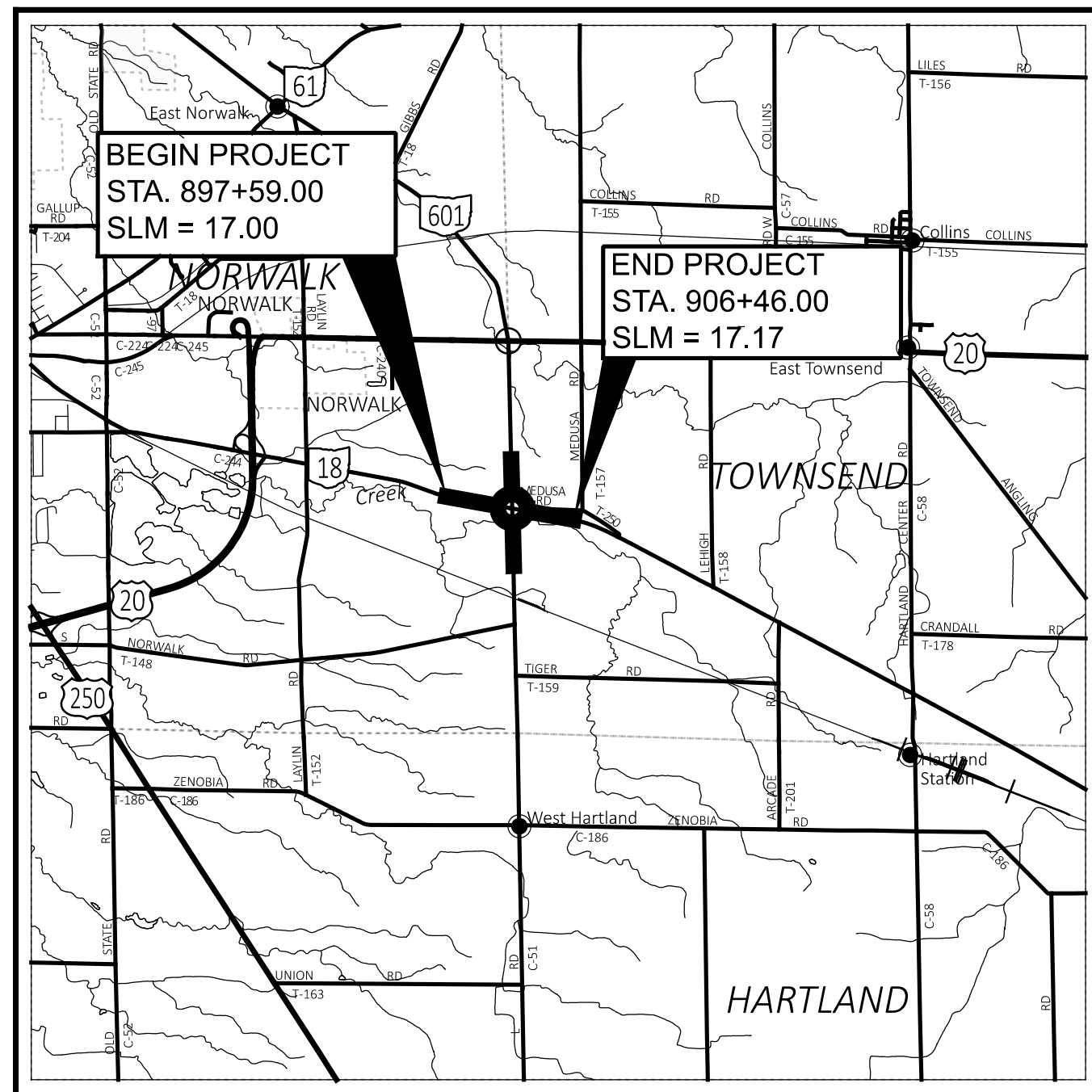


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

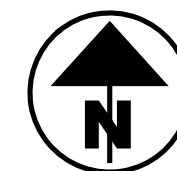
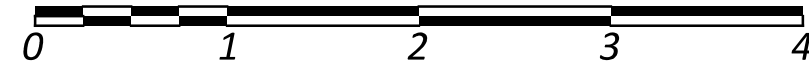
## HUR-18-17.10

NORWALK TOWNSHIP  
TOWNSEND TOWNSHIP  
HURON COUNTY



**LOCATION MAP**

LATITUDE: 41° 13'59" N LONGITUDE: 82°32'20" W  
SCALE IN MILES



PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

**DESIGN DESIGNATION**

	SR 18 (WEST LEG)	SR 18 (EAST LEG)	SR 601 (NORTH LEG)	CR 51 (SOUTH LEG)
CURRENT ADT (2024)	3,500	3,400	3,200	1,500
DESIGN YEAR ADT (2044)	3,500	3,400	4,500	2,100
DESIGN HOURLY VOLUME (2044)	350	340	450	210
DIRECTIONAL DISTRIBUTION	0.63	0.63	0.60	0.60
TRUCKS (24 HOUR B&C)	0.18	0.18	0.28	0.15
DESIGN SPEED	60	60	60	60
LEGAL SPEED	55	55	55	55
DESIGN FUNCTIONAL CLASSIFICATION:	[03] PRINCIPAL ARTERIAL (RURAL)		[05] MAJOR COLLECTOR (RURAL)	[06] MINOR COLLECTOR (RURAL)
NHS PROJECT	YES			

**DESIGN EXCEPTIONS**

NONE REQUIRED

**ADA DESIGN WAIVERS**

NONE REQUIRED

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

**OHIO811.org**  
Before You Dig

**OHIO811, 8-1-1, or 1-800-362-2764**  
(Non members must be called directly)

PLAN PREPARED BY:

**TRANSYSTEMS**  
400 W. NATIONWIDE BLVD., STE 225  
COLUMBUS, OHIO 43215

**INDEX OF SHEETS:**

TITLE SHEET	P.01
SCHEMATIC PLAN	P.02 - P.04
TYPICAL SECTIONS	P.05 - P.11
GENERAL NOTES	P.12 - P.14
MAINTENANCE OF TRAFFIC	P.15 - P.18
GENERAL SUMMARY	P.19 - P.21
SUBSUMMARIES	P.22 - P.27
PROJECT SITE PLAN	P.28
PLAN & PROFILES	P.29 - P.36
ROUNDBOUT PROFILES	P.37 - P.39
CROSS SECTION LAYOUT GRID	P.40
CROSS SECTIONS	P.41 - P.63
INTERSECTION DETAILS	P.64 - P.65
SPLITTER ISLAND DETAILS	P.66 - P.67
PLAN INSERT SHEETS	P.68 - P.75
STORM SEWER PROFILES	P.76 - P.77
TRAFFIC CONTROL	P.78 - P.89
LIGHTING	P.90 - P.94
LANDSCAPING	P.95
GEOTECHNICAL PROFILE - ROADWAY	P.96 - P.101

**FEDERAL PROJECT NUMBER**

E220 (108)

**RAILROAD INVOLVEMENT**

NONE

**PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A SINGLE LANE ROUNDBOUT AT THE INTERSECTION OF SR 18, SR 601, AND CR 51. IMPROVEMENTS WILL BE LIMITED TO THE IMMEDIATE AREA OF THE INTERSECTION REQUIRED TO CONSTRUCT THE ROUNDBOUT APPROACHES.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA:	2.87 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.33 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	3.20 ACRES

**2023 SPECIFICATIONS**

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET P.18, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE PLANS.

Robert Weaver  
District 03 Deputy Director

Jack Marchbanks, PhD  
Director, Department of Transportation

STAGE 3  
TRACINGS  
04/15/2024

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/19/24	MGS-1.1	7/16/21	HL-10.13	1/20/23	TC-52.10	10/18/13	800-2023	1/19/24		
BP-3.2	1/18/19	MGS-2.1	1/19/18	HL-20.11	7/21/23	TC-65.11	1/19/24	832	7/21/23		
BP-4.1	7/19/13	MGS-4.2	7/19/13	HL-30.11	7/21/23	TC-71.10	4/21/23	902	7/19/19		
BP-5.1	7/15/22	MGS-4.3	1/18/13	HL-30.21	4/17/20			921	4/20/12		
		MGS-5.3	7/15/16	HL-30.22	1/15/21			821	4/20/12		
<del>CB-2-2A, 2B, 2C</del>	<del>1/20/23</del>	MH-3	1/19/24	HL-40.20	1/19/24			825	4/21/23		
CB-3	7/16/21			HL-60.11	7/21/17						
		RM-1.1	1/20/23	HL-60.31	7/21/23						
DM-1.1	7/17/20	RM-3.1	7/20/18	MT-97.10	4/19/19						
DM-1.2	7/16/21			MT-101.60	4/21/23						
DM-4.1	7/17/20	HW-2.1	7/15/22								
DM-4.3	1/15/16	HW-2.2	7/20/18	TC-41.20	10/18/13						
DM-4.4	1/15/16			TC-41.30	4/21/23						
		HL-10.11	7/21/23	TC-41.40	10/18/13						
F-1.1	7/19/13	HL-10.12	7/21/23	TC-41.50	10/18/13						

<p>ENGINEER'S SEAL FOR ROADWAY</p>	<p>ENGINEER'S SEAL FOR LIGHTING</p>
--	---

DESIGN AGENCY	TRANSYSTEMS 400 W. NATIONWIDE BLVD., STE 225 COLUMBUS, OHIO 43215
DESIGNER	TK
REVIEWER	GHM 02/16/24
PROJECT ID	116163
SHEET	P.01
TOTAL	101

HUR-18-17.10

MODEL: Sheet PAPER/SIZE: 34x22 (in.) DATE: 7/20/2024 TIME: 11:01:52 AM USER: ikontautalle pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 03\Huron\116163\401-Engineering\Transystems\Roadway\Sheets\116163\_G1001.dgn

TITLE SHEET



**ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 60 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.18 . A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 10,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CLOSURE SHALL NOT START UNTIL AFTER LABOR DAY.

**ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)**

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

NEW YEAR'S	MEMORIAL DAY
THANKSGIVING	CHRISTMAS
FOURTH OF JULY	LABOR DAY
GENERAL/REGULAR ELECTION DAY (NOV)	

**SUMMIT MOTORSPORTS (MAY 2024 TO SEPTEMBER, 2024)**

- 4TH ANNUAL RED LINE OIL PDRA SMOKIES GARAGE AMERICAN DOOR SLAMMER CHALLENGE.
- 18TH ANNUAL UNIVERSITY HOSPITALS CAVALCADE OF STARS
- 4TH ANNUAL MICKEY THOMPSON NMRA FORD HOMECOMING
- 8TH ANNUAL SUMMIT RACING EQUIPMENT NHRA NATIONALS
- 33RD ANNUAL AMES PERFORMANCE PONTIAC NATIONALS

FOR FURTHER DETAILS VISIT THE WEBSITE AT: <https://summitmotorsportspark.com/events/21376>

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

DAY OF HOLIDAY TIME ALL LANES OR SPECIAL EVENT MUST BE OPEN TO TRAFFIC

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
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	THURSDAY 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	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

DURING THE SAME PERIODS, MAINTAIN PEDESTRAIN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE IN THE AMOUNT OF \$10,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED TIME LIMIT.

**ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)**

NOTICE OF CLOSURE SIGNS (W20-H14) 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-H14 SIGN LISTS THE NAME OF THE DEPARTMENT, i.e. "THE OHIO DEPT. OF TRANS."

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET P.18 OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONTINUED)**

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 12 SIGN MONTH ASSUMING 4 PCMS SIGN(S) FOR 3 MONTH(S)

**FLOODLIGHTING**

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

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

**ITEM 614 - DETOUR SIGNING**

THE CONTRACTOR SHALL PROVIDE, MAINTAIN AND SUBSEQUENTLY REMOVE ALL DETOUR SIGNING AND SUPPORTS AS SHOWN ON THE MOT DETOUR SHEET. ALL WORK SHALL BE PAID FOR UNDER ITEM 614, DETOUR SIGNING.

**TEMPORARY LIGHTING**

INSTALL ALL PERMANENT LIGHTING PRIOR TO OPENING THE PROPOSED FACILITY TO TRAFFIC. IF THE PERMANENT LIGHTING IS NOT ABLE TO BE COMPLETED PRIOR TO OPENING, SUPPLY TEMPORARY LIGHTING MEETING THE PHOTOMETRIC PROPERTIES OF THE PERMANENT LIGHTING PLAN PRIOR TO OPENING THE FACILITY TO TRAFFIC. A MINIMUM OF 14 DAYS PRIOR TO THE INSTALLATION OF ANY SUCH TEMPORARY LIGHTING, SUPPLY A TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR APPROVAL. THIS LIGHTING PLAN MUST ALSO BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER. THE CONTRACTOR IS PROHIBITED FROM INSTALLING ANY SUCH TEMPORARY LIGHTING UNTIL THE TEMPORARY LIGHTING PLAN IS APPROVED BY THE PROJECT AND DISTRICT TRAFFIC ENGINEERS.

AT A MINIMUM, THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 0.8 FOOT-CANDLES WITH AN AVERAGE-TO-MINIMUM UNIFORMITY NOT TO EXCEED 3:1. THE MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING. WHEN POSSIBLE, THE TEMPORARY LIGHTING SHALL UTILIZE A PERMANENT POWER SOURCE (i.e. A POWER DROP FROM AN EXISTING OR PROPOSED TRANSMISSION OR DISTRIBUTION ELECTRIC LINE) RATHER THAN A TEMPORARY SOURCE (i.e. PORTABLE GENERATORS). TEMPORARY SOURCES OF ELECTRICITY MAY ONLY BE USED WHEN NO PERMANENT SOURCES ARE AVAILABLE.

AFTER THE INSTALLATION, INSPECTION, AND ACCEPTANCE OF THE FINAL PERMANENT LIGHTING, AND WHEN THE TEMPORARY LIGHTING IS NO LONGER NEEDED, REMOVE AND PROPERLY DISPOSE OF THE TEMPORARY LIGHTING EQUIPMENT AND MATERIALS.

IN ACCORDANCE WITH C&MS 105, THE CONTRACTOR IS ALSO RESPONSIBLE FOR MAINTAINING EXISTING LIGHTING PRIOR TO CLOSURE OF THE PROJECT AREA TO TRAFFIC.

PAYMENT FOR THE ABOVE DETAILED TEMPORARY LIGHTING, IF NEEDED, INCLUDING MAINTENANCE OF TRAFFIC TO INSTALL PERMANENT LIGHT POLES AND REMOVE TEMPORARY LIGHT POLES AFTER THE ROUNDABOUT IS OPEN TO TRAFFIC, WILL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID PRICE FOR MAINTENANCE OF TRAFFIC AND WILL INCLUDE ALL MATERIAL, EQUIPMENT, LABOR, AND OTHER INCIDENTALS NEEDED TO COMPLETE THE WORK.



**SEQUENCE OF CONSTRUCTION**

**PRE-PHASE:**

CONTRACTOR SHALL INSTALL PROPOSED DRIVEWAY ON SR 601 STA. 56+94, 12' RT AT THE PROPERTY OF R&L CARRIERS FOR PURPOSES OF MAINTAINING TRUCK TRAFFIC DURING THE INTERSECTION CLOSURE AND CONSTRUCTION OF SR 18/601 ROUNDABOUT. THE PROPOSED DRIVEWAY SHALL REMAIN AFTER CONSTRUCTION AS DIRECTED BY THE ENGINEER IN COORDINATION WITH R&L CARRIERS.

MAINTENANCE OF TRAFFIC FOR THE DRIVEWAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH SCD MT-97.10.

**GENERAL:**

UPON COMPLETION OF THE NEW NORTHERN DRIVEWAY ACCESS ON SR 601 FOR R&L CARRIERS, PERFORM FULL CLOSURE OF THE INTERSECTION OF SR 18 AND SR 601 FOR UP TO 60 CALENDAR DAYS TO COMPLETE THE PROPOSED ROUNDABOUT CONSTRUCTION. IMPLEMENT DETOUR PLAN FOR REROUTING OF TRAFFIC AS SHOWN ON SHEET P.18 .

**ITEM 615 ROADS FOR MAINTAINING TRAFFIC**

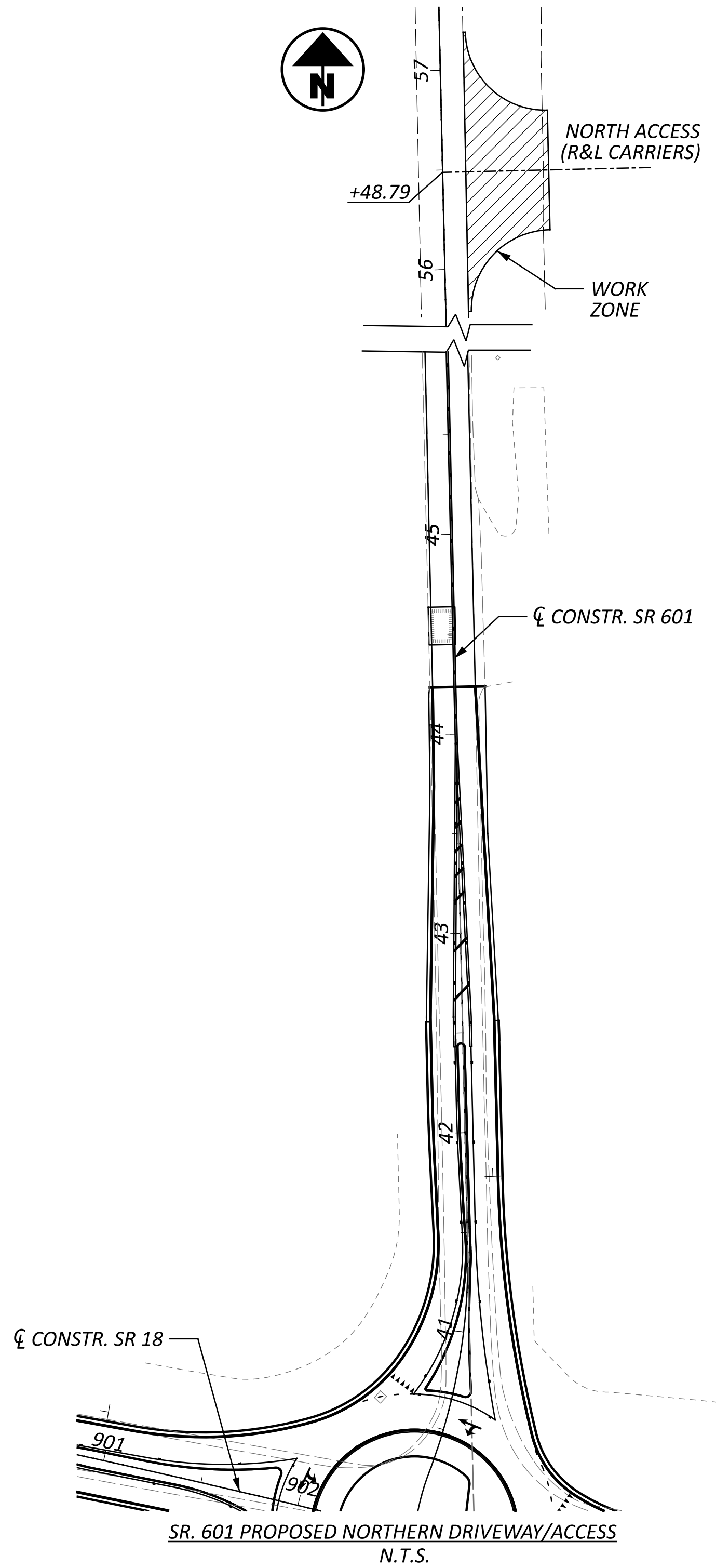
IN ACCORDANCE WITH ODOT CM&S 615.02 FENCES, THE CONTRACTOR SHALL REPLACE PERMANENT FENCING WITH TEMPORARY FENCING WHILE OCCUPYING ANY TEMPORARY RIGHT-OF-WAY, PROVIDE, ERECT, AND MAINTAIN COMPARABLE TEMPORARY FENCING DURING THE PERIOD OF CONSTRUCTION. TAKE OWNERSHIP OF THE EXISTING FENCE. THE CONTRACTOR MAY USE THIS MATERIAL IN THE ERECTION OF THE TEMPORARY FENCE. CONTRACTOR SHALL REMOVE AND REPLACE ALL FENCE IN THE SAME DAY, OR PROVIDE TEMPORARY FENCING AT NO COST TO THE DEPARTMENT AT THE CONTRACTOR'S DISCRETION.

THE FOLLOWING TABLE IS PROVIDED FOR TEMPORARY FENCING ESTIMATING PURPOSES:

LOCATION	EXISTING FENCE TO BE REMOVED (FT)	PROPOSED FENCE (FT)	GATE (FT)
SUMMIT MOTORSPORTS PARK	129'	97'	-
R&L CARRIERS	376'	371'	-
R&L CARRIERS NORTH	80'	20'	60'
	<b>585'</b>	<b>488'</b>	<b>60'</b>

C&MS ITEM 410 TRAFFIC COMPACTED SURFACE FOR MAINTAINING TRAFFIC AT DRIVEWAYS, AND TEMPORARY ROAD PAVEMENT SURFACES ARE INCIDENTAL TO ITEM 615.

