

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 130 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS-80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE SOUTH ZONE
COMBINED SCALE FACTOR: 0.99990578064
ORIGIN OF COORDINATE SYSTEM: 0,0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ITEM 609 CURB, TYPE 6, AS PER PLAN

THE CONTRACTOR SHALL INSTALL CURB, TYPE 6 AS PER CMS 609.04, EXCEPT THE CURB SHALL BE FORMED FOR A FUTURE, TYPE A2 CURB RAMP AS PER STANDARD DRAWING BP-7.1. THE FUTURE CURB RAMP WILL BE 10 FOOT WIDE.

ALL EQUIPMENT, LABOR, MATERIALS OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 609, CURB, TYPE 6, AS PER PLAN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

SOUTH CENTRAL POWER
ATTN: ZACK REED
2780 COONPATH RD, NE
P.O. BOX 250
LANCASTER, OH 43130
(740) 689-6150

AT&T - OHIO
ATTN: KEVIN GLASSER
111 NORTH FOURTH ST
COLUMBUS, OHIO 43215
(614) 208-9312

FRONTIER COMMUNICATIONS
ATTN: ROBERT CHANDLER
1300 SANDUSKY ROAD
MARION, OHIO 43302
(740) 369-0826

SPECTRUM CABLE TV
ATTN: DANIEL FEINGOLD
3760 INTERCHANGE RD.
COLUMBUS, OHIO 43204
(614) 487-7718
DANIEL.FEINGOLD@CHARTER.COM

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ITEM 202 - REMOVAL, MISC.: POST
ITEM 202 - REMOVAL, MISC.: ROCK
ITEM 202 - REMOVAL, MISC.: BILLBOARD

IN ADDITION TO THE REQUIREMENTS OF CMS 202, THESE ITEMS SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF THE ITEMS NOTED IN THE PLANS.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND DEPOSAL FEES NECESSARY TO REMOVE THE ITEMS.

ITEM 407, NON-TRACKING TACK COAT

THE RATE OF APPLICATION OF THE ITEM 407, NON-TRACKING TACK COAT SHALL BE PER CMS TABLE 407.06-1 AND SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GAL/SY FOR TACK COAT UNDER THE INTERMEDIATE AND 0.05 GAL/SY UNDER THE SURFACE COURSE, (FOR ESTIMATING PURPOSES ONLY).

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- 659, SOIL ANALYSIS TEST
2 EACH
- 659, TOPSOIL, AS PER PLAN
111 CU. YD. X 14474SQ. YD. / 1000 SQ. YD. = 1607 CU. YD.
- 659, SEEDING AND MULCHING
10202 SQ. YD. + 2074 SQ. YD. + 2198 SQ. YD. = 14474SQ. YD.
- 659, REPAIR SEEDING AND MULCHING
14474SQ. YD. X 5% = 724 SQ. YD.
- 659, INTER-SEEDING
14474SQ. YD. X 5% = 724 SQ. YD.
- 659, COMMERCIAL FERTILIZER
14474 SQ. YD. X 1 TON / 7410 SQ. YD. = 1.95 TON
+ 724 SQ. YD. X 20 LB / 1000 SQ. FT. X 9 SQ. FT./SQ. YD. = 130.3 LB
= 1.95 TON + 130.3 LB / 2000 LB/TON = 2.02 TON
- 659, LIME
14474 SQ. YD. X 9 SQ. FT./SQ. YD. / 43560 SQ. FT./AC. = 2.99 ACRES
- 659, WATER
14474 SQ. YD. X 0.0027 M GAL / SQ. YD. X 2 APPLICATIONS = 78.2 M GAL
+ 724 SQ. YD. X 0.0027 M GAL / SQ. YD. = 1.95 M GAL
= 78.2 M GAL + 1.95 M GAL = 81 M GAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).
- IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.
- PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

THE QUANTITIES FOR THE ABOVE DESCRIBED WORK ARE SHOWN ON SHEET 60.

