet-pw\benley.com\jnet-pw-01\Documents\Projects\6749011405402-Engineering-ARCADIS\Drainage\Sheets\11405\_DS506.dgn

SHEET NO.	REF. NO.	LOCATION				CFN	DESCRIPTION																																												
		STATION		ROAD	SIDE		EACH	FT	EACH	FT	EACH	FT	SPECIAL	503	601	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	670	670	836													
		FROM	TO																																				HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	MANHOLE REMOVED	CATCH BASIN REMOVED	FILL AND PLUG EXISTING CONDUIT	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, STA. 918+12.35	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	CONCRETE MASONRY	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	15" CONDUIT, TYPE F, TYPE C 707.05, OR 707.21
216	DR35	1012+55.72	1012+97.14	I-77	RT	2	38				59																																								
216	D30	1013+00.00		I-77	LT	2E+06								2	0.3																																				
216	EC27	1013+00.00	1021+00.00	I-77	LT																																														
217	D31	1023+10.00		I-77	LT																																														
218	D32	1859+70.75	886+97.99	SR-176 Ramp A	LT	2E+06								2	0.3	67																																			
218	DR36	1859+70.75	886+97.06	SR-176 Ramp A	LT	2E+06	1	242																																											
220	D33	3886+54.00		SR-176 Ramp D	LT	2E+06																																													
220	D34	3886+54.00	3885+80.00	SR-176 Ramp D	RT									2	0.3																																				
220	DR37	3885+79.66		SR-176 Ramp D	RT		1	65																																											
220	DR38	3886+53.47		SR-176 Ramp D	LT	2E+06																																													
220	DR39	3886+52.21		SR-176 Ramp D	RT																																														
220	D35	3899+06.00		SR-176 Ramp D	RT	2E+06								2	0.3	46																																			
227	D36	918+12.35	917+01.32	I-77/SR-271	RT	2E+06							LS	6		0.7																																			
227	DR40	918+26.02	917+06.93	I-77/SR-271	RT	2E+06	1	224			1																																								
231	D37	9019+51.00	9020+53.00	SR-21 RAMP F	LT																																														
231	D38	9020+53.00		SR-21 RAMP F	LT	2E+06								2	0.3	46																																			
231	DR41	9019+51.37		SR-21 RAMP F	LT	2E+06	1	100																																											
231	DR42	9019+51.37	9020+53.27	SR-21 RAMP F	LT																																														
SUB-TOTALS THIS SHEET						6	988			1	4	59	LS	6	10	2.07	268	102	227																																
TOTALS CARRIED FROM SHEET 196						4	1401				14	411			14	1.84		1227	98																																
TOTALS CARRIED FROM SHEET 197						6	870			1	19	1482			18	2.74	35	696	379	65																															
TOTALS CARRIED TO DRAINAGE SUBSUMMARY						16	3259			2	37	1952	LS	6	42	6.65	303	2025	704	65																															

**ESTIMATED QUANTITIES**

DESIGN AGENCY  
**ARCADIS**  
 222 SOUTH MAIN STREET, SUITE 200  
 ARIZONA, AZ 85143-8806  
 (303) 434-1995  
 www.arcadis.com

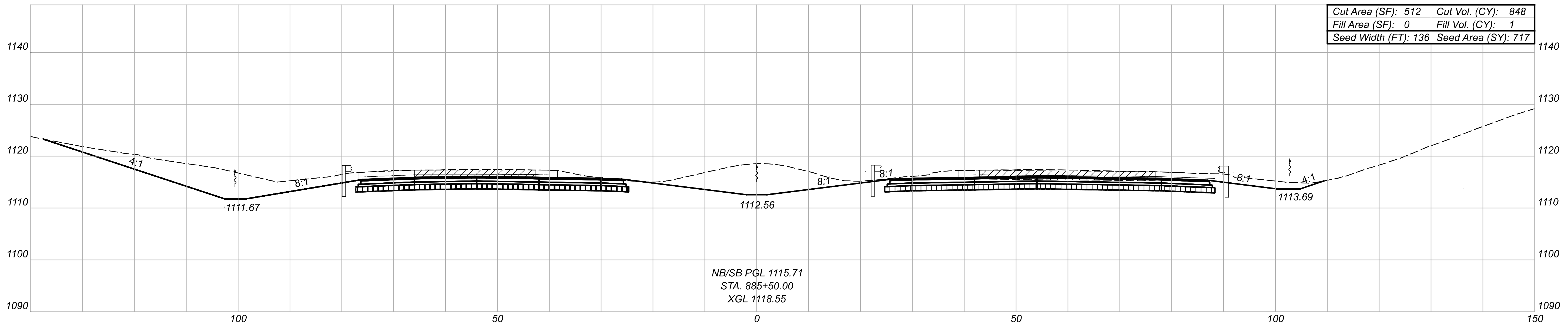
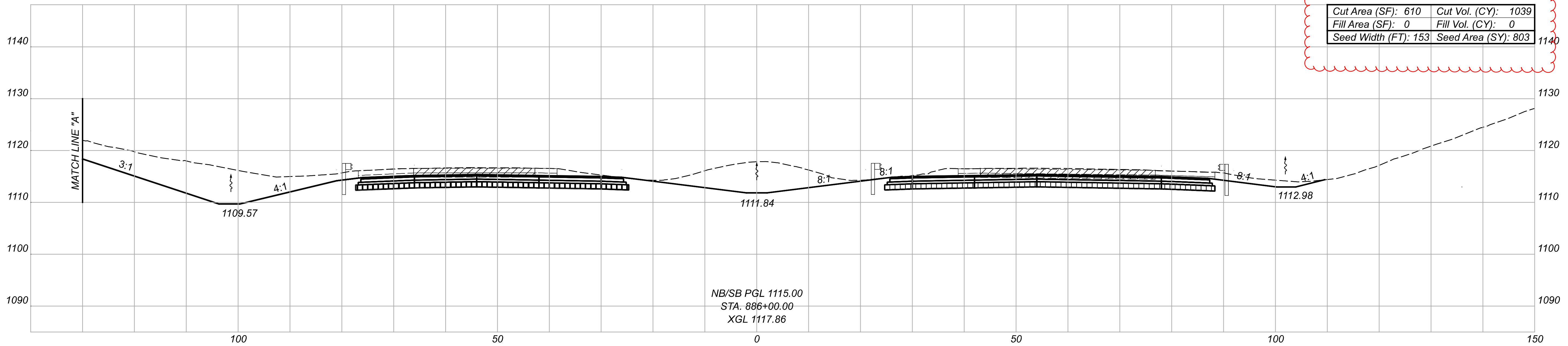
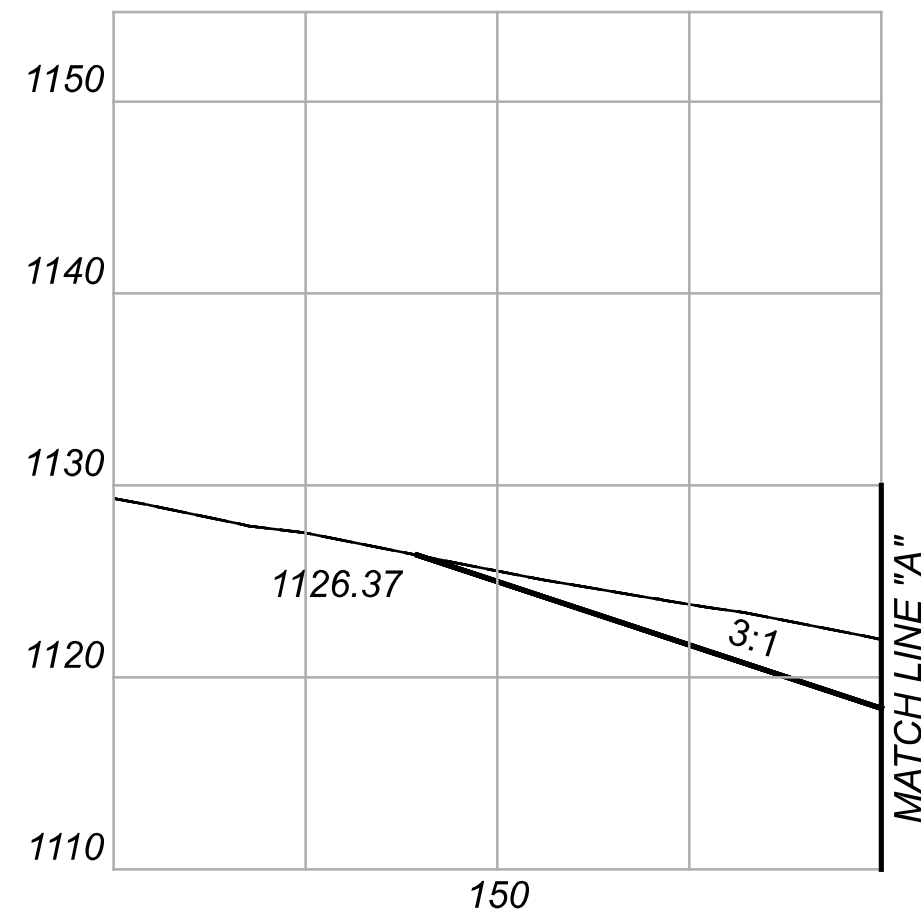
DESIGNER  
**MAH**


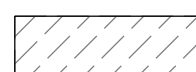
REVIEWER  
 PSB 9-3-22

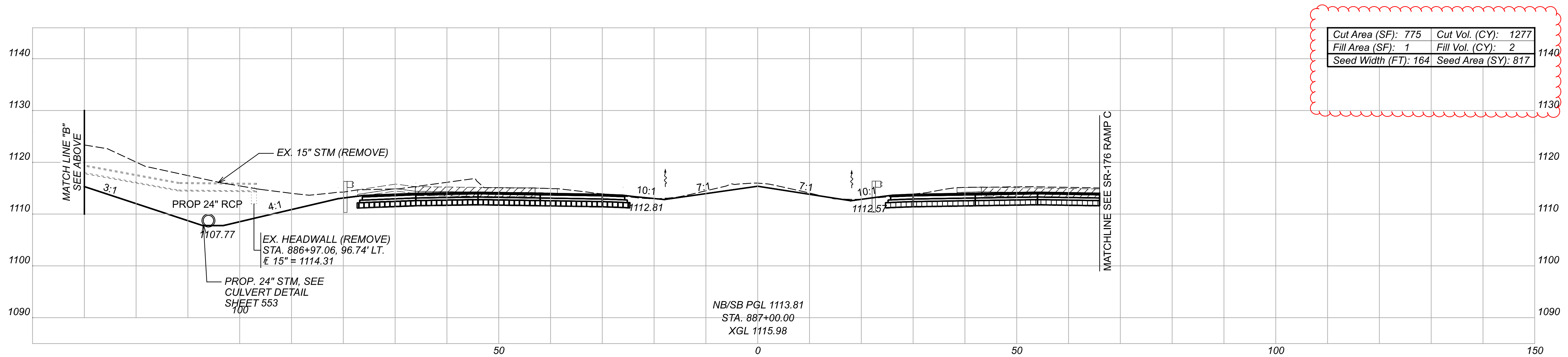
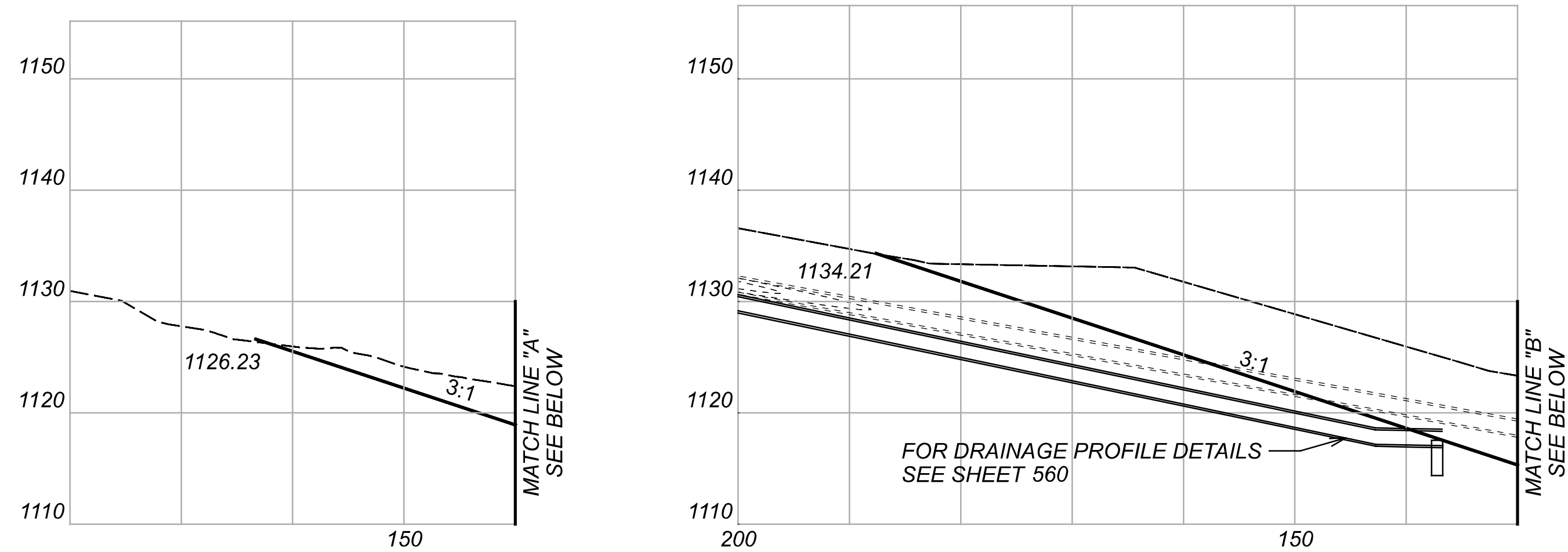
PROJECT ID  
 111405

SHEET TOTAL  
 198 | 927

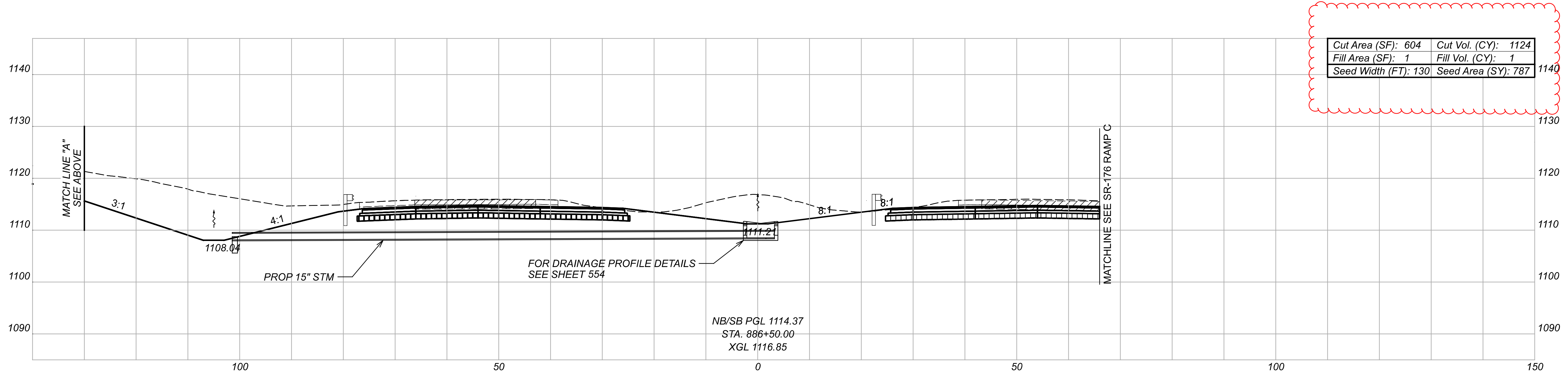




-  CEMENT STABILIZATION
-  PAVEMENT REMOVAL



Cut Area (SF): 775	Cut Vol. (CY): 1277
Fill Area (SF): 1	Fill Vol. (CY): 2
Seed Width (FT): 164	Seed Area (SY): 817



Cut Area (SF): 604	Cut Vol. (CY): 1124
Fill Area (SF): 1	Fill Vol. (CY): 1
Seed Width (FT): 130	Seed Area (SY): 787

- CEMENT STABILIZATION
- PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 886+50.00 TO STA. 887+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

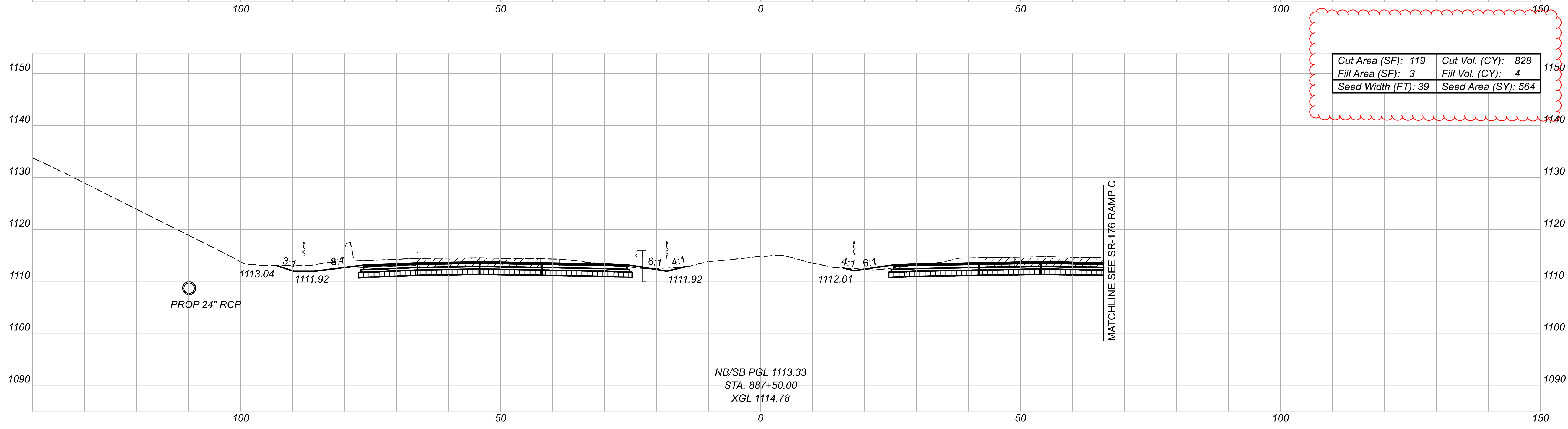
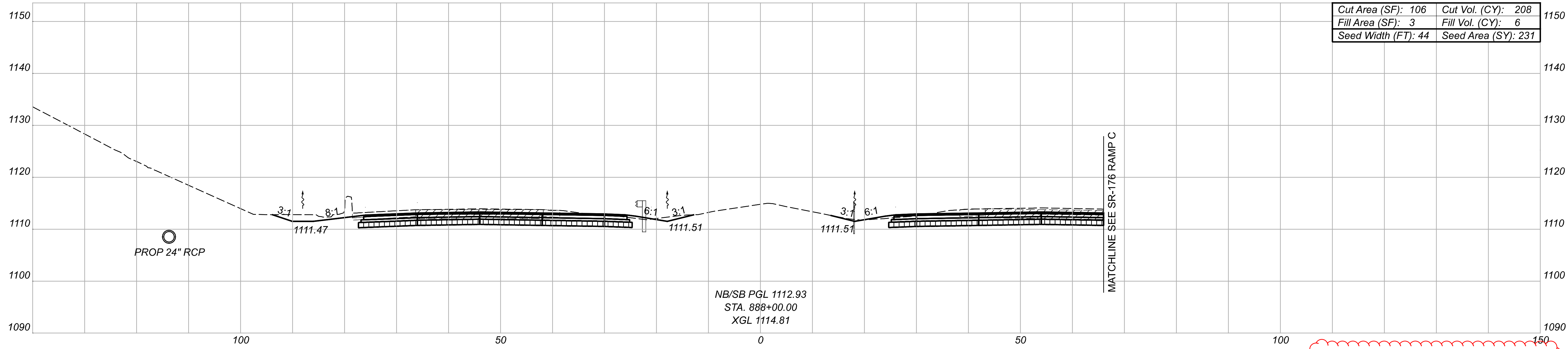
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

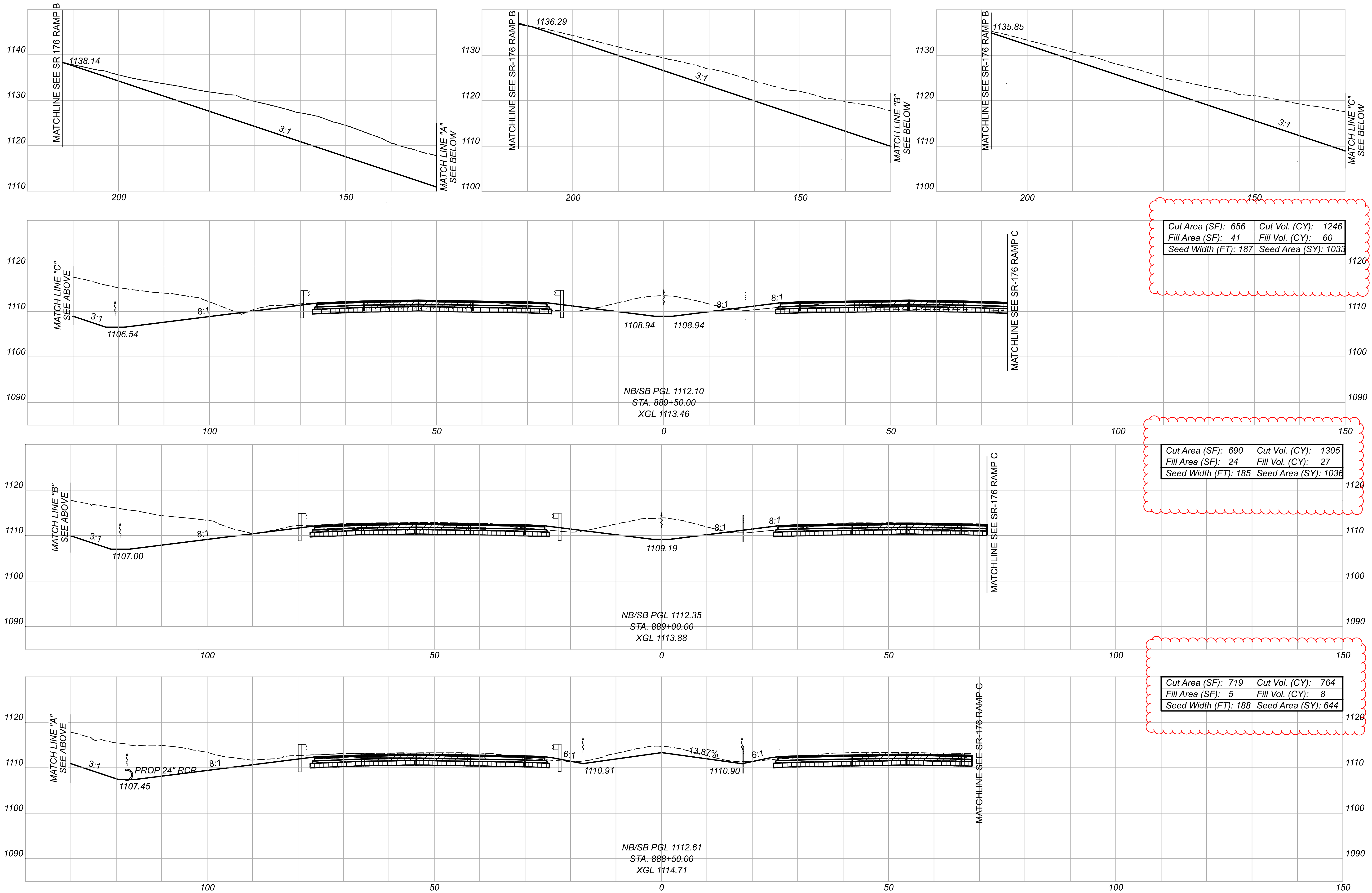
SHEET	TOTAL
271	927





CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 887+50.00 TO STA. 888+00.00



Cut Area (SF): 656	Cut Vol. (CY): 1246
Fill Area (SF): 41	Fill Vol. (CY): 60
Seed Width (FT): 187	Seed Area (SY): 1033

