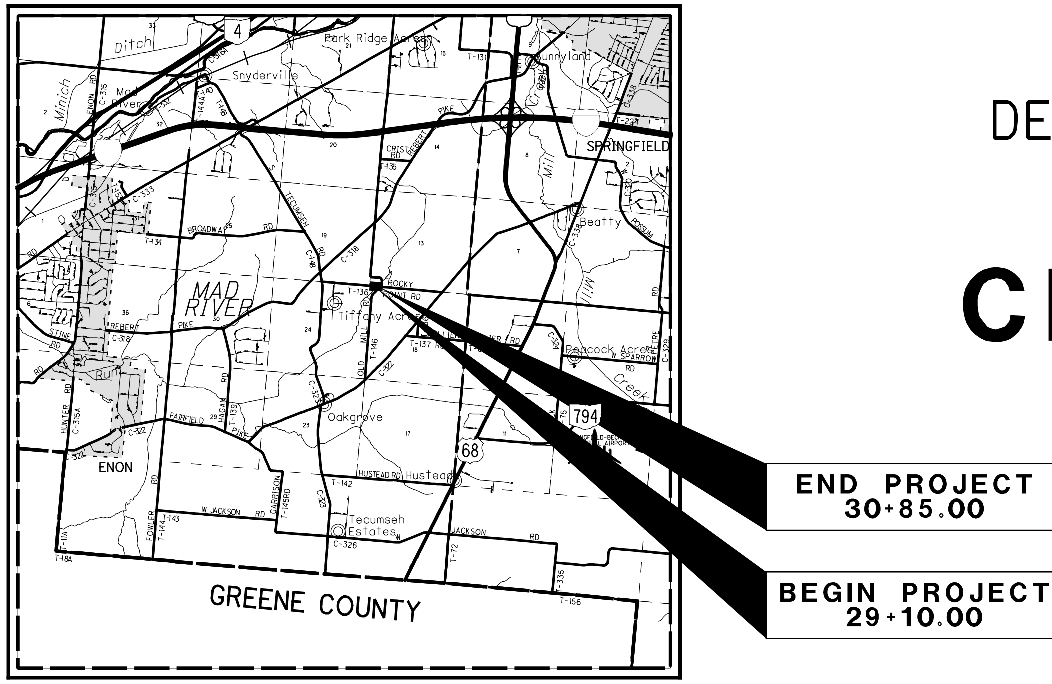
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CLA-TR136-0.55

MAD RIVER TOWNSHIP
CLARK COUNTY



LOCATION MAP

LATITUDE: 39 °52'10"   LONGITUDE: 83 °52'45"

SCALE IN MILES 0 1 2 3 4

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

DESIGN DESIGNATION

CURRENT ADT (2013)	820
DESIGN YEAR ADT (2033)	860
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
MINOR RURAL COLLECTOR	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:

AMERICAN STRUCTUREPOINT INC.
2550 CORPORATE EXCHANGE DR, STE 300
COLUMBUS, OH 43231
TEL 614.901.2235 FAX 614.901.2236
www.structurepoint.com

PROJECT DESCRIPTION

IMPROVEMENT OF 175 FEET OF ROCKY POINT ROAD BY REHABILITATION OF THE EXISTING EARTH FILLED STONE ARCH STRUCTURE OVER MUD RUN.

PROJECT EARTH DISTURBED AREA:	0.17 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	0.30 ACRES

2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

STAGE 1 PLAN SUBMITTAL, FEBRUARY 10, 2011

INDEX OF SHEETS:

TITLE SHEET	1
TYPICAL SECTIONS	2
GENERAL NOTES	3
PLAN AND PROFILE	4
CROSS SECTIONS	5-7
SITE PLAN	8
GENERAL PLAN	9
TRANSVERSE SECTION	10
RETAINING WALL DETAILS	11-13

ENGINEERS SEAL:

SIGNED:
DATE:

ENGINEERS SEAL:

SIGNED:
DATE:

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

APPROVED ______
DATE ______ *CLARK COUNTY ENGINEER*

APPROVED ______
DATE ______ *DISTRICT DEPUTY DIRECTOR, DEPARTMENT OF TRANSPORTATION*

FEDERAL PROJECT NO. **E090 (155)**
PID NO. **85169**
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT **NONE**
CLA-TR136-0.55

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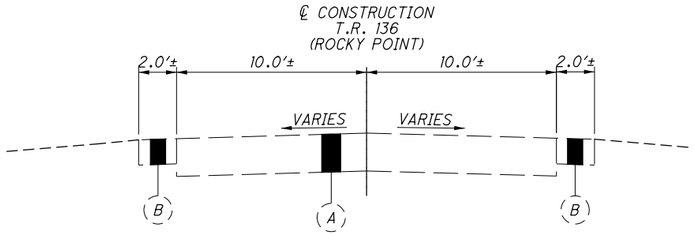
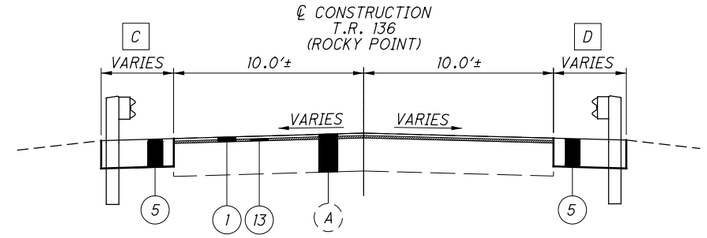


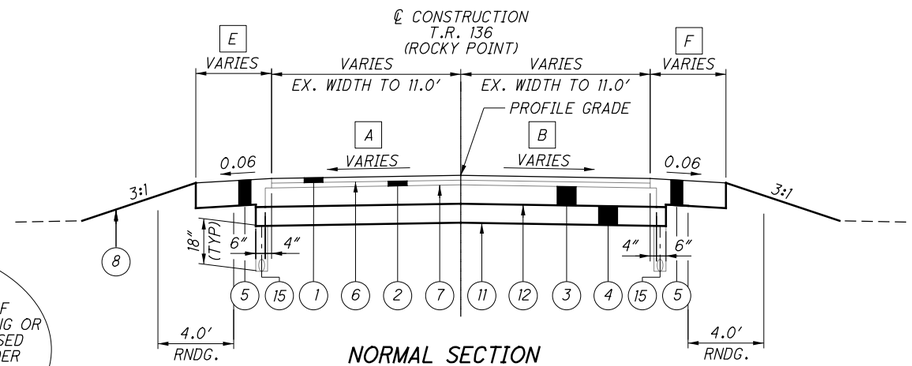
ADJOINING SECTIONS

STA. 26+00.00 TO STA. 28+95.00
STA. 31+00.00 TO STA. 33+00.00



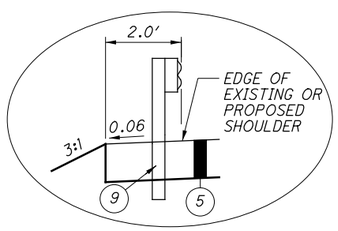
BUTT JOINT SECTIONS

STA. 28+95.00 TO STA. 29+10.00
STA. 30+85.00 TO STA. 31+00.00



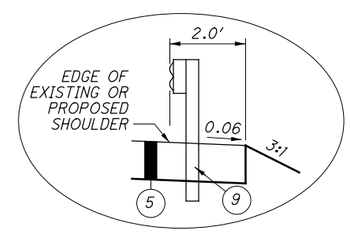
NORMAL SECTION

STA. 29+10.00 TO STA. 29+50.21 LEFT
STA. 29+10.00 TO STA. 29+29.63 RIGHT
STA. 30+55.71 TO STA. 30+85.00 LEFT
STA. 30+24.63 TO STA. 30+85.00 RIGHT



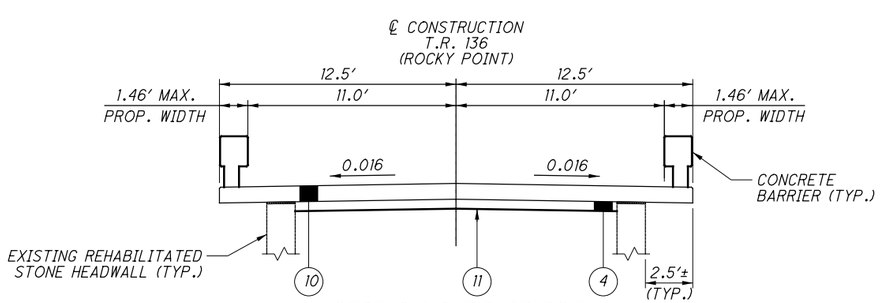
GUARDRAIL SECTION

SECTION APPLIES:
STA. 29+46.35 TO STA. 29+82.85 = 36.50 FT
STA. 30+06.85 TO STA. 30+87.50 = 80.65 FT
TOTAL LENGTH 117.15 FT



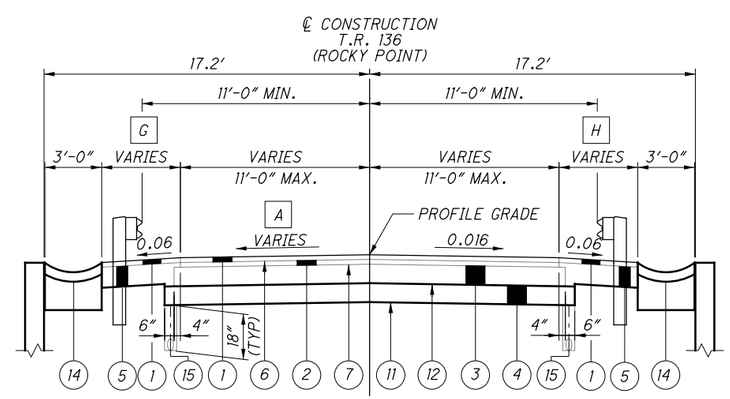
GUARDRAIL SECTION

SECTION APPLIES:
STA. 29+98.34 TO STA. 29.78.99 = 80.65 FT
STA. 30+02.99 TO STA. 30+39.49 = 36.50 FT
TOTAL LENGTH 117.15 FT