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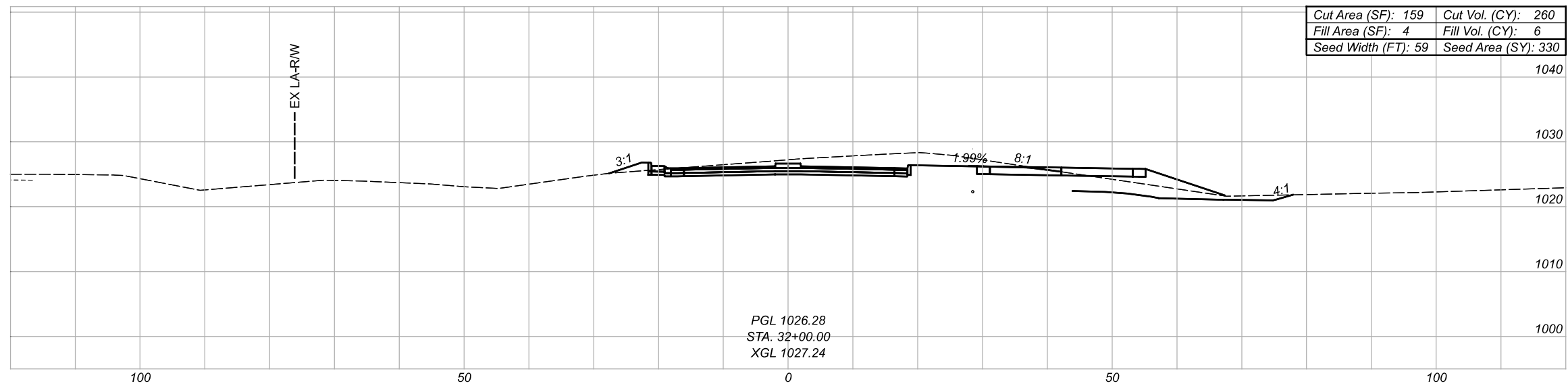
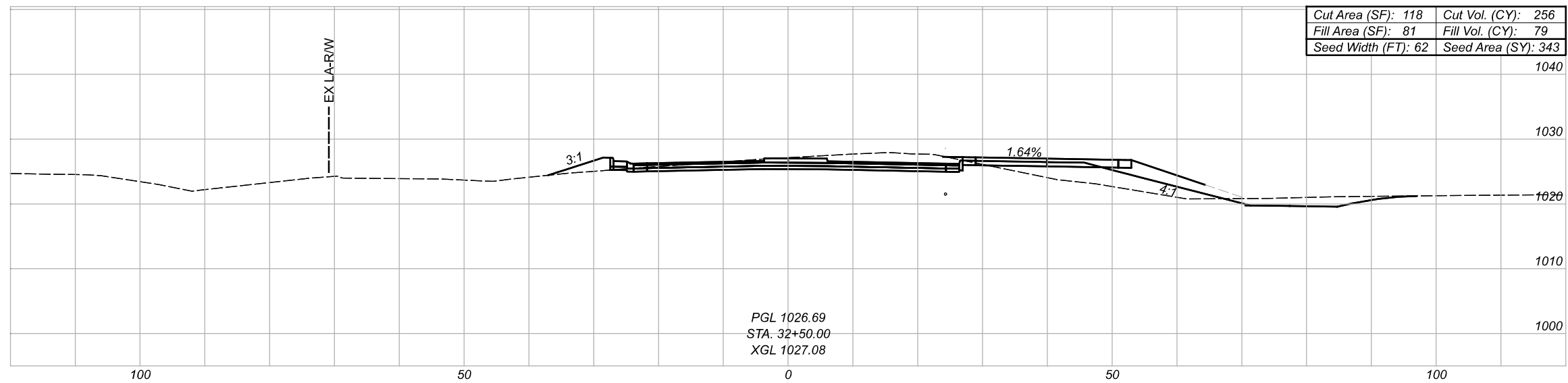
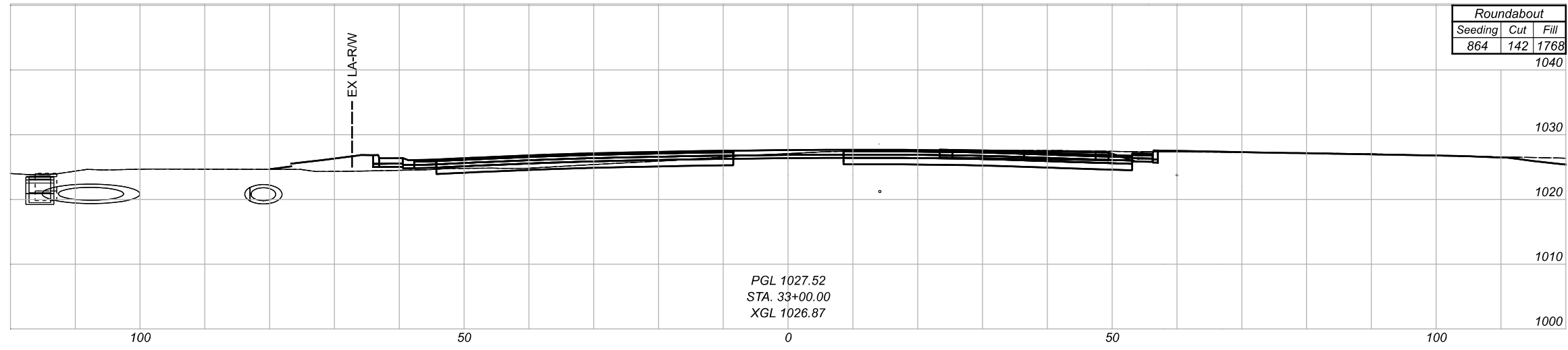
REVIEWER
MJC 10/22/21

