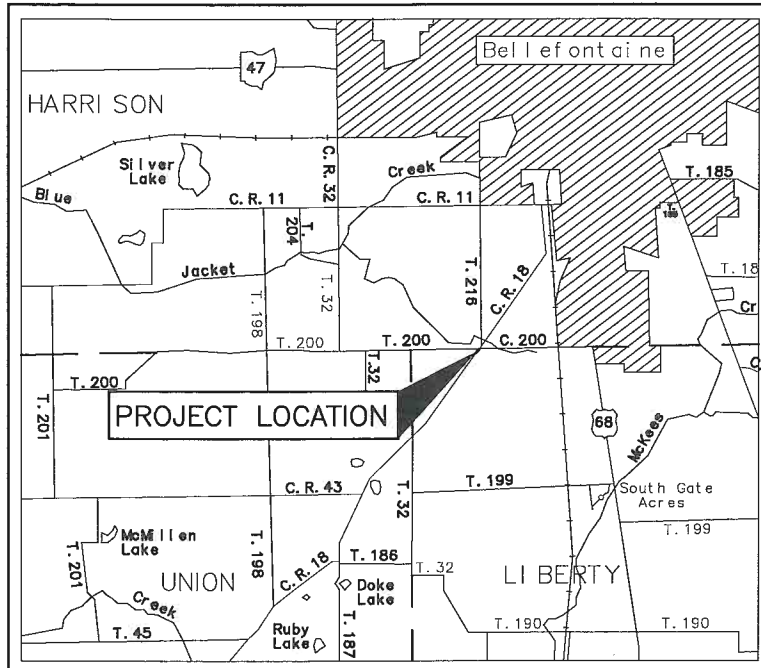


LOGAN COUNTY
ENGINEER'S OFFICE

SCOTT C. COLEMAN, P.E., P.S.
COUNTY ENGINEER

LOG CR 18 PROFILE
IMPROVEMENTS

LIBERTY TOWNSHIP
2023



LOCATION MAP

PORTION TO BE IMPROVED -----
STATE AND FEDERAL ROUTES -----
OTHER ROADS -----

DESIGN DESIGNATION

CURRENT A.D.T. (2022) ----- 3343
DESIGN YEAR A.D.T. (2042) ----- 6038
DESIGN HOURLY VOLUME (2042) ----- N/A
DIRECTIONAL DISTRIBUTION ----- 50%
TRUCKS (24 HOUR B&C) ----- 1%
DESIGN SPEED ----- 55 MPH
LEGAL SPEED ----- 55 MPH
DESIGN FUNCTIONAL CLASSIFICATION ----- MAJOR COLLECTOR

KEY

EXISTING EDGE OF PAVEMENT -----
PROPOSED EDGE OF PAVEMENT -----
EX. = EXISTING
PR. = PROPOSING

INDEX OF SHEETS

TITLE SHEET ----- 1
GENERAL & GUARDRAIL NOTES ----- 2
PAVEMENT NOTES ----- 3
SITE PLAN & PROFILE ----- 4
TYPICAL SECTION ----- 5
CROSS SECTIONS ----- 6-8
ESTIMATED QUANTITIES & VERTICAL CURVE DETAILS ----- 9

DESIGN EXCEPTION	DESIGN FEATURE
VERTICAL CURVE LENGTH	PROPOSED LENGTH (300') SUFFICIENT FOR POSTED 45 MPH ADVISORY SPEED

PROJECT DESCRIPTION

PERFORM PROFILE IMPROVEMENTS ON COUNTY ROAD 18 BEGINNING APPROXIMATELY 1000- FEET TO THE SOUTH OF TOWNSHIP ROAD 200 THENCE NORTHERLY TO A PROJECT TERMINI AT TOWNSHIP ROAD 200. EXISTING INTERSECTIONS IN THE PROJECT VICINITY ARE TO REMAIN UNCHANGED. PROJECT EARTH DISTURBED AREA = 0.4 ACRES ESTIMATED CONTRACTOR DISTURBED AREA = 0.4 ACRES NOTICE OF INTENT EARTH DISTURBED AREA = N/A (NOI NOT REQUIRED)

2023 SPECIFICATIONS

EXCEPT WHERE OTHERWISE NOTED, THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO, DATED JANUARY 1, 2023, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED HEREON, SHALL GOVERN THIS IMPROVEMENT.

DOMESTIC STEEL

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN SECTION 153.011 OF THE OHIO REVISED CODE APPLY TO THIS PROJECT. COPIES OF SECTION 153.011 OF THE OHIO REVISED CODE CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES.

LOGAN COUNTY ENGINEER APPROVAL

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE WORK LIMITS WILL BE WITHIN THE RIGHT-OF-WAY AND THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THESE PLANS.

12-18-23
DATE
Scott C. Coleman
LOGAN COUNTY, OHIO, ENGINEER



PLANS PREPARED BY:
LOGAN COUNTY ENGINEER'S OFFICE
1991 C.R. 13, P.O. BOX 427
BELLEFONTAINE, OHIO 43311



STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS
MGS 2.1 1-19-2018		SS 832
MGS 4.2 7-19-2013		
BP 3.2 1-18-2019		

FEDERAL PROJECT NO.
NON-FEDERAL

PID NO.
115979

WORK ORDER NO.
11696

RAILROAD INVOLVEMENT
NONE

LOG CR 18

UTILITIES

LISTED BELOW ARE UTILITIES THAT MAY BE INVOLVED WITHIN THE PROPOSED CONSTRUCTION LIMITS. AS OF 4/14/2023, OHIO811 REPORTED A POSTIVE RESPONSE OF 'NO CONFLICT' FOR THIS PROJECT.

TELEPHONE

CENTURYLINK
127 NORTH MAIN STREET
BELLEFONTAINE, OHIO 43311
937-599-9378

QWEST
4901 CONCORDIA CIRCLE
KETTERING, OH 45440
937-312-0275
800-283-4237

ALSO LISTED BELOW ARE UTILITIES LISTED BY THE OHIO UTILITIES PROTECTION SERVICE WHICH MAY BE ADJACENT TO THE CONSTRUCTION LIMITS.