SECTION OVER BRIDGE

STA. 29+80.92 TO 30+04.92



WINGWALL SECTION

STA. 29+50.21 TO STA. 29+80.12 LEFT
STA. 29+29.63 TO STA. 29+80.12 RIGHT
STA. 30+04.92 TO STA. 30+55.71 LEFT
STA. 30+04.92 TO STA. 30+24.63 RIGHT

LEGEND

1. ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
2. ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
3. ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
4. ITEM 304 - 6" AGGREGATE BASE
5. ITEM 304 - 8" AGGREGATE BASE
6. ITEM 407 - TACK COAT (0.075 GAL/SY)
7. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL/SY)
8. ITEM 659 - SEEDING AND MULCHING
9. ITEM 606 - GUARDRAIL, TYPE 5
10. ITEM 511 - 10" REINFORCED CONCRETE SLAB
11. ITEM 204 - SUBGRADE COMPACTION
12. ITEM 408 - PRIME COAT (0.4 GAL/SY)
13. ITEM 202 - PAVEMENT REMOVED, VARIABLE DEPTH ½" MIN. TO 1¼" MAX. (PER SCD BP 3.1)
14. ITEM 601 - PAVED GUTTER, TYPE 2
15. ITEM 605 - 4" BASE PIPE UNDERDRAIN W/ FABRIC WRAP

(A) ASPHALT PAVEMENT OVER AGGREGATE BASE

(B) AGGREGATE BASE

[A] VARIES FROM -0.004± (EX) AT STA. 29+10.00 TO 0.016 AT STA. 29+47.04

VARIES FROM 0.016 AT STA. 30+07.70 TO 0.067± (EX) AT STA. 30+85.00

[B] VARIES FROM 0.025± (EX) AT STA. 29+10.00 TO 0.016 AT STA. 29+26.67

VARIES FROM 0.016 AT STA. 30+44.09 TO -0.011± (EX) AT STA. 30+85.00

[C] VARIES FROM 2.00' AT STA. 28+95.00 TO 2.43' AT STA. 29+10.00

VARIES FROM 3.49' AT STA. 30+85.00 TO 2.00' AT STA. 31+00.00

[D] VARIES FROM 2.00' AT STA. 28+95.00 TO 5.09' AT STA. 29+10.00

VARIES FROM 3.75' AT STA. 30+85.00 TO 2.00' AT STA. 31+00.00

[E] VARIES FROM 2.43' AT STA. 29+10.00 TO 2.14' AT STA. 29+50.21

VARIES FROM 2.66' AT STA. 30+55.70 TO 3.50' AT STA. 30+85.00

[F] VARIES FROM 5.09' AT STA. 29+10.00 TO 3.95' AT STA. 29+29.63

VARIES FROM 2.00' AT STA. 30+24.63 TO 3.75' AT STA. 30+85.00

[G] VARIES FROM 3.34' AT STA. 29+50.21 TO 3.20' AT STA. 29+70.00

WIDTH IS 3.20' FROM STA. 29+70.00 TO 29+82.85

WIDTH IS 3.20' FROM STA. 30+06.85 TO 30+25.00

VARIES FROM 3.20' AT STA. 30+25.00 TO 3.46' AT STA. 30+55.71

[H] VARIES FROM 4.74' AT STA. 29+29.63 TO 3.20' AT STA. 29+70.00

WIDTH IS 3.20' FROM STA. 29+70.00 TO 29+78.98

WIDTH IS 3.20' FROM STA. 30+02.98 TO 30+24.63

TYPICAL SECTIONS

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ROUNDING

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

UTILITIES

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

GAS:

COLUMBIA GAS OF OHIO
ATTN: SCOTT DAHMS
1600 DUBLIN ROAD,
EAST WING
COLUMBUS, OH 43215
(6141) 481-1063

MARATHON PIPELINE
ATTN: DWAYNE YEAGER
840 HEATH ROAD
HEATH, OH 43056
(740) 504-8169

ELECTRIC:

OHIO EDISON
ATTN: RICH LAPSO
420 SOUTH YORK STREET
SPRINGFIELD, OH 45505
937-327-1257

TELEPHONE:

AT&T
ATTN: BILL PREACHER
3233 WOODMAN DRIVE,
ROOM 225
DAYTON, OH 45420
(937) 296-7068

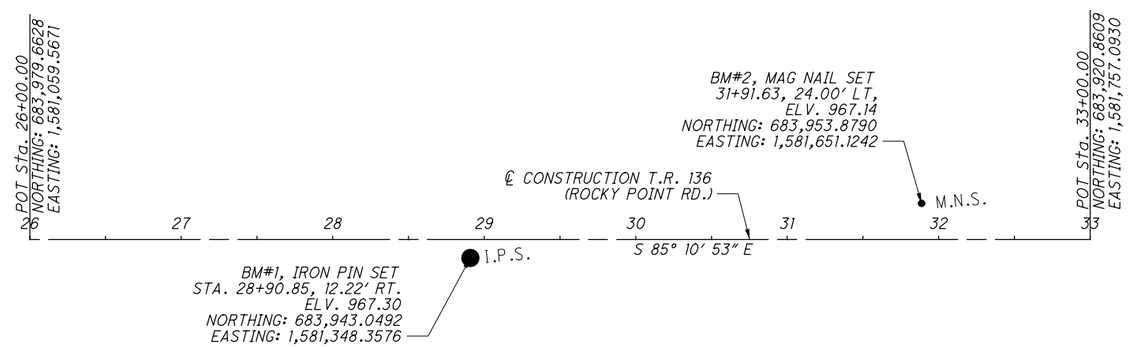
CABLE:

TIME WARNER CABLE
ATTN: MR. TIM KUSS
3691 TURNER ROAD
DAYTON, OH 45415
937-425-8850

SANITARY SEWER AND WATER:

CITY OF SPRINGFIELD
ATTN: LEO SHANAYDA, PE
76 EAST HIGH STREET
SPRINGFIELD, OH 45502
937-324-7310

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.



℄ CONSTRUCTION DIAGRAM

CALCULATED CLB
CHECKED MBS

GENERAL NOTES

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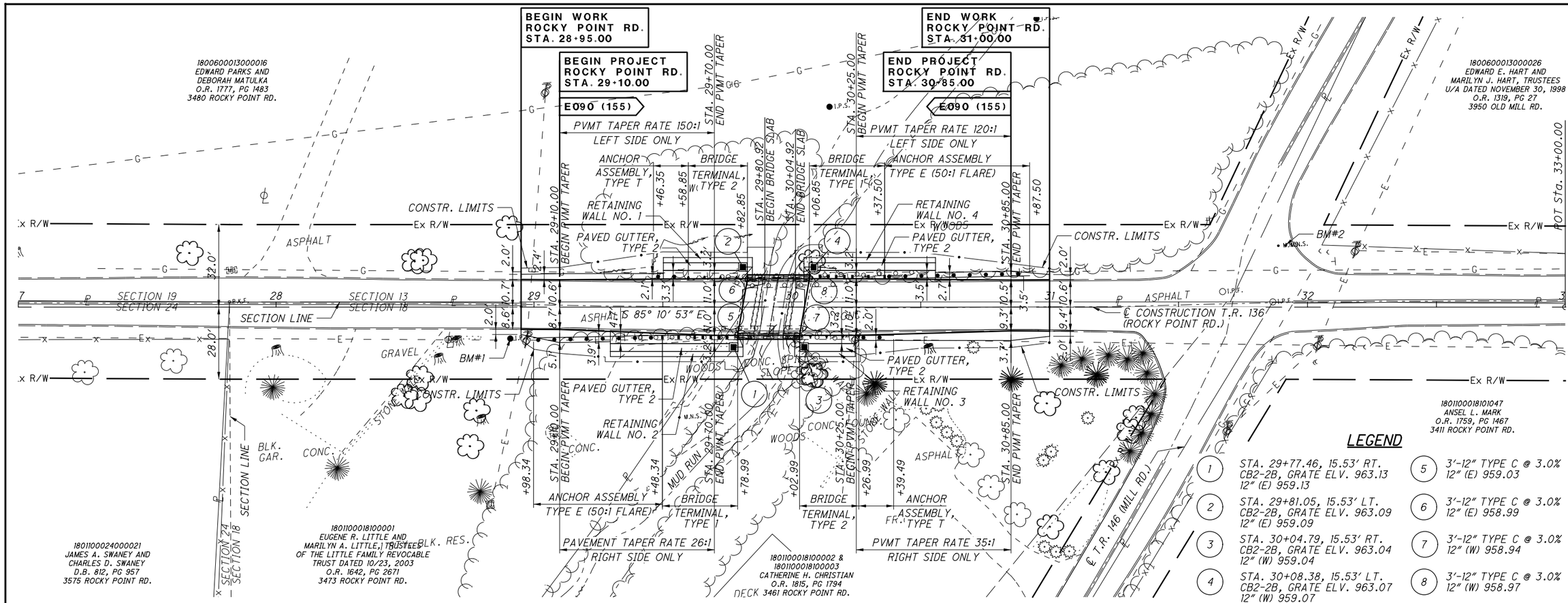
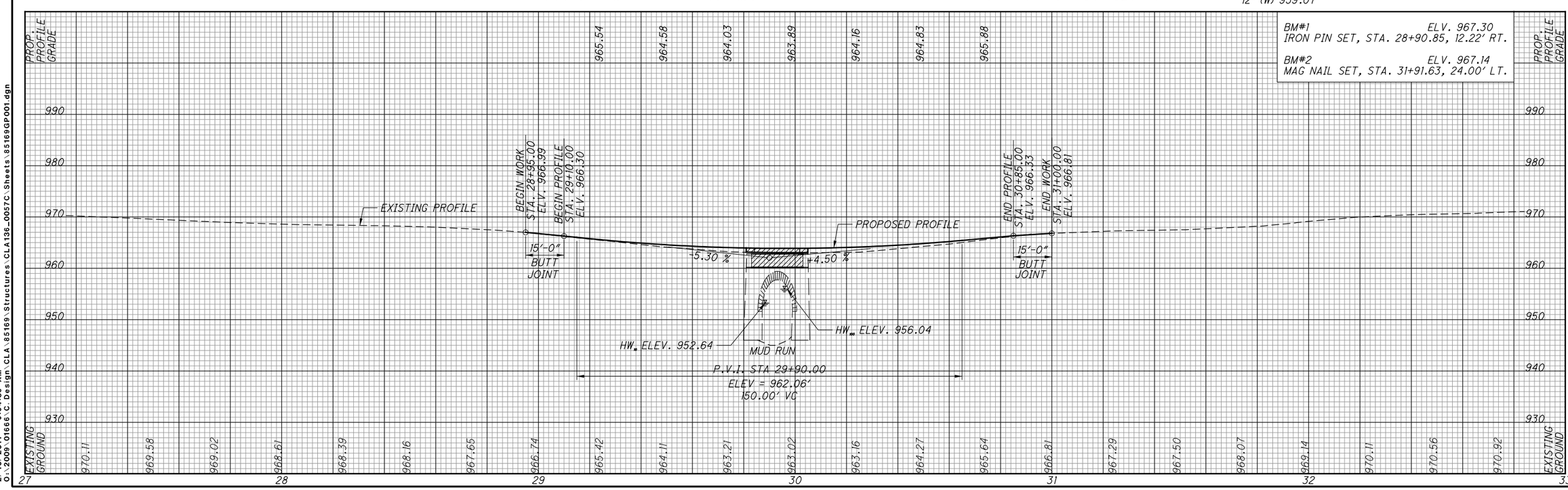