PROJECT ID
110407

SHEET TOTAL
P.10 | P.144

SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	59	60	61	62	63	85	88	94	130	01/SAE/PV	EXT	TOTAL					
	LS										LS	201	11000	LS		ROADWAY CLEARING AND GRUBBING		
				5							5	202	20010	5	EACH	HEADWALL REMOVED		
			8,810								8,810	202	23000	8,810	SY	PAVEMENT REMOVED		
				327							327	202	35100	327	FT	PIPE REMOVED, 24" AND UNDER		
				97							97	202	35200	97	FT	PIPE REMOVED, OVER 24"		
				3							3	202	58100	3	EACH	CATCH BASIN REMOVED		
		1									1	202	98100	1	EACH	REMOVAL MISC.:BILLBOARD	10	
		6									6	202	98100	6	EACH	REMOVAL MISC.:POST	10	
		1									1	202	98100	1	EACH	REMOVAL MISC.:ROCK	10	
							4,959	1,394	961		7,314	203	10000	7,314	CY	EXCAVATION		
							5,538	498	1,667		7,703	203	20000	7,703	CY	EMBANKMENT		
			13,947								13,947	204	10000	13,947	SY	SUBGRADE COMPACTION		
			470								470	204	13000	470	CY	EXCAVATION OF SUBGRADE		
			470								470	204	30010	470	CY	GRANULAR MATERIAL, TYPE B		
			7								7	204	45000	7	HOUR	PROOF ROLLING		
			1,408								1,408	204	51000	1,408	SY	GEOGRID		
										2	2	623	40520	2	EACH	RIGHT-OF-WAY MONUMENT		
																EROSION CONTROL		
						8					8	601	21050	8	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
		66									66	601	21060	66	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		
				25							25	601	32100	25	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER		
	1			23							24	601	32200	24	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
2											2	659	00100	2	EACH	SOIL ANALYSIS TEST		
1,607			514								2,121	659	00301	2,121	CY	TOPSOIL, AS PER PLAN	11	
14,474											14,474	659	00500	14,474	SY	SEEDING AND MULCHING, CLASS 1		
724											724	659	14000	724	SY	REPAIR SEEDING AND MULCHING		
724											724	659	15000	724	SY	INTER-SEEDING		
2.02											2.02	659	20000	2.02	TON	COMMERCIAL FERTILIZER		
2.99											2.99	659	31000	2.99	ACRE	LIME		
81											81	659	35000	81	MGAL	WATER		
			1,913								1,913	659	98000	1,913	SY	SEEDING, MISC.:ARTIFICIAL TURF	11	
			4,622								4,622	670	00500	4,622	SY	SLOPE EROSION PROTECTION		
			874								874	670	00700	874	SY	DITCH EROSION PROTECTION		
						LS					LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		
						LS					LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
						LS					LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
						157,000					157,000	832	30000	157,000	EACH	EROSION CONTROL		
			311								311	836	10000	311	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	11	
																DRAINAGE		
							8				8	602	20000	8	CY	CONCRETE MASONRY		
	20						624				644	605	13300	644	FT	6" UNCLASSIFIED PIPE UNDERDRAINS		
							5,048				5,048	605	14000	5,048	FT	6" BASE PIPE UNDERDRAINS		
	20										20	605	31100	20	FT	AGGREGATE DRAINS		
	10						232				242	611	00510	242	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
	75										75	611	03100	75	FT	10" CONDUIT, TYPE B		
	75										75	611	03600	75	FT	10" CONDUIT, TYPE E		
	75										75	611	03700	75	FT	10" CONDUIT, TYPE F		
							333				333	611	04400	333	FT	12" CONDUIT, TYPE B		
											258	611	04600	258	FT	12" CONDUIT, TYPE C		
											17	611	07600	17	FT	18" CONDUIT, TYPE C		
											141	611	10400	141	FT	24" CONDUIT, TYPE B		
											118	611	10600	118	FT	24" CONDUIT, TYPE C		