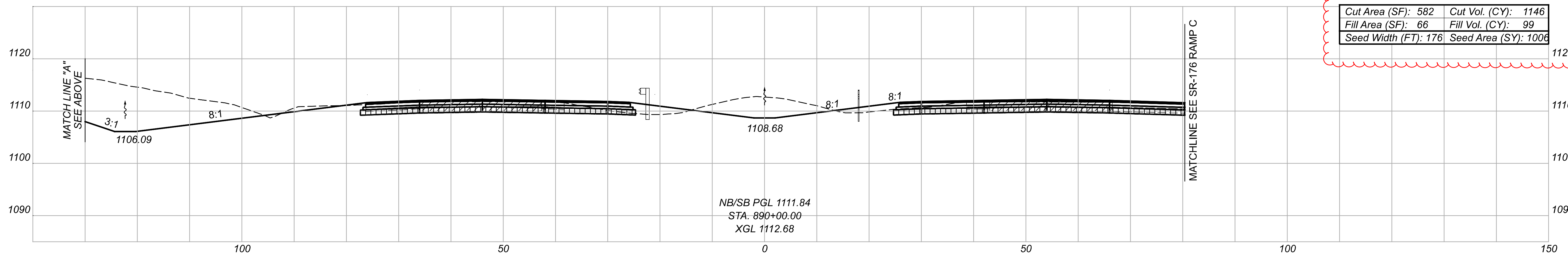
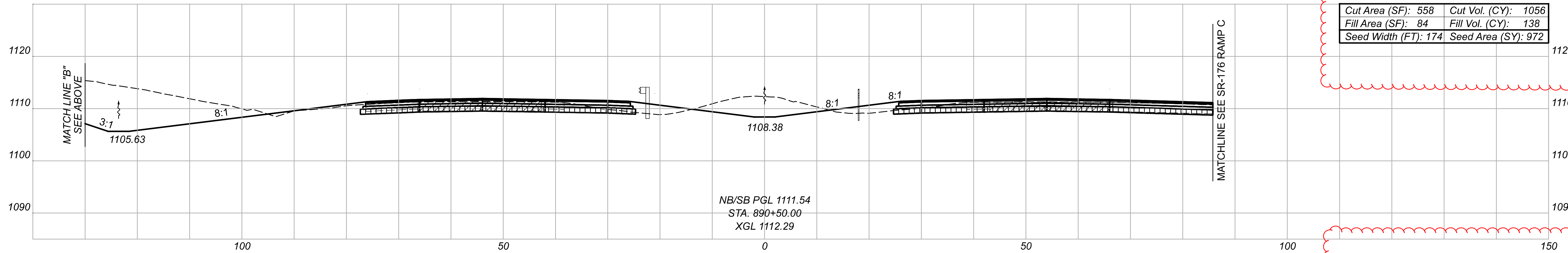
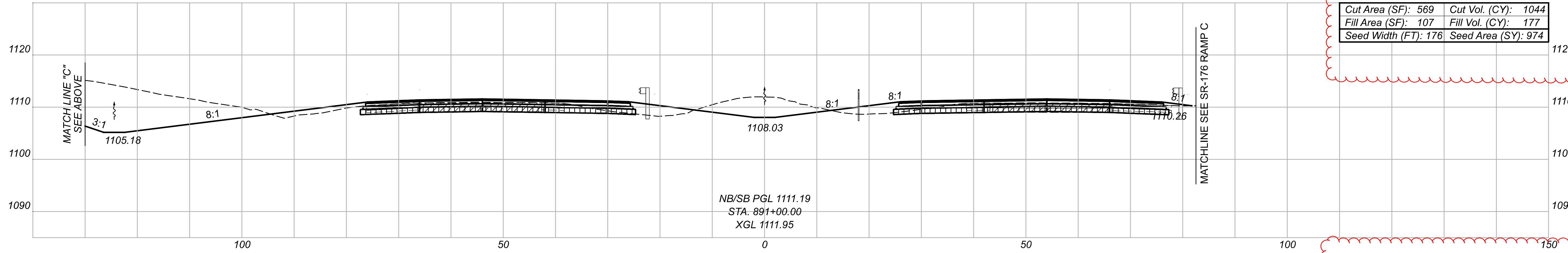
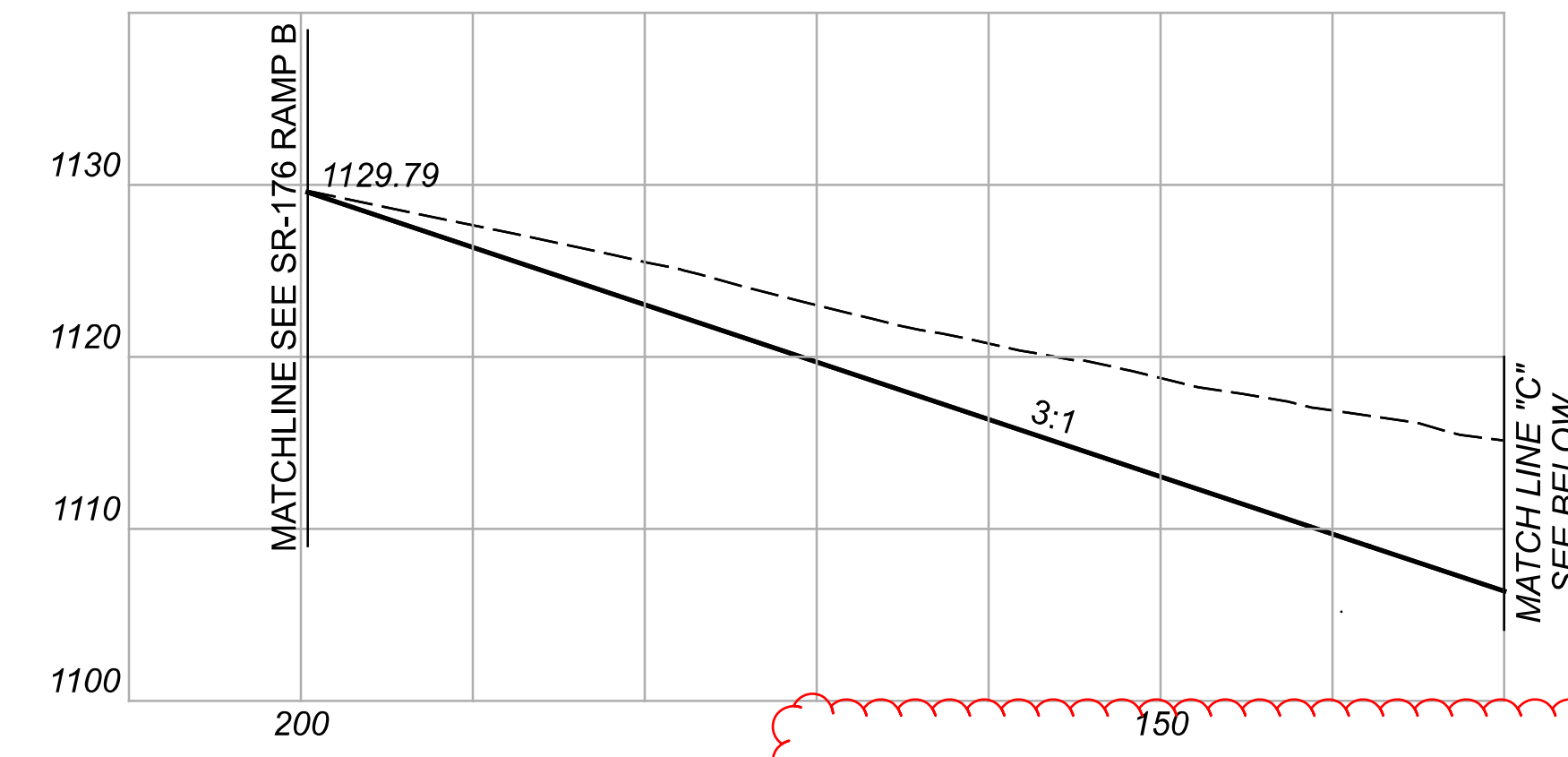
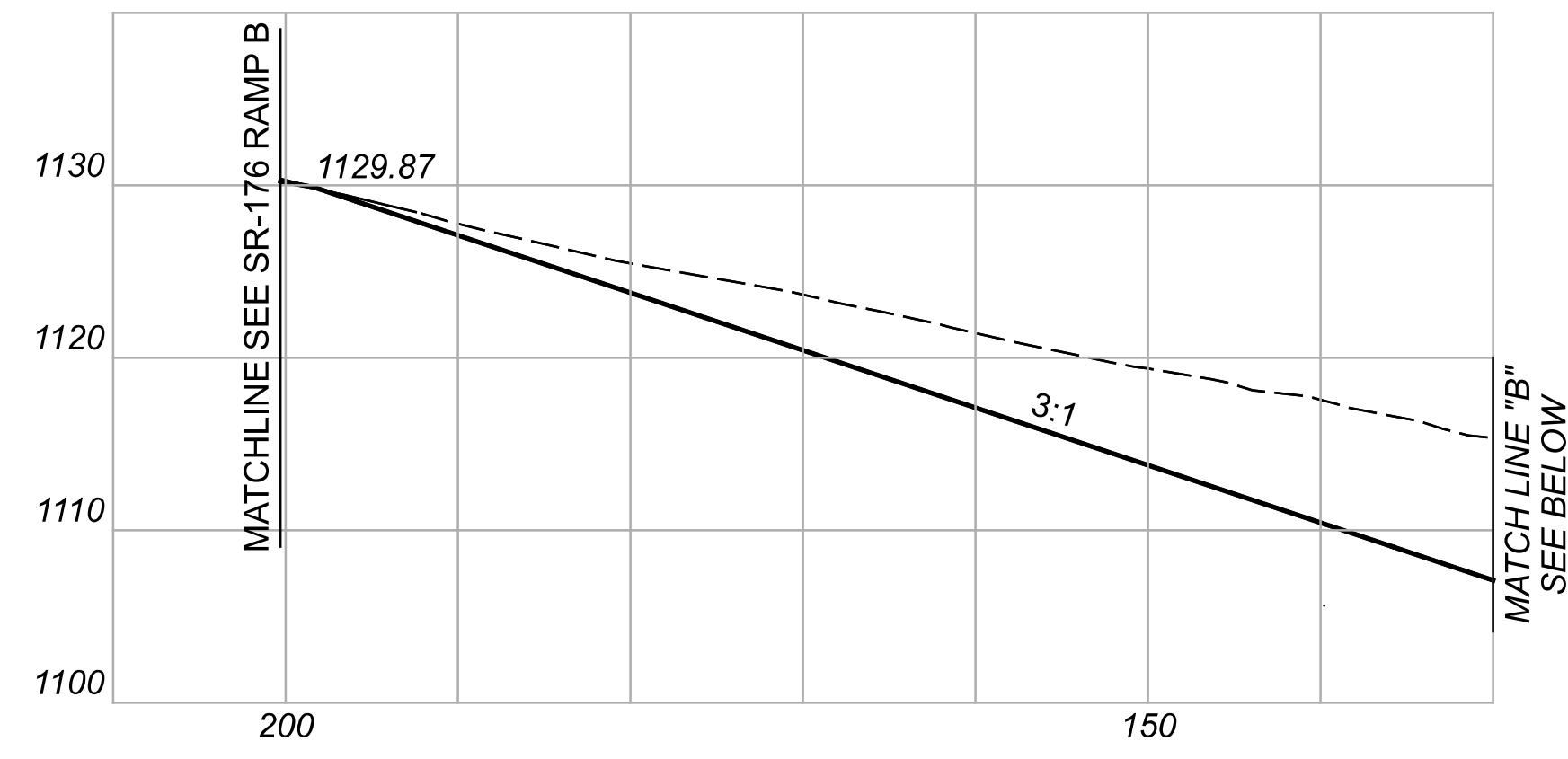
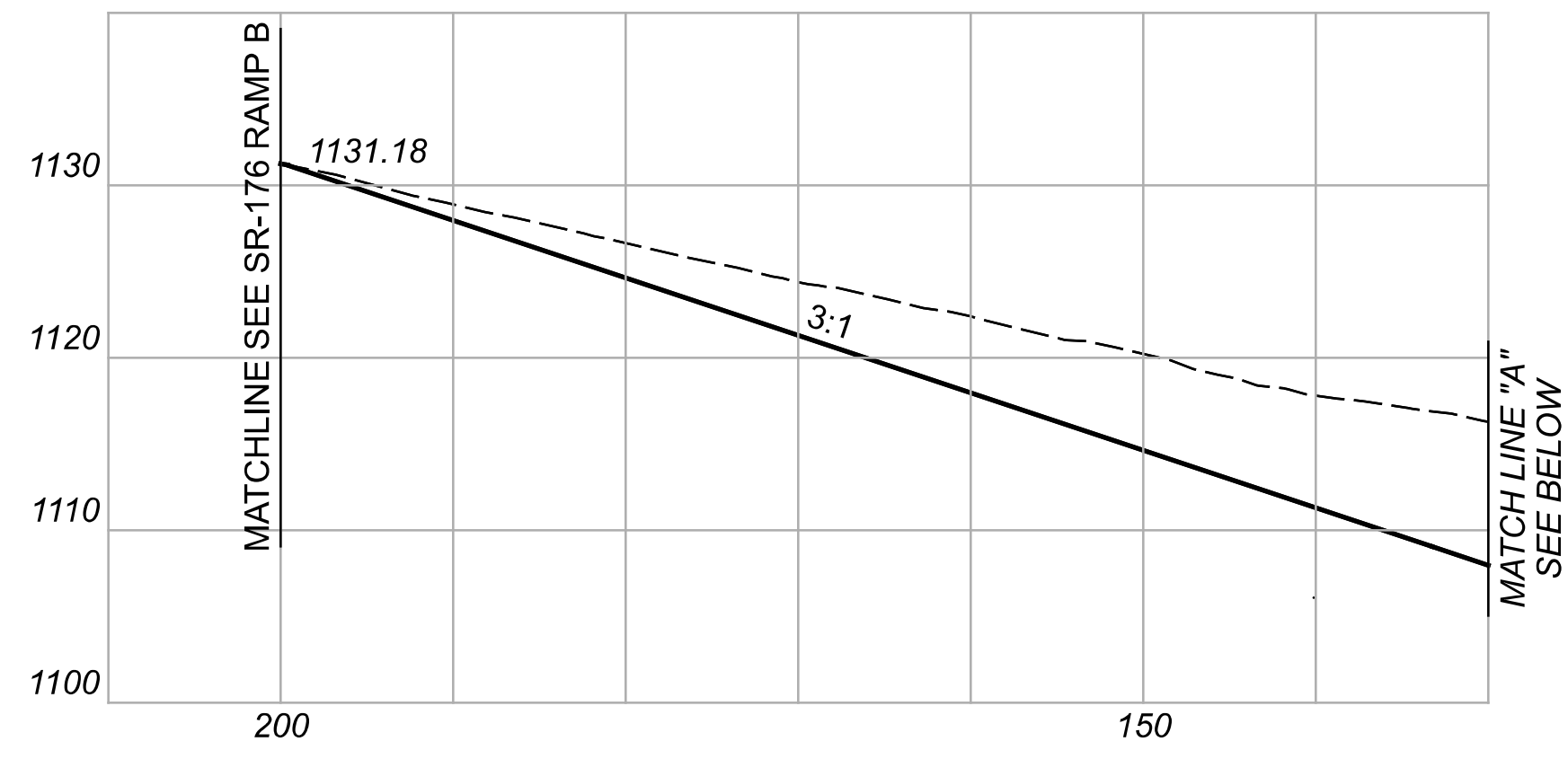
Cut Area (SF): 690	Cut Vol. (CY): 1305
Fill Area (SF): 24	Fill Vol. (CY): 27
Seed Width (FT): 185	Seed Area (SY): 1036

Cut Area (SF): 719	Cut Vol. (CY): 764
Fill Area (SF): 5	Fill Vol. (CY): 8
Seed Width (FT): 188	Seed Area (SY): 644

CEMENT STABILIZATION  
 PAVEMENT REMOVAL

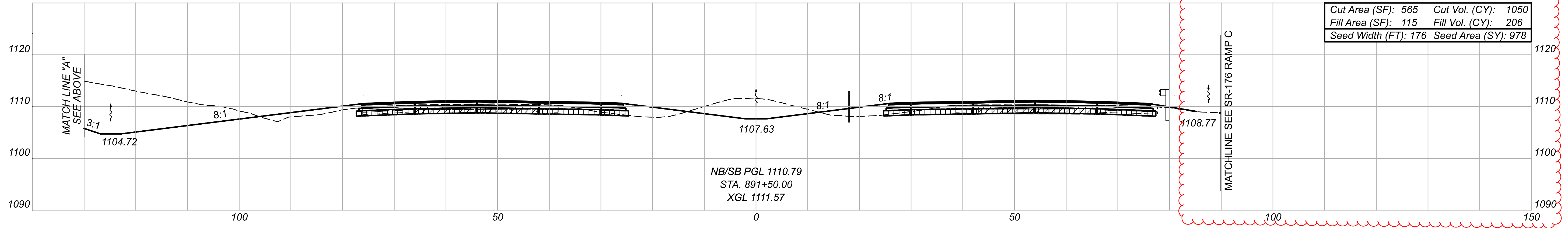
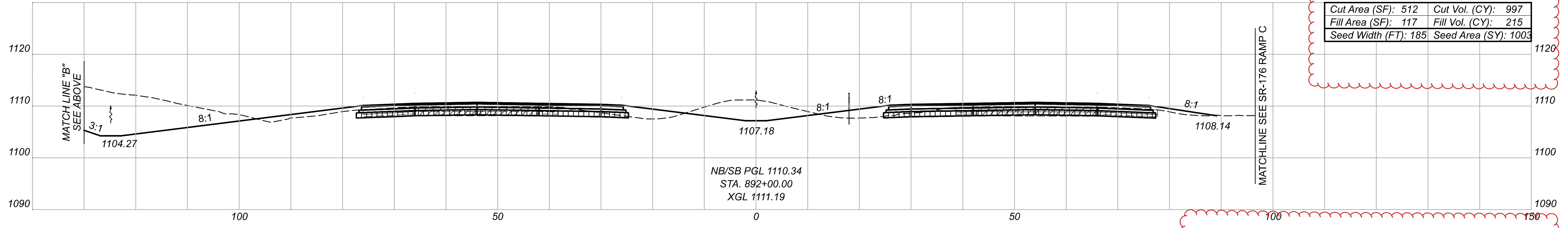
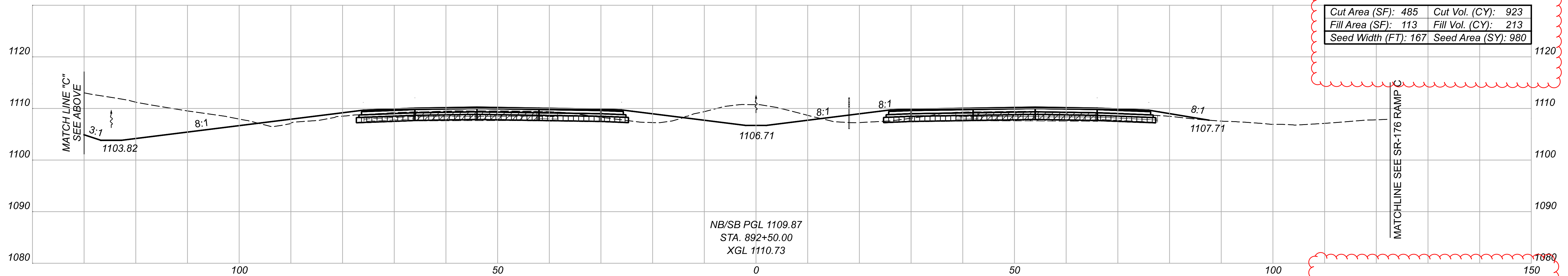
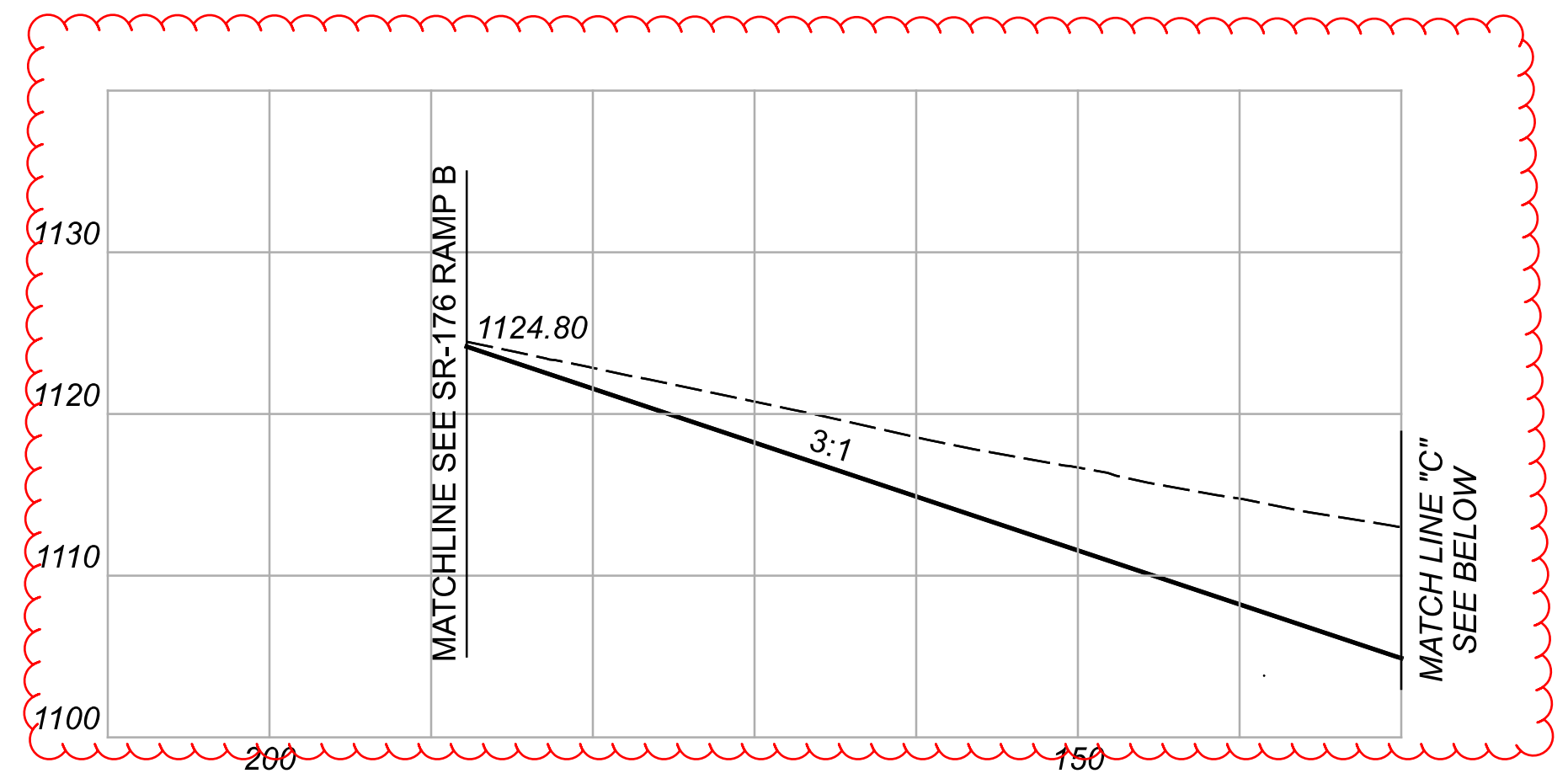
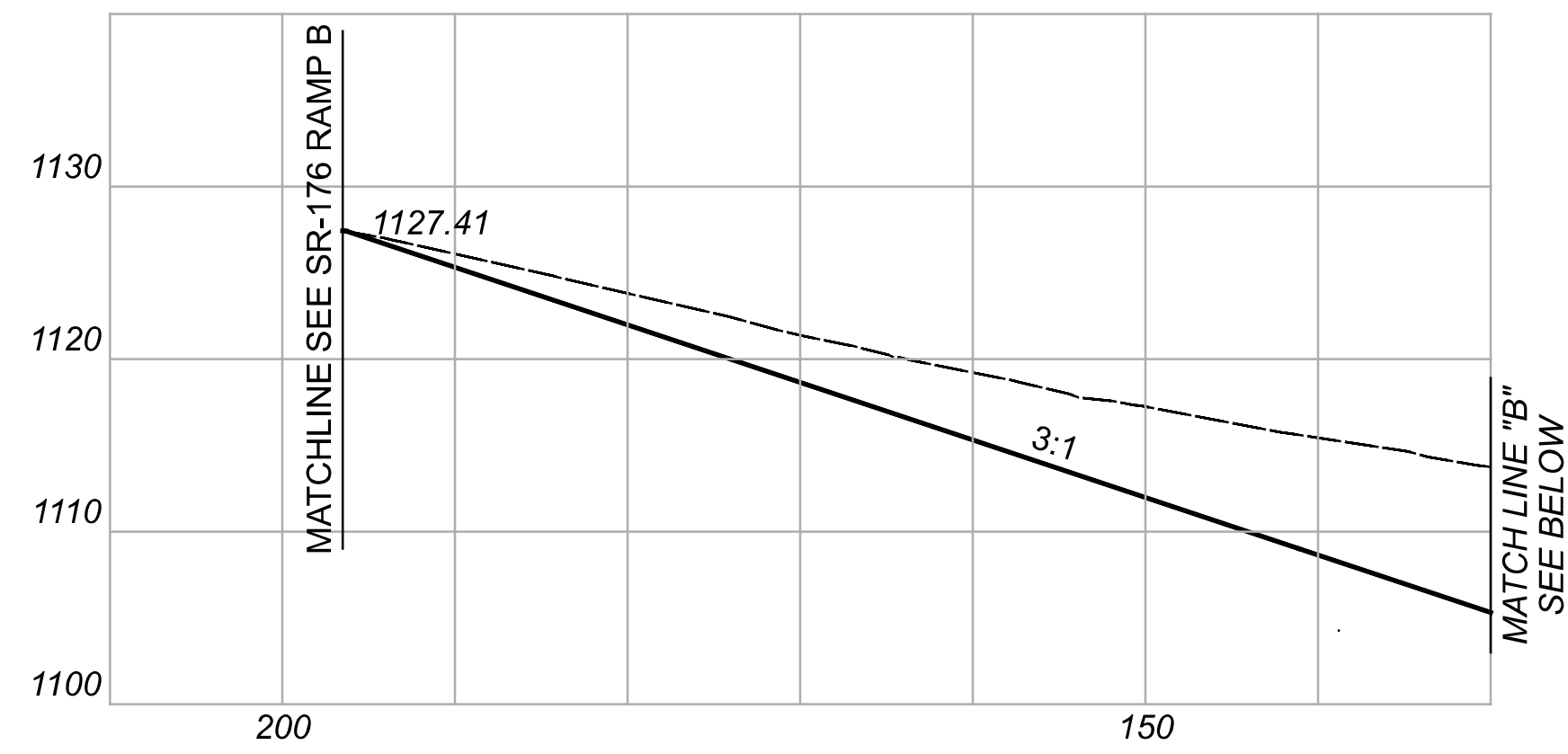
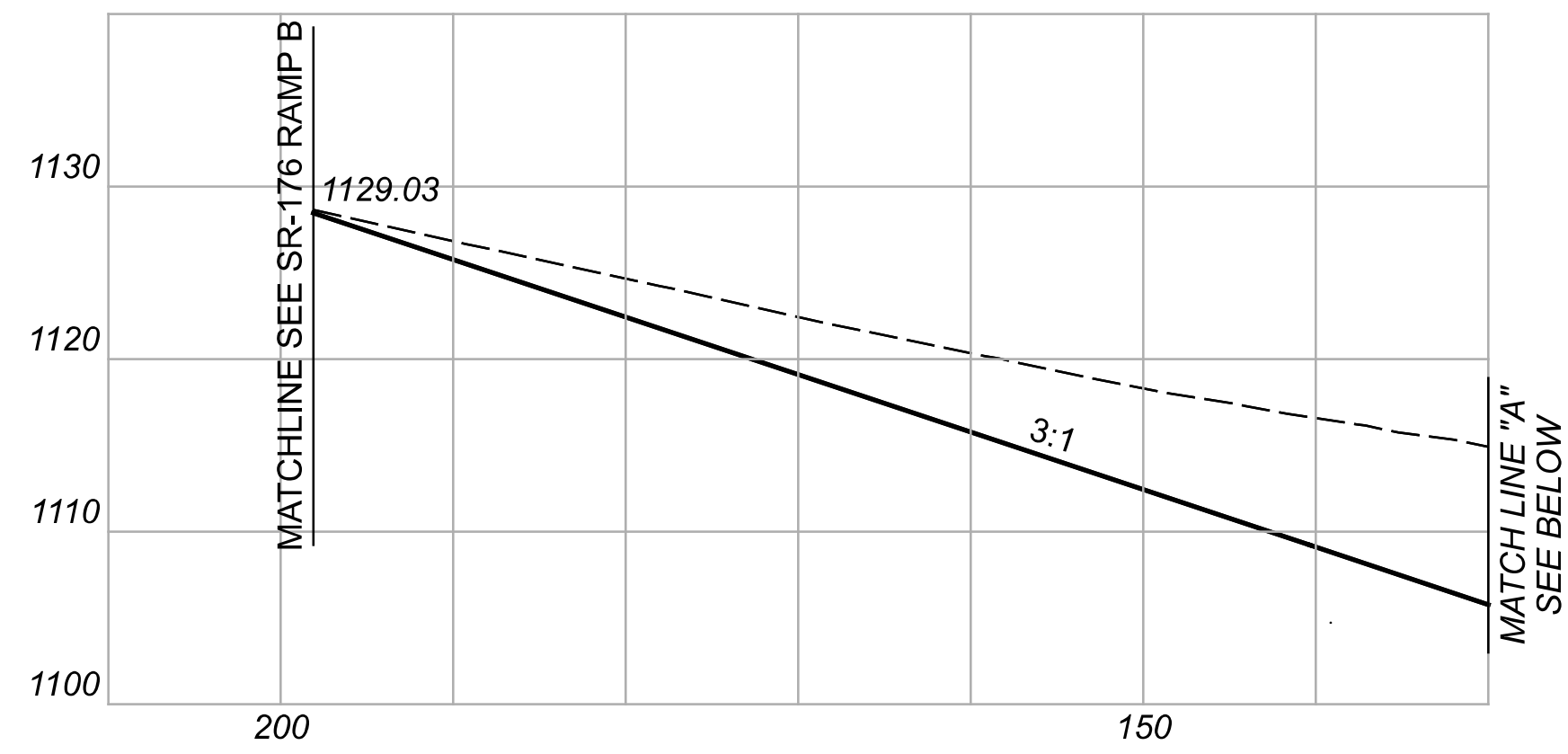
CROSS SECTIONS - IR-77  
 STA. 888+50.00 TO STA. 889+50.00