ELECTRIC

DAYTON POWER & LIGHT
1204 WEST FIFTH STREET
MARYSVILLE, OHIO 43040
937-642-9060

LOGAN COUNTY CO-OP POWER & LIGHT ASSOC., INC.
1587 CR 32 N.
BELLEFONTAINE, OH 43311
937-592-4781

PIONEER RURAL ELECTRIC
771 SCIOTO STREET
URBANA, OHIO 43078
800-762-2171

UNION RURAL ELECTRIC CO-OP, INC.
15461 U.S. 36 EAST
P.O. BOX 393
MARYSVILLE, OHIO 43040
937-642-1826

CABLE TV

CHARTER COMMUNICATIONS
877-988-3407

WARNER CABLE COMMUNICATIONS
14500 INDUSTRIAL PARKWAY
MARYSVILLE, OHIO 43040
937-644-9171
800-934-4181

WATER/SEWER

CITY OF BELLEFONTAINE
DIVISION OF WATER AND SEWER
226 COLUMBUS AVE. WEST
BELLEFONTAINE, OH 43311
937-593-4216 (SEWER)
937-593-6121 (WATER)

LOGAN COUNTY SANITARY SEWER DISTRICT
1015 SR 708
RUSSELLS POINT, OH 43348
937-843-3328

NATURAL GAS/PETROLEUM PRODUCTS

BP OIL PIPELINE CO.
1500 W. BUCKEYE RD.
LIMA, OH 45806
419-222-7221

BUCKEYE PIPELINE
3250 S. DIXIE HWY.
LIMA, OH 45802
419-229-0166

SOUTHEASTERN NATURAL GAS CO.
P.O. BOX 377
FARZEYSBURG, OH 43822
740-828-2892

COLUMBIA GAS OF OHIO, INC.
5725 AVERY RD.
DUBLIN, OHIO 43016
614-789-5814

COLUMBIA GAS TRANSMISSION
1440 McNAUGHTEN
COLUMBUS, OH 43232
614-460-6904

UNDERGROUND UTILITIES

THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO CONSTRUCTION, AND SHALL WORK WITH THE ENGINEER TO ADJUST ANY INSTALLATIONS AS NECESSARY.

ITEM 606 – GUARDRAIL REBUILT

REBUILD EXISTING GUARDRAIL PER ODOT CMS SECTION 606.05. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC, AND MEET STATE REQUIREMENTS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION INITIATION

THE CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER TWENTY-ONE (21) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL IMMEDIATELY INFORM THE COUNTY ENGINEER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION PROJECT. THE COUNTY ENGINEER WILL PROVIDE CLARIFICATION FOR ANY QUESTIONS ABOUT THIS NOTIFICATION REQUIREMENT.

ITEM 614 – MAINTAINING TRAFFIC

C.R. 18, WITHIN THE PROJECT LIMITS, WILL BE CLOSED TO ALL TRAFFIC FOR A PERIOD NOT TO EXCEED 30 CALENDAR DAYS. COUNTY EMPLOYEES WILL POST THE DETOURS USING COUNTY ROAD 43, COUNTY ROAD 31 AND COUNTY ROAD 11. THE CONTRACTOR MUST ALLOW ACCESS TO ADJACENT PROPERTIES.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

ITEM 203 – EMBANKMENT

QUANTITIES FOR THIS ITEM REFLECT THE QUANTITIES DETERMINED FROM THE CROSS SECTIONS. IT'S THE INTENT OF THESE PLANS TO REUSE A MAJORITY OF THE ASPHALT MILLINGS THAT COMPRISES THE EXISTING ROADWAY; THE ENGINEER WILL DETERMINE WHETHER SAID MATERIAL IS SUITABLE TO BE REUSED. EXCAVATION IN EXCESS OF THE SPECIFIED WIDTH AND DEPTH SHALL BE BACKFILLED WITH ITEM 304 AT NO COST TO THE ENGINEER. 'ITEM 203-EMBANKMENT' INCLUDES FURNISHING AND PLACING A MINIMUM OF 4' OF TOPSOIL PER THE PLAN CROSS SECTIONS.

CONSTRUCTION LAYOUT STAKES

RIGHT-OF-WAY AND BENCH MARK STAKING WILL BE PERFORMED BY THE LOGAN COUNTY ENGINEER'S OFFICE.

PROTECTION OF THE SPOTTED TURTLE:

PORTIONS OF THE PROJECT ARE WITHIN THE KNOWN RANGE OF THE SPOTTED TURTLE. THE CONTRACTOR SHALL AVOID ANY LIVE TURTLES OBSERVED ON OR NEAR THE ROADWAY DURING ACTIVITIES. IF A TURTLE IS NOTED DURING CONSTRUCTION, ACTIVITY NEAR THE TURTLE MUST STOP AND THE TURTLE SHALL BE ALLOWED TO EXIT THE PROJECT AREA. THE SPECIES IS FOUND IN WETLANDS AND SLUGGISH STREAMS AND ADJACENT UPLAND AREAS. IN ORDER TO AVOID IMPACTING HABITAT FOR THIS SPECIES, EQUIPMENT AND MATERIALS STAGING ON CR 18 MAY ONLY OCCUR IN AREAS OF EXISTING PAVEMENT OR AREAS THAT ARE REGULARLY MOWED/DISTURBED. ABSOLUTELY NO STAGING IS PERMITTED DIRECTLY ADJACENT TO STREAMS OR WITHIN OR DIRECTLY ADJACENT TO WETLANDS.

642-58 NOTIFICATION OF TRAFFIC RESTRICTIONS

THE CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER 21 DAYS BEFORE BEGINNING CONSTRUCTION AND THE COUNTY ENGINEER'S OFFICE WILL NOTIFY THE PUBLIC ABOUT THE ROAD CLOSURE 14 DAYS PRIOR TO CLOSURE.

