

END PROJECT
STA. 536+15.00
SLM = 10.15

BEGIN PROJECT
STA. 353+00.00
SLM = 6.69

LOCATION MAP

LATITUDE: N 38°50'25" LONGITUDE: W 82°50'50"

SCALE IN MILES



PORTION TO BE IMPROVED -----
 INTERSTATE & DIVIDED HIGHWAY -----
 UNDIVIDED STATE & FEDERAL ROUTES -----
 OTHER ROADS -----

DESIGN DESIGNATION
(SEE SHEET 2)

GRADE SEPARATION WITH THE CSXT RAILROAD

DESIGN EXCEPTIONS
(SEE SHEET 2)

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:

HDR HDR ENGINEERING, INC.
 9987 CARVER RD, SUITE 200
 CINCINNATI, OHIO 45242
 513-984-7500

ENGINEERS SEAL: STRUCTURE SCI-234-0122 (KZF DESIGN)	
SIGNED: _____ DATE: _____	ENGINEERS SEAL: ROADWAY PLANS (HDR ENGINEERING, INC.)
SIGNED: _____ DATE: _____	ENGINEERS SEAL: MOT/TRAFFIC PLANS (WD TRANSPORTATION)
SIGNED: _____ DATE: _____	SIGNED: _____ DATE: _____

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SCI-TR234-0122	

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
SCI-823-6.81
PART 2
 MADISON & HARRISON TOWNSHIPS
 SCIOTO COUNTY
 PART 1 - EARTHWORK
 PART 2 - SR 335 & BRIDGE NO. SCI-TR234-0122
 PART 3 - BRIDGE NO. SCI-823-0837 L & R
 PART 4 - BRIDGE NO. SCI-823-0917 L & R
 PART 5 - PAVEMENT

PROJECT DESCRIPTION (PART 2)

RE-ALIGNMENT OF 0.33 MILES OF SR335 IN ORDER TO CONSTRUCT A NEW INTERSECTION WITH RELOCATED TR234. PROJECT TO INCLUDE THE CONSTRUCTION OF A BRIDGE ON RELOCATED TR234 OVER THE CSXT RAILROAD. CONSTRUCT A SOUTHBOUND RIGHT TURN LANE FROM SR335 ONTO RELOCATED TR234 AND WIDEN THE CR540 APPROACH TO THE INTERSECTION. IMPROVEMENTS INCLUDE GUARDRAIL, DRAINAGE, TRAFFIC CONTROL AND DRIVEWAYS.

PROJECT EARTH DISTURBED AREAS

SEE PART 1

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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC THE HIGHWAY AND THAT THE PROVISIONS FOR MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
 DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
 DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

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FEDERAL PROJECT NO. **G990 (624)**
 PID NO. **19415**
 CONSTRUCTION PROJECT NO. _____
 RAILROAD INVOLVEMENT **CSXT**
SCI-823-6.81
 1/111

BENCHMARKS:

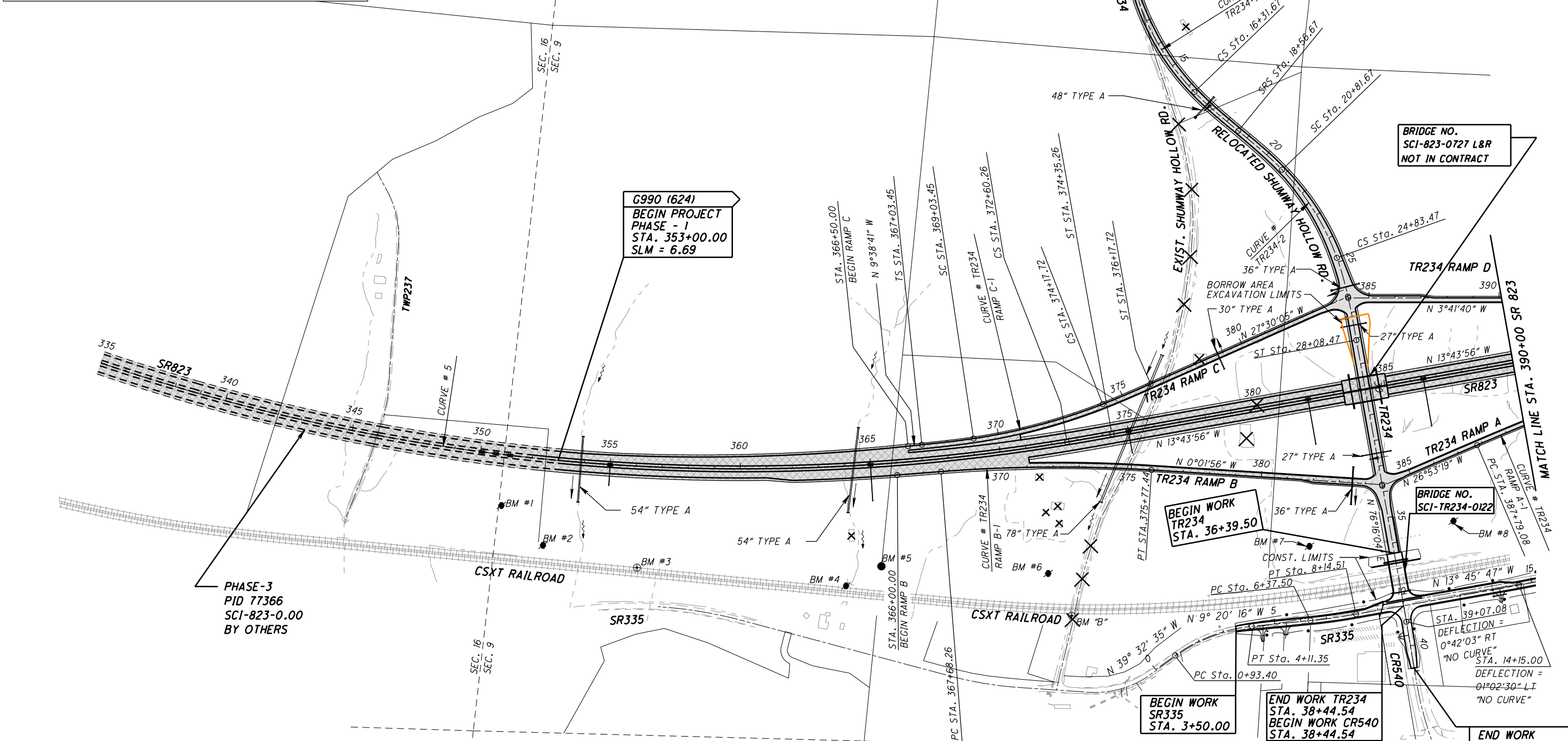
BM #1 RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 349+97, 190' RT., ELEV.=657.72 N = 302441.6358, E = 1868042.3000	BM #5 TOP OF CONCRETE MONUMENT WITH "X" STA. 365+16, 392' RT., ELEV.=643.18 N = 303912.6720, E = 1868182.1910	BM "A" RAILROAD SPIKE SET IN WOOD POST ABOUT 170' WEST OF CENTERLINE STATION 10+23.46 (TR 234) AND 37' NORTH OF EXISTING CENTERLINE, ELEV.=719.57 N = 304731.6782, E = 1865592.4912
BM #2 RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 352+73, 330' RT., ELEV.=641.10 N = 302610.4334, E = 1868184.7478	BM #6 RAILROAD SPIKE SET IN WEST SIDE OF OAK TREE STA. 371+16, 488' RT., ELEV.=653.97 N = 304553.4892, E = 1868169.0902	BM "B" CHISELED SQUARE ON EAST END OF RETAINING WALL STA. 371+76, 662' RT. ELEV.=609.96 N = 304654.2464, E = 1868325.0882
BM #3 TOP OF CONCRETE MILE MARKER POST No. 8 STA. 356+22, 389' RT., ELEV.=632.90 N = 302975.9477, E = 1868247.3226	BM #7 RAILROAD SPIKE SET IN WOOD FENCE POST STA. 381+08, 557' RT. ELEV.=646.20 N = 305547.9483, E = 1868000.8797	
BM #4 RAILROAD SPIKE SET IN SOUTHWEST CORNER OF RETAINING WALL STA. 363+83, 460' RT., ELEV.=622.55 N = 303781.7810, E = 1868266.1064	BM #8 RAILROAD SPIKE SET IN WOOD FENCE POST STA. 386+68, 558' RT. ELEV.=659.05 N = 306093.6216, E = 1867868.9028	

NOTE:
SR823, TR234 RAMPS AND TR234
IMPROVEMENTS (UP TO STA. 36+39.50) WILL BE
PERFORMED IN OTHER PART (NIP)



SCHEMATIC PLAN - SR823
STA. 335+00.00 TO STA. 390+00.00

SCI-823-6.81



- NOTES:**
1. THERE ARE NO LANDSCAPING AREAS WITHIN THE WORK LIMITS.
 2. FOR INTERSECTION STATIONS AND FOR INTERSECTION ANGLES FOR ALL INTERSECTING ROADWAYS, SEE INTERSECTION DETAIL SHEETS AND PLAN SHEETS.
 3. FOR BEARINGS ON SIDEROADS SEE PLAN SHEETS.
 4. FOR HORIZONTAL CURVE DATA SEE PLAN SHEETS AND HORIZONTAL CURVE DATA SHEET.
 5. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.
 6. FOR CENTERLINE REFERENCE MONUMENTS SEE PLAN SHEETS.

LEGEND:

X = REMOVAL

[Hatched Box] PAVEMENT TO BE CONSTRUCTED IN OTHER PART


[Solid Box] PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

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BENCHMARKS:

BM #9 CHISELED SQUARE ON CONCRETE WATER TROUGH STA. 392+48, 553' RT., ELEV.=669.13 N = 306655.1529, E = 1867726.2407	BM #13 RAILROAD SPIKE SET IN OAK TREE STA. 423+34, 200' LT., ELEV.=850.08 N = 308836.5034, E = 1865481.0299
BM #10 RAILROAD SPIKE SET IN WOOD FENCE POST STA. 399+99, 557' RT., ELEV.=676.77 N = 307406.4002, E = 1867542.8188	BM #14 RAILROAD SPIKE SET IN OAK TREE STA. 433+21, 126' LT., ELEV.=808.34 N = 309250.9930, E = 1864611.5782
BM #11 RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 408+62, 227' LT., ELEV.=728.38 N = 307911.6558, E = 1866461.5041	BM "C" RAILROAD SPIKE SET IN WOOD POST STA. 442+75, 489' RT., ELEV.=633.18 N = 310148.0120, E = 1863915.9426
BM #12 RAILROAD SPIKE SET IN FENCE POST STA. 418+99, 217' RT., ELEV.=715.20 N = 308756.3812, E = 1866320.5736	BM "D" RAILROAD SPIKE SET IN GATE POST STA. 441+57, 994' LT., ELEV.=651.84 N = 308709.8811, E = 1863535.6918

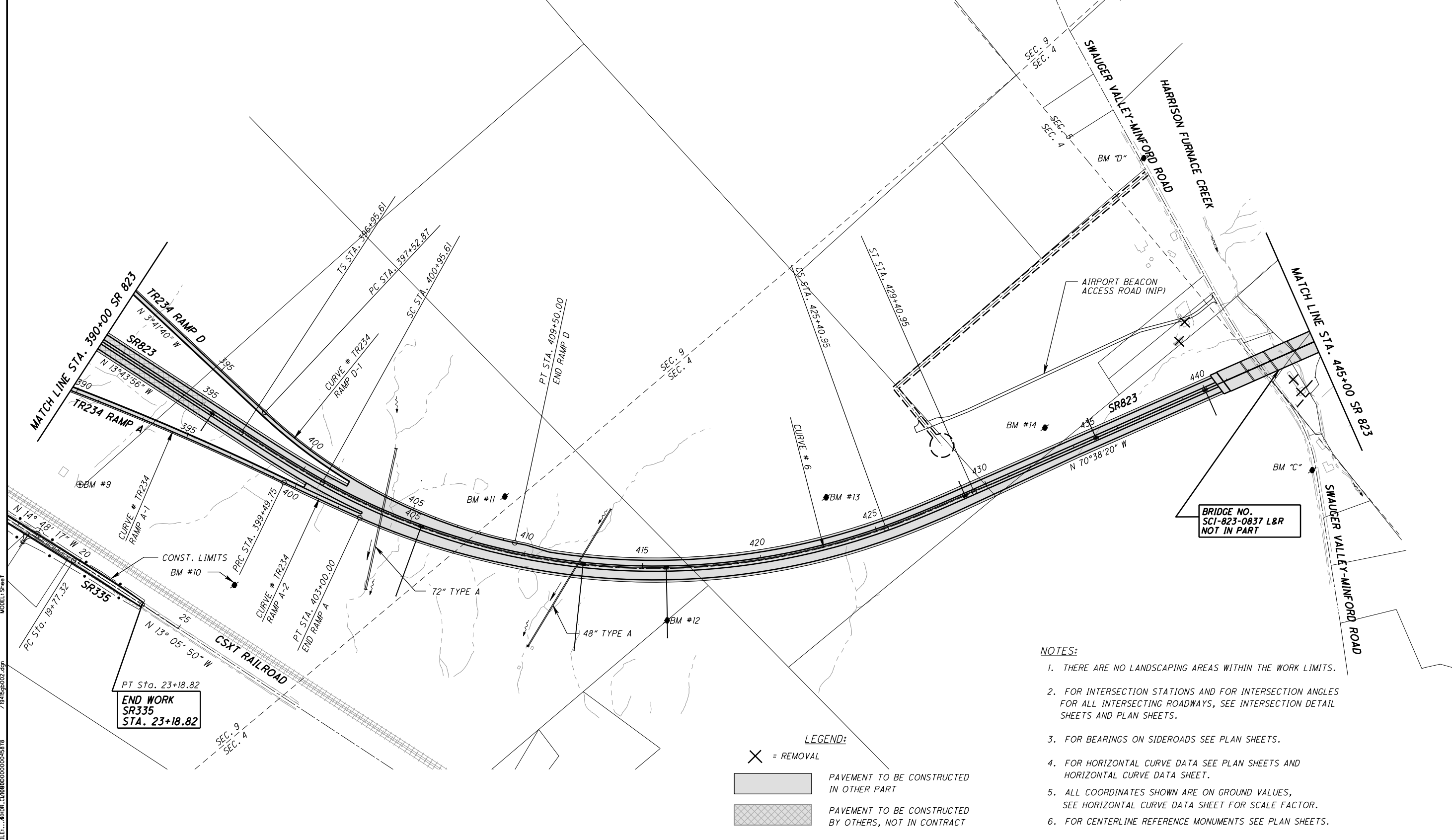
NOTE:
SR823 AND TR234 RAMPS IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP)



 HORIZONTAL SCALE IN FEET
 CALCULATED: BEE
 CHECKED: JBM

**SCHEMATIC PLAN - SR823
STA. 390+00.00 TO STA. 445+00.00**

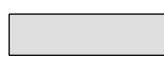

SCI-823-6.81



BRIDGE NO.
SCI-823-0837 L&R
NOT IN PART

- NOTES:**
1. THERE ARE NO LANDSCAPING AREAS WITHIN THE WORK LIMITS.
 2. FOR INTERSECTION STATIONS AND FOR INTERSECTION ANGLES FOR ALL INTERSECTING ROADWAYS, SEE INTERSECTION DETAIL SHEETS AND PLAN SHEETS.
 3. FOR BEARINGS ON SIDEROADS SEE PLAN SHEETS.
 4. FOR HORIZONTAL CURVE DATA SEE PLAN SHEETS AND HORIZONTAL CURVE DATA SHEET.
 5. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.
 6. FOR CENTERLINE REFERENCE MONUMENTS SEE PLAN SHEETS.

LEGEND:

- X = REMOVAL
-  PAVEMENT TO BE CONSTRUCTED IN OTHER PART
-  PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

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BENCHMARKS:

BM #15 RAILROAD SPIKE SET IN GATE FENCE POST STA. 447+03, 174' RT., ELEV.=690.56 N = 309992.5286, E = 1863407.9114	BM #20 RAILROAD SPIKE SET IN TREE STA. 488+01, 314' LT., ELEV.=638.73 N = 311158.7309, E = 1859403.3334
BM #16 RAILROAD SPIKE SET IN SOUTH SIDE OF OAK TREE STA. 456+03, 171' RT., ELEV.=689.12 N = 310288.7050, E = 1862557.7932	BM #21 RAILROAD SPIKE SET IN OAK TREE STA. 496+45, 162' RT., ELEV.=677.97 N = 312072.5364, E = 1859045.4633
BM #17 RAILROAD SPIKE SET IN SOUTH SIDE OF OAK TREE STA. 464+02, 153' LT., ELEV.=730.81 N = 310247.1396, E = 1861696.6525	BM "E" CHISELED SQUARE ON NORTH SIDE OF CONC. HEADWALL STA. 484+08, 335' RT., ELEV.=631.27 N = 311480.0444, E = 1860081.8846
BM #18 RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 471+49, 239' LT., ELEV.=734.22 N = 310414.8969, E = 1860961.4740	BM "F" RAILROAD SPIKE SET IN TREE STA. 485+89, 506' LT., ELEV.=634.57 N = 310882.1048, E = 1859462.4739
BM #19 RAILROAD SPIKE SET IN EAST SIDE OF OAK TREE STA. 481+38, 122' RT., ELEV.=708.97 N = 311158.0709, E = 1860204.9890	

NOTE:
SR823 AND SR139 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP)

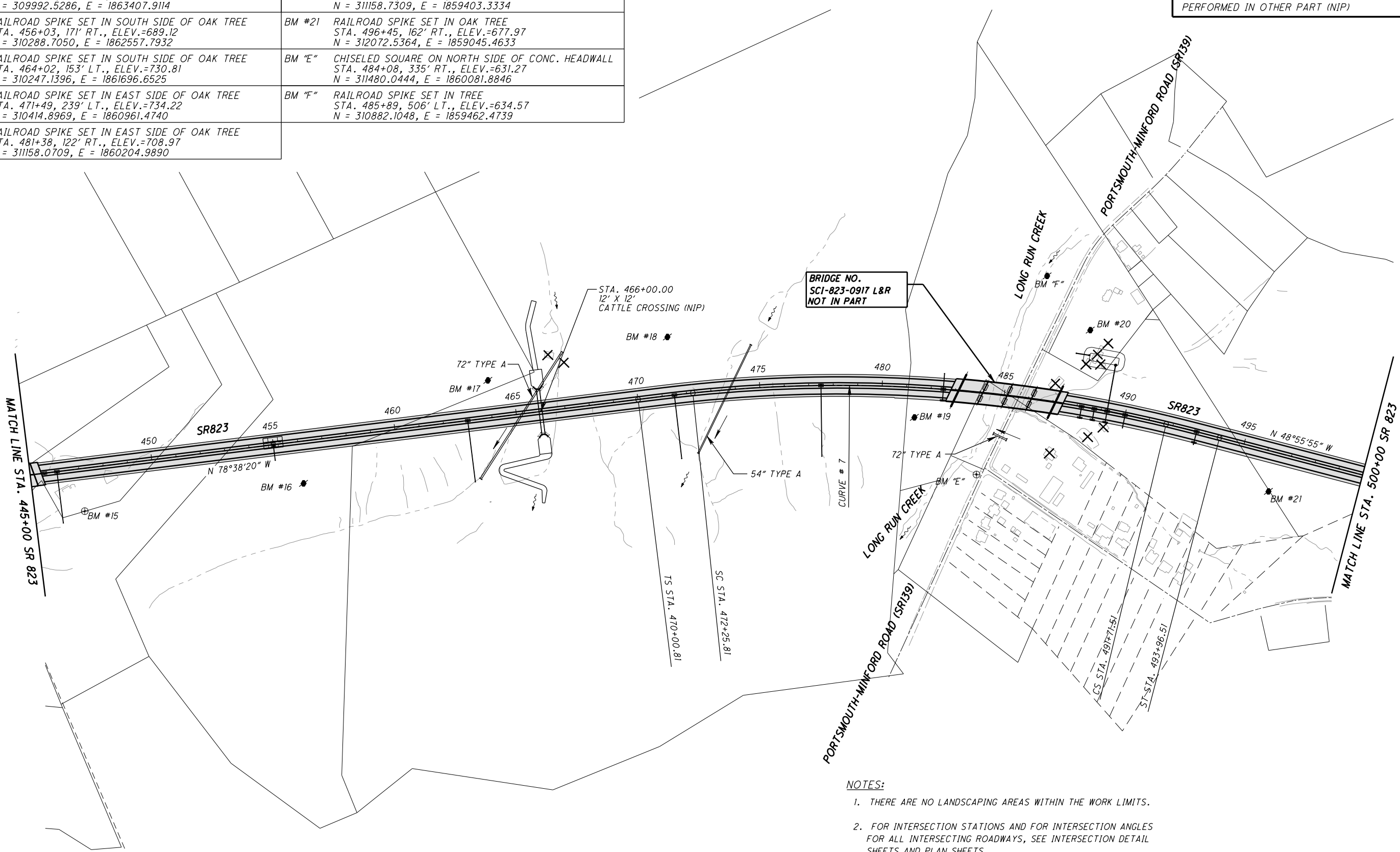
0 100 200 400
HORIZONTAL SCALE IN FEET

CALCULATED BEE CHECKED JMB

**SCHEMATIC PLAN - SR823
STA. 445+00.00 TO STA. 500+00.00**

SCI-823-6.81

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BRIDGE NO.
SCI-823-0917 L&R
NOT IN PART

NOTES:

1. THERE ARE NO LANDSCAPING AREAS WITHIN THE WORK LIMITS.
2. FOR INTERSECTION STATIONS AND FOR INTERSECTION ANGLES FOR ALL INTERSECTING ROADWAYS, SEE INTERSECTION DETAIL SHEETS AND PLAN SHEETS.
3. FOR BEARINGS ON SIDEROADS SEE PLAN SHEETS.
4. FOR HORIZONTAL CURVE DATA SEE PLAN SHEETS AND HORIZONTAL CURVE DATA SHEET.
5. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.
6. FOR CENTERLINE REFERENCE MONUMENTS SEE PLAN SHEETS.

LEGEND:

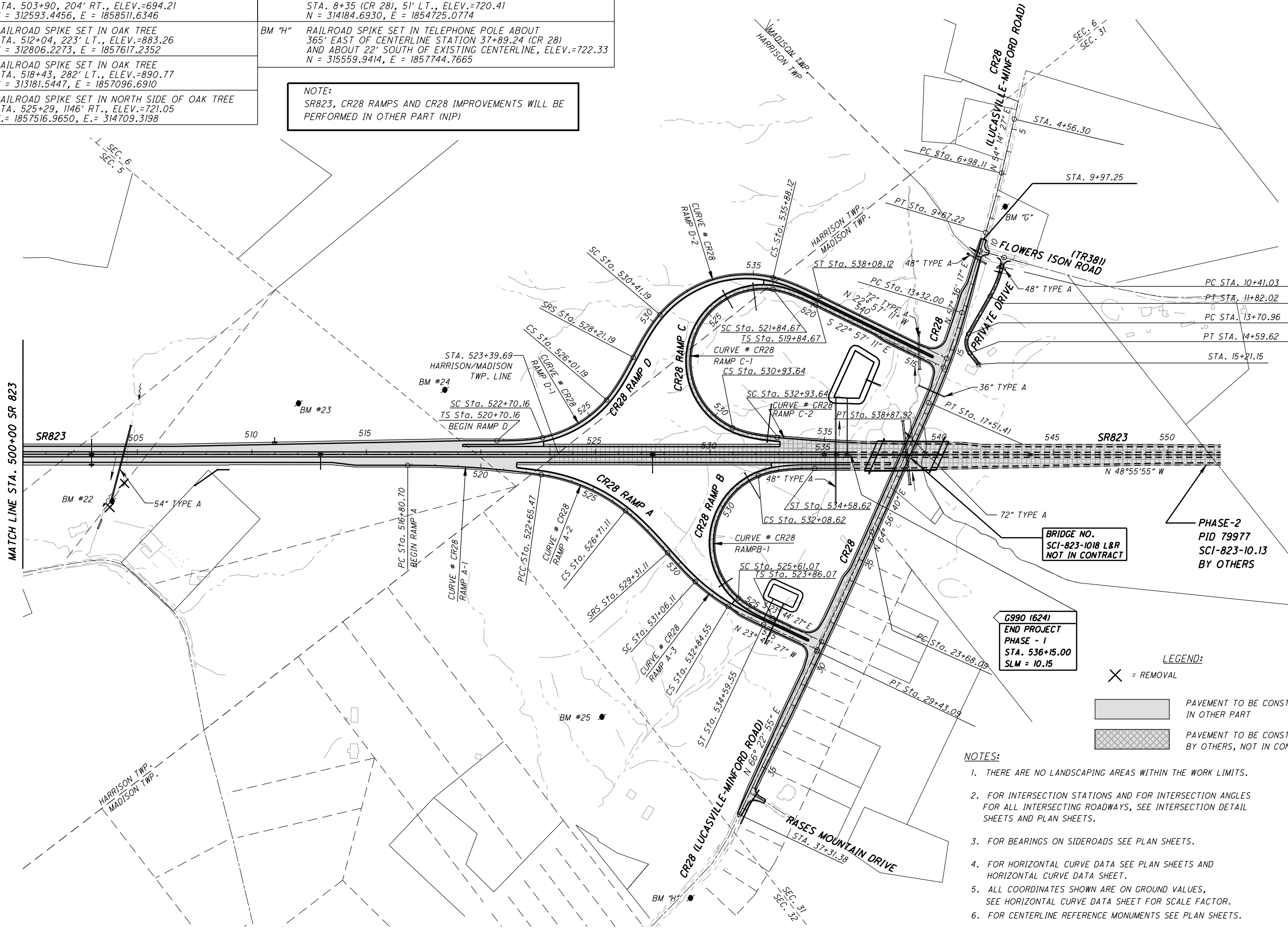
- X = REMOVAL
- PAVEMENT TO BE CONSTRUCTED IN OTHER PART

BENCHMARKS:

BM #22	RAILROAD SPIKE SET IN TREE STA. 503+90, 204' RT., ELEV.=694.21 N = 312593.4456, E = 1858511.6346	BM "G"	RAILROAD SPIKE SET IN CEDAR TREE STA. 8+35 (CR 28), 51' LT., ELEV.=720.41 N = 314184.6930, E = 1854725.0774
BM #23	RAILROAD SPIKE SET IN OAK TREE STA. 512+04, 223' LT., ELEV.=883.26 N = 312806.2273, E = 1857617.2352	BM "H"	RAILROAD SPIKE SET IN TELEPHONE POLE ABOUT 365' EAST OF CENTERLINE STATION 37+89.24 (CR 28) AND ABOUT 22' SOUTH OF EXISTING CENTERLINE, ELEV.=722.33 N = 315559.9414, E = 1857744.7665
BM #24	RAILROAD SPIKE SET IN OAK TREE STA. 518+43, 282' LT., ELEV.=890.77 N = 313181.5447, E = 1857096.6910		
BM #25	RAILROAD SPIKE SET IN NORTH SIDE OF OAK TREE STA. 525+29, 1146' RT., ELEV.=721.05 N = 1857516.9650, E = 314709.3198		

NOTE:
SR823, CR28 RAMPS AND CR28 IMPROVEMENTS WILL BE PERFORMED IN OTHER PART (NIP)

MATCH LINE STA. 500+00 SR 823



BRIDGE NO.
SCI-823-1018 L&R
NOT IN CONTRACT

G990 (624)
END PROJECT
PHASE - 1
STA. 536+15.00
SLM = 10.15

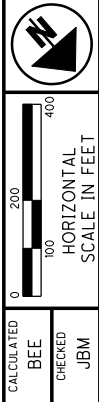
LEGEND:

X = REMOVAL

[Hatched Box] PAVEMENT TO BE CONSTRUCTED IN OTHER PART

[Cross-hatched Box] PAVEMENT TO BE CONSTRUCTED BY OTHERS, NOT IN CONTRACT

- NOTES:**
1. THERE ARE NO LANDSCAPING AREAS WITHIN THE WORK LIMITS.
 2. FOR INTERSECTION STATIONS AND FOR INTERSECTION ANGLES FOR ALL INTERSECTING ROADWAYS, SEE INTERSECTION DETAIL SHEETS AND PLAN SHEETS.
 3. FOR BEARINGS ON SIDEROADS SEE PLAN SHEETS.
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 5. ALL COORDINATES SHOWN ARE ON GROUND VALUES, SEE HORIZONTAL CURVE DATA SHEET FOR SCALE FACTOR.
 6. FOR CENTERLINE REFERENCE MONUMENTS SEE PLAN SHEETS.



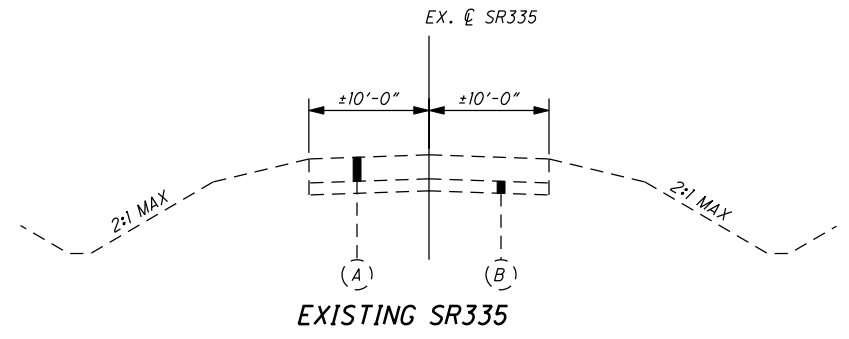
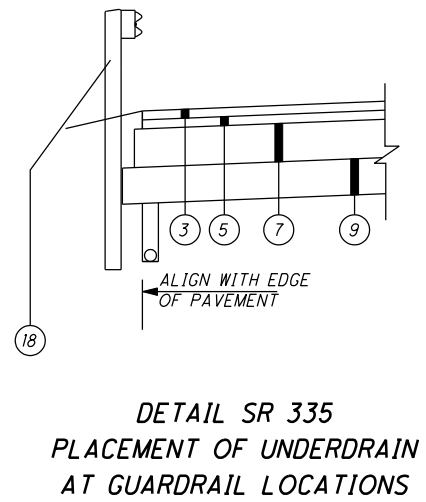
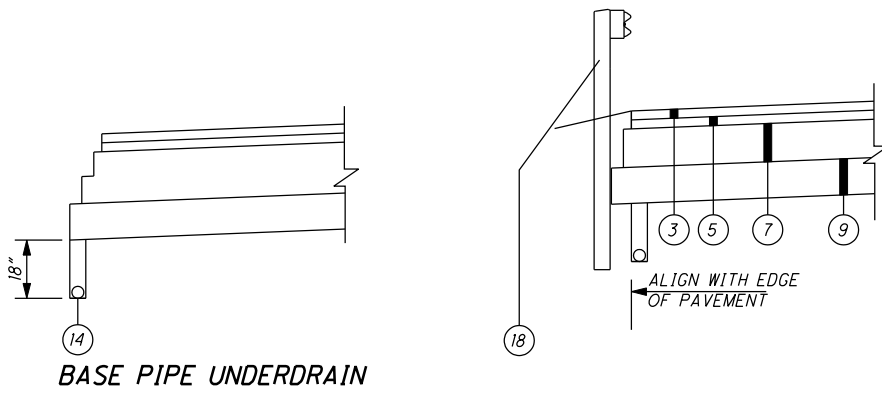
SCHEMATIC PLAN - SR823
STA. 500+00.00 TO STA. 555+00.00

SCI-823-6.81

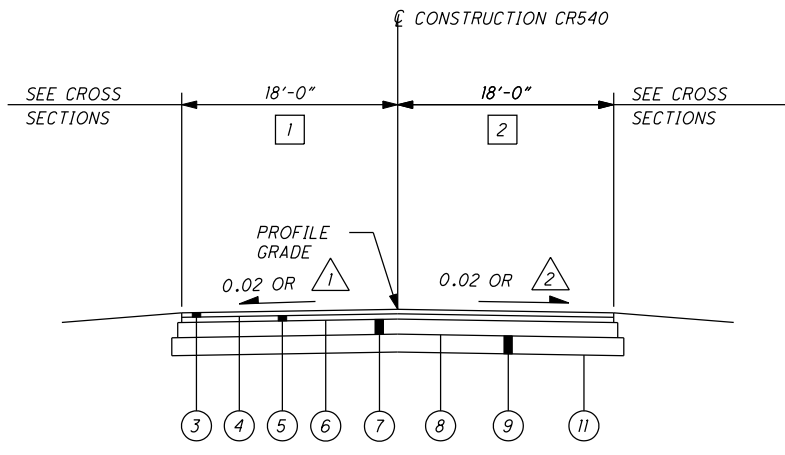
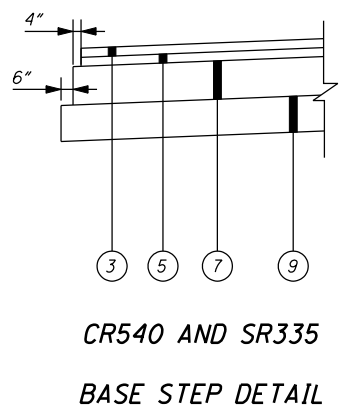
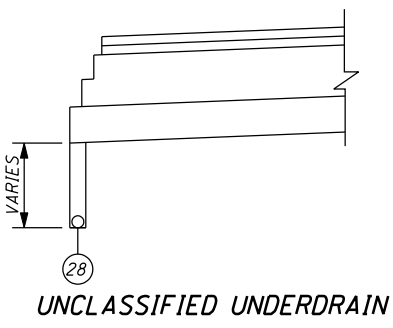
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LEGEND

- ① ② NOT USED
- ③ ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
- ④ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GALLONS/SQ YD)
- ⑤ ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)
- ⑥ ITEM 407 - TACK COAT (0.075 GALLONS/SQ YD)
- ⑦ ITEM 302 - 5" ASPHALT CONCRETE BASE, PG64-22
- ⑦A ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22 (NIP)
- ⑦B ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22 (NIP)
- ⑧ ITEM 408 - PRIME COAT (0.4 GALLONS/SQ YD)
- ⑨ ITEM 304 - 6" AGGREGATE BASE
- ⑩ ITEM 304 - 8" AGGREGATE BASE
- ⑪ ITEM 204 - SUBGRADE COMPACTION & PROOF ROLLING
- ⑪A ITEM 204 - SUBGRADE COMPACTION
- ⑫ ITEM 422 - CHIP SEAL (NIP)
- ⑬ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN
- ⑭ ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH FABRIC WRAP, 707.31
- ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP, 707.31 (NIP)
- ⑯ ITEM 605 - 6" ROCK CUT UNDERDRAINS, 707.31 (NIP)
- ⑰ ITEM 605 - AGGREGATE DRAINS (NIP)
- ⑱ ITEM 606 - GUARDRAIL, TYPE 5
- ⑲ ITEM 609 - CURB, TYPE 4-C
- ⑳ ITEM 609 - 6" CONCRETE MEDIAN (NIP)
- ㉑ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 WITH 2-4" RACEWAY (NIP)
- ㉒ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 WITH 2-4" RACEWAY (NIP)
- ㉓ ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D (NIP)
- ㉓A ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (NIP)
- ㉔ ITEM 659 - SEEDING AND MULCHING
- ㉕ ITEM SPECIAL - NOISE BARRIER (NIP)
- ㉖ NOT USED
- ㉗ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (NIP)
- ㉘ ITEM 605 - 6" UNCLASSIFIED UNDERDRAIN WITH FABRIC WRAP
- ㉙ ITEM 605 - 6" DEEP PIPE UNDERDRAIN WITH FABRIC WRAP (NIP)
- ㉚ ITEM 204 - GEOTEXTILE FABRIC
- ㉛ ITEM 204 - GRANULAR MATERIAL, TYPE C



- EXISTING LEGEND**
- (A) ±8" ASPHALT CONCRETE PAVEMENT
 - (B) ±4" AGGREGATE BASE



STA. 38+56.50 (SR 335 EOP) TO STA. 40+87.00 = 230.50 LF

- ① SLOPE VARIES FROM -0.02 AT STA. 40+44.10 TO +0.005 AT STA. 40+87.00.
- ② SLOPE VARIES FROM -0.02 AT STA. 40+61.26 TO -0.005 AT STA. 40+87.00.
- ① WIDTH VARIES FROM 18'-0" AT STA. 40+20.00 TO ±11.7' AT STA. 40+87.00.
- ② WIDTH VARIES FROM 18'-0" AT STA. 40+20.00 TO ±11.6' AT STA. 40+87.00.

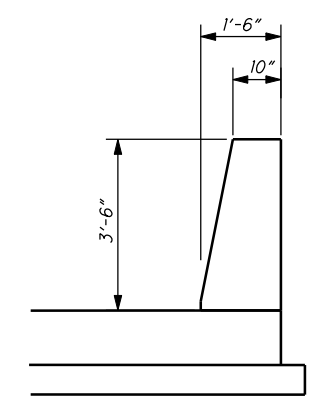
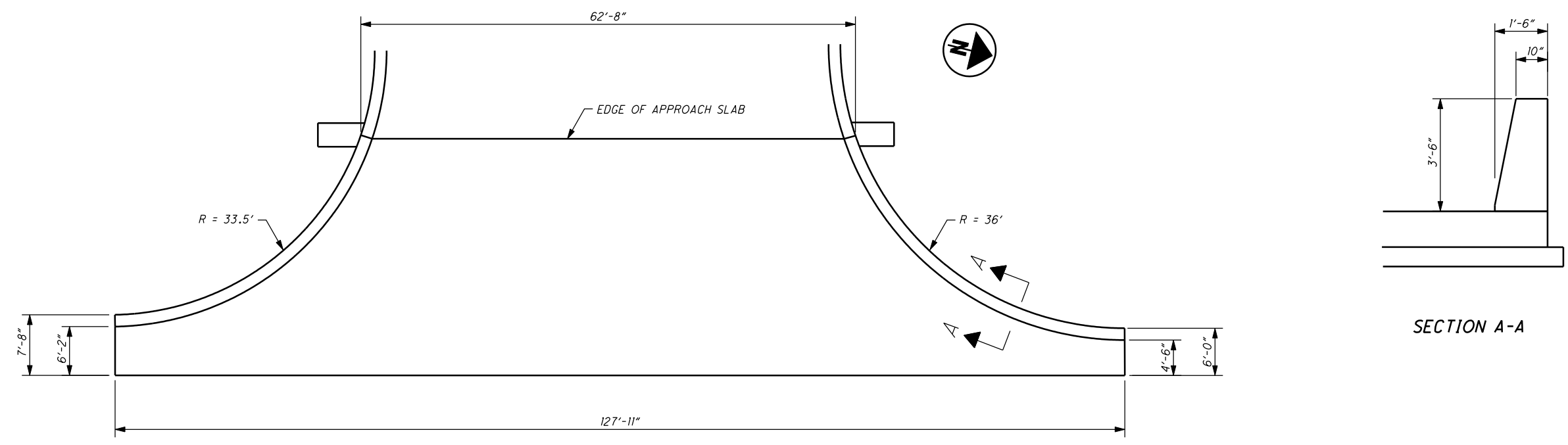
NOTES:
1. FOR GUARDRAIL LOCATIONS SEE PLAN SHEETS

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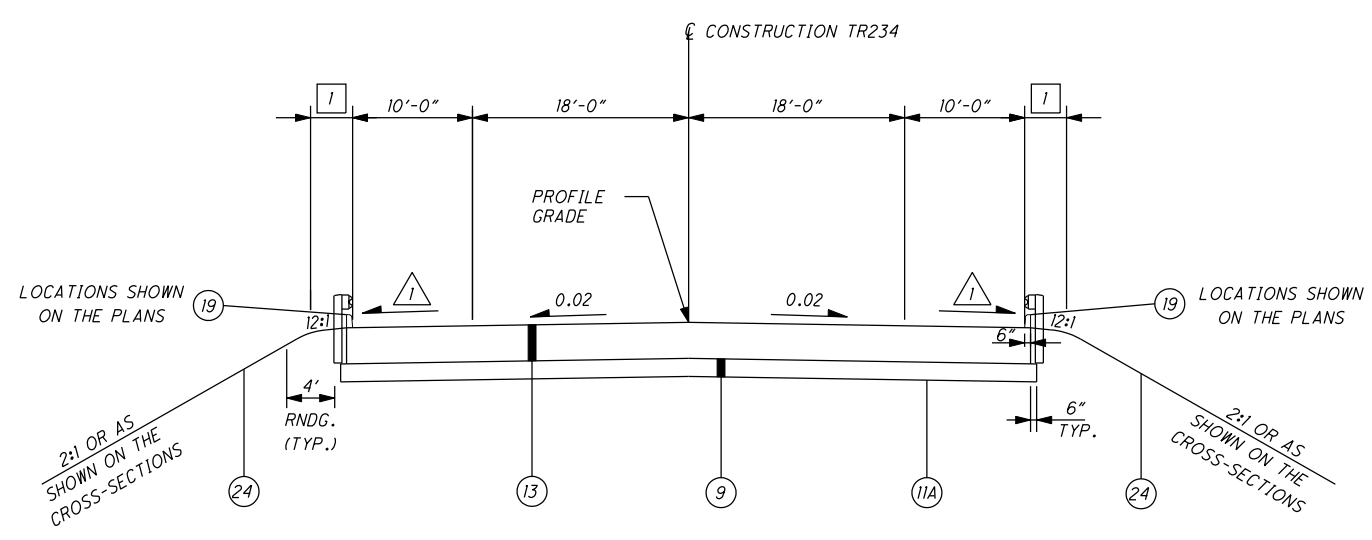
CALCULATED
LBD
CHECKED
JMB

TYPICAL SECTIONS - CR540

SCI-823-6.81



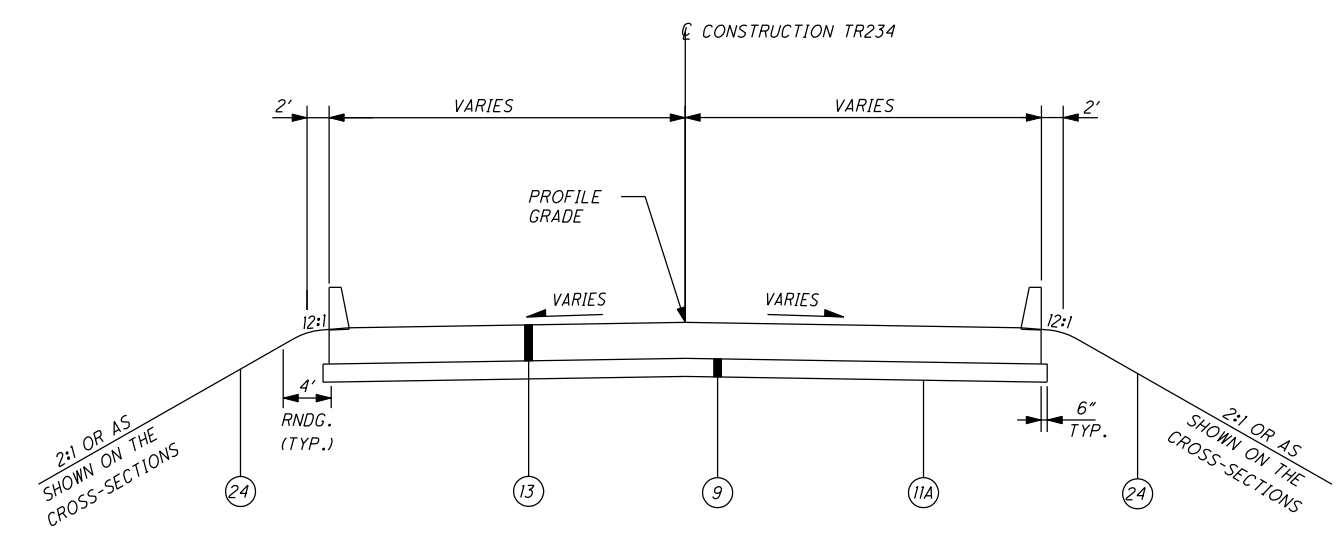
APPROACH SLAB, AS PER PLAN - TR234 (RELOCATED SHUMWAY ROAD) OVER CSXT RAILROAD
SEE BRIDGE NO. SCI-823-0122 PLANS FOR DETAILS



APPROACH SLAB SECTION - TR234 (RELOCATED SHUMWAY ROAD) OVER CSX RAILROAD

STA. 36+39.50 TO STA. 36+69.50 = 30.00 LF ∇ VARIES FROM 0.06 TO 0.02 \square VARIES FROM 2'-0" TO 3'-6"

SCI-TR234-0122 BRIDGE LIMITS



APPROACH SLAB, AS PER PLAN - TR234 (RELOCATED SHUMWAY ROAD) OVER CSX RAILROAD

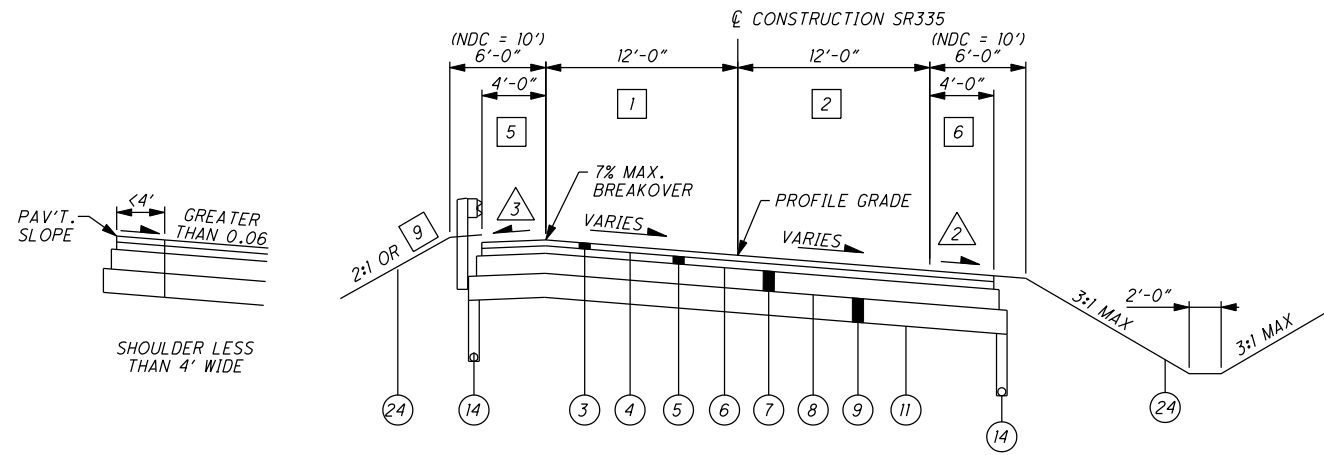
STA. 37+91.00 TO STA. 38+21.00 = 30.00 LF

NOTE: SEE INTERSECTION DETAILS FOR CROSS SLOPES AND ELEVATIONS

NOTES:

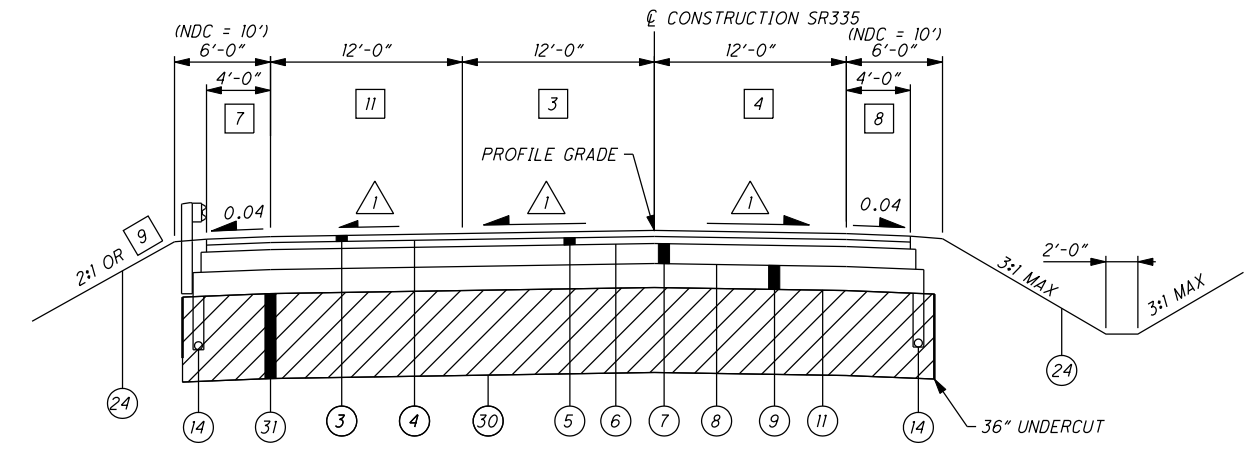
1. FOR LEGEND SEE SHEET 8

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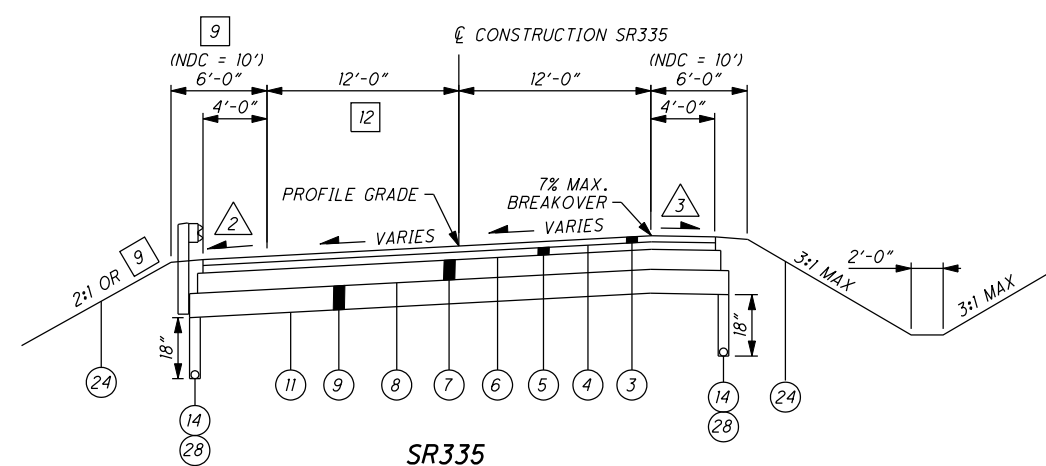
SR335
SUPERELEVATED SECTION

STA. 3+50.00 TO STA. 5+54.51 = 204.51 LF [EMAX = 0.08]



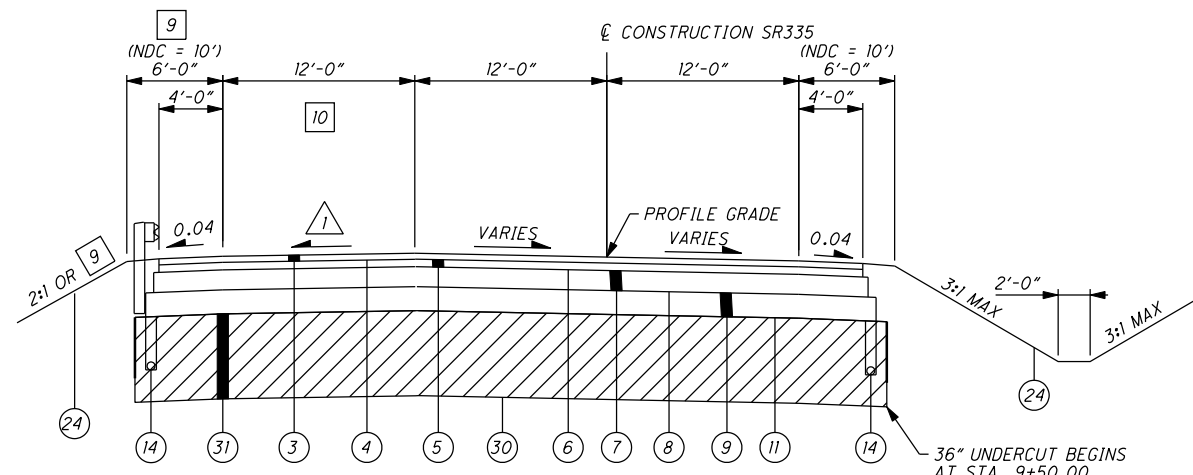
SR335
NORMAL SECTION

STA. 11+24.00 TO STA. 23+18.82 = 1194.82 LF



SR335
SUPERELEVATED SECTION

STA. 5+54.51 TO STA. 8+93.77 = 339.26 LF [EMAX = 0.053]



SR335
SUPERELEVATED SECTION

STA. 8+93.77 TO STA. 11+24.00 = 230.23 LF [EMAX = 0.02]

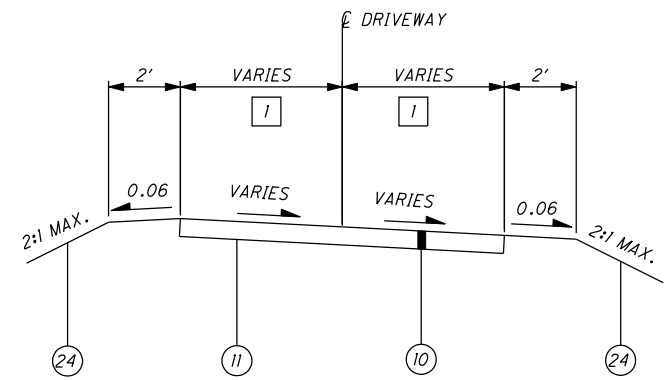
NOTES:

1. FOR LEGEND AND BASE STEP DETAIL SEE SHEET 8
2. FOR GUARDRAIL LOCATIONS SEE PLAN SHEETS.
3. FOR UNDERDRAIN DETAILS SEE SHEET 8
4. UNDERCUT TO EXTEND 18" BEYOND THE EDGE OF PAVEMENT SURFACE

- △ 1 0.016 OR AS SHOWN ON THE INTERSECTION DETAIL SHEETS.
- △ 2 0.04 OR RATE OF SUPERELEVATION, WHICH EVER IS GREATER.
- △ 3 SLOPE VARIES, SEE SUPERELEVATION TABLE.

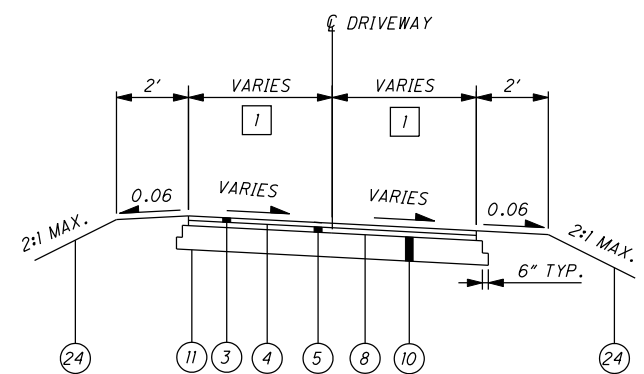
- 1 WIDTH VARIES FROM ±9.7' AT STA. 3+50.00 TO 12'-0" AT STA. 4+75.00.
- 2 WIDTH VARIES FROM ±11.0' AT STA. 3+50.00 TO 12'-0" AT STA. 4+11.35.
- 3 WIDTH VARIES FROM 12'-0" AT STA. 22+19.00 TO ±10.5' AT STA. 23+18.82.
- 4 WIDTH VARIES FROM 12'-0" AT STA. 22+19.00 TO ±10.2' AT STA. 23+18.82.
- 5 WIDTH VARIES FROM ±1.3' AT STA. 3+50.00 TO 4'-0" AT STA. 4+75.00.
- 6 WIDTH VARIES FROM ±2.1' AT STA. 3+50.00 TO 4'-0" AT STA. 4+11.35.
- 7 WIDTH VARIES FROM 4'-0" AT STA. 22+19.00 TO ±0.8' AT STA. 23+18.82.
- 8 WIDTH VARIES FROM 4'-0" AT STA. 22+19.00 TO ±1.0' AT STA. 23+18.82.
- 9 OR AS SHOWN ON CROSS SECTIONS.
- 10 WIDTH VARIES FROM STA. 8+93.77 TO STA. 10+65.54, SEE INTERSECTION DETAIL SHEETS. WIDTH IS 12'-0" FROM STA. 10+65.54 TO STA. 11+24.00.
- 11 WIDTH IS 12'-0" FROM STA. 11+24.00 TO STA. 13+80.00. WIDTH VARIES FROM 12'-0" AT STA. 13+80.00 TO 0'-0" AT STA. 14+30.00.
- 12 WIDTH VARIES FROM STA. 8+50.00 TO STA. 8+93.77, SEE INTERSECTION DETAIL SHEETS.

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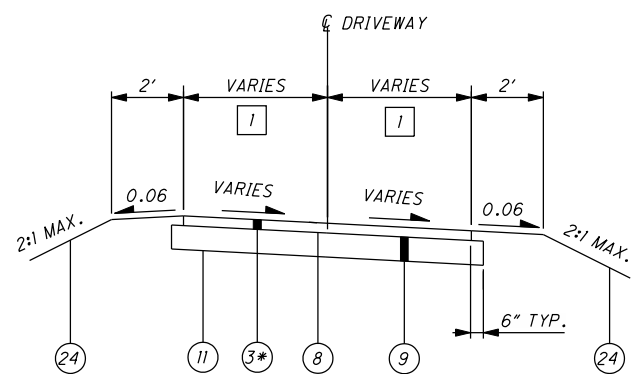
DRIVEWAY SECTION

SR335: STA. 4+55.00 RT.
 SR335: STA. 13+74.50 RT.
 SR335: STA. 17+58.00 RT.
 SR335: STA. 17+88.50 LT.



DRIVEWAY SECTION

CR540 STA 39+59.52 RT.



DRIVEWAY SECTION

SR335: STA. 5+45.00 RT.

NOTES:

1. FOR LEGEND SEE SHEET 8

1 SEE DRIVEWAY DETAIL SHEETS OR PLAN SHEETS

3* ITEM 442 - 2" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)

ROUNDING

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

UTILITIES

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

COLUMBIA GAS OF OHIO
TIFFANY WOODYARD
843 PIATT AVENUE
CHILLICOTHE, OHIO 45601
(740) 772-9131

AMERICAN ELECTRIC POWER
PAUL PAXTON
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
(614) 883-6831

MINFORD TELEPHONE COMPANY
PAULA MCGRAW
PO BOX 181
MINFORD, OHIO 45653
(740) 820-2151

SPRINT COMMUNICATIONS, INC.
JOE THOMAS
11370 ENTERPRISE PARK DRIVE
SHARONVILLE, OHIO 45241
(513) 459-5761

TIME WARNER CABLE
TERRY ALLEN
3760 INTERCHANGE DRIVE
COLUMBUS, OHIO 43204-4131
(614) 255-6349

SCIOTO COUNTY SANITARY ENGINEERING
DARREN LEBRUN
602 SEVENTH STREET
PORTSMOUTH, OHIO 45662
(740) 355-8249

SCIOTO COUNTY REGIONAL WATER AUTHORITY
JONATHAN KING
PO BOX 310
LUCASVILLE, OHIO 45648
(740) 259-2301

PIKE NATURAL GAS COMPANY
ROBERT SEELING JR.
PO BOX 249
HILLSBORO, OHIO 45133
(937) 393-1901

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.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON NAD83 HORIZONTAL DATUM AND NAVD83 VERTICAL DATUM.

WORK LIMITS

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

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT OF WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED IN THE PLANS.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON THE PLAN SHEETS.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

COOPERATION BETWEEN CONTRACTORS

AT ANY TIME, THE DEPARTMENT MAY CONTRACT FOR OTHER WORK ON OR NEAR THE PROJECT.

SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS OR COMPLETION OF WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

WASTE AND BORROW AREAS

HIRE AN ECOLOGICAL ENVIRONMENTAL CONSULTANT TO CERTIFY THAT THE PROPOSED BORROW AND WASTE OPERATIONS WILL NOT IMPACT "THE WATERS OF THE UNITED STATES" OR A ISOLATED WETLAND(S) OR TO OBTAIN AN U.S. ARMY CORPS OF ENGINEERS 404 PERMIT AND AN OHIO EPA 401 PERMIT, PER THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS 105.16.

HIRE A CULTURAL RESOURCE ENVIRONMENTAL CONSULTANT PER CONSTRUCTION AND MATERIAL SPECIFICATIONS IN 105.16 TO PERFORM A CULTURAL RESOURCE INVESTIGATION FOR ALL WASTE AND BORROW AREAS OUTSIDE THE RIGHT-OF-WAY LIMITS.

THE CONTRACTOR SHALL NOT BORROW FROM A SITE KNOWN OR SUSPECTED OF HAVING CONTAMINATED SOIL OR WATER.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 750 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT AERONAUTICAL STUDY NO. 2011-AGL-7796-OE OR 2011-AGL-8018-OE IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

COPIES OF THE ALTERATION AND FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

Express Processing Center
The Federal Aviation Administration
Southwest Regional Office
Air Traffic Airspace Branch ASW-520
2601 Meachan Blvd.
Fort Worth, TX 76137-4298

Ohio Department of Transportation
Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235
614-387-2346

CONTRACTOR SHALL REFER TO AERONAUTICAL STUDY NUMBERS LISTED ABOVE FOR CONDITIONS THAT NEED TO BE MET IN ADDITION TO DETERMINATION EXPIRATION DATES AND INSTRUCTIONS FOR EXTENSION REQUESTS.

ADDITIONAL SOIL INFORMATION

THE SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATIONS SHEETS CONTAIN ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN. ADDITIONAL SUBSURFACE INVESTIGATION INFORMATION IS AVAILABLE FROM "ODOT DISTRICT 9."

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05. THE EXCAVATION LIMITS FOR UNSUITABLE SOIL ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. THE EXCAVATION LIMITS FOR UNSUITABLE SUBGRADE CONSISTING OF COAL, SHALE OR ROCK ARE SHOWN ON THE CROSS SECTIONS AND DETAILED ON THE TYPICAL SECTIONS

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204

EROSION CONTROL

ITEMS 601, 660, AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS AND TURF OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE 660 OR 670. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THESE ITEMS SHALL MEET REQUIREMENT OF 108.04.

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GENERAL NOTES

SCI-823-6.81

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SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST 2 EACH

659, TOPSOIL 784 CU. YD.

659, SEEDING AND MULCHING 7059 SQ. YD.

659, REPAIR SEEDING AND MULCHING 353 SQ. YD

659, INTER-SEEDING 353 SQ. YD.

659, COMMERCIAL FERTILIZER 0.98 TON

659, LIME 0.16 ACRES

659, WATER 39 M. GAL.

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

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY COUNTY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

UNTREATED SEPTIC CONNECTIONS

THIS PLAN MAKES NO PROVISION FOR CONNECTION, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY UNTREATED SEPTIC DRAINAGE INTO THE HIGHWAY DRAINAGE SYSTEM. ANY PIPE CARRYING UNTREATED SEPTIC FLOW SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT-OF-WAY LINE.

PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEMS 203 EXCAVATION.

UNRECORDED UNTREATED NON-STORMWATER DRAINAGE

FURNISH NO CONTINUANCE FOR ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE SUCH AS UNTREATED SEPTIC, UNTREATED WASTEWATER, UNTREATED CURTAIN/GRADIENT DRAINS, AND UNTREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. PLUG ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE WITH CLASS C CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE FOR ITEM SPECIAL - PIPE CLEANOUT. THE PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

SPECIAL, PIPE CLEANOUT 50 FT.

REVIEW OF DRAINAGE FACILITIES

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

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

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

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAIL-BOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4" BY 4" SQUARE OR 4 1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D. O.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE.

UTILITY LEGEND

ABBREVIATIONS:

----- UNK UNKNOWN FUNCTION UTILITY PIPE

----- (DATUR) DEPICTED ACCORDING TO UTILITY RECORDS, NO ELECTRONIC INFORMATION WAS OBTAINED.

NAP NO ASSOCIATED PIPING FOUND FROM STRUCTURE TO ANY OTHER UTILITY OR STRUCTURE.

(FO) FIBER OPTIC

(AATFI) ABANDONED ACCORDING TO FIELD INSPECTION

(AATUR) ABANDONED ACCORDING TO UTILITY RECORDS

(DATFI) DEPICTED ACCORDING TO FIELD INSPECTION, NO ELECTRONIC INFORMATION WAS OBTAINED.

(QL-C) DEPICTED ACCORDING TO RECORD INFORMATION AND EXISTING ASSOCIATED UTILITY STRUCTURES. NO ELECTRONIC INFORMATION WAS OBTAINED.

(QL-D) DEPICTED ACCORDING TO RECORD INFORMATION. NO ELECTRONIC INFORMATION WAS OBTAINED. UTILITY END POINT

EOI END OF ELECTRONIC DESIGNATING INFORMATION

EORI END OF RECORD INFORMATION

JOURNAL ENTRY: TR234 RAMP D RENAMED SR335C

SUBSEQUENT TO THE COMPLETED PLANS, TR234 RAMP D (STA. 402+09.94 TO STA. 384+20.66) AND TR234 BETWEEN TR234 RAMP D AND SR335 (STA. 26+43.58 TO STA. 38+44.54) WAS JOURNALIZED AND SHALL NOW BE REFERRED TO AS SR335C.

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GENERAL NOTES

SCI-823-6.81

ITEM 614. MAINTAINING TRAFFIC

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

SEQUENCE OF CONSTRUCTION

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. USE TEMPORARY TRAFFIC SIGNALS WITH MICROWAVE OR VIDEO DETECTION WHEN SHOWN ON PLANS FOR MAINTAINING DRIVE ACCESS.

**S.R. 335
STAGE 1, PHASE 1**

CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC WITH THE USE OF A FLAGGER AND/OR LAW ENFORCEMENT OFFICER AND INSTALL TEMPORARY SIGNALS. SHIFT TRAFFIC TO THE WEST SIDE OF S.R. 335 AND CONSTRUCT PAVEMENT ALONG THE EAST SIDE OF S.R. 335 FROM STA. 3+50 TO STA. 17+00 AND THE NORTH SIDE OF C.R. 540 (BARKLOW ROAD) AS SHOWN ON SHEET 18. MAINTAIN ONE-LANE TWO-WAY TRAFFIC ON S.R. 335 FROM STA. 2+00 TO STA. 11+50 AND C.R. 540 WITH THE USE OF TEMPORARY TRAFFIC SIGNALS. INSTALL TEMPORARY TRAFFIC SIGNALS WITH MICROWAVE OR VIDEO DETECTION TO MAINTAIN ACCESS TO DRIVES EAST OF S.R. 335. CONSTRUCT PROPOSED DRIVES ALONG THE EAST SIDE.

STAGE 1, PHASE 2

SHIFT C.R. 540 (BARKLOW ROAD) TRAFFIC TO THE NORTH AND CONSTRUCT PAVEMENT ON THE SOUTH SIDE OF C.R. 540. MAINTAIN ONE-LANE TWO-WAY TRAFFIC ON C.R. 540 WITH THE USE OF TEMPORARY TRAFFIC SIGNALS. CONTINUE TO CONSTRUCT PAVEMENT ON THE EAST SIDE OF S.R. 335 AS SHOWN ON SHEET 19.

STAGE 2

UPON COMPLETION OF STAGE 1, INSTALL TEMPORARY SIGNALS AND SHIFT TRAFFIC TO THE EAST SIDE AS SHOWN ON SHEET 20. MAINTAIN ONE-LANE TWO-WAY TRAFFIC FROM STA. 2+00 TO STA. 11+50 WITH THE USE OF TEMPORARY TRAFFIC SIGNALS. CONSTRUCT PAVEMENT ON THE WEST SIDE FROM STA. 3+50 TO STA. 14+50 ALONG S.R. 335. CONSTRUCT T.R. 234 FROM STA. 36+40 TO STA. 38+21.

STAGE 3

UPON COMPLETION OF STAGE 2, INSTALL TEMPORARY TRAFFIC SIGNALS, OPEN PROPOSED 12 FOOT LANES FROM ON S.R. 335 FROM STA. 3+50 TO STA. 13+00 AND SHIFT TRAFFIC WEST FROM STA. 13+00 TO STA. 24+00 AS SHOWN ON SHEET 21. MAINTAIN ONE-LANE TWO-WAY TRAFFIC WITH THE USE OF TEMPORARY TRAFFIC SIGNALS. CONSTRUCT PAVEMENT ON THE EAST SIDE OF S.R. 335 FROM STA. 17+00 TO STA. 23+19 AND CONSTRUCT PROPOSED DRIVE.

