

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CLE-32-3.57 / 6.82 / 6.94 / 7.32

**VILLAGE OF BATAVIA
UNION TOWNSHIP
BATAVIA TOWNSHIP
CLERMONT COUNTY**

PROJECT DESCRIPTION

ADDITION OF RIGHT TURN LANE AT EASTBOUND S.R. 32 AND ELICK LANE. BRIDGE REHABILITATION OF CLE-32-6.82, CLE-32-6.94, AND CLE-32-7.34. CULVERT REHABILITATION OF CLE-32-6.77 AND CLE-32-6.77N.

EARTH DISTURBED AREA

PROJECT EARTH DISTURBED AREA: 0.96 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 4.9 ACRES

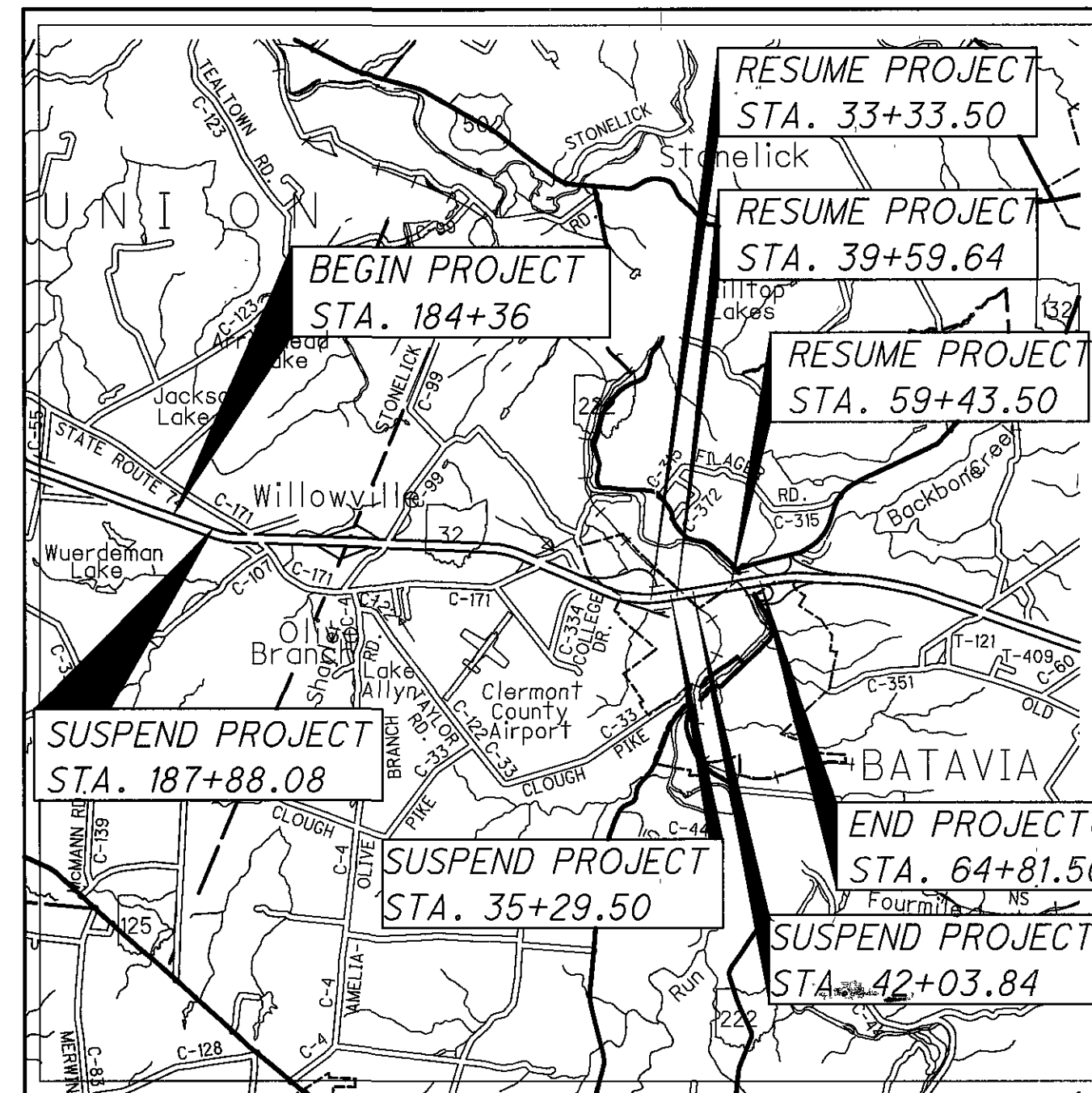
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2005 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.

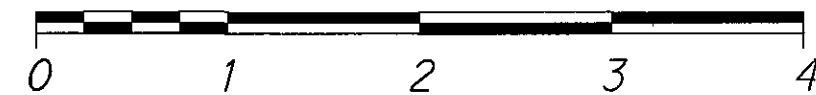
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: 39°05'26" LONGITUDE: 84°14'53"

SCALE IN MILES



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

DESIGN DESIGNATION

CURRENT ADT (2008)	34910
DESIGN YEAR ADT (2028)	43540
DESIGN HOURLY VOLUME (2028)	3700
DIRECTIONAL DISTRIBUTION	0.58
TRUCKS (24 HOUR B&C)	0.09
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN FREEWAY & EXPRESSWAY	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

TWO WORKING DAYS

BEFORE YOU DIG

CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

BURGESS & NIPLE INC.
312 Plum Street, 12th Floor
Cincinnati, Ohio 45202-2678

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTIONS	3-6
GENERAL NOTES	7-8
MAINTENANCE OF TRAFFIC	9-49
GENERAL SUMMARIES	50-51
SUBSUMMARIES	52-58
CALCULATIONS	59
PROJECT SITE PLAN	60
PLAN AND PROFILE	61-66
CROSS SECTIONS	67-75
INTERSECTION DETAIL	76
SUPERELEVATION TABLE	77
DRAINAGE DETAILS	78-79, 79A
TRAFFIC CONTROL	80-90
STRUCTURES 20' AND UNDER	91-92
STRUCTURES OVER 20':	
CLE-32-6.82	93-110
CLE-32-6.94	111-121, 123-131
CLE-32-7.34	132-156
NOT USED	122

ENGINEERS SEAL:



SIGNED: Christopher W. Probst
DATE: November 3, 2006

ENGINEERS SEAL:



SIGNED: Suepian Allee Chen
DATE: NOV. 3 2006

STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-16-04	CB-2.2	7-15-05	HL-30.11	1-21-05	MT-35.10	4-20-01	AS-1-81	7-19-02	800	10-19-07
BP-5.1	7-28-00			HL-30.22	1-21-05	MT-95.30	9-05-06	BR-1	7-19-02	802	4-15-05
						MT-95.40	10-20-06	EXJ-4-87	7-19-02	832	4-25-06
		HW-2.1	4-21-06			MT-98.13	4-19-02	GSD-1-96	7-19-02		
GR-1.1	7-16-04			TC-41.20	1-19-01	MT-98.14	4-19-02	ICD-1-82	7-19-02	898	7-21-06
GR-2.1	1-16-04			TC-42.20	7-16-04	MT-98.16	4-19-02	PCB-91	7-19-02	878	4-21-06
GR-3.1	1-19-07			TC-52.20	1-19-07	MT-99.20m	1-30-95	RB-1-55	2-02-59		
GR-3.2	1-19-07	DM-1.1	4-21-06			MT-101.70	10-18-02	SICD-1-96	7-19-02		
GR-5.1	4-18-03	DM-1.2	10-21-05	TC-65.10	1-21-05	MT-102.10	10-20-06				
		DM-1.4	4-21-06	TC-65.11	1-21-05	MT-102.20	9-05-06				
		DM-4.1	7-19-02	TC-71.10	1-19-07	MT-105.10	10-18-02				
RM-4.2	10-20-06	DM-4.2	1-21-05	TC-72.20	1-21-05	MT-105.11	10-18-02				
RM-4.3	1-19-07	DM-4.3	7-19-02	TC-73.10	1-19-01						
RM-4.4	1-19-07			TC-82.10	4-19-02						

APPROVED: DATE 11/07 DISTRICT DEPUTY DIRECTOR

APPROVED: DATE 10-23-07 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E040(321)

PID NO.
24955

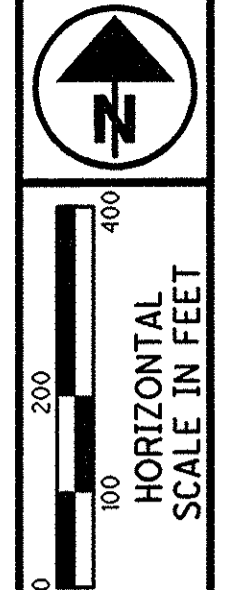
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NORFOLK SOUTHERN RR

**CLE-32-3.57 /
6.82 / 6.94 / 7.32**

CLE - SR-32-3.57/6.82/6.94/7.32
 080005 PID - 24955
 Dist 8 1/9/2008

P:\PR40537\cle\24955\roadway\sheets\24955GT001.dgn

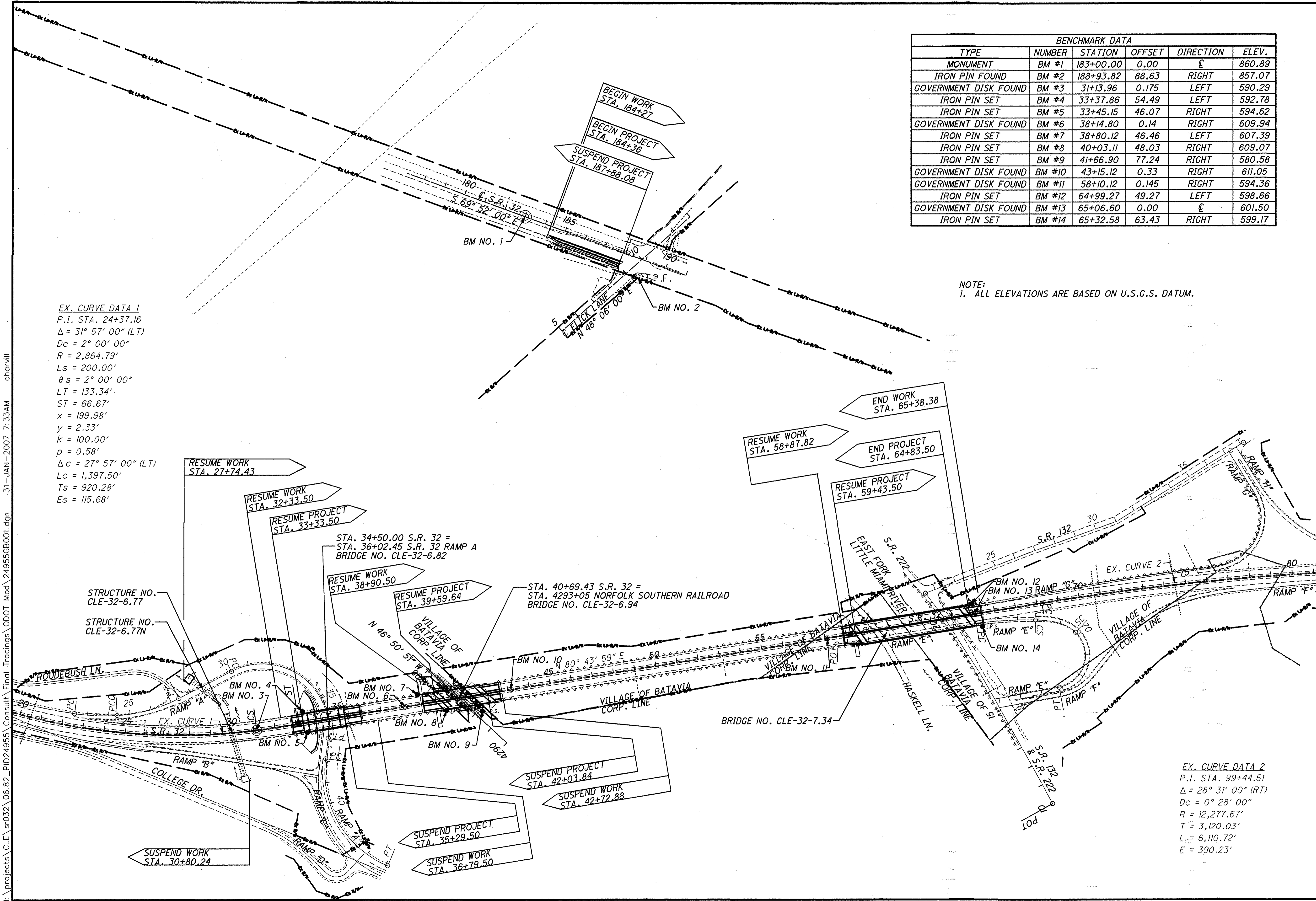


BENCHMARK DATA					
TYPE	NUMBER	STATION	OFFSET	DIRECTION	ELEV.
MONUMENT	BM #1	183+00.00	0.00	€	860.89
IRON PIN FOUND	BM #2	188+93.82	88.63	RIGHT	857.07
GOVERNMENT DISK FOUND	BM #3	31+13.96	0.175	LEFT	590.29
IRON PIN SET	BM #4	33+37.86	54.49	LEFT	592.78
IRON PIN SET	BM #5	33+45.15	46.07	RIGHT	594.62
GOVERNMENT DISK FOUND	BM #6	38+14.80	0.14	RIGHT	609.94
IRON PIN SET	BM #7	38+80.12	46.46	LEFT	607.39
IRON PIN SET	BM #8	40+03.11	48.03	RIGHT	609.07
IRON PIN SET	BM #9	41+66.90	77.24	RIGHT	580.58
GOVERNMENT DISK FOUND	BM #10	43+15.12	0.33	RIGHT	611.05
GOVERNMENT DISK FOUND	BM #11	58+10.12	0.145	RIGHT	594.36
IRON PIN SET	BM #12	64+99.27	49.27	LEFT	598.66
GOVERNMENT DISK FOUND	BM #13	65+06.60	0.00	€	601.50
IRON PIN SET	BM #14	65+32.58	63.43	RIGHT	599.17

NOTE:
1. ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

EX. CURVE DATA 1
 P.I. STA. 24+37.16
 $\Delta = 31^\circ 57' 00''$ (LT)
 $Dc = 2^\circ 00' 00''$
 $R = 2,864.79'$
 $Ls = 200.00'$
 $\theta s = 2^\circ 00' 00''$
 $LT = 133.34'$
 $ST = 66.67'$
 $x = 199.98'$
 $y = 2.33'$
 $k = 100.00'$
 $p = 0.58'$
 $\Delta c = 27^\circ 57' 00''$ (LT)
 $Lc = 1,397.50'$
 $Ts = 920.28'$
 $Es = 115.68'$

EX. CURVE DATA 2
 P.I. STA. 99+44.51
 $\Delta = 28^\circ 31' 00''$ (RT)
 $Dc = 0^\circ 28' 00''$
 $R = 12,277.67'$
 $T = 3,120.03'$
 $L = 6,110.72'$
 $E = 390.23'$

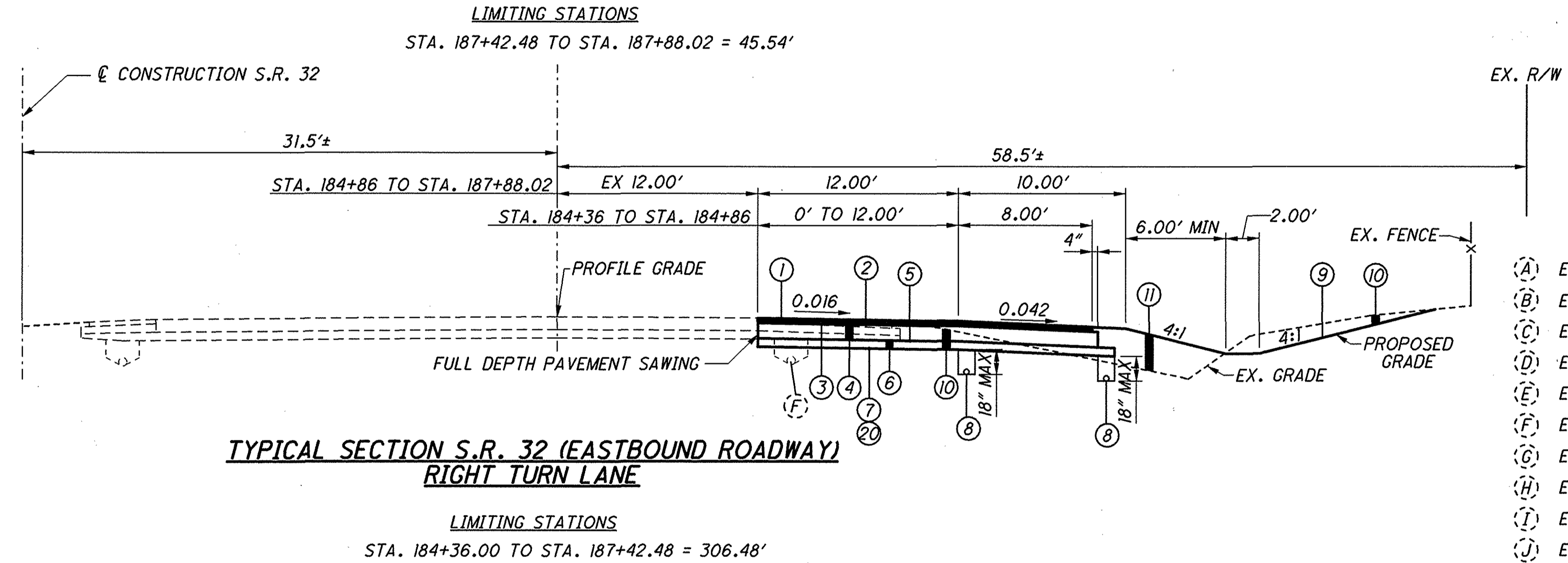
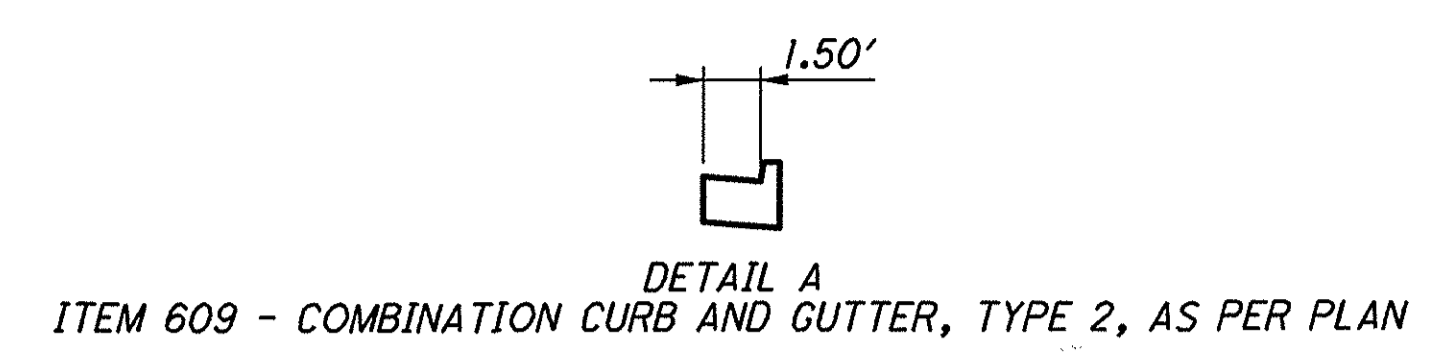
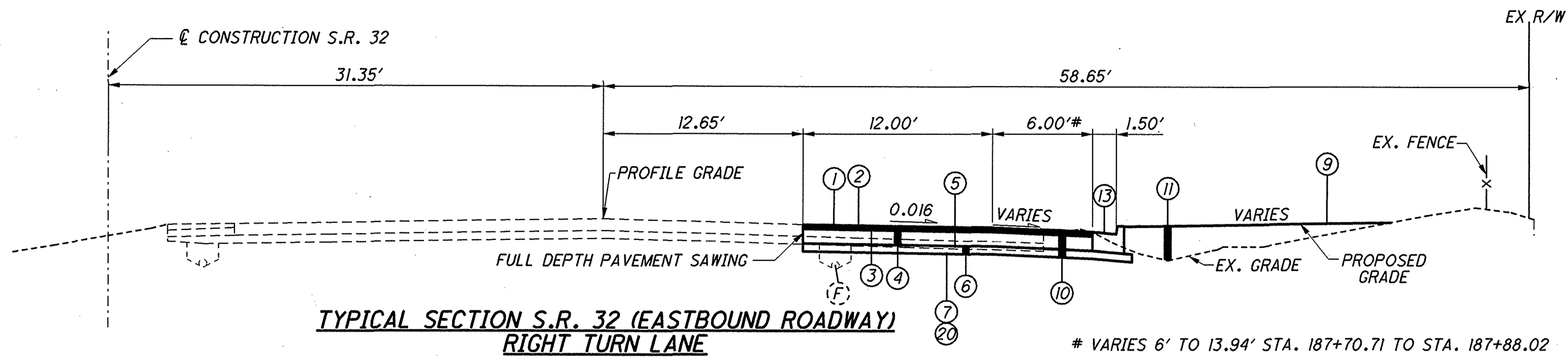


I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GB001.dgn 31-JAN-2007 7:33AM charvill

SCHEMATIC PLAN

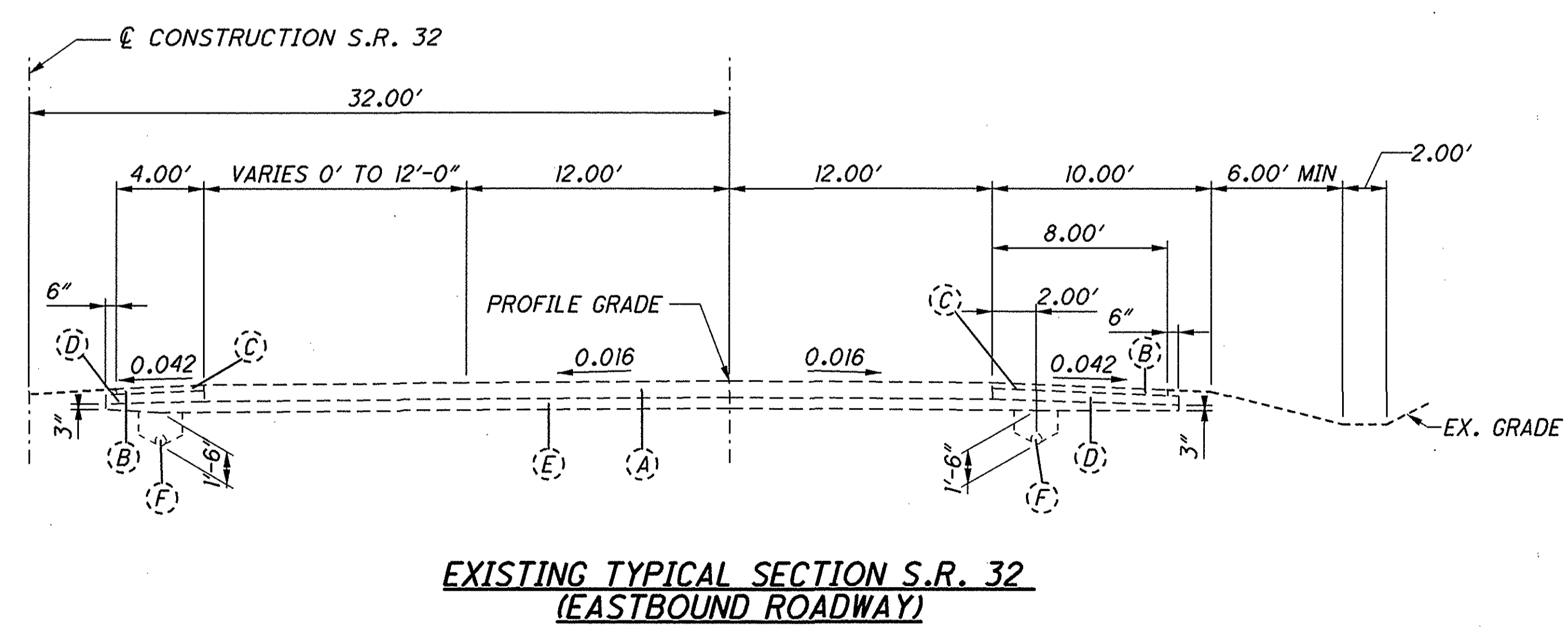
CLE-32-3.57 /
 6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GY001.dgn 31-JAN-2007 8:16AM charvill



LEGEND

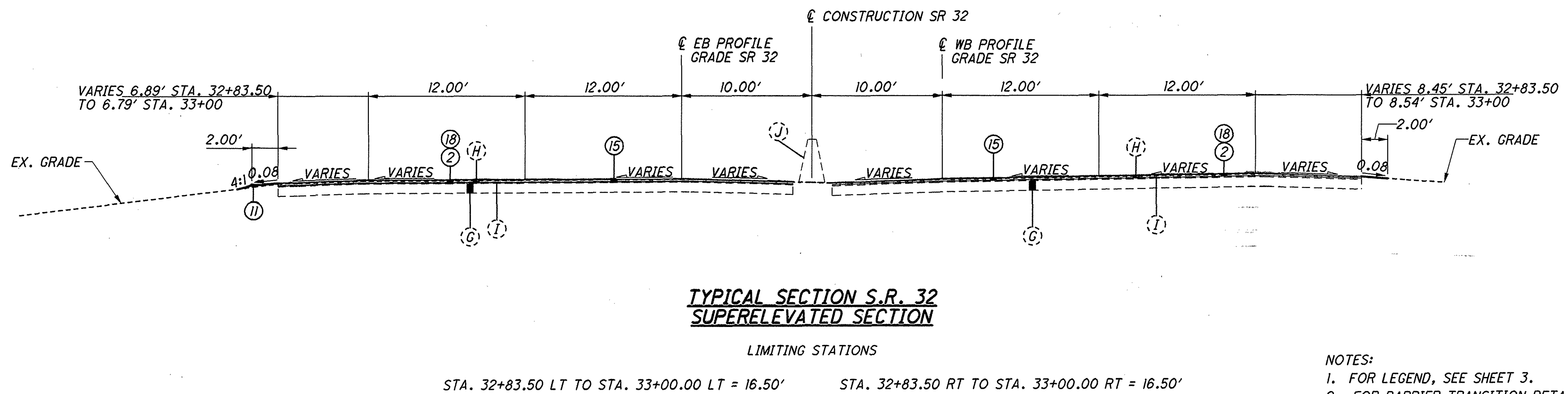
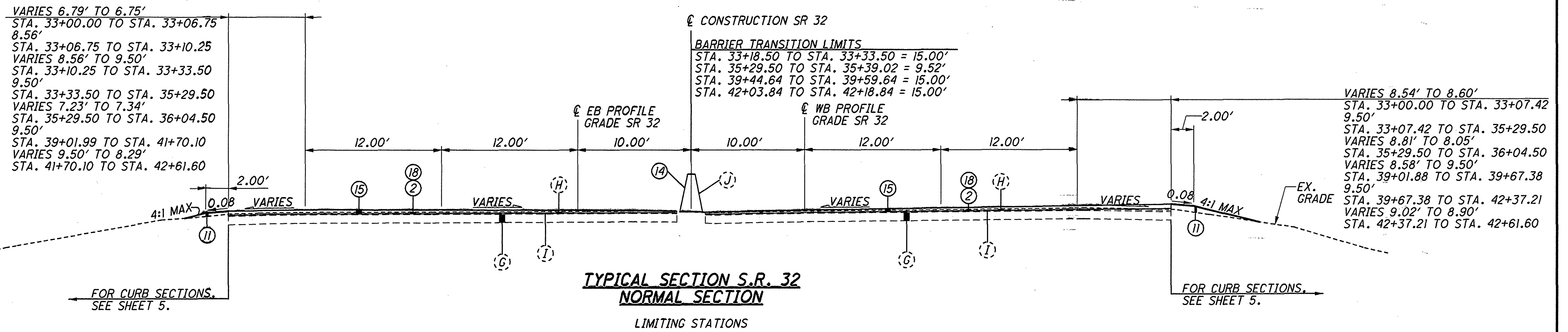
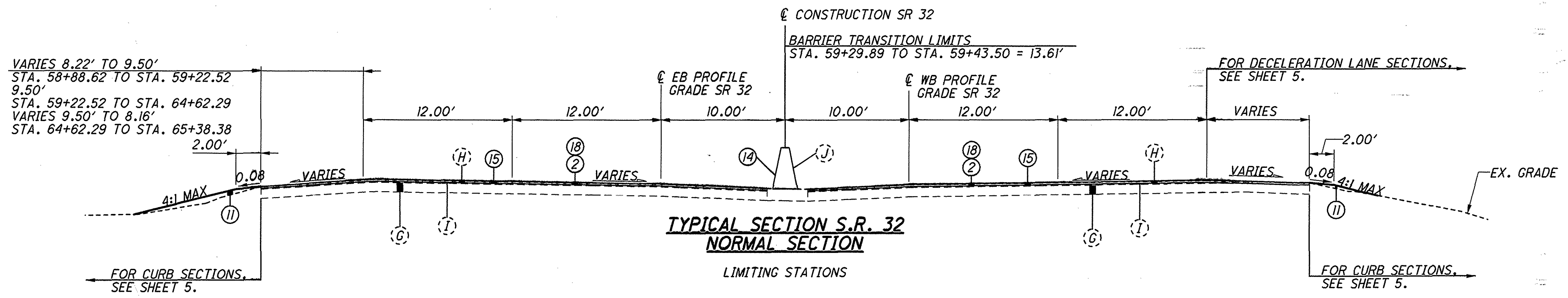
- (A) EXISTING 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH ASPHALT OVERLAY
- (B) EXISTING BITUMINOUS SURFACE TREATMENT
- (C) EXISTING 3" WATERPROOFED AGGREGATE BASE COURSE
- (D) EXISTING 5" STABILIZED CRUSHED AGGREGATE SHOULDERS AND APPROACHES
- (E) EXISTING 6" SUBBASE
- (F) EXISTING 6" PIPE UNDERDRAIN
- (G) EXISTING 9" ASPHALT BASE COURSE
- (H) EXISTING 1/4" ASPHALT SURFACE COURSE
- (I) EXISTING 1/4" ASPHALT INTERMEDIATE COURSE
- (J) EXISTING CONCRETE BARRIER
- (1) ITEM 448 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
- (2) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE (0.05 GALLONS PER SQ. YD.)
- (3) ITEM 448 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28
- (4) ITEM 301 1" ASPHALT CONCRETE BASE, PG64-22
- (5) ITEM 408 BITUMINOUS PRIME COAT (0.4 GALLONS PER SQ. YD.)
- (6) ITEM 304 6" AGGREGATE BASE
- (7) ITEM 204 SUBGRADE COMPACTION
- (8) ITEM 605 4" BASE PIPE UNDERDRAINS OR 4" UNCLASSIFIED PIPE UNDERDRAINS
- (9) ITEM 659 SEEDING AND MULCHING (SEE GENERAL NOTES)
- (10) ITEM 203 EXCAVATION
- (11) ITEM 203 EMBANKMENT
- (12) ITEM 526 REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN
- (13) ITEM 609 COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN
- (14) ITEM 622 BARRIER TRANSITION
- (15) ITEM 448 VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 1H
- (16) ITEM 609 CURB, TYPE 4-C
- (17) ITEM 606 GUARDRAIL, TYPE 5
- (18) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"
- (19) ITEM 301 8/4" ASPHALT CONCRETE BASE, PG64-22
- (20) ITEM 204 PROOF ROLLING



TYPICAL SECTIONS

CLE-32-3.57/
6.82/6.94/7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955G\002.dgn 31-JAN-2007 8:24AM charvill

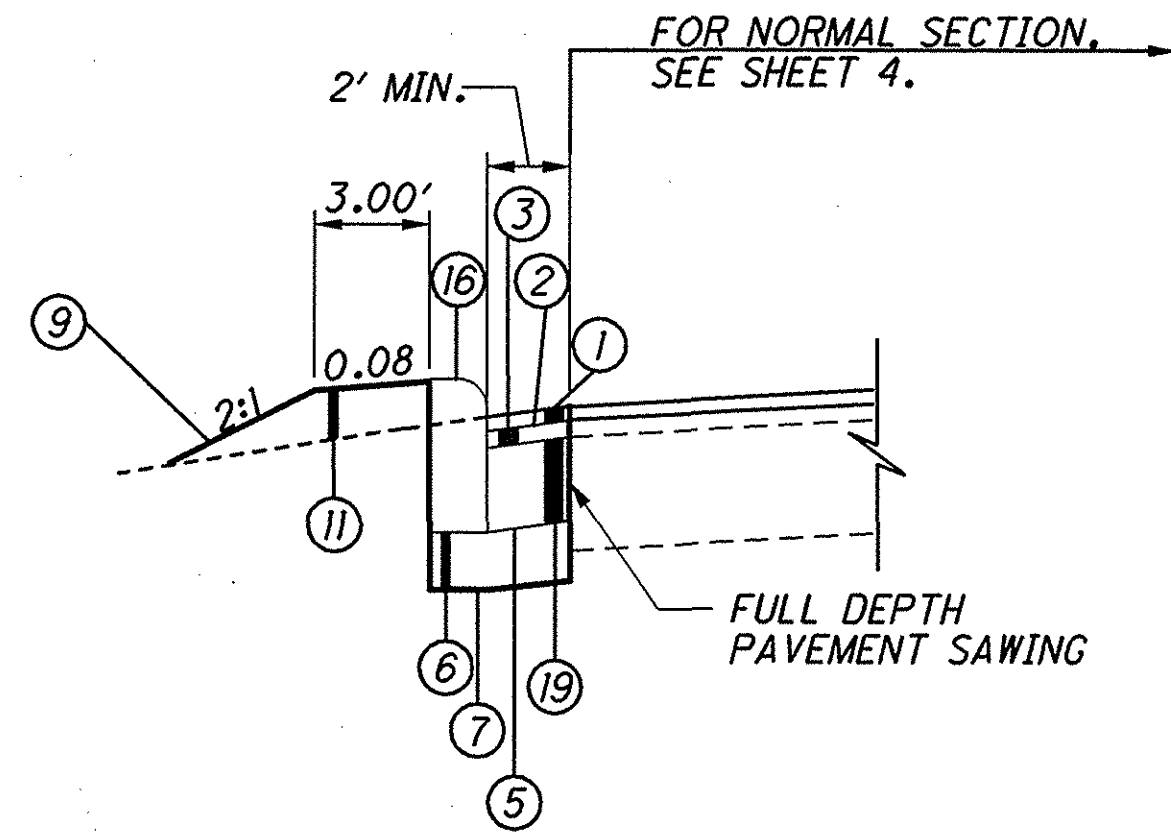


- NOTES:
1. FOR LEGEND, SEE SHEET 3.
 2. FOR BARRIER TRANSITION DETAILS, SEE STRUCTURE SHEETS.
 3. FOR CROSS SLOPES, SEE SUPERELEVATION TABLE ON SHEET 77.

TYPICAL SECTIONS

CLE-32-3.57 / 6.82 / 6.94 / 7.32

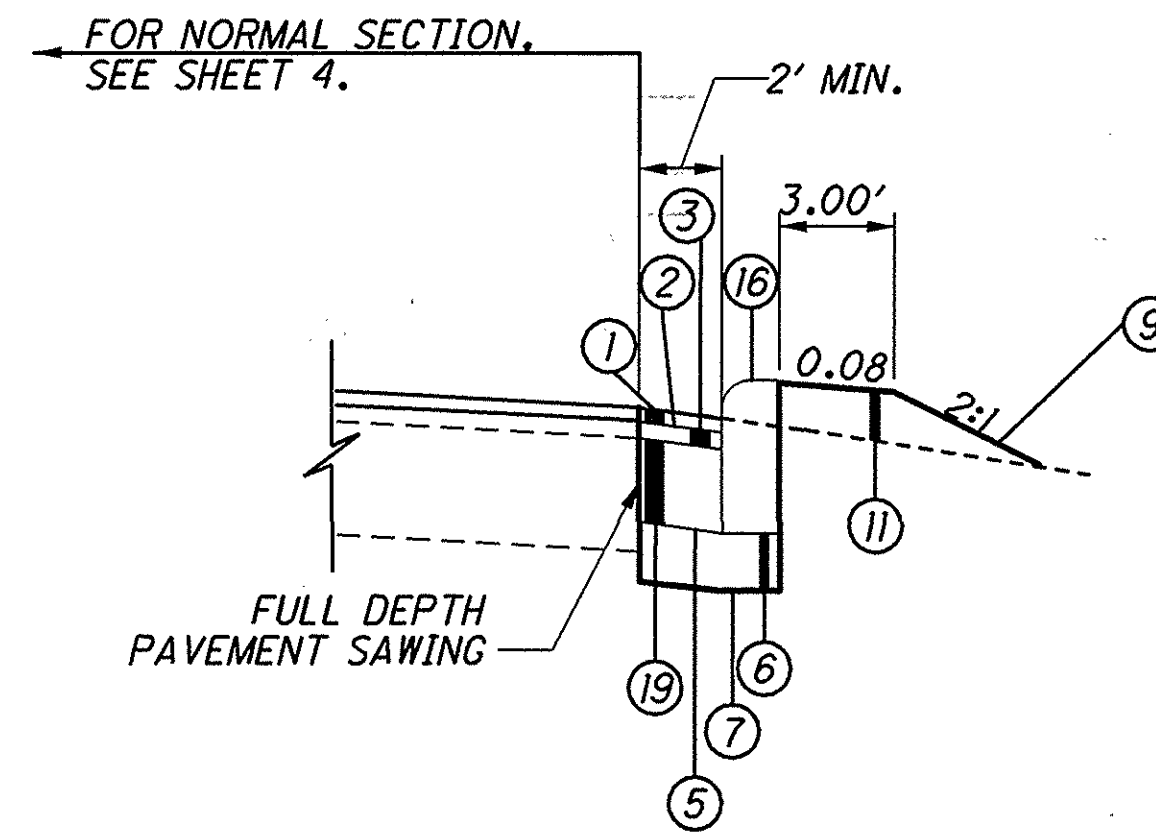
i:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955G\Y003.dgn 31-JAN-2007 8:23AM charvill



TYPICAL CURB SECTION LT

LIMITING STATIONS

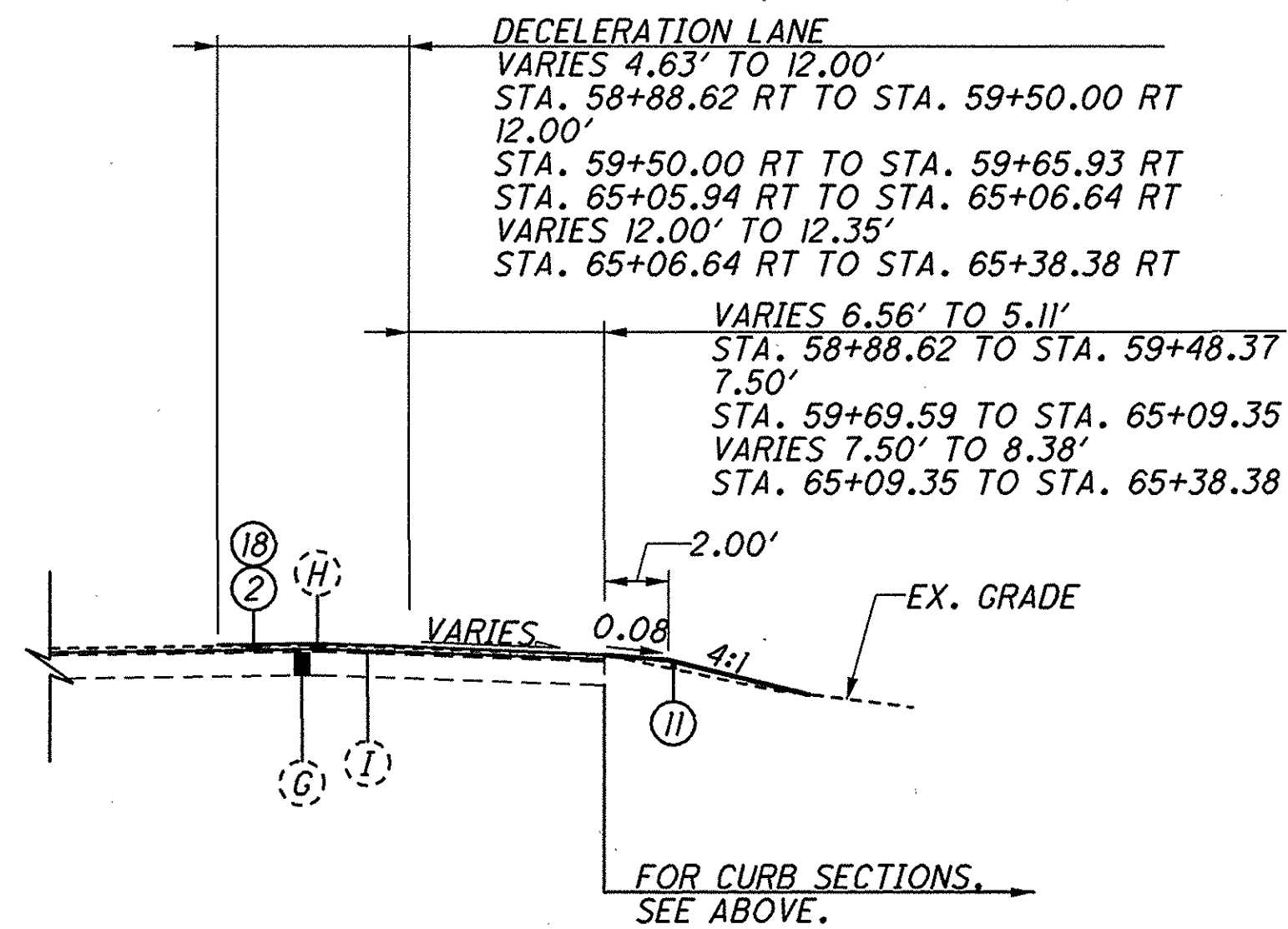
STA. 33+06.75 LT TO STA. 33+33.50 LT = 26.75'
 STA. 38+99.90 LT TO STA. 39+25.90 LT = 26.00'
 STA. 58+96.82 LT TO STA. 59+22.52 LT = 25.70'



TYPICAL CURB SECTION RT

LIMITING STATIONS

STA. 33+07.42 RT TO STA. 33+33.50 RT = 26.08'
 STA. 39+67.38 RT TO STA. 39+93.38 RT = 26.00'
 STA. 59+43.47 RT TO STA. 59+69.59 RT = 26.12'



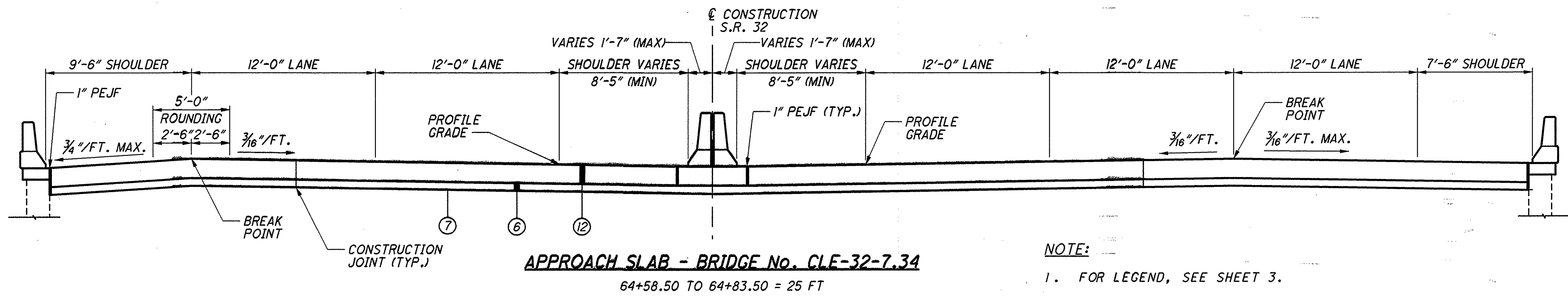
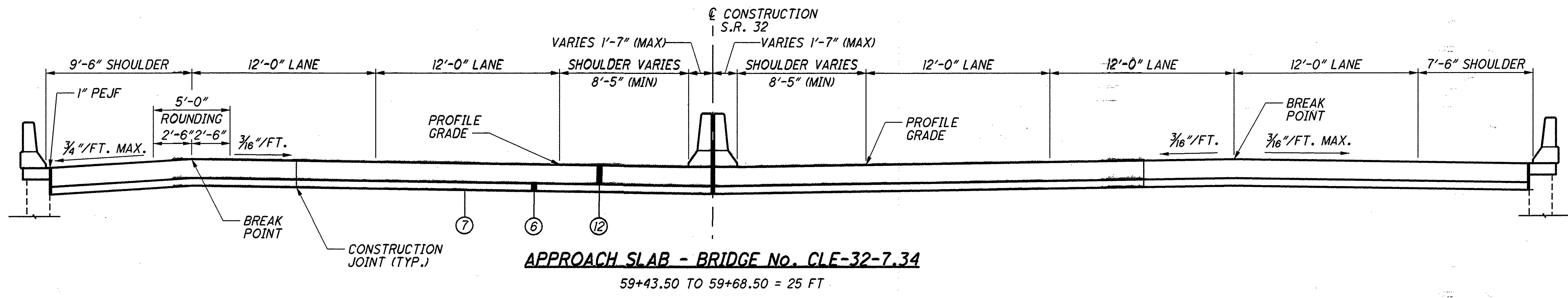
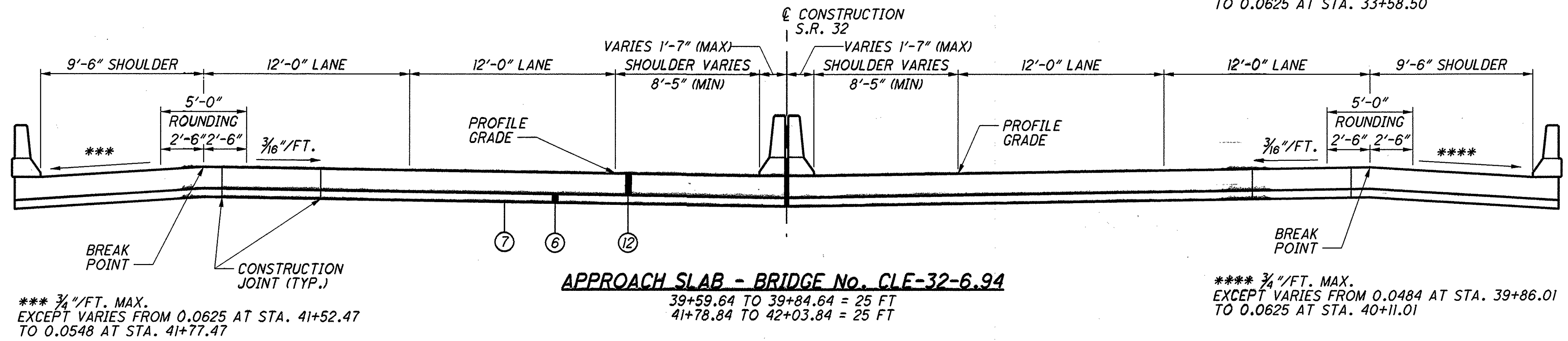
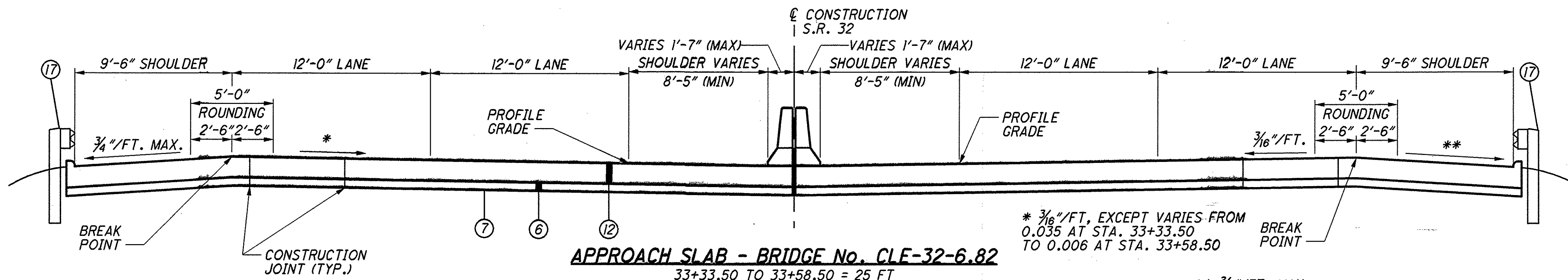
DECELERATION LANE SECTION RT

LIMITING STATIONS

STA. 58+88.62 RT TO STA. 59+65.93 RT = 77.31'
 STA. 65+05.94 RT TO STA. 65+38.38 RT = 32.44'

NOTE:
 1. FOR LEGEND, SEE SHEET 3.

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GY004.dgn 31-JAN-2007 8:23AM charvill



NOTE:
 1. FOR LEGEND, SEE SHEET 3.

TYPICAL SECTIONS
 APPROACH SLABS

CLE-32-3.57/
 6.82/ 6.94/ 7.32

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 LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

WATER:

CLERMONT COUNTY WATER DISTRICT
3685 LEWIS ROAD
AMELIA, OH 45102
(RANDY DAVIS)
PHONE: (513) 732-7041

VILLAGE OF BATAVIA WATER
389 E. MAIN ST.
BATAVIA, OH 45103
(ERIC MYERS)
PHONE: (513) 732-2020

SANITARY SEWER:

CLERMONT COUNTY SEWER DISTRICT
4386 HASKELL LANE
BATAVIA, OH 45103
(RANDY DAVIS)
PHONE: (513) 732-7041

VILLAGE OF BATAVIA SEWER
389 E. MAIN ST.
BATAVIA, OH 45103
(ERIC MYERS)
PHONE: (513) 732-2020

GAS:

DUKE ENERGY
P.O. BOX 960 ROOM 460A
CINCINNATI, OH 45202
(TOM FRANCK)
PHONE: (513) 287-1264

ELECTRIC AND TRANSMISSIONS:

DUKE ENERGY
P.O. BOX 960 ROOM 467A
CINCINNATI, OH 45201
(GINNY MEYER)
PHONE: (513) 287-1748

CABLE:

TIME WARNER CABLE
11252 CORNELL PARK DRIVE
CINCINNATI, OH 45242
(GARY NAPIER)
PHONE: (513) 469-5483

ADELPHIA CABLE

3416 STATE ROUTE 132
AMELIA, OH 45102
(MIKE BOONE)
PHONE: (513) 615-2627

TELEPHONE:

CINCINNATI BELL TELEPHONE
201 EAST FOURTH STREET
MAIL LOCATION 103-1175
CINCINNATI, OH 45202
(KEITH GALEY)
PHONE: (513) 565-7043

LIGHTING AND TRAFFIC SIGNALS:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8
505 SOUTH S.R. 741
LEBANON, OH 45036-9518
(JAN KETRON)
PHONE: (513) 933-6692

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.

CONTINGENCY QUANTITIES

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

SEEDING AND MULCHING

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

659, TOPSOIL 123 CU YD

659, REPAIR SEEDING AND MULCHING 56 SQ YD

659, INTER-SEEDING 56 SQ YD

659, COMMERCIAL FERTILIZER 0.16 TON

659, LIME 0.23 ACRE

659, WATER 6 M GAL

659, MOWING 3 M SQ FT

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.

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.

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.

SPECIAL MAINTAIN EXISTING LIGHTING

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN. THIS NOTE APPLIES TO THE S.R. 32 INTERCHANGE AT AT S.R. 132 AND S.R. 222.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWN UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM SPECIAL, REPLACEMENT OF EXISTING LIGHTING UNIT 1 EACH

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.

PROJECTS LOCATED OVER A SOLE SOURCE AQUIFER

THE PROJECT AREA IS LOCATED OVER THE GREAT MIAMI VALLEY AQUIFER SYSTEM, A DESIGNATED SOLE SOURCE AQUIFER. IN ORDER TO MINIMIZE THE POTENTIAL FOR A RELEASE IN THIS SENSITIVE AREA, ALL PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL NOT BE PERFORMED FROM STA. 59+43.50 TO STA. 64+83.50. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR WILL CONTACT THE UNION TOWNSHIP FIRE DEPARTMENT AT (513) 528-4446 (CHIEF STAN DEIMLING) FOR CLEAN UP OF THE SPILL.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

ABBREVIATIONS USED IN THE PLANS

WHEREVER THE ABBREVIATIONS "EX." AND "PR." ARE SHOWN IN THE PLANS, SUCH ABBREVIATIONS RESPECTIVELY DENOTE "EXISTING" AND "PROPOSED".

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GN001.dgn 31-JAN-2007 7:52AM charvill

CALCULATED
CHECKED

GENERAL NOTES

CLE-32-3.57/
6.82/6.94/7.32

7
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GN002.dgn 31 - JAN - 2007 7:52AM charvill

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 180 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 SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF 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.

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

ITEM 601 - TIED CONCRETE BLOCK MAT, TYPE 1

THIS SPECIFIC ITEM SHALL BE USED FOR EROSION CONTROL AT BRIDGE INSTEAD OF REINFORCED SODDING. ON SCD DM-4.1, ALL REFERENCES TO REINFORCED SODDING OR SOD SHALL BE REPLACED WITH TIED CONCRETE BLOCK MAT, TYPE 1 AND ALL REFERENCES TO POULTRY NETTING SHALL BE REPLACED WITH FILTER FABRIC, TYPE B. PRIOR TO PLACING THE FILTER FABRIC, THE AREA SHALL BE SEED WITH A SEED MIX THAT CONFORMS TO CMS 659.07.

PAYMENT FOR ALL WORK DESCRIBED ABOVE AND ON SCD DM-4.1, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1, SQUARE YARD.

ITEM 604 - BARRIER MEDIAN INLET 3A, AS PER PLAN

THIS BARRIER MEDIAN INLET IS DESIGNED TO MATCH EXISTING BARRIER IN THE MEDIAN AND IS SHOWN ON SHEETS 79 AND 79A IN THE PLANS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY AT THE CONTRACT PRICE EACH FOR ITEM 604 INLET, NO. 3, AS PER PLAN.

ITEM 609 - COMBINATION CURB AND GUTTER, AS PER PLAN

THIS COMBINATION CURB AND GUTTER IS MODIFIED AS SHOWN ON SHEET 3 IN THE PLANS.

INSPECTION AND COMPACTION OF UNBOUND MATERIALS

A LUMP SUM HAS BEEN PROVIDED FOR THIS SUPPLEMENTAL SPECIFICATION.

ITEM SPECIAL, MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED.

TESTING CONCRETE FOR STRUCTURES AND FOR PORTLAND CEMENT CONCRET PAVEMENT SHALL BE PERFORMED AS RESPECTIVELY OUTLINED IN SUPPLEMENTAL SPECIFICATIONS 888 AND 898. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE NOT INCLUDED UNDER SUPPLEMENTAL SPECIFICATIONS 888 AND 898 SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL PROVIDE A CONSULTANT PRE-QUALIFIED BY ODOT.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIANS AND EQUIPMENT AND SHALL FURNISH THE PROJECT ENGINEER TWO (2) COPIES OF ACCEPTABLE TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIAN SHALL BE AC LEVEL 2 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGONNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN WHO IS NOT VERSED IN THE REQUIRED TESTING PROCEDURRE.

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

THE TECHNICIAN SHLL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT TO THE PROJECT ENGINEER THE FOLLOW-UP WRITTEN NOTIFICATION OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBLTY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER THE DAILY TEST REPORTS, TE-45'S, INSPECTOR'S DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS

SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.

THE CONCRET TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS A LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:

UPON APPROVAL OF CONSULTANT	20%
PROGRESSIVE EQUIVALENT PAYMENTS	50%
UPON SUBMISSION OF FINAL REPORT	30%.

PAYMENT FOR TESTING, INSPECTION AND QUALITY CONTROL WILL BE INCLUDED WITH THE APPROPRIATE LUMP-SUM ITEM.

ITEM 626 - BARRIER REFLECTOR, TYPE B

BARRIER REFLECTOR, TYPE B SHALL BE PLACED ON ALL BRIDGE AND APPROACH SLAB CONCRETE BARRIER AND PARAPETS AT 50' SPACING. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 626, BARRIER REFLECTOR, TYPE B	94 EACH.
-------------------------------------	----------

CONSTRUCTION LAYOUT STAKES

ALL OF THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH 623 EXCEPT WHERE MODIFIED IN THE PLANS.

PRIOR TO CONSTRUCTION, BENCH MARKS SHALL BE REESTABLISHED OUTSIDE THE CONSTRUCTION LIMITS.

IN A MATTER SATISFACTORY TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE HIGHWAY. IN A SEMI-PERMANENT CONDITION, THE PAVEMENT SHALL BE REFERENCED IN 100-FOOT INCREMENTS ACCEPTABLE TO THE ENGINEER.

AT THE TERMINATION OF THE PROJECT, SET ALL MISSING AND/OR OBLITERATED IRON PINS SHOWN ON THE RIGHT-OF-WAY. EACH PIN SHALL BE 3/4" BY 36" REINFORCING ROD WITH AN ALUMINUM CAP STAMPED WITH THE SURVEYOR'S NAME AND REGISTRATION NUMBER. THE PINS SHALL BE SET UNDER THE SUPERVISION OF A REGISTERED SURVEYOR HIRED BY THE CONTRACTOR.

THE DEPARTMENT WILL PAY FOR ALL LABOR, TOOLS, SERVICES, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK INCLUDED IN THE ACCEPTABLE QUANTITY AT THE CONTRACT PRICE BY THE LUMP SUM FOR ITEM 623 CONSTRUCTION LAYOUT STAKES, AS PER PLAN.

A GRANTED TIME EXTENSION TO THE INTERIM COMPLETION DATE WILL NOT INCLUDE A CORRESPONDING EXTENSION TO THE FINAL COMPLETION DATE. FAILURE TO COMPLETE THE "PUNCH LIST" AND TO REMOVE ALL FIELD OFFICES BY THE FINAL COMPLETION DATE SHALL RESULT IN ASSESSMENT OF LIQUIDATED DAMAGES AS PER SECTION 108.06 OF THE SPECIFICATIONS BOOK. EXTENSIONS OF TIME TO THE FINAL COMPLETION DATE WILL ONLY BE GRANTED IF IT CAN BE JUSTIFIED THAT NOT ENOUGH TIME EXISTS TO COMPLETE "PUNCH LIST" ITEMS AND TO REMOVE ALL PROJECT FIELD OFFICES PRIOR TO THE FINAL COMPLETION DATE.

INTERIM COMPLETION DATE

AN INTERIM COMPLETION DATE FOR THIS SPECIFIC CONTRACT IS SET 30 DAYS PRIOR TO THE FINAL COMPLETION DATE. ALL CONTRACT ITEMS OF WORK MUST BE COMPLETED BY THE INTERIM COMPLETION DATE. THE INTERIM COMPLETION DATE SHALL BE SUBJECT TO LIQUIDATED DAMAGES AS INDICATED BY SECTION 108.06 OF THE SPECIFICATIONS BOOK. THE PERIOD OF TIME BETWEEN THE INTERIM COMPLETION DATE AND THE FINAL COMPLETION DATE IS STRICTLY TO ALLOW FOR COMPLETION OF THE "PUNCH LIST" ITEMS AND REMOVAL OF ANY PROJECT FIELD OFFICES.

A GRANTED TIME EXTENSION TO THE INTERIM COMPLETION DATE WILL NOT INCLUDE A CORRESPONDING EXTENSION TO THE FINAL COMPLETION DATE. FAILURE TO COMPLETE THE "PUNCH LIST" AND TO REMOVE ALL FIELD OFFICES BY THE FINAL COMPLETION DATE SHALL RESULT IN ASSESSMENT OF LIQUIDATED DAMAGES AS PER SECTION 108.06 OF THE SPECIFICATIONS BOOK. EXTENSIONS OF TIME TO THE FINAL COMPLETION DATE WILL ONLY BE GRANTED IF IT CAN BE JUSTIFIED THAT NOT ENOUGH TIME EXISTS TO COMPLETE "PUNCH LIST" ITEMS AND TO REMOVE ALL PROJECT FIELD OFFICES PRIOR TO THE FINAL COMPLETION DATE.

CALCULATED
CHECKED

GENERAL NOTES

CLE-32-3.57/
6.82/6.94/7.32

ITEM 614. MAINTAINING TRAFFIC

PRIOR TO THE BEGINNING OF WORK, SUMMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR WHO CAN BE CONTACTED 24 HOURS PER DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. SUCH PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING AND REPLACING NECESSARY TRAFFIC-CONTROL DEVICES.

ALL WORK AND TRAFFIC-CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND ALL OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS AND PROPOSAL AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION.

UNLESS SEPARATELY ITEMIZED IN THE PLANS, THE DEPARTMENT WILL PAY FOR ALL LABOR, EQUIPMENT AND MATERIALS INCLUDED IN THE LUMP-SUM CONTRACT PRICE FOR 614 MAINTAINING TRAFFIC.

SEQUENCE OF CONSTRUCTION

RIGHT TURN LANE ON S.R. 32 AT ELICK LANE:

PRIOR TO BEGINNING PHASE 1 CONSTRUCTION:
° LOOP DETECTOR CONDUIT ALONG S.R. 32 WILL BE RELOCATED.

PHASE 1
2 EASTBOUND LANES AND LEFT TURN LANE WILL BE MAINTAINED AT S.R. 32 AND ELICK LANE. ALL LANES ARE REQUIRED TO BE OPEN TO TRAFFIC DURING THE HOURS OF 6AM TO 9AM AND 3PM TO 7PM ON BOTH S.R. 32 AND ELICK LANE.

THE FOLLOWING WILL BE CONSTRUCTED:
° CONSTRUCT RIGHT TURN LANE AND OTHER IMPROVEMENTS AT S.R. 32 AND ELICK LANE

S.R. 32 AT INTERCHANGES:

PHASE 1
ONE LANE WILL BE MAINTAINED ON S.R. 32 AT THE BRIDGES. THE EXIT AND ENTRANCE RAMP TO S.R. 132/S.R. 222 WILL REMAIN OPEN AT ALL TIMES. TRAFFIC WILL DRIVE ON THE SOUTH SECTION OF EASTBOUND S.R. 32 AND THE NORTH SECTION OF WESTBOUND S.R. 32

THE FOLLOWING WILL BE CONSTRUCTED:
° CONSTRUCT NORTH SECTION OF THE EASTBOUND BRIDGES AND THE SOUTH SECTION OF THE WESTBOUND BRIDGES
° REHABILITATE CULVERTS

PHASE 2
ONE LANE WILL BE MAINTAINED ON S.R. 32 AT THE BRIDGES. THE EXIT AND ENTRANCE RAMP TO S.R. 132/S.R. 222 WILL REMAIN OPEN AT ALL TIMES. TRAFFIC WILL DRIVE ON THE NORTH SECTION OF EASTBOUND S.R. 32 AND THE SOUTH SECTION OF WESTBOUND S.R. 32.

THE FOLLOWING WILL BE CONSTRUCTED:
° CONSTRUCT SOUTH SECTION OF THE EASTBOUND BRIDGES AND THE NORTH SECTION OF THE WESTBOUND BRIDGES

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

CONSTRUCTION NOTIFICATION

A MINIMUM OF 14 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, ADVISE THE PROJECT ENGINEER. ALSO, PROVIDE THE PROJECT SUCH NOTIFICATION 14 DAYS PRIOR TO ANY LANE CLOSURES, ROAD CLOSURES OR RAMP CLOSURES.