LEGEND

1. STA. 29+77.46, 15.53' RT. CB2-2B, GRATE ELV. 963.13 12" (E) 959.13
2. STA. 29+81.05, 15.53' LT. CB2-2B, GRATE ELV. 963.09 12" (E) 959.09
3. STA. 30+04.79, 15.53' RT. CB2-2B, GRATE ELV. 963.04 12" (W) 959.04
4. STA. 30+08.38, 15.53' LT. CB2-2B, GRATE ELV. 963.07 12" (W) 959.07
5. 3'-12" TYPE C @ 3.0% 12" (E) 959.03
6. 3'-12" TYPE C @ 3.0% 12" (E) 958.99
7. 3'-12" TYPE C @ 3.0% 12" (W) 958.94
8. 3'-12" TYPE C @ 3.0% 12" (W) 958.97



HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED MBS
CHECKED CLB

PLAN AND PROFILE
STA. 28+95.00 TO STA. 31+00.00

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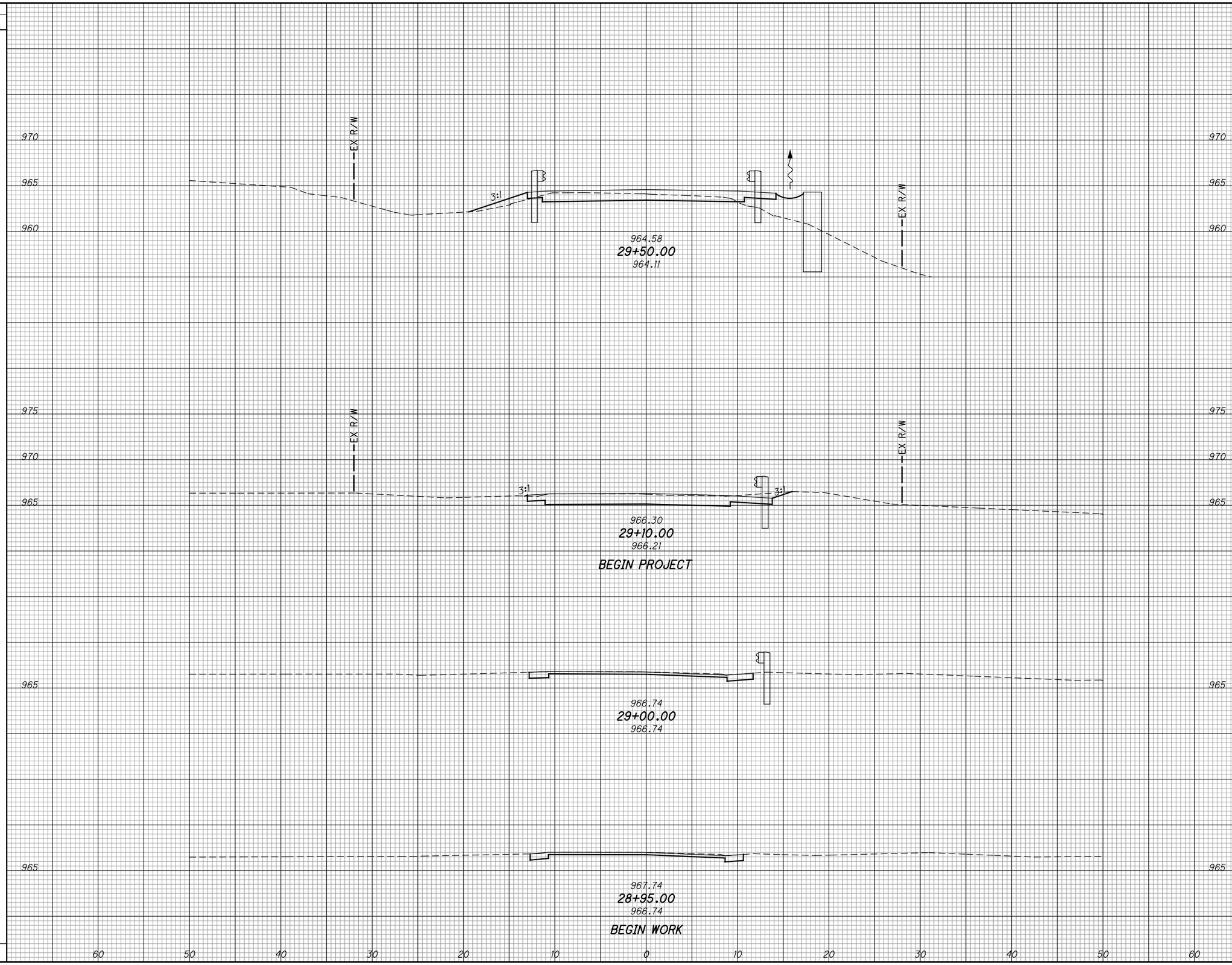
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED AJE
CHECKED CLB



CROSS SECTIONS T.R. 136 (ROCKY POINT ROAD)
STA. 28+95.00 TO STA. 29+50.00

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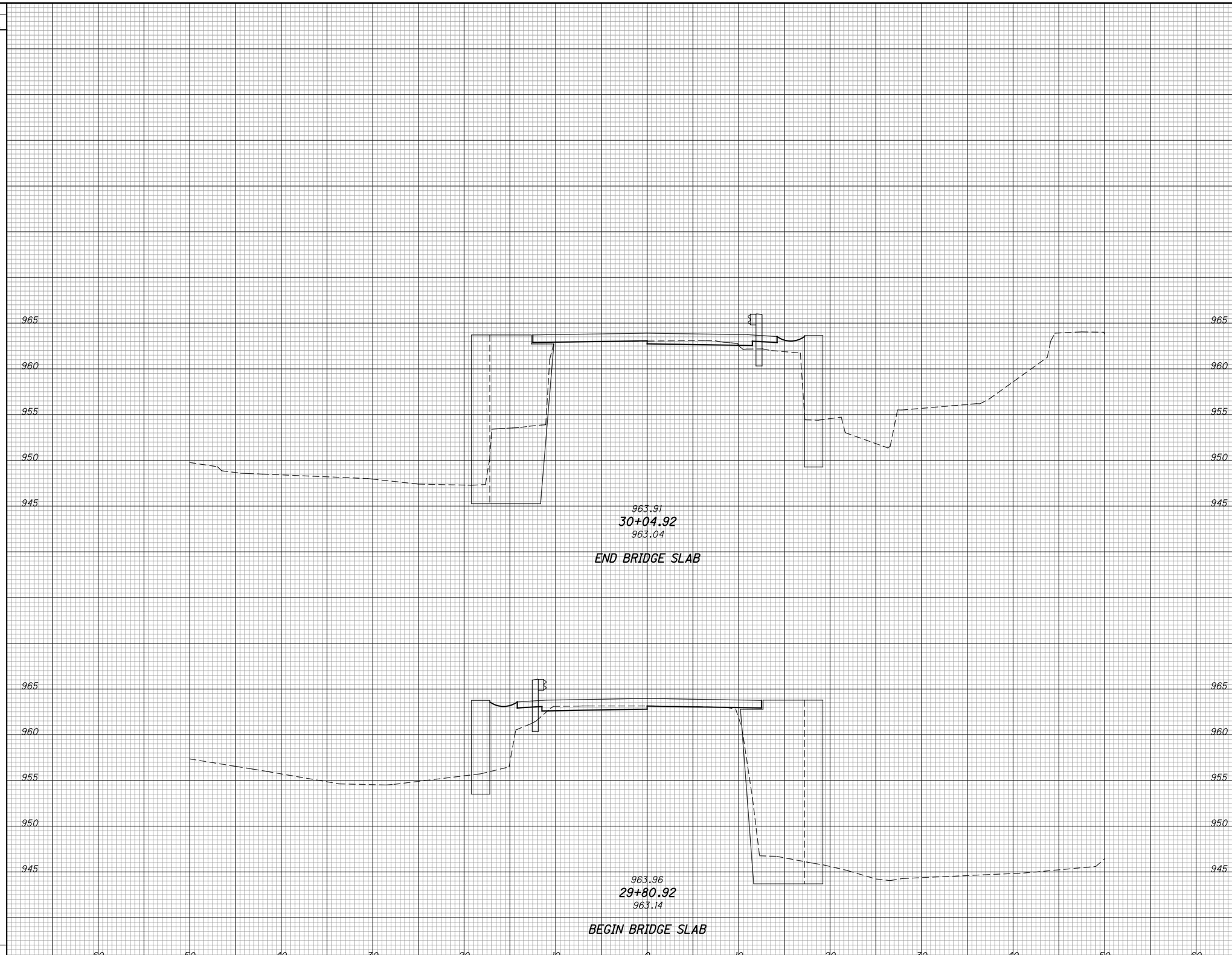
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED AJE
CHECKED CLB