STAGE 4

UPON COMPLETION OF STAGE 3, SHIFT TRAFFIC EAST ON S.R. 335 FROM STA. 13+00 TO STA. 25+00 MAINTAINING ONE-LANE TWO-WAY TRAFFIC WITH THE USE OF TEMPORARY TRAFFIC SIGNALS AS SHOWN ON SHEET 22. CONSTRUCT PAVEMENT ON THE WEST SIDE OF S.R. 335 FROM STA. 14+50 TO STA. 23+19 AND CONSTRUCT PROPOSED DRIVE. CONSTRUCT THE REMAINING PORTION OF C.R. 540. MAINTAIN TRAFFIC ON C.R. 540 WITH THE USE OF FLAGGERS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS 18-22 AND SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS ON S.R. 335 FOR STAGE 1, SIGNAL PHASE 3 SHALL BE FOR C.R. 540 AND PHASE 4 FOR DRIVEWAYS:

	PHASE *			
	1	2	3	4
INITIAL	20	20	7	7
VEHICLE	4	4	3	3
MAXIMUM	30	30	30	10
YELLOW	5	5	3	3
ALL RED	20	20	30	15
RECALL	ON	ON	OFF	OFF

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS ON S.R. 335 FOR STAGE 2, SIGNAL PHASE 3 SHALL BE FOR C.R. 540 AND PHASE 4 FOR DRIVEWAYS:

	PHASE *			
	1	2	3	4
INITIAL	20	20	7	7
VEHICLE	4	4	3	3
MAXIMUM	30	30	30	10
YELLOW	5	5	3	3
ALL RED	20	20	20	15
RECALL	ON	ON	OFF	OFF

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS ON S.R. 335 FOR STAGES 3 AND 4, SIGNAL PHASE 3 SHALL BE FOR DRIVEWAYS:

	PHASE *		
	1	2	3
INITIAL	20	20	7
VEHICLE	4	4	3
MAXIMUM	30	30	10
YELLOW	5	5	3
ALL RED	20	20	15
RECALL	ON	ON	OFF

*PHASES AS SHOWN ON SCD MT-96.20 FOR ACTUATED CONTROL +/- PROVIDE TIMING FOR THE SIGNAL LOCATION UNDER CONSIDERATION.

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

OVERHEAD-MOUNTED WORK ZONE SIGNALS

SIGNALS SHALL BE OVERHEAD MOUNTED IN ACCORDANCE WITH THE DETAILS SHOWN ON SCD MT-96.20.

ITEM 614. WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS. THE APPROVED LIST IS AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 18 M. GAL

ITEM 614. BARRIER REFLECTORS AND/OR OBJECT MARKERS

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE 50 FEET. AN ESTIMATED QUANTITY OF 114 EACH OF ITEM 614 BARRIER REFLECTOR, TYPE B AND 114 EACH OF ITEM 614 OBJECT MARKER, TWO-WAY HAVE BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EMBANKMENT FOR MAINTAINING TRAFFIC 618 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/ DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 20 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

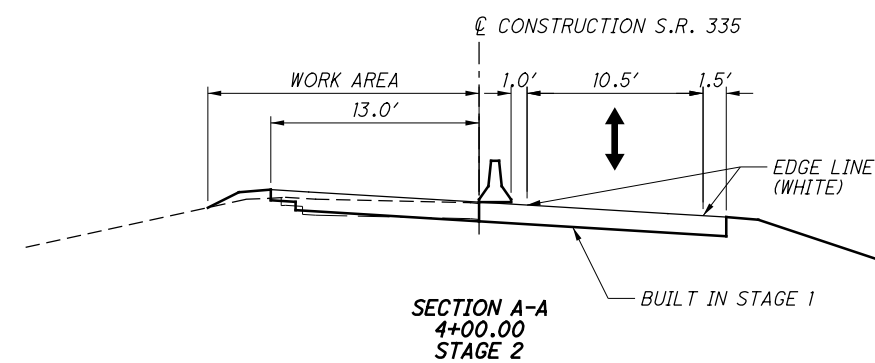
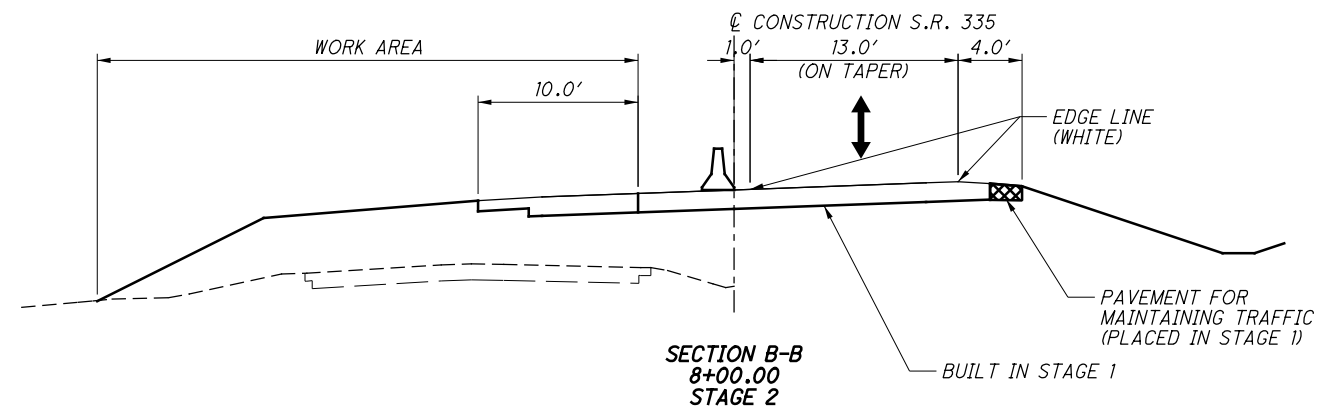
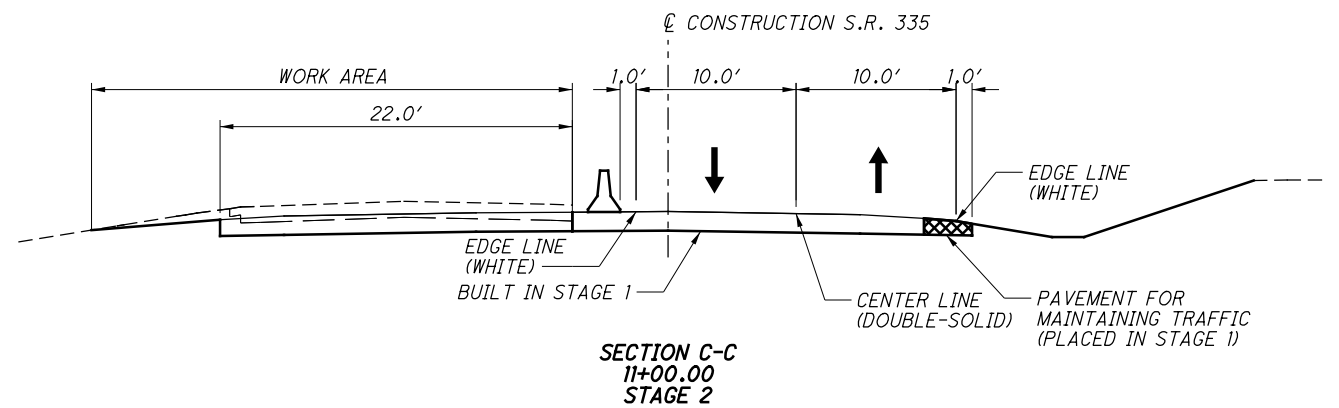
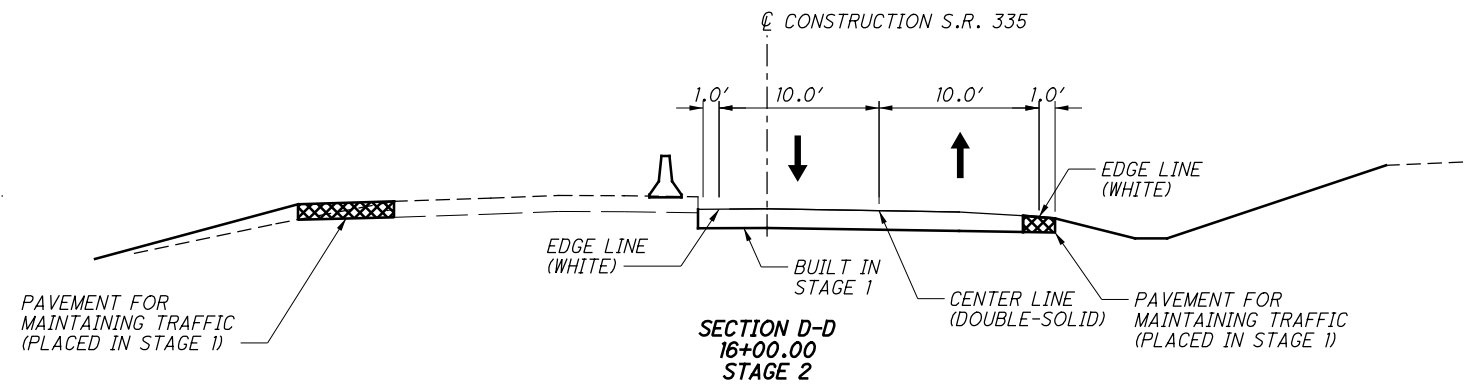
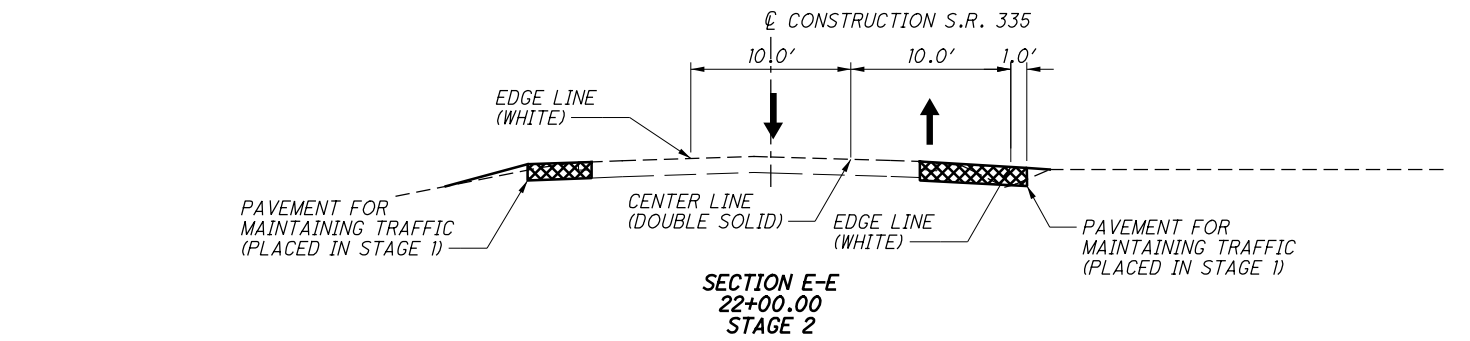
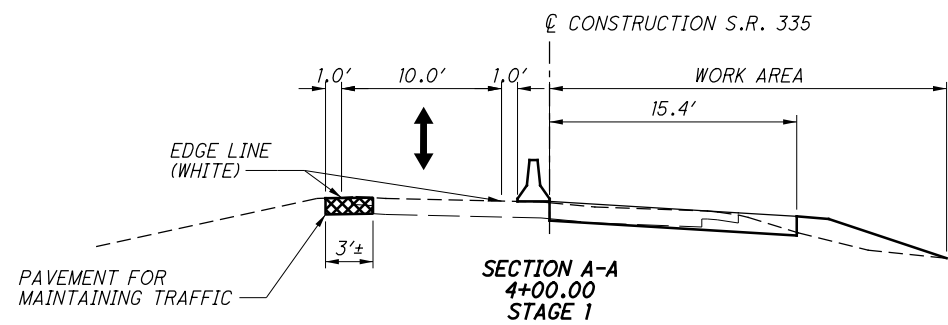
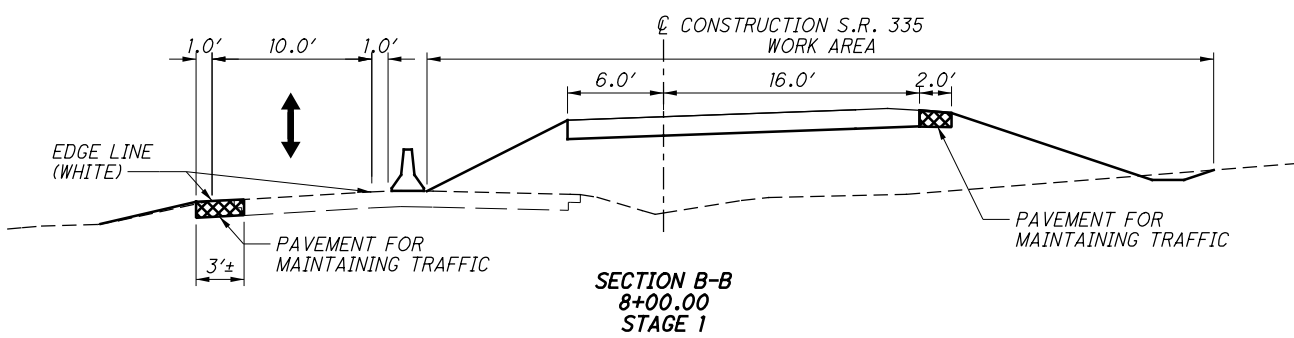
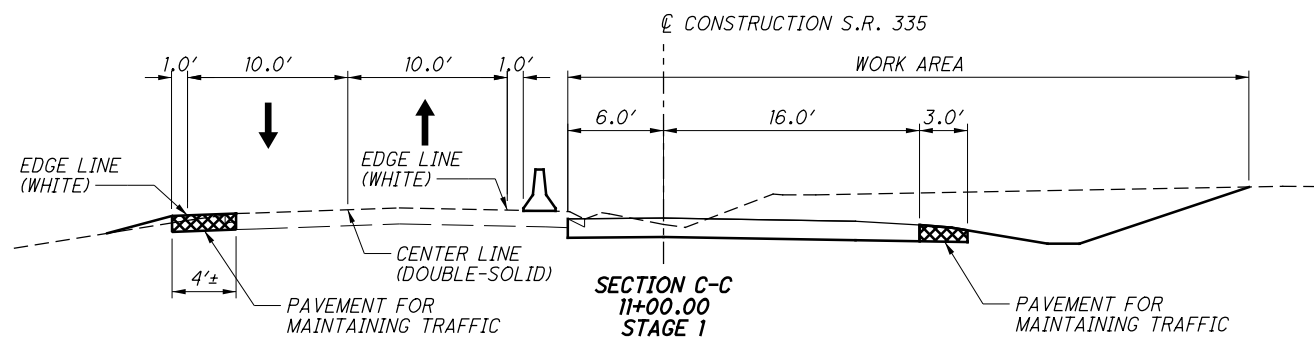
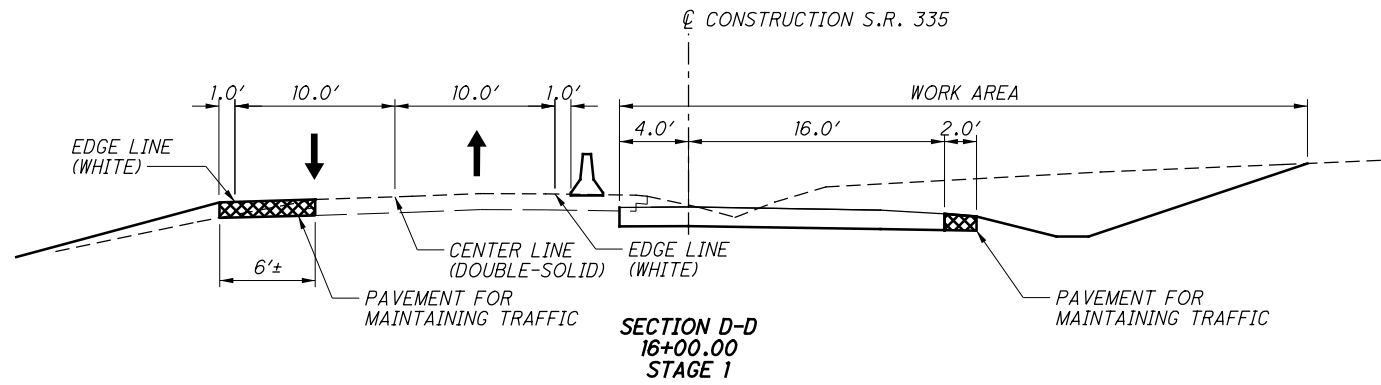
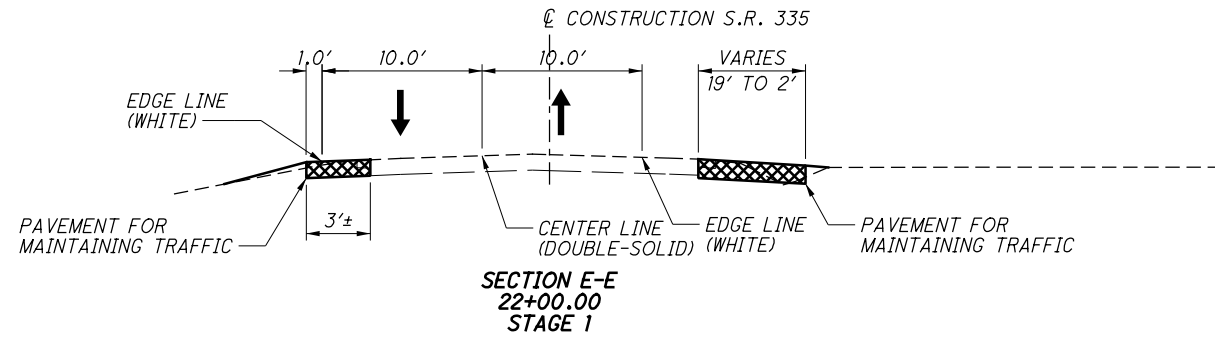
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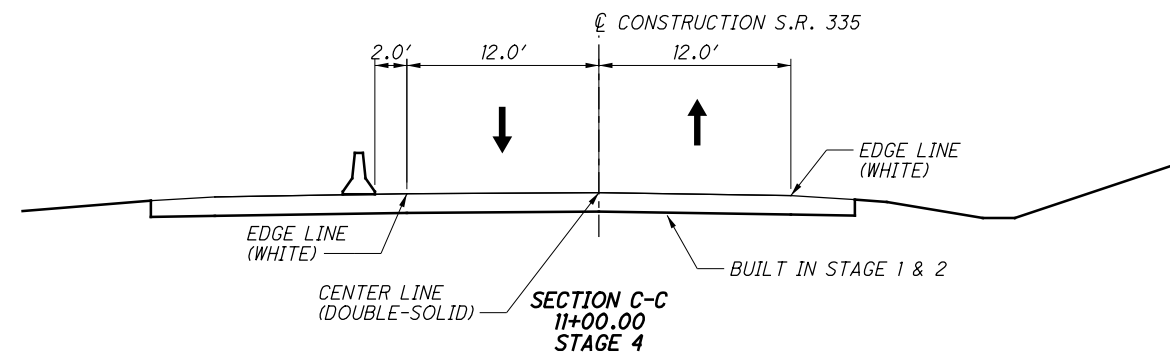
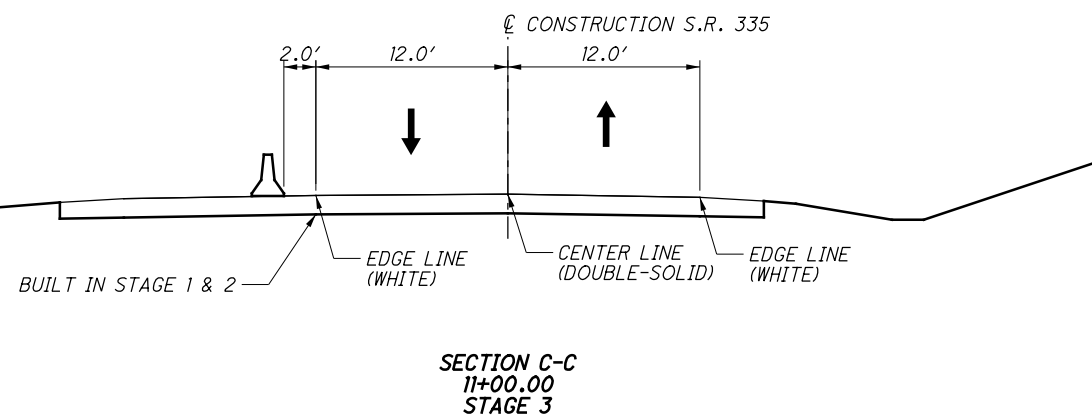
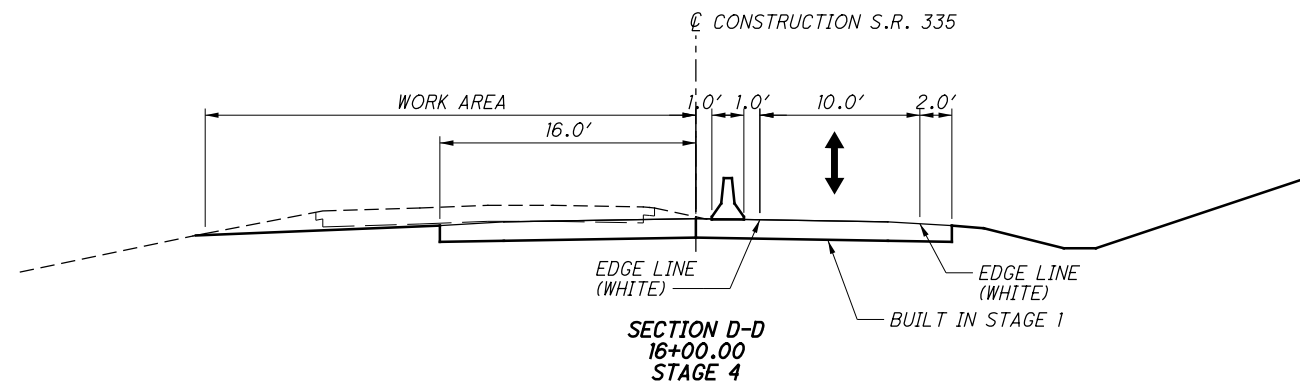
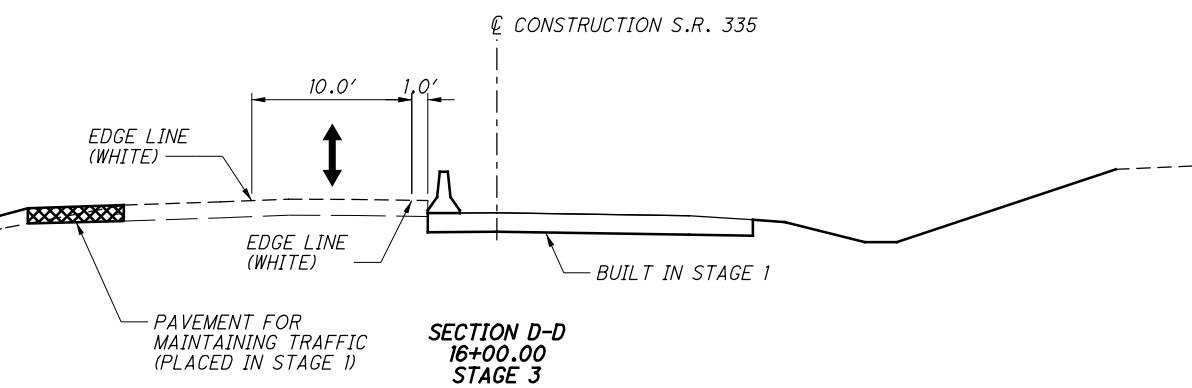
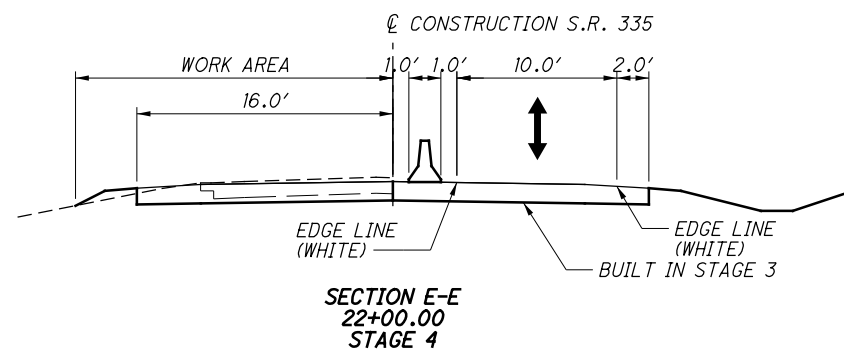
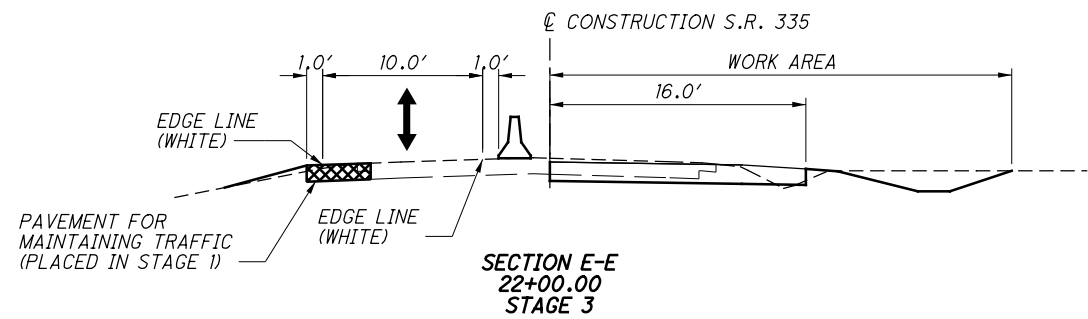
MAINTENANCE OF TRAFFIC GENERAL NOTES

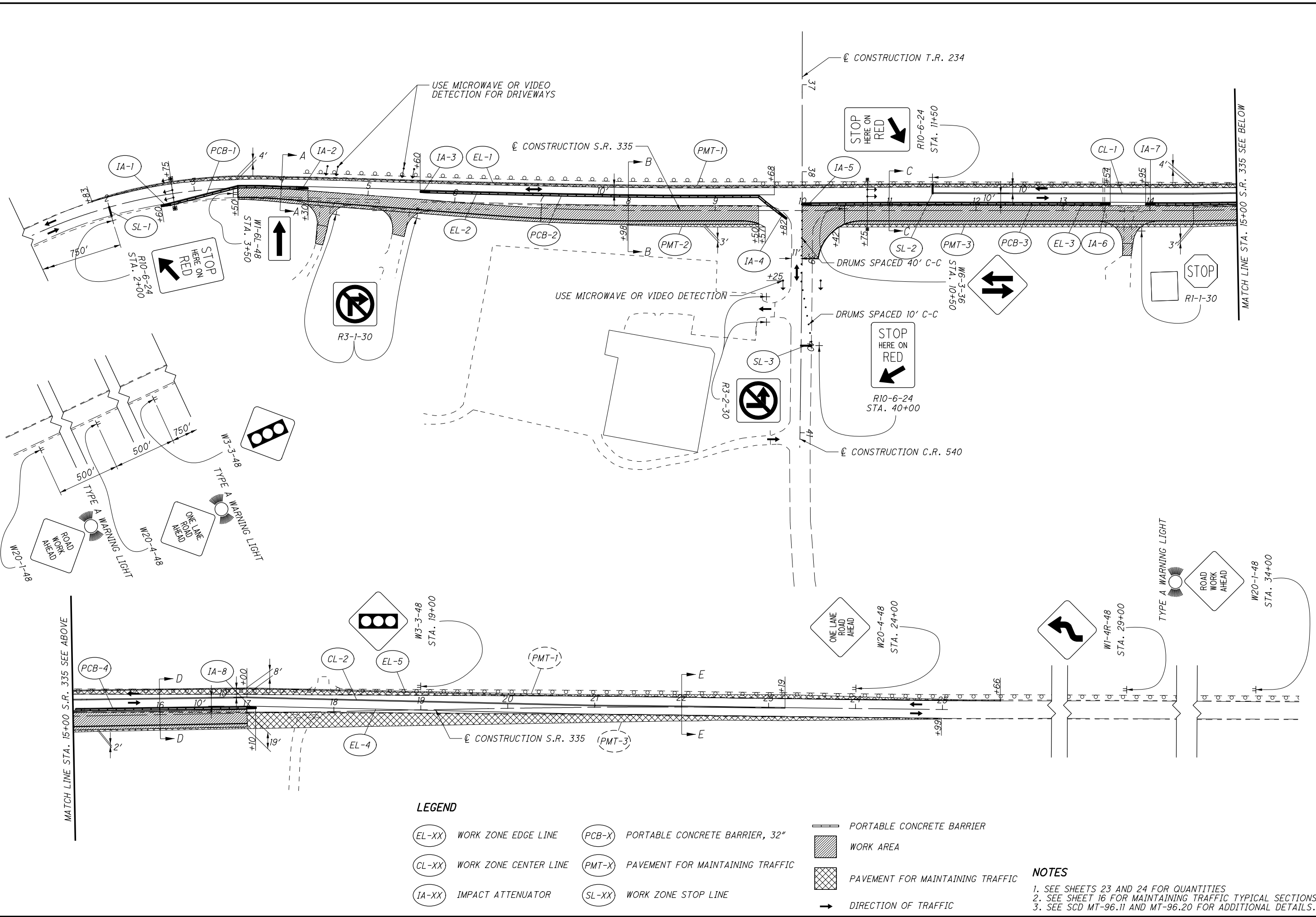
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- | | | | |
|---------|-----------------------|---------------------|----------------------------------|
| (EL-XX) | WORK ZONE EDGE LINE | (PCB-X) | PORTABLE CONCRETE BARRIER, 32" |
| (CL-XX) | WORK ZONE CENTER LINE | (PMT-X) | PAVEMENT FOR MAINTAINING TRAFFIC |
| (IA-XX) | IMPACT ATTENUATOR | (SL-XX) | WORK ZONE STOP LINE |
| | | [Hatched Box] | WORK AREA |
| | | [Cross-hatched Box] | PAVEMENT FOR MAINTAINING TRAFFIC |
| | | [Arrow] | DIRECTION OF TRAFFIC |

NOTES

- SEE SHEETS 23 AND 24 FOR QUANTITIES
- SEE SHEET 16 FOR MAINTAINING TRAFFIC TYPICAL SECTIONS.
- SEE SCD MT-96.11 AND MT-96.20 FOR ADDITIONAL DETAILS.

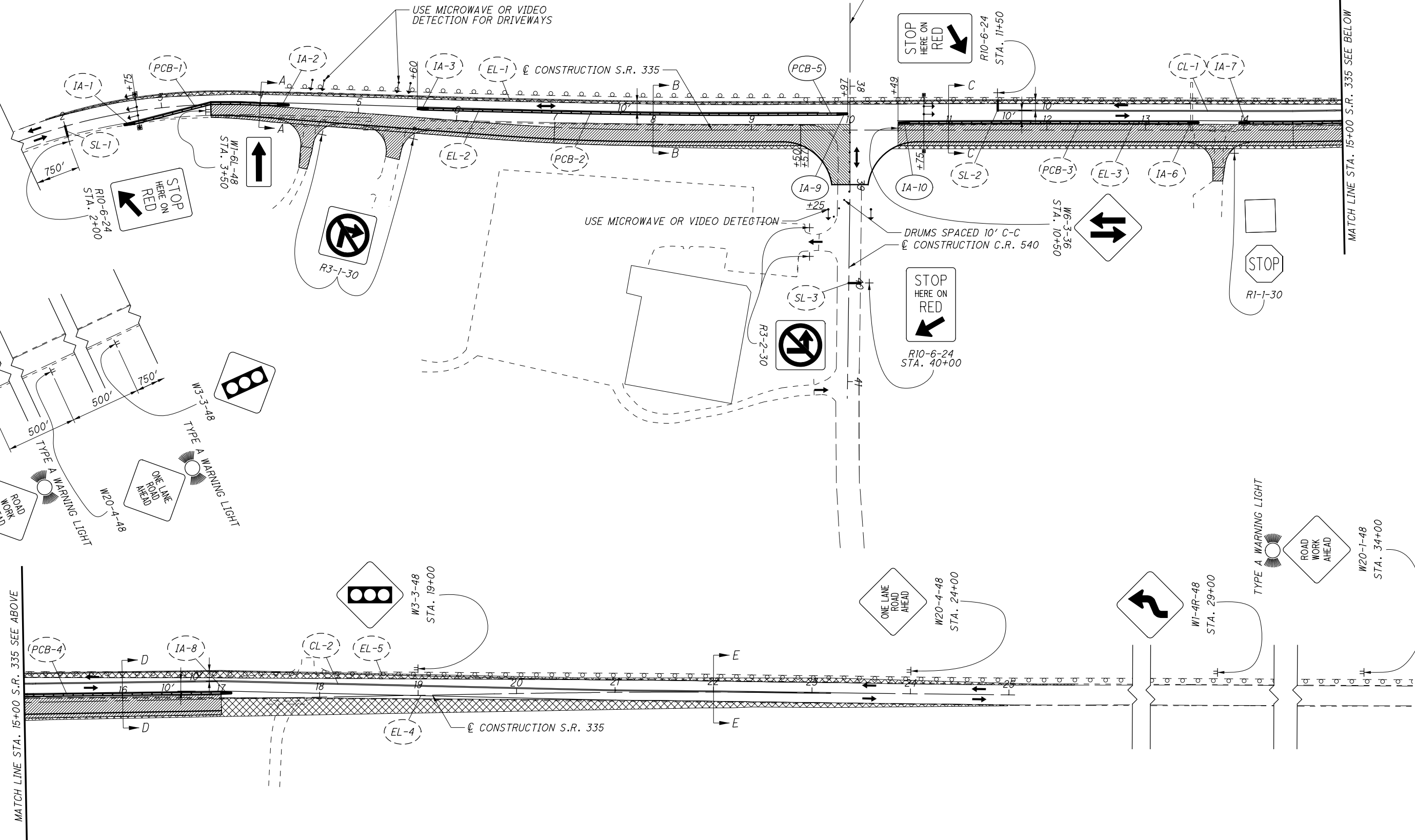
MAINTENANCE OF TRAFFIC PLAN - S.R. 335
STAGE 1, PHASE 1

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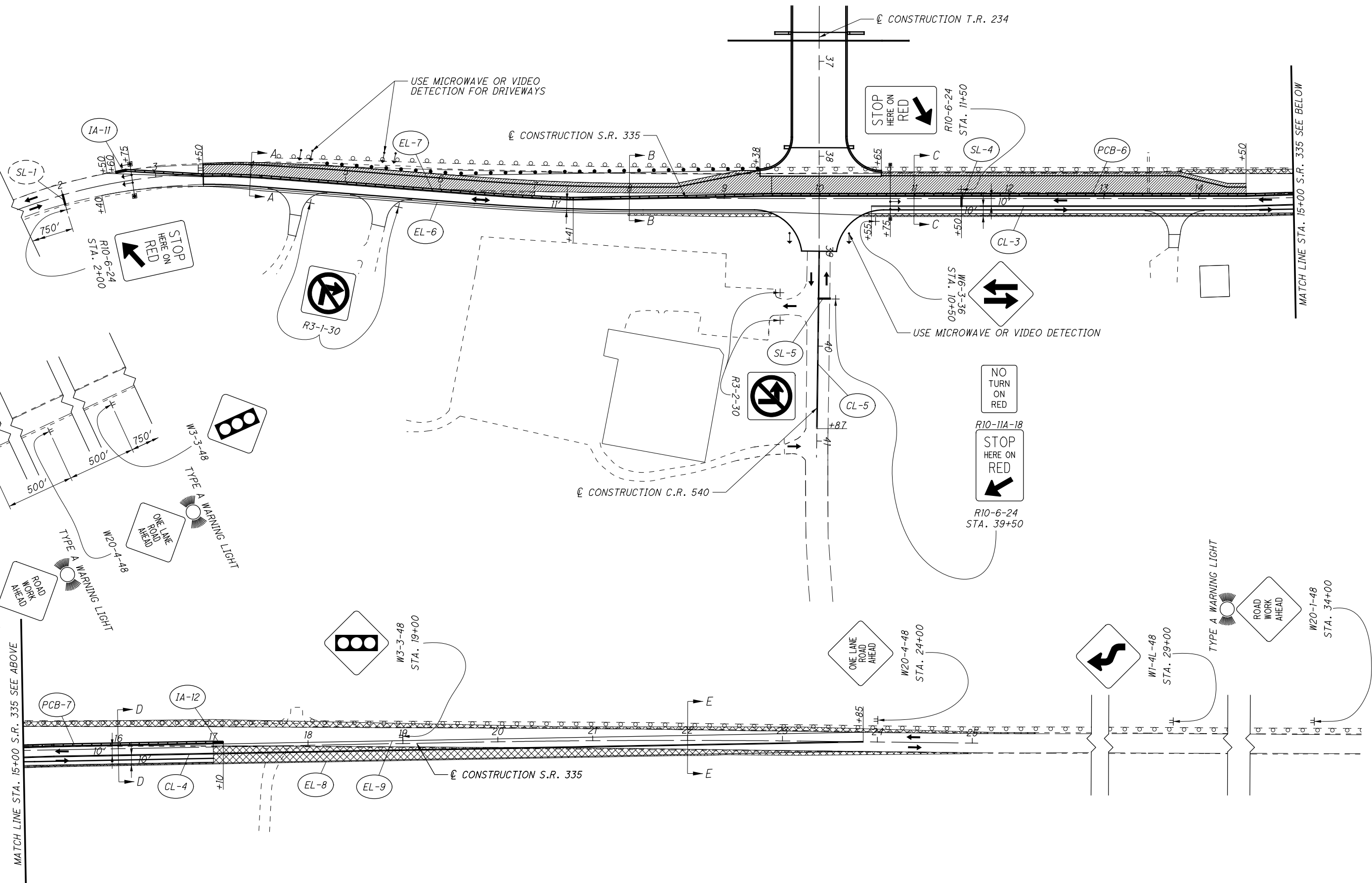


- NOTES**
- SEE SHEET 18 FOR LEGEND
 - SEE SHEETS 23 AND 24 FOR QUANTITIES
 - SEE SHEET 16 FOR MAINTAINING TRAFFIC TYPICAL SECTIONS.
 - SEE SCD MT-96.11 AND MT-96.20 FOR ADDITIONAL DETAILS.

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**MAINTENANCE OF TRAFFIC PLAN - S.R. 335
STAGE 1, PHASE 2**



NOTES

1. SEE SHEET 18 FOR LEGEND
2. SEE SHEETS 23 AND 24 FOR QUANTITIES
3. SEE SHEET 16 FOR MAINTAINING TRAFFIC TYPICAL SECTIONS.
4. SEE SCD MT-96.11 AND MT-96.20 FOR ADDITIONAL DETAILS.
5. SEE BRIDGE SHEETS FOR BRIDGE CONSTRUCTION PHASING.



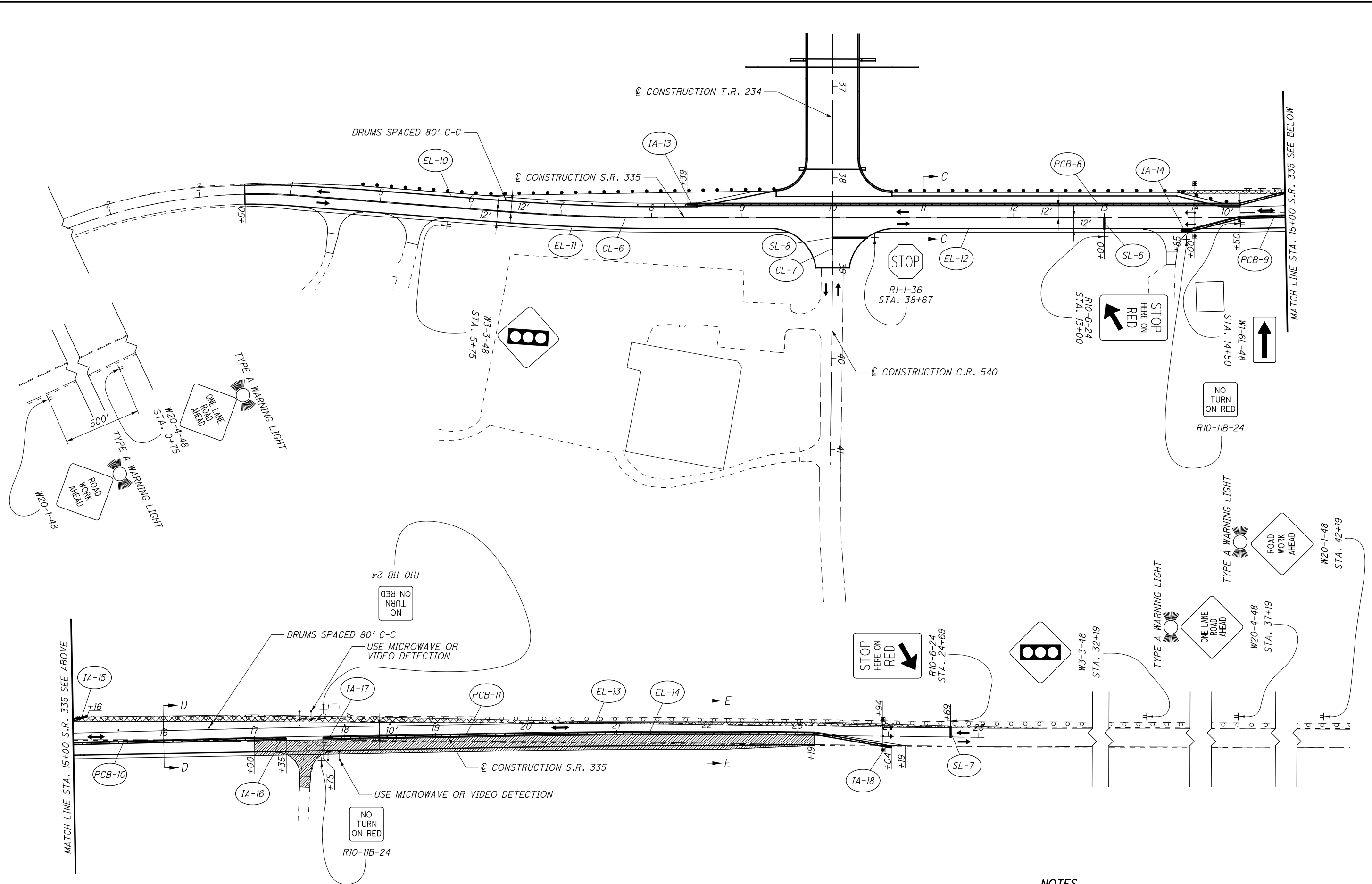


 HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - S.R. 335
STAGE 2**

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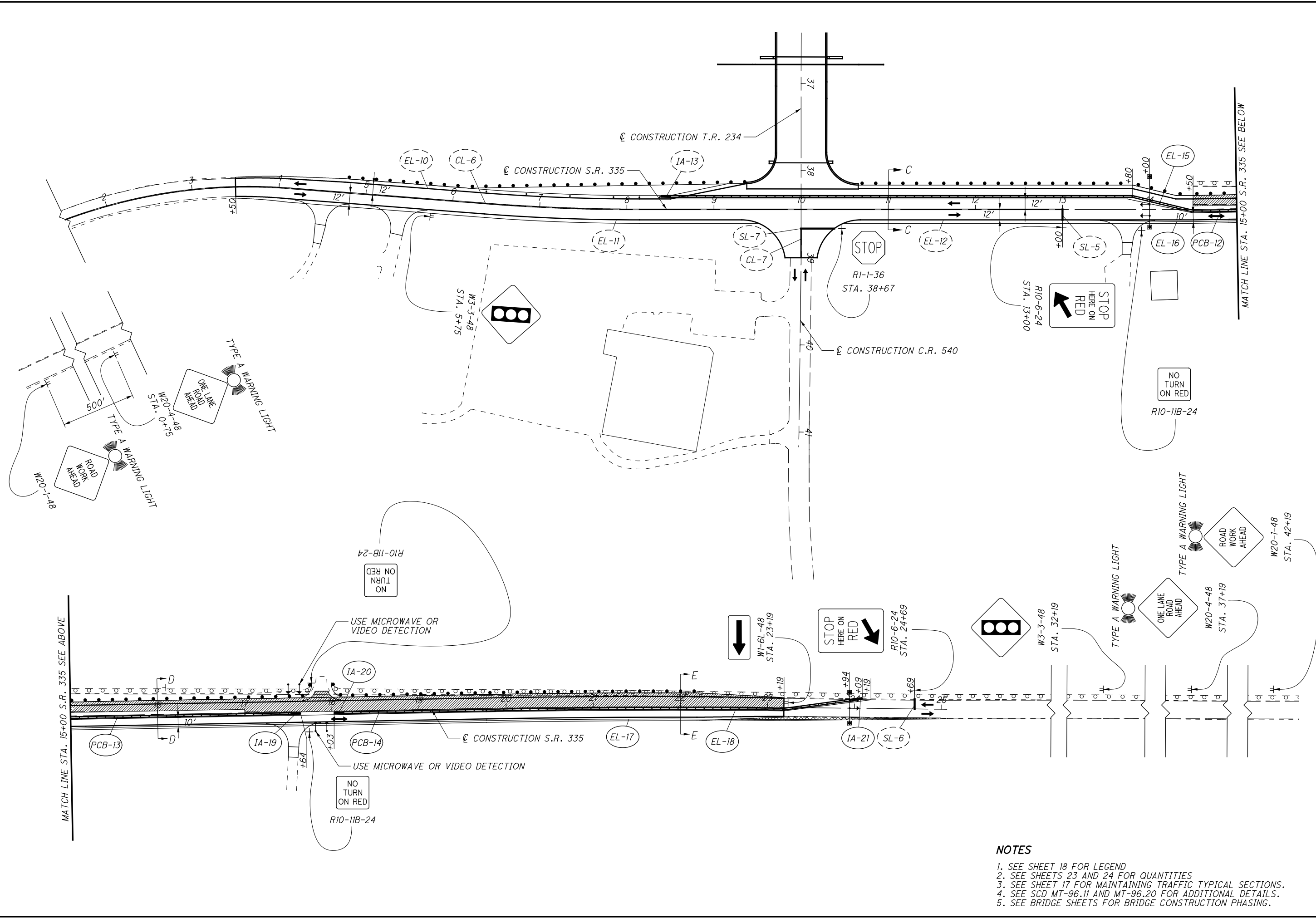
1. SEE SHEET 18 FOR LEGEND
2. SEE SHEETS 23 AND 24 FOR QUANTITIES
3. SEE SHEET 17 FOR MAINTAINING TRAFFIC TYPICAL SECTIONS.
4. SEE SCD MT-96.11 AND MT-96.20 FOR ADDITIONAL DETAILS.
5. SEE BRIDGE SHEETS FOR BRIDGE CONSTRUCTION PHASING.



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**MAINTENANCE OF TRAFFIC PLAN - S.R. 335
STAGE 3**

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- NOTES**
1. SEE SHEET 18 FOR LEGEND
 2. SEE SHEETS 23 AND 24 FOR QUANTITIES
 3. SEE SHEET 17 FOR MAINTAINING TRAFFIC TYPICAL SECTIONS.
 4. SEE SCD MT-96.11 AND MT-96.20 FOR ADDITIONAL DETAILS.
 5. SEE BRIDGE SHEETS FOR BRIDGE CONSTRUCTION PHASING.

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**MAINTENANCE OF TRAFFIC PLAN - S.R. 335
STAGE 4**

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REF NO.	SHEET NO.	STATION		SIDE	614				615	622									
		FROM	TO		WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE B	OBJECT MARKER, TWO-WAY	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	PORTABLE CONCRETE BARRIER, 32"									
					EACH	EACH	EACH	FT	SQ YD	FT									
IA-16	21	17+25	17+35	LT.	1														
IA-17	21	17+75	17+85	LT.	1														
IA-18	21	23+93	24+04	RT.	1														
IA-19	22	17+54	17+64	LT.	1														
IA-20	22	18+03	18+13	LT.	1														
IA-21	22	23+99	24+09	LT.	1														
PCB-1	18	2+70	4+20	LT./RT.		4	4			150									
PCB-2	18	5+70	9+73	LT./RT.		9	9			410									
PCB-3	18	10+10	13+44	LT.		7	7			330									
PCB-4	18	14+05	17+00	LT.		7	7			300									
PCB-5	19	9+50	9+87	LT.		2	2			40									
PCB-6	20	2+70	15+00	LT.		26	26			1230									
PCB-7	20	15+00	17+00	LT.		5	5			200									
PCB-8	21	8+49	15+05	LT.		14	14			660									
PCB-9	21	13+95	15+00	LT./RT.		3	3			107									
PCB-10	21	15+00	17+25	LT./RT.		4	4			223									
PCB-11	21	17+85	23+93	LT./RT.		13	13			610									
PCB-12	22	13+80	15+00	LT.		2	2			122									
PCB-13	22	15+00	17+54	LT.		6	6			253									
PCB-14	22	18+13	23+99	LT.		12	12			585									
PMT-1	18	1+83	25+66	LT.					993										
PMT-2	18	7+98	9+57	RT.					43										
PMT-3	18	10+42	24+99	RT.					1055										
SL-1	18	2+00	-	RT.				10											
SL-2	18	11+50	-	LT.				10											
SL-3	18	40+00	-	LT.				12											
SL-4	20	11+50	-	RT.				10											
SL-5	20	39+50	-	LT.				12											
SL-6	21	13+00	-	RT.				12											
SL-7	21	24+69	-	LT.				11											
SL-8	21	38+67	-	LT.				38											
TOTALS CARRIED TO GENERAL SUMMARY					6	114	114	115	2091		5220								

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MAINTENANCE OF TRAFFIC ESTIMATED QUANTITIES	
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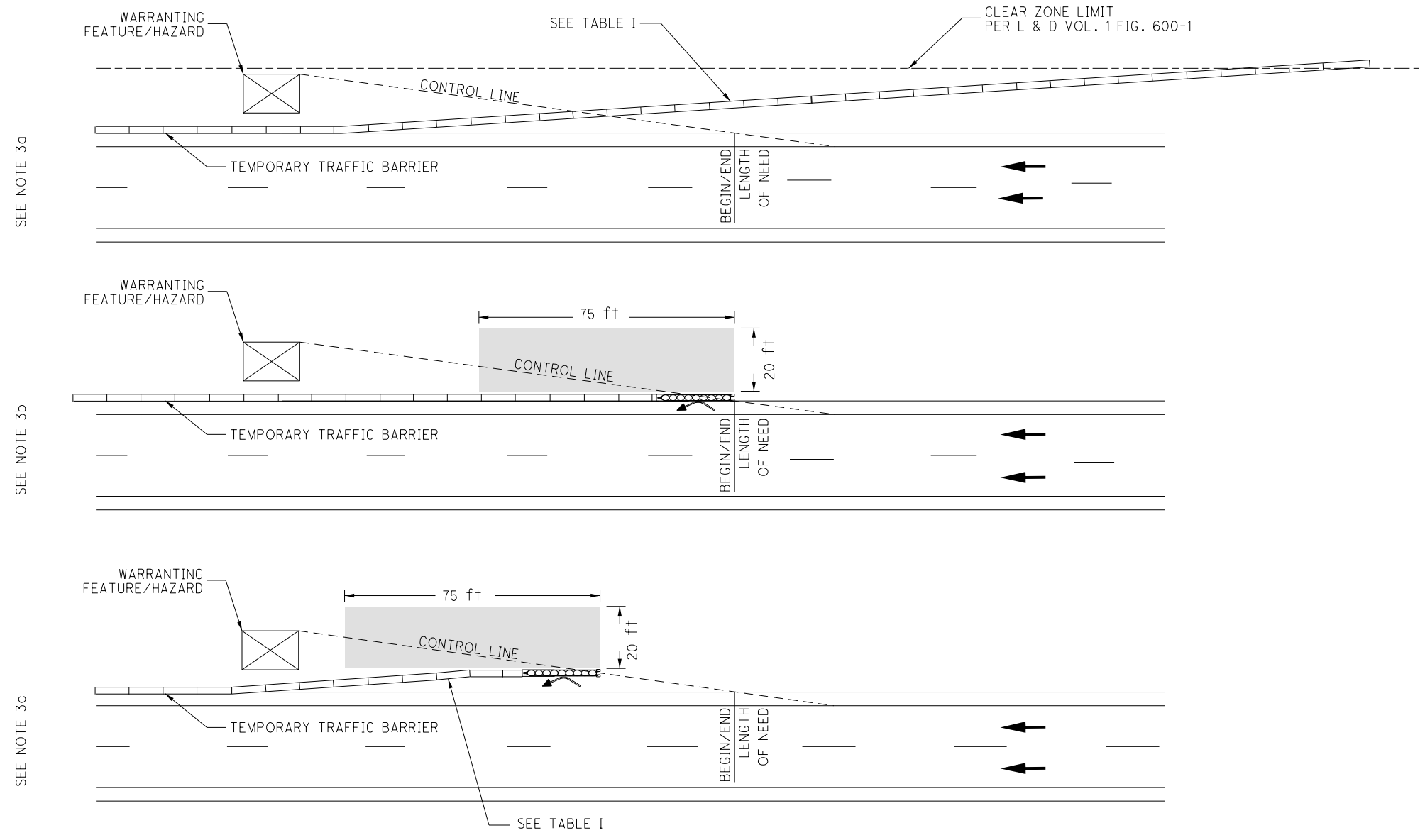
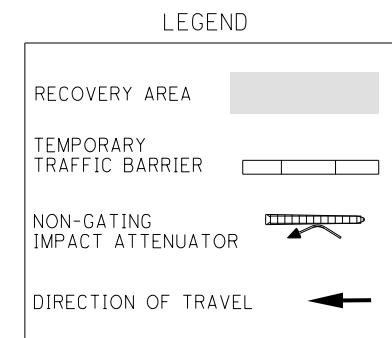


TABLE I

SPEED LIMIT (MPH)	PCB FLARE RATE MINIMUM
25	8:1
30	8:1
35	10:1
40	11:1
45	13:1
50	14:1
55	16:1
60	17:1
65	18:1

NOTES

- Attenuators shall be installed per manufacturers' specifications.
- Recovery area shall have slopes 3:1 or flatter and be free of workers, hazards, equipment, drop-offs, and material storage.
- The Contractor shall select one of the three acceptable options for terminating temporary traffic barrier:
 - Terminate flared section of temporary traffic barrier outside clear zone with tapered end only where cross slopes are 10:1 or flatter.
 - Terminate temporary traffic barrier with an impact attenuator. A non-gating impact attenuator may be included in the length of need measurement.
 - Flare a section of temporary traffic barrier to the length of need control line and terminate with an impact attenuator. A non-gating impact attenuator may be included in the flared section of temporary traffic barrier.
- The Contractor shall submit documentation, 2 weeks prior to implementation, to the Engineer for acceptance when:
 - Deviating from the three acceptable options for terminating temporary traffic barrier.
Documentation shall explain any deviations and verify that the recovery area fulfills the manufacturers' specifications and note 2.
 - Using a gating impact attenuator in lieu of a non-gating impact attenuator.
The gating impact attenuator length shall not be included as part of the length of need or recovery area requirements. Additional temporary traffic barrier will need to be added. The additional cost for the additional barrier required for a gating impact attenuator shall be included in the cost of the gating impact attenuator.
Documentation shall verify that the extended recovery area fulfills the manufacturers' specifications and note 2.
- Gating impact attenuators shall not be used in gore locations or within the clear zone between bi-directional traffic.



USER: ldecnel PLOT DATE: 2/21/2012 11:29:35 AM REVISION DATE: 2/21/2012
 FILE: \\HQR.C\PROJECTS\00000000045878_7\94599003.dgn MODEL: Sheet

SHEET NUMBER													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
							14	15	23	24	77							
													STRUCTURES (20' AND OVER) CONTINUED					
											424		840	25010	424	FT	6" DRAINAGE PIPE, PERFORATED	
											20		840	25020	20	FT	6" DRAINAGE PIPE, NON-PERFORATED	
											197		840	26000	197	FT	CONCRETE COPING	
											5		840	27000	5	DAY	ON-SITE ASSISTANCE	
											LUMP		840	28000	LUMP		SGB INSPECTION AND COMPACTION TESTING	
											304		898	10201	304	CU YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN	75
											495		898	10709	495	SO YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN	75
											52		898	11000	52	CU YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (PARAPET)	
											172		898	20150	172	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (ABUTMENT)	
											51		898	20300	51	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING)	
											105		898	20301	105	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING), AS PER PLAN	75
													MAINTENANCE OF TRAFFIC					
								20					614	11110	20	HOURLY	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
								15	6				614	12338	21	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	
									114				614	13300	114	EACH	BARRIER REFLECTOR, TYPE B	
									114				614	13360	114	EACH	OBJECT MARKER, TWO WAY	
								0.71					614	21200	0.71	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
								2.86					614	22200	2.86	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	
									115				614	26400	115	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
													615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC	
									2091				615	25000	2091	SO YD	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
						18							616	10000	18	M GAL	WATER	
											5220		622	40020	5220	FT	PORTABLE CONCRETE BARRIER, 32"	

CALCULATED LBD CHECKED KAG
GENERAL SUMMARY
SCI-823-6.81
 28
 111

USER: cwhhbj; PLOT DATE: 9/15/2011 2:08:40 PM REVISION DATE: 9/15/2011
 FILE: \\hdw-cl\p0000000045878 /945g001.dgn MODEL Sheet

REF. NO.	SHEET NO.	STATION		SIDE	202	202	202	202	202	202	202	202	604	606	606	606	606	606				
		FROM	TO		HEADWALL REMOVED EACH	PIPE REMOVED, 24" AND UNDER FT	GUARDRAIL REMOVED FT	CATCH BASIN REMOVED EACH	MONUMENT ASSEMBLY REMOVED EACH	SPECIAL - PIPE CLEANOUT FT	FENCE REMOVED FT	REMOVAL MISC.: POST EACH	MONUMENT ASSEMBLY EACH	GUARDRAIL, TYPE 5 FT	FLARED END SECTION EACH	ANCHOR ASSEMBLY, TYPE T EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH				
		SR335																				
M-1	35		0+93.40	CL									1									
G-1	35	3+50.00	9+33.36	LT										587.5							1	
R-1	35	3+50.00	17+75.72	LT			1435															
R-2		NOT USED																				
M-2	35		4+11.35	CL									1									
R-3	35	4+34.44	4+65.78	RT		32																
R-4	35	5+06.28	5+58.17	RT		53		1														
R-5	35	5+58.17	6+46.38	RT		89																
M-3	35		6+37.50	CL									1									
M-4	35		8+14.51	CL									1									
R-6	35		9+01.47	RT					1													
M-5	35		10+00.00	CL									1									
R-7	35		10+62.57	RT										1								
G-2	35	10+69.69	17+77.19	LT																		
R-8	35	11+00.65	13+22.04	RT						295				712.5	1	1	1					
P-1	37		13+46.91	LT							50											
R-9	37	13+48.92	13+49.71	RT		21																
R-10	37	13+65.33	13+92.43	RT	1	27																
M-6	37		14+50.00	CL									1									
R-11	37	14+55.47	17+45.17	RT						361												
R-12	37	17+46.46	17+87.44	RT		41																
G-3	37	18+00.01	23+18.82	LT																		
R-13	37	18+02.21	23+18.82	LT			519							525.0	1	1						
M-7	37		19+77.32	CL									1									
M-8	37		23+18.82	CL									1									
TOTALS CARRIED TO GENERAL SUMMARY					1	263	1954	1	1	50	656	1	8	1825	2	2	1	1				

CALCULATED LBD CHECKED KAG	ROADWAY SUBSUMMARY	SCI-823-6.81	29 111
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EARTHWORK			
SHEET	203		659
	EXC.	EMB.	SEEDING & MULCHING
	CU YD	CU YD	SQ YD
TR234/ CR540			
40	167	190	730
41	238	0	134
SUBTOTALS	405	190	864
SR335			
42	0	0	23
43	203	121	524
44	191	832	619
45	110	881	503
46	85	916	451
47	73	521	170
48	412	37	317
49	528	18	441
50	175	43	298
51	549	35	652
52	740	2	622
53	566	17	578
54	469	10	398
55	369	0	294
56	269	7	287
57	91	9	18
SUBTOTALS	4830	3449	6195
TOTALS CARRIED TO GENERAL SUMMARY	5235	3639	7059

ITEM 204 CALCULATIONS					
STATION	END AREA	WIDTH	204		
	SQ FT	FT	EXC. OF SUBGRADE	GRAN. MAT. TYPE C	GEOTEXTILE FABRIC
			CU YD	CU YD	SQ YD
SR335					
9+50	130	52			
10+00	120	40	231	231	256
10+50	151	51	251	251	253
11+00	141	48	270	270	275
11+50	141	48	261	261	267
12+00	139	48	259	259	267
12+50	138	48	256	256	267
13+00	137	48	255	255	267
13+50	84	47	205	205	264
14+00	126	43	194	194	250
14+50	105	36	214	214	219
15+00	105	36	194	194	200
15+50	105	36	194	194	200
16+00	105	36	194	194	200
16+50	105	36	194	194	200
17+00	105	36	194	194	200
17+50	105	36	194	194	200
18+00	105	36	194	194	200
18+50	105	36	194	194	200
19+00	105	36	194	194	200
19+50	105	36	194	194	200
20+00	105	36	194	194	200
20+50	105	36	194	194	200
21+00	105	36	194	194	200
21+50	105	36	194	194	200
22+00	105	36	194	194	200
22+50	96	33	186	186	192
23+00	82	28	165	165	169
23+18.82	78	25	56	56	55
TOTALS CARRIED TO GENERAL SUMMARY			5721	5721	6000

SEEDING CALCULATIONS		
659, SOIL ANALYSIS TEST	2	EACH
659, TOPSOIL	784	CU. YD.
659, SEEDING & MULCHING	7059	SQ. YD.
659, REPAIR SEEDING & MULCHING	353	SQ. YD.
659, INTER-SEEDING	353	SQ. YD.
659, COMMERCIAL FERTILIZER	0.98	TON
659, LIME	0.16	ACRE
659, WATER	39	M. GAL.
TOTALS CARRIED TO GENERAL SUMMARY		

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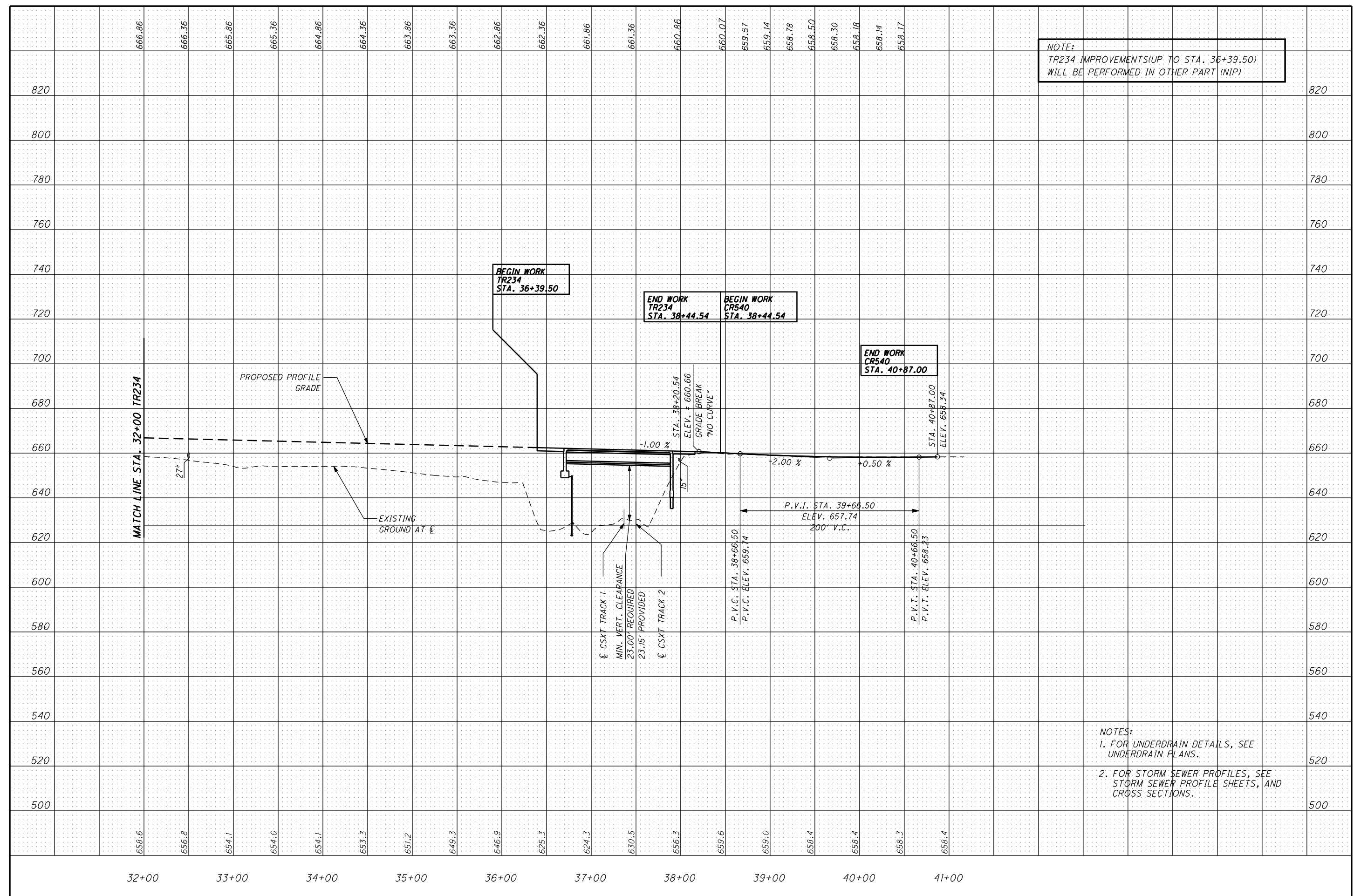
REF. NO.	SHEET NO.	STATION		SIDE	601	603	603	603	603	603	603	604	604	604	604	605	605	605	670	FOR INFORMATION ONLY		
		FROM	TO		TIED CONCRETE BLOCK MAT, TYPE I SQ YD	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS FT	12" CONDUIT, TYPE B FT	12" CONDUIT, TYPE D FT	18" CONDUIT, TYPE D FT	24" CONDUIT, TYPE B FT	24" CONDUIT, TYPE D FT	CATCH BASIN, NO. 3A EACH	CATCH BASIN, NO. 2-2B EACH	MANHOLE, NO. 1 EACH	PRECAST REINFORCED CONCRETE OUTLET EACH	6" UNCLASSIFIED PIPE UNDERDRAINS WITH FABRIC WRAP EACH	6" BASE PIPE UNDERDRAINS WITH FABRIC WRAP EACH	AGGREGATE DRAINS FT	VEGETATED SWALE EROSION PROTECTION MAT, TYPE B SQ YD	6" PLUG EACH	6" X 45° BEND EACH	6" X 45° WYE EACH
		SR335																				
D-1	35	4+32	4+69	RT				37					1									
D-2	35	4+69	5+58	RT				89														
E-1	35	5+58	9+00	RT																	292	
D-3	35	9+24	9+24	LT			12					1										
D-4	35	10+71	10+71	LT			10					1										
D-8	35	9+00	9+24	BOTH			53						1									
D-9	35	9+24	10+71	LT			147						1									
D-5	37	13+47		RT					25			1	1									
D-6	37	13+47	13+98.25	RT						51												
E-2	37	13+98.25	17+33.75	RT																	280	
D-7	37	17+33.75	17+76	RT				42														
E-3	37	17+76	20+50	RT																	230	
U-1	67	5+50	9+20	LT		4										367				1	1	1
U-2	67	5+50	7+95	RT	2	41							1		244					1	2	
U-3	67	8+00	9+00	RT	2	14							1	96						1	2	
U-4	66	9+03 (SR335)	40+27 (CR540)	BOTH	2	19							1	398						2	7	2
U-5	67	10+75.24	13+93	LT		8									312					1	1	1
U-6	67	10+54	13+93	RT	2	58							1		337					1	2	
U-7	67	13+93	18+95	LT		8									498					1	1	1
U-8	67	13+93	18+95	RT		8									498					1	1	1
U-9	67	19+00	23+18.82	LT		8									415					1	1	1
U-10	67	19+00	23+18.82	RT	2	53							1		415					1	2	
U-11	66	9+28		LT																		
U-12	67	13+40		LT																	27	
U-13	67	13+52		LT																	18	
																					18	
TOTALS CARRIED TO GENERAL SUMMARY					10	221	222	126	42	25	51	2	2	3	5	494	3086	63	802	11	20	7

DRAINAGE & EROSION CONTROL SUBSUMMARY	CALCULATED LBD CHECKED KAG
SCI-823-6.81	31 111

SHEET NO.	REFERENCE NO.	STATION	SIDE	DRIVE TYPE	DRIVE ANGLE	APRON LENGTH "L1"	DRIVEWAY LENGTH "L2"	WIDTH "W"	R1 (LEFT SIDE RADIUS OF DRIVE LOOKING FROM CL)	R2 (RIGHT SIDE RADIUS OF DRIVE LOOKING FROM CL)	CADD GENERATED SURFACE AREA	204	304	304	407	408	442	442	442	690	690			
					DEG.	FT.	FT.	FT.	FT.	FT.	SO FT	SO YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	EACH	EACH		
		SR 335																						
35	DW-1	4+55.00	RT	RES	83°15'00"	26.95	21.76	12	25	25	666	74												
35	DW-2	5+45.00	RT	RES	81°00'00"	31.39	0.00	14	25	25	564	63	11			26		5			1	1		
37	DW-3	13+74.50	RT	RES	90°00'00"	26.00	13.70	12	25	25	587	66			15						1	1		
37	DW-4	17+58.00	RT	RES	86°15'00"	28.09	11.94	12	25	25	595	67			15						1	1		
37	DW-5	17+88.50	LT	RES	90°00'00"	11.14	0.00	14.6	15	15	134	15			4						1	1		
		CR 450																						
35	DW-6	39+59.52	RT	COMM	90°05'06"	17.86	0.00	16.5	15	15	389	44		10	2	18	2			3	1	1		
SUBTOTALS												329	11	61	2	44	2	5	3	6	6			
TOTALS CARRIED TO GENERAL SUMMARY												329	72		2	44	7	3	6	6				

DRIVEWAY SUBSUMMARY	CALCULATED
	BEE
	CHECKED LBD

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NOTE:
 TR234 IMPROVEMENTS (UP TO STA. 36+39.50)
 WILL BE PERFORMED IN OTHER PART (NIP)

NOTES:
 1. FOR UNDERDRAIN DETAILS, SEE UNDERDRAIN PLANS.
 2. FOR STORM SEWER PROFILES, SEE STORM SEWER PROFILE SHEETS, AND CROSS SECTIONS.