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND IPCOMING MAINTENACNE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	≥2 WEEKS >12 HOURS & <2 WEEKS ≤12 HOURS	21 CALENDAR DAYS PRIOR TO CLOSURE 14 CALENDAR DAYS PRIOR TO CLOSURE 4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	≥2 WEEKS <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

DESIGNED
MJK

CHECKED
SOC

DRAWN
MJK

REVIEWED
WTB

DATE
12/14/2023

PROJECT NUMBER
115979

DESIGN AGENCY
LOGAN COUNTY ENGINEER'S OFFICE
1991 C.R. 13, P.O. BOX 427
BELLEFONTAINE, OHIO 43311

GENERAL & GUARDRAIL NOTES

LOG CR 18

AGGREGATE

THE CONTRACTOR SHALL PROVIDE THE NAME AND LOCATION OF THE AGGREGATE PRODUCER PROVIDING THE AGGREGATE FOR THIS PROJECT. THE ENGINEER SHALL THEN INFORM THE LABORATORY, WHO WILL TEST THE AGGREGATE TO INSURE IT COMPLIES WITH ALL OF THE REQUIREMENTS OF THE O.D.O.T. SPECIFICATIONS. HOWEVER, IF THE AGGREGATE HAS BEEN PREVIOUSLY TESTED BY THE COUNTY, NO TESTING WILL BE REQUIRED. THE PERCENTAGE OF CRUSHED AGGREGATE SHALL BE DETERMINED BY COUNTING THE NUMBER OF SINGLE FRACTURED FACES. THE COUNTY MAY PERFORM DURABILITY TESTING OF THE AGGREGATE STOCKPILE.

JOB MIX FORMULA

THE JOB MIX FORMULA SHALL BE DESIGNED FOR LOW VOLUME TRAFFIC. WARM MIX ASPHALT IS REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL PROVIDE THE JOB MIX FORMULA TO THE ENGINEER AT THE TIME OF BIDDING. THE ENGINEER SHALL FORWARD THE JMF TO THE LABORATORY FOR VERIFICATION.

TEMPORARY PAVEMENT MARKING

THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKING IN THE CENTER OF THE PAVEMENT IMMEDIATELY BEHIND THE PAVER. THIS SHALL CONSIST OF 4" X 12" REFLECTIVE STRIPS PLACED EVERY 100 FEET. PAYMENT FOR SAID MARKING SHALL BE INCLUDED IN THE UNIT COST FOR BID ITEM 404.

ASPHALT BINDER

SHALL BE BINDER GRADE PG58-28.

ITEM 402 LVT (AS PER PLAN)

ITEM 402 LVT IS A COARSE VERSION OF THE OHIO DOT 404LVT. THIS AS PER PLAN MIX DESIGN WILL BE USED FOR LEVELING AND INTERMEDIATE MAT PLACEMENT. ODOT SPECIFICATION ITEM 404 LVT SHALL BE FOLLOWED WHEN DEVELOPING JMF WITH EXCEPTION OF MIXTURE PROPORTIONS OUTLINED BELOW. COMPLETE MIX DESIGN DOCUMENTATION SHALL BE PROVIDED ALONG WITH THE JMF AT THE TIME OF BIDDING FOR APPROVAL BY THE COUNTY ENGINEER.

402 LVT (AS PER PLAN) - MIXTURE PROPORTIONS
50-BLOW MARSHALL

SIEVE	TOTAL PERCENT PASSING
1 1/2	100
1	95 TO 100
3/4	90 TO 100
1/2	75 TO 90
#4	50 TO 65
#8	35 TO 50
#16	25 TO 40
#30	15 TO 30
#50	8 TO 16
#100	2 TO 10
TOTAL BINDER	5.5 TO 6.5 INDICATE GRAVEL OR LIMESTONE COARSE AGGREGATE
VIRGIN BINDER	5.3 (MINIMUM)
BINDER GRADE	PG 58-28
AIR VOIDS	3.5%

ITEM 404LVT. EXTRA MATERIAL

QUANTITIES OF ASPHALT CONCRETE HAVE BEEN PROVIDED TO CORRECT SURFACE IRREGULARITIES AND TO PROVIDE FOR TWO FEET WIDE TAPERS AT DRIVEWAYS AND MAILBOXES. ADDITIONAL QUANTITIES HAVE ALSO BEEN PROVIDED TO RESURFACE INTERSECTIONS TO THE RIGHT OF WAY LINE. THESE QUANTITIES ARE ESTIMATED AND SHALL BE USED AT THE DIRECTION OF THE ENGINEER OR THE ENGINEER'S DESIGNEE. ALL EXTRA MATERIAL SHALL BE OF THE SAME TYPE AS USED FOR THE FINISH COURSE.

SAFETY EDGE

A "SAFETY EDGE" SHALL BE INSTALLED DURING MAT PLACEMENT OPERATIONS. THE SAFETY EDGE SHALL BE PLACED AT 30 DEGREES FROM VERTICAL.

JOB MIX

JOB MIX FORMULA SHALL BE 20% PERCENT R.A.P. (RECLAIMED ASPHALT PAVEMENT) MAXIMUM FOR SURFACE MATERIAL. JOB MIX FORMULA MUST INCLUDE MAXIMUM PERCENT OF R.A.P. PROPOSED AND MINIMUM PERCENT VIRGIN ASPHALT BINDER PROPOSED FOR ALL MIXES BEING BID.

ASPHALT BINDER PRICE ADJUSTMENT

2023 O.D.O.T. CMS, 401.20 SHALL NOT APPLY TO THIS PROJECT

TESTING

THE ENGINEER'S REPRESENTATIVE SHALL COLLECT A SAMPLE OF THE MATERIAL BEING PLACED AT RANDOM TIMES EACH 500 TONS OF MATERIAL DELIVERED TO THE PROJECT. EACH SAMPLE SHALL BE MARKED WITH THE DATE, TIME THE SAMPLE WAS TAKEN, AND THE DELIVERY TICKET NUMBER. THE SAMPLES WILL BE ANALYZED BY THE LABORATORY FOR ASPHALT CONTENT, GRADATION AND AGGREGATE PROPERTIES.