CROSS SECTIONS T.R. 136 (ROCKY POINT ROAD) STA. 29+80.92 TO STA. 30+04.92

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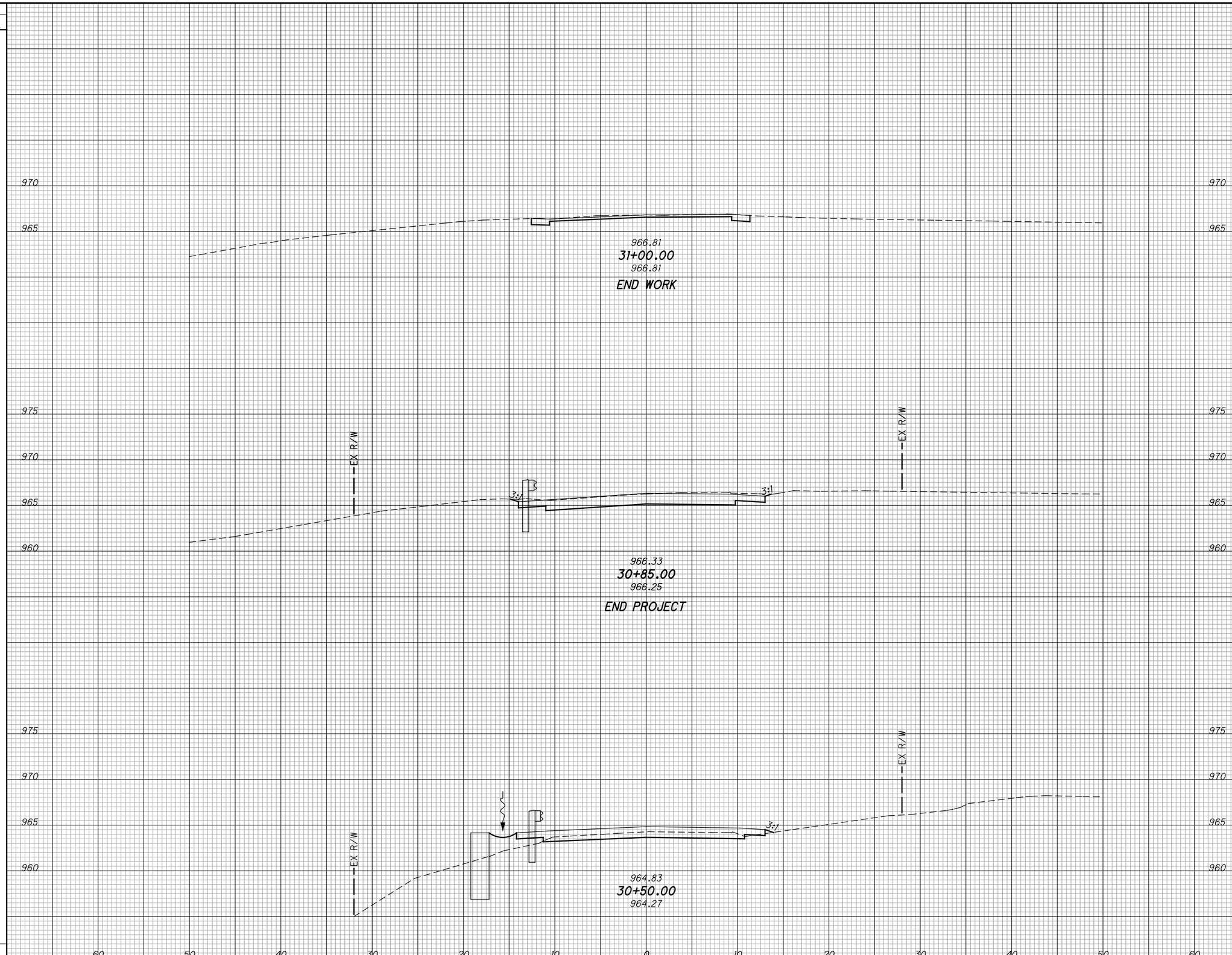
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED AJE
CHECKED CLB

CROSS SECTIONS T.R. 136 (ROCKY POINT ROAD) STA. 30+50.00 TO STA. 31+00.00

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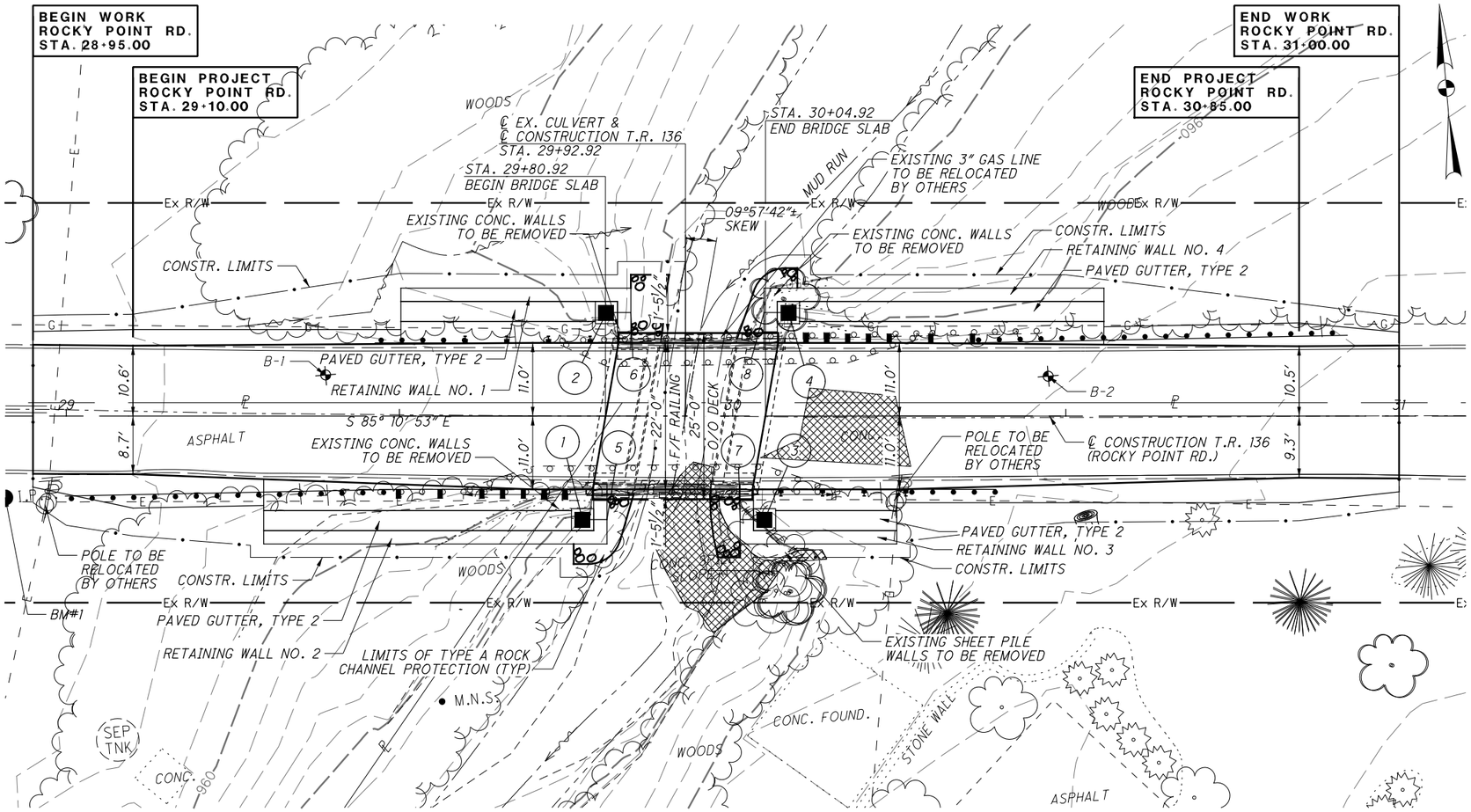
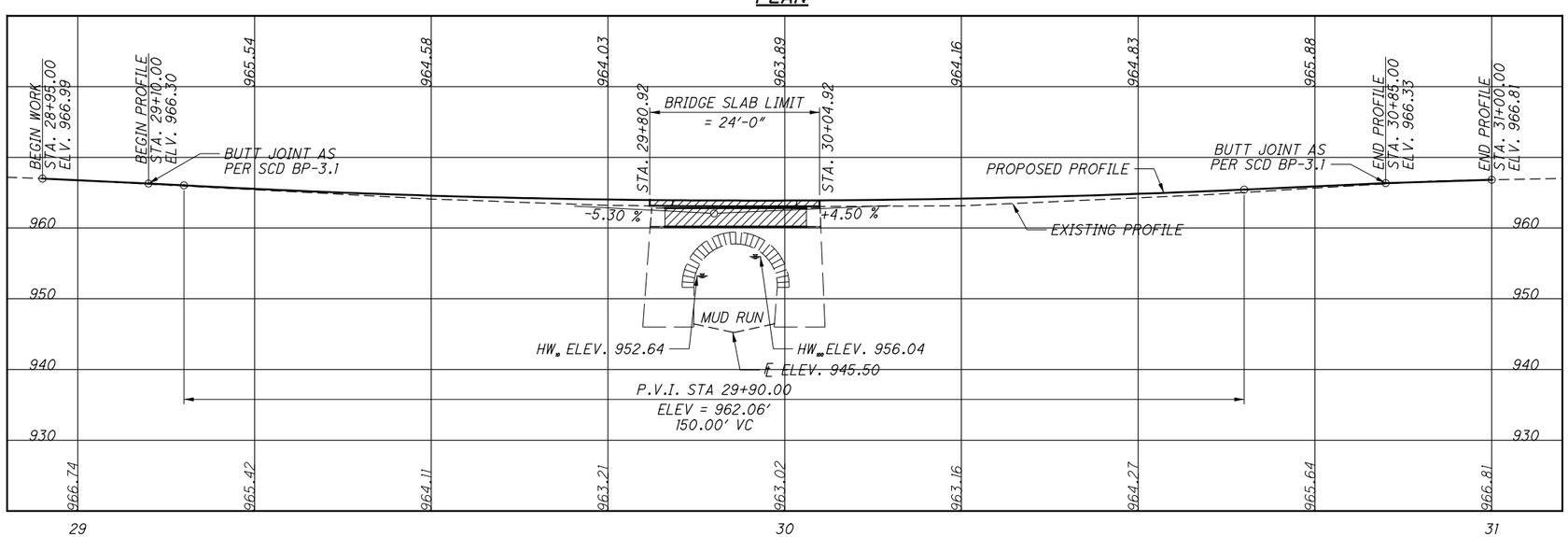


PLAN



PROFILE

ALONG ℄ CONSTRUCTION T.R. 136

BENCHMARK DATA

BM #1 STA. 28+90.85,	ELEV. 967.30,	OFFSET 12.22',	RT.
BM #2 STA. 31+91.63,	ELEV. 967.14,	OFFSET 24.00,	LT.