CALCULATED
 LD/KAG
 CHECKED
 JMB

PROFILE - TOWNSHIP ROAD 234 AND CR 540
 STA. 32+00.00 TO STA. 40+82.50

SCI-823-6.81



PLAN - SR335
STA. 3+50 TO STA. 12+00

SCI-823-6.81

EROSION CONTROL LEGEND

- 670 VEGETATED SWALE EROSION PROTECTION TYPE B
- 836 TURF REINFORCING MAT
- 601 ROCK CHANNEL PROTECTION
- 601 TIED CONCRETE BLOCK MAT TYPE 2

NOTE: DITCH LININGS CHANGE AT EVEN 50' STATIONS

SR335 CURVE # 1

P.I. STA. = 2+56.17
 DELTA = 30° 12' 19" (RT)
 Dc = 9° 30' 00"
 (NDC Dc = 6° 00' 00" MAX)
 R = 603.11'
 T = 162.76'
 L = 317.95'
 E = 20.83'
 Emax. = 0.080
 DESIGN SPEED = 55 MPH

SR335 CURVE # 2

P.I. STA. = 7+26.05
 DELTA = 4° 25' 32" (LT)
 Dc = 2° 30' 00"
 R = 2,291.83'
 T = 88.55'
 L = 177.02'
 E = 1.71'
 Emax. = 0.053
 DESIGN SPEED = 55 MPH

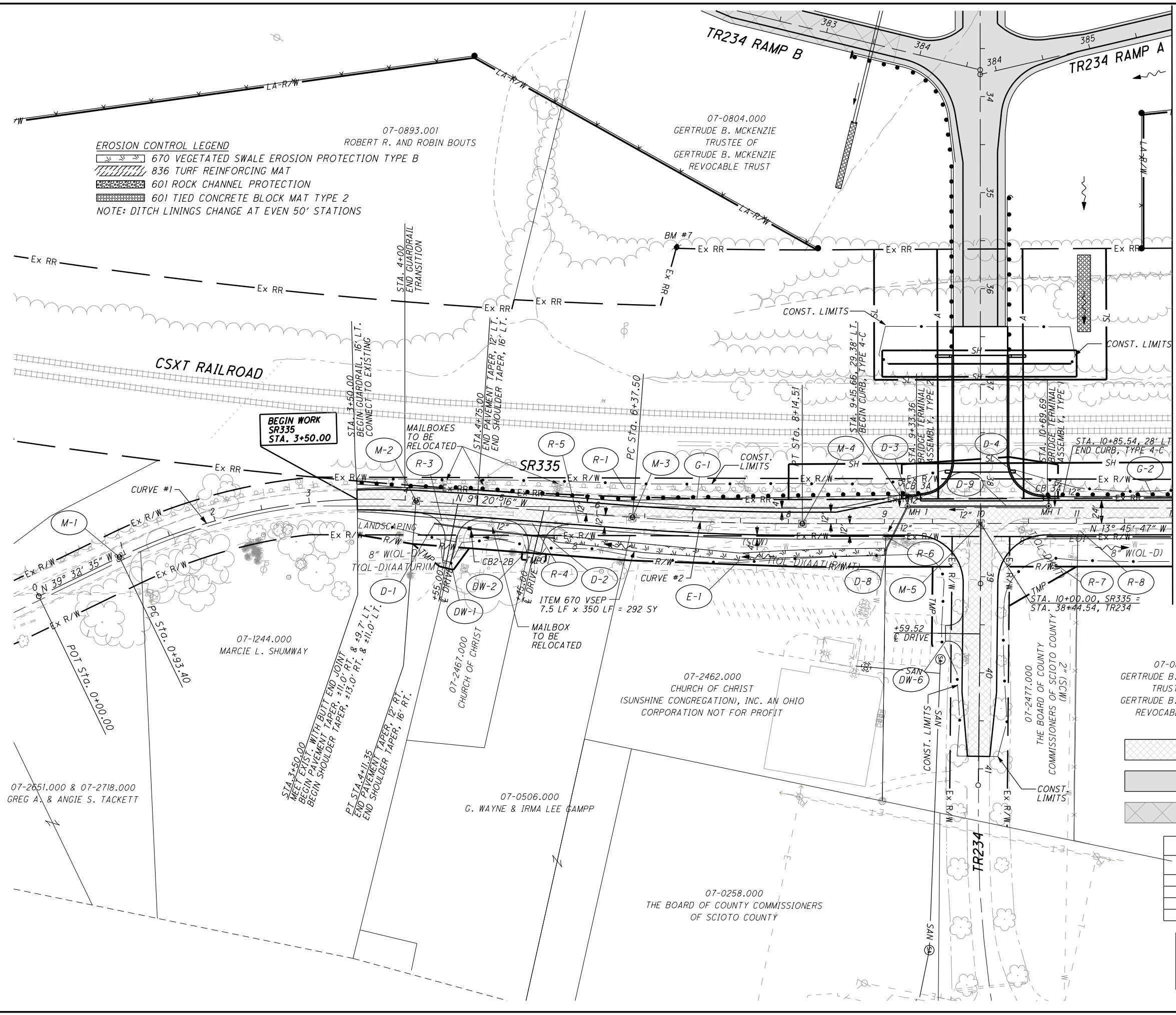
07-0804.000
 GERTRUDE B. MCKENZIE
 TRUSTEE OF
 GERTRUDE B. MCKENZIE
 REVOCABLE TRUST

LEGEND:

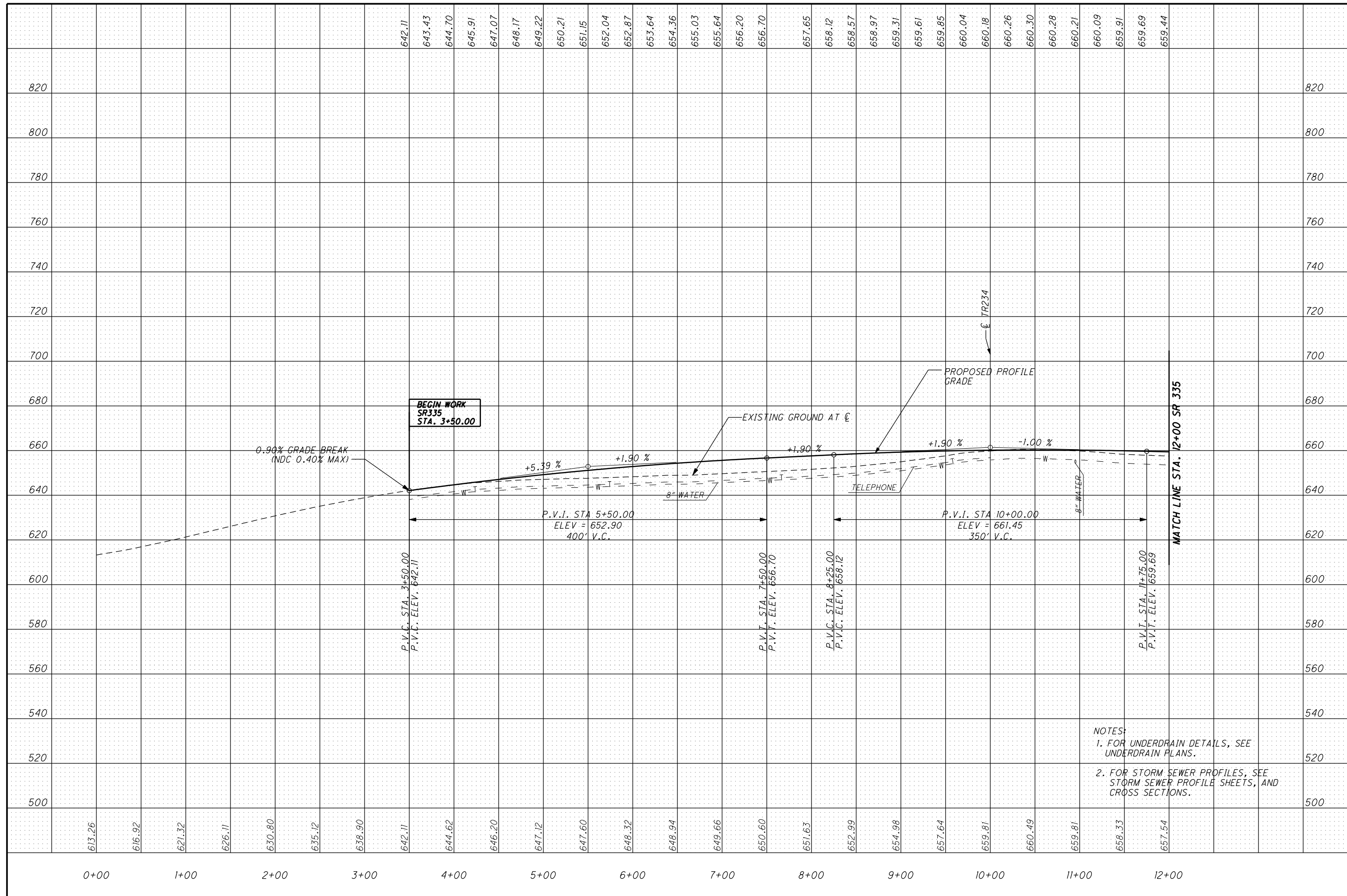
- PAVEMENT REMOVED
(PAID FOR UNDER ITEM 203, SEE CROSS SECTIONS)
- PAVEMENT TO BE CONSTRUCTED
IN OTHER PART
- PAVEMENT TO BE CONSTRUCTED
BY OTHERS, NOT IN CONTRACT

CROSS REFERENCES	
SHEET NO.	DESCRIPTION
36	PROFILE SR335
29	ROADWAY SUBSUMMARY
31	DRAINAGE AND EROSION CONTROL SUBSUMMARY
32	DRIVEWAY SUBSUMMARY

NOTE:
 TR234 RAMPS AND TR234 IMPROVEMENTS
 (UP TO STA. 36+39.50) WILL BE PERFORMED
 IN OTHER PART (NIP)



USER: ldeemel PLOT DATE: 2/22/2012 10:46:27 AM REVISION DATE: 2/22/2012 MODEL: Sheet
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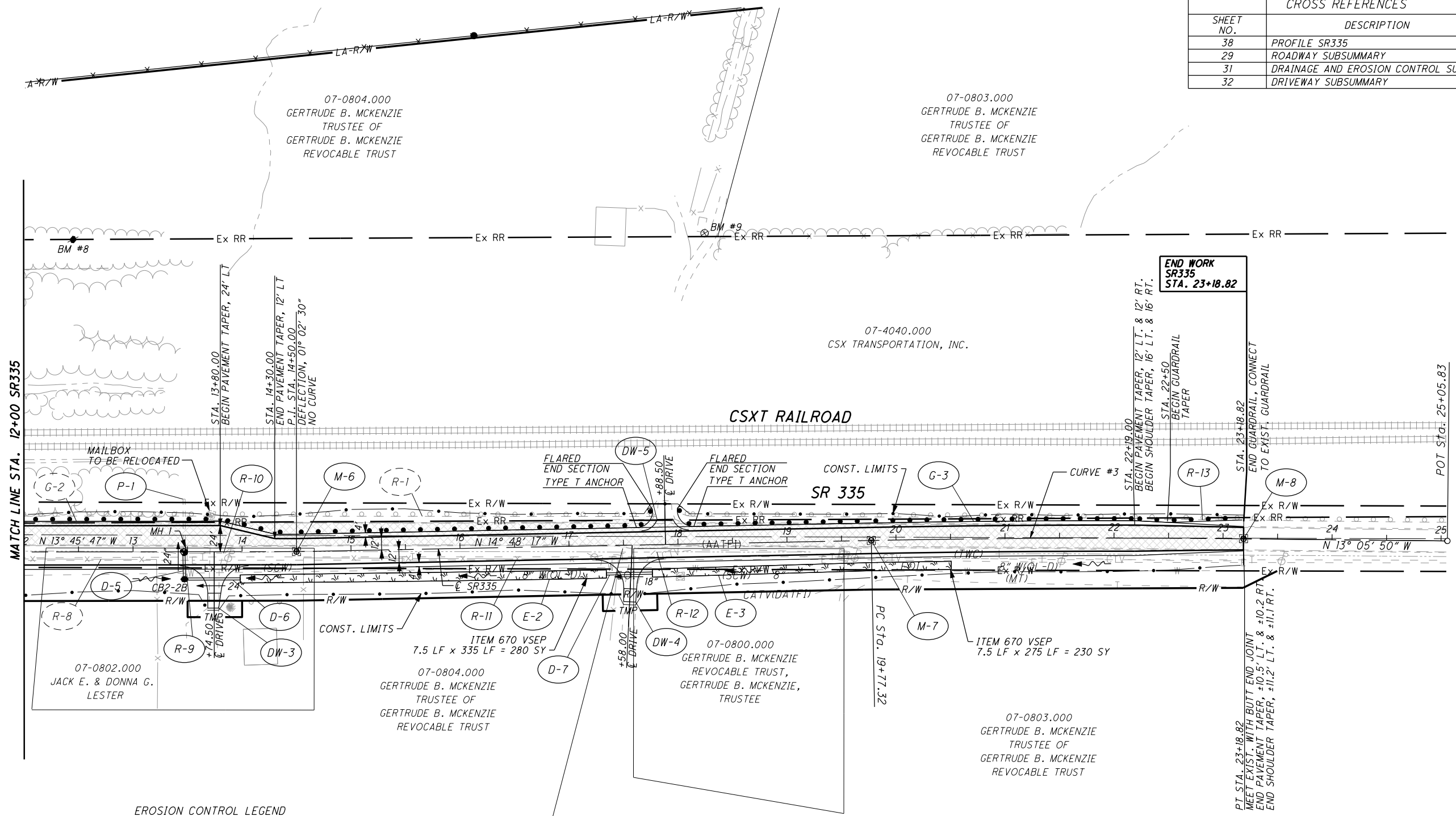
NOTES:
 1. FOR UNDERDRAIN DETAILS, SEE UNDERDRAIN PLANS.
 2. FOR STORM SEWER PROFILES, SEE STORM SEWER PROFILE SHEETS, AND CROSS SECTIONS.

**PROFILE - SR335
 STA. 0+00.00 TO STA. 12+00.00**



0 25 50
 HORIZONTAL SCALE IN FEET
 CALCULATED LBD/KAG
 CHECKED JMB

CROSS REFERENCES	
SHEET NO.	DESCRIPTION
38	PROFILE SR335
29	ROADWAY SUBSUMMARY
31	DRAINAGE AND EROSION CONTROL SUBSUMMARY
32	DRIVEWAY SUBSUMMARY



EROSION CONTROL LEGEND

- 670 VEGETATED SWALE EROSION PROTECTION TYPE B
- 836 TURF REINFORCING MAT
- 601 ROCK CHANNEL PROTECTION
- 601 TIED CONCRETE BLOCK MAT TYPE 2

NOTE: DITCH LININGS CHANGE AT EVEN 50' STATIONS

SR335 CURVE # 3

P.I. STA. = 21+48.08
 DELTA = 1° 42' 27" (RT)
 Dc = 0° 30' 00"
 R = 11,459.16'
 T = 170.77'
 L = 341.51'
 E = 1.27'
 Emax. = NC
 DESIGN SPEED = 55 MPH

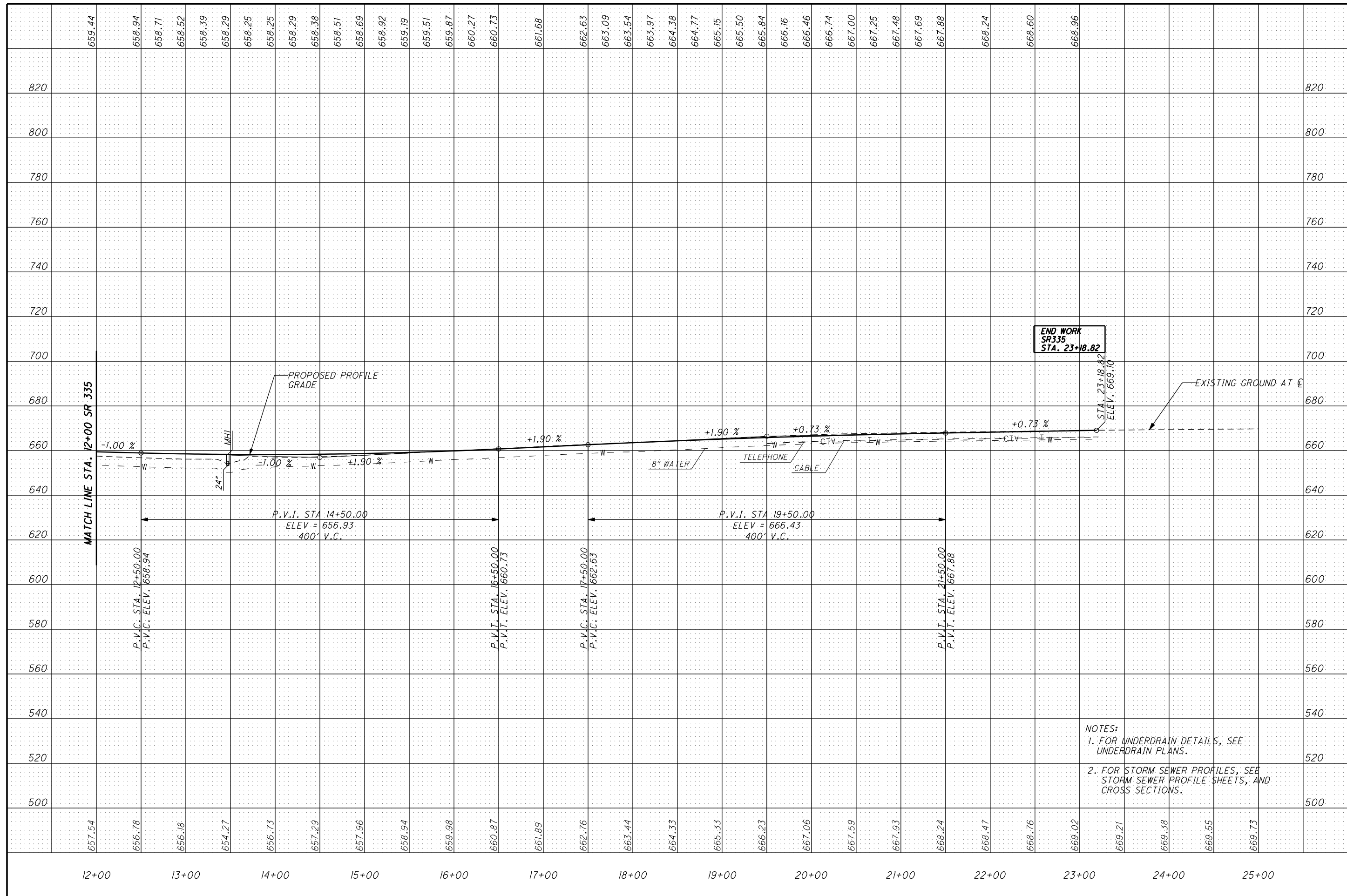
LEGEND:

- PAVEMENT REMOVED
 (PAID FOR UNDER ITEM 203, SEE CROSS SECTIONS)

PLAN - SR335
STA. 12+00 TO STA. 23+18.82

SCI-823-6.81

USER: ldeemel PLOT DATE: 2/22/2012 10:48:00 AM REVISION DATE: 2/22/2012 MODEL: Sheet
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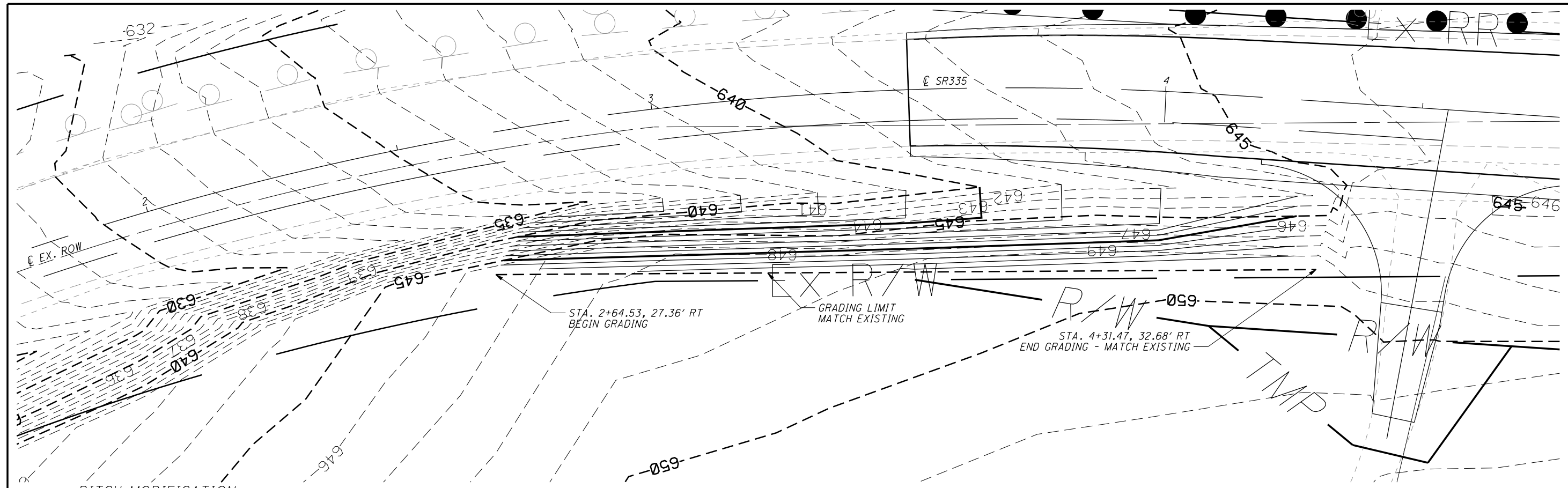
NOTES:
 1. FOR UNDERDRAIN DETAILS, SEE UNDERDRAIN PLANS.
 2. FOR STORM SEWER PROFILES, SEE STORM SEWER PROFILE SHEETS, AND CROSS SECTIONS.

CALCULATED
 BD/KAG
 CHECKED
 JMB

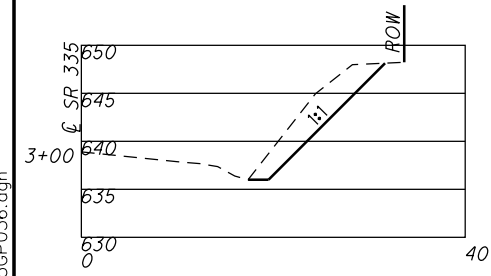
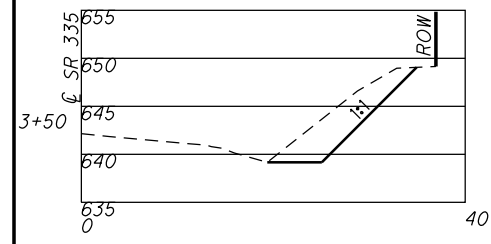
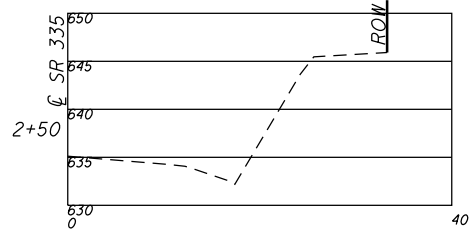
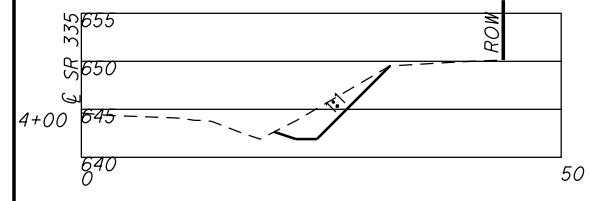
**PROFILE - SR335
 STA. 12+00.00 TO STA. 25+00.00**

SCI-823-6.81

c:\pwworking\pitt\d0304851\19415GP036.dgn



PLAN VIEW



QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 203 EXCAVATION	186 CY
ITEM 659 SEEDING AND MULCHING	252 SY

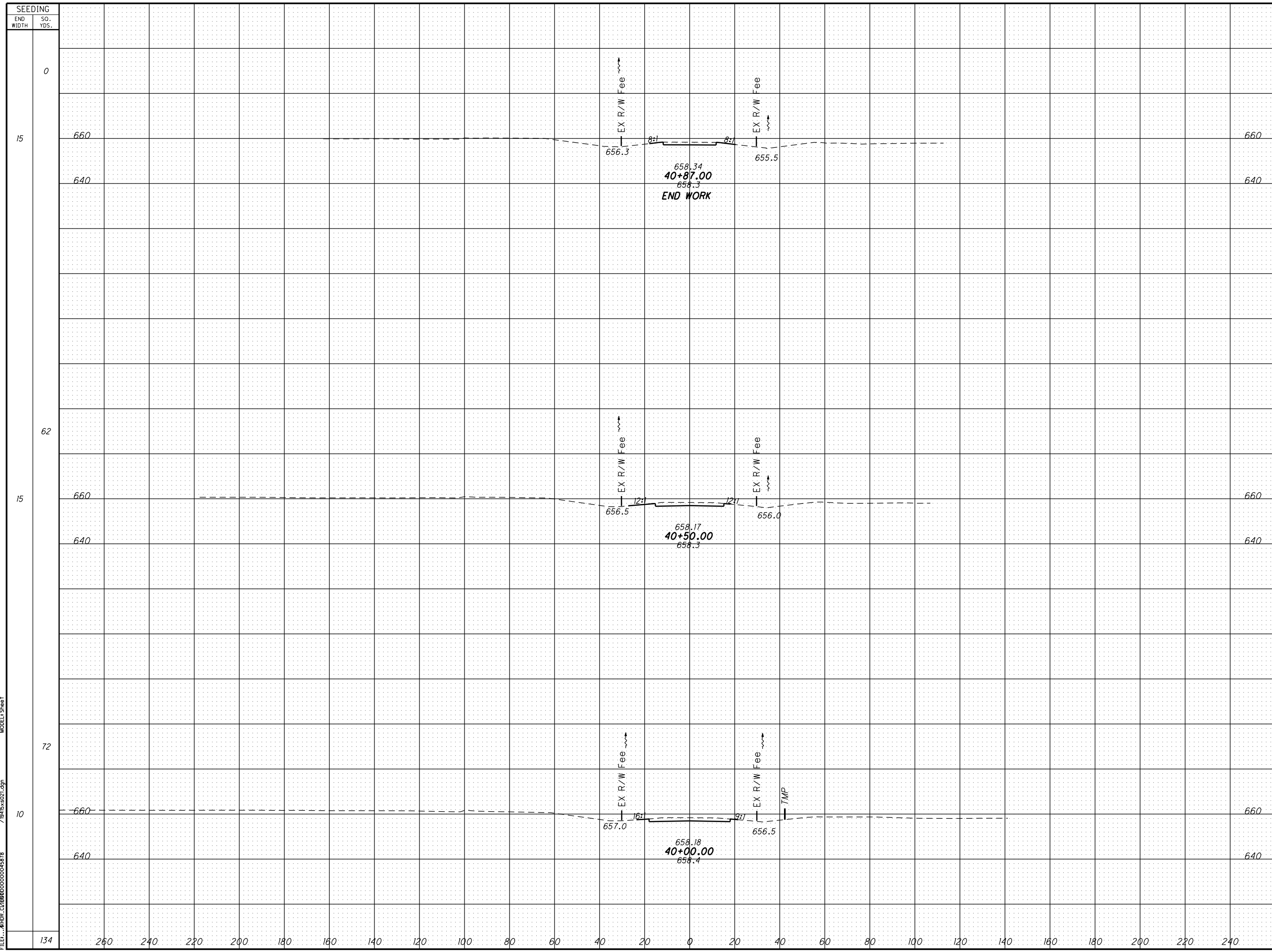
CALCULATED CDR
CHECKED DCJ

0 5 10 20
HORIZONTAL SCALE IN FEET

S.R. 335 DRIVE STA. 4+55.00
SIGHT DISTANCE WITH DITCH GRADING 1:1

SCI-823+6.81

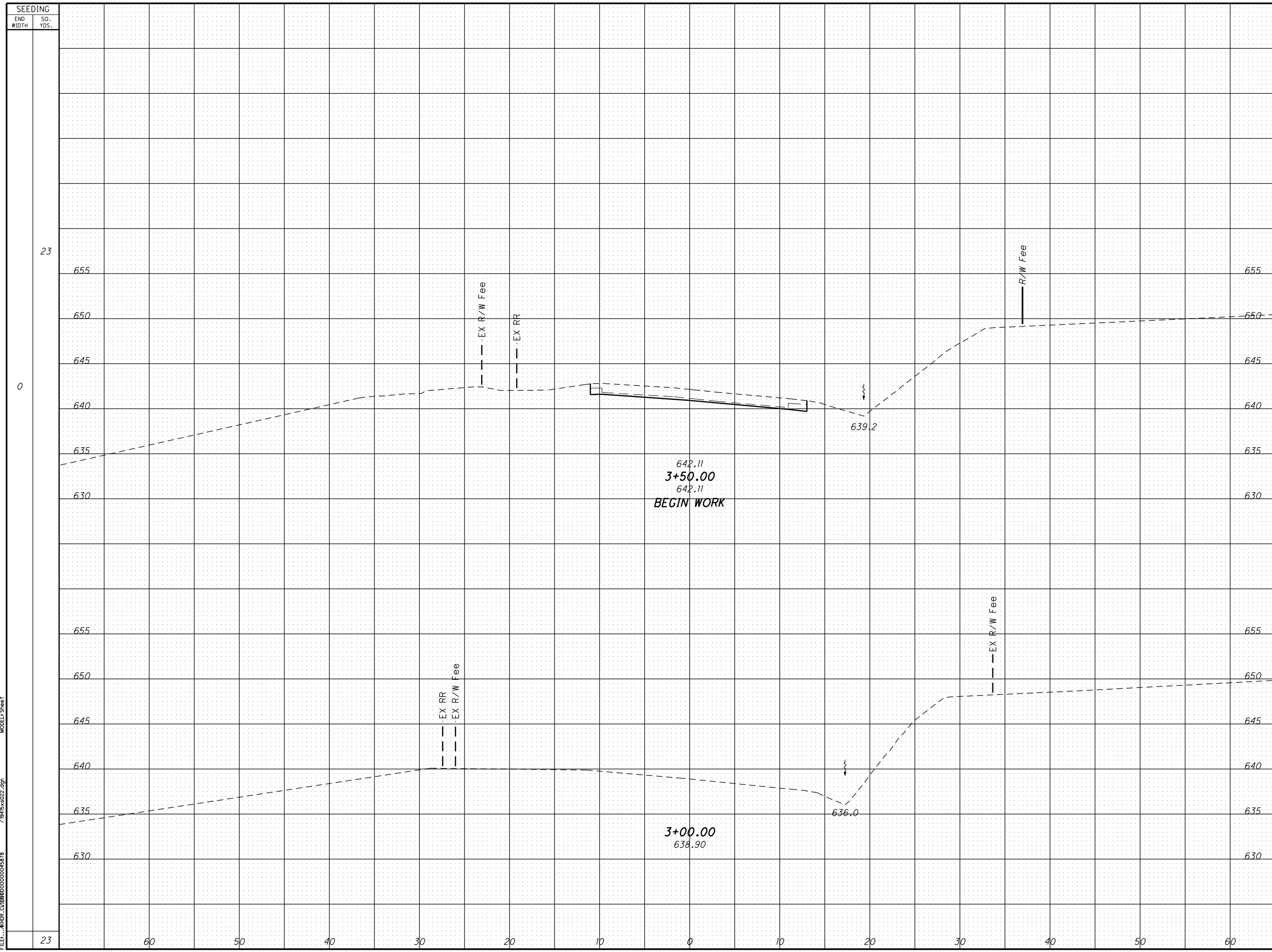
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END AREA	VOLUME	CUT		FILL	
		CUT	FILL	CUT	FILL
28	0				
46	0				
53	0				
238	0				

CALCULATED: **SCI-823-6.81**
 CHECKED: JMB
CROSS SECTIONS - TR 234
STA. 40+00.00 TO STA. 40+87.00

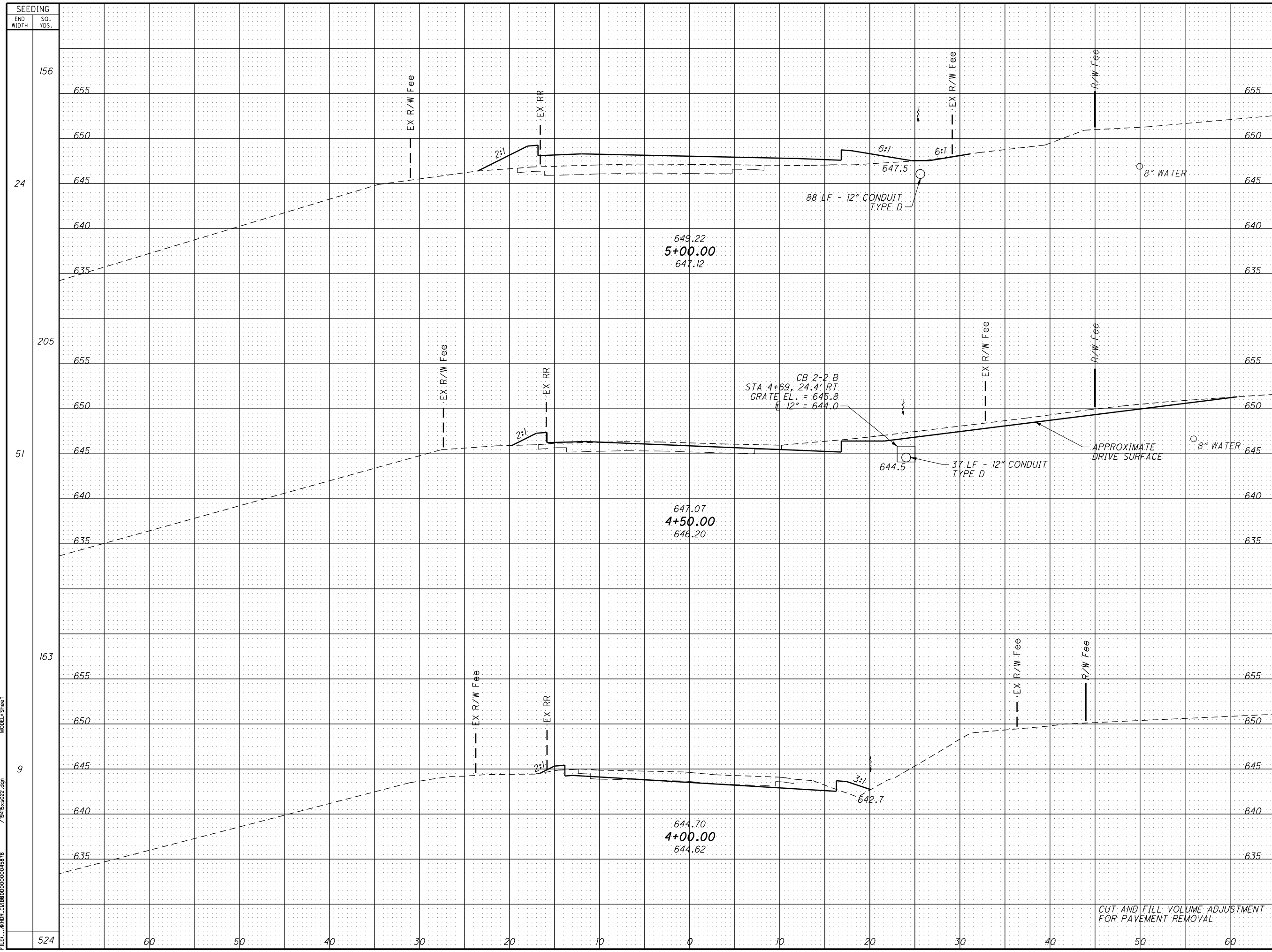
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SEEDING		END AREA		VOLUME	
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL
23				0	0
60					
50					
40					
30					
20					
10					
0					
10					
20					
30					
40					
50					
60					
				0	0

CALCULATED
 LD/KAG
 CHECKED
 JMB
CROSS SECTIONS - SR335
STA. 3+00.00 TO STA. 3+50.00
SCI-823-6.81
 42
 111

USER: C:\hp\brt; PLOT DATE: 9/15/2011 2:17:05 PM REVISION DATE: 9/15/2011
 FILE: \\hdw\c\p0000000045878 MODEL1 Sheet



END WIDTH	SO. YDS.	END AREA		VOLUME	
		CUT	FILL	CUT	FILL
156					
24		1	49		
205				33	50
51		34	4		
				59	9
163					
9		29	5		
				54	5
				57	57
524				203	121

CUT AND FILL VOLUME ADJUSTMENT FOR PAVEMENT REMOVAL

CROSS SECTIONS - SR335
STA. 4+00.00 TO STA. 5+00.00

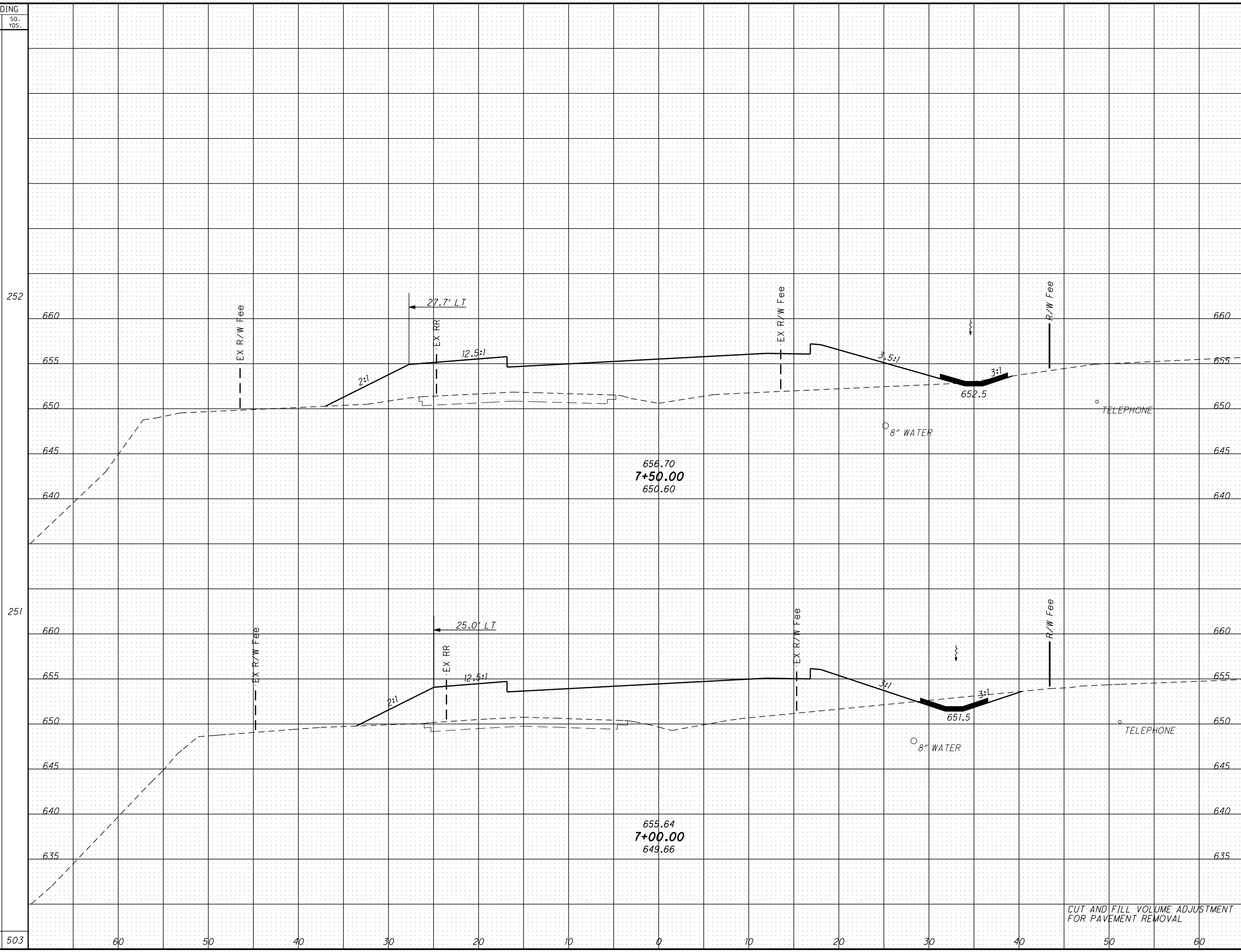
SCI-823-6.81

CALCULATED: BD/KAG
 CHECKED: JMB

43
111

USER: cwhhbr; PLOT DATE: 9/16/2011 2:17:43 PM REVISION DATE: 9/15/2011
 FILE: \\hdh\C\B00000000045878 /9/15/2011.dgn MODEL: Sheet

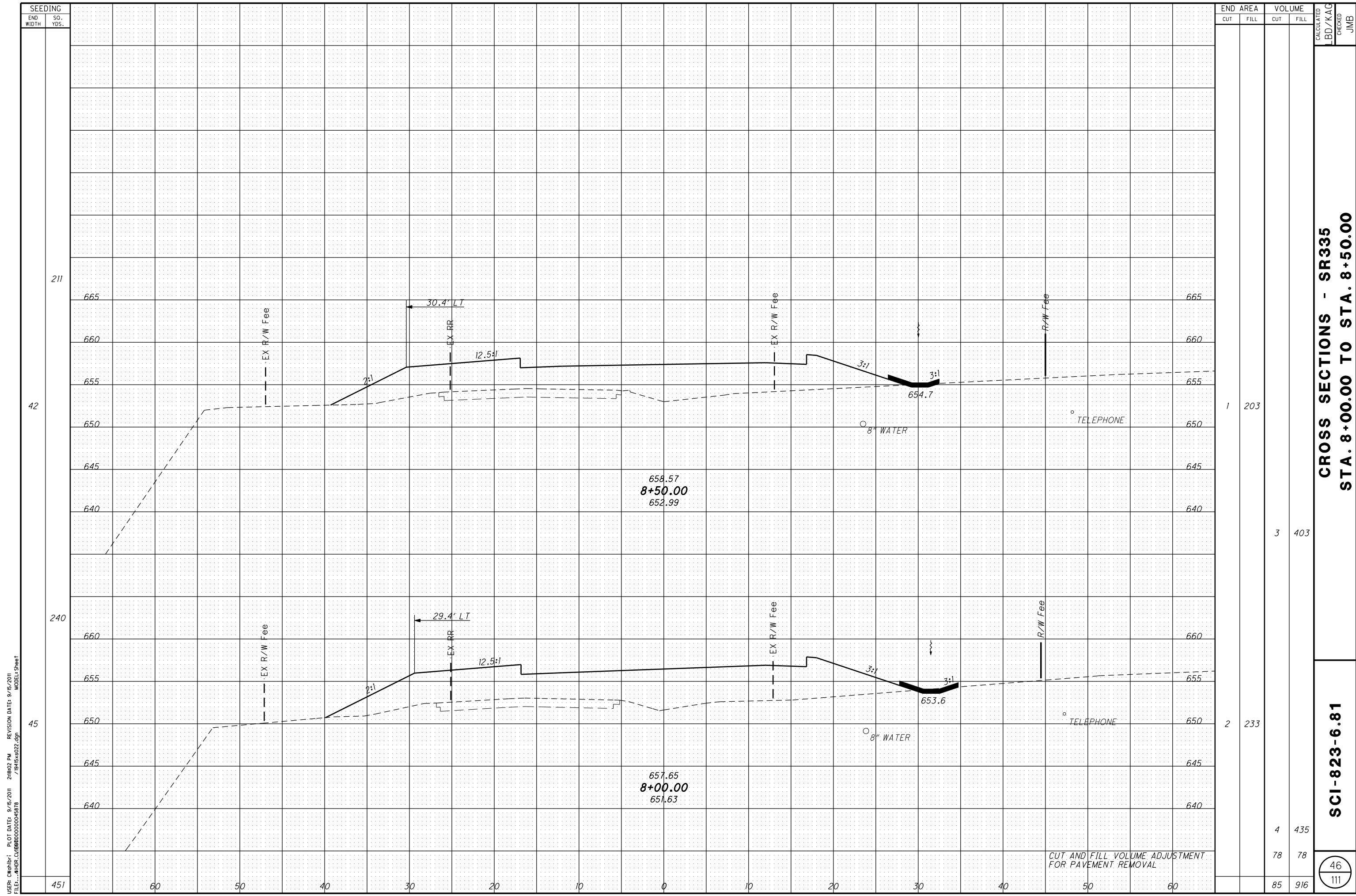
SEEDING	
END WIDTH	SO. YDS.
503	
60	
50	
40	
30	
20	
10	
0	
10	
20	
30	
40	
50	
60	



END AREA	VOLUME				
		CUT	FILL	CUT	FILL
2	237				
11	417				
10	214				
18	383				
81	81				
110	881				

CUT AND FILL VOLUME ADJUSTMENT FOR PAVEMENT REMOVAL

CALCULATED: **BD/KAG**
 CHECKED: **JMB**
CROSS SECTIONS - SR335
STA. 7+00.00 TO STA. 7+50.00
SCI-823-6.81
 45
 111



SEEDING	
END WIDTH	SO. YDS.
60	42
50	45
40	240
30	211
20	
10	
0	
10	
20	
30	
40	
50	
60	

END AREA	VOLUME	CALCULATED	CHECKED
1	203		
3	403		
2	233		
4	435		
78	78		
85	916		

**CROSS SECTIONS - SR335
STA. 8+00.00 TO STA. 8+50.00**

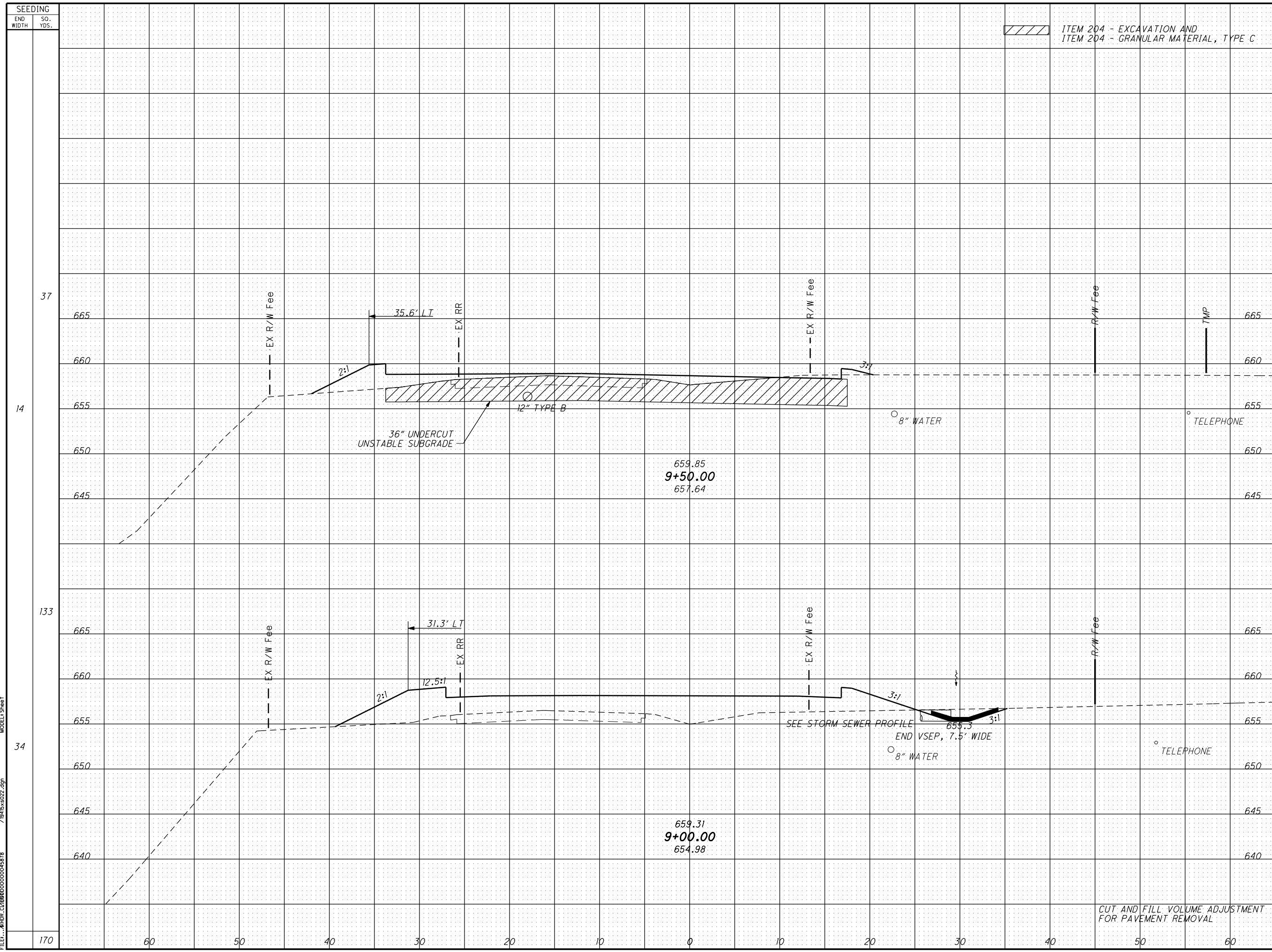
SCI-823-6.81

46
111

USER: cwhbbr; PLOT DATE: 9/16/2011 2:00:02 PM REVISION DATE: 9/15/2011
FILE: \\hdh\CAD\00000000045878_7\9415x822.dgn MODEL: Sheet

CUT AND FILL VOLUME ADJUSTMENT FOR PAVEMENT REMOVAL

USER: cwhhbr; PLOT DATE: 9/15/2011 2:08:21 PM REVISION DATE: 9/15/2011
 FILE: \\hdh.c\p0000000045878 /9/15/2011.dgn MODEL: Sheet



ITEM 204 - EXCAVATION AND
 ITEM 204 - GRANULAR MATERIAL, TYPE C

END STA	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
665				
660				
655	2	40		
650				
645			8	156
665				
660				
655	7	129		
650				
645				
640			7	307
			58	58
			73	521

CUT AND FILL VOLUME ADJUSTMENT
 FOR PAVEMENT REMOVAL

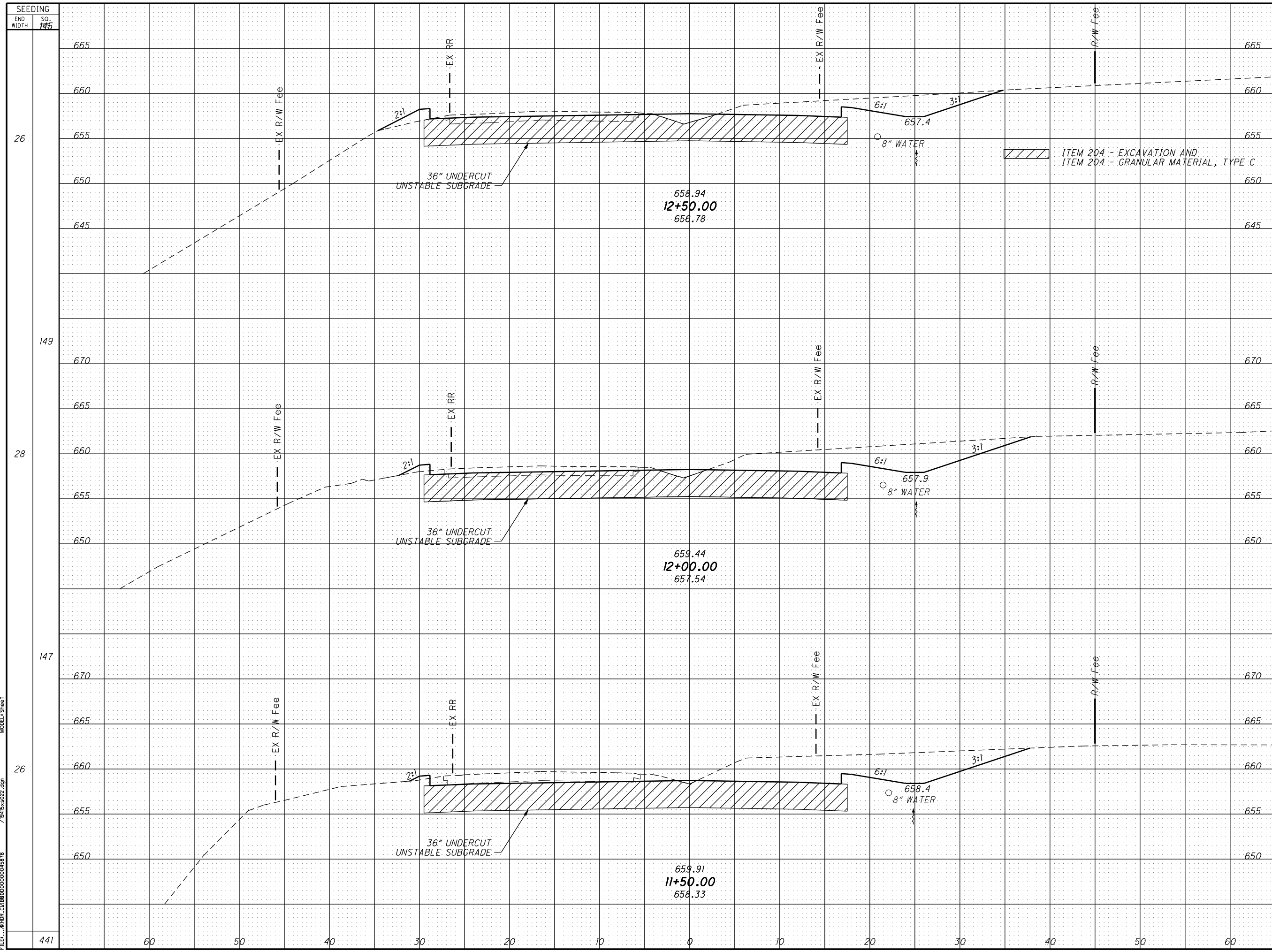
CALCULATED
 LD/KAG
 CHECKED
 JMB

CROSS SECTIONS - SR335
STA. 9+00.00 TO STA. 9+50.00

SCI-823-6.81

47
 111

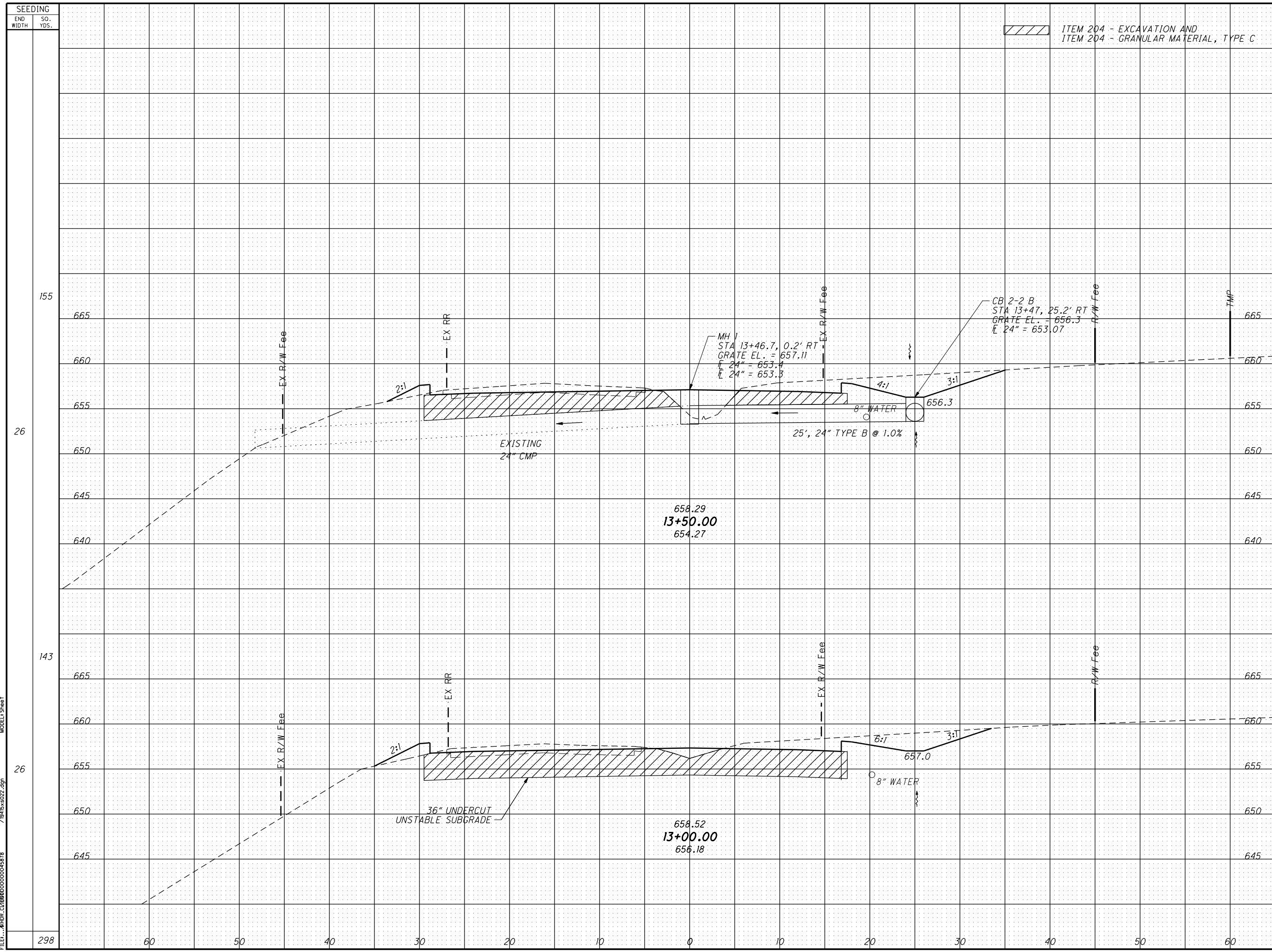
USER: C:\pwh\brt; PLOT DATE: 9/16/2011 2:08:58 PM REVISION DATE: 9/15/2011
 FILE: \\hdrc\c\pwh\000000045878 MODEL1 Sheet



END STA	START STA	END AREA		VOLUME	
		CUT	FILL	CUT	FILL
665	665				
660	660				
655	655	52	8		
650	650				
645	645			124	12
670	670				
665	665				
660	660	82	4		
655	655				
650	650			179	5
670	670				
665	665				
660	660	111	1		
655	655				
650	650			225	1
650	650			528	18

CALCULATED BY: KAG
 CHECKED BY: JMB
CROSS SECTIONS - SR335
STA. 11+50.00 TO STA. 12+50.00
SCI-823-6.81
 49
 111

USER: cwhbbr; PLOT DATE: 9/15/2011 2:59:17 PM REVISION DATE: 9/15/2011
 FILE: \\hdrc\c\00000000045878 /945x822.dgn MODEL: Sheet



ITEM 204 - EXCAVATION AND
 ITEM 204 - GRANULAR MATERIAL, TYPE C

MH 1
 STA 13+46.7, 0.2' RT
 GRATE EL. = 657.11
 E 24" = 653.4
 E 24" = 653.3

CB 2-2 B
 STA 13+47, 25.2' RT
 GRATE EL. = 656.3
 E 24" = 653.07

EXISTING
 24" CMP

36" UNDERCUT
 UNSTABLE SUBGRADE

658.29
 13+50.00
 654.27

658.52
 13+00.00
 656.18

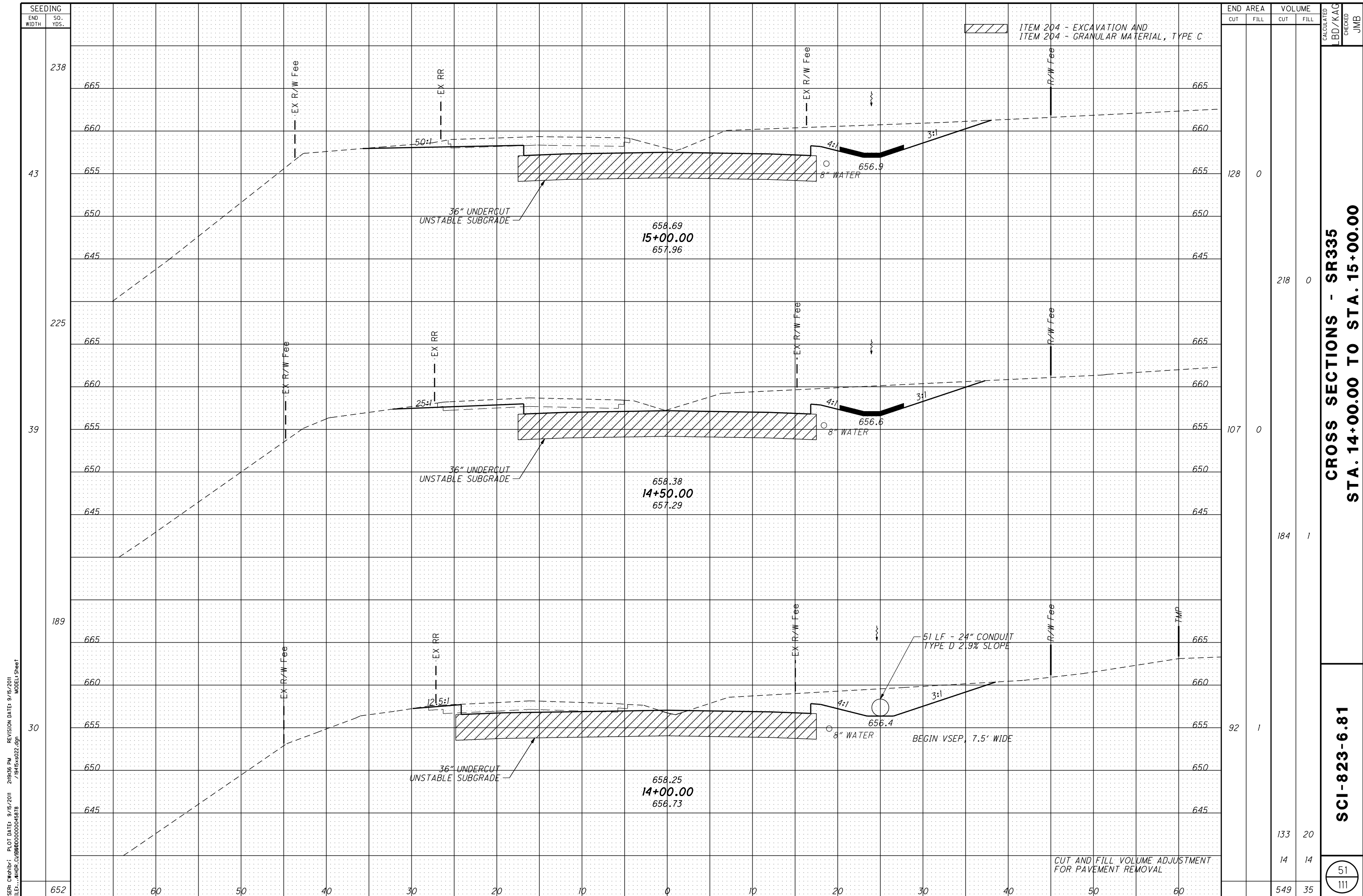
SEEDING		END AREA		VOLUME	
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL
155					
26		52	20	87	27
143					
26		43	9	88	16
298		175	43		

CALCULATED
 LD/KAG
 CHECKED
 JMB

**CROSS SECTIONS - SR335
 STA. 13+00.00 TO STA. 13+50.00**

SCI-823-6.81

50
 111



END	AREA		VOLUME		CALCULATED	CHECKED
	CUT	FILL	CUT	FILL		
238						
43	128	0				
225						
39	107	0				
189						
30	92	1				
652						
			133	20		
			14	14		
			549	35		