ALL WORK SHALL BE PAID FOR UNDER ITEM 615 ROADS FOR MAINTAINING TRAFFIC, LUMP SUM.



SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.12	P.23	P.25	P.26	P.27	P.90	P.91					01/SAF/21	EXT	TOTAL				
<b>DRAINAGE</b>																	
25											25	605	05200	25	FT	4" UNCLASSIFIED PIPE UNDERDRAINS	
				3,002							3,002	605	06000	3,002	FT	4" BASE PIPE UNDERDRAINS	
25											25	605	31100	25	FT	AGGREGATE DRAINS	
25											25	611	00406	25	FT	4" CONDUIT, TYPE F	
				123							123	611	00410	123	FT	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	
			5								5	611	02000	5	FT	8" CONDUIT, TYPE C	
			140								140	611	04900	140	FT	12" CONDUIT, TYPE D	
			204								204	611	05900	204	FT	15" CONDUIT, TYPE B	
			26								26	611	06100	26	FT	15" CONDUIT, TYPE C	
			43								43	611	06400	43	FT	15" CONDUIT, TYPE D	
			286								286	611	10900	286	FT	24" CONDUIT, TYPE D	
			3								3	611	98150	3	EACH	CATCH BASIN, NO. 3	
			3								3	611	98470	3	EACH	CATCH BASIN, NO. 2-2B	
			1								1	611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	
			2								2	611	99574	2	EACH	MANHOLE, NO. 3	
2				2							4	611	99710	4	EACH	PRECAST REINFORCED CONCRETE OUTLET	
<b>PAVEMENT</b>																	
		796									796	301	56000	796	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
		1,380									1,380	304	20000	1,380	CY	AGGREGATE BASE	
		831									831	407	10000	831	GAL	TACK COAT	
		11									11	441	70500	11	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
		7									7	441	70700	7	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)	
		310									310	442	10001	310	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG88-22M	
		315									315	442	10080	315	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
		148									148	451	13011	148	SY	8" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	
		485									485	452	10011	485	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	
		362									362	452	12010	362	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
	236										236	609	14000	236	FT	CURB, TYPE 2-A	
	1,235										1,235	609	18000	1,235	FT	COMBINATION CURB AND GUTTER, TYPE 3	
	327										327	609	22001	327	FT	CURB, TYPE 3-B, AS PER PLAN	
	701										701	609	24510	701	FT	CURB, TYPE 4-C	
	695										695	609	26000	695	FT	CURB, TYPE 6	
<b>LIGHTING</b>																	
					100						100	611	00400	100	FT	4" CONDUIT, TYPE E	
					5						5	611	99710	5	EACH	PRECAST REINFORCED CONCRETE OUTLET	
						72					72	625	00450	72	EACH	CONNECTION, FUSED PULL APART	
						8					8	625	10490	8	EACH	LIGHT POLE, CONVENTIONAL, 30' POLE, 10' BRACKET ARM	
						1					1	625	10490	1	EACH	LIGHT POLE, CONVENTIONAL, 30' POLE, 15' BRACKET ARM	
						1					1	625	10490	1	EACH	LIGHT POLE, CONVENTIONAL, 30' POLE, 20' BRACKET ARM	
						10					10	625	14000	10	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
						351					351	625	23200	351	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
						1,395					1,395	625	23410	1,395	FT	NO. 12 AWG POLE AND BRACKET CABLE	
						1,098					1,098	625	24320	1,098	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
						113					113	625	25500	113	FT	CONDUIT, 3", 725.04	
						172					172	625	25902	172	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
						10					10	625	26253	10	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, 80 WATT, 120 VOLTS	
						950					950	625	29002	950	FT	TRENCH, 24" DEEP	
						7					7	625	30700	7	EACH	PULL BOX, 725.08, 18"	
						10					10	625	32000	10	EACH	GROUND ROD	
						1					1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN	
						1					1	625	34450	1	EACH	CONTROL CENTER CABINET, COMPLETE	
						950					950	625	36010	950	FT	UNDERGROUND WARNING/MARKING TAPE	
					1						1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	

GENERAL SUMMARY

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
**MSW**

REVIEWER  
**GHM 02/16/24**

PROJECT ID  
**116163**

SHEET TOTAL  
 P.20 | 101



MODEL: Sheet 3 PAPER SIZE: 34x22 (in.) DATE: 7/20/2024 TIME: 5:45:09 PM USER: kntauialate  
 pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\07 Active Projects\District 03\Huron\116163\40-Engineering\_\Transportation\Roadway\Sheets\116163\_G001.dgn

SHEET NUM.

PART.

ITEM

ITEM

GRAND

UNIT

DESCRIPTION

SEE SHEET NO.

01/SAF/21

EXT

TOTAL

P.15	P.16	P.17	P.22	P.78	P.80	P.95											
<b>TRAFFIC CONTROL</b>																	
				8								8	620	60000	8	EACH	DELINEATOR, POST SURFACE MOUNTED
				108								108	621	00100	108	EACH	RPM (TWO-WAY)
				48								48	621	54000	48	EACH	RAISED PAVEMENT MARKER REMOVED
				6								6	626	00110	6	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)
					329.4							329.4	630	03100	329.4	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
					164.5							164.5	630	04100	164.5	FT	GROUND MOUNTED SUPPORT, NO. 4 POST
					11							11	630	08520	11	FT	STREET NAME SIGN SUPPORT, NO. 3 POST
					28							28	630	08600	28	EACH	SIGN POST REFLECTOR
					4							4	630	79500	4	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED
												343.22	630	80100	343.22	SF	SIGN, FLAT SHEET
					1							1	630	80500	1	EACH	SIGN, DOUBLE FACED, STREET NAME
					40							40	630	84900	40	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
												3	630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION
			1									1	630	85200	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DELIVERY
					34							34	630	86002	34	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
					9							9	630	97700	9	EACH	SIGNING, MISC.: 6" PVC PIPE
																	P.82
				0.42								0.42	644	00104	0.42	MILE	EDGE LINE, 6"
				1								1	644	00300	1	MILE	CENTER LINE
				166								166	644	00700	166	FT	TRANSVERSE/DIAGONAL LINE
												4	644	01300	4	EACH	LANE ARROW
				174								174	644	01510	174	FT	DOTTED LINE, 6"
				63								63	644	20800	63	FT	YIELD LINE
<b>LANDSCAPING</b>																	
						453						453	SPECIAL	69098300	453	SY	STONE MULCH
																	P.95
<b>MAINTENANCE OF TRAFFIC</b>																	
LS												120	614	11110	120	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
12												LS	614	12420	LS		DETOUR SIGNING
												12	614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
												LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC
			35									LS	616	10000	35	MGAL	WATER
<b>INCIDENTALS</b>																	
LS												LS	614	11000	LS		MAINTAINING TRAFFIC
												10	619	16010	10	MNTH	FIELD OFFICE, TYPE B
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING
												LS	624	10000	LS		MOBILIZATION

GENERAL SUMMARY

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43216

DESIGNER  
 MSW

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

SHEET TOTAL  
 P.21 101



REF NO.	SHEET NO.	ALIGNMENT	STATION TO STATION		SIDE	601	601	602	611	611	611	611	611	611	611	611	611	611	611	670	670	
			FROM	TO		TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT SY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CY	CONCRETE MASONRY CY	8" CONDUIT, TYPE C FT	12" CONDUIT, TYPE D FT	15" CONDUIT, TYPE B FT	15" CONDUIT, TYPE C FT	15" CONDUIT, TYPE D FT	24" CONDUIT, TYPE D FT	CATCH BASIN, NO. 2-2B EACH	CATCH BASIN, NO. 3 EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	MANHOLE, NO. 3 EACH	SLOPE EROSION PROTECTION SY	DITCH EROSION PROTECTION SY		
D-1	P.29	SR-18	897+50.00	897+65.00	RT															12	13	
D-2	P.29	SR-18	897+65.00	898+34.00	RT						70											
D-3	P.29	SR-18	897+65.00	898+34.00	RT						70											
D-4	P.29	SR-18	898+34.00	899+37.00	RT															86	86	
D-5	P.29	SR-18	898+34.00	899+37.00	RT															61		
D-6	P.29	SR-18	899+79.00	899+79.00	RT									42								
D-7	P.29	SR-18	899+79.00	901+95.00	RT															142	178	
D-8	P.29	SR-18/SR-601	899+79.00	901+69.00	RT															56		
D-9	P.29	SR-18	900+35.00		LT		7															
D-10	P.29	SR-18	900+35.00		RT		6															
D-16	P.30	SR-601/SR-18	40+75.00	40+62	C/LT							60							1			
D-17	P.30	SR-601/SR-18	40+95.00	40+75	RT/C							35						1				
D-18	P.30	SR-601/SR-18	40+62.00	903+25+00	RT/LT							10							1			
D-19	P.30	SR-18	903+25.00		LT				5													
D-20	P.30	SR-18	903+60.00	903+25.00	LT							34			1							
D-21	P.30	SR-18	903+78.00	903+60.00	LT							26					1					
D-22	P.30	SR-18	904+87.00	906+46.00	LT															182		
D-27	P.33	SR-601	37+22.00	39+70.00	LT															45		
D-28	P.33	SR-601	37+22.00	39+88.00	LT															487	265	
D-29	P.33	SR-601	38+64.00		RT		15															
D-30	P.33	SR-601	38+64.00		LT		8															
D-35	P.34	SR-601	40+67.00	44+15.00	RT																67	
D-36	P.30	SR-601	41+08.00	40+75.00	LT							39						1				
D-37	P.34	SR-601	41+22.00	41+08.00	LT								15					1				
D-38	P.34	SR-601	41+19.00	42+48.00	LT																48	
D-40	P.34	SR-601	42+56.00		LT		5															
D-41	P.34	SR-601	42+56.00		RT		6															
D-42	P.34	SR-601	42+56.00	44+24.00	LT																	
D-43	P.34	SR-601	44+15.00	44+19.00	RT																	
D-48	P.36	SR-601	55+78.00	57+19.00	RT			0.3				11				143	1					29
D-49	P.36	SR-601	55+78.00	57+19.00	RT											143						
TOTALS CARRIED TO GENERAL SUMMARY						48	3	1	5	140	204	26	43	286	3	3	1	2	1215	542		

DRAINAGE QUANTITIES

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. WATSONWIDE BLVD., STE 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 JR

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

SHEET TOTAL  
 P.26 | 101



HUR-18-17.10

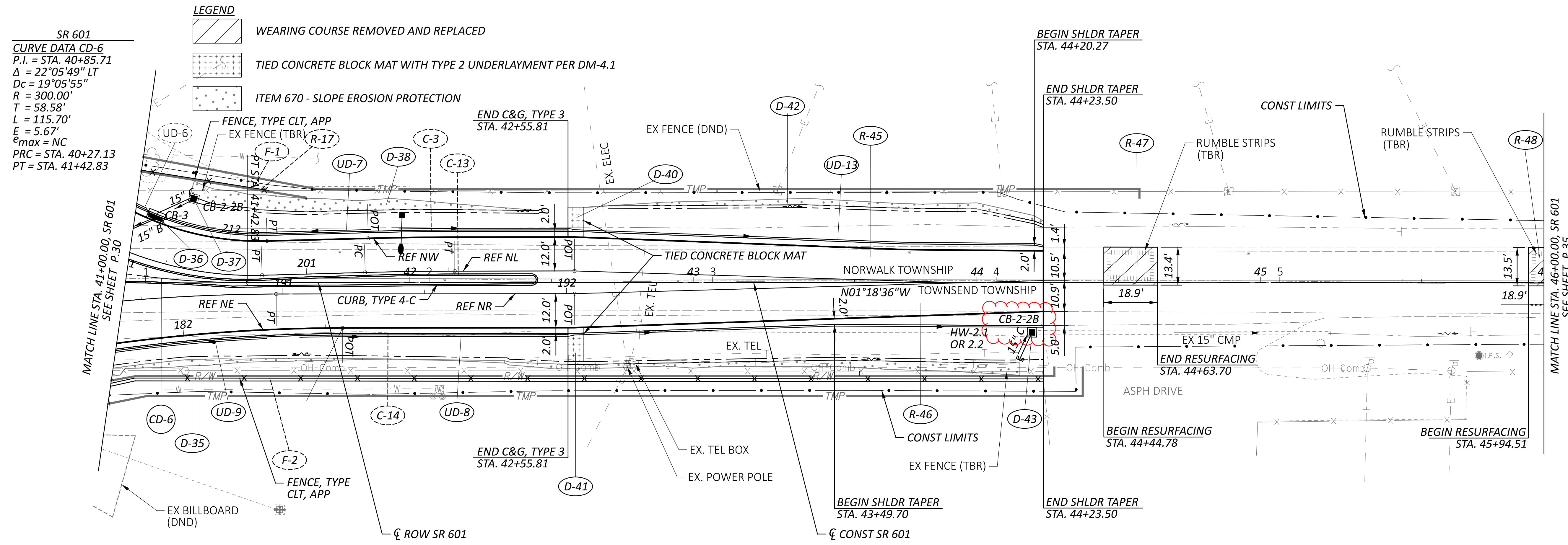
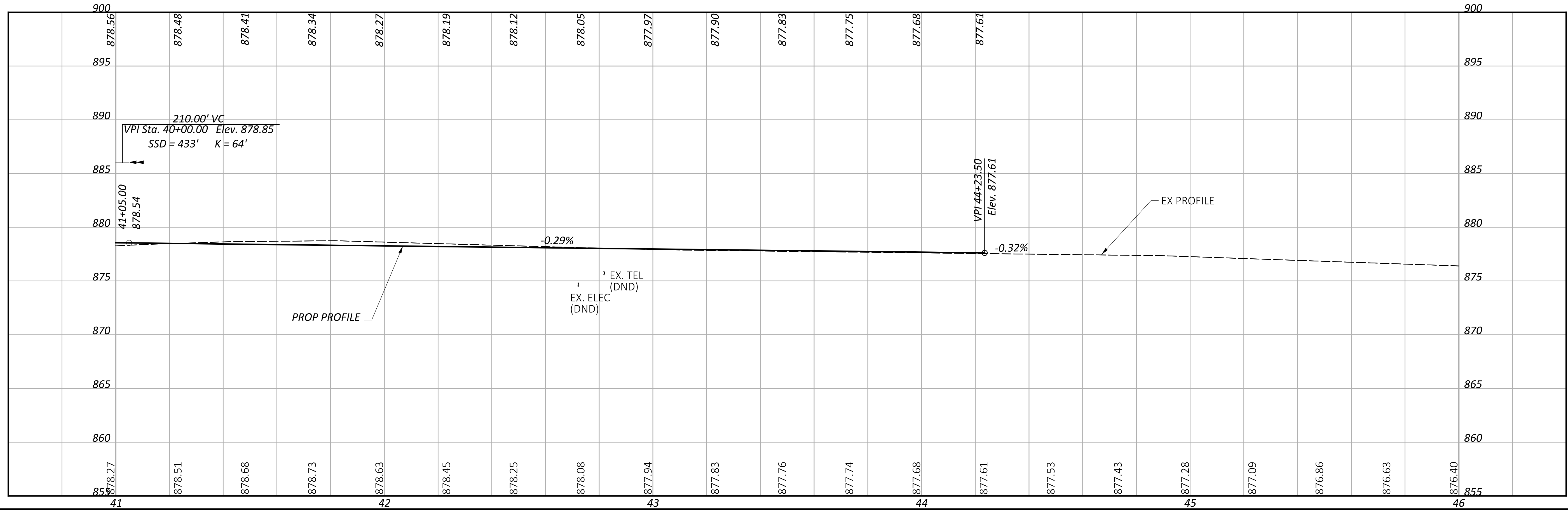
MODEL: Sheet PAPER: 34x22 (in.) DATE: 7/20/2024 TIME: 6:49:35 PM USER: ikontautale  
 p:\vohodol-pw-bentley.com\ohiodol-pw-02\Documents\01 Active Projects\District 03\Huron\116163\40-Engineering\_TransSystems\Drainage\Sheets\116163\_DS002.dgn

SHEET NO.	REF NO.	STATION		CHAIN	SIDE	OUTLET ELEVATION	601	605	611	611	FOR INFORMATION ONLY								
							TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	4" BASE PIPE UNDERDRAINS	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	PRECAST REINFORCED CONCRETE OUTLET	BENDS AND BRANCHES								
											SY	FT	FT	EACH	4" PLUG	4" X 11.25" BEND	4" X 22.50" BEND	4" X 45" BEND	4" X 90" BEND
P.29	UD-1	897+59.00	902+23.00	SR18	LT	EX UD		480				1	2						
P.29	UD-2	897+59.00	901+84.00	SR18	RT	EX UD		426				1							
P.30	UD-3	901+92.00	37+26.00	SR18 / SR601	RT/LT	866.44		271	13	1		1				1			
P.30	UD-4	902+08.00	903+25.00	SR18	RT/LT	874.94	2	125	23			1					1		
P.30	UD-5	902+09.00	903+02.00	SR18	RT/LT	875.81		195				1							
P.30	UD-6	40+76.00	41+08.00	SR601	LT	874.94		20	10			1				1			
P.30	UD-10	40+95.00	903+73.00	SR601 / SR18	RT/LT	874.79		101	10			1				1			
P.30	UD-11	37+26.00	906+46.00	SR601 / SR18	RT/RT	866.12	2	545	17	1		1	2			1			
P.30	UD-12	903+78.00	906+46.00	SR18	LT	873.46		258	10			1				1			
P.34	UD-7	41+08.00	41+86.00	SR601	LT	874.92		64	10			1				1			
P.34	UD-8	41+61.00	44+24.00	SR601	RT	EX UD		252	10			1							
P.34	UD-9	40+96.00	71+50.00	SR601	RT	874.79		47	10			1				1			
P.34	UD-13	41+96.00	44+24.00	SR601	LT	EX UD		218	10			1	2						
SUBTOTAL							4	3002	123	2		13	6			5	2	1	
TOTALS CARRIED TO GENERAL SUBSUMMARY							4	3002	123	2									

UNDERDRAIN QUANTITIES

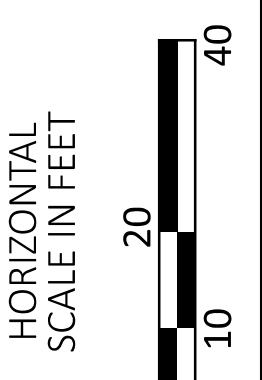
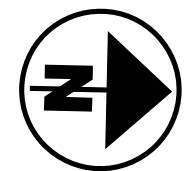
DESIGN AGENCY	400 W. NATIONWIDE BLVD., STE. 225 COLUMBUS, OHIO 43216
DESIGNER	JR
REVIEWER	GHM 02/16/24
PROJECT ID	116163
SHEET TOTAL	P.27   101





SR 601  
 CURVE DATA CD-6  
 P.I. = STA. 40+85.71  
 $\Delta = 22^\circ 05' 49''$  LT  
 $D_c = 19^\circ 05' 55''$   
 $R = 300.00'$   
 $T = 58.58'$   
 $L = 115.70'$   
 $E = 5.67'$   
 $e_{max} = NC$   
 PRC = STA. 40+27.13  
 PT = STA. 41+42.83