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

FOR THIS PROJECT, PERMITS FOR SECTION 401 AND 404 OF THE CLEAN WATER ACT, ARE BASED ON THE LIMITS OF TEMPORARY CONSTRUCTION FILL PLACED IN "WATERS OF THE UNITED STATES" AS SHOWN BELOW. IF EITHER OF THE LIMITS PROVIDED ARE EXCEEDED, THEN A 404/401 PERMIT MODIFICATION WILL BE REQUIRED. IF A PERMIT MODIFICATION IS REQUIRED, REFER TO SUPPLEMENTAL SPECIFICATION 832.09 FOR THE APPLICATION REQUIREMENTS.

PLAN AREA OF TEMPORARY FILL MATERIAL = 0.012 ACRES
TOTAL VOLUME OF TEMPORARY FILL MATERIAL = 45 CU YD

DESIGN TRAFFIC:
2013 ADT = 820
2033 ADT = 860
DIRECTIONAL DISTRIBUTION = 0.55

LEGEND

- BORING LOCATION
- EXISTING CONCRETE REMOVAL
- (1) PROPOSED CATCH BASIN AND STORM SEWER, SEE PLAN AND PROFILE FOR DETAILS.

HYDRAULIC DATA

DRAINAGE AREA = 2.28 SQ. MILES

Q (10) =	492 CFS	V (10) =	15.10 FT/S
Q (100) =	915 CFS	V (100) =	18.97 FT/S

EXISTING STRUCTURE

TYPE: STONE ARCH CULVERT
SPANS: 11'-9"±
ROADWAY: 15'-0"± F/F GUARDRAIL
LOADING: UNKNOWN
SKEW: 09°57'42"±
APPROACH SLABS: NONE
ALIGNMENT: TANGENT
CROWN: VARIES
STRUCTURAL FILE NUMBER: 1253670
DATE BUILT: 1871
DISPOSITION: TO BE REHABILITATED

PROPOSED WORK

TYPE: REINFORECED CONCRETE SLAB OVER EXISTING STONE ARCH CULVERT. CONSTRUCT NEW REINFORCED CONCRETE RETAINING WALLS. REFACE AND REPLACE DAMAGED AND MISSING STONE.
SPANS: 11'-9"±
ROADWAY: 22'-0" F/F RAILING
SLAB LOADING: HS20
SKEW: 09°57'42"±
APPROACH SLABS: NONE
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
COORDINATES: LATITUDE 39° 52' 10" N
LONGITUDE 83° 52' 45" W

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DRAWN	REVIEWED	DATE
AJE	STRUCTURE FILE NUMBER 1253670	
DESIGNED MBS	CHECKED CLB	REVISED

CLARK COUNTY
STA. 29+80.92 TO STA. 30+04.92

SITE PLAN
BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

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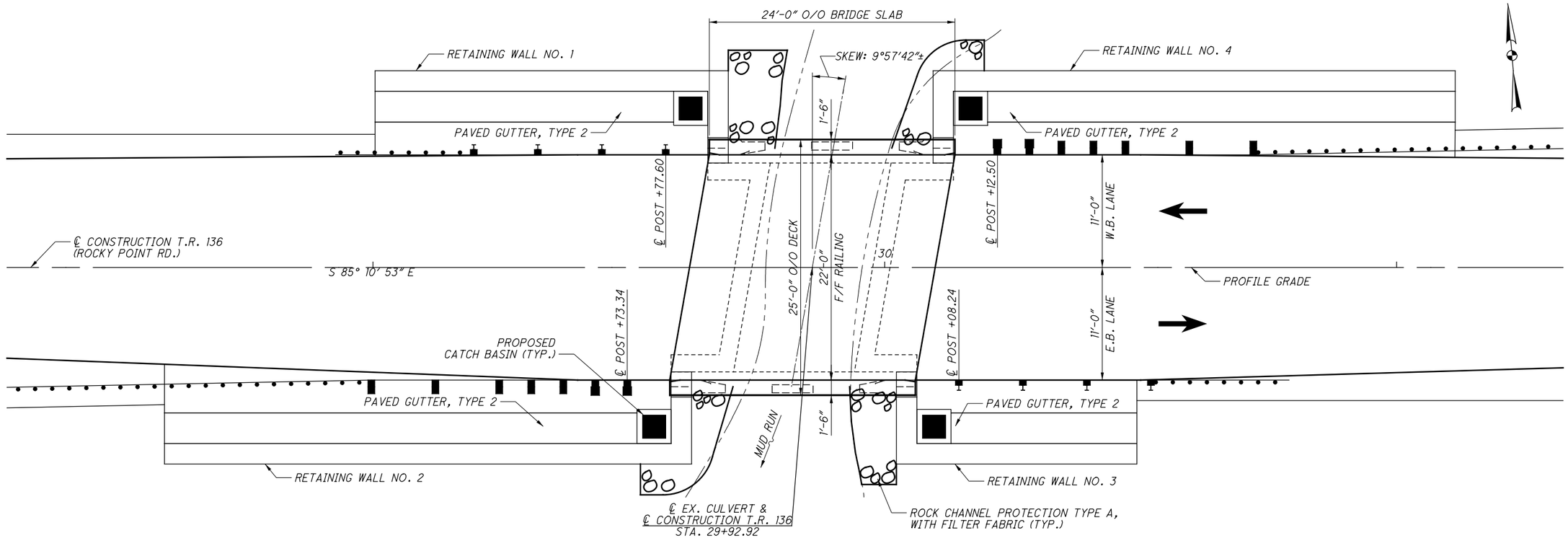
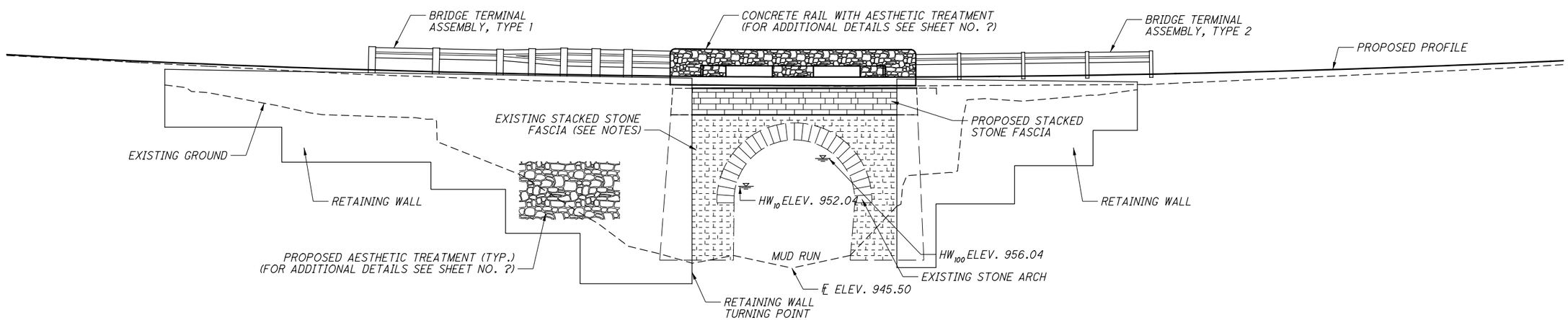


PLAN

NOTES

REPLACE AND REFACE HEAVILY DAMAGED STONE AS REQUIRED, FOR LOCATIONS SEE SHEET */*.

FOR ADDITIONAL RETAINING WALL DETAILS, SEE SHEET */* THRU */*.