ITEM 204 - EXCAVATION AND
ITEM 204 - GRANULAR MATERIAL, TYPE C

658.69
15+00.00
657.96

658.38
14+50.00
657.29

658.25
14+00.00
656.73

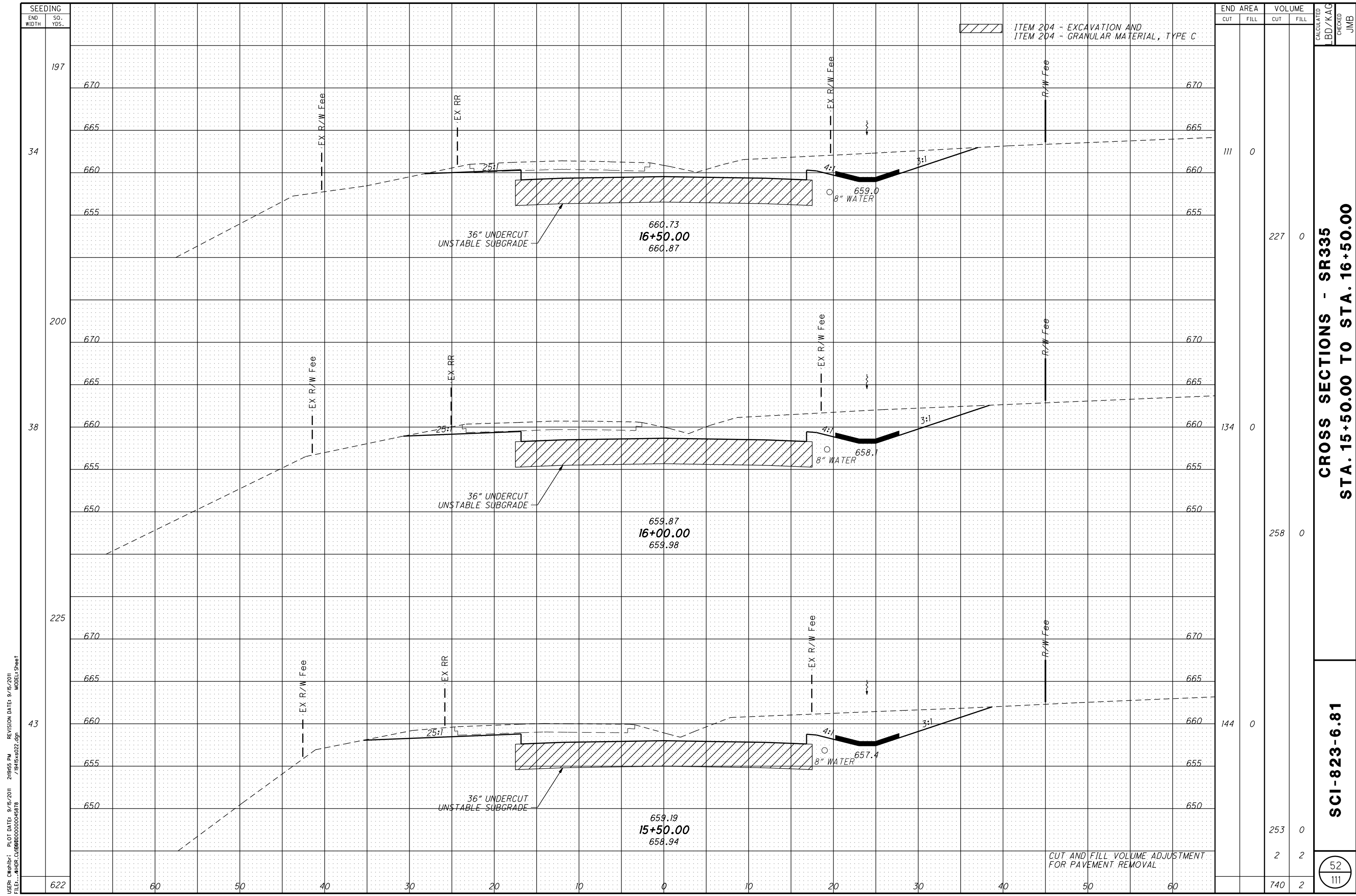
CUT AND FILL VOLUME ADJUSTMENT
FOR PAVEMENT REMOVAL

CROSS SECTIONS - SR335
STA. 14+00.00 TO STA. 15+00.00

SCI-823-6.81

51
111

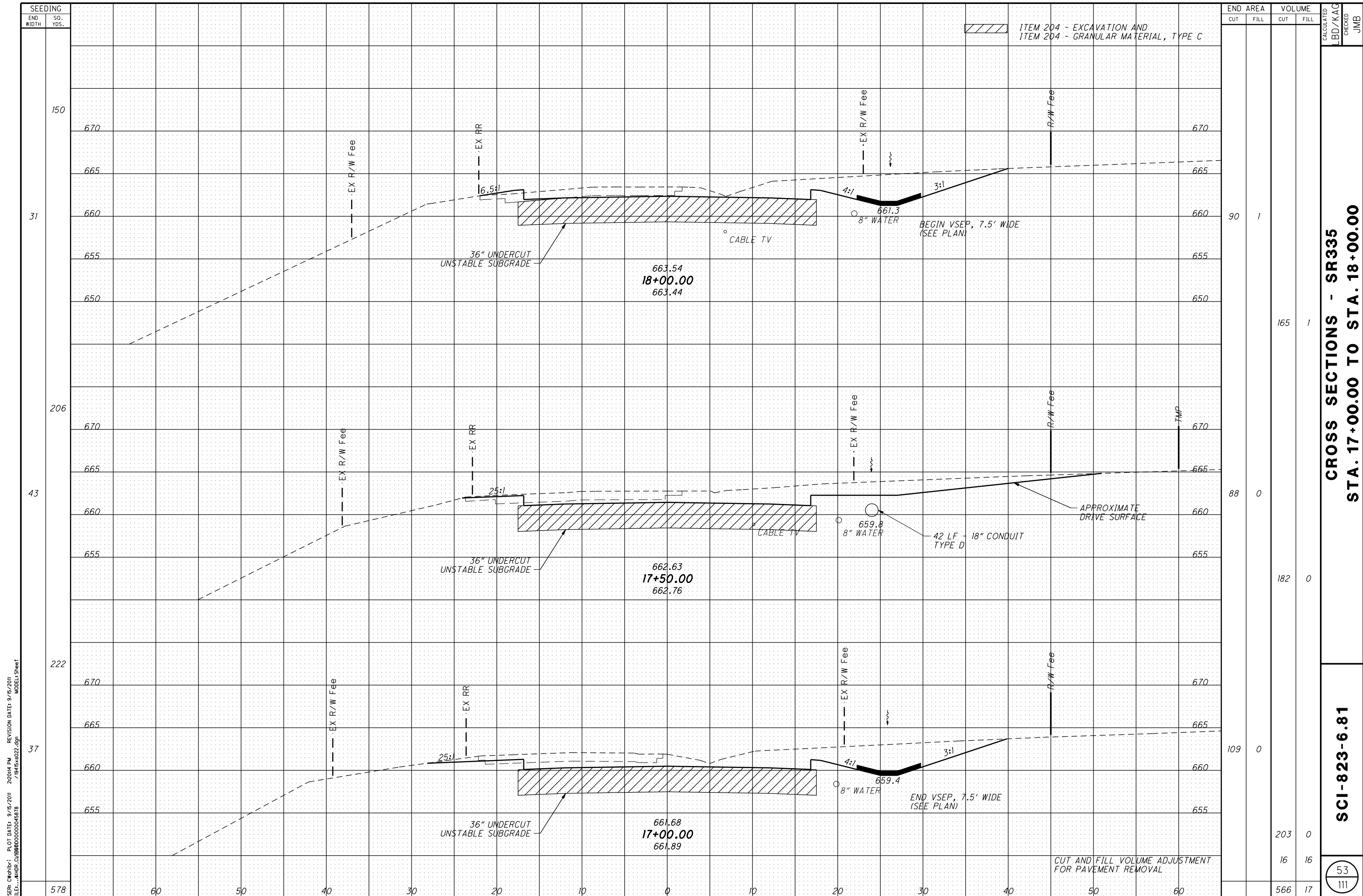
USER: cwhhbr; PLOT DATE: 9/16/2011 2:08:36 PM REVISION DATE: 9/15/2011
FILE: \\hdor.c\p0000000045878 MODEL1 Sheet



USER: cwhhbr; PLOT DATE: 9/15/2011 2:18:45 PM REVISION DATE: 9/15/2011
 FILE: \\hdrc\c\00000000045878_7\1515s022.dgn MODEL: Sheet

**CROSS SECTIONS - SR335
 STA. 15+50.00 TO STA. 16+50.00**

SCI-823-6.81



USER: C:\p1\h1\...
 PLOT DATE: 9/15/2011 2:20:14 PM REVISION DATE: 9/15/2011
 FILE: ... MODEL1 Sheet

END AREA	VOLUME	CUT		FILL	
		AREA	FEET	AREA	FEET
90	1				
165	1				
88	0				
182	0				
109	0				
203	0				
16	16				
566	17				

CROSS SECTIONS - SR335
STA. 17+00.00 TO STA. 18+00.00

SCI-823-6.81

CALCULATED
 LD/KAG
 CHECKED
 JMB

CUT AND FILL VOLUME ADJUSTMENT FOR PAVEMENT REMOVAL

ITEM 204 - EXCAVATION AND
ITEM 204 - GRANULAR MATERIAL, TYPE C

BEGIN VSEP, 7.5' WIDE
(SEE PLAN)

END VSEP, 7.5' WIDE
(SEE PLAN)

APPROXIMATE
DRIVE SURFACE

42 LF - 18" CONDUIT
TYPE D

CABLE TV

CABLE TV

CABLE TV

36" UNDERCUT
UNSTABLE SUBGRADE

36" UNDERCUT
UNSTABLE SUBGRADE

36" UNDERCUT
UNSTABLE SUBGRADE

4:1

3:1

25:1

25:1

4:1

3:1

6.5:1

4:1

3:1

661.3

659.8

659.4

663.54
18+00.00
663.44

662.63
17+50.00
662.76

661.68
17+00.00
661.89

EX R/W Fee

EX RR

EX R/W Fee

R/W Fee

EX R/W Fee

EX RR

EX R/W Fee

R/W Fee

EX R/W Fee

EX RR

EX R/W Fee

R/W Fee

150

31

206

43

222

37

578

60

50

40

30

20

10

0

10

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30

40

50

60

90

1

165

1

88

0

182

0

109

0

203

0

16

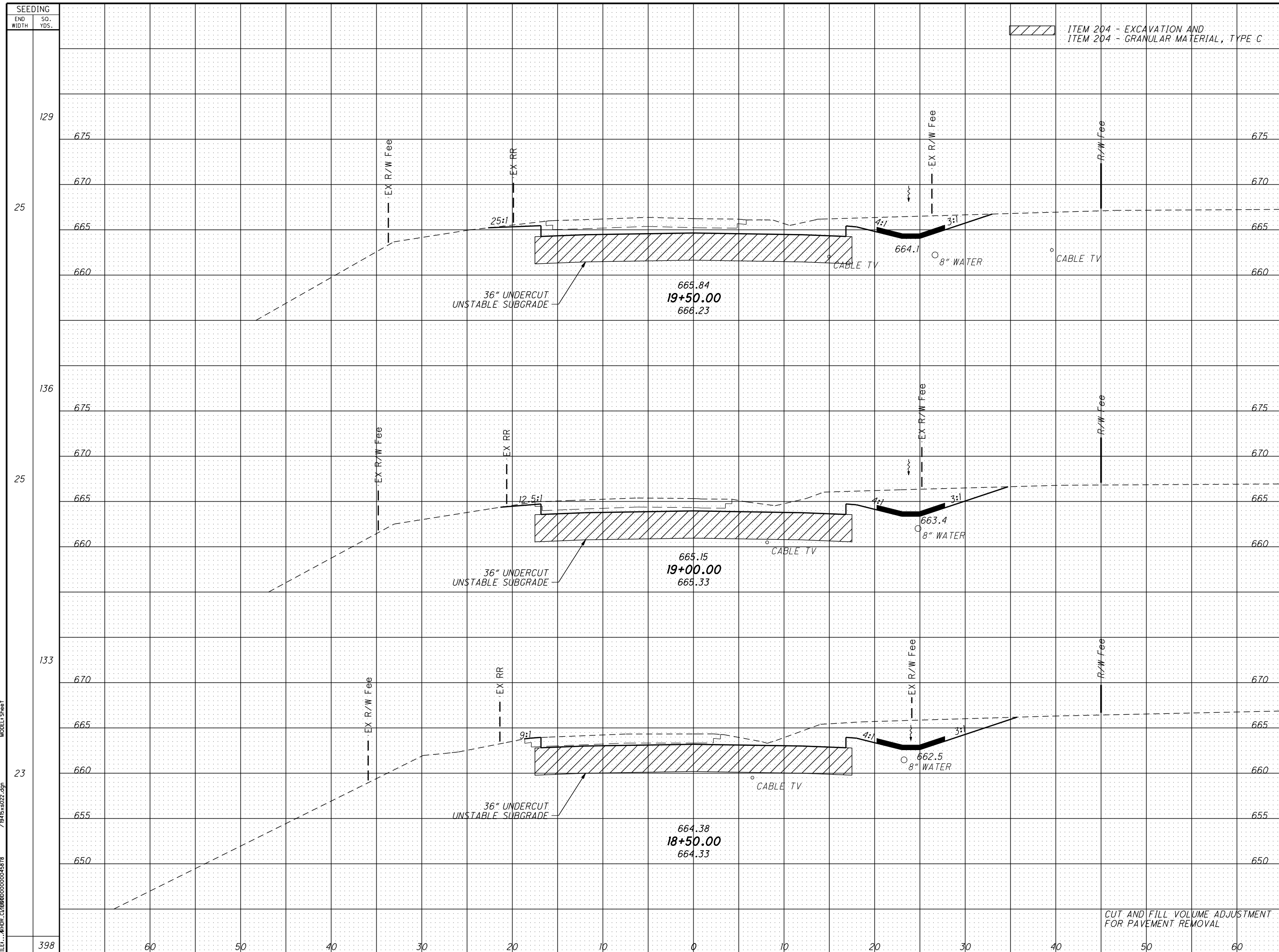
16

566

17

53
111

USER: cwhhbr; PLOT DATE: 9/16/2011 2:03:14 PM REVISION DATE: 9/15/2011
 FILE: \\HDDR.C\BDD\000000045878 /1945x802.dgn MODEL: Sheet



SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
129	80	0	151	0
136	83	0	151	0
133	81	0	158	1
398	9	9	469	10

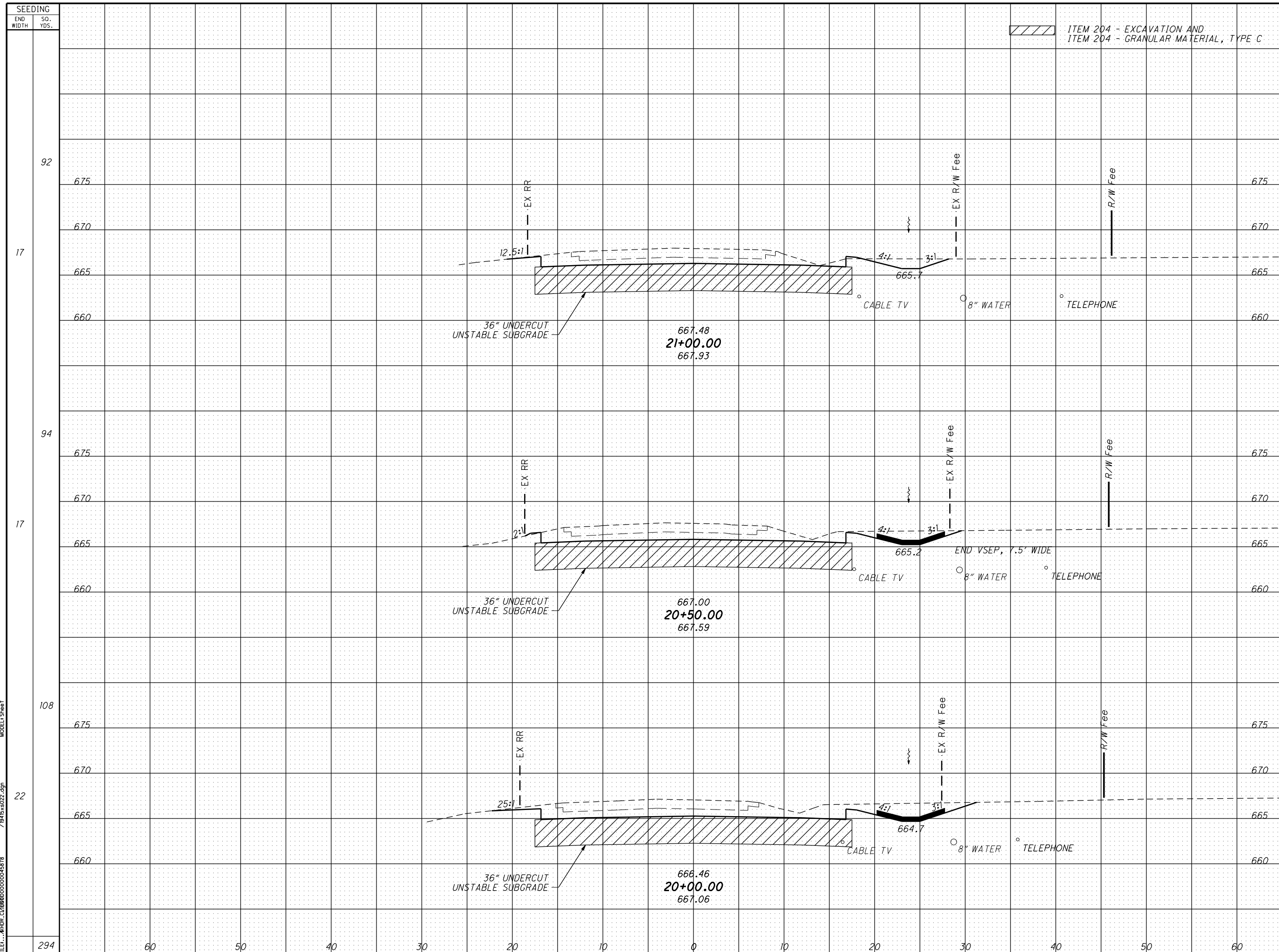
ITEM 204 - EXCAVATION AND
 ITEM 204 - GRANULAR MATERIAL, TYPE C

**CROSS SECTIONS - SR335
 STA. 18+50.00 TO STA. 19+50.00**

SCI-823-6.81

CUT AND FILL VOLUME ADJUSTMENT
 FOR PAVEMENT REMOVAL

USER: cwhhbr; PLOT DATE: 9/16/2011 2:06:53 PM REVISION DATE: 9/15/2011
 FILE: \\HDR.C\BDD00000045878_7\945s022.dgn MODEL: Sheet



ITEM 204 - EXCAVATION AND
 ITEM 204 - GRANULAR MATERIAL, TYPE C

END STA	AREA	VOLUME	CUT		FILL	
			CUT	FILL	CUT	FILL
675						
670						
665	52	0				
660						
675						
670						
665	61	0				
660						
675						
670						
665	72	0				
660						
675						
670						
665	141	0				
660						
TOTAL	369	0				

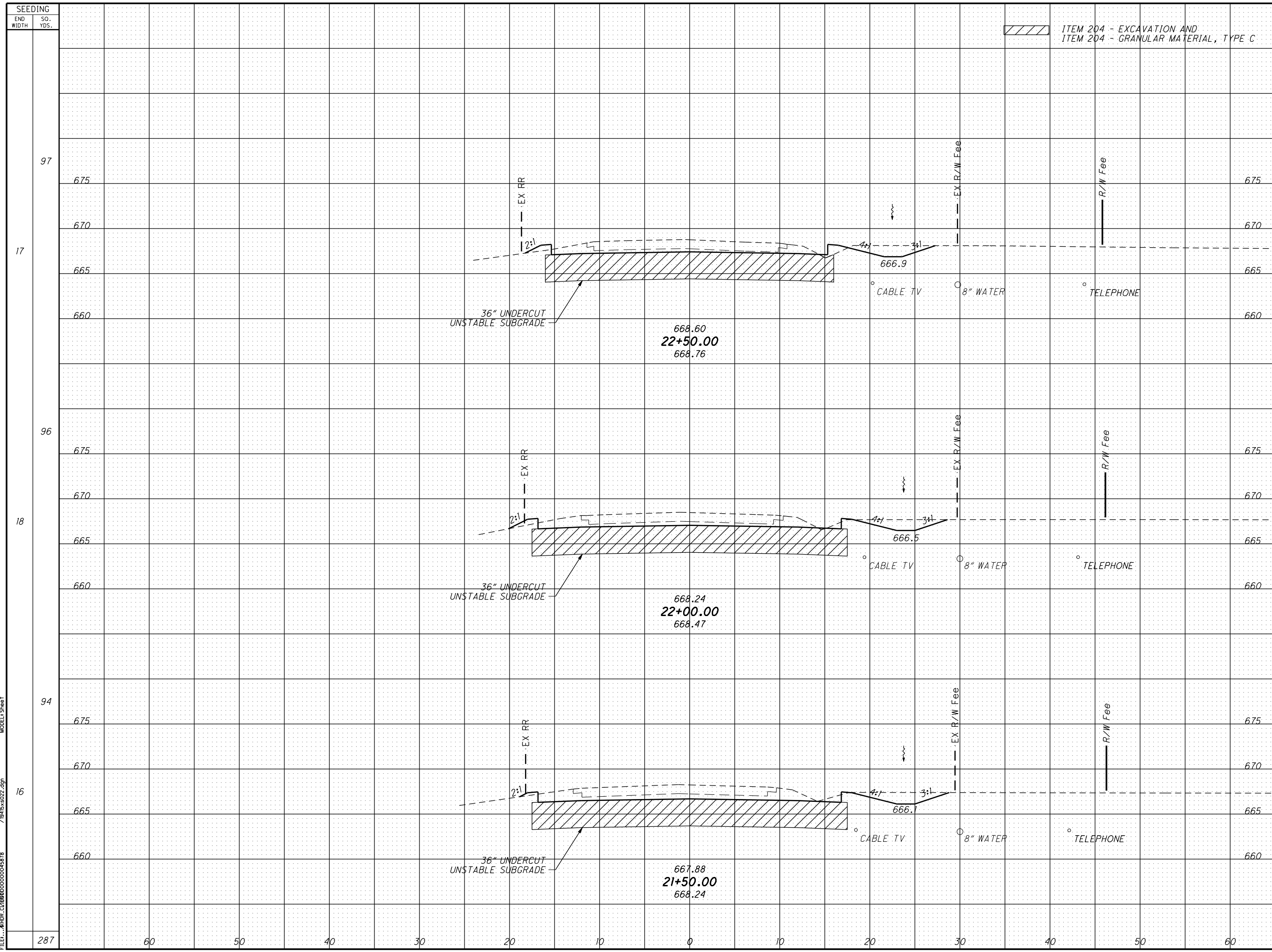
CROSS SECTIONS - SR335
STA. 20+00.00 TO STA. 21+00.00

SCI-823-6.81

55
111

CALCULATED
 LD/KAG
 CHECKED
 JMB

USER: C:\winbr\; PLOT DATE: 9/15/2011 2:24:10 PM REVISION DATE: 9/15/2011
 FILE: \\HDDR.C\BDD000000045878 /1945x822.dgn MODEL: Sheet



END AREA	VOLUME	
	CUT	FILL
42	3	
46	2	
51	1	
269	7	

CALCULATED: BD/KAG
 CHECKED: JMB
CROSS SECTIONS - SR335
STA. 21+50.00 TO STA. 22+50.00
SCI-823-6.81
 56
 111

CURVE# SR335-1
P.I. STA. 2+56.17

Dc = 9° 30'
EMAX = 0.08 FT/FT

SUPERELEVATION TABLE

CURVE# SR335-2
P.I. STA. 7+26.05

DC = 2° 30'
EMAX = 0.053 FT/FT

LEFT SHOULDER			SB PAVEMENT			CENTERLINE CONTROL		NB PAVEMENT			RIGHT SHOULDER					REMARKS				
SHOULDER ELEVATION	SHOULDER SLOPE	SHOULDER WIDTH	POINT ON SHOULDER	SHOULDER SLOPE	SHOULDER WIDTH	EDGE OF PAVEMENT ELEVATION	PAVEMENT SLOPE	PAVEMENT WIDTH	STATION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	EDGE OF PAVEMENT ELEVATION	SHOULDER WIDTH	SHOULDER SLOPE		POINT ON SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	SHOULDER ELEVATION
MATCH EXISTING SHOULDER						642.89	0.0800	9.73	3+50.00	642.11	10.95	-0.0800	641.23				MATCH EXISTING SHOULDER			
644.27	0.0702	1.84				644.14	0.0702	10.18	3+75.00	643.43	11.38	-0.0702	642.63				2.85	-0.0702	642.43	
645.48	0.0604	2.38				645.34	0.0604	10.64	4+00.00	644.70	11.81	-0.0604	643.99				3.64	-0.0604	643.76	
645.82	-0.0140	2.63				645.86	0.0560	10.84	4+11.35	645.25	12.00	-0.0560	644.58				4.00	-0.0560	644.36	PT, CURVE # SR335-1
646.41	-0.0193	2.92				646.47	0.0507	11.09	4+25.00	645.91	12.00	-0.0507	645.30				4.00	-0.0507	645.10	
647.47	-0.0291	3.46				647.54	0.0409	11.55	4+50.00	647.07	12.00	-0.0409	646.58				4.00	-0.0409	646.41	
648.38	-0.0389	4.00				648.54	0.0311	12.00	4+75.00	648.17	12.00	-0.0311	647.80				4.00	-0.0400	647.64	
649.31	-0.0400	4.00				649.47	0.0213	12.00	5+00.00	649.22	12.00	-0.0213	648.96				4.00	-0.0400	648.80	
650.19	-0.0400	4.00				650.35	0.0115	12.00	5+25.00	650.21	12.00	-0.0115	650.07				4.00	-0.0400	649.91	
651.01	-0.0400	4.00				651.17	0.0018	12.00	5+50.00	651.15	12.00	-0.0018	651.13				4.00	-0.0400	650.97	
651.16	-0.0400	4.00				651.32	0.0000	12.00	5+54.51	651.32	12.00	0.0000	651.32				4.00	-0.0400	651.16	FLAT
651.78	-0.0400	4.00				651.94	-0.0080	12.00	5+75.00	652.04	12.00	0.0080	652.14				4.00	-0.0400	651.98	
652.49	-0.0400	4.00				652.65	-0.0178	12.00	6+00.00	652.87	12.00	0.0178	653.08				4.00	-0.0400	652.92	
653.15	-0.0400	4.00				653.31	-0.0276	12.00	6+25.00	653.64	12.00	0.0276	653.97				4.00	-0.0400	653.81	
653.46	-0.0400	4.00				653.62	-0.0325	12.00	6+37.50	654.01	12.00	0.0325	654.40				4.00	-0.0375	654.25	PC, CURVE # SR335-2
653.75	-0.0400	4.00				653.91	-0.0374	12.00	6+50.00	654.36	12.00	0.0374	654.81				4.00	-0.0326	654.68	
654.27	-0.0471	4.00				654.46	-0.0471	12.00	6+75.00	655.03	12.00	0.0471	655.60				4.00	-0.0229	655.51	
654.55	-0.0530	4.00				654.76	-0.0530	12.00	6+90.00	655.40	12.00	0.0530	656.04				4.00	-0.0170	655.97	FULL SUPER
FULL SUPER																				
656.00	-0.0530	4.00				656.21	-0.0530	12.00	7+58.00	656.85	12.00	0.0530	657.49				4.00	-0.0170	657.42	FULL SUPER
656.42	-0.0464	4.00				656.61	-0.0464	12.00	7+75.00	657.17	12.00	0.0464	657.73				4.00	-0.0236	657.64	
657.05	-0.0400	4.00				657.21	-0.0366	12.00	8+00.00	657.65	12.00	0.0366	658.09				4.00	-0.0334	657.95	
657.39	-0.0400	4.00				657.55	-0.0309	12.00	8+14.51	657.92	12.00	0.0309	658.29				4.00	-0.0391	658.13	PT, CURVE # SR335-2
657.64	-0.0400	4.00				657.80	-0.0268	12.00	8+25.00	658.12	12.00	0.0268	658.44				4.00	-0.0400	658.28	
658.20	-0.0400	4.00				658.36	-0.0171	12.00	8+50.00	658.57	12.00	0.0171	658.78				4.00	-0.0400	658.62	
						658.88	-0.0073	12.00	8+75.00	658.97	12.00	0.0073	659.06				4.00	-0.0400	658.90	
						659.23	0.0000	12.00	8+93.77	659.23	12.00	0.0000	659.23				4.00	-0.0400	568.07	FLAT
SEE SR335 INTERSECTION DETAIL SHEET						659.34	0.0024	12.00	9+00.00	659.31	12.00	-0.0024	659.28				4.00	-0.0400	659.12	
						659.76	0.0122	12.00	9+25.00	659.61	12.00	-0.0122	659.46				4.00	-0.0400	659.30	
						660.05	0.0200	12.00	9+45.00	659.81	12.00	-0.0200	659.57			SEE SR335 INTERSECTION DETAIL SHEET				

USER: C:\ahdr\1 PLOT DATE: 9/15/2011 2:23:46 PM REVISION DATE: 9/15/2011
FILE: ...AHDR\1\00000000000045818 MODEL SHEET

CALCULATED BEE CHECKED LBD
SUPERELEVATION TABLE - SR335
SCI-823-6.81
 58
 111



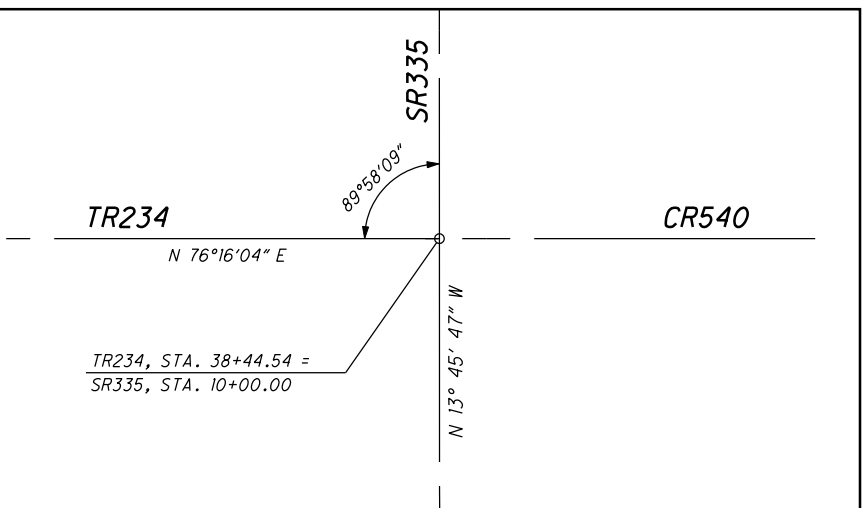
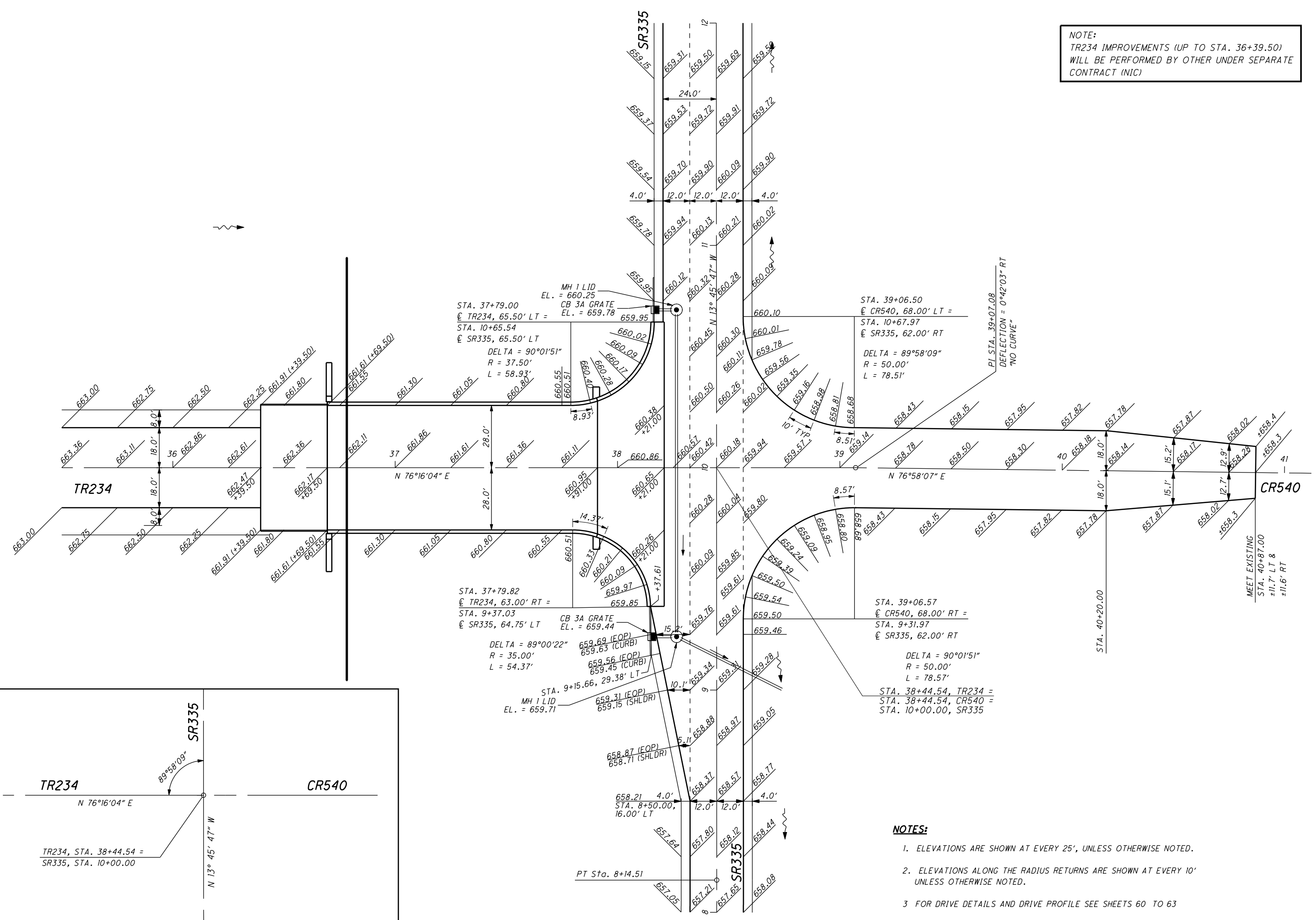
0 10 20 40
HORIZONTAL
SCALE IN FEET

CALCULATED
LBD
CHECKED
JMB

**INTERSECTION DETAIL
TR234/CR540 AND SR335**

SCI-823-6.81

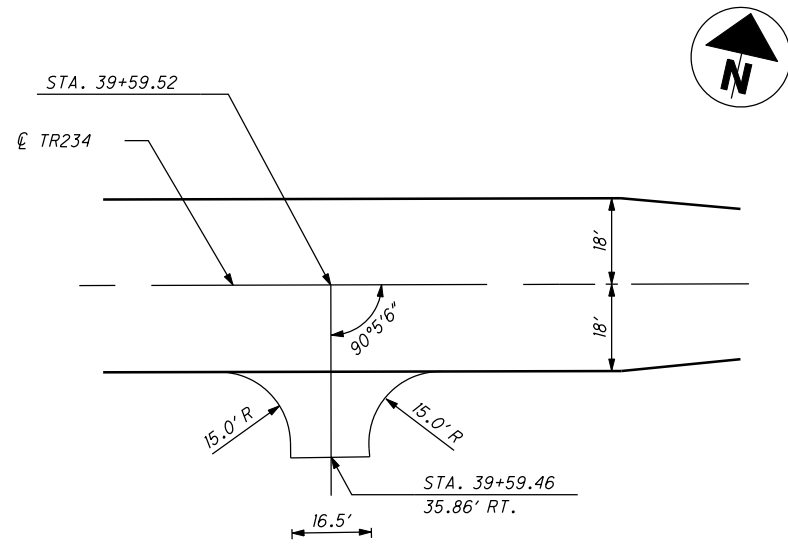
NOTE:
TR234 IMPROVEMENTS (UP TO STA. 36+39.50)
WILL BE PERFORMED BY OTHER UNDER SEPARATE
CONTRACT (NIC)



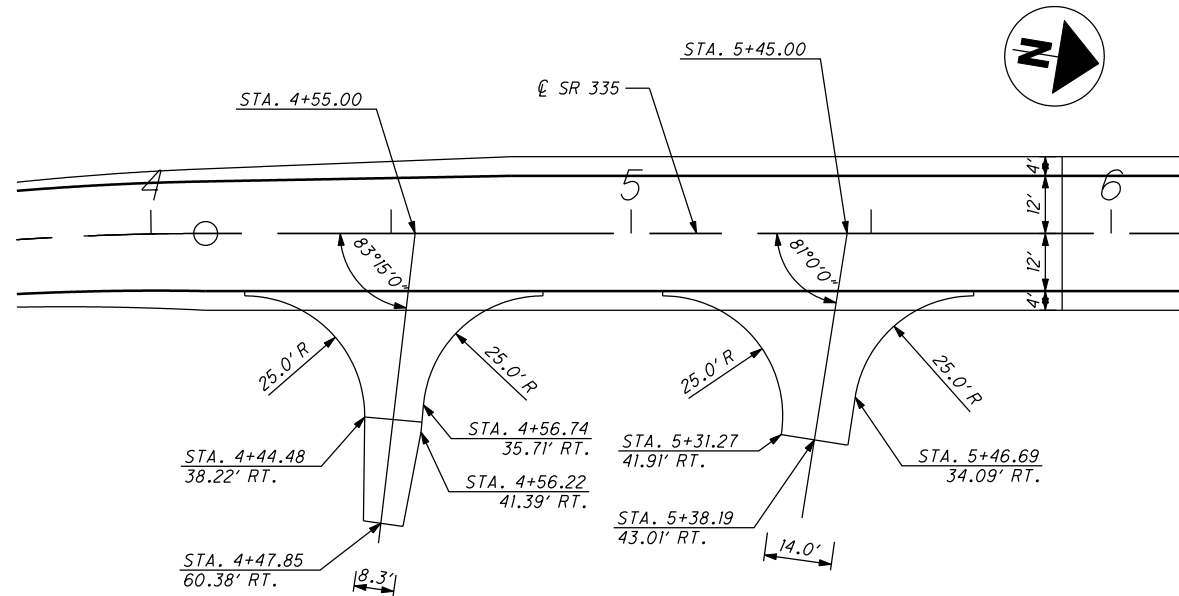
- NOTES:**
1. ELEVATIONS ARE SHOWN AT EVERY 25', UNLESS OTHERWISE NOTED.
 2. ELEVATIONS ALONG THE RADIUS RETURNS ARE SHOWN AT EVERY 10' UNLESS OTHERWISE NOTED.
 3. FOR DRIVE DETAILS AND DRIVE PROFILE SEE SHEETS 60 TO 63

USER: C:\wsh\br; PLOT DATE: 9/16/2011 2:23:23 PM REVISION DATE: 9/15/2011 MODEL: Sheet
FILE: ... \HDR CL\0000000045878 7\84591008.dwg

USER: C:\hp\h... PLOT DATE: 9/16/2011 2:23:29 PM REVISION DATE: 9/15/2011
 FILE: ... \HDR\C:\BDD000000045878 /1845g001.dgn MODEL: Sheet



CR540, STA. 39+59.52, RT.



SR335, STA. 4+55.00, RT. & STA. 5+45.00, RT.

NOTES :

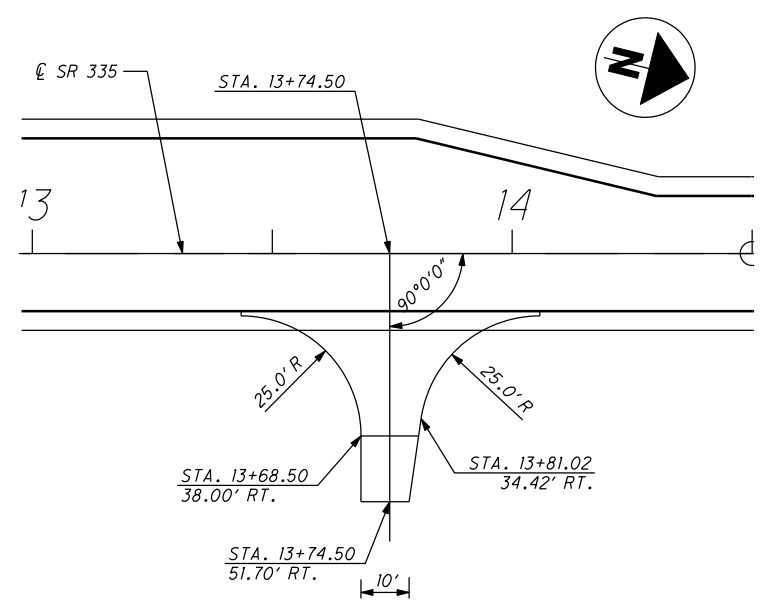
1. FOR DRIVEWAY PROFILES SEE DRIVEWAY PROFILE SHEETS.
2. FOR DRIVEWAY TYPICALS SEE TYPICAL SECTION SHEETS.
3. SEE INTERSECTION DETAIL SHEETS FOR MORE INFO.

CALCULATED	LBD	CHECKED	JMB

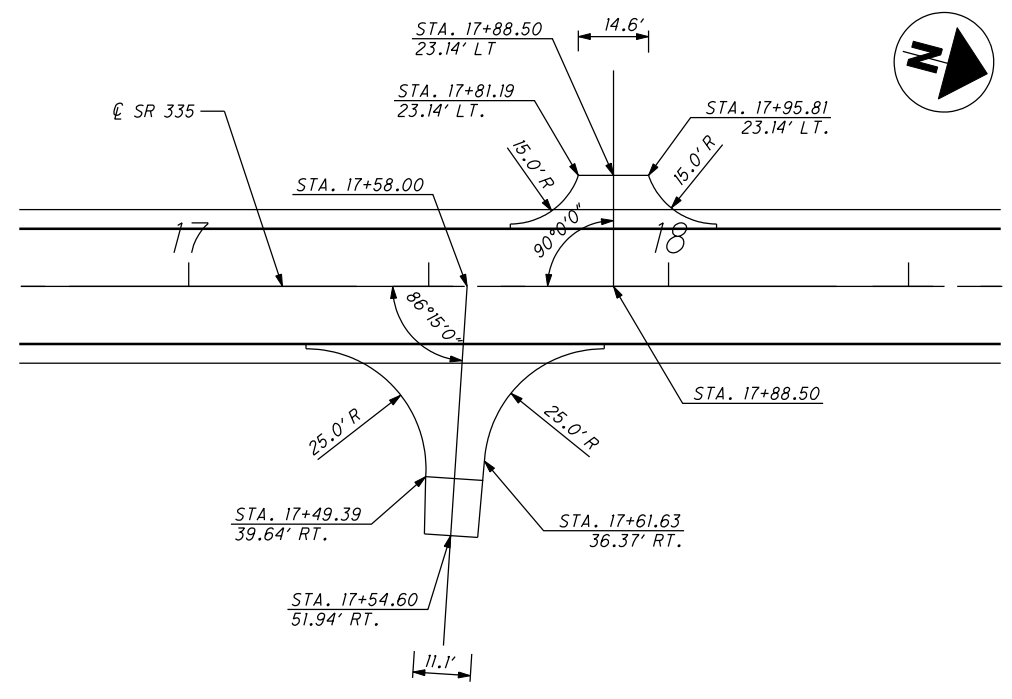
DRIVEWAY DETAILS

SCI-823-6.81

USER: C:\hp\h... PLOT DATE: 9/16/2011 2:23:14 PM REVISION DATE: 9/15/2011
 FILE: ...HDR_C:\BDD000000045878 /1945g002.dgn MODEL: Sheet



SR335, STA. 13+74.50, RT.



SR335, STA. 17+58.00, RT. & STA. 17+88.50, LT.

NOTES :

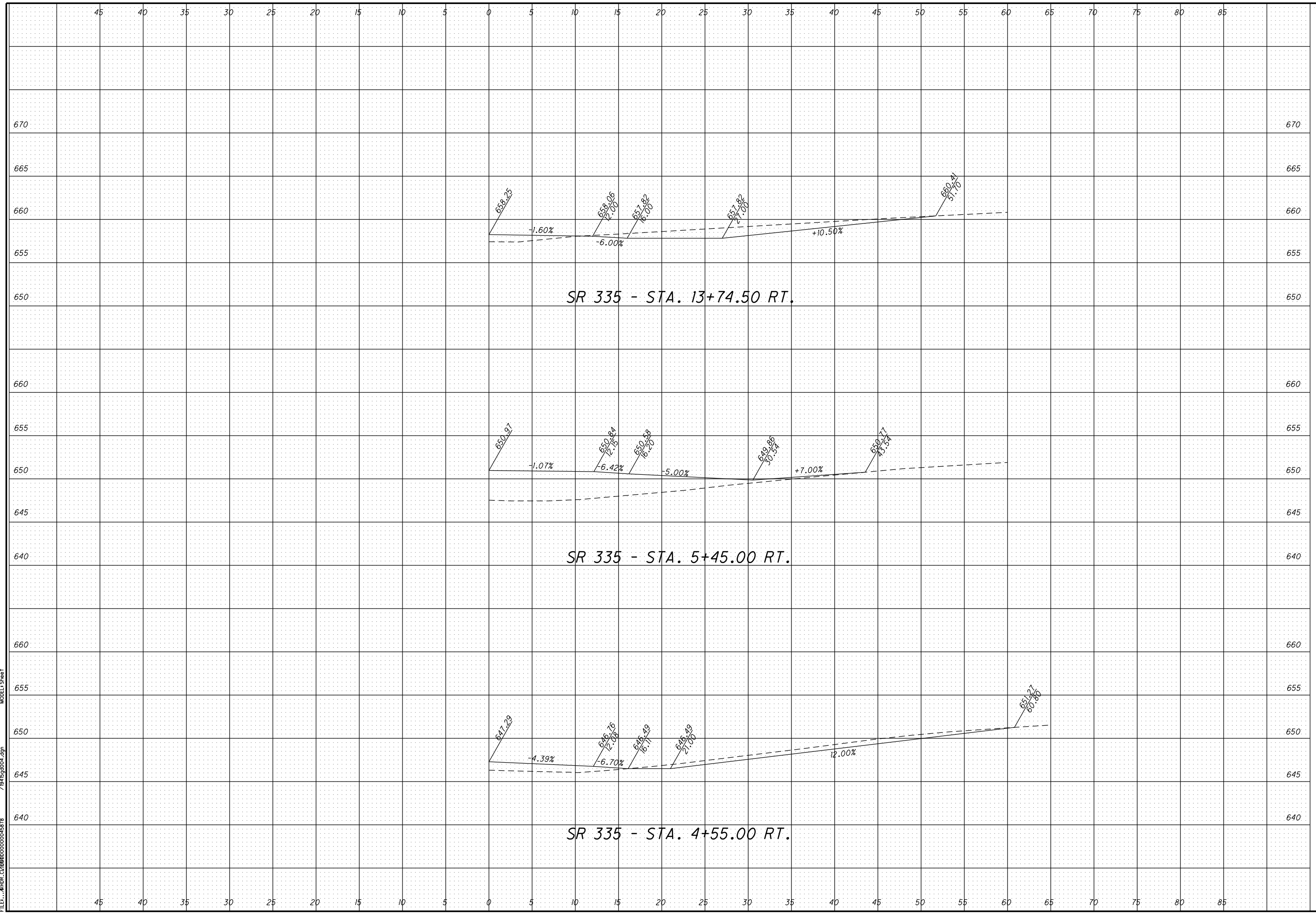
1. FOR DRIVEWAY PROFILES SEE DRIVEWAY PROFILE SHEETS.
2. FOR DRIVEWAY TYPICALS SEE TYPICAL SECTION SHEETS.
3. SEE INTERSECTION DETAIL SHEETS FOR MORE INFO.

CALCULATED	LBD	CHECKED	JMB

DRIVEWAY DETAILS

SCI-823-6.81

USER: C:\hp\brj; PLOT DATE: 9/15/2011 2:24:40 PM REVISION DATE: 9/15/2011
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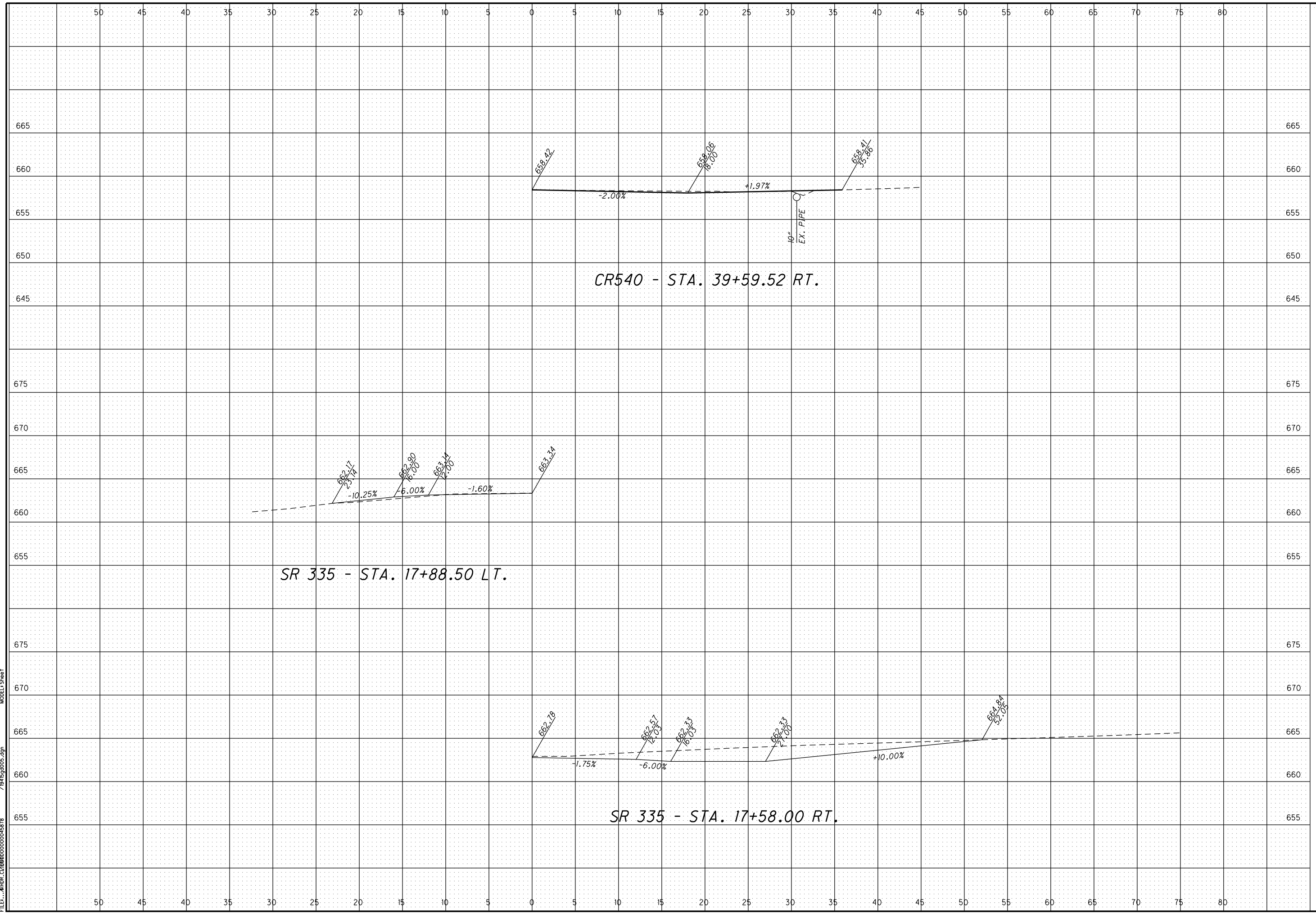


CALCULATED
LBD
CHECKED
JMB

DRIVEWAY PROFILES

SCI-823-6.81

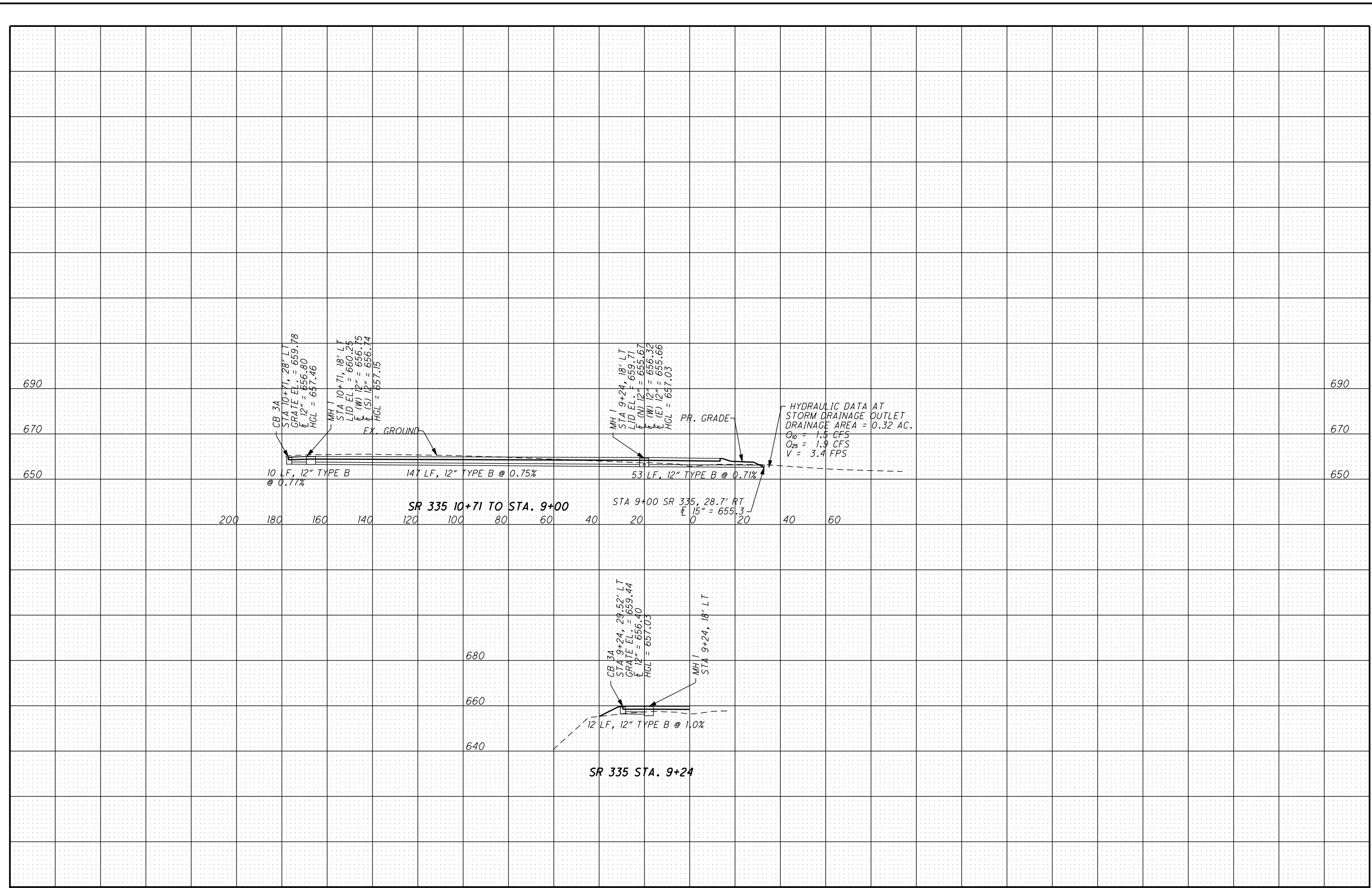
USER: C:\hp\h... PLOT DATE: 9/15/2011 2:25:05 PM REVISION DATE: 9/15/2011
FILE: ...HDR_C:\00000000045878_7\945g005.dgn MODEL Sheet



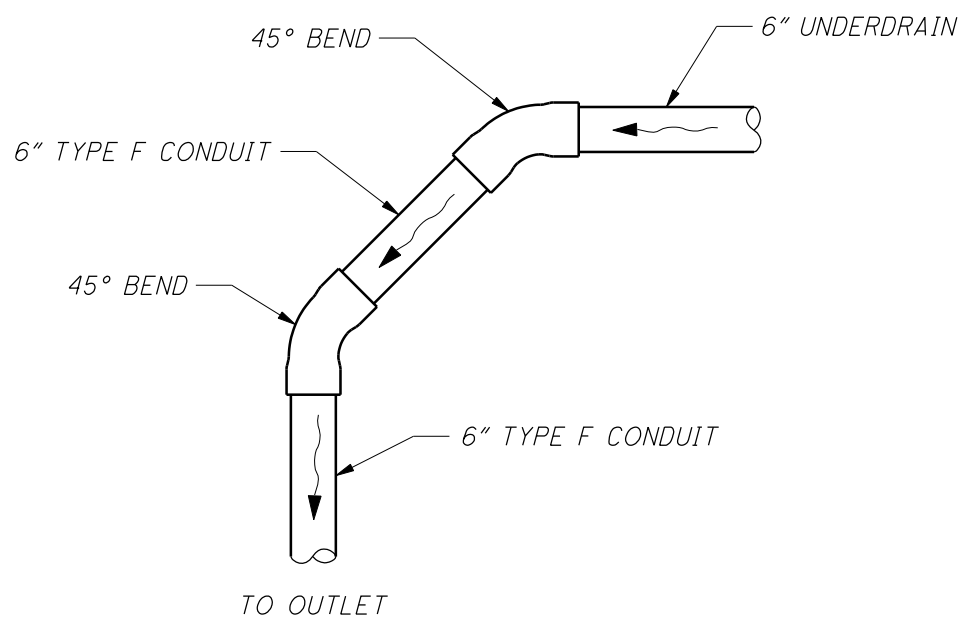
CALCULATED
LBD
CHECKED
JMB

DRIVEWAY PROFILES

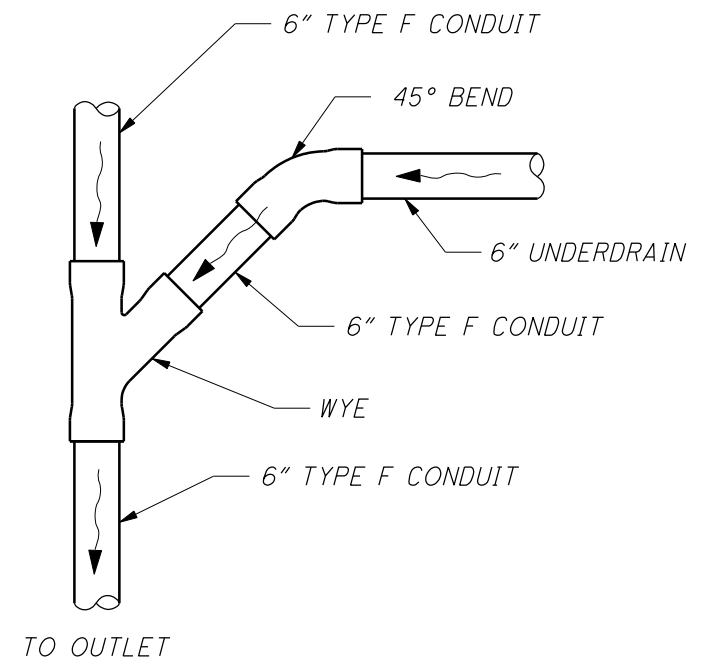
SCI-823-6.81



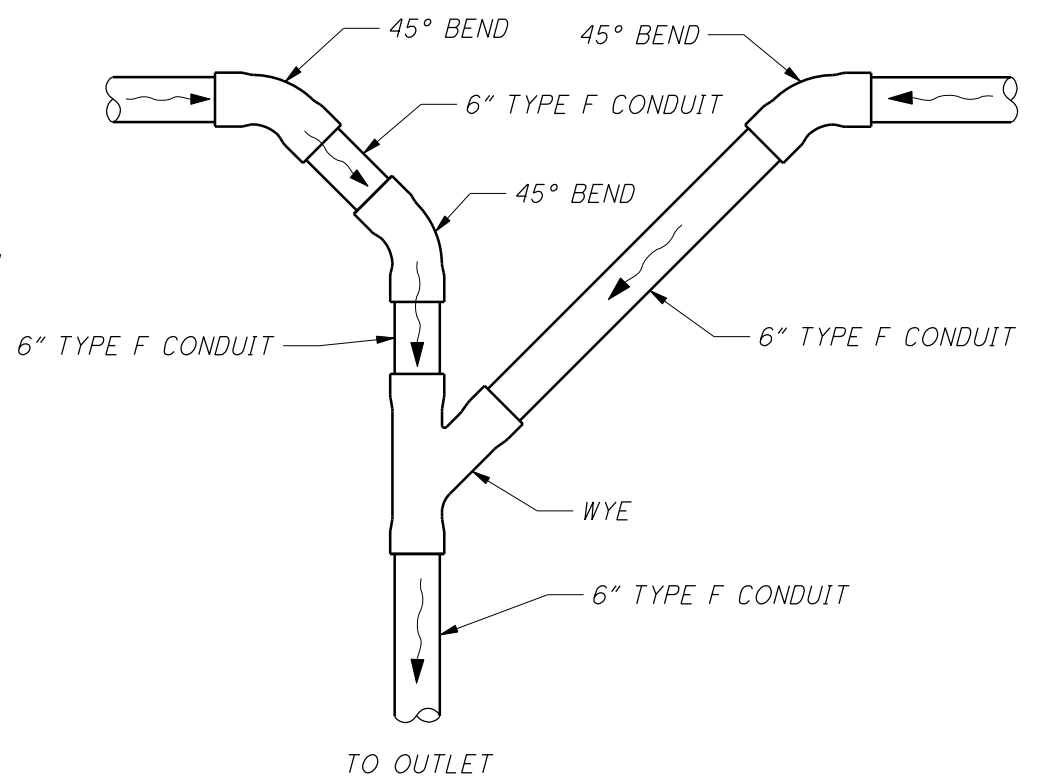
STORM SEWER PROFILES



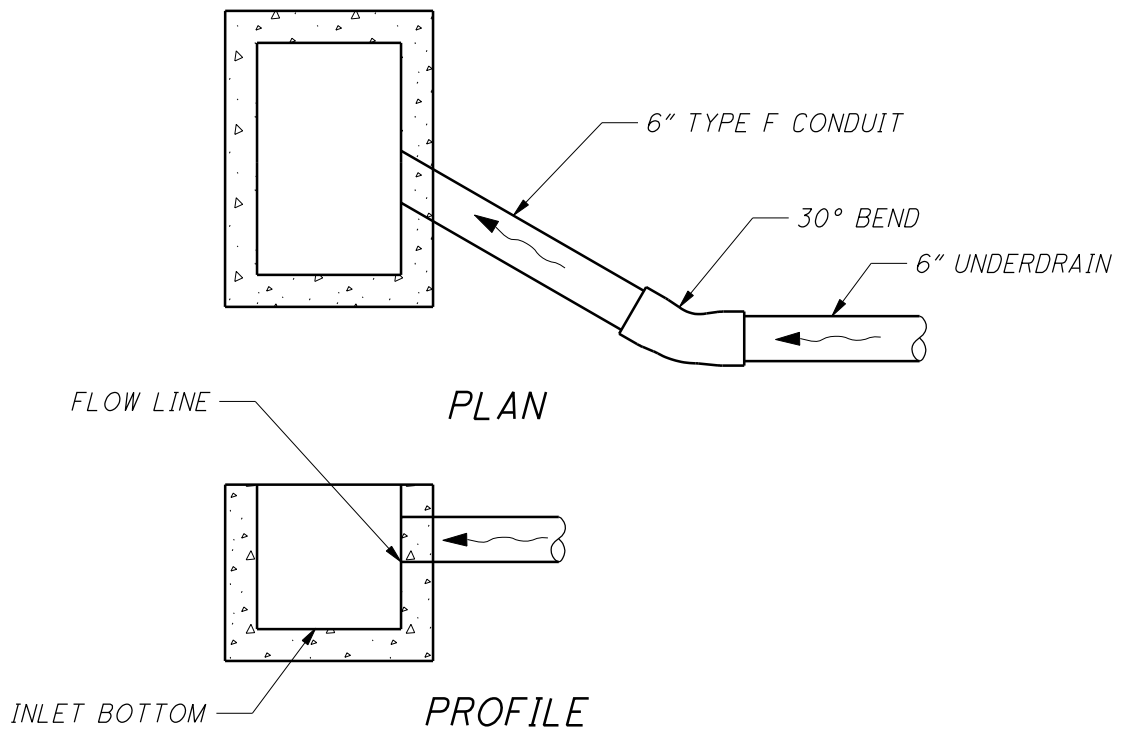
UNDERDRAIN DETAIL (A) (PLAN)
N.T.S.



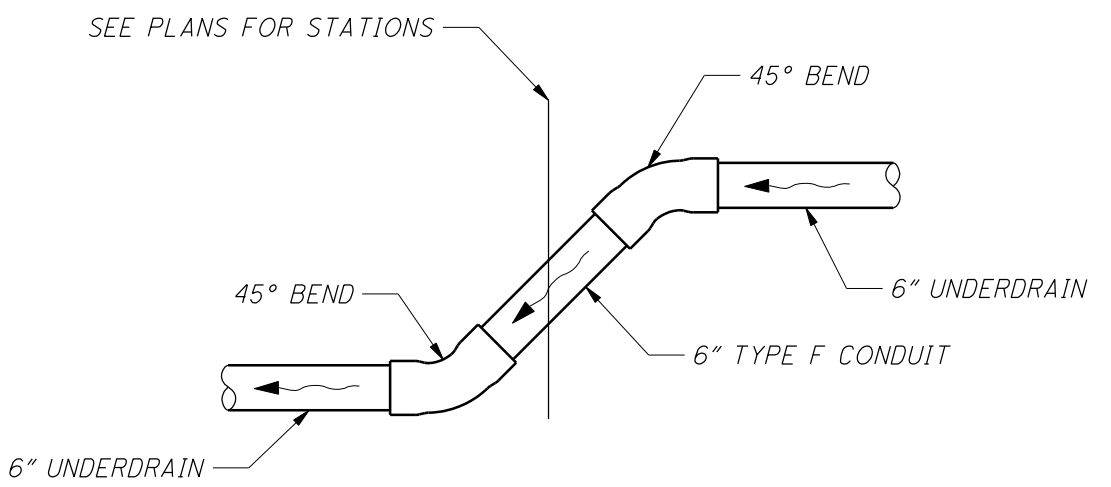
UNDERDRAIN DETAIL (B) (PLAN)
N.T.S.



UNDERDRAIN DETAIL (A) & (B) (PLAN)
N.T.S.



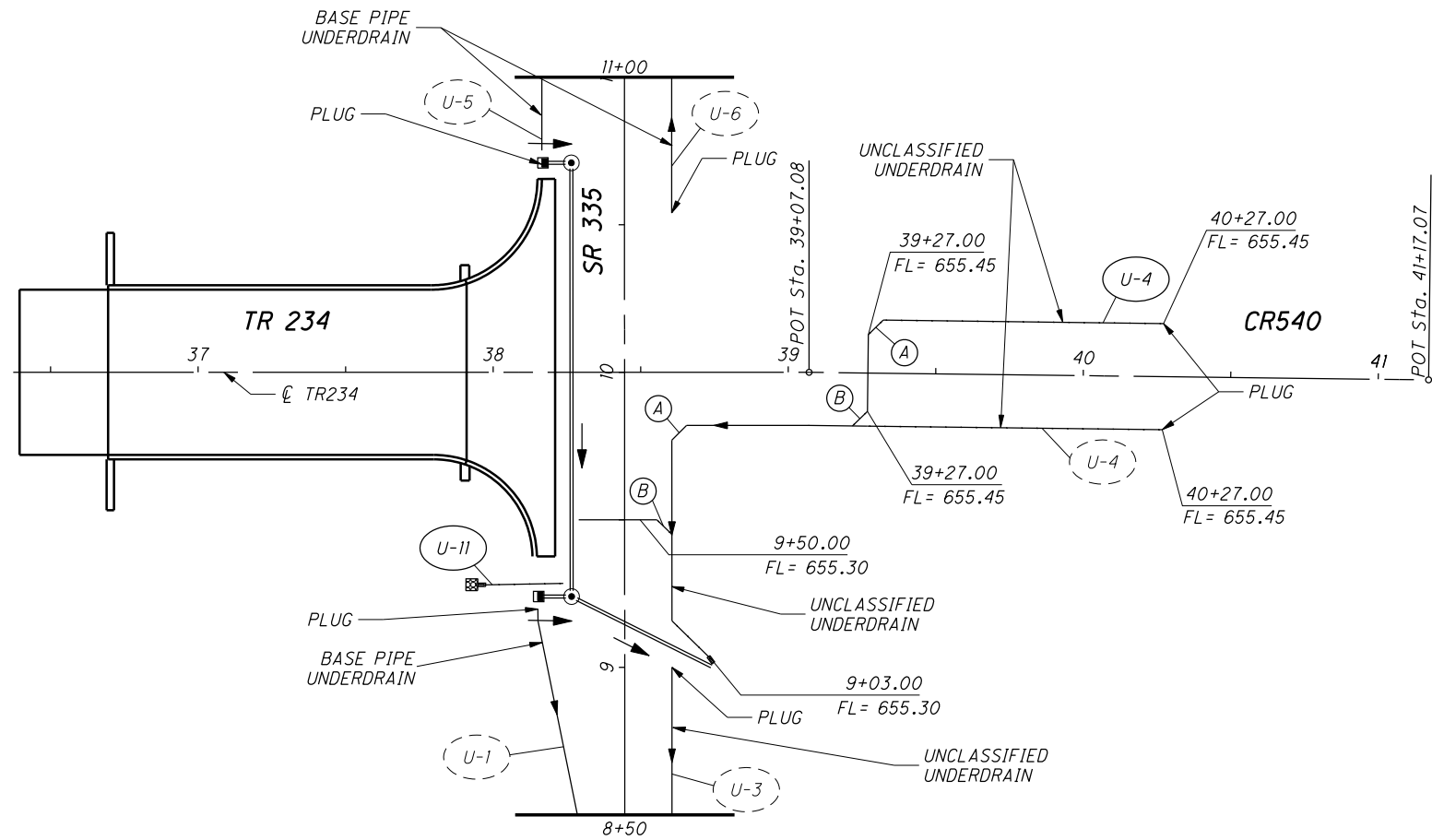
UNDERDRAIN DETAIL (C)
N.T.S.