QUALITY CONTROL

NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS, EXCLUDING WEEKENDS AND LEGAL HOLIDAYS, PRIOR TO STARTING ASPHALT CONCRETE PRODUCTION. THE FAILURE TO PROVIDE THE REQUIRED MINIMUM NOTICE MAY RESULT IN THE ENGINEER BEING UNABLE TO OBSERVE THE TESTING AS MAY BE REQUIRED BY THIS SPECIFICATION. PRODUCTION AND/OR PLACEMENT OF ASPHALT SHALL NOT TAKE PLACE WITHOUT TESTING EQUIPMENT BEING IN PROPER WORKING ORDER.

THE MINIMUM ASPHALT BINDER CONTENT AS SPECIFIED HEREIN BY THE APPROVED JMF FOR EACH TYPE OF ASPHALT MATERIAL PER DAY OF PRODUCTION AND PLACEMENT SHALL BE TESTED IN ACCORDANCE WITH AASHTO T-287 AND ASTM D 4125. ASPHALT CONTENT OF EACH ASPHALT MATERIAL TYPE SHALL BE TESTED A MINIMUM OF ONE (1) TIME PER 500 TONS OF PRODUCTION DURING EACH DAY. THE ENGINEER OR HIS DESIGNATED REPRESENTATIVE SHALL DETERMINE WHEN, DURING THE DAY'S PRODUCTION, EACH OF THE REQUIRED TESTS SHALL BE MADE; HOWEVER, THE CONTRACTOR MAY CONDUCT ADDITIONAL TESTS BEYOND THOSE ORDERED BY THE ENGINEER TO ENSURE PROPER QUALITY CONTROL

DOCUMENT EACH ASPHALT CONTENT TEST IN A MANNER ACCEPTABLE TO THE ENGINEER'S REPRESENTATIVE. AT A MINIMUM INCLUDE IN EACH TEST REPORT THE INFORMATION SPECIFIED IN AASHTO T-287. PROVIDE THE WRITTEN TEST REPORTS TO THE ENGINEER AS SOON AS PRACTICABLE UPON COMPLETION OF EACH TEST.

WHEN DIRECTED BY THE ENGINEER, PROVIDE SAMPLES OF MATERIAL PER 403.06. SAMPLES OBTAINED PER 403.06 WILL BE USED, AT THE ENGINEER'S DISCRETION, TO DETERMINE AGGREGATE GRADATION.

THE ENGINEER MAY ORDER ADDITIONAL TESTS BASED ON THE SCOPE OF THE PROJECT, SCHEDULE OF ASPHALT CONCRETE PLACEMENT, OR IF WORKMANSHIP PROBLEMS BECOME EVIDENT. NOTHING IN THIS SPECIFICATION, IF AND WHEN DEEMED NECESSARY, SHALL PRECLUDE THE ENGINEER FROM OBTAINING AND TESTING SAMPLES BY ANY OTHER GENERALLY ACCEPTABLE METHOD, IN ACCORDANCE WITH ESTABLISHED STANDARDS AND PRACTICES

PAYMENT AND ACCEPTANCE

PAYMENT FOR ASPHALT CONCRETE PAVING ITEMS REPRESENTING EACH DAY'S PRODUCTION WILL BE AS ACCEPTED AND AUTHORIZED BY THE ENGINEER ON THE BASIS OF WEIGHT SLIPS AND THE FOLLOWING PAY SCHEDULE. WEIGHT SLIPS SHALL INDICATE GROSS, TARE, AND NET WEIGHTS, NOT BATCH WEIGHTS.

ACCEPTANCE AND PAYMENT FOR EACH TYPE OF MATERIAL WILL BE BASED ON THE MEASURED TOTAL ASPHALT BINDER CONTENT AS COMPARED WITH THAT SPECIFIED, AND VERIFIED THROUGH LABORATORY TEST RESULTS AND THE DATA LOGS. ALL PRODUCTION DATA LOGS SHALL BE CORRELATED TO THE LOADING TIME BY THE PRODUCTION PLANT. QUALITY CONTROL REPORTS SHALL BE SUBMITTED USING OHIO DOT CONTRACTOR FORM TE-199. RESULTING PAY ADJUSTMENT(S) WILL BE MADE IN ACCORDANCE WITH THE FOLLOWING PAY SCHEDULE:

PAY FACTOR	DEVIATION BELOW MINIMUM SPECIFIED REQUIRED TOTAL ASPHALT BINDER CONTENT
1.00	0.00 TO 0.10
0.99	0.11 TO 0.20
0.98	0.21 TO 0.30
0.95	0.31 TO 0.40
0.70	0.41 TO 0.50
REMOVAL	MORE THAN 0.50

THE PAY FACTOR WILL BE APPLIED TO THE UNIT PRICE FOR THE RESPECTIVE ITEM IN THE CONTRACT WHEN CALCULATING PAYMENT PROGRESS ESTIMATES.