THE PROJECT ENGINEER WILL FORWARD THE INFORMATION TO THE DISTRICT PUBLIC INFORMATION OFFICER (PIO) EITHER BY FAX (513-932-7651) OR AT DISTRICT 8 PIO NOTIFICATION WEBSITE (HTTP://WWW.DOT.STATE.OH.US/DIST8/CONTACT%20INFO/PLANNING_PIO_WEBFORM.HTM).

THE ODOT PUBLIC INFORMATION OFFICER WILL THEN PROVIDE NOTIFICATION TO THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND APPROPRIATE BUSINESSES REGARDING ANY UPCOMING LANE CLOSURES, ROAD CLOSURES AND/OR RAMP CLOSURES.

ITEM 614. LAW ENFORCEMENT OFFICER (WITH PATROL CAR)

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL CAR WITH WORKING TOP-MOUNTED EMERGENCY FLASHING LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING 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.

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

DURING A TRAFFIC SIGNAL INSTALLATION.

LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEOS ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

THE OHIO STATE HIGHWAY PATROL POST - WILMINGTON
950 ROMBACH AVENUE
WILMINGTON, OH 45177
(937) 382-2551

THE PATROL POST IN BATAVIA MAY BE CONTACTED IN EMERGENCY SITUATIONS AT (513) 732-1510

LAW ENFORCEMENT OFFICERS (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). THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER
WITH PATROL CAR 100 HOURS

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

IF CONTRACTORS WISH TO UTILIZE LEOS FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE

PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614, MAINTAINING TRAFFIC.

ITEM 614. PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, CLASS I, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT [HTTP://WWW.DOT.STATE.OH.US/TESTLAB/APPLIST/MISC/PCMS.HTM](http://www.dot.state.oh.us/testlab/applist/misc/pcms.htm). THE LIST CURRENTLY CONTAINS CLASS I, II, III UNITS WITH MINIMUM LEGIBILITY DISTANCES OR 1250 FT., 850 FT., AND 650 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH-INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

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

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

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

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING

THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

THE CONTRACTOR SHALL INSTALL THE PCMS ONE WEEK IN ADVANCE OF A LANE CLOSURE WITH THE MESSAGE "WORK BEGINS date"/EXPECT DELAYS".

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN 3 SIGN-MONTHS

FLOODLIGHTING

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

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC (SECTION 642-2).

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MN001.dgn 31-JAN-2007 8:22AM char.vll

MAINTENANCE OF TRAFFIC NOTES

CLE-32-3.57/
6.82/6.94/7.32

CALCULATED
CHECKED

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

- 1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: QSCZCVR-T4
 DRAWING NAME: QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES
 REVISION DATE: 5/13/99 REV. J
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-10
 DRAWING NAME: QUADGUARD SYSTEM CONCRETE PAD, CZ, QG
 REVISION DATE: 11/19/97 REV. D
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-16
 DRAWING NAME: QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG
 REVISION DATE: 7/30/99 REV. F
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 354051Z
 DRAWING NAME: QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36
 REVISION DATE: 5/17/99
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-18
 DRAWING NAME: TRANSITION ASSEMBLY, 4 OFFSET, QG
 REVISION DATE: 6/25/99 REV. F
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35400260
 DRAWING NAME: QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY
 REVISION DATE: 11/19/97 REV. C
 ODOT APPROVAL DATE: 8/27/99

- 2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: SS450
 DRAWING NAME: CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS
 REVISION DATE: 3/12/99 REV. 1
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS455
 DRAWING NAME: TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS
 REVISION DATE: 2/18/99
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS461
 DRAWING NAME: TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS
 REVISION DATE: 6/30/99 REV. 1
 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS462
 DRAWING NAME: TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS
 REVISION DATE: 6/30/99
 ODOT APPROVAL DATE: 8/27/99

- 3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE 330-799-9291)

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT (24' LONG AND 35" WIDE). INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: A040416
 DRAWING NAME: UNIVERSAL TAU-II PARTS LIST
 REVISION DATE: 4/22/04
 ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040420
 DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP
 REVISION DATE: 4/28/04
 ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040105
 DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)
 REVISION DATE: 1/07/04
 ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: B040239
 DRAWING NAME: APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)
 REVISION DATE: 4/21/04
 ODOT APPROVAL DATE: 10/16/04

- 4. THE GREAT CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC.

THIS ATTENUATOR MAY BE USED UNTIL JANUARY 1, 2007 IF THE ITEM WAS PURCHASED BEFORE OCTOBER 1, 1998 AND IS IN THE CONTRACTOR'S INVENTORY.

THE CONTRACTOR SHALL PROVIDE A REPLACEMENT UNIT WHEN AN IMPACT IS SEVERE ENOUGH TO REQUIRE COMPLETE REPLACEMENT OF THE ATTENUATOR. THE CONTRACTOR SHALL HAVE A SPARE PARTS PACKAGE AVAILABLE ON THE PROJECT SITE AT

ALL TIMES WHEN AN ATTENUATOR IS IN PLACE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE COMPLETE SPARE PARTS PACKAGE FOR EVERY ONE TO SIX UNITS INSTALLED ON THE PROJECT SITE. FOR EXAMPLE, FIVE INSTALLED UNITS REQUIRE ONE SPARE PARTS PACKAGE AND SEVEN INSTALLED UNITS REQUIRE TWO SPARE PARTS PACKAGES.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. 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, MAINTAIN, REPAIR, REPLACE OR RELOCATE 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.

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

A) EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

B) NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE ENGINEER AND THE CITY/COUNTY SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS, AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. THE CONTRACTOR'S RESPONSE TIME, FROM THE TIME OF NOTIFICATION UNTIL PERSONNEL ARRIVE AT THE MALFUNCTIONING SIGNAL, SHALL NOT EXCEED TWO (2) HOURS.

ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN TWO (2) HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT, EXCEPT POLES AND CONTROL EQUIPMENT, SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN SIX (6) HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS, AS NECESSARY, TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED SIX (6) HOUR PERIOD. THE CONTRACTOR SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT, THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15. ANY SUBSEQUENT BILLINGS TO THE STATE/CITY/COUNTY FOR POLICE AND MAINTENANCE SERVICES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES. THE CONTRACTOR SHALL FOLLOW THE PERSONNEL REQUIREMENTS OF SECTION 632.02.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 7 AM TO 9 AM AND 3 PM AND 6 PM.

ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED BY THE CONTRACTOR OR AN OFF-DUTY STATE/CITY/COUNTY POLICE OFFICER HIRED BY THE CONTRACTOR.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING, WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN ITEM 614 MAINTAINING TRAFFIC.

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\MN002.dgn 31 - JAN - 2007 8:35AM charvill

CALCULATED
CHECKED
MAINTENANCE OF TRAFFIC NOTES

CLE-32-3.57/
6.82/6.94/7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MN003.dgn 31 - JAN - 2007 8:35AM charvill

OBJECT MARKER, ONE-WAY

OBJECT MARKERS SHALL BE INSTALLED ON ALL CONCRETE BARRIER, PERMANENT AND/OR TEMPORARY, 32 INCHES (0.8 M) OR LESS IN HEIGHT, LOCATED WITHIN 5 FEET (1.5 M) OF THE EDGE OF THE ADJACENT TRAVEL LANE. OBJECT MARKER SPACING SHALL BE 50 FEET (15 METERS).

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING OBJECT MARKERS.

FOR OBJECT MARKERS INSTALLED ON CONCRETE BARRIER, AN ESTIMATED QUANTITY OF 148 EACH OF ITEM 614 OBJECT MARKER, ONE-WAY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

OBJECT MARKERS SHALL BE INSTALLED ON ALL GUARDRAIL LOCATED WITHIN 5 FEET (1.5 M) OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKER SPACING SHALL BE APPROXIMATELY 50 FEET (15 METERS).

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING OBJECT MARKERS.

FOR OBJECT MARKERS INSTALLED ON GUARDRAIL, AN ESTIMATED QUANTITY OF 96 EACH OF ITEM 614 OBJECT MARKERS, ONE-WAY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO CMS 614 OR CMS 621 AS SPECIFIED HEREIN.

° RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

° RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO CMS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER CMS 202.10.

AN ESTIMATED QUANTITY OF 625 EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

WORK ZONE RAISED PAVEMENT MARKERS ON CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON TO CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

AN ESTIMATED QUANTITY OF 170 EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN

PAVEMENT FOR MAINTAINING TRAFFIC SHALL BE 304 BITUMINOUS AGGREGATE BASE 10" THICK AND 448 TYPE I ASPHALT SURFACE COURSE 1 1/2" THICK. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE AND IN ACCORDANCE WITH CMS 203 AND 615; THIS INCLUDES BUT IS NOT LIMITED TO EXCAVATION AND PREPARATION OF THE SUBGRADE.

A LUMP SUM HAS BEEN PROVIDED FOR THIS SPECIFIC ITEM.

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC

A LUMP SUM HAS BEEN PROVIDED FOR THIS SPECIFIC ITEM.

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUB-BASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 1/4" INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

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:

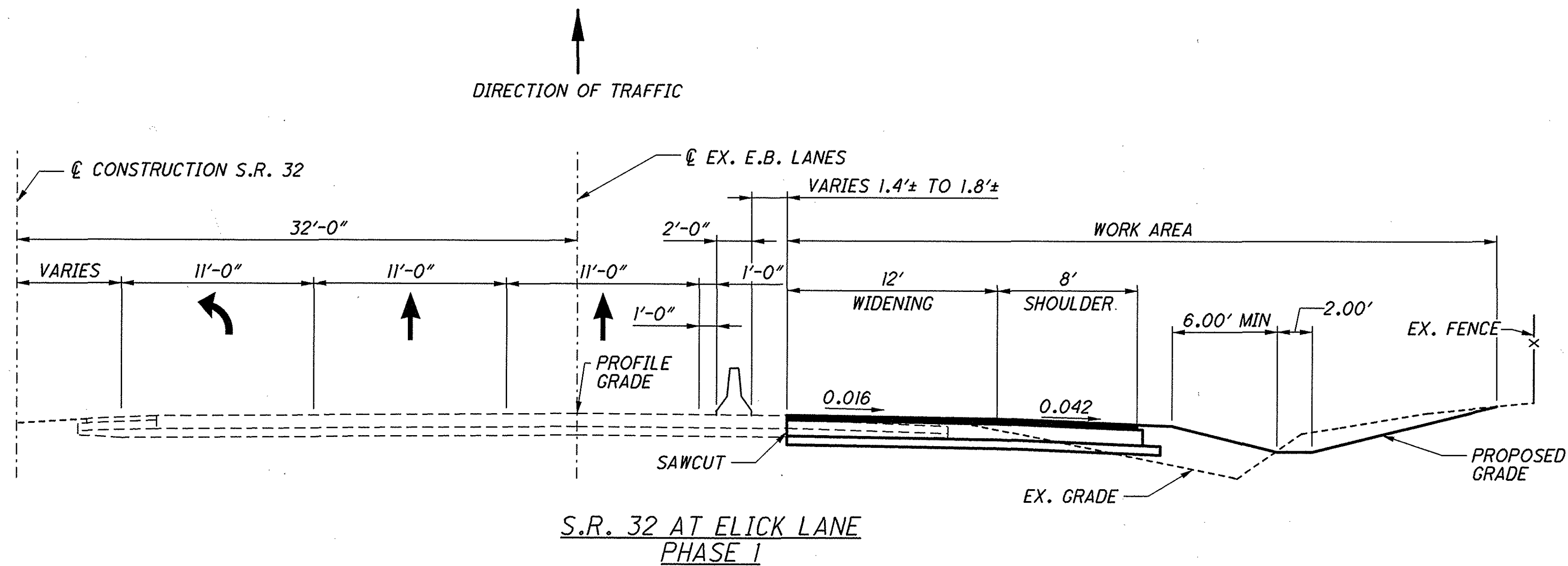
ITEM 616, WATER 2 M GAL

CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC NOTES

CLE-32-3.57/
6.82/6.94/7.32

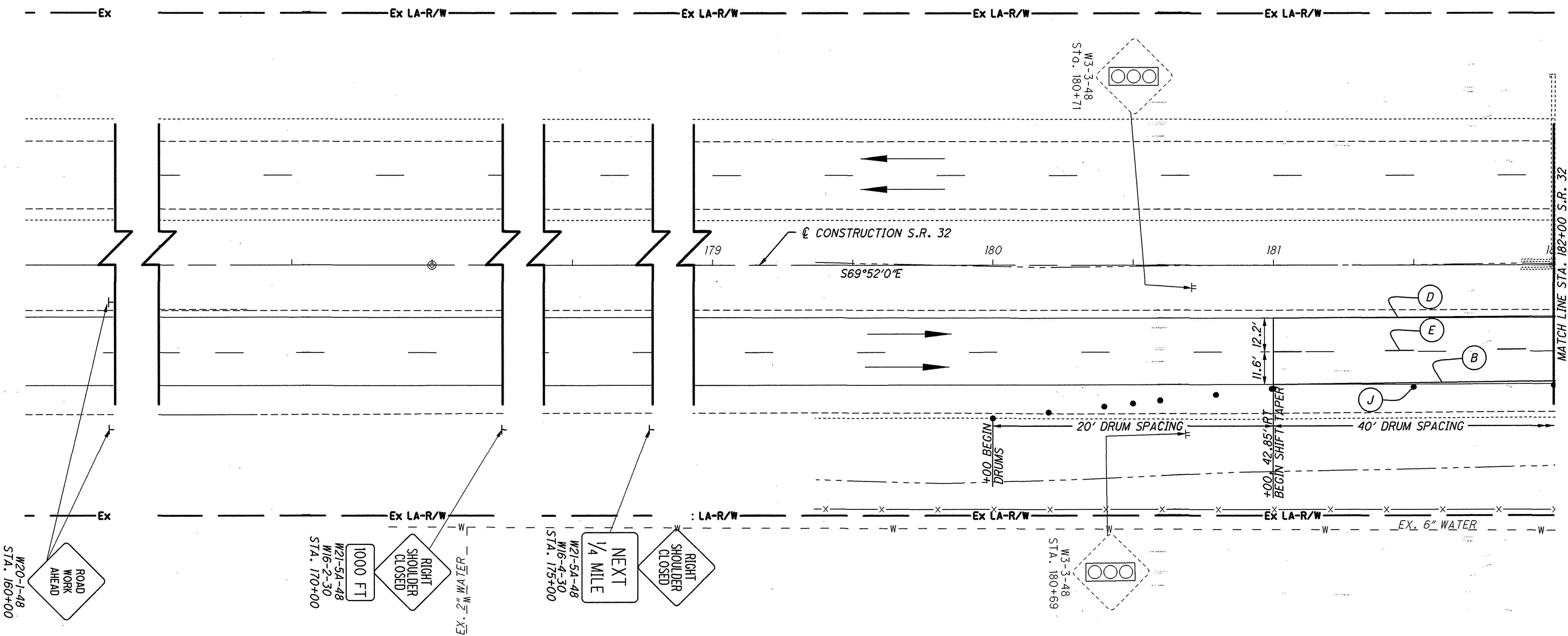
I:\Projects\CLE\sr032\06.82_PID24955\Consult\Final_Tracings\ODOT_Mod\24955M\Y001.dgn 31-JAN-2007 12:09PM charvill



S.R. 32 AT ELICK LANE
PHASE I
STA. 185+82.63 TO STA. 187+88.08

MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

CLE-32-3.57/
6.82/6.94/7.32



W20-1-48
STA. 160+00
ROAD WORK AHEAD

1000 FT
W21-5A-48
W16-2-30
STA. 170+00
RIGHT SHOULDER CLOSED

W21-5A-48
W16-4-30
STA. 175+00
NEXT 1/4 MILE

W3-3-48
STA. 180+69

MATCH LINE STA. 182+00 S.R. 32
FOR CONTINUATION, SEE SHEET 14

LEGEND

- | | |
|---|--|
| (A) WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE) | (G) WORK ZONE DOTTED LINE, 4 INCH, CLASS I, 740.06, TYPE I (WHITE) |
| (B) WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WHITE) | (H) WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL) |
| (C) WORK ZONE EDGE LINE, CLASS I, 642 PAINT (YELLOW) | (I) WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) |
| (D) WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (YELLOW) | (J) DRUMS (20' OR 40' C/C SPACING) |
| (E) WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I (WHITE) | (K) PORTABLE CONCRETE BARRIER, 32 INCH |
| (F) WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, (WHITE) | (L) WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I (WHITE) |

NOTE:
1. CONTRACTOR TO REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.

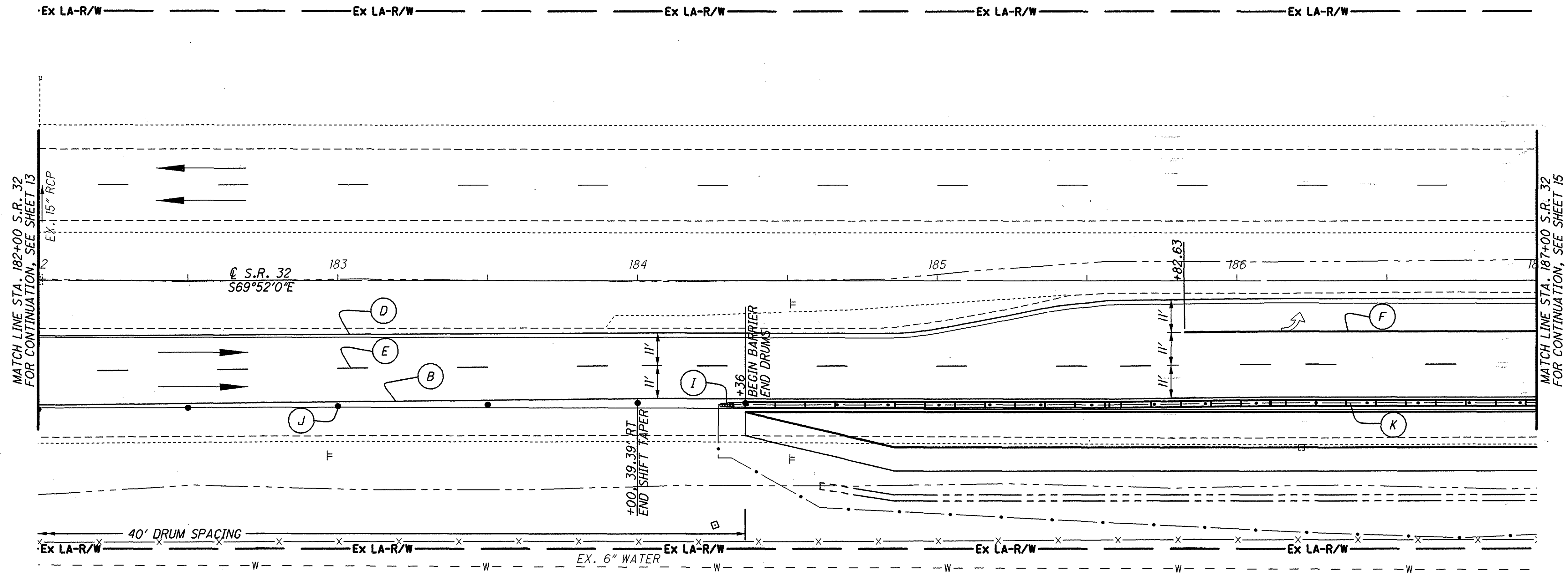
CALCULATED
CHECKED

0 10 20
HORIZONTAL
SCALE IN FEET

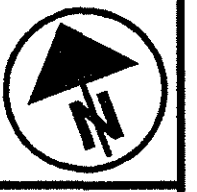
MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 160+00 TO STA. 182+00

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP002.dgn 31-JAN-2007 8:33AM charvii



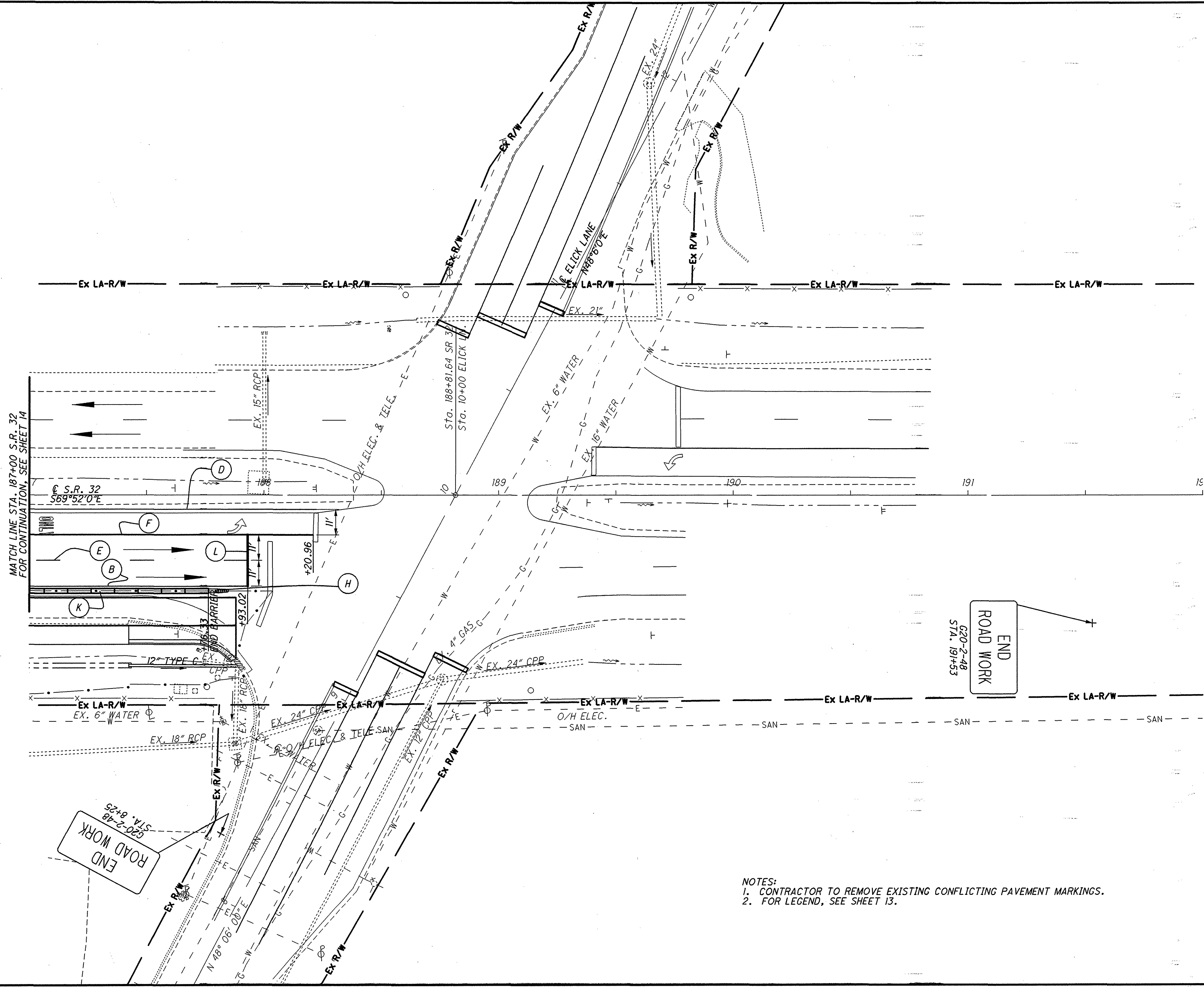
NOTES:
 1. CONTRACTOR TO REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
 2. FOR LEGEND, SEE SHEET 13.



CALCULATED
 CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 182+00 TO STA. 187+00

CLE-32-3.57 /
 6.82 / 6.94 / 7.32



MATCH LINE STA. 187+00 S.R. 32 FOR CONTINUATION, SEE SHEET 14

S.R. 32
569°52'0"E

END ROAD WORK
G20-2-48
STA. 8+25

END ROAD WORK
G20-2-48
STA. 191+53

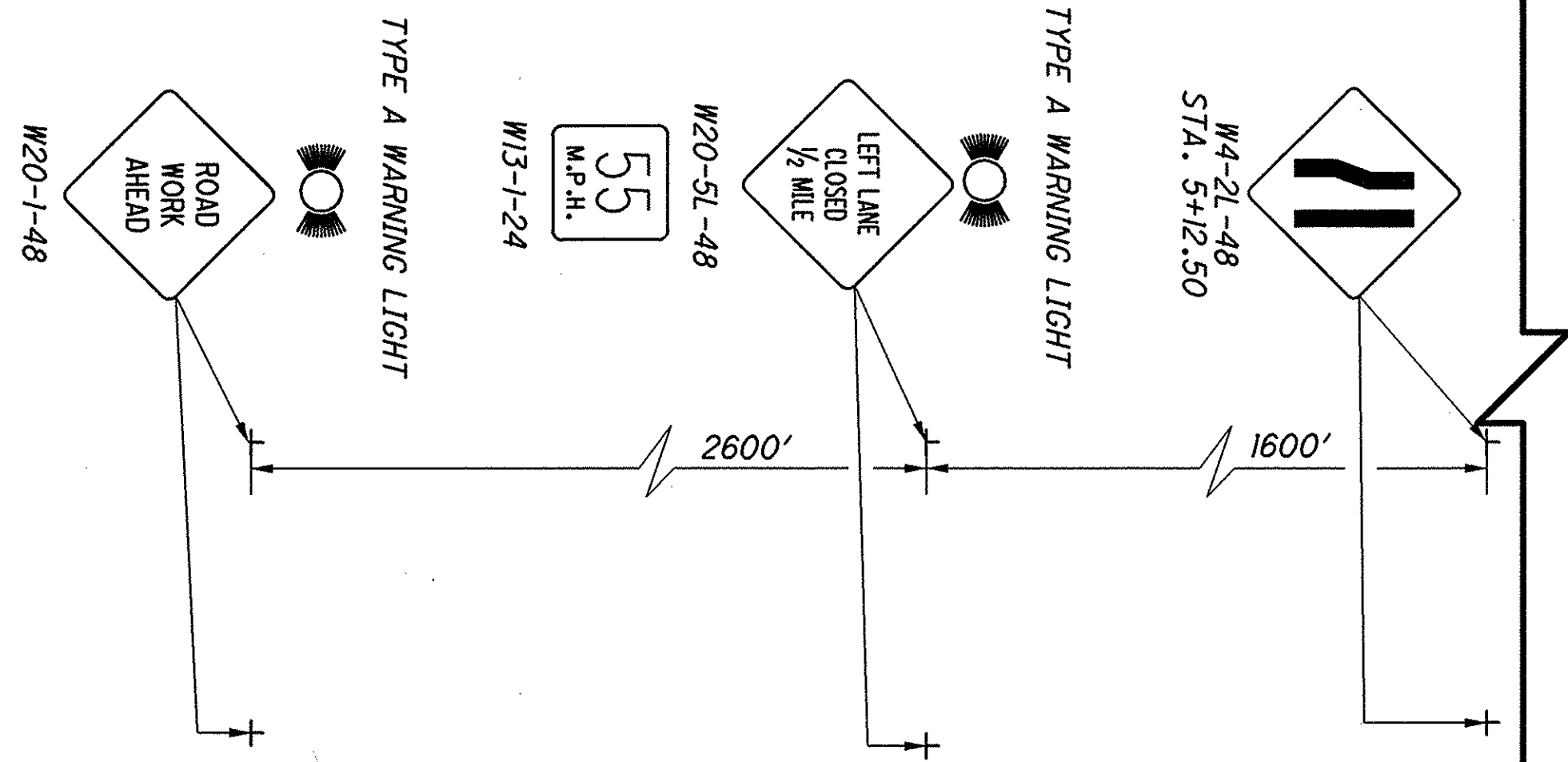
NOTES:
 1. CONTRACTOR TO REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
 2. FOR LEGEND, SEE SHEET 13.



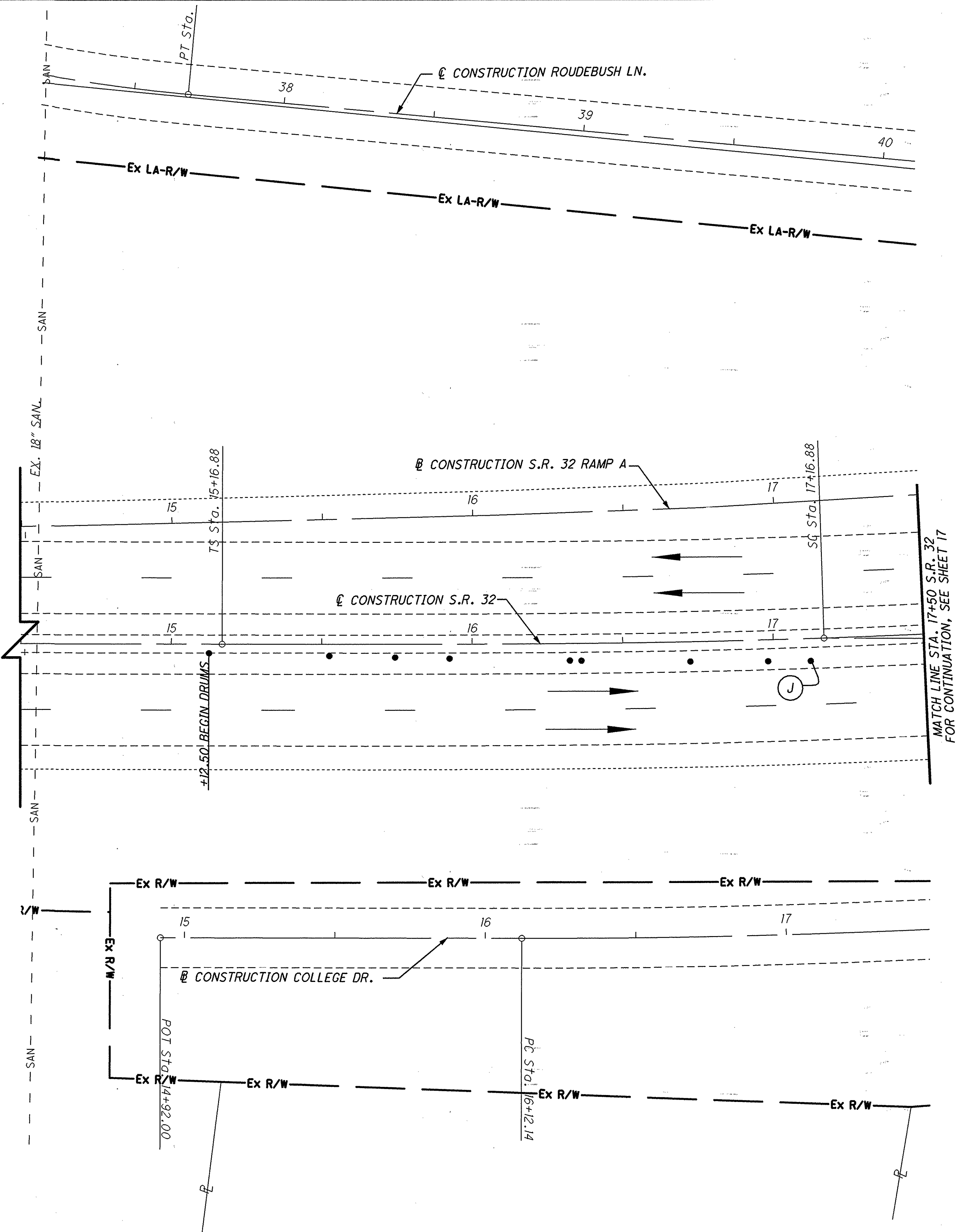
CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 187+00 TO STA. 192+00

CLE-32-3.57 /
 6.82 / 6.94 / 7.32



NOTE:
1. FOR LEGEND, SEE SHEET 13.

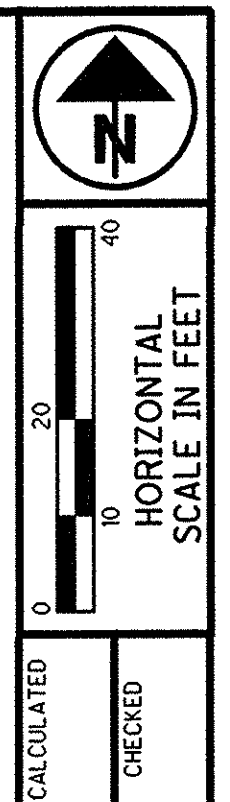
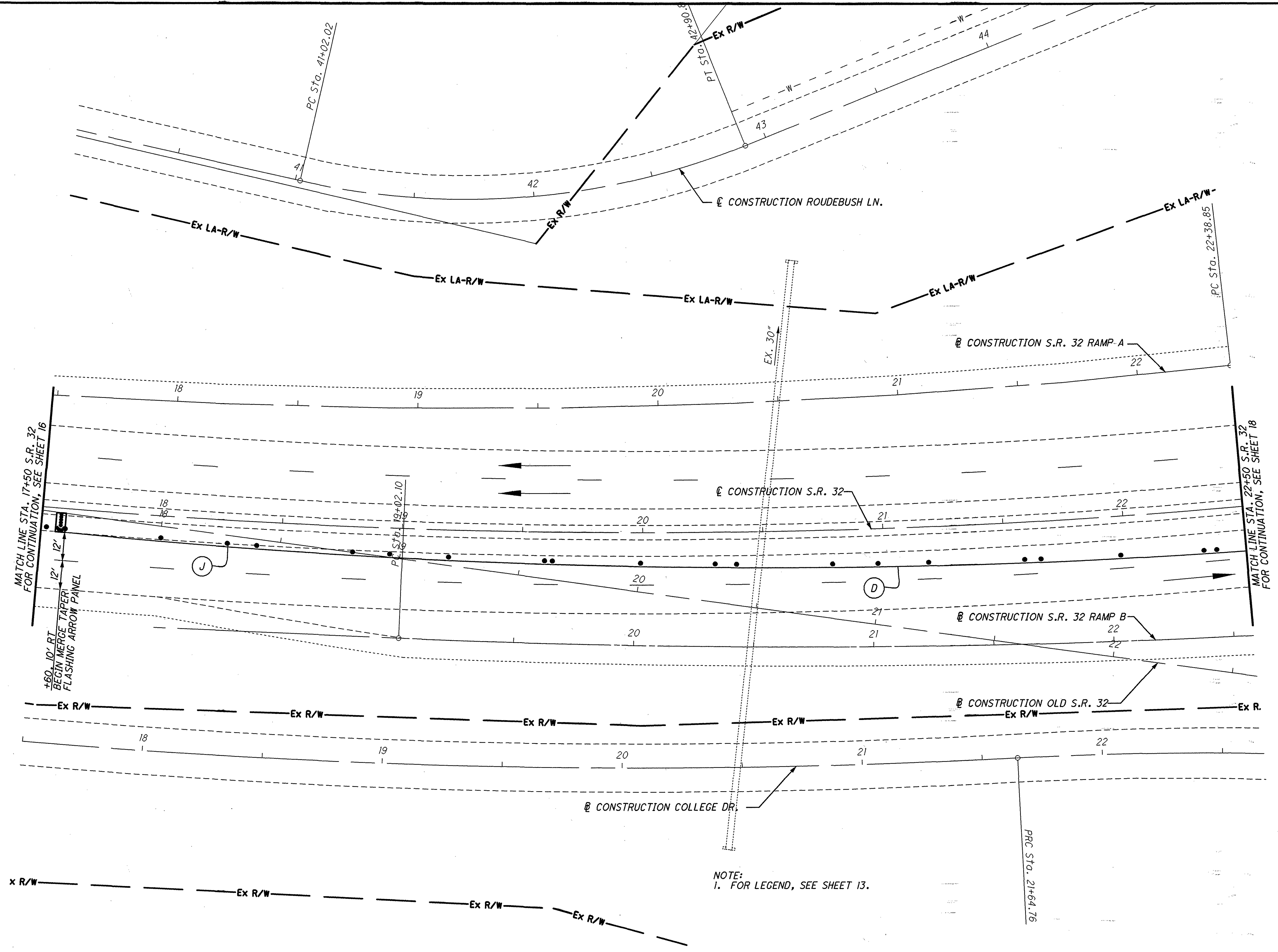


CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
BEGIN PROJECT TO STA. 17+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP005.dgn 31-JAN-2007 8:51AM charvill



CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 17+50 TO STA. 22+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

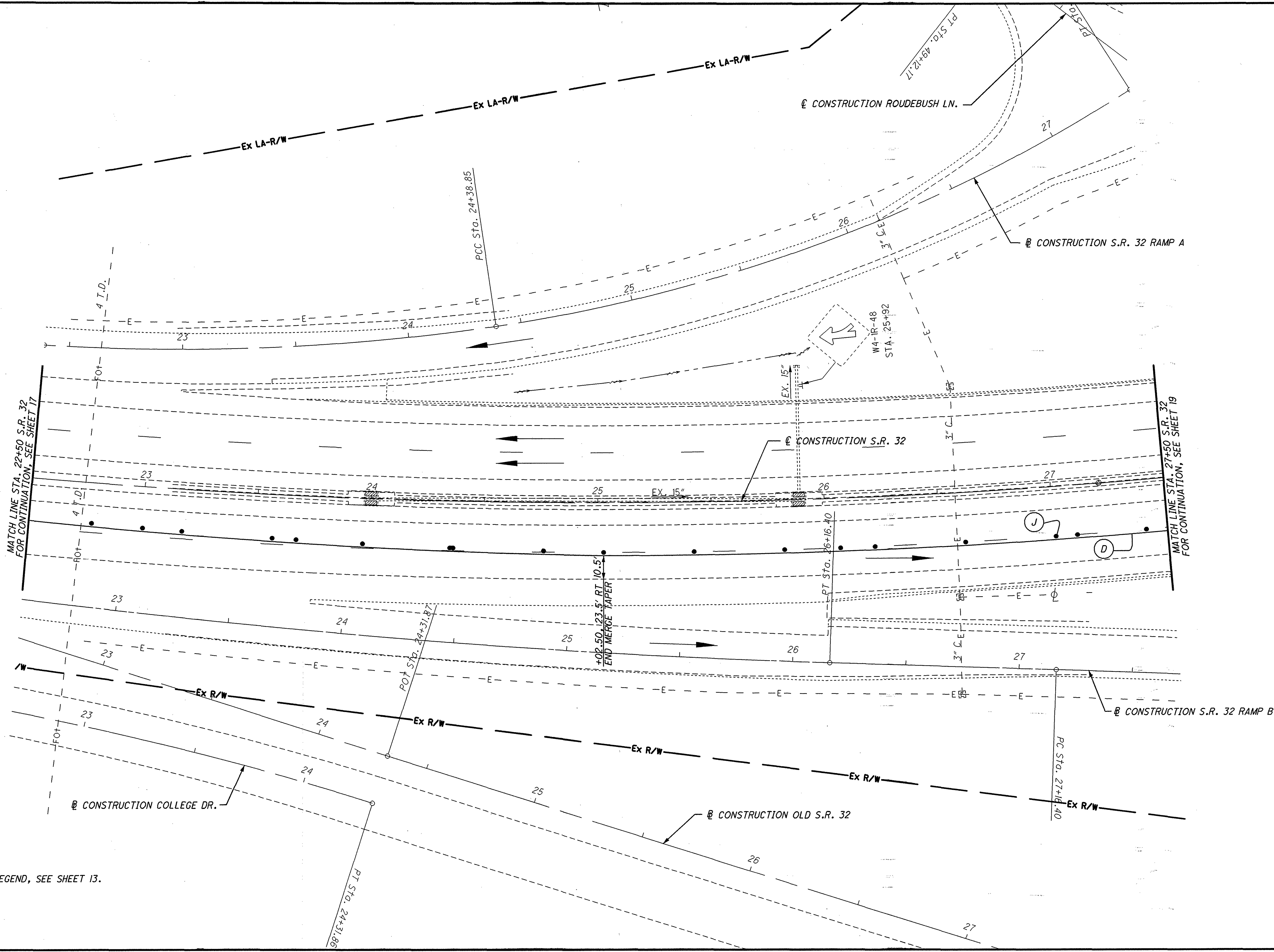
i:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP006.dgn 31-JAN-2007 8:50AM charvill

CALCULATED
CHECKED

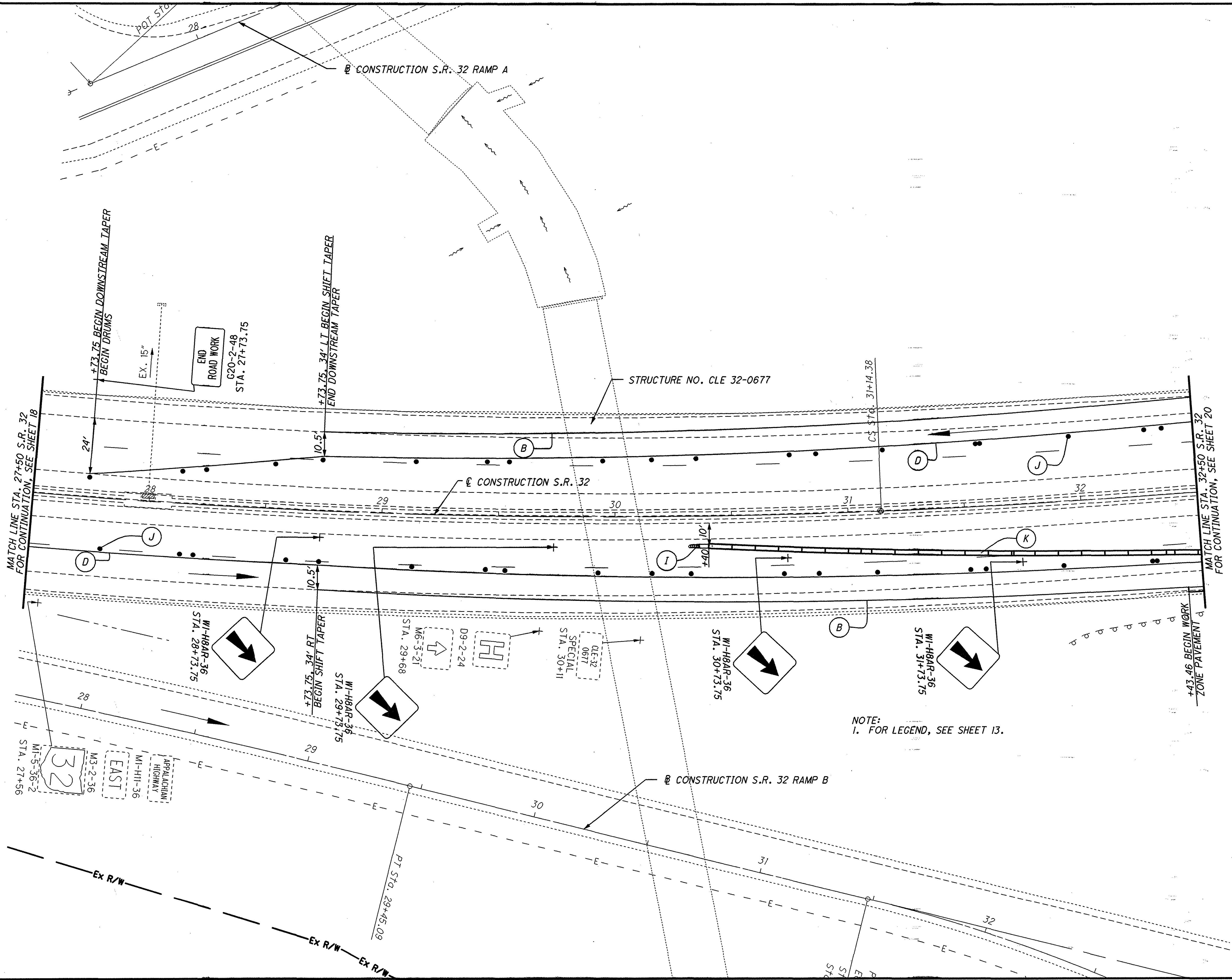
0 10 20 40
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 22+50 TO STA. 27+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



NOTE:
1. FOR LEGEND, SEE SHEET 13.



NOTE:
1. FOR LEGEND, SEE SHEET 13.

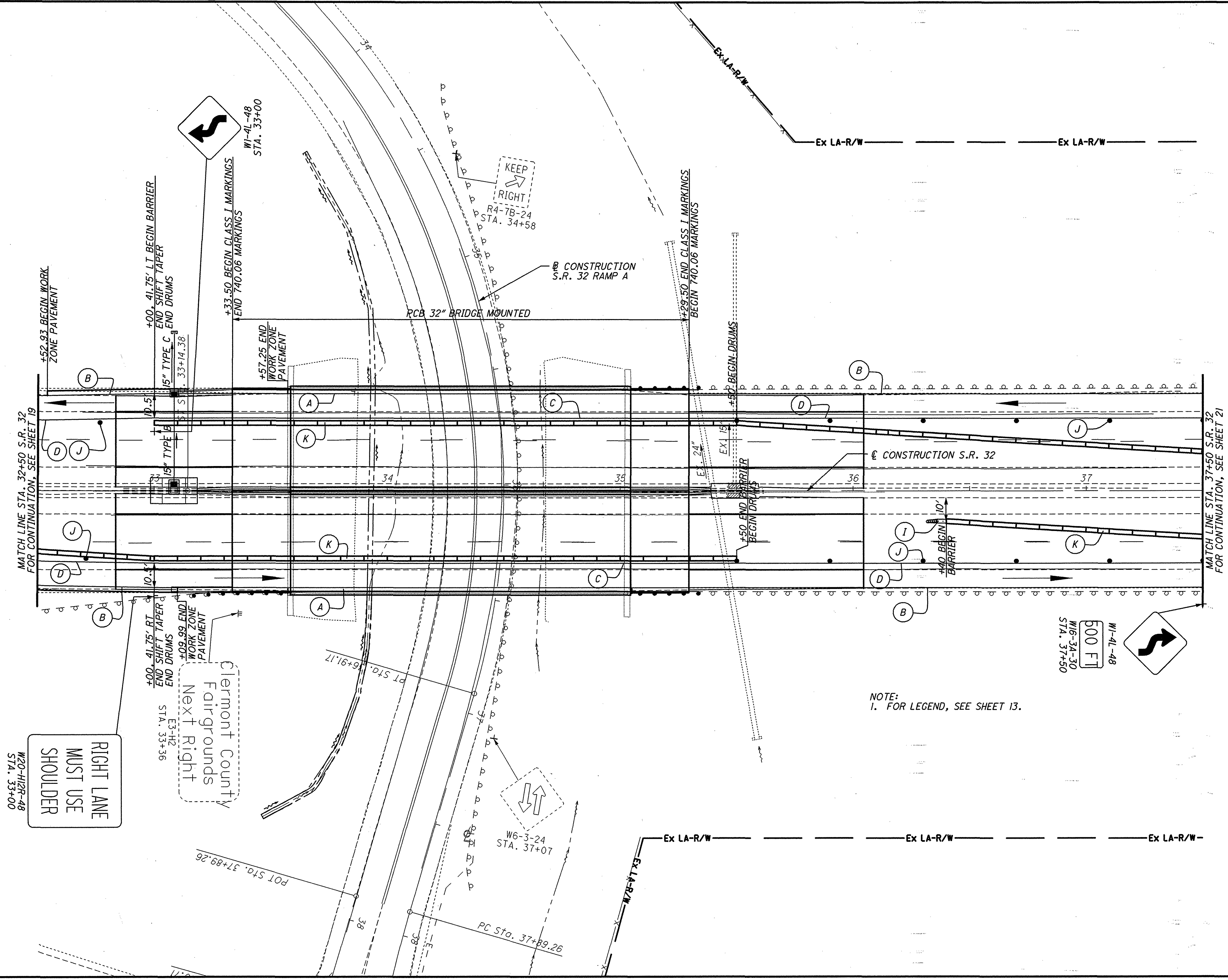
CALCULATED
CHECKED

0 10 20
HORIZONTAL
SCALE IN FEET

19
156

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 27+50 TO STA. 32+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



RIGHT LANE
MUST USE
SHOULDER

W20-H12R-48
STA. 33+00

Clermont County
Fairgrounds
Next Right

+00.41.75' RT
END SHIFT TAPER
END DRUMS
E3-H2
STA. 33+36

+00.41.75' LT
BEGIN BARRIER
END SHIFT TAPER
END DRUMS
15" TYPE C
STA. 33+14.38

+33.50 BEGIN CLASS I MARKINGS
END 740.06 MARKINGS

W1-4L-48
STA. 33+00

+57.25 END
WORK ZONE
PAVEMENT

RCB 32" BRIDGE MOUNTED

B CONSTRUCTION
S.R. 32 RAMP A

+29.50 END CLASS I MARKINGS
BEGIN 740.06 MARKINGS

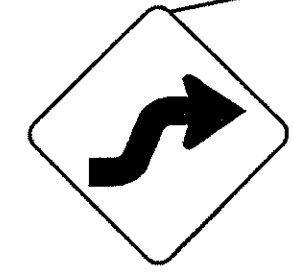
+50 BEGIN DRUMS

+50 END BARRIER
BEGIN DRUMS

+40 BEGIN
BARRIER

NOTE:
1. FOR LEGEND, SEE SHEET 13.

W1-4L-48
W16-3A-30
STA. 37+50



W6-3-24
STA. 37+07

PC Sta. 37+89.26

POT Sta. 37+89.26

MATCH LINE STA. 32+50 S.R. 32
FOR CONTINUATION, SEE SHEET 19

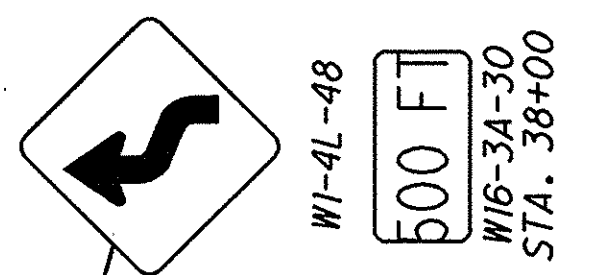
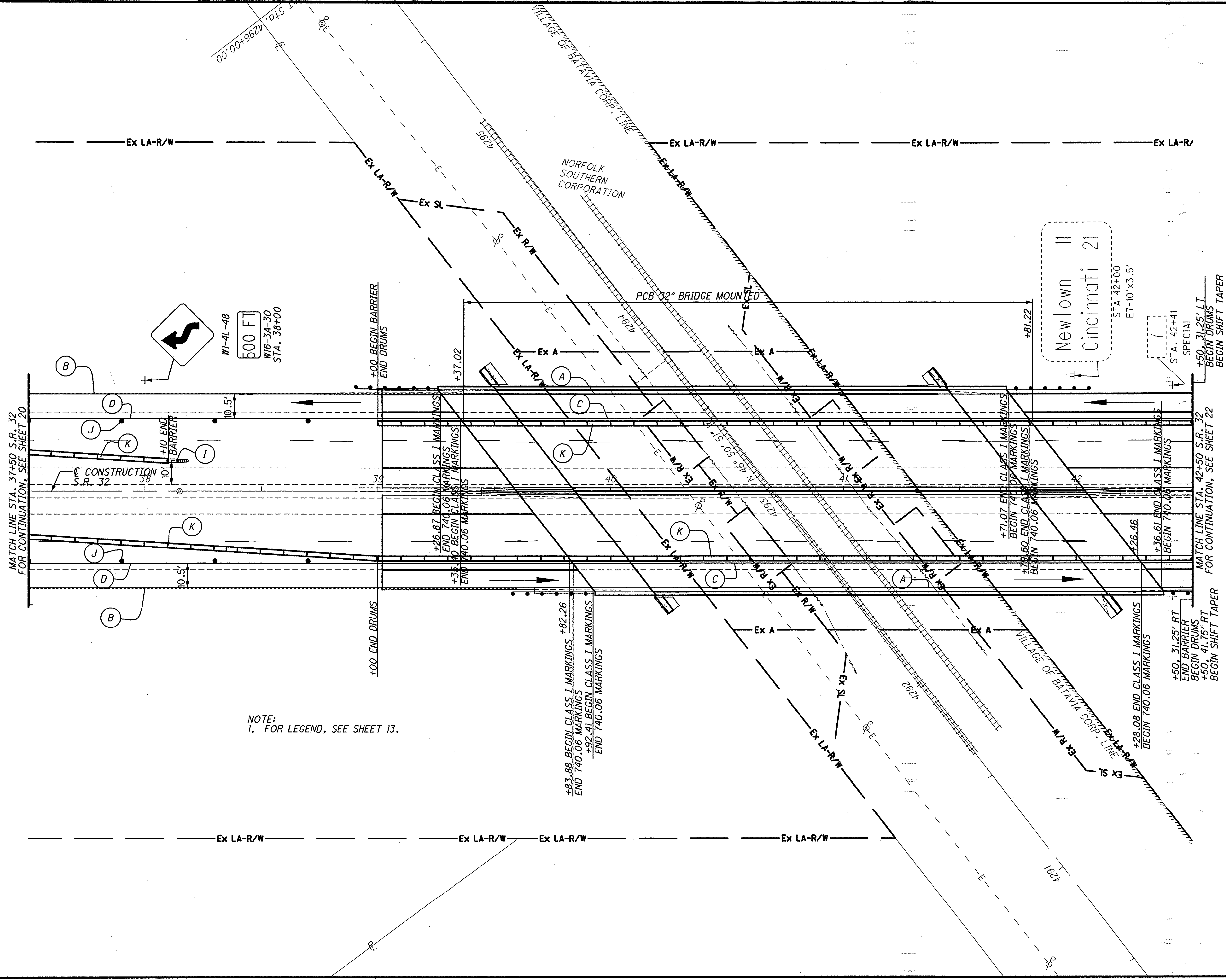
MATCH LINE STA. 37+50 S.R. 32
FOR CONTINUATION, SEE SHEET 21

CALCULATED
CHECKED

HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 32+50 TO STA. 37+50

CLE-32-3.57
6.82 / 6.94 / 7.32 /

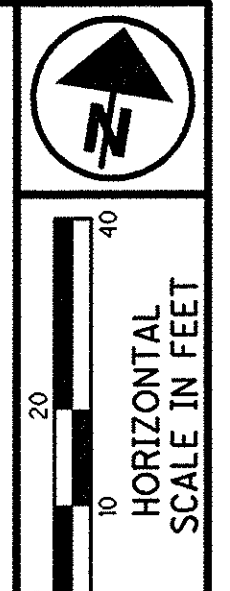


NOTE:
1. FOR LEGEND, SEE SHEET 13.

MATCH LINE STA. 37+50 S.R. 32
FOR CONTINUATION, SEE SHEET 20

MATCH LINE STA. 42+50 S.R. 32
FOR CONTINUATION, SEE SHEET 22

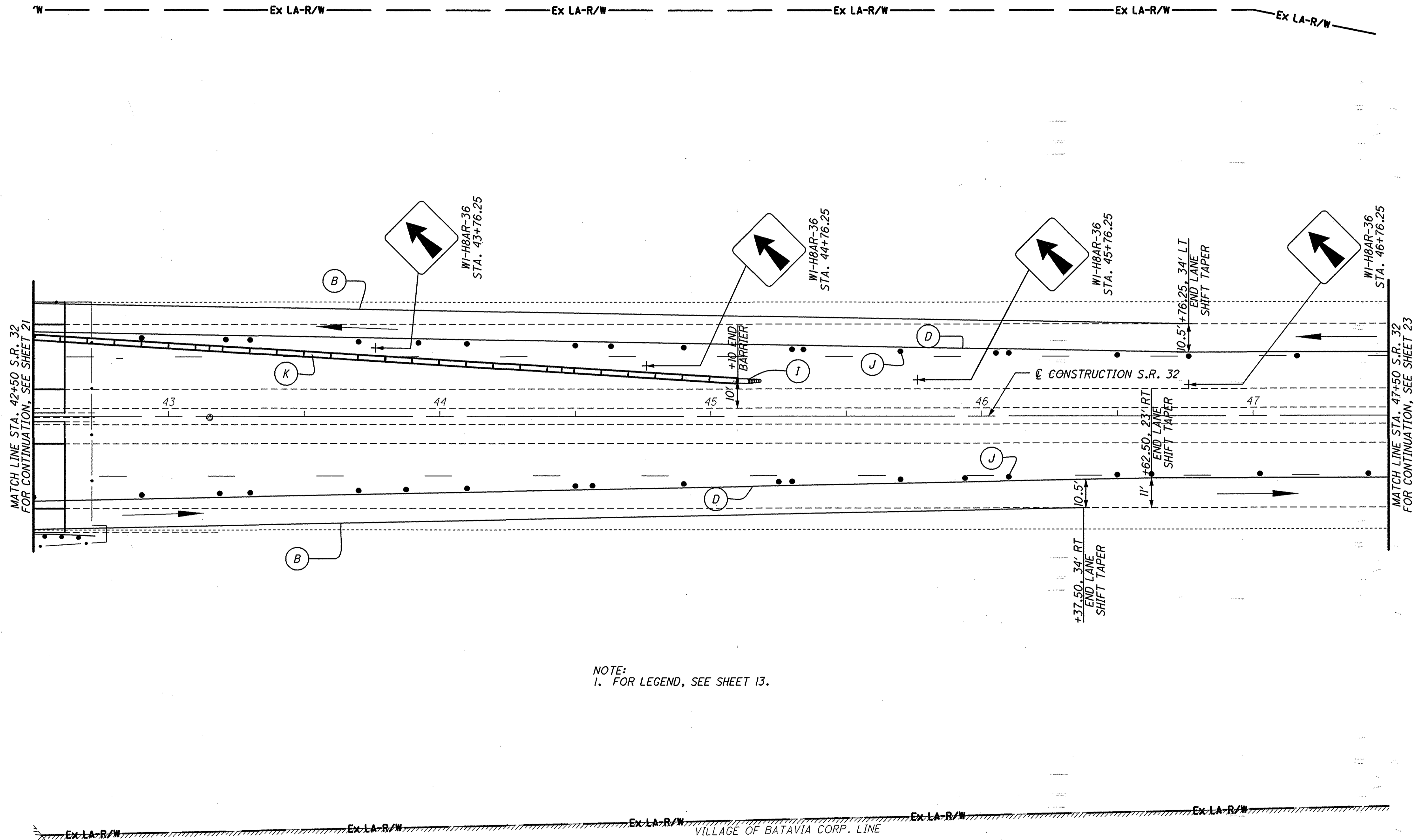
Newtown 11
Cincinnati 21



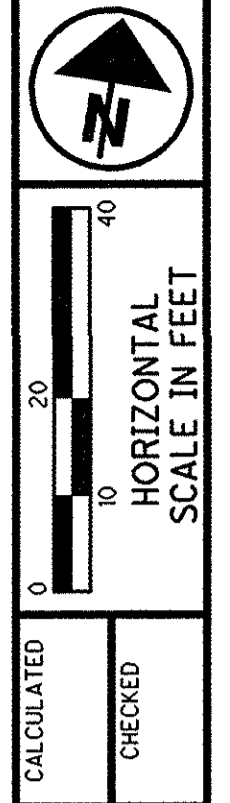
CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 37+50 TO STA. 42+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

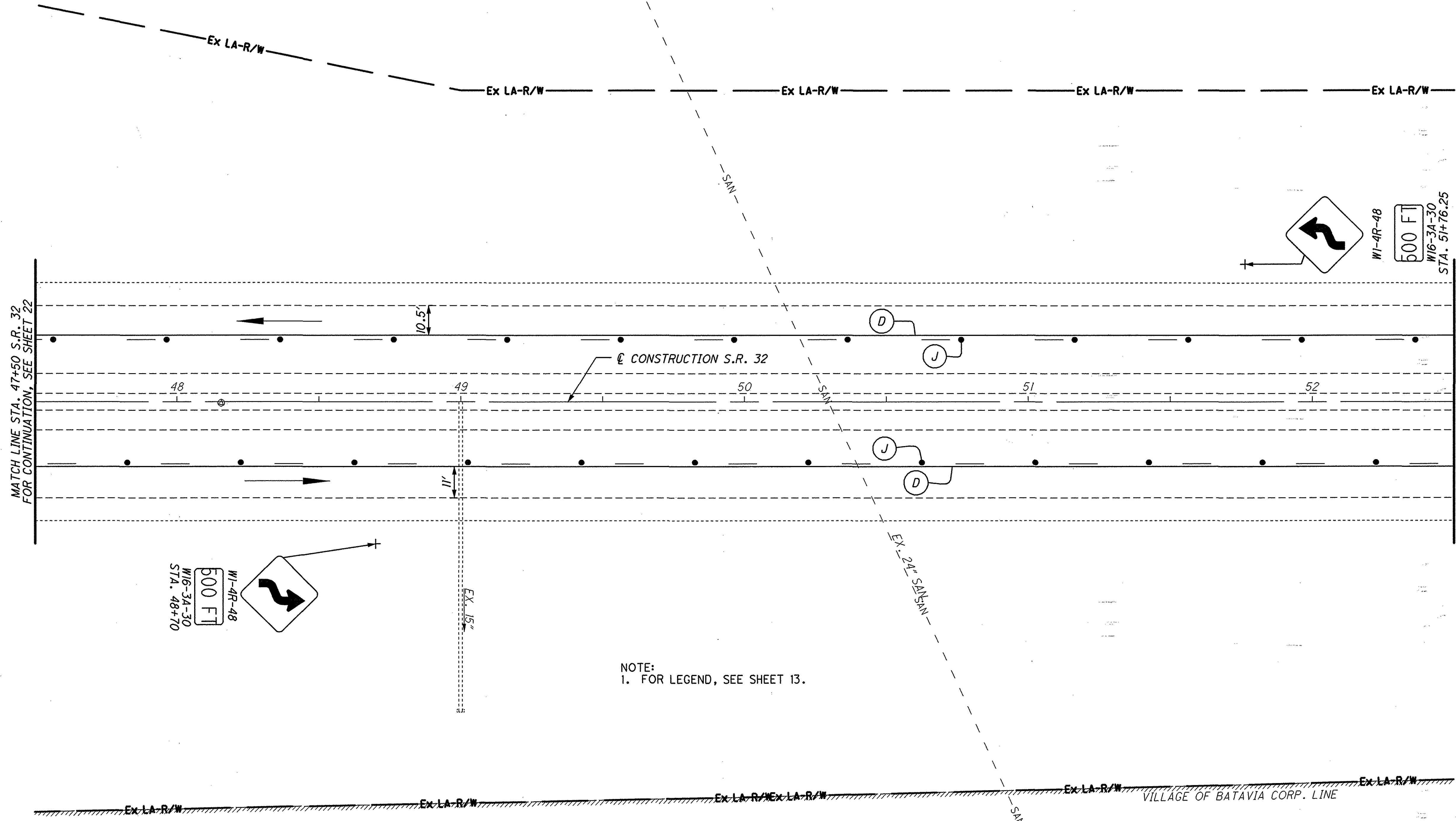


NOTE:
1. FOR LEGEND, SEE SHEET 13.



MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 42+50 TO STA. 47+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



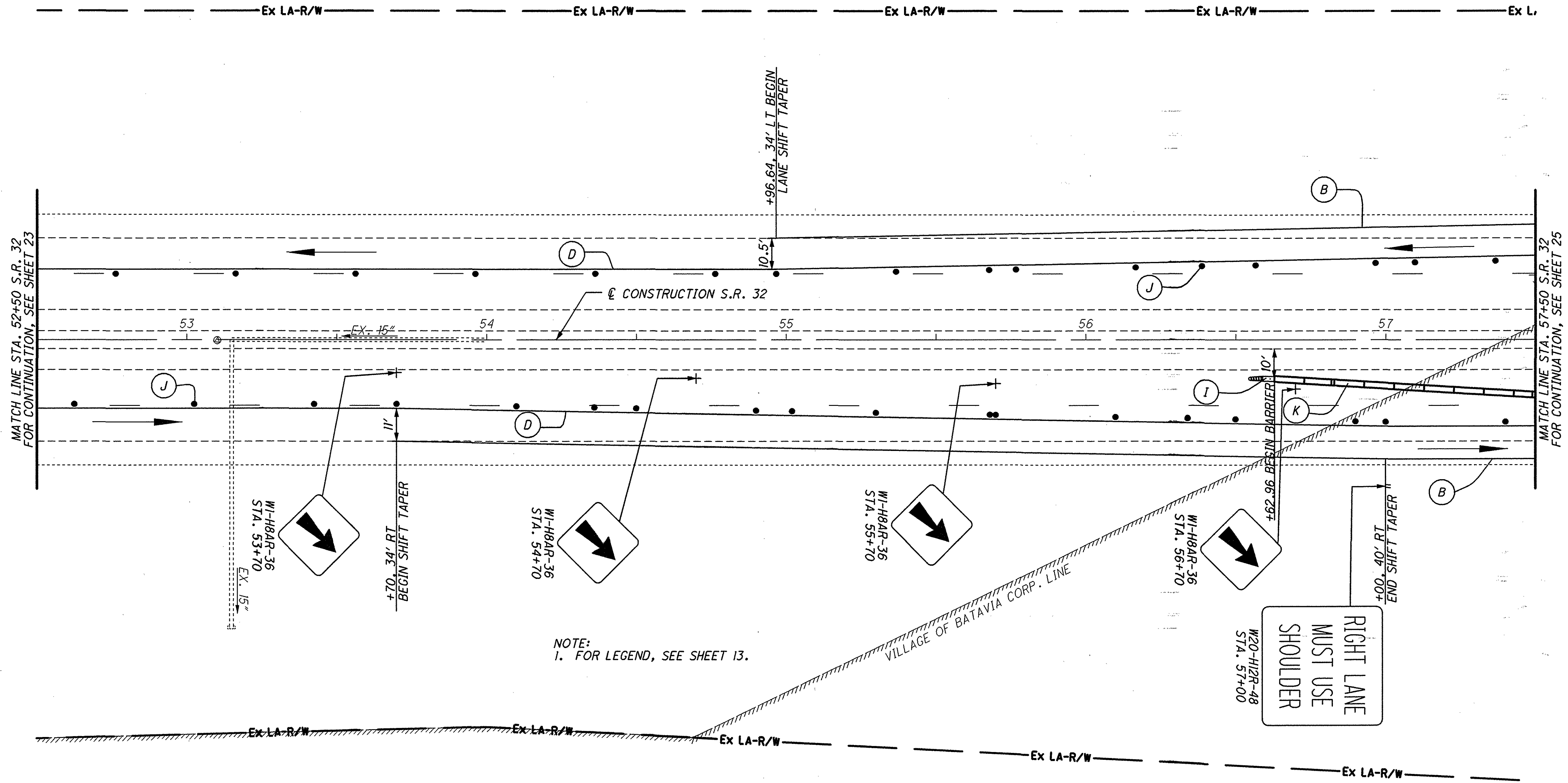
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 47+50 TO STA. 52+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



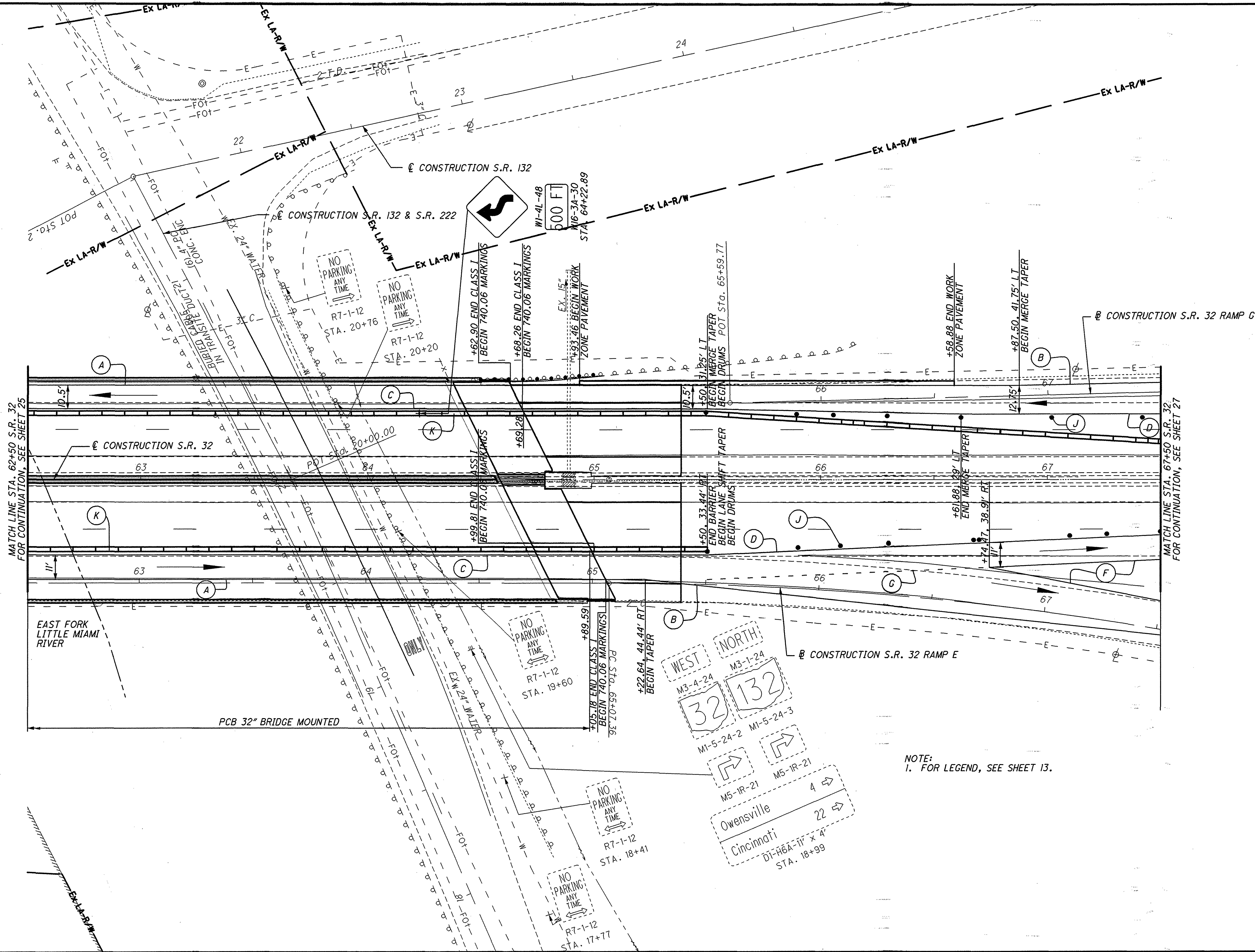
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 52+50 TO STA. 57+50

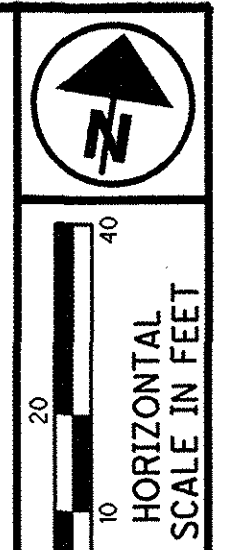
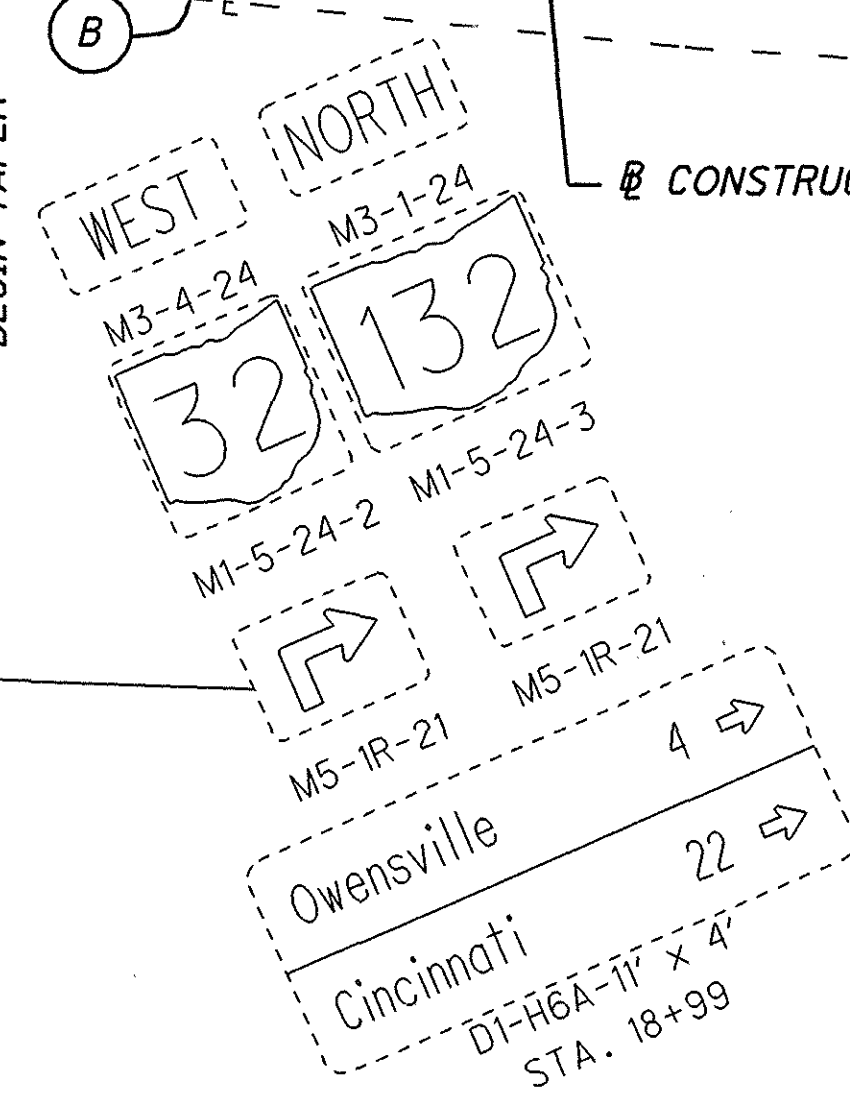
CLE-32-3.57 /
6.82 / 6.94 / 7.32



MATCH LINE STA. 62+50 S.R. 32
FOR CONTINUATION, SEE SHEET 25

MATCH LINE STA. 67+50 S.R. 32
FOR CONTINUATION, SEE SHEET 27

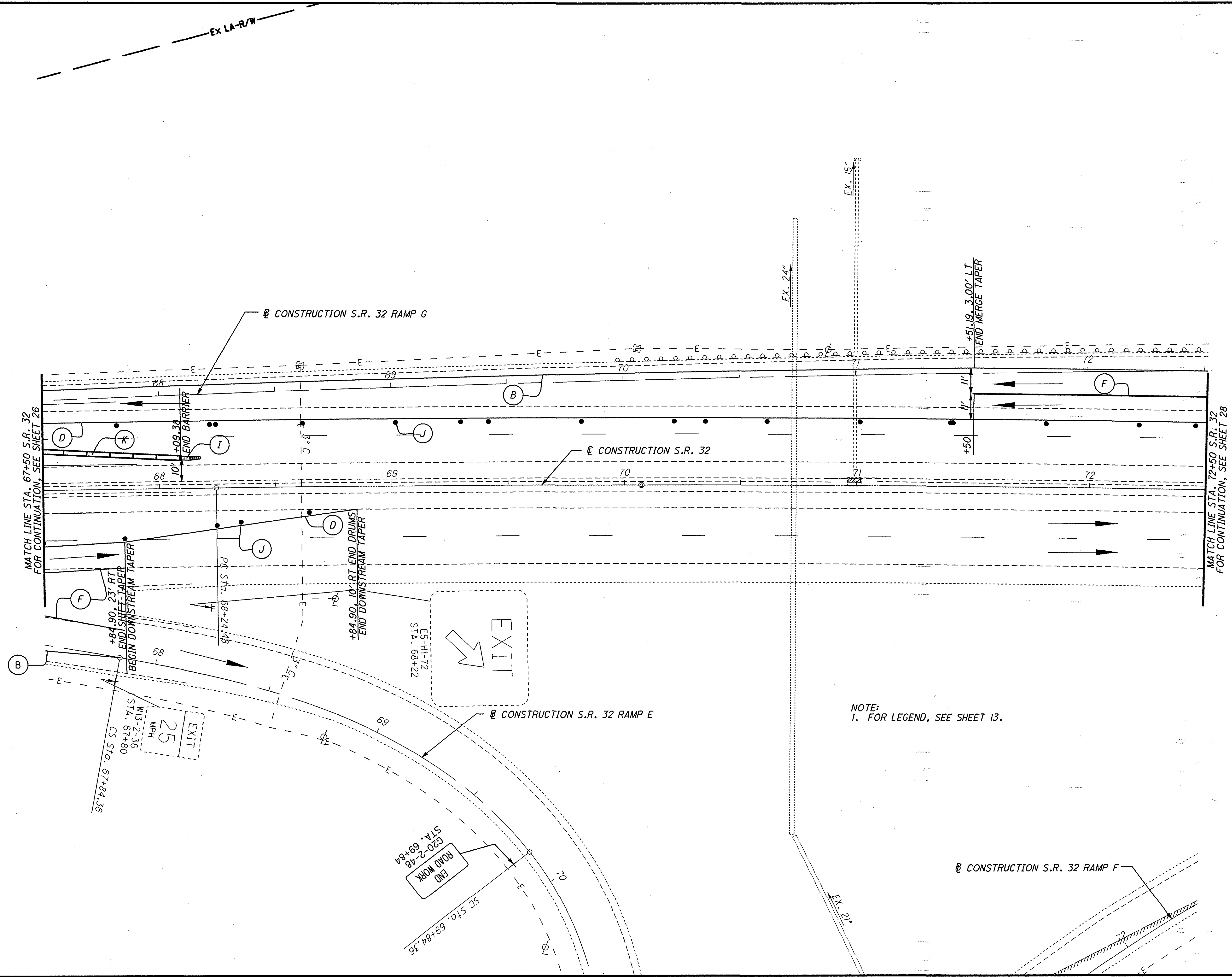
NOTE:
1. FOR LEGEND, SEE SHEET 13.



CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 62+50 TO STA. 67+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



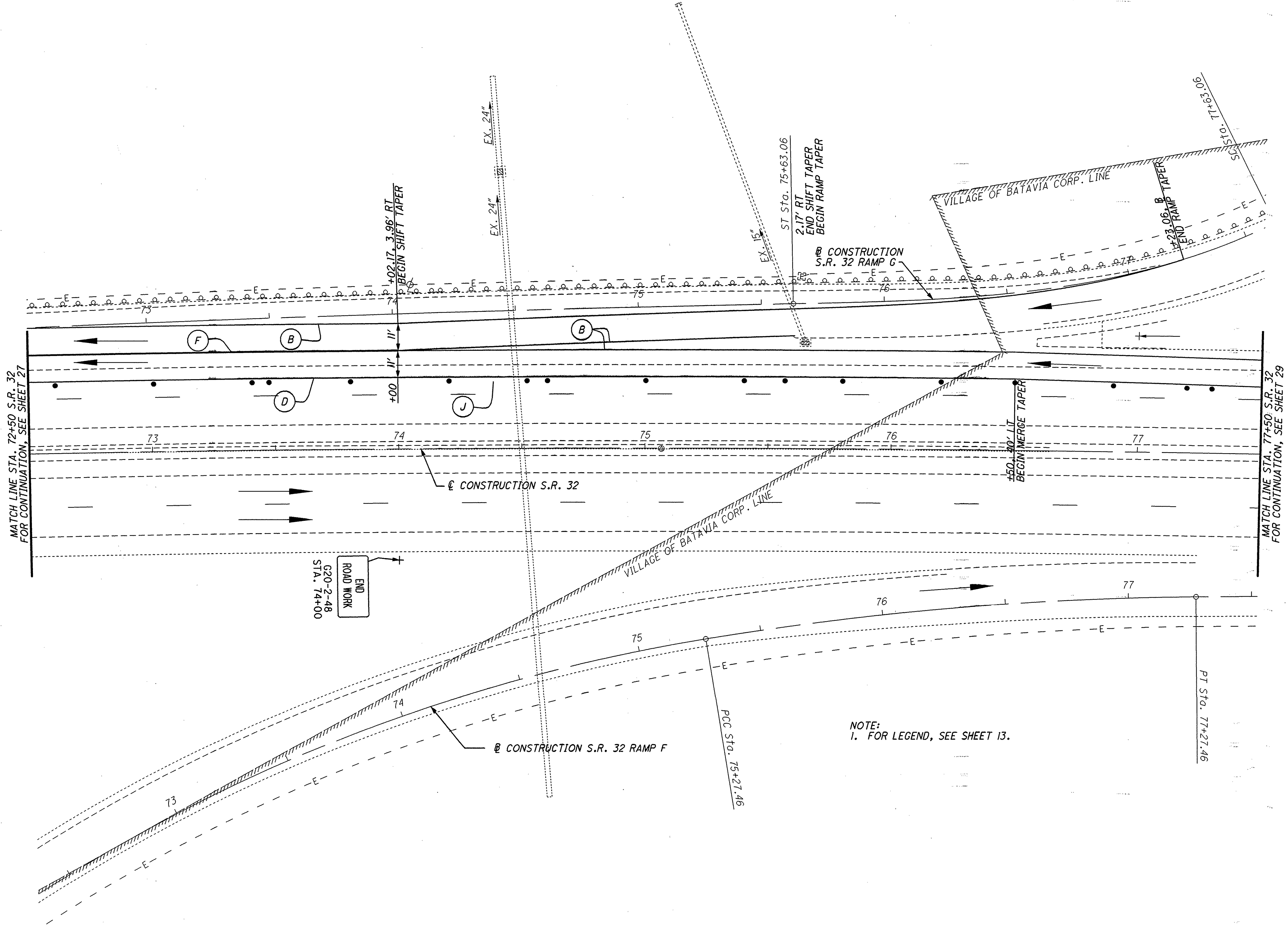
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 67+50 TO STA. 72+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



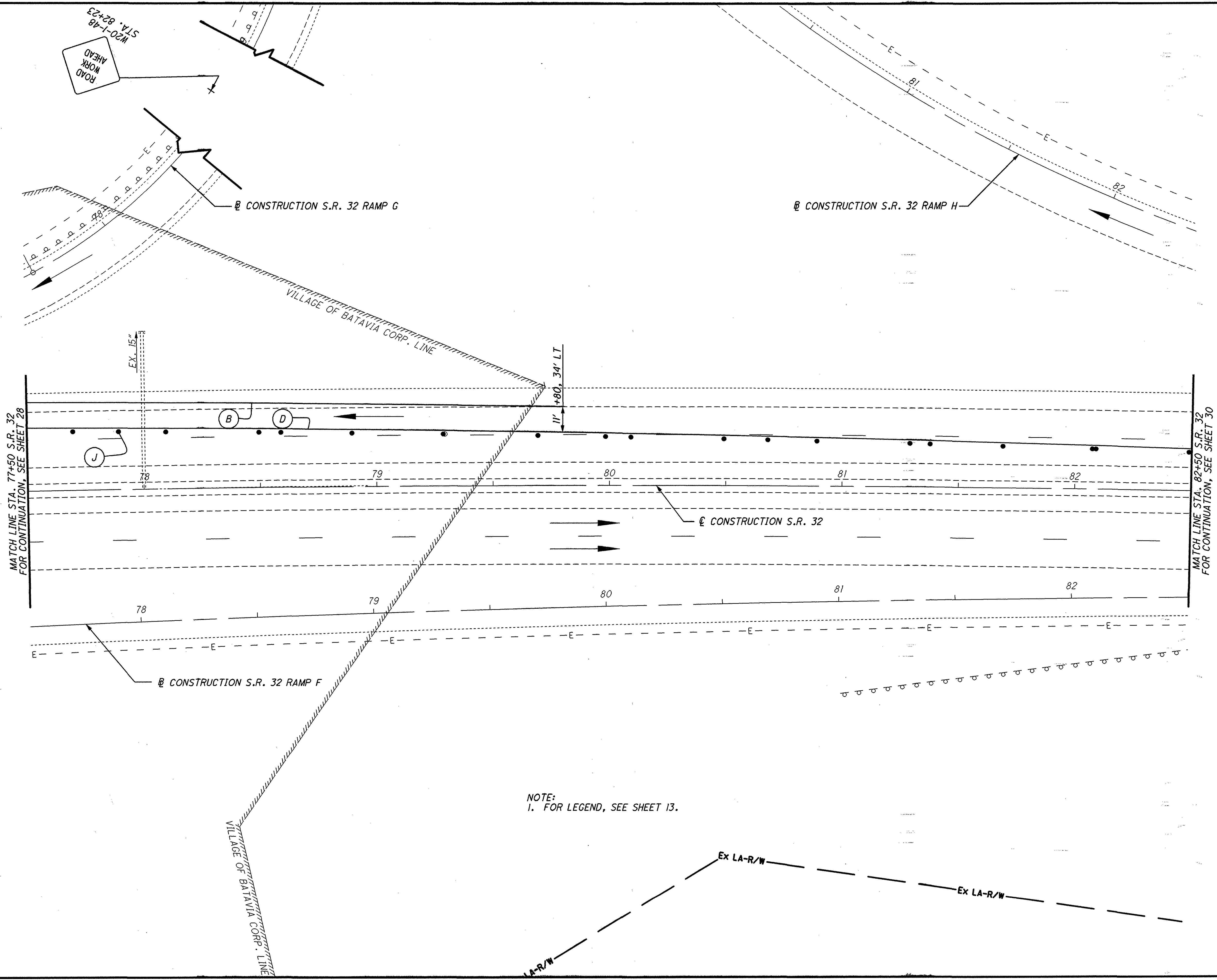
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

0 10 20 40
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 72+50 TO STA. 77+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



CALCULATED
CHECKED

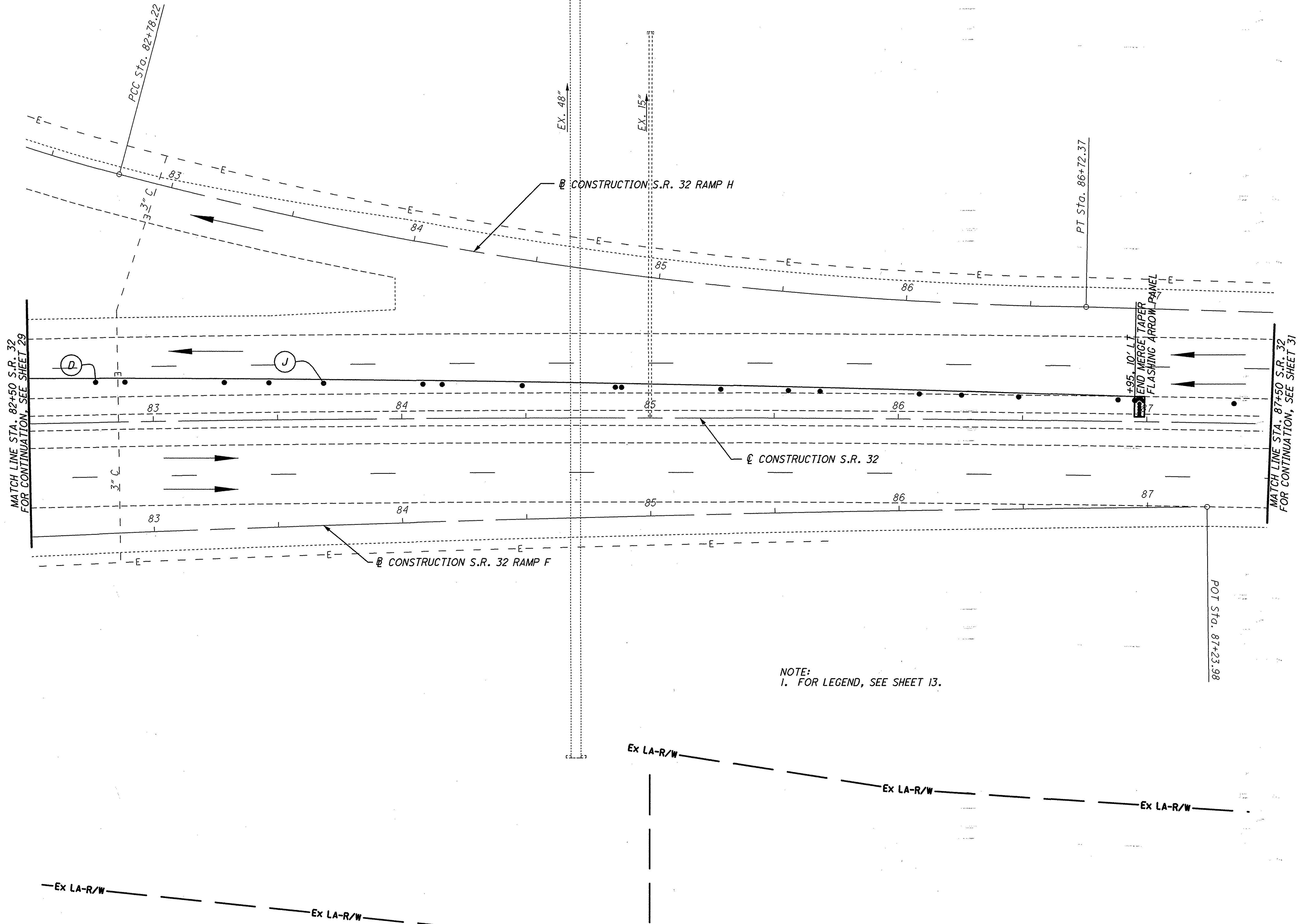
0 10 20 30
HORIZONTAL
SCALE IN FEET

20
10
0

↑
N

MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 77+50 TO STA. 82+50

CLE-32-3.57 /
6.82/6.94/7.32



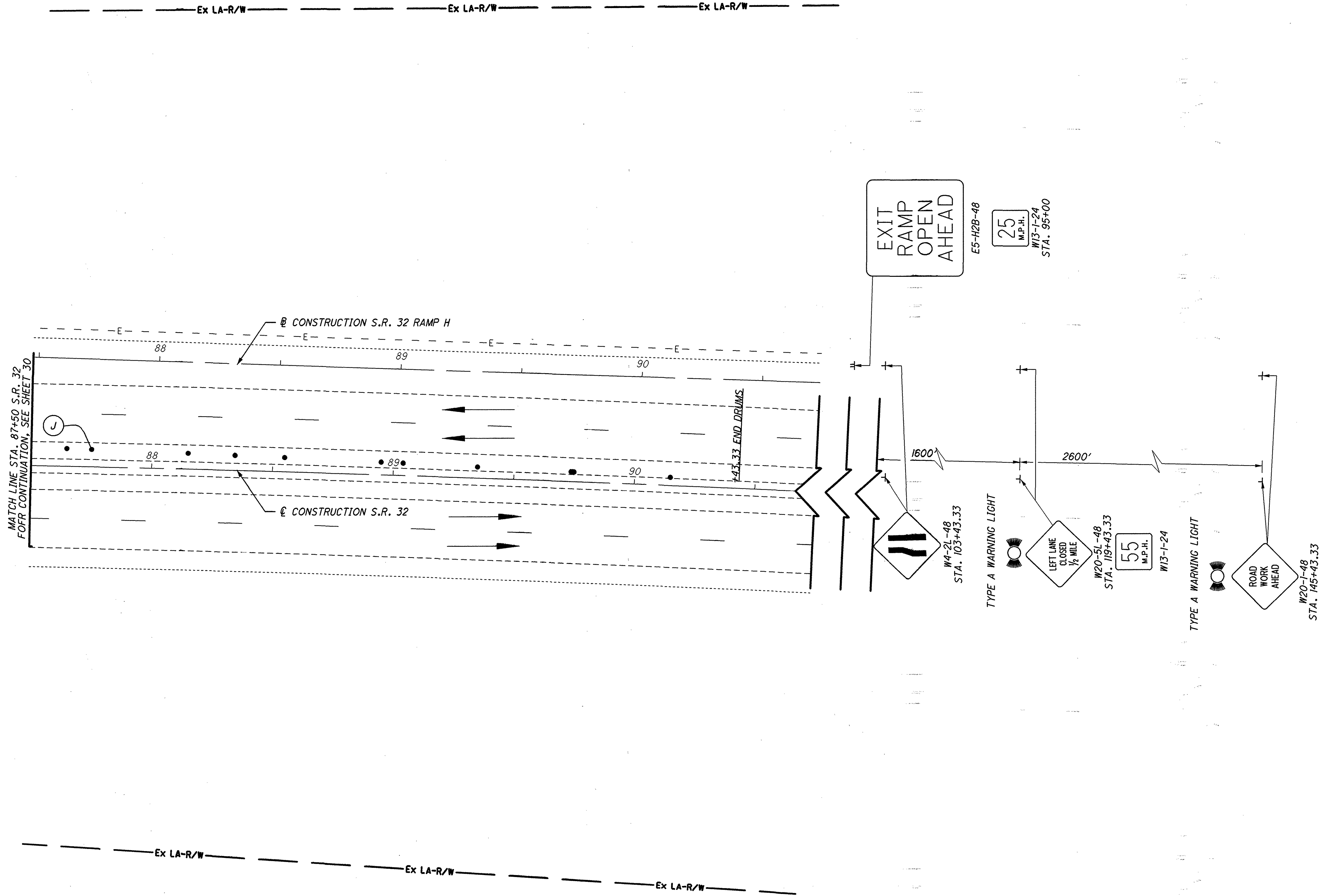
NOTE:
1. FOR LEGEND, SEE SHEET 13.



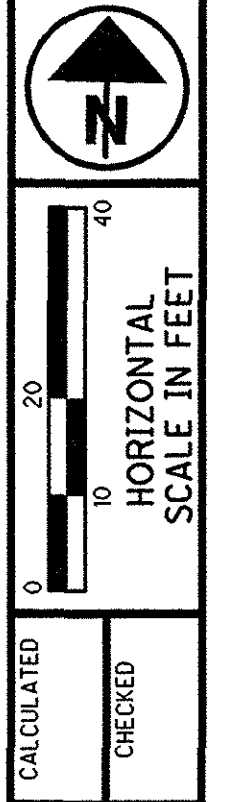
MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 82+50 TO STA. 87+50

CLE-32-3.57 /
6.82/6.94/7.32

CALCULATED
CHECKED

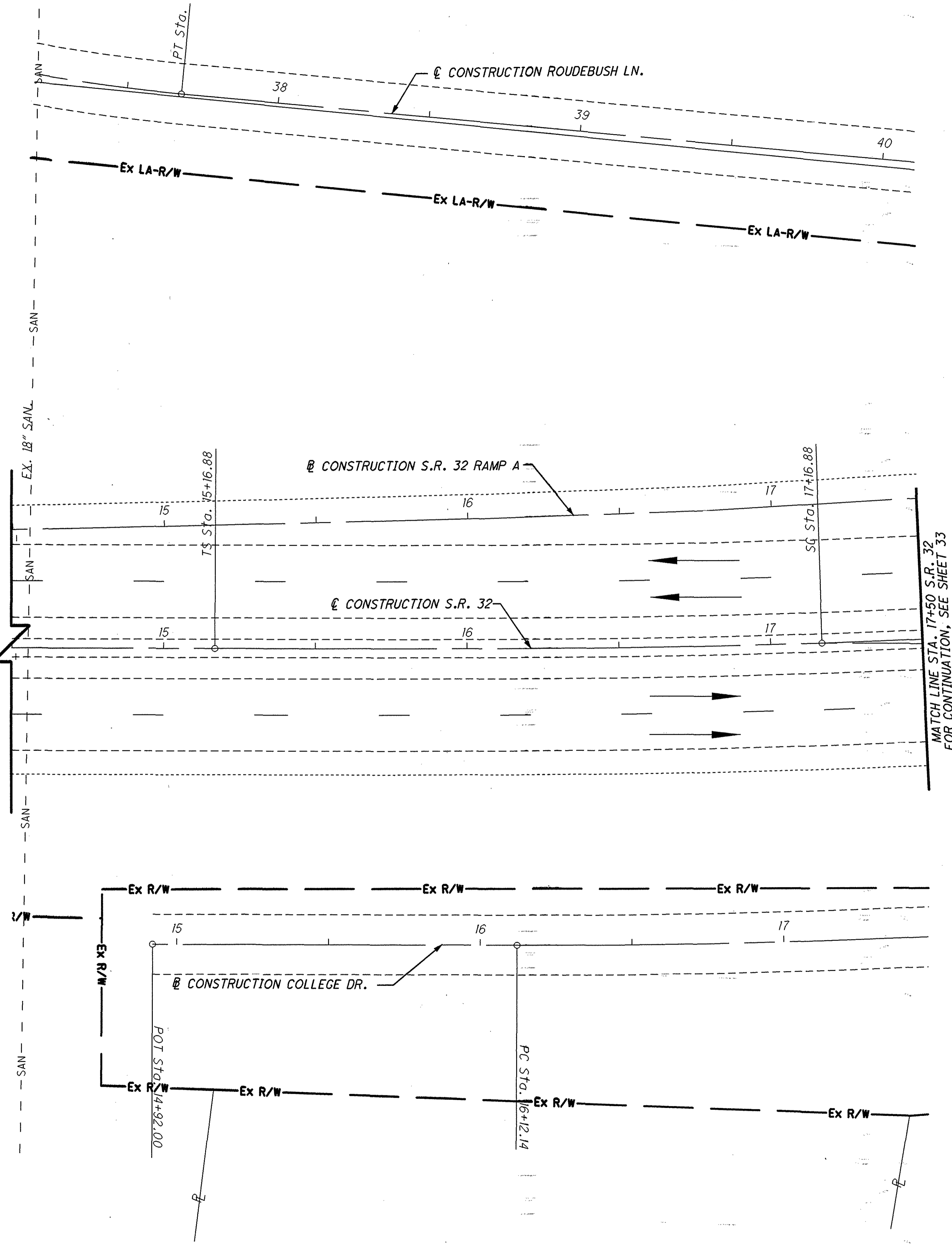
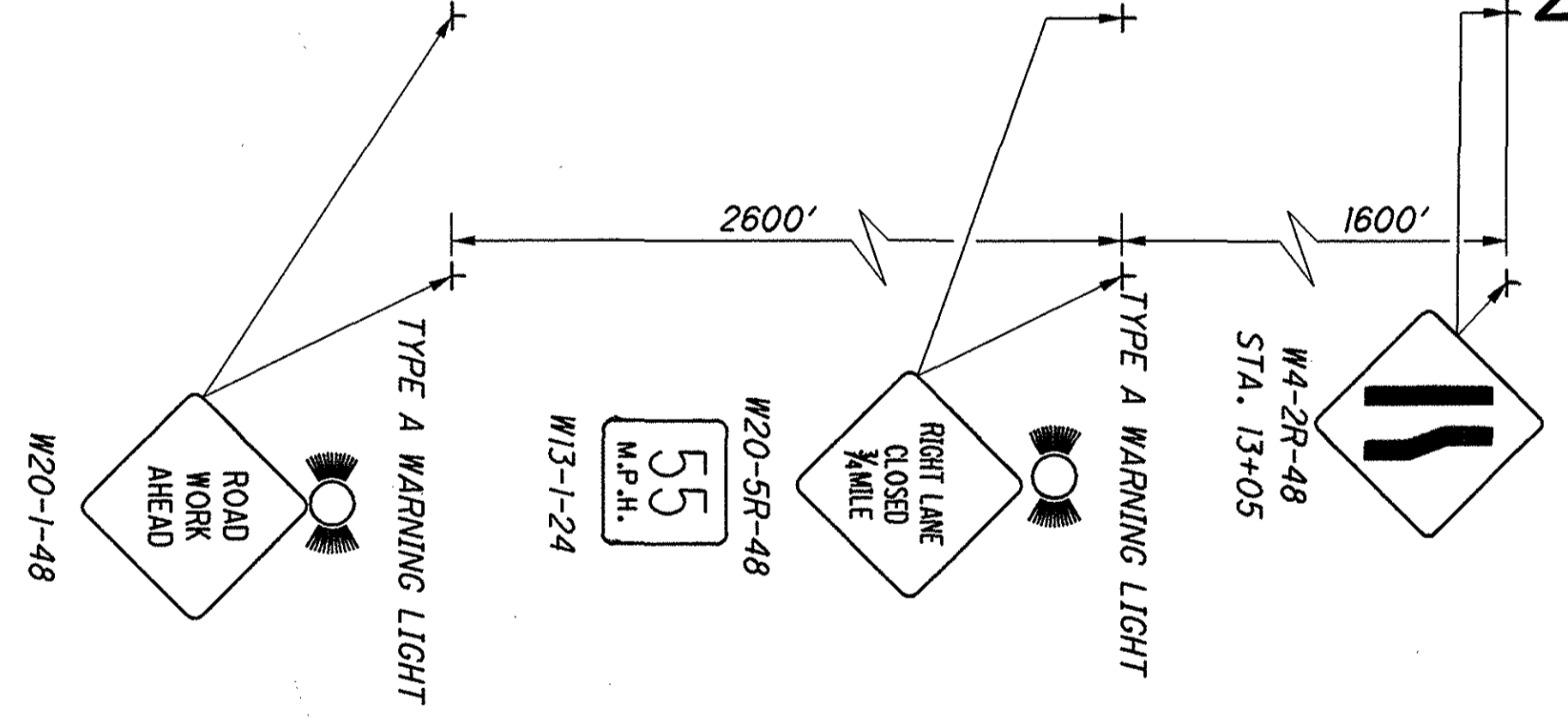


NOTE:
1. FOR LEGEND, SEE SHEET 13.



MAINTENANCE OF TRAFFIC PLAN - PHASE 1
STA. 87+50 TO STA. 145+43.33

CLE-32-3.57 /
6.82 / 6.94 / 7.32



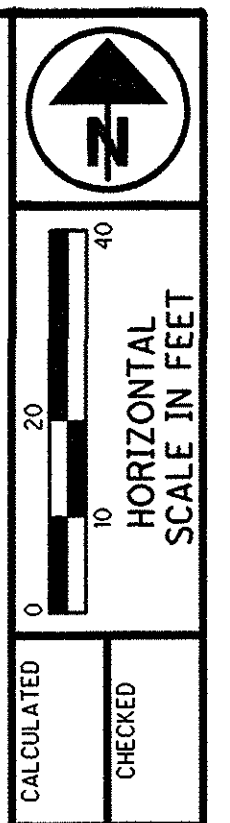
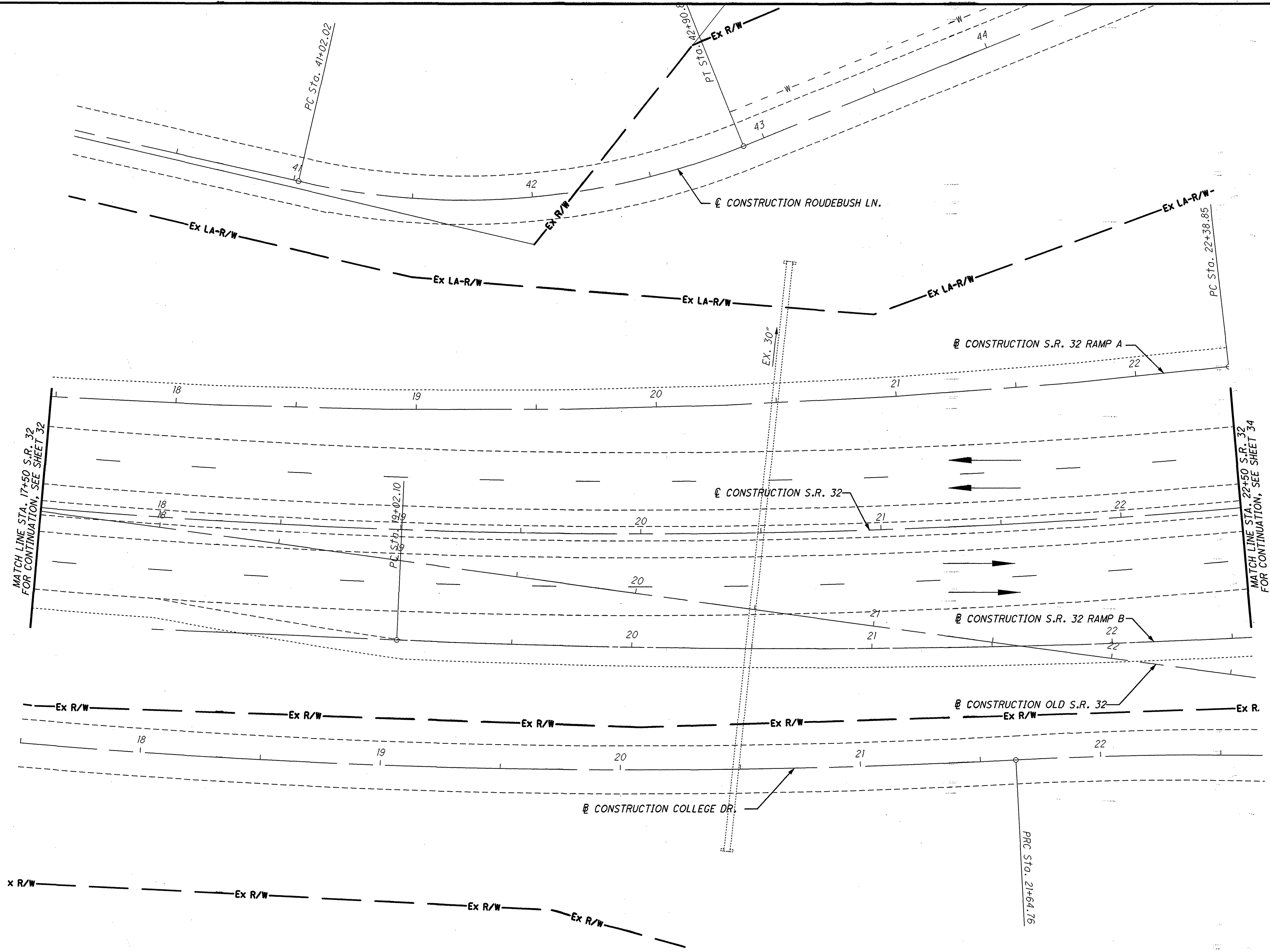
CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN- PHASE 2
BEGIN PROJECT TO STA. 17+50**

**CLE-32-3.57 /
6.82 / 6.94 / 7.32**

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final_Tracings\ODOT_Mod\24955MP021.dgn 31-JAN-2007 9:55AM charvill

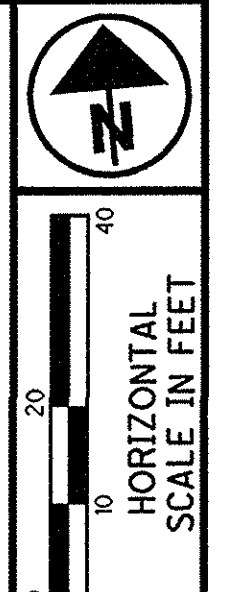


MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 17+50 TO STA. 22+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

CALCULATED
CHECKED

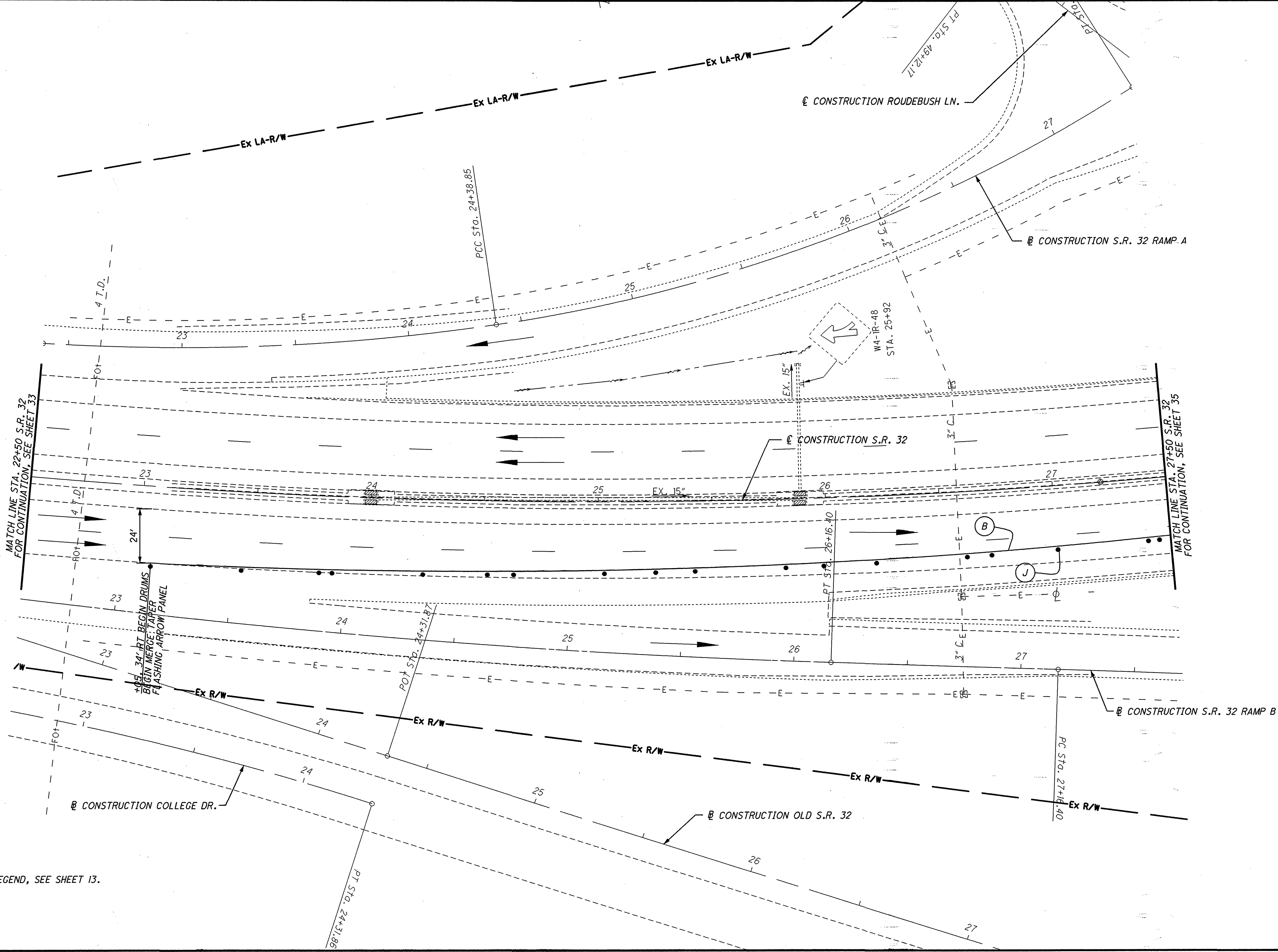
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP022.dgn 31-JAN-2007 9:55AM charvill



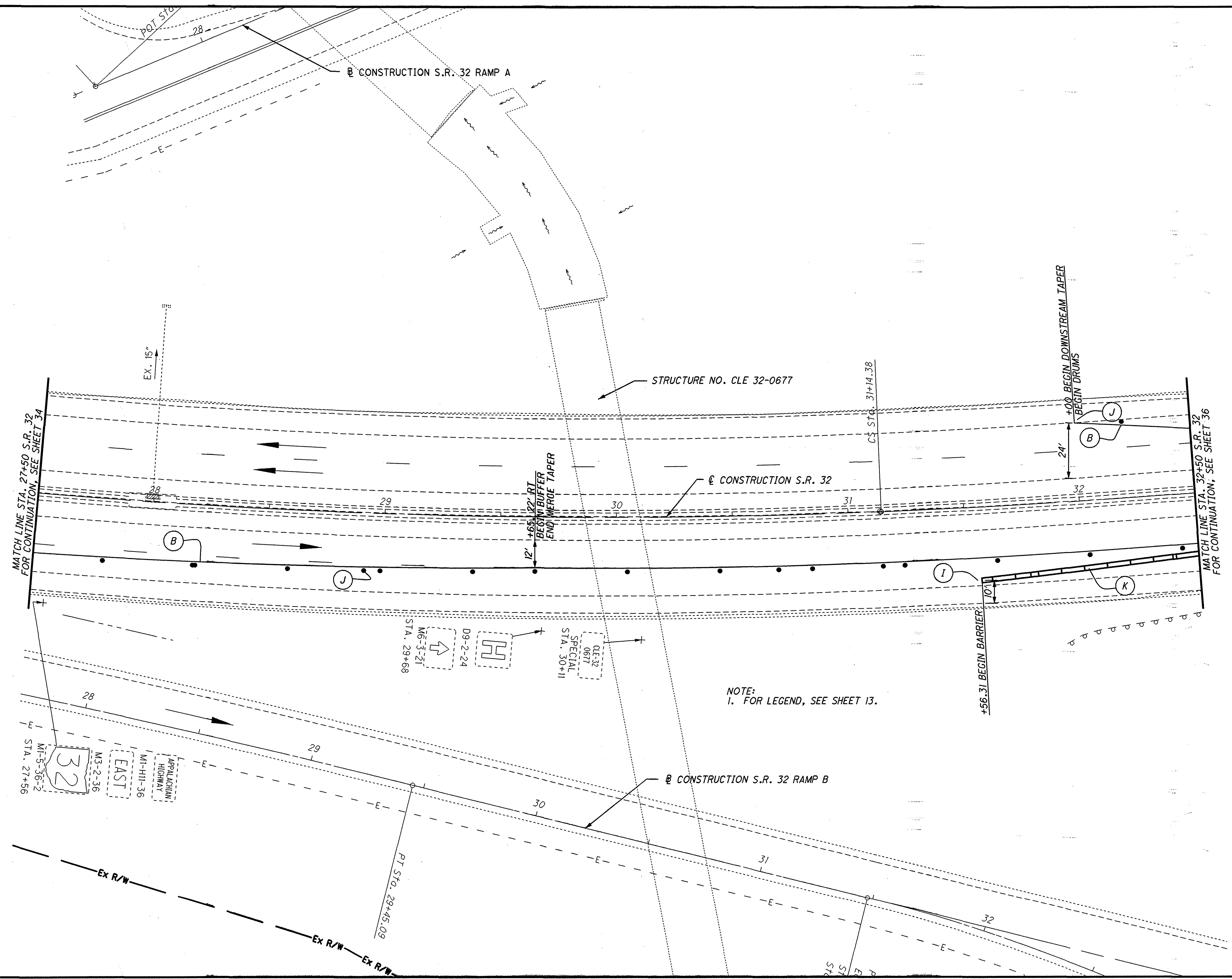
CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 22+50 TO STA. 27+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



NOTE:
1. FOR LEGEND, SEE SHEET 13.



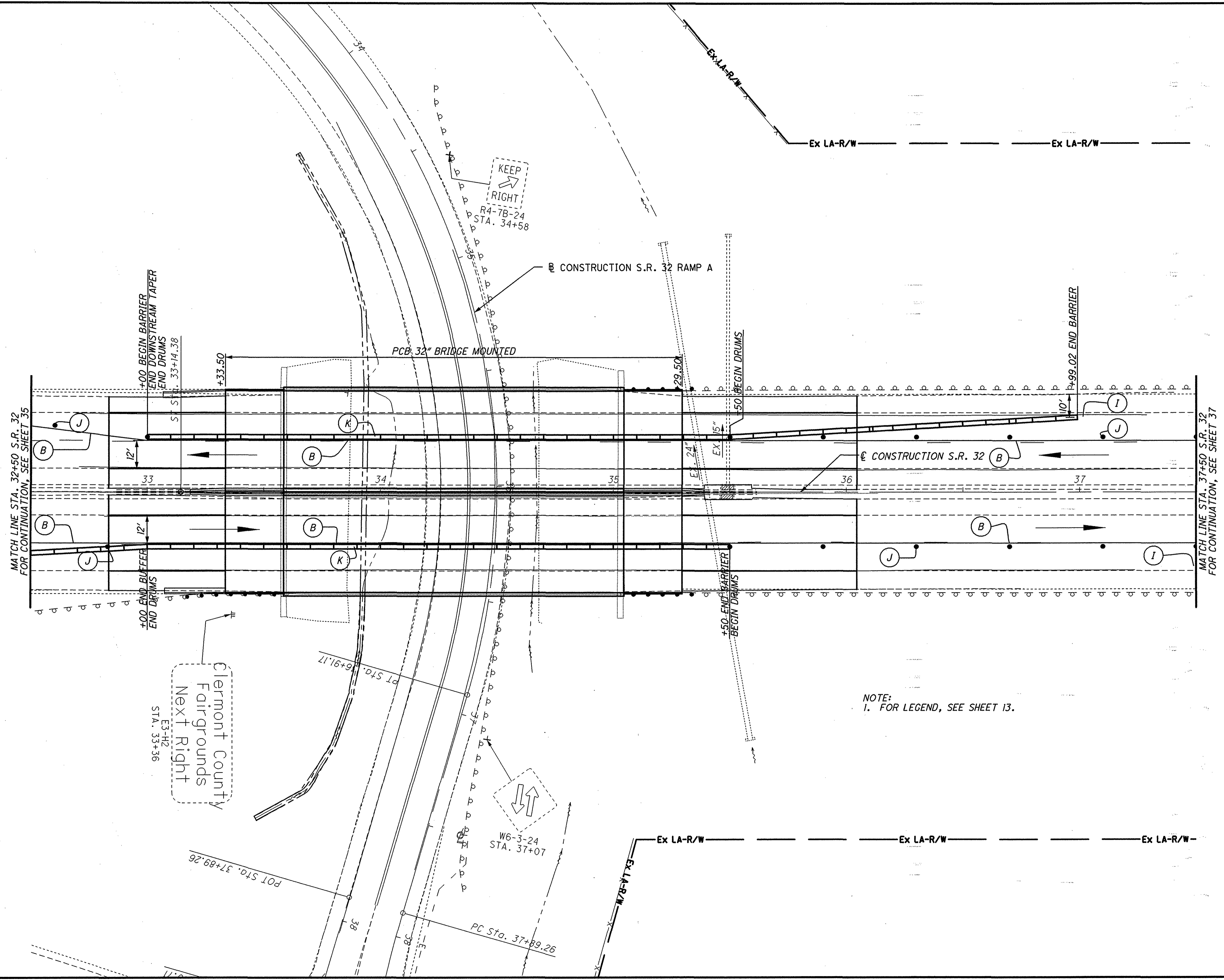
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 27+50 TO STA. 32+50

CLE-32-3.57 / 6.82 / 6.94 / 7.32



NOTE:
1. FOR LEGEND, SEE SHEET 13.

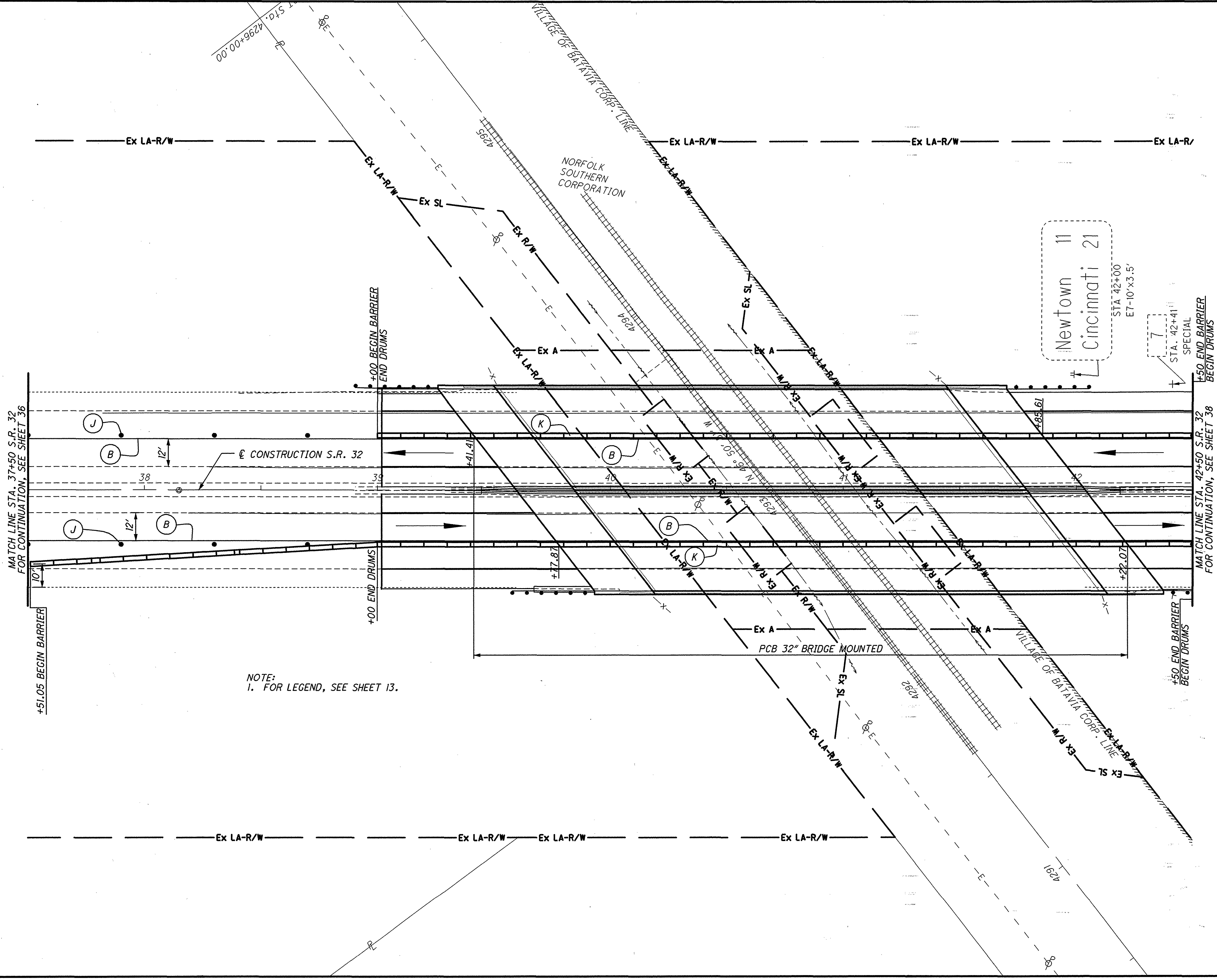
CALCULATED
CHECKED

0 10 20 40
HORIZONTAL SCALE IN FEET

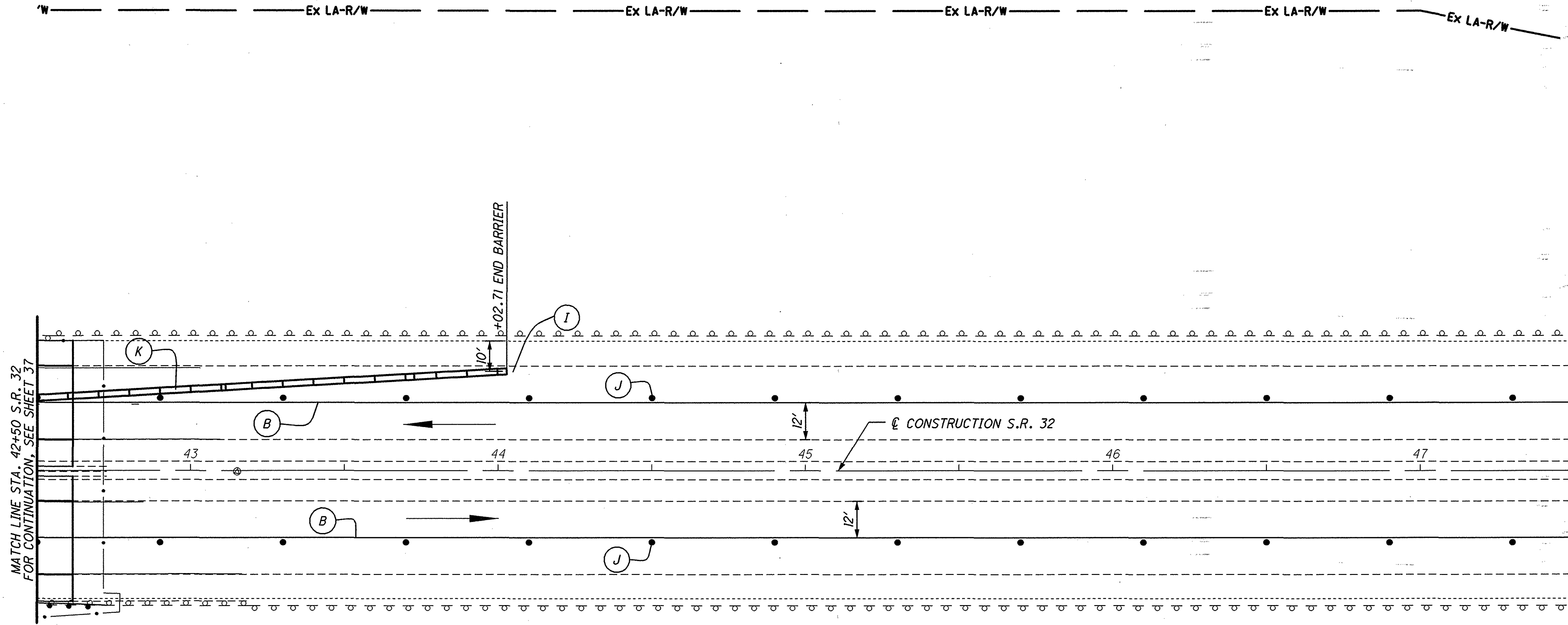
N

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 32+50 TO STA. 37+50

CLE-32-3.57
6.82/6.94/7.32



I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP026.dgn 31-JAN-2007 10:04AM charvill



NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

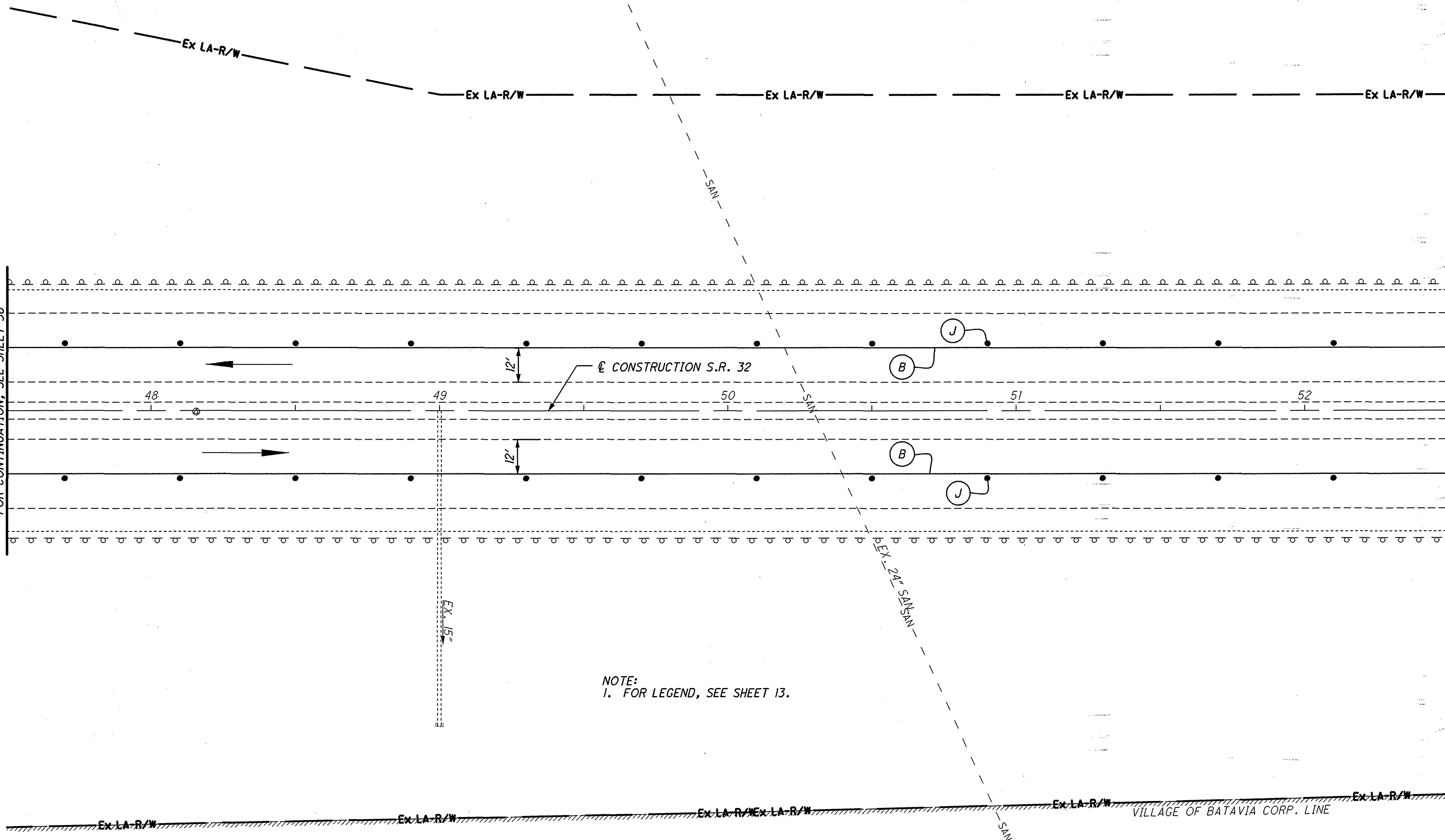
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 42+50 TO STA. 47+50

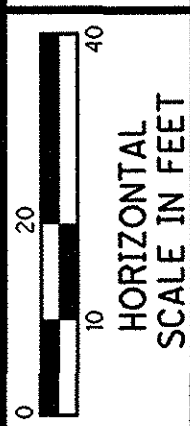
CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP027.dgn 31-JAN-2007 10:39AM charvill

MATCH LINE STA. 47+50 S.R. 32
FOR CONTINUATION, SEE SHEET 38



NOTE:
1. FOR LEGEND, SEE SHEET 13.