CEMENT STABILIZATION  
 PAVEMENT REMOVAL

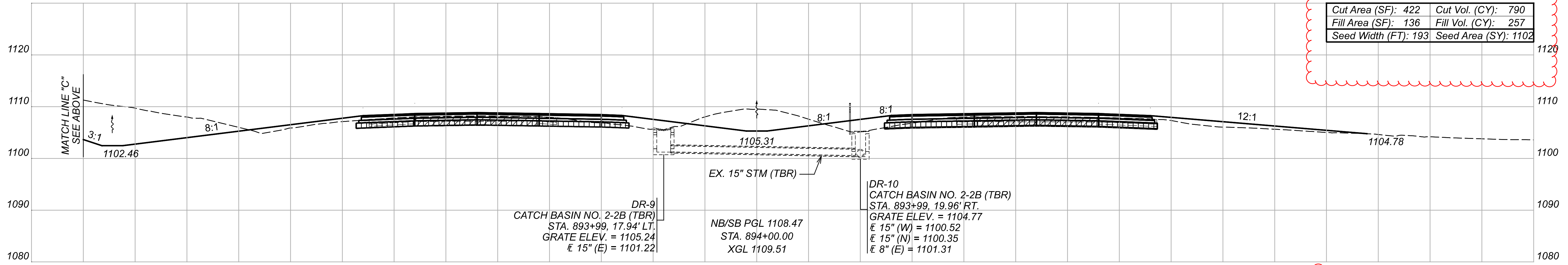
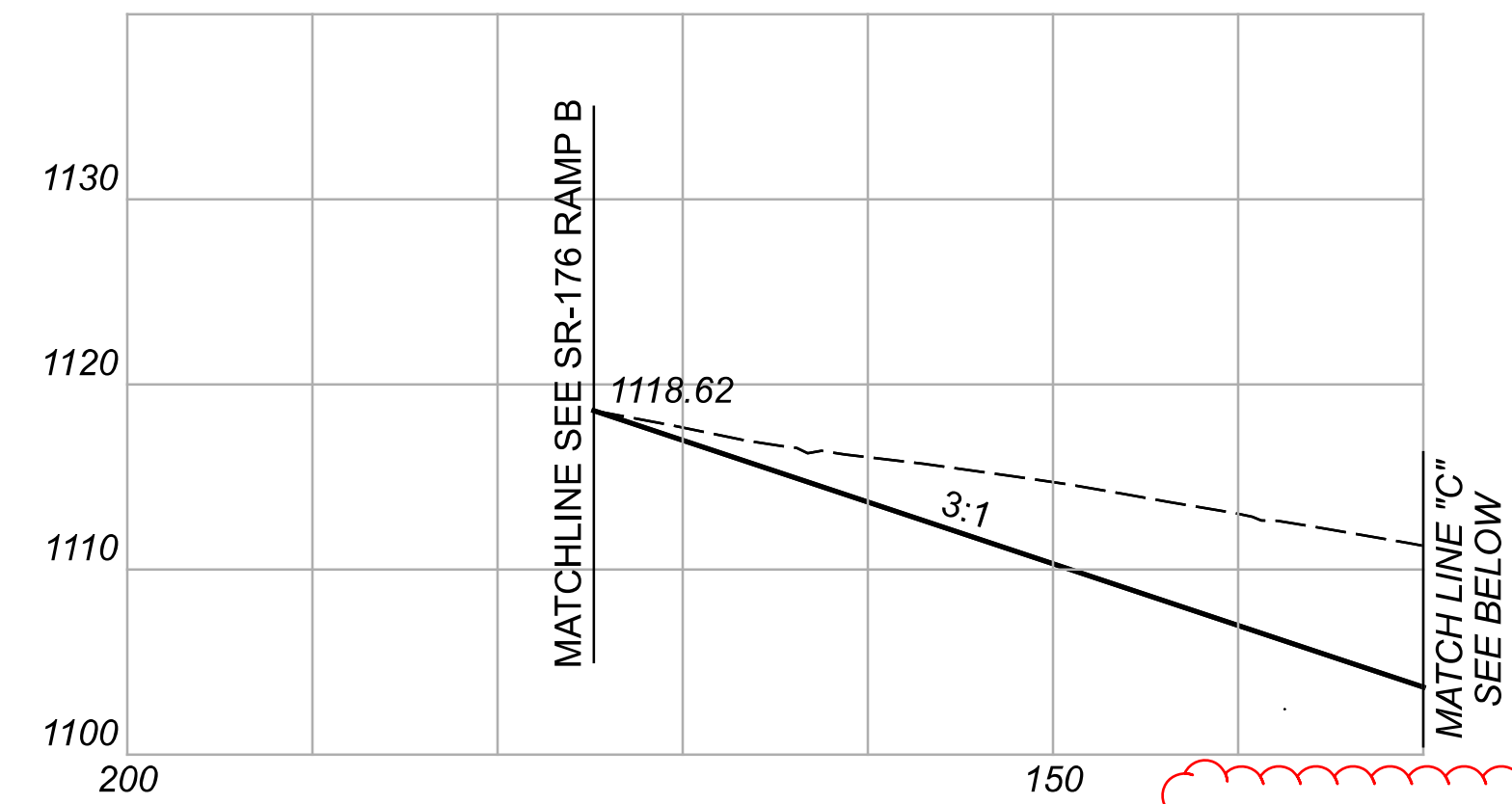
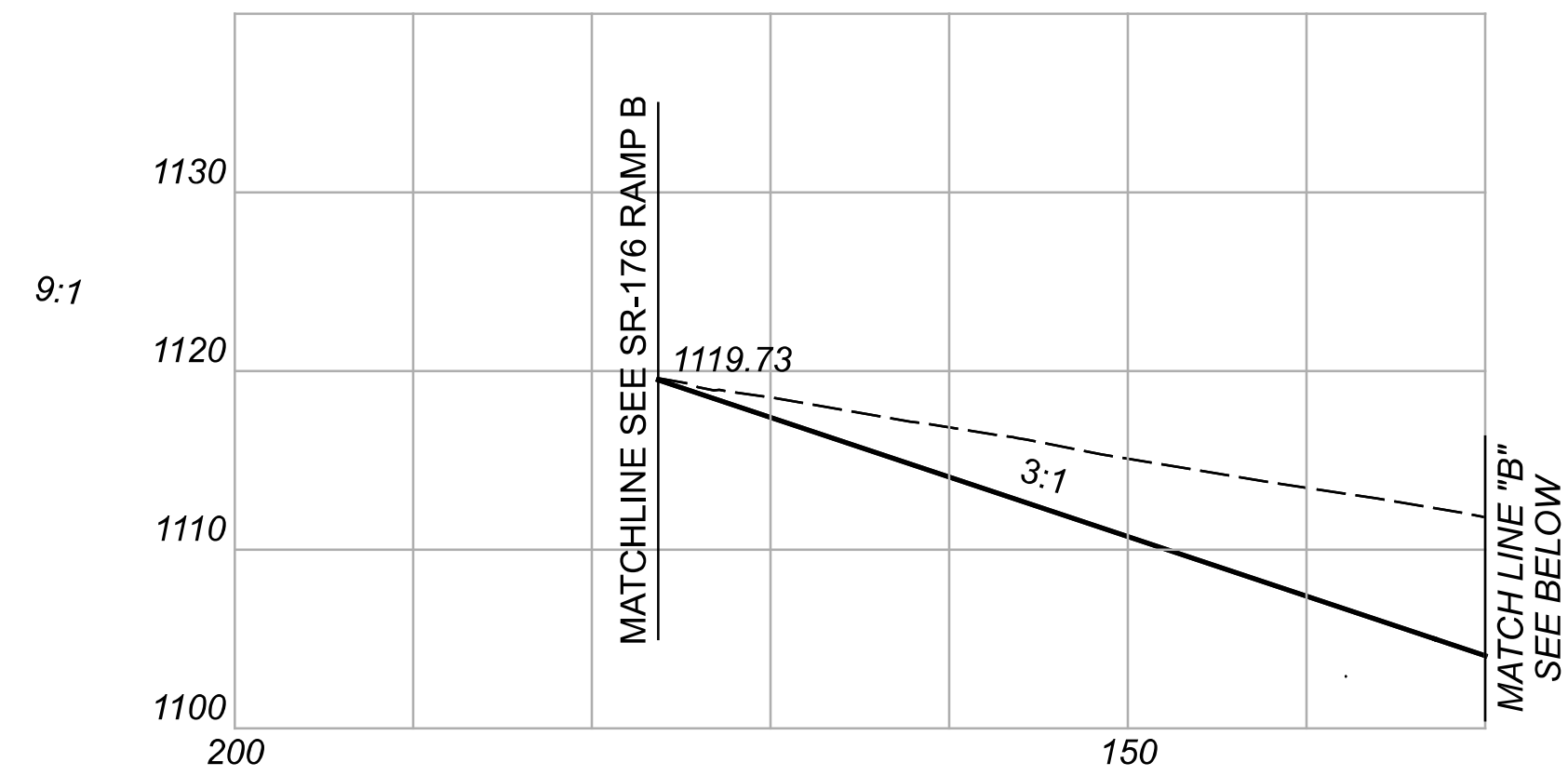
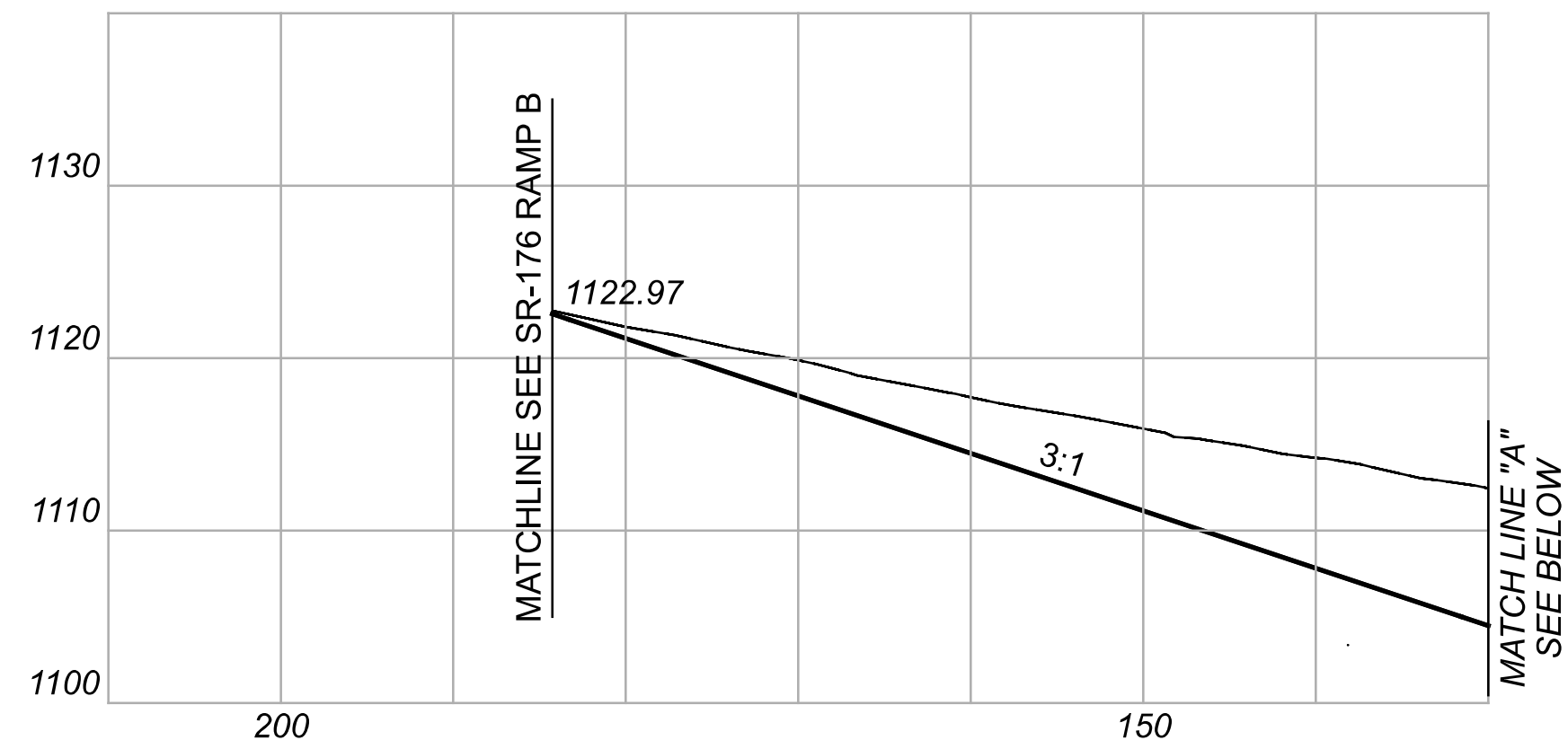
CROSS SECTIONS - IR-77  
 STA. 890+00.00 TO STA. 891+00.00



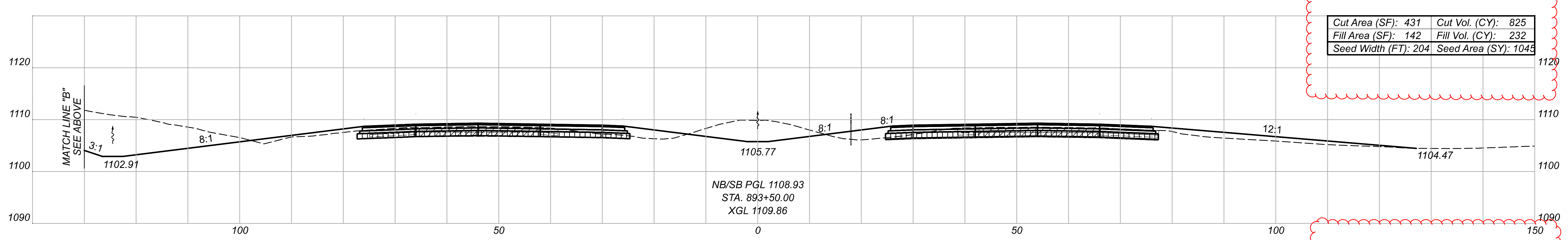
CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 891+50.00 TO STA. 892+50.00

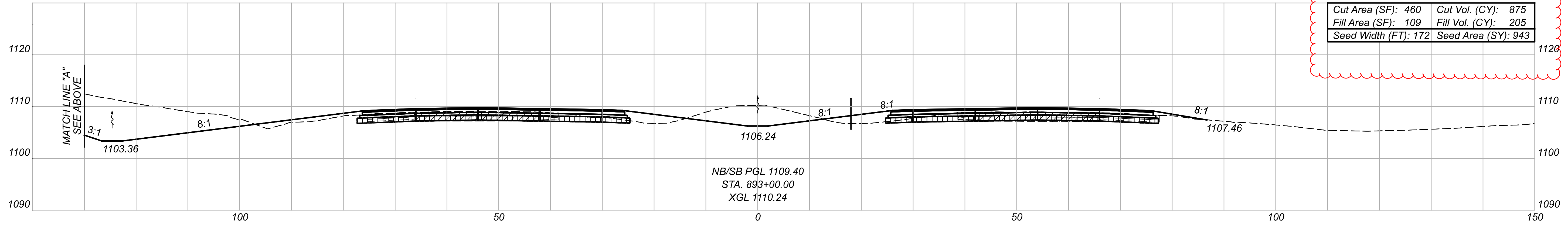




Cut Area (SF): 422	Cut Vol. (CY): 790
Fill Area (SF): 136	Fill Vol. (CY): 257
Seed Width (FT): 193	Seed Area (SY): 1102



Cut Area (SF): 431	Cut Vol. (CY): 825
Fill Area (SF): 142	Fill Vol. (CY): 232
Seed Width (FT): 204	Seed Area (SY): 1045



Cut Area (SF): 460	Cut Vol. (CY): 875
Fill Area (SF): 109	Fill Vol. (CY): 205
Seed Width (FT): 172	Seed Area (SY): 943

- CEMENT STABILIZATION
- PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 893+00.00 TO STA. 894+00.00

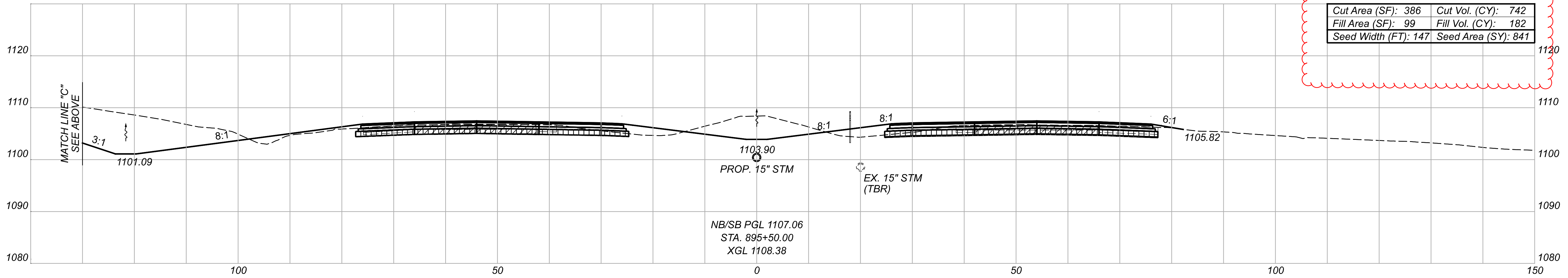
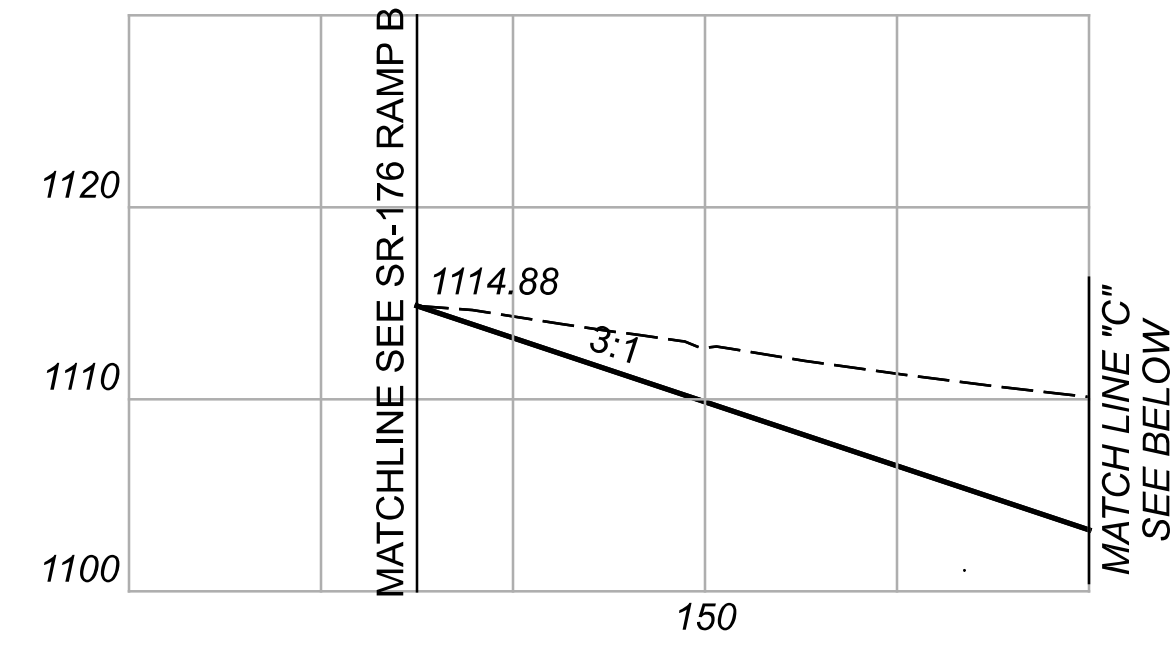
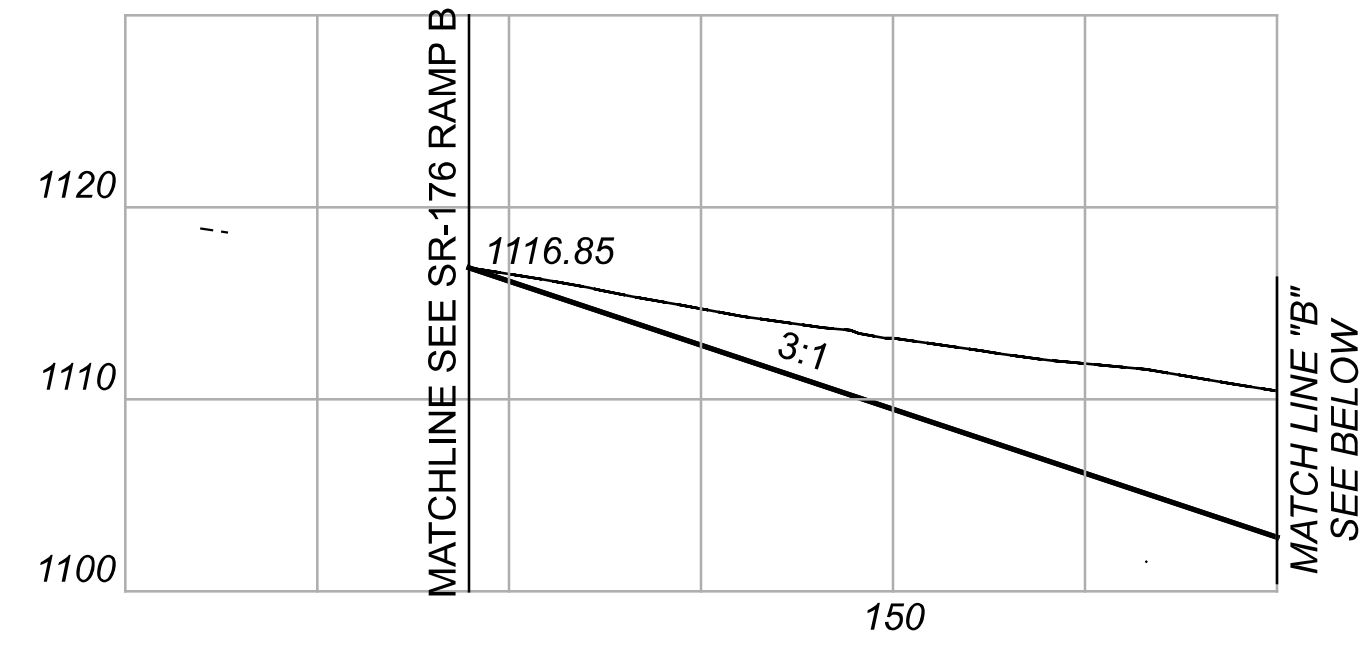
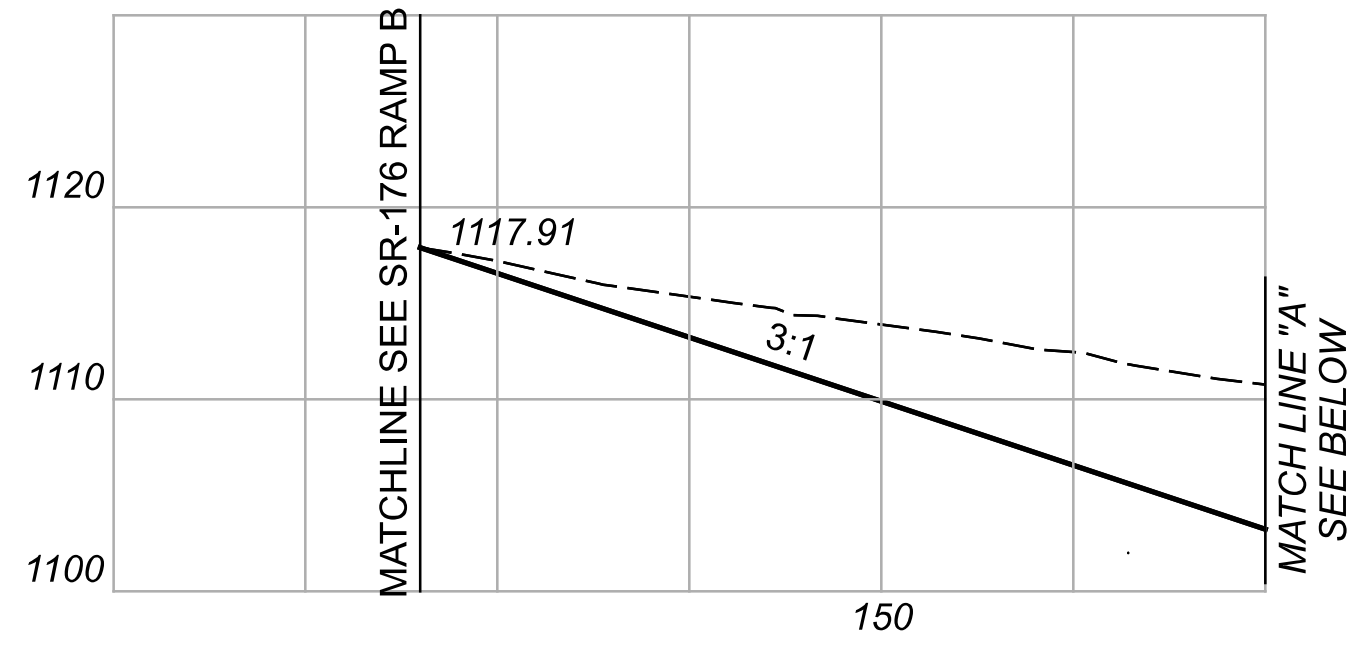
DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

DESIGNER  
**TQD**

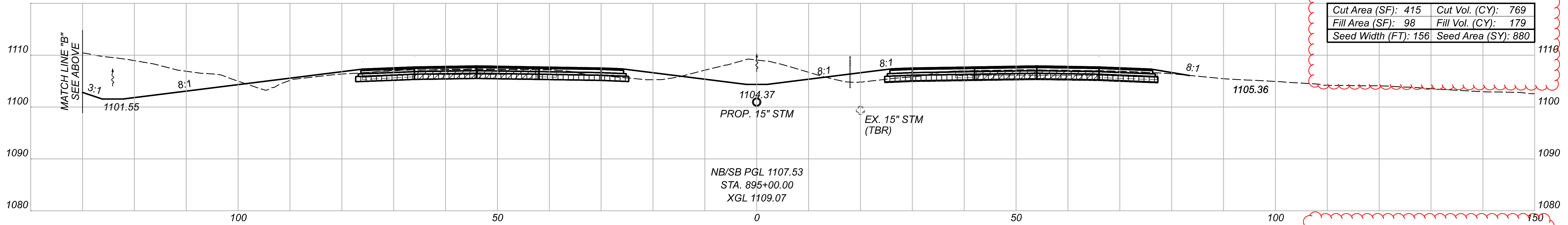
REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

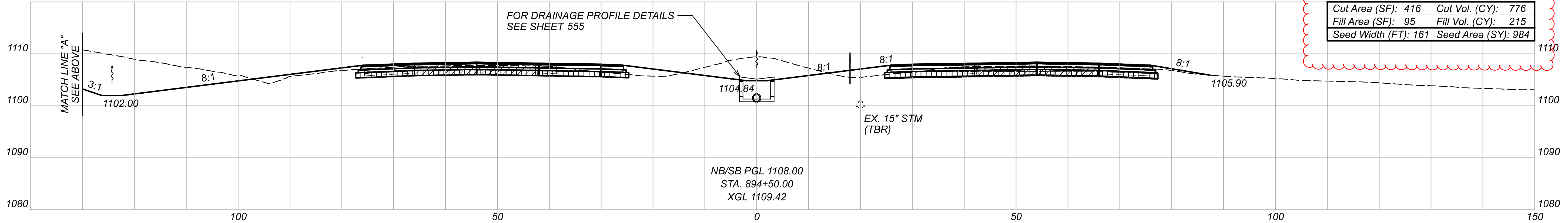
SHEET TOTAL  
 276 927



Cut Area (SF): 386	Cut Vol. (CY): 742
Fill Area (SF): 99	Fill Vol. (CY): 182
Seed Width (FT): 147	Seed Area (SY): 841



Cut Area (SF): 415	Cut Vol. (CY): 769
Fill Area (SF): 98	Fill Vol. (CY): 179
Seed Width (FT): 156	Seed Area (SY): 880



Cut Area (SF): 416	Cut Vol. (CY): 776
Fill Area (SF): 95	Fill Vol. (CY): 215
Seed Width (FT): 161	Seed Area (SY): 984

	CEMENT STABILIZATION
	PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 894+50.00 TO STA. 895+50.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

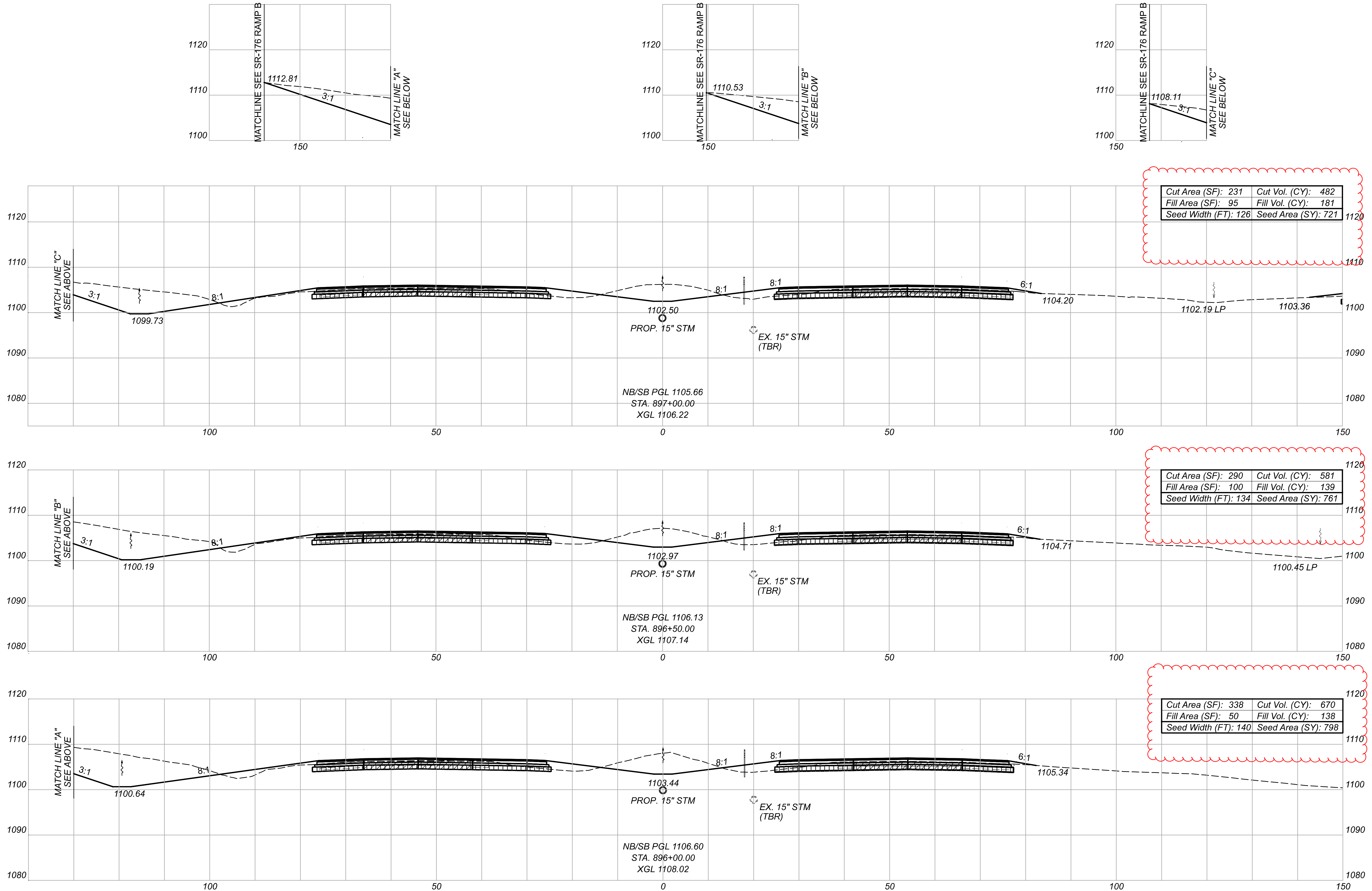
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET TOTAL  
 277 927





Cut Area (SF): 231	Cut Vol. (CY): 482
Fill Area (SF): 95	Fill Vol. (CY): 181
Seed Width (FT): 126	Seed Area (SY): 721

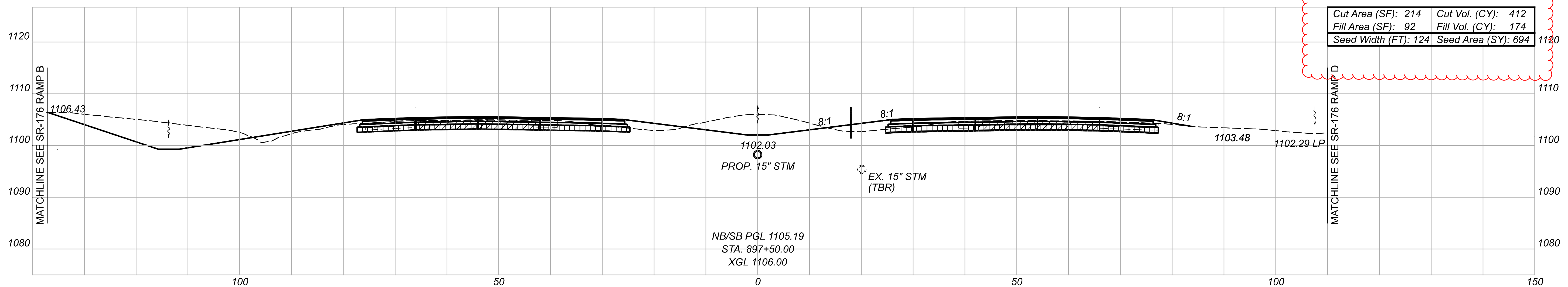
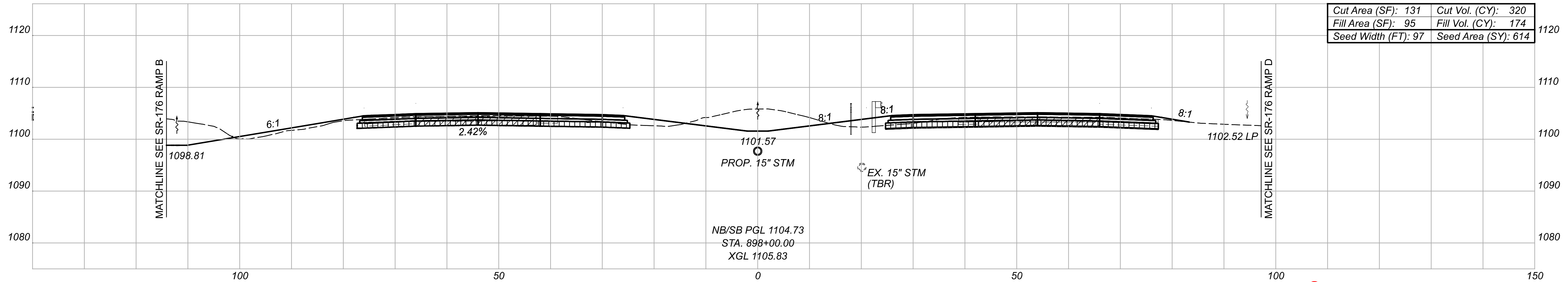
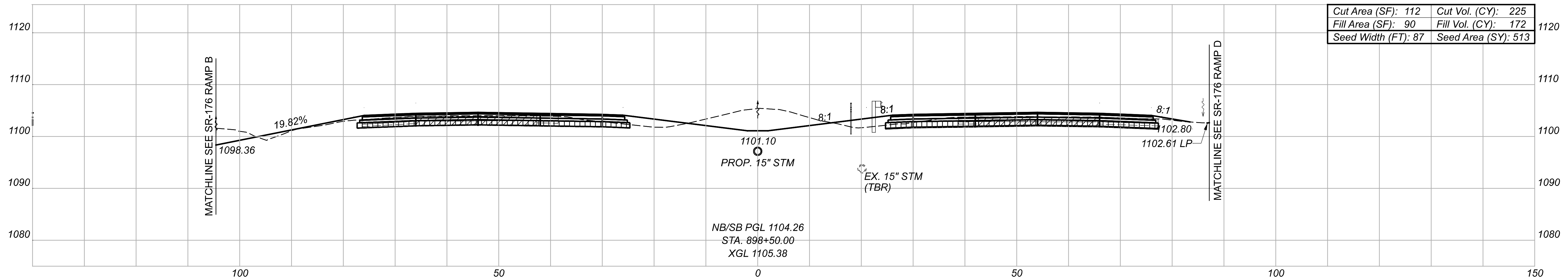
Cut Area (SF): 290	Cut Vol. (CY): 581
Fill Area (SF): 100	Fill Vol. (CY): 139
Seed Width (FT): 134	Seed Area (SY): 761