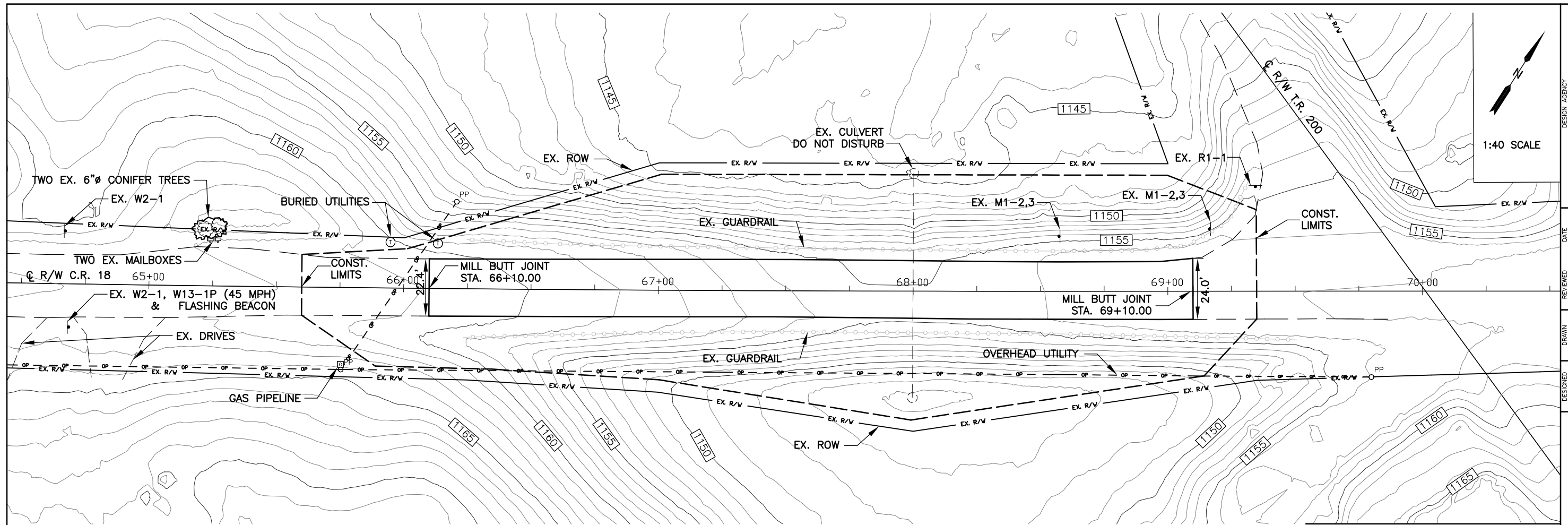
DESIGN AGENCY
LOGAN COUNTY ENGINEER'S OFFICE
1991 C.R. 13, P.O. BOX 427
BELLEFONTAINE, OHIO 43311