UNDERDRAIN DEPTH TRANSITION DETAIL (PROFILE)
N.T.S.

NOTE: SEE PLANS FOR LOCATIONS OF DETAILS (A), (B) AND (C)

USER: C:\wch\h\... PLOT DATE: 9/15/2011 2:15:57 PM REVISION DATE: 9/15/2011 MODEL: Sheet
FILE: ... \HDR CL\B0000000045878 /B415dm000.dgn



LEGEND
 SEE TYPICAL UNDERDRAIN DETAILS SHEET
 FOR CONNECTION DETAILS.

CALCULATED
 CTM
 CHECKED
 JMB

0 30 60
 HORIZONTAL
 SCALE IN FEET

UNDERDRAIN DETAILS - CR540
STA. 38+44.54 TO STA. 41+00

SCI-823-6.81

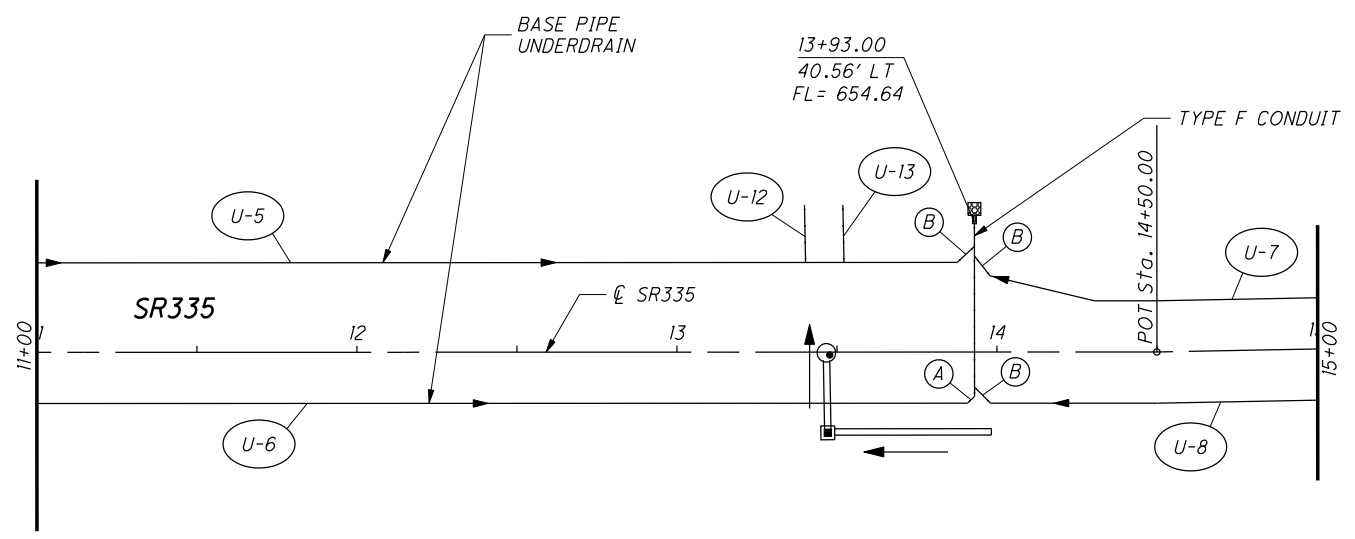
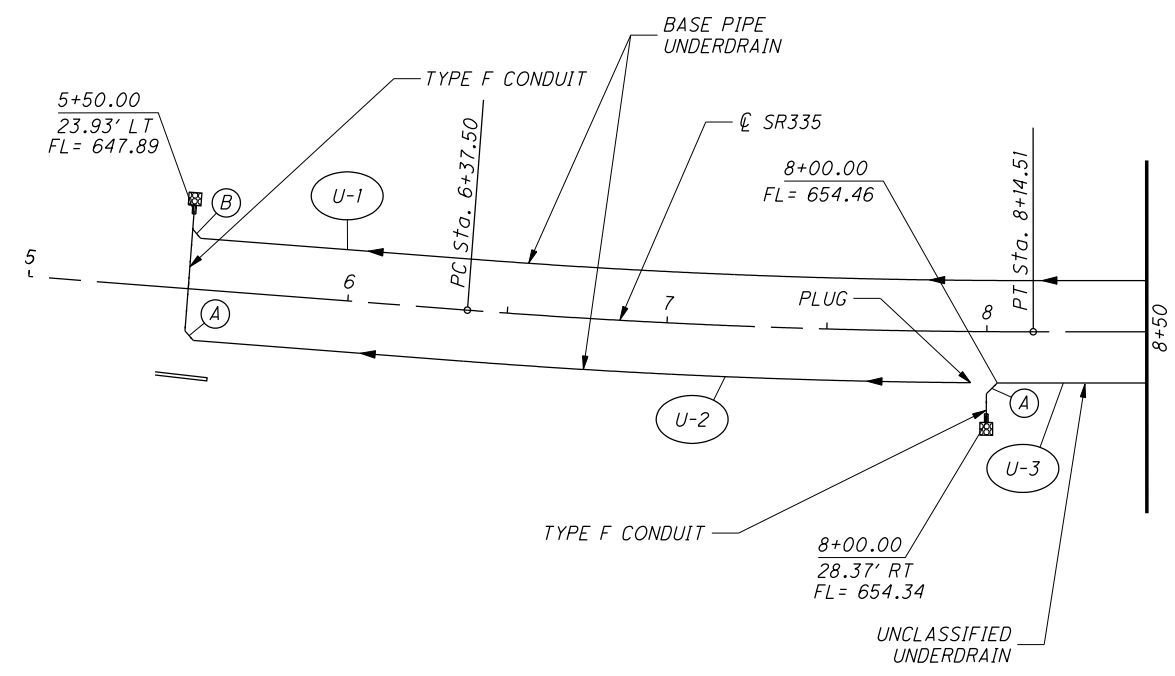
NOTE:
 ALL UNDERDRAINS THAT OUTLET TO A
 SLOPE SHALL HAVE A PRECAST REINFORCED
 CONCRETE OUTLET



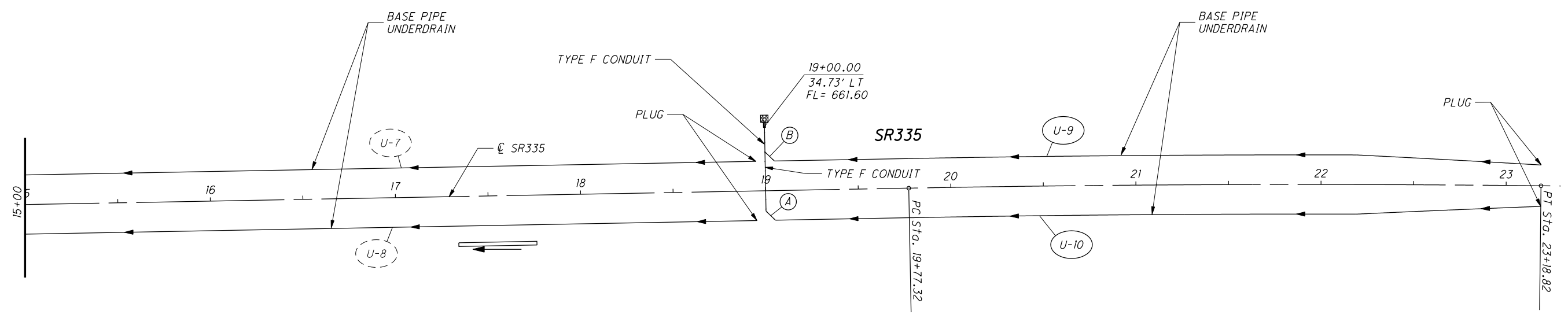
CALCULATED
CTM
CHECKED
JMB

**UNDERDRAIN DETAILS - SR335
STA. 5+00 TO STA. 23+00**

SCI-823-6.81

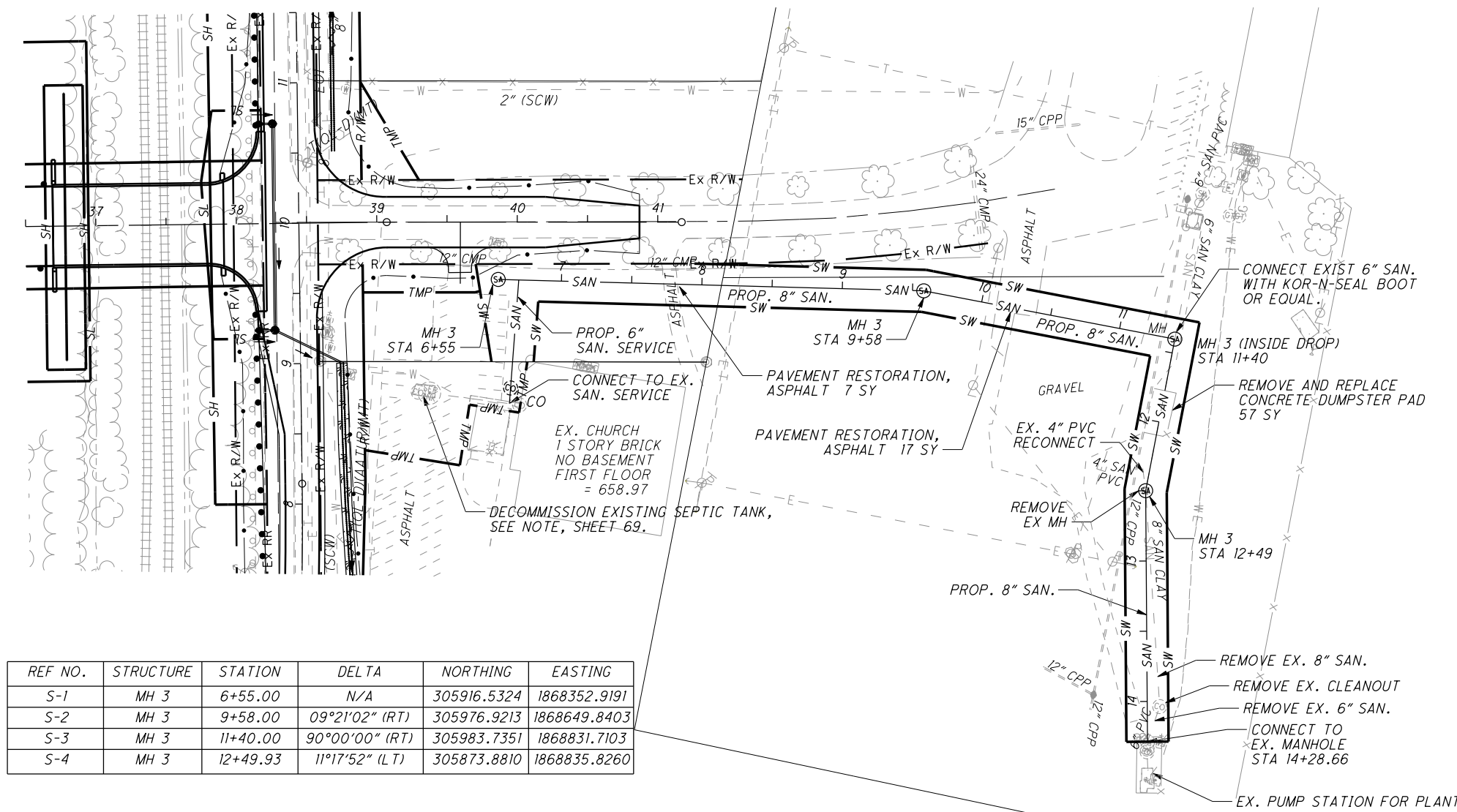


LEGEND
SEE TYPICAL UNDERDRAIN DETAILS SHEET
FOR CONNECTION DETAILS.



NOTE:
ALL UNDERDRAINS THAT OUTLET TO A
SLOPE SHALL HAVE A PRECAST REINFORCED
CONCRETE OUTLET

USER: C:\hp\l... PLOT DATE: 9/16/2011 2:12:09 PM REVISION DATE: 9/15/2011
FILE: ...HDR_C:\BDD000000045878 /1945dm024.dgn MODEL1 Sheet



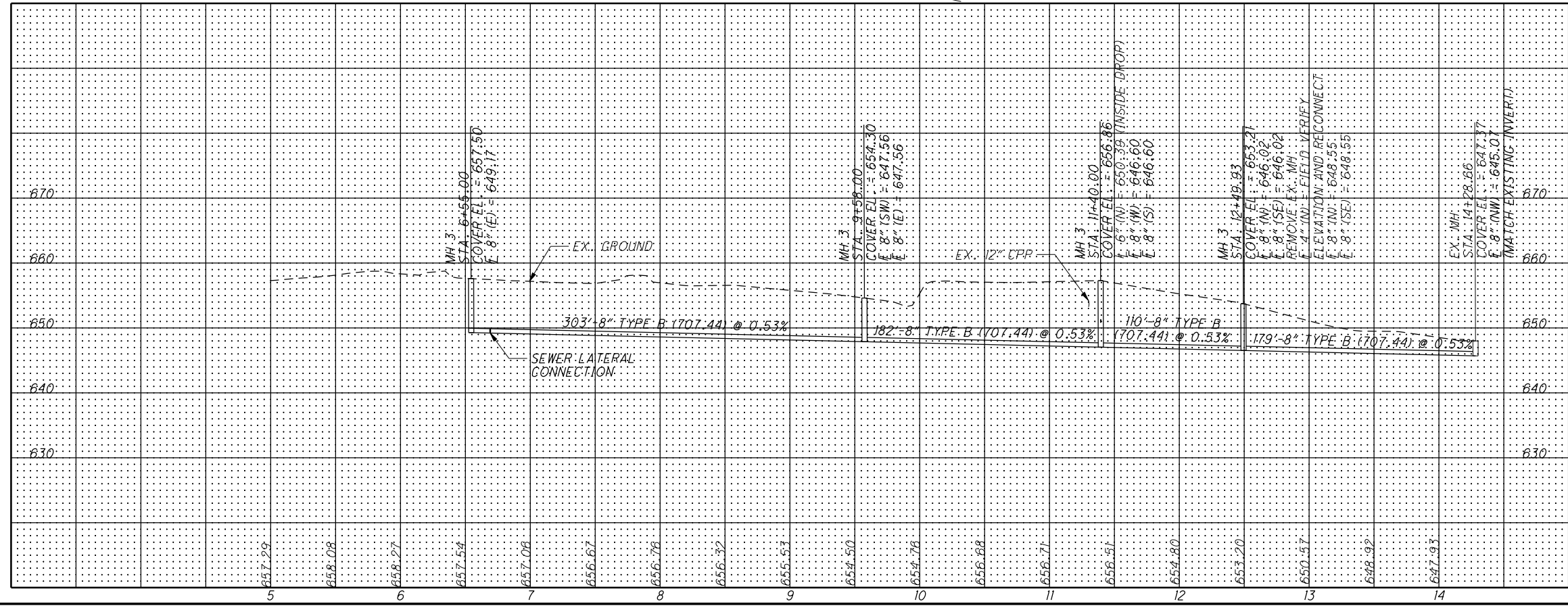
REF NO.	STRUCTURE	STATION	DELTA	NORTHING	EASTING
S-1	MH 3	6+55.00	N/A	305916.5324	1868352.9191
S-2	MH 3	9+58.00	09°21'02" (RT)	305976.9213	1868649.8403
S-3	MH 3	11+40.00	90°00'00" (RT)	305983.7351	1868831.7103
S-4	MH 3	12+49.93	11°17'52" (LT)	305873.8810	1868835.8260

SEE SANITARY NOTES, ESTIMATED QUANTITIES AND PAVEMENT RESTORATION DETAILS ON SHEET 69

NOTES:
ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

CONTRACTOR SHALL SCHEDULE WORK SUCH THAT THE CHURCH CAN UTILIZE THEIR PARKING LOT FOR NORMALLY SCHEDULED SERVICES.

THE PROPOSED WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND APPLICATION APPROVED BY THE DIRECTOR OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY. THERE SHALL BE NO DEVIATION FROM THESE PLANS WITHOUT THE PRIOR EXPRESS, WRITTEN APPROVAL OF THE AGENCY. THE PERMIT WILL EXPIRE IF CONSTRUCTION HAS NOT BEEN INITIATED BY THE APPLICANT WITHIN EIGHTEEN MONTHS OF THE EFFECTIVE DATE (DECEMBER 7, 2011). CONTRACTOR SHALL APPLY FOR A NEW PERMIT TO INSTALL IF CONSTRUCTION HAS NOT BEEN INITIATED BY THE PERMIT EXPIRATION DATE.



USER: lderrel PLOT DATE: 2/22/2012 10:51:02 AM REVISION DATE: 2/22/2012
FILE: \\HDDR\CL\B0000000045878_7\84151\JF001.dwg MODEL: Sheet

REF NO.	STATION		SIDE	202				204	304	408	442	442	452	603	604	604	603
				PIPE REMOVED, 24" AND UNDER	MANHOLE REMOVED	REMOVAL MISC.: DECOMMISSION EX. SEPTIC TANK	PAVEMENT REMOVED	SUBGRADE COMPACTION	8" AGGREGATE BASE	PRIME COAT (R=0.40)	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	8" NON-REINFORCED CONCRETE PAVEMENT	8" CONDUIT, TYPE B (707.44)	MANHOLE, NO. 3	MANHOLE, NO. 3, AS PER PLAN	6" CONDUIT, TYPE B (707.44)
	FT	EACH		EACH	SQ YD	SQ YD	CU YD	GALLON	CU YD	CU YD	SQ YD	FT	EACH	EACH	FT		
	5+00.00	5+93.00				1											
S-1	6+55.00	9+58.00					7	2	3	1	1		303	1			88
S-2	9+58.00	11+40.00					17	4	7	1	1		182	1			
S-3	11+40.00	12+49.93				57	57					57	110		1		
S-4	12+49.93	14+28.66		181	1								179	1			
TOTALS CARRIED TO GENERAL SUMMARY				181	1	1	57	81	6	10	2	2	57	774	3	1	88

NOTE: DECOMMISSION EXISTING SEPTIC TANK

CONTACT SCIOTO COUNTY HEALTH DEPARTMENT FOR INSPECTION DURING REMOVAL. PHONE# (740) 354-3241

PUMP AND PROPERLY DISPOSE OF TANK CONTENTS.

DEMOLISH TOP OF CONCRETE TANK DOWN TO A MINIMUM 3 FEET DEPTH TO ASPHALT SURFACE.

CAP INLET AND OUTLET PIPES WITH GROUT STOPPER.

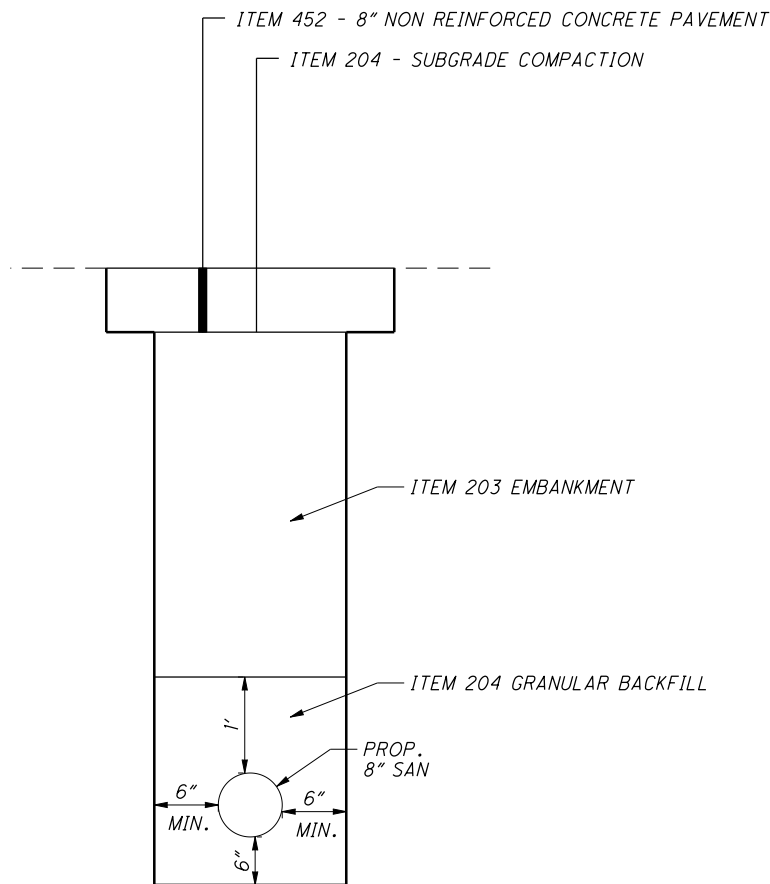
FILL REMAINING TANK WITH SAND AND COMPACT APPROPRIATELY FOR ASPHALT RESTORATION.

PAYMENT FOR THIS WORK IS INCLUDED IN ITEM 202, REMOVAL MISC.: DECOMMISSION EXISTING SEPTIC TANK.

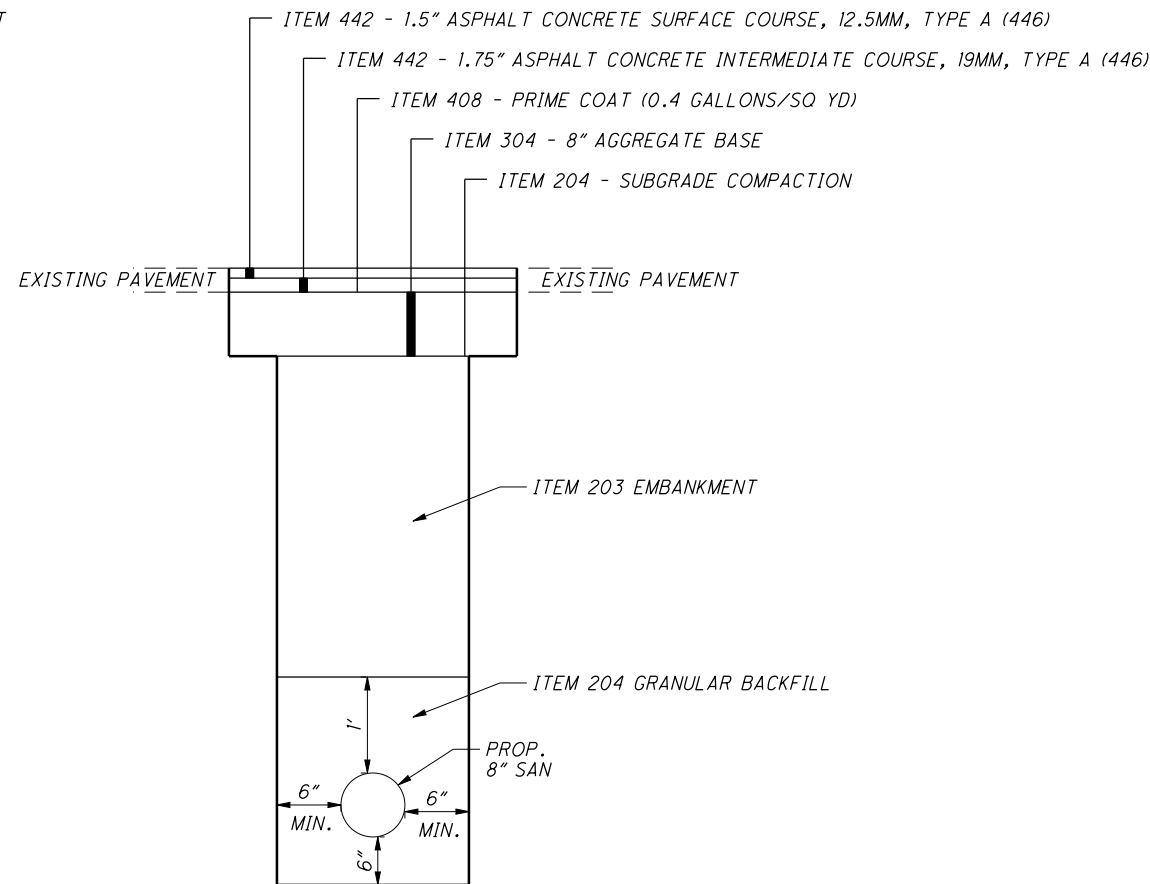
NOTES:

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

THE PROPOSED WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND APPLICATION APPROVED BY THE DIRECTOR OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY. THERE SHALL BE NO DEVIATION FROM THESE PLANS WITHOUT THE PRIOR EXPRESS, WRITTEN APPROVAL OF THE AGENCY. THE PERMIT WILL EXPIRE IF CONSTRUCTION HAS NOT BEEN INITIATED BY THE APPLICANT WITHIN EIGHTEEN MONTHS OF THE EFFECTIVE DATE (DECEMBER 7, 2011). CONTRACTOR SHALL APPLY FOR A NEW PERMIT TO INSTALL IF CONSTRUCTION HAS NOT BEEN INITIATED BY THE PERMIT EXPIRATION DATE.



PAVEMENT RESTORATION
CONCRETE



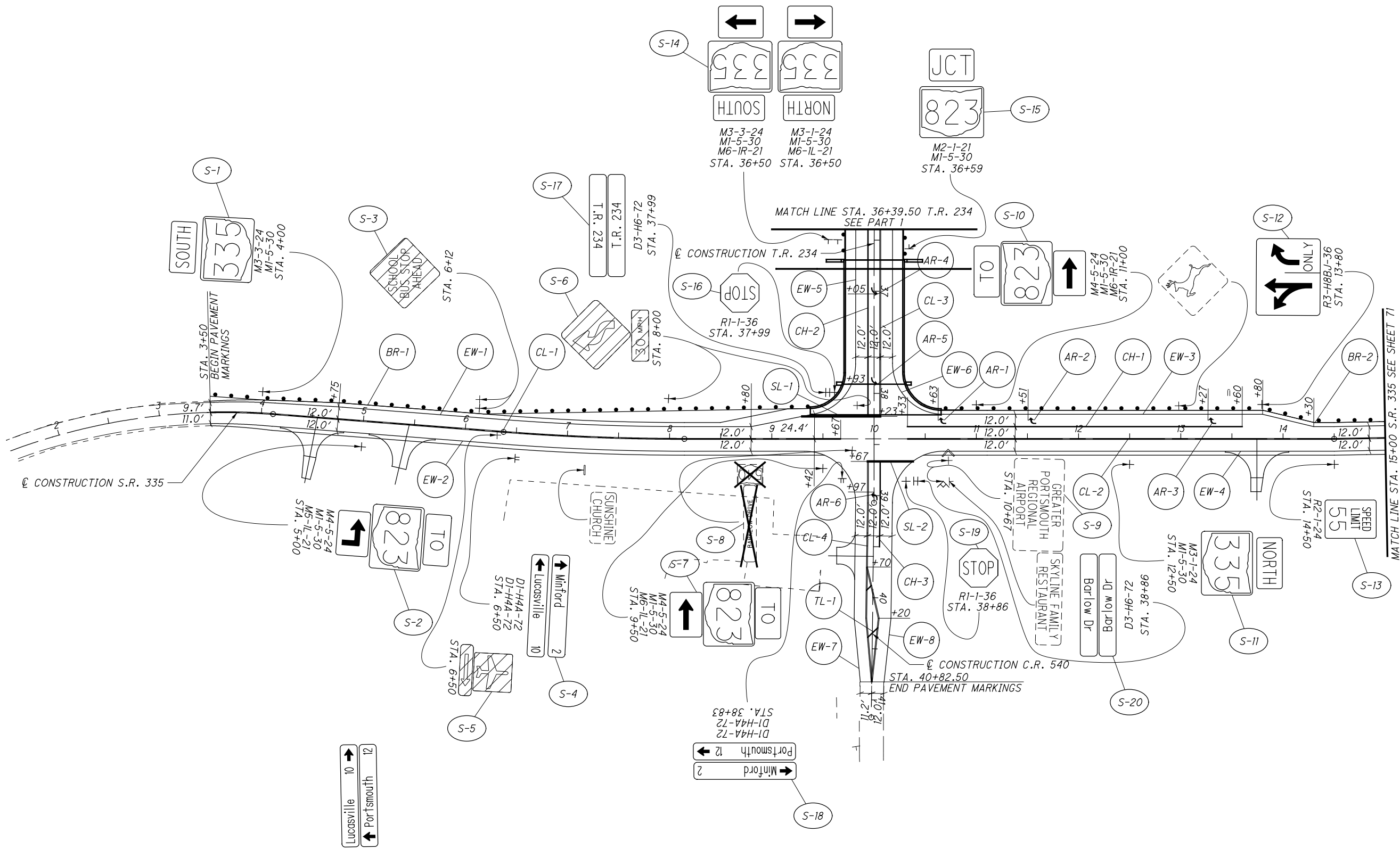
PAVEMENT RESTORATION
ASPHALT

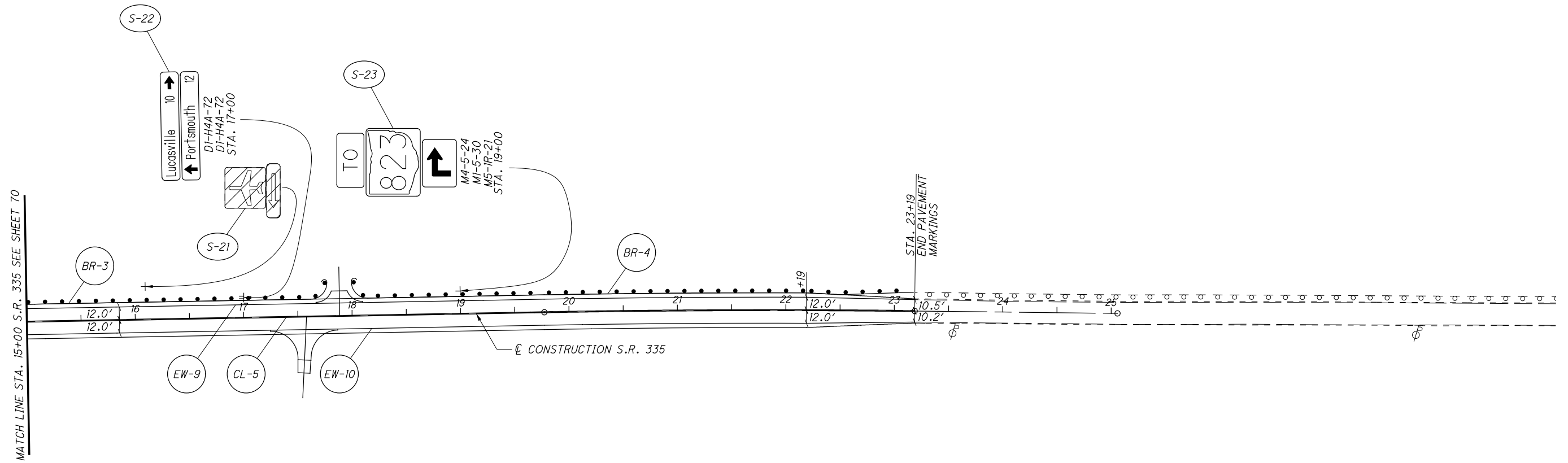
LEGEND

- | | | | | | | | |
|------|---------------------------|------|----------------------------------|--------|-------------------------|--------|-------------------------------|
| (EW) | EDGE LINE, WHITE | (SL) | STOP LINE | (STOP) | PROPOSED SIGN | (STOP) | EXISTING SIGN TO BE RELOCATED |
| (CH) | CHANNELIZING LINE | (TL) | TRANSVERSE/DIAGONAL LINE, YELLOW | (STOP) | EXISTING SIGN TO REMAIN | (STOP) | EXISTING SIGN TO BE REMOVED |
| (CL) | CENTER LINE, DOUBLE SOLID | (AR) | LANE ARROW | | | | |
| (LL) | LANE LINE | (BR) | BARRIER REFLECTOR | | | | |

NOTES

- SEE SHEET 72 FOR PAVEMENT MARKING QUANTITIES
- SEE SHEET 73 FOR SIGNING QUANTITIES





- NOTES**
1. SEE SHEET 70 FOR LEGEND
 2. SEE SHEET 72 FOR PAVEMENT MARKING QUANTITIES
 3. SEE SHEET 73 FOR SIGNING QUANTITIES

N
0 50 100 HORIZONTAL SCALE IN FEET
CALCULATED MMB
CHECKED TWG

SIGNING AND PAVEMENT MARKING PLAN
S.R. 335 - STA. 15+00 TO STA. 25+00

P:\COV\ODT\MP\0043_SCI-823-6.81\19415\traffic\sheets\19415TS013.dgn 9/12/2011 7:59:33 AM wda672

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	621	621	621	626	626	644	644	644	644	644	644								
			FROM	TO		RPM, 1 WAY (WHITE)	RPM, 2 WAY (WHITE/RED)	RPM, 2 WAY (YELLOW/YELLOW)	BARRIER REFLECTOR (TYPE A)	BARRIER REFLECTOR (TYPE B)	EDGE LINE (WHITE)	CENTER LINE (DOUBLE SOLID)	CHANNELIZING LINE	STOP LINE	TRANSVERSE/DIAGONAL LINE (YELLOW)	LANE ARROW								
						EACH	EACH	EACH	EACH	EACH	MILE	MILE	FT	FT	FT	EACH								
70	EW-1	S.R. 335	STA. 3+50	STA. 9+42	LT.						0.11													
	EW-2	S.R. 335	STA. 3+50	STA. 9+32	RT.						0.11													
	EW-3	S.R. 335	STA. 10+68	STA. 15+00	LT.						0.08													
	EW-4	S.R. 335	STA. 10+68	STA. 15+00	RT.						0.08													
	EW-5	T.R. 234	STA. 36+40	STA. 38+20	RT.	5					0.03													
	EW-6	T.R. 234	STA. 36+40	STA. 38+20	LT.						0.03													
	EW-7	C.R. 540	STA. 38+57	STA. 40+83	RT.						0.04													
	EW-8	C.R. 540	STA. 38+57	STA. 40+83	LT.	6					0.04													
	CL-1	S.R. 335	STA. 3+50	STA. 9+67	℄			8			0.12													
	CL-2	S.R. 335	STA. 10+33	STA. 15+00	℄			6			0.09													
	CL-3	T.R. 234	STA. 36+40	STA. 38+23	LT.			3			0.03													
	CL-4	C.R. 540	STA. 38+67	STA. 40+83	LT./RT.			7			0.06													
	CH-1	S.R. 335	STA. 10+33	STA. 13+60	LT.		9						327											
	CH-2	T.R. 234	STA. 36+40	STA. 38+23	RT.		5						183											
	CH-3	C.R. 540	STA. 38+67	STA. 39+50	LT.		3						83											
	AR-1	S.R. 335	STA. 10+63	STA. 10+63	LT.											1								
	AR-2	S.R. 335	STA. 11+51	STA. 11+51	LT.											1								
	AR-3	S.R. 335	STA. 13+27	STA. 13+27	LT.											1								
	AR-4	T.R. 234	STA. 37+05	STA. 37+05	℄											1								
	AR-5	T.R. 234	STA. 37+93	STA. 37+93	℄											1								
	AR-6	C.R. 540	STA. 38+97	STA. 38+97	℄											1								
	TL-1	C.R. 540	STA. 39+70	STA. 40+83	℄									17										
	SL-1	T.R. 234	STA. 38+23	STA. 38+23	RT.								76											
	SL-2	C.R. 540	STA. 38+67	STA. 38+67	LT.								44											
70	BR-1	S.R. 335/T.R. 234	STA. 3+50	STA. 36+40	LT./RT.				7	2														
	BR-2	T.R. 234/S.R. 335	STA. 36+40	STA. 15+00	LT.				6	2														
71	EW-9	S.R. 335	STA. 15+00	STA. 23+19	LT.						0.16													
	EW-10	S.R. 335	STA. 15+00	STA. 23+19	RT.						0.16													
	CL-5	S.R. 335	STA. 15+00	STA. 23+19	℄			11			0.16													
71	BR-3	S.R. 335	STA. 15+00	STA. 17+77	LT.				3															
	BR-4	S.R. 335	STA. 18+00	STA. 23+19	LT.				6															
SUBTOTAL						11	17	35	22	4														
TOTALS CARRIED TO GENERAL SUMMARY							63		26		0.84	0.46	593	120	17	6								

PAVEMENT MARKING SUBSUMMARY

CALCULATED
MMB
CHECKED
TWG

SCI-823-6.81

72
111

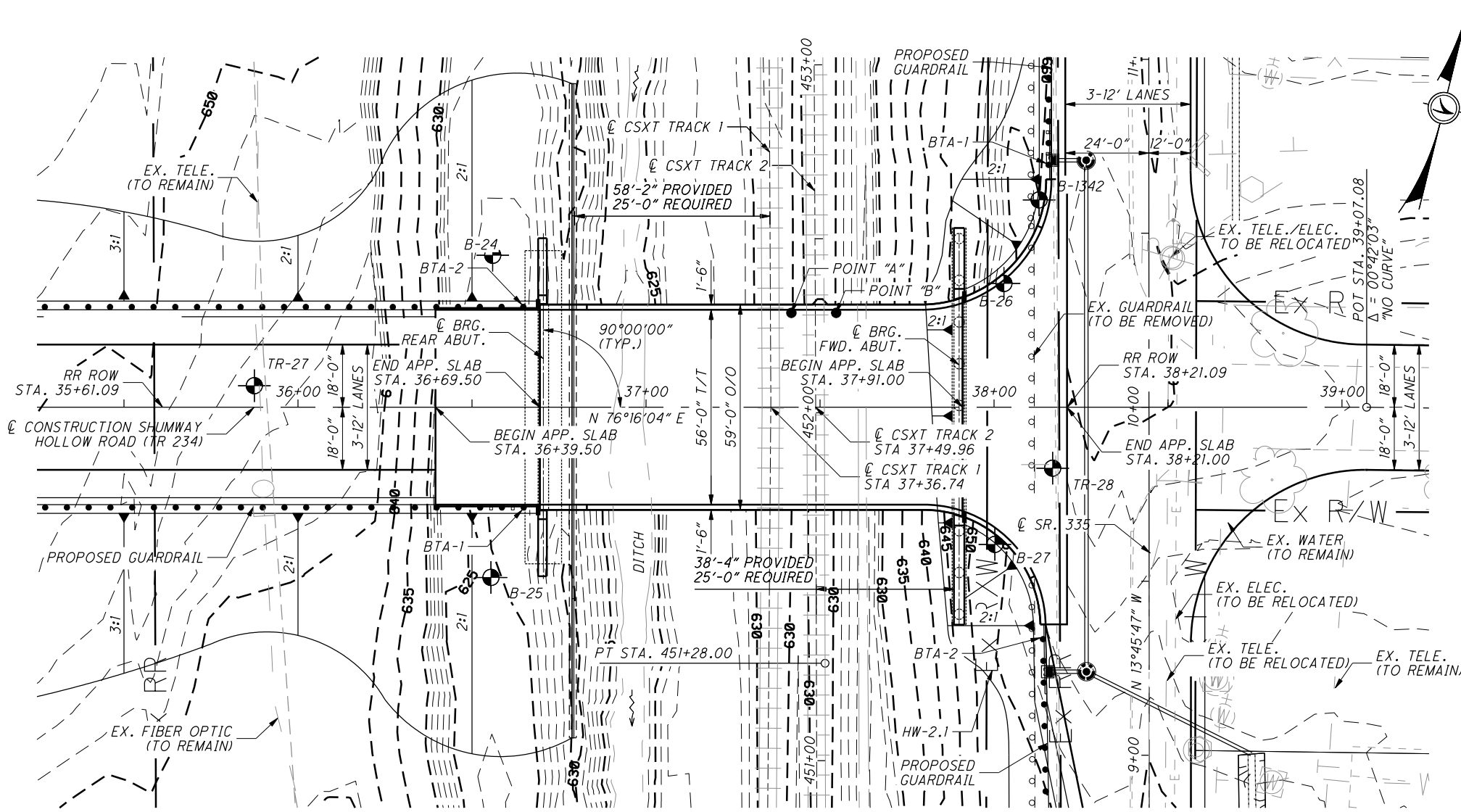
P:\CO\ODT\MP\0043_SCI-823-6.81\19415\traffic\sheets\19415TS014.dgn 9/12/2011 7:59:35 AM wda672

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630	630	630	630	630	630	630	630	630	630	630							
							GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN POST REFLECTOR (RED)	SIGN POST REFLECTOR (YELLOW)	SIGN, FLAT SHEET	SIGN, DOUBLE FACED, STREET NAME	STREET NAME SIGN SUPPORT, NO. 3 POST	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED WOODEN BOX BEAM SUPPORT AND REERECTION						
							FT	FT	EACH	EACH	SQ FT	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH				
70	S-1	S.R. 335	STA. 4+00	LT.	M3-3	24 X 12		14			2.0													
				LT.	M1-5	30 X 24					5.0													
	S-2	S.R. 335	STA. 5+00	RT.	M4-5	24 X 12		15			2.0													
				RT.	M1-5	30 X 24					5.0													
				RT.	M5-1L	21 X 15					2.19													
	S-3	S.R. 335	STA. 6+12	LT.	S3-1	30 X 30		13	1						1	1								
	S-4	S.R. 335	STA. 6+50	RT.	D1-H4A	72 X 12		15/15			5.0													
					D1-H4A	72 X 12					5.0													
	S-5	S.R. 335	STA. 6+50	RT.	I-5	24 X 30									2	1								
					I-H12R	24 X 6																		
	S-6	S.R. 335	STA. 8+00	RT.	W1-4L	30 X 30		14							2	1								
					W1-H6P	24 X 12																		
	S-7	S.R. 335	STA. 9+50	RT.	M4-5	24 X 12		15			2.0													
				RT.	M1-5	30 X 24					5.0													
				RT.	M6-1L	21 X 15					2.19													
	S-8	S.R. 335	STA. 9+78	RT.	SPECIAL	-								2		1								
	S-9	S.R. 335	STA. 10+67	RT.	SPECIAL	-		13									2	3						
	S-10	S.R. 335	STA. 11+00	LT.	M4-5	24 X 12		15			2.0													
				LT.	M1-5	30 X 24					5.0													
				LT.	M6-1R	21 X 15					2.19													
	S-11	S.R. 335	STA. 12+50	RT.	M3-1	24 X 12		14			2.0													
				RT.	M1-5	30 X 24					5.0													
	S-12	S.R. 335	STA. 13+80	LT.	R3-H8BJ	36 X 30		13			7.5													
	S-13	S.R. 335	STA. 14+50	RT.	R2-1	24 X 30	13				5.0													
	S-14	T.R. 234	STA. 36+50	RT.	M3-1	24 X 12		15			2.0													
				RT.	M1-5	30 X 24					5.0													
				RT.	M6-1L	21 X 15					2.19													
				RT.	M3-3	24 X 12		15			2.0													
				RT.	M1-5	30 X 24					5.0													
				RT.	M6-1R	21 X 15					2.19													
	S-15	T.R. 234	STA. 36+59	LT.	M2-1	21 X 15		13			2.19													
				LT.	M1-5	30 X 24					5.0													
	S-16	T.R. 234	STA. 37+99	RT.	R1-1	36 X 36		13	1		9.0													
	S-17	T.R. 234	STA. 37+99	RT.	D3-H6	72 X 12						1	14											
	S-18	C.R. 540	STA. 38+83	RT.	D1-H4A	72 X 12		15/15			5.0													
					D1-H4A	72 X 12					5.0													
	S-19	C.R. 540	STA. 38+86	LT.	R1-1	36 X 36		13	1		9.0													
70	S-20	C.R. 540	STA. 38+86	LT.	D3-H6	72 X 12						1	14											
	S-21	S.R. 335	STA. 16+10	LT.	I-5	24 X 30									2	1								
					I-H12R	24 X 6																		
	S-22	S.R. 335	STA. 17+00	LT.	D1-H4A	72 X 12		15/15			5.0													
					D1-H4A	72 X 12					5.0													
71	S-23	S.R. 335	STA. 19+00	LT.	M4-5	24 X 12		15			2.0													
					M1-5	30 X 24					5.0													
					M6-1R	21 X 15					2.19													
TOTALS CARRIED TO GENERAL SUMMARY							13	300	2	1	137	2	28	2	7	5	2	3						

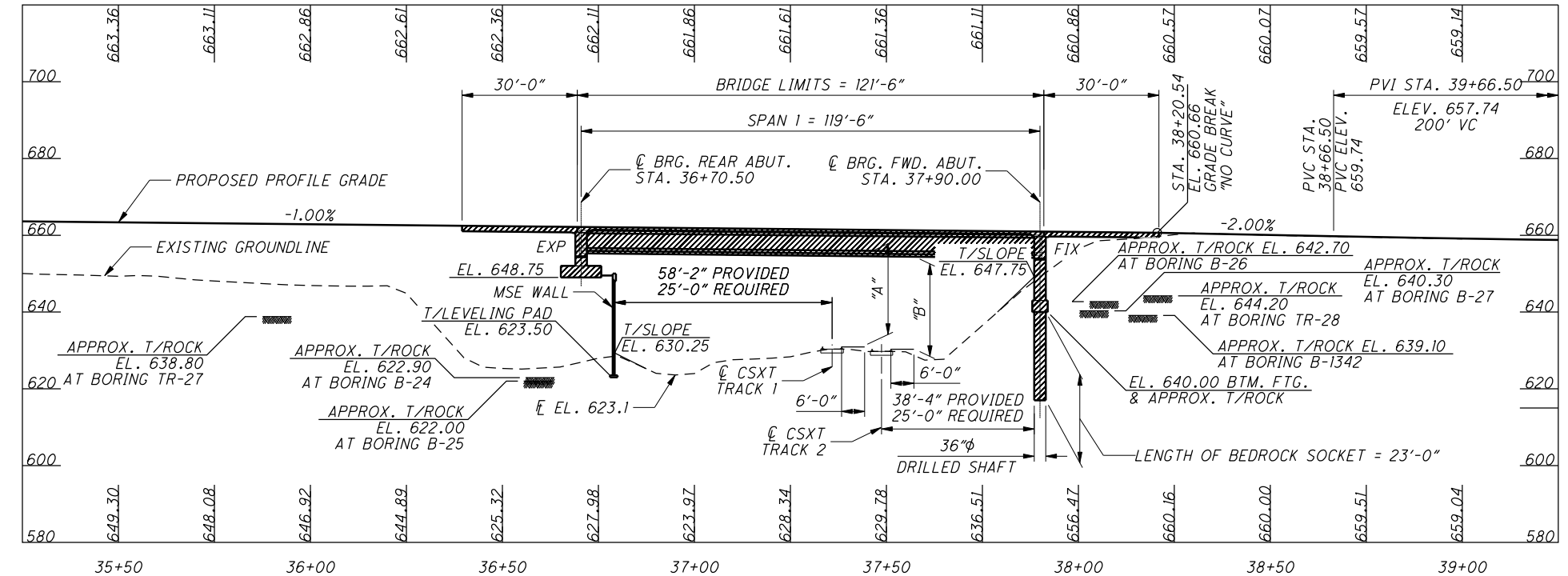
SIGNING SUBSUMMARY

CALCULATED
AWN
CHECKED
TWG

SCI-823-6.81



PLAN



PROFILE ALONG \hat{C} CONSTRUCTION SHUMWAY HOLLOW ROAD

BENCHMARK DATA			
BM #7	STA. 381+08,	ELEV. 646.20',	OFFSET 557', RT.
BM #8	STA. 386+68,	ELEV. 659.05',	OFFSET 558', RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS.

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

DESIGN TRAFFIC:
 2010 ADT = 3800 2010 ADTT = 228
 2030 ADT = 7800 2030 ADTT = 468
 DIRECTIONAL DISTRIBUTION =

LEGEND
 BTA-1 = BRIDGE TERMINAL ASSEMBLY TYPE 1
 BTA-2 = BRIDGE TERMINAL ASSEMBLY TYPE 2
 \bullet = SOIL BORING LOCATION

VERTICAL CLEARANCES		
LOCATION	"A" *	"B"*
PROPOSED	23.15'	23.19'
REQUIRED	23.0'	23.0'

* 6'-0" FROM \hat{C} CSXT TRACK

GUARDRAIL POST		
LOCATION	STATION	TYPE
REAR ABUT	36+64.75	BTA-2
REAR ABUT	36+64.85	BTA-1
FWD ABUT	9+33.36	BTA-2
FWD ABUT	10+69.69	BTA-1

PROPOSED STRUCTURE

TYPE: SINGLE SPAN 72" MODIFIED AASHTO TYPE 4 PRESTRESSED CONCRETE I-BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON SEMI-INTEGRAL REAR ABUTMENT AND INTEGRAL FORWARD ABUTMENT

SPANS: 119'-6" C/C BEARINGS
 ROADWAY: 56'-0" T/T BARRIER
 LOADING: HS25 AND ALTERNATE MILITARY FWS = 60 PSF
 SKEW: NONE
 WEARING SURFACE: MONOLITHIC CONCRETE
 APPROACH SLABS: AS-1-81, 30'-0" LONG (MODIFIED)
 ALIGNMENT: TANGENT
 CROWN: NORMAL
 COORDINATES: LATITUDE 38°50'30" N
 LONGITUDE 82°51'00" W

DESIGN AGENCY: **KZF DESIGN**
 DATE: 06/24/11
 REVIEWED: BAA
 DRAWN: RBK
 CHECKED: RBK
 STRUCTURE FILE NUMBER: 7336934
 DAT
 SCIOTO COUNTY
 STA. 36+39.50
 STA. 37+91.00
 SITE PLAN
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD
 SCI-823-6.81
 PID No. 19415
 1/38
 74
 111

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

A-1-69 REVISED 07-19-02 SBR-1-99 REVISED 07-19-02
 AS-1-81 REVISED 07-19-02 SICD-1-96 REVISED 07-19-02
 IGD-1-82 REVISED 07-19-02 VPF-1-90 REVISED 04-15-11
 PSID-1-99 REVISED 04-20-07

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 04-15-11
 840 DATED 10-15-10
 898 DATED 01-21-11

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION (2002) AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
 FUTURE WEARING SURFACE (FWS) OF 60 LBS/FT²

DESIGN DATA:

CONCRETE CLASS OSC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
 CONCRETE CLASS OSC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
 CONCRETE CLASS S MODIFIED - COMPRESSIVE STRENGTH 4000 PSI (DRILLED SHAFT)
 REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
 SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615
 STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50,000 PSI

CONCRETE FOR PRESTRESSED BEAMS:
 COMPRESSIVE STRENGTH (FINAL) - 7,000 PSI
 COMPRESSIVE STRENGTH (RELEASE) - 5,500 PSI
 PRESTRESSING STRAND:
 AREA = 0.167 IN²
 ULTIMATE STRENGTH = 270 KSI
 INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:
 EPOXY COATED REINFORCING STEEL
 2 1/2" CONCRETE COVER

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

REAR ABUTMENT CONSTRUCTION CONSTRAINTS:

PRIOR TO CONSTRUCTING THE SPREAD FOOTING FOUNDATIONS, CONSTRUCT THE BRIDGE APPROACH EMBANKMENTS BEHIND THE ABUTMENT UP AT A 1:1 SLOPE FROM THE BOTTOM OF THE HEEL OF THE FOOTING TO THE SUBGRADE ELEVATION AND FOR A MINIMUM DISTANCE OF 250 FEET BEHIND THE ABUTMENTS. AFTER THE ABUTMENT FOOTING AND BRESTWALL ARE COMPLETED AND PRIOR TO SETTING SUPERSTRUCTURE MEMBERS, CONSTRUCT THE EMBANKMENT IMMEDIATELY BEHIND THE ABUTMENT UP TO THE BEAM SEAT ELEVATION AND ON A 1:1 SLOPE UP TO THE SUBGRADE ELEVATION, TYPE B GRANULAR MATERIAL CONFORMING TO 703.16.C.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH THE SS840 TO SUPPORT THE ABUTMENT LOADS PROVIDED IN THE TABLE BELOW. ALL LOADS IN THE TABLE REPRESENT UNFACTORED SERVICE LOADS APPLIED TO THE REINFORCED SOIL MASS AT THE BASE OF THE CONCRETE FOOTING. DL REPRESENTS A VERTICAL SPREAD FOOTING STRIP LOAD THAT INCLUDES THE DEAD LOAD OF THE APPROACH SLAB; THE DEAD LOAD OF THE ABUTMENT; AND THE DEAD LOAD FROM THE SUPERSTRUCTURE. LL REPRESENTS A VERTICAL SPREAD FOOTING STRIP LOAD THAT INCLUDES ONLY THE LIVE LOAD FROM THE SUPERSTRUCTURE. H REPRESENTS A HORIZONTAL STRIP LOAD FROM THE SUPERSTRUCTURE APPLIED PERPENDICULAR TO THE FACE OF WALL. ECC. REPRESENTS THE DISTANCE BETWEEN THE GEOMETRICAL CENTER OF THE STRIP FOOTING AND THE RESULTANT OF ALL LOADS APPLIED TO THE FOOTING.

WALL LOCATION	DL	LL	H	ECC.	BEARING PRESSURE
	(K/FT)	(K/FT)	(K/FT)	(FT)	(K/FT ²)
REAR ABUTMENT	33.61	4.02	2.92	0.00	3.58

FOUNDATION BEARING PRESSURE:

REAR ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 1.8 TONS PER SQUARE FOOT AND A MAXIMUM FACTORED LOAD PRESSURE OF 2.5 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 2 TONS PER SQUARE FOOT.

ITEM 898, OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING), AS PER PLAN:

IN ADDITION TO THE REQUIREMENTS OF ITEM 898, INSTALL A REFERENCE MONUMENT AT EACH END OF EACH SPREAD FOOTING. THE REFERENCE MONUMENT SHALL CONSIST OF A #8, OR LARGER, EPOXY COATED REBAR EMBEDDED AT LEAST 6" INTO THE FOOTING AND EXTENDED VERTICALLY 4 TO 6 INCHES ABOVE THE TOP OF THE FOOTING. INSTALL A SIX INCH DIAMETER, SCHEDULE 40, PLASTIC PIPE AROUND THE REFERENCE MONUMENT. CENTER THE PIPE ON THE REFERENCE MONUMENT AND PLACE THE PIPE VERTICAL WITH ITS TOP AT THE FINISHED GRADE. THE PIPE SHALL HAVE A REMOVABLE, SCHEDULE 40, PLASTIC CAP. PERMANENTLY ATTACH THE BOTTOM OF THE PIPE TO THE TOP OF THE FOOTING.

ESTABLISH A BENCHMARK TO DETERMINE THE ELEVATIONS OF THE REFERENCE MONUMENTS AT VARIOUS MONITORING PERIODS THROUGHOUT THE LENGTH OF THE CONSTRUCTION PROJECT. THE BENCHMARK SHALL BE THE SAME THROUGHOUT THE PROJECT AND SHALL BE INDEPENDENT OF ALL STRUCTURES.

RECORD THE ELEVATION OF EACH REFERENCE MONUMENT AT EACH MONITORING PERIOD SHOWN IN THE TABLE BELOW.

THE ORIGINAL COMPLETED TABLES WILL BECOME PART OF THE DISTRICT'S PROJECT PLAN RECORDS. SEND A COPY OF THE COMPLETED TABLES TO THE OFFICE OF STRUCTURAL ENGINEERING.

PROJECT NUMBER:	MAXIMUM BEARING PRESSURE: 1.8 TSF	
BRIDGE NUMBER: SCI-TR234-0122	STRUCTURE FILE NUMBER: 7336934	
BENCHMARK LOCATION:		
FOOTING LOCATION: REAR ABUTMENT		
MONITORING PERIOD	LEFT MONUMENT	RIGHT MONUMENT
AFTER FOOTING CONCRETE IS PLACED		
BEFORE PLACEMENT OF SUPERSTRUCTURE MEMBERS		
BEFORE DECK PLACEMENT		
AFTER DECK PLACEMENT		
PROJECT COMPLETION		

DRILLED SHAFTS:

THE DESIGN LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 240 TONS AT THE FORWARD ABUTMENT. THIS LOAD IS RESISTED BY SHAFT ADHESION WITHIN A PORTION OF THE BEDROCK SOCKET AND ALSO BY SHAFT END BEARING. THE ALLOWABLE BEDROCK SOCKET ADHESION IS 353 TONS, ASSUMED TO ACT ALONG THE BOTTOM 10 FEET OF THE BEDROCK SOCKET FOR THE FORWARD ABUTMENT. THE ALLOWABLE END BEARING PRESSURE IS 40 TONS PER SQUARE FOOT. THE REINFORCING STEEL SHALL BE EPOXY COATED ACCORDING TO 709.00

RAILROAD NOTES:

MAINTAIN A CONSTRUCTION CLEARANCE OF 25 FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 23 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AT ALL TIMES.

THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A DETAILED PLAN AND PROCEDURE TO THE CSXT DIRECTOR OF RIGHT OF WAY CONSTRUCTION OR HIS DESIGNATE IDENTIFIED IN THE PRECONSTRUCTION MEETING, FOR STRUCTURAL ERECTION PROCEDURES OVER AND ADJACENT TO RAILROAD SPANS.

CSXT TRANSPORTATION - CONSTRUCTION SUBMISSION CRITERIA ISSUED APRIL 3, 2009 CLARIFIES REQUIREMENTS FOR HOISTING AND ERECTION OF SUPERSTRUCTURE MEMBERS AND OTHER CONSTRUCTION TASKS THAT SHALL REQUIRE SUBMITTAL, REVIEW, AND APPROVAL BY CSXT OR THEIR ENGINEERING DESIGNATE. THE CURRENT VERSION OF THIS DOCUMENT CAN BE FOUND ON THE CSXT WEBSITE - WWW.CSX.COM.

AN EROSION CONTROL PLAN SUBMITTAL, SPECIFIC TO THE TR 234 & SR 335 CONSTRUCTION IMPACTS TO CSXT PROPERTY AND DITCHES WILL BE REQUIRED.

NO REQUEST FOR TEMPORARY AT-GRADE CONSTRUCTION CROSSING OF THE CSXT TRACKS WILL BE CONSIDERED FOR THIS PROJECT LOCATION. USE OF THE RAILROAD SEPARATED STRUCTURE AT RR STATION 466+00± BY AGENCY OR CONTRACTOR EMPLOYEES WILL NOT BE PERMITTED. THE CSXT RIGHT-OF-WAY CONSTRUCTION DEPARTMENT SHALL BE FURNISHED AS BUILT DRAWINGS SHOWING ACTUAL CLEARANCES AS CONSTRUCTED PRIOR TO PROJECT COMPLETION, ACCEPTANCE, AND CLOSE-OUT.

UTILITY LINES:

THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 898 - OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE, APPROACH SLAB, AS PER PLAN:

FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, OC/OA CONCRETE, CLASS OSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING. THE DEPARTMENT WILL MEASURE APPROACH SLABS BY THE NUMBER OF SQUARE YARDS. THE DEPARTMENT WILL INITIALLY PAY THE FULL BID PRICE TO THE CONTRACTOR UPON COMPLETING THE WORK. THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

ITEM 898 - OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE, (DECK), AS PER PLAN:

THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:

INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1/4" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY-DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM	REQUIREMENT
THICKNESS, INCHES	D751	0.094±0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM	D751	700 X 700 (LONG. X TRANS.)
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS, MINIMUM	D751	9
BURST STRENGTH, PSI, MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40°F, BEND AROUND 1/4" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT:
 THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT:
 THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.



DESIGNED	DATE	REVIEWED	DATE	DRAWN	DATE
DEF/RBK	06/24/11	BAA	06/24/11	RBK	06/24/11
CHECKED				REVISED	
DAT					

GENERAL NOTES
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

ITEM 516 - INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:
 INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS.
 SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1/4" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, ±, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY-DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM	REQUIREMENT
THICKNESS, INCHES	D751	0.094±0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM	D751	700 X 700 (LONG. X TRANS.)
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS, MINIMUM	D751	9
BURST STRENGTH, PSI, MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40°F, BEND AROUND 1/4" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT:

THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT:

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 1.21 KIPS FOR A TOTAL MACHINE LOAD OF 9.7 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

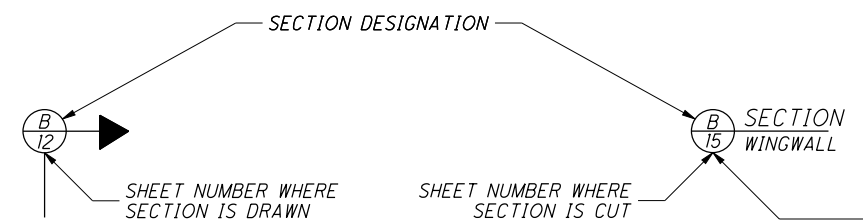
A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ABBREVIATION LIST:

N.F. = NEAR FACE	P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
F.F. = FAR FACE	P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
E.F. = EACH FACE	N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE
TYP. = TYPICAL	INV. = INVERT
MIN. = MINIMUM	FWD. = FORWARD
STA. = STATION	ABUT. = ABUTMENT
SPA. = SPACES	CONC. = CONCRETE
CONST. = CONSTRUCTION	EA. = EACH
EL. = ELEVATION	STD. = STANDARD
C.I.P. = CAST-IN-PLACE	DWG. = DRAWING
BRG. = BEARING	DIA. = DIAMETER
EX. = EXISTING	E.B. = EASTBOUND
PROP. = PROPOSED	W.B. = WESTBOUND
A.P.P. = AS PER PLAN	W.P. = WORK POINT
R.A. = REAR ABUTMENT	C/C = CENTER TO CENTER
F.A. = FORWARD ABUTMENT	STRUCT. = STRUCTURE
O/O = OUT TO OUT	TEMP. = TEMPORARY
F/F = FACE TO FACE	C.J. = CONSTRUCTION JOINT
CLR. = CLEAR	BTM. = BOTTOM
LT. = LEFT	T/T = TOE TO TOE
RT. = RIGHT	
EST. = ESTIMATE	
EQ. = EQUAL	

SECTION CONVENTION:



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CALCULATED BY: RBK DATE: 10/11/10
 CHECKED BY: DAT DATE: 11/24/10

ESTIMATED QUANTITIES									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	SHT. REF.
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	21100	606	CU YD	UNCLASSIFIED EXCAVATION	606				
509	10000	122241	POUND	EPOXY COATED REINFORCING STEEL	55668		66573		
512	10100	1177	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	633		544		
515	15051	8	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MODIFIED (72"), AS PER PLAN			8		16-17/38
515	20000	28	EACH	INTERMEDIATE DIAPHRAGMS			28		
516	13900	96	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	96				
516	14015	87	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	87				3/38
516	14021	84	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	84				2/38
516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 2.24" THICK x 22" x 16" WITH 1/2" THICK x 24" x 18" LOAD PLATE AND HP 14x73 SHAPE WITH 1/2" THICK x 26" x 16" LOAD PLATE	16				
518	21200	156	CU YD	POROUS BACKFILL WITH FILTER FABRIC	156				
518	40000	207	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	207				
518	40010	31	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	31				
524	94704	230	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK	230				
607	39900	240	FT	VANDAL PROTECION FENCE, 6' STRAIGHT, COATED FABRIC			240		
840	20000	4222	SQ FT	MECHANICALLY STABILIZED EARTH WALL				4222	
840	21000	1318	CU YD	WALL EXCAVATION				1318	
840	22000	561	SQ YD	FOUNDATION PREPARATION				561	
840	23000	3527	CU YD	SELECT GRANULAR BACKFILL				3527	
840	23050	320	CU YD	NATURAL SOIL				320	
840	25010	424	FT	6" DRAINAGE PIPE, PERFORATED				424	
840	25020	20	FT	6" DRAINAGE PIPE, NON-PERFORATED				20	
840	26000	197	FT	CONCRETE COPING				197	
840	27000	5	DAY	ON-SITE ASSISTANCE				5	
840	28000	LUMP		SGB INSPECTION AND COMPACTION TESTING				LUMP	
898	10201	304	CU YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			304		2/38
898	10709	495	SQ YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN			495		2/38
898	11000	52	CU YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (PARAPET)			52		
898	20150	172	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (ABUTMENT)	172				
898	20300	51	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING)	51				
898	20301	105	CU YD	OC/OA CONCRETE, CLASS OSC1, SUBSTRUCTURE (FOOTING), AS PER PLAN	105				2/38

TOTALS CARRIED TO GENERAL SUMMARY

CALCULATED BY: RBK DATE: 09/17/10
 CHECKED BY: EAS DATE: 09/17/10

LIGHTING ESTIMATED QUANTITIES									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	SHT. REF.				
625	10614	4	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	15/38				
625	25400	169	FT	CONDUIT, 2", 725.04	15/38				
625	29920	1	EACH	STRUCTURE JUNCTION BOX (18"x12"x8", 725.10)					

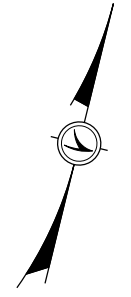
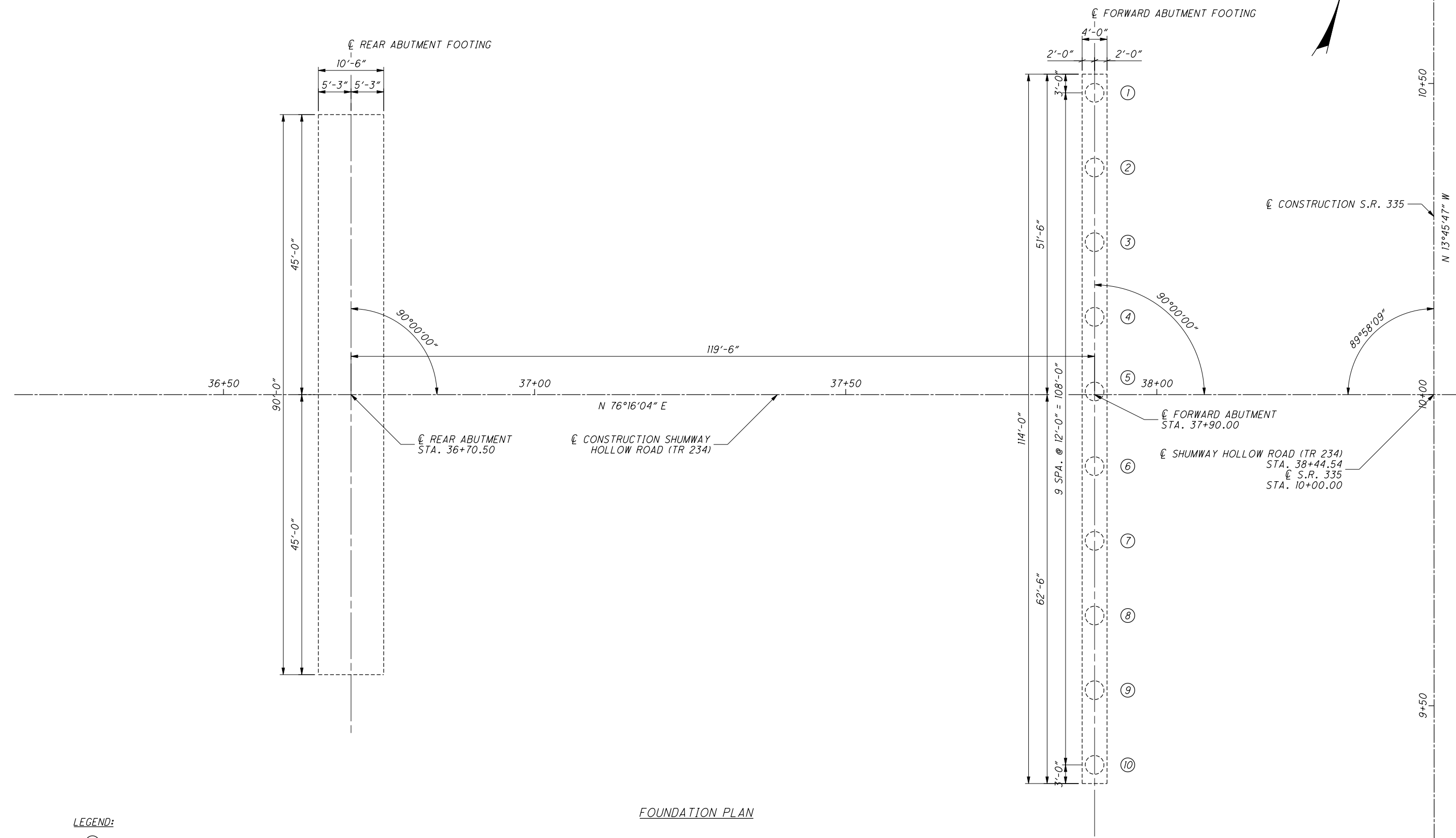
TOTALS CARRIED TO GENERAL SUMMARY



DESIGN AGENCY
 DATE: 06/24/11
 REVIEWED: BAA
 DRAWN: RBK
 DESIGNED: DEF/RBK
 CHECKED: DAT

ESTIMATED QUANTITIES
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
 PID No. 19415
 4/38
 77
 III



LEGEND:
 (XX) DENOTES DRILLED SHAFT NUMBER
 (○) DENOTES DRILLED SHAFT

FOUNDATION PLAN

NOTES:
 1. DEEP FOUNDATIONS AT FORWARD ABUTMENT SHALL BE 36"φ DRILLED SHAFTS.

DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		

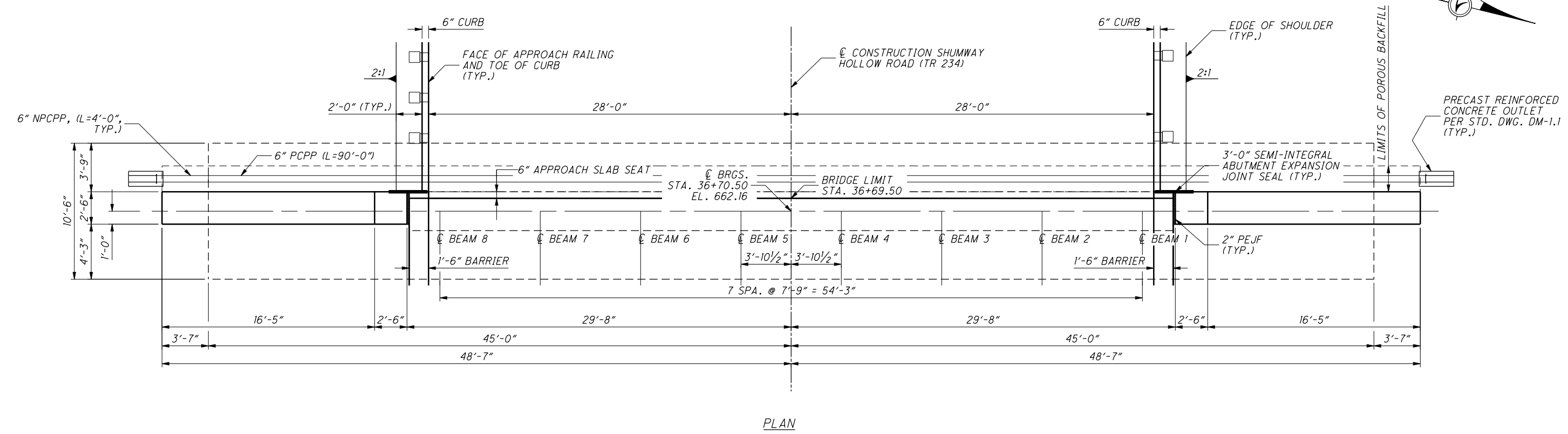
FOUNDATION PLAN
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
 PID No. 19415

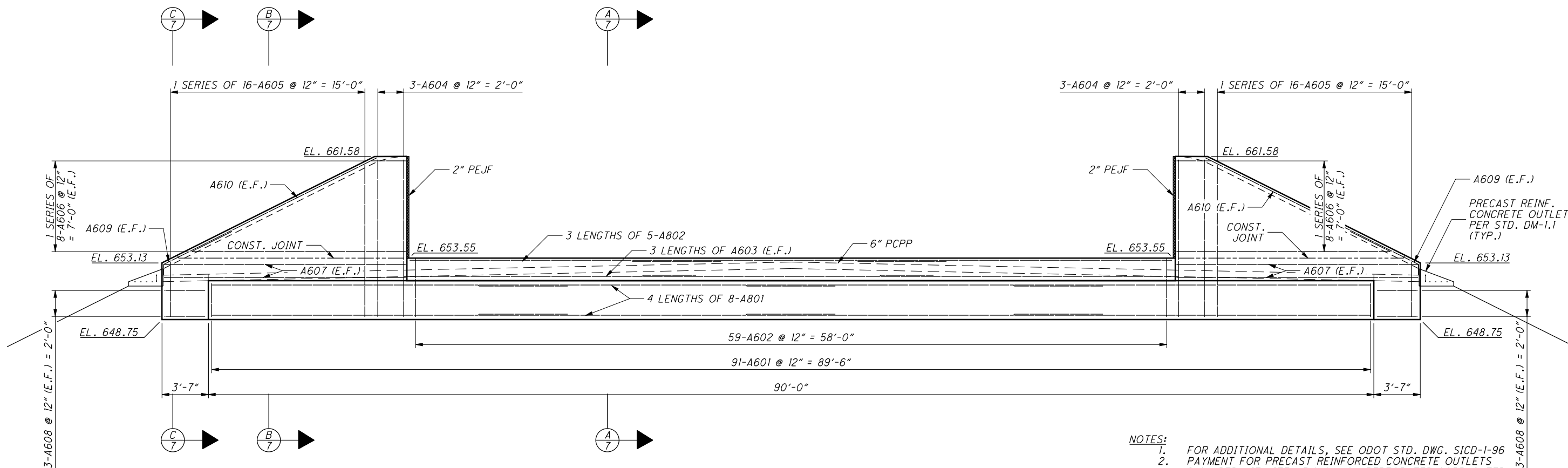
DATE	06/24/11
REVIEWED	BAA
DRAWN	RBK
DESIGNED	DEF/RBK
CHECKED	DAT
STRUCTURE FILE NUMBER	7336934

REAR ABUTMENT DETAILS
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
 PID No. 19415

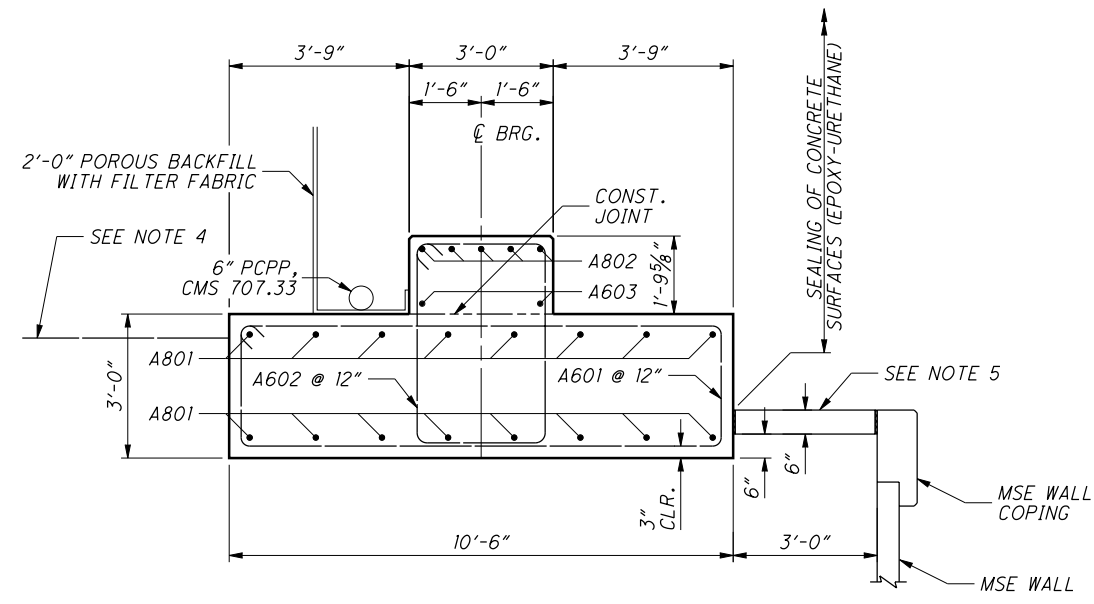


PLAN

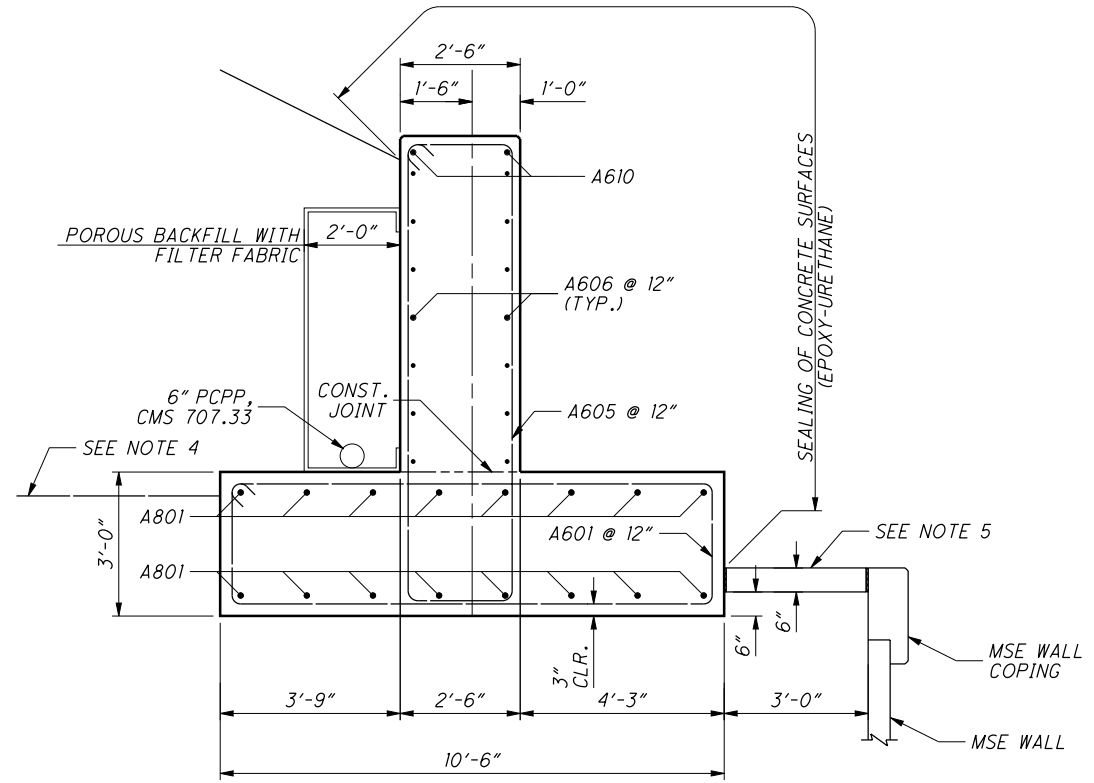


ELEVATION

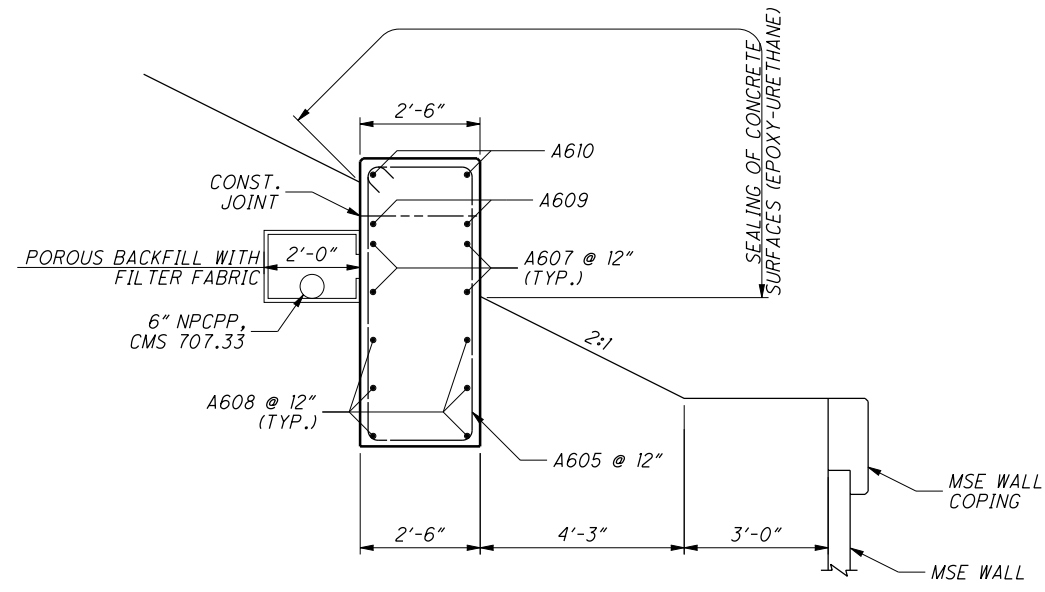
- NOTES:
- FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. SICD-1-96
 - PAYMENT FOR PRECAST REINFORCED CONCRETE OUTLETS INCLUDED WITH ITEM 518 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS.
 - MIN. LAP #6 BAR = 4'-1"
 MIN. LAP #8 BAR = 6'-10"



A/6 ABUTMENT SECTION

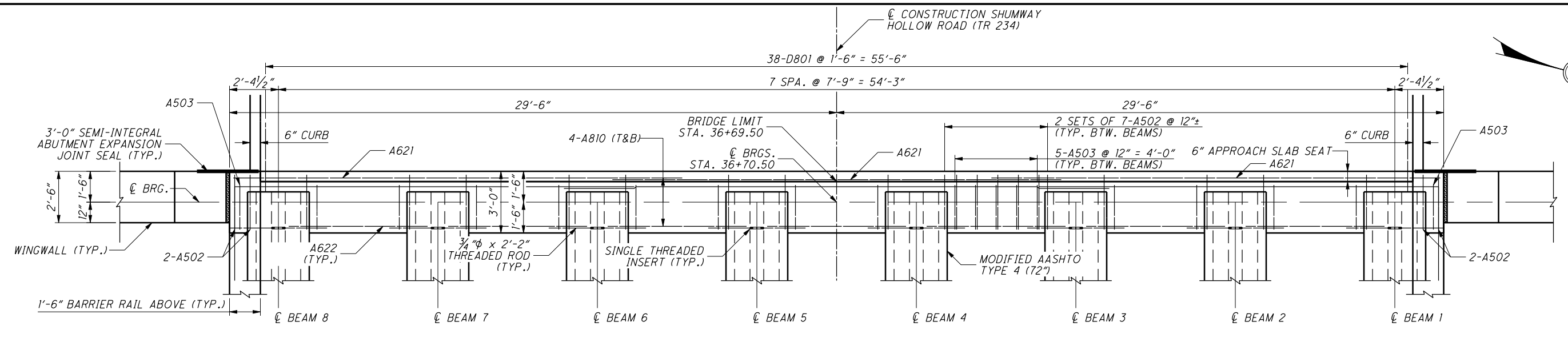


B/6 WINGWALL SECTION

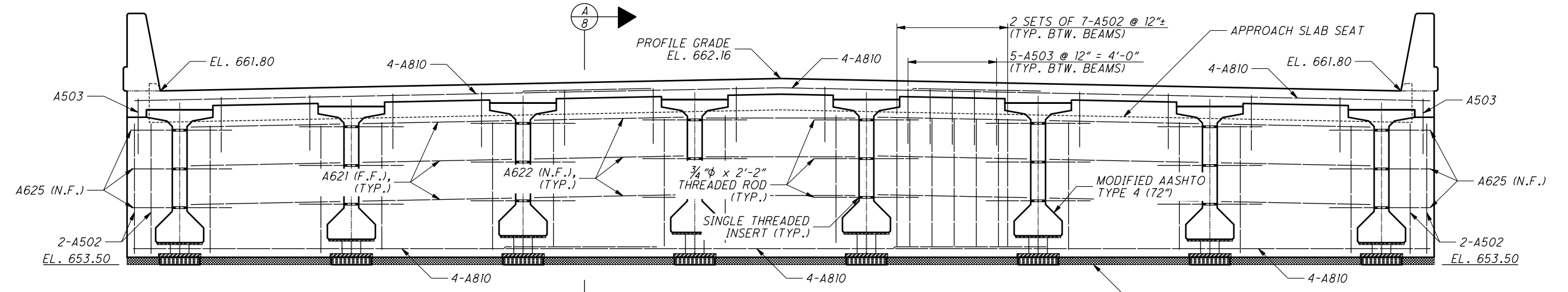


C/6 WINGWALL SECTION

- NOTES:**
- FOR ADDITIONAL MSE DETAILS, SEE SHEETS 12/38, 13/38 & 14/38.
 - POLYSTYRENE JOINT FILLER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 898 QC/QA CONCRETE, SUPERSTRUCTURE (DECK), AS PER PLAN.
 - POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
 - MSE REINFORCING STRIPS, DESIGNED AND PROVIDED BY MSE WALL SUPPLIER, SHALL BE INCLUDED WITH MSE WALL FOR PAYMENT.
 - 6" UNREINFORCED CONCRETE SLAB SHALL BE INCLUDED WITH MSE WALL FOR PAYMENT.

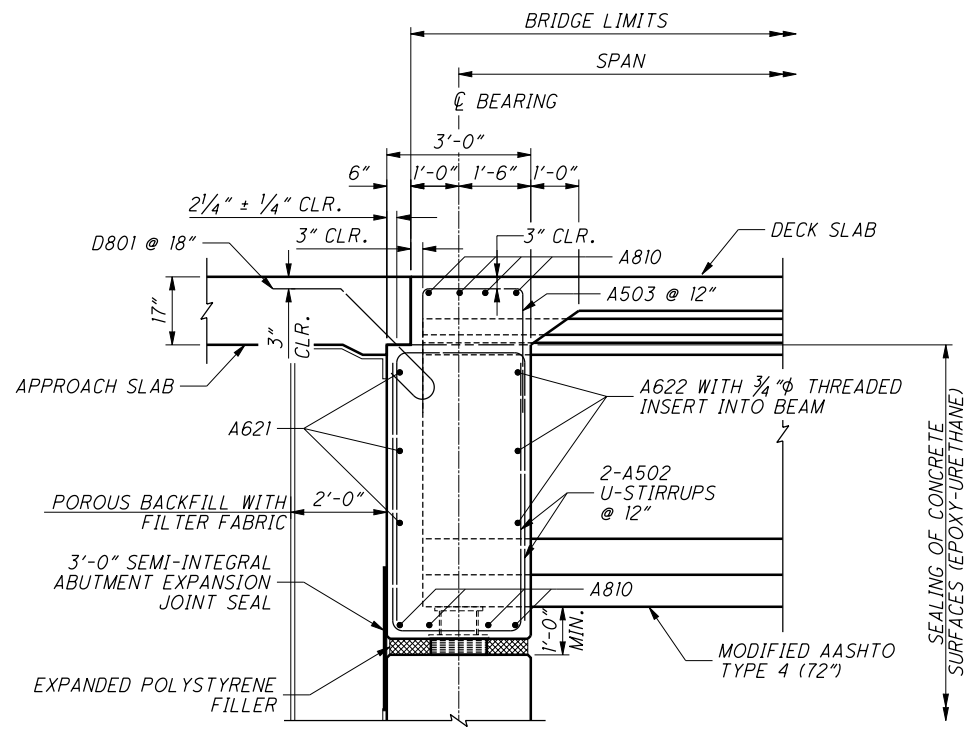


PLAN



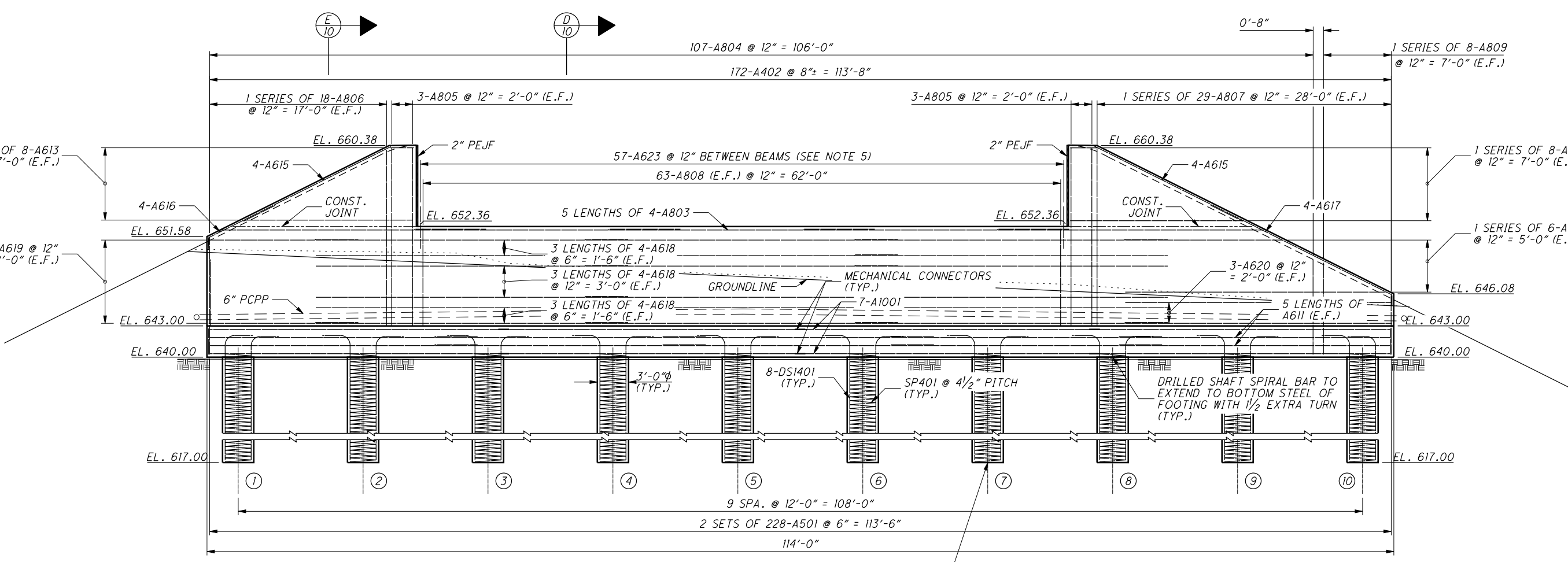
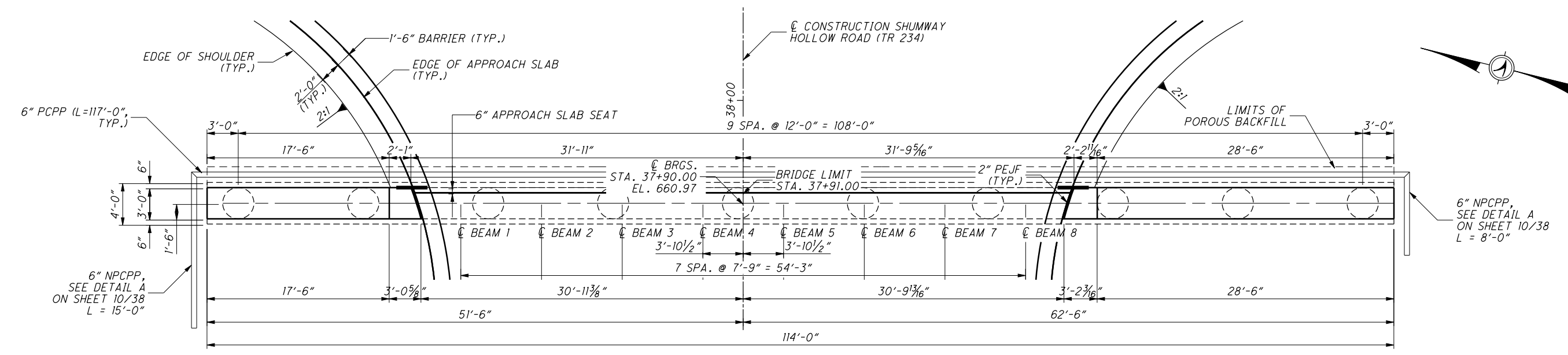
ELEVATION

EXPANDED POLYSTYRENE FILLER SHALL BE USED IN FORMING TO PROVIDE THE CLEARANCE REQUIRED BETWEEN THE ABUTMENT AND SUPERSTRUCTURE AND SHALL BE INCLUDED WITH ITEM 898, QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN FOR PAYMENT.



TYPICAL SECTION DIAPHRAGM

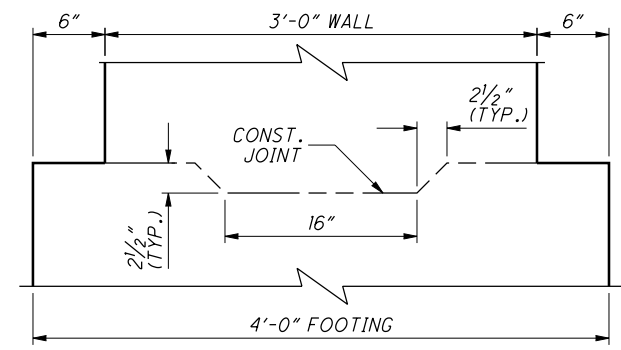
- NOTES:
- FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. SICD-1-96
 - UNLESS OTHERWISE NOTED, ELEVATIONS ARE GIVEN AT CENTERLINE OF BEARING.
 - MIN. LAP #6 BAR = 4'-1"
MIN. LAP #8 BAR = 6'-10"
 - ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASEING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATED THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT. CONCRETE SHALL BE INCLUDED WITH ITEM 898, QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN FOR PAYMENT.



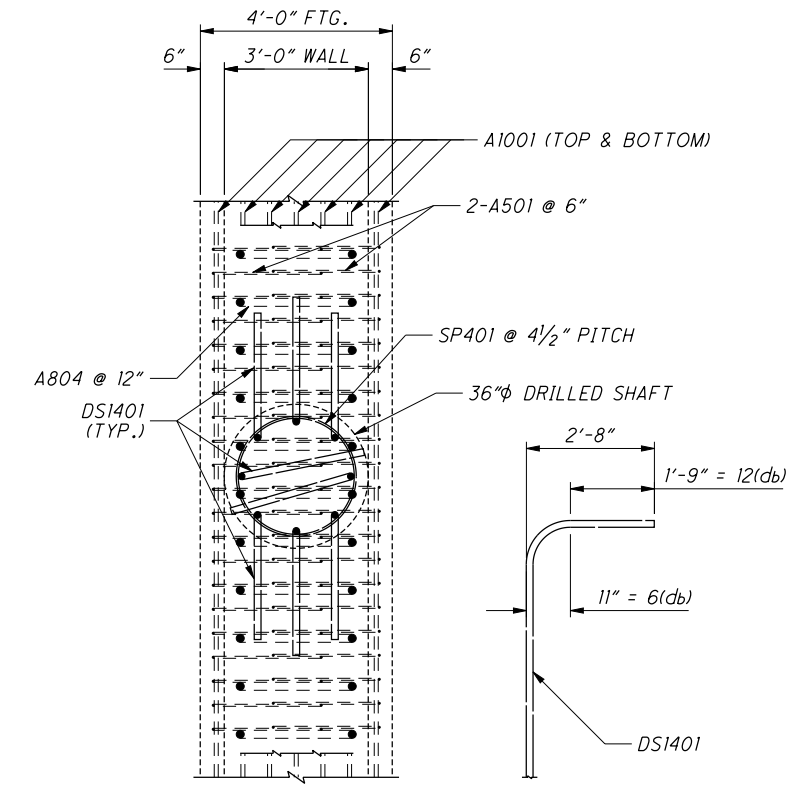
LEGEND:
 [Symbol] APPROXIMATE TOP OF ROCK

DRILLED SHAFT SPIRAL BAR SHALL CONTAIN 1/2 EXTRA TURN AT BOTTOM (TYP.)

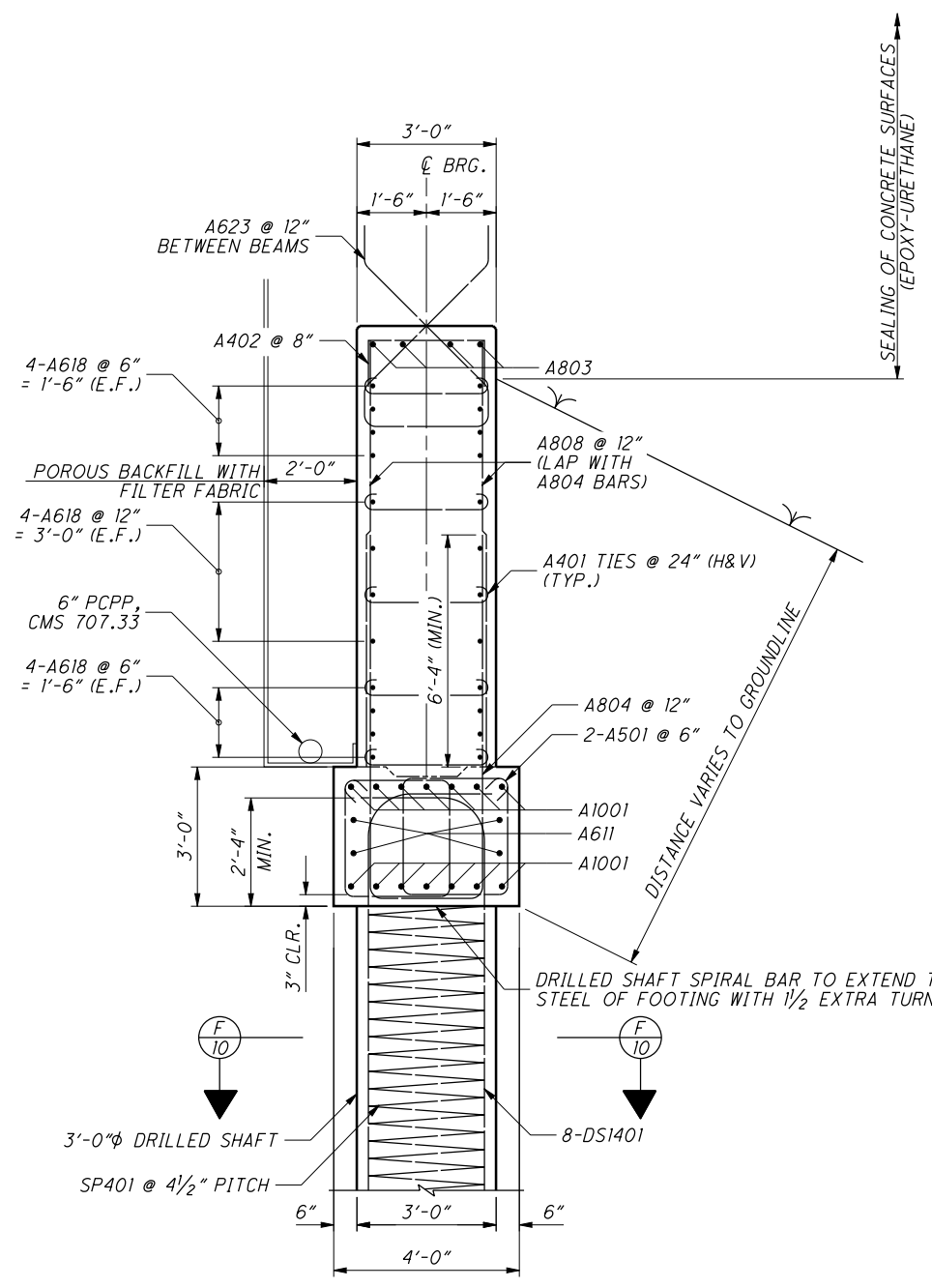
- NOTES:**
1. FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. ICD-1-82.
 2. REINFORCING IN DRILLED SHAFT SHALL BE INCLUDED IN PAYMENT FOR ITEM 524 - DRILLED SHAFTS.
 3. MECHANICAL CONNECTORS FOR A1001 BARS SHALL BE INCLUDED IN PAYMENT FOR ITEM 509 - REINFORCING STEEL (42 TOTAL).
 4. MIN. LAP #6 BAR = 4'-1"
 MIN. LAP #8 BAR = 6'-10"
 5. FOR SPACING OF A620 BARS, SEE FORWARD ABUTMENT INTEGRAL DIAPHRAGM DETAILS SHEET.



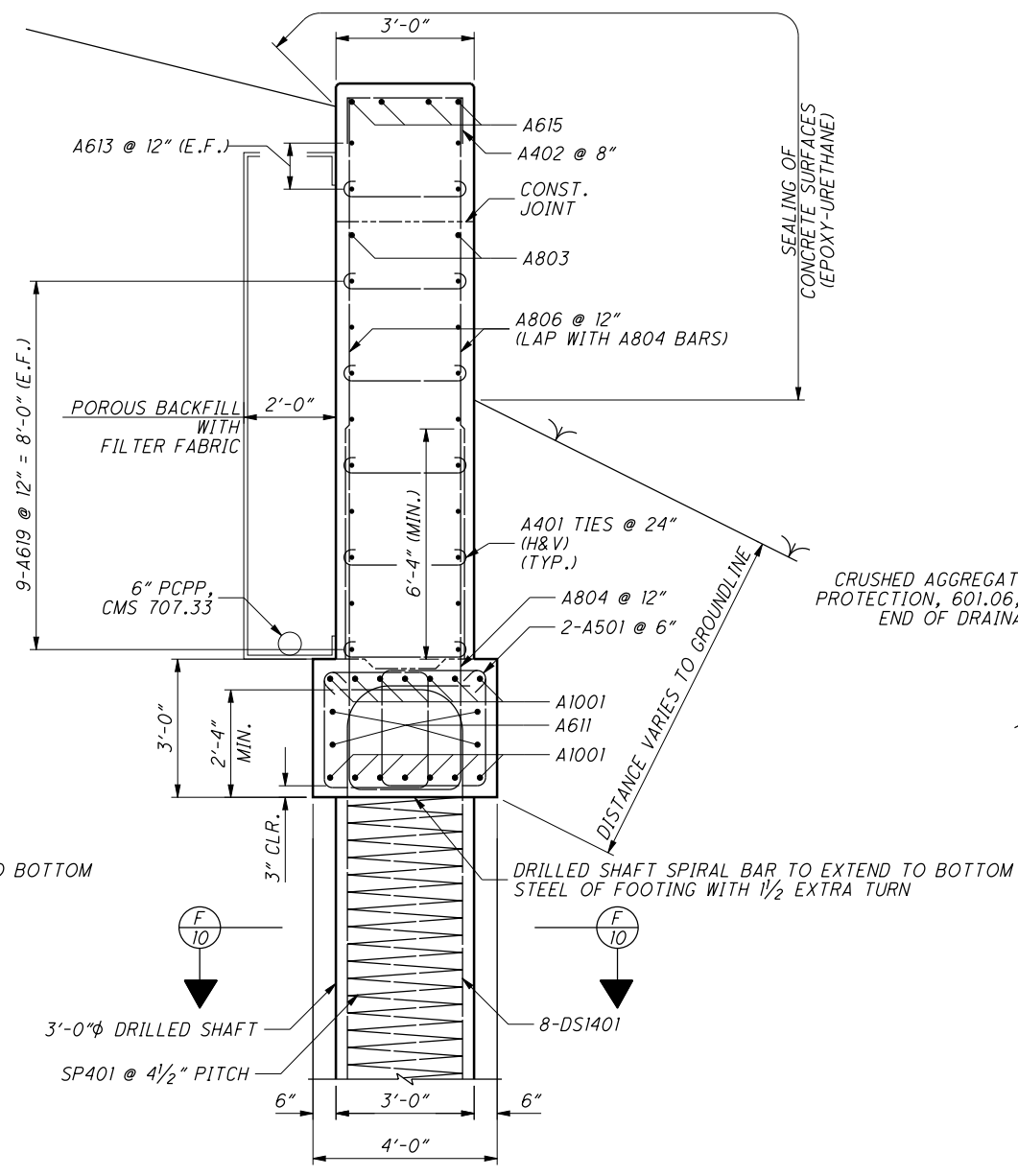
SHEAR KEY DETAIL



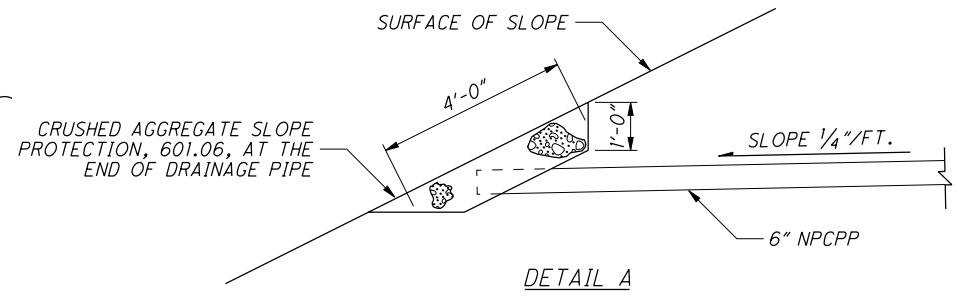
DRILLED SHAFT IN FOOTING DETAIL



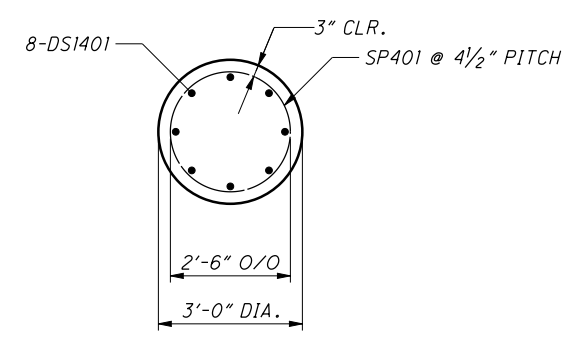
(D/9) ABUTMENT SECTION



(E/9) WINGWALL SECTION
 LEFT FORWARD WINGWALL SHOWN
 RIGHT FORWARD SIMILAR

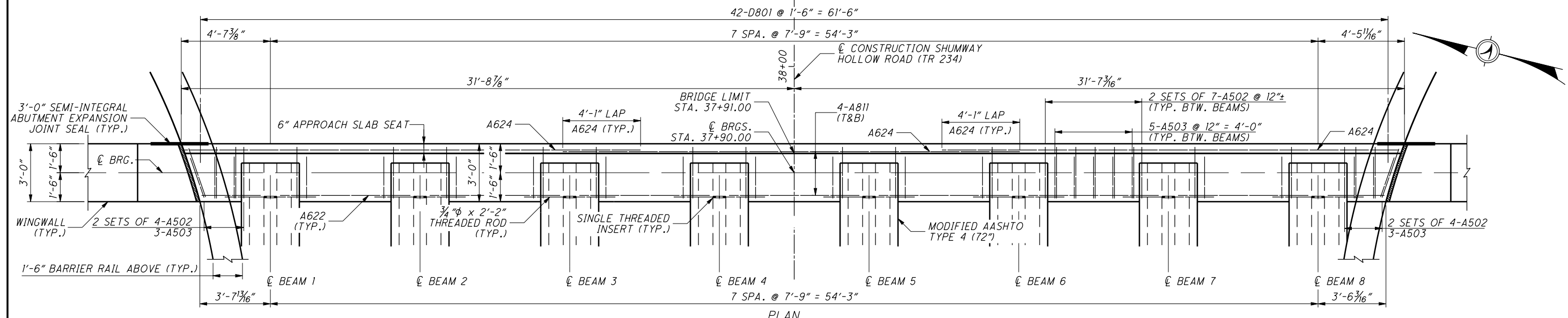


DETAIL A

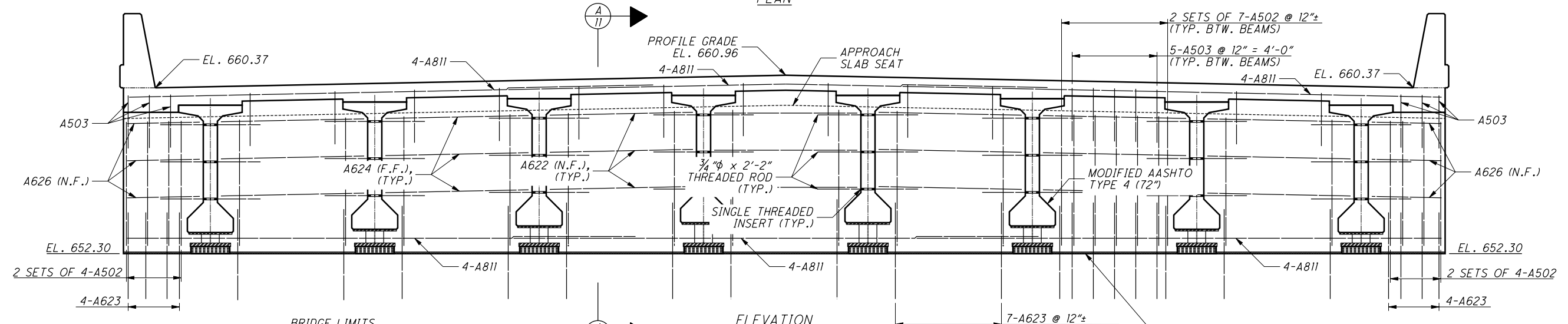


(F/10) DRILLED SHAFT SECTION

- NOTES:
- POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALLS.
 - REINFORCING IN DRILLED SHAFT SHALL BE INCLUDED IN PAYMENT FOR ITEM ITEM 524 - DRILLED SHAFT.

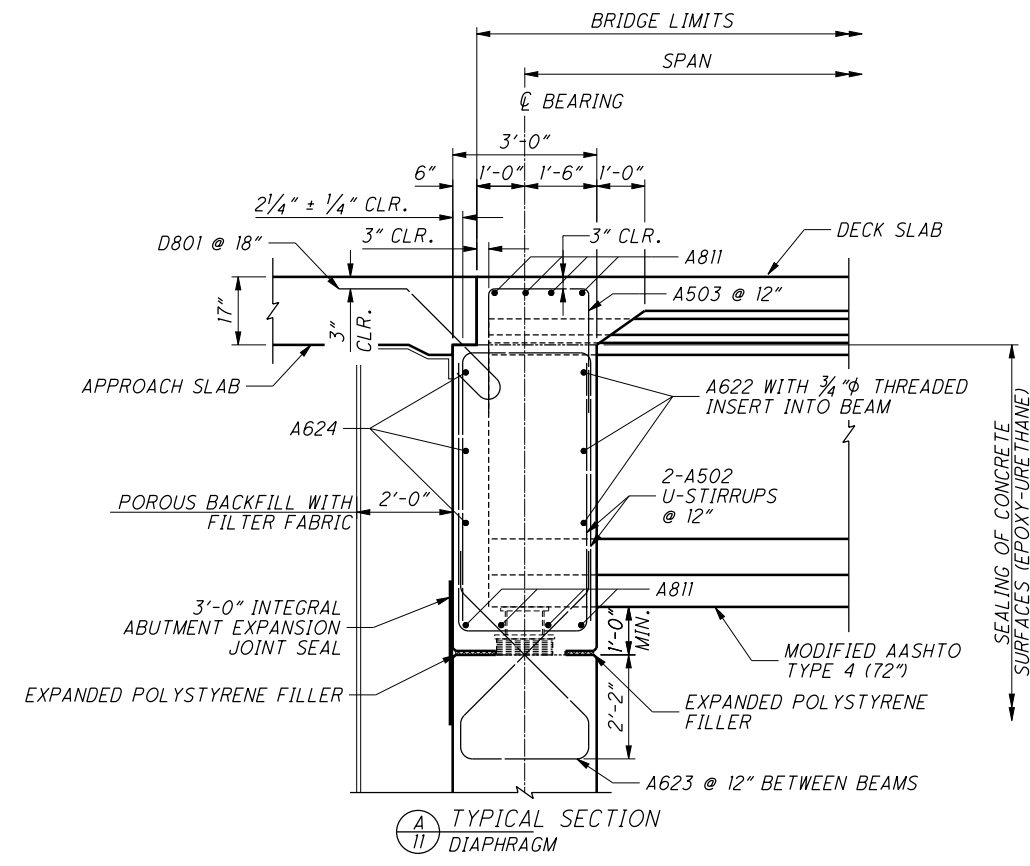


PLAN



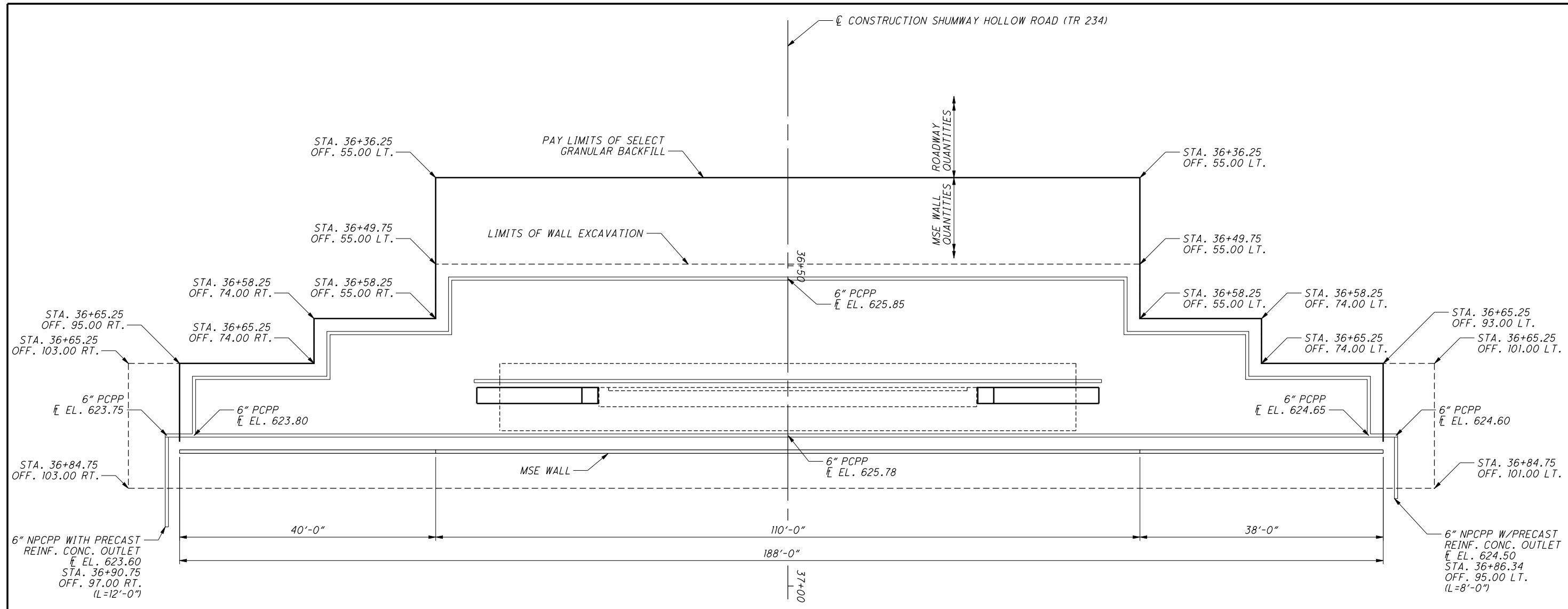
ELEVATION

EXPANDED POLYSTYRENE FILLER, INCLUDE WITH ITEM 898 OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN FOR PAYMENT.

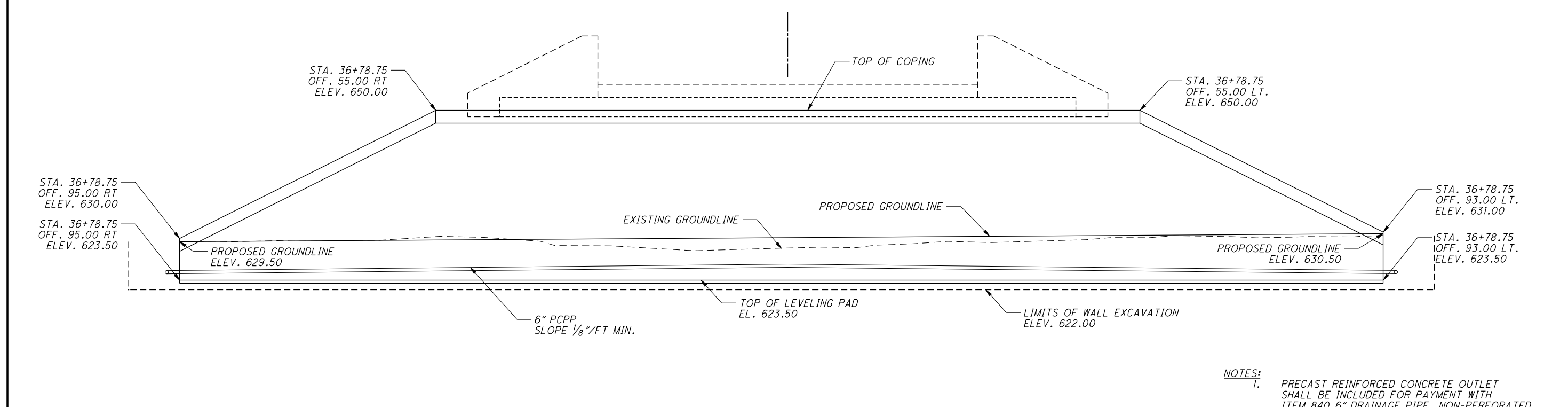


TYPICAL SECTION DIAPHRAGM

- NOTES:
- FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. ICD-1-82
 - UNLESS OTHERWISE NOTED, ELEVATIONS ARE GIVEN AT CENTERLINE OF BEARING.
 - MIN. LAP #6 BAR = 4'-1"
MIN. LAP #8 BAR = 6'-10"
 - ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASE THE STRUCTURAL MEMBER ENDS WITH DECK CONCRETE AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PHASED SEPARATELY, LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT. CONCRETE SHALL BE INCLUDED WITH ITEM 898, OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (DECK), AS PER PLAN FOR PAYMENT.

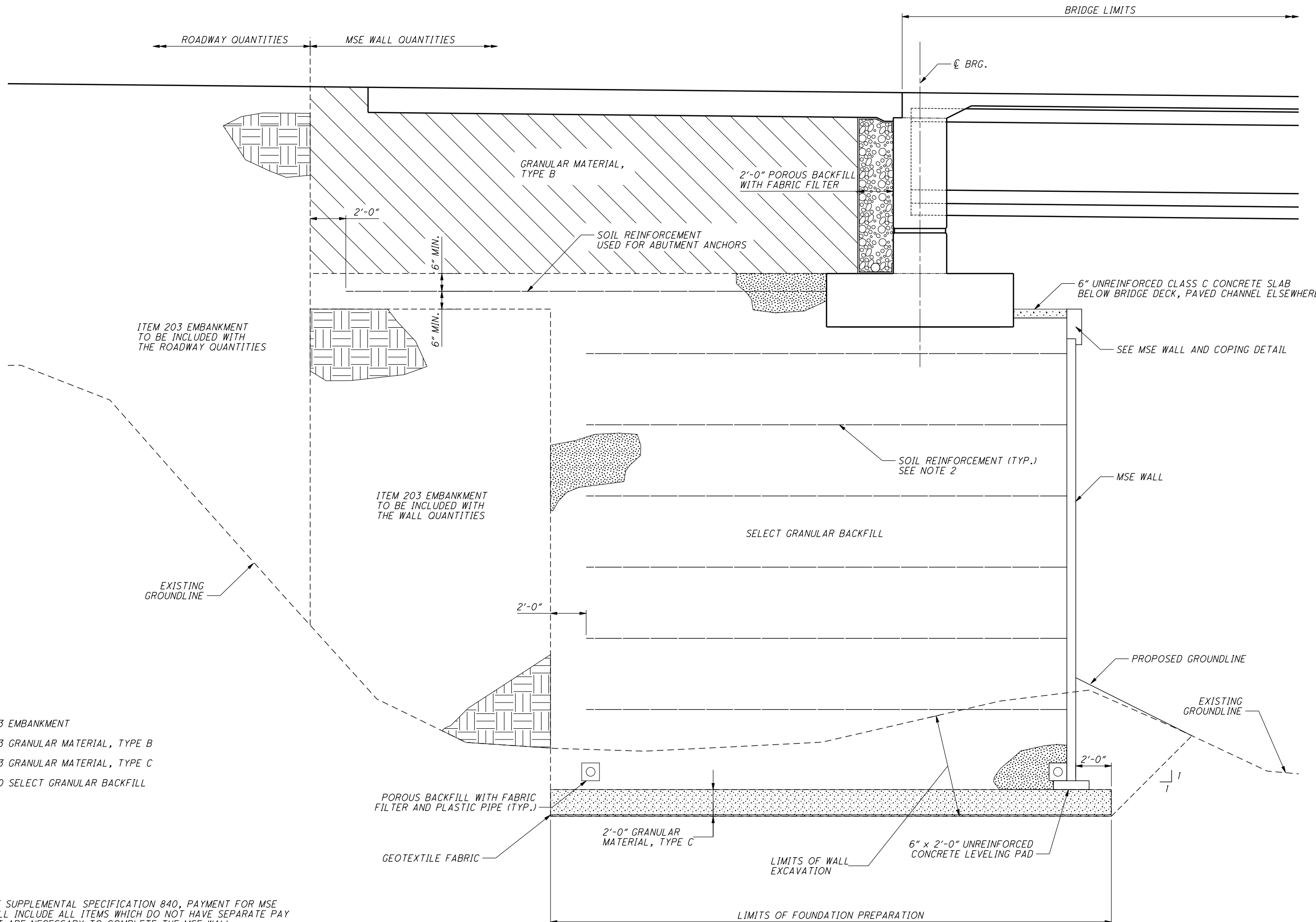


PLAN







ELEVATION

NOTES:
 1. PRECAST REINFORCED CONCRETE OUTLET SHALL BE INCLUDED FOR PAYMENT WITH ITEM 840 6" DRAINAGE PIPE, NON-PERFORATED.



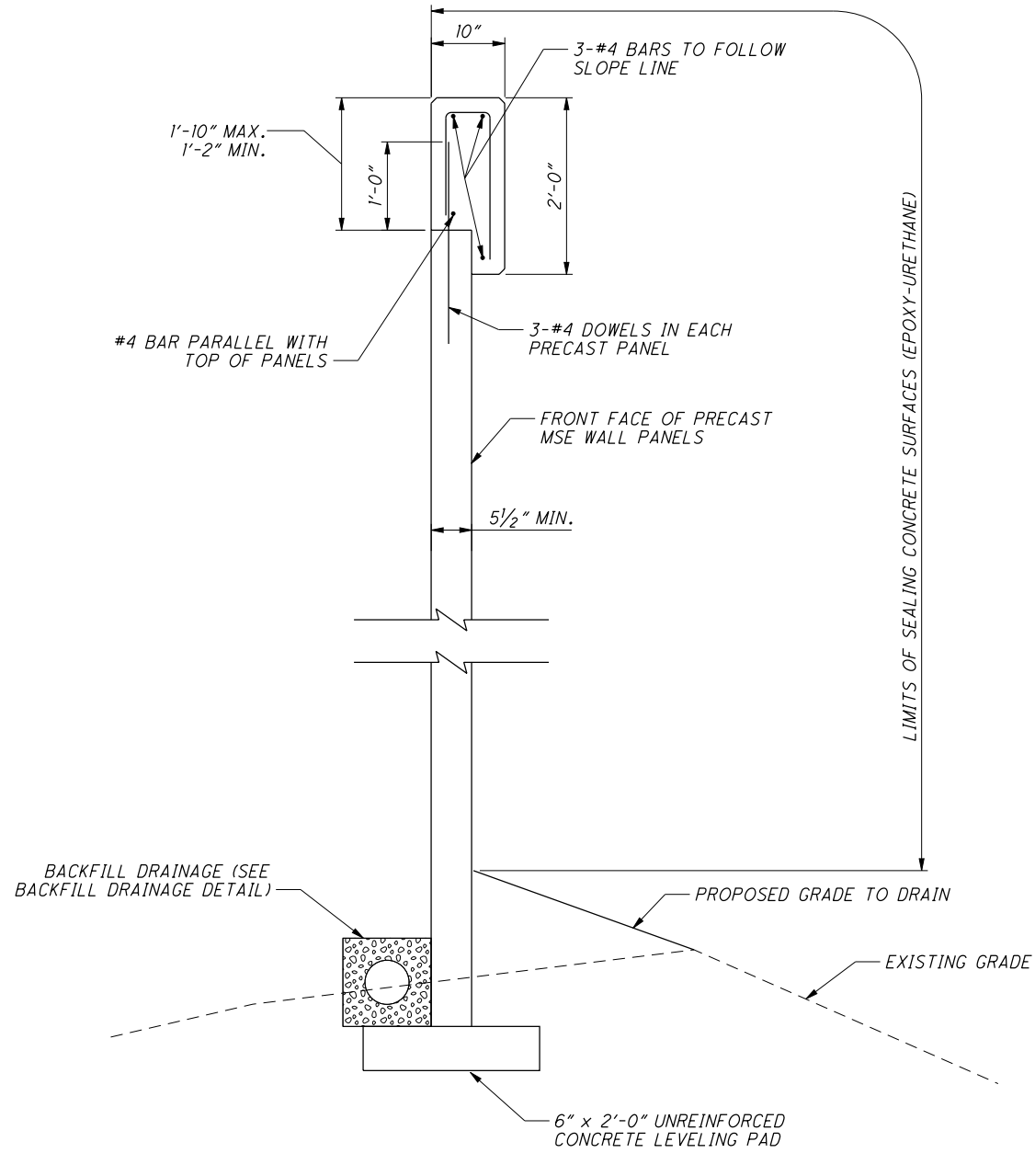
LEGEND:

-  ITEM 203 EMBANKMENT
-  ITEM 203 GRANULAR MATERIAL, TYPE B
-  ITEM 203 GRANULAR MATERIAL, TYPE C
-  ITEM 840 SELECT GRANULAR BACKFILL

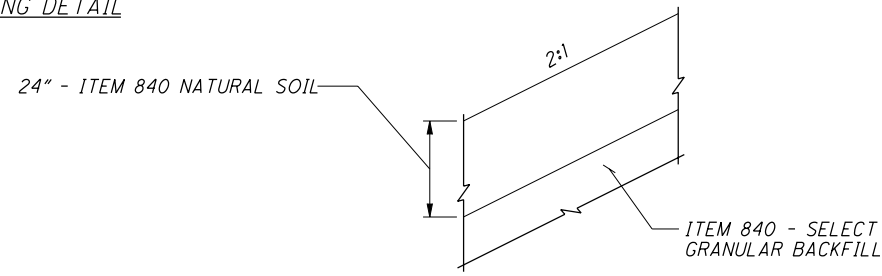
NOTES:

1. PER ODOT SUPPLEMENTAL SPECIFICATION 840, PAYMENT FOR MSE WALL SHALL INCLUDE ALL ITEMS WHICH DO NOT HAVE SEPARATE PAY ITEMS BUT ARE NECESSARY TO COMPLETE THE MSE WALL.
2. MSE REINFORCING STRIPS, DESIGNED AND PROVIDED BY MSE WALL SUPPLIER, SHALL BE INCLUDED WITH MSE WALL FOR PAYMENT.

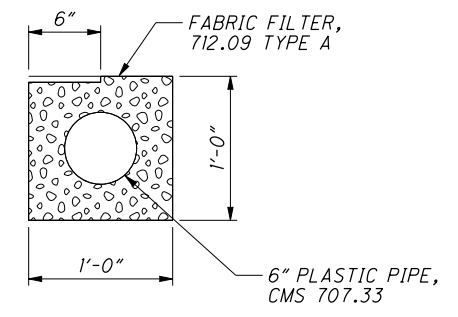
DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		



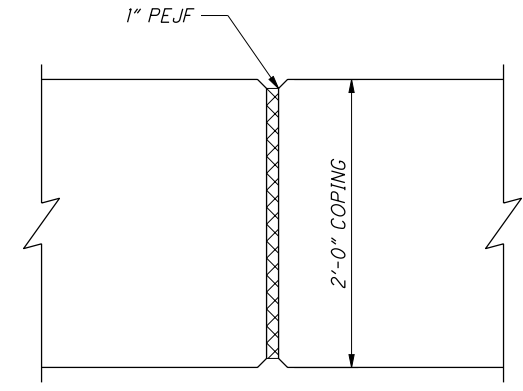
MSE WALL AND COPING DETAIL



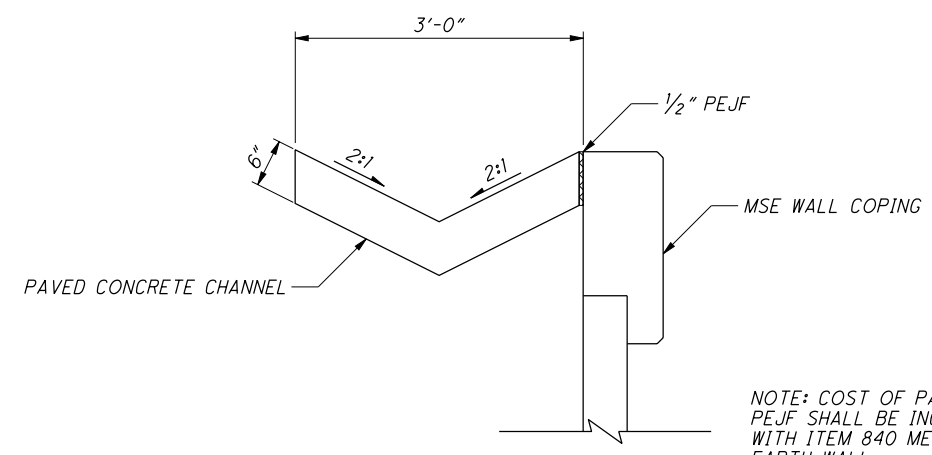
NATURAL SOIL SECTION DETAIL



BACKFILL DRAINAGE DETAIL



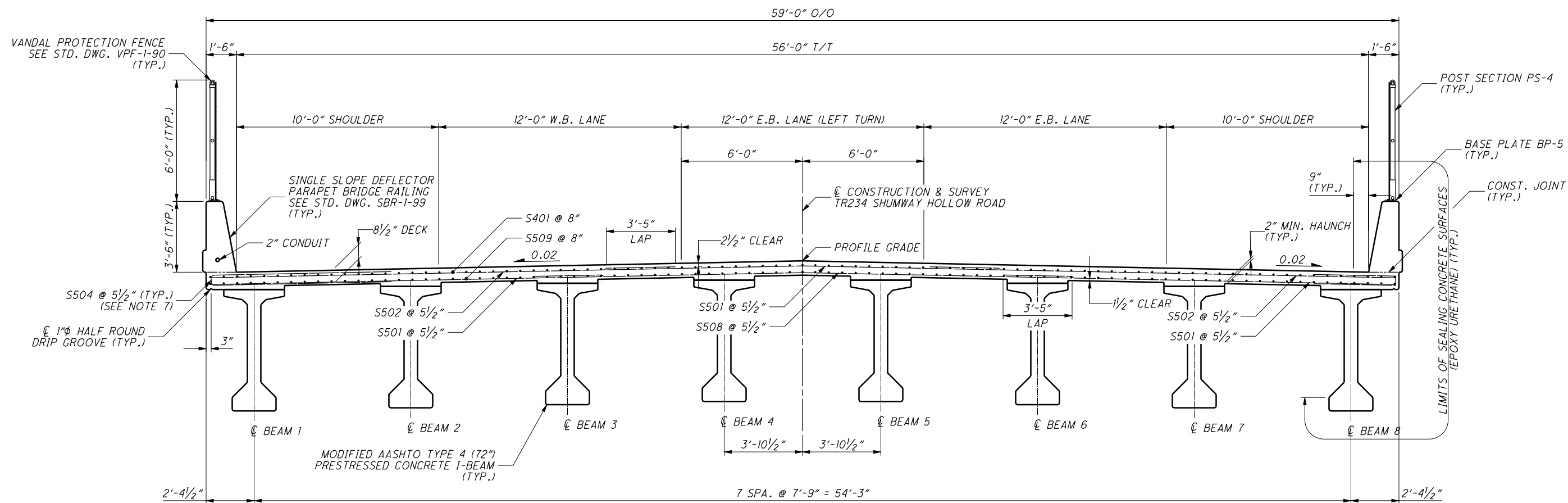
COPING EXPANSION JOINT DETAIL



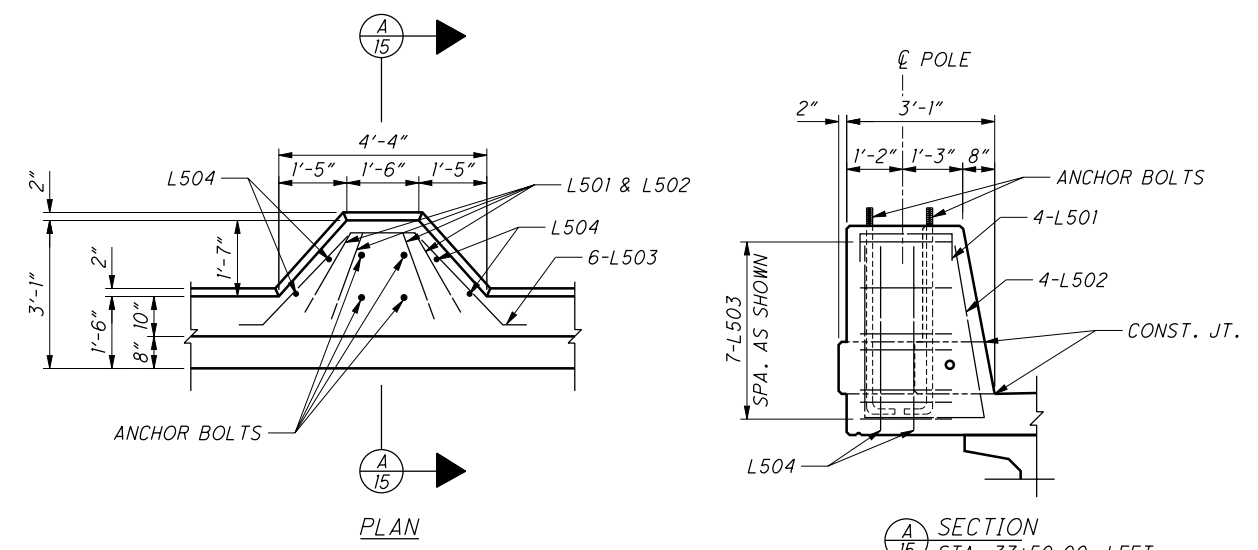
PAVED CHANNEL DETAIL

NOTE: COST OF PAVED CHANNEL AND 1/2" PEJF SHALL BE INCLUDED FOR PAYMENT WITH ITEM 840 MECHANICALLY STABILIZED EARTH WALL.

- NOTES:**
- SEE SITE PLAN DRAWING FOR BORING LOCATIONS AND APPROX. TOP OF ROCK ELEVATIONS
 - THE SLOPING LINE WHICH DEFINES THE LIMIT OF THE SELECT GRANULAR BACKFILL IS NOT AN ALLOWABLE SLOPE FOR EXCAVATION. CUT THE SIDES OF ALL EXCAVATIONS TO PREVENT CAVING OR PROTECT THE EXCAVATIONS FROM CAVING.
 - ALL REINFORCING STEEL TO BE EPOXY COATED.
 - SOIL REINFORCEMENT LENGTH DETERMINED BY WALL SUPPLIER. MINIMUM REINFORCEMENT LENGTH IS 0.7H IN ACCORDANCE WITH DLZ OHIO INC. SUBSURFACE EXPLORATION PRELIMINARY REPORT OF 10/01/07. WALL HEIGHT, H, IS DEFINED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 840.
 - GRANULAR MATERIAL, TYPE C, PLACED ABOVE THE GEOTEXTILE FABRIC, SHALL BE INCLUDED WITH ITEM 840 FOUNDATION PREPARATION. ALL MATERIAL BELOW THE GEOTEXTILE FABRIC SHALL BE INCLUDED WITH ITEM 203 GRANULAR MATERIAL, TYPE C.
 - POROUS BACKFILL SHALL BE INCLUDED FOR PAYMENT WITH ITEM 840 6" DRAINAGE PIPE, PERFORATED.
 - 1" PEJF SHALL BE INCLUDED FOR PAYMENT WITH ITEM 840 CONCRETE COPING FOR PAYMENT.