Cut Area (SF): 338	Cut Vol. (CY): 670
Fill Area (SF): 50	Fill Vol. (CY): 138
Seed Width (FT): 140	Seed Area (SY): 798

CEMENT STABILIZATION  
 PAVEMENT REMOVAL

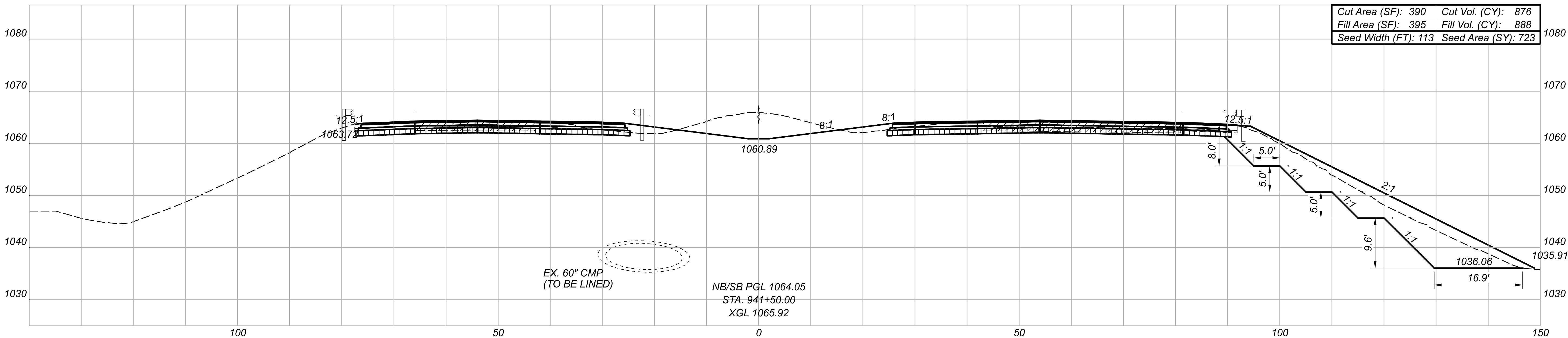
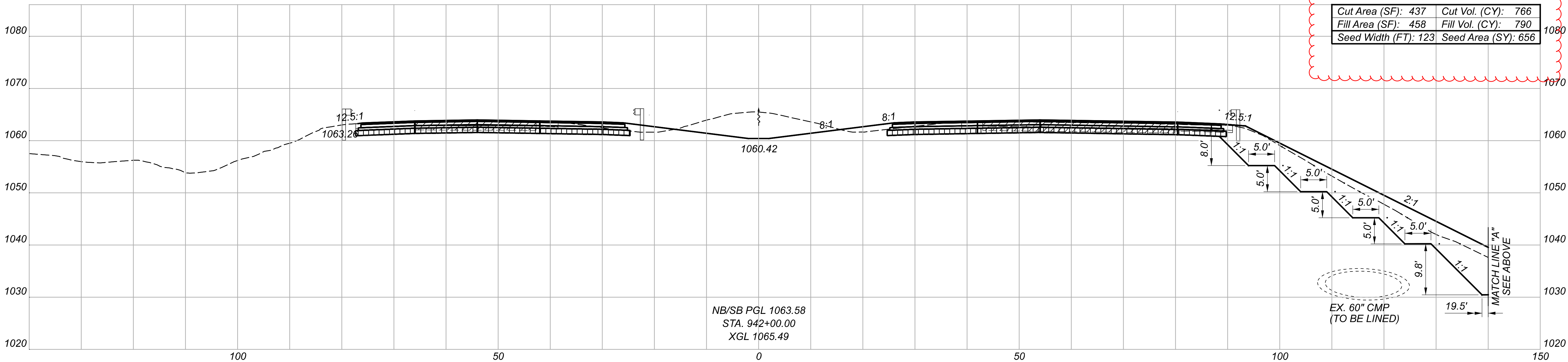
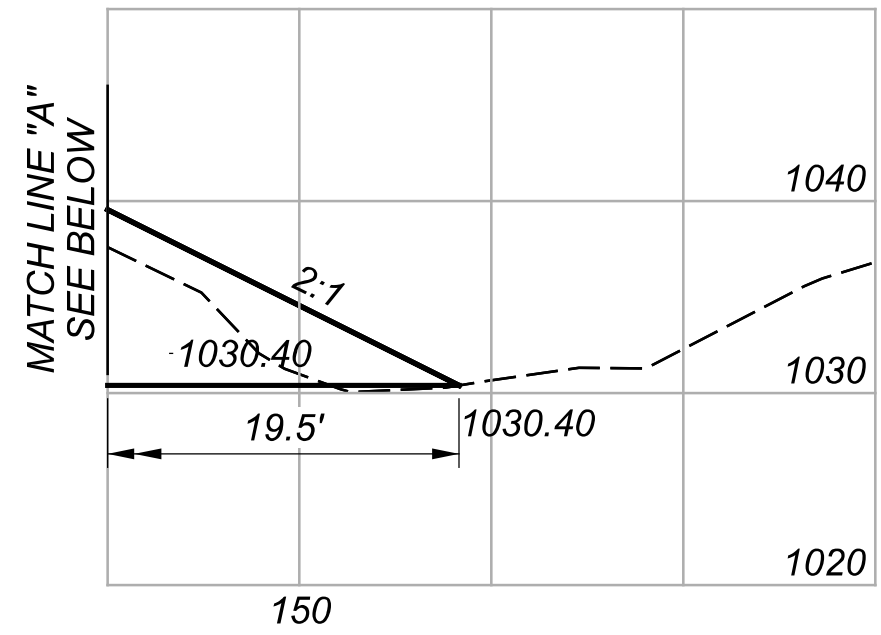
CROSS SECTIONS - IR-77  
 STA. 896+00.00 TO STA. 897+00.00







CEMENT STABILIZATION  
 PAVEMENT REMOVAL

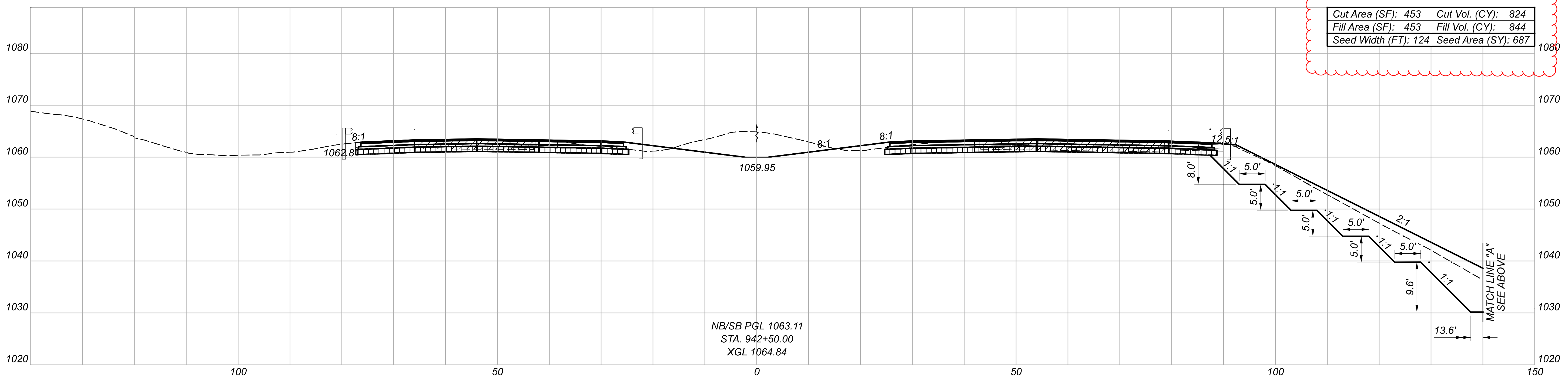
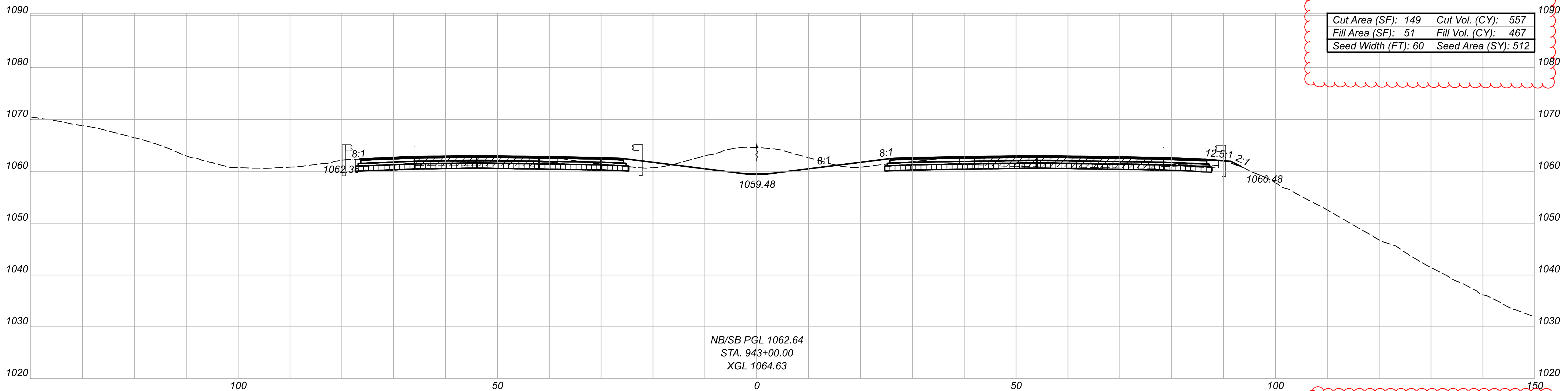
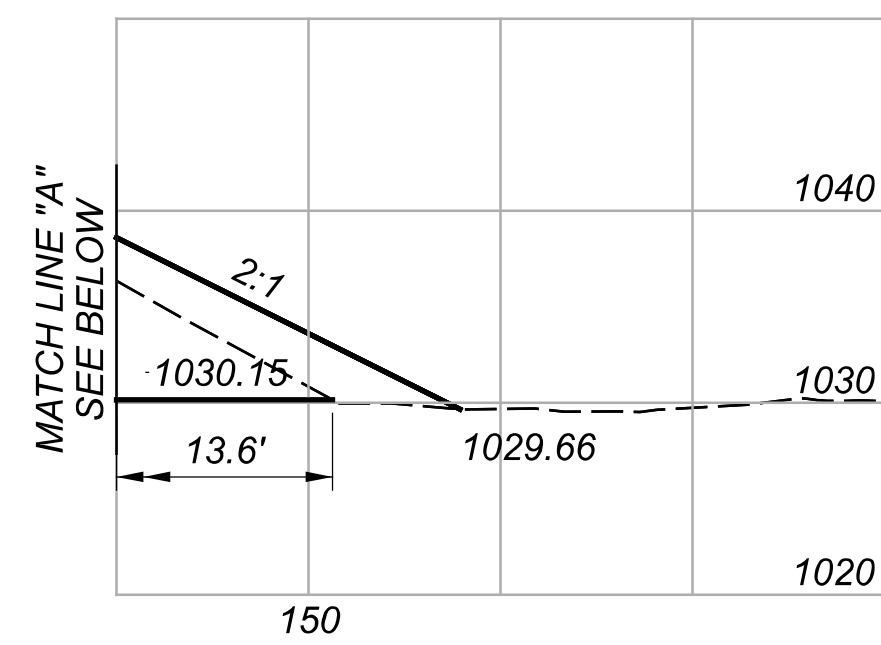
CROSS SECTIONS - IR-77  
 STA. 897+50.00 TO STA. 898+50.00



-  CEMENT STABILIZATION
-  PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 941+50.00 TO STA. 942+00.00

DESIGN AGENCY	GANNETT FLEMING
2500 Corporate Exchange Dr.	
Suite 230	
Columbus, OH 43231	
DESIGNER	TQD
REVIEWER	DRJ 04/22/22
PROJECT ID	111405
SHEET	TOTAL
312	927



CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
STA. 942+50.00 TO STA. 943+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
2500 Corporate Exchange Dr.  
Suite 230  
Columbus, OH 43231

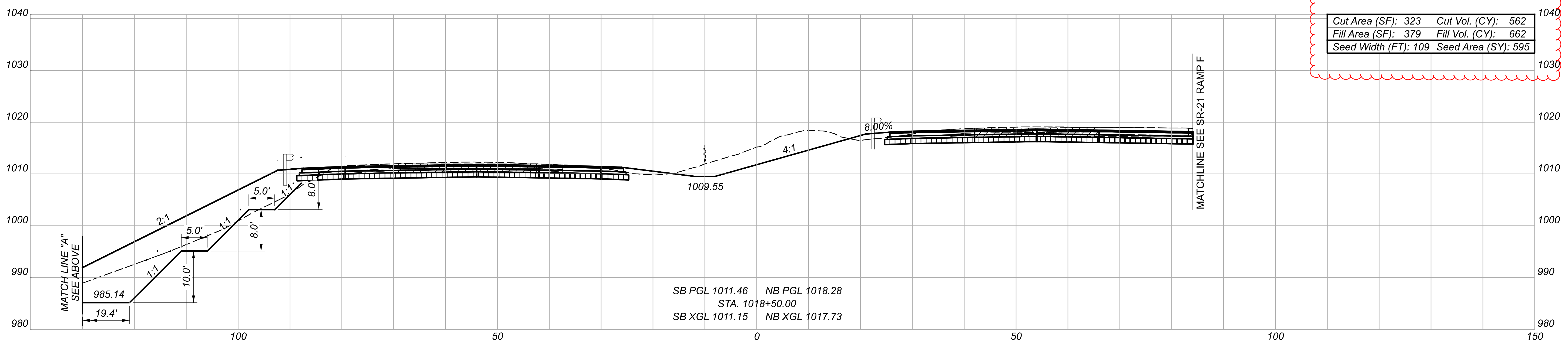
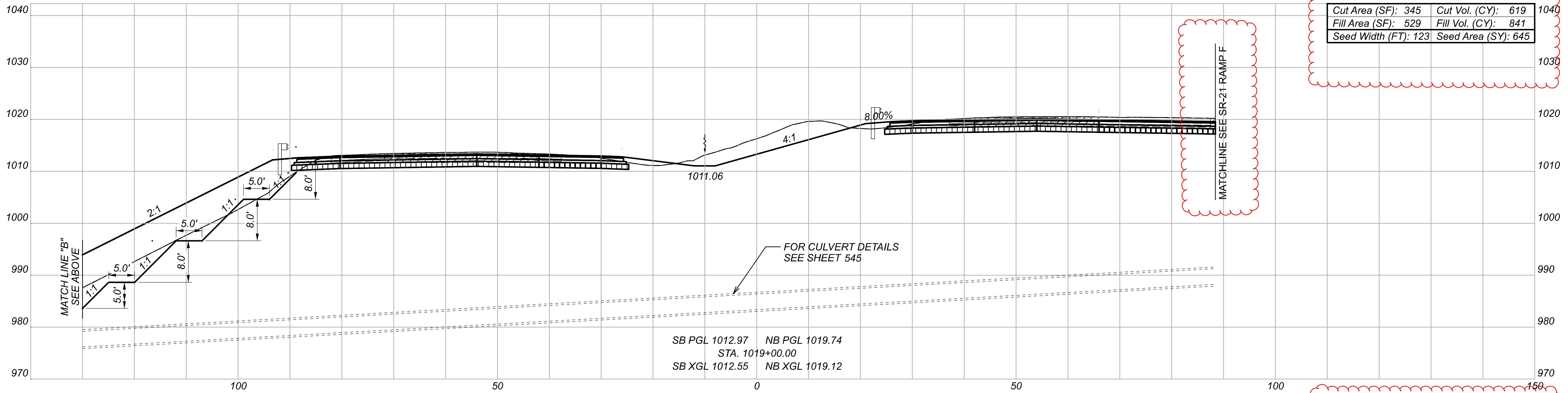
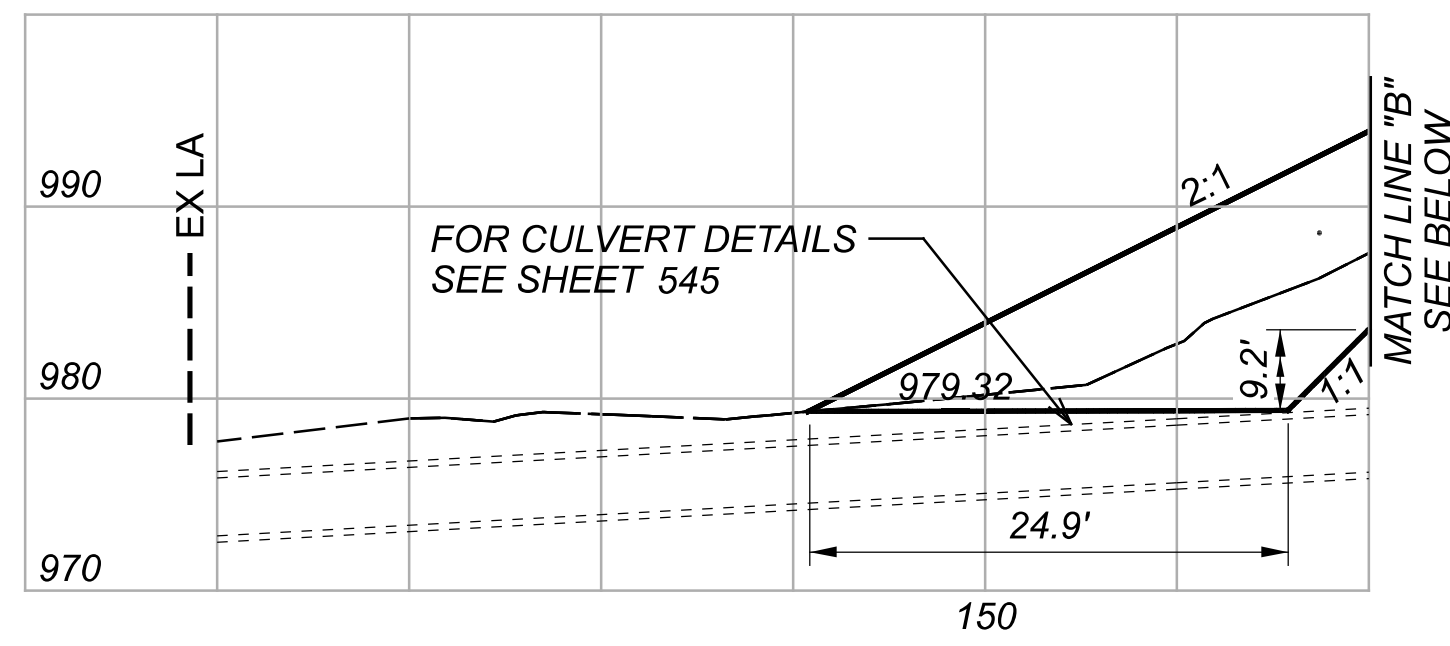
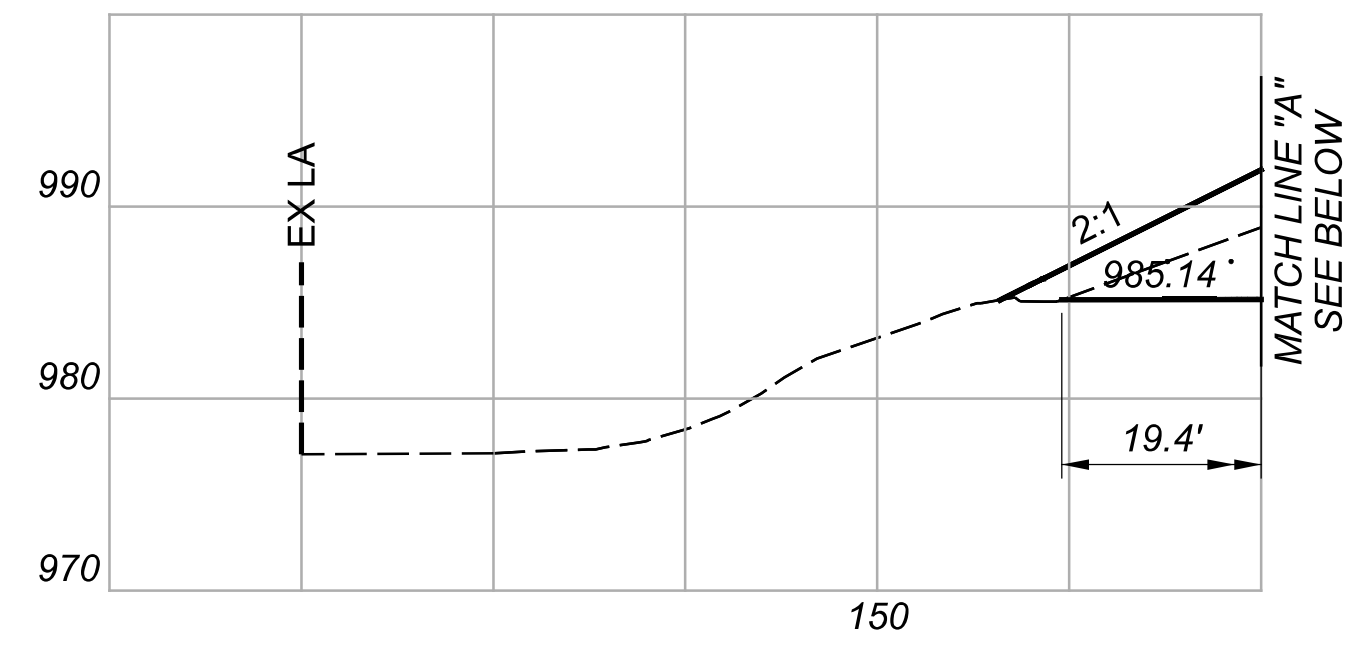
DESIGNER  
TQD

REVIEWER  
DRJ 04/22/22

PROJECT ID  
111405

SHEET TOTAL  
313 927





CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 1018+50.00 TO STA. 1019+00.00

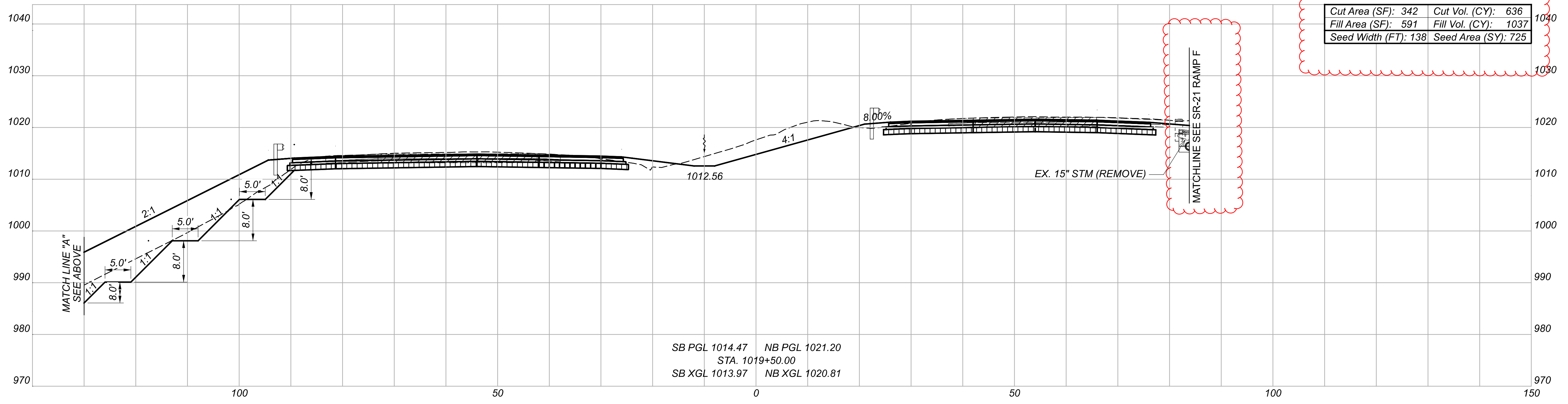
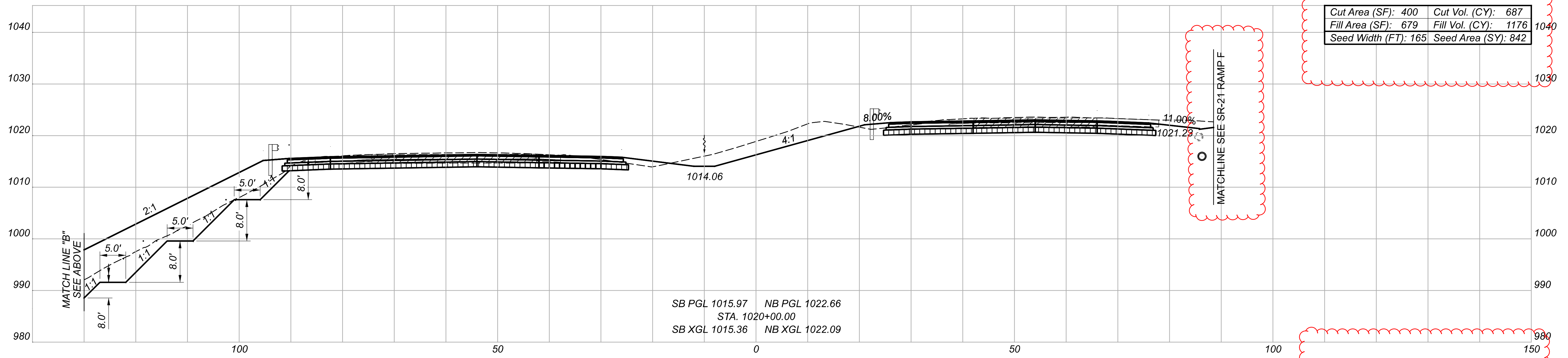
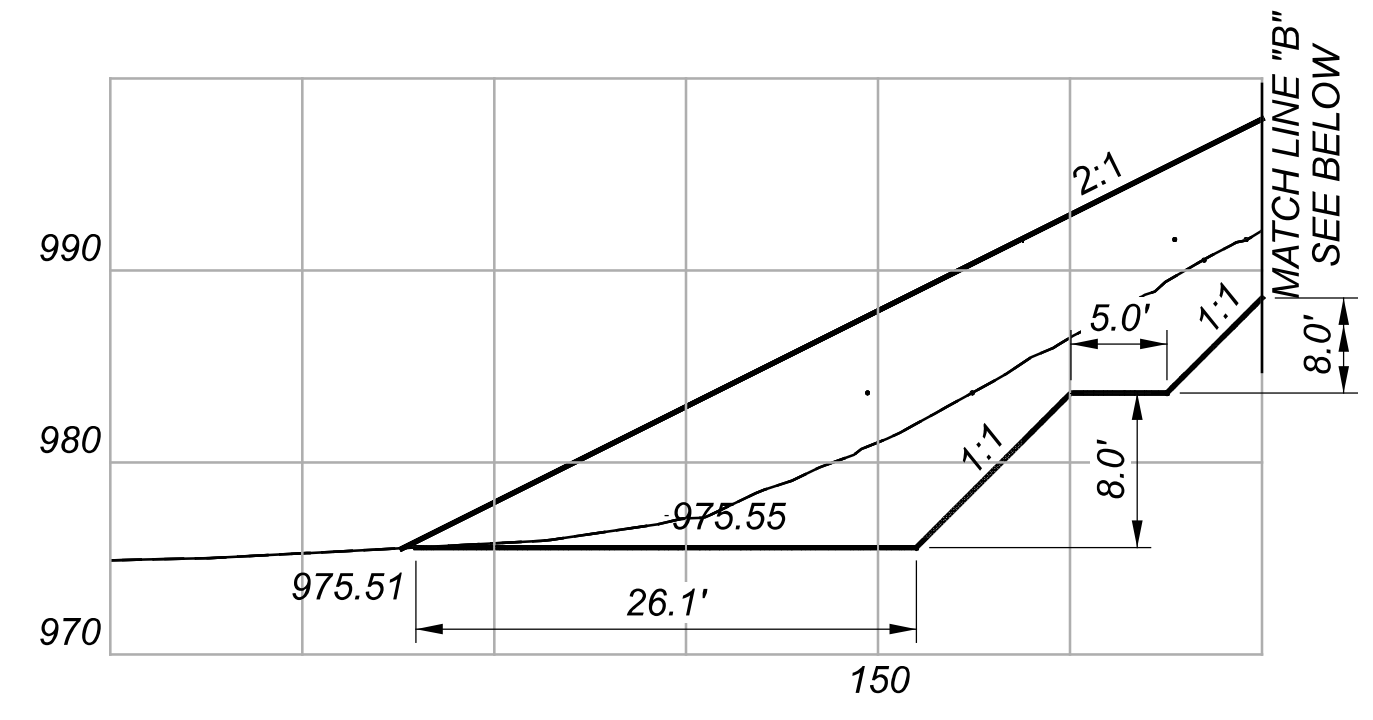
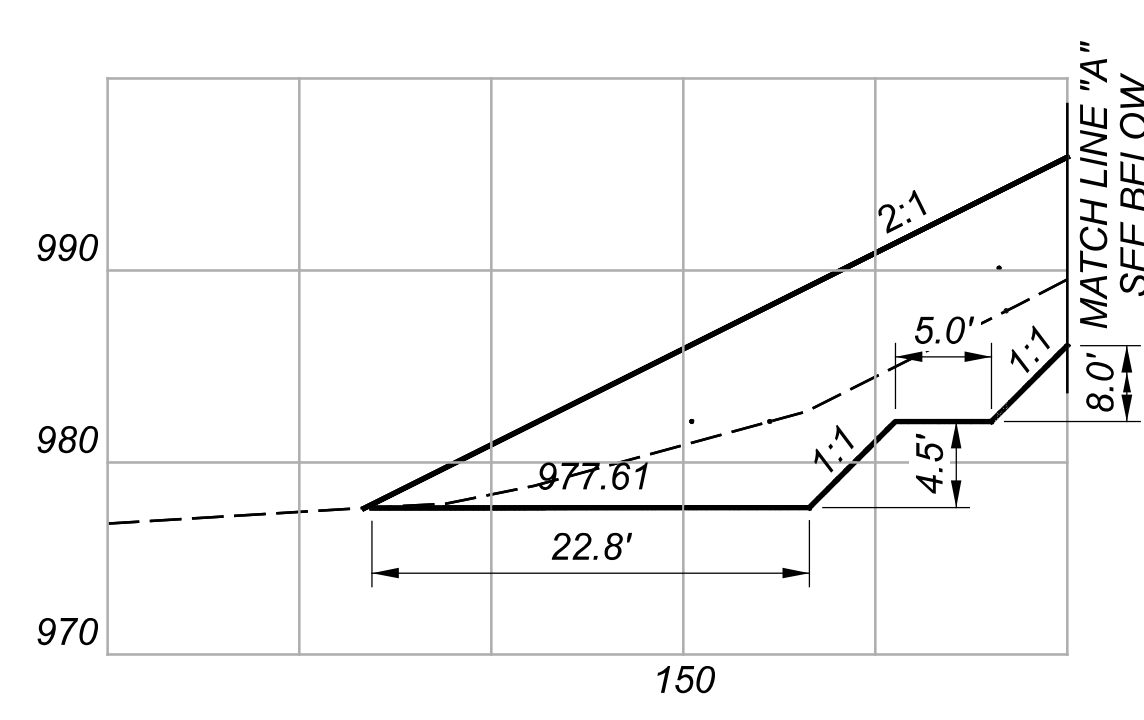
DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231