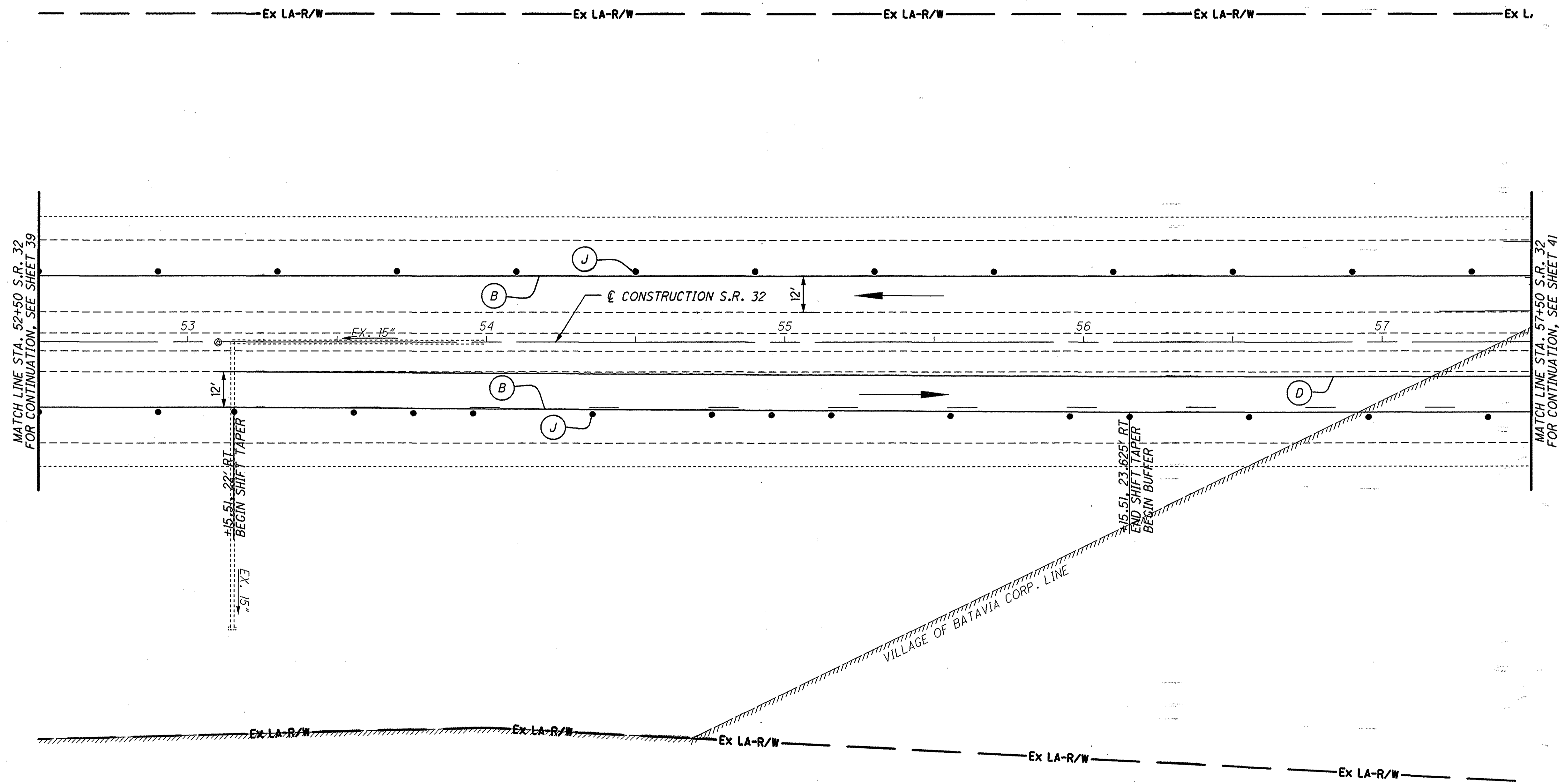


CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 47+50 TO STA. 52+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MP028.dgn 31-JAN-2007 10:38AM charvill



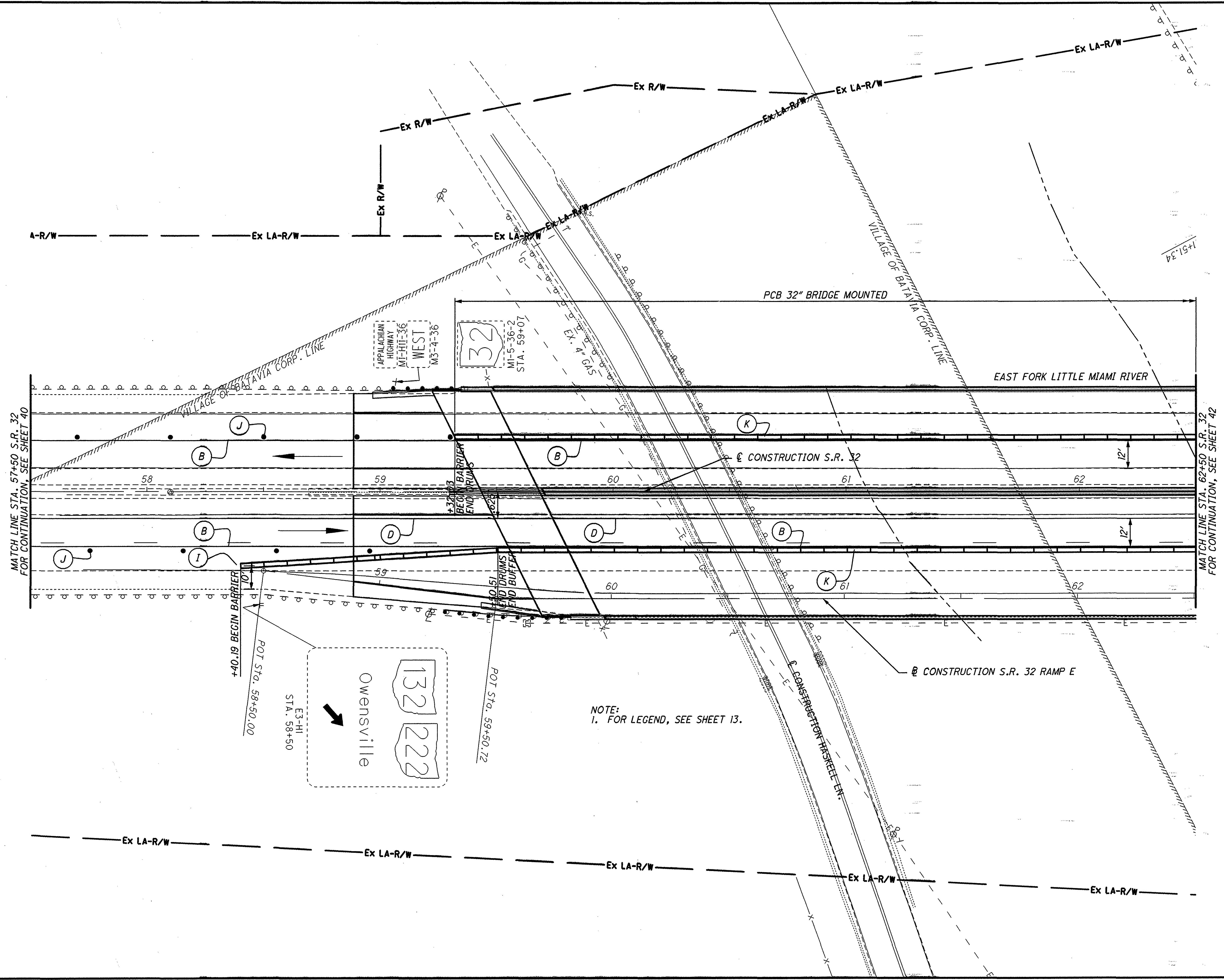
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

0 10 20 40
HORIZONTAL
SCALE IN FEET

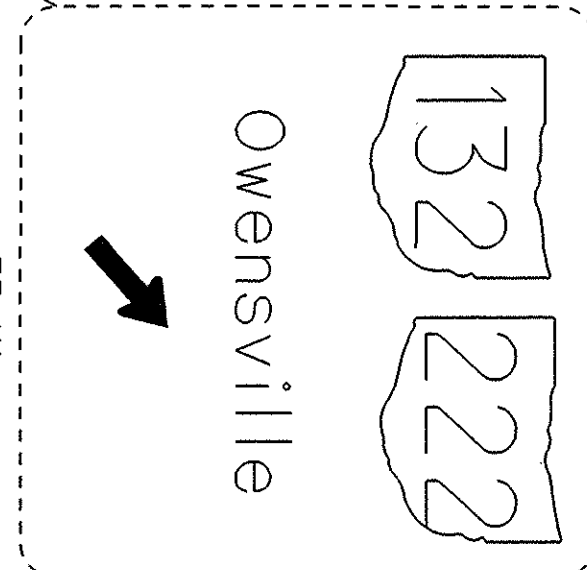
MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 52+50 TO STA. 57+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



MATCH LINE STA. 57+50 S.R. 32
FOR CONTINUATION, SEE SHEET 40

MATCH LINE STA. 62+50 S.R. 32
FOR CONTINUATION, SEE SHEET 42



NOTE:
1. FOR LEGEND, SEE SHEET 13.

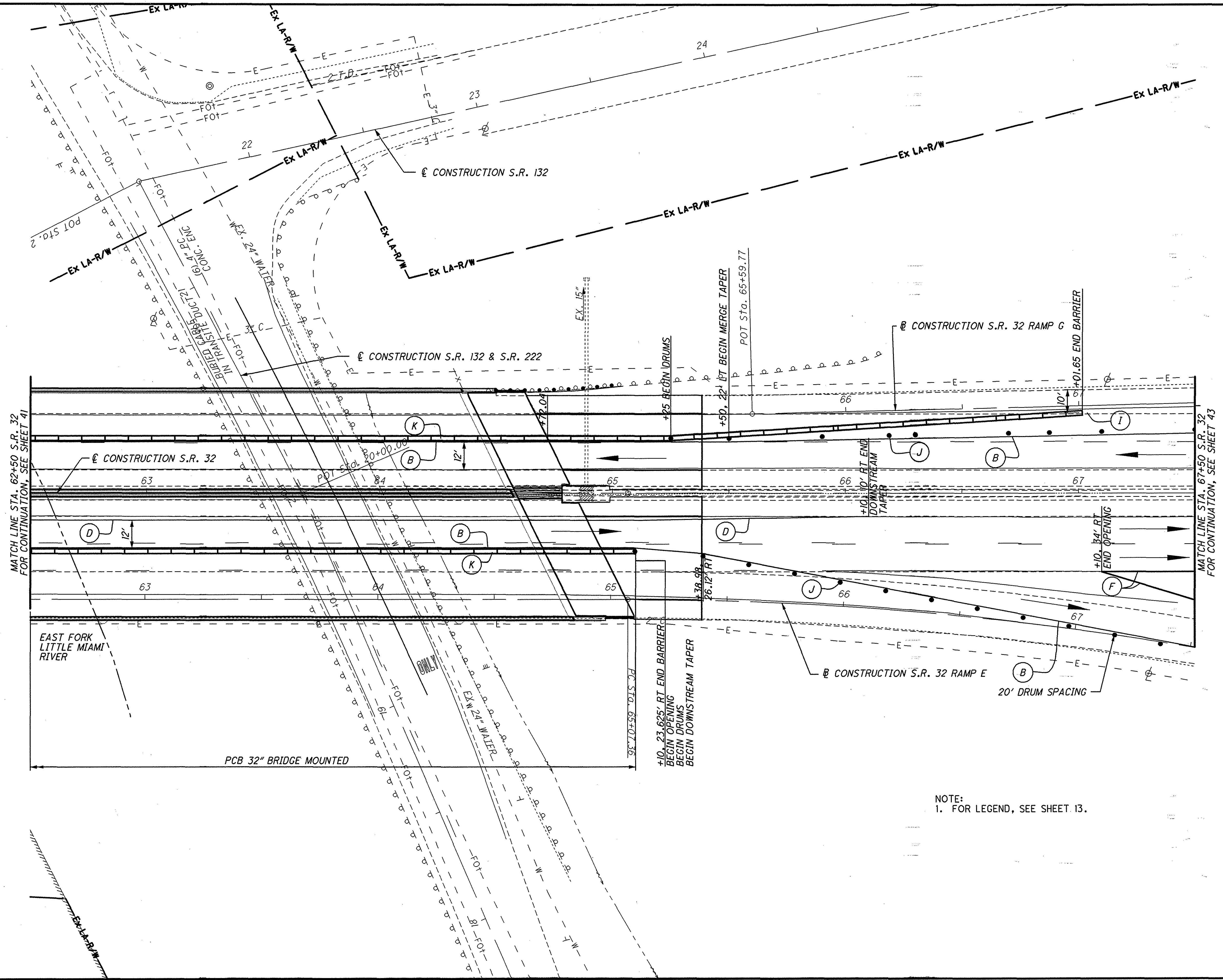
CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 57+50 TO STA. 62+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

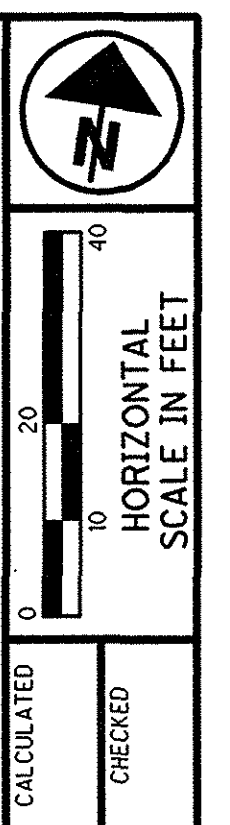
I:\projects\CLE\sr032\06.82_PID24955\Final Tracings\ODOT Mod\24955MP030.dgn 31-JAN-2007 10:37AM charvill



MATCH LINE STA. 62+50 S.R. 32
FOR CONTINUATION, SEE SHEET 41

MATCH LINE STA. 67+50 S.R. 32
FOR CONTINUATION, SEE SHEET 43

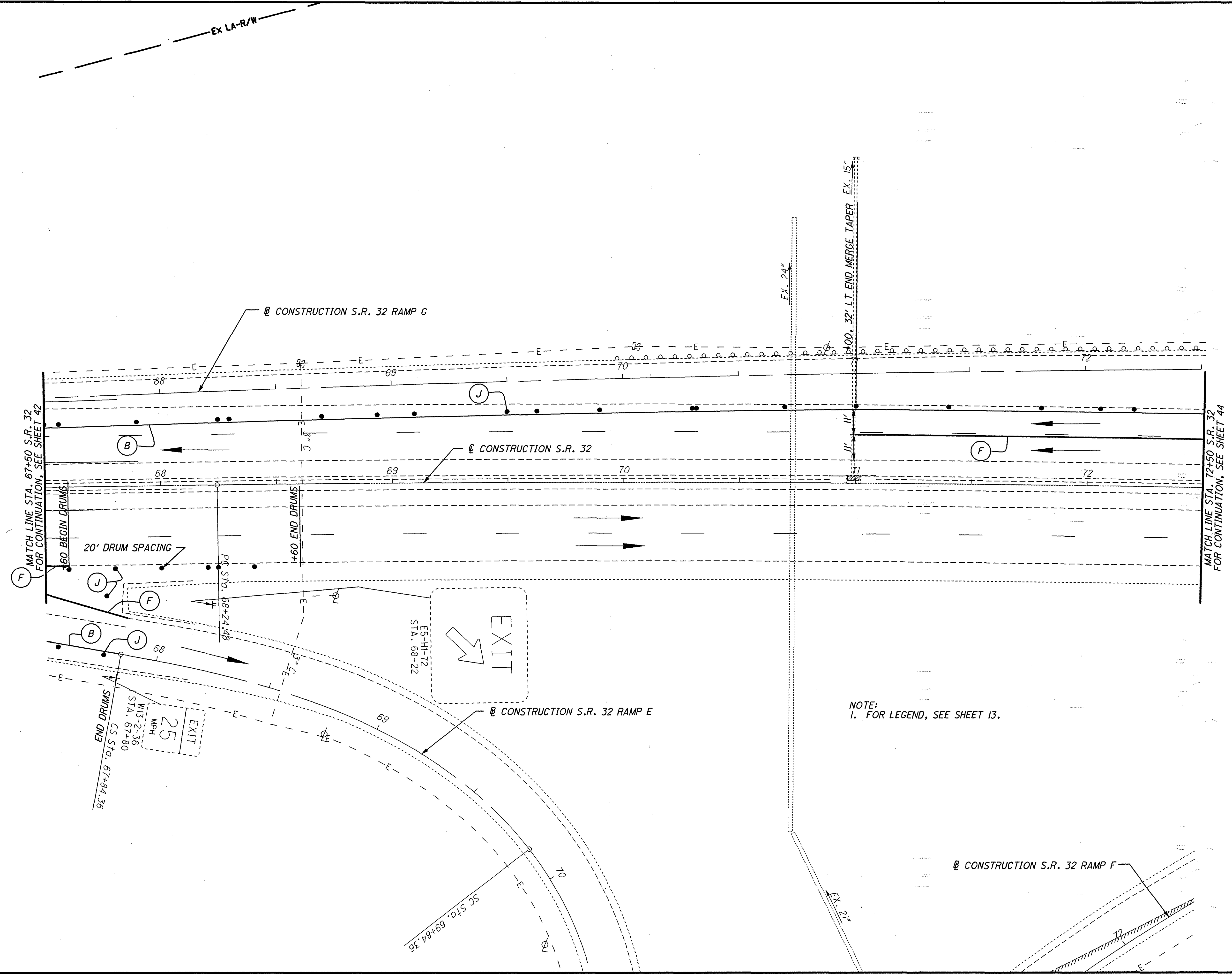
NOTE:
1. FOR LEGEND, SEE SHEET 13.



CALCULATED
CHECKED
MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 62+50 TO STA. 67+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\24955MP031.dgn 31-JAN-2007 10:47AM charvill



NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED
CHECKED

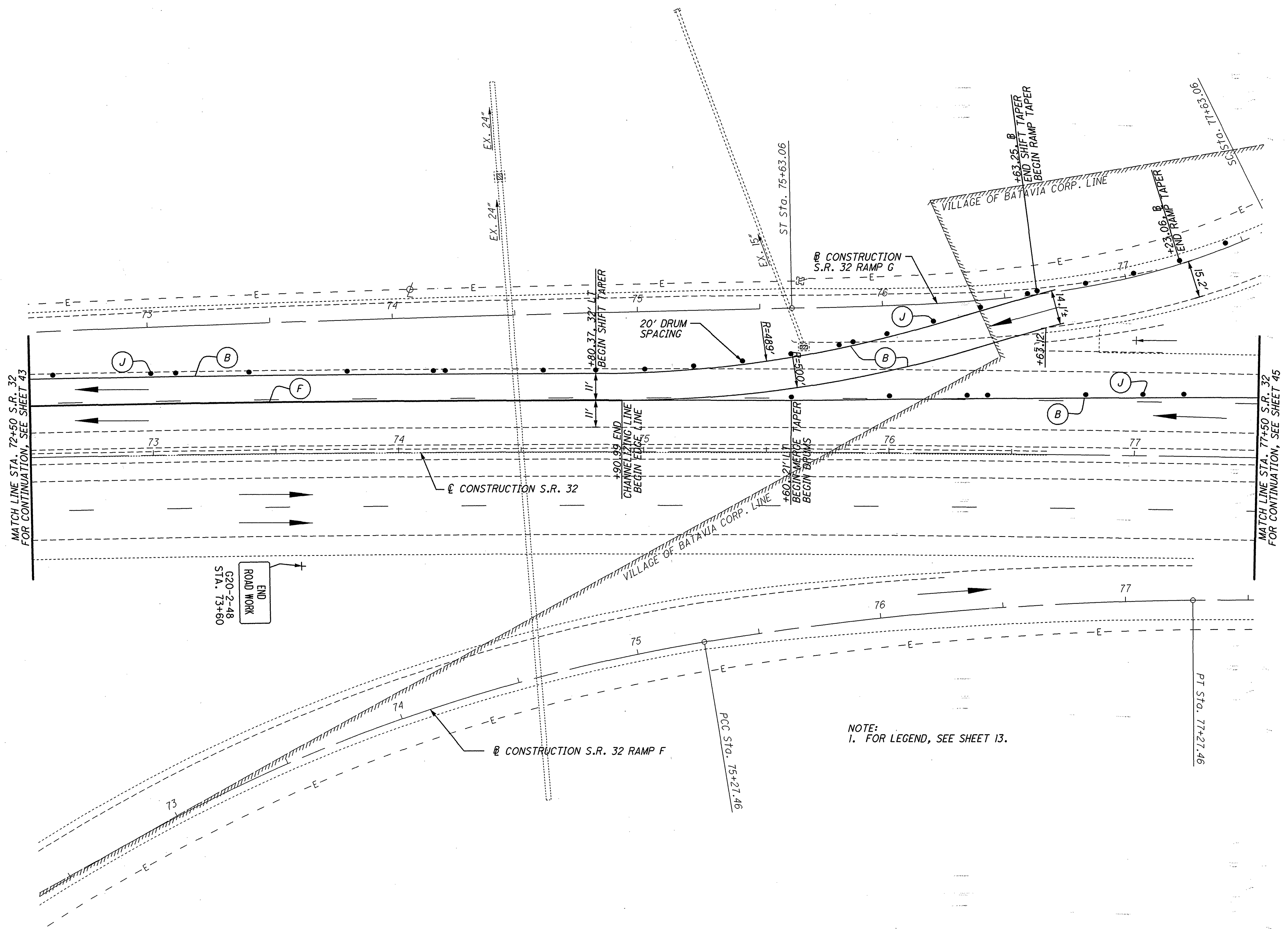
0 10 20 40
HORIZONTAL
SCALE IN FEET

↑
N

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 67+50 TO STA. 72+50

CLE-32-3.57 / 6.82 / 6.94 / 7.32

43
156



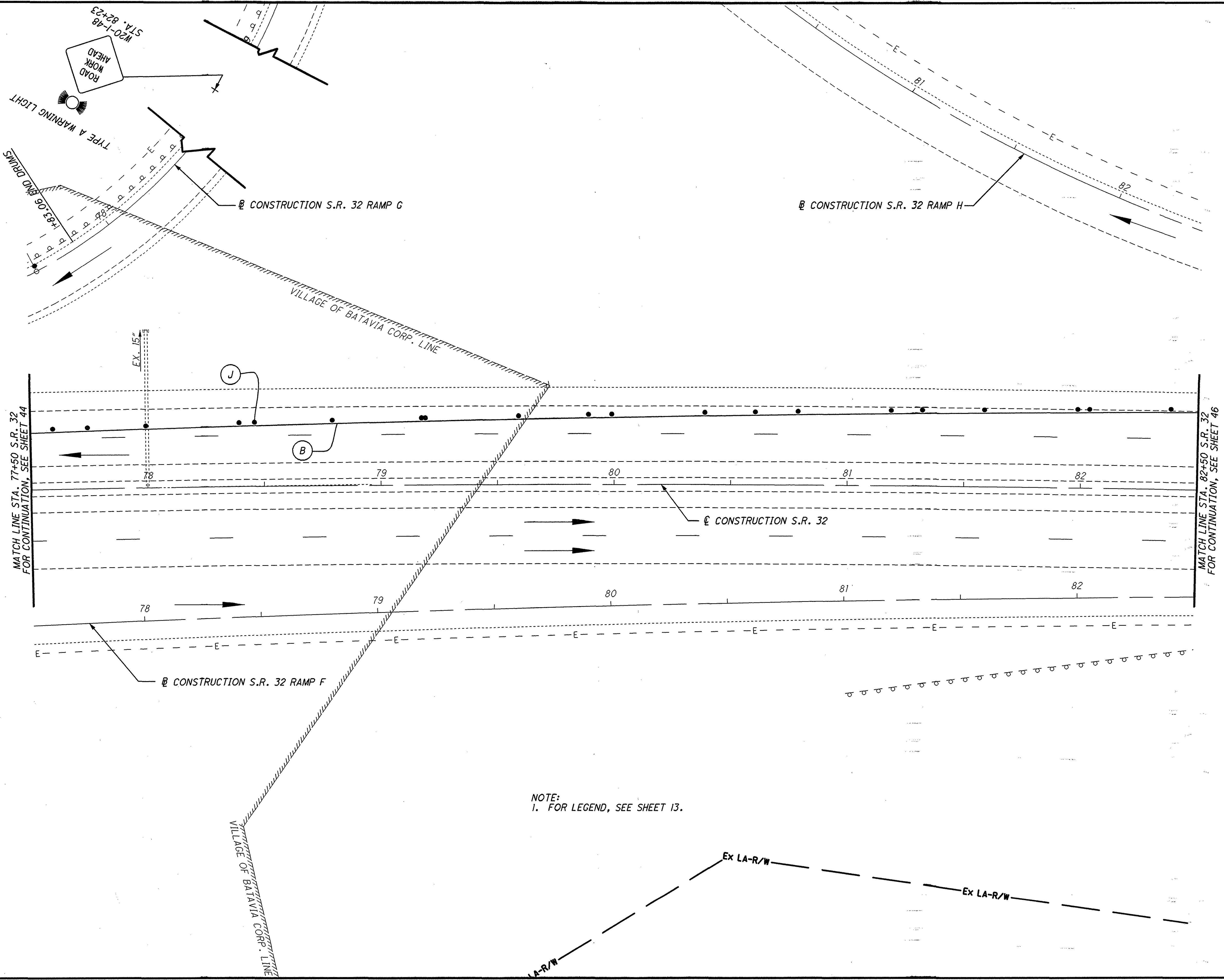
NOTE:
1. FOR LEGEND, SEE SHEET 13.

CALCULATED _____
CHECKED _____

0 10 20 40
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 72+50 TO STA. 77+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



NOTE:
1. FOR LEGEND, SEE SHEET 13.

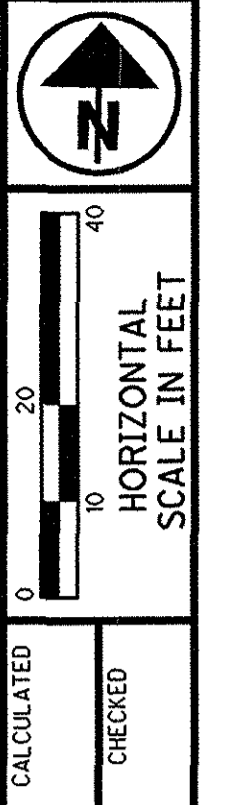
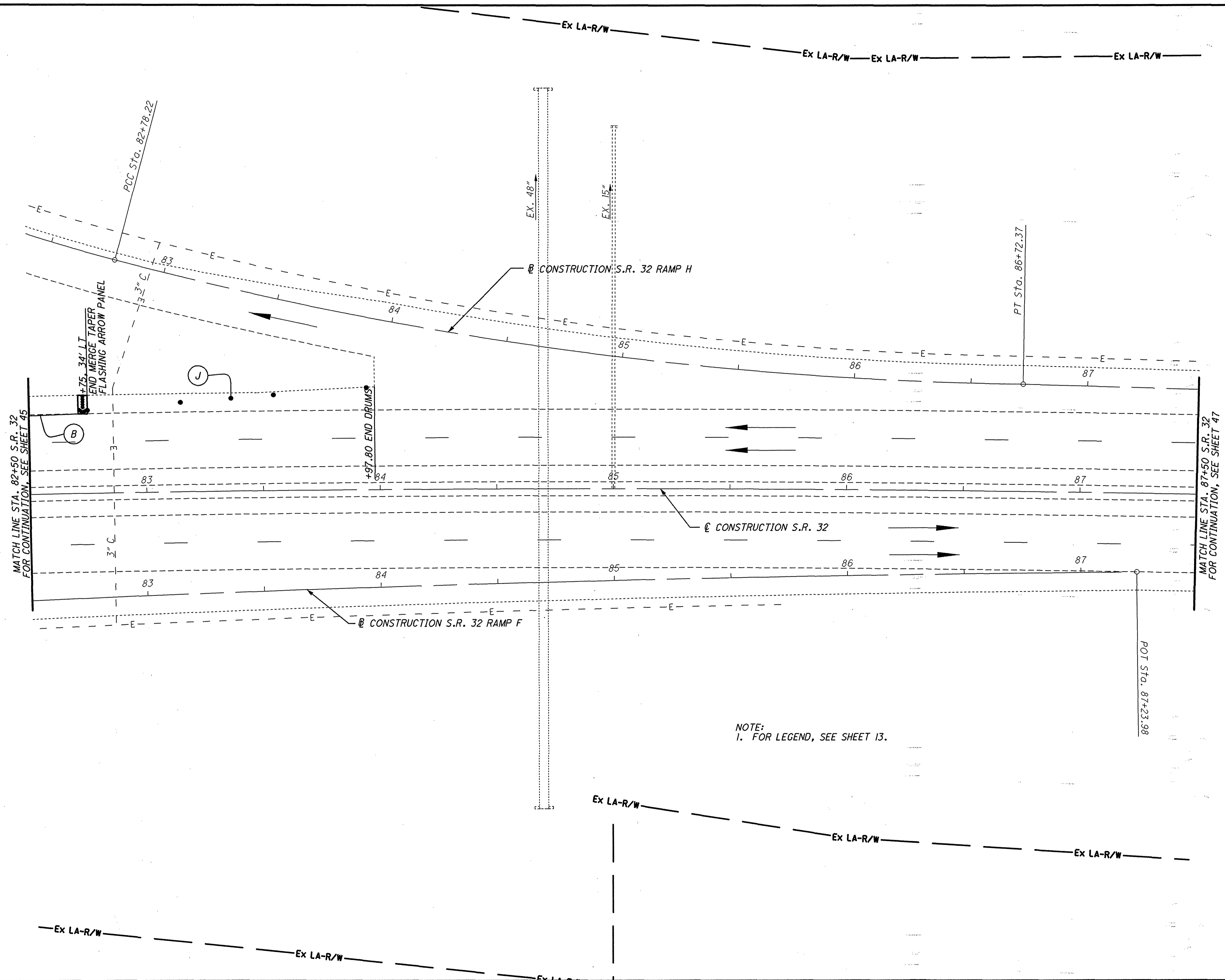
CALCULATED
CHECKED

0 10 20 40
HORIZONTAL
SCALE IN FEET

↑
N

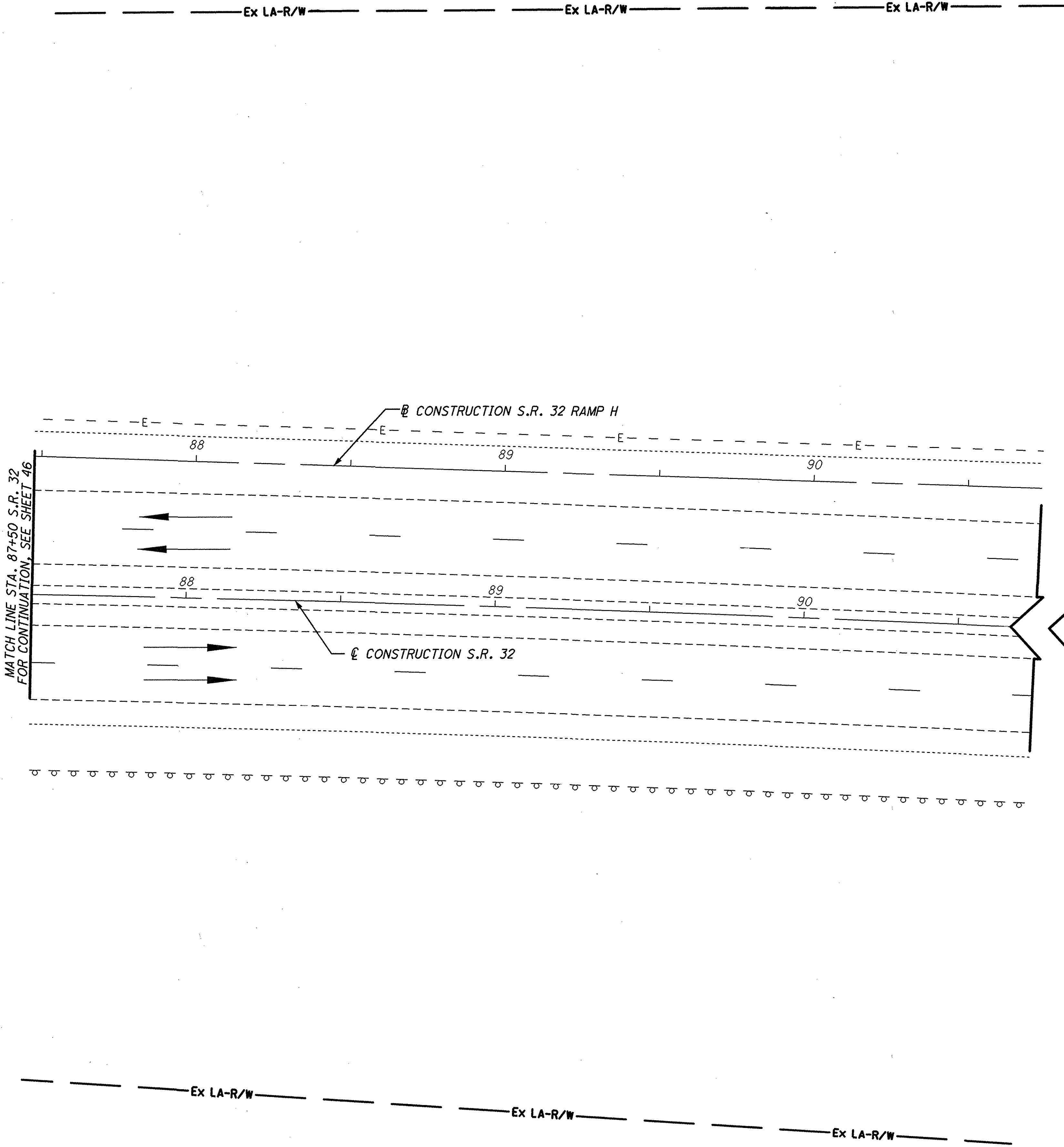
MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 77+50 TO STA. 82+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 82+50 TO STA. 87+50

CALCULATED
 CHECKED



MATCH LINE STA. 87+50 S.R. 32
FOR CONTINUATION, SEE SHEET 46

NOTE:
1. FOR LEGEND, SEE SHEET 13.

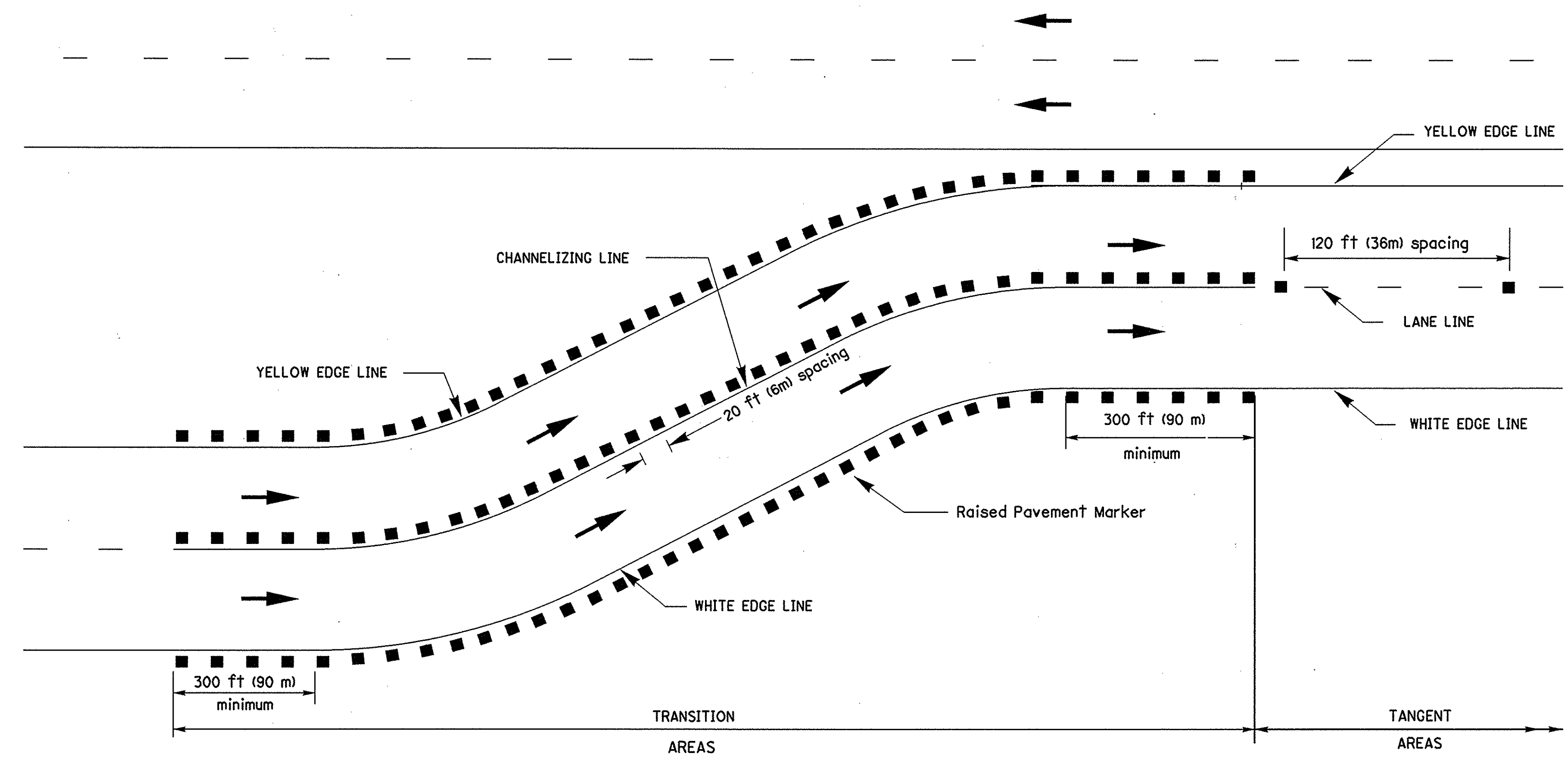
CALCULATED
CHECKED

0 10 20 40
HORIZONTAL
SCALE IN FEET

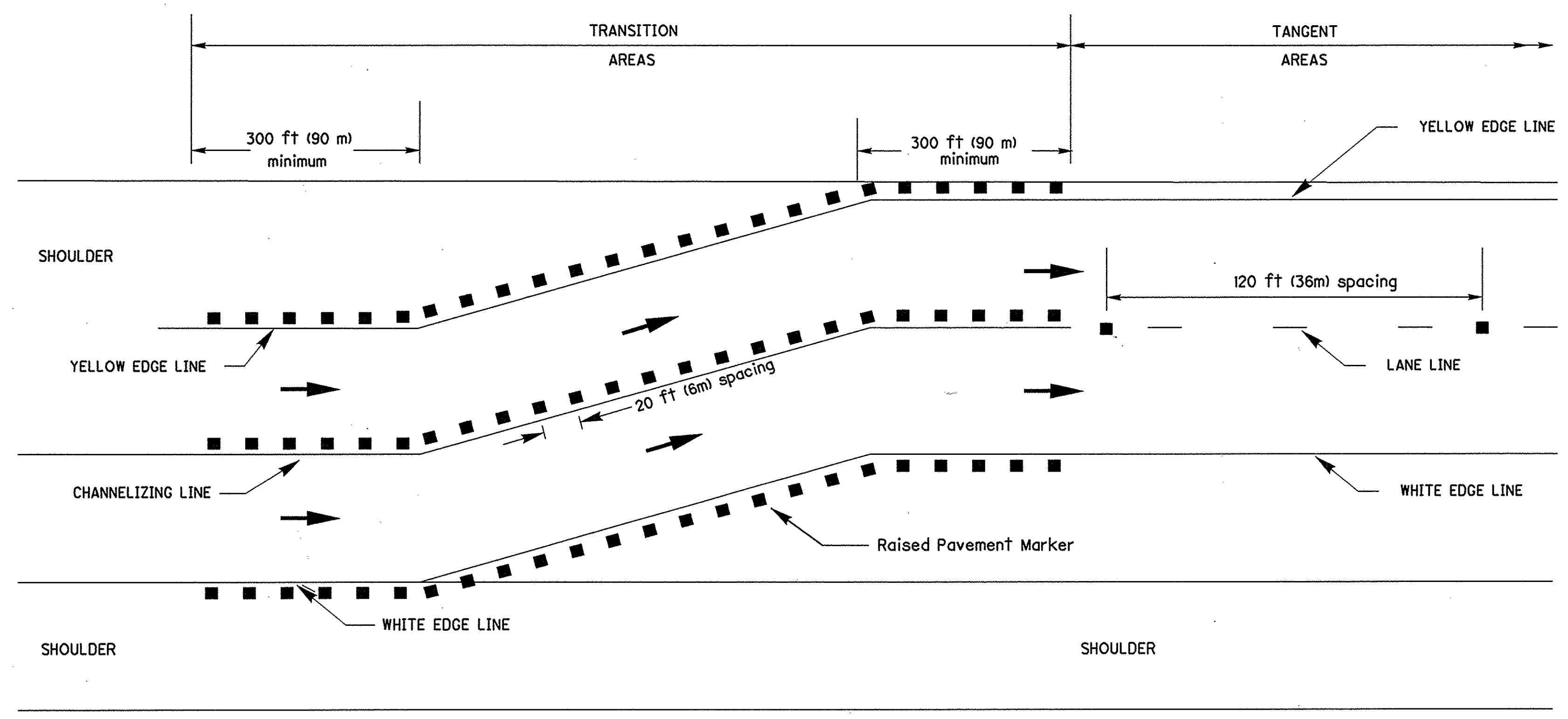
MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 87+50 TO STA. 136+00

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\209930_042106_v8.dgn 31-JAN-2007 1:49PM charvill



WORK ZONE DELINEATION FOR CROSSOVERS



WORK ZONE DELINEATION FOR LANE SHIFTS

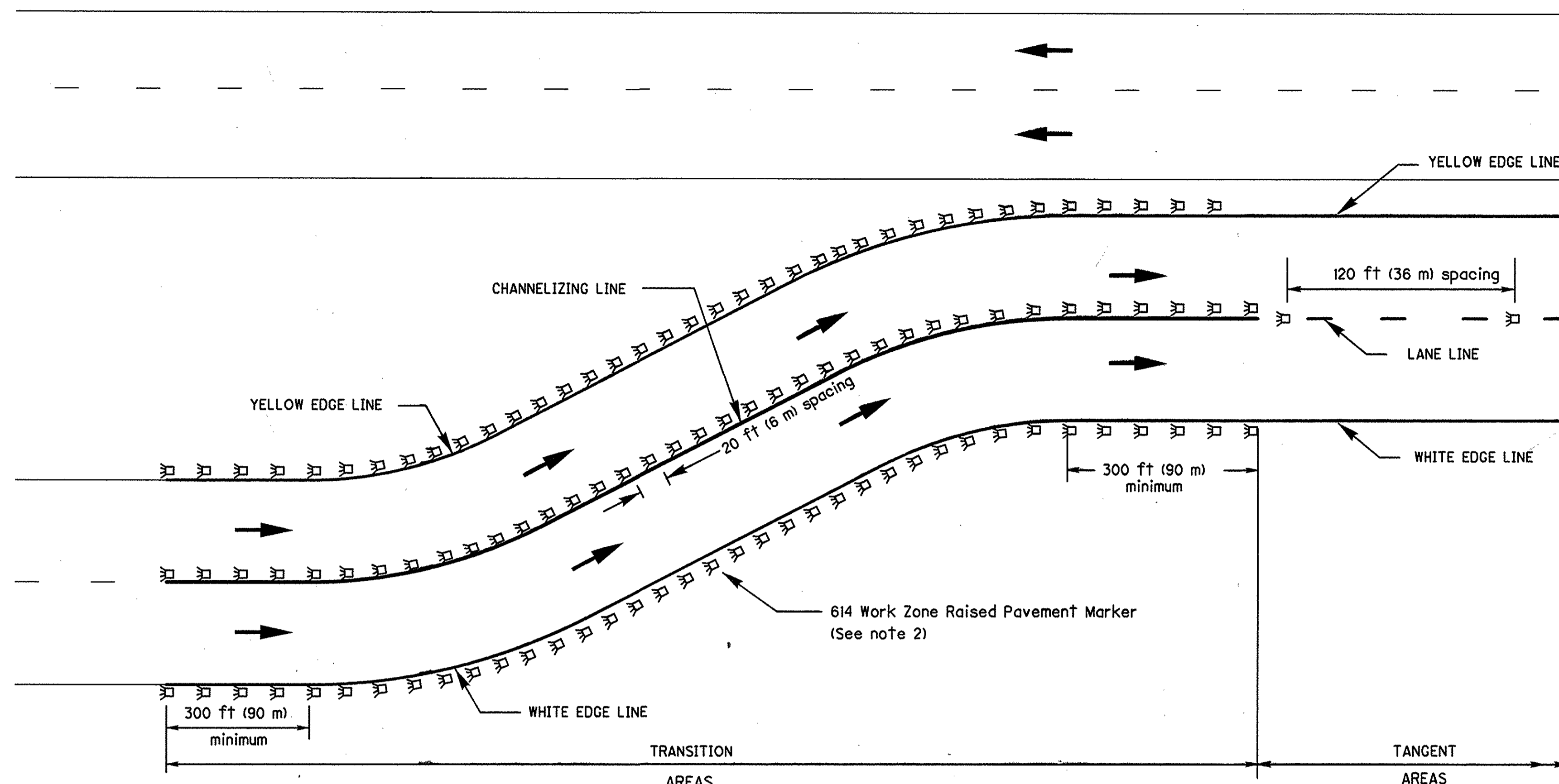
LEGEND

■	RPM
➔	DIRECTION OF TRAVEL

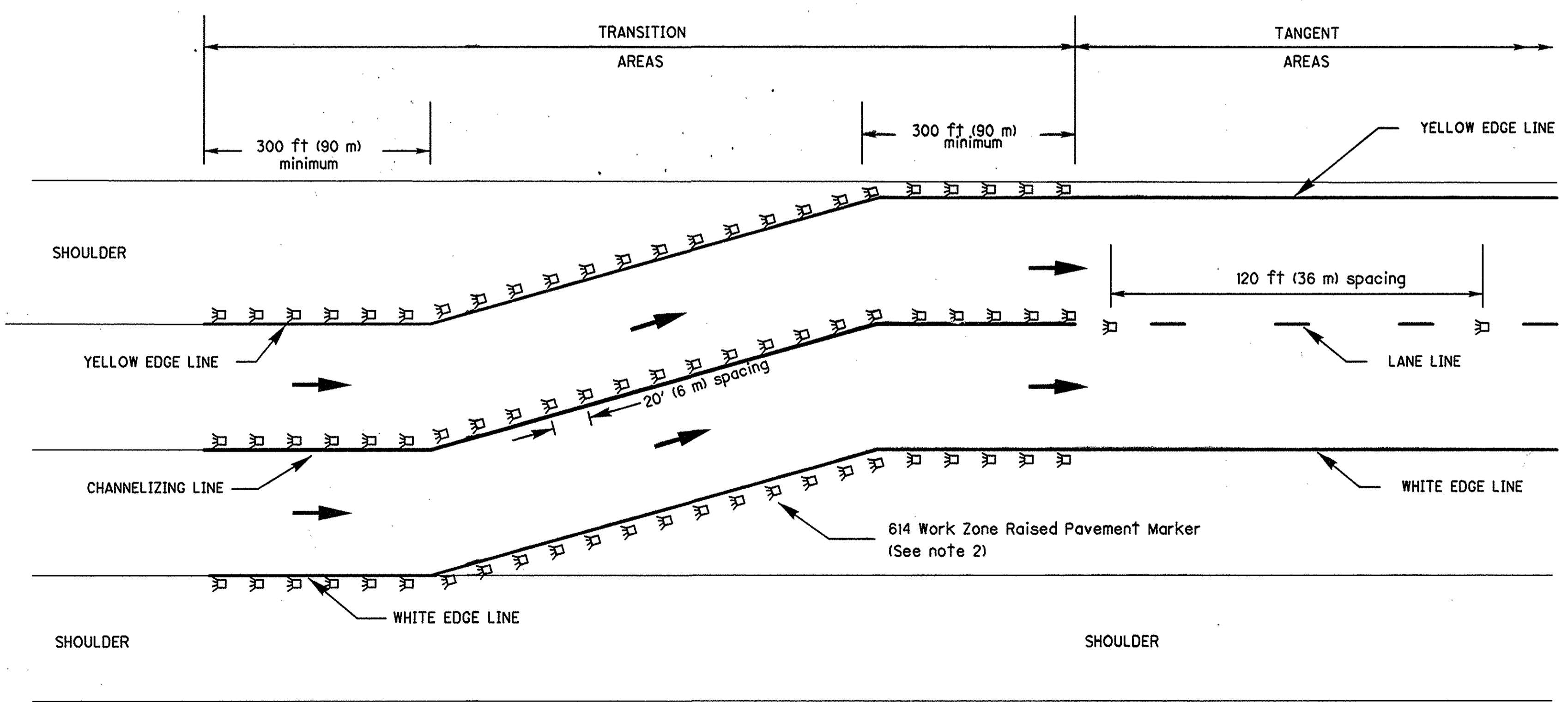
NOTES

- This drawing presents delineation procedures for freeways and expressways on asphalt surfaces. Procedures are provided for transition areas and for tangent areas. The procedures for transition areas apply to crossovers and to lane shifts of 4 feet (1.2 m) or greater. Delineation of transition areas for shifts of less than 4 feet (1.2 m) shall be as per the tangent area delineation.
- Raised Pavement Markers shall meet the following seasonal specifications:
 - Raised Pavement Markers in place during the normal construction season may be either 621 Raised Pavement Markers or 614 Work Zone Raised Pavement Markers (WZRPMs). The normal construction season with regard to use of WZRPMs shall be the period from April 1 through October 15.
 - At locations where it is intended that Raised Pavement Markers will winter over, 621 Raised Pavement Markers shall be provided.
 - At locations where it is intended that work will continue beyond October 15 but will be completed prior to the beginning of snow-plowing season, 614 WZRPMs may remain in place until such time. Snow-plowing season shall be as specified in the plans. If snow-plowing season is not specified in the plans, it shall be assumed that snow-plowing season runs from October 16 through March 31. If project delays, not the fault of ODOT, cause work to extend into the snow-plowing season, the contractor shall be responsible for replacing WZRPMs with 621 Raised Pavement Markers, as determined by the Engineer, at the contractor's expense.
- All material furnished shall be listed on the Department's Prequalified Lists.
- The geometrics of the crossover shall be as shown in the plans. Additional details are provided in Standard Construction Drawing MT-95.70.
- See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.
- Spacing of raised pavement markers (RPMs) shall be at 20 feet (6 m) center-to-center for all long-line marking within transition areas. Within tangent areas RPMs shall be provided only along the lane lines, spaced at 120 foot (36 m) center-to-center.
- The RPMs shall be 1-way, facing oncoming traffic, and shall be white or yellow to match the color of the associated line marking.
- Along the edge lines, the RPMs shall be offset a maximum of 4 inches (100 mm) to the outside of the lines. Along the channelizing lines, the RPMs shall be offset to the left of the lines by no more than 1 inch (25 mm). Along the lane lines the RPMs shall be centered between dashes.
- The RPMs shall be removed when they are no longer appropriate.
- Holes resulting from removal of 621 RPMs shall be filled as per 202.10. If removal of the 621 RPMs does not take place immediately after the highlighted alignment becomes invalid, the reflectors within the 621 RPMs shall be removed.
- Following removal of 621 RPMs resurfacing of the transition shall be performed. The resurfacing shall be performed at the time the surface course is being applied. In preparation for resurfacing, the existing pavement shall be removed to a depth necessary to match the level of the intermediate course of the proposed pavement.

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\209931_042106_v8.dgn 31-JAN-2007 1:49PM charvill



WORK ZONE DELINEATION FOR CROSSOVERS



WORK ZONE DELINEATION FOR LANE SHIFTS

NOTES

1. This drawing presents delineation procedures for freeways and expressways on concrete surfaces. Procedures are provided for transition areas and for tangent areas. The procedures for transition areas apply to crossovers and to lane shifts of 4 feet (1.2 m) or greater. Delineation of transition areas for shifts of less than 4 feet (1.2 m) shall be as per the tangent area delineation.
2. The Work Zone Raised Pavement Markers (WZRPMS) shown on this drawing are intended for use only during the non-snow-plowing season. WZRPMS shall not be provided during the snow-plowing season. The snow-plowing season shall be from October 16 through March 31 or as otherwise specified in the plans. Where a temporary alignment will remain in use through the winter, the WZRPMS shall be removed prior the beginning of snow-plowing season and replaced approximately April 1, or as otherwise determined by the Engineer.
3. All material furnished shall be listed on the Department's Qualified Products Lists.
4. The geometrics of the crossover shall be as shown in the plans. Additional details are provided in Standard Construction Drawing MT-95.70.
5. See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.
6. Spacing of WZRPMS shall be at 20 feet (6 m) center-to-center for all long-line marking within transition areas. Within tangent areas WZRPMS shall be provided only along the lane lines, spaced at 120 feet (36 m) center-to-center.
7. The WZRPMS shall be 1-way, facing oncoming traffic, and shall be white or yellow to match the color of the associated line marking.
8. Along the edge lines, the WZRPMS shall be offset a maximum of 4 inches (100 mm) to the outside of the lines. Along the channelizing lines, the WZRPMS shall be offset to the left of the lines by no more than 1 inch (25 mm). Along the lane lines the WZRPMS shall be centered between dashes.
9. The WZRPMS shall be removed when they are no longer appropriate.