DATE
12/14/2023
REVIEWED
WTB
DRAWN
MJK
DESIGNED
MJK
CHECKED
SCC
PID NUMBER
115979

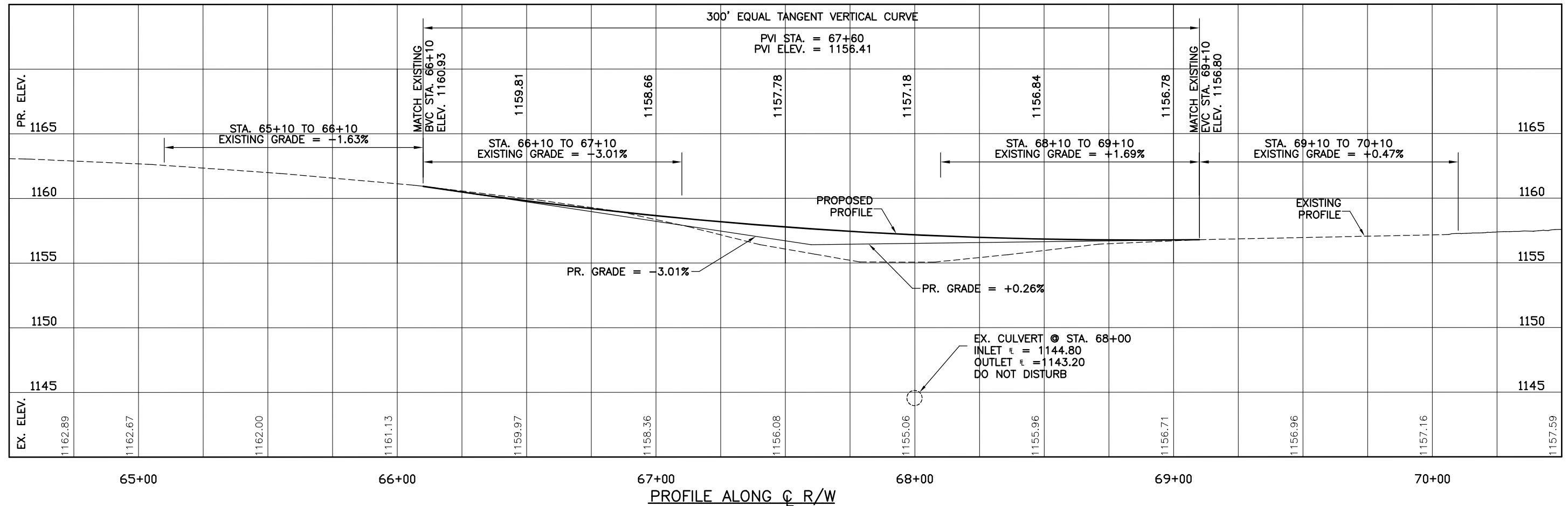
PAVEMENT NOTES

LOG CR 18

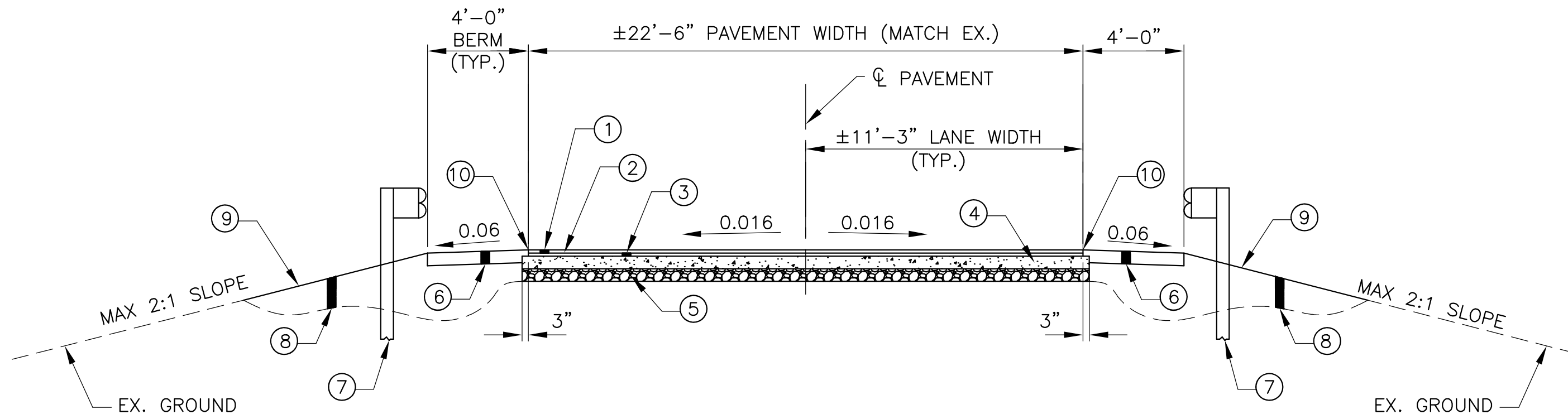




PLAN



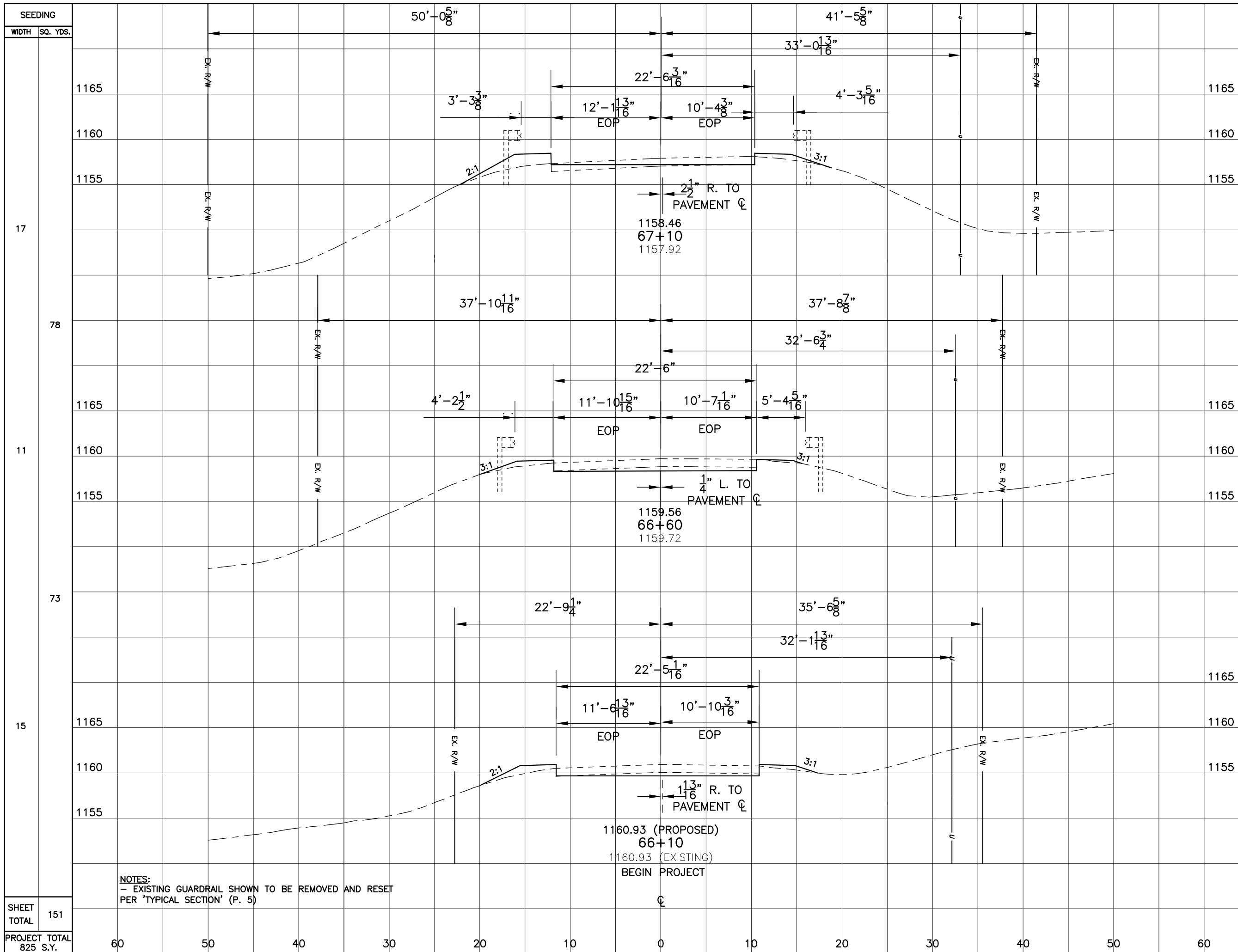
PROFILE ALONG C R/W



NOTES

- ① 1.5" 404 LVT SURFACE COURSE (PG 58-28)
- ② ITEM 407 TACK COAT, 0.075 GAL/SY
- ③ 1.5" 402 LVT INTERMEDIATE COURSE (PG 58-28)
- ④ 6" 301 ASPHALT CONCRETE BASE
- ⑤ 6": 304 AGGREGATE BASE OR RECYCLED ASPHALT MILLINGS
- ⑥ 6" 411 STABILIZED CRUSHED AGGREGATE
- ⑦ ITEM 606.05 GUARDRAIL REBUILT PER MGS 2.1 WITH 4' MIN. OFFSET FROM EDGE OF PAVEMENT
- ⑧ ITEM 203 EXCAVATION AND EMBANKMENT; ASPHALT MILLINGS PLACED AS NEEDED TO TIE INTO EX. GROUND
- ⑨ ITEM 659 SEEDING AND MULCHING, CLASS 1
- ⑩ SAFETY EDGE