ELEVATION

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

REVIEWED	DATE	STRUCTURE FILE NUMBER
		1253670

DRAWN	REVISED
BNM	

DESIGNED	CHECKED
MBS	CLB

GENERAL PLAN & ELEVATION
BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

2/6

9/13

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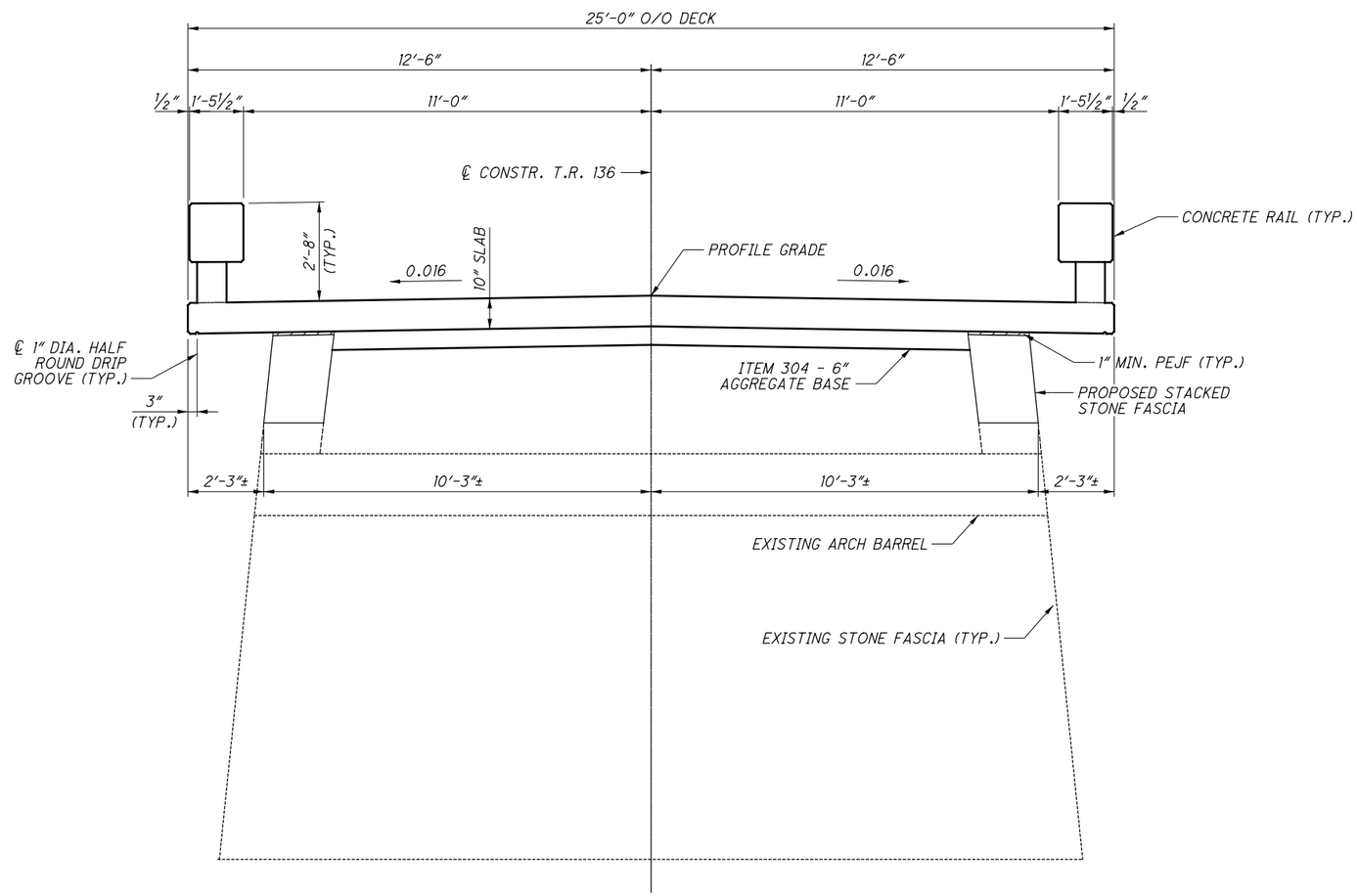

PROPOSED TRANSVERSE SECTION

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNED	DRAWN	REVIEWED	DATE
MBS	AJE		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CLB		1253670	

TRANSVERSE SECTION
BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

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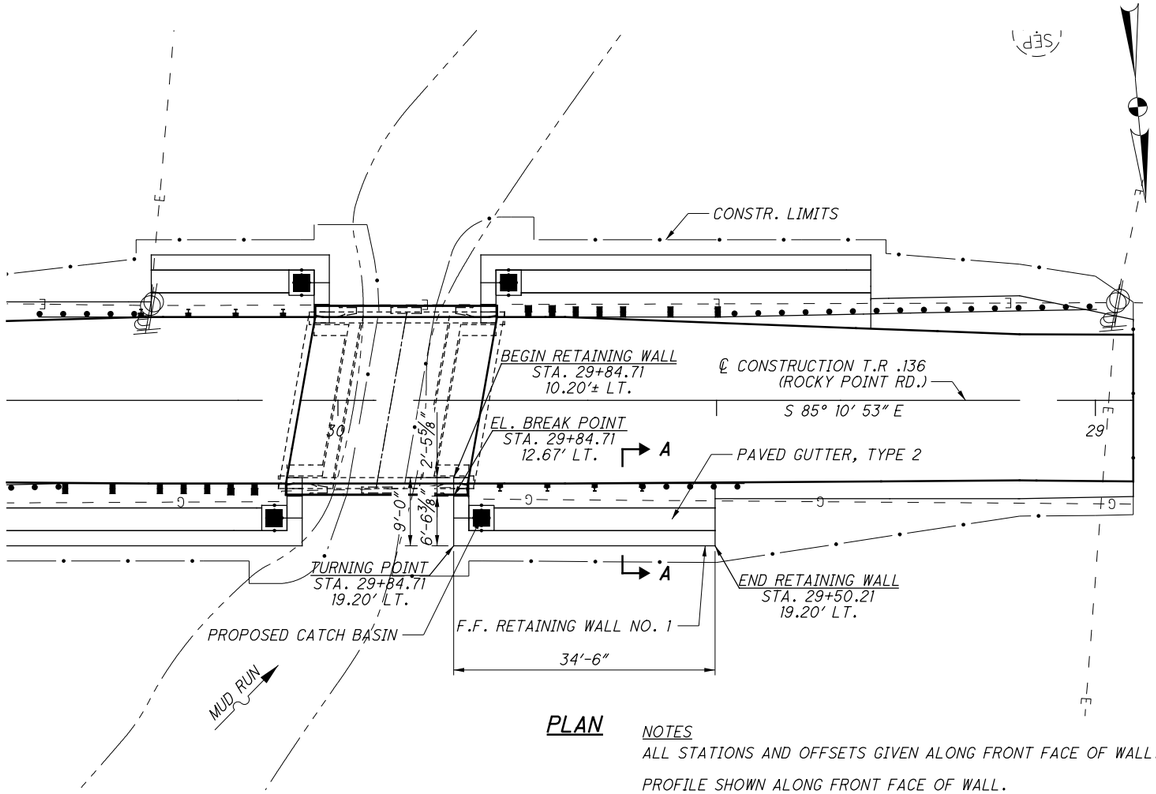