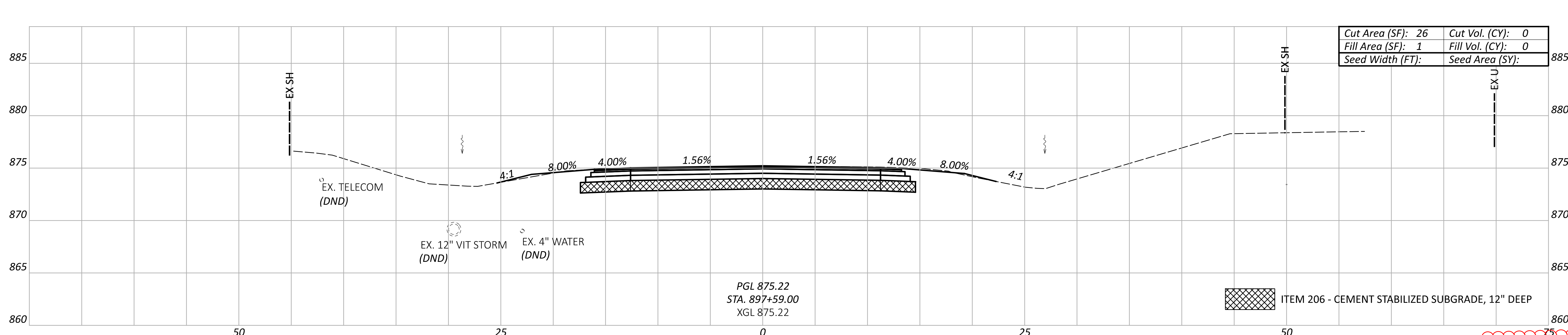
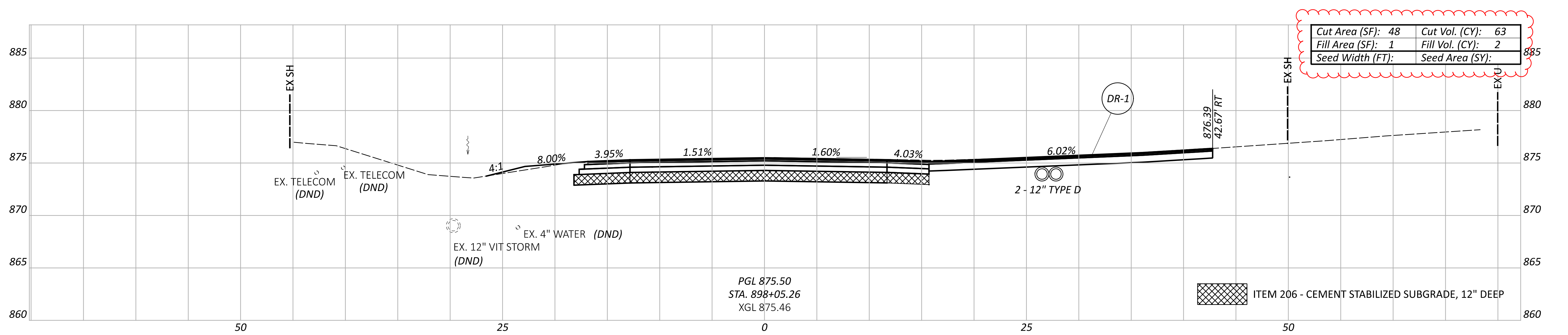
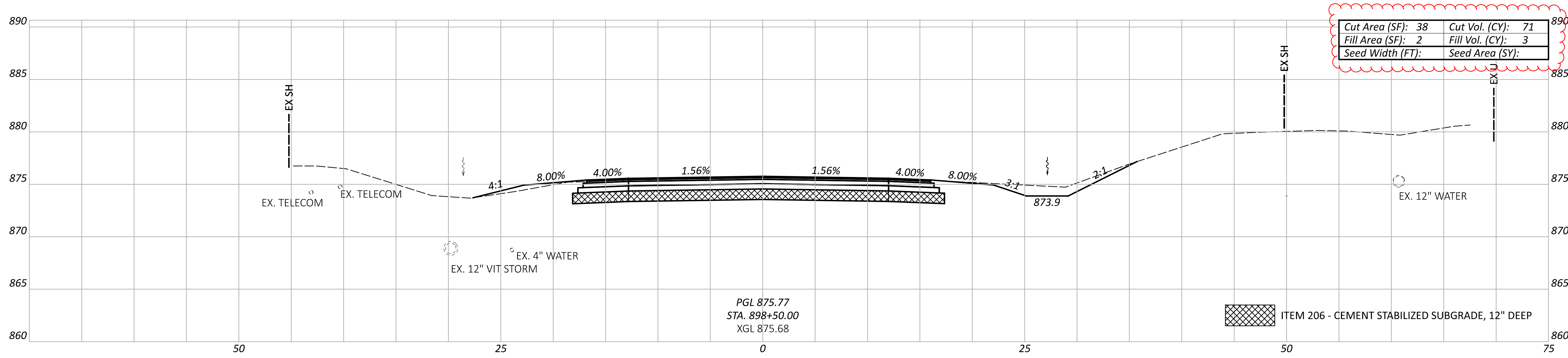
- LEGEND**
- WEARING COURSE REMOVED AND REPLACED
  - TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT PER DM-4.1
  - ITEM 670 - SLOPE EROSION PROTECTION



**PLAN AND PROFILE - SR 601**  
 STA 41+00.00 TO STA 46+00.00

DESIGN AGENCY	
<b>TRANSYSTEMS</b> 400 W. NATIONWIDE BLD., STE. 225 COLUMBUS, OHIO 43215	
DESIGNER	
TK	
REVIEWER	
GHM 02/16/24	
PROJECT ID	
116163	
SHEET	TOTAL
P.34	101





NOTE: ALL SEEDING QUANTITIES HAVE BEEN GENERATED USING PLAN VIEW AREAS BASED ON THE 3-D MODEL. FOR QUANTITIES, SEE SHEET P.12

Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
134	5		P.41 101

CROSS SECTIONS - SR 18  
 STA. 897+59.00 TO STA. 898+50.00

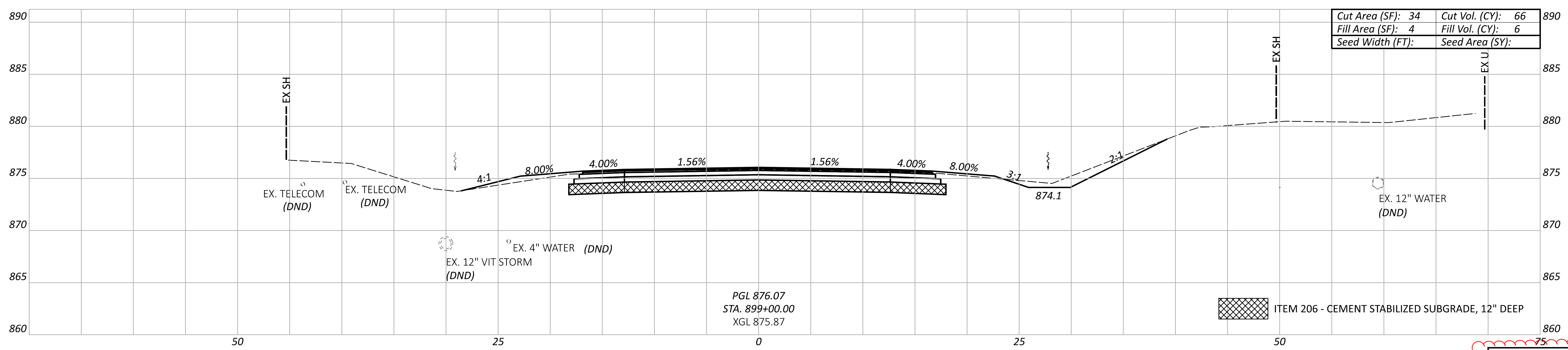
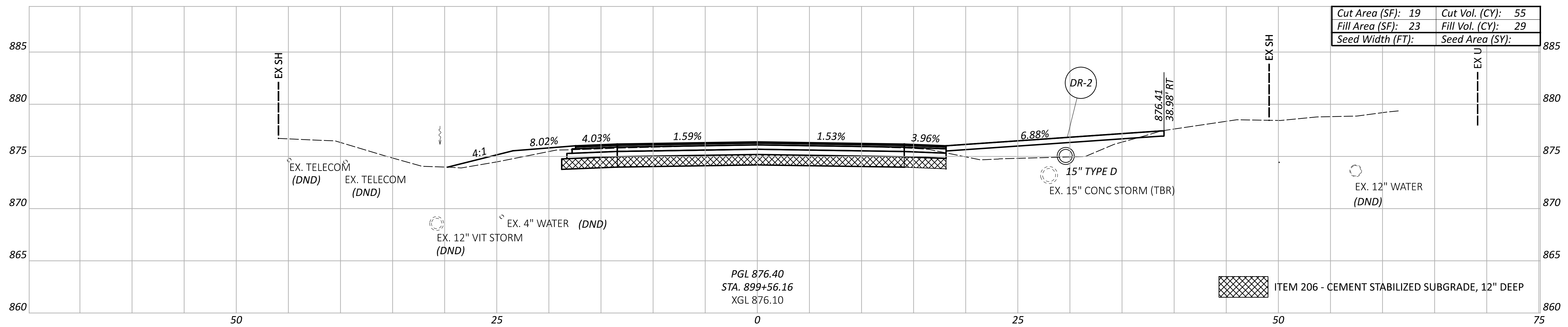
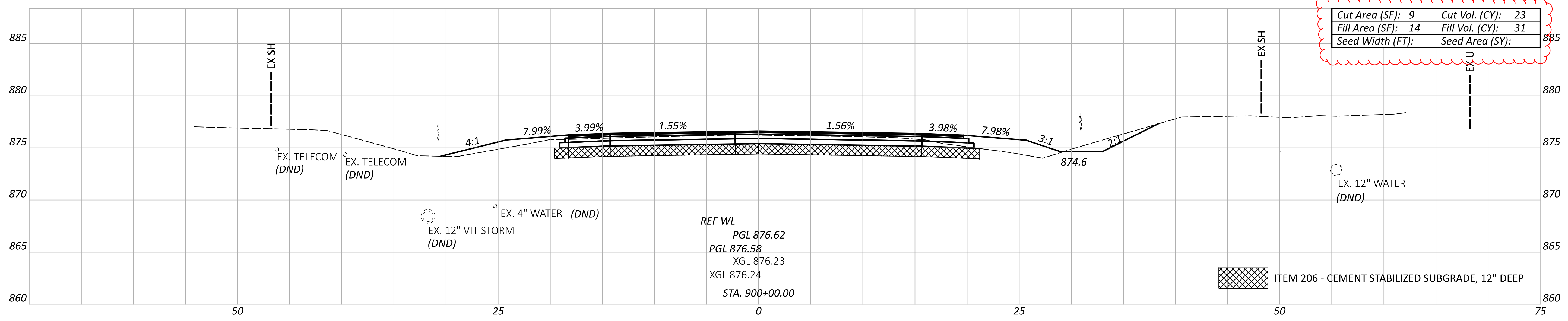
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLDG., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163





Sheet Totals			116163
Seeding	Cut	Fill	TOTAL
144	66		P.42   101

CROSS SECTIONS - SR 18  
 STA. 899+00.00 TO STA. 900+00.00

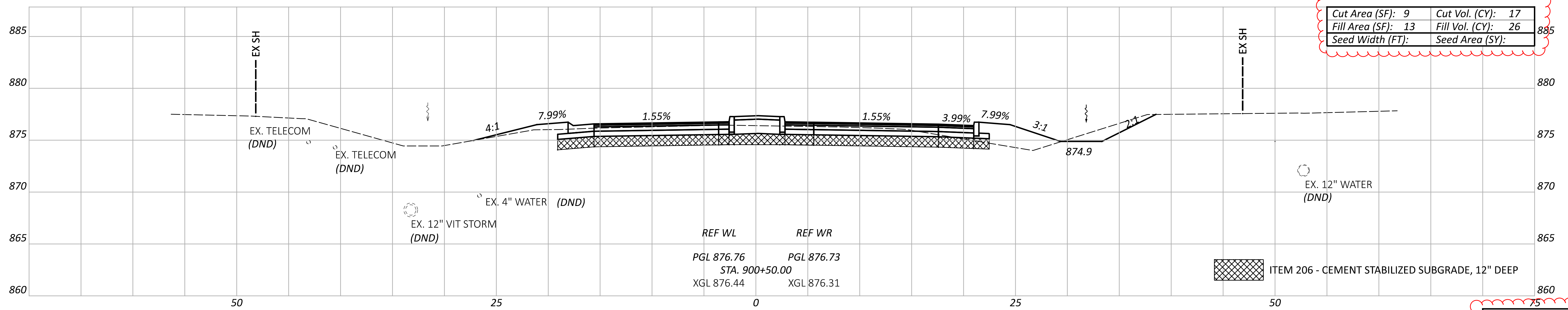
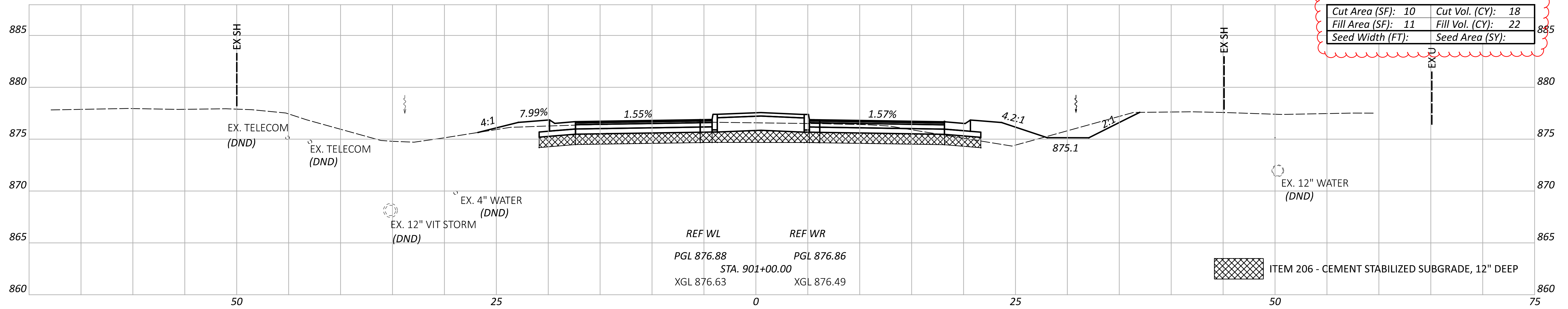
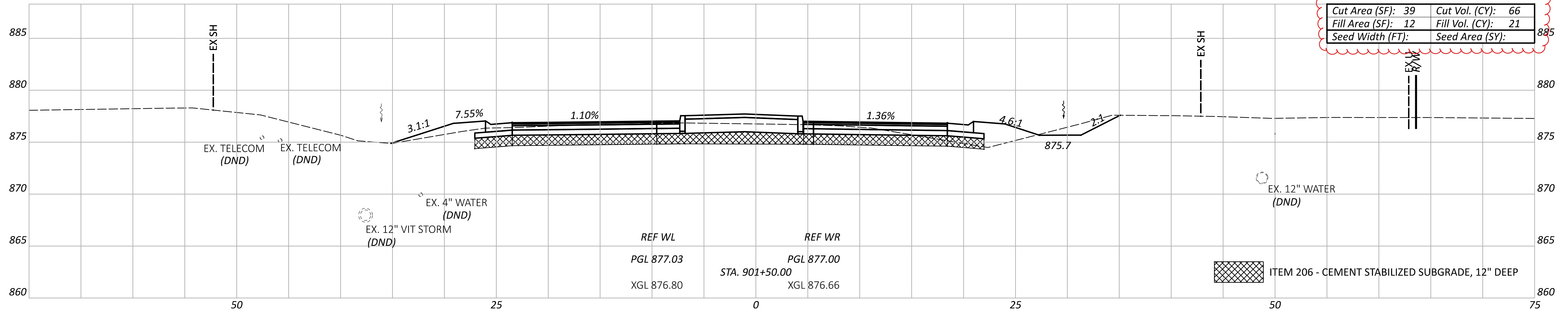
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163





Sheet Totals		116163	
Seeding	Cut	Fill	SHEET TOTAL
101	69	P.43	101

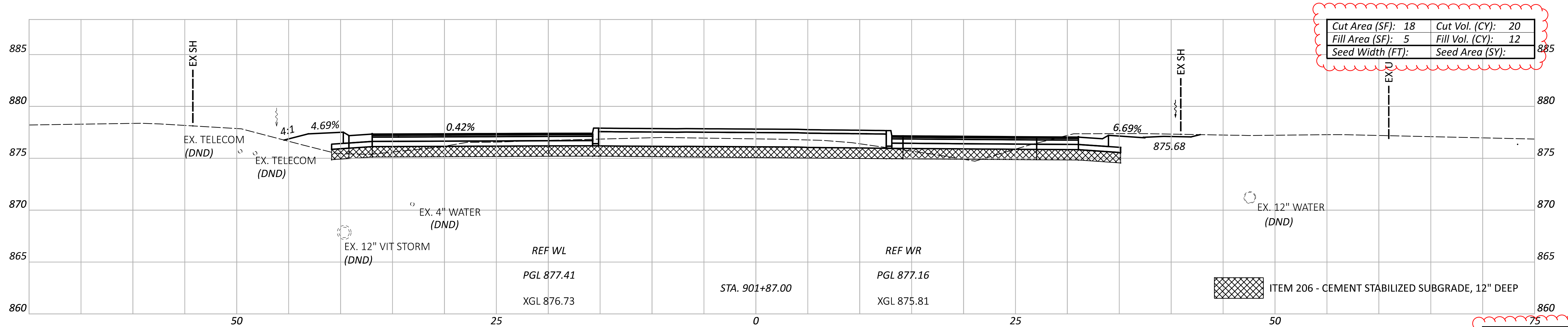
CROSS SECTIONS - SR 18  
STA. 900+50.00 TO STA. 901+50.00

DESIGN AGENCY  
**TRANSYSTEMS**  
400 W. NATIONWIDE BLVD., STE. 225  
COLUMBUS, OHIO 43215

DESIGNER  
TK

REVIEWER  
GHM 02/16/24

PROJECT ID  
116163

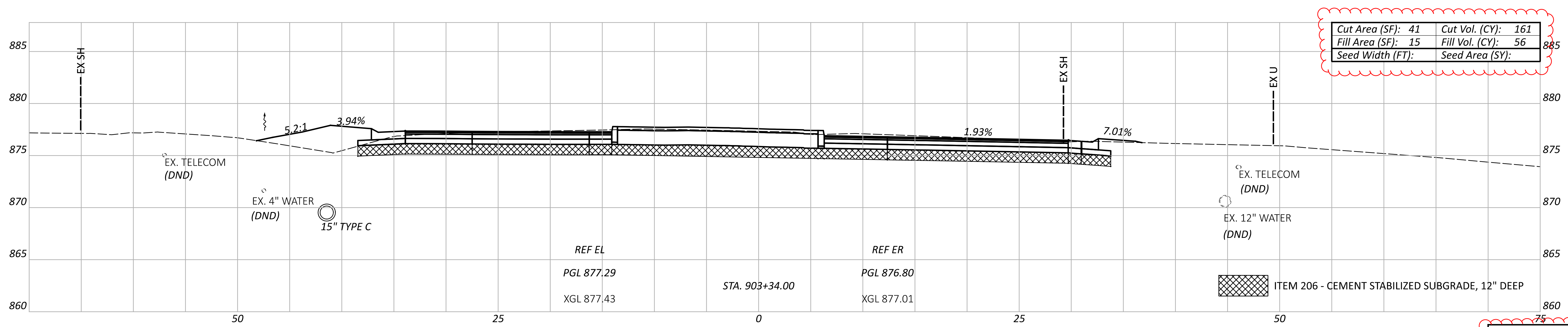
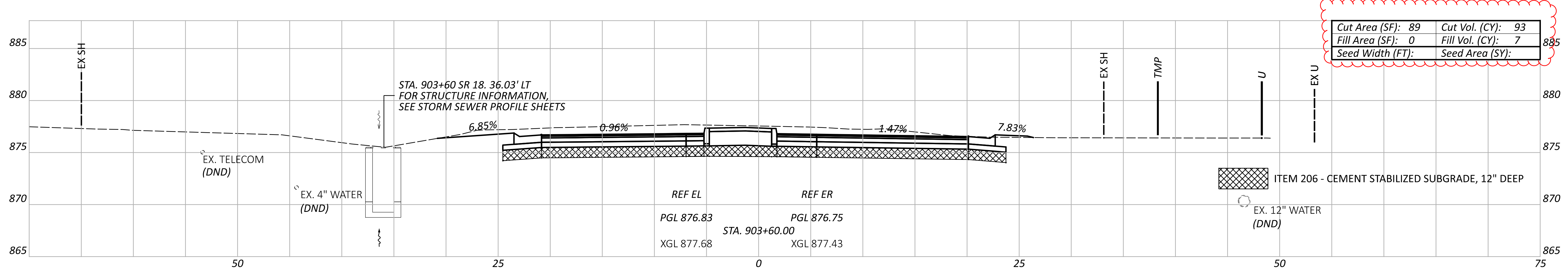
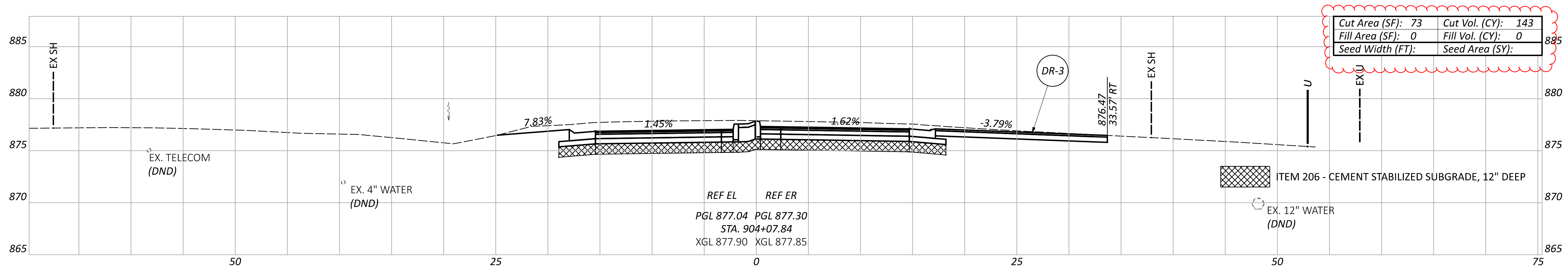