CROSS SECTIONS - U.S. 22
 STA. 32+00.00 TO STA. 33+00.00

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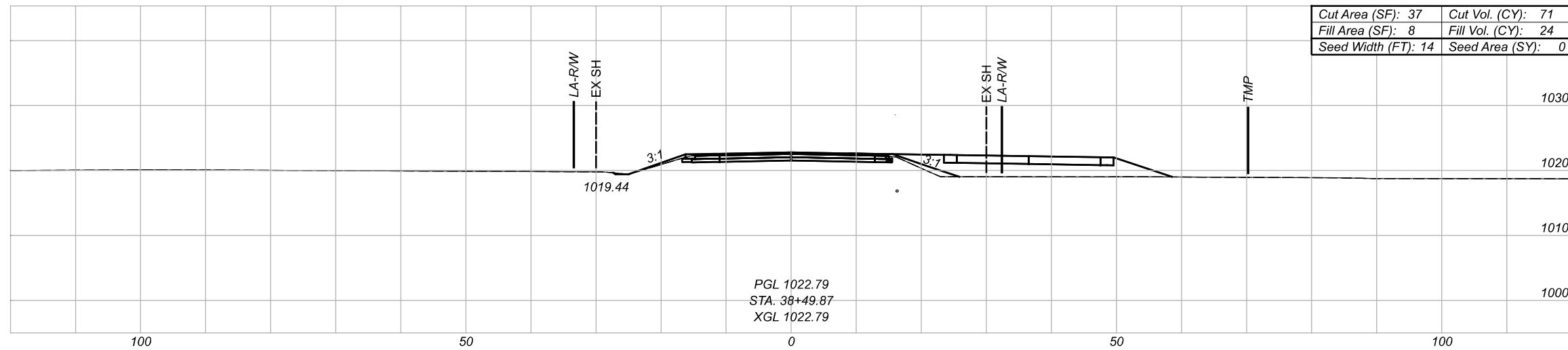
REVIEWER
MJC 10/22/21

PROJECT ID
110407

Sheet Totals		
Seeding	Cut	Fill
1537	658	1853

SHEET	TOTAL
P.81	P.144

US-22 Totals		
Seeding	Cut	Fill
10202	4959	5538



Cut Area (SF): 37	Cut Vol. (CY): 71
Fill Area (SF): 8	Fill Vol. (CY): 24
Seed Width (FT): 14	Seed Area (SY): 0