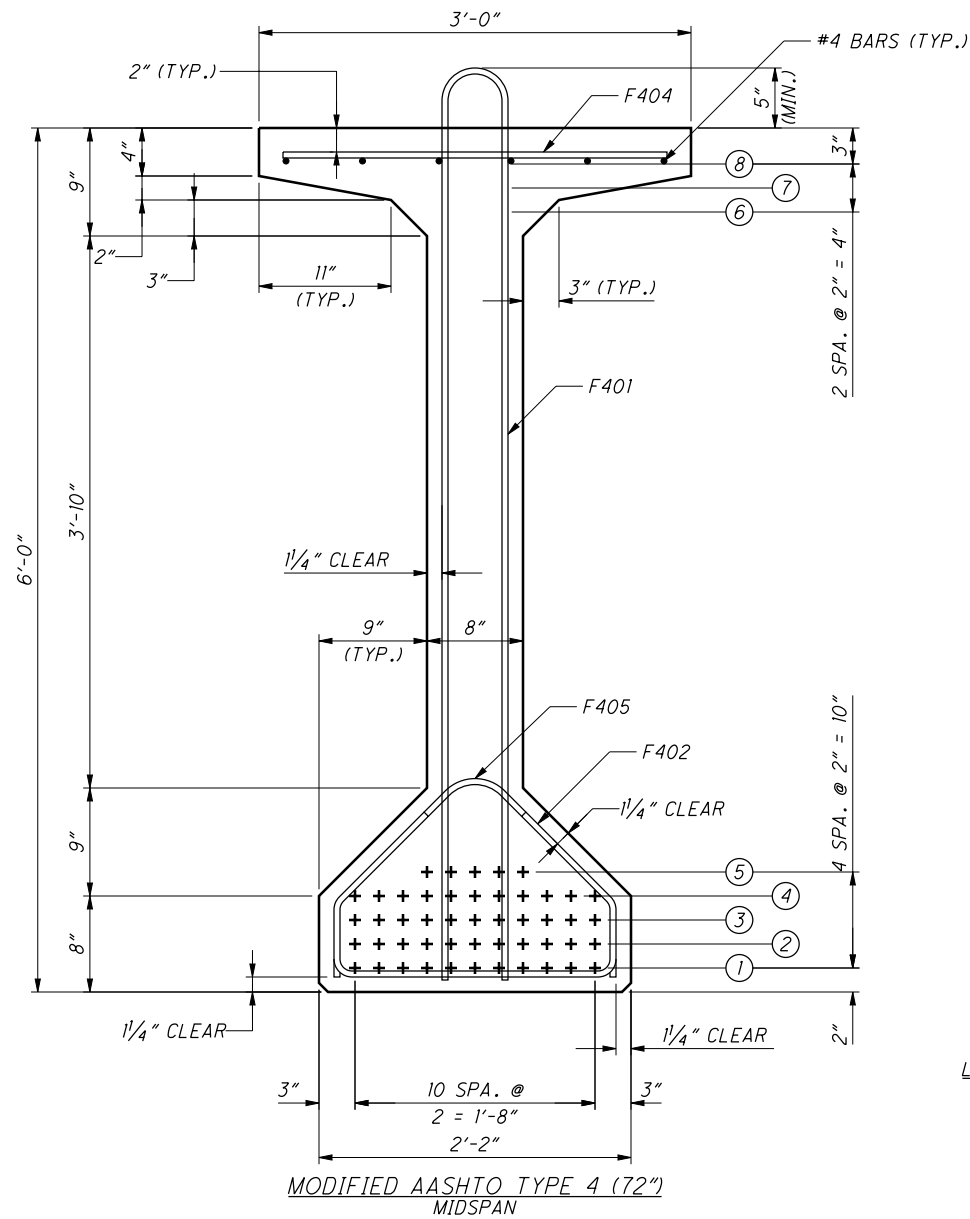


BRIDGE TYPICAL SECTION
 BRIDGE NO. SCI-TR234-0122

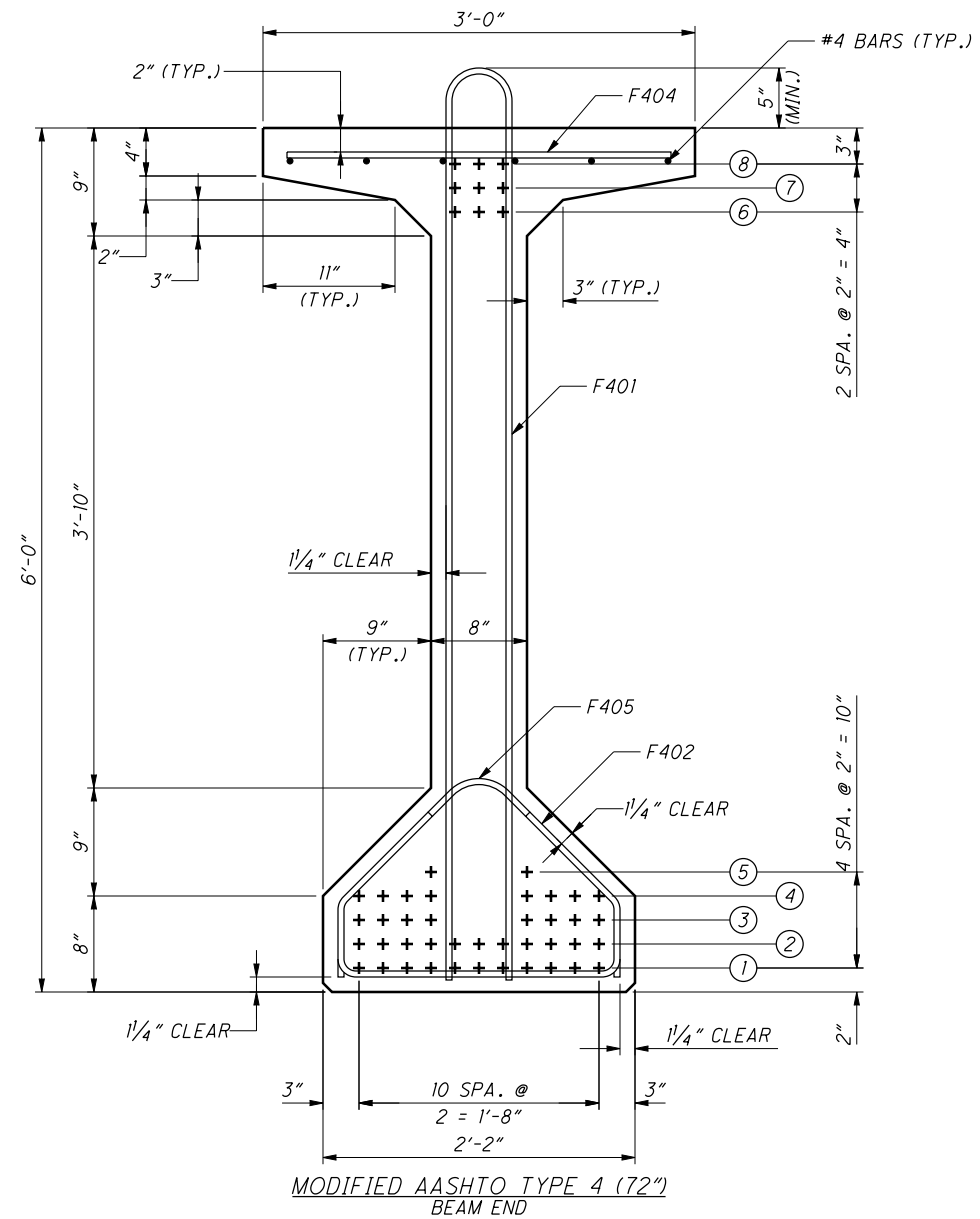


LIGHT POLE PILASTER FOR BRIDGE WITH STANDARD ROADWAY RAILING

- NOTES:
1. MIN. LAP LENGTH #4 BAR = 2'-9"
 2. MIN. LAP LENGTH #5 BAR = 3'-5"
 3. FOR ADDITIONAL PRESTRESSED CONCRETE I-BEAM DETAILS, SEE ODOT STD. DWG. PSID-1-99.
 4. FOR ADDITIONAL VANDAL PROTECTION FENCING DETAILS, SEE ODOT STD. DWG. VPF-1-90.
 5. LIGHT POLE PILASTER SHALL BE LOCATED AT STA. 37+50.
 6. FOR ADDITIONAL LIGHT POLE PILASTER DETAILS, SEE ODOT STD. DWG. HL-20.14.
 7. S504 BAR IS LOCATED ONLY IN AREA OF VARYING DECK OVERHANG WIDTH. SEE DECK PLAN DETAIL SHEET FOR ADDITIONAL INFORMATION.



MODIFIED AASHTO TYPE 4 (72") MIDSPAN

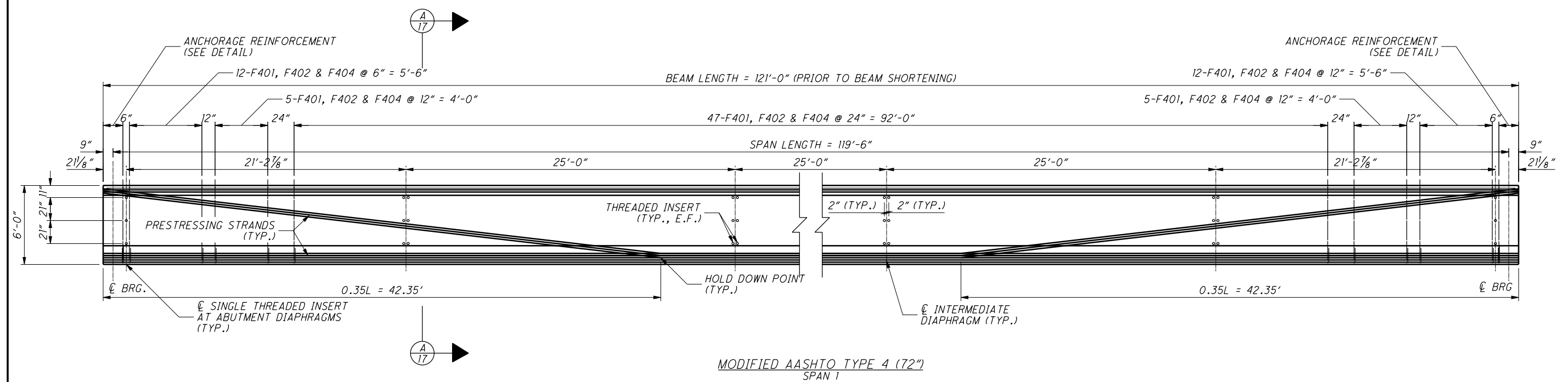


MODIFIED AASHTO TYPE 4 (72") BEAM END

LEGEND:
+ PRESTRESSING STRAND

BEAM MARK	NUMBER OF STRANDS PER ROW								TOTAL STRANDS	CONCRETE STRENGTHS		F401 BARS REQ'D	F402 BARS REQ'D	F404 BARS REQ'D	F405 BARS REQ'D
	ROW NUMBER									f'ci	f'c				
	①	②	③	④	⑤	⑥	⑦	⑧							
BEAM 1 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 1 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 2 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 2 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 3 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 3 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 4 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 4 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 5 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 5 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 6 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 6 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 7 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 7 (BEAM END)	11	11	8	8	2	3	3	3	49						
BEAM 8 (MIDSPAN)	11	11	11	11	5	-	-	-	49	5.5	7	87	93	87	12
BEAM 8 (BEAM END)	11	11	8	8	2	3	3	3	49						

NOTES:
1. SEE ODOT STD. DWG. PSID-1-99 FOR ADDITIONAL BEAM DETAILS, INCLUDING BENDING DIAGRAM FOR REINFORCING.

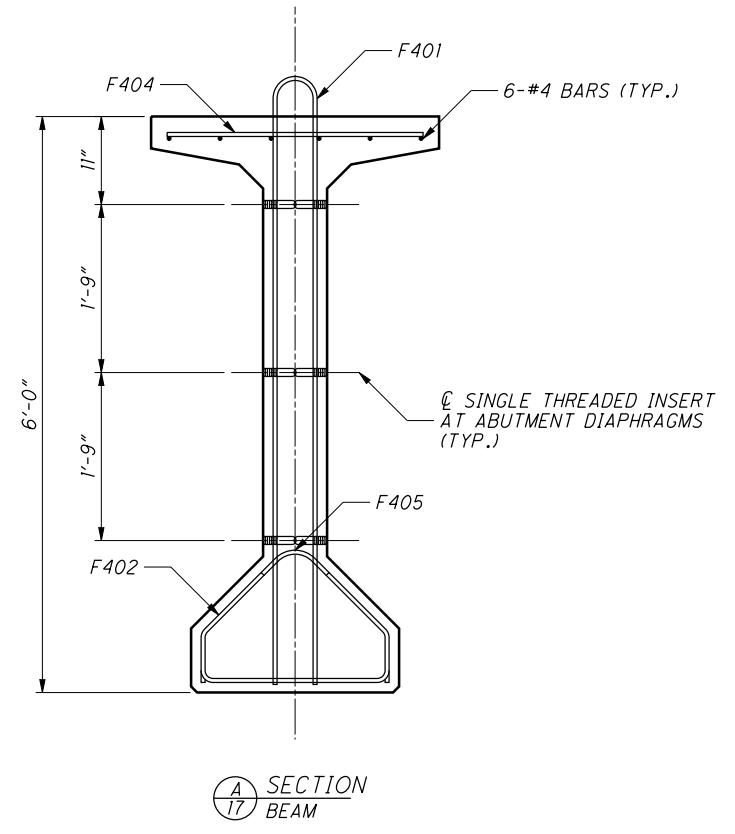
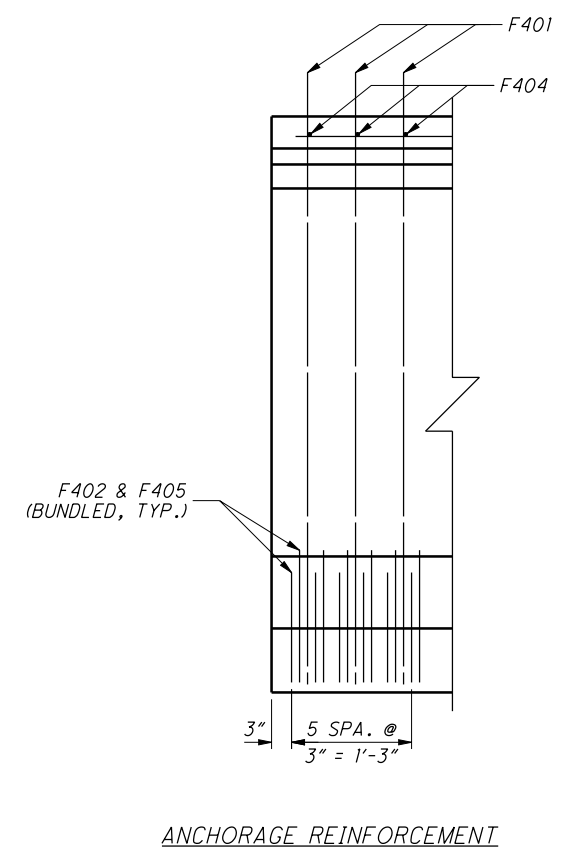


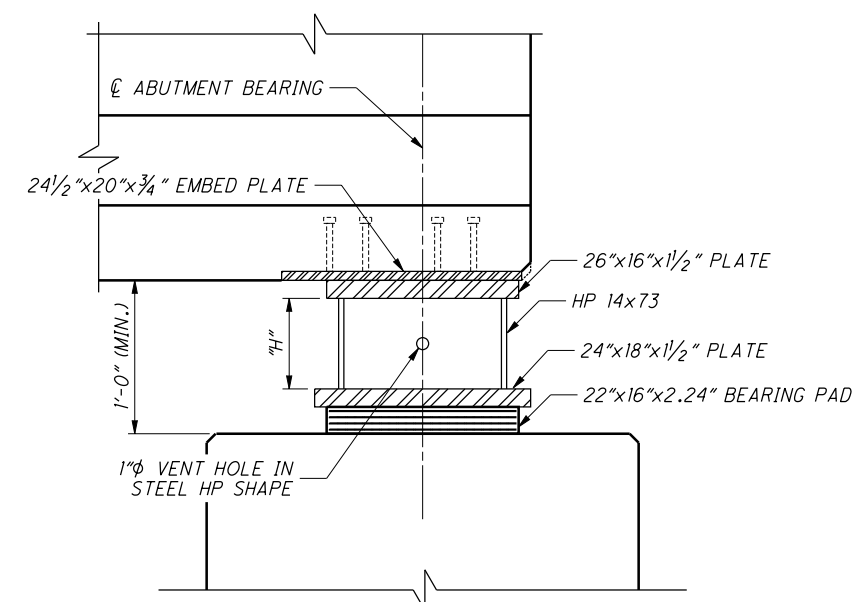
SCI-TR234-0122	
BEAM MARK	APPROXIMATE WEIGHT (LBS)
BEAM 1	120,516
BEAM 2	120,516
BEAM 3	120,516
BEAM 4	120,516
BEAM 5	120,516
BEAM 6	120,516
BEAM 7	120,516
BEAM 8	120,516

INITIAL PRESTRESSING TENSION LOAD FOR LOW RELAXATION STRAND SHALL BE 33,818 LB/STRAND.

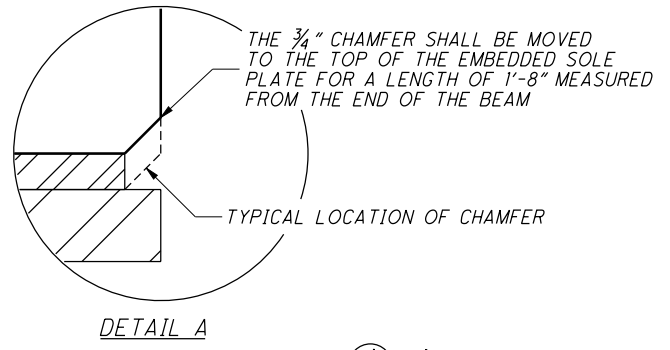
NOTES:

- SEE ODOT STD. DWG. PSID-1-99 FOR ADDITIONAL BEAM DETAILS, INCLUDING BENDING DIAGRAM FOR REINFORCING.
- FOR ADDITIONAL DETAILS ON LOCATIONS OF END & INTERMEDIATE DIAPHRAGMS, SEE FRAMING PLAN.
- SHEAR REINFORCEMENT IN BEAMS SHALL BE PAID FOR UNDER ITEM - 515 PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS.
- OMIT THREADED INSERTS ON EXTERIOR FACE OF EXTERIOR BEAMS.
- THREADED INSERTS MAY BE MOVED SLIGHTLY WHERE NECESSARY TO AVOID REINFORCING STEEL AND PRESTRESSING STRANDS.
- THREADED INSERTS SHOWN FOR INTERMEDIATE DIAPHRAGMS ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY CHOOSE GALVANIZED STEEL INTERMEDIATE DIAPHRAGMS INSTEAD, PER PSID-1-99, AND PROVIDE SLEEVED HOLES INSTEAD OF THREADED INSERTS.

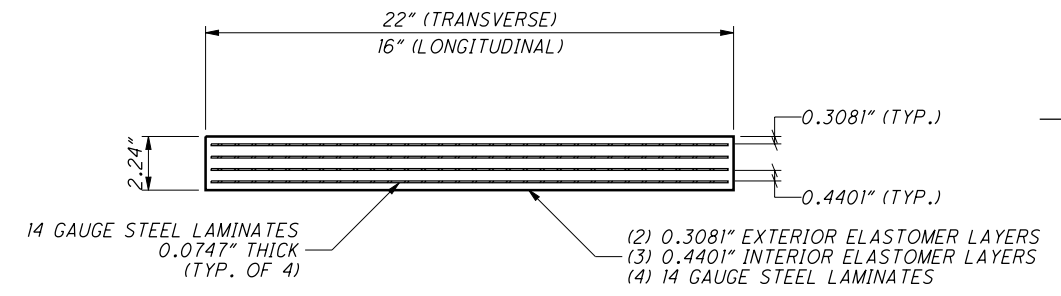
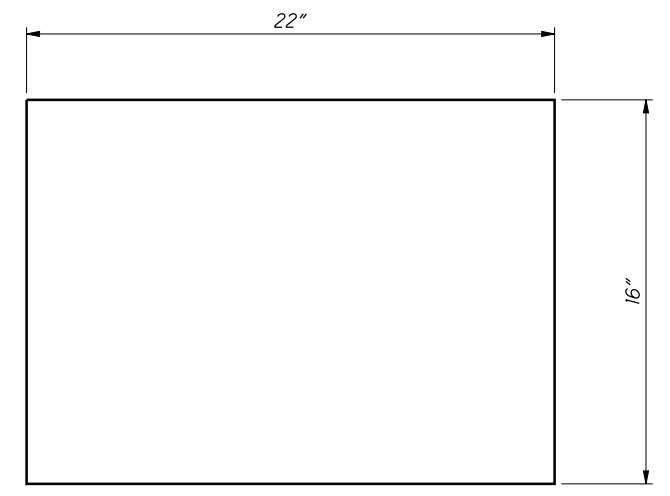




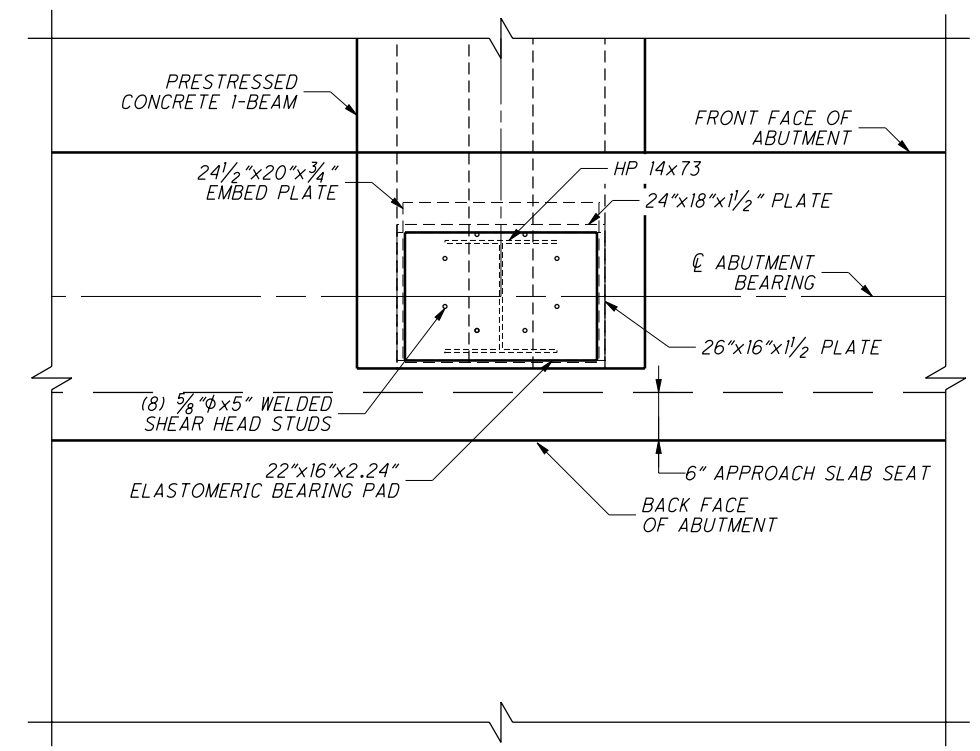
A SECTION
 18 REAR AND FORWARD ABUTMENTS



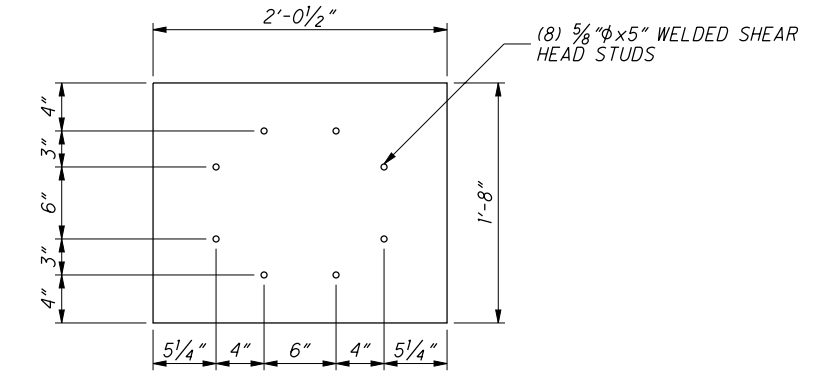
DETAIL A



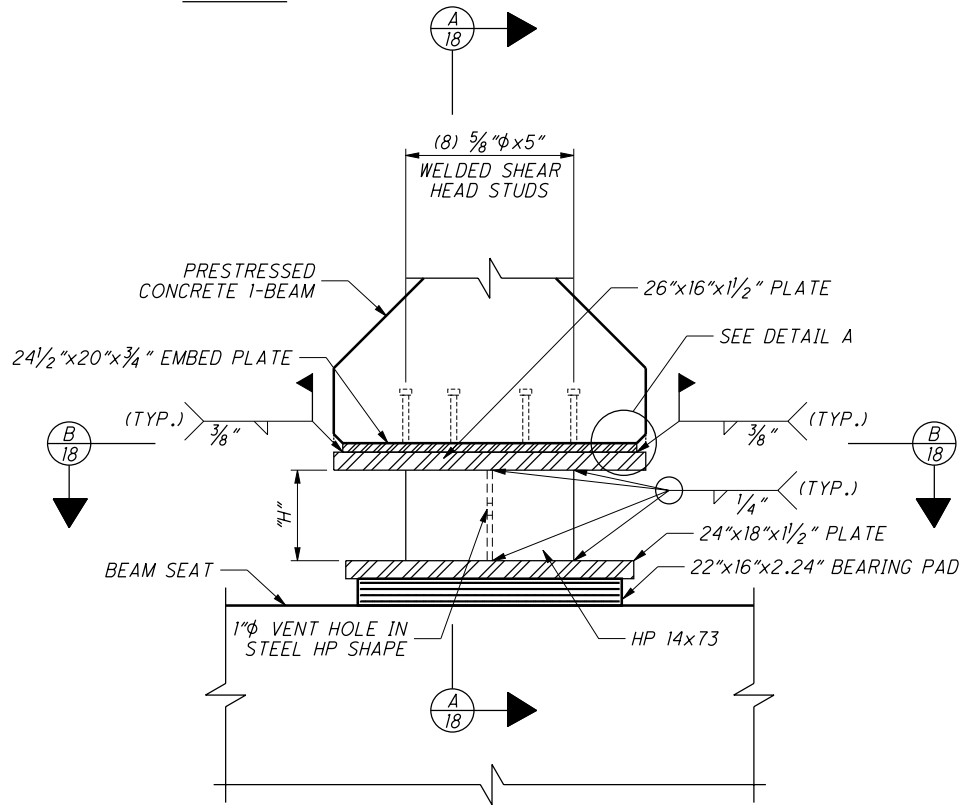
ELASTOMERIC BEARING PAD DETAIL
 REAR ABUTMENT AND FORWARD ABUTMENTS



TYPICAL PLAN
 REAR AND FORWARD ABUTMENTS



B EMBEDDED PLATE DETAILS
 18 REAR AND FORWARD ABUTMENTS



TYPICAL ELEVATION
 REAR AND FORWARD ABUTMENTS

	DIMENSION 'H'	
	REAR ABUTMENT	FORWARD ABUTMENT
BEAM 1	6.77"	6.77"
BEAM 2	8.63"	8.63"
BEAM 3	10.49"	10.49"
BEAM 4	12.35"	12.35"
BEAM 5	12.35"	12.35"
BEAM 6	10.49"	10.49"
BEAM 7	8.63"	8.63"
BEAM 8	6.77"	6.77"

SCI-TR234-0122

NOTES:

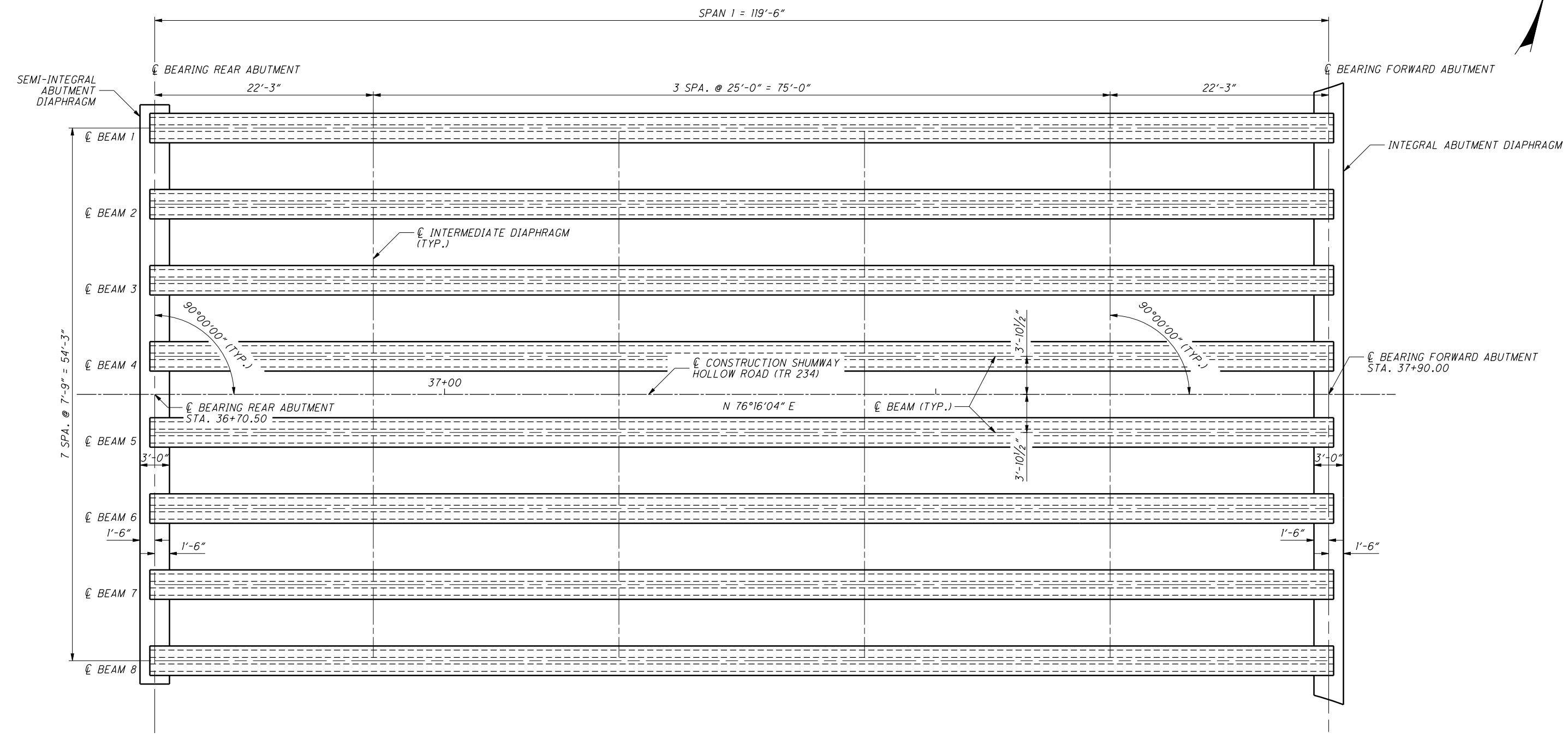
- WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300 °F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
 - ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- BEARINGS SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
- | | | |
|------------------|---------------|------------------|
| | REAR ABUTMENT | FORWARD ABUTMENT |
| MAX. DEAD LOAD = | 176 KIPS | 176 KIPS |
| MAX. LIVE LOAD = | 71 KIPS | 71 KIPS |
- TOTAL DESIGN LOAD = 247 KIPS 247 KIPS
- THE BOTTOM STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
 - BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ELASTOMERIC BEARING PAD, BOTTOM LOAD PLATE, HP SHAPE, TOP LOAD PLATE, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS AS DETAILED. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).



DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		

FRAMING PLAN
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
 PID No. 19415



FRAMING PLAN
 BRIDGE NO. SCI-TR234-0122

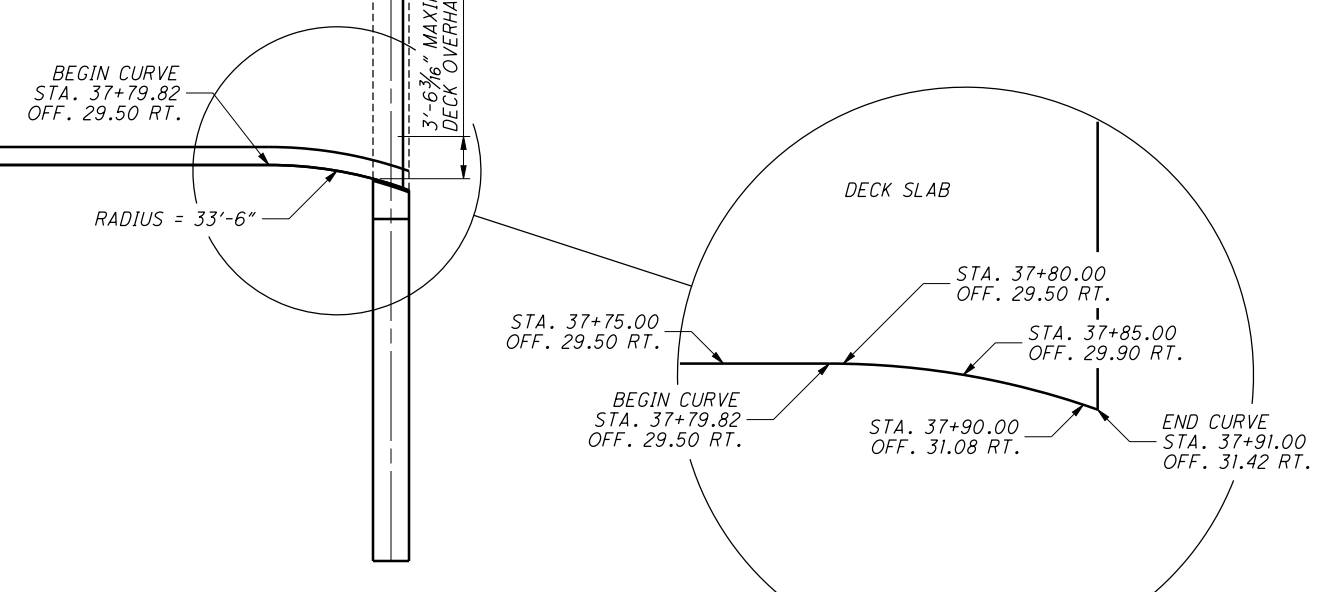
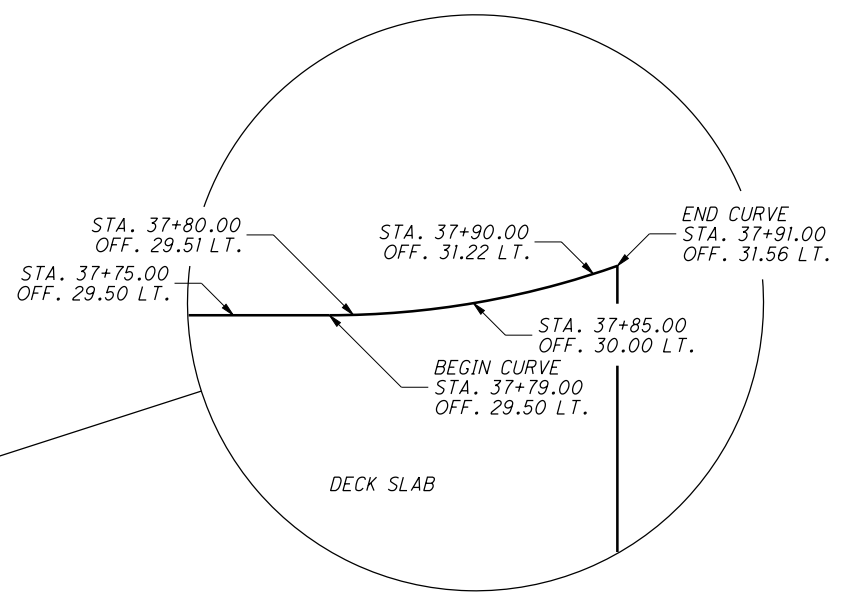
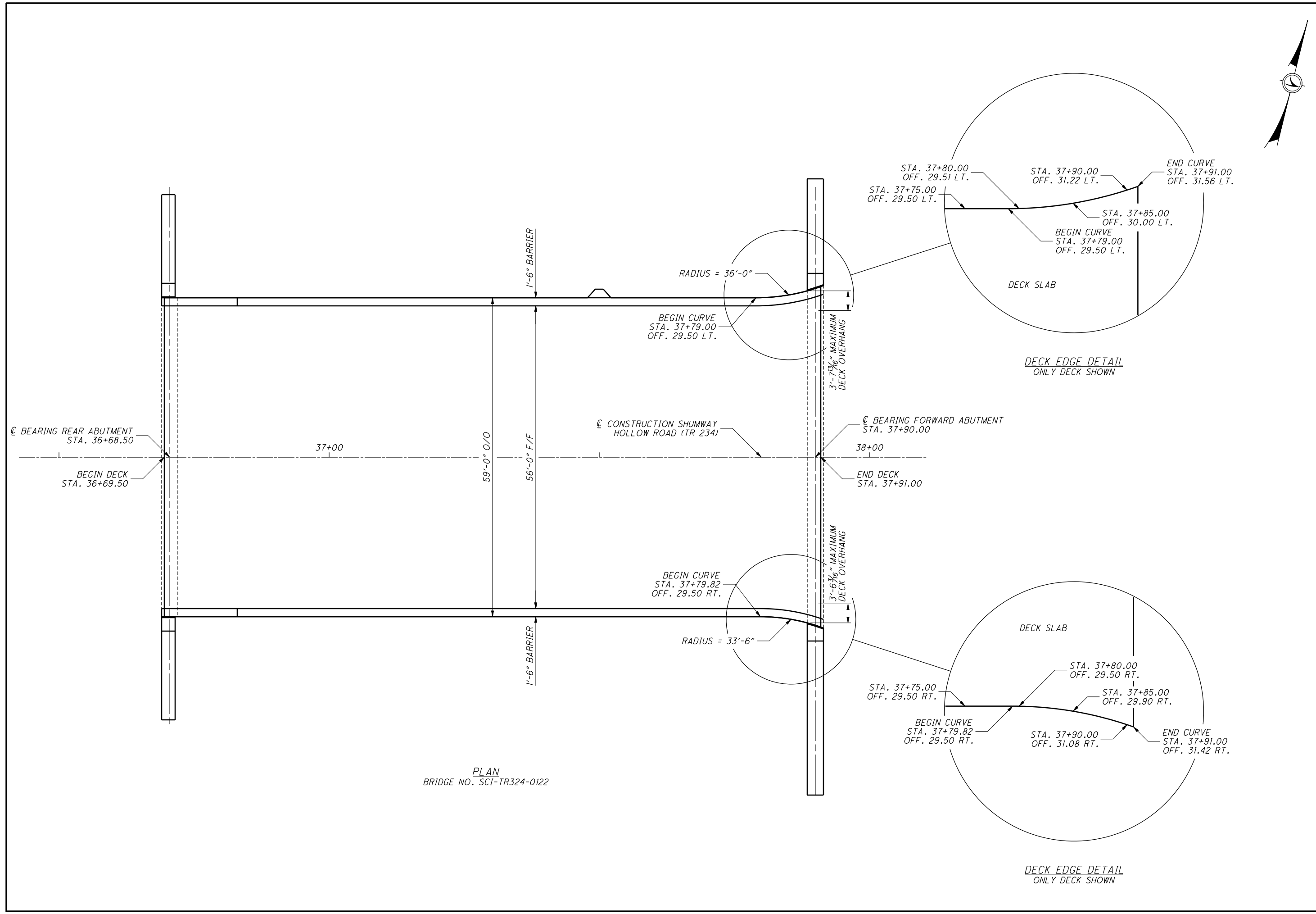
- NOTES:
- DO NOT PLACE THE DECK CONCRETE UNTIL ALL INTERMEDIATE DIAPHRAGMS HAVE BEEN PROPERLY INSTALLED.
 - INTERMEDIATE DIAPHRAGMS SHOWN ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY USE GALVANIZED STEEL INTERMEDIATE DIAPHRAGMS, PER STD. DWG. PSID-1-99.

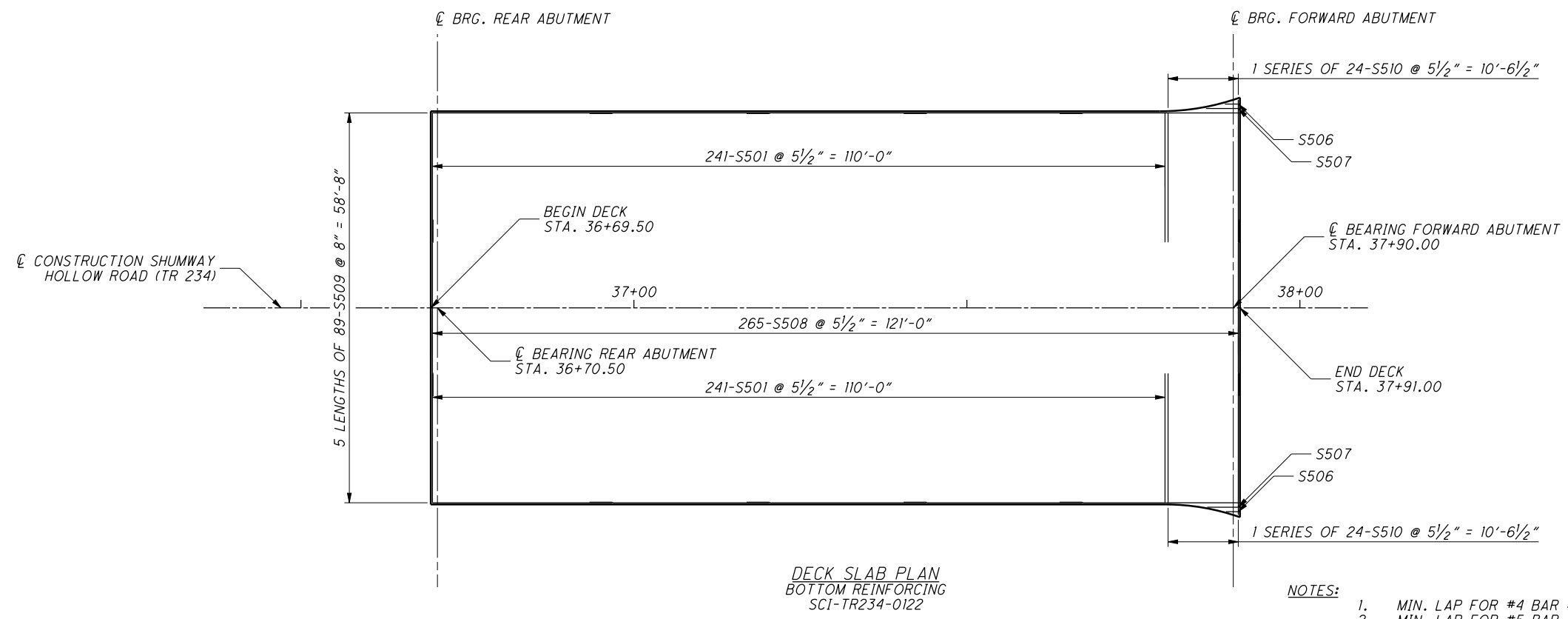
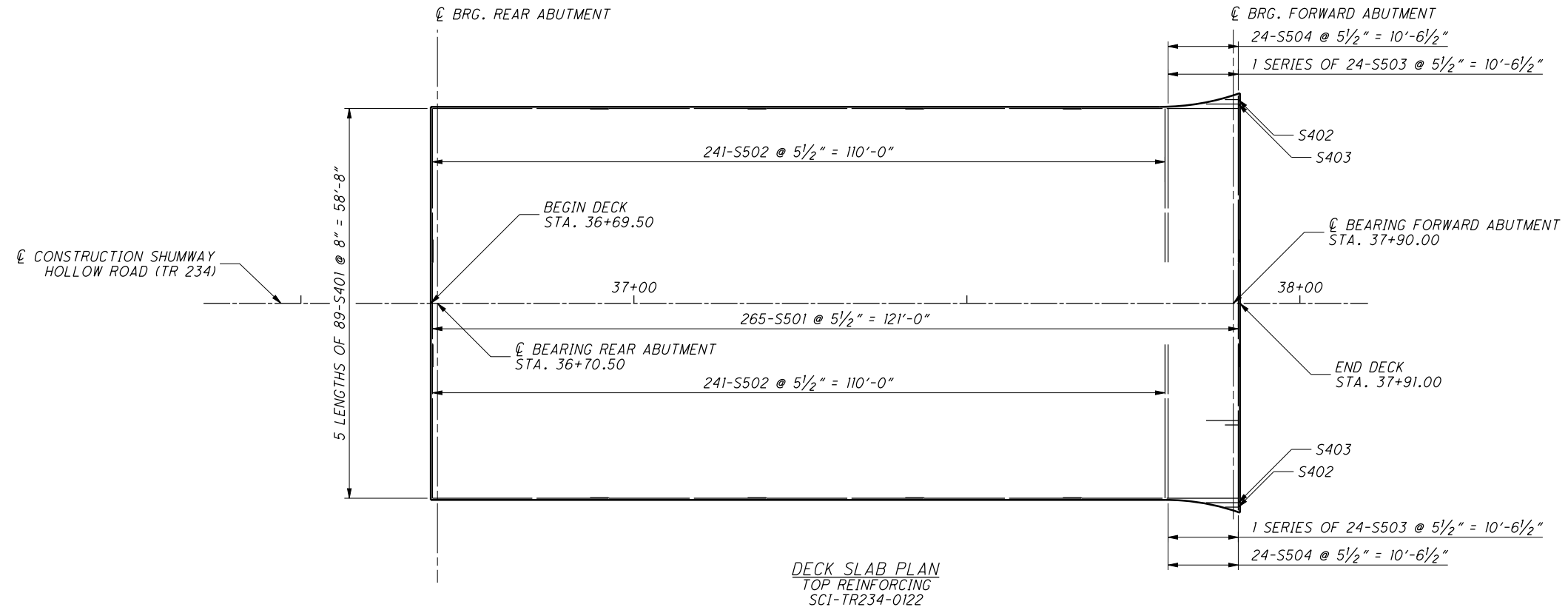


DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		

DECK LAYOUT
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
 PID No. 19415

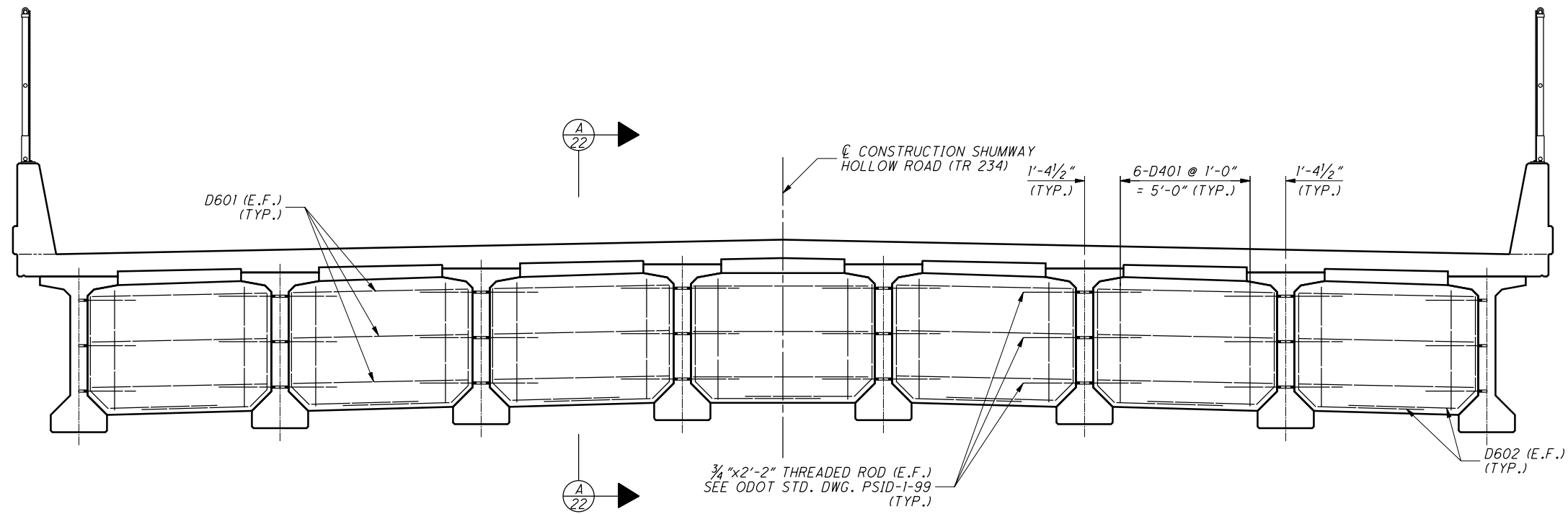




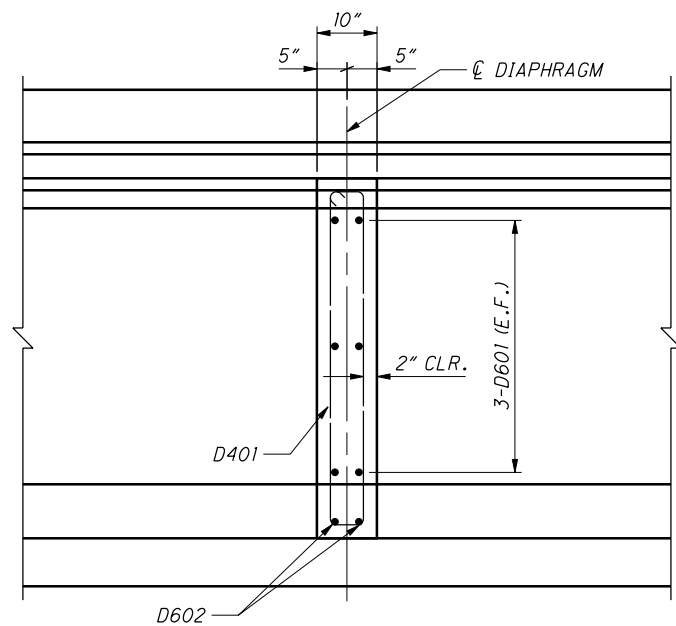
- NOTES:
1. MIN. LAP FOR #4 BAR = 2'-9"
 2. MIN. LAP FOR #5 BAR = 3'-5"
 3. FOR ADDITIONAL DETAILS ON DECK REINFORCING, SEE TRANSVERSE DECK SECTION.



DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		



TRANSVERSE SECTION
SCI-TR234-0122



SECTION
A-22 INTERMEDIATE DIAPHRAGM

NOTES:

1. FOR ADDITIONAL DETAILS ON INTERMEDIATE DIAPHRAGMS, SEE ODOT STD. DWG. PSID-1-99.
2. INTERMEDIATE DIAPHRAGMS SHOWN ARE FOR CAST-IN-PLACE CONCRETE DIAPHRAGMS. THE CONTRACTOR MAY USE GALVANIZED STEEL INTERMEDIATE DIAPHRAGMS, PER STD. DWG. PSID-1-99.
3. REINFORCING IN INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED WITH ITEM 515 - INTERMEDIATE DIAPHRAGMS FOR PAYMENT.

DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		

		TOP OF HAUNCH ELEVATIONS								
		CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG. FWD ABUT
BEAM 1	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.	27.13' LT.
	TOP OF HAUNCH ELEVATION	660.90	660.81	660.71	660.60	660.46	660.16	660.11	659.92	659.71
BEAM 2	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.	19.38' LT.
	TOP OF HAUNCH ELEVATION	661.06	660.97	660.87	660.75	660.61	660.31	660.27	660.07	659.86
BEAM 3	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.	11.63' LT.
	TOP OF HAUNCH ELEVATION	661.21	661.12	661.02	660.91	660.77	660.47	660.42	660.23	660.02
BEAM 4	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.	3.88' LT.
	TOP OF HAUNCH ELEVATION	661.37	661.28	661.18	661.06	660.92	660.62	660.58	660.38	660.17
BEAM 5	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.	3.88' RT.
	TOP OF HAUNCH ELEVATION	661.37	661.28	661.18	661.06	660.92	660.62	660.58	660.38	660.17
BEAM 6	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.	11.63' RT.
	TOP OF HAUNCH ELEVATION	661.21	661.12	661.02	660.91	660.77	660.47	660.42	660.23	660.02
BEAM 7	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.	19.38' RT.
	TOP OF HAUNCH ELEVATION	661.06	660.97	660.87	660.75	660.61	660.31	660.27	660.07	659.86
BEAM 8	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.	27.13' RT.
	TOP OF HAUNCH ELEVATION	660.90	660.81	660.71	660.60	660.46	660.16	660.11	659.92	659.71

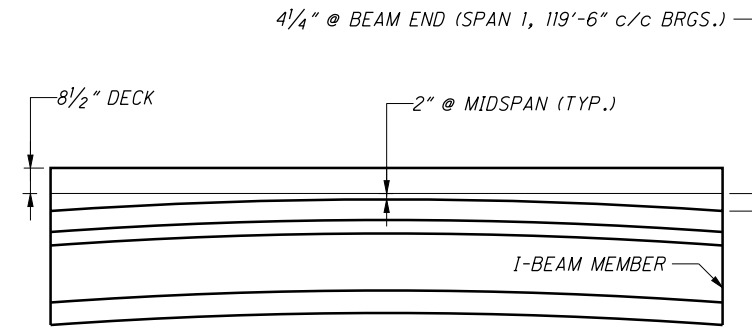
TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE I-BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

		SCREED ELEVATIONS								
		CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG. FWD ABUT
LEFT EDGE OF DECK	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.
	SCREED ELEVATION	661.57	661.47	661.37	661.26	661.12	660.82	660.78	660.58	660.37
PROFILE GRADE	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	SCREED ELEVATION	662.16	662.06	661.96	661.85	661.71	661.41	661.37	661.17	660.96
RIGHT EDGE OF DECK	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.
	SCREED ELEVATION	661.57	661.47	661.37	661.26	661.12	660.82	660.78	660.58	660.37

SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

		FINAL DECK SURFACE ELEVATIONS								
		CL BRG REAR ABUT	1/8 SPAN	2/8 SPAN	3/8 SPAN	4/8 SPAN	5/8 SPAN	6/8 SPAN	7/8 SPAN	CL BRG. FWD ABUT
LEFT EDGE OF DECK	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.	29.50' LT.
	FINAL DECK ELEVATION	661.57	661.42	661.27	661.12	660.97	660.82	660.67	660.52	660.37
PROFILE GRADE	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	0'	0'	0'	0'	0'	0'	0'	0'	0'
	FINAL DECK ELEVATION	662.16	662.01	661.86	661.71	661.56	661.41	661.26	661.11	660.96
RIGHT EDGE OF DECK	STATION	36+70.50	36+85.44	37+00.38	37+15.31	37+30.25	37+45.19	37+60.13	37+75.06	37+90.00
	OFFSET	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.	29.50' RT.
	FINAL DECK ELEVATION	661.57	661.42	661.27	661.12	660.97	660.82	660.67	660.52	660.37

FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

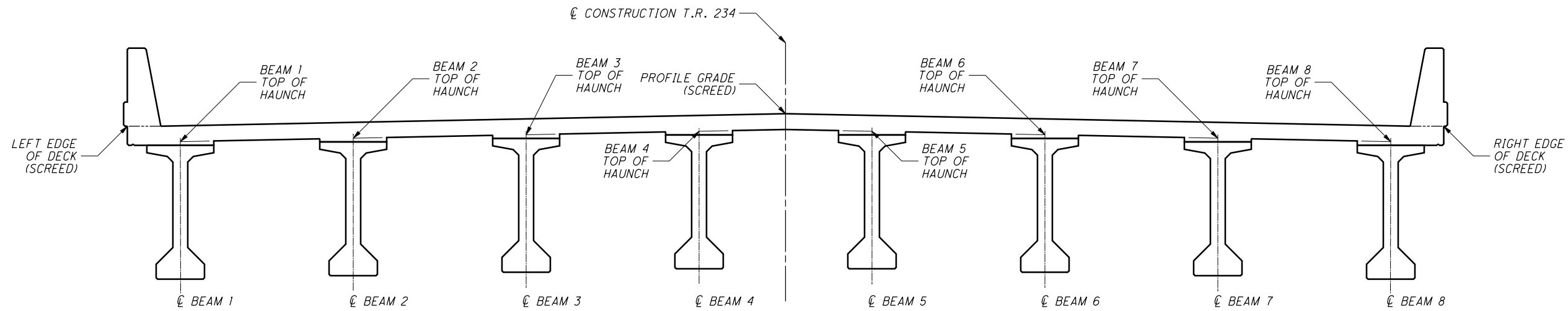


HAUNCH THICKNESS DIAGRAM

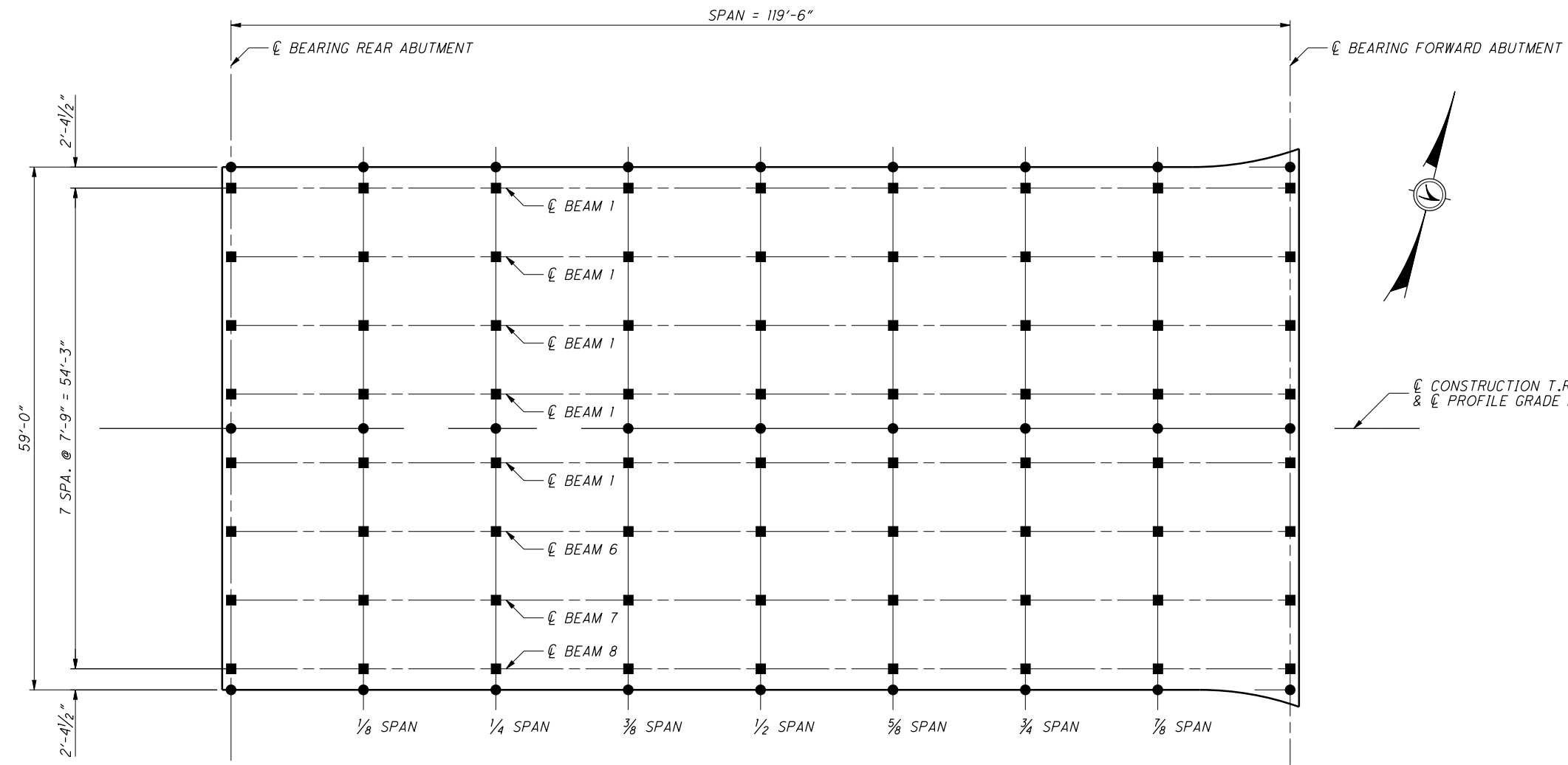
CALCULATED CAMBER AT TIME OF RELEASE IS 2 3/16 INCHES.
 CALCULATED CAMBER AT TIME OF ERECTION IS 3 3/16 INCHES.
 CALCULATED LONG-TERM CAMBER IS 5 3/8 INCHES.

NOTES:

- DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESSES SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.



SCREED LOCATIONS
BRIDGE NO. SCI-TR234-0122



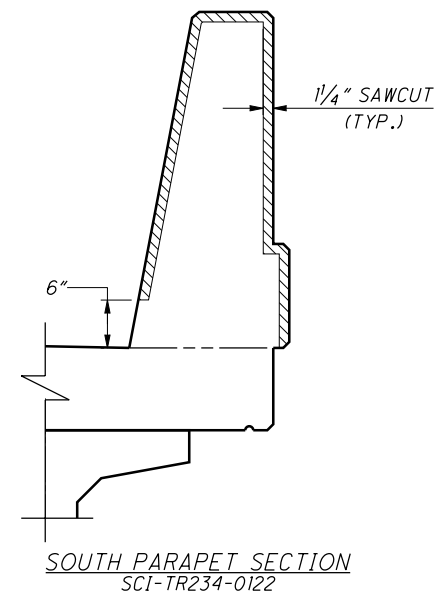
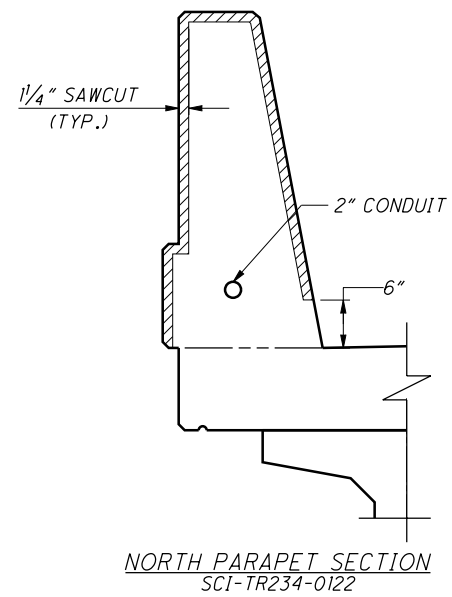
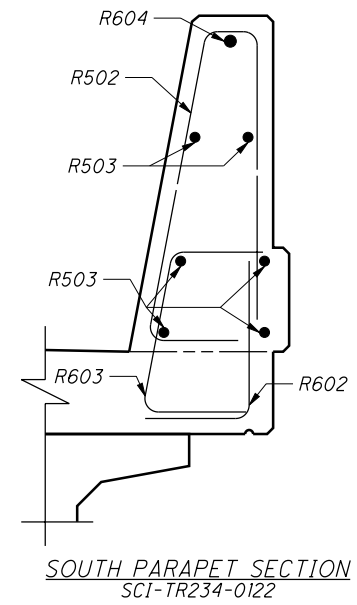
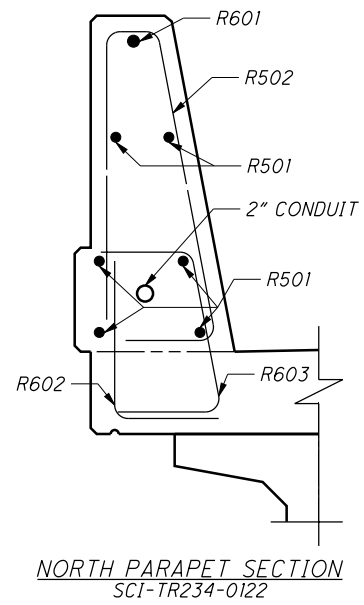
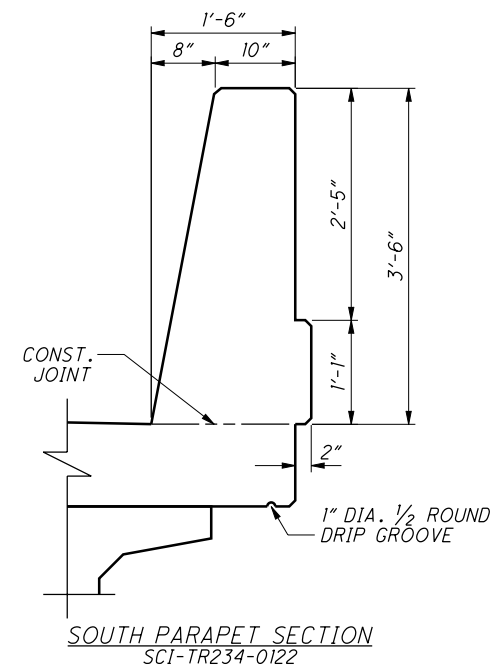
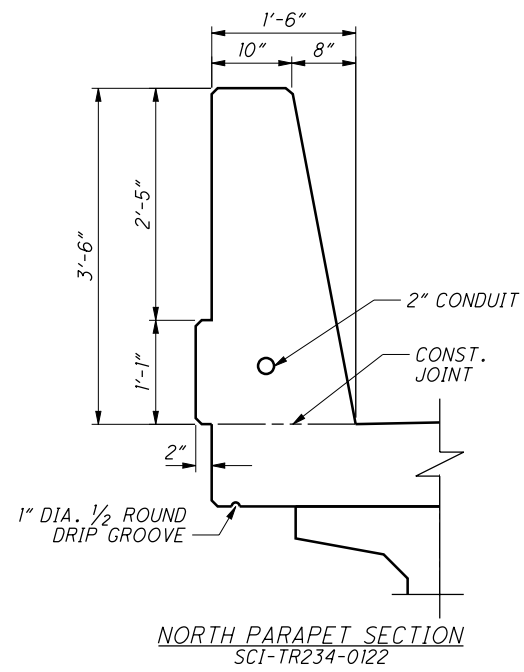
LEGEND:
 ● SCREED AND FINAL DECK SURFACE ELEVATION LOCATION POINT
 ■ TOP OF HAUNCH ELEVATION LOCATION POINT

NOTES:
 1. SCREED ELEVATIONS ARE GIVEN AT 1/8 POINTS OF EACH SPAN MEASURED ALONG BEAM OR EDGE OF DECK.