LEGEND

	WORK ZONE RPM, TYPE A
	DIRECTION OF TRAVEL

4-21-06

**WORK ZONE DELINEATION ON
CONCRETE SURFACES**

CLE-32-3.57/
6.82/6.94/7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\G001.dgn 31-JAN-2007 7:37AM charvill

SHEET NUMBER												ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	8	52	58	59	60	70	75	82	91	92							
												ROADWAY					
LUMP												201	11000	LUMP		CLEARING AND GRUBBING	
			1									202	20010	1	EACH	HEADWALL REMOVED	
		49										202	32500	49	FT	CURB AND GUTTER REMOVED	
			15									202	35100	15	FT	PIPE REMOVED, 24" AND UNDER	
		460										202	38000	460	FT	GUARDRAIL REMOVED	
			10									202	47000	10	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
												202	75300	1	EACH	PULL BOX REMOVED	
						404	40					203	10000	444	CU YD	EXCAVATION	
						126						203	20000	126	CU YD	EMBANKMENT	
					2321							204	10000	2321	SQ YD	SUBGRADE COMPACTION	
				1								204	45000	1	HOUR	PROOF ROLLING	
									75	60		209	10000	135	FT	DITCH CLEANOUT	
		400										606	13000	400	FT	GUARDRAIL, TYPE 5	
		6										606	35000	6	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
		4										606	35100	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
			5									622	10200	5	EACH	BARRIER TRANSITION	
	LUMP											SPECIAL	69098400	LUMP		MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	8
	LUMP											878	25000	LUMP		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
												EROSION CONTROL					
			242									601	21050	242	SQ YD	TIED CONCRETE BLOCK MAT, TYPE 1	
												601	32100	78	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
			1									601	32200	1	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
123												659	00300	123	CU YD	TOPSOIL	
						710	402					659	10000	1112	SQ YD	SEEDING AND MULCHING	
												659	14000	56	SQ YD	REPAIR SEEDING AND MULCHING	
56												659	15000	56	SQ YD	INTER-SEEDING	
0.15												659	20000	0.15	TON	COMMERCIAL FERTILIZER	
0.23												659	31000	0.23	ACRE	LIME	
6												659	35000	6	M GAL	WATER	
												659	40000	3	M SQ FT	MOWING	
						LUMP						832	15000	LUMP		STORM WATER POLLUTION PREVENTION PLAN	
						5000						832	30000	5000	EACH	EROSION CONTROL	
												DRAINAGE					
			0.7									602	20000	0.7	CU YD	CONCRETE MASONRY	
			59									603	00510	59	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
			46									603	04600	46	FT	12" CONDUIT, TYPE-C	
			95									603	05900	95	FT	15" CONDUIT, TYPE B	
			26									603	06100	26	FT	15" CONDUIT, TYPE-C	
												604	00800	1	EACH	CATCH BASIN, NO. 3A	
												604	14501	2	EACH	INLET, NO. 3A, AS PER PLAN	8
												605	05200	107	FT	4" UNCLASSIFIED PIPE UNDERDRAINS	
												605	06000	484	FT	4" BASE PIPE UNDERDRAINS	
												PAVEMENT					
												252	01500	509	FT	FULL DEPTH PAVEMENT SAWING	
												254	01000	3220	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
												301	46000	240	CU YD	ASPHALT CONCRETE BASE, PG64-22	
												304	20000	389	CU YD	AGGREGATE BASE	
												407	14000	200	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
												408	10000	317	GALLON	PRIME COAT	
												448	46040	38	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28	
												448	50000	242	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H	
												609	12001	48	FT	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	8
												609	24510	157	FT	CURB, TYPE 4-C	

GENERAL SUMMARY

CLE-32-3.57 /
 6.82 / 6.94 / 7.32

REF NO.	SHEET NO.	STATION		SIDE	202	202	202						606	606	606	609	609	622		626	
					CURB AND GUTTER REMOVED	GUARDRAIL REMOVED	BRIDGE TERMINAL ASSEMBLY REMOVED					GUARDRAIL, TYPE 5	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	CURB, TYPE 4-C	BARRIER TRANSITION		BARRIER REFLECTOR, TYPE A		
					FT	FT	EACH					FT	EACH	EACH	FT	FT	EACH		EACH		
C1	62	187+42.48	187+88.08	RT											47.87						
R1	62	187+73.71	187+88.63	RT	49.01																
C3	63	33+06.75	33+33.50	LT																	
C2	63	33+07.42	33+33.50	RT																	
R2	63	33+18.50	33+33.50	CL																	
GR1	63	33+16.95	33+60.60	RT																	
R3	63	33+16.95	33+60.97	RT		44.02	1						43.75	1						1	
R4	63	35+00.55	35+33.75	RT		33.20	1														
R5	63	35+00.60	35+33.65	LT		33.05	1														
GR2	63	35+02.40	35+33.65	LT																	
GR3	63	35+02.50	35+33.75	RT																	
R6	63	35+29.50	35+39.02	CL																	
GR4	64	38+90.50	39+27.90	LT																	
R7	64	38+90.50	39+40.78	LT		50.28	1														
C4	64	38+99.90	39+25.90	LT																	
R8	64	39+44.64	39+59.64	CL																	
GR5	64	39+57.99	39+95.49	RT																	
R9	64	39+57.99	40+07.95	RT		49.96	1														
C5	64	39+67.38	39+93.38	RT																	
R10	64	41+54.73	42+05.49	LT		50.76	1														
GR6	64	41+67.99	42+05.49	LT																	
R11	64	42+03.84	42+18.84	CL																	
R12	64	42+21.80	42+72.88	RT		51.08	1														
GR7	64	42+35.48	42+72.88	RT																	
C6	65	58+96.82	59+22.52	LT																	
GR8	65	59+05.54	59+36.79	LT																	
R13	65	59+05.54	59+37.51	LT		31.97	1														
R14	65	59+29.89	59+43.50	CL																	
GR9	65	59+27.81	59+83.96	RT																	
R15	65	59+27.81	59+84.26	RT		56.45	1														
C7	65	59+43.47	59+69.59	RT																	
R16	66	64+44.79	65+04.06	LT		59.27	1														
GR10	66	64+47.91	65+04.06	LT																	
SUBTOTAL					49.01	460.04	10						400.00	6	4	47.87	156.65	5		12	
TOTAL CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY																					12
TOTAL CARRIED TO GENERAL SUMMARY					49	460	10						400	6	4	48	157	5			

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GS001.dgn 31-JAN-2007 8:15AM charvill

CALCULATED
 CHECKED
ESTIMATED QUANTITIES
CLE-32-3.57 / 6.82 / 6.94 / 7.32
 52 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\24955MS001.dgn 31-JAN-2007 11:56AM charvill

SHEET NO.	PHASE	614	614	614		614		614	614	614	614	614	614	614	615					622	622
		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	SPECIAL - FLASHING ARROW PANEL (FOR INFO ONLY)		BARRIER REFLECTOR, TYPE B		WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE)	WORK ZONE EDGE LINE, CLASS I, 642 PAINT (YELLOW)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WHITE)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (YELLOW)	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I		WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN					PORTABLE CONCRETE BARRIER, 32"
		EACH	EACH	EACH		EACH		MILE	MILE	MILE	MILE	MILE	FT		FT	SQ YD				FT	FT
13	1										0.02										
13	1											0.02									
13	1							0.02													
14	1										0.09										
14	1											0.09									
14	1							0.09													
14	1	1																			
14	1					6														264.00	
14	1												117.37								
15	1										0.02										
15	1											0.02									
15	1						0.02														
15	1		1										120.96								
15	1					2														76.33	
15	1													22.00							
17	1											0.09									
17	1			1																	
18	1											0.09									
19	1											0.09									
19	1											0.09									
19	1										0.07										
19	1										0.07										
19	1					5														211.47	
19	1	1																			
20	1										0.02										
20	1											0.02									
20	1										0.02										
20	1					2						0.02								83.50	
20	1					4															196.00
20	1					1														20.50	
19-20	1														11						
20	1													17						33.50	
20	1					1															
20	1					4															196.00
20	1									0.04											
20	1								0.04												
20	1										0.04										
20	1											0.04									
SUBTOTAL		2	1	1		25		0.13	0.08	0.08	0.31	0.53	238.33		22.00	28				689.30	392.00
TOTAL CARRIED TO GENERAL SUMMARY		2	1			25		0.13	0.16		0.84		238		22	28				689	392

MAINTENANCE OF TRAFFIC SUBSUMMARY

CLE-32-3.57 / 6.82 / 6.94 / 7.32

CALCULATED
CHECKED

53
156

SHEET NO.	PHASE	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	622	622
		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)			BARRIER REFLECTOR, TYPE B			WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE)	WORK ZONE EDGE LINE, CLASS I, 642 PAINT (YELLOW)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WHITE)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (YELLOW)											PORTABLE CONCRETE BARRIER, 32"
		EACH			EACH		MILE	MILE	MILE	MILE											FT	FT
20	1								0.04													
20	1								0.04													
20	1				5																220.89	
20	1								0.04													
20	1								0.04													
20	1	1																				
20	1				3																110.21	
21	1								0.04													
21	1								0.03													
21	1								0.04													
21	1								0.05													
21	1				2																60.12	
21	1				5																232.64	
21	1				5																	244.20
21	1				1																23.54	
21	1	1																				
21	1				1																37.02	
21	1						0.05															
21	1							0.05														
21	1				5																	244.20
21	1								0.05													
21	1						0.05															
21	1								0.01													
21	1								0.01													
21	1				2																68.78	
21	1																					
21	1								0.01													
21	1								0.08													
22	1								0.09													
22	1				6																260.51	
22	1								0.07													
22	1								0.09													
22	1	1																				
23	1								0.09													
23	1								0.09													
24	1								0.09													
24	1								0.09													
24	1								0.07													
24	1	1																				
24	1				2																87.21	
24	1								0.05													
25	1								0.03													
SUBTOTAL		4			37		0.10	0.10	0.48	0.72											1100.92	488.40
TOTAL CARRIED TO GENERAL SUMMARY		4			37		0.20		1.20												1101	488

I:\projects\CLE\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MS002.dgn 31-JAN-2007 11:55AM charvill

MAINTENANCE OF TRAFFIC SUBSUMMARY
CLE-32-3.57
6.82 / 6.94 / 7.32
 CALCULATED
 CHECKED

54
156

SHEET NO.	PHASE	614	614	614		614		614	614	614	614	614	614	614	614	615					622	622	
		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)		SPECIAL - FLASHING ARROW PANEL		BARRIER REFLECTOR, TYPE B					WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WHITE)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (YELLOW)										PORTABLE CONCRETE BARRIER, 32"	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED
		EACH	EACH	EACH		EACH		MILE	MILE	MILE	MILE	MILE	FT	FT	FT	SQ YD						FT	FT
34	2			1																			
34	2										0.09												
35	2										0.10												
35	2	1																					
35	2					2																94.38	
35	2										0.01												
36	2										0.09												
36	2										0.09												
36	2					2																83.50	
36	2					1																33.50	
36	2					4																	196.00
36	2					4																	196.00
36	2					4																169.52	
36	2					1																20.50	
36	2	1																					
37	2										0.09												
37	2										0.09												
37	2	1																					
37	2					5																226.82	
37	2					1																41.41	
37	2					5																	244.20
37	2					5																	244.20
37	2					2																64.39	
37	2					1																27.93	
38	2										0.09												
38	2										0.09												
38	2					4																152.96	
38	2	1																					
39	2										0.09												
39	2										0.09												
40	2										0.09												
40	2										0.09												
40	2																						
41	2										0.09												
41	2										0.09												
41	2																						
41	2	1																					
41	2					3																110.32	
41	2					7																	317.97
41	2					6																	299.49
42	2										0.09												
42	2										0.10												
42	2					5																	222.04
42	2					6																	260.00
SUBTOTAL		5		1		68					1.47	0.17										1025.23	1979.90
TOTAL CARRIED TO GENERAL SUMMARY		5				68					1.64											1025	1980

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955MS004.dgn 31-JAN-2007 12:08PM charvill

MAINTENANCE OF TRAFFIC SUBSUMMARY

CLE-32-3.57
6.82/ 6.94/ 7.32

CALCULATED
CHECKED

56
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955DS001.dgn 31-JAN-2007 7:29AM charvill

REF NO.	SHEET NO.	STATION TO STATION		202	202	602	603	603	603	603	604	604	605	605	601	601	CALCULATED	CHECKED
				HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	CONCRETE MASONRY	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	CATCH BASIN, No. 3A	INLET, No. 3A, AS PER PLAN	4" UNCLASSIFIED PIPE UNDERDRAINS	4" BASE PIPE UNDERDRAINS	TIED CONCRETE BLOCK MAT, TYPE I	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
		FROM	TO	EACH	FT	CU YD	FT	FT	FT	FT	EACH	EACH	FT	FT	SQ YD	CU YD		
U1	61	184+36.00	186+69.67											235.00				
U2	61-62	184+61.00	187+08.88											249.00				
U3	61-62	186+69.67	187+42.48										73.00					
U4	62	187+08.88	187+42.48										34.00					
U5	62	187+42.48	187+42.48				10.00											
U6	62	187+42.48	187+88.08				49.00											
D1	62	187+42.48				0.21												
D2	62	187+42.48	187+88.66					46.18										
D3	62	187+73.96		1														
D4	62	187+73.96	187+88.66		14.8													
E2	NOT USED																	
D5	63	33+08.50																
D6	63	33+08.50	33+08.50						39.81									
D7	63	33+08.50																
D8	63	33+08.50	33+08.50							26.01								
D9	63	33+08.50				0.25												
E2	64	38+90.90	38+99.90												68.5			
E3	64	39+58.38	39+67.38												73.53			
D10	65	59+19.80																
D11	65	59+19.80	59+19.80						55.28									
D12	65	59+19.80				0.25												
E4	65	59+19.80	58+96.82													1.33		
E5	65	58+87.82	58+96.82												46.26			
E6	65	59+34.47	59+43.47												53.9			
SUBTOTAL				1	14.8	0.71	59.00	46.18	95.09	26.01	1	2	107.00	484.00	242.19	1.33		
TOTAL CARRIED TO GENERAL SUMMARY				1	15	0.7	59	46	95	26	1	2	107	484	242	1		

DRAINAGE SUBSUMMARY

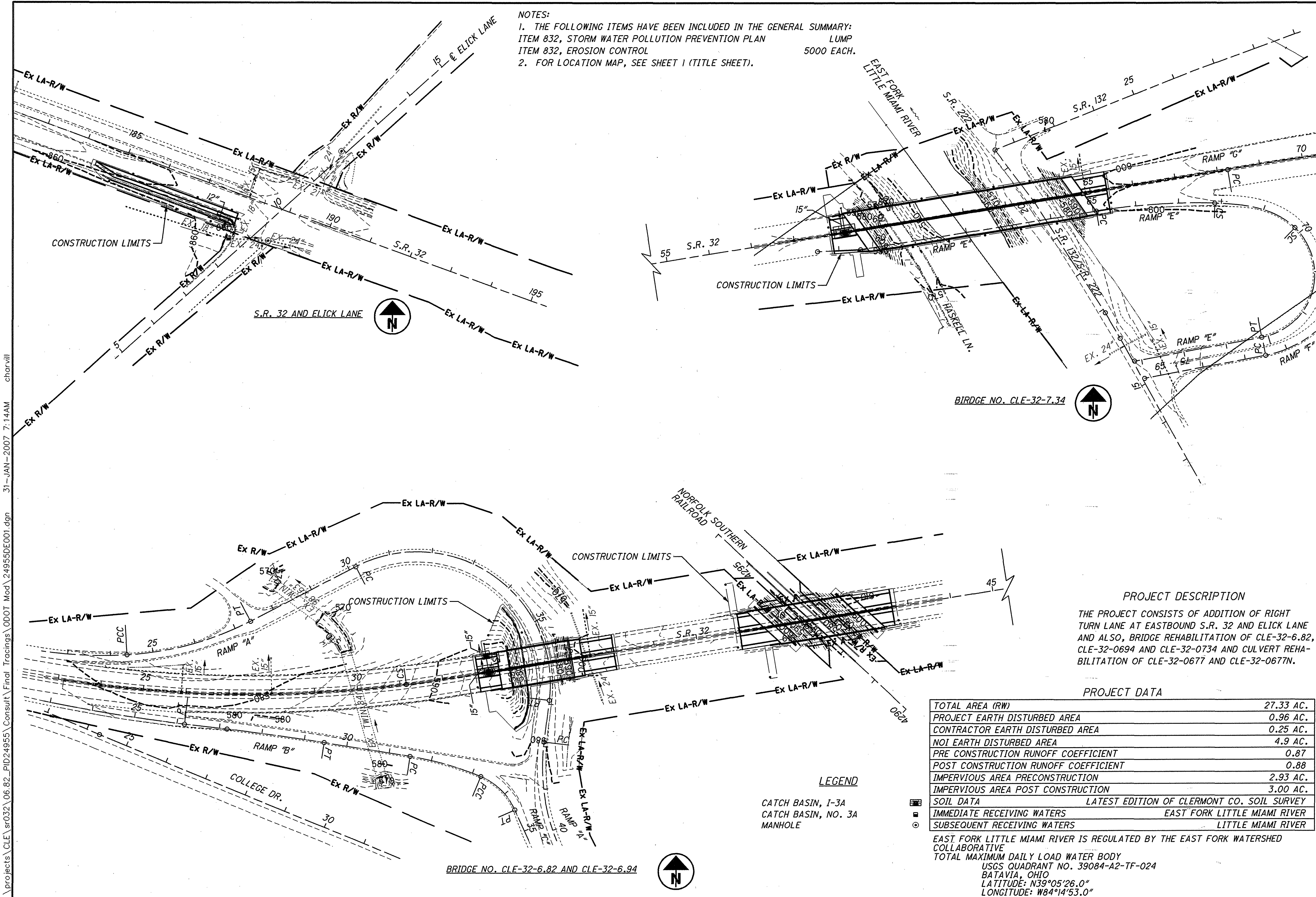
CLE-32-3.57 / 6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GC001.dgn 31-JAN-2007 7:35AM charvill

STATION TO STATION	SIDE	LENGTH L	AVERAGE WIDTH W	SURFACE AREA A A=LxW	PLANIMETERED AREAS	204	204	252	254	301	301	304	407	408	448	448	448		
						SUBGRADE COMPACTION SQ YD	PROOF ROLLING HOUR	FULL DEPTH PAVEMENT SAWING FT	PAVEMENT PLANING; ASPHALT CONCRETE, 1.5" SQ YD	8.75" ASPHALT CONCRETE BASE, PG64-22 CU YD	11" ASPHALT CONCRETE BASE, PG64-22 CU YD	6" AGGREGATE BASE CU YD	TACK COAT FOR INTERMEDIATE COURSE (RATE=0.05 GAL/SY) GAL	BITUMINOUS PRIME COAT (RATE=0.4 GAL/SY) GAL	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28 CU YD	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H CU YD	VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 1H CU YD		
184+36.00 TO 187+88.08	RT	352.08			6693			352.08					37.18		36.15	30.99			
184+36.00 TO 187+88.08	RT	352.08			6824						231.68			303.29					
184+36.00 TO 187+88.08	RT	352.08			7221	802	0.27					133.72							
32+83.50 TO 33+33.50	RT	50.00			2031				225.71				11.29				13.16		
32+83.50 TO 33+33.50	LT	50.00			1966				218.48				10.92				13.47		
33+06.75 TO 33+33.50	LT	26.75	2.12		56	6		26.75		1.56		1.54	0.31	2.50	0.30	0.26			
33+07.42 TO 33+33.50	RT	26.08	2.00		52	6		26.08		1.45		1.45	0.29	2.32	0.28	0.24			
33+33.50 TO 33+58.50	LT&RT	25.00			2067	230	0.08					38.28							
35+04.50 TO 35+29.50	LT&RT	25.00			2175	242	0.08					40.28							
35+29.50 TO 36+04.50	RT	75.00			2984				331.59				16.58				28.75		
35+29.50 TO 36+04.50	LT	75.00			2952				327.96				16.40				29.52		
38+99.90 TO 39+25.90	LT	26.00	2.00		54	6		26.00		1.49		1.47	0.30	2.38	0.29	0.25			
39+01.88 TO 39+51.88	LT	50			1659				184.32				9.22				9.26		
39+01.88 TO 39+67.40	RT	65.52			3034				337.10				16.86				15.17		
39+59.64 TO 39+84.64	LT&RT	25.00			2175	242	0.08					40.28							
39+67.38 TO 39+93.38	RT	26.00	2.00		51	6		26.00		1.40		1.42	0.28	2.25	0.27	0.23			
41+78.84 TO 42+03.84	LT&RT	25.00			2175	242	0.08					40.28							
41+96.08 TO 42+61.60	LT	65.52			3047				338.50				16.93				19.63		
42+11.60 TO 42+61.60	RT	50			1664				184.90				9.25				9.49		
58+88.62 TO 59+38.62	LT	50			1771				196.73				9.84				12.83		
58+96.82 TO 59+23.26	LT	26.44	2.00		52	6		26.44		1.44		1.45	0.29	2.31	0.28	0.24			
58+88.62 TO 59+48.37	RT	59.75			3093				343.65				17.18				28.04		
59+43.47 TO 59+69.59	RT	26.12	2.00		52	6		26.12		1.44		1.44	0.29	2.30	0.28	0.24			
59+43.50 TO 59+68.50	LT&RT	25.00			2392	266	0.09					44.30							
64+58.50 TO 64+83.50	LT&RT	25.00			2351	261	0.09					43.54							
64+78.63 TO 65+38.38	LT	59.75			2623				291.48				14.57				14.84		
64+88.38 TO 65+38.38	RT	50			2161				240.07				12.00				15.48		
SUBTOTAL						2321	0.77	509.47	3220.49	8.78	231.68	389.45	199.98	317.35	37.85	32.45	209.64		
TOTAL CARRIED TO GENERAL SUMMARY						2321	1	509	3220	240		389	200	317	38		242		

CALCULATED
 CHECKED
PAVEMENT CALCULATIONS
CLE-32-3.57 / 6.82.6.94 / 7.32
 59
 156

NOTES:
 1. THE FOLLOWING ITEMS HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:
 ITEM 832, STORM WATER POLLUTION PREVENTION PLAN LUMP 5000 EACH.
 ITEM 832, EROSION CONTROL LUMP 5000 EACH.
 2. FOR LOCATION MAP, SEE SHEET 1 (TITLE SHEET).



PROJECT DESCRIPTION
 THE PROJECT CONSISTS OF ADDITION OF RIGHT TURN LANE AT EASTBOUND S.R. 32 AND ELICK LANE AND ALSO, BRIDGE REHABILITATION OF CLE-32-6.82, CLE-32-0694 AND CLE-32-0734 AND CULVERT REHABILITATION OF CLE-32-0677 AND CLE-32-0677N.

PROJECT DATA

TOTAL AREA (RW)	27.33 AC.
PROJECT EARTH DISTURBED AREA	0.96 AC.
CONTRACTOR EARTH DISTURBED AREA	0.25 AC.
NOI EARTH DISTURBED AREA	4.9 AC.
PRE CONSTRUCTION RUNOFF COEFFICIENT	0.87
POST CONSTRUCTION RUNOFF COEFFICIENT	0.88
IMPERVIOUS AREA PRECONSTRUCTION	2.93 AC.
IMPERVIOUS AREA POST CONSTRUCTION	3.00 AC.
SOIL DATA	LATEST EDITION OF CLERMONT CO. SOIL SURVEY
IMMEDIATE RECEIVING WATERS	EAST FORK LITTLE MIAMI RIVER
SUBSEQUENT RECEIVING WATERS	LITTLE MIAMI RIVER

EAST FORK LITTLE MIAMI RIVER IS REGULATED BY THE EAST FORK WATERSHED COLLABORATIVE
 TOTAL MAXIMUM DAILY LOAD WATER BODY
 USGS QUADRANT NO. 39084-A2-TF-024
 BATAVIA, OHIO
 LATITUDE: N39°05'26.0"
 LONGITUDE: W84°14'53.0"

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955DE001.dgn 31-JAN-2007 7:14AM charvill

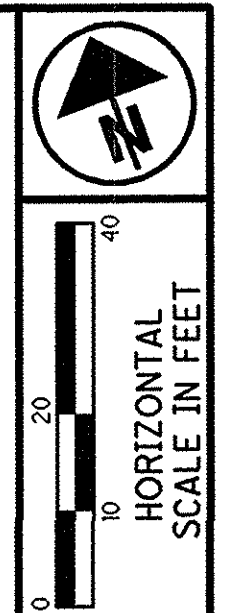
PROJECT SITE PLAN

CLE-32-3.57 / 6.82 / 6.94 / 7.32

CALCULATED
 CHECKED
 SCALE IN FEET
 0 50 100 200
 HORIZONTAL
 60
 156

31-JAN-2007 8:01AM charvill

i:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GF001.dgn

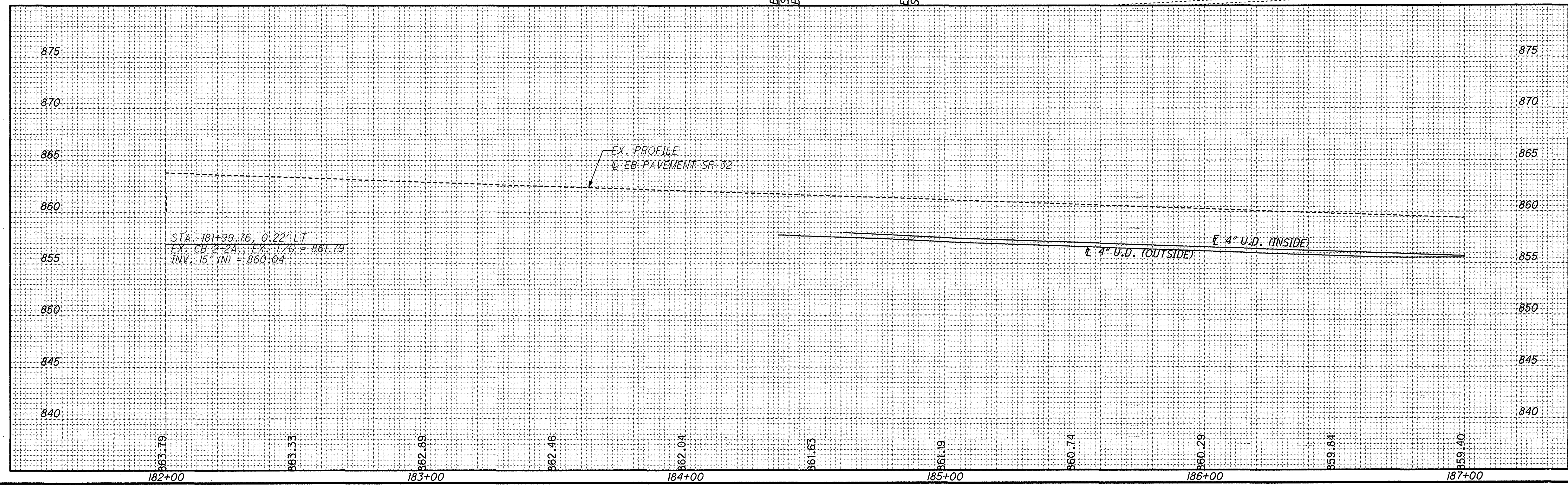
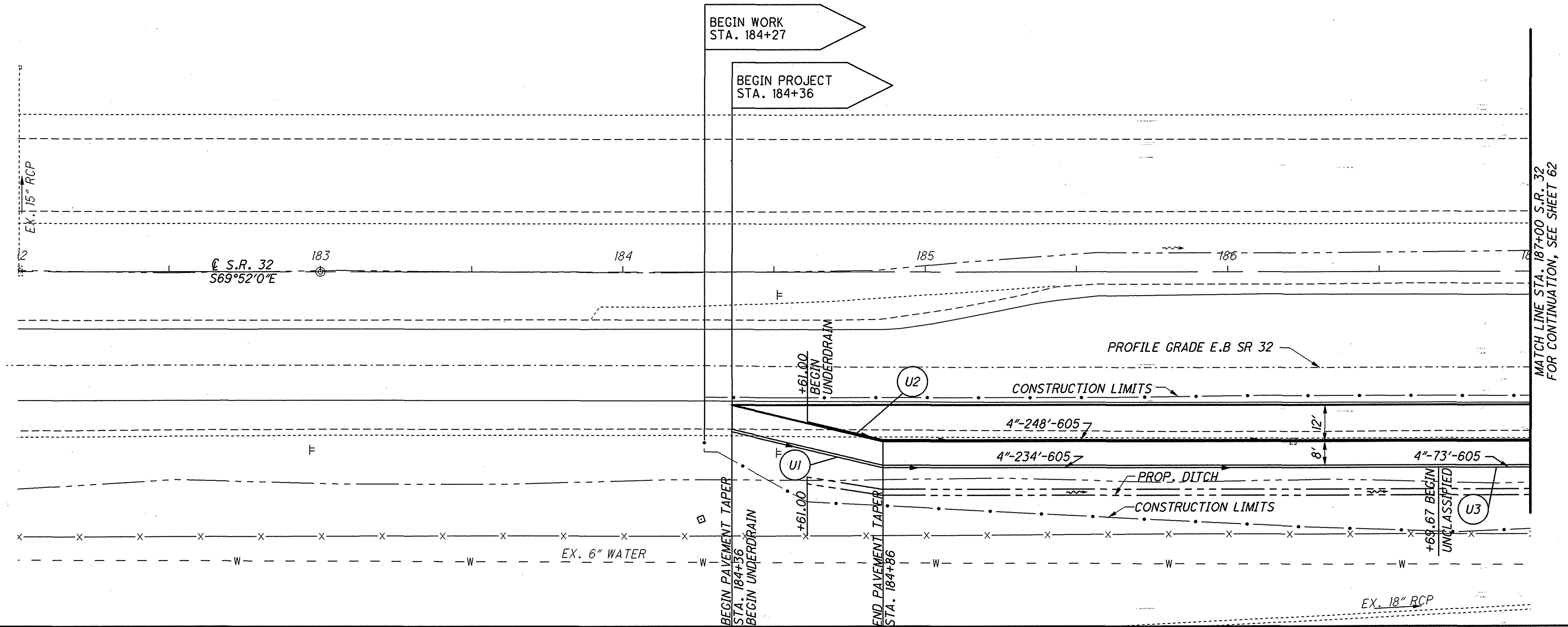


CALCULATED
CHECKED

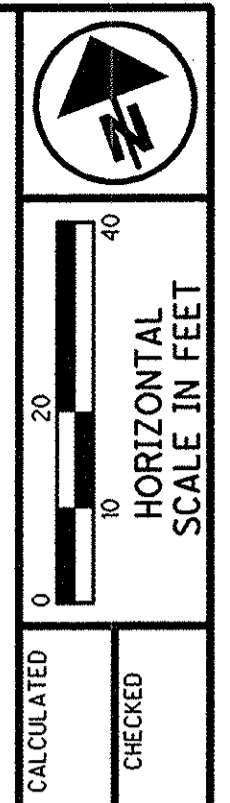
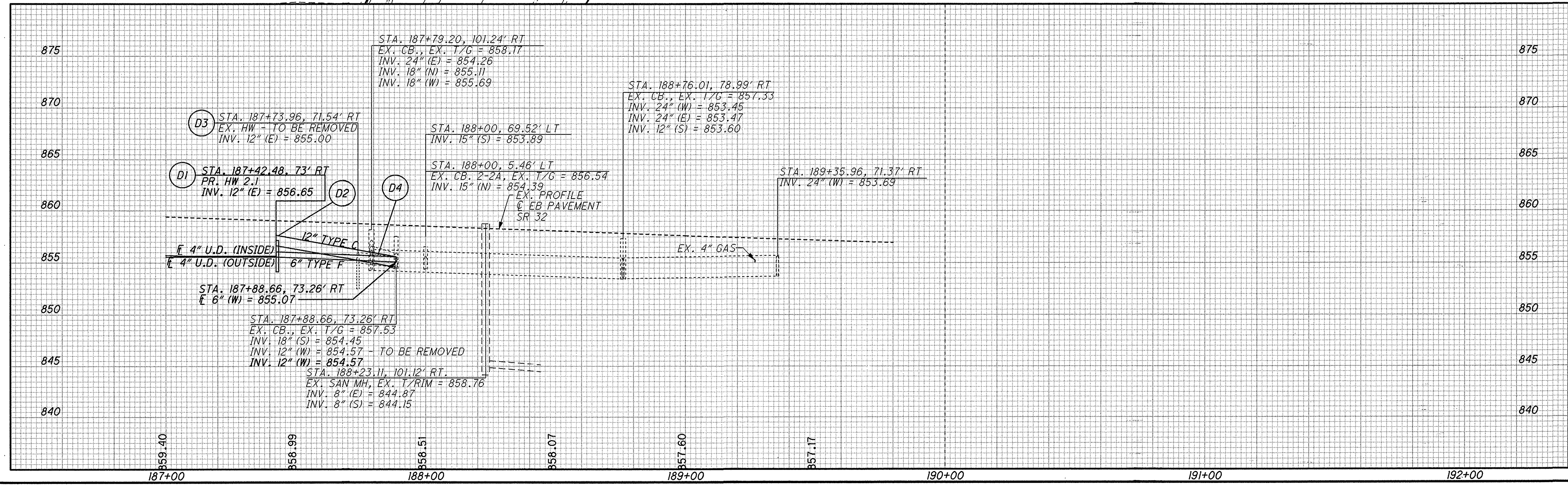
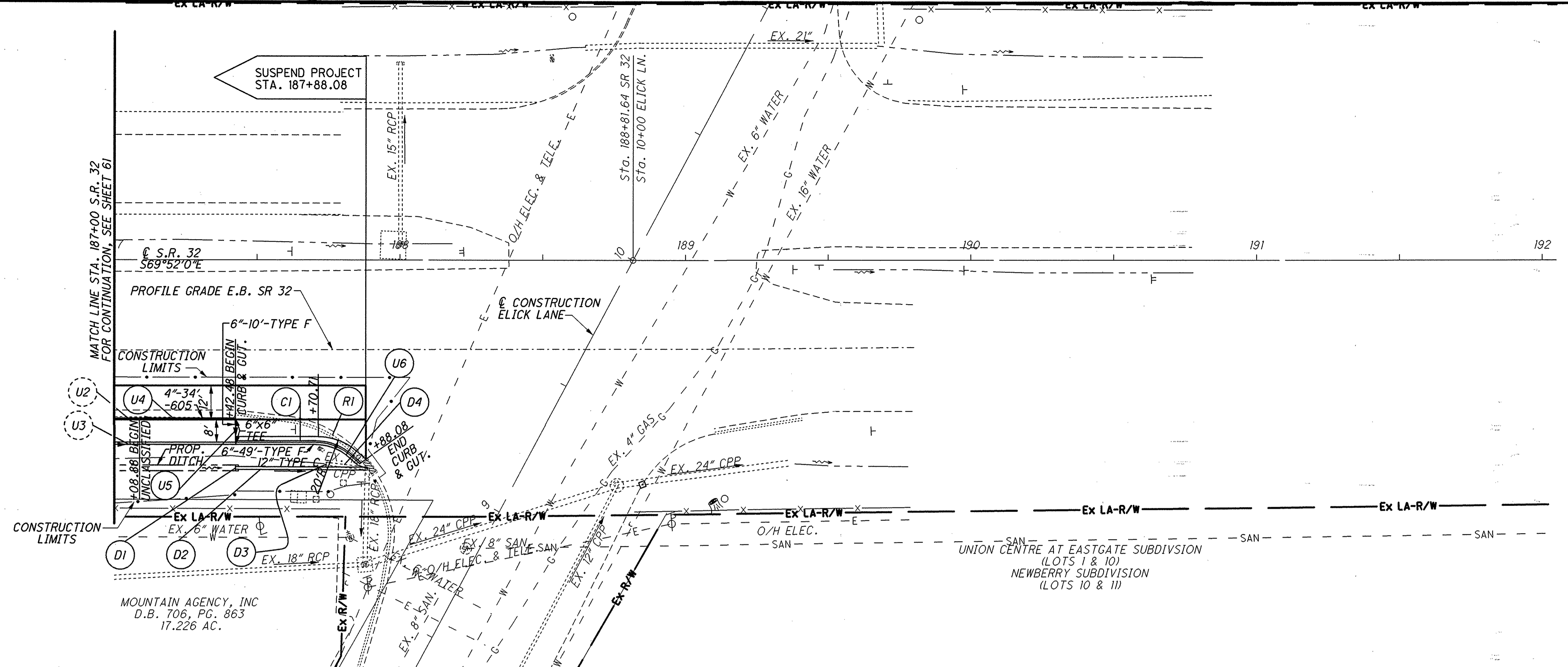
PLAN AND PROFILE STA. 182+00 TO STA. 187+00

CLE-32-3.57 /
6.82 / 6.94 / 7.32

61
156



I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GP002.dgn 31-JAN-2007 8:02AM chorvill



CALCULATED
CHECKED

PLAN AND PROFILE
STA. 187+00 TO STA. 192+00

CLE-32-3.57 /
6.82/6.94/7.32

62
156

MATCH LINE STA. 32+25 S.R. 32

RESUME WORK STA. 32+83.50

FOR STM PROFILE, SEE BELOW.

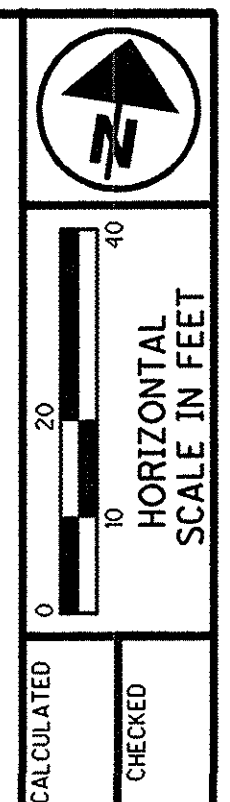
RESUME PROJECT STA. 33+33.50

SUSPEND PROJECT STA. 35+29.50

SUSPEND WORK STA. 36+04.50

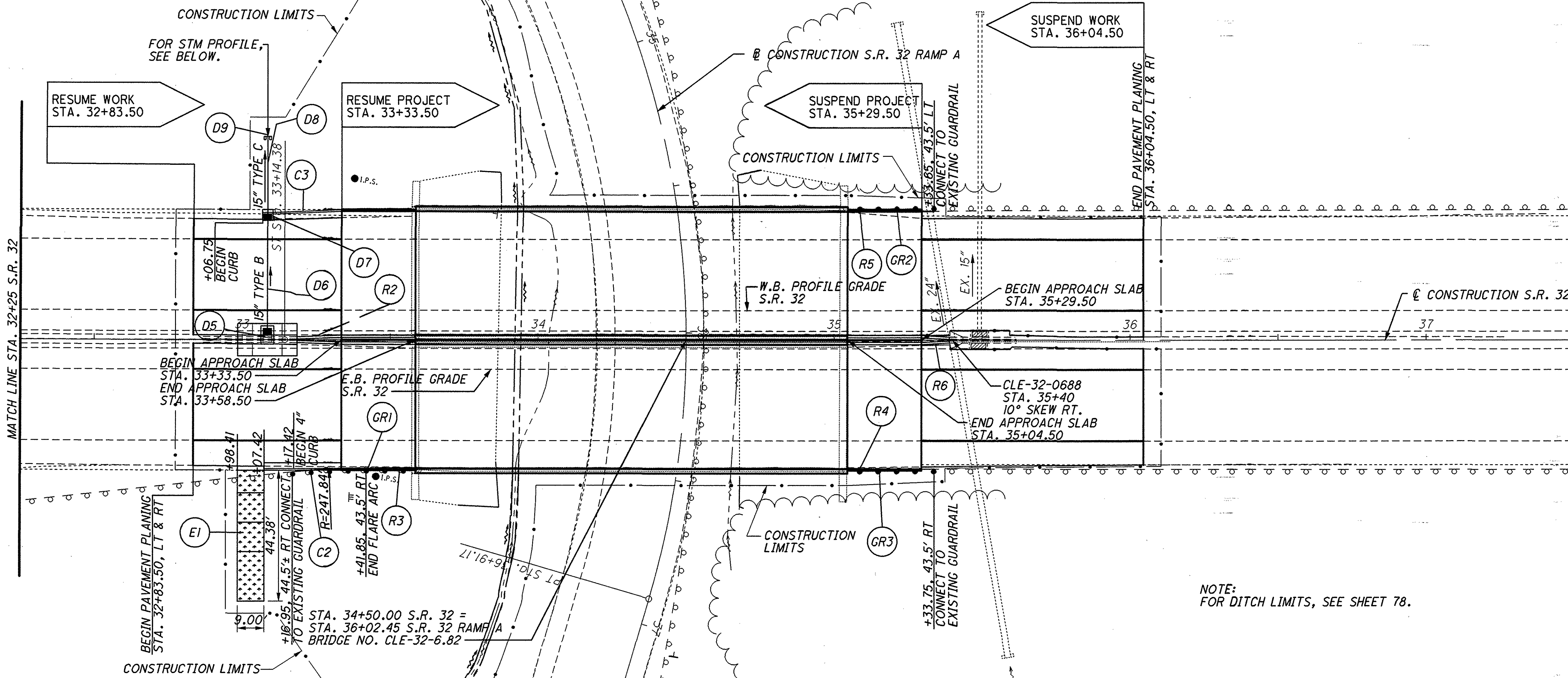
MATCH LINE STA. 37+50 S.R. 32 FOR CONTINUATION, SEE SHEET 64

EX. CURVE DATA I
 P.I. STA. 24+37.16
 $\Delta = 31^\circ 57' 00''$ (LT)
 $D_c = 2^\circ 00' 00''$
 $R = 2,864.79'$
 $L_s = 200.00'$
 $\theta_s = 2^\circ 00' 00''$
 $LT = 133.34'$
 $ST = 66.67'$
 $x = 199.98'$
 $y = 2.33'$
 $k = 100.00'$
 $p = 0.58'$
 $\Delta c = 27^\circ 57' 00''$ (LT)
 $L_c = 1,397.50'$
 $T_s = 920.28'$
 $E_s = 115.68'$

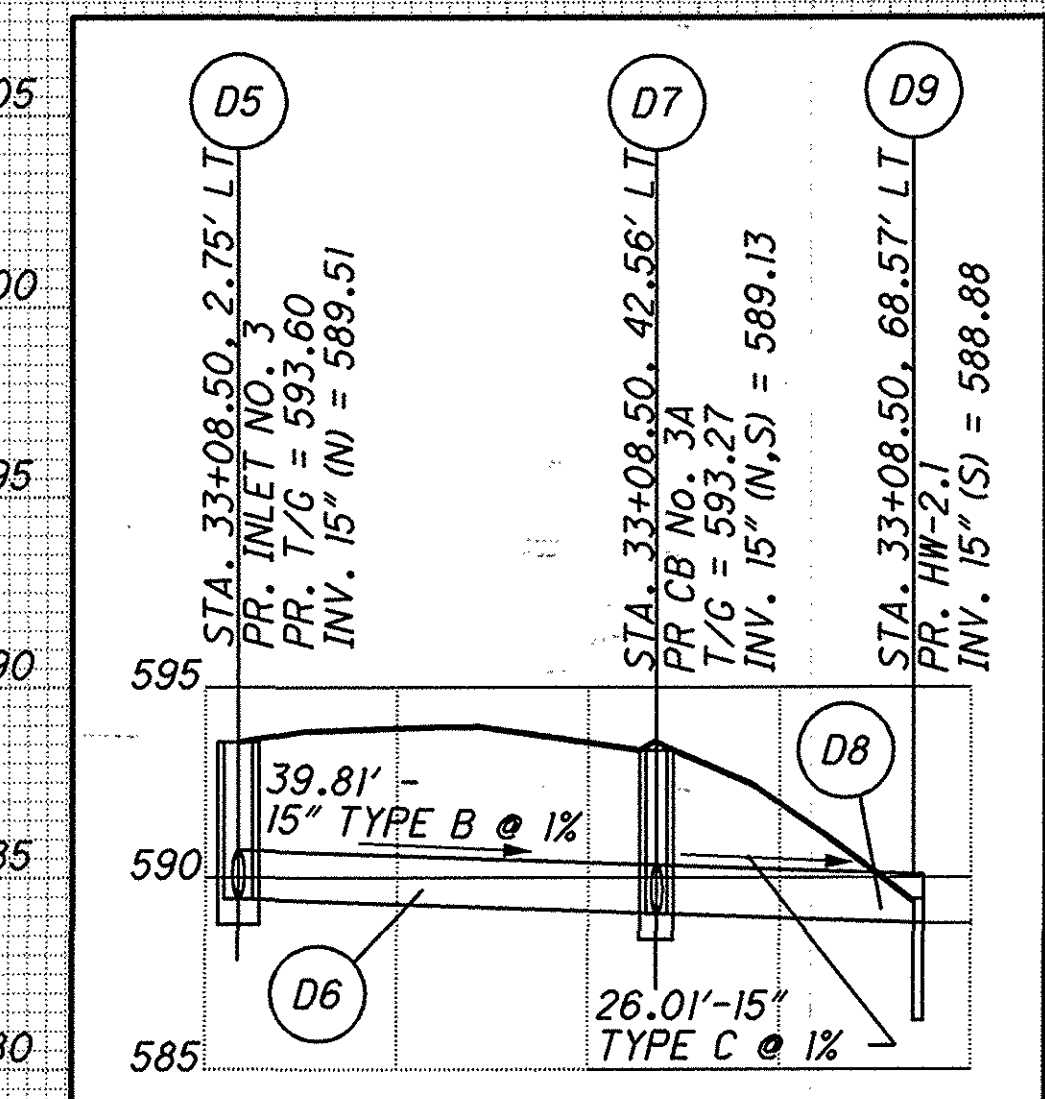
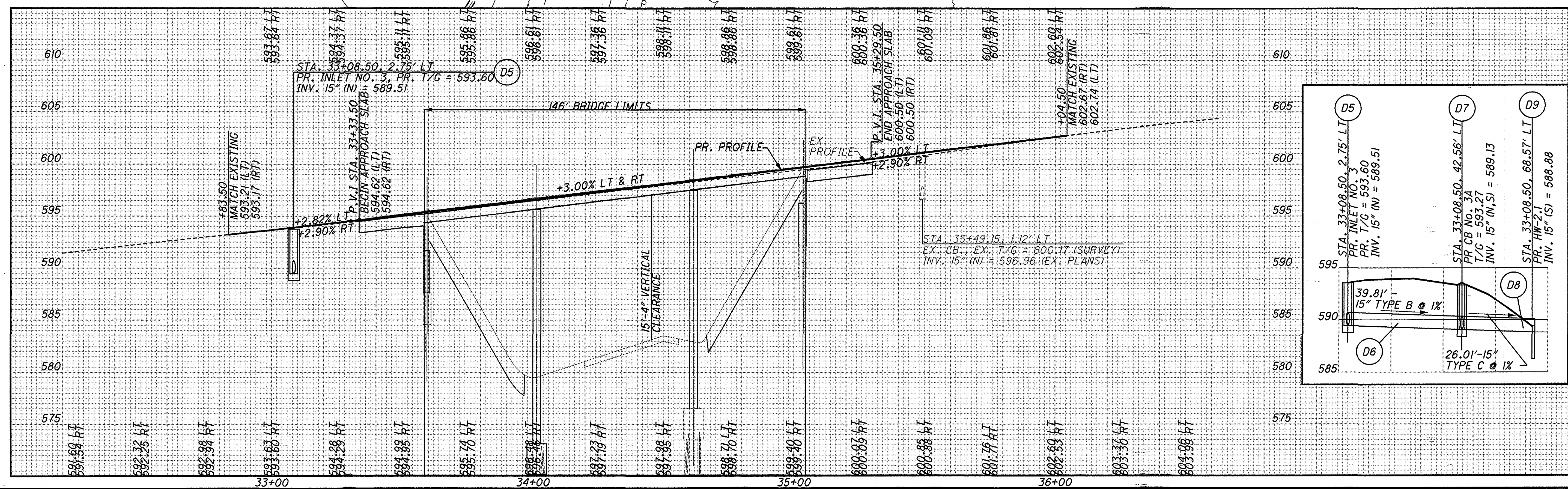


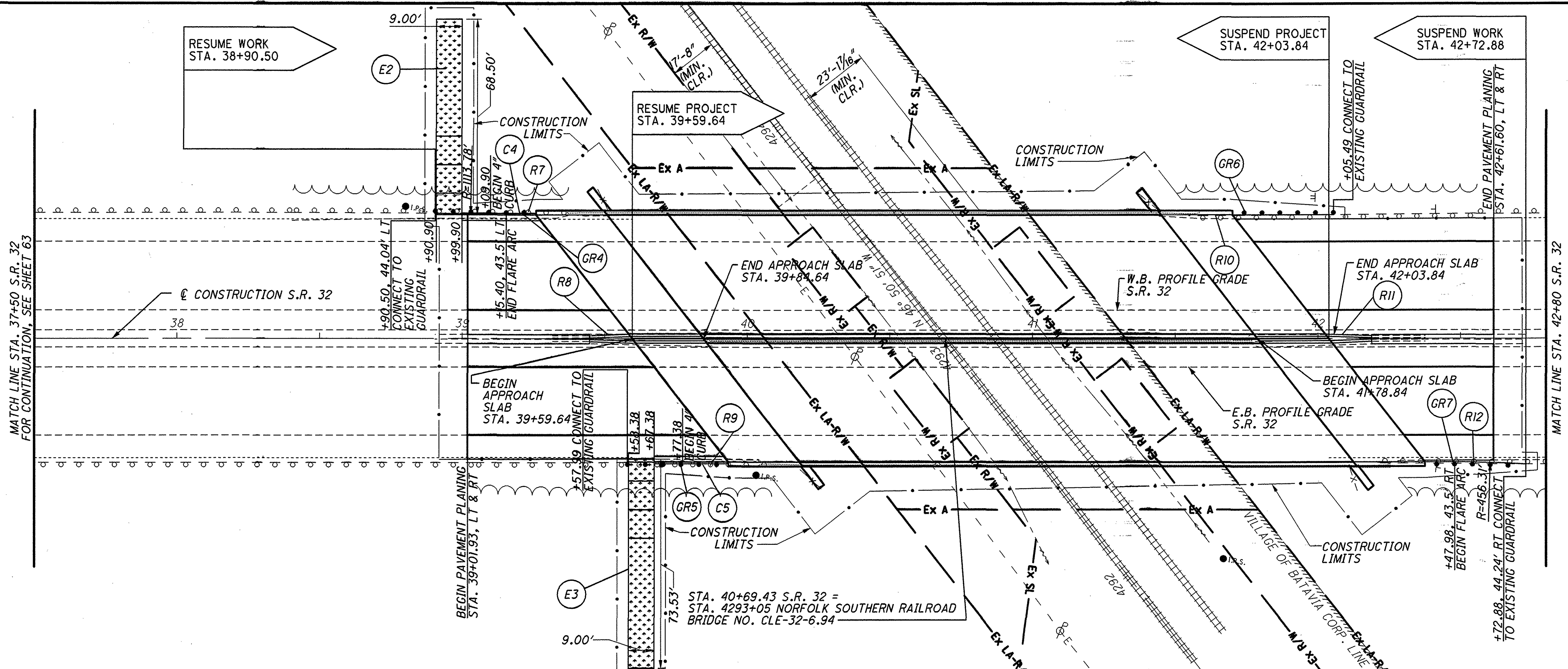
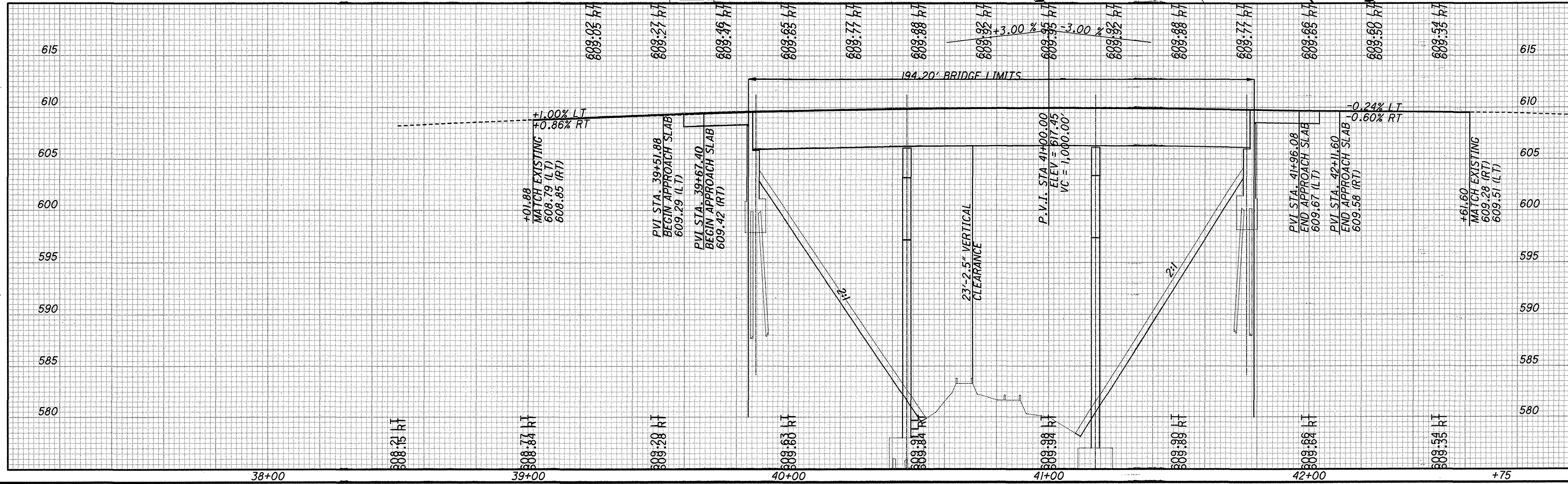
PLAN AND PROFILE
 STA. 32+25 TO STA. 37+50

CLE-32-3.57 /
 6.82 / 6.94 / 7.32

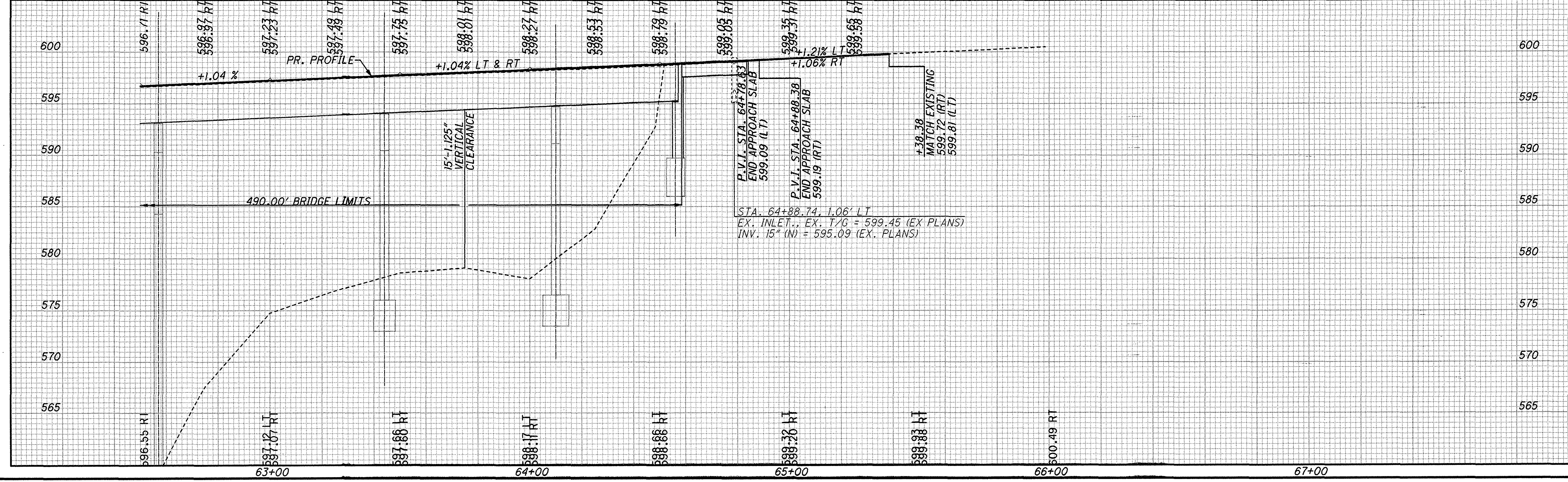
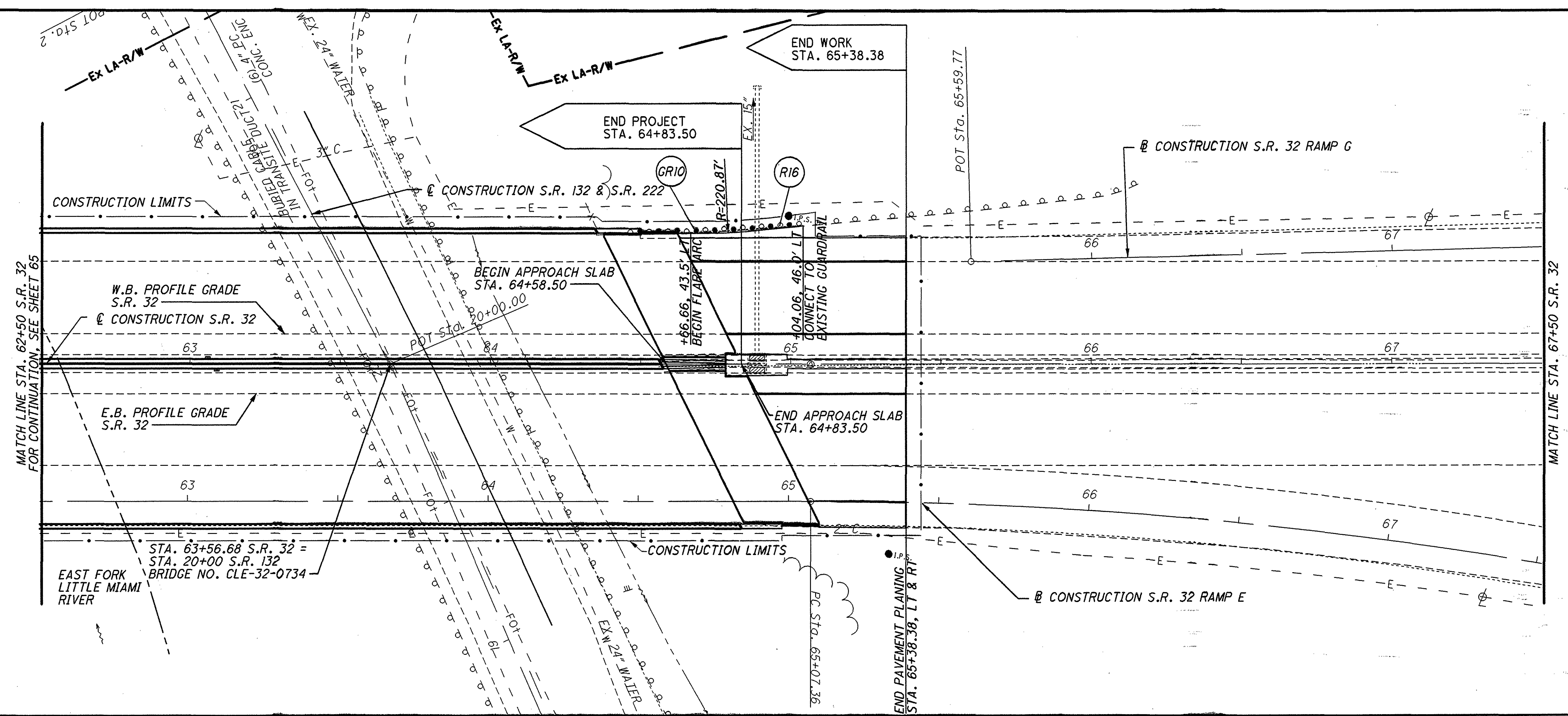


NOTE:
 FOR DITCH LIMITS, SEE SHEET 78.





I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\F06.dgn 31-JAN-2007 8:14AM charvill



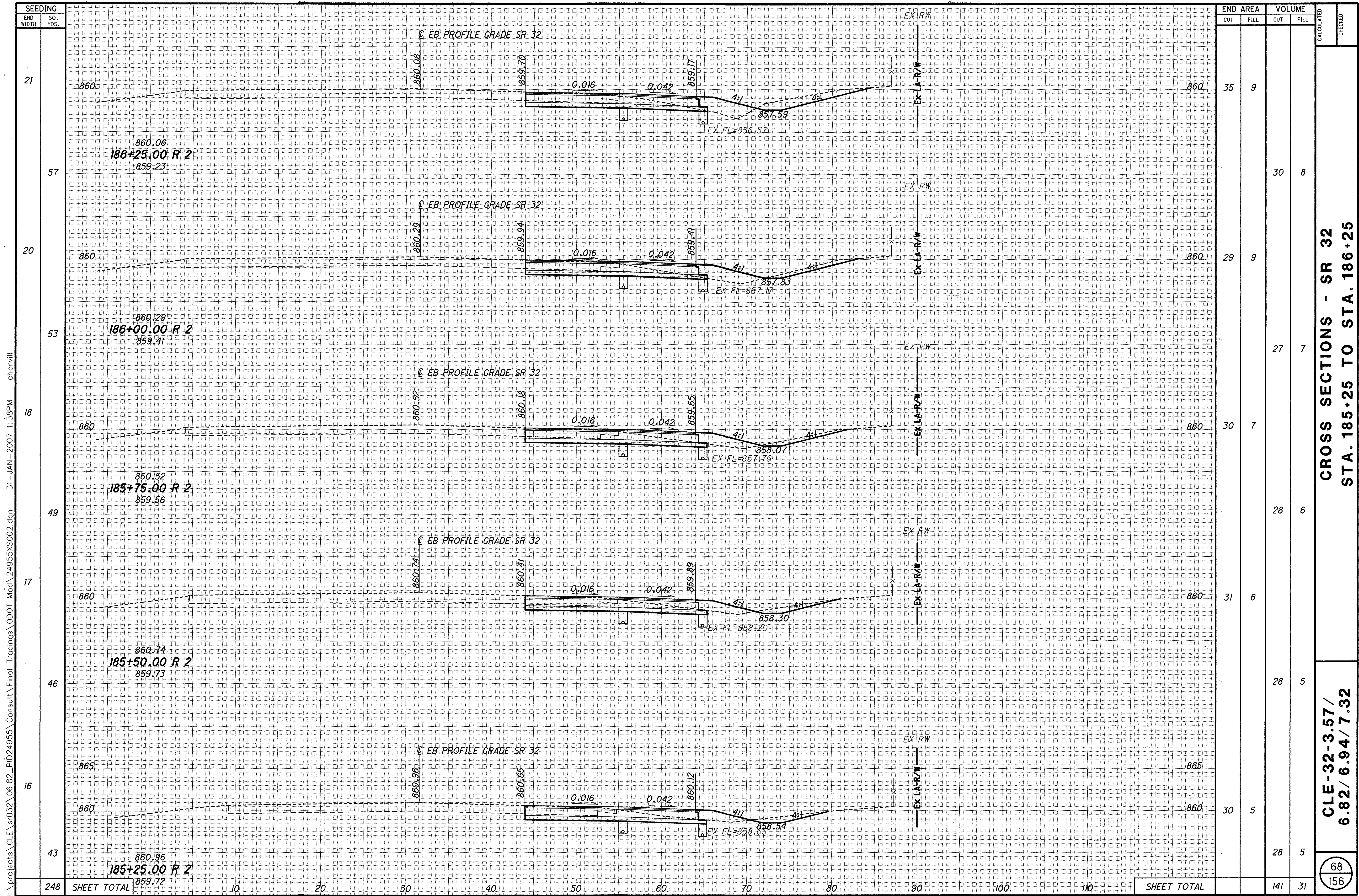
PLAN AND PROFILE
STA. 62+50 TO STA. 67+50

66
156

CLE-32-3.57 /
6.82 / 6.94 / 7.32

CALCULATED
CHECKED

HORIZONTAL
SCALE IN FEET

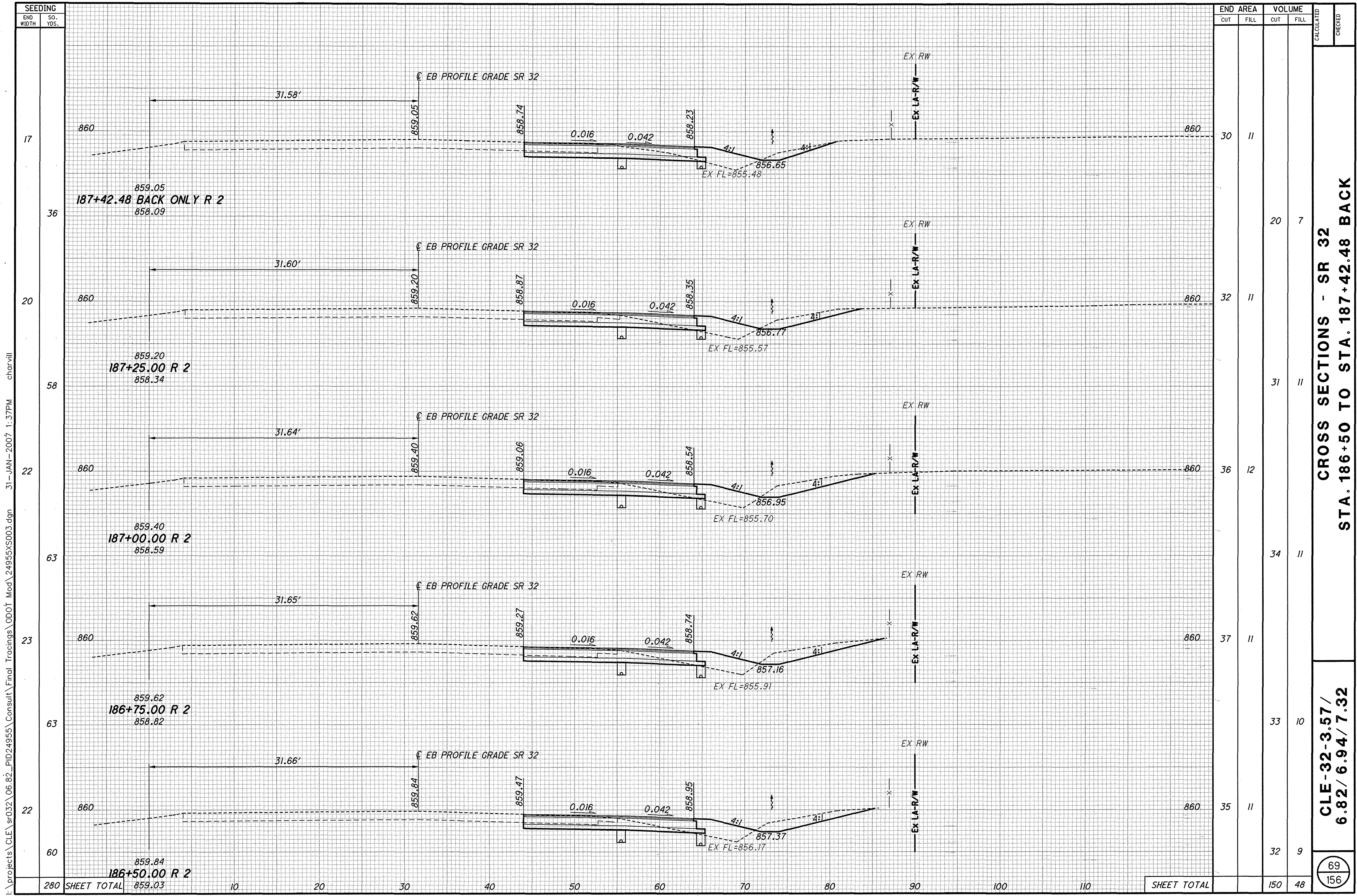


SEEDING	
END WIDTH	SO. YDS.
21	
57	
20	
53	
18	
49	
17	
46	
16	
43	
248	SHEET TOTAL

END AREA	VOLUME	
	CUT	FILL
860	35	9
860	29	9
860	30	7
860	30	7
860	31	6
865	30	5
860	30	5
SHEET TOTAL	141	31

CROSS SECTIONS - SR 32
 STA. 185+25 TO STA. 186+25
 CLE-32-3.57 /
 6.82 / 6.94 / 7.32
 68
 156

I:\projects\CLE\sr032\06.82_PiD24955\Consult\Final Tracings\ODOT Mod\24955XS002.dgn 31-JAN-2007 1:38PM charvill

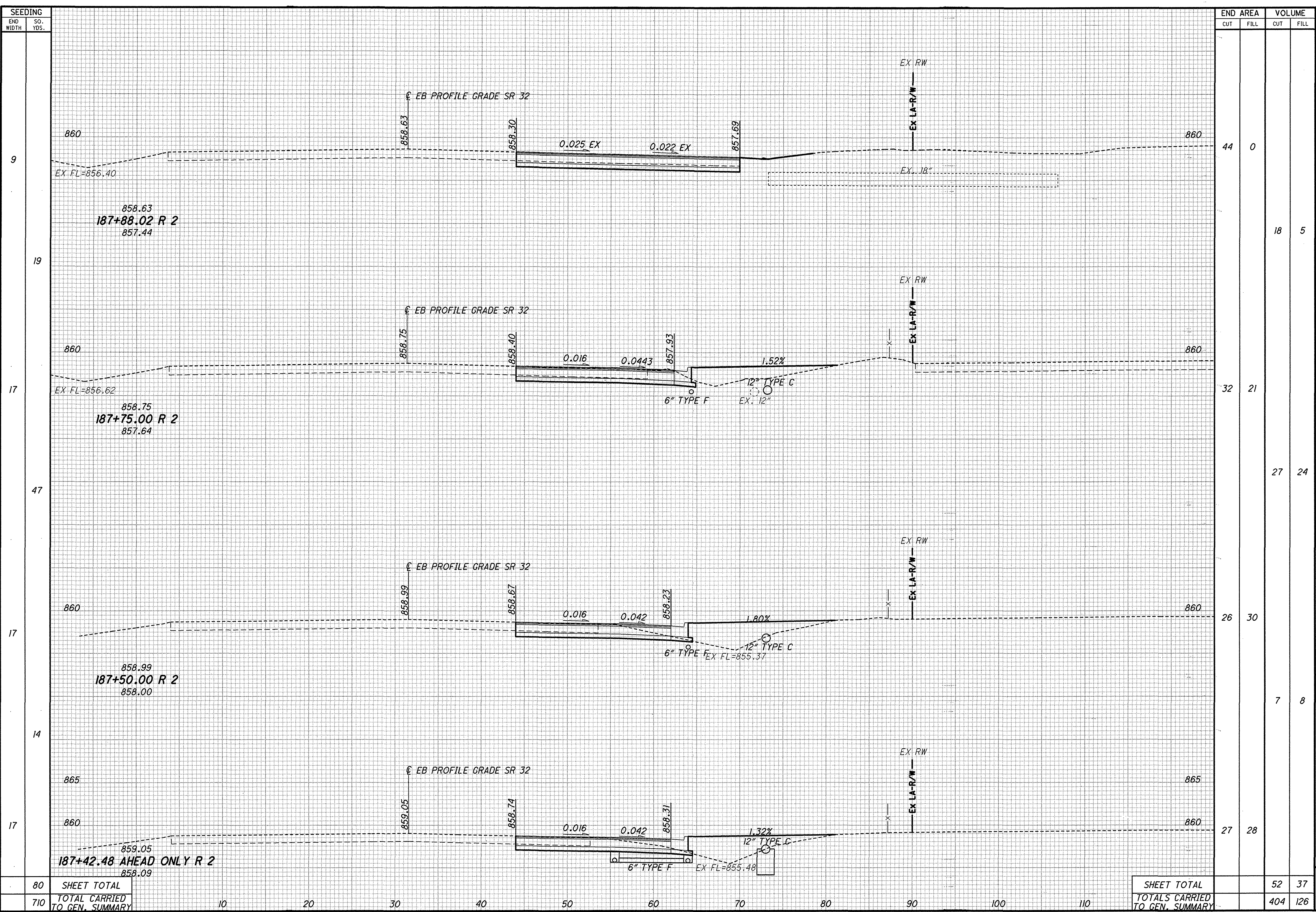


I:\projects\CLE\sr032\06.82_PID24955\Consult\Final_Trocings\ODOT_Mod\24955\S003.dgn 31-JAN-2007 1:37PM charvill