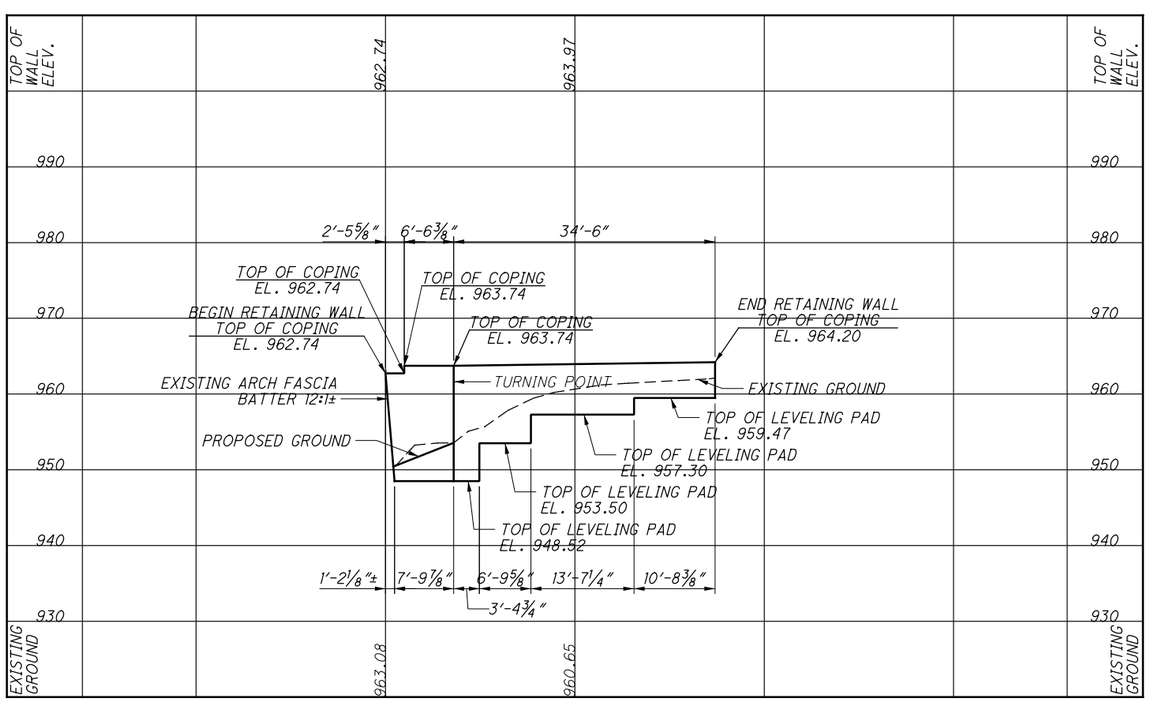
PLAN

NOTES

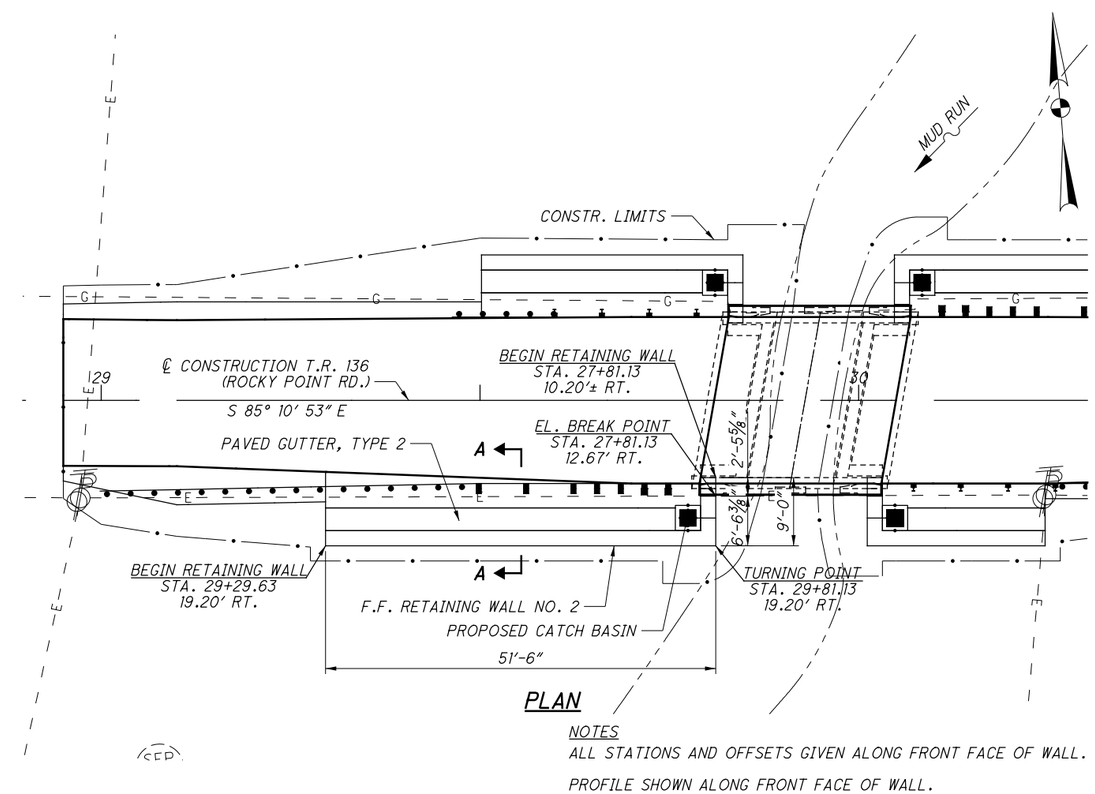
ALL STATIONS AND OFFSETS GIVEN ALONG FRONT FACE OF WALL.

PROFILE SHOWN ALONG FRONT FACE OF WALL.

SEE SHEET 13 FOR SECTION A-A.



ELEVATION



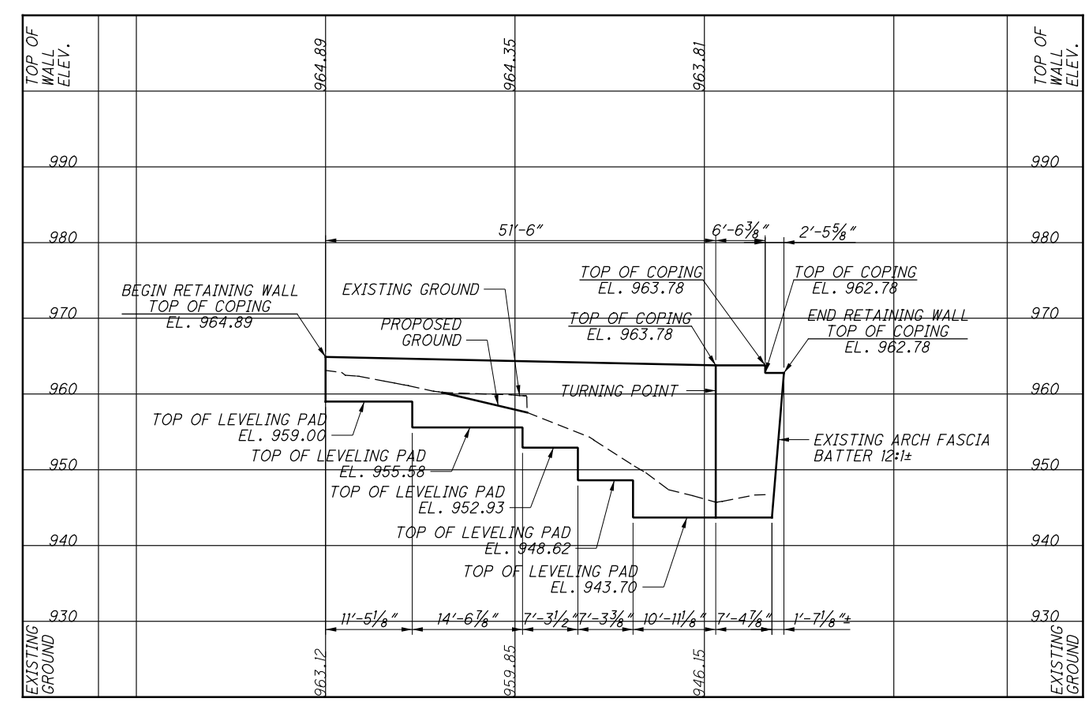
PLAN

NOTES

ALL STATIONS AND OFFSETS GIVEN ALONG FRONT FACE OF WALL.

PROFILE SHOWN ALONG FRONT FACE OF WALL.

SEE SHEET 13 FOR SECTION A-A.



ELEVATION

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNED	DRAWN	REVIEWED	DATE
MBS	AJE		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CLB	—	1253670	

RETAINING WALL DETAILS

BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

4 / 6

11 / 13

cbettinger
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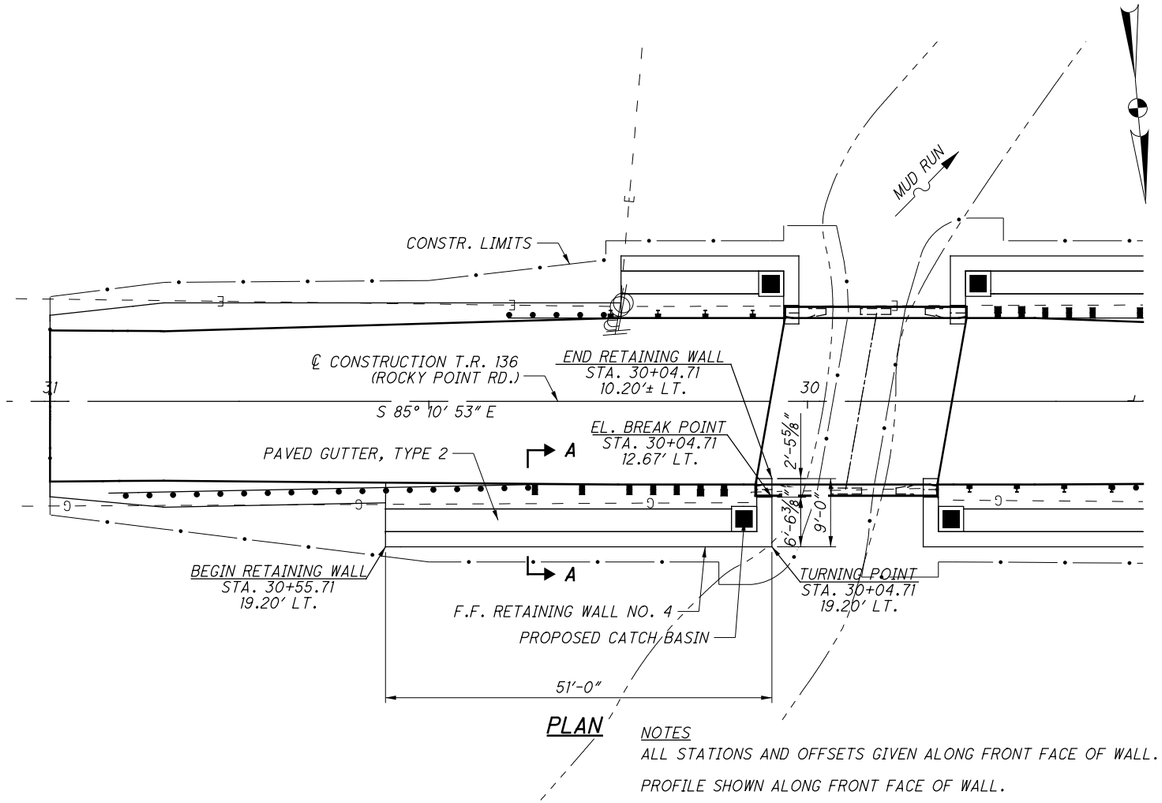


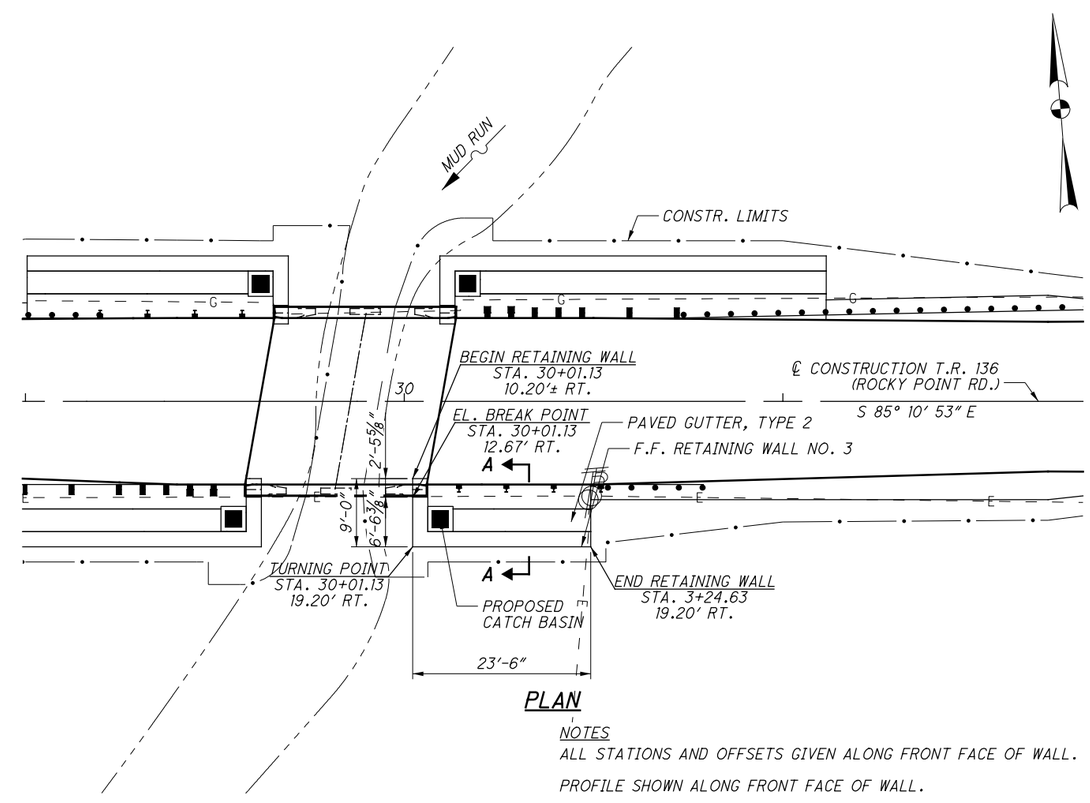
PLAN

NOTES

ALL STATIONS AND OFFSETS GIVEN ALONG FRONT FACE OF WALL.