Cut Area (SF):	18	Cut Vol. (CY):	20
Fill Area (SF):	5	Fill Vol. (CY):	12
Seed Width (FT):		Seed Area (SY):	

ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP

Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
	20	12	P.44 101





Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
397	63	7.45	101

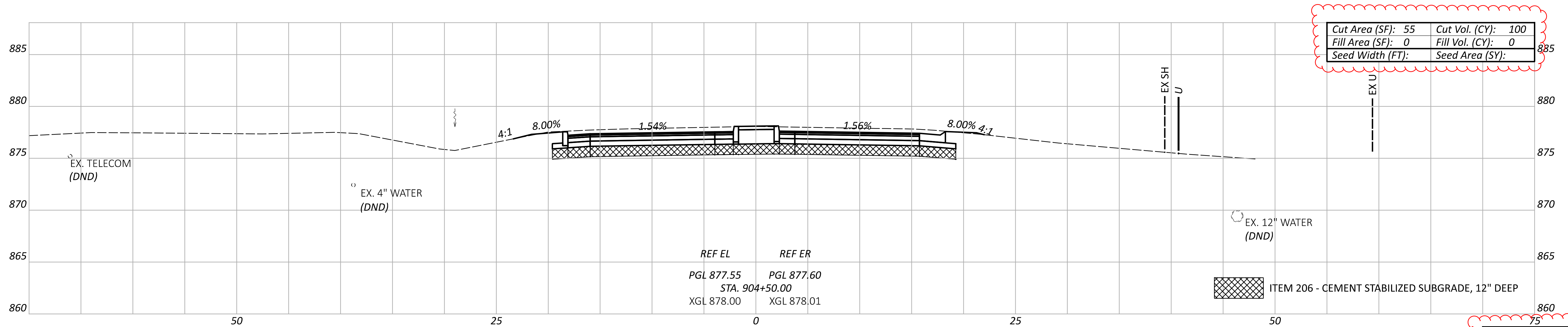
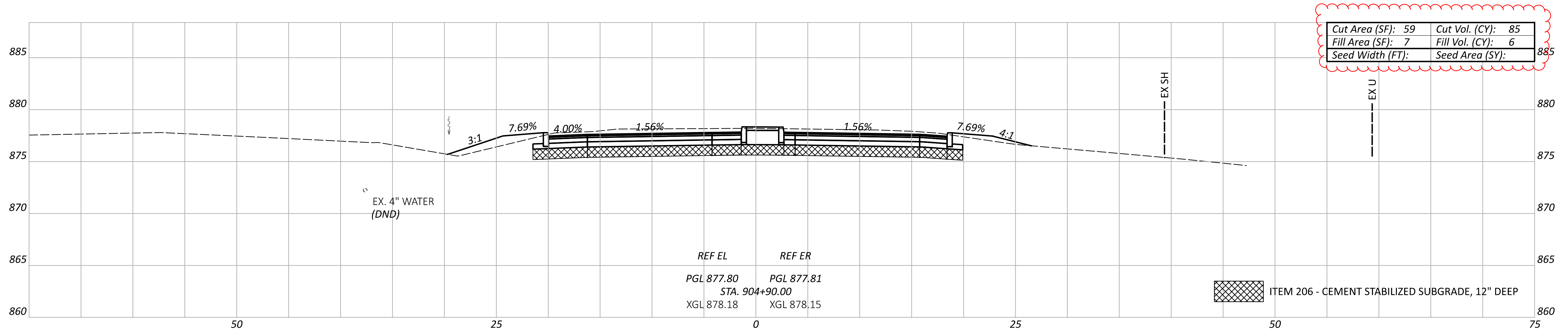
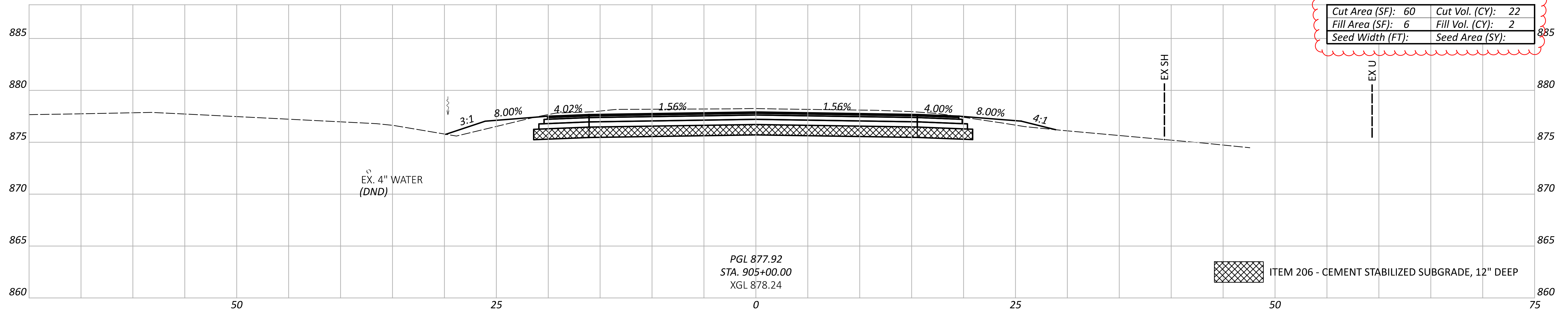
CROSS SECTIONS - SR 18  
 STA. 903+34.00 TO STA. 904+07.84

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID

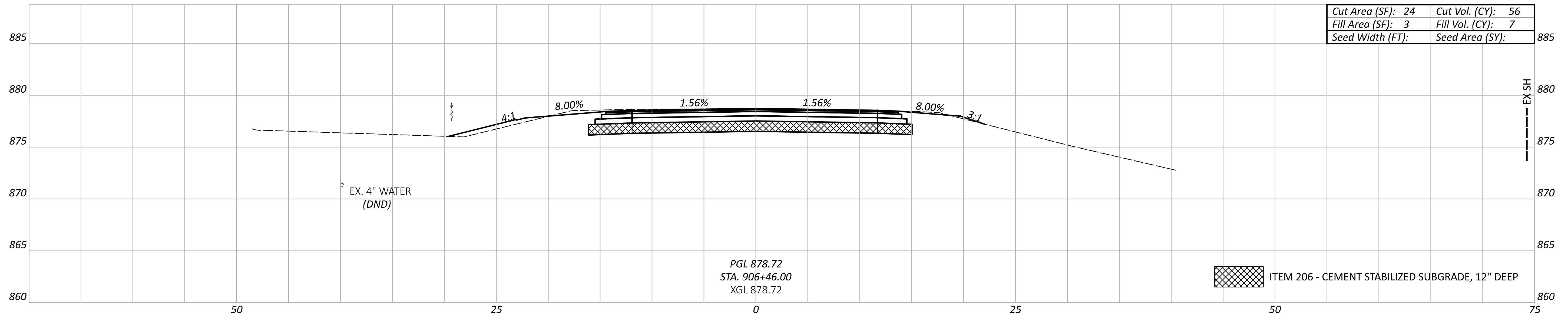


Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
207	8		P.46   101

CROSS SECTIONS - SR 18  
 STA. 904+50.00 TO STA. 905+00.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215  
 DESIGNER  
 TK  
 REVIEWER  
 GHM 02/16/24  
 PROJECT ID

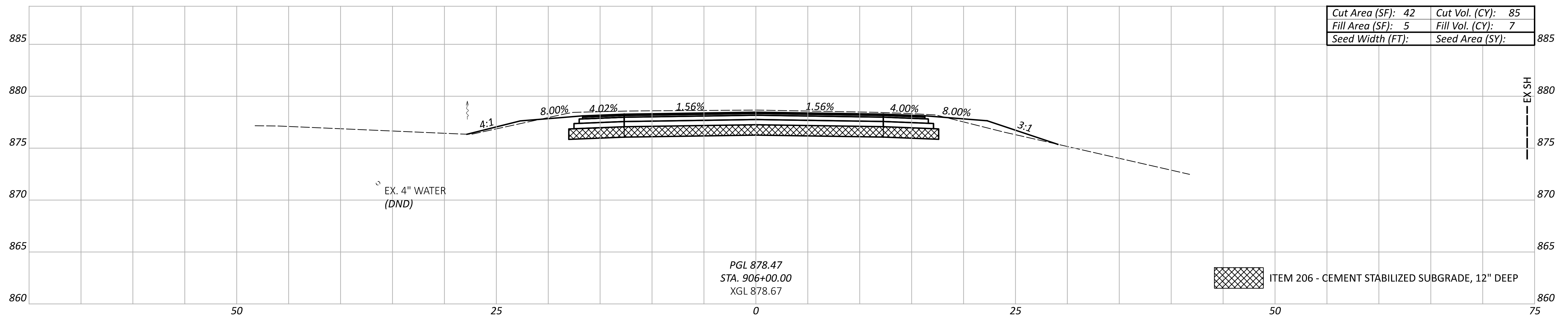




Cut Area (SF): 24	Cut Vol. (CY): 56
Fill Area (SF): 3	Fill Vol. (CY): 7
Seed Width (FT):	Seed Area (SY):

PGL 878.72  
 STA. 906+46.00  
 XGL 878.72

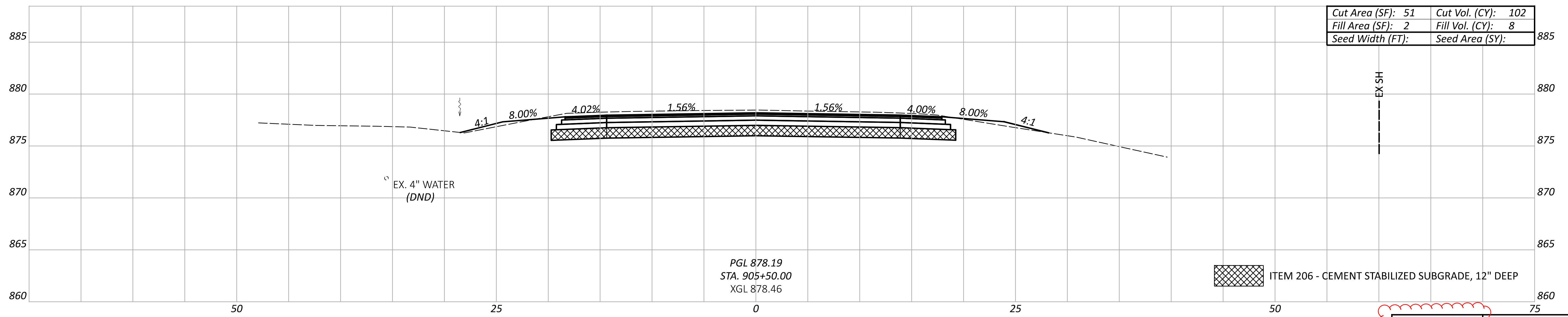
ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP



Cut Area (SF): 42	Cut Vol. (CY): 85
Fill Area (SF): 5	Fill Vol. (CY): 7
Seed Width (FT):	Seed Area (SY):

PGL 878.47  
 STA. 906+00.00  
 XGL 878.67

ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP



Cut Area (SF): 51	Cut Vol. (CY): 102
Fill Area (SF): 2	Fill Vol. (CY): 8
Seed Width (FT):	Seed Area (SY):

PGL 878.19  
 STA. 905+50.00  
 XGL 878.46

ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP

Alignment Totals			Sheet Totals		
Seeding	Cut	Fill	Seeding	Cut	Fill
1245	245		243	22	

CROSS SECTIONS - SR 18  
 STA. 905+50.00 TO STA. 906+46.00

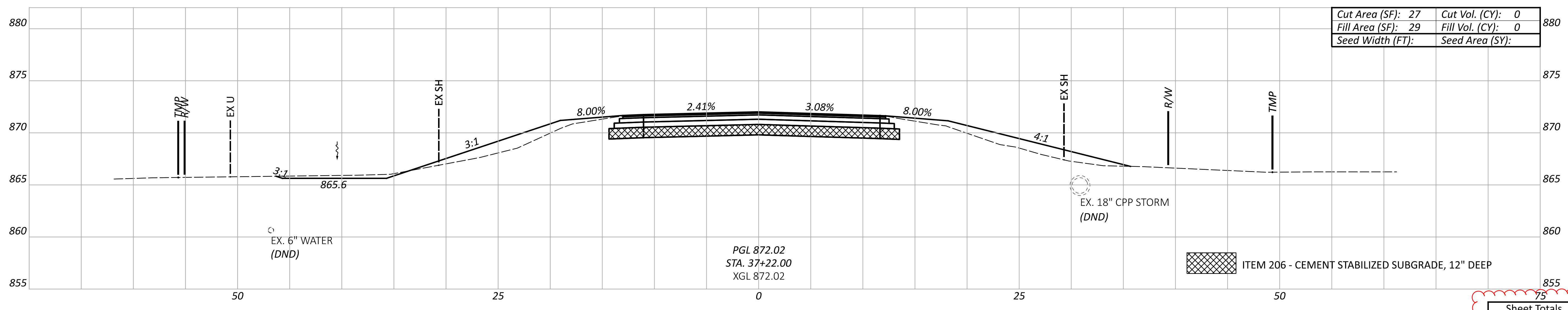
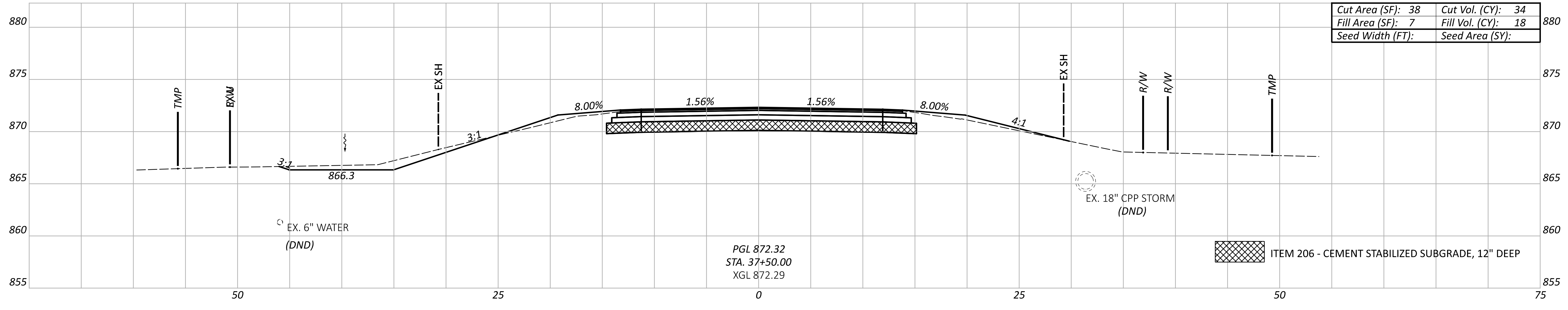
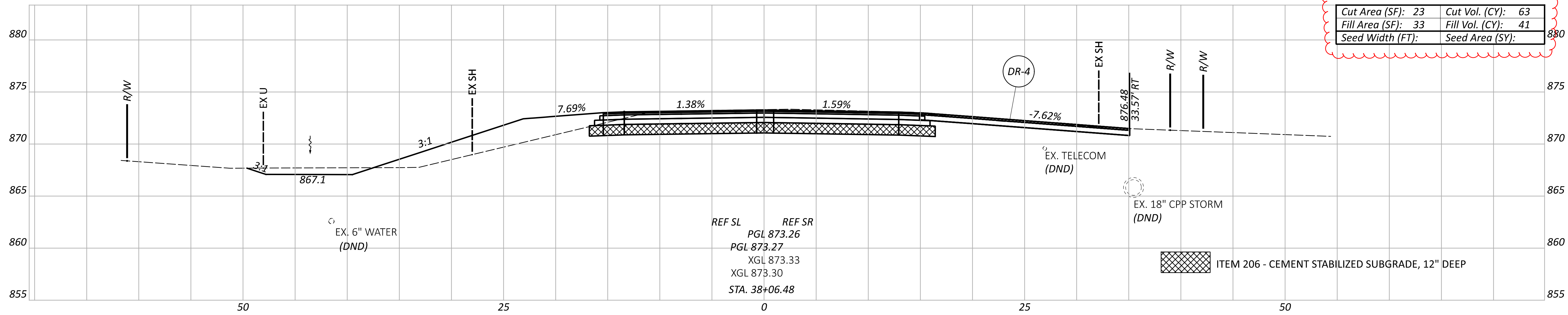
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLDG., STE. 225  
 COLUMBUS, OHIO 43216

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

SHEET TOTAL  
 P.47 101



CROSS SECTIONS - CR 51  
 STA. 37+22.00 TO STA. 38+06.48

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

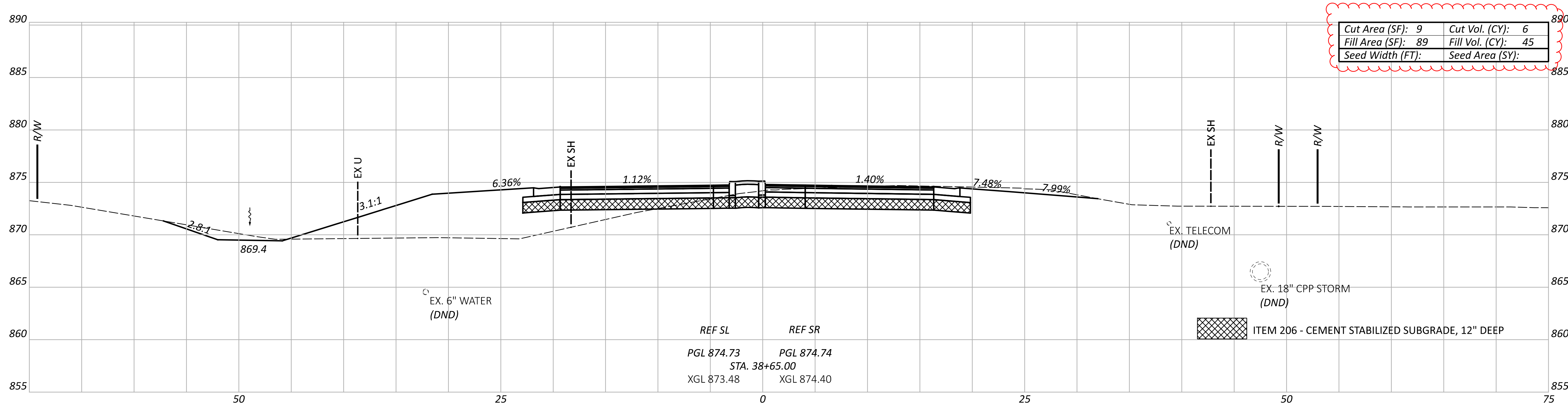
REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

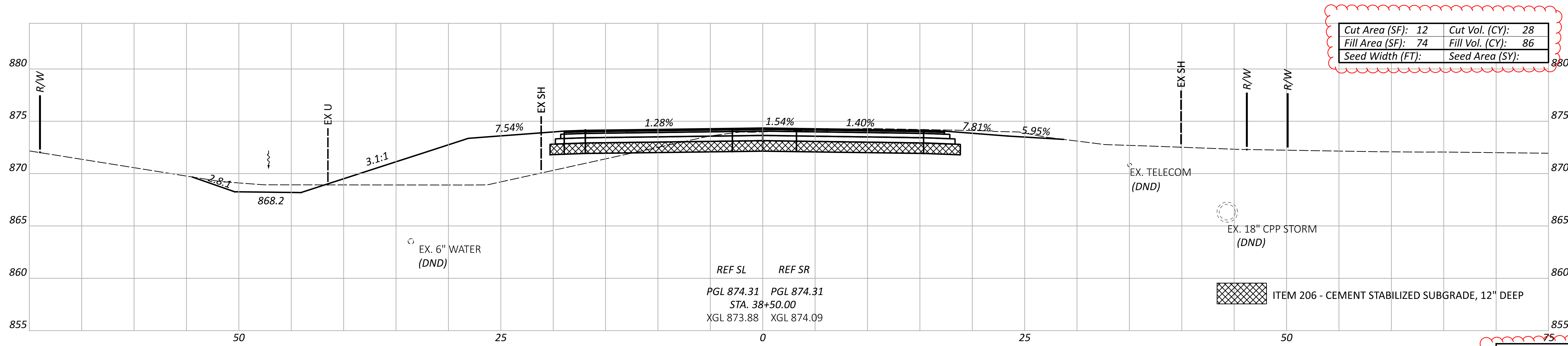
SHEET TOTALS  
 SHEET TOTAL: P.48 / 101

Sheet Totals			116163
Seeding	Cut	Fill	
97	59		





Cut Area (SF): 9	Cut Vol. (CY): 6
Fill Area (SF): 89	Fill Vol. (CY): 45
Seed Width (FT):	Seed Area (SY):



Cut Area (SF): 12	Cut Vol. (CY): 28
Fill Area (SF): 74	Fill Vol. (CY): 86
Seed Width (FT):	Seed Area (SY):

Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
34	131	P.49	101

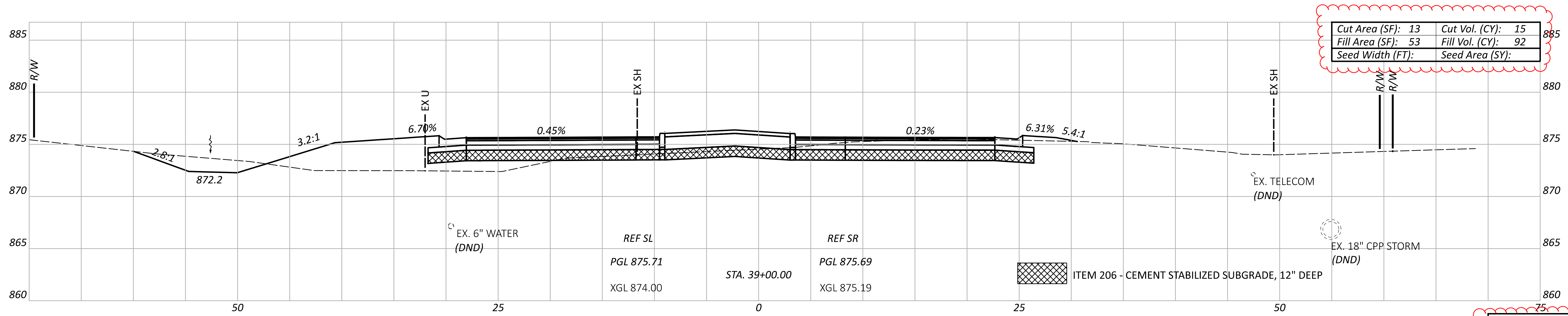
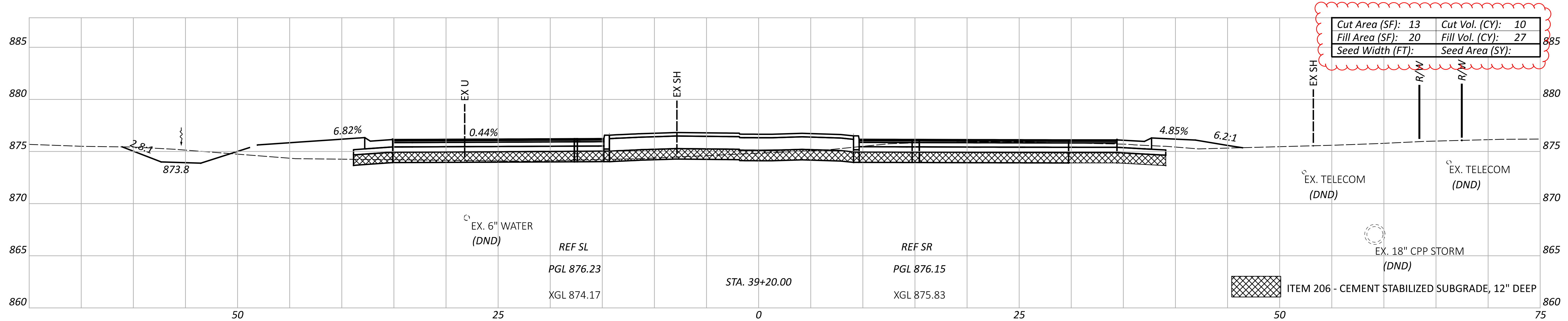
CROSS SECTIONS - CR 51  
 STA. 38+50.00 TO STA. 38+65.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163



Sheet Totals			116163	
Seeding	Cut	Fill	SHEET	TOTAL
25	119		P.50	101

CROSS SECTIONS - CR 51  
 STA. 39+00.00 TO STA. 39+20.00

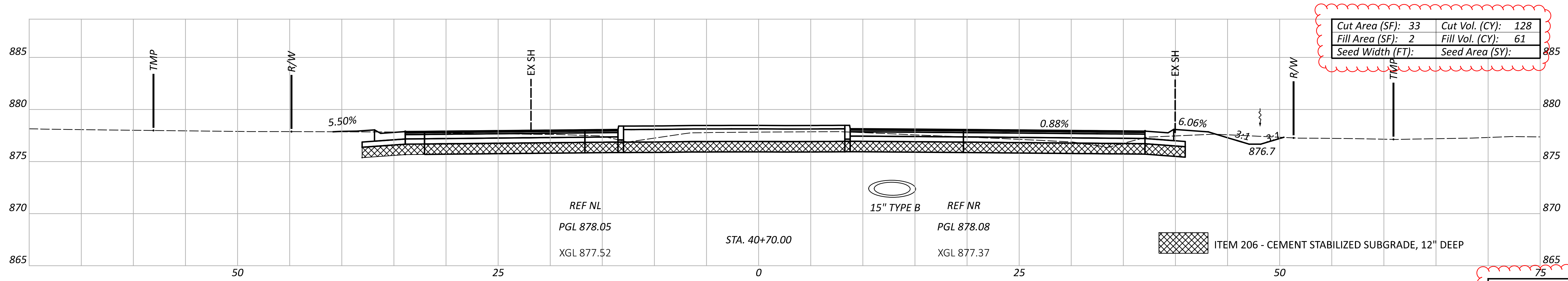
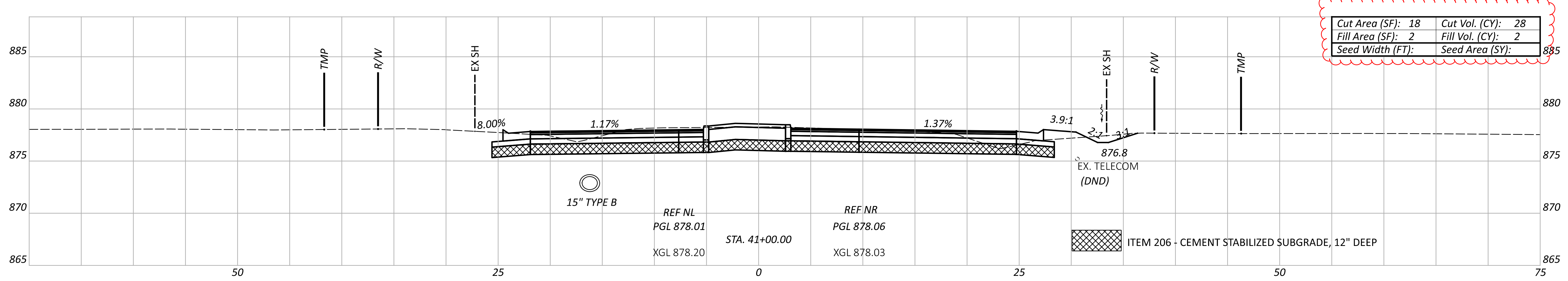
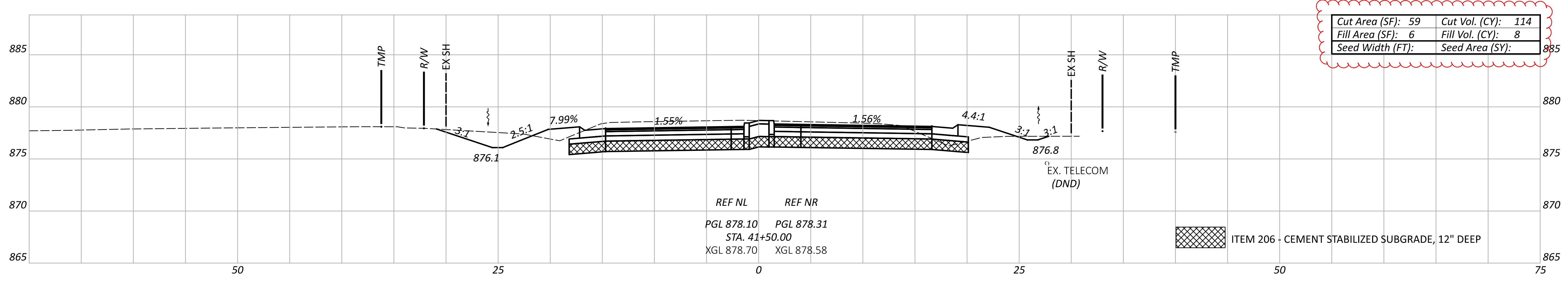
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163





Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
270	71	P.51	101

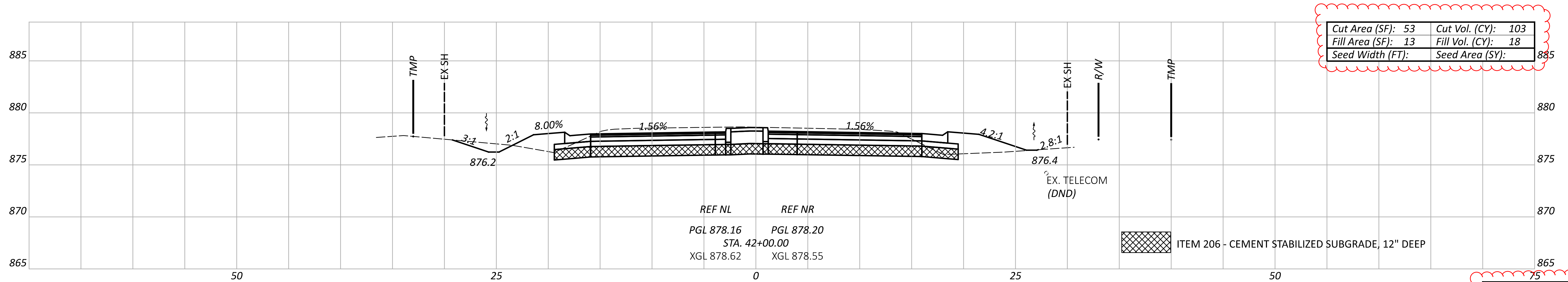
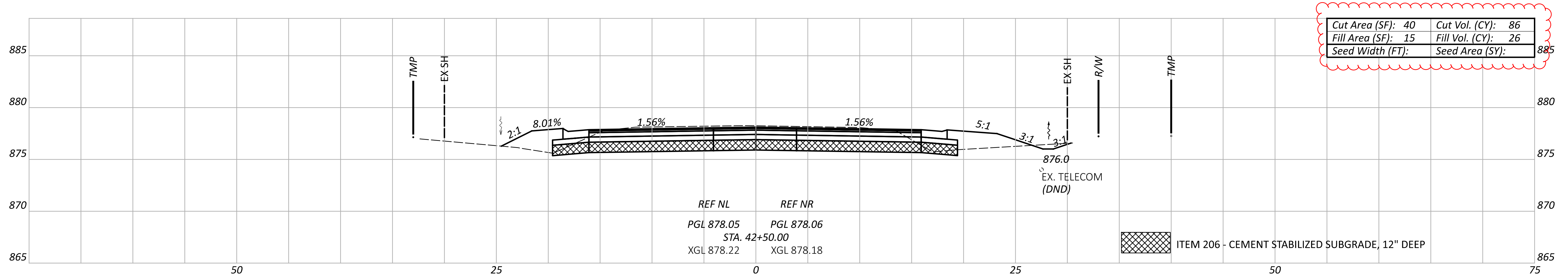
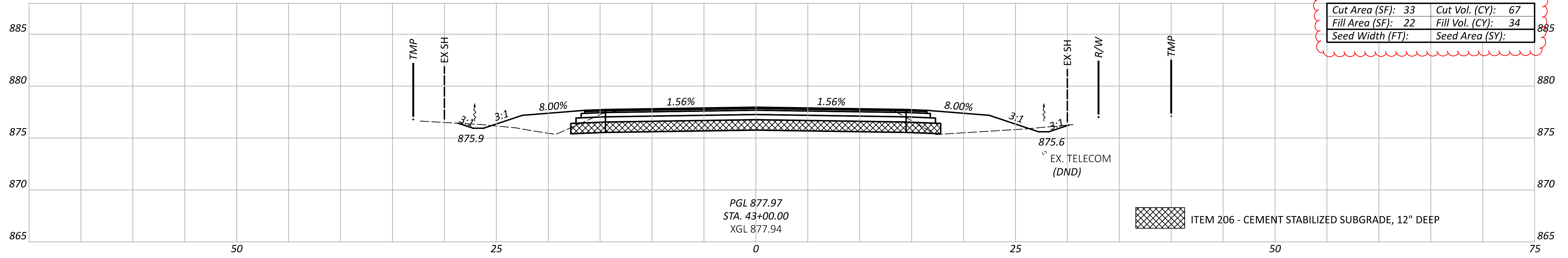
CROSS SECTIONS - SR 601  
 STA. 40+70.00 TO STA. 41+50.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163



Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
256	78		P.52   101

CROSS SECTIONS - SR 601  
STA. 42+00.00 TO STA. 43+00.00

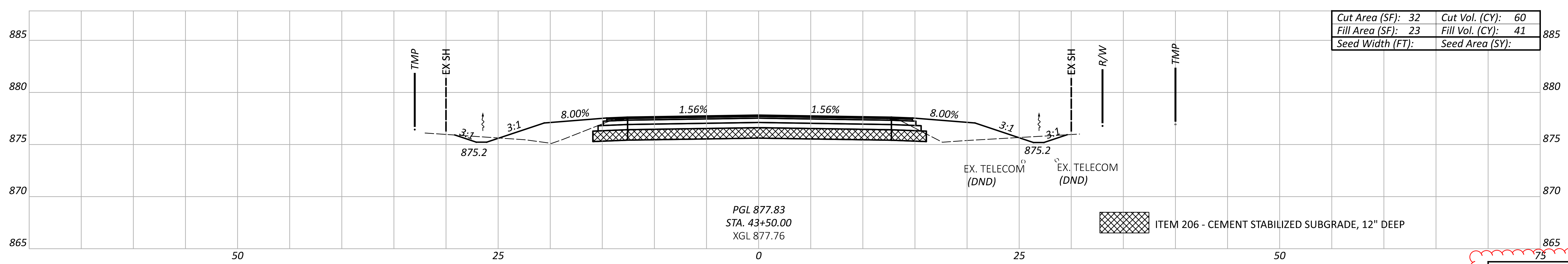
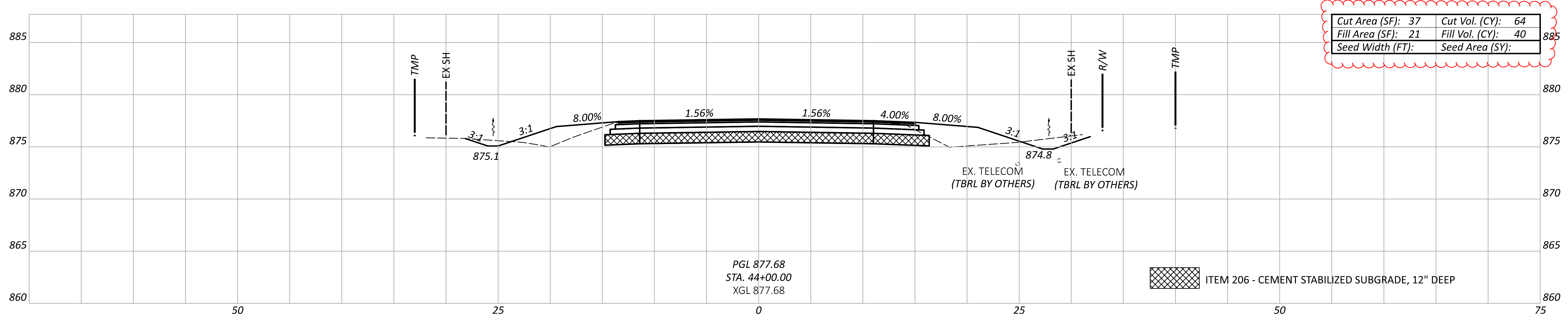
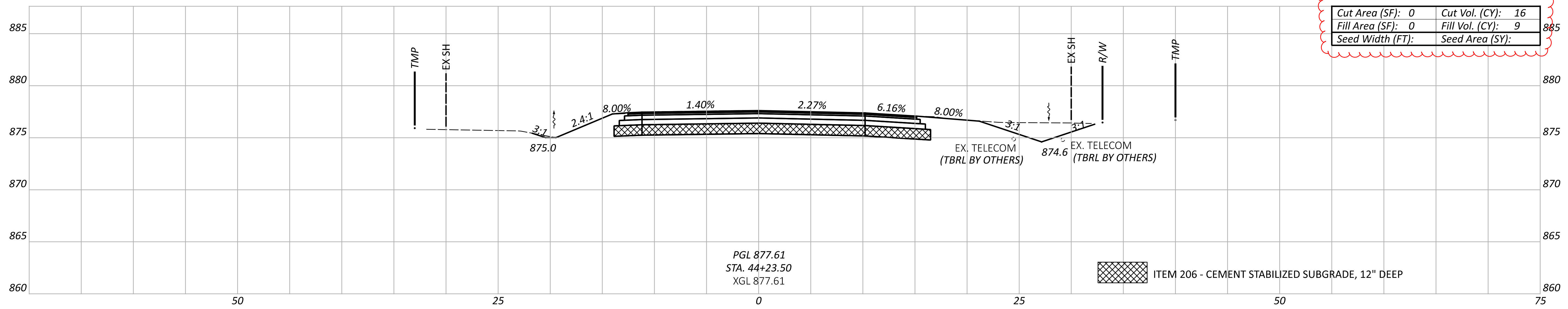
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163





CROSS SECTIONS - SR 601  
 STA. 44+50.00 TO STA. 44+23.50

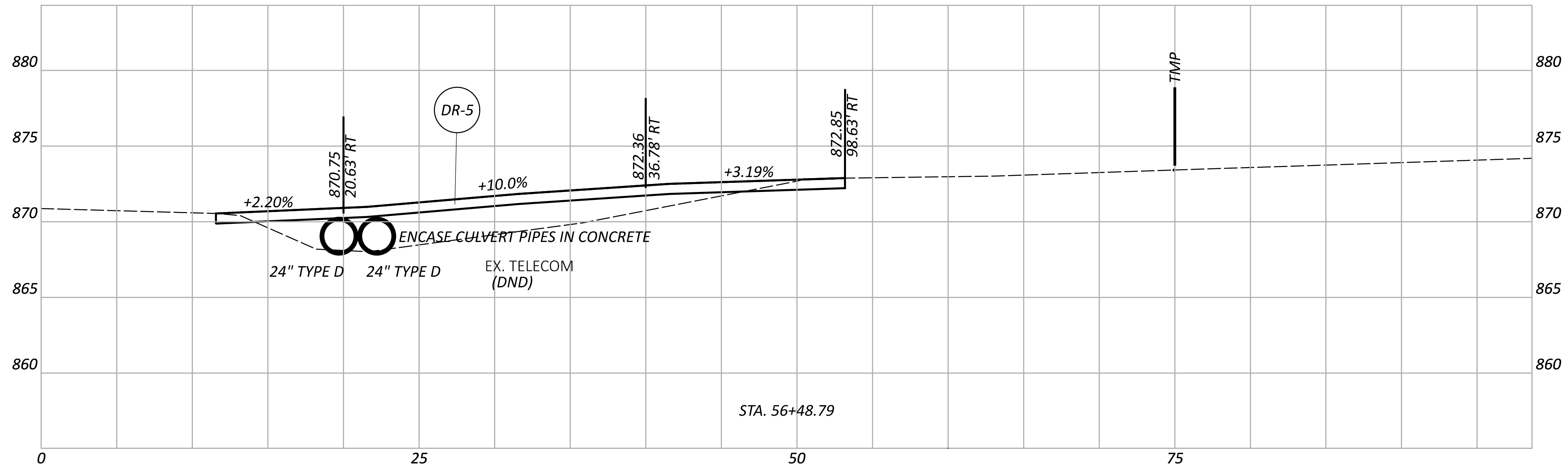
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

Sheet Totals			116163
Seeding	Cut	Fill	TOTAL
140	90		P.53   101



Alignment Totals			Sheet Totals		
Seeding	Cut	Fill	Seeding	Cut	Fill
	830	632		7.6	83.2

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

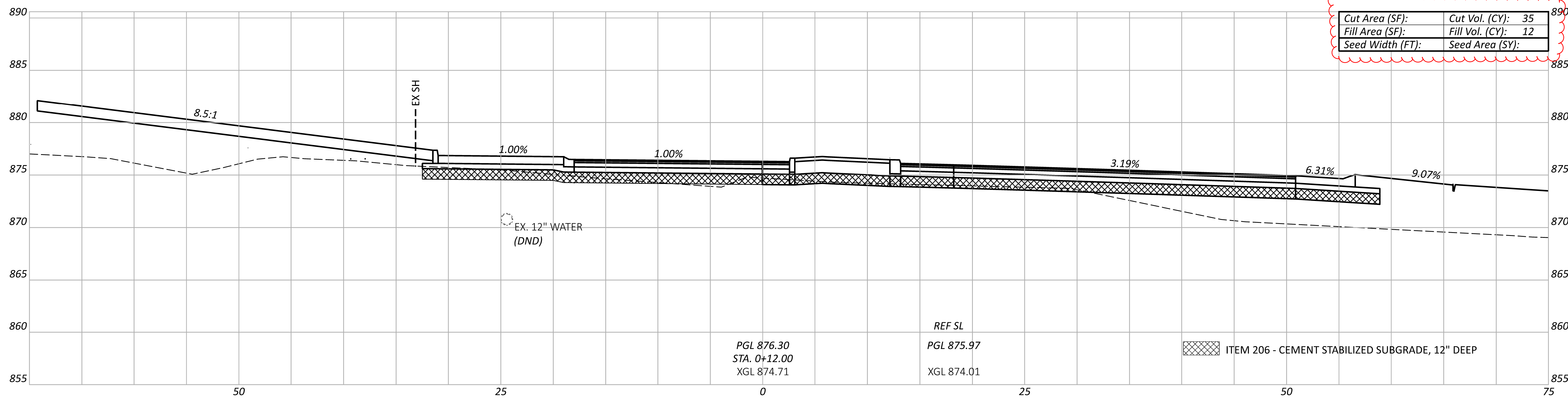
REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

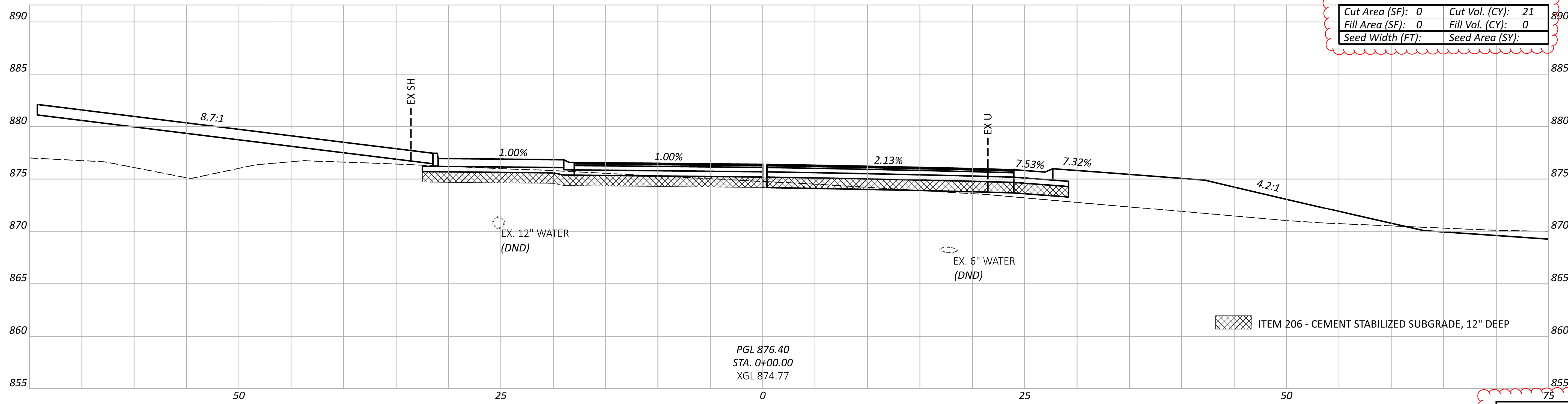
SHEET TOTAL  
 P.54 | 101

CROSS SECTIONS - SR 601  
 STA. 56+48.79





Cut Area (SF):	Cut Vol. (CY): 35
Fill Area (SF):	Fill Vol. (CY): 12
Seed Width (FT):	Seed Area (SY):



Cut Area (SF): 0	Cut Vol. (CY): 21
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):

CROSS SECTIONS - REF CC  
 STA. 0+00.00 TO STA. 0+12.00

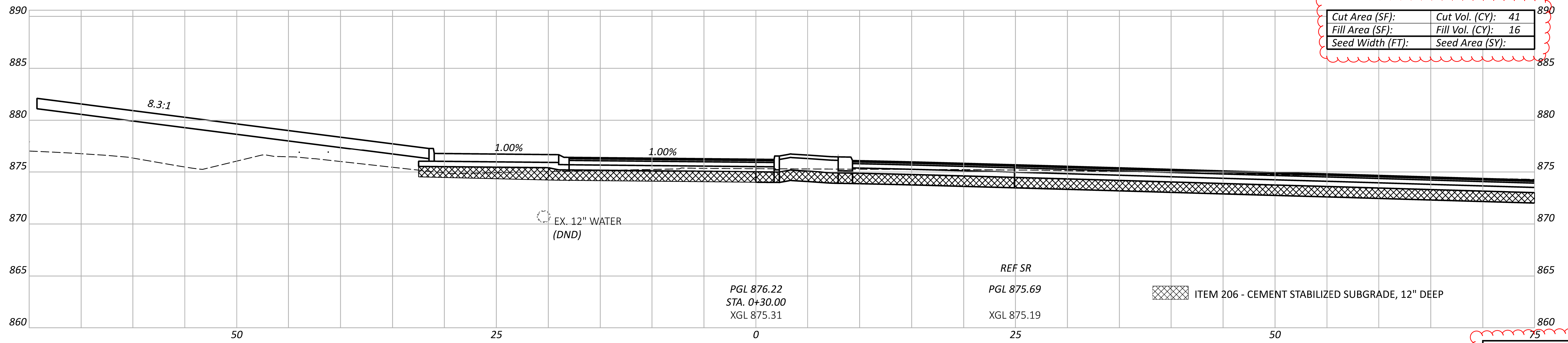
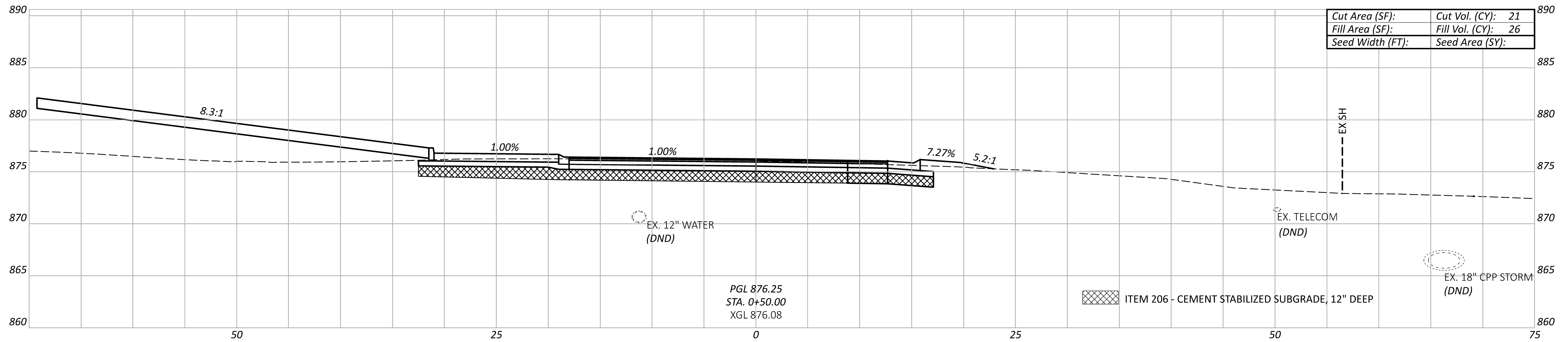
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

Sheet Totals			116163
Seeding	Cut	Fill	TOTAL
56	12		P.55   101



CROSS SECTIONS - REF CC  
 STA. 0+30.00 TO STA. 0+50.00

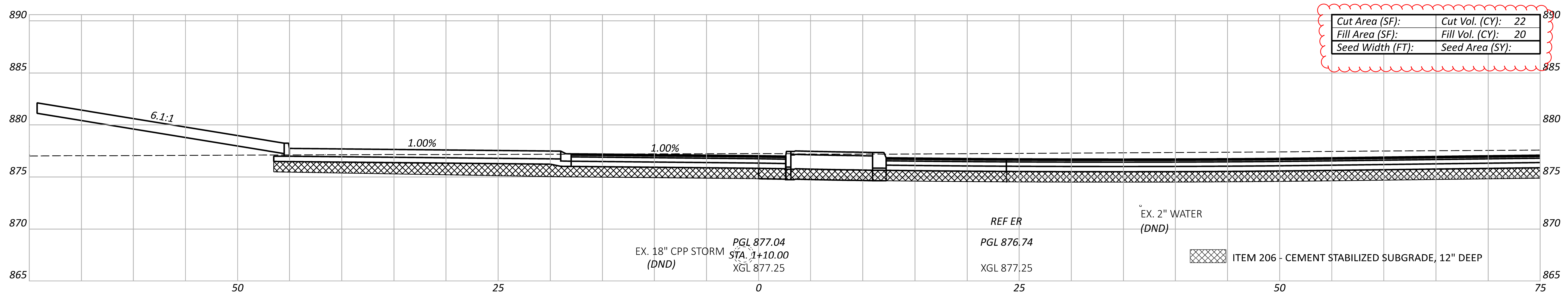
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK  
 REVIEWER  
 GHM 02/16/24

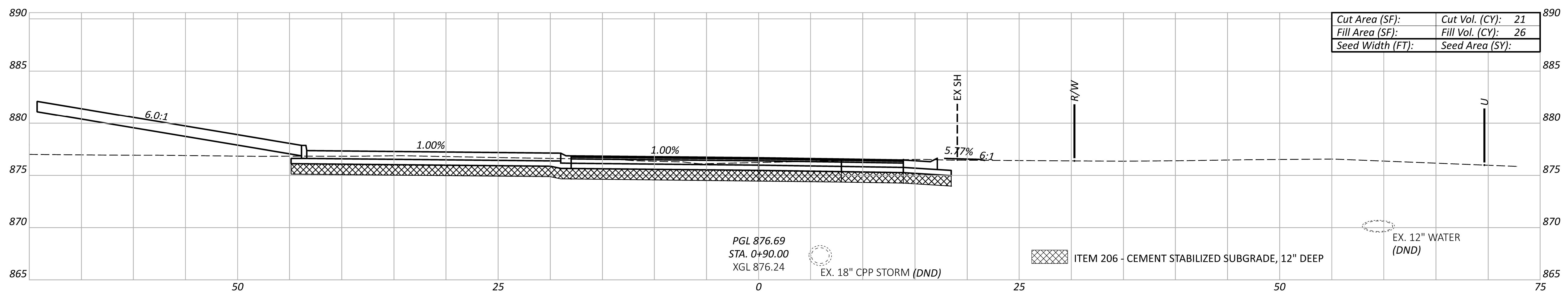
PROJECT ID  
 116163  
 SHEET TOTAL  
 P.56 | 101

Sheet Totals			116163
Seeding	Cut	Fill	TOTAL
62	42		P.56   101

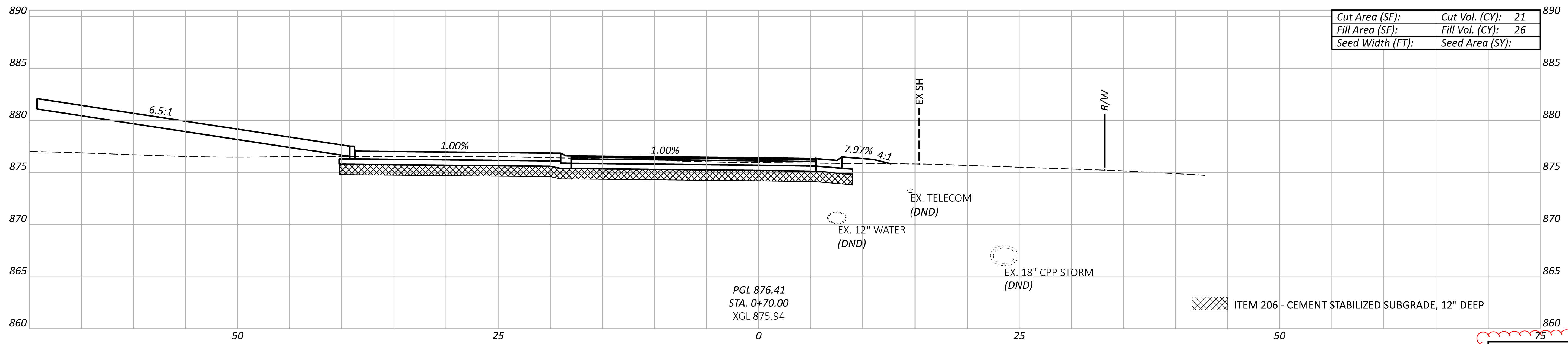




Cut Area (SF):	Cut Vol. (CY):	22
Fill Area (SF):	Fill Vol. (CY):	20
Seed Width (FT):	Seed Area (SY):	



Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	26
Seed Width (FT):	Seed Area (SY):	



Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	26
Seed Width (FT):	Seed Area (SY):	

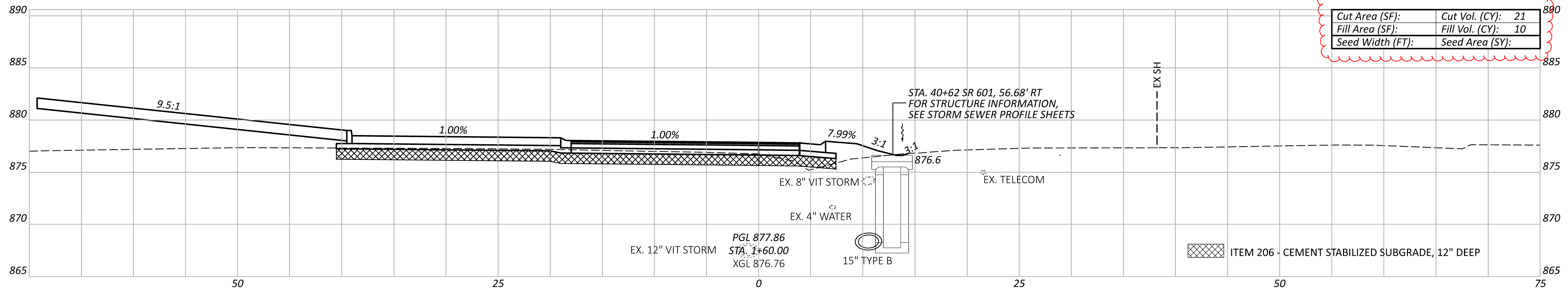
CROSS SECTIONS - REF CC  
 STA. 0+70.00 TO STA. 1+10.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

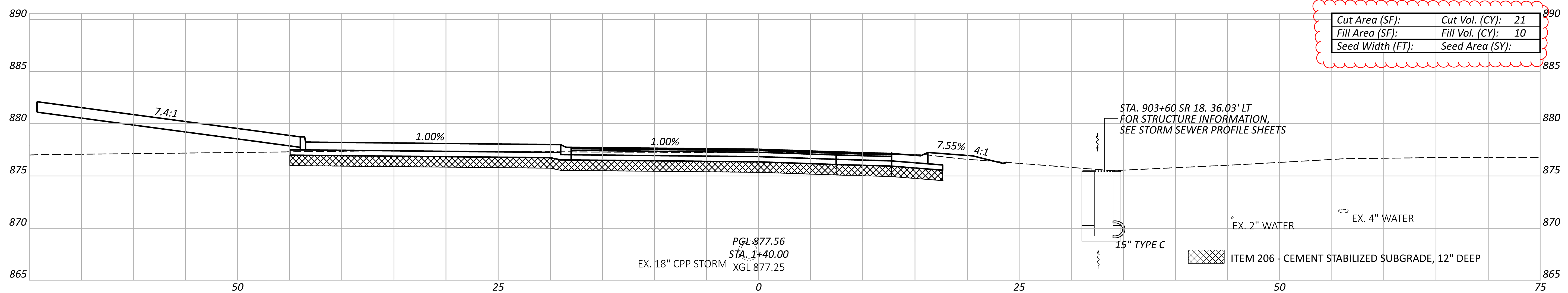
DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

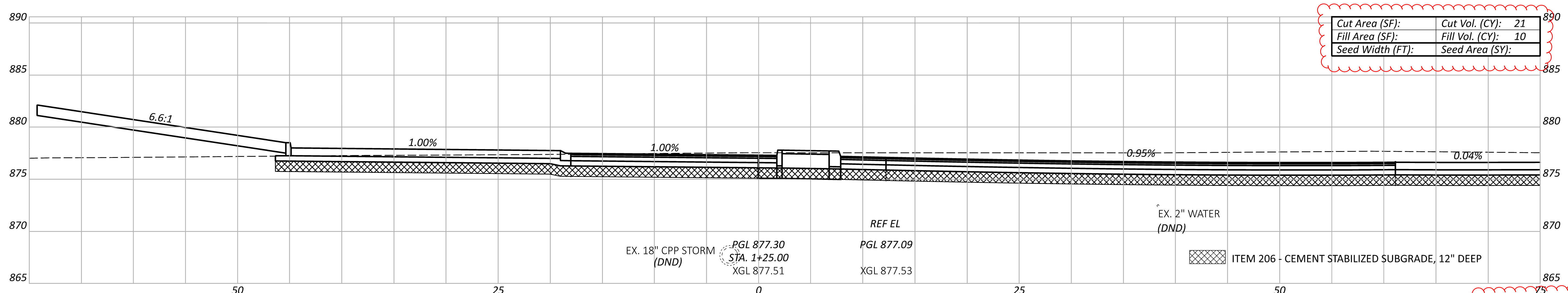
Sheet Totals		116163	
Seeding	Cut	Fill	TOTAL
	64	72	P.57   101



Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	10
Seed Width (FT):	Seed Area (SY):	



Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	10
Seed Width (FT):	Seed Area (SY):	



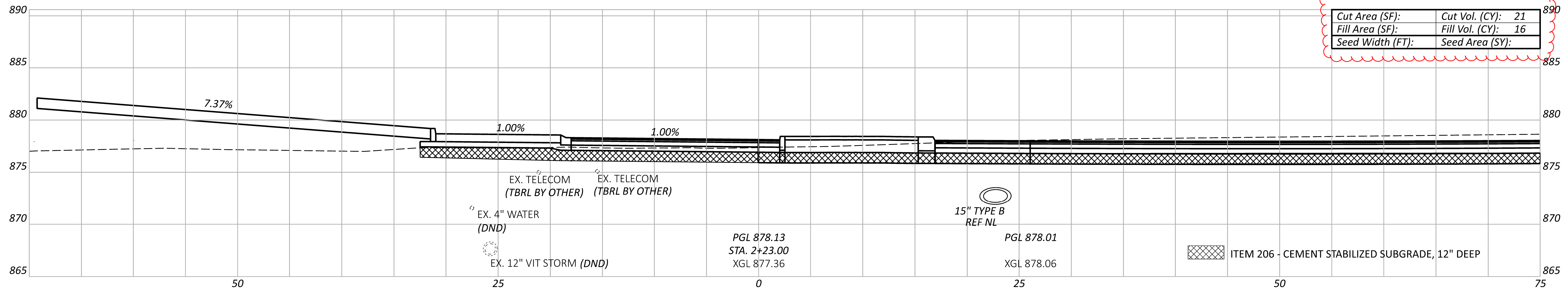
Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	10
Seed Width (FT):	Seed Area (SY):	

Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
63	30		P.58   101

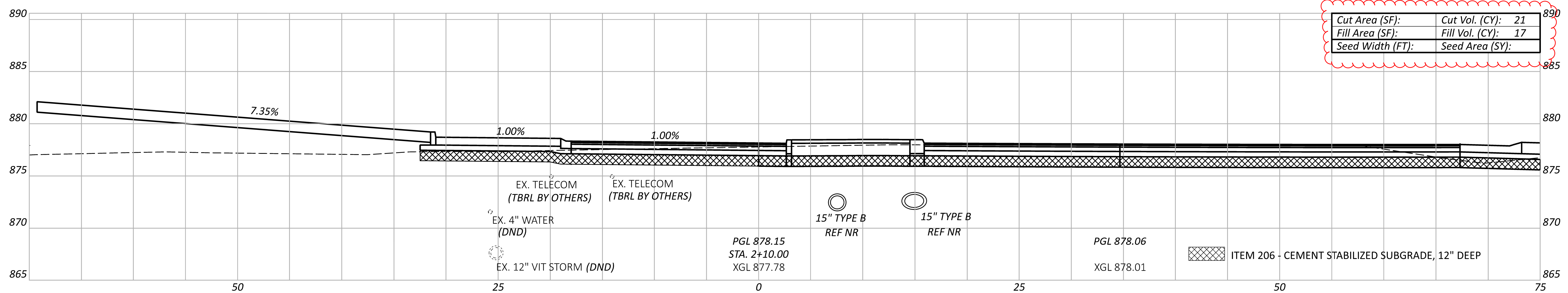
CROSS SECTIONS - REF CC  
 STA. 1+25.00 TO STA. 1+60.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215  
 DESIGNER  
 TK  
 REVIEWER  
 GHM 02/16/24  
 PROJECT ID

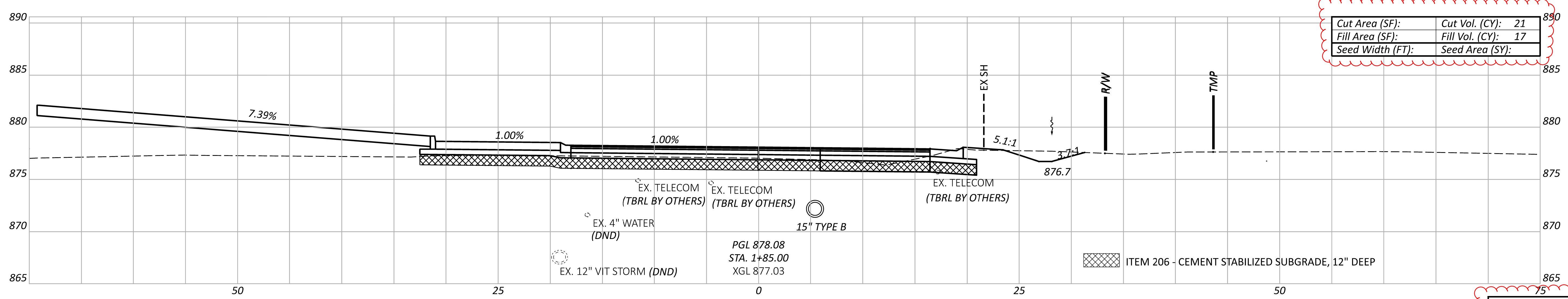




Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	16
Seed Width (FT):	Seed Area (SY):	



Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	17
Seed Width (FT):	Seed Area (SY):	

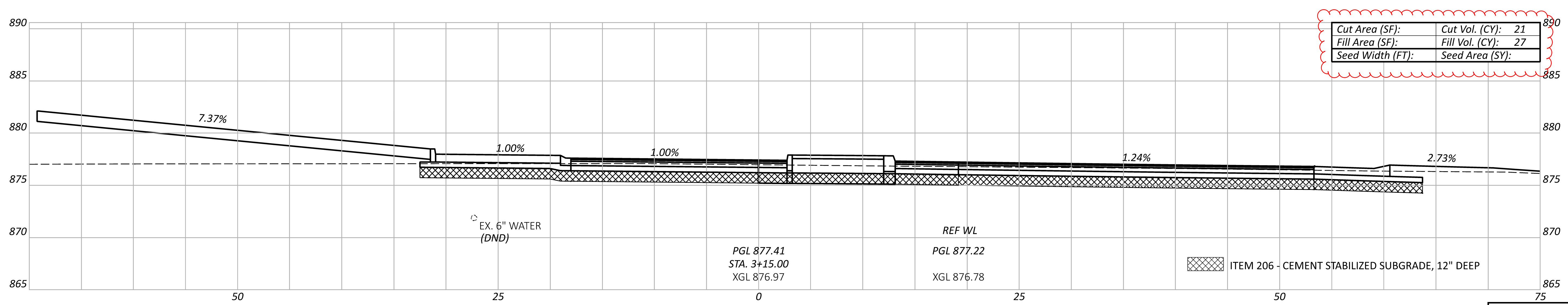
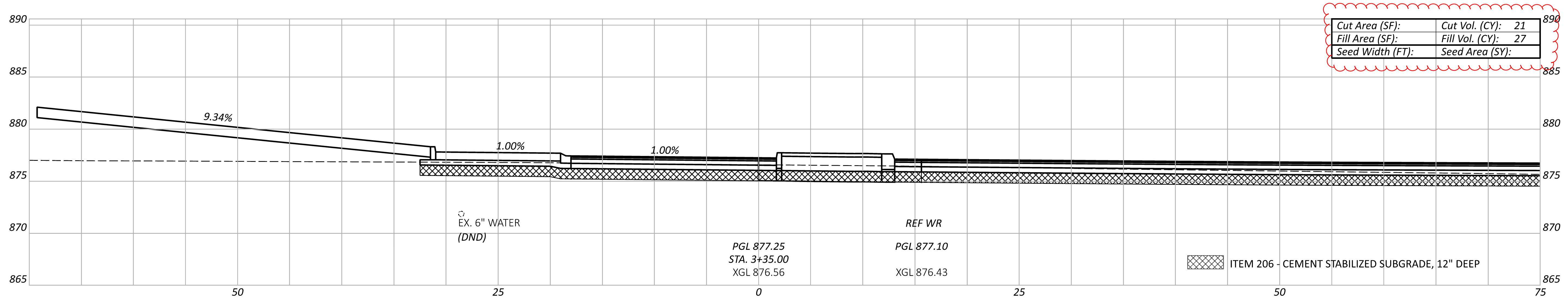
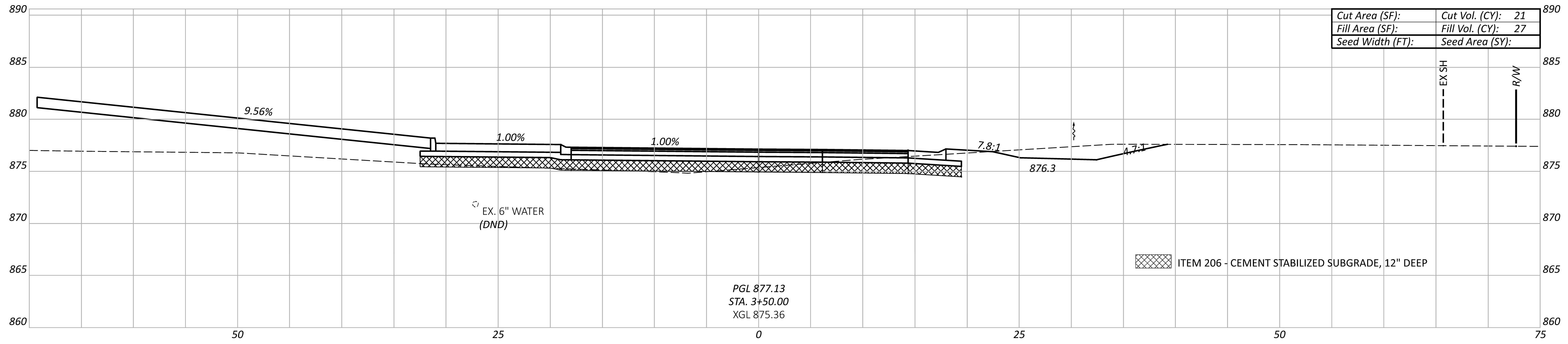


Cut Area (SF):	Cut Vol. (CY):	21
Fill Area (SF):	Fill Vol. (CY):	17
Seed Width (FT):	Seed Area (SY):	

Sheet Totals			116163
Seeding	Cut	Fill	SHEET TOTAL
63	50		P.59   101

CROSS SECTIONS - REF CC  
 STA. 1+85.00 TO STA. 2+23.00

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215  
 DESIGNER  
 TK  
 REVIEWER  
 GHM 02/16/24



Sheet Totals			116163	
Seeding	Cut	Fill	SHEET	TOTAL
	63	81	P.61	101

CROSS SECTIONS - REF CC  
 STA. 3+15.00 TO STA. 3+50.00

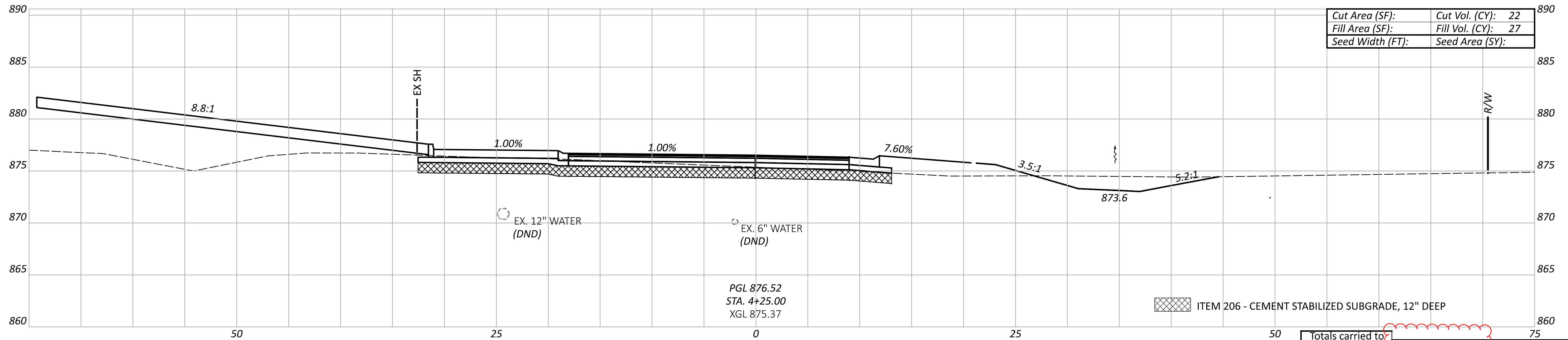
DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43215

DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163





Cut Area (SF):	Cut Vol. (CY):	22
Fill Area (SF):	Fill Vol. (CY):	27
Seed Width (FT):	Seed Area (SY):	

Totals carried to General Summary			Alignment Totals			Sheet Totals		
Seeding	Cut	Fill	Seeding	Cut	Fill	Seeding	Cut	Fill
	2574	1324		498	446		22	27

DESIGN AGENCY  
**TRANSYSTEMS**  
 400 W. NATIONWIDE BLVD., STE. 225  
 COLUMBUS, OHIO 43216

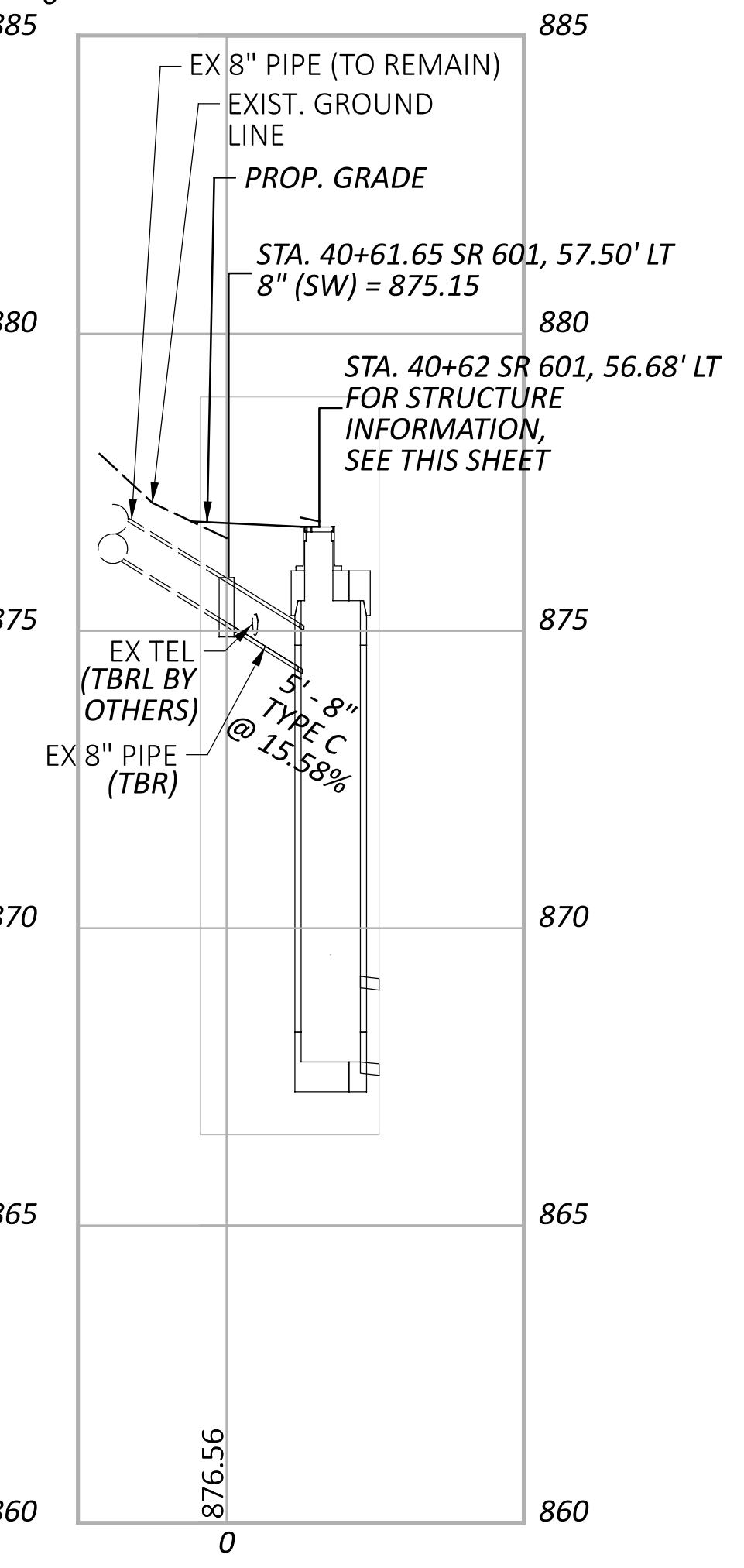
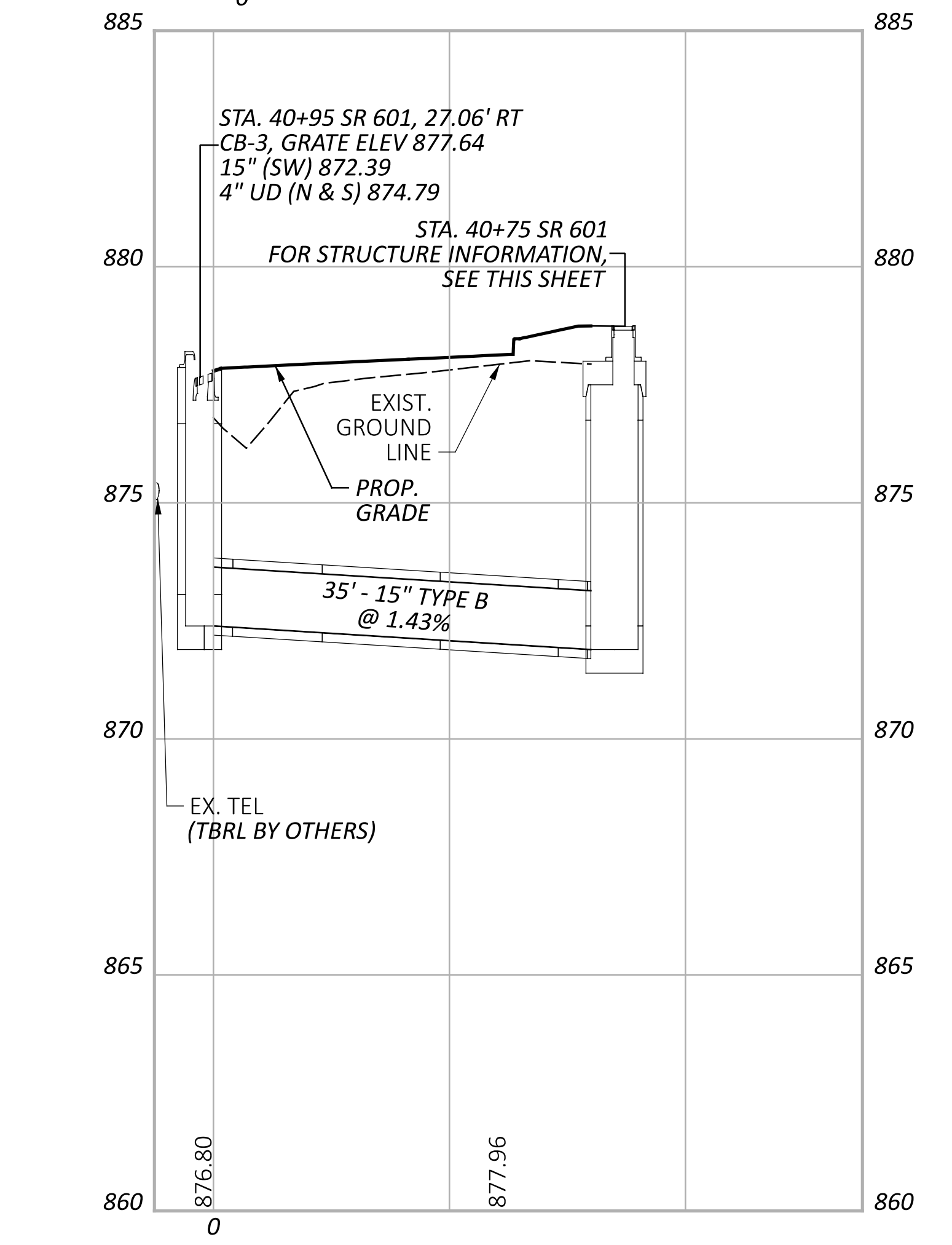
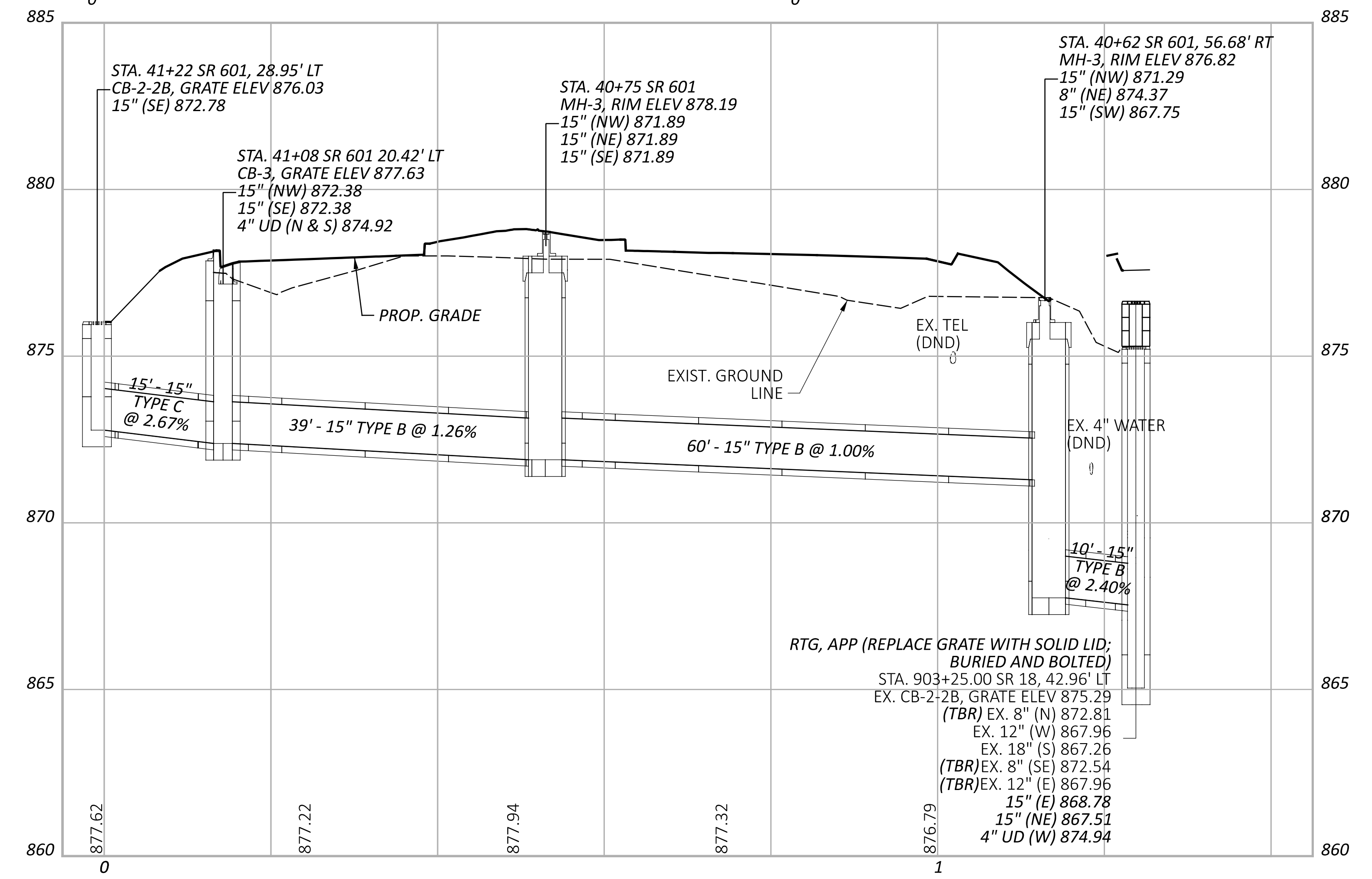
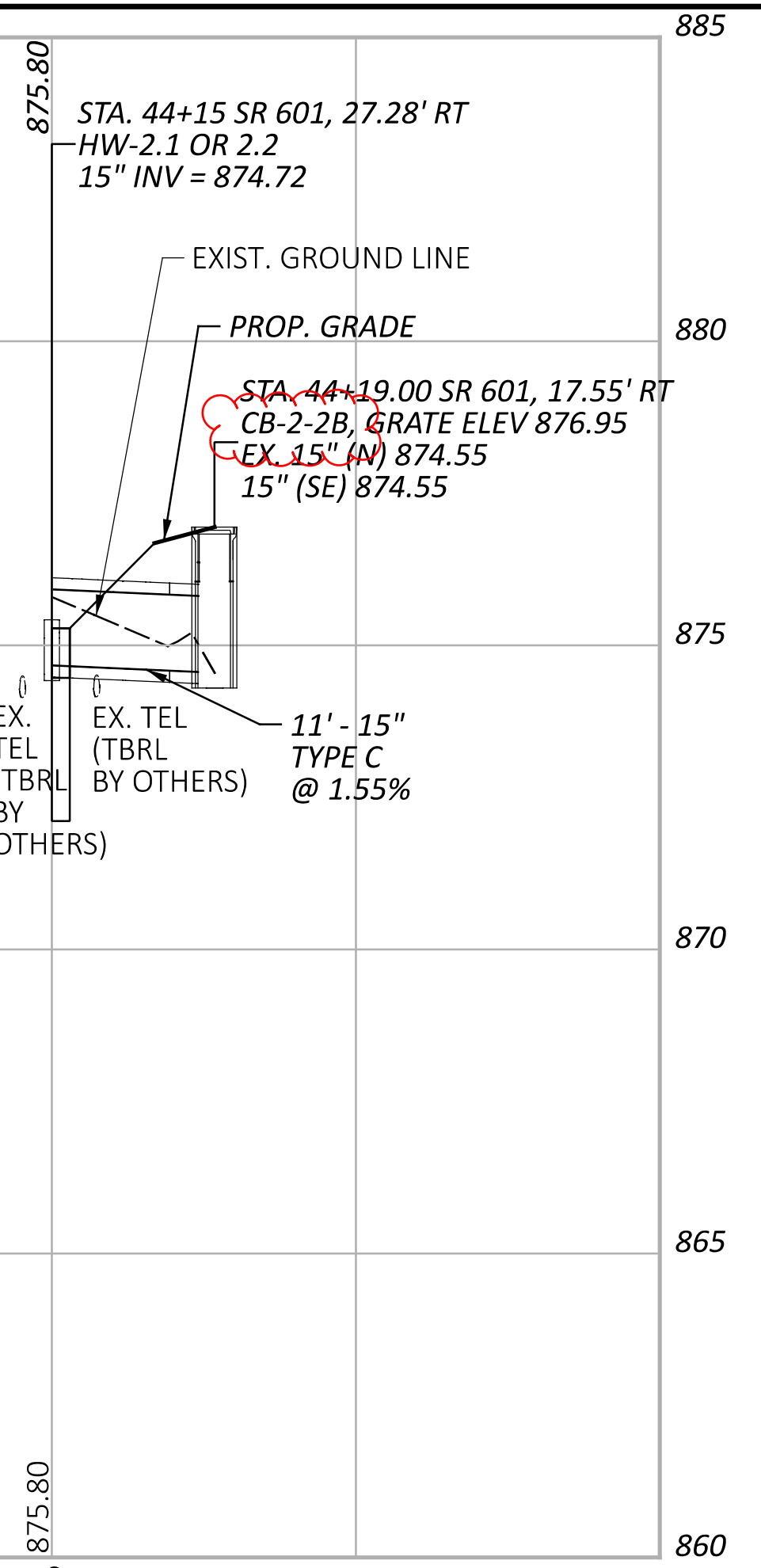
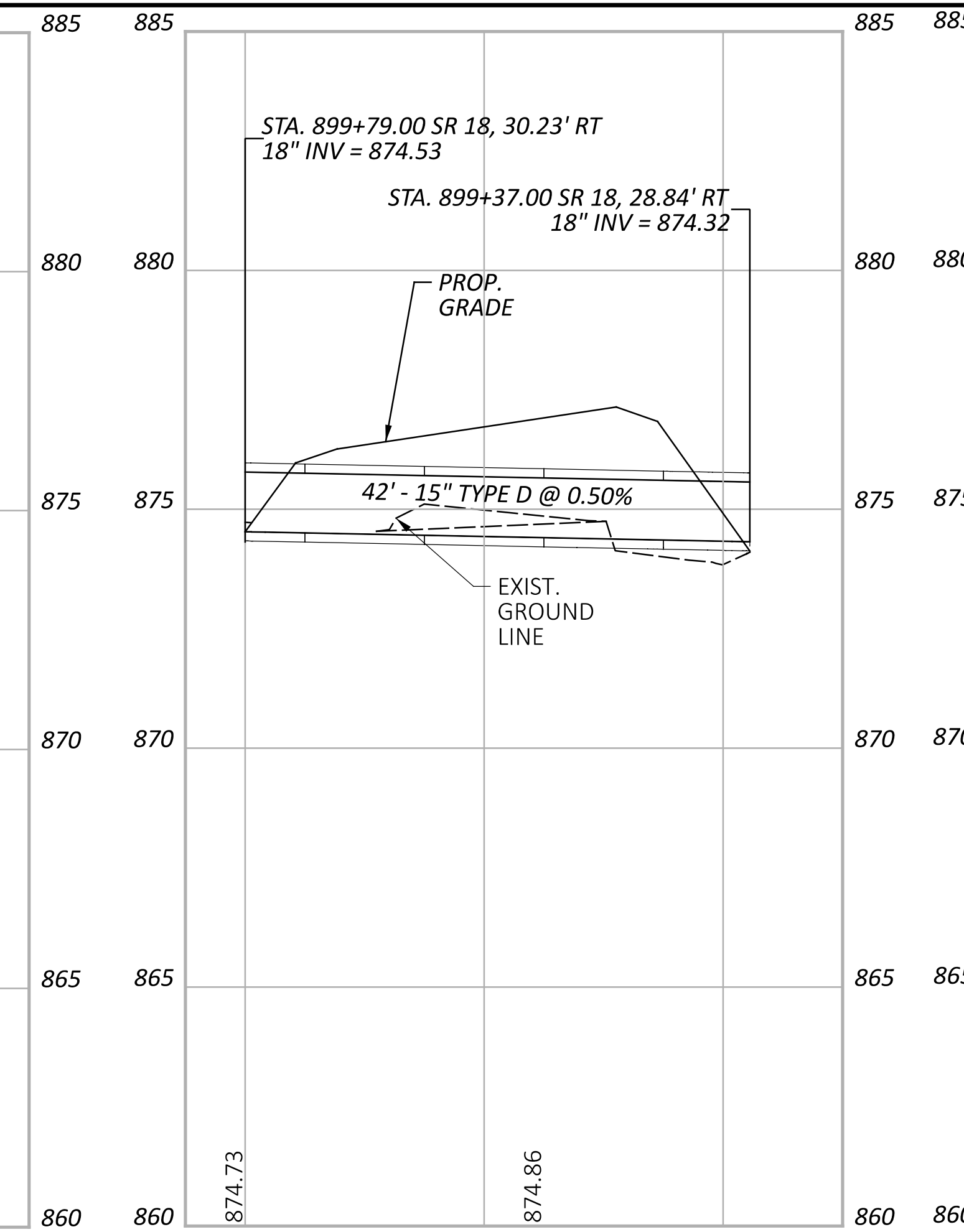
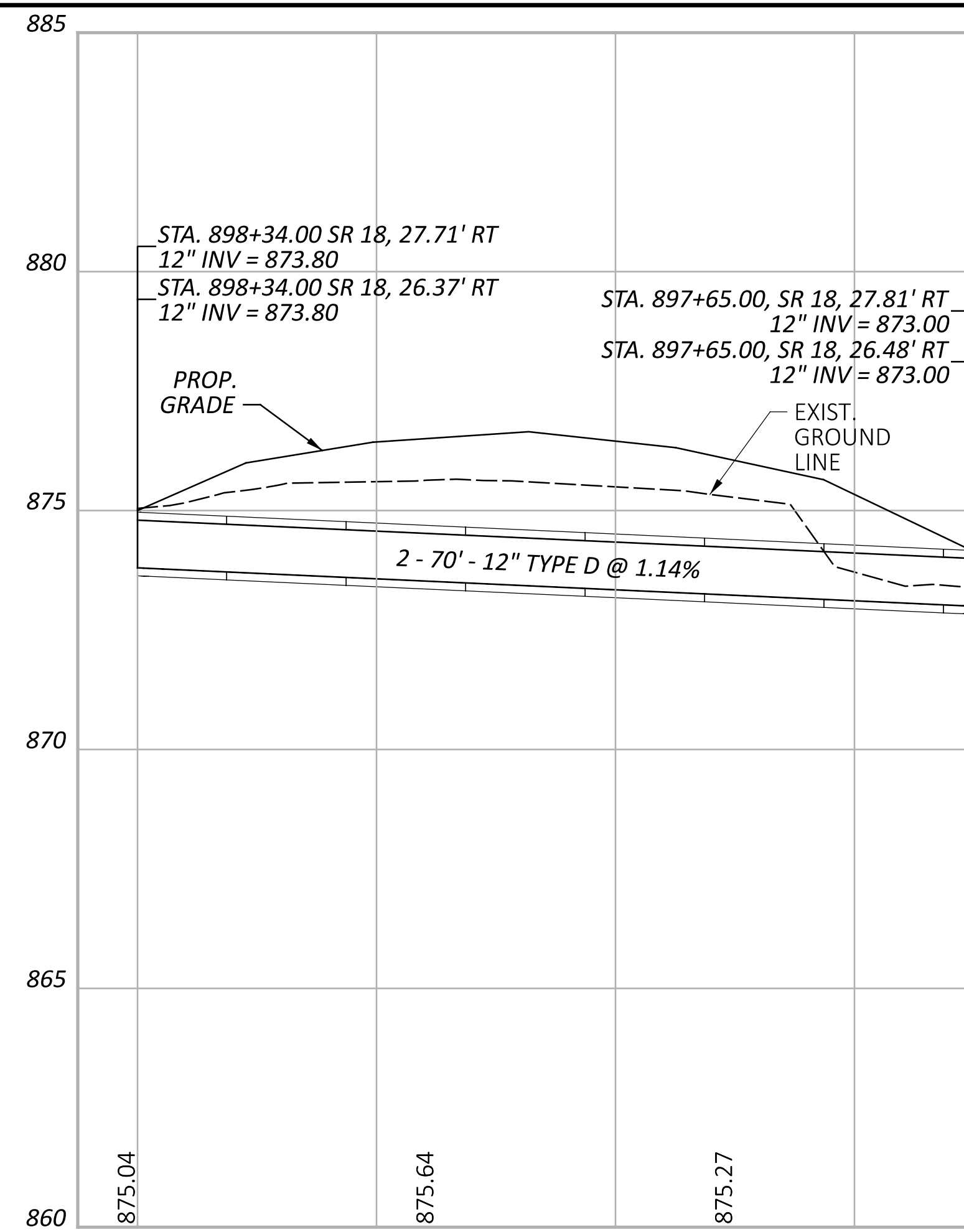
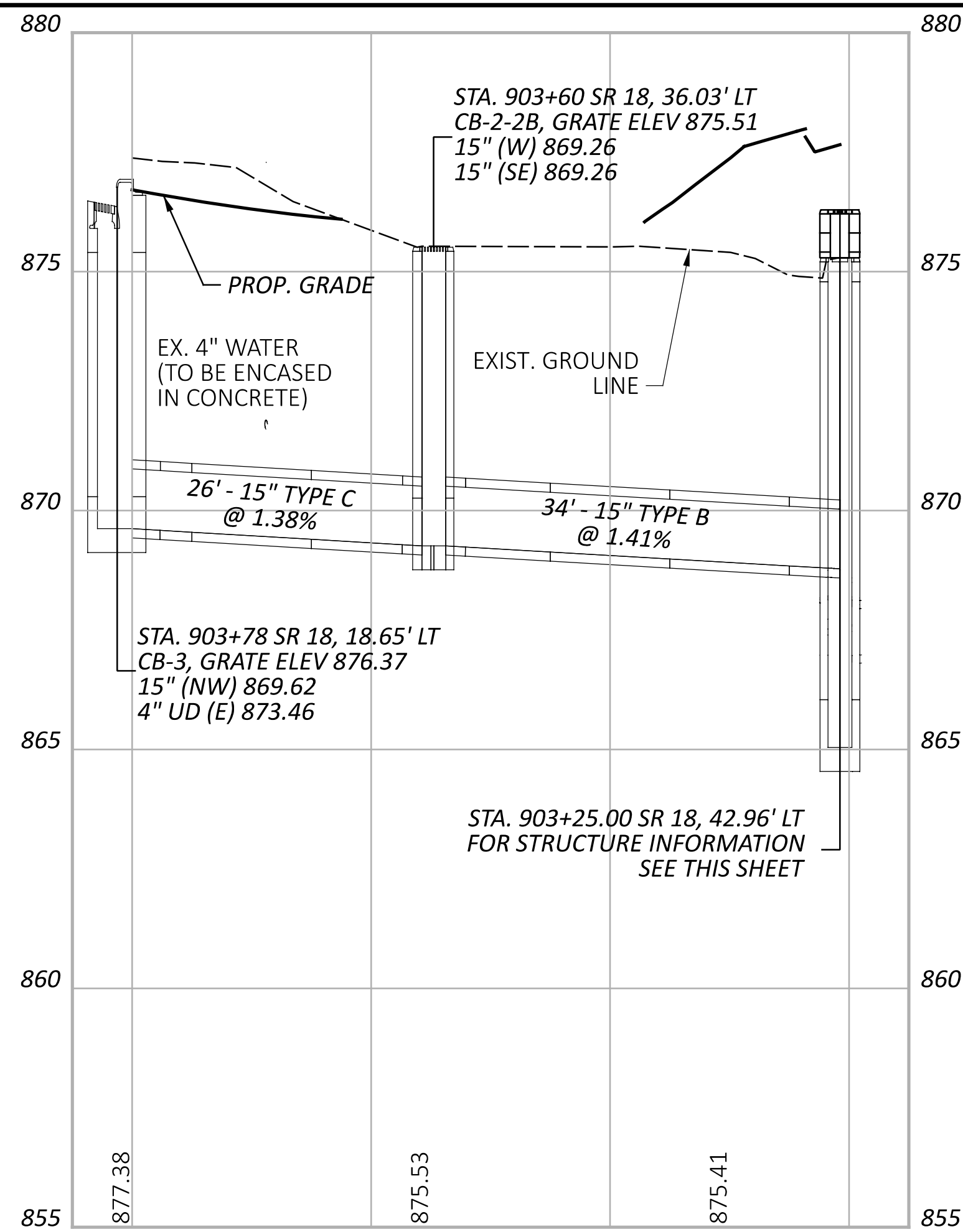
DESIGNER  
 TK

REVIEWER  
 GHM 02/16/24

PROJECT ID  
 116163

SHEET TOTAL  
 P.63 101

CROSS SECTIONS - REF CC  
 STA. 4+25.00



STORM SEWER PROFILES  
SR 18 AND SR 601

DESIGN AGENCY	TRANSYSTEMS
400 W. NATIONWIDE BLVD., STE. 225 COLUMBUS, OHIO 43215	
DESIGNER	MHT
REVIEWER	
PROJECT ID	GHM 02/16/24
	116163
SHEET	TOTAL
P.76	101

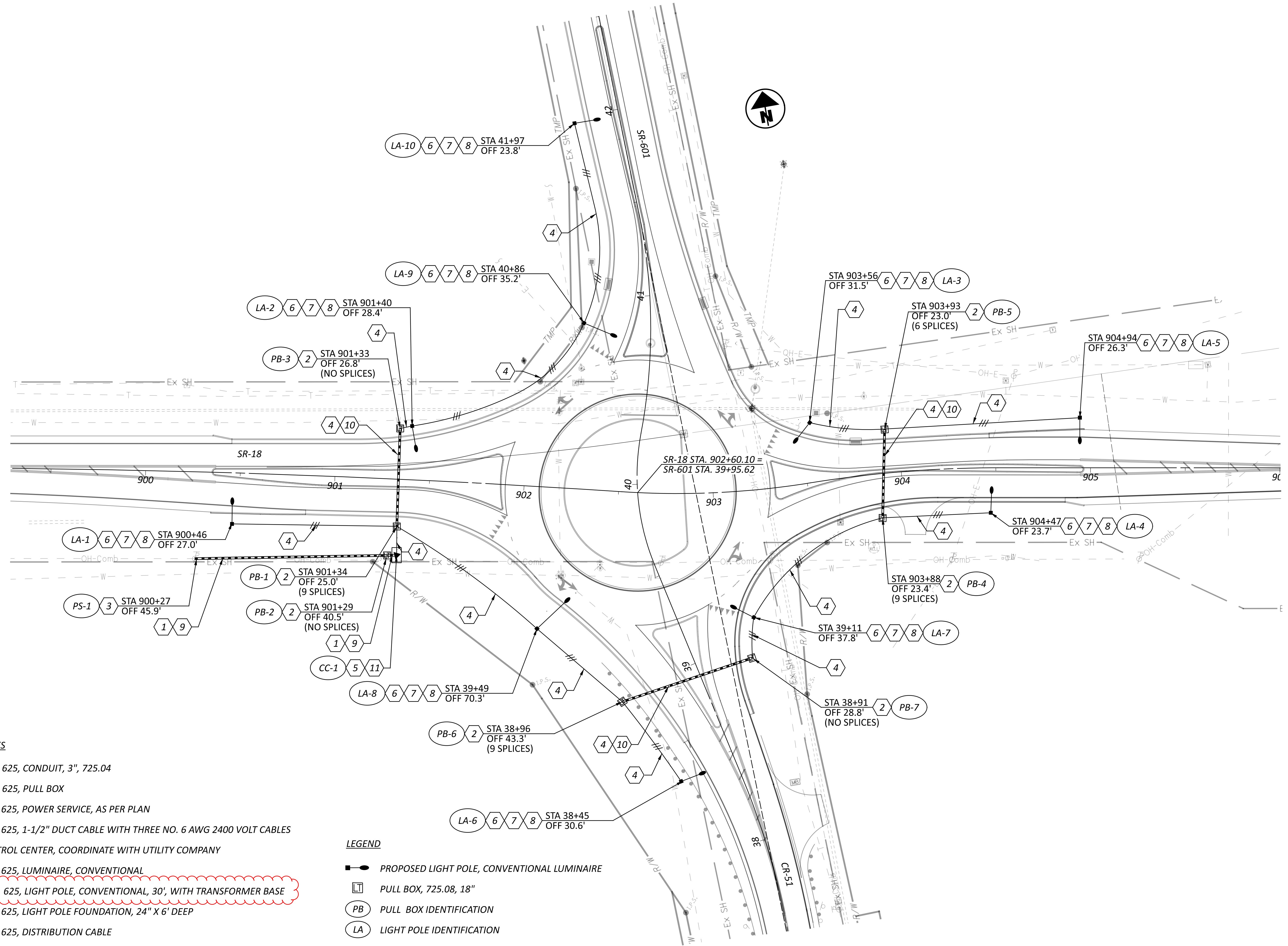


**CODED NOTES**

- 1 ITEM 625, CONDUIT, 3", 725.04
- 2 ITEM 625, PULL BOX
- 3 ITEM 625, POWER SERVICE, AS PER PLAN
- 4 ITEM 625, 1-1/2" DUCT CABLE WITH THREE NO. 6 AWG 2400 VOLT CABLES
- 5 CONTROL CENTER, COORDINATE WITH UTILITY COMPANY
- 6 ITEM 625, LUMINAIRE, CONVENTIONAL
- 7 ITEM 625, LIGHT POLE, CONVENTIONAL, 30', WITH TRANSFORMER BASE
- 8 ITEM 625, LIGHT POLE FOUNDATION, 24" X 6' DEEP
- 9 ITEM 625, DISTRIBUTION CABLE
- 10 ITEM 625, CONDUIT, JACKED OR DRILLED, 725.04, 3"
- 11 ITEM 633, CONTROLLER WORK PAD, AS PER PLAN

**LEGEND**

- PROPOSED LIGHT POLE, CONVENTIONAL LUMINAIRE
- PULL BOX, 725.08, 18"
- PULL BOX IDENTIFICATION
- LIGHT POLE IDENTIFICATION
- 3" CONDUIT
- DUCT CABLE WITH 3 CABLES



LIGHTING PLAN