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REVISY	
DESIGNED	DEF/RBK
CHECKED	DAT

TOP OF HAUNCH, SCREED & FINAL DECK SURFACE LOCATION POINTS
 BRIDGE NO. SCI-TR234-0122
 SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

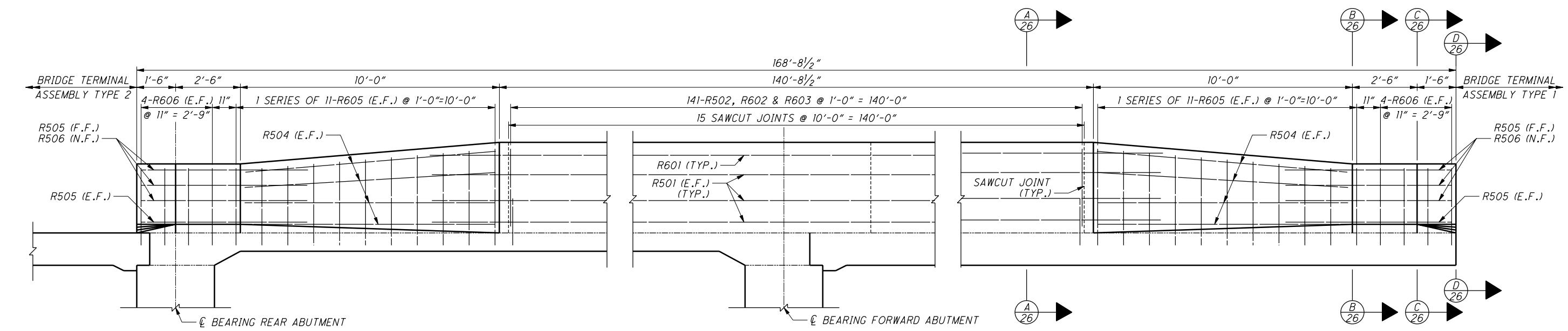
SCI-823-6.81
PID No. 19415



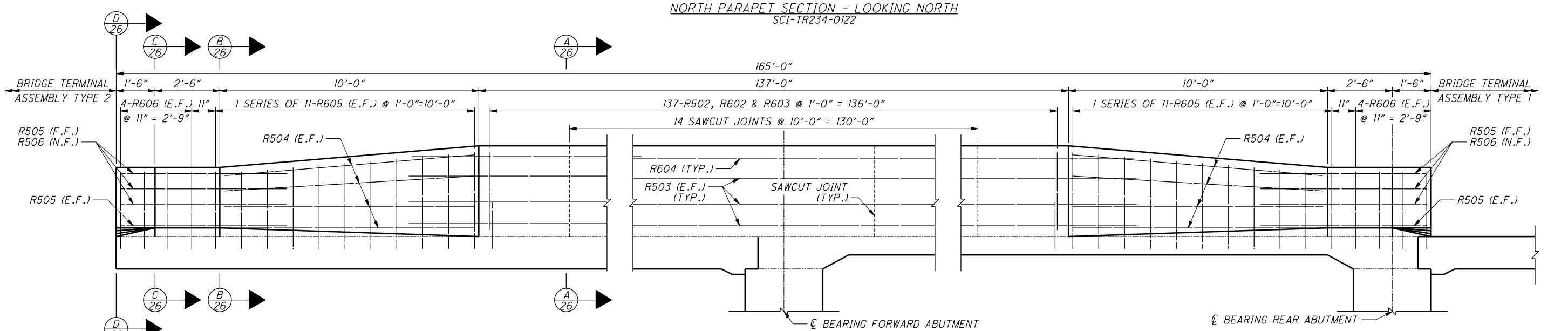
DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
DATE	06/24/11		

PARAPET DETAILS
BRIDGE NO. SCI-TR234-0122
SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

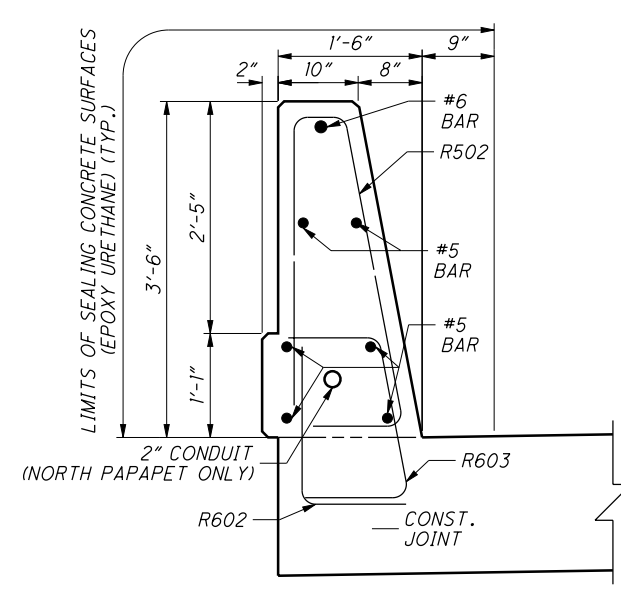
SCI-823-6.81
PID No. 19415



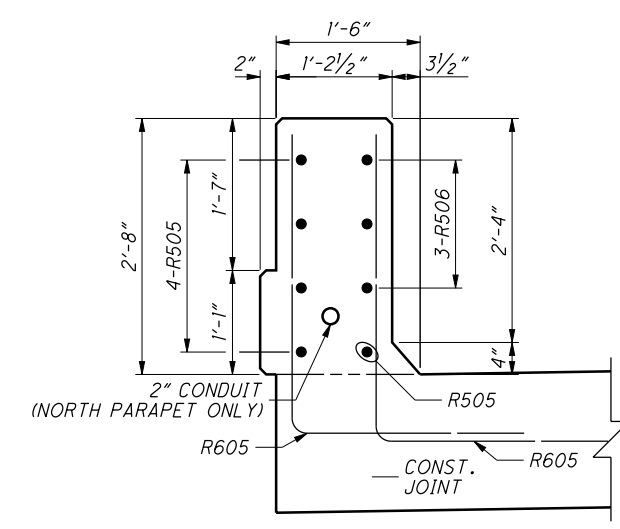
NORTH PARAPET SECTION - LOOKING NORTH
 SCI-TR234-0122



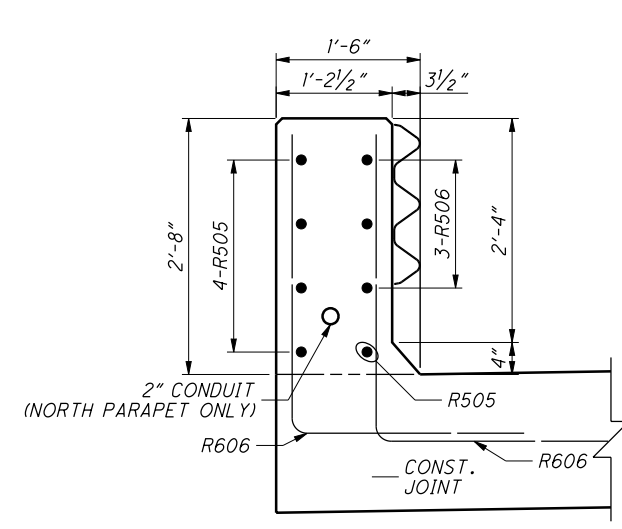
SOUTH PARAPET SECTION - LOOKING SOUTH
 SCI-TR234-0122



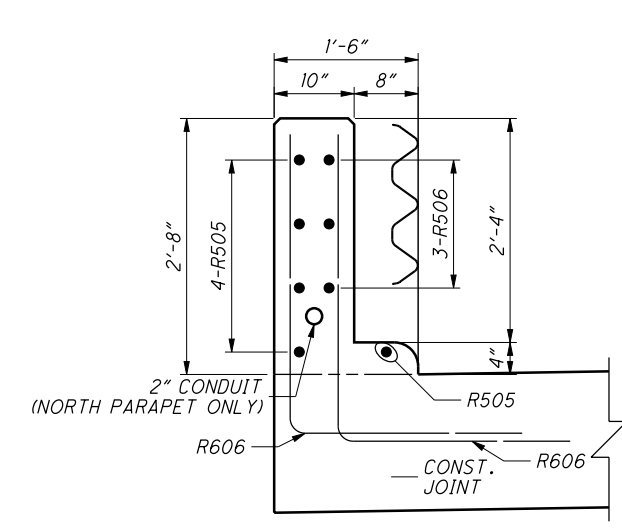
SECTION A
 26



SECTION B
 26

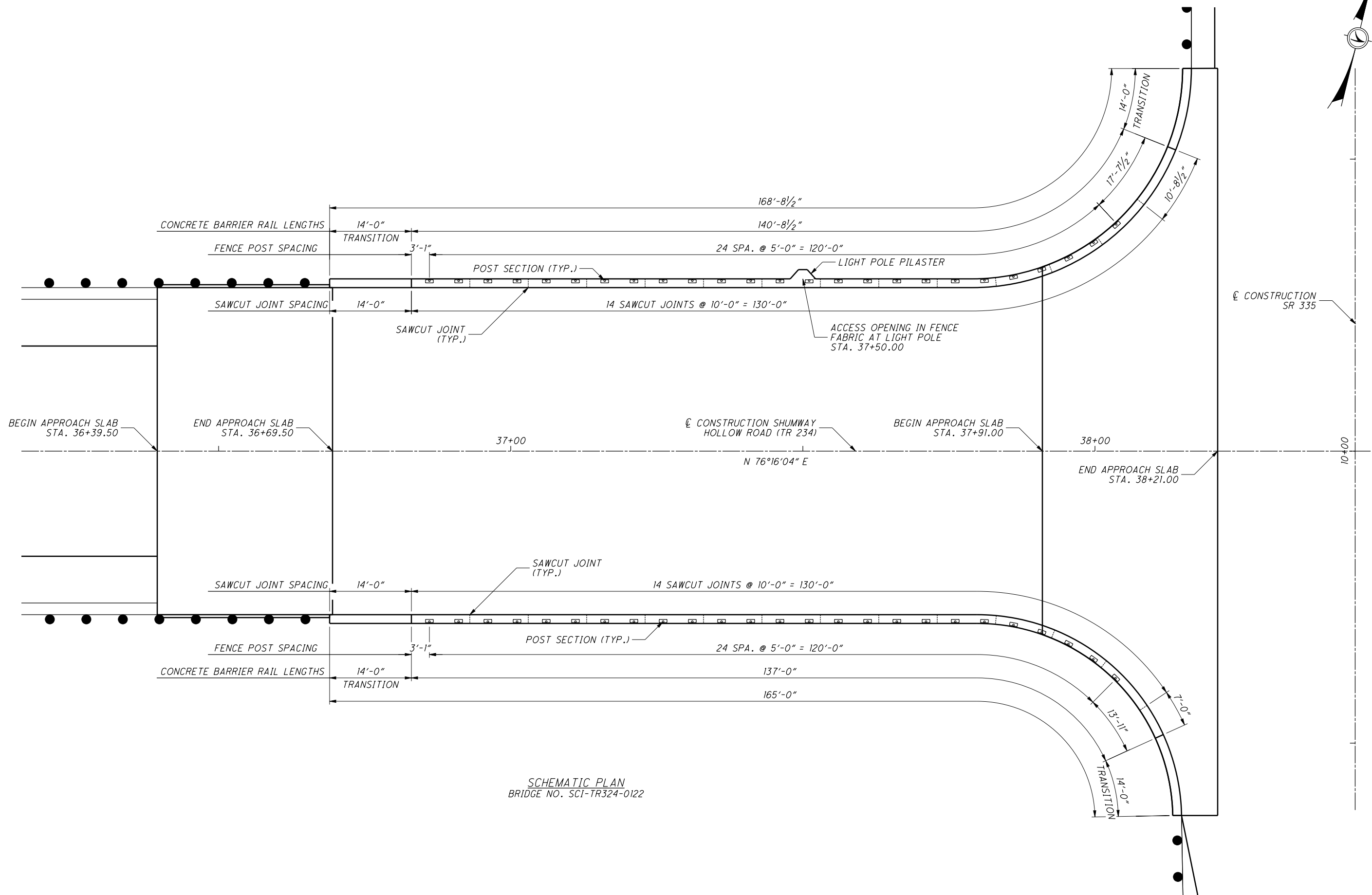


SECTION C
 26



SECTION D
 26

- NOTES:
- FOR ADDITIONAL DETAILS, SEE ODOT STD. DWG. SBR-1-99
 - MIN. LAP FOR #5 BAR = 3'-5"
 - MIN. LAP FOR #6 BAR = 4'-1"

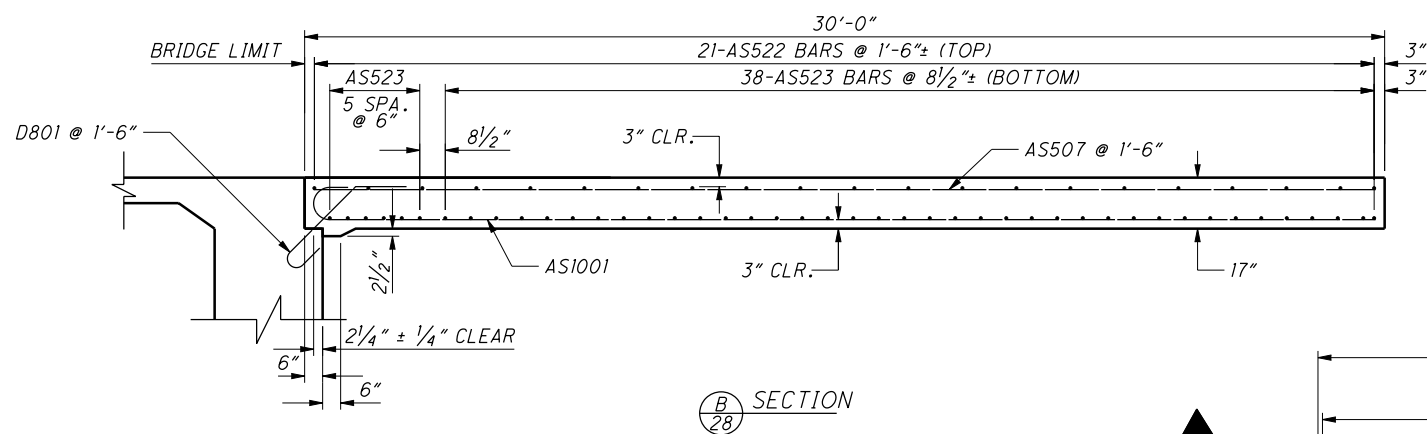
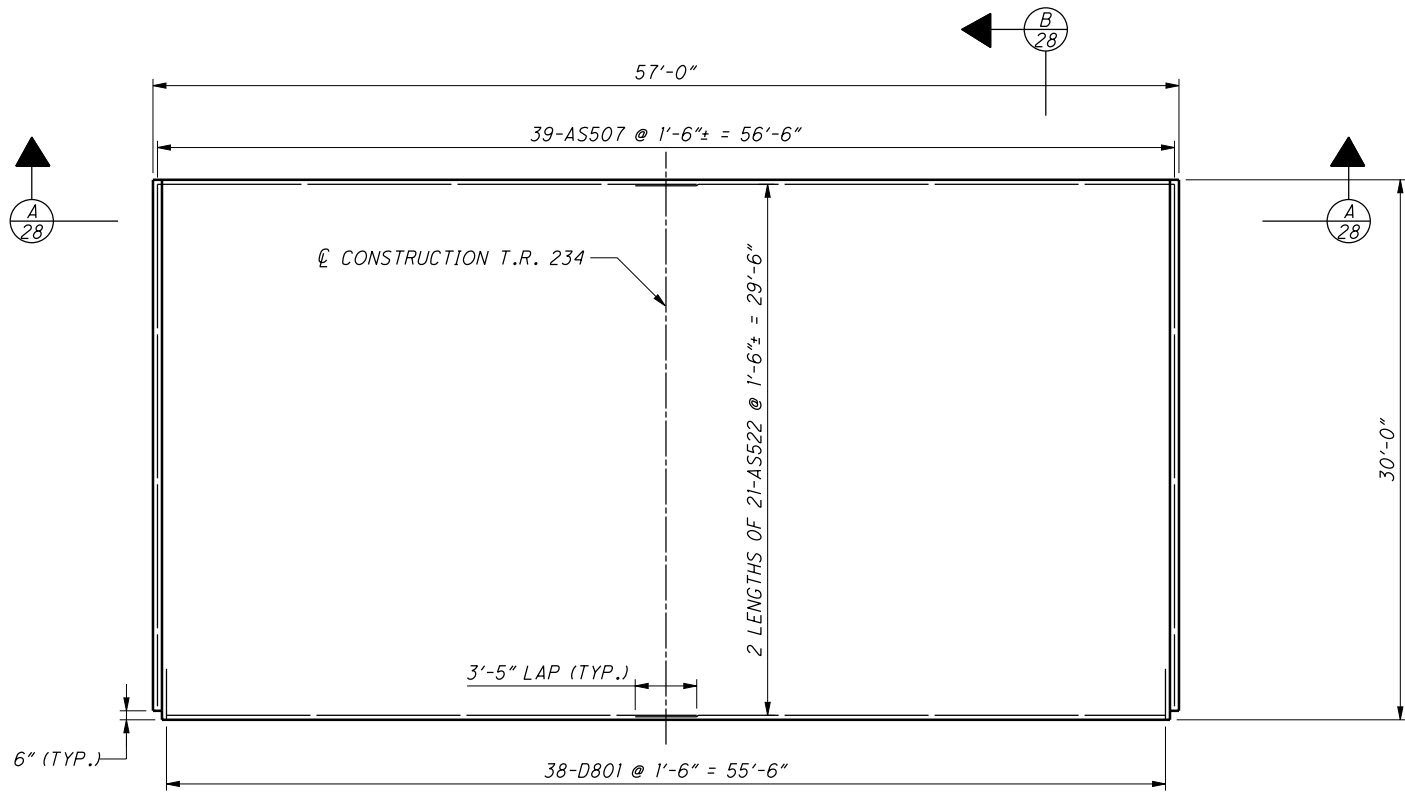
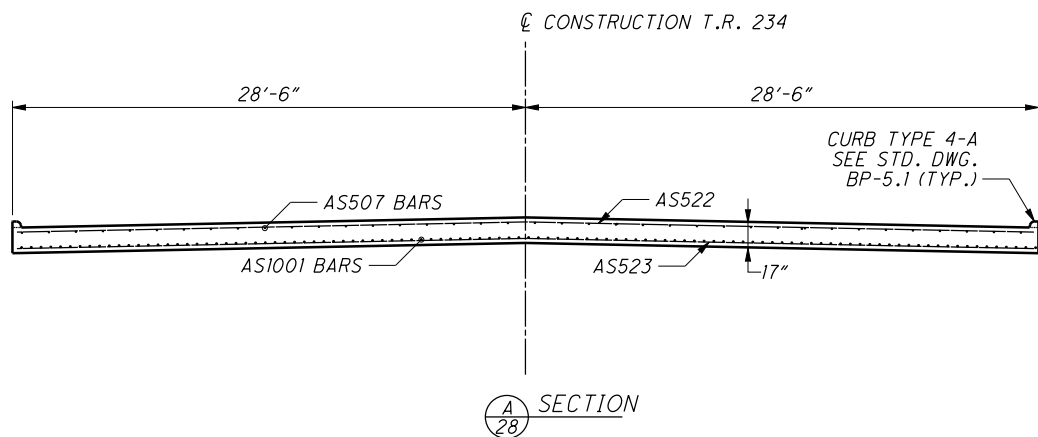


SCHMATIC PLAN
BRIDGE NO. SCI-TR324-0122

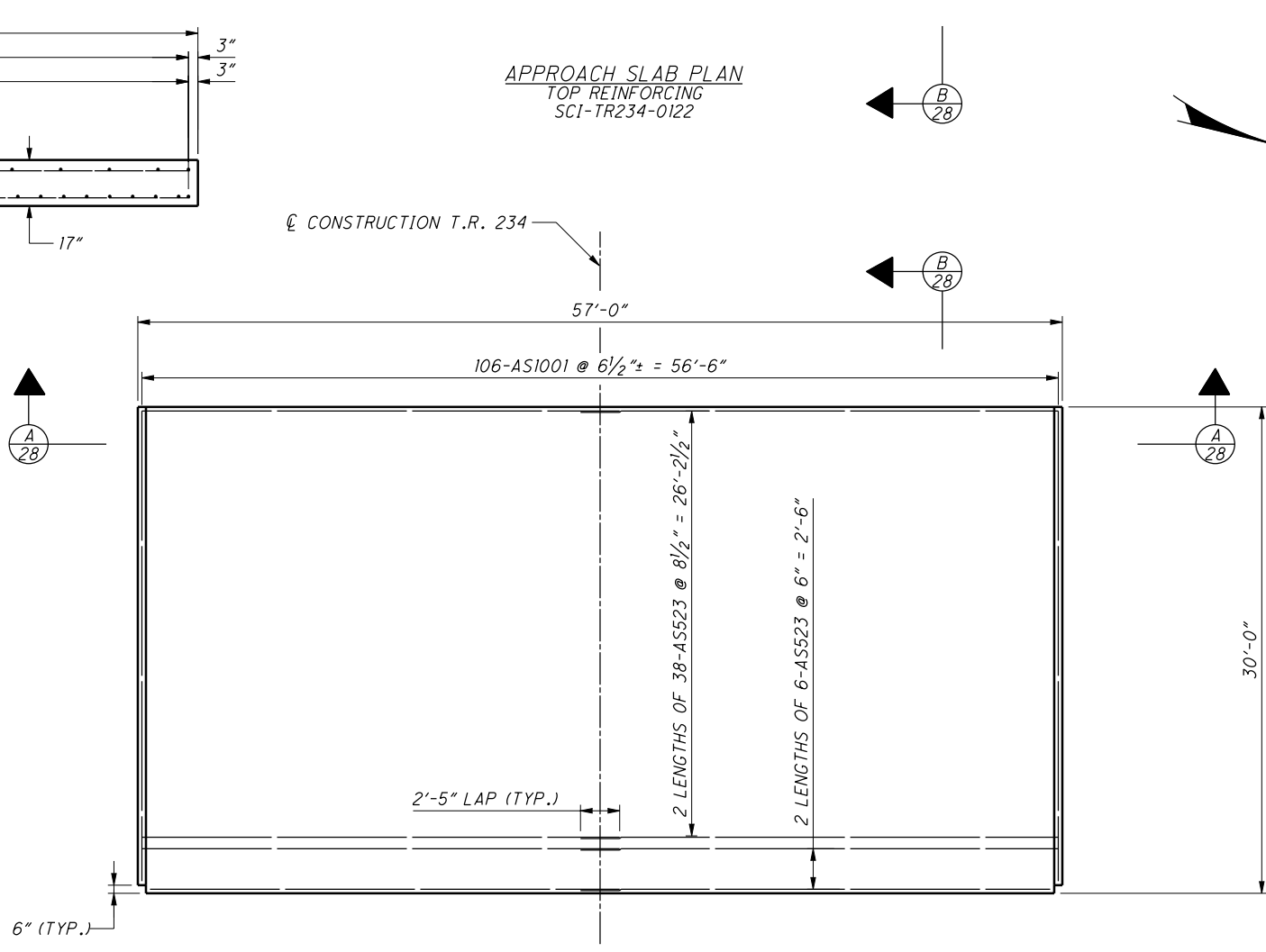
NOTES:

- FOR ADDITIONAL VANDAL PROTECTION FENCING DETAILS, SEE ODOT STD. DWG. VPF-1-90.

DESIGNED	DEF/RBK	CHECKED	DAT
DRAWN	RBK	REVISED	
REVIEWED	BAA	STRUCTURE FILE NUMBER	7336934
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APPROACH SLAB PLAN
TOP REINFORCING
SCI-TR234-0122



APPROACH SLAB PLAN
BOTTOM REINFORCING
SCI-TR234-0122

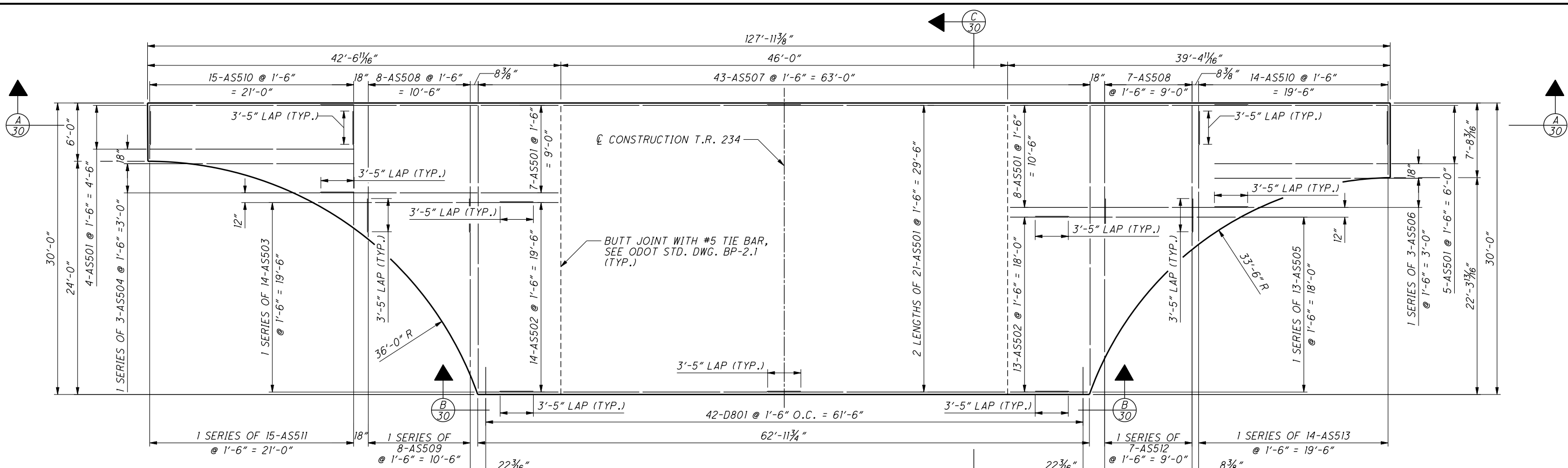
- NOTES:
1. MIN. LAP #5 TOP BAR = 3'-5"
 2. MIN. LAP #5 BTM. BAR = 2'-5"
- FOR ADDITIONAL DETAILS ON APPROACH SLAB, SEE ODOT STD. DWG. AS-1-81.

REAR APPROACH SLAB DETAILS
BRIDGE NO. SCI-TR234-0122
SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

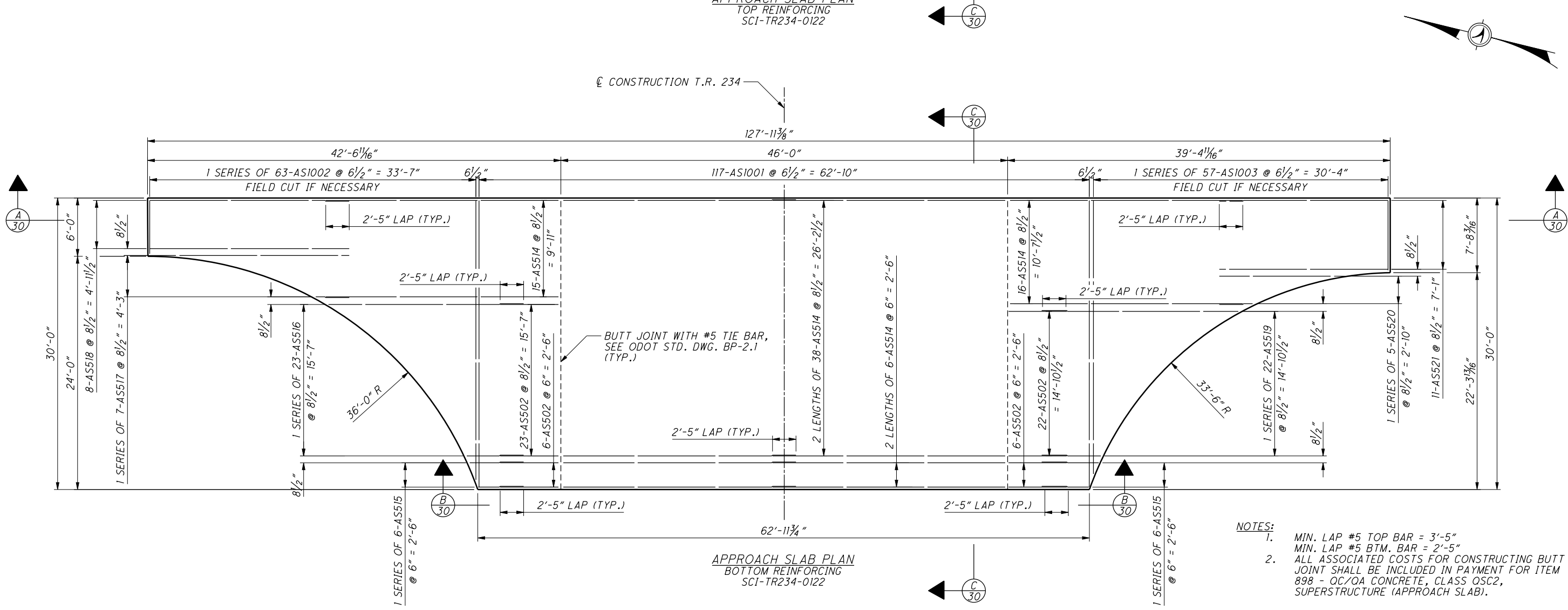
DESIGNED DEF/RBK	DRAWN RBK	REVIEWED BAA	DATE 06/24/11
CHECKED DAT	REVISED	STRUCTURE FILE NUMBER 7336934	

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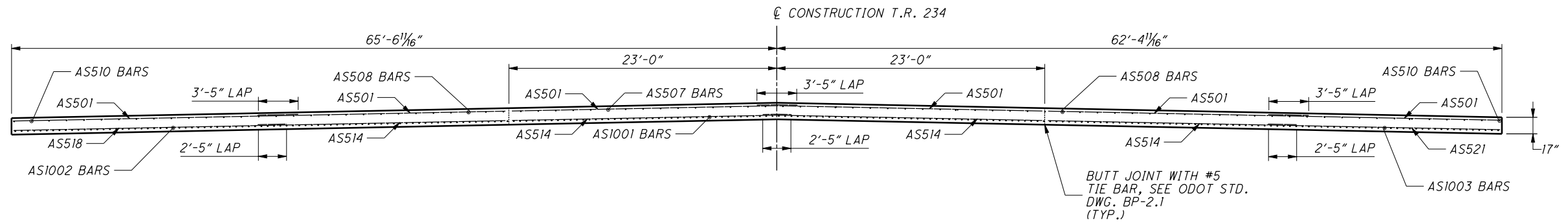


APPROACH SLAB PLAN
 TOP REINFORCING
 SCI-TR234-0122

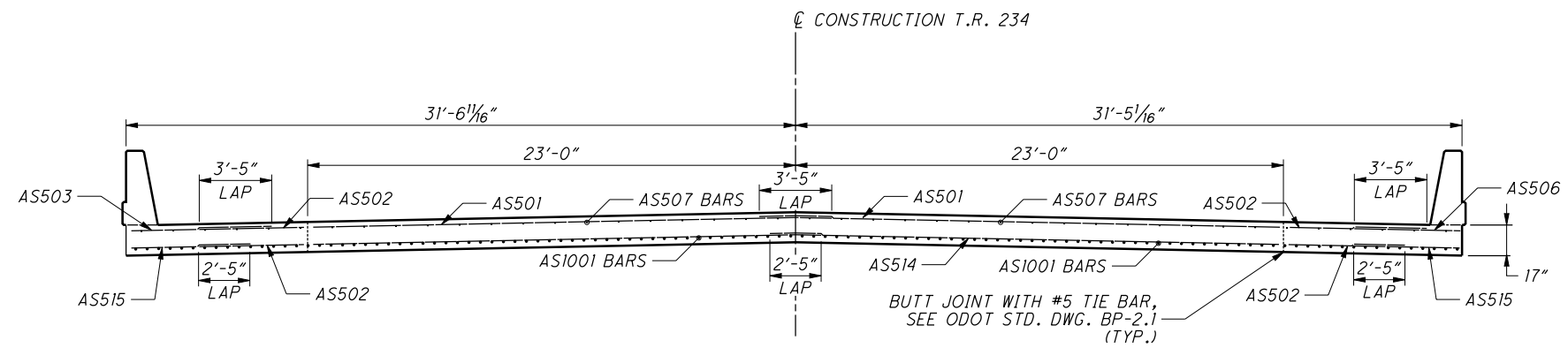


APPROACH SLAB PLAN
 BOTTOM REINFORCING
 SCI-TR234-0122

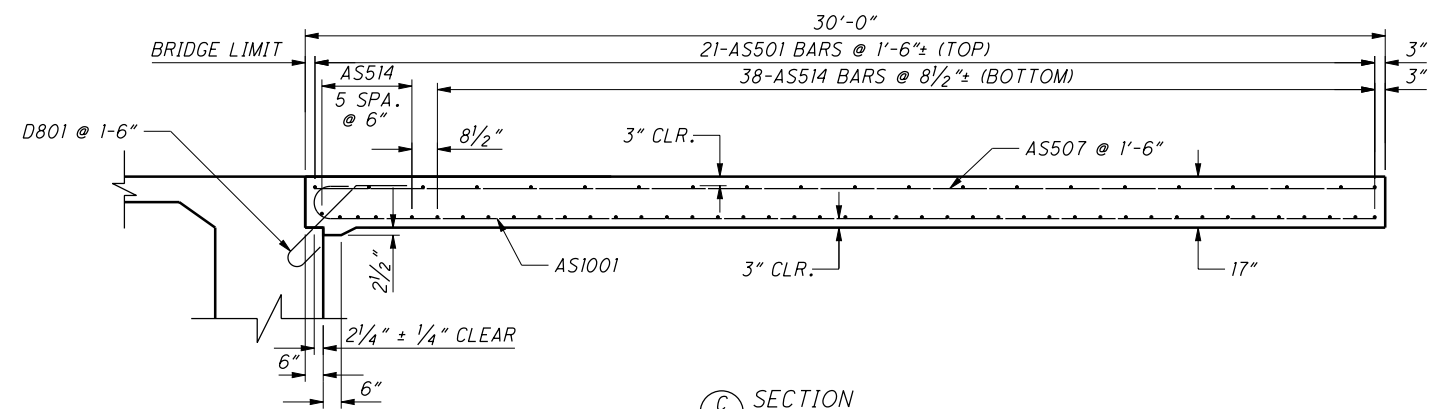
- NOTES:
1. MIN. LAP #5 TOP BAR = 3'-5"
 2. MIN. LAP #5 BTM. BAR = 2'-5"
- ALL ASSOCIATED COSTS FOR CONSTRUCTING BUTT JOINT SHALL BE INCLUDED IN PAYMENT FOR ITEM 898 - QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (APPROACH SLAB).



A SECTION
29



B SECTION
29



C SECTION
29

NOTES:

1. FOR ADDITIONAL DETAILS ON APPROACH SLAB, SEE ODOT STD. DWG. AS-1-81.
2. FOR ADDITIONAL DETAILS ON RAILINGS, SEE RAILING DETAIL SHEETS.
3. ALL ASSOCIATED COSTS FOR CONSTRUCTING BUTT JOINT SHALL BE INCLUDED IN PAYMENT FOR ITEM 898 - QC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB).

DATE	06/24/11
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DRAWN	RBK
DESIGNED	DEF/RBK
CHECKED	DAT
STRUCTURE FILE NUMBER	7336934

FORWARD APPROACH SLAB DETAILS
BRIDGE NO. SCI-TR234-0122
SHUMWAY HOLLOW ROAD OVER CSXT RAILROAD

SCI-823-6.81
PID No. 19415

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC	
DRILLED SHAFT REINFORCING STEEL LIST (FOR INFORMATION ONLY)														
SP401		10	10	23'-0"	3319	27	4 1/2"	2'-6"	23'-0"					
DS1401		80	80	27'-4"	16728	1	2'-8"	25'-2"						
SUB-TOTAL					20047	LBS								

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC	
INTERMEDIATE DIAPHRAGM REINFORCING STEEL LIST (FOR INFORMATION ONLY)														
D401					168		10'-10"	1216	3	0'-6"	4'-8"			
D601					168	STR	6'-9"	1703						
D602					112	13	8'-9"	1472		3'-8"	0'-8"	0'-8"		
SUB-TOTAL					4391	LBS								

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC	
ABUTMENT REINFORCING STEEL LIST														
A401		290	290	3'-3"	630	17	2'-8"							
A402		172	172	4'-6"	517	2	1'-0"	2'-8"	1'-0"					
A501		456	456	9'-9"	4637	3	2'-3"	2'-6"						
A601	91		91	25'-3"	3451	3	10'-0"	2'-6"						
A602	59		59	14'-5"	1278	3	2'-8"	4'-5"						
A603	6		6	22'-5"	202	STR								
A604	6		6	29'-5"	265	3	2'-2"	12'-5"						
A605	2		2	13'-1"				4'-3"						
A605	SERIES OF	SERIES OF	TO	989	3	2'-2"	TO				0'-6"			
	16		16	28'-1"				11'-9"						
A606	4		4	2'-8"										
A606	SERIES OF	SERIES OF	TO	451	STR						1'-11"			
	8		8	16'-1"										
A607	8		8	18'-6"	222	STR								
A608	12		12	3'-2"	57	STR								
A609	4		4	6'-8"	40	19	5'-10"	0'-5"	0'-9"					
A610	4		4	16'-1"	97	STR								
A611		20	20	26'-0"	781	STR								
	2		2	15'-1"										
A612	SERIES OF	SERIES OF	TO	362	STR						2'-0"			
	6		6	25'-1"										
	2		2	2'-3"										
A613	SERIES OF	SERIES OF	TO	222	STR						2'-0"			
	8		8	16'-3"										
	2		2	2'-8"										
A614	SERIES OF	SERIES OF	TO	232	STR						2'-0"			
	8		8	16'-8"										
A615	8		8	16'-0"	192	STR								
A616	4		4	8'-1"	49	19	7'-3"	0'-5"	0'-9"					
A617	4		4	20'-4"	122	19	19'-6"	0'-5"	0'-9"					
A618	72		72	30'-0"	3244	STR								
A619	18		18	14'-5"	390	STR								
A620	6		6	25'-8"	231	STR								
A801	64		64	27'-7"	4713	STR								
A802	15		15	24'-3"	971	STR								
A803		20	20	25'-6"	1362	STR								
A804		107	107	20'-7"	5880	2	9'-2"	2'-8"	9'-2"					
A805		12	12	17'-2"	550	STR								
		2	2	8'-5"										
A806	SERIES OF	SERIES OF	TO	1218	STR						0'-6"			
	18		18	16'-11"										
	2		2	2'-10"										
A807	SERIES OF	SERIES OF	TO	1523	STR						0'-6"			
	29		29	16'-10"										
A808		126	126	9'-2"	3084	STR								
		2	2	13'-7"				5'-8"	5'-8"					
A809	SERIES OF	SERIES OF	TO	730	2	TO	2'-8"	TO			0'-6"			
	8		8	20'-7"			9'-2"	9'-2"						
A1001		56	56	28'-5"	6848	STR								
SUB-TOTAL					45540	LBS								

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	TOP	BOTTOM	TOTAL				A	B	C	D	E	R	INC	
DECK SLAB REINFORCING STEEL LIST														
S401	445		445	26'-5"	7853	STR								
S402	2		2	2'-0"	3	STR								
S403	2		2	4'-10"	6	STR								
S501	265	482	747	19'-5"	15128	STR								
S502	482		482	23'-1"	11605	STR								
	2		2	23'-1"										
S503	SERIES OF	SERIES OF	TO	1204	STR						0'-1"			
	24		24	25'-0"										
S504	48		48	18'-0"	901	2	8'-11"	0'-5"	8'-11"					
REINFORCING STEEL BAR DESIGNATION NOT USED IN STEEL LIST														
S505		2	2	2'-0"	4	STR								
S506		2	2	4'-10"	10	STR								
S507		265	265	26'-9"	7394	STR								
S508		445	445	27'-0"	12532	STR								
S509		2	2	19'-5"										
S510	SERIES OF	SERIES OF	TO	1020	STR						0'-1"			
	24		24	21'-4"										
SUB-TOTAL					57659	LBS								

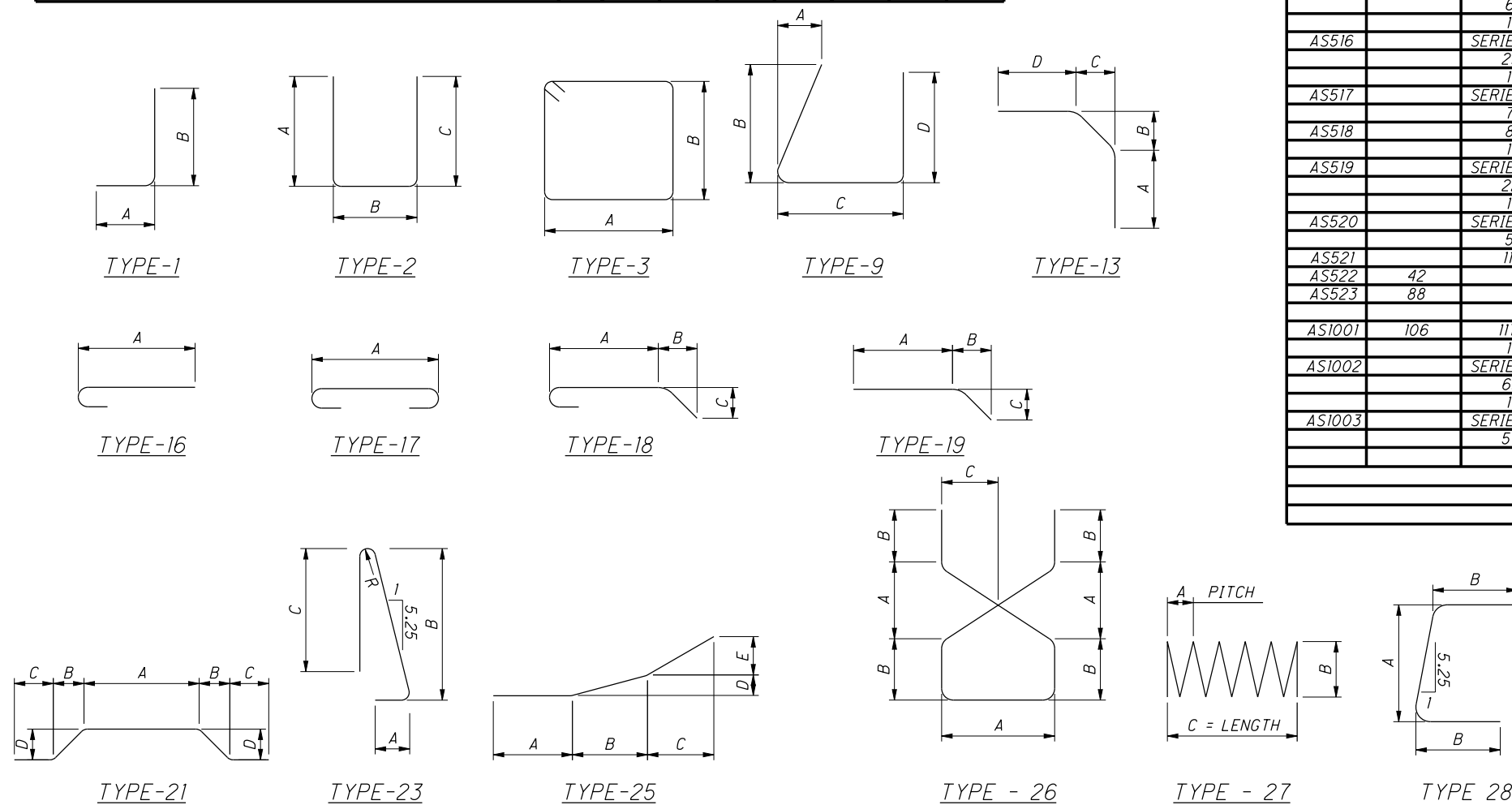
MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC	
ABUTMENT DIAPHRAGM REINFORCING STEEL LIST														
A502	106	114	220	13'-7"	3117	2	5'-7"	2'-8"	5'-7"					
A503	37	41	78	7'-1"	610	2	2'-10"	2'-1"	2'-10"					
A621	9		9	22'-5"	303	STR								
A622	21	21	42	6'-10"	431	STR								
A623		57	57	13'-1"	1120	26	2'-8"	0'-10"	1'-4"					
A624		9	9	23'-9"	321	STR								
A625	6		6	1'-9"	16	STR								
A626		6	6	2'-10"	26	STR								
A810	24		24	24'-2"	1549	STR								
A811		24	24	25'-7"	1639	STR								
D801	38	42	80	4'-8"	997	18	2'-10"	1'-0"	1'-0"					
SUB-TOTAL					10128	LBS								

NOTES:
1. ALL REINFORCING STEEL TO BE EPOXY COATED
2. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS
3. REFER TO ODOT CMS SEC. 509.05 FOR STANDARD BAR DIMENSIONS
4. ALL DIMENSIONS ARE OUT TO OUT

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS							
	NORTH	SOUTH	TOTAL				A	B	C	D	E	R	INC	
RAILING REINFORCING STEEL LIST														
R501	36		36	27'-2"	1020	STR								
R502	141	137	278	7'-5"	2150	23	1'-1"	3'-2"	3'-0"				2 3/4"	
R503		36	36	26'-7"	998	STR								
R504	16	16	32	10'-0"	334	STR								
R505	10	10	20	5'-6"	115	STR								
R506	6	6	12	5'-6"	69	25	1'-8"	2'-5"	1'-5"	1 1/2"	5"			
R601	6		6	27'-9"	250	STR								
R602	141	137	278	2'-8"	1113	1	1'-1"	1'-9"						
R603	141	137	278	3'-7"	1496	28	1'-9"	1'-1"						
R604		6	6	27'-1"	244	STR								
R605	4	4	8	5'-3"				3'-0"						
R606	11	11	22	6'-1"	749	1	2'-5"	TO	3'-10"				0'-1"	
R607	16	16	32	5'-3"	252	1	2'-5"	3'-0"						
				SUB-TOTAL	8791	LBS								

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	LEFT	RIGHT	TOTAL				A	B	C	D	E	R	INC
LIGHT POLE PILASTER REINFORCING STEEL LIST													
L501	4		4	2'-11"	12	2	0'-7"	1'-11"	0'-7"				
L502	4		4	9'-10"	41	9	6 1/2"	3'-9"	2'-5"	3'-9"			
L503	7		7	7'-4"	54	21	1'-4"	1-10"	0'-6"	1'-11"			
L504	4		4	3'-10"	16	STR							
				SUB-TOTAL	123	LBS							

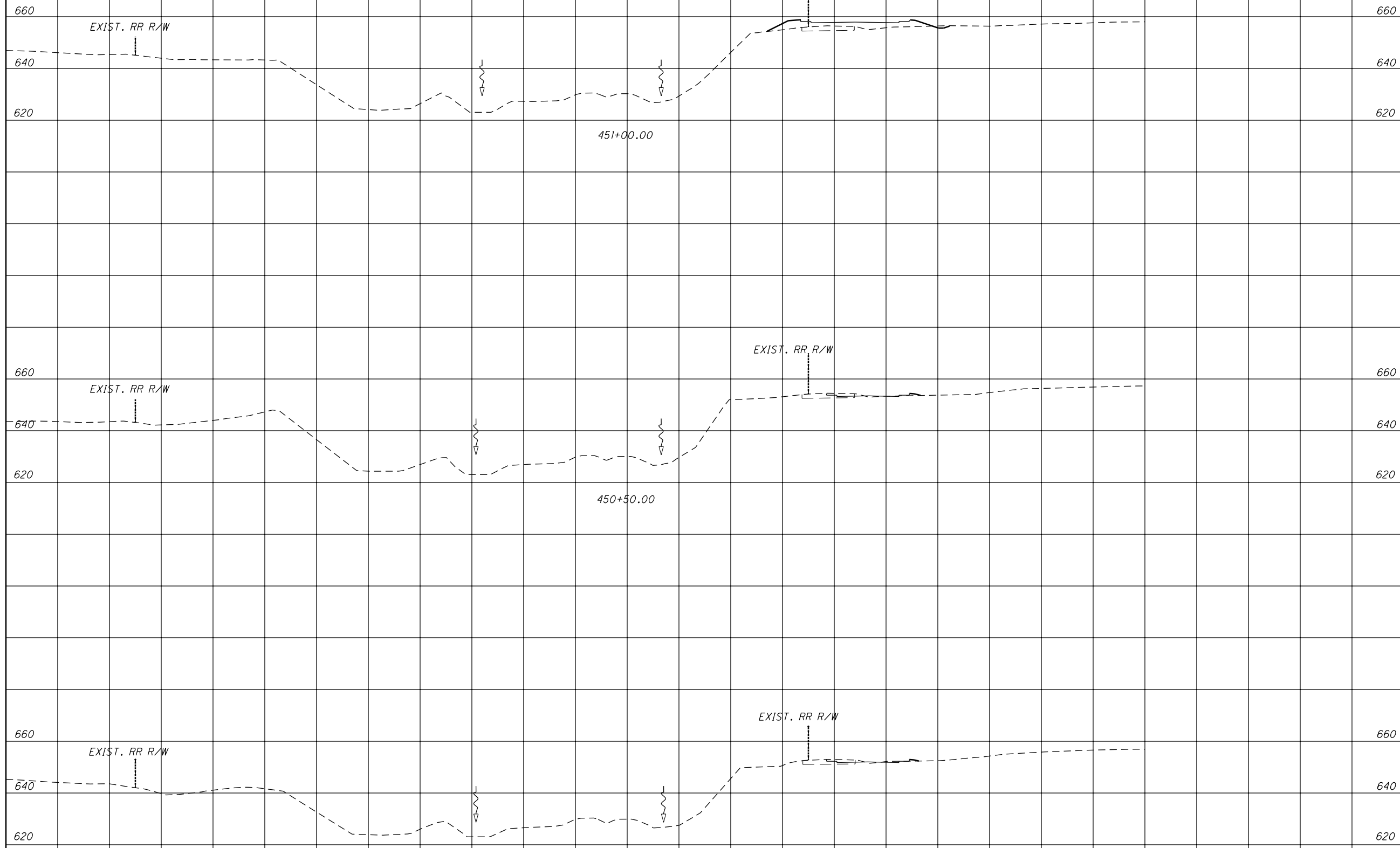
MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC
APPROACH SLAB REINFORCING STEEL LIST (FOR INFORMATION ONLY)													
AS501		66	66	24'-6"	1687	STR							
AS502		84	84	6'-0"	526	STR							
AS503		1	1	5'-8"									
AS504		14	14	21'-11"	201	STR							1'-3"
AS505		1	1	5'-8"									
AS506		3	3	15'-4"	33	STR							4'-10"
AS507		1	1	5'-8"									
AS508		13	13	20'-8"	179	STR							1'-3"
AS509		1	1	4'-2"									
AS510		3	3	14'-2"	29	STR							5'-0"
AS511		1	1	5'-8"									
AS512		13	13	20'-8"	29	STR							1'-3"
AS513		1	1	4'-2"									
AS514		3	3	14'-2"	29	STR							5'-0"
AS515		8	8	17'-5"	89	STR							1'-11"
AS516		29	29	4'-0"	121	STR							
AS517		1	1	5'-0"									
AS518		15	15	12'-0"	133	STR							0'-6"
AS519		1	1	4'-11"									
AS520		7	7	15'-11"	76	STR							1'-10"
AS521		1	1	6'-7"									
AS522		14	14	14'-2"	151	STR							0'-7"
AS523		119	119	24'-0"	2979	STR							
AS524		2	2	4'-10"									
AS525		6	6	6'-1"	68	STR							0'-3"
AS526		1	1	5'-10"									
AS527		23	23	20'-6"	316	STR							0'-8"
AS528		1	1	3'-6"									
AS529		7	7	17'-6"	77	STR							2'-4"
AS530		8	8	20'-6"	171	STR							
AS531		1	1	6'-1"									
AS532		22	22	21'-10"	320	STR							0'-9"
AS533		1	1	3'-6"									
AS534		5	5	11'-6"	39	STR							2'-0"
AS535		11	11	17'-4"	199	STR							
AS536		42	42	30'-0"	1314	STR							
AS537		88	88	29'-6"	2708	STR							
AS1001	106	117	223	30'-11"	29667	16	29'-6"						
AS1002		1	1	5'-6"									
AS1003		63	63	28'-9"	4642	STR							4 1/2"
AS1004		1	1	7'-2"									
AS1005		57	57	28'-2"	4333	STR							4 1/2"
				SUB-TOTAL	52784	LBS							
				STRUCTURE TOTAL	122241	LBS							



NOTES:
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 4. ALL DIMENSIONS ARE OUT TO OUT

SEEDING
END WIDTH SQ. YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED CHECKED



SHEET TOTAL 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 SHEET TOTAL

CROSS SECTIONS
CSX RR - STA. 450+00.00 TO STA. 451+00.00

SCI-823-6.81

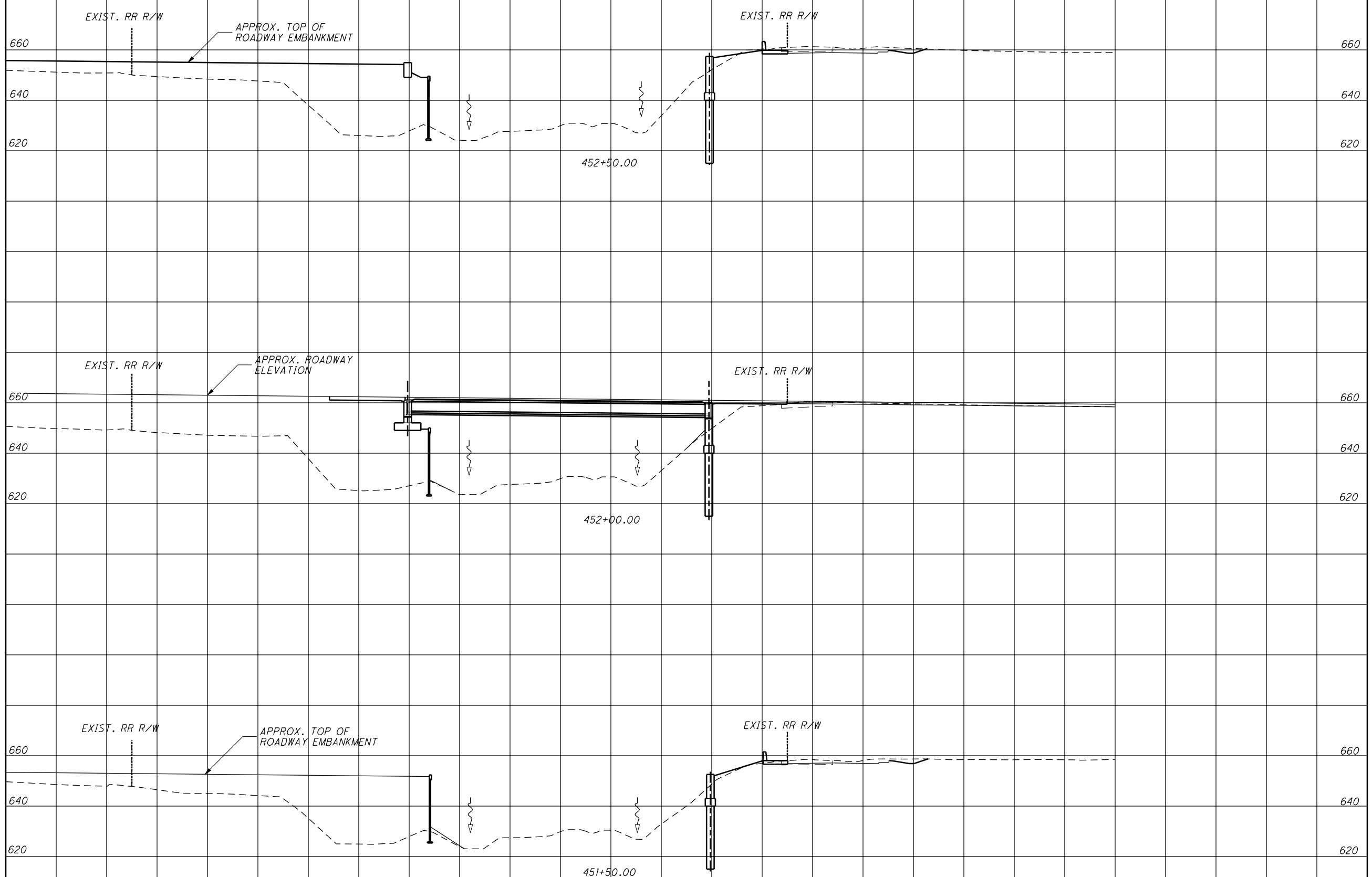
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107
111

SEEDING	
END WIDTH	SO. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
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SHEET TOTAL	180	160	140	120	100	80	60	40	20	0	20	40	60	80	100	120	140	160	180	200	SHEET TOTAL
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**CROSS SECTIONS
CSX RR - STA. 451+50.00 TO STA. 452+50.00**

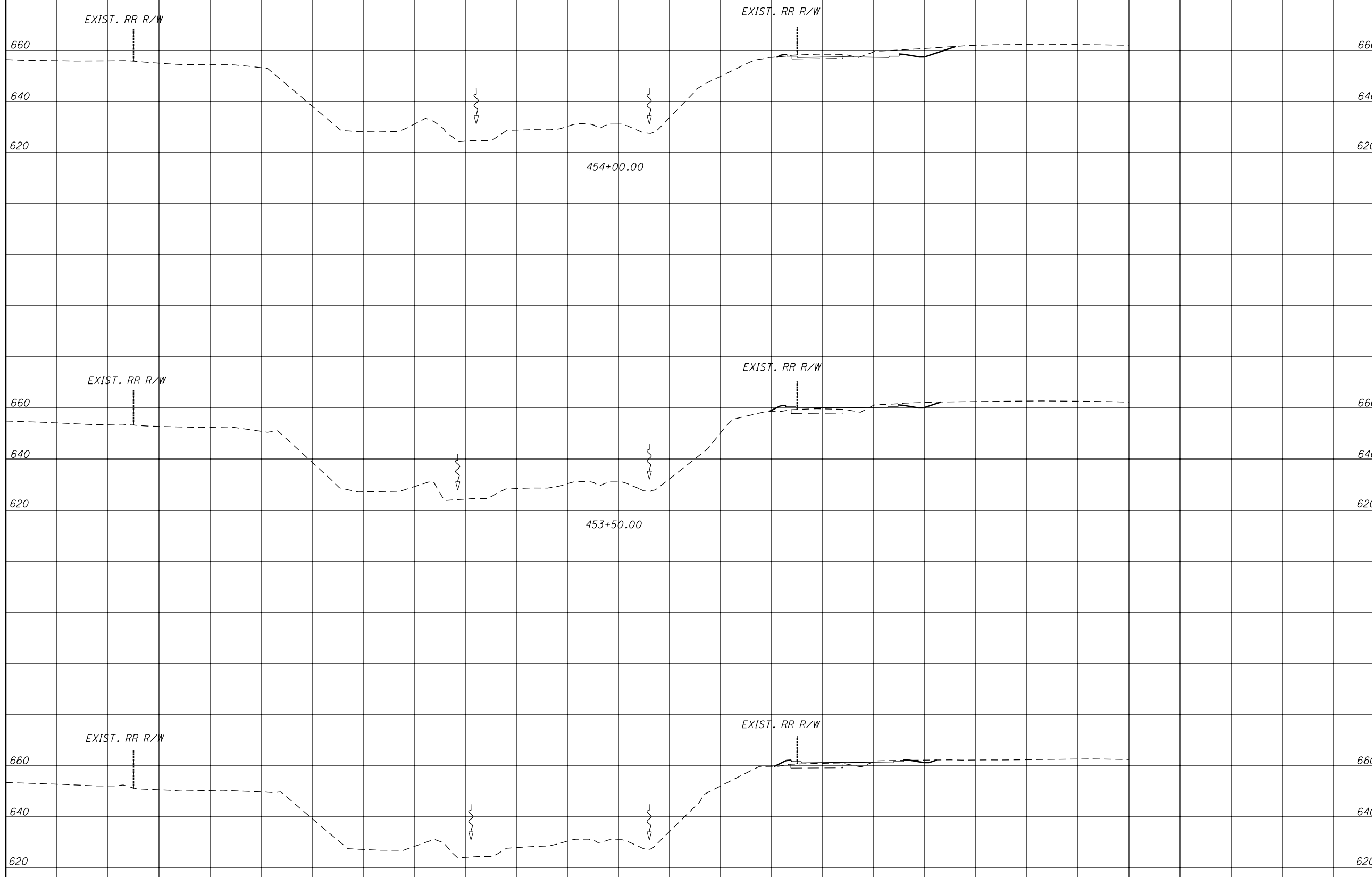
SCI-823-6.81

35 / 38

108
111

SEEDING
END WIDTH SQ. YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED CHECKED



CROSS SECTIONS
CSX RR - STA. 453+00.00 TO STA. 454+00.00

SCI-823-6.81

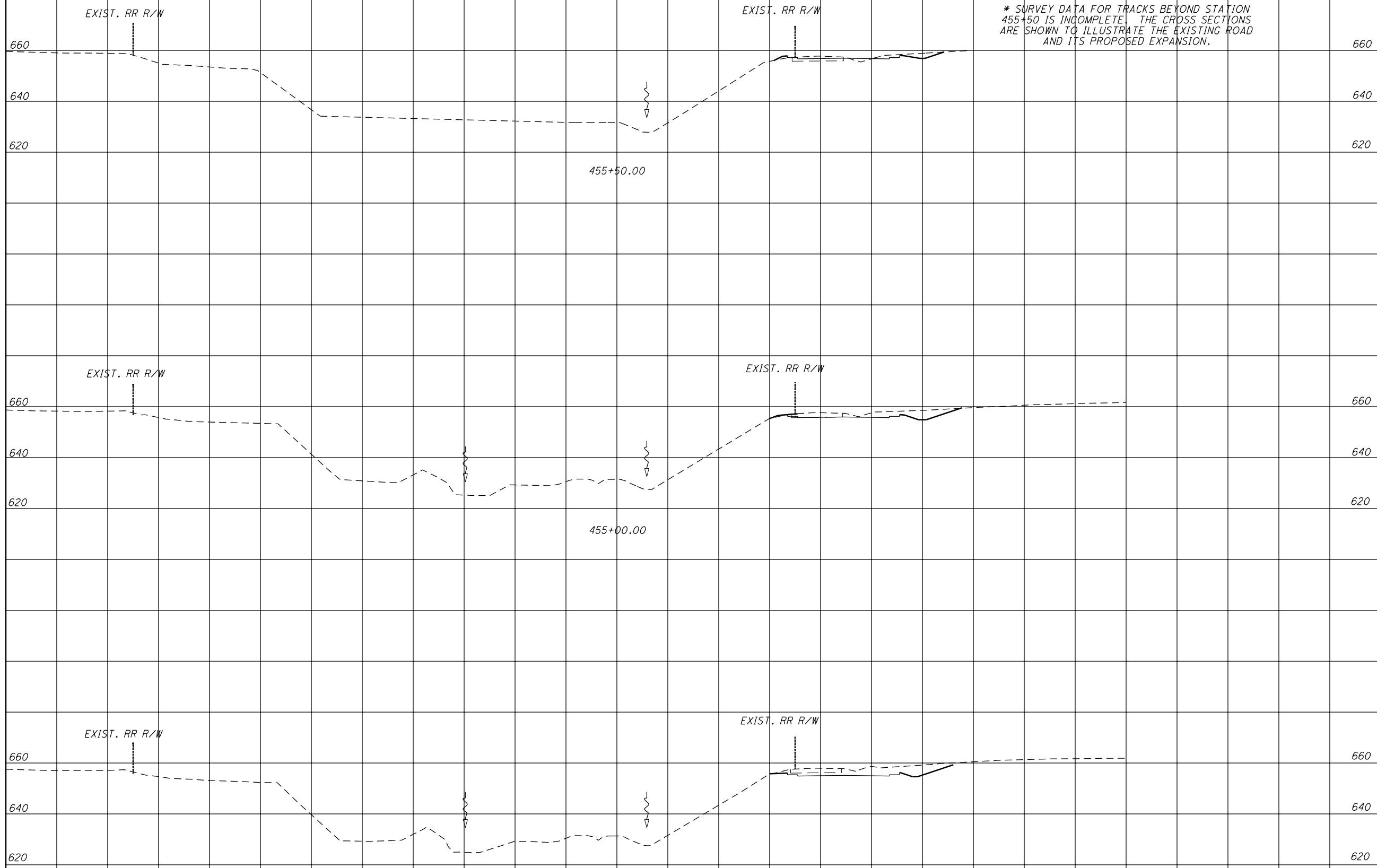
36 / 38

109
111

SHEET TOTAL

SEEDING
END WIDTH SQ. YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED CHECKED



SHEET TOTAL 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 SHEET TOTAL

CROSS SECTIONS
CSX RR - STA. 454+50.00 TO STA. 455+50.00

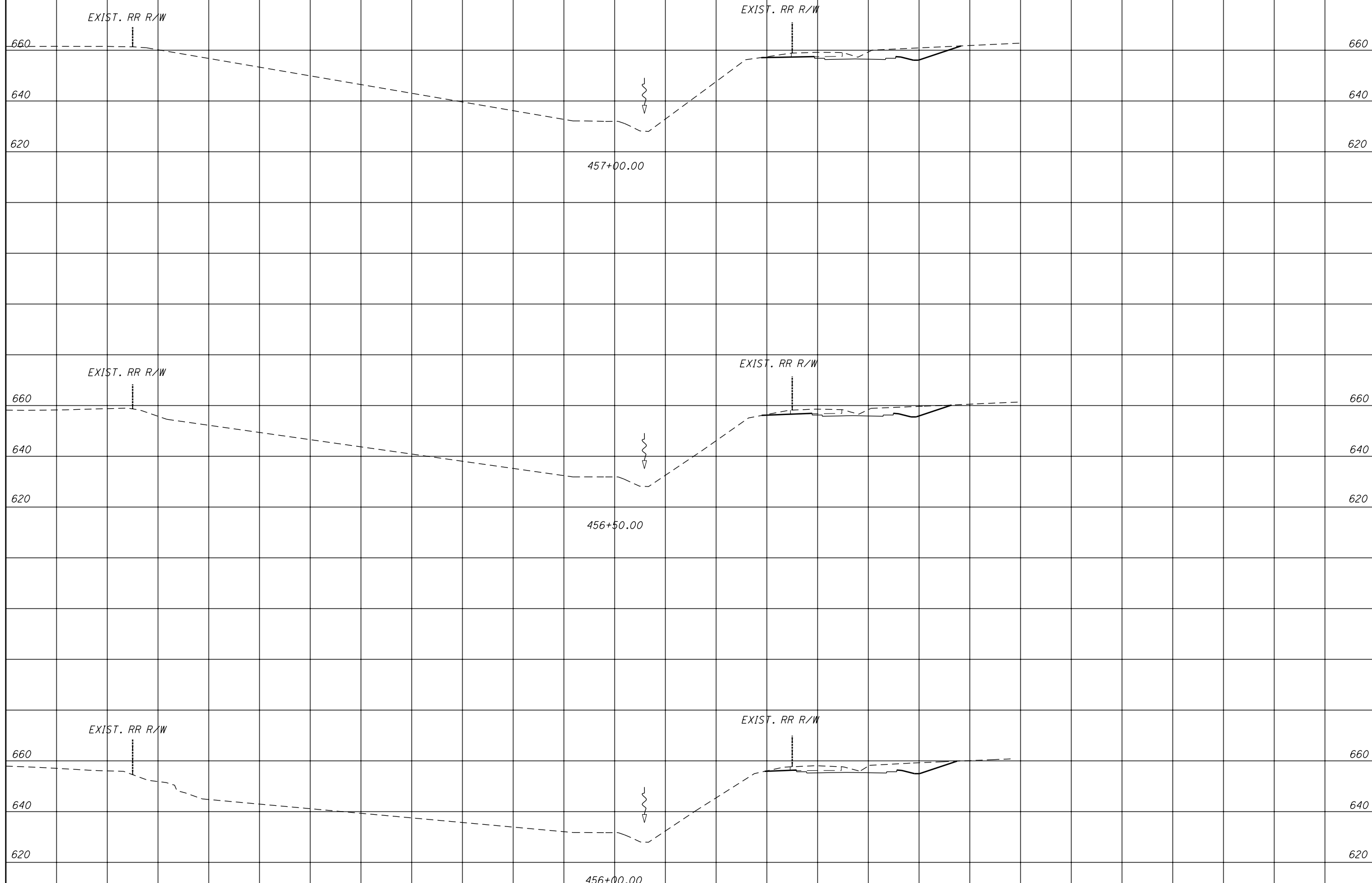
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37/38

110
111

SEEDING
END WIDTH SQ. YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED CHECKED



SHEET TOTAL 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 SHEET TOTAL

CROSS SECTIONS
CSX RR - STA. 456+00.00 TO STA. 457+00.00

SCI-823-6.81

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111
111