PROFILE SHOWN ALONG FRONT FACE OF WALL.

SEE SHEET 13 FOR SECTION A-A.



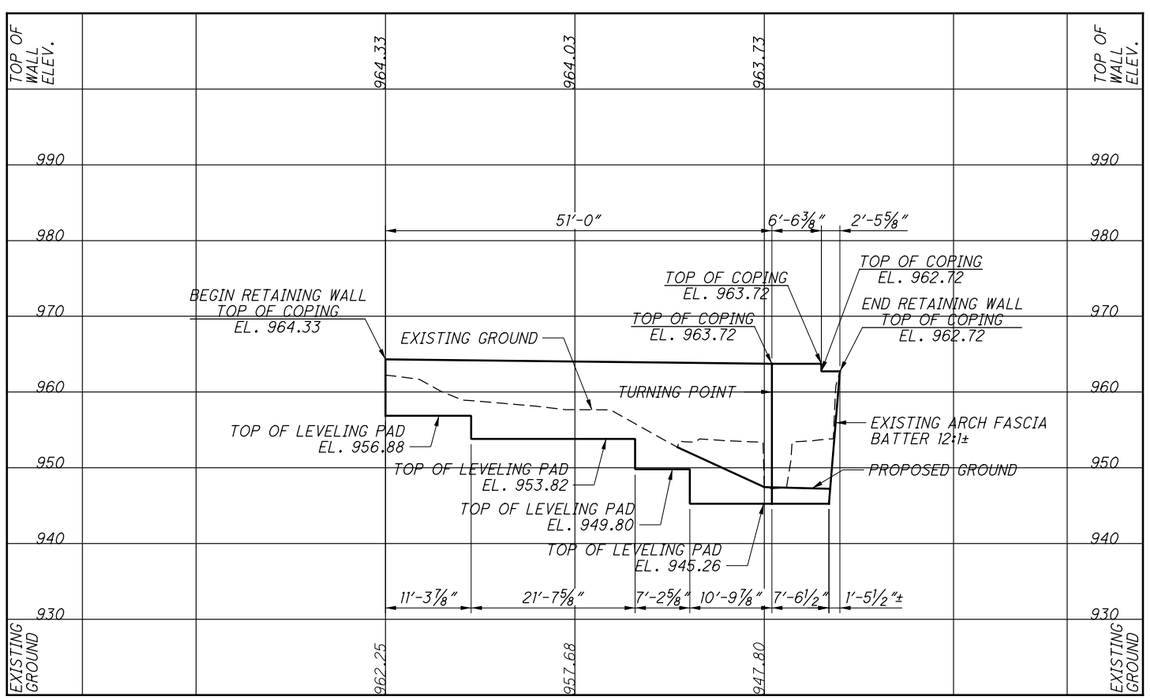
PLAN

NOTES

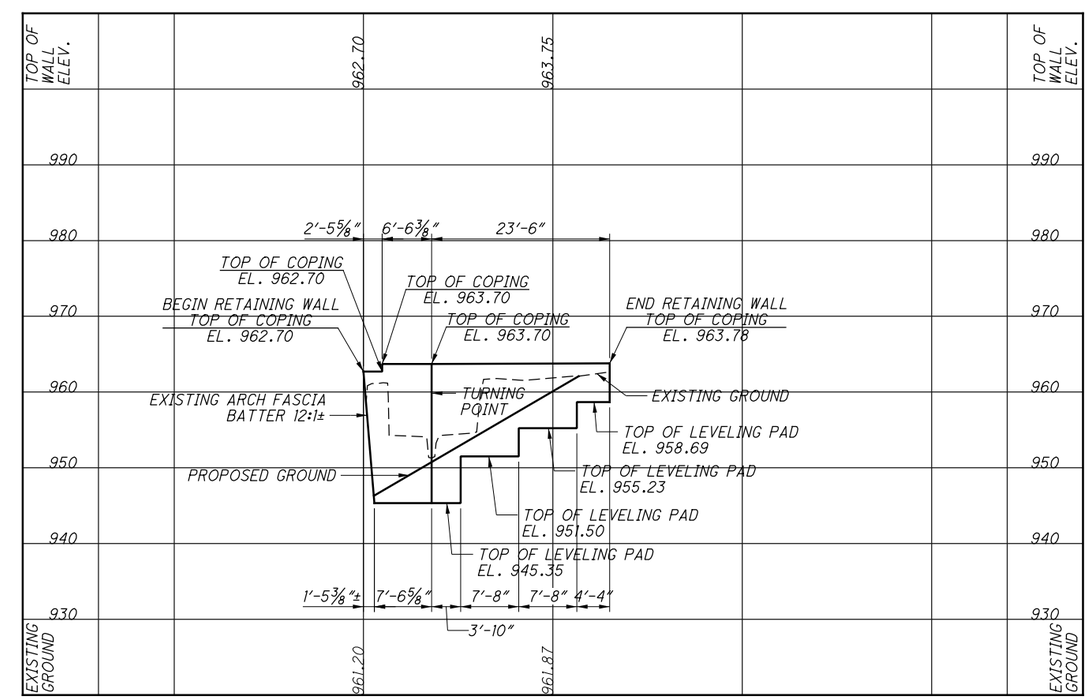
ALL STATIONS AND OFFSETS GIVEN ALONG FRONT FACE OF WALL.

PROFILE SHOWN ALONG FRONT FACE OF WALL.

SEE SHEET 13 FOR SECTION A-A.



ELEVATION



ELEVATION

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNED	DRAWN	REVIEWED	DATE
MBS	AJE	CLB	02/08/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CLB		1253670	

RETAINING WALL DETAILS

BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

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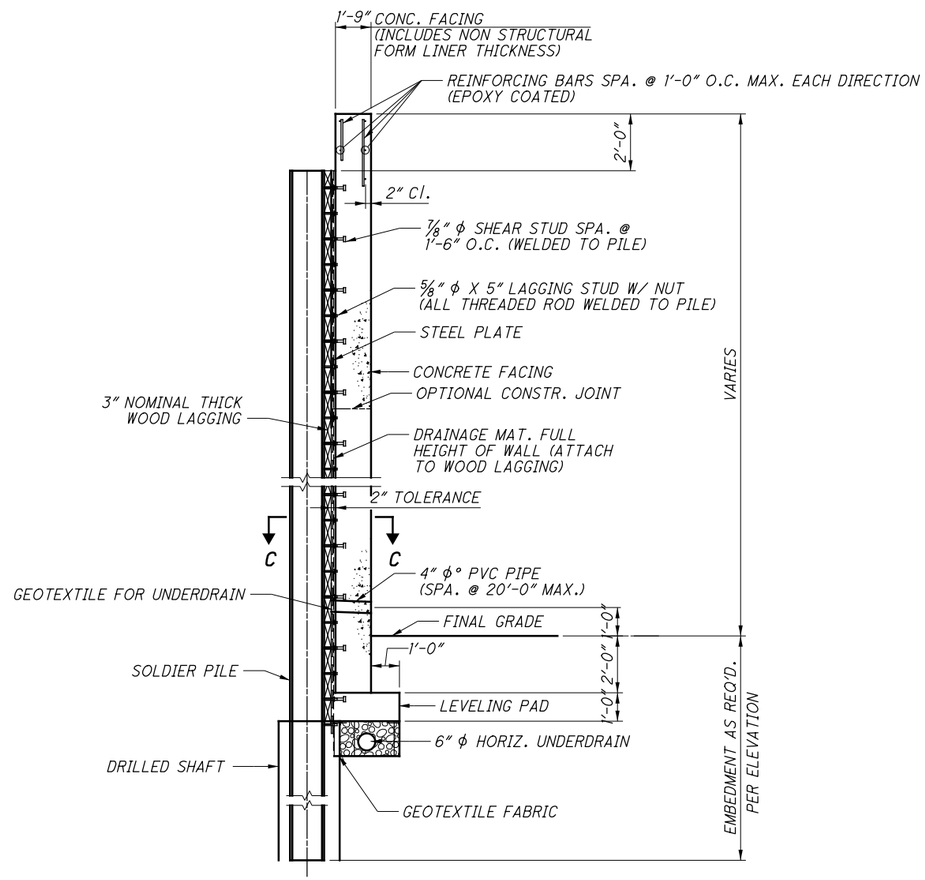
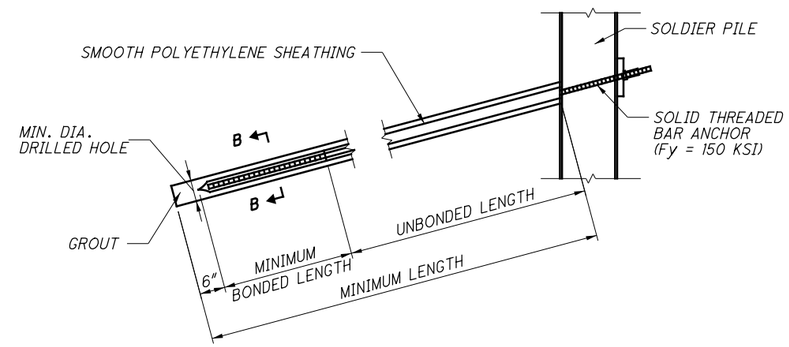


SECTION A-A



ROCK ANCHOR DETAIL

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNED	DRAWN	REVIEWED	DATE
MBS	AJE		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CLB		1253670	

RETAINING WALL DETAILS
BRIDGE NO. CLA-TR136-0057
T.R. 136 OVER MUD RUN

CLA-TR136-0.55
PID No. 85169

6 / 6

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13

cbettinger
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