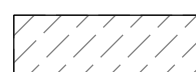
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

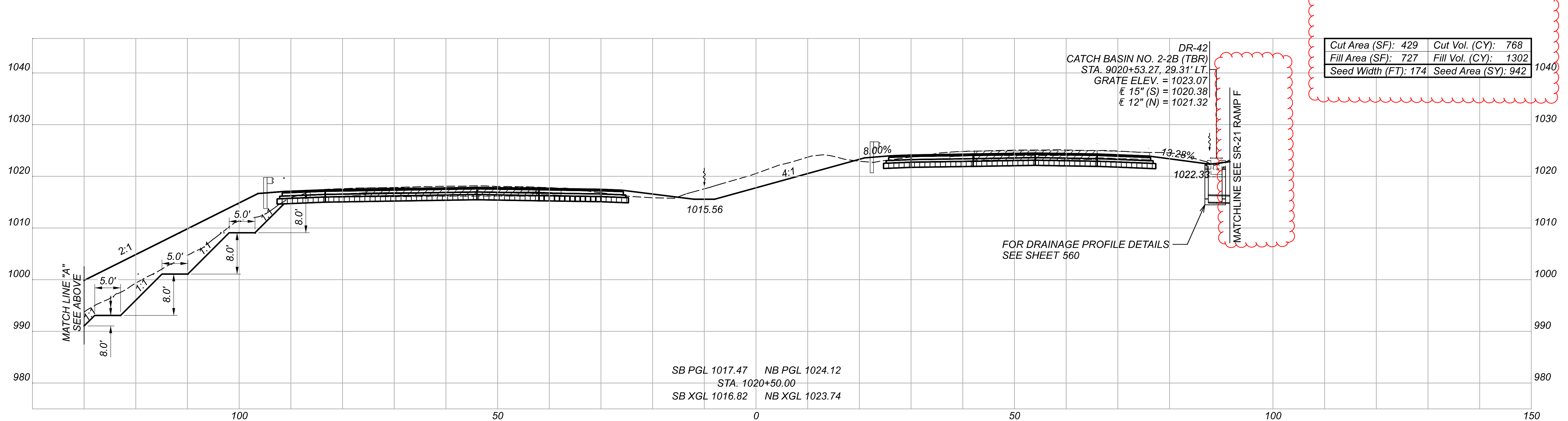
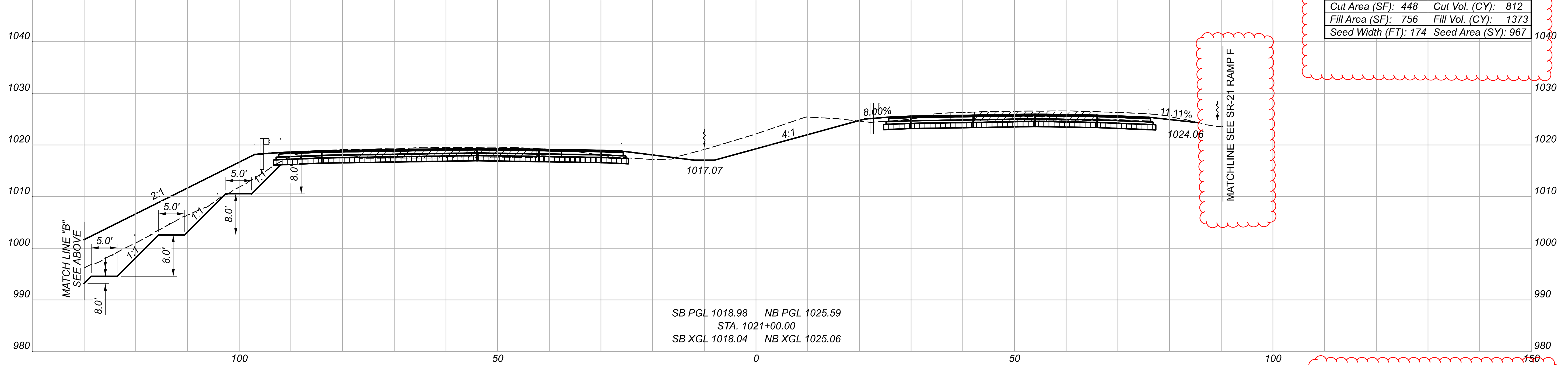
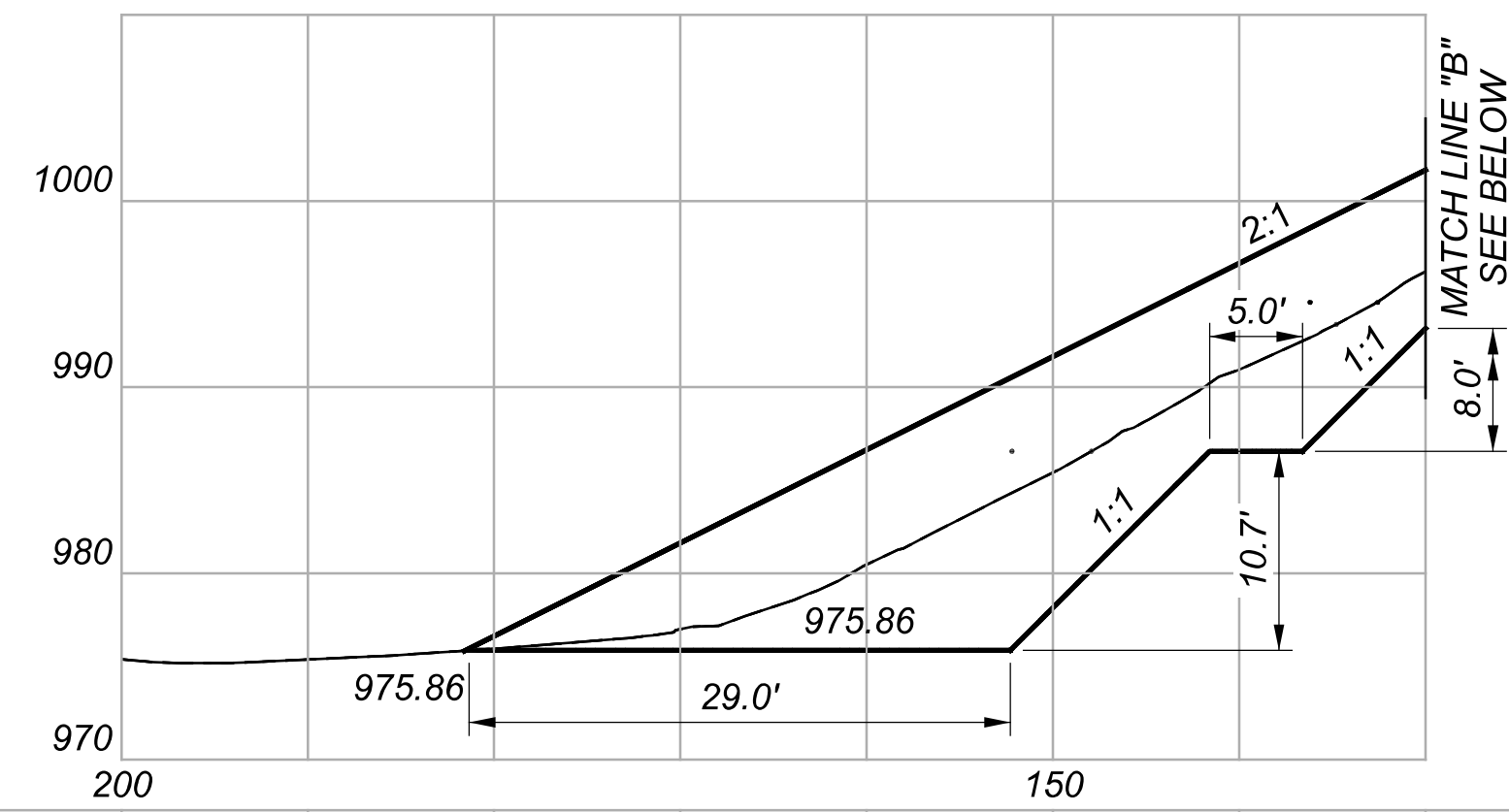
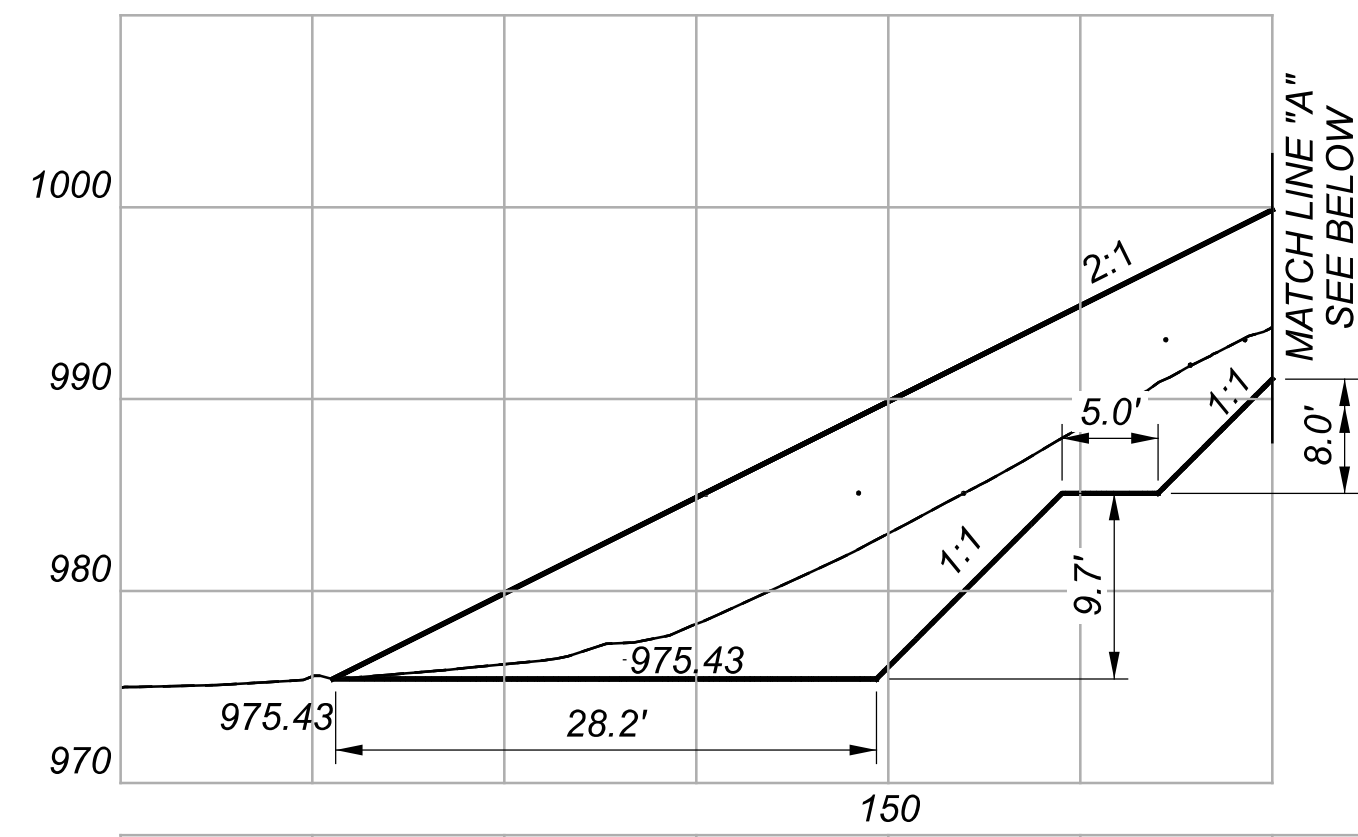
SHEET TOTAL  
 376 927



 CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 1019+50.00 TO STA. 1020+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231  
 DESIGNER  
**TQD**  
 REVIEWER  
 DRJ 04/22/22  
 PROJECT ID  
 111405  
 SHEET TOTAL  
 377 927



 CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 1020+50.00 TO STA. 1021+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

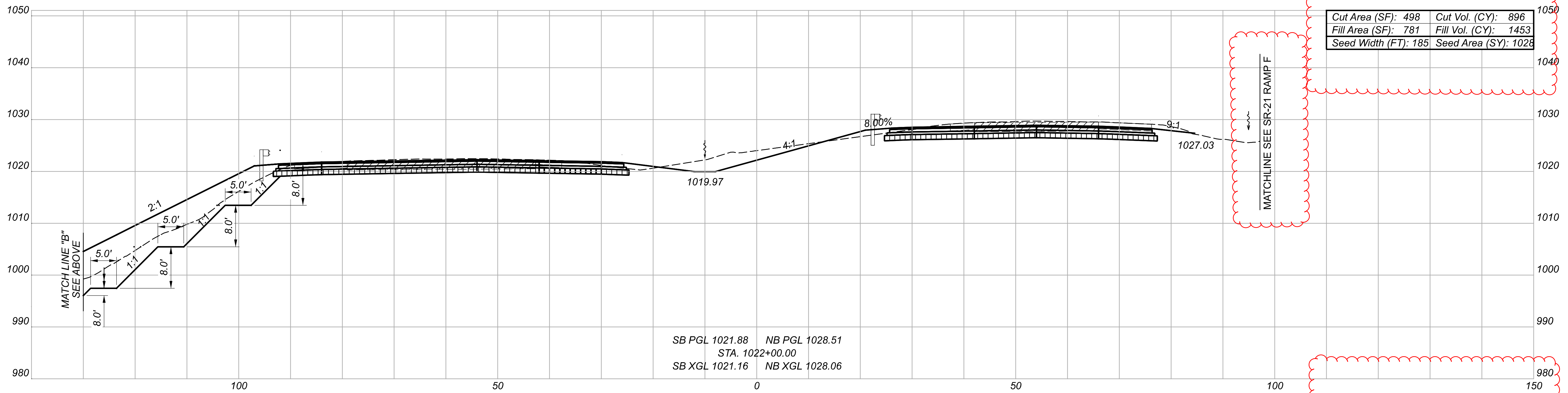
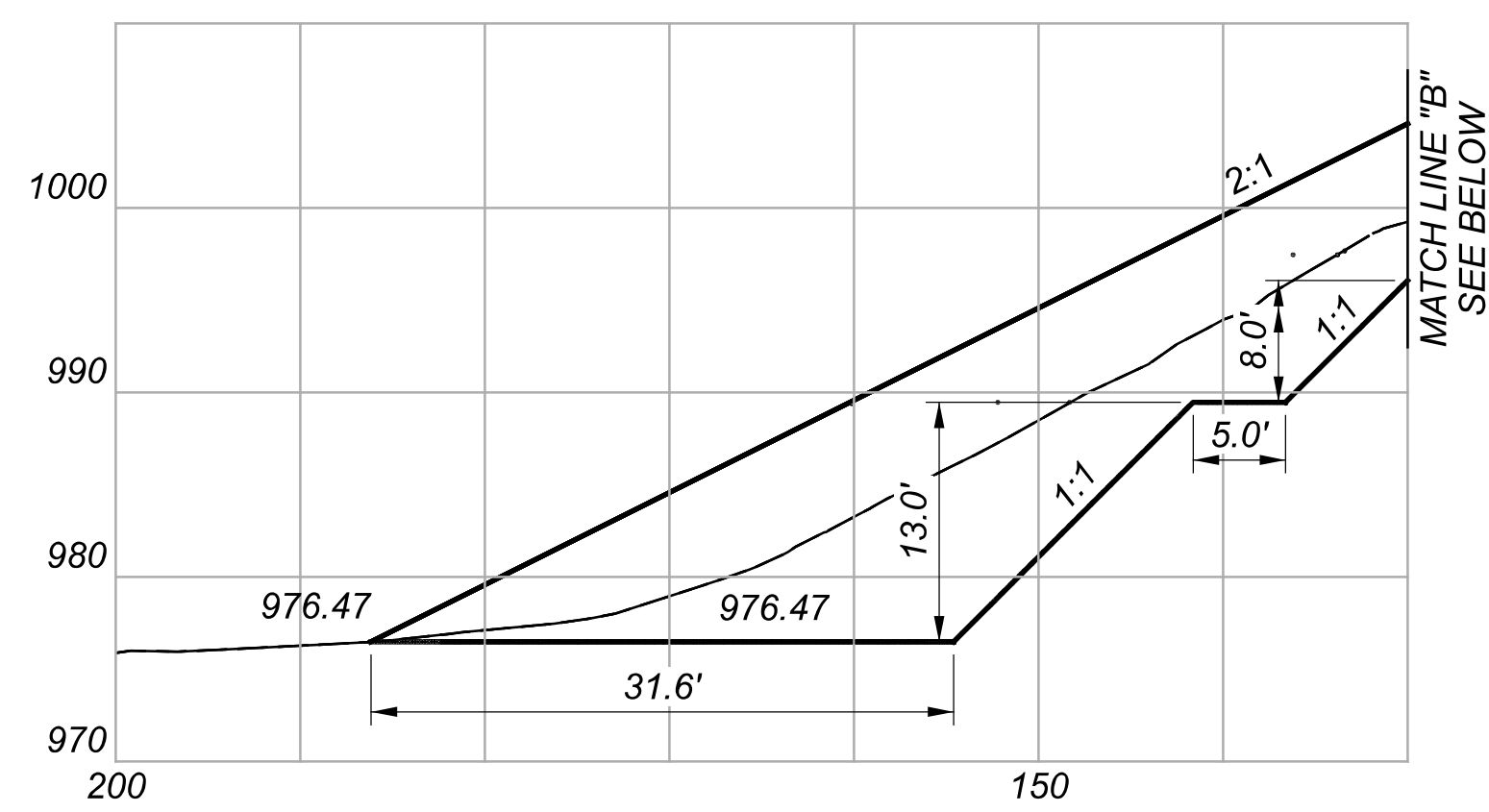
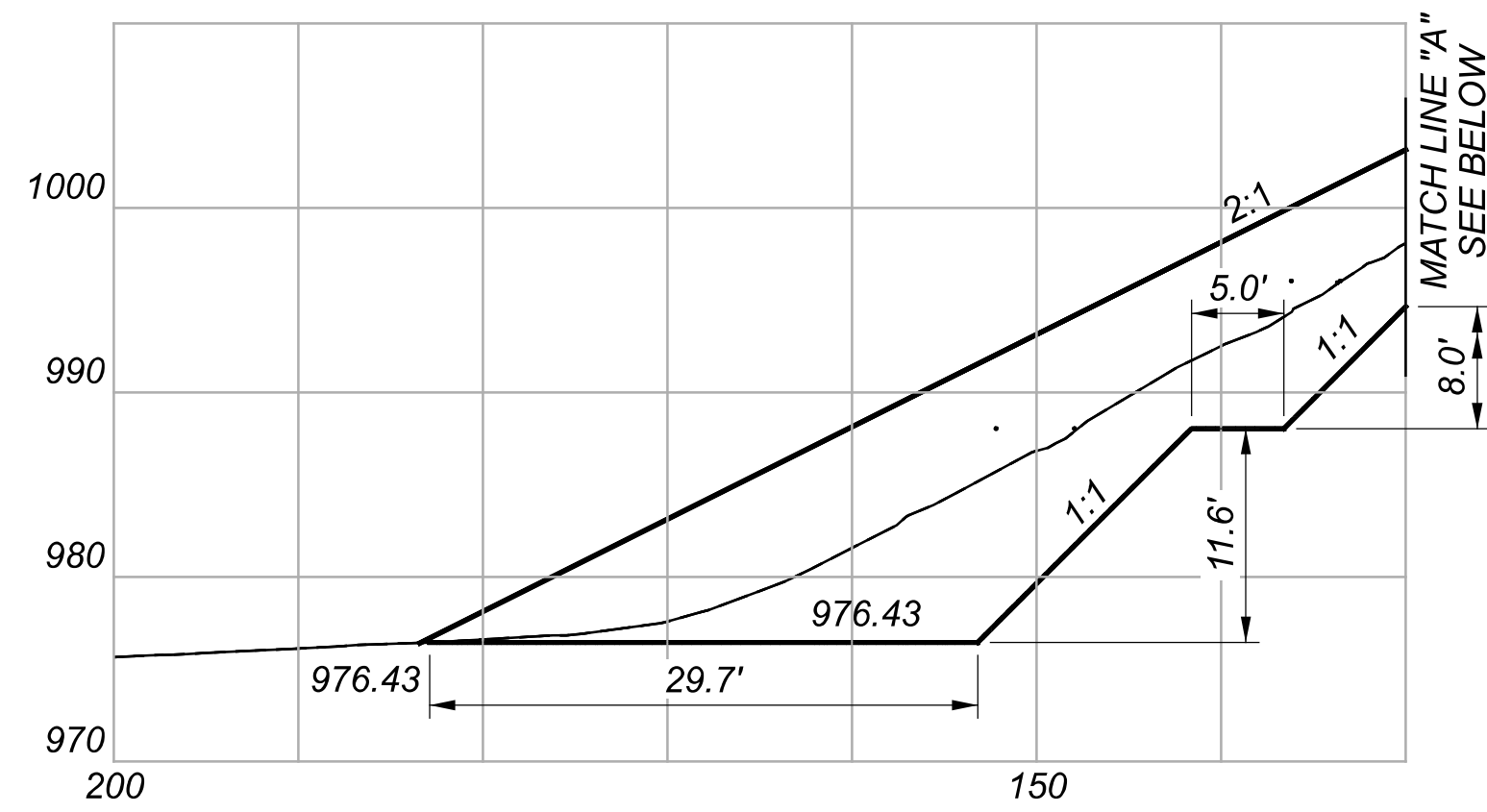
DESIGNER  
**TQD**