DESIGNED MJK CHECKED SCC	DRAWN MJK REVISED .	REVIEWED WTB PID NUMBER 115979	DATE 12/14/2023	LOG CR 18
TYPICAL SECTION				
DESIGN AGENCY LOGAN COUNTY ENGINEER'S OFFICE 1991 C.R. 13, P.O. BOX 427 BELLEFONTAINE, OHIO 43311				



NOTES:
 - EXISTING GUARDRAIL SHOWN TO BE REMOVED AND RESET PER 'TYPICAL SECTION' (P. 5)

1160.93 (PROPOSED)
 66+10
 1160.93 (EXISTING)
 BEGIN PROJECT
 CL

SEEDING		END AREA		VOLUME	
WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
1165					
1160		19.7	16.8		
1155					
78				43.6	19.0
1165					
1160		27.4	3.7		
1155					
73				48.3	10.2
1165					
1160		24.8	7.3		
1155					
15					
SHEET TOTAL		91.9	29.2		
PROJECT TOTAL		247	416		

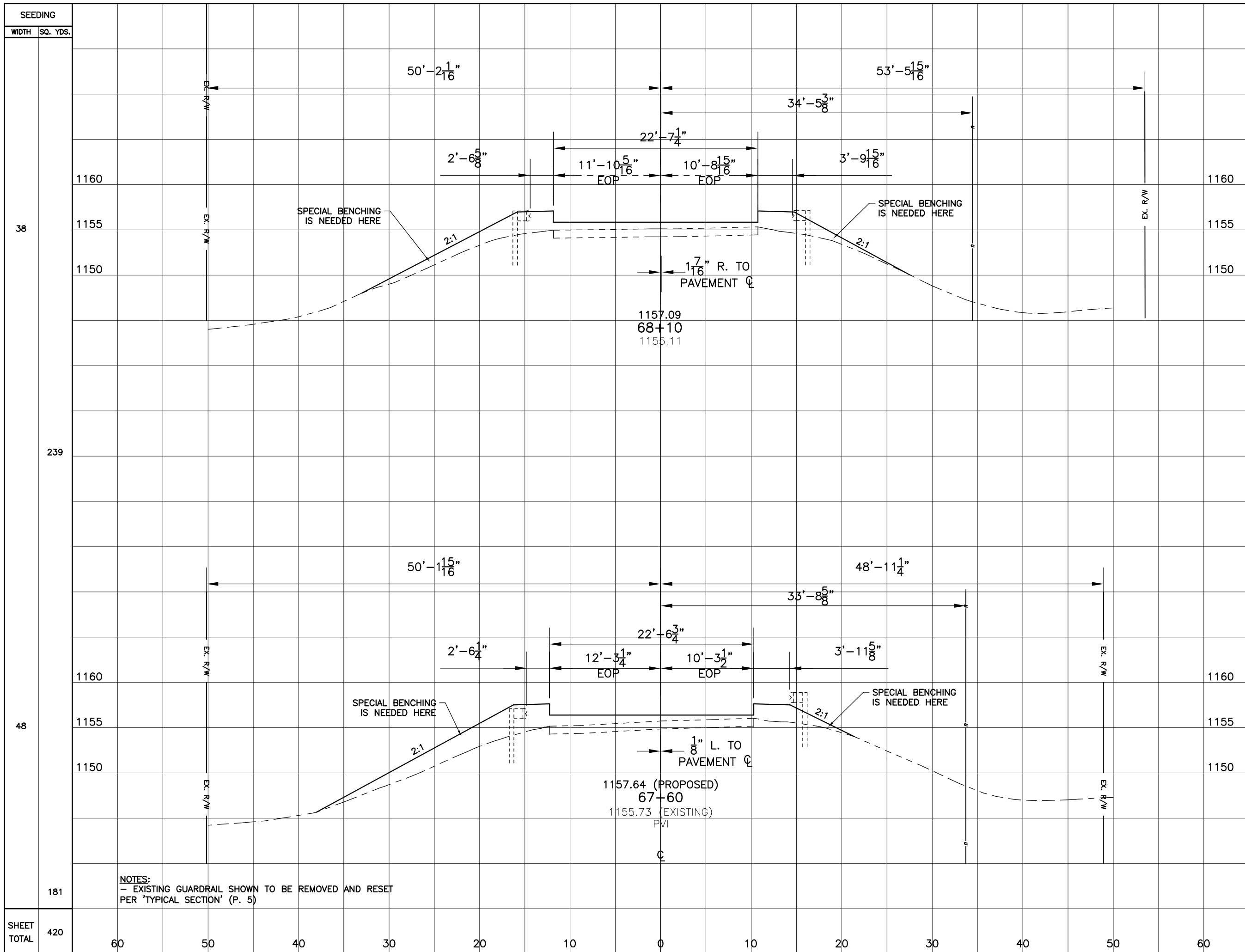
CROSS SECTIONS
 STA. 66+10 TO 67+10

CR 18

6
9

SHEET TOTAL 151
 PROJECT TOTAL 825 S.Y.