PGL 1022.79
 STA. 38+49.87
 XGL 1022.79

CROSS SECTIONS - U.S. 22
 STA. 38+49.87

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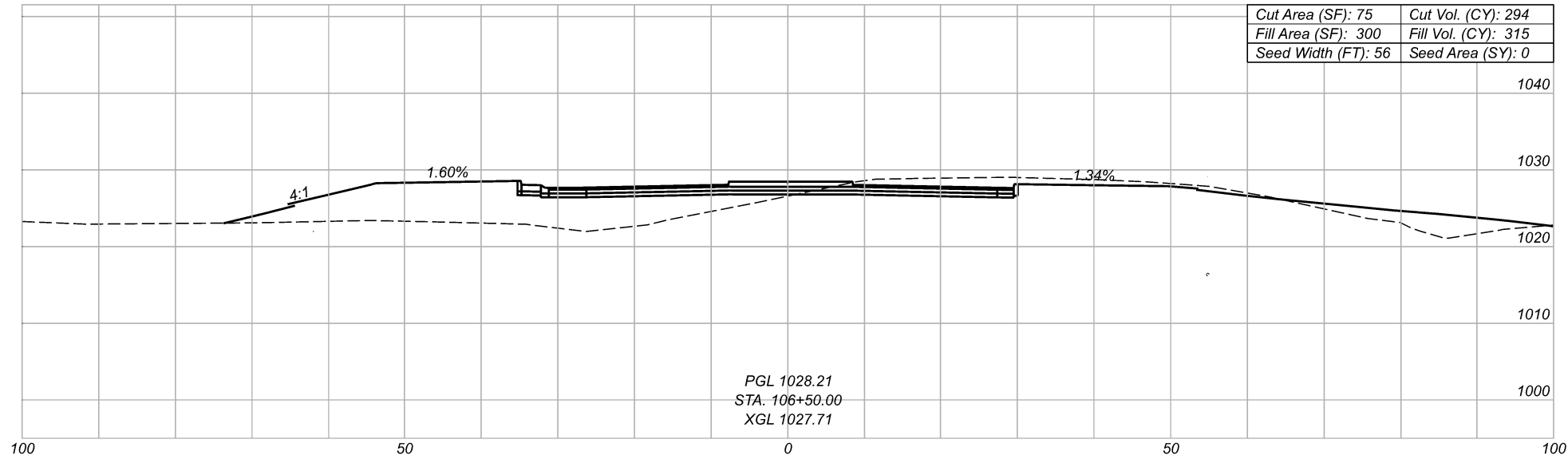
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Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
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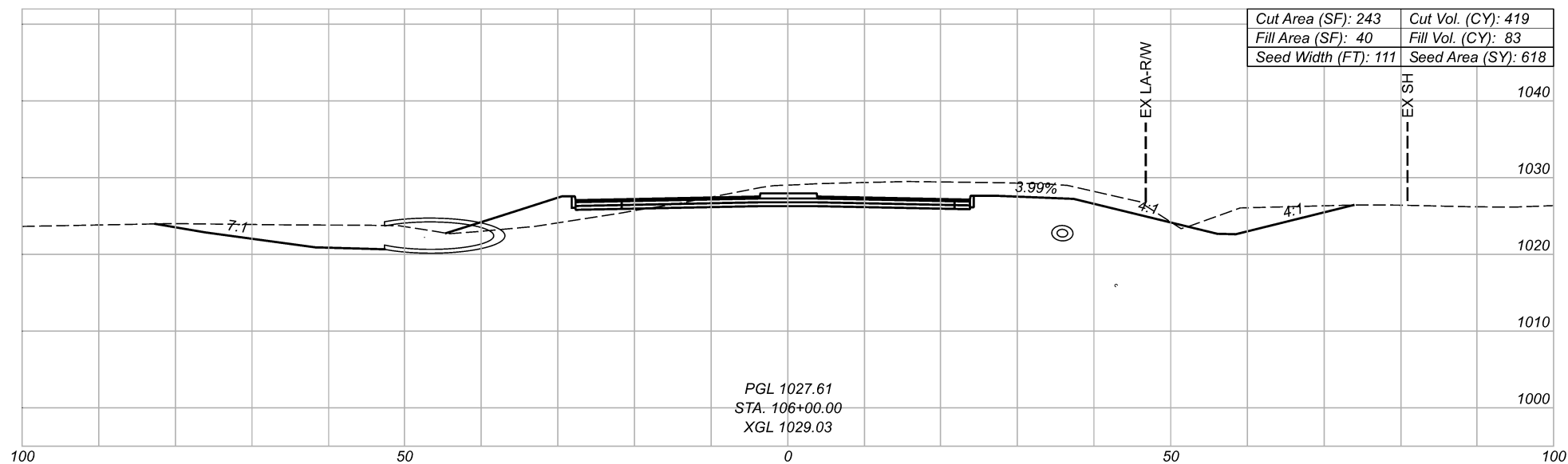
SR-159 Totals		
Seeding	Cut	Fill
2074	1394	498

Cut Area (SF): 75	Cut Vol. (CY): 294
Fill Area (SF): 300	Fill Vol. (CY): 315
Seed Width (FT): 56	Seed Area (SY): 0



PGL 1028.21
STA. 106+50.00
XGL 1027.71

Cut Area (SF): 243	Cut Vol. (CY): 419
Fill Area (SF): 40	Fill Vol. (CY): 83
Seed Width (FT): 111	Seed Area (SY): 618



PGL 1027.61
STA. 106+00.00
XGL 1029.03

FAI-22-9.42

MODEL: I:\07.XS207 PAPER SIZE: I:\X(11n.) DATE: 4/20/2022 TIME: 11:50 PM USER: mcorne++
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CROSS SECTIONS - S.R. 159
STA. 106+00.00 TO STA. 106+50.00

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PROJECT ID
110407

Sheet Totals		
Seeding	Cut	Fill
618	713	398

SHEET	TOTAL
P.88	P.144