REVIEWER  
 DRJ 04/22/22

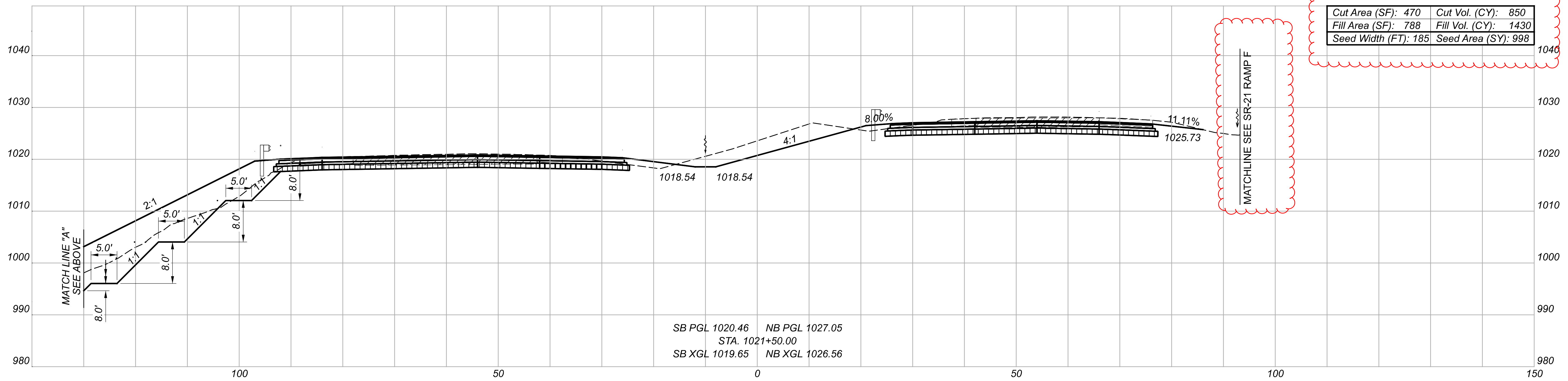
PROJECT ID  
 111405

SHEET TOTAL  
 378 927


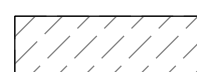




SB PGL 1021.88 NB PGL 1028.51  
 STA. 1022+00.00  
 SB XGL 1021.16 NB XGL 1028.06



SB PGL 1020.46 NB PGL 1027.05  
 STA. 1021+50.00  
 SB XGL 1019.65 NB XGL 1026.56

 CEMENT STABILIZATION  
 PAVEMENT REMOVAL

CROSS SECTIONS - IR-77  
 STA. 1021+50.00 TO STA. 1022+00.00

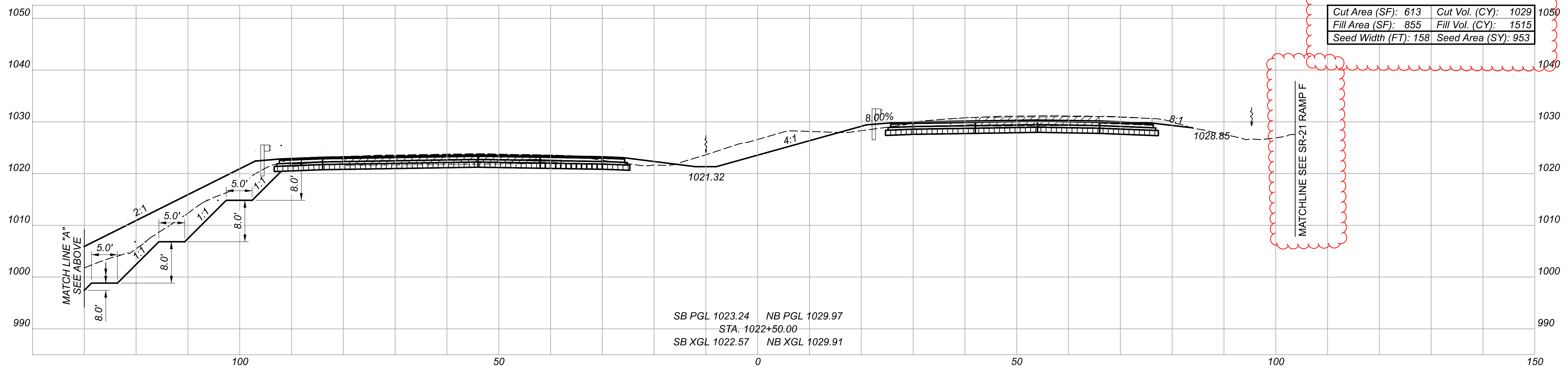
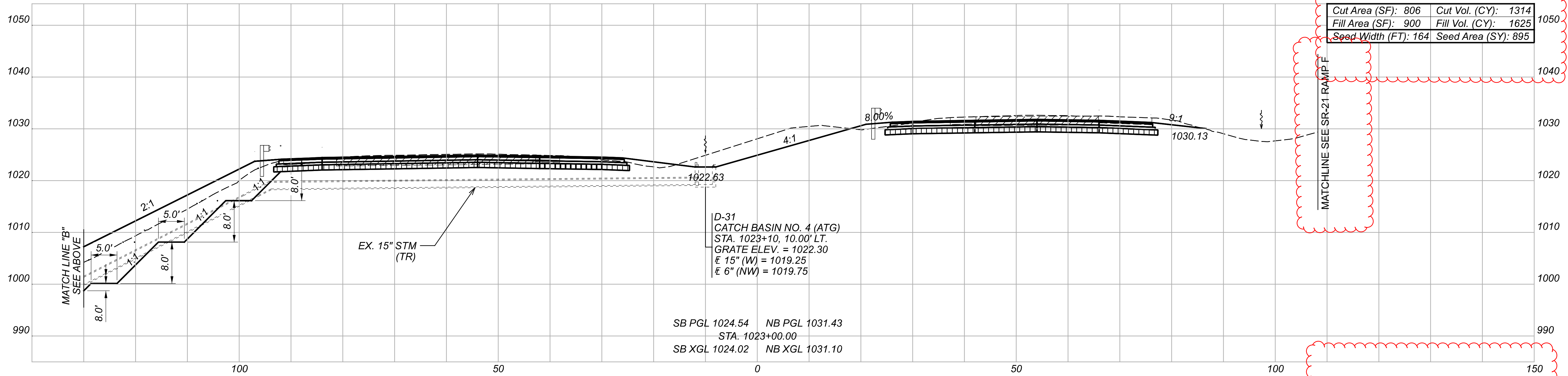
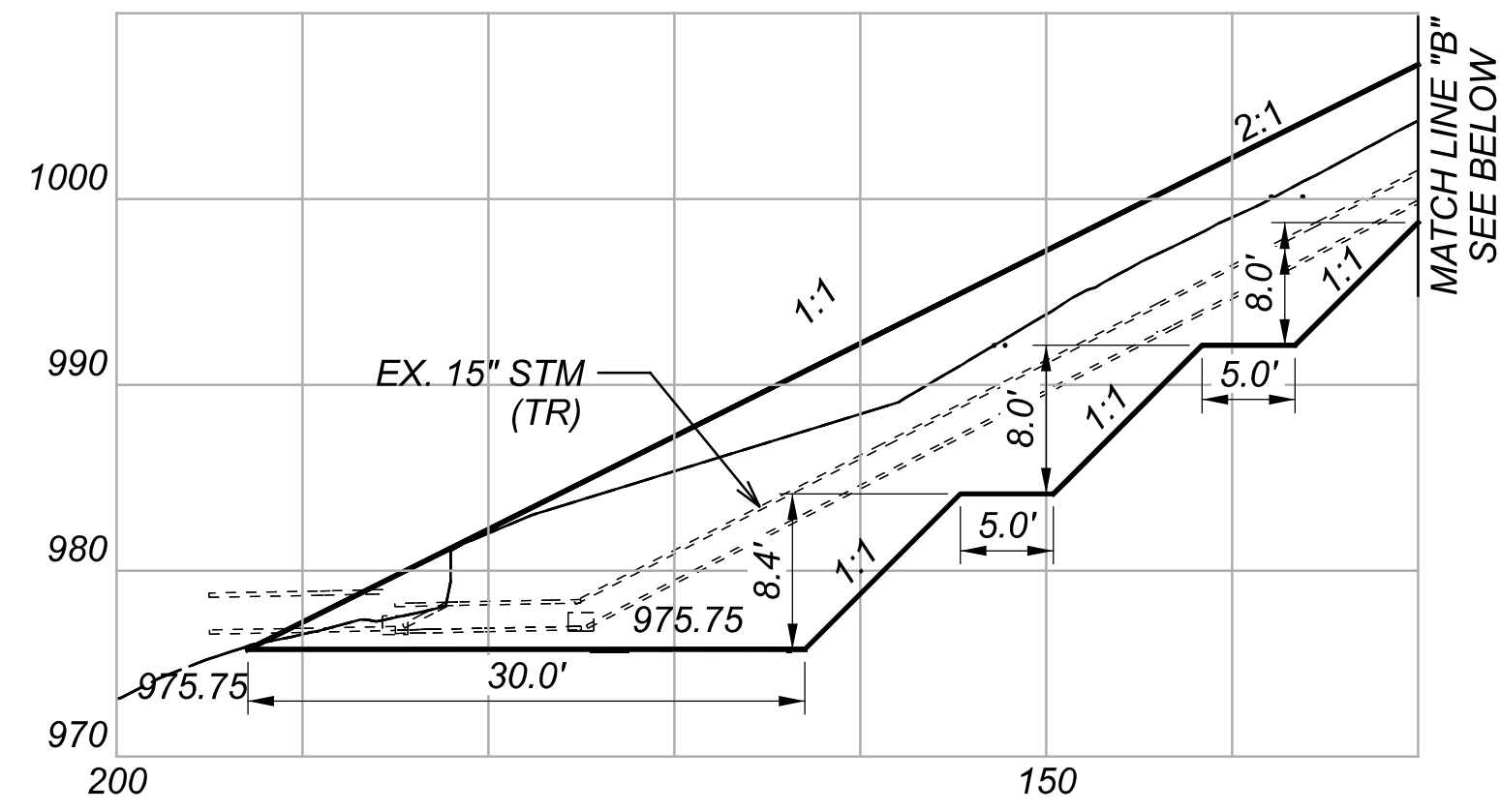
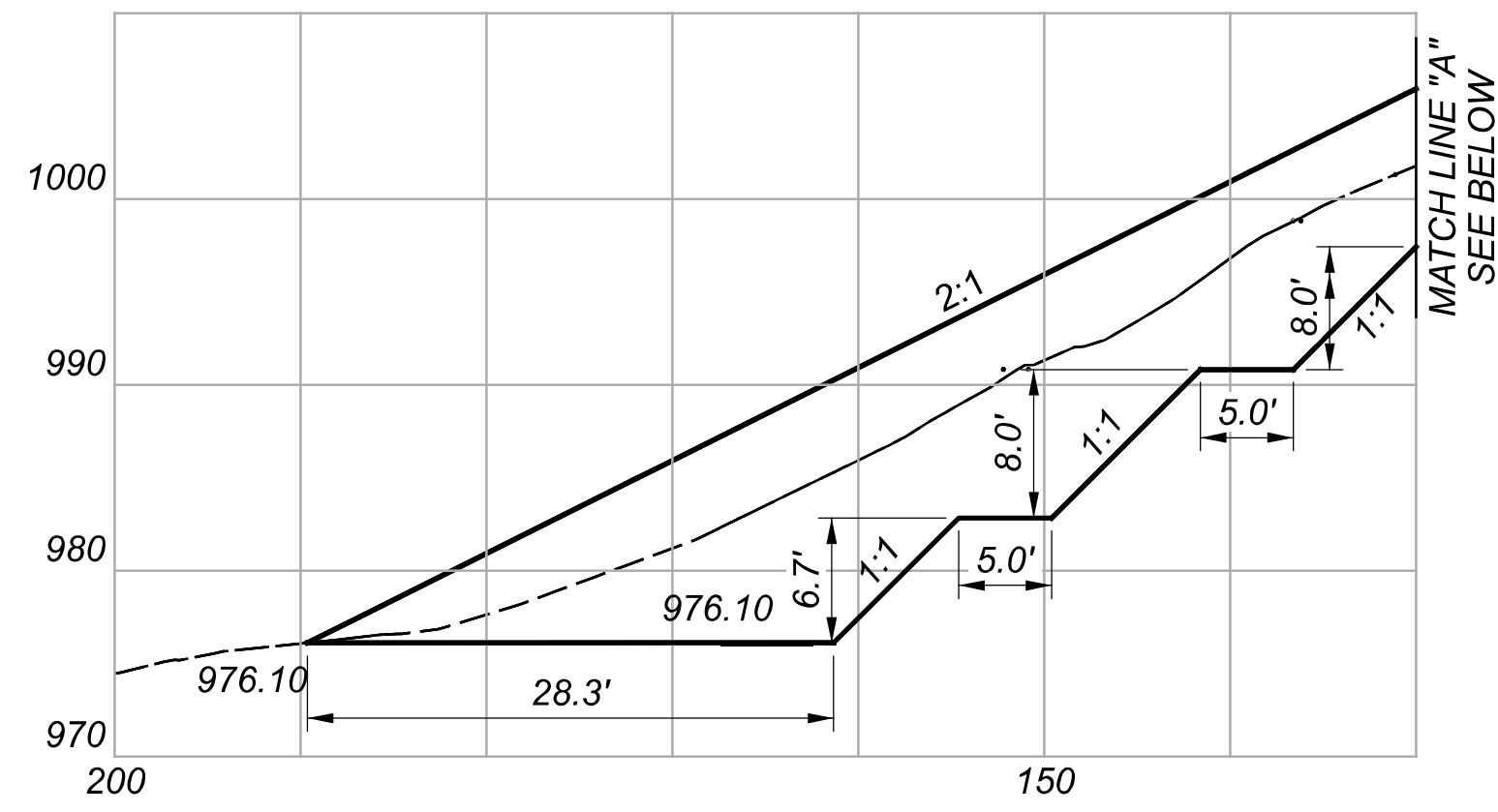
DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231


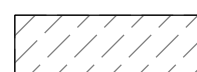
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

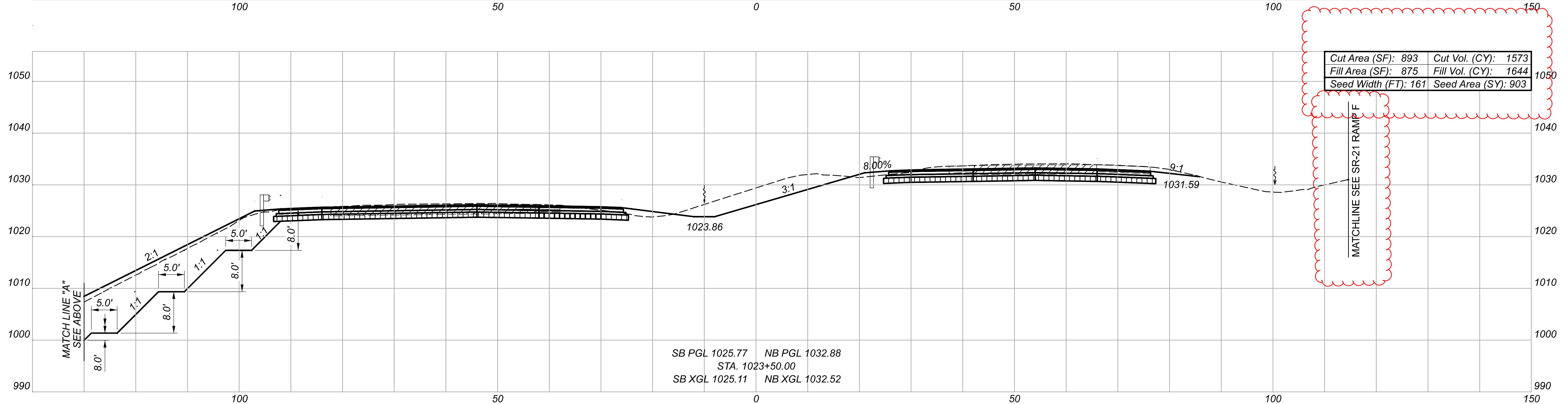
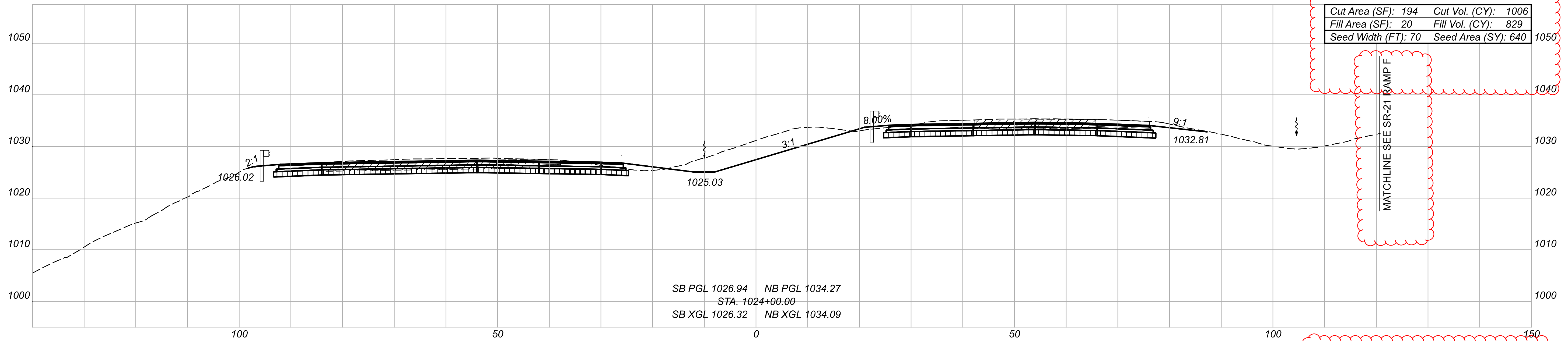
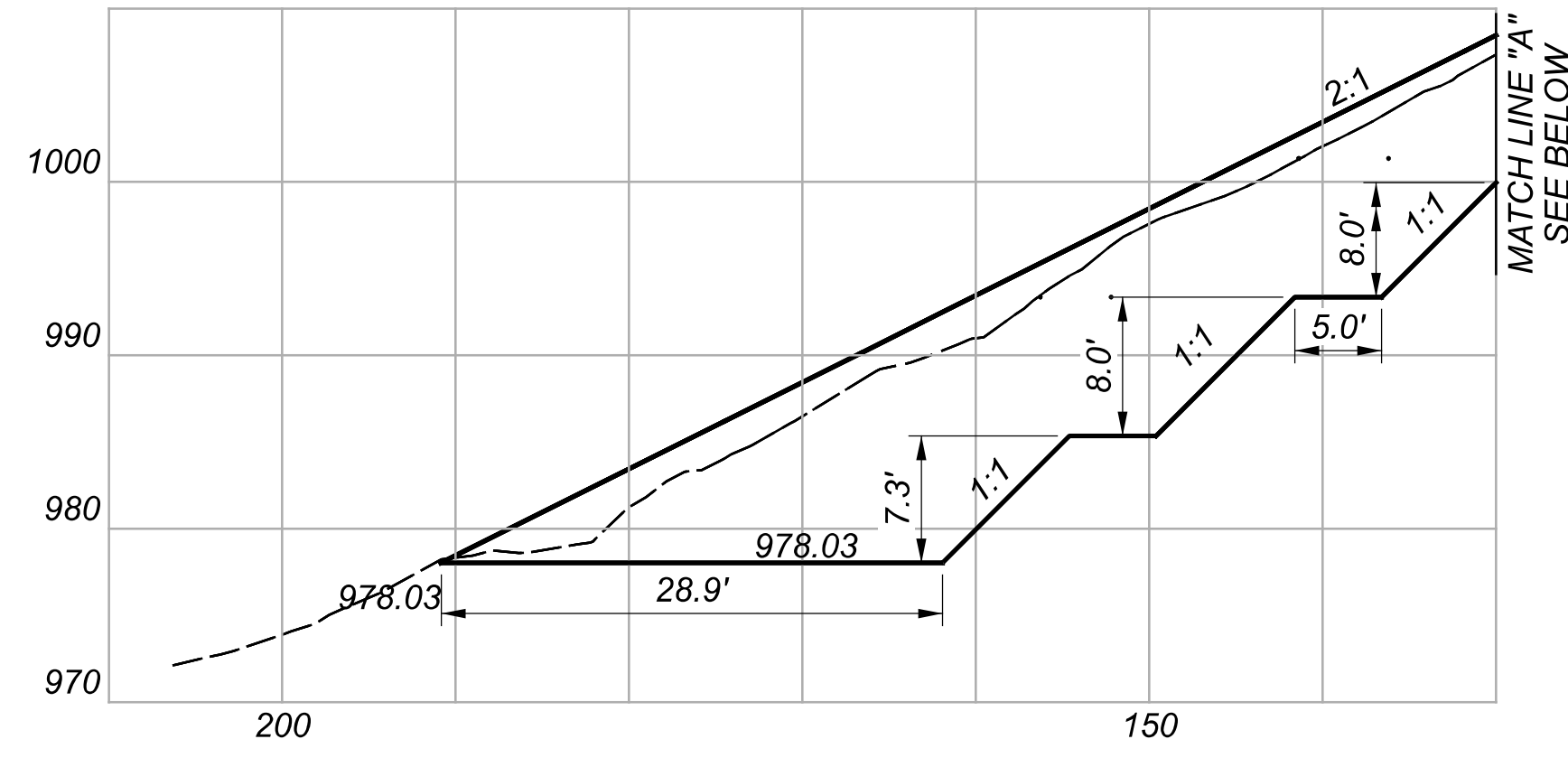
PROJECT ID  
 111405


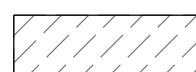
SHEET TOTAL  
 379 927



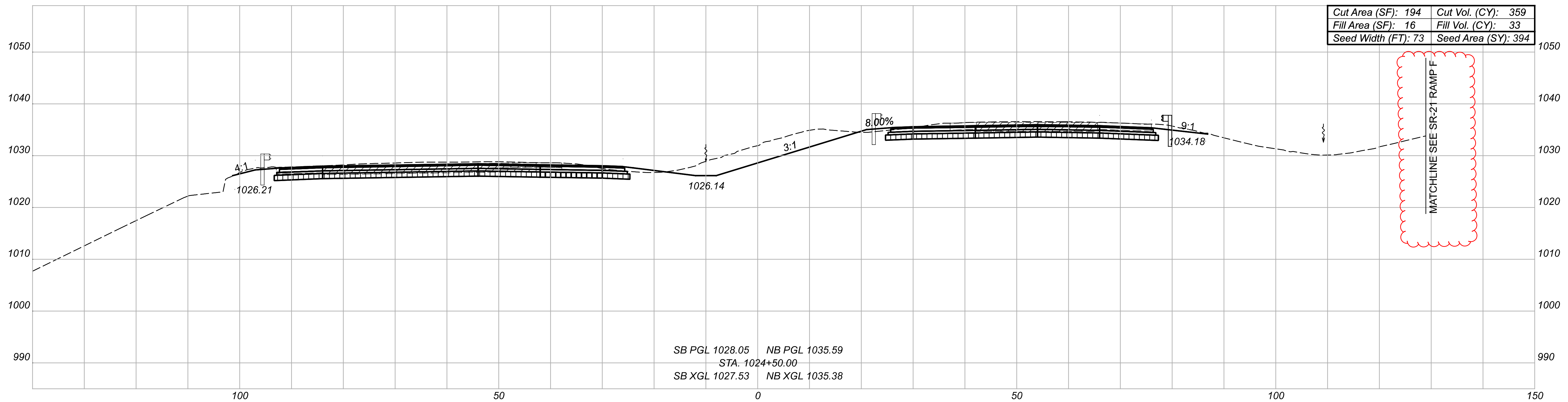
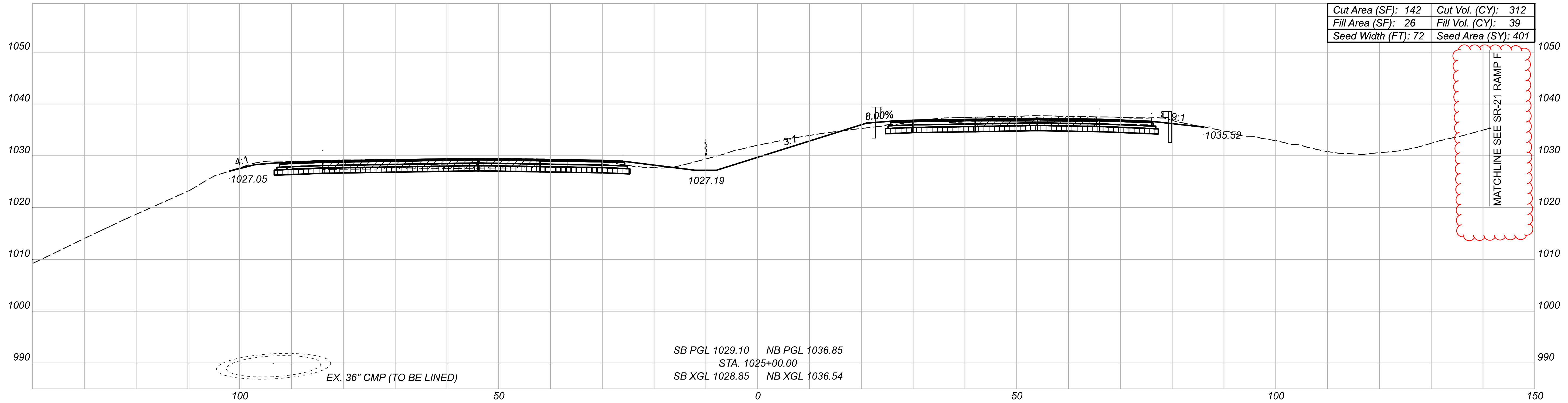
 CEMENT STABILIZATION  
 PAVEMENT REMOVAL



CROSS SECTIONS - IR-77  
 STA. 1022+50.00 TO STA. 1023+00.00



 CEMENT STABILIZATION  
 PAVEMENT REMOVAL



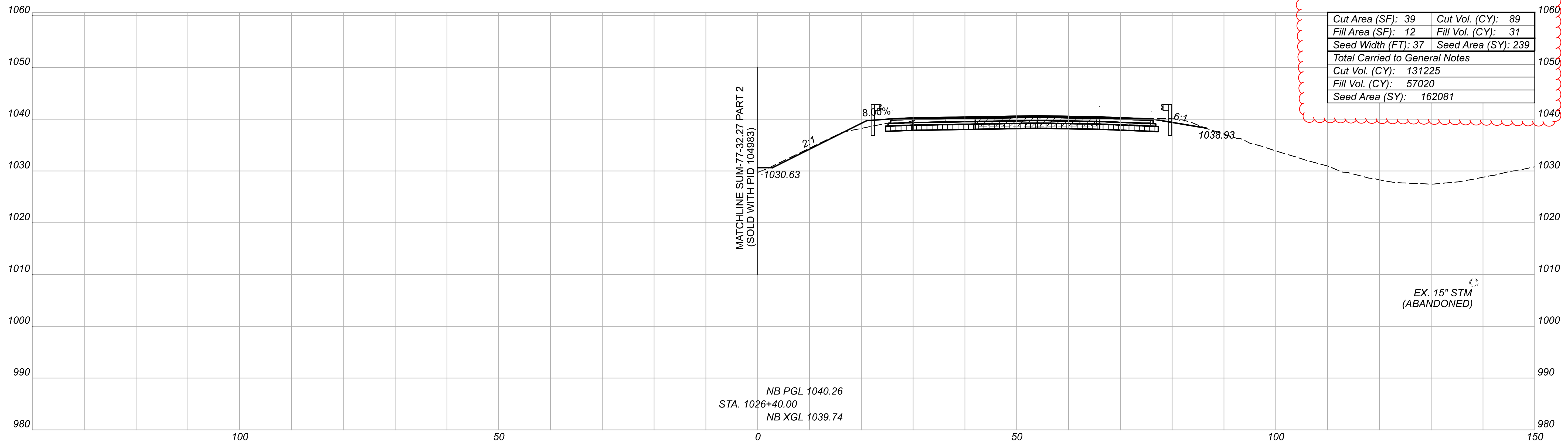


 CEMENT STABILIZATION  
 PAVEMENT REMOVAL

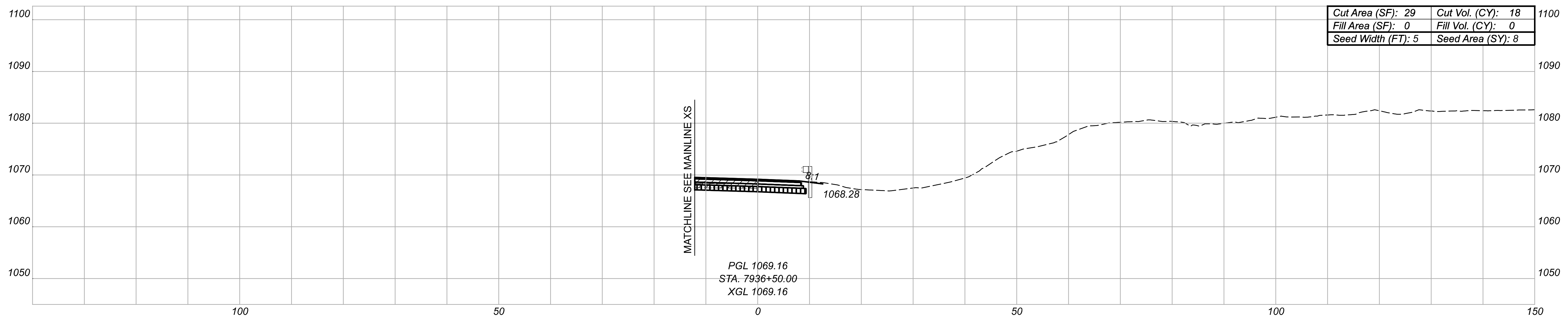
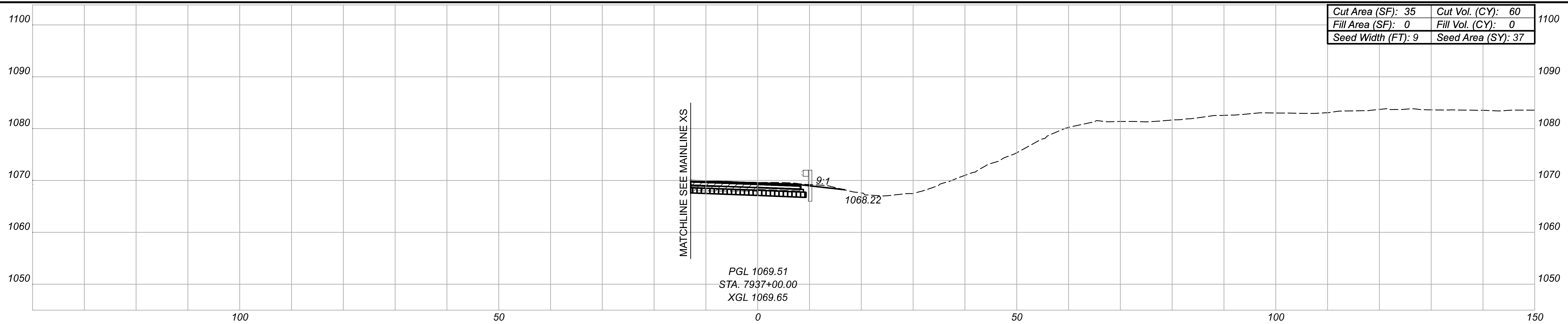
CROSS SECTIONS - IR-77  
 STA. 1024+50.00 TO STA. 1025+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231


DESIGNER  
 TQD  
 REVIEWER  
 DRJ 04/22/22  
 PROJECT ID  
 111405  
 SHEET TOTAL  
 382 927



CEMENT STABILIZATION  
 PAVEMENT REMOVAL



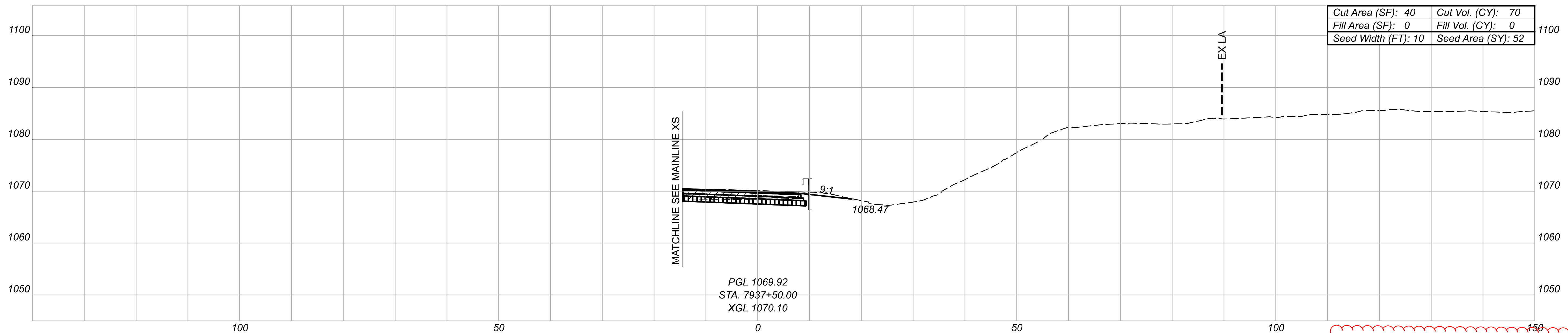
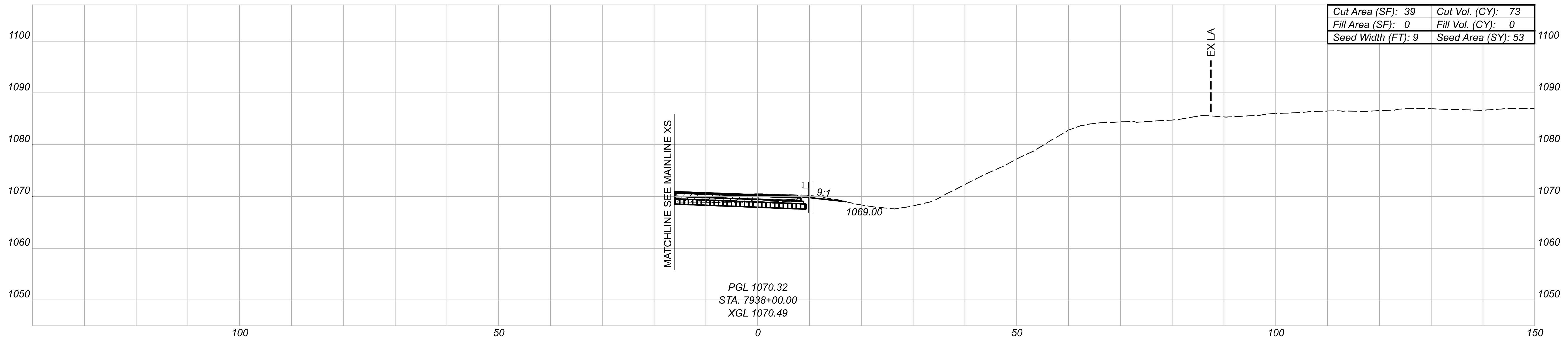
BEGIN WORK  
STA. 7936+17.09

	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP A  
STA. 7936+17.09 TO STA. 7937+00.00

DESIGN AGENCY	
<b>GANNETT FLEMING</b> 2500 Corporate Exchange Dr. Suite 230 Columbus, OH 43231	
DESIGNER	
TQD	
REVIEWER	
DRJ	04/22/22
PROJECT ID	
111405	
SHEET	
451	TOTAL
	927