SEEDING	END AREA		VOLUME		CALCULATED	CHECKED
	CUT	FILL	CUT	FILL		
17	30	11				
36			20	7		
20	32	11				
58			31	11		
22	36	12				
63			34	11		
23	37	11				
63			33	10		
22	35	11				
60			32	9		
280	SHEET TOTAL		150	48		

CROSS SECTIONS - SR 32
STA. 186+50 TO STA. 187+42.48 BACK
CLE-32-3.57 / 6.82 / 6.94 / 7.32
 69 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\S004.dgn 31-JAN-2007 1:37PM charvill



SEEDING	
END WIDTH	SO. YDS.
80	10
70	20
17	30
17	40
17	50
17	60
17	70
17	80
17	90
17	100
17	110

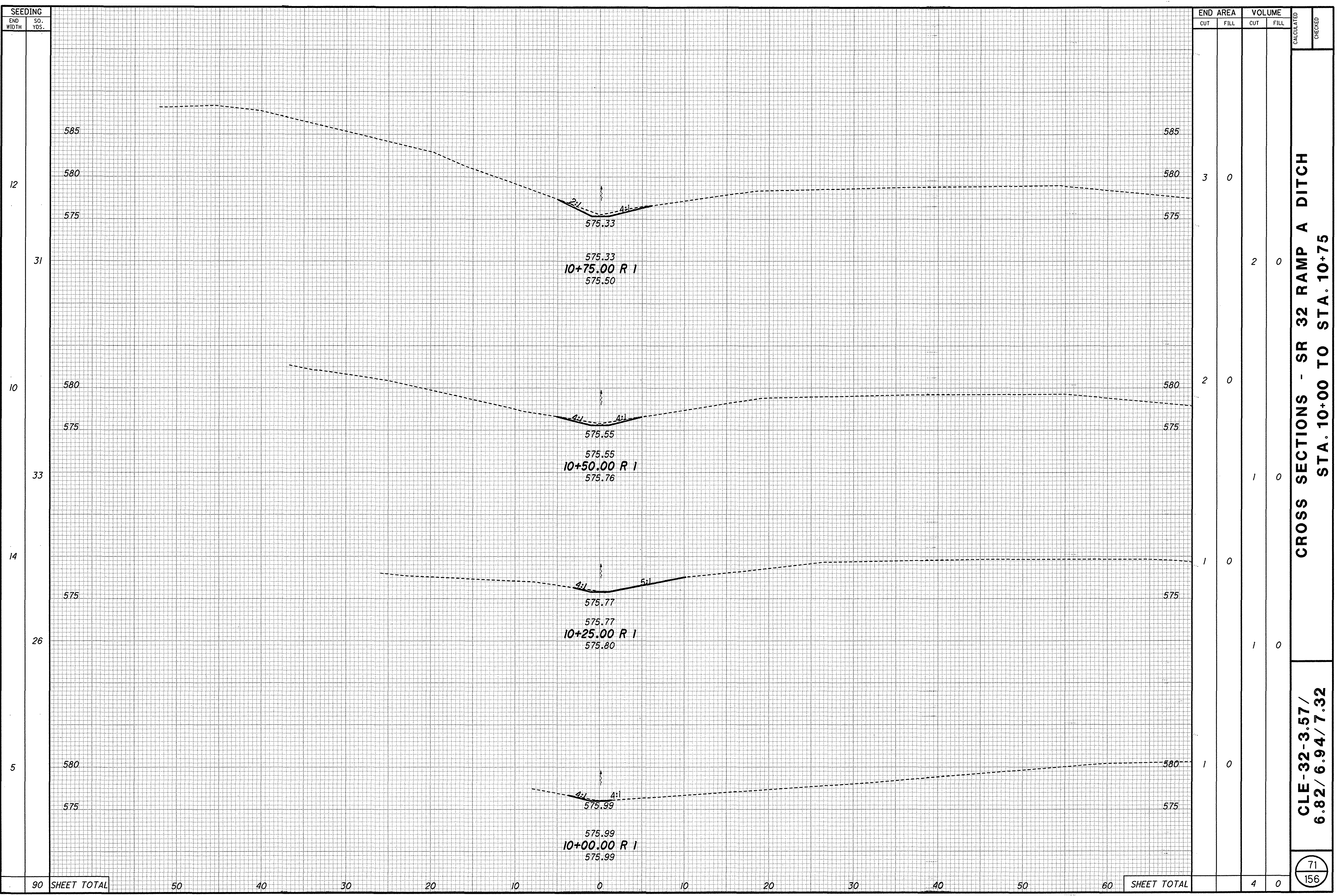
END AREA		VOLUME	
CUT	FILL	CUT	FILL
44	0	18	5
32	21	27	24
26	30	7	8
27	28		
SHEET TOTAL		52	37
TOTAL CARRIED TO GEN. SUMMARY		404	126

CROSS SECTIONS - SR 32
STA. 187+42.48 AHEAD TO STA. 187+88.02
CLE-32-3.57 / 6.82 / 6.94 / 7.32
 70 / 156

80 SHEET TOTAL
710 TOTAL CARRIED TO GEN. SUMMARY

SHEET TOTAL
TOTALS CARRIED TO GEN. SUMMARY

I:\projects\CLE\sr032\06.82_P1D24955\Consult\Final Tracings\ODOT Mod\24955\S005.dgn 31-JAN-2007 1:47PM charvill



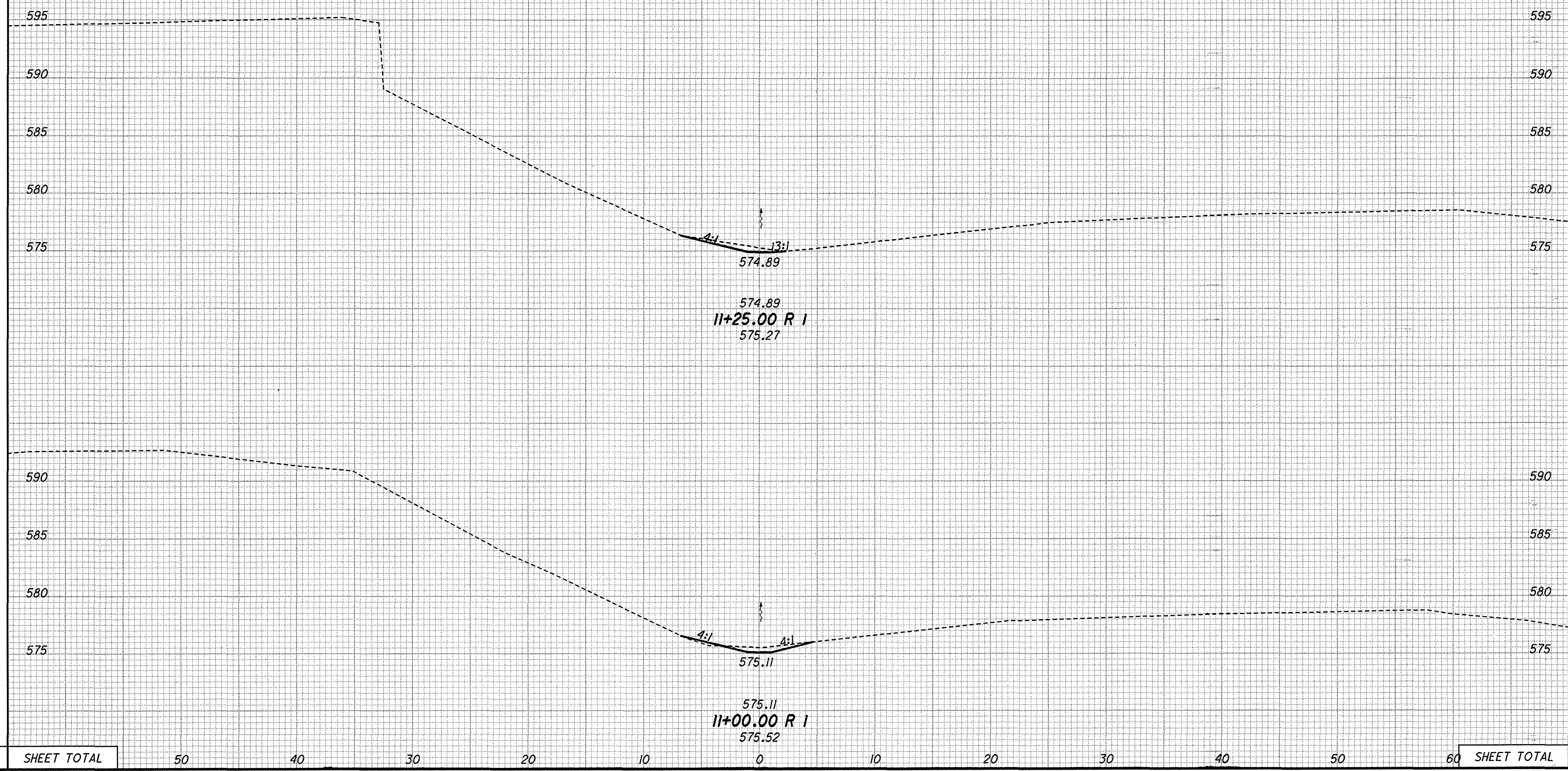
SEEDING	
END WIDTH	SO. YDS.
90	5
	26
	14
	33
	10
	31
	12

END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
3	0				
		2	0		
		1	0		
		1	0		
		1	0		
		4	0		
SHEET TOTAL					

CROSS SECTIONS - SR 32 RAMP A DITCH
STA. 10+00 TO STA. 10+75
CLE-32-3.57 / 6.82 / 6.94 / 7.32
 71 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\S006.dgn 31-JAN-2007 1:47PM charvill

SEEDING	
END WIDTH	SO. YDS.
62	33
12	29
9	9



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2	0	2	0
2	1	2	0
SHEET TOTAL		4	0

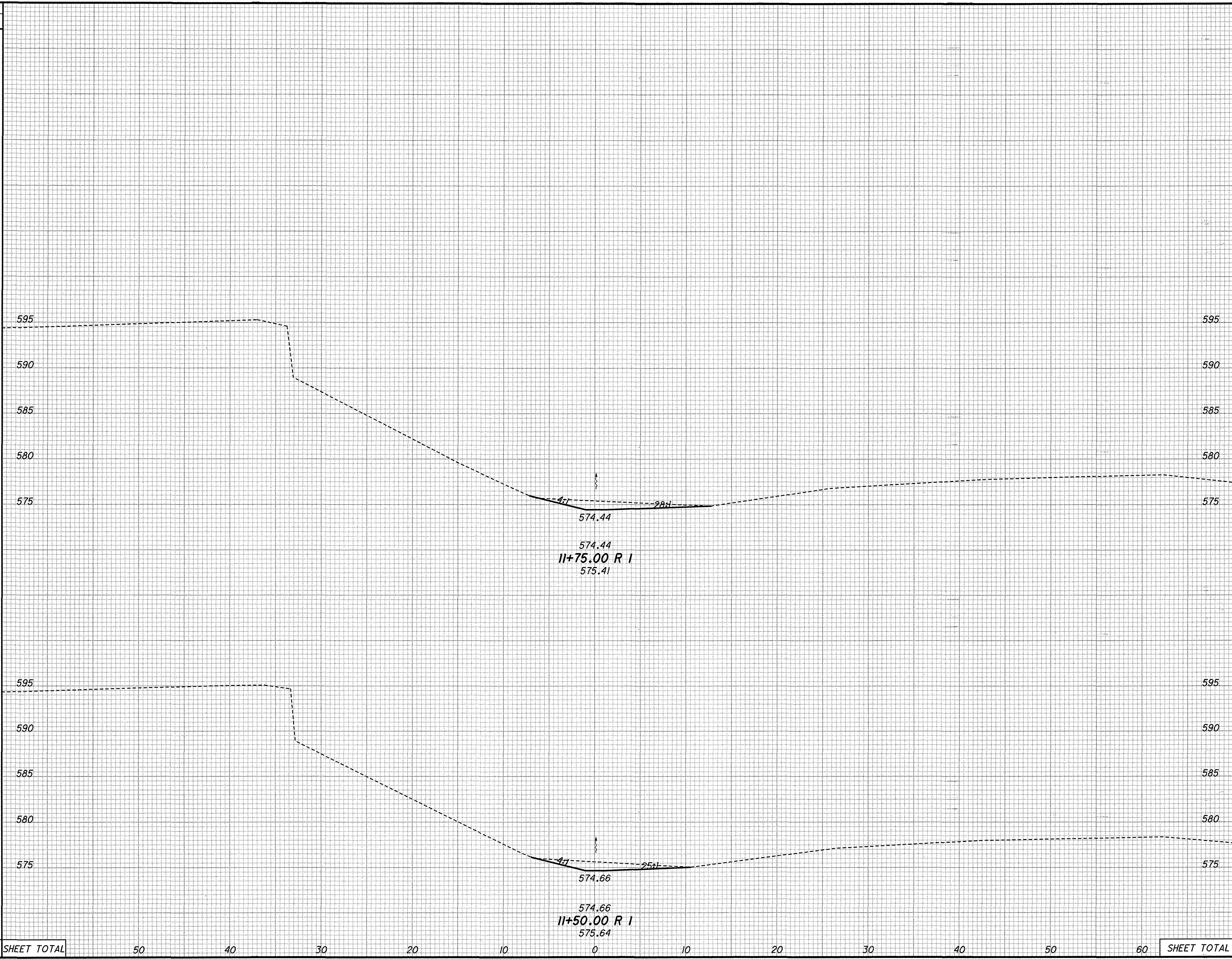
CROSS SECTIONS - SR 32 RAMP A DITCH
 STA. 11+00 TO STA. 11+25

CLE-32-3.57 /
 6.82 / 6.94 / 7.32

72
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Drawings\DOT Mod\24955\S007.dgn 31-JAN-2007 1:46PM charvill

SEEDING	
END WIDTH	SO. YDS.
20	
53	
18	
38	
91	SHEET TOTAL



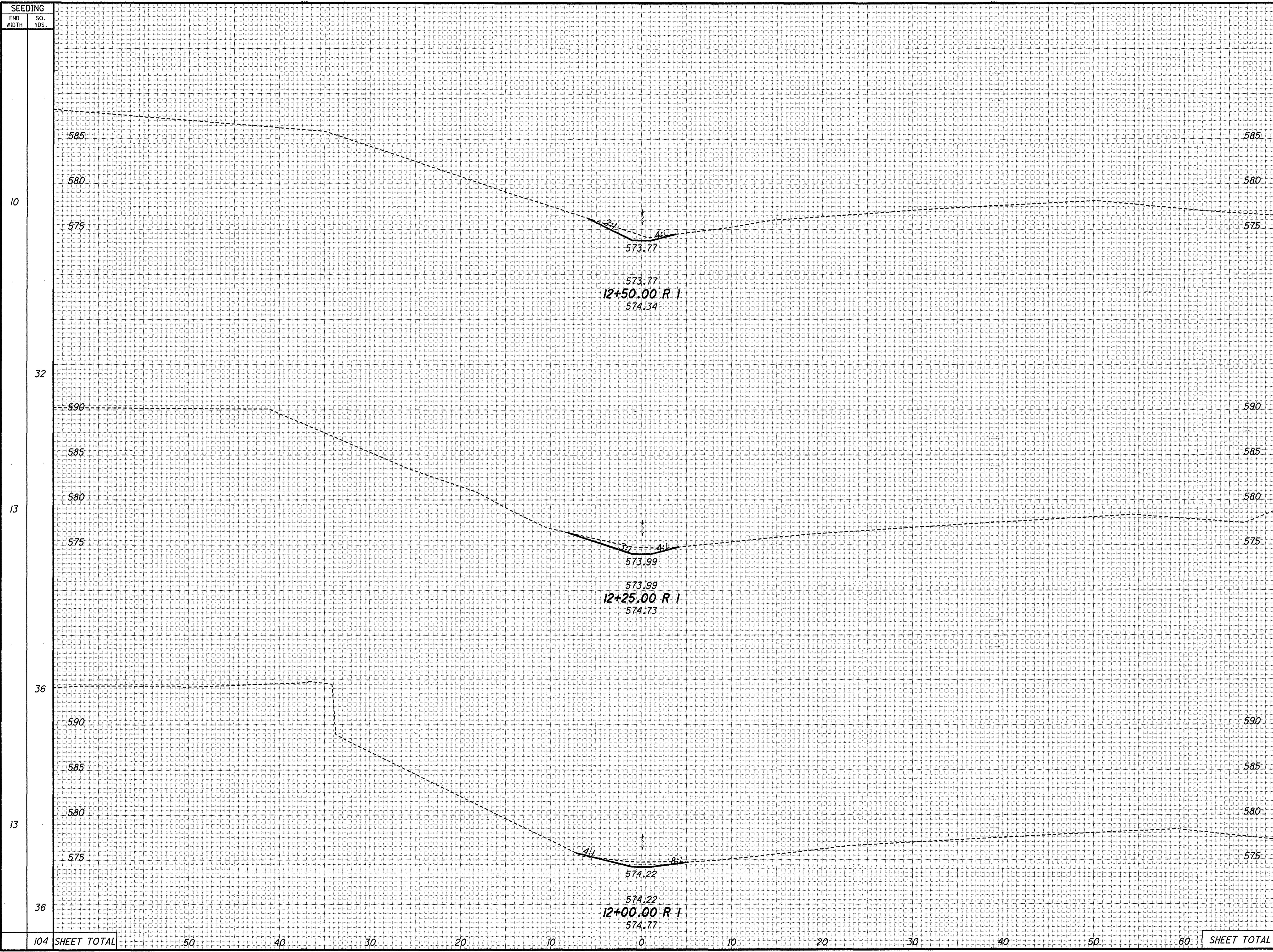
END AREA		VOLUME	
CUT	FILL	CUT	FILL
10	0	9	0
9	0	5	0
SHEET TOTAL		14	0

CROSS SECTIONS - SR 32 RAMP A DITCH
 STA. 11+50 TO STA. 11+75

CLE-32-3.57 /
 6.82 / 6.94 / 7.32

73
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\S008.dgn 31-JAN-2007 1:45PM charvill



SEEDING		END AREA		VOLUME	
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL
10		4	0		
32				4	0
13		5	0		
36				4	0
13		3	0		
36				6	0
104	SHEET TOTAL			14	0

**CROSS SECTIONS - SR 32 RAMP A DITCH
STA. 12+00 TO STA. 12+50**

**CLE-32-3.57 /
6.82 / 6.94 / 7.32**

74
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955\S009.dgn 31-JAN-2007 1:48PM charvill

SEEDING	
END WIDTH	SO. YDS.
9	
10	
8	
21	
7	
24	

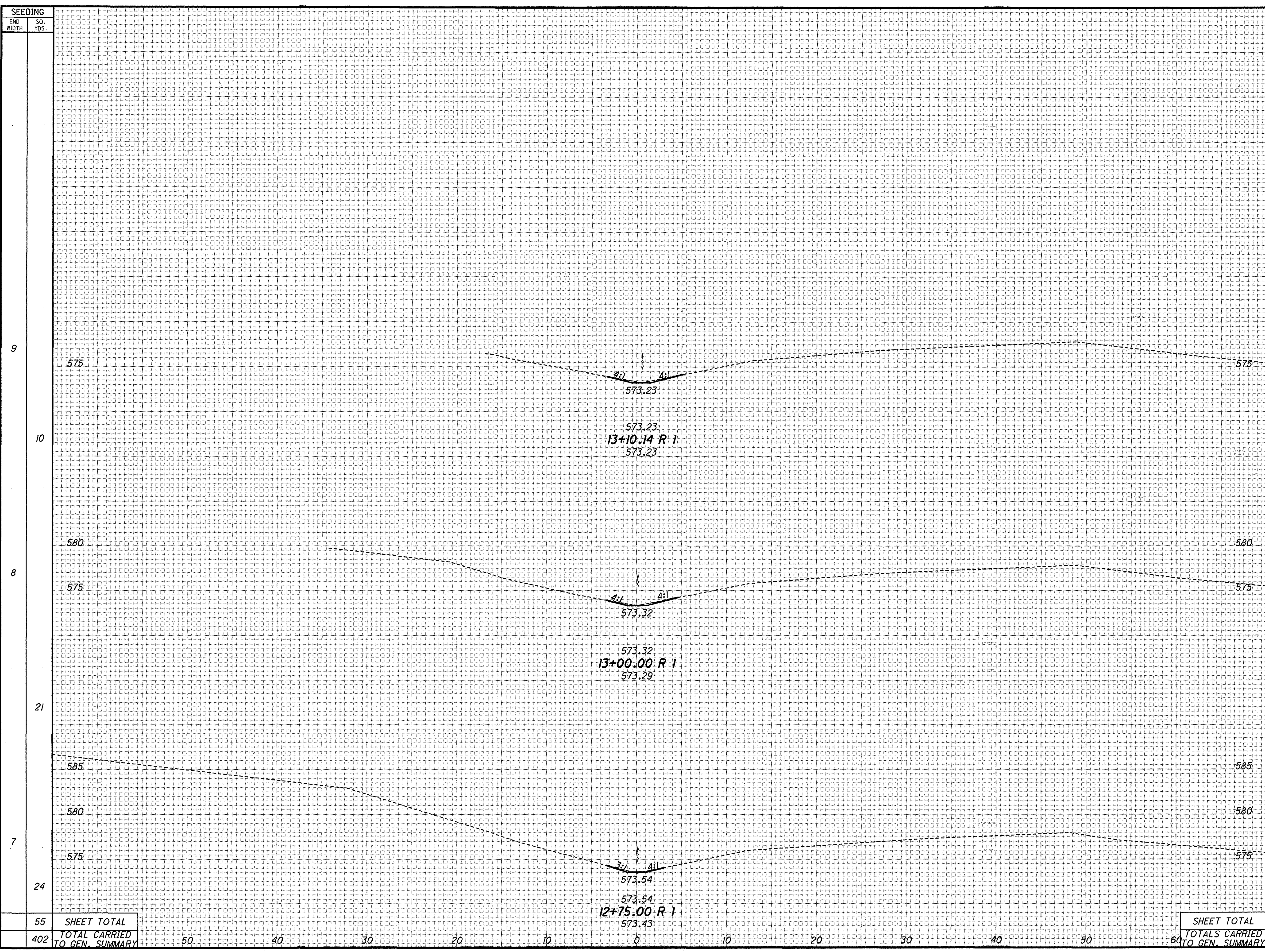
END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
1	0				
1	0	1	0		
1	0	1	0		
1	0	2	0		
		4	0	75	
		40	0	156	

**CROSS SECTIONS - SR 32 RAMP A DITCH
STA. 12+75 TO STA. 13+10.14**

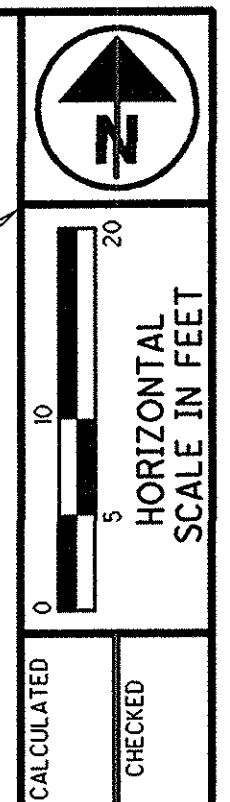
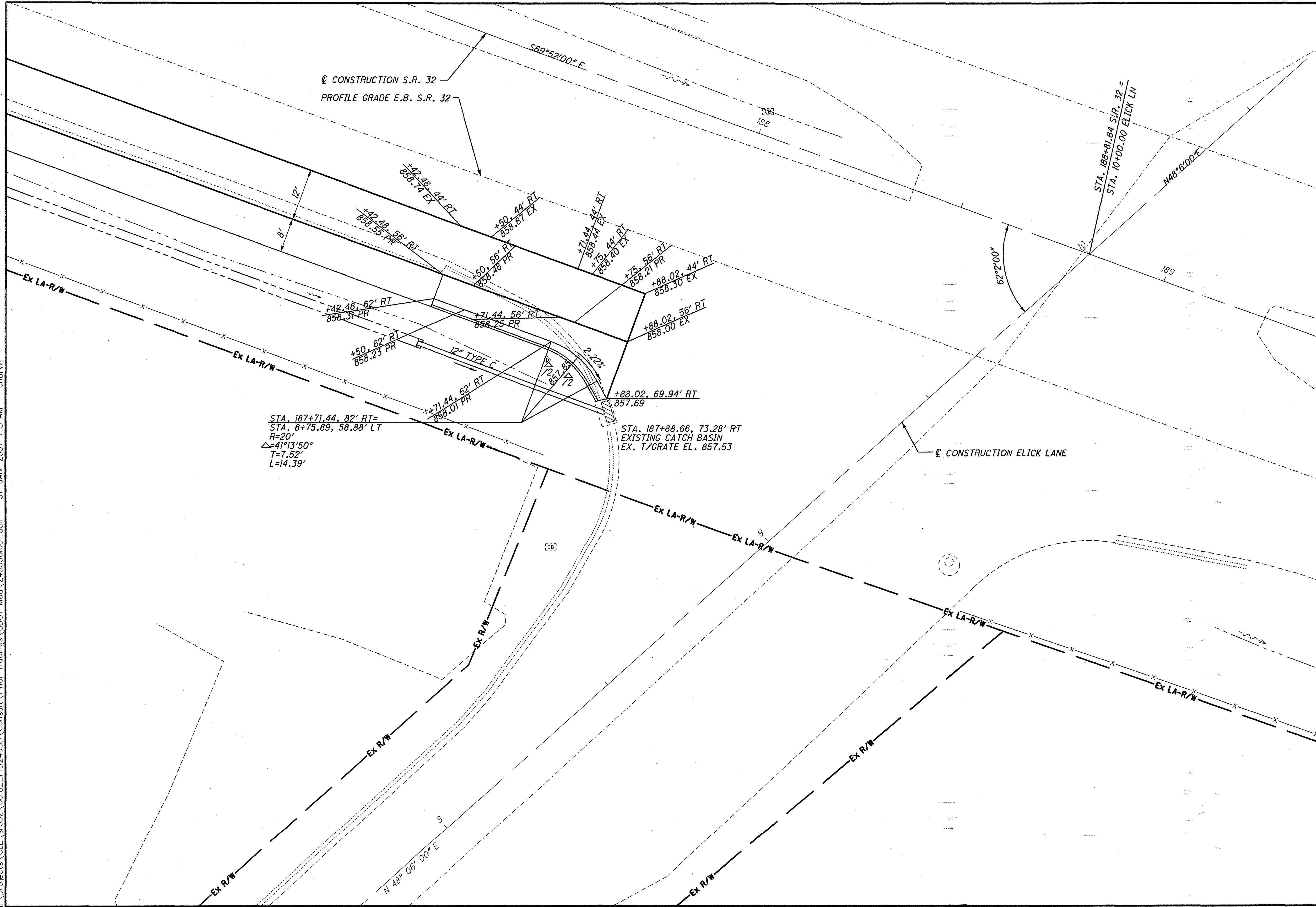
**CLE-32-3.57 /
6.82 / 6.94 / 7.32**

55	SHEET TOTAL
402	TOTAL CARRIED TO GEN. SUMMARY

SHEET TOTAL	
TOTALS CARRIED TO GEN. SUMMARY	



I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955G001.dgn 31-JAN-2007 7:51AM charvill



CALCULATED
CHECKED

INTERSECTION DETAIL
S.R. 32 - ELICK LANE

CLE-32-3.57 /
6.82/6.94/7.32

76
156

SUPERELEVATION TABLE

P.I. STA. 24+37.16 Dc = 2°00'

REMARKS	LEFT OUTSIDE EDGE -					LEFT CENTERLINE OF LANES					LEFT INSIDE EDGE (PROFILE GRADE)		STATION	RIGHT INSIDE EDGE (PROFILE GRADE)		RIGHT CENTERLINE OF LANES					RIGHT OUTSIDE EDGE -					REMARKS
	ELEVATION	ELEVATION CORRECTION *	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION *	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	OFFSET		OFFSET	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION *	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION *	ELEVATION	
	594.44	0.06	0.00260		12	594.41	0.03	0.00260		12	594.38	10	33+25.00	10	594.37	12		0.0092	-0.11	594.48	12		0.0100	-0.23	594.60	
	594.70	0.08	0.00348	↑	12	594.66	0.04	0.00348	↑	12	594.62	10	33+33.50	10	594.62	12		0.0156	-0.19	594.80	12		0.0156	-0.37	594.99	N.C.
	595.23	0.12	0.00520	↑	12	595.17	0.06	0.00520	↑	12	595.11	10	33+50.00	10	595.11	12		0.0156	-0.19	595.30	12		0.0156	-0.37	595.48	
	595.52	0.15	0.00608	↑	12	595.44	0.07	0.00608	↑	12	595.37	10	33+58.50	10	595.37	12		0.0156	-0.19	595.56	12		0.0156	-0.37	595.74	
	596.05	0.19	0.0078	↑	12	595.95	0.09	0.0078	↑	12	595.86	10	33+75.00	10	595.86	12		0.0156	-0.19	596.05	12		0.0156	-0.37	596.23	
	596.86	0.25	0.0104	833:1	12	596.73	0.12	0.0104	790:1	12	596.61	10	34+00.00	10	596.61	12		0.0156	-0.19	596.80	12		0.0156	-0.37	596.98	
	597.67	0.31	0.0130	↓	12	597.52	0.16	0.0130	↓	12	597.36	10	34+25.00	10	597.36	12		0.0156	-0.19	597.55	12		0.0156	-0.37	597.73	
	598.48	0.37	0.0156	↓	12	598.30	0.19	0.0156	↓	12	598.11	10	34+50.00	10	598.11	12		0.0156	-0.19	598.30	12		0.0156	-0.37	598.48	
	599.23	0.37	0.0156	↓	12	599.05	0.19	0.0156	↓	12	598.86	10	34+75.00	10	598.86	12		0.0156	-0.19	599.05	12		0.0156	-0.37	599.23	
	599.98	0.37	0.0156	↓	12	599.80	0.19	0.0156	↓	12	599.61	10	35+00.00	10	599.61	12		0.0156	-0.19	599.80	12		0.0156	-0.37	599.98	
N.C.	600.12	0.37	0.0156	↓	12	599.94	0.19	0.0156	↓	12	599.75	10	35+04.50	10	599.75	12		0.0156	-0.19	599.94	12		0.0156	-0.37	600.12	N.C.

* NEGATIVE CORRECTIONS DENOTE BELOW PROFILE GRADE.
POSITIVE CORRECTIONS DENOTE ABOVE PROFILE GRADE.

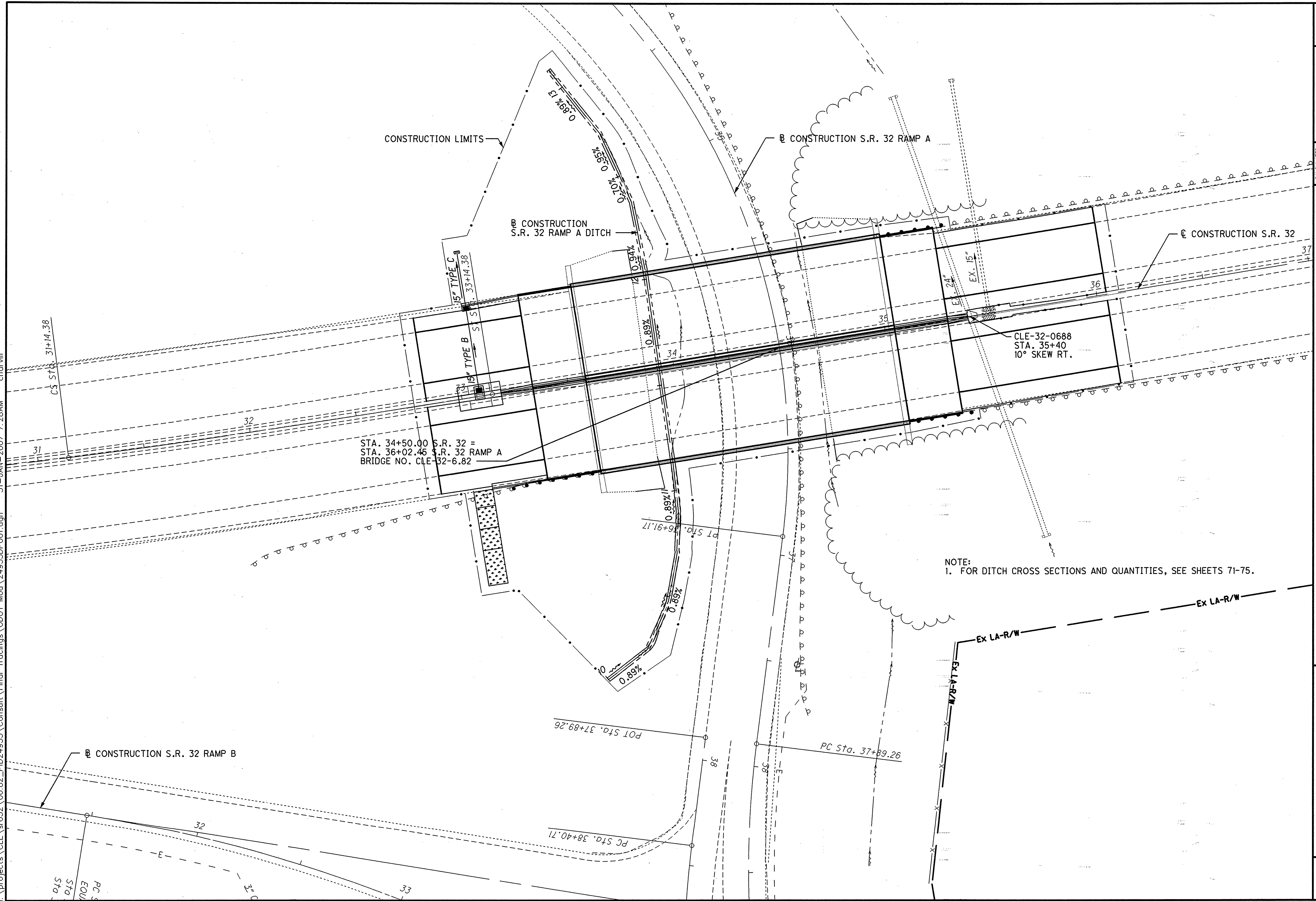
i:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955GE001.dgn 31-JAN-2007 7:34AM chorvill

CALCULATED
CWP
CHECKED

SUPERELEVATION TABLE
S.R. 32

CLE-32-3.57/
6.82.6.94/7.32

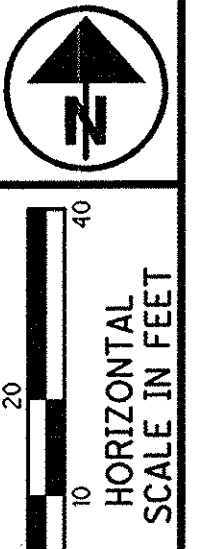
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955DP001.dgn 31-JAN-2007 7:28AM charvill



STA. 34+50.00 S.R. 32 =
STA. 36+02.45 S.R. 32 RAMP A
BRIDGE NO. CLE-32-6.82

CLE-32-0688
STA. 35+40
10° SKEW RT.

NOTE:
1. FOR DITCH CROSS SECTIONS AND QUANTITIES, SEE SHEETS 71-75.



CALCULATED
CHECKED

DRAINAGE DETAIL
SR 32 RAMP A DITCH

CLE-32-3.57 /
6.82 / 6.94 / 7.32

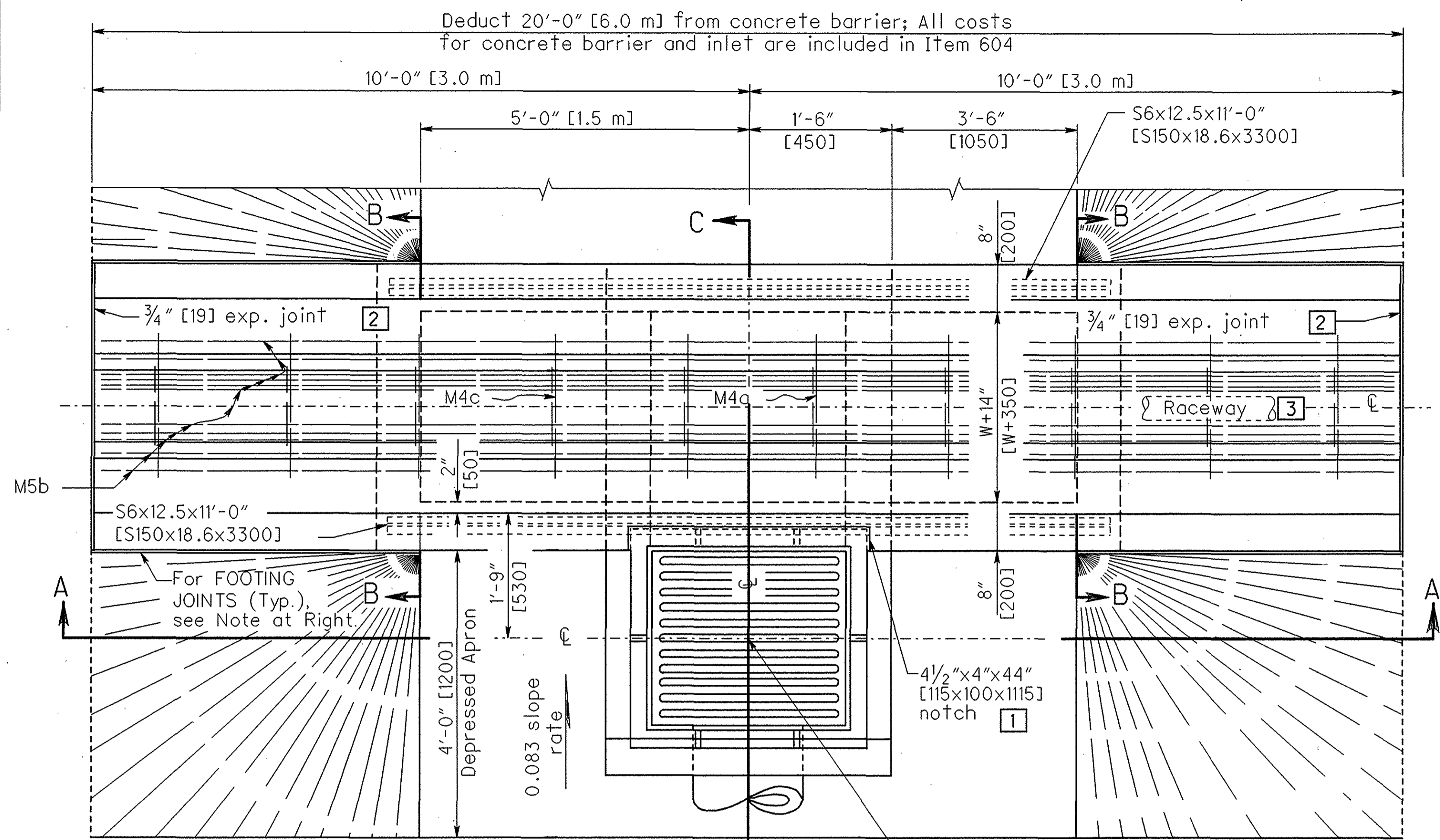
NOTES

- GENERAL:** For details of concrete barriers, see SCD RM-4.3. Minimum weight [mass] of frame and cover shall be 540 lbs. [245 kg].
- WALLS:** The walls between the bottom slab and the upper permissible construction joint may be built of brick, concrete block or cast-in-place concrete, 8" [200] nominal thickness for depths of 12' [3.5 m] or less. Precast walls shall have a minimum thickness of 6" [150] and be reinforced sufficiently to permit shipping and handling without damage. The unit above the permissible construction joint may be precast or cast-in-place.
- HEIGHT:** When placed in 50" [1270] high barrier the 30" [763] height shall be made 48" [1220].
- CONCRETE:** Cast-in-place concrete is to be Class C. All precast concrete shall meet the requirements of CMS 706.13. Required markings shall include the inlet number. Exposed concrete surfaces of the barrier shall be sealed with an approved sealer.
- REINFORCING STEEL:** Reinforcing steel shall be epoxy coated in accordance with CMS 509.09.
- FOOTING JOINTS:** The vertical walls between the barrier footing and a concrete pavement or concrete base shall be provided with a sealed joint as detailed on SCD RM-4.3.
- STEPS:** Steps shall be in accordance with SCD MH-1.1.
- GRATE LOCATION:** In superelevated curves or at other locations where there is unequal discharge from the directional roadways, the inlet grating shall be located in the roadway which discharges the major flow.
- INLETS OVER 12 FEET [3.5 m] IN DEPTH:** Such inlets shall be precast or cast-in-place concrete; reinforced with #4 [#13M] bars on 12" [300] centers both vertically and horizontally with 2" [50] clearance from the inside wall face.
- OPENINGS:** Pipe openings shall be the outside diameter of the pipe being supplied plus 2" [50] when fabricated or field cut. The interstitial space shall be filled with grout per CMS 601.
- PCJ:** Permissible Construction Joint

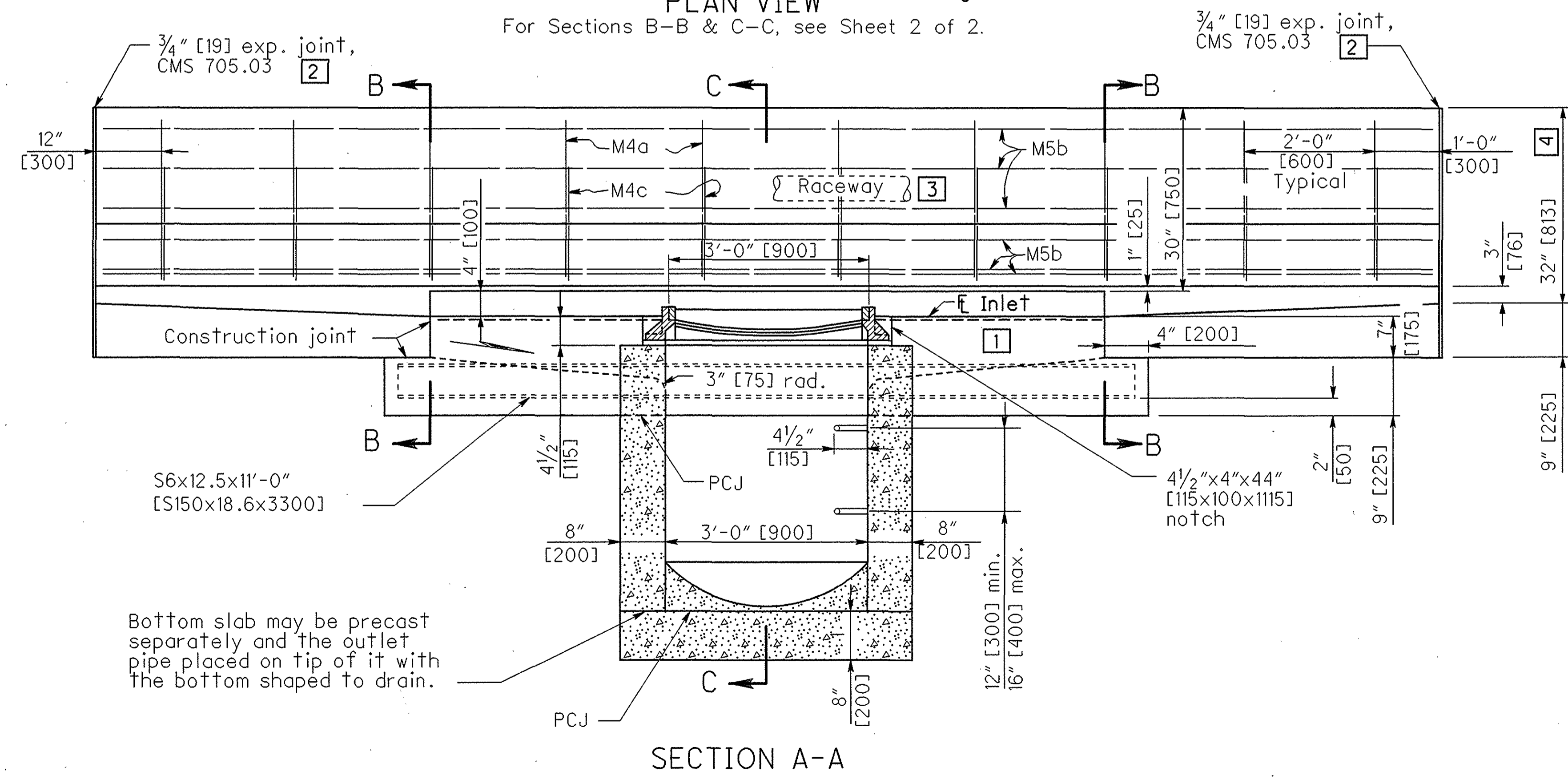
STANDARD INLET NUMBERS	
I-3A Type A	(32" [813] Barrier with W=6" [150])
I-3A Type A1	(50" [1270] Barrier with W=6" [150])
I-3B Type B	(32" [813] Barrier with W=12" [300])
I-3B Type B1	(50" [1270] Barrier with W=12" [300])

LEGEND

- 1 After casting is placed, fill notch with Class C concrete
- 2 A 1/2" [38] minimum exp. joint shall be provided in concrete pavement or concrete shoulders.
- 3 4" [100] Lighting raceway, if required elsewhere by the plans.
- 4 Barrier height equals either 32" [813] or 50" [1270].

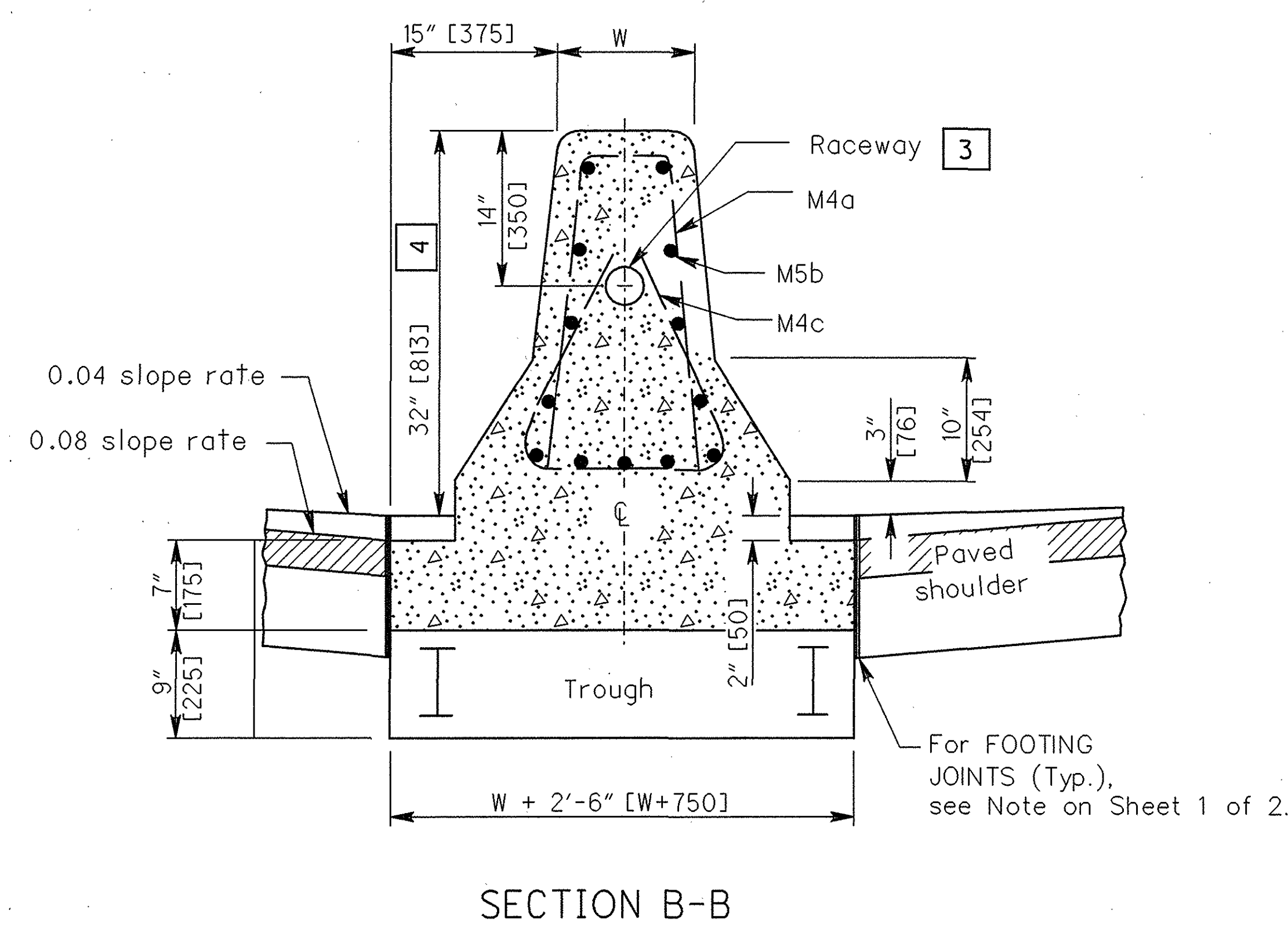


PLAN VIEW
For Sections B-B & C-C, see Sheet 2 of 2.



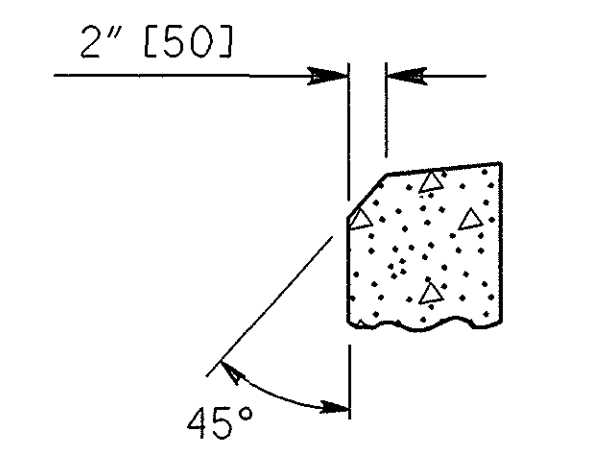
SECTION A-A

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955DM001.dgn 31-JAN-2007 7:27AM charvill

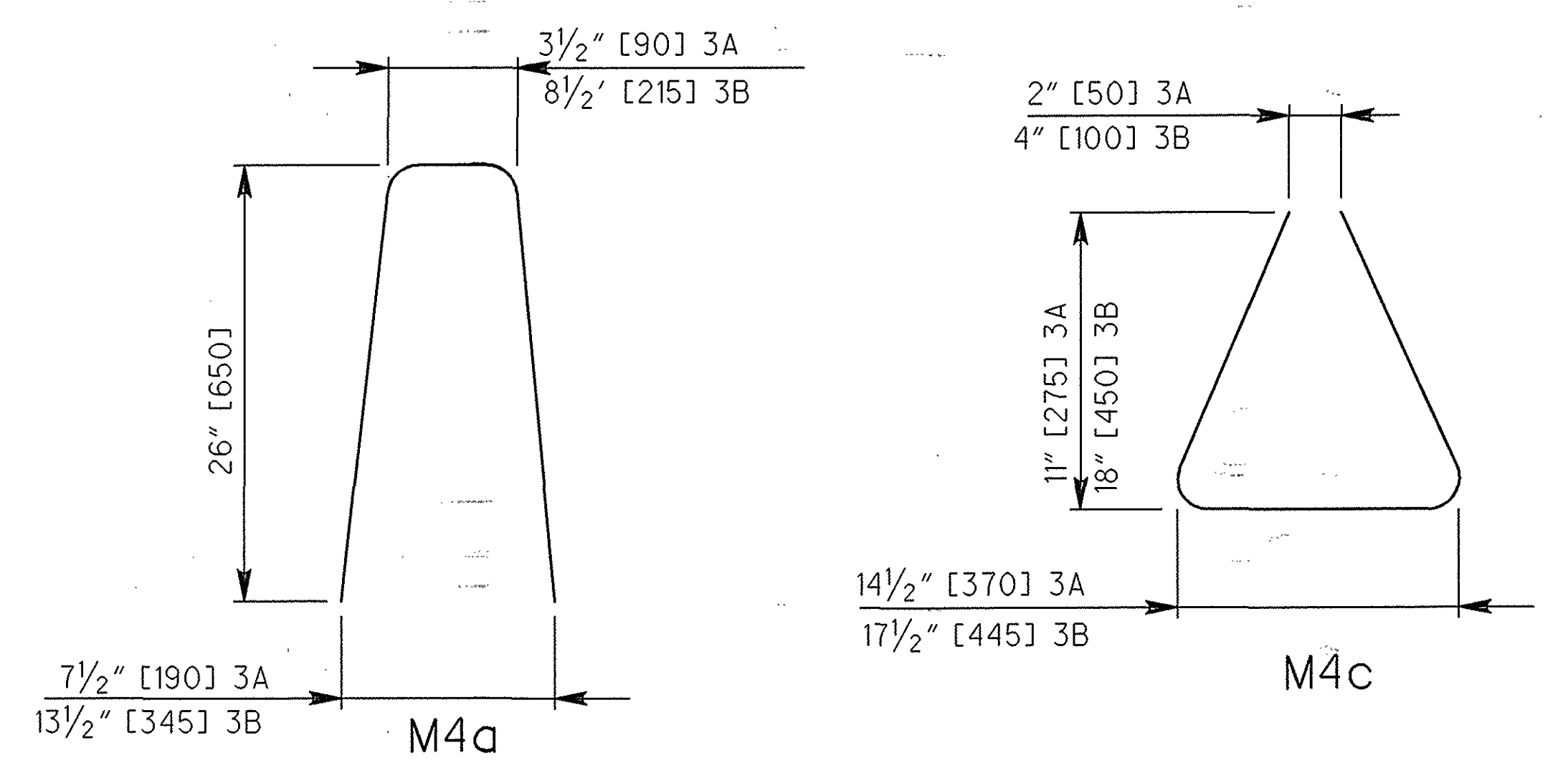


SECTION B-B

NOTE:
For NOTES and LEGEND, see Sheet 1 of 2.



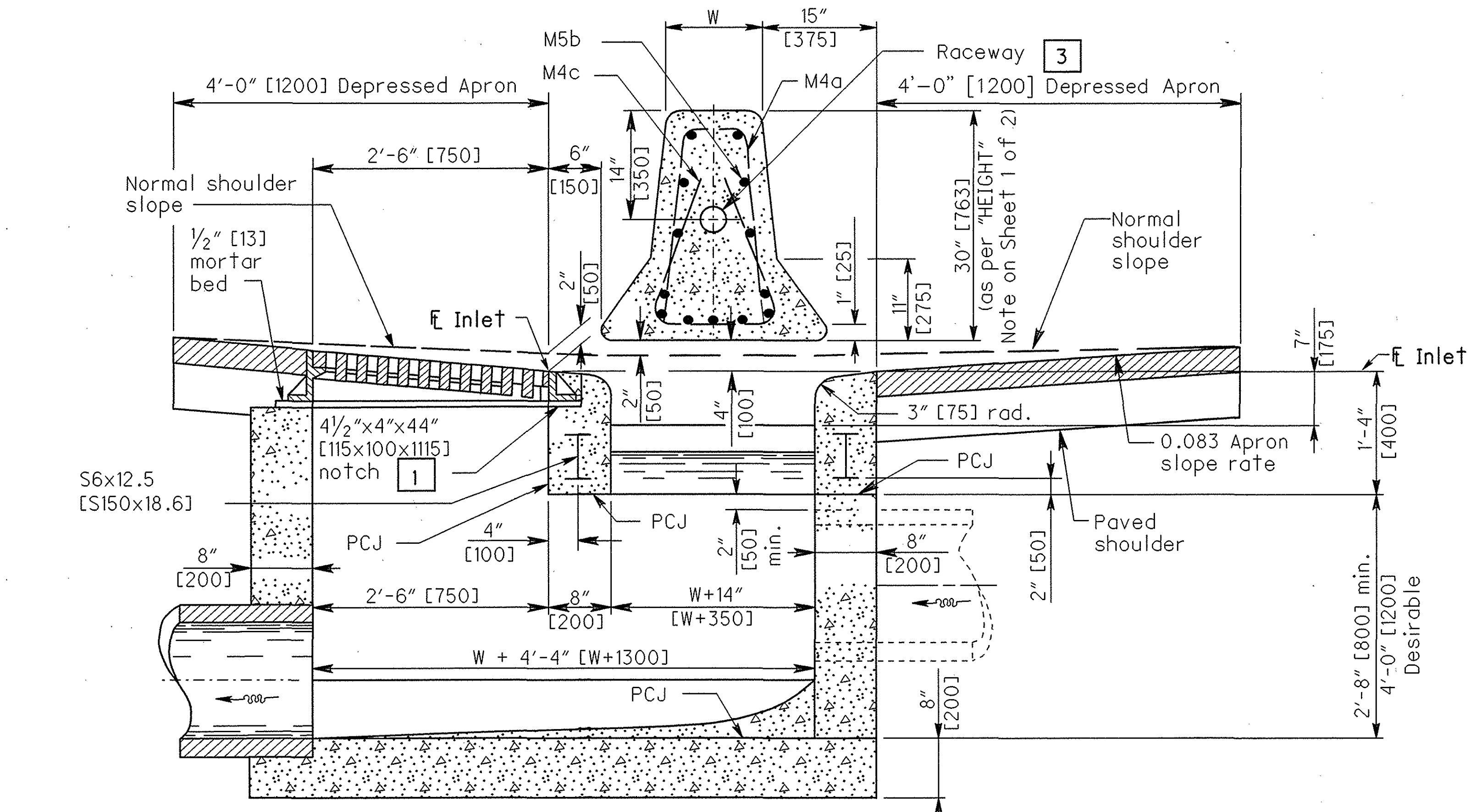
ALTERNATE
SPILLWAY SHAPE



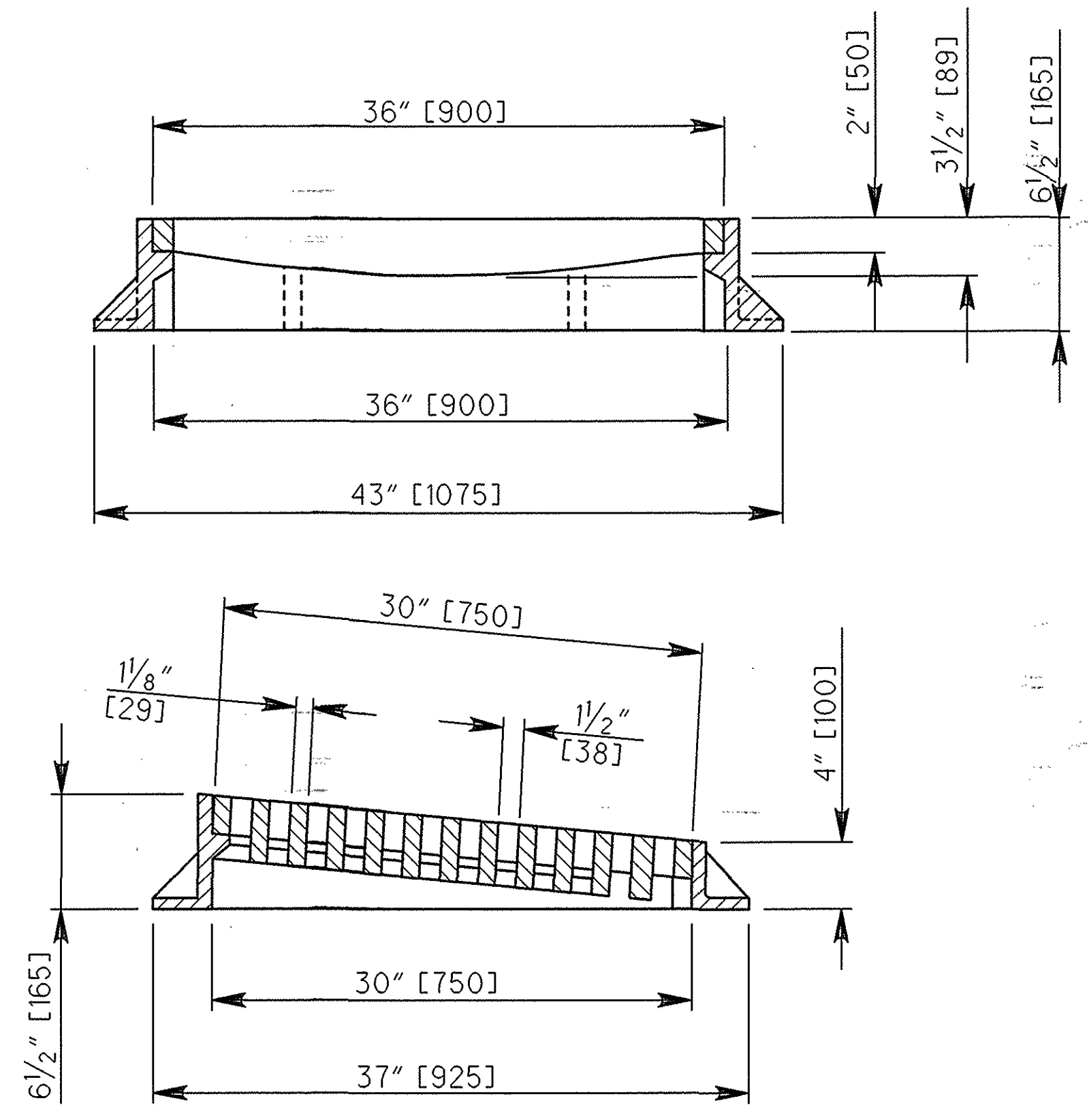
BENDING DIAGRAM

INLET NO.	W	M4a #4 [#13M]		M5b #5 [#16M]		M4c #4 [#13M]		S6x12.5 [S150x18.6]	
		No.	Length	No.	Length	No.	Length	No.	Length
I-3A	6" [150]	10	4'-6" [1370]	13	19'-8" [5900]	10	3'-1" [940]	2	11'-0" [3300]
I-3B	12" [300]	10	5'-0" [1525]	13	19'-8" [5900]	10	4'-6" [1370]	2	11'-0" [3300]

Included for estimating purposes only. The cost of furnishing and placing all reinforcing steel shall be included in Item 604 for payment.



SECTION C-C



CASTING DETAILS

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955DM002.dgn 31-JAN-2007 7:27AM charvill

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	642	642	642	644	644	644									621	621		
			FROM	TO		EDGE LINE (WHITE)	EDGE LINE (YELLOW)	LANE LINE (WHITE)	CHANNELIZING LINE	STOP LINE	LANE ARROW											RPM, ONE-WAY LOW PROFILE, WHITE	RPM, TWO-WAY LOW PROFILE, WHITE/RED
			MILE	MILE		MILE	FT	FT	EACH												EACH	EACH	
83		S.R. 32/ELICK LANE	184+36.00	187+00.00	RT	0.05																	
83		S.R. 32/ELICK LANE	184+36.00	187+00.00	RT		0.05																
83		S.R. 32/ELICK LANE	184+36.00	187+00.00	RT			0.05															
83		S.R. 32/ELICK LANE	184+86.00	187+00.00	RT				214.00												6		
83		S.R. 32/ELICK LANE	185+41.00		RT					1													
83		S.R. 32/ELICK LANE	185+82.65	187+00.00	RT				117.35														
83		S.R. 32/ELICK LANE	186+32.00		RT					1													
84		S.R. 32/ELICK LANE	187+00.00	187+86.00	RT	0.02																	
84		S.R. 32/ELICK LANE	187+00.00	188+21.31	RT		0.02																
84		S.R. 32/ELICK LANE	187+00.00	188+01.61	RT			0.02															
84		S.R. 32/ELICK LANE	187+00.00	188+01.61	RT				101.61												3		
84		S.R. 32/ELICK LANE	187+00.00	188+21.31	RT				121.31														
84		S.R. 32/ELICK LANE	187+44.00		RT					1													
84		S.R. 32/ELICK LANE	187+86.00		RT					24.81													
84		S.R. 32/ELICK LANE	188+01.61		RT					24.00													
84		S.R. 32/ELICK LANE	188+21.31		RT					12.00													
85		S.R. 32/RAMP A	32+83.50	36+04.50	LT	0.06																	
85		S.R. 32/RAMP A	32+83.50	36+04.50	RT	0.06																	
85		S.R. 32/RAMP A	32+83.50	36+04.50	LT		0.06																
85		S.R. 32/RAMP A	32+83.50	36+04.50	RT		0.06																
85		S.R. 32/RAMP A	32+83.50	36+04.50	LT			0.06												3			
85		S.R. 32/RAMP A	32+83.50	36+04.50	RT			0.06												3			
86		S.R.32/RAILROAD	39+01.88	42+61.60	LT	0.07																	
86		S.R.32/RAILROAD	39+01.88	42+61.60	RT	0.07																	
86		S.R.32/RAILROAD	39+01.88	42+61.60	LT		0.07																
86		S.R.32/RAILROAD	39+01.88	42+61.60	RT			0.07															
86		S.R.32/RAILROAD	39+01.88	42+61.60	LT				0.07												3		
86		S.R.32/RAILROAD	39+01.88	42+61.60	RT				0.07												3		
87		S.R. 32/RAMP E	58+88.62	62+50.00	LT	0.07																	
87		S.R. 32/RAMP E	58+88.62	62+50.00	RT	0.07																	
87		S.R. 32/RAMP E	58+88.62	62+50.00	LT		0.07																
87		S.R. 32/RAMP E	58+88.62	62+50.00	RT			0.07													4		
87		S.R. 32/RAMP E	58+88.62	62+50.00	LT				0.07												4		
88		S.R. 32/S.R.222	62+50.00	65+38.38	LT	0.05																	
88		S.R. 32/S.R.222	62+50.00	65+38.38	RT	0.05																	
88		S.R. 32/S.R.222	62+50.00	65+38.38	LT		0.05																
88		S.R. 32/S.R.222	62+50.00	65+38.38	RT			0.05													3		
88		S.R. 32/S.R.222	62+50.00	65+38.38	LT			0.05													3		
88		S.R. 32/S.R.222	62+70.00	65+38.38	RT			0.05															
SUBTOTAL						0.57	0.57	0.62	554.27	60.81	3										26	9	
TOTAL CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY						1.14		0.62	554	61	3											26	9

CALCULATED
 CHECKED
PAVEMENT MARKING SUBSUMMARY
CLE-32-3.57 / 6.82 / 6.94 / 7.32
 80
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\DDOT_Moc\24955TS001.dgn 31-JAN-2007 1:02PM charvill

i:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955TS002.dgn 31-JAN-2007 1:03PM charvill

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630	630	630	630												
							GROUND MOUNTED SUPPORT, NO. 3 POST FT	SIGN, FLAT SHEET SQ FT	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH												
83	S1	S.R.32/ELICK LANE	184+36.00	RT	R3-H8DA-54	54"x30"	13.5 / 13.5	11.25														
83	S2	S.R.32/ELICK LANE	184+36.00	RT	R5-1A-36	36"x24"		6														
83	S3	S.R.32/ELICK LANE	184+50.86	RT	R3-H8CG-48				1	2												
83	S4	S.R.32/ELICK LANE	184+36.00	RT	R3-H8DA-54	54"x30"	13.5 / 14.0	11.25														
83	S5	S.R.32/ELICK LANE	184+36.00	RT	R5-1A-36	36"x24"		6														
83	S6	S.R.32/ELICK LANE	184+51.09	RT	R3-H8CG-48				1	2												
84	S7	S.R.32/ELICK LANE	187+63.00	RT	R5-1-36	36"x36"	12.50	9														
84	S8	S.R.32/ELICK LANE	187+63.42	RT	R5-1-36				1	1												
84	S9	S.R.32/ELICK LANE	191+36.00	LT	R5-1A-36	36"x24"		6														
84	S10	S.R.32/ELICK LANE	191+36.00	LT	R5-1A-36	36"x24"		6														
SUBTOTAL							67.00	55.50	3	5												
TOTAL CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY							67	56	3	5												

SIGNING SUBSUMMARY

CLE-32-3.57 / 6.82 / 6.94 / 7.32

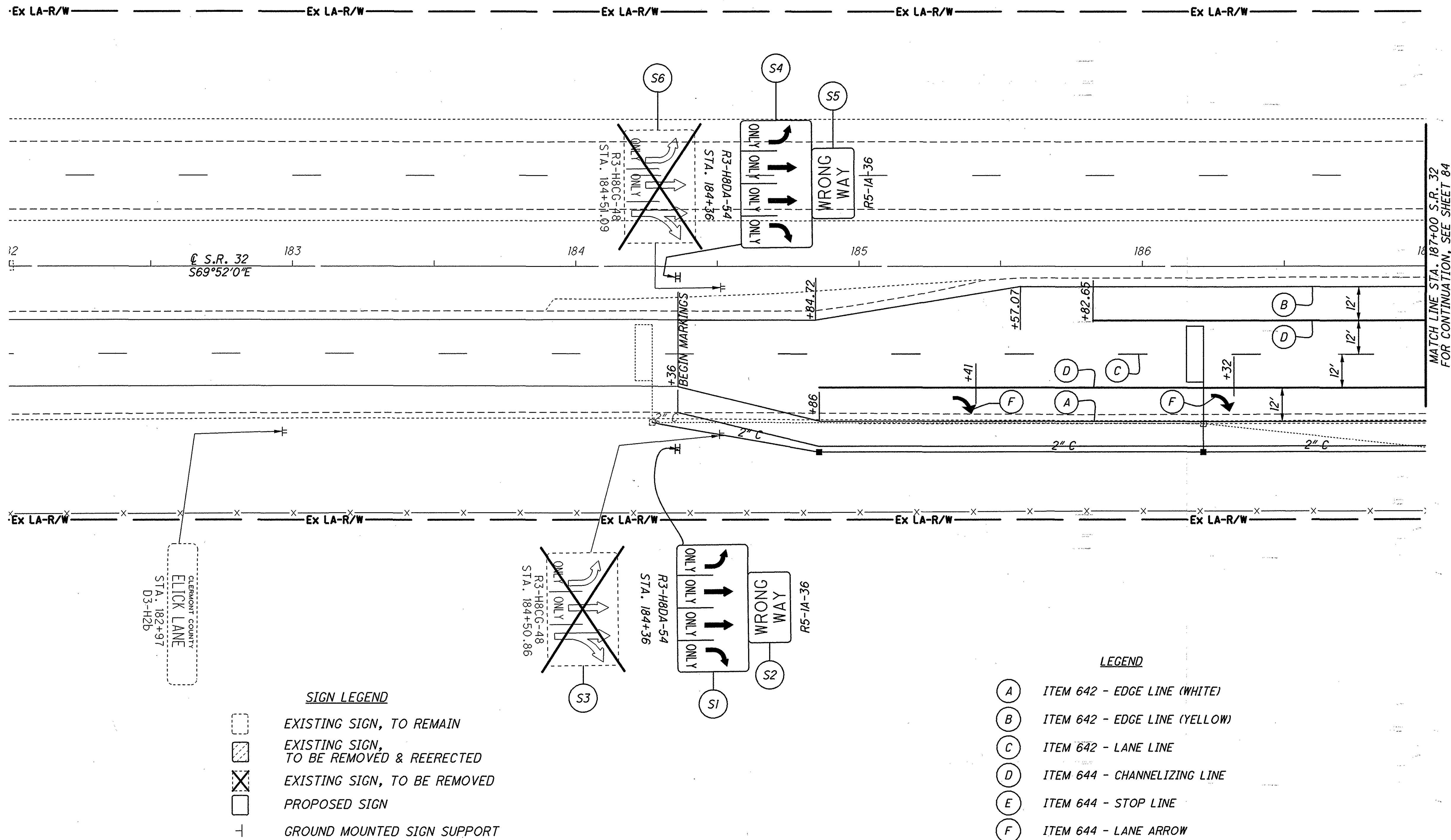
CALCULATED
CHECKED

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955CS001.dgn 31-JAN-2007 7:11AM charvill

SHEET NO.	LOCATION	SIDE	202	625	625	625	625	632	632										
			PULL BOX REMOVED	CONDUIT, 2", 725.04	TRENCH, 24" DEEP	PULL BOX, 725.08, 18"	PULL BOX CLEANED	DETECTOR LOOP	LOOP DETECTOR LEAD-IN CABLE										
			EACH	FT	FT	EACH	EACH	EACH	FT										
89	EXPB1	184+27.00	RT				1												
89	EXPB1-PB2	184+27.00 TO 184+86.00	RT	60	60														
89	PB2	184+86.00	RT			1													
89	PB2-PB3	184+86.00 TO 186+21.60	RT	136	136														
89	PB3	186+21.60	RT	1		1		1											
89	PB3-PB4	186+21.60 TO 187+63.90	RT	143	143														
90	PB4	187+63.90	RT			1													
90	PB4-EXPB5	187+63.90 TO 187+80.24	RT	21	21														
89-90	EXPB1-EXPB5	184+27.00 TO 187+80.24	RT						385										
89-90	PB3-EXPB5	186+21.60 TO 187+80.24	RT						179										
90	EXPB5	187+80.24	RT				1												
SUBTOTAL				1	360	360	3	2	1	564									
TOTAL CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY				1	360	360	3	2	1	564									

TRAFFIC SIGNAL SUBSUMMARY	CALCULATED
	CHECKED
CLE-32-3.57 / 6.82 / 6.94 / 7.32	82 / 156

I:\projects\CLE\sr032\06.82_PiD24955\Consult\Final Tracings\ODOT Mod\24955TP001.dgn 31--JAN--2007 12:10PM chtarvill

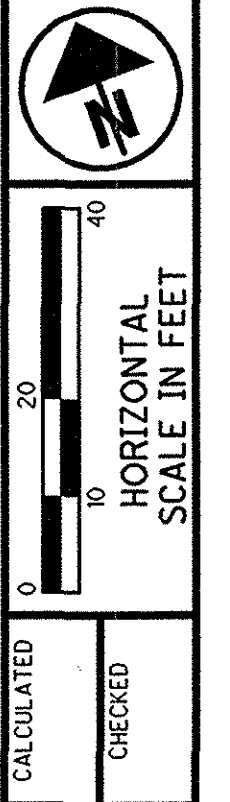


SIGN LEGEND

EXISTING SIGN, TO REMAIN
 EXISTING SIGN, TO BE REMOVED & REERECTED
 EXISTING SIGN, TO BE REMOVED
 PROPOSED SIGN
 GROUND MOUNTED SIGN SUPPORT

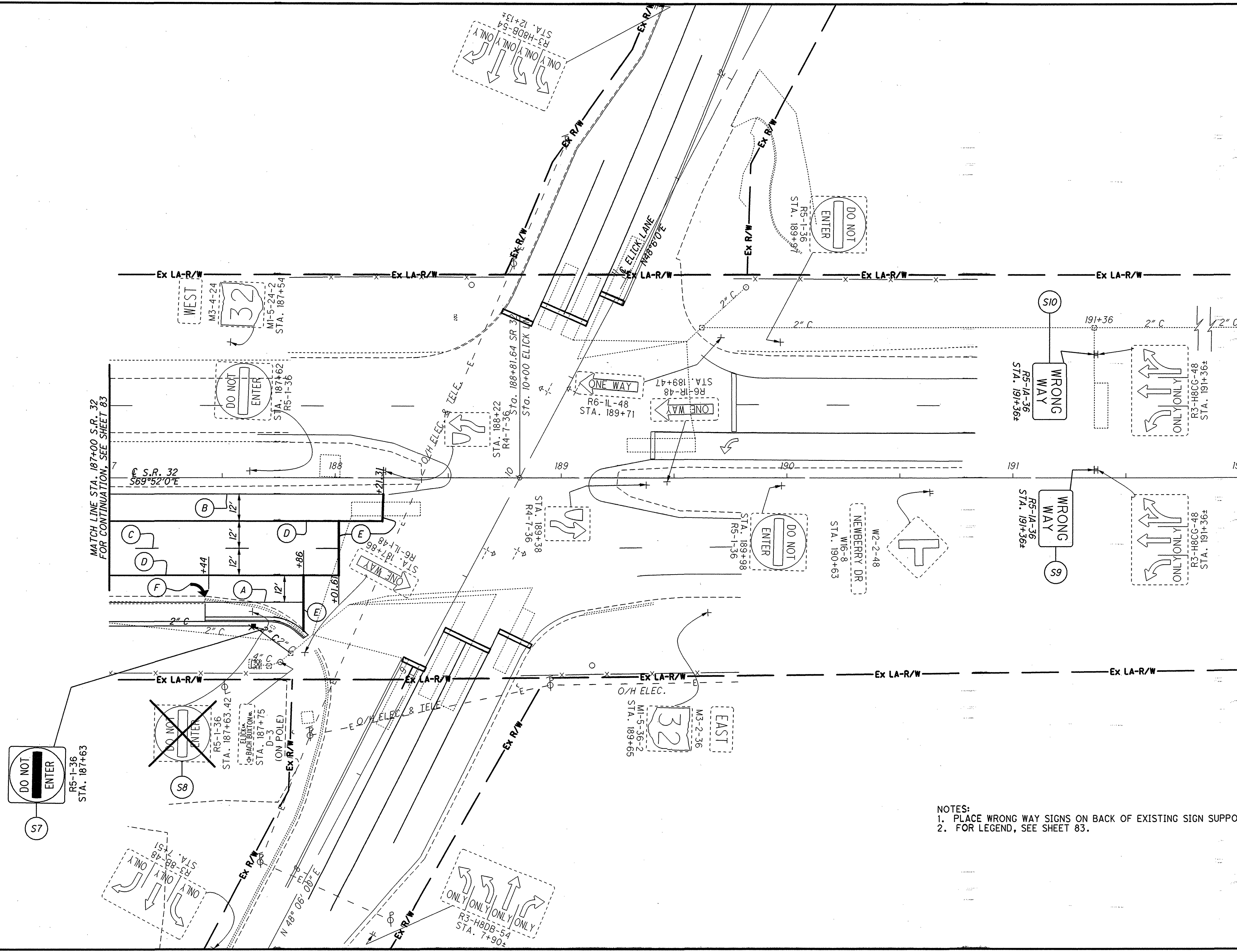
LEGEND

(A) ITEM 642 - EDGE LINE (WHITE)
 (B) ITEM 642 - EDGE LINE (YELLOW)
 (C) ITEM 642 - LANE LINE
 (D) ITEM 644 - CHANNELIZING LINE
 (E) ITEM 644 - STOP LINE
 (F) ITEM 644 - LANE ARROW

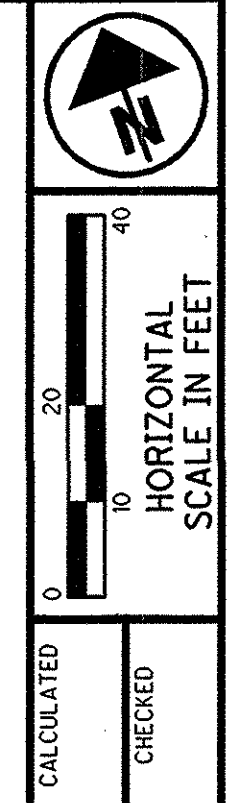


SIGNING AND PAVEMENT MARKING PLAN
STA. 182+00 TO STA. 187+00

CLE-32-3.57 / 6.82 / 6.94 / 7.32



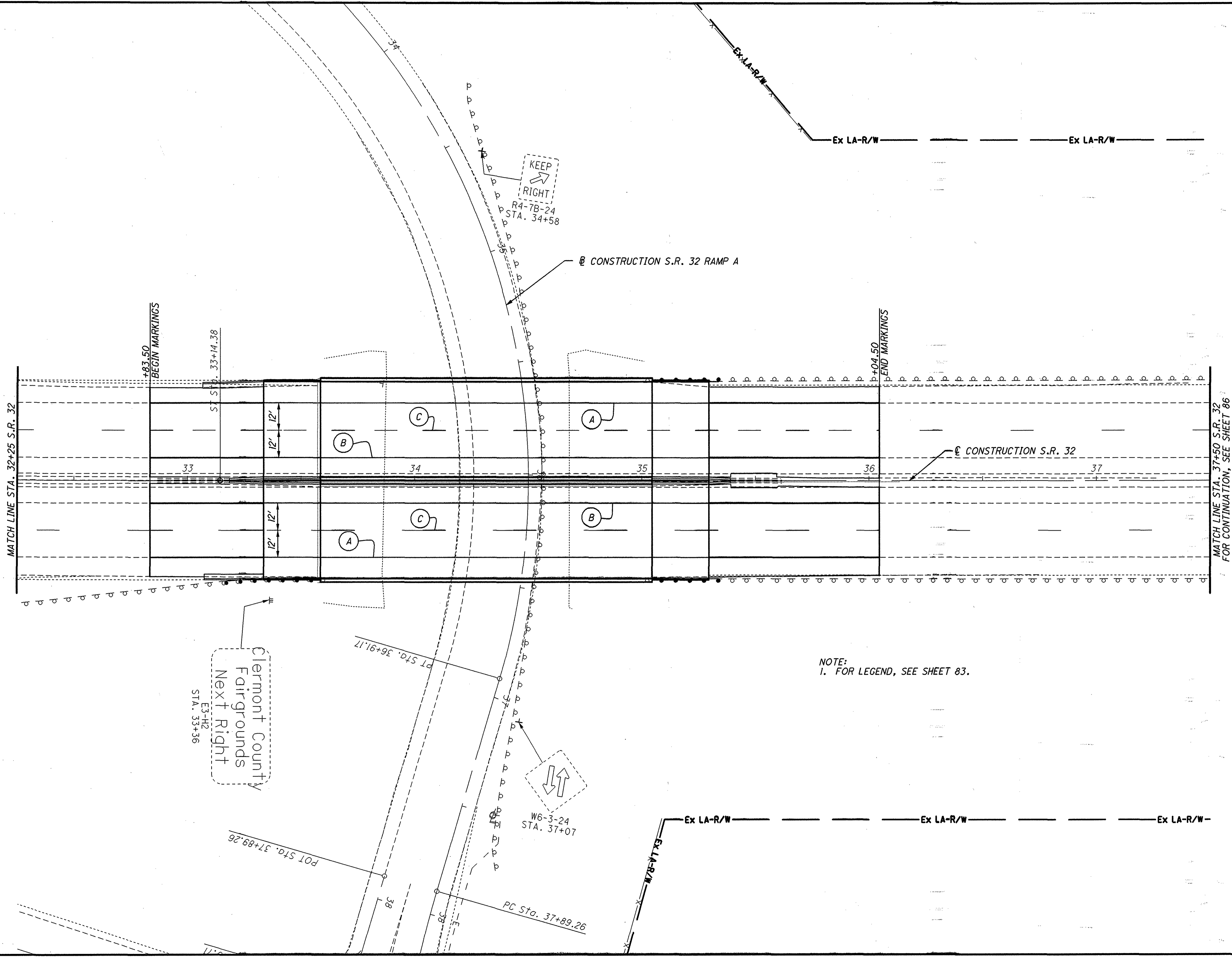
NOTES:
 1. PLACE WRONG WAY SIGNS ON BACK OF EXISTING SIGN SUPPORTS.
 2. FOR LEGEND, SEE SHEET 83.



SIGNING AND PAVEMENT MARKING PLAN
STA. 187+00 TO STA. 192+00

CLE-32-3.57 /
6.82/ 6.94/ 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\24955TP003.dgn 31-JAN-2007 12:49PM charvill

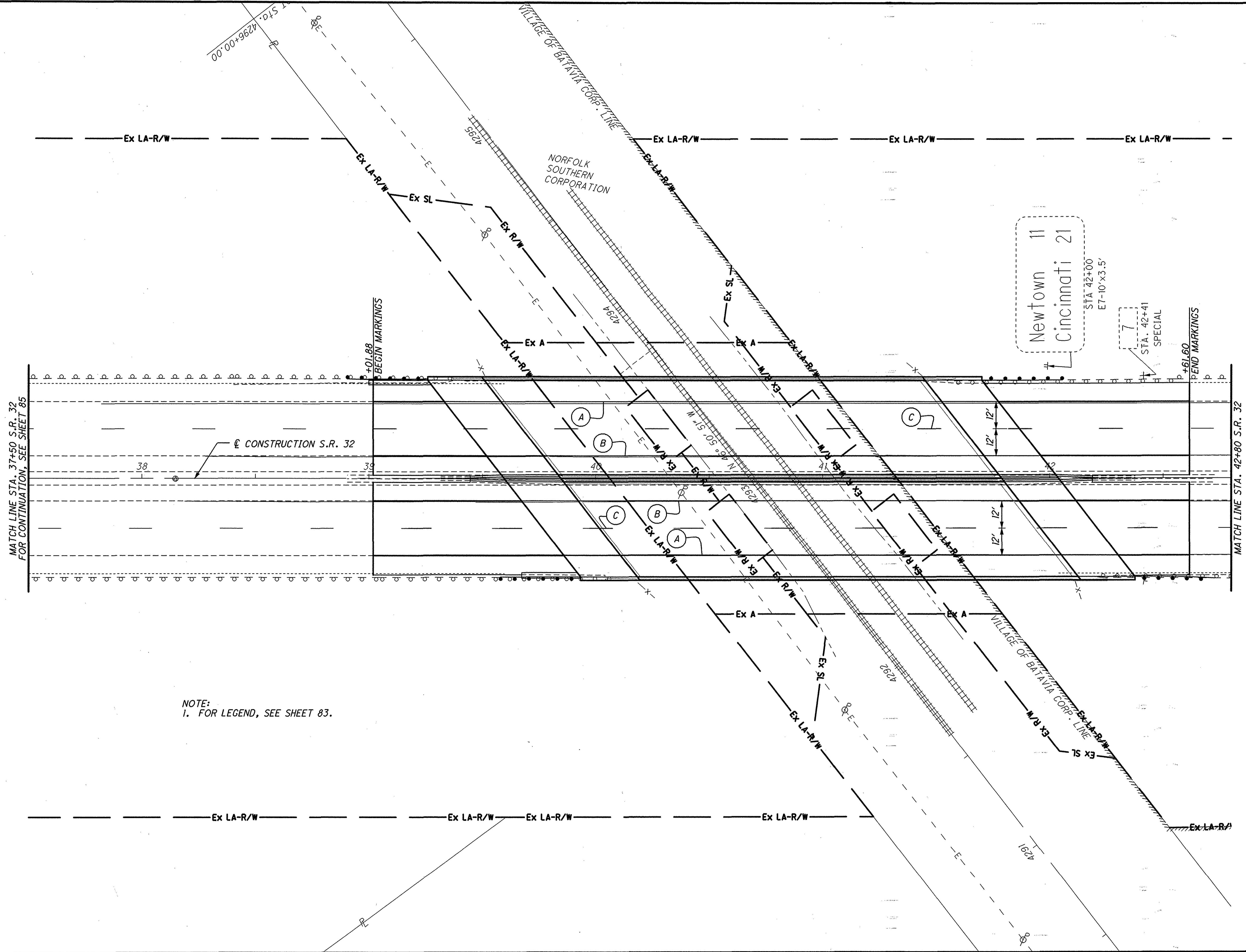


CALCULATED _____
 CHECKED _____

0 10 20
 HORIZONTAL SCALE IN FEET

SIGNING AND PAVEMENT MARKING PLAN
STA. 32+25 TO STA. 37+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32



NOTE:
 1. FOR LEGEND, SEE SHEET 83.



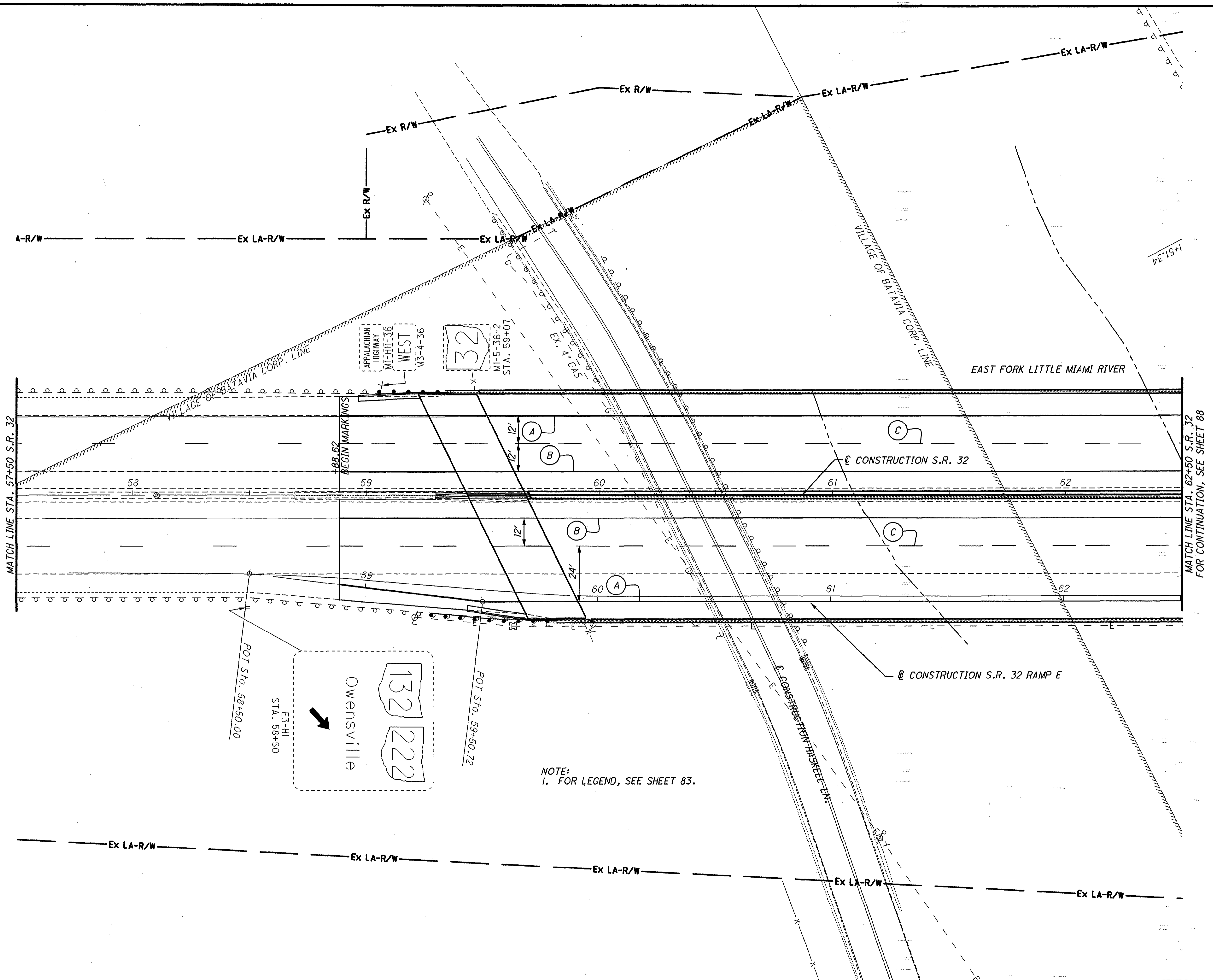
CALCULATED
 CHECKED

SIGNING AND PAVEMENT MARKING PLAN
STA. 37+50 TO STA. 42+80

CLE-32-3.57 /
 6.82 / 6.94 / 7.32

86
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final_Tracings\ODOT_Mod\24955TP005.dgn 31-JAN-2007 12:48PM charvill



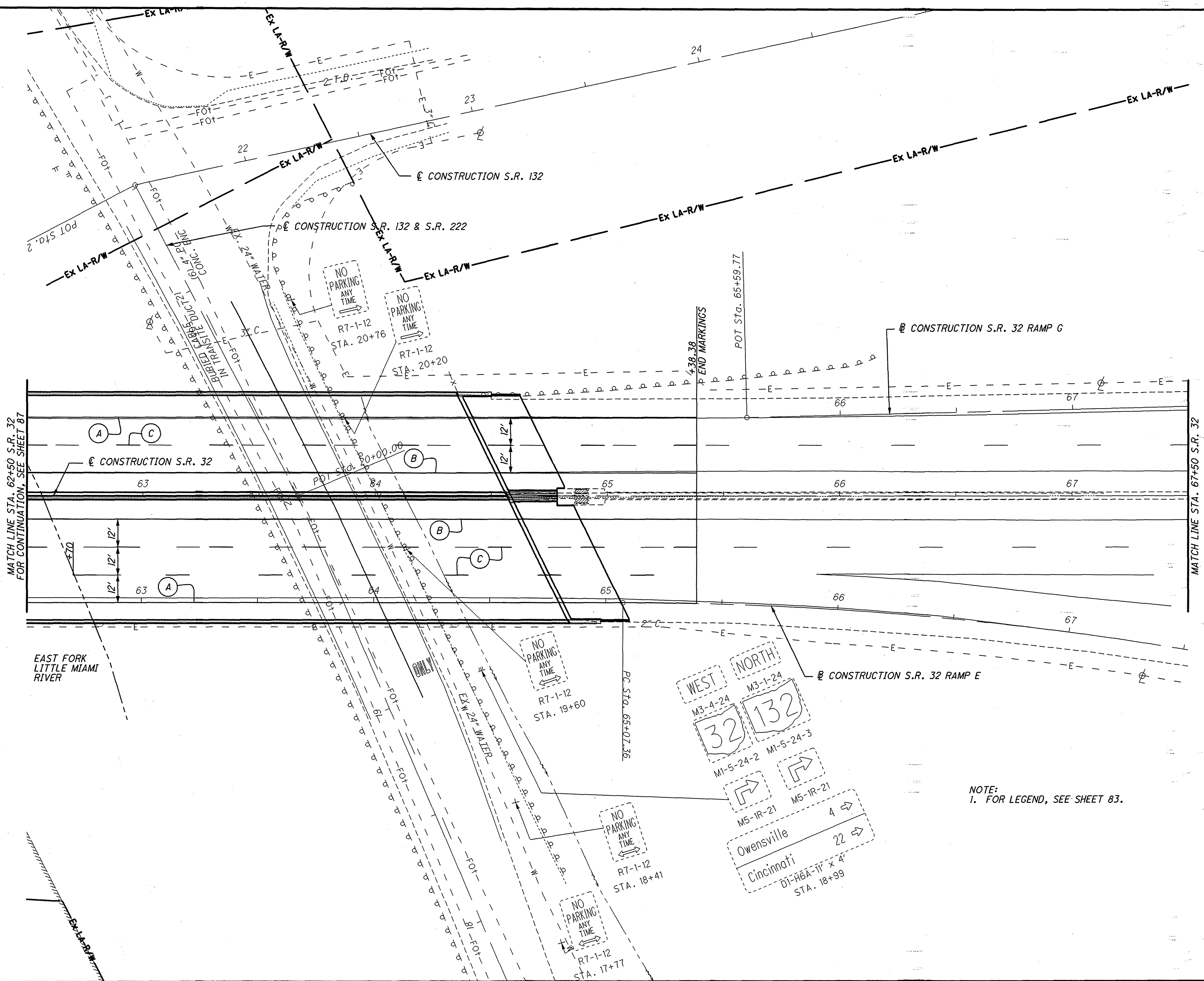
CALCULATED
CHECKED

0 10 20
HORIZONTAL
SCALE IN FEET

SIGNING AND PAVEMENT MARKING PLAN
STA. 57+50 TO STA. 62+50

CLE-32-3.57 /
6.82 / 6.94 / 7.32

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955TP006.dgn 31-JAN-2007 1:02PM charvill



NOTE:
1. FOR LEGEND, SEE SHEET 83.



CALCULATED
CHECKED

SIGNING AND PAVEMENT MARKING PLAN
STA. 62+50 TO STA. 67+50

CLE-32-3.57/
6.82/6.94/7.32

TRAFFIC SIGNAL GENERAL NOTES

725.08 PORTLAND CONCRETE PULL BOXES

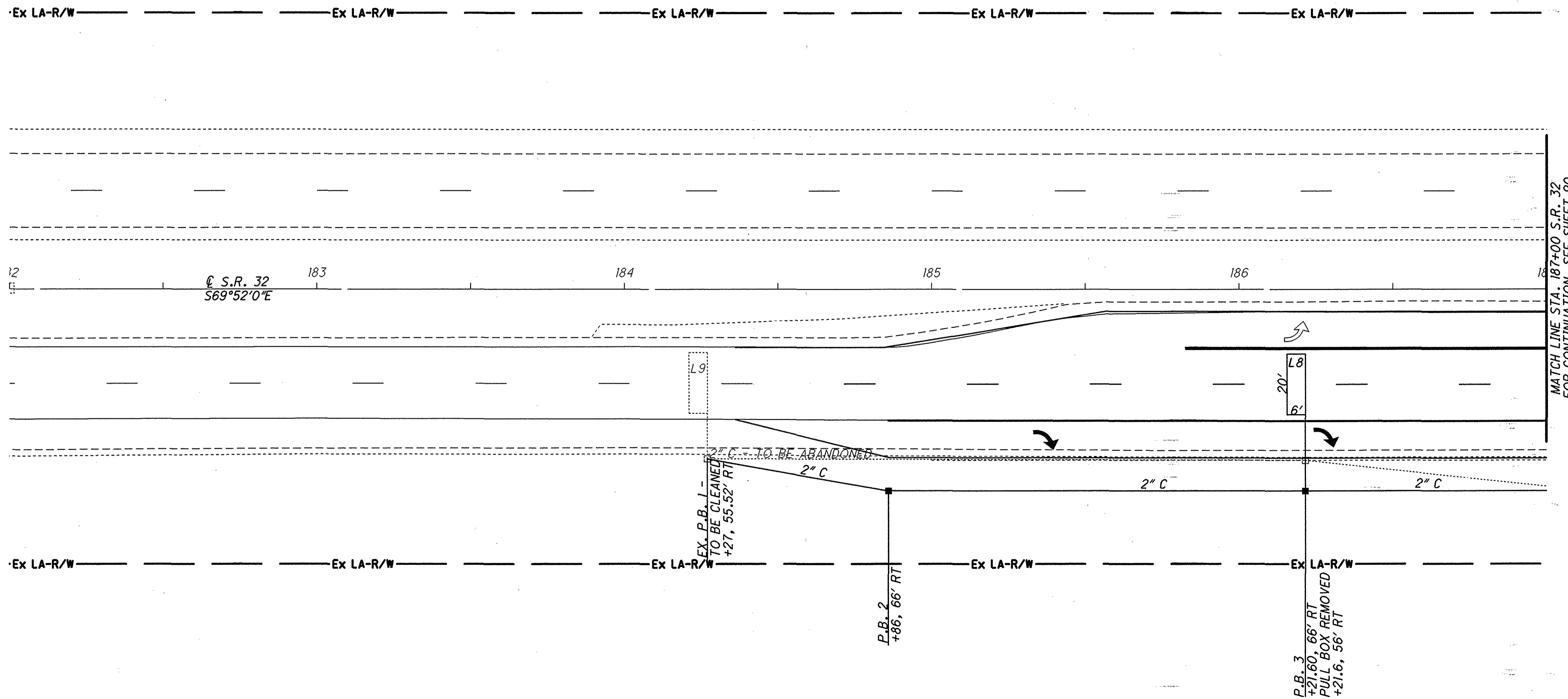
A. PULL BOX. ENSURE THAT THE PORTLAND CONCRETE PULL BOX IS CONSTRUCTED OF REINFORCED PORTLAND CEMENT CONCRETE. WHEN THE BOX IS PRECAST, ONLY PROVIDE PULL BOXES FROM SUPPLIERS CERTIFIED TO SUPPLEMENT 1073. ENSURE THAT THE PULL-BOX COVER IS CONSTRUCTED ACCORDING TO 725.08B AND AS SHOWN IN THE PLANS.

B. PULL-BOX COVERS. FURNISH METAL PULL-BOX COVERS THAT CONFORM TO THE FOLLOWING REQUIREMENTS:

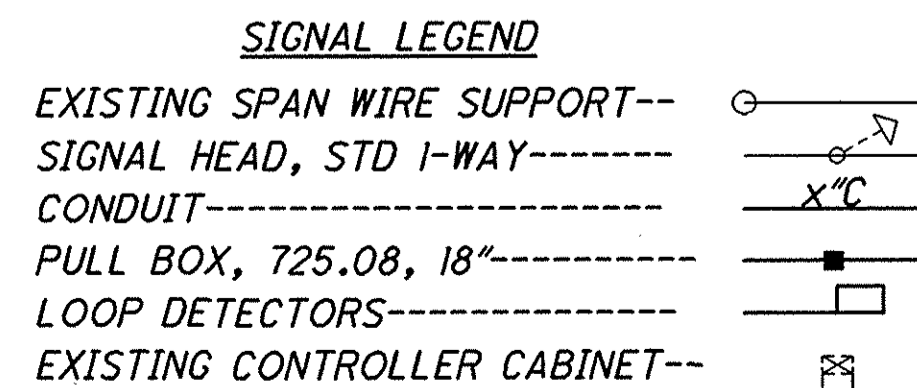
1. FURNISH 1/2-INCH (13-MM) THICK STEEL PLATE FOR THE COVER CONFORMING TO 711.01 WITH 1/2-INCH (13-MM) MINIMUM FLANGE AROUND THE EDGE AND GALVANIZED TO CONFORM TO 711.02. DISPLAY ON THE STEEL COVER OR ON AN ATTACHED BRASS

OR STAINLESS-STEEL PLATE (TAG) CLEARLY-LEGIBLE BLOCK LETTERS 1 INCH TO 2 INCHES (25 MM TO 50 MM) IN HEIGHT WITH THE WORD "TRAFFIC", "LIGHTING", "ELECTRIC" OR "TELEPHONE" TO DESIGNATE THE CIRCUIT(S) CONTAINED. ENSURE THAT THE WORD DESIGNATING THE USE IS IN RAISED LETTERS THAT ARE EITHER INTEGRAL TO THE STEEL COVER OR INTEGRAL TO A BRASS OR STAINLESS-STEEL PLATE 1/16 INCH (1.6 MM) IN THICKNESS SECURELY AND MECHANICALLY ATTACHED TO THE STEEL COVER AT THE FOUR CORNERS OF THE TAG AND AT INTERVALS 2 TO 3 INCHES (50 TO 75 MM) ALONG THE PERIMETER BETWEEN CORNERS.

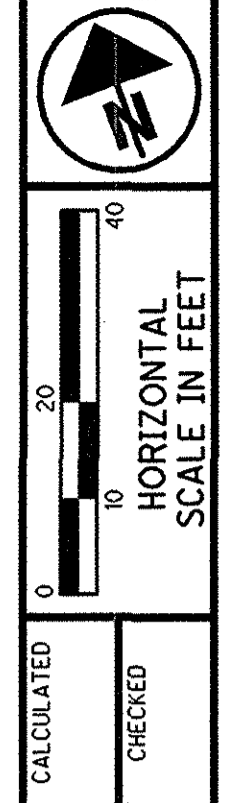
2. FURNISH GRAY IRON OR DUCTILE IRON WITH A MINIMUM THICKNESS OF 3/8 INCH (9 MM) CONFORMING TO ASTM A 48 OR ASTM 536. CERTIFICATION IS REQUIRED. ENSURE THAT THE WORD "TRAFFIC", "LIGHTING", "ELECTRIC" OR "TELEPHONE" IS CAST IN THE TOP SURFACE OF THE COVER FORMING LETTERS 1 TO 2 INCHES (25 TO 50 MM) IN HEIGHT.



NOTES:
 1. LOOP DETECTOR CONDUIT TO BE RELOCATED BEFORE PAVEMENT WIDENING.
 2. LOOP DETECTOR L8 WILL BE ABANDONED DURING CONSTRUCTION AND REPLACED AFTER PAVEMENT WIDENING IS COMPLETE.



I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\24955CP001.dgn 31-JAN-2007 7:08AM charvill

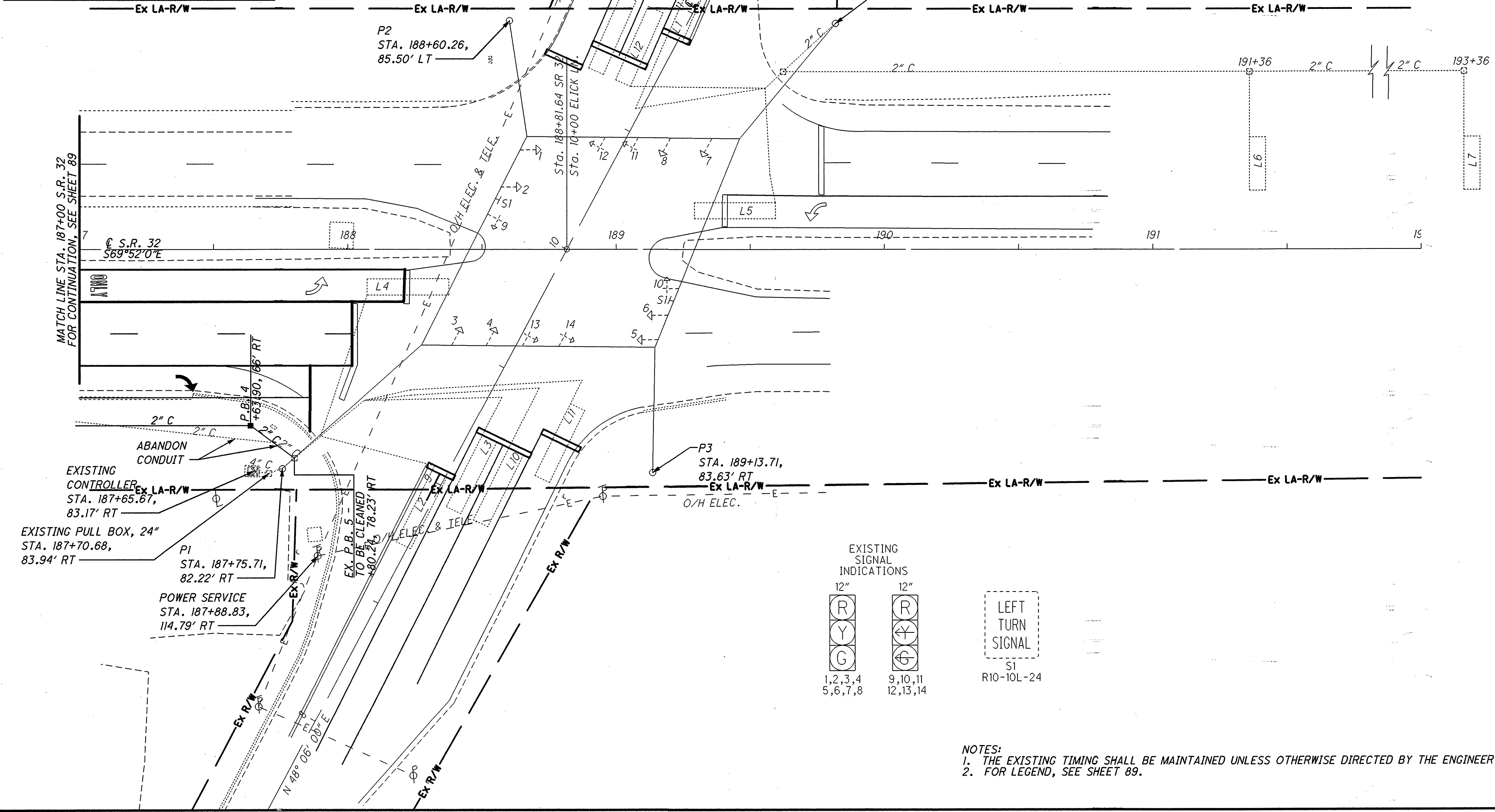
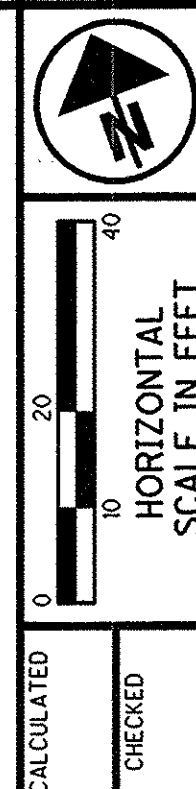
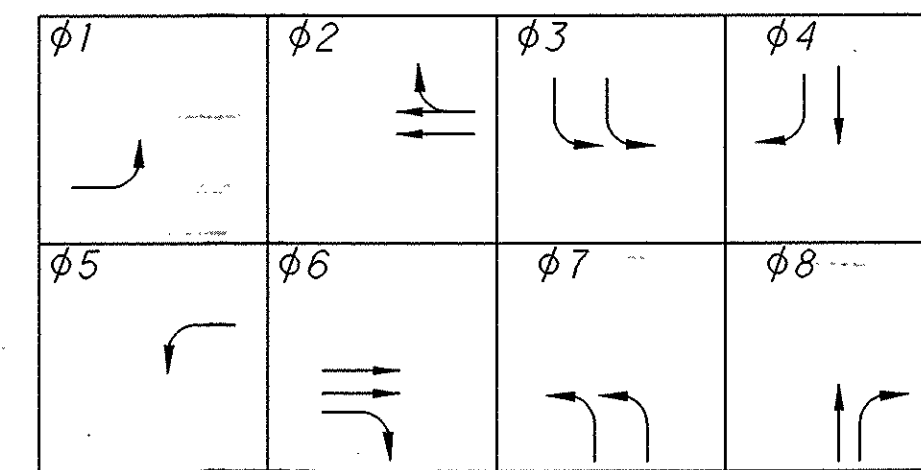


TRAFFIC SIGNAL PLAN
STA. 182+00 TO STA. 187+00

CLE-32-3.57 /
6.82 / 6.94 / 7.32

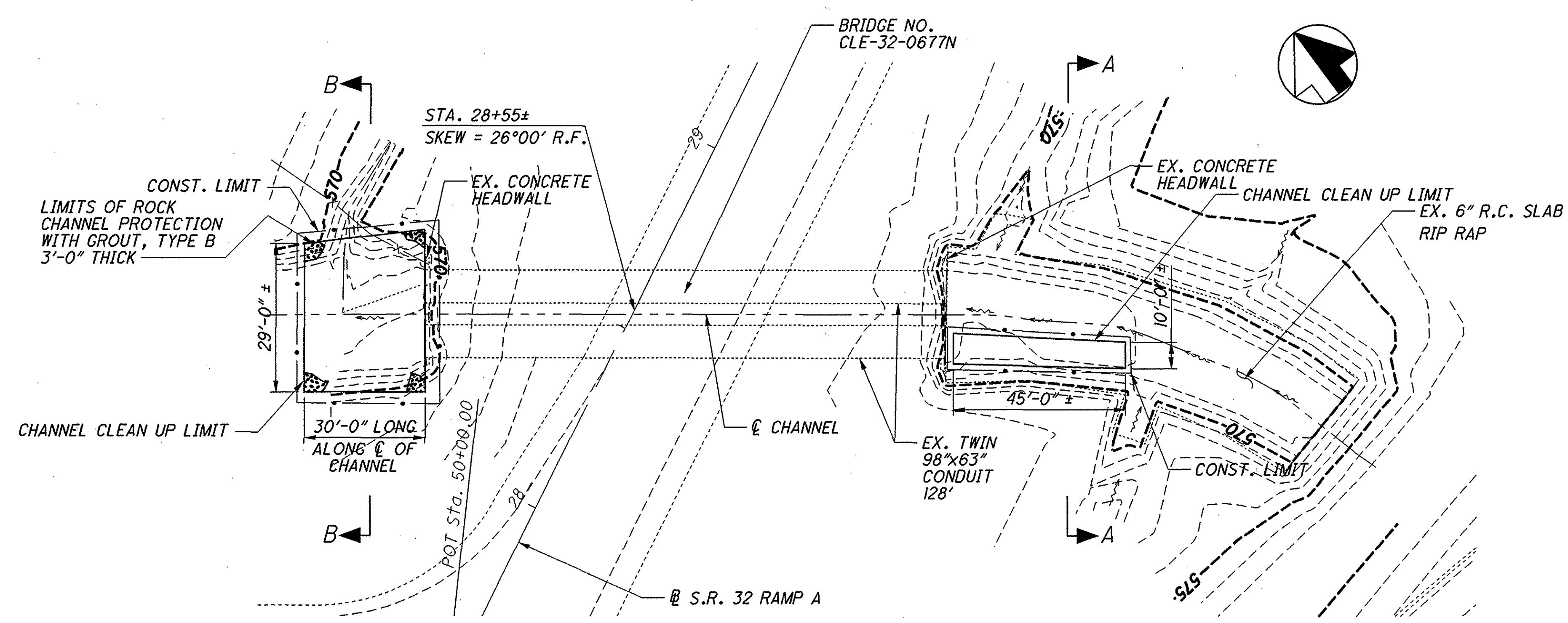
LOOP DESIGNATION	SIZE (FT.)	# TURNS	PULSE OR PRESENCE	DELAY (SEC.)	ASSOCIATED CONTROLLER PHASE
L1	6'x30'	3	PRESENCE		φ3
L2	6'x30'	3	PRESENCE		φ7
L3	6'x30'	3	PRESENCE		φ7
L4	6'x30'	3	PRESENCE		φ1
L5	6'x30'	3	PRESENCE		φ5
L6	6'x20'	3	PRESENCE		φ2
L7	6'x20'	3	PRESENCE		φ2
L8	6'x20'	3	PRESENCE		φ6
L9	6'x20'	3	PRESENCE		φ6
L10	6'x30'	3	PRESENCE		φ8
L11	6'x30'	3	PRESENCE	10 SEC	φ8
L12	6'x30'	3	PRESENCE	10 SEC	φ3

NEMA SIGNAL PHASING

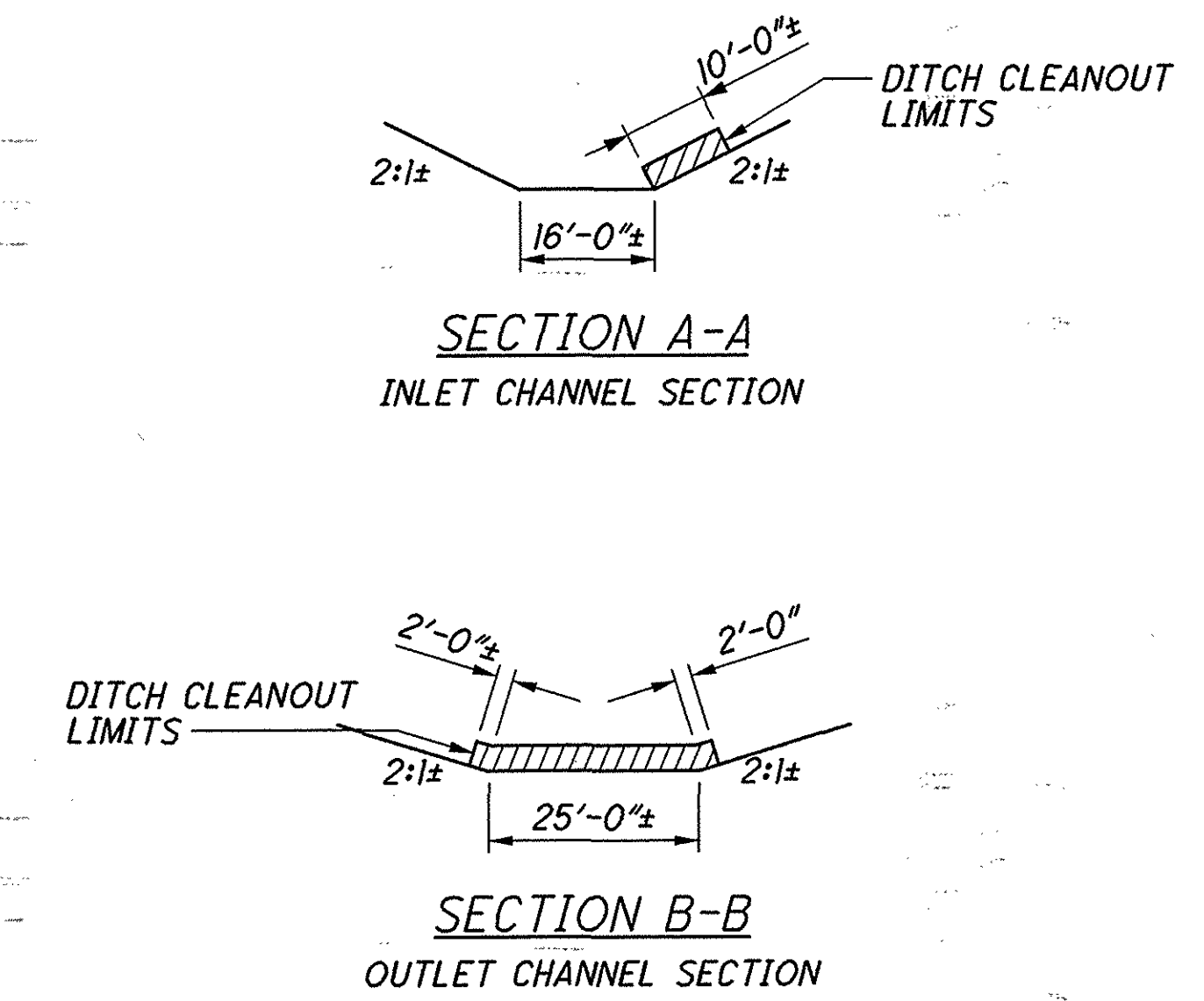


TRAFFIC SIGNAL PLAN STA. 187+00 TO STA. 192+00

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0677LSP001.dgn 30-JAN-2007 10:54AM charvill



PLAN



PROPOSED WORK:

1. CLEAN OUT CULVERT INVERT AND STREAM CHANNEL WITHIN 45' OF CULVERT INLET AND 30' OF OUTLET.
 ITEM 209 - FT DITCH CLEANOUT
 INLET: 45 FT
 OUTLET: 30 FT
2. INSTALL ROCK CHANNEL PROTECTION WITH GROUT, TYPE B, 3'-0" THICK WITHIN 30' OF OUTLET.
 ITEM 601 - CU YD ROCK CHANNEL PROTECTION, TYPE B WITH FILTER, 2'-6" THICK
 OUTLET: 30 FT x 28 FT x 2.5 FT = 78 CU YD

LEGEND:

- @ = BASE LINE
- CONST. = CONSTRUCTION
- EX. = EXISTING
- R.C. = REINFORCED CONCRETE
- R.F. = RIGHT FORWARD

ESTIMATED QUANTITIES				
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
209	10000	75	FT	DITCH CLEANOUT
601	32100	78	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER

DESIGN AGENCY
BURGESS & NIPLE
3rd Floor, 17th Floor
Cincinnati, Ohio 45202

DATE: 8-14-06
REVIEWED: JSB
DRAWN: KML
DESIGNED: XAC

STRUCTURE FILE NUMBER: 1300288
REVISED: [blank]
CHECKED: [blank]

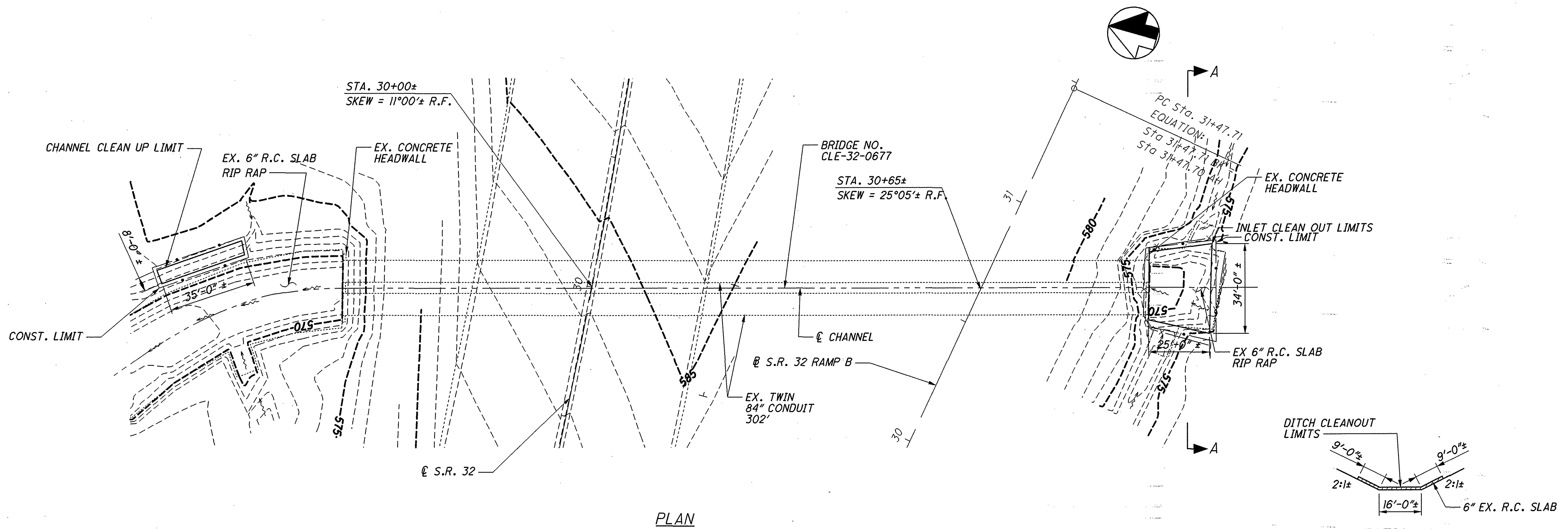
SITE PLAN
BRIDGE NO. CLE-32-0677N
CULVERT UNDER S.R. 32 RAMP A

CLE-32-3.57 / 6.82 / 6.94 / 7.32
PID No. 24955

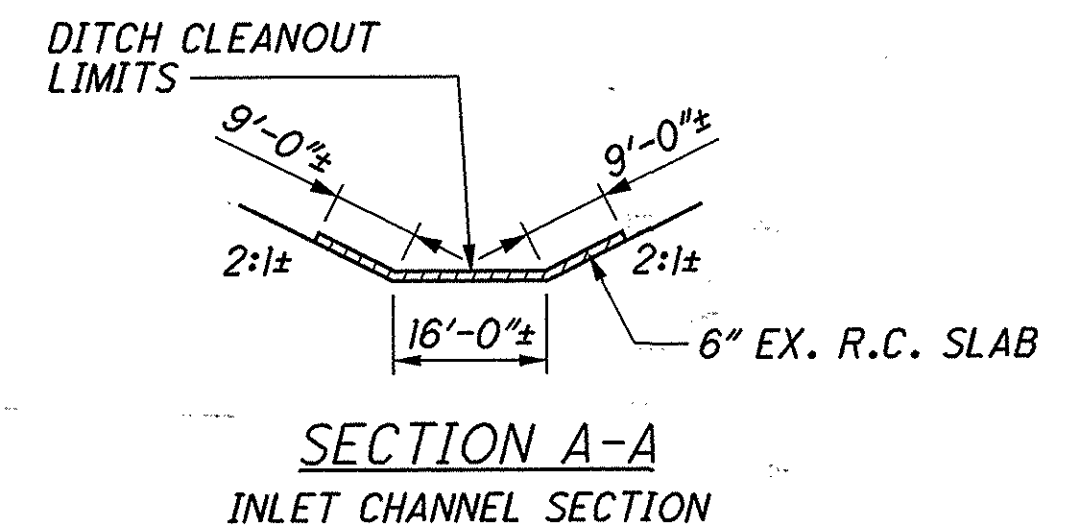
1 / 1

91 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0677CSP001.dgn 30-JAN-2007 10:47AM charvill



PLAN



PROPOSED WORK:

1. CLEAN OUT CULVERT INVERT AND STREAM CHANNEL WITHIN 25' OF CULVERT INLET.
 ITEM 209 - DITCH CLEANOUT
 25 FT
2. CLEAN STREAM CHANNEL AREA AS SHOWN, AT OUTLET (NORTH) END OF THE CULVERT.
 ITEM 209 - DITCH CLEANOUT
 35 FT

LEGEND:

B = BASE LINE
 CONST. = CONSTRUCTION
 EX. = EXISTING
 R.C. = REINFORCED CONCRETE
 R.F. = RIGHT FORWARD

ESTIMATED QUANTITIES				
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
209	10000	60	FT	DITCH CLEANOUT

DESIGN AGENCY
BURGESS & NIPLE
 302 Plus Street, 6th Floor
 Cincinnati, Ohio 45202

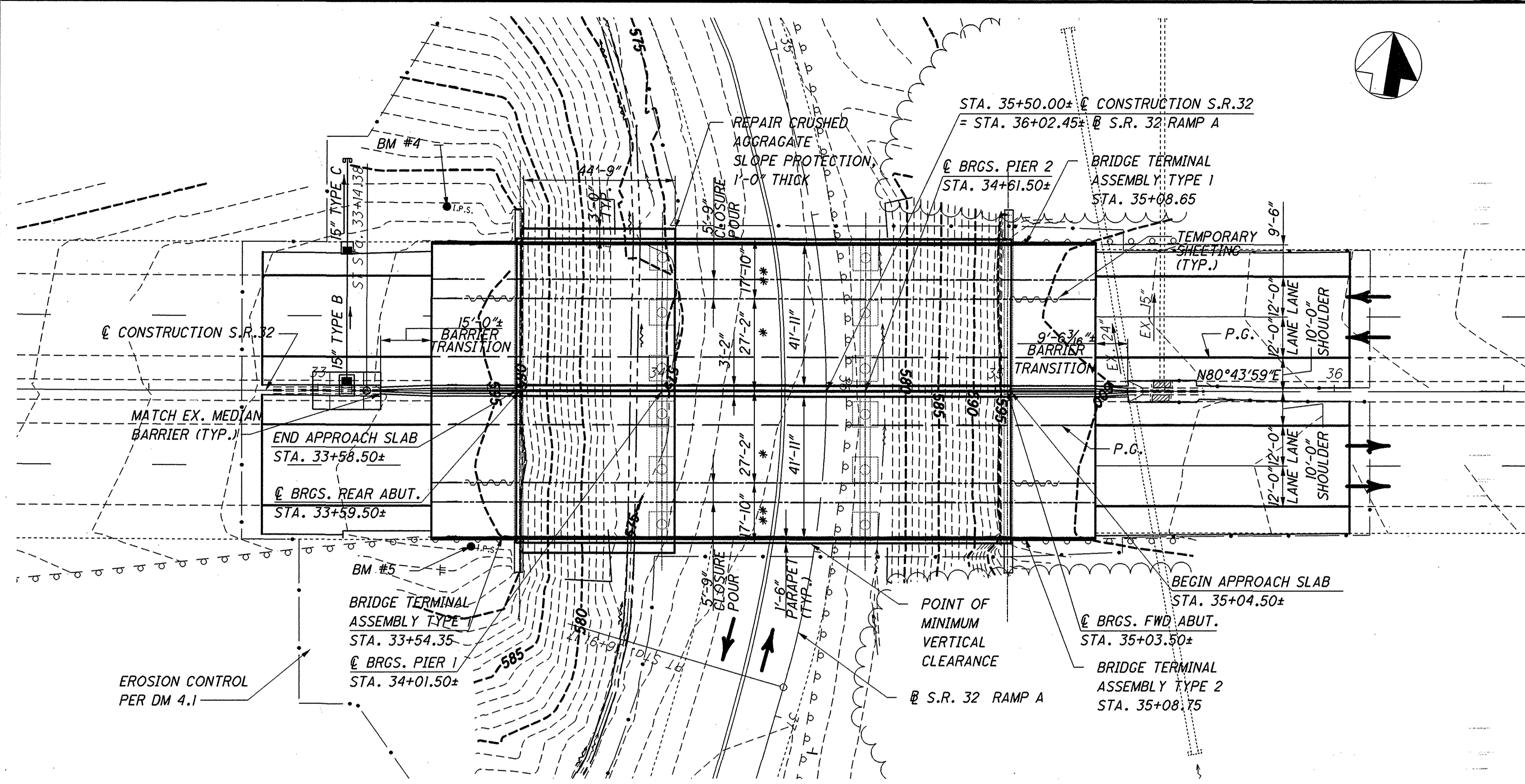
DESIGNED	XAC	DRAWN	KWL	DATE
CHECKED	SJA	REVIEWED	JSB	8-14-06
STRUCTURE FILE NUMBER				1300296

SITE PLAN
 BRIDGE NO. CLE-32-0677
 CULVERT UNDER S.R. 32 AND S.R. 32 RAMP B

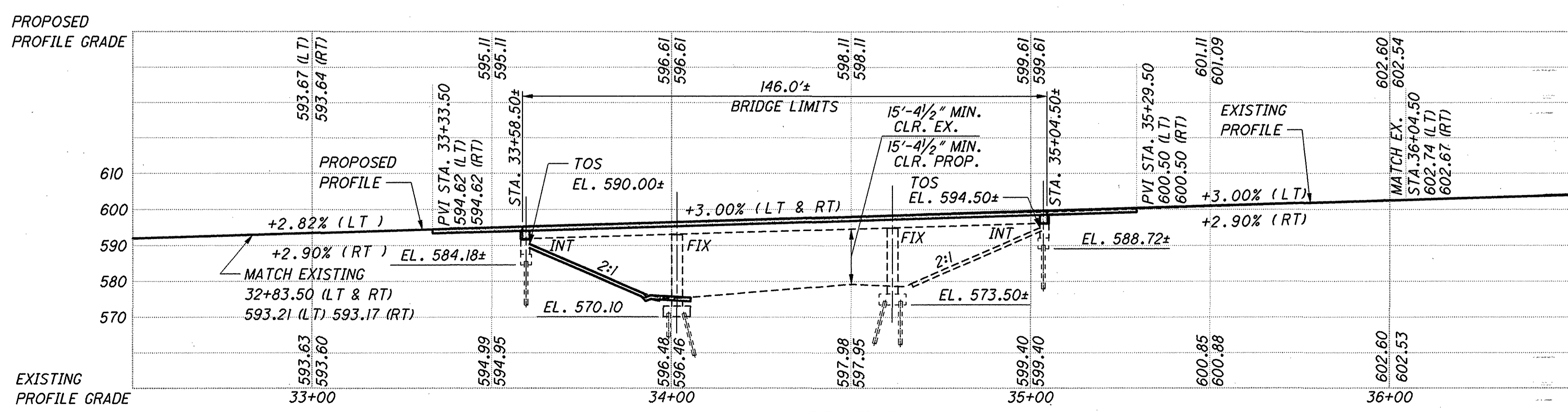
CLE-32-3.57/
 6.82/6.94/7.32
 PID No. 24955

1 / 1
 92 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT Mod\032_0682CSP001.dgn 30-JAN-2007 1:55PM charvill



PLAN



PROFILE
ALONG \hat{C} CONSTRUCTION S.R. 32

BENCHMARK DATA

BM #4 STA. 33+37.86, ELEV. 592.78, OFFSET 54.49, LEFT
 BM #5 STA. 33+45.15, ELEV. 594.62, OFFSET 46.07, RIGHT
 BOTH BENCHMARKS ARE IRON PINS SET

NOTES

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

DESIGN TRAFFIC:

2008 ADT = 34,910 2008 ADTT = 1822
 2028 ADT = 43,540 2028 ADTT = 2773
 DIRECTIONAL DISTRIBUTION = 0.58

LEGEND

- * - PHASE 1 CONSTRUCTION
- ** - PHASE 2 CONSTRUCTION
- BRGS. = BEARINGS
- \hat{C} = BASE LINE
- INT = INTEGRAL
- FIX = FIXED
- P.G. = PROFILE GRADE
- MIN. = MINIMUM
- CLR. = CLEAR
- TOS = TOP OF SLOPE

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS BEAM BRIDGE WITH REINFORCED CONCRETE SUPERSTRUCTURE AND REINFORCED CONCRETE SUBSTRUCTURE w/INTEGRAL ABUTMENTS

SPANS: 42'-0", 60'-0", 42'-0" C/C BEARINGS
 ROADWAY: 88'-0" F/F PARAPETS
 LOADING: HS20-44
 SKEW: 0°
 APPROACH SLABS: AS-1-67 (25' LONG)
 ALIGNMENT: TANGENT
 CROWN: VARIES
 STRUCTURAL FILE NUMBER: 1300326
 DATE BUILT: 1969
 WEARING SURFACE: 1 3/4" SUPERPLASTICIZED DENSE CONCRETE OVERLAY

PROPOSED STRUCTURE

PROPOSED WORK:
 REPLACE EXISTING SUPERSTRUCTURE w/COMPOSITE CONCRETE DECK ON EXISTING AND TWO NEW STEEL BEAMS, PAINTING OF EXISTING AND PROPOSED BEAMS.

SPANS: 42'-0"±, 60'-0"±, 42'-0"± C/C BEARINGS
 ROADWAY: 87'-0" TOE/TOE PARAPET INCLUDING MEDIAN
 LOADING: HS20-44 CASE II AND ALTERNATE MILITARY
 SKEW: 0°
 APPROACH SLABS: (AS-1-81) 25'-0" LONG (MODIFIED)
 ALIGNMENT: TANGENT
 CROWN: VARIES
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 COORDINATES: LATITUDE 39°05'02"N
 LONGITUDE 84°11'18"W

DESIGN AGENCY: **BURGESS & NIPLE**

DATE: 8-14-06

REVIEWED: JSB

DESIGNED: XAC

DRAWN: KML

CHECKED: SJA

CLERMONT COUNTY

STA. 33+58.50

STA. 35+04.50

S I T E P L A N

BRIDGE NO. CLE-32-0882

OVER S.R. 32 RAMP A

CLE-32-357 / 6.82 / 6.94 / 7.32

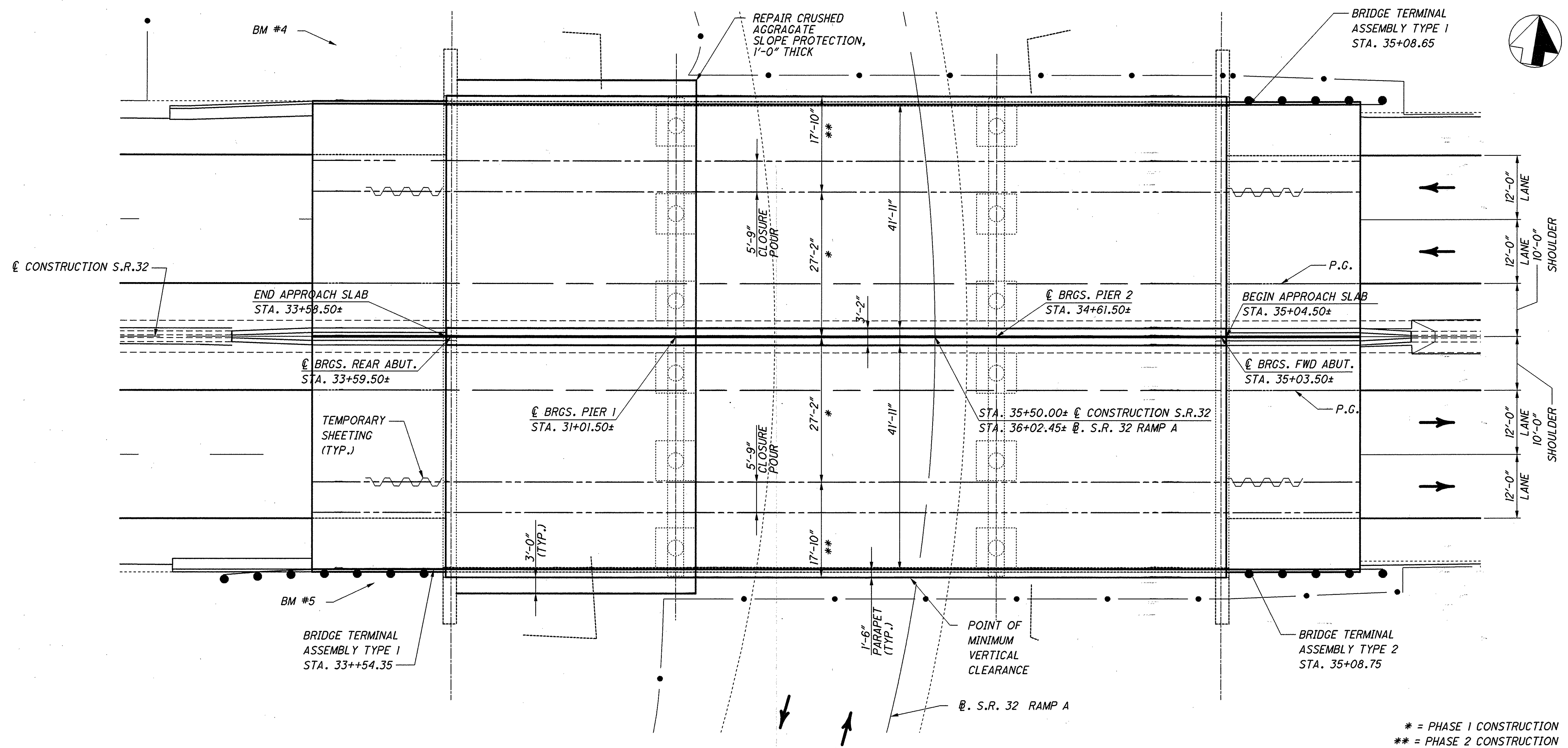
PID No. 24955

1 / 18

93

156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CGP001.dgn 30-JAN-2007 12:45PM charvill



GENERAL PLAN

* = PHASE 1 CONSTRUCTION
 ** = PHASE 2 CONSTRUCTION

DESIGN AGENCY BURGESS & NIPLE <small>30 Plus Street, 2nd Floor Cincinnati, Ohio 45202</small>	DATE 8-14-06
	REVIEWED JSB STRUCTURE FILE NUMBER 1300326
DRAWN KML REVISIONS	DESIGNED XAC CHECKED SJA
GENERAL PLAN BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A	
CLERMONT COUNTY STA. 33+58.50 STA. 35+04.50	
CLE-32-3.57/ 6.82/6.94/7.32 PID No. 24955	
2 / 18	
94 156	

DESIGN REFERENCES:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

- AS-1-81 REVISED 07-19-2002
- BR-1 REVISED 07-19-2002
- GSD-1-96 REVISED 07-19-2002
- ICD-1-82 REVISED 07-19-2002
- PCB-91 REVISED 07-19-2002

AND TO SUPPLEMENTAL SPECIFICATIONS:

898, DATED 7-21-06

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

HS20-44, CASE II, AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE OF 60 PSF

DESIGN DATA:

CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4,500 PSI (SUPERSTRUCTURE).

CONCRETE, CLASS QSC1 - COMPRESSIVE STRENGTH 4,000 PSI (SUBSTRUCTURE).

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI.

STRUCTURAL STEEL ASTM A709 GRADE 36 - YIELD STRENGTH 36,000 PSI.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2 1/2 INCH CONCRETE COVER
SEALING OF CONCRETE SURFACES

WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ONE (1) INCH THICK.

MAINTENANCE OF TRAFFIC:

ONE (1) LANE OF THRU TRAFFIC IN EACH DIRECTION WITH A MINIMUM HORIZONTAL WIDTH OF TEN AND A HALF (10.5) FEET SHALL BE MAINTAINED ON SR 32 AT ALL TIMES. REFER TO THE ROADWAY PLANS FOR OTHER TRAFFIC REQUIREMENTS AND PAYMENT PROVISIONS. FOR MAINTENANCE OF TRAFFIC DETAILS, SEE ROADWAY PLANS.

COLORS:

THE COLOR FOR ITEM - 514, FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU, SHALL BE FEDERAL COLOR NUMBER 14277, GREEN.

THE COLOR FOR ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE FEDERAL COLOR NUMBER 17778, LIGHT NEUTRAL.

EXISTING STRUCTURE PLANS:

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE, 505 SOUTH STATE ROUTE 741, LEBANON, OHIO AND ARE AVAILABLE FOR REFERENCE.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

INSPECTION OF EXISTING STRUCTURAL STEEL:

UPON REMOVAL OF ABUTMENT END DIAPHRAGM, THE ENGINEER WILL INSPECT THE STRUCTURAL STEEL EMBEDDED IN THE CONCRETE. IF DEEMED NECESSARY, THE ENGINEER WILL DIRECT THE REPAIR OF EXISTING BEAM ENDS.

PROPOSED WORK:

1. PROTECT AND MAINTAIN ALL SR 32 TRAFFIC DURING ALL PHASES OF CONSTRUCTION.
2. EXCAVATE BEHIND THE ABUTMENT, REMOVE THE APPROACH SLABS AND ABUTMENT DIAPHRAGM. REMOVE CONCRETE DECK AND PARAPET.
3. REPLACE TWO EXTERIOR BEAMS, INSTALL SHEAR CONNECTORS ON ALL BEAMS.
4. CONSTRUCT NEW CONCRETE DECK AND PARAPETS.
5. BACKFILL BEHIND THE ABUTMENTS AND CONSTRUCT NEW ABUTMENT DIAPHRAGM AND APPROACH SLABS.
6. SEAL PIERS AND ABUTMENTS AS SHOWN IN THE PLANS.
7. SEAL PARAPET AND DECK TO THE LIMITS SHOWN.
8. PAINT EXISTING STRUCTURAL STEEL AND NEW BEAMS WITH SYSTEM OZEU.
9. REPAIR SLOPE PROTECTION AT REAR ABUTMENT.

CONSTRUCTION SEQUENCE:

THE FOLLOWING IS THE SUGGESTED ORDER OF WORK; THE CONTRACTOR IS NOT REQUIRED TO COMPLETE THE WORK IN THE ORDER LISTED.

1. REDIRECT TRAFFIC AND INSTALL PORTABLE CONCRETE BARRIER PER MAINTENANCE OF TRAFFIC PLANS.
2. REMOVE THE SUPERSTRUCTURE CONCRETE TO THE LIMITS SHOWN. REMOVE THE SCUPPERS, GRIND ALL WELDS SMOOTH.
3. REMOVE THE EXISTING APPROACH SLABS AND ROADWAY PAVEMENT TO THE LIMITS SHOWN.
4. REPLACE TWO EXTERIOR BEAMS ON EXISTING BEARINGS.
5. INSTALL SHEAR CONNECTORS ON THE BEAMS. BUILD ABUTMENT DIAPHRAGM. PLACE DECK AND PARAPET.
6. CONSTRUCT APPROACH SLABS AND PAVEMENT TO THE LIMITS SHOWN.

OTHER WORK:

WORK NOT LISTED IN THE SEQUENCE MAY BE PERFORMED ACCORDING TO THE CONTRACTOR'S TIMING IN ACCORDANCE WITH CONTRACT PROVISIONS.

REMOVE THE TEMPORARY PROTECTION AND SUPPORTS PRIOR TO PAINTING.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

DESCRIPTION:

THIS WORK CONSISTS OF THE REMOVAL OF TWO EXISTING BEAMS (I1 AND I2), THE ABUTMENT END DIAPHRAGMS, AND THE CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND / OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS:

BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS:

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STEEL GIRDER BRIDGE MEMBERS THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER BRIDGE MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS.

DECK REMOVALS:

DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRINGERS WHICH ARE TO REMAIN. REPLACE OR REPAIR STRINGERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS:

REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

MEASUREMENT & PAYMENT:

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

(CONTINUED ON GENERAL NOTES 2, SHEET 4/18)

I:\projects\CLE\sr032\06.82_P1024955\Consult\Final Tracings\ODOT Mod\032_0682CGN001.dgn 05-FEB-2007 12:29PM charwill

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300326	DRAWN KML
DESIGNED XAC	CHECKED SJA
BRIDGE GENERAL NOTES 1	
BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A	
CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955	3 / 18
95 156	

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE, IF REQUIRED IN THE PLANS. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE DUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING ONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMER EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EX. REINFORCING STEEL, AS PER PLAN: REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 509 - EPOXY COATED REINFORCING STEEL:

MECHANICAL CONNECTORS FOR REINFORCING STEEL: AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED WHERE REQUIRED. INSTALLATION OF CONNECTORS SHALL CONFORM TO MANUFACTURER'S RECOMMENDED PROCEDURES. MECHANICAL CONNECTORS CAPABLE OF DEVELOPING 125 PERCENT OF THE YIELD STRENGTH OF THE BARS CONNECTED AND SHALL BE EPOXY COATED. COATING FOR BOTH THE CONNECTORS AND REINFORCING BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. ALL EXPENSES INVOLVED IN REPAIR OR REPLACEMENT SHALL BE BORN BY THE CONTRACTOR. THE CONNECTORS SHALL CONFORM AND BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL FOR PAYMENT.

ITEM 516 - REFURBISHING BEARING DEVICE, AS PER PLAN:

REFURBISH PIER BEARINGS FOR BEAMS 11 AND 12. THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEADWITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, GRINDING SMOOTH THE EXISTING WELDS ON THE REFURBAND BEAMS, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AND MATERIAL AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN.

ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN: FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QC/QA CONCRETE, CLASS QSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING. IN ADDITION, THE PARAPET TRANSITIONS ON THE APPROACH SLABS, INCLUDING THE CONCRETE, REINFORCING STEEL, HMWM AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE INCLUDED IN THE COST OF THE APPROACH SLABS. 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 - QC/QA CONCRETE, CLASS QSCS, 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 601 - CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN: AFTER COMPLETION OF MAJOR MODIFICATION ITEMS, EXISTING EMBANKMENT SURFACES SHALL BE RESTORED TO A UNIFORM PLANE SURFACE WITH CRUSHED AGGREGATE SLOPE PROTECTION. REMOVE BRUSH AND DEBRIS UNDER THE STRUCTURE AND TO 10 FEET EACH SIDE OF STRUCTURE. PROTECTION SHALL EXTEND LONGITUDINALLY FROM FACE OF ABUTMENT TO TOE OF SLOPE AND LATERALLY TO AT LEAST 3'-0" BEYOND DECK FASCIAS. THE MINIMUM TOTAL THICKNESS OF PROTECTION (RESTORED AND NEW) SHALL BE 1'-0".

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 DAMETER) 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 TWO 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 ONE 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 METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 * 0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 X 700
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. BRITTLINESS, 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.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN: THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FROM THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH ODOT'S PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

LEGEND:

- ABUT. = ABUTMENT
- BOT. = BOTTOM
- BRS. = BEARINGS
- BTW. = BETWEEN
- CJ = CONSTRUCTION JOINT
- CONST. = CONSTRUCTION
- E.F. = EACH FACE
- EL. = ELEVATION
- EX. = EXISTING
- FA = FORWARD ABUTMENT
- FTG. = FOOTING
- F.F. = FAR FACE
- FWD. = FORWARD
- NCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE
- N.F. = NEAR FACE
- PCPP = PERFORATED CORRUGATED PLASTIC PIPE
- PEJF = PREFORMED EXPANSION JOINT FILLER
- P.G. = PROFILE GRADE
- PROP = PROPOSED
- RA = REAR ABUTMENT
- SO = SERIES OF
- T & B = TOP AND BOTTOM
- TYP. = TYPICAL
- UNO = UNLESS NOTED OTHERWISE

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CGN002.dgn 31-JAN-2007 6:46AM charvill

BRIDGE GENERAL NOTES 2

BRIDGE NO. CLE-32-0682
OVER S.R. 32 RAMP A

DESIGN AGENCY: **BURGESS & NIPLE**

DATE: 8-14-06
REVIEWED: JSB
DRAWN: KML
DESIGNED: XAC
CHECKED: SJA

STRUCTURE FILE NUMBER: 1300326

4 / 18

96
156

CLE-32-3.57/6.82 / 6.94/7.32
PID No. 24955

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CEQ001.dgn 05-FEB-2007 10:14AM charvil

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIERS	SUPER.	CALC.	DATE	CHK'D	DATE
								XAC	02-07-06	SJA	08-01-06
								APPROACH SLAB	GENERAL	SHT. REF.	
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN							3/18
202	22900	267	SQ YD	APPROACH SLAB REMOVED				267			
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING						LUMP	
503	21100	55	CU YD	UNCLASSIFIED EXCAVATION						55	
509	10000	125116	POUND	EPOXY COATED REINFORCING STEEL			125116				
509	20001	200	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	200						4/18
512	10100	995	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	38	358	599				
512	33000	6	SQ YD	TYPE 2 WATERPROOFING	6						
513	10240	41060	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 2			41060				
513	20000	4408	EACH	WELDED STUD SHEAR CONNECTORS			4408				
514	00050	13289	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			13289				
514	00056	13289	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			13289				
514	00060	15947	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			15947				
514	00066	15947	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			15947				
514	00504	89	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			89				
514	10000	17	EACH	FINAL INSPECTION REPAIR			17				
516	13200	184	SQ FT	1/2" PREFORMED EXPANSION JOINT FILLER	184						
516	13600	163	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	163						
516	13900	20	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	20						
516	14015	206	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	206						4/18
516	45305	4	EACH	REFURBISH BEARING DEVICE, AS PER PLAN		4					4/18
516	46900	24	EACH	BEARING DEVICE, MISC.: 1" BEVELED BEARING PLATE, 8"x1'-6"	24						
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN						LUMP	4/18
518	21200	59	CU YD	POROUS BACKFILL WITH FILTER FABRIC	59						
601	20001	478	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	478						4/18
898	10200	407	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			407				
898	10705	489	SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN				489			4/18
898	11000	70	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			70				

DESIGN AGENCY: **BURGESS & NIPLE**
 30 Plus Street, 6th Floor
 Cincinnati, Ohio 45202

DATE: 8-14-06
 REVIEWED: JSB
 STRUCTURE FILE NUMBER: 1300326

DRAWN: KML
 CHECKED: SJA

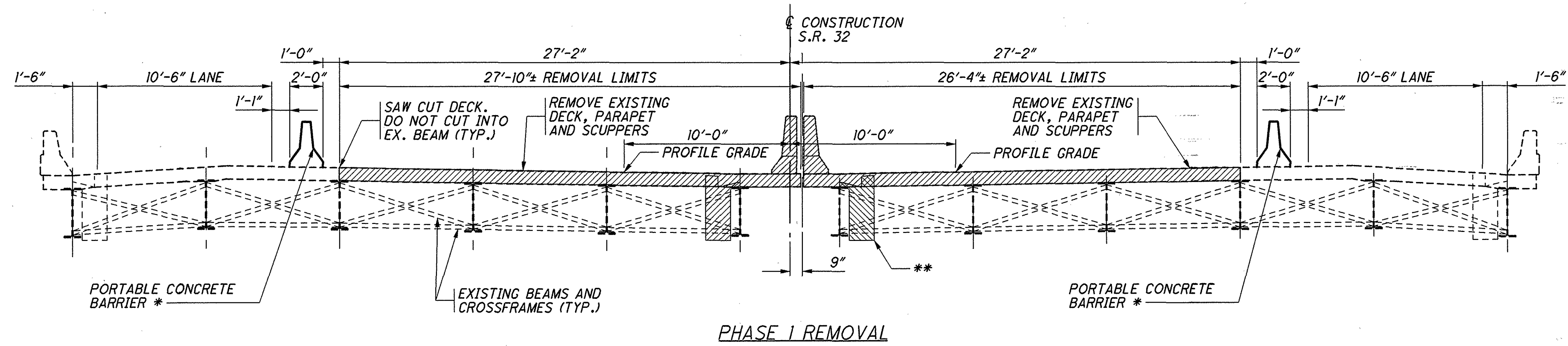
ESTIMATED QUANTITIES
 BRIDGE NO. CLE-32-0682
 OVER S.R. 32 RAMP A

CLE-32-3.57/6.82
 / 6.94/7.32
 PID No. 24955

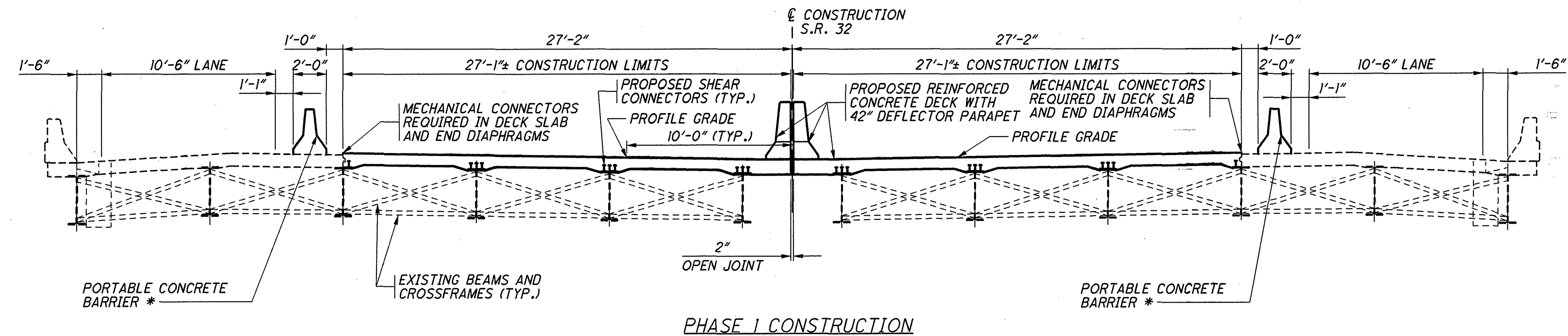
5 / 18

97
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682PC001.dgn 30-JAN-2007 1:04PM chorvill



PHASE I REMOVAL



PHASE I CONSTRUCTION

PHASE I

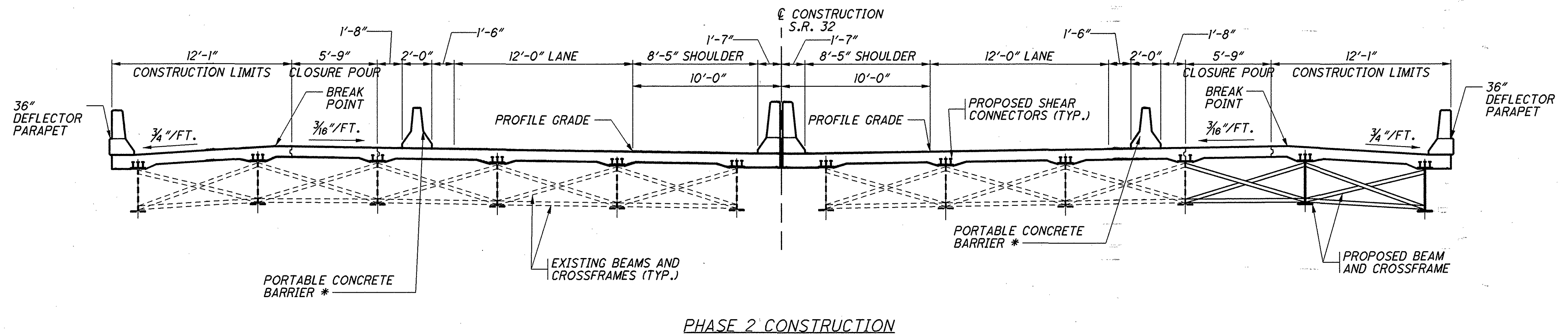
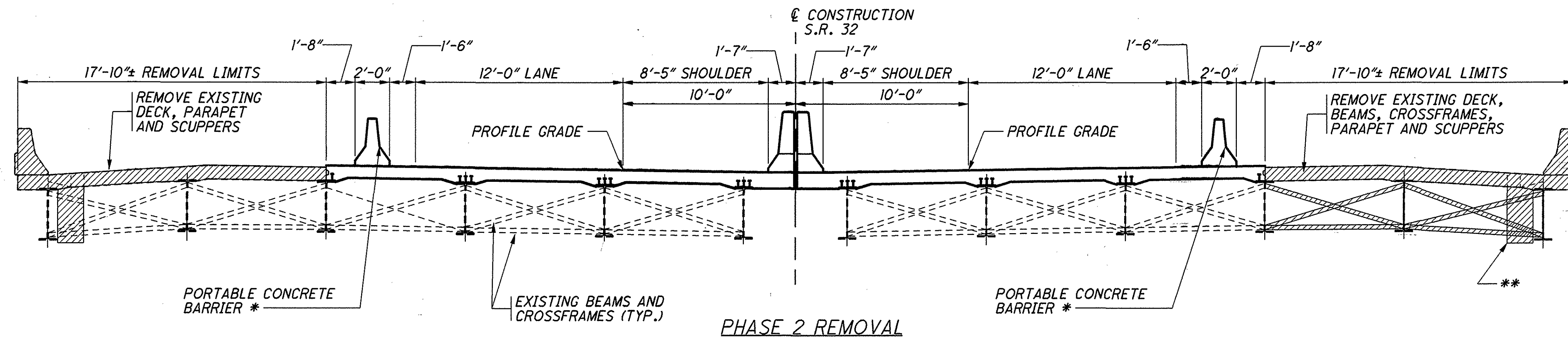
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.
- C) REMOVE PORTION OF EXISTING ABUTMENT DIAPHRAGMS.
- D) CONSTRUCT PORTION OF ABUTMENT DIAPHRAGMS.
- E) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91. FOR DETAILS, SEE ROADWAY PLAN. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	STRUCTURE FILE NUMBER 1300326
REVIEWED JSB	DRAWN KML
DESIGNED XAC	CHECKED SJA
PHASE CONSTRUCTION 1	
BRIDGE NO. CLE-32-0682	
OVER S.R. 32 RAMP A	
CLE-32-3.57/6.82	PID No. 24955
6/18	98/156

I:\projects\CLE\s032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682PC002.dgn 30-JAN-2007 12:59PM charvill



PHASE 2

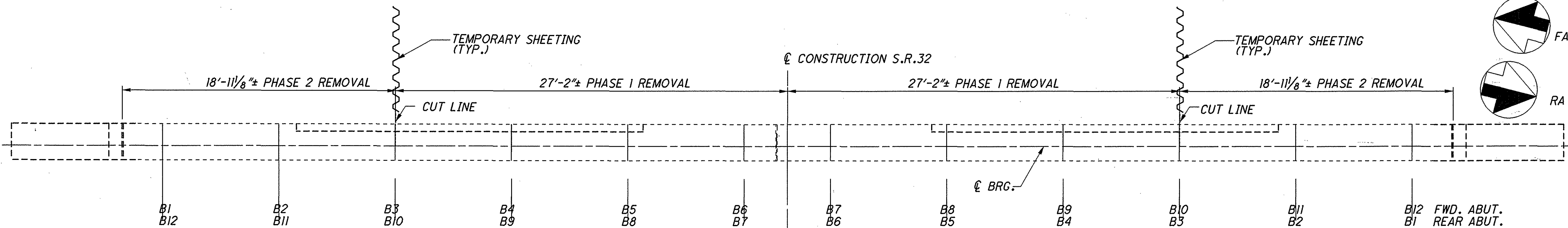
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.
- C) REMOVE PORTION OF EXISTING ABUTMENT DIAPHRAGMS.
- D) CONSTRUCT PORTION OF ABUTMENT DIAPHRAGMS.
- E) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91. PARTIAL DEPTH HOLES REQUIRED FOR NEW SLAB. FILL THE HOLES LEFT IN THE BRIDGE DECK WITH GROUT 705.20. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

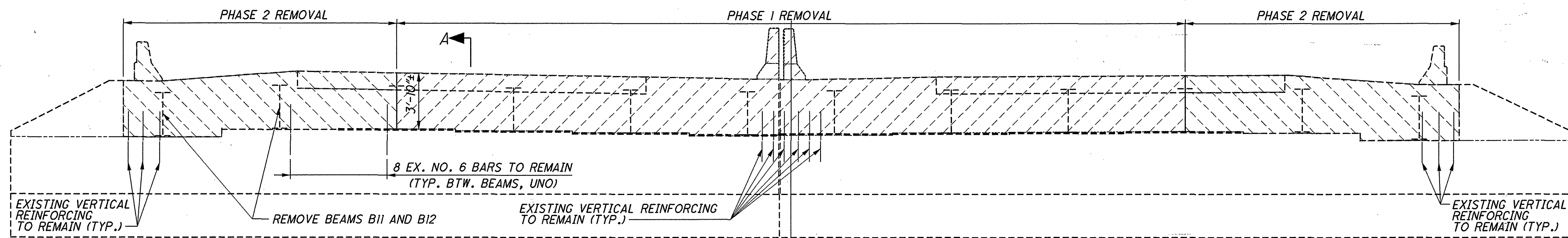
** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	FILE NUMBER 1300326
REVIEWED JSB	STRUCTURE FILE NUMBER 1300326
DRAWN KML	REVISED
DESIGNED XAC	CHECKED SJA
PHASE CONSTRUCTION 2	
BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A	
CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955	
7 / 18	
99 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CRE001.dgn 30-JAN-2007 1:34PM charvill



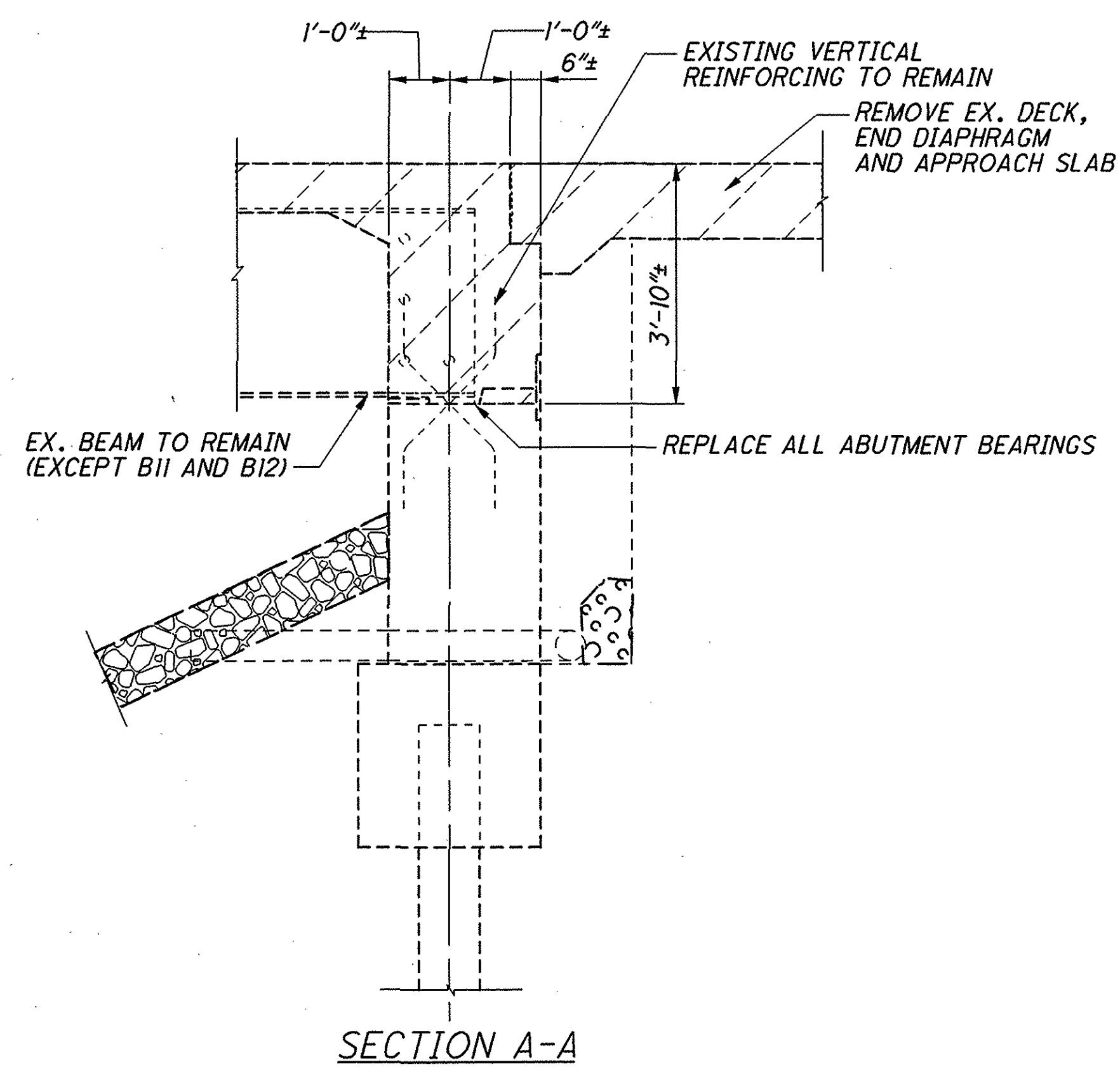
PLAN



ELEVATION

REAR ABUTMENT SHOWN
FORWARD ABUTMENT SIMILAR

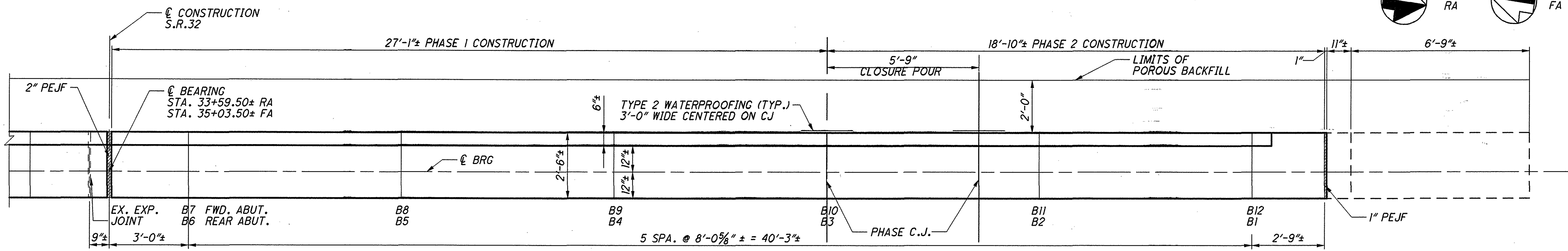
LEGEND:
 PORTIONS OF EXISTING STRUCTURE TO BE REMOVED.



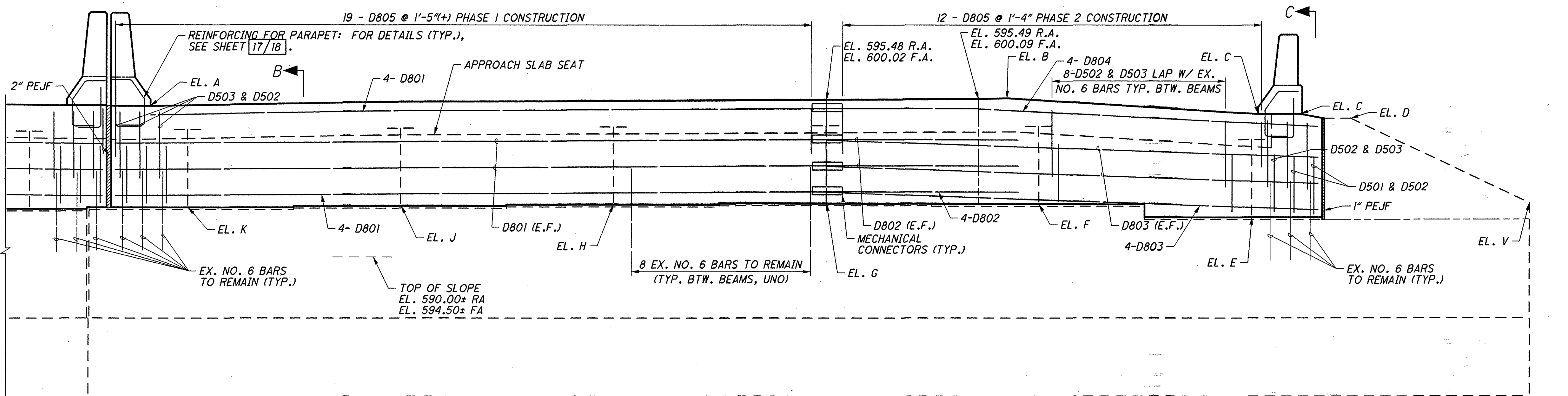
SECTION A-A

- NOTES:
1. THE EXISTING REINFORCING STEEL THAT IS TO REMAIN AND CAN BE INCORPORATED INTO THE PROPOSED WORK SHALL NOT BE CUT.
 2. TEMPORARY SHEETING SHALL BE PAID FOR UNDER ITEM 503 COFFER DAMS, CRIBS AND SHEETING.
 3. FOR PORTIONS OF STRUCTURE REMOVED NOTE AND EXISTING STRUCTURE VERIFICATION NOTE, SEE GENERAL NOTES SHEET 3/18.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	FILE NUMBER 1300326
REVIEWED JSB	STRUCTURE FILE NUMBER 1300326
DRAWN SDC	CHECKED SJA
DESIGNED XAC	CHECKED SJA
ABUTMENT REMOVAL DETAIL BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A	
CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955	
8	18



PLAN



ELEVATION
LEFT REAR ABUTMENT SHOWN;
RIGHT FWD. ABUTMENT SIMILAR

ELEVATION		
LOCATION	R.A.	F.A.
EL. A	595.32	599.62
EL. B	595.52	600.12
EL. C	594.93	599.53
EL. D	594.70±	599.24±
EL. E	591.03±	595.53±
EL. F	591.56±	596.04±
EL. G	591.58±	595.00±
EL. H	591.53±	595.88±
EL. J	591.47±	595.75±
EL. K	591.40±	595.63±
EL. V	591.32±	595.86±

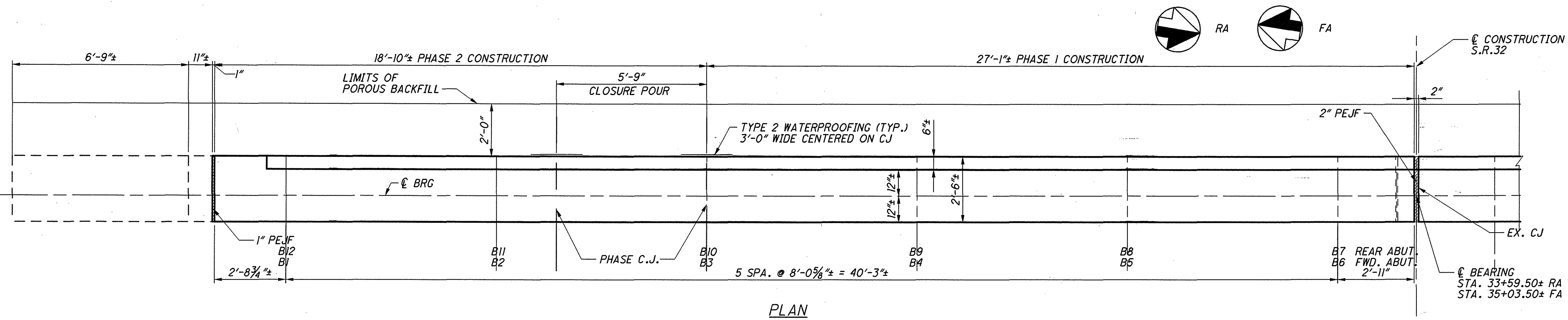
NOTES:

- MIN. LAP LENGTH:
NO. 5 BAR = 2'-7"
NO. 8 BAR = 7'-3"
- PLACE THE CONCRETE IN THE ABUTMENT DIAPHRAGM ENCASING STRUCTURAL STEEL MEMBERS OF AN INDIVIDUAL PHASE SEPARATELY OR WITH THE DECK CONCRETE OF THAT PHASE. IF THE DIAPHRAGM CONCRETE IS PLACED SEPARATELY, ALLOW AT LEAST 48 HOURS OF SET TIME BEFORE PLACING DECK CONCRETE. LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.
- PLACE TYPE 2 WATERPROOFING, 3'-0" WIDE, CENTERED ON VERTICAL JOINT, FROM BOTTOM OF APPROACH SLAB TO TOP OF ABUTMENT SEAT.
- FOR ADDITIONAL DETAILS AND NOTES, REFER TO STANDARD DRAWING ICD-I-82.
- FOR SECTIONS B-B AND C-C, SEE SHEET 11/18.

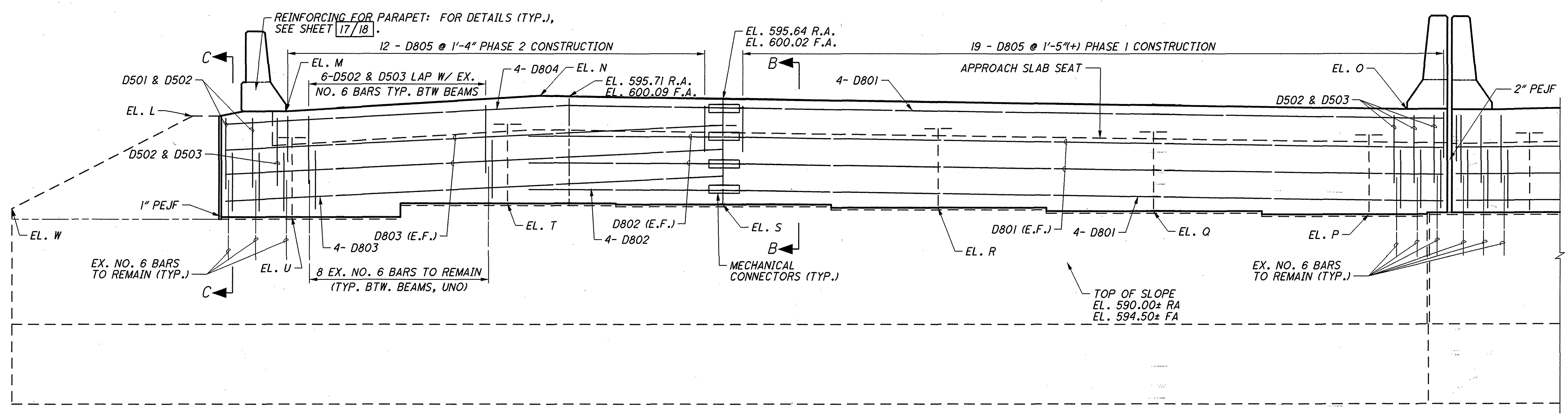
\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CAR001.dgn 30-JAN-2007 10:59AM charvill

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 STRUCTURE FILE NUMBER: 1300326
 DESIGNED: XAC
 CHECKED: SJA
 DRAIN: KML
 REVISION:
 ABUTMENT DETAILS 1
 BRIDGE NO. CLE-32-0682
 OVER S.R. 32 RAMP A
 CLE-32-3.57/6.82
 /6.94/7.32
 PID No. 24955
 9/18
 101
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CAR002.dgn 30-JAN-2007 12:32PM charvill



PLAN



ELEVATION
RIGHT REAR ABUTMENT SHOWN;
LEFT FWD. ABUTMENT SIMILAR

ELEVATION		
LOCATION	R.A.	F.A.
EL. L	594.92±	599.24±
EL. M	595.15	599.53
EL. N	595.74	600.12
EL. O	595.24	599.62
EL. P	591.35±	595.63±
EL. Q	591.47±	595.75±
EL. R	591.60±	595.88±
EL. S	591.72±	595.00±
EL. T	591.76±	596.04±
EL. U	591.26±	595.53±
EL. W	591.52±	595.86±

- NOTES:
- FOR SECTION B-B AND C-C, SEE SHEET 11/18.
 - FOR ADDITIONAL NOTES, SEE SHEET 9/18.

DESIGN AGENCY
BURGESS & NIPLE
30 Plus Street, 6th Floor
Cincinnati, Ohio 45202

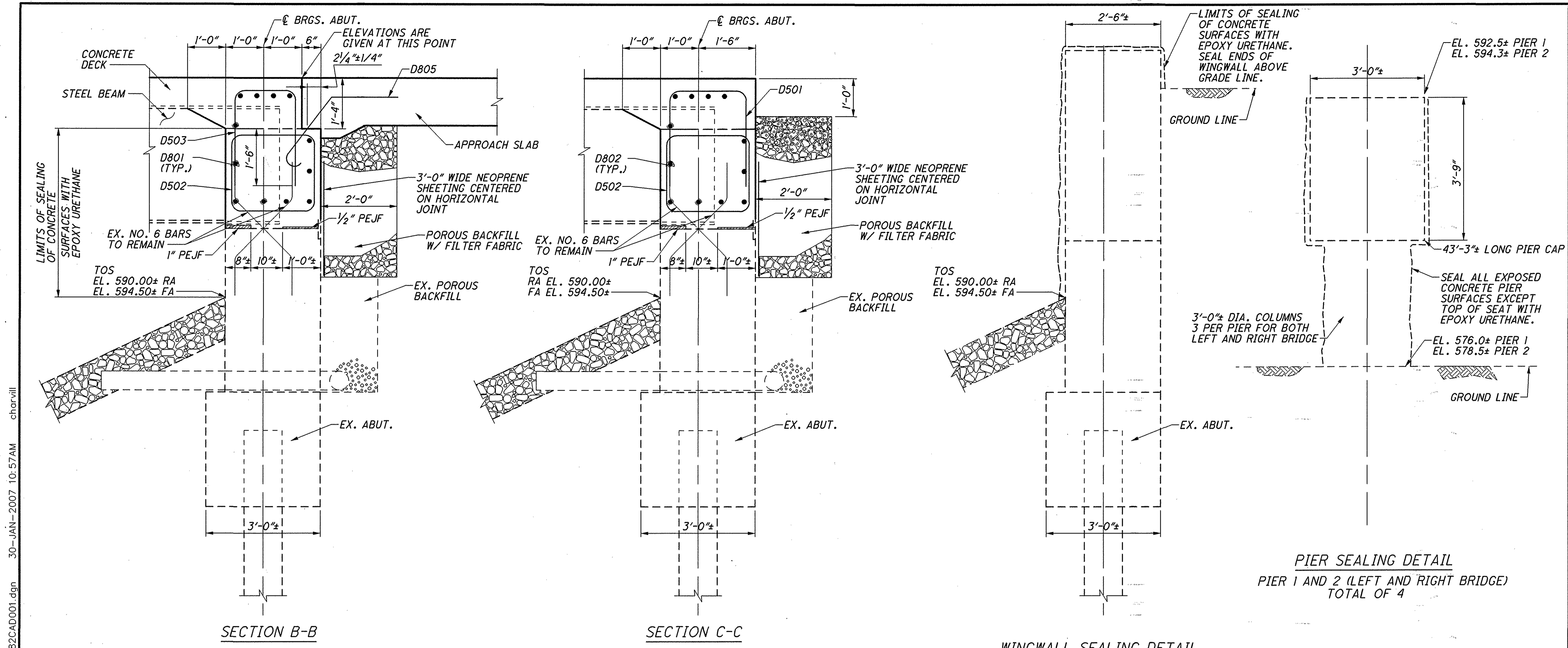
DATE	8-14-06
REVIEWED	JSB
STRUCTURE FILE NUMBER	1300326
DRAWN	KLM
REVISION	
DESIGNED	XAC
CHECKED	SJA

ABUTMENT DETAILS 2
BRIDGE NO. CLE-32-0682
OVER S.R. 32 RAMP A

CLE-32-3.57/6.82
/6.94/7.32
PID No. 24955

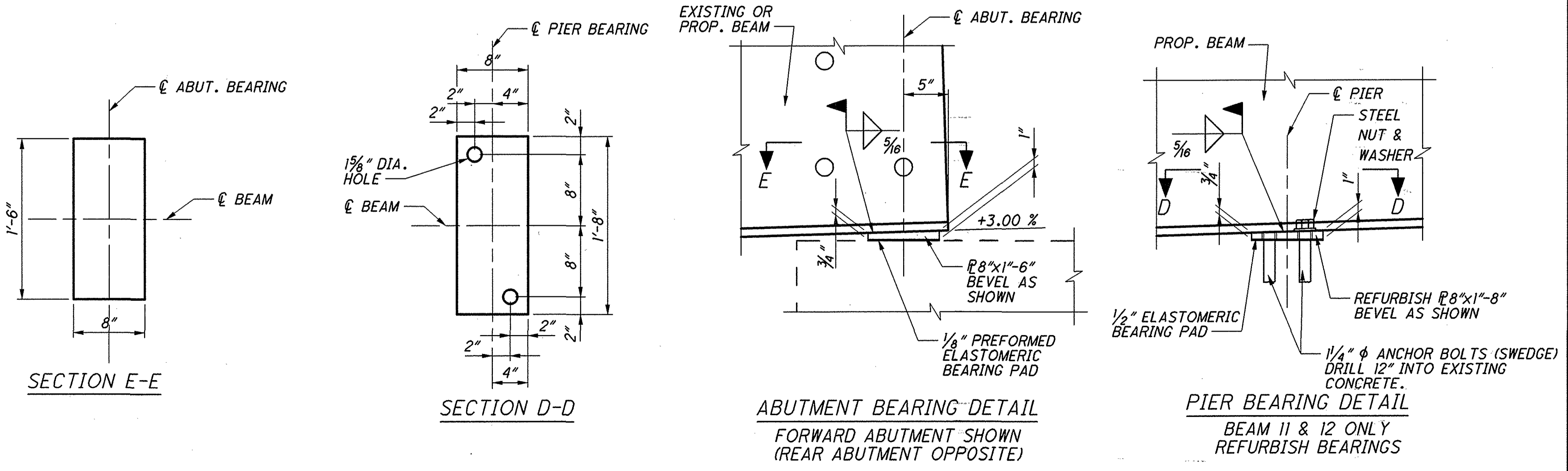
10 / 18

102
156



NOTES:

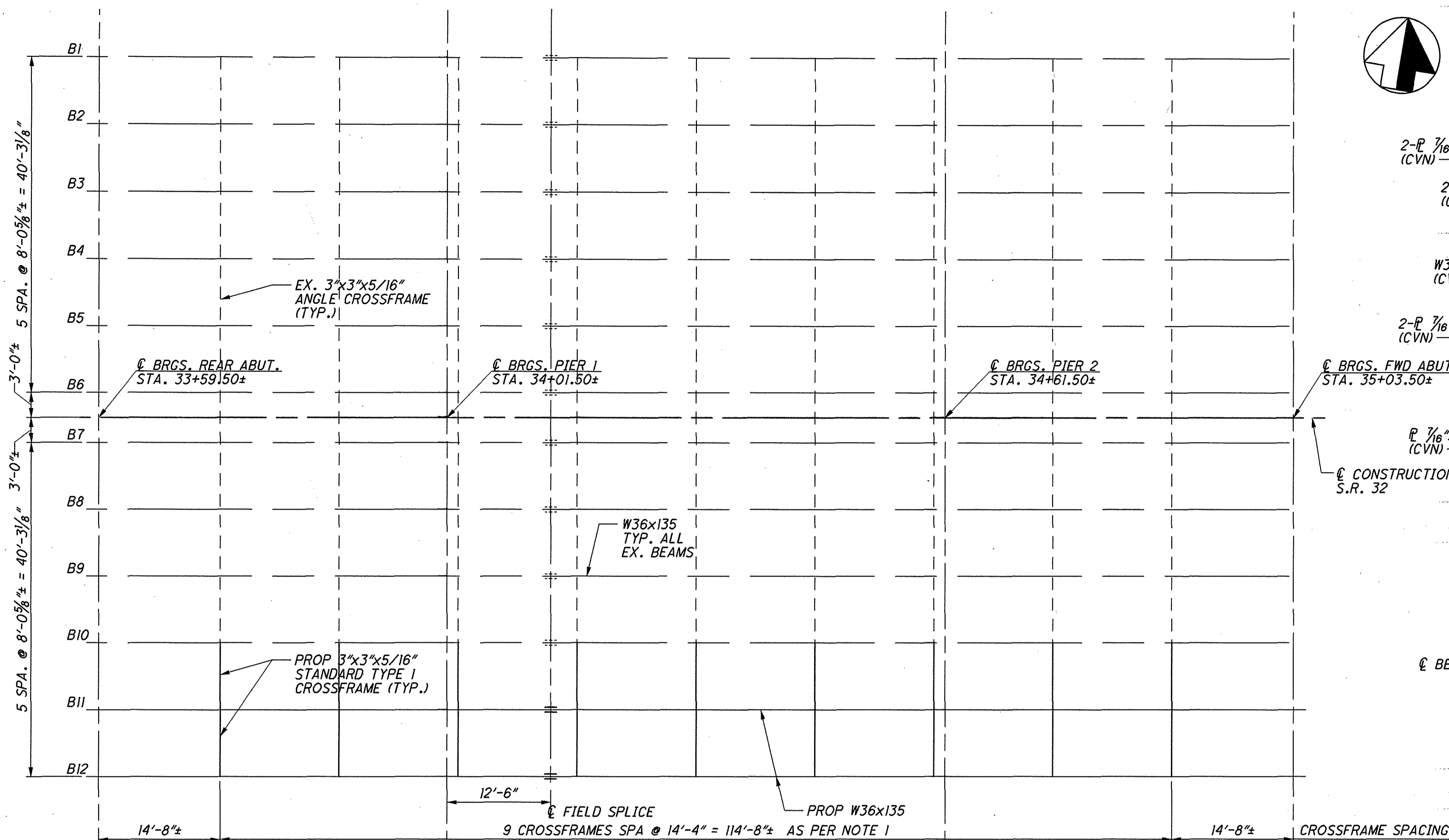
- MIN. LAP LENGTH:
NO. 5 BAR = 2'-7"
NO. 8 BAR = 6'-4"
- FOR ABUTMENT PLAN AND ELEVATIONS.
2'-0" THICK POROUS BACKFILL WITH FILTER FABRIC SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
- ALL EXISTING ABUTMENT BEARINGS SHALL BE REPLACED. FURNISH THE BEARINGS AS SHOWN IN THE PLANS. ALL PLATES, WASHERS AND ANCHOR BOLTS SHALL BE A709 GRADE 36, GALVANIZED. FURNISH ELASTOMERIC BEARING PADS, ANCHOR BOLTS, NUTS, AND WASHERS PER 711. ALL LABOR AND MATERIAL FOR REPLACING THE BEARING SHALL BE PAID UNDER ITEM 516, BEARING DEVICE, MISC.
- REFURBISH PIER BEARINGS FOR BEAMS 11 AND 12.
- SEE SHEETS 9/18 THRU 10/18.



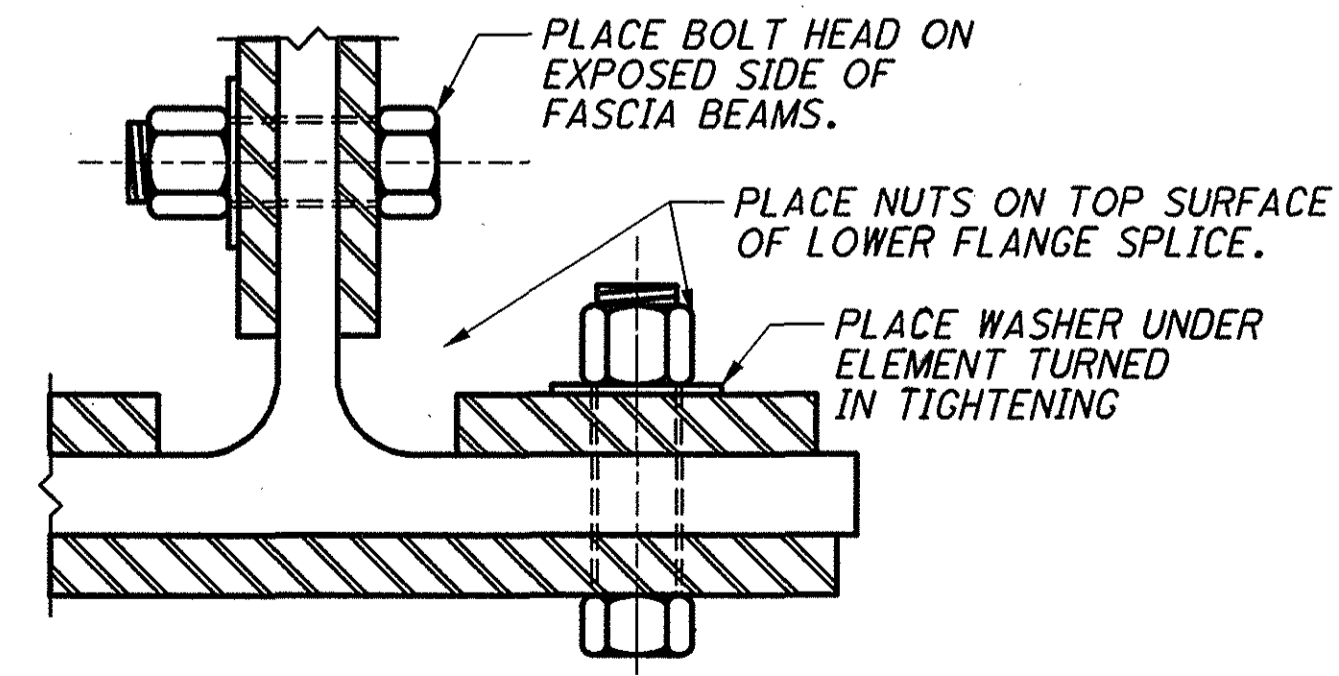
DESIGNED	XAC	CHECKED	SJA
DRAWN	KML	REVIEWED	
REVIEWED	JSB	STRUCTURE FILE NUMBER	1300326
DATE	8-14-06	DESIGN AGENCY	BURGESS & NIPLE
ABUTMENT SECTION AND BEARING DETAILS BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A			
CLE-32-3.57/6.82 / 6.94/7.32		PID No. 24955	
11 / 18		103 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Drawings\ODOT Mod\032_0682CAD001.dgn 30-JAN-2007 