DESIGNED MJK
 CHECKED BDD



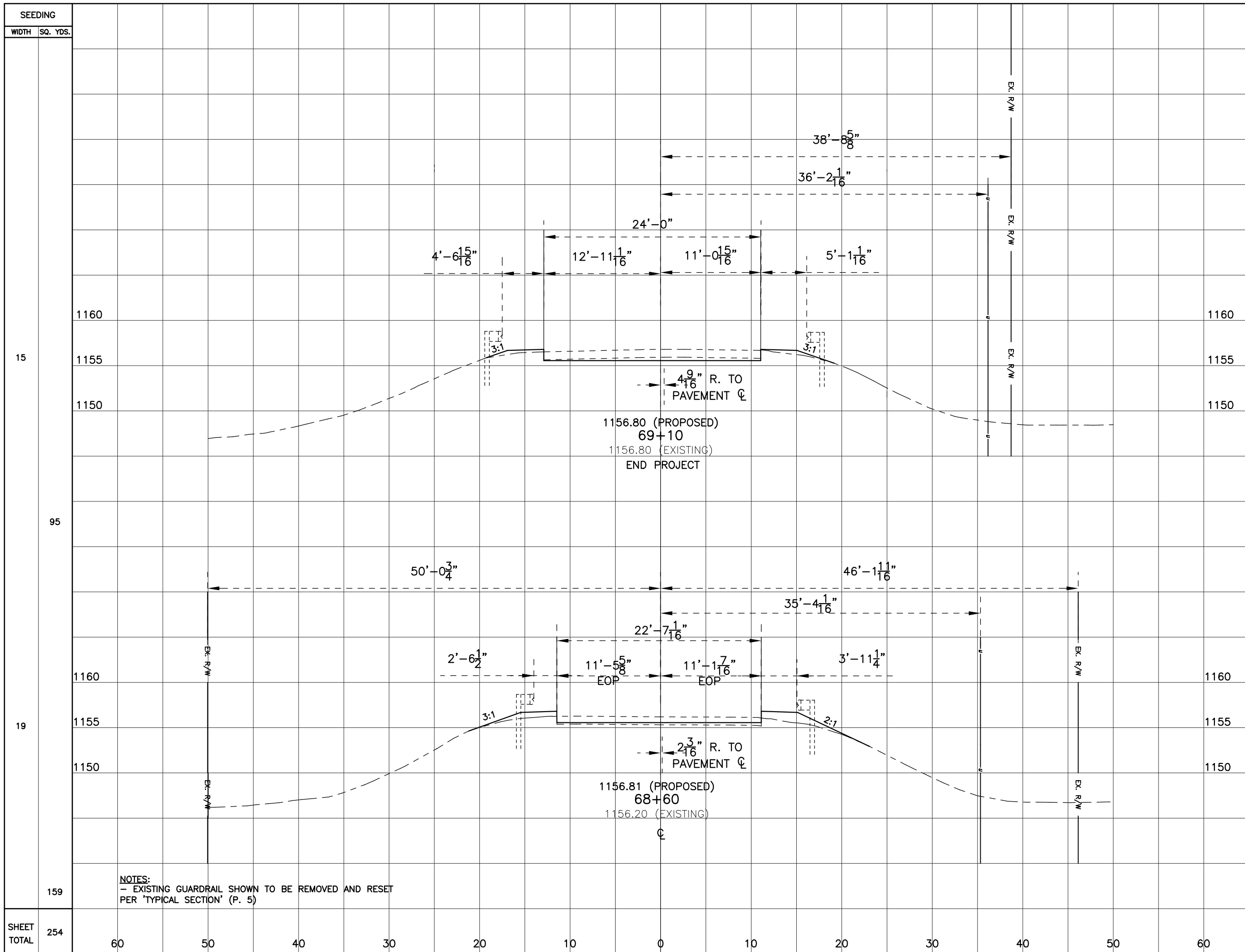
SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
38	19.8	82.1		
239	37.2	168.5		
48	20.4	99.9		
181	37.1	108.1		
SHEET TOTAL	74.3	276.6		

DESIGNED: MJK
 CHECKED: BDD

CROSS SECTIONS
 STA. 67+60 TO STA. 68+10

CR 18

NOTES:
 - EXISTING GUARDRAIL SHOWN TO BE REMOVED AND RESET PER 'TYPICAL SECTION' (P. 5)



SEEDING	END AREA		VOLUME	
	WIDTH	SQ. YDS.	CUT	FILL
15			27.7	3.7
95			44	18.6
19			19.8	16.4
159			36.7	91.2
SHEET TOTAL	254	60	80.7	109.8

DESIGNED: MJK
 CHECKED: BDD

CROSS SECTIONS
 STA. 68+60 TO STA. 69+10

CR 18

NOTES:
 - EXISTING GUARDRAIL SHOWN TO BE REMOVED AND RESET PER 'TYPICAL SECTION' (P. 5)

ITEM	QUANTITY	UNIT	COMMENT
203	247	CY	EXCAVATION
203	416	CY	EMBANKMENT
204	790	SY	SUBGRADE COMPACTION AND PROOF ROLLING
209	600	LF	LINEAR GRADING OF DITCHES
301	263	TON	ASPHALT CONCRETE BASE
304	263	TON	AGGREGATE BASE
402	64	TON	LOW VOLUME TRAFFIC ASPHALT INTERMEDIATE COURSE
404	64	TON	LOW VOLUME TRAFFIC ASPHALT SURFACE COURSE
407	60	GAL	TACK COAT
411	92	TON	STABILIZED CRUSH AGGREGATE
659	850	S.Y	SEEDING AND MULCHING
659	0.08	TON	COMMERCIAL FERTILIZER
659	4590	GAL	WATER (TWO APPLICATIONS)
SPEC	750	SY	EXISTING ASPHALT TO BE MILLED AND STOCKPILED ON SITE

ESTIMATED QUANTITIES

STATION	EXISTING ELEVATION	LENGTH (X)	G1*X	(R/2)*X ²	PROPOSED ELEVATION
6610 (BVC)	1160.93	0	0	0	1160.93
6660	1159.72	0.5	-1.505	0.136	1159.56
6710	1157.92	1.0	-3.010	0.545	1158.46
6760 (PVI)	1155.73	1.5	-4.515	1.226	1157.64
6810	1155.11	2.0	-6.020	2.180	1157.09
6860	1156.20	2.5	-7.525	3.410	1156.81
6910 (EVC)	1156.80	3.0	-9.030	4.910	1156.80

LENGTH OF EQUAL TANGENT VC = 300'
G1 = -3.01% G2 = +0.26%
RATE OF CHANGE OF GRADE = 1.09

VERTICAL CURVE DETAILS