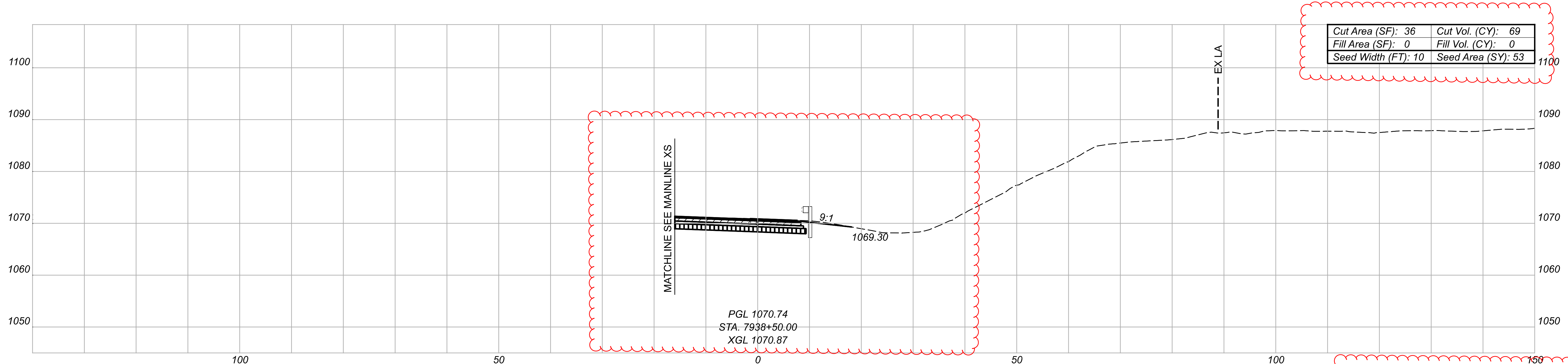
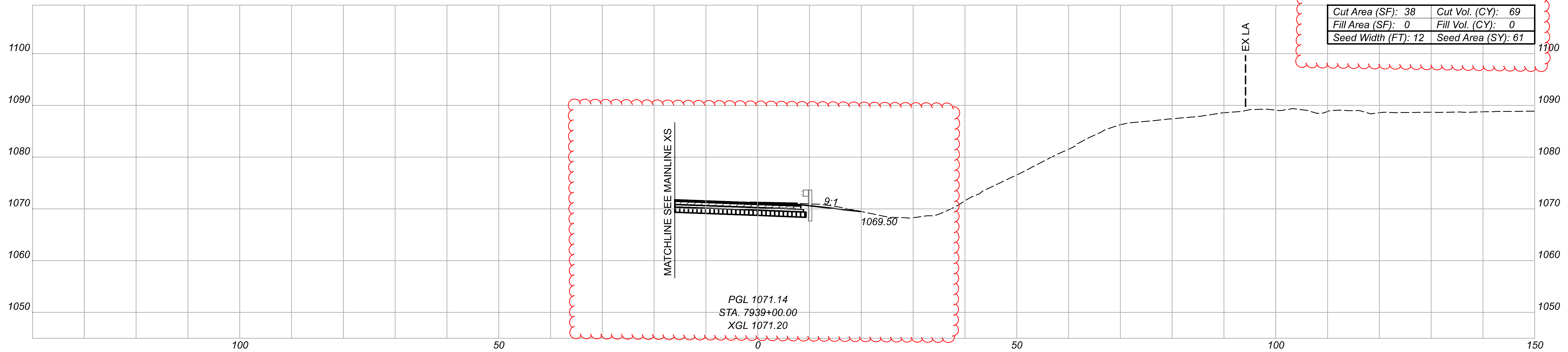




	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP A  
 STA. 7937+50.00 TO STA. 7938+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

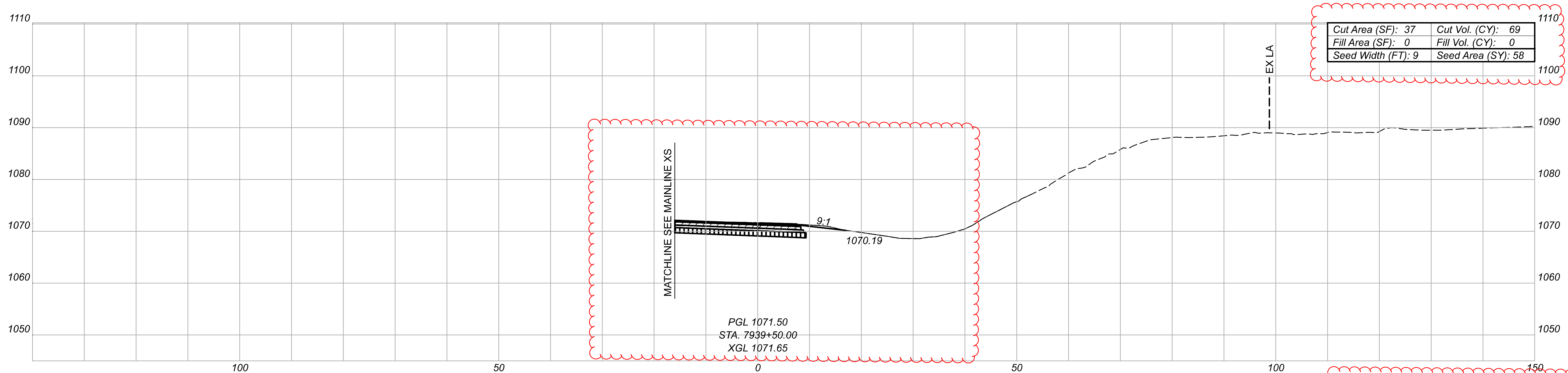
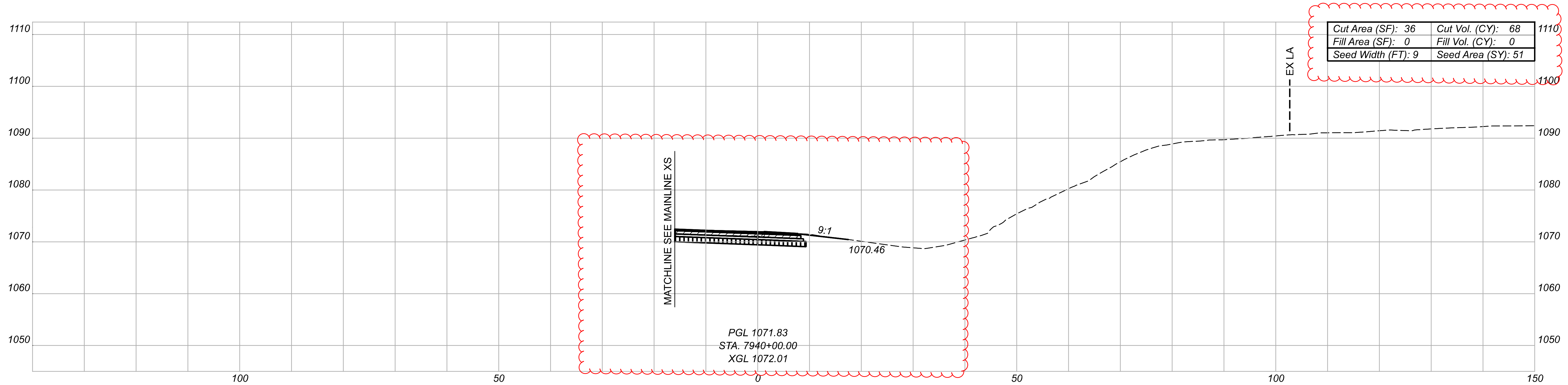
DESIGNER	TQD
REVIEWER	DRJ 04/22/22
PROJECT ID	111405
SHEET	452
TOTAL	927



	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP A  
 STA. 7938+50.00 TO STA. 7939+00.00

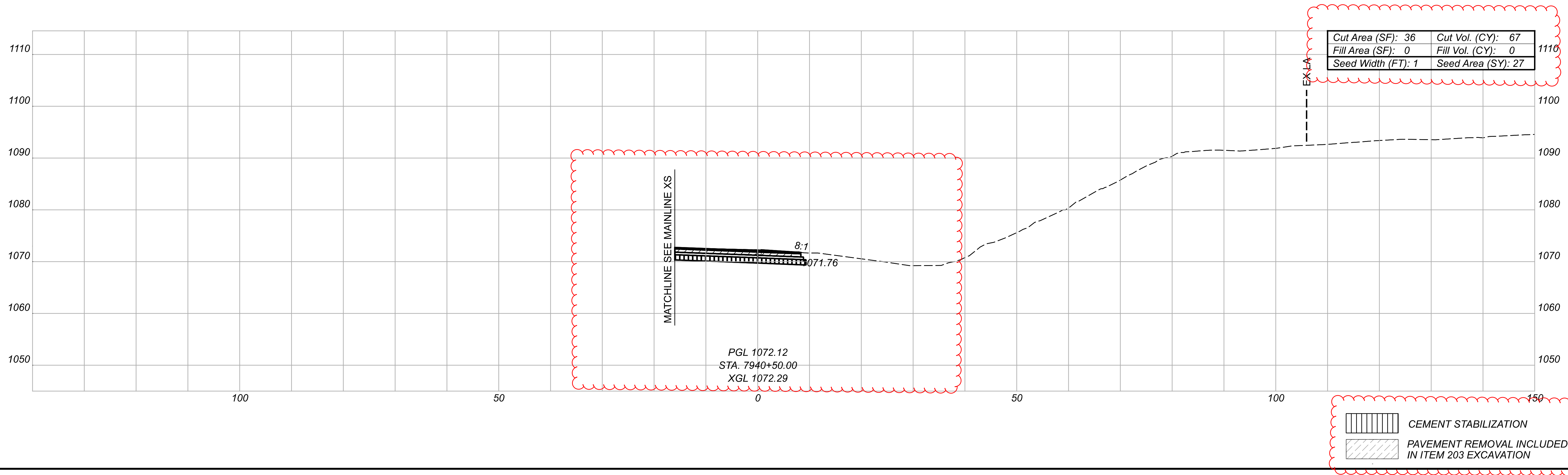
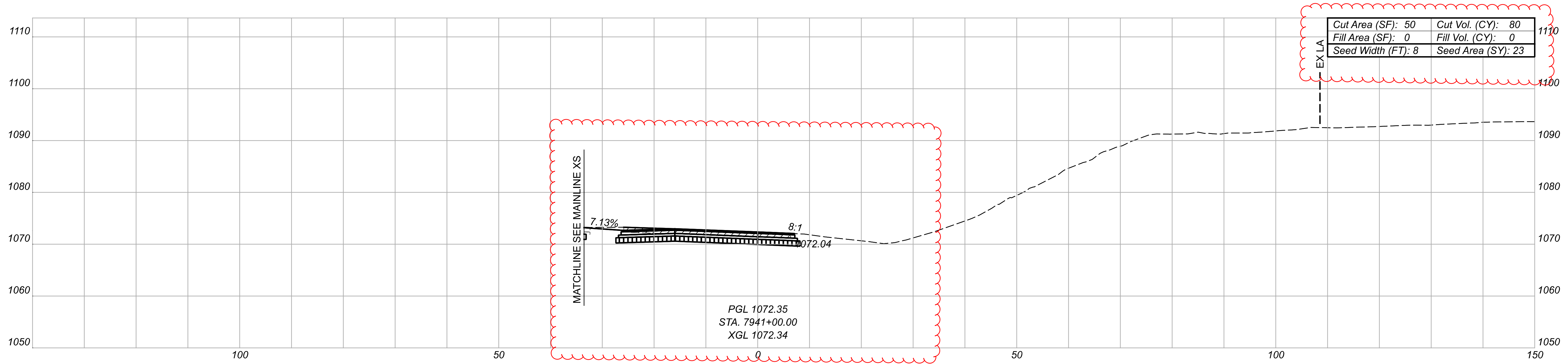
DESIGN AGENCY	GANNETT FLEMING
DESIGNER	TQD
REVIEWER	BRJ 04/22/22
PROJECT ID	111405
SHEET	453
TOTAL	927



	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP A  
 STA. 7939+50.00 TO STA. 7940+00.00





CROSS SECTIONS - IR-271 INTERCHANGE - RAMP A  
 STA. 7940+50.00 TO STA. 7941+00.00

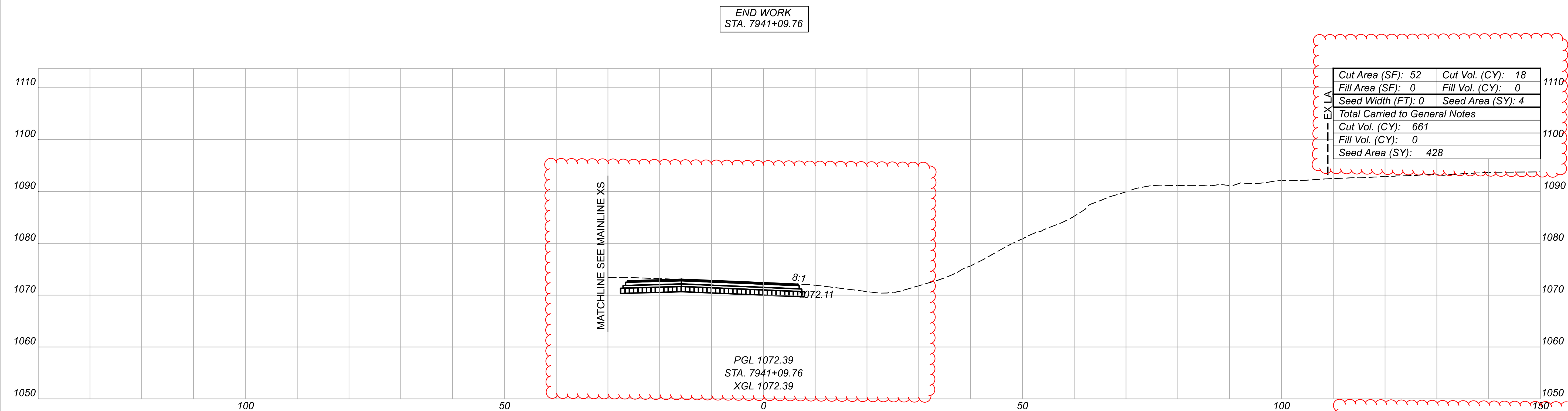
DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET	TOTAL
455	927

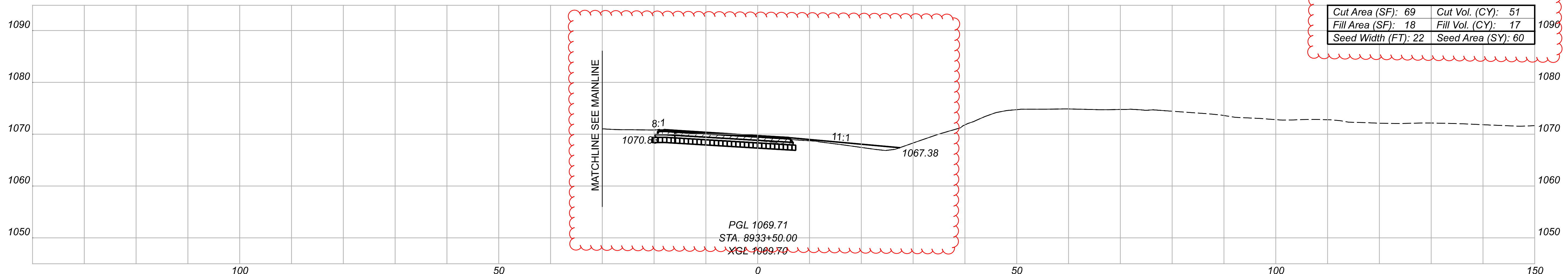
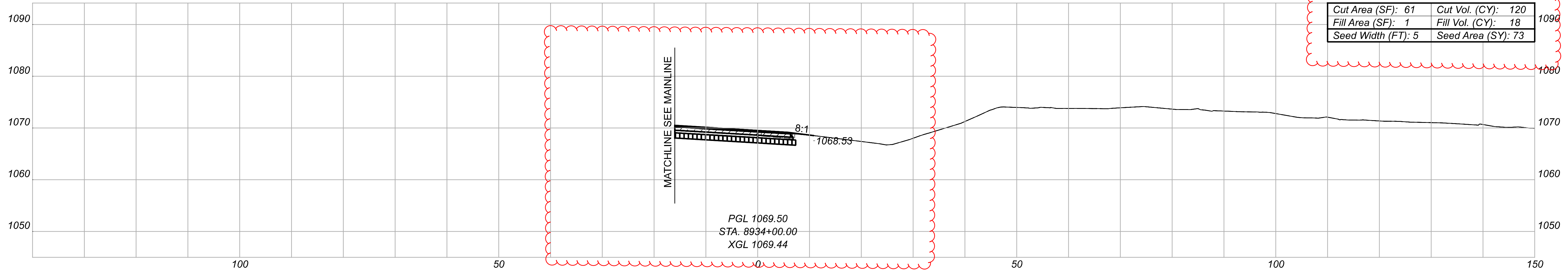


END WORK  
 STA. 7941+09.76

MATCHLINE SEE MAINLINE XS

PGL 1072.39  
 STA. 7941+09.76  
 XGL 1072.39

	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION



BEGIN WORK  
 STA. 8933+10.00

	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP B  
 STA. 8933+50.00 TO STA. 8934+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

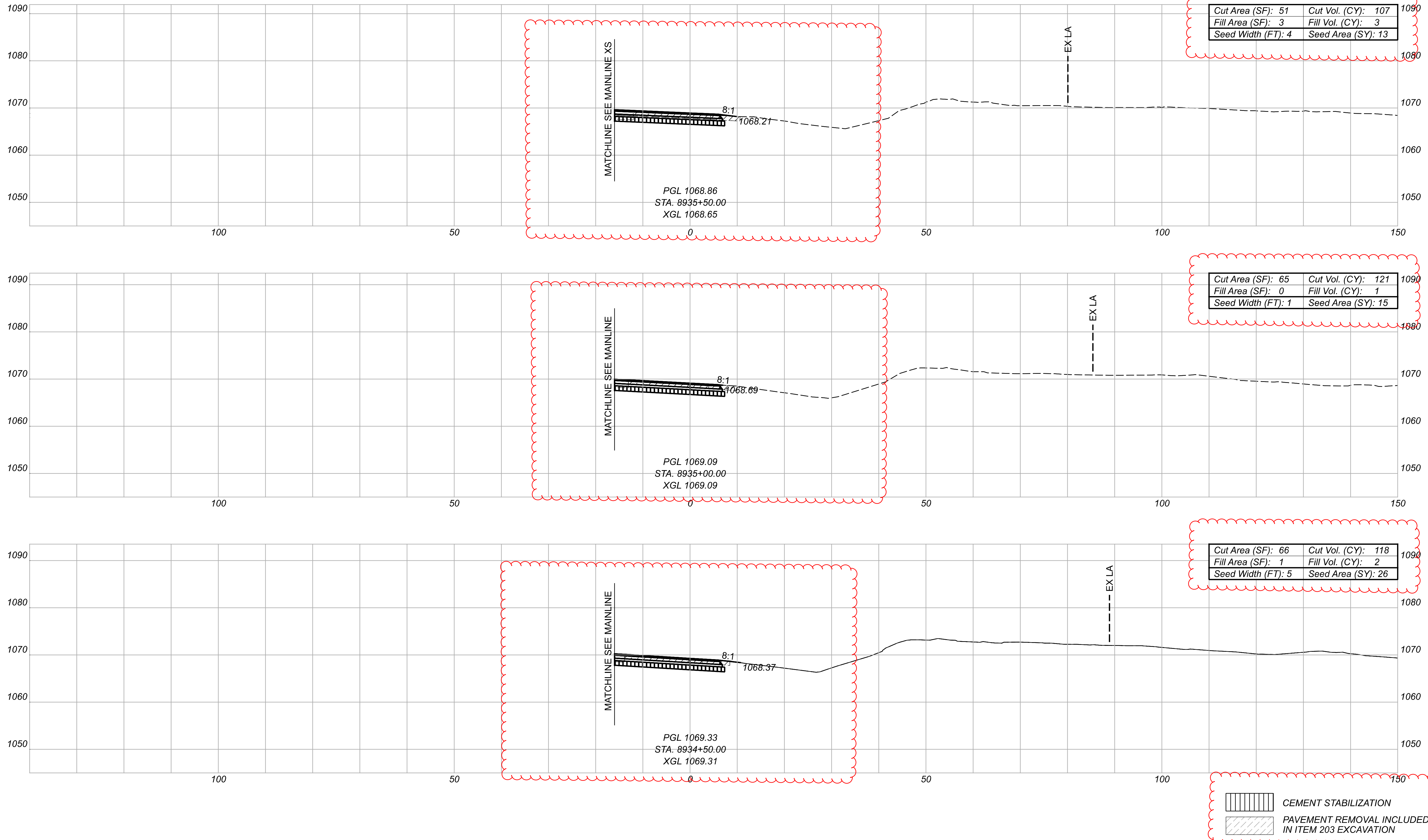
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET	TOTAL
457	927





CROSS SECTIONS - IR-271 INTERCHANGE - RAMP B  
 STA. 8934+50.00 TO STA. 8935+50.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

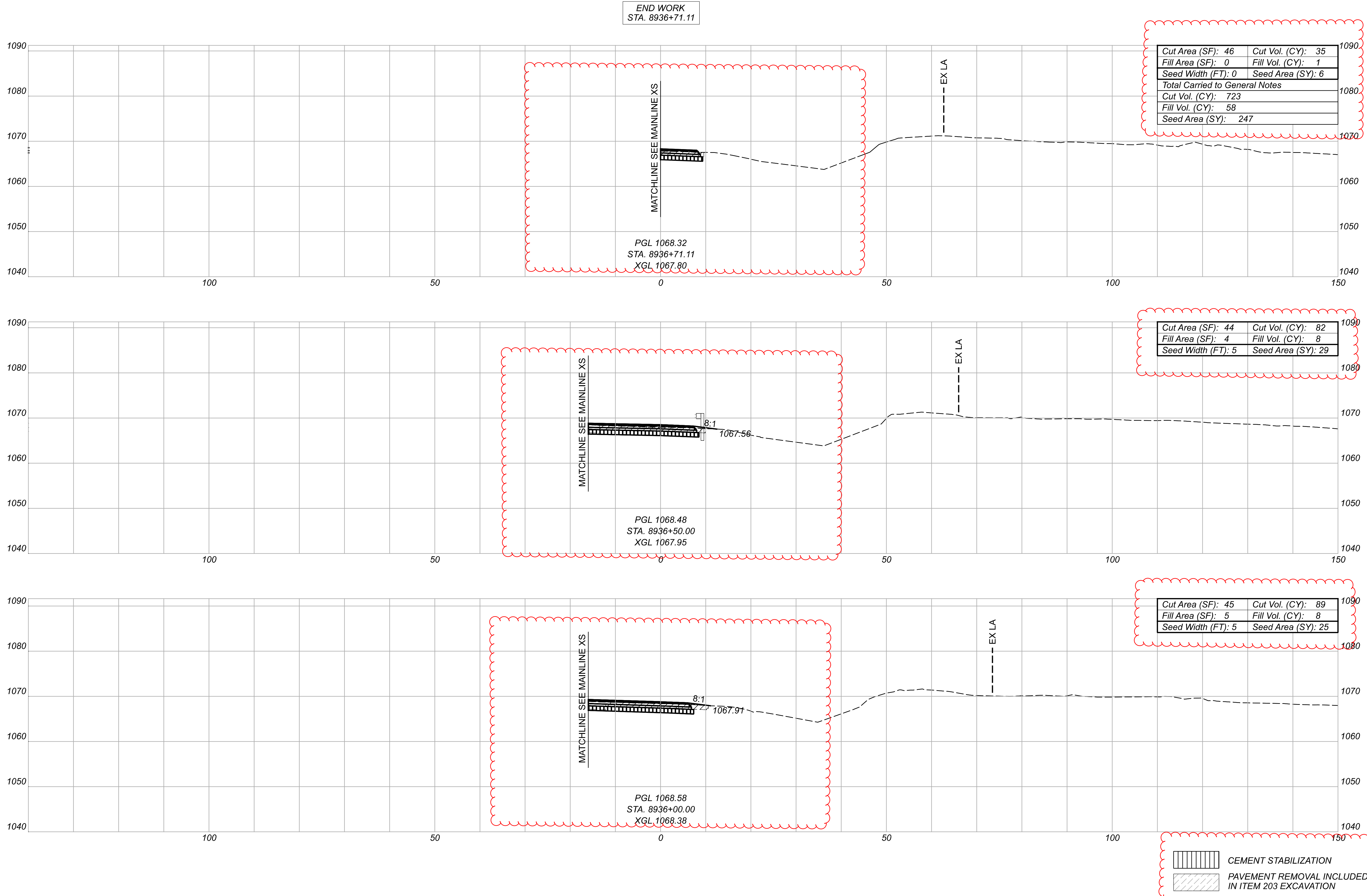
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET	TOTAL
458	927

CEMENT STABILIZATION  
 PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION



CROSS SECTIONS - IR-271 INTERCHANGE - RAMP B  
 STA. 8936+00.00 TO STA. 8936+71.11



DESIGNER: **GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

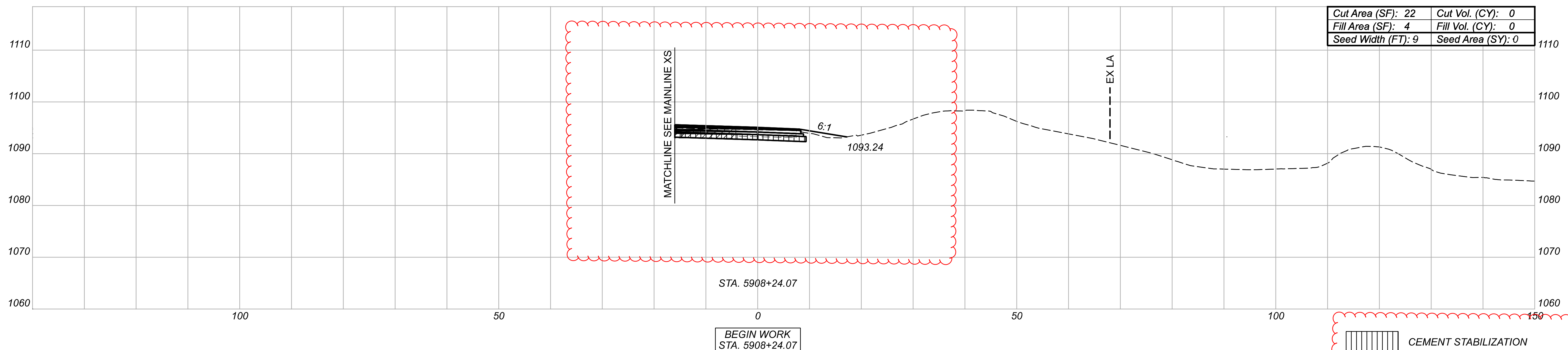
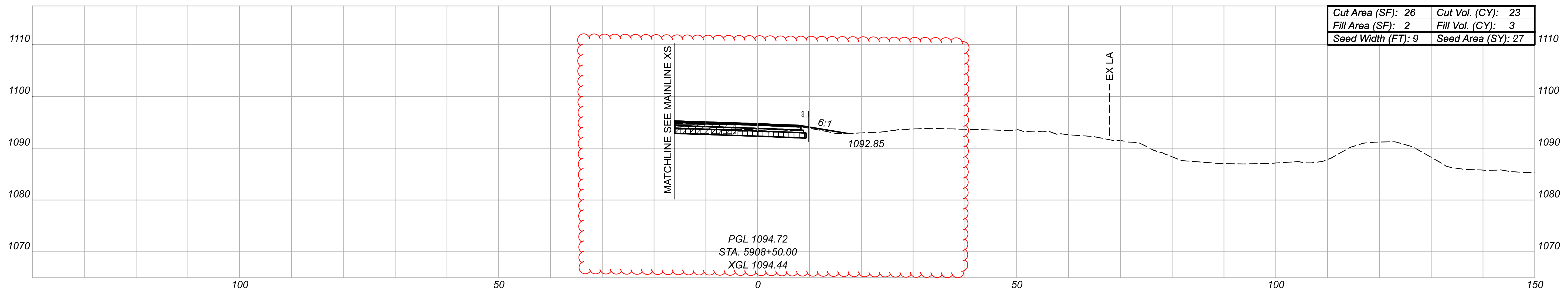
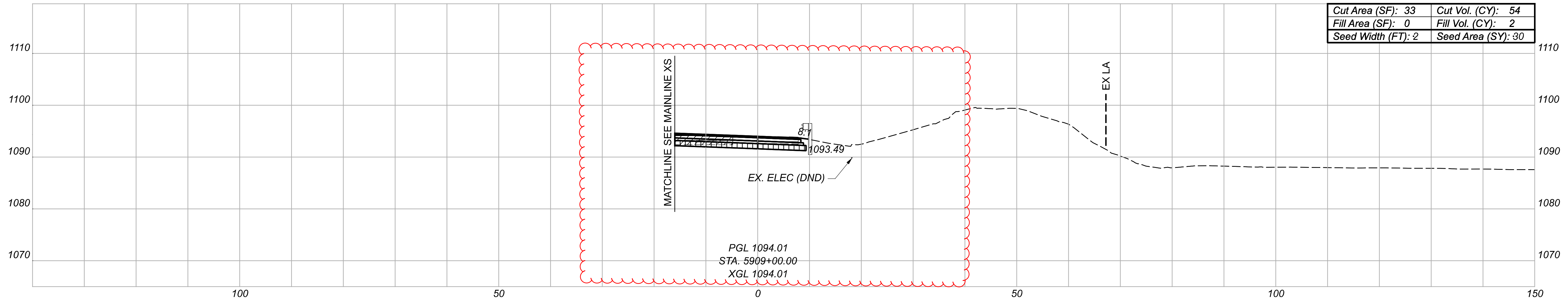
DESIGNER: TQD

REVIEWER: DRJ 04/22/22

PROJECT ID: 111405

SHEET TOTAL: 459 / 927

 CEMENT STABILIZATION  
 PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION



CROSS SECTIONS - IR-271 INTERCHANGE - RAMP C  
 STA. 5908+24.07 TO STA. 5909+00.00

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

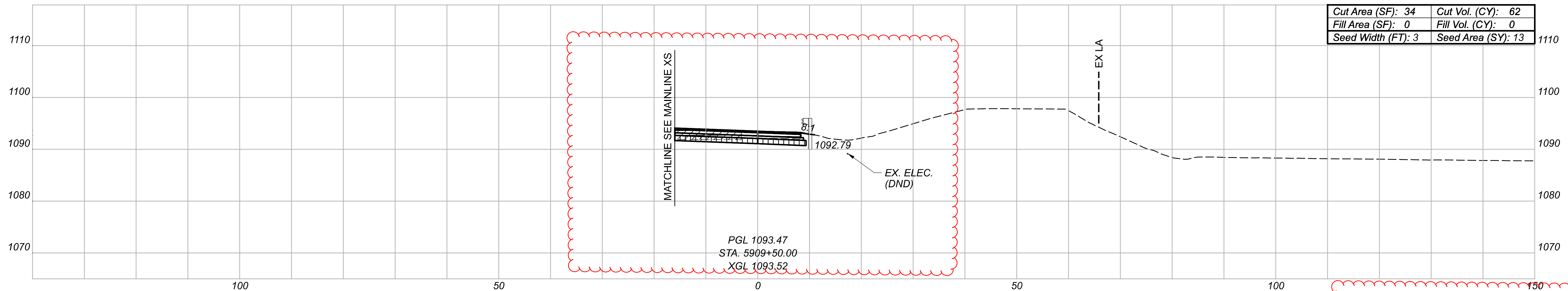
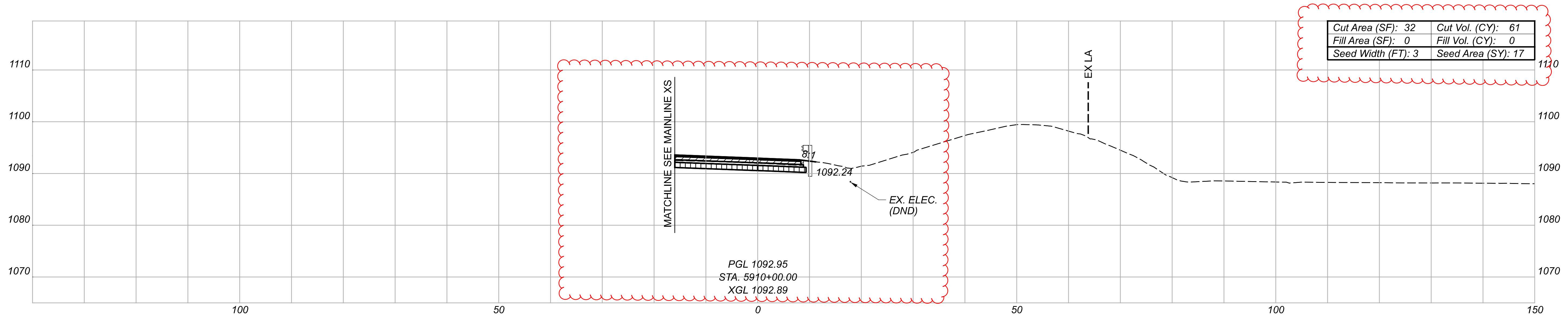
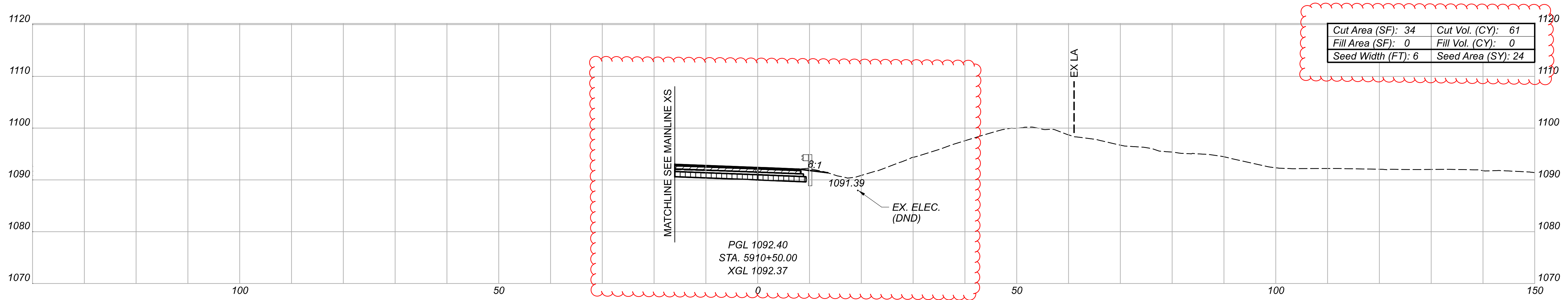
DESIGNER  
 TQD


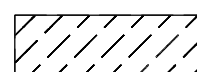
REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET	TOTAL
460	927





	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP C  
 STA. 5909+50.00 TO STA. 5910+50.00

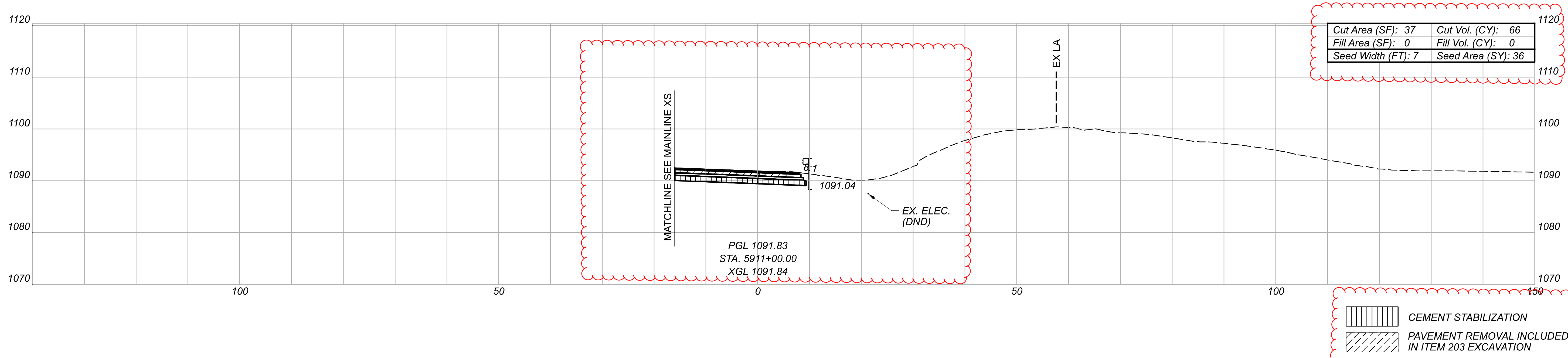
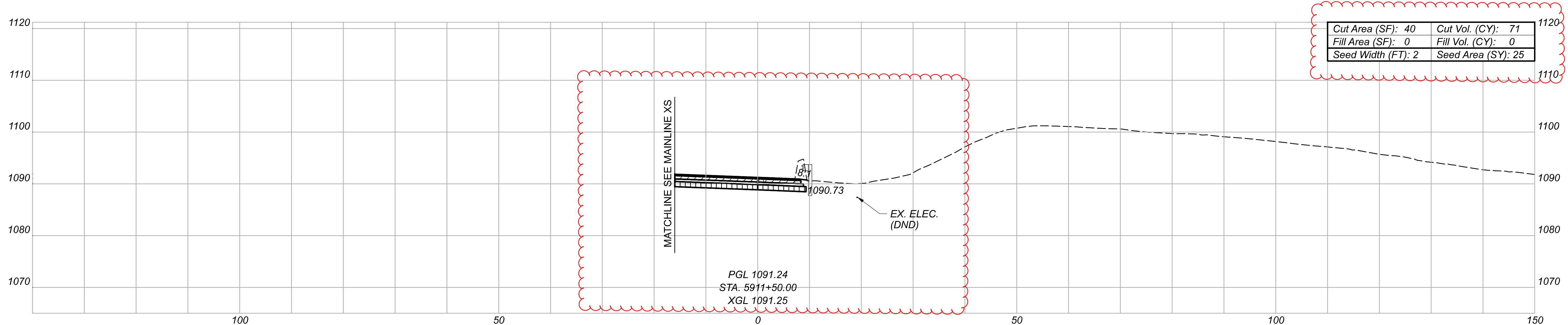
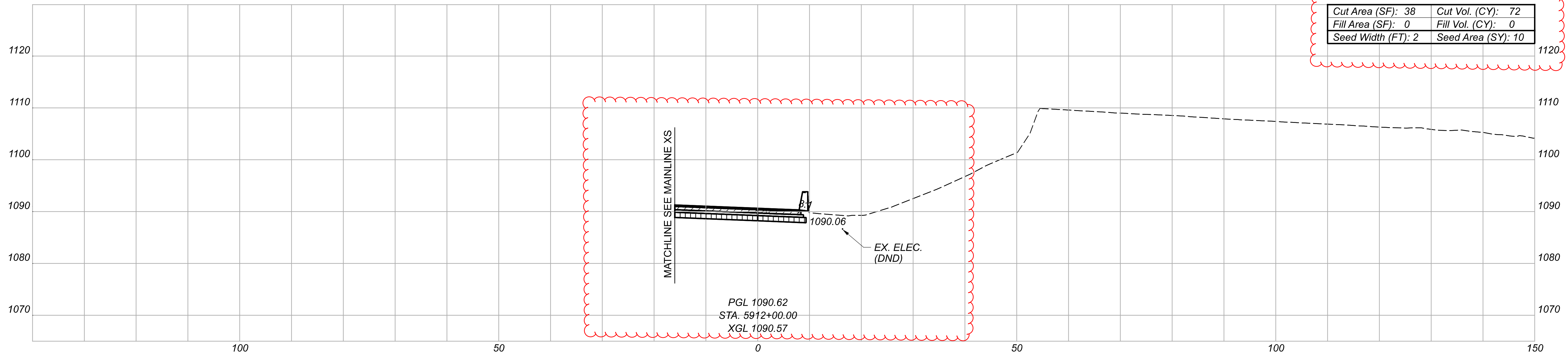
DESIGNER: GANNETT FLEMING  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

DESIGNER: TQD

REVIEWER: DRJ 04/22/22

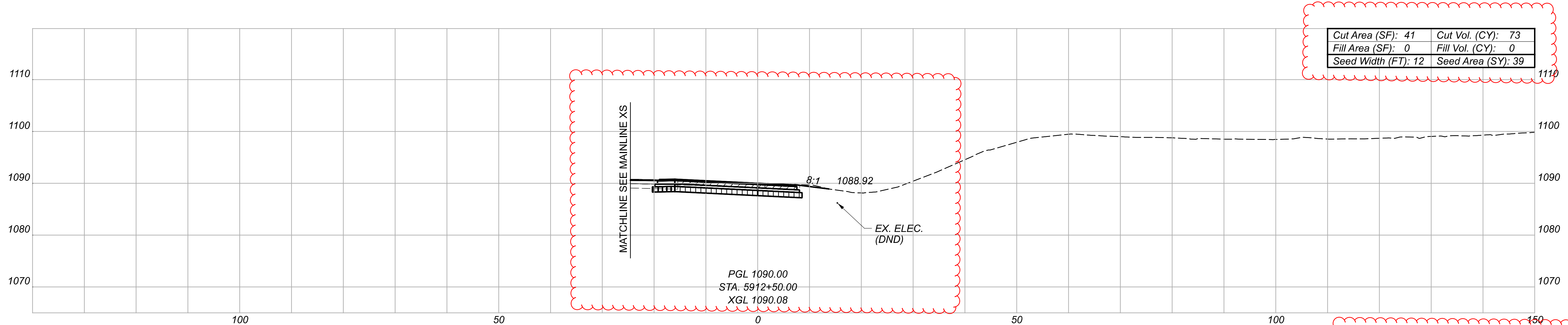
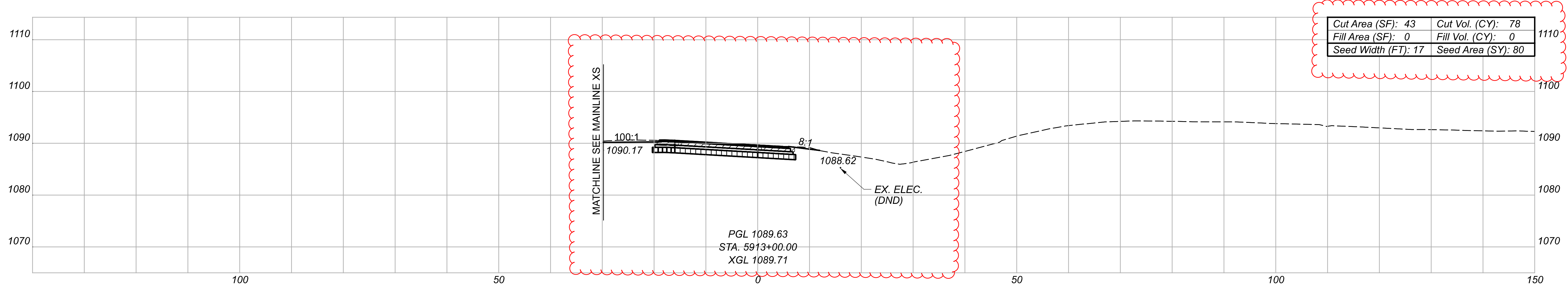
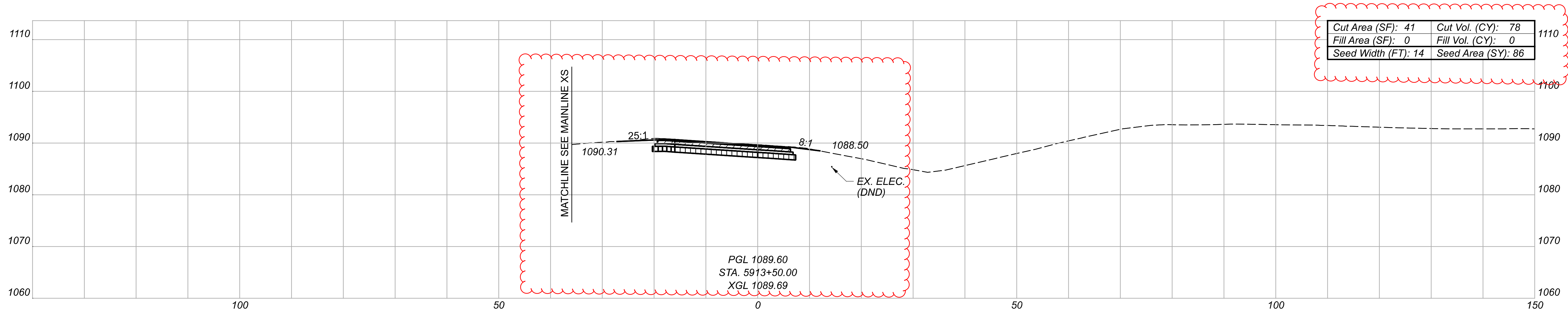
PROJECT ID: 111405


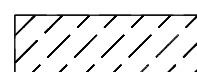
SHEET TOTAL: 461 / 927



CROSS SECTIONS - IR-271 INTERCHANGE - RAMP C  
 STA. 5911+00.00 TO STA. 5912+00.00

DESIGN AGENCY	GANNETT FLEMING
DESIGNER	TQD
REVIEWER	DRJ 04/22/22
PROJECT ID	111405
SHEET	462
TOTAL	927

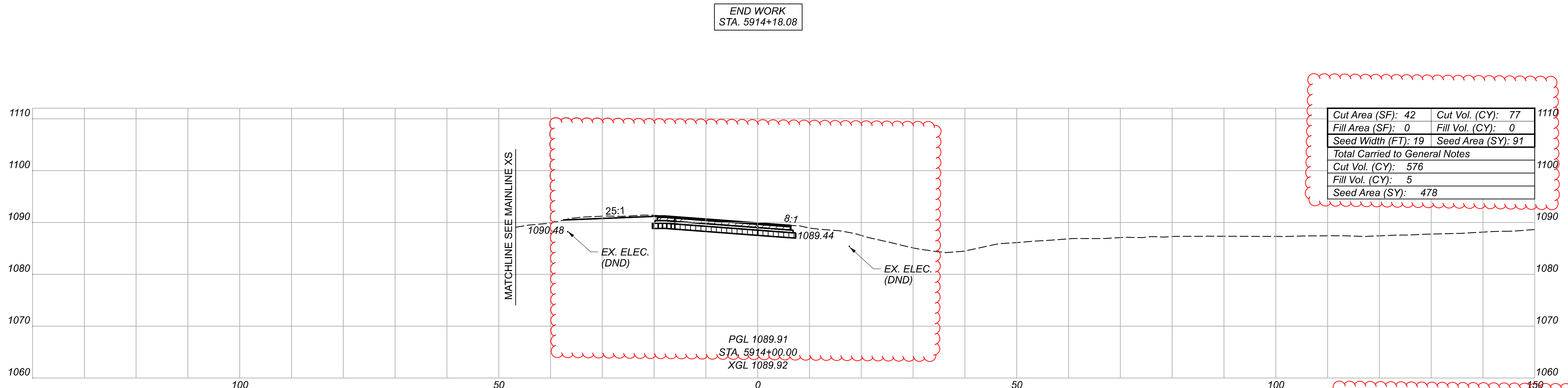


	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP C  
 STA. 5912+50.00 TO STA. 5913+50.00

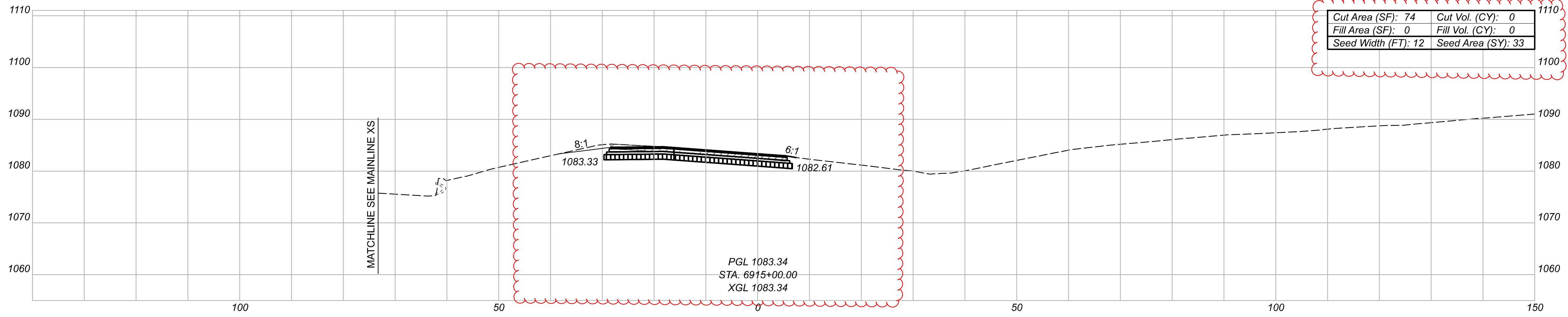
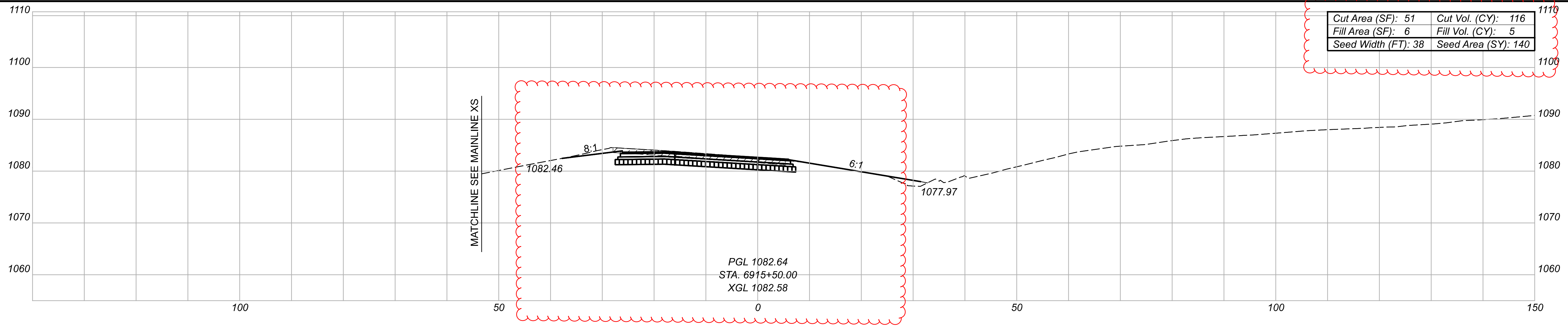
DESIGNER	TQD
REVIEWER	DRJ 04/22/22
PROJECT ID	111405
SHEET	463
TOTAL	927




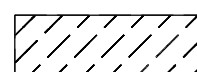


Cut Area (SF): 42	Cut Vol. (CY): 77
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 19	Seed Area (SY): 91
Total Carried to General Notes	
Cut Vol. (CY): 576	
Fill Vol. (CY): 5	
Seed Area (SY): 478	

	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION



BEGIN WORK  
 STA. 6915+00.00

	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP D  
 STA. 6915+00.00 TO STA. 6915+50.00

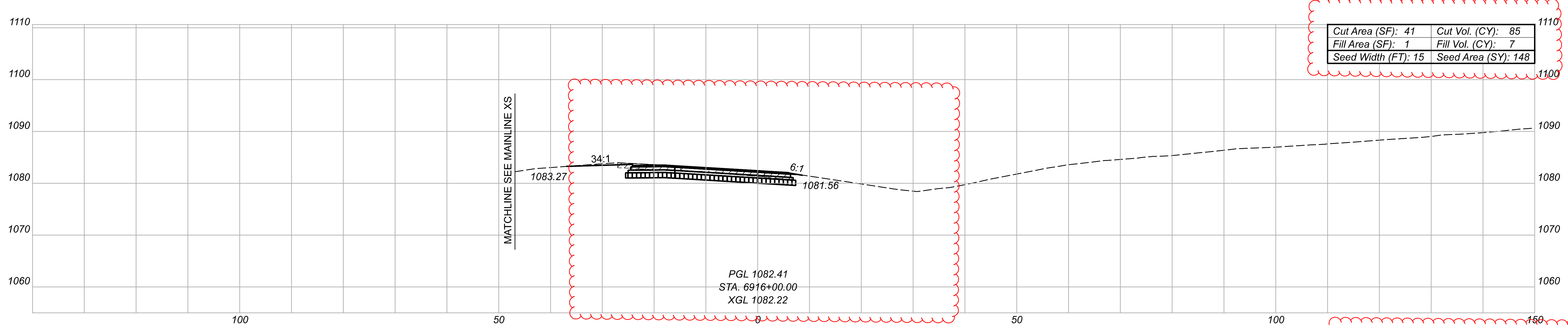
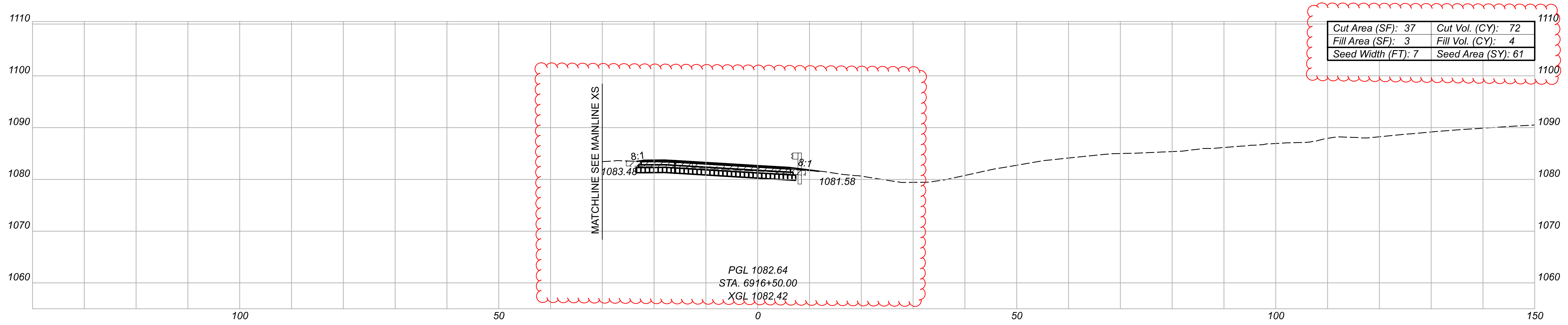
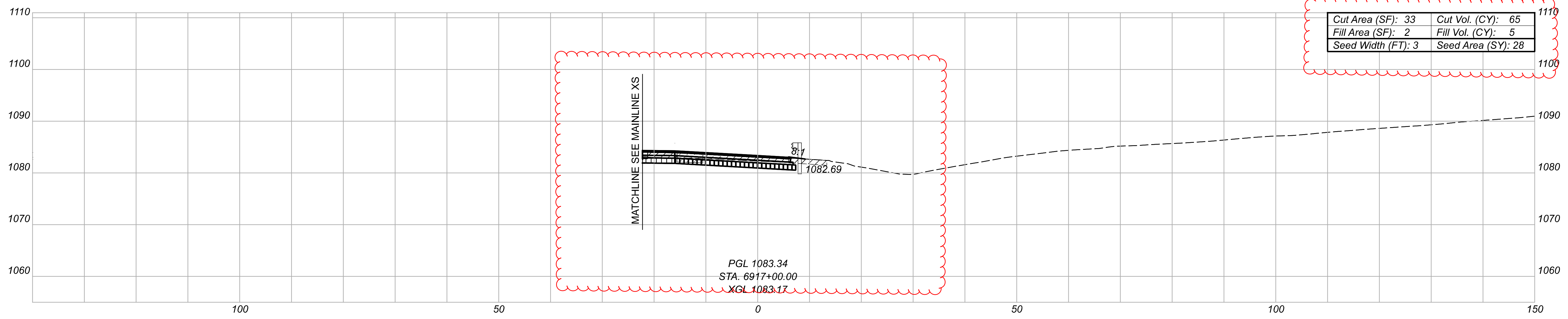
DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231


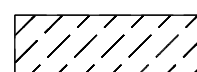
DESIGNER  
 TQD

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET	TOTAL
465	927

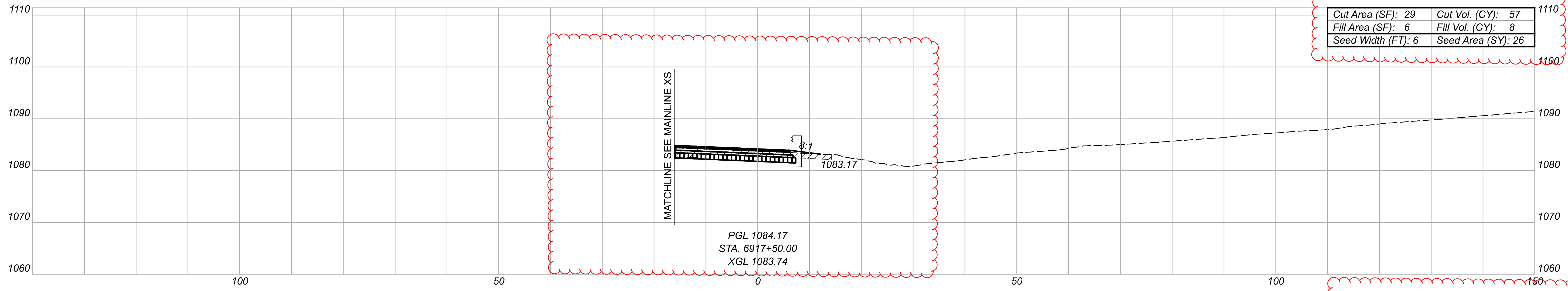
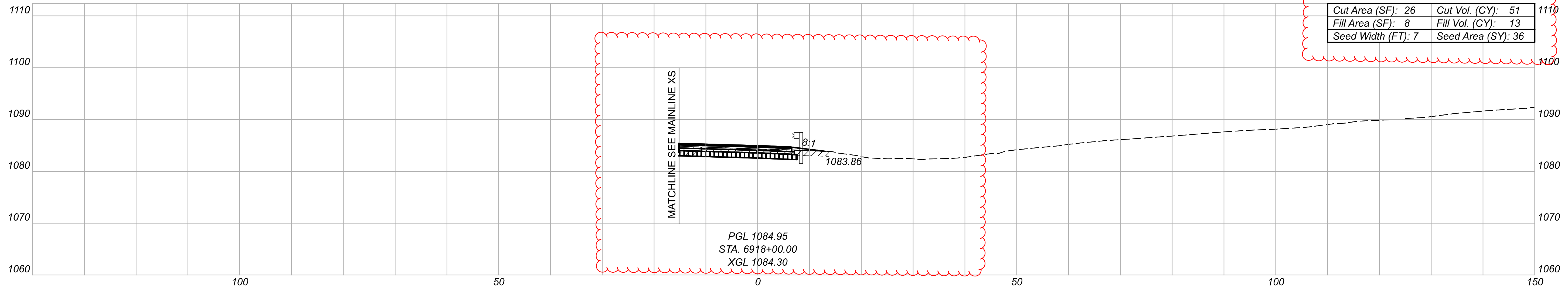
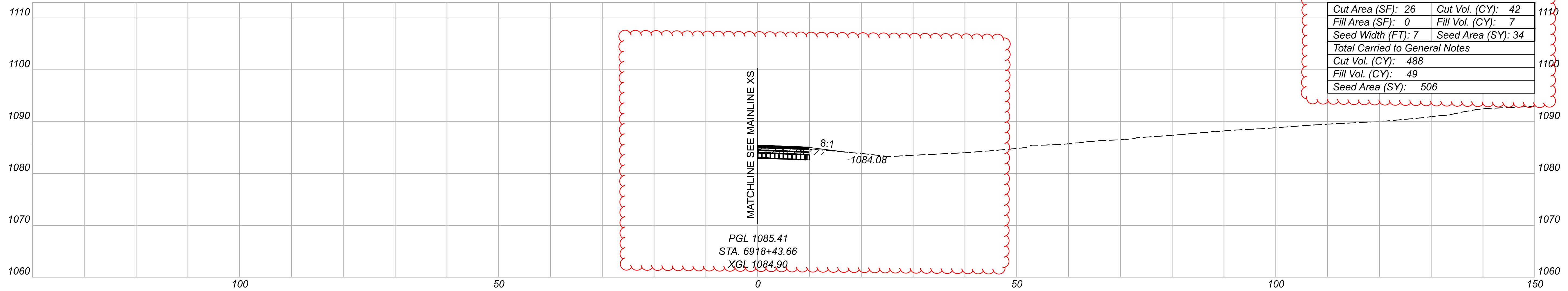


 CEMENT STABILIZATION  
 PAVEMENT REMOVAL INCLUDED  
 IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP D  
 STA. 6916+00.00 TO STA. 6917+00.00

DESIGNER	TQD
REVIEWER	DRJ 04/22/22
PROJECT ID	111405
SHEET	466
TOTAL	927





	CEMENT STABILIZATION
	PAVEMENT REMOVAL INCLUDED IN ITEM 203 EXCAVATION

CROSS SECTIONS - IR-271 INTERCHANGE - RAMP D  
 STA. 6917+50.00 TO STA. 6918+43.66

DESIGN AGENCY  
**GANNETT FLEMING**  
 2500 Corporate Exchange Dr.  
 Suite 230  
 Columbus, OH 43231

DESIGNER  
**TQD**

REVIEWER  
 DRJ 04/22/22

PROJECT ID  
 111405

SHEET TOTAL  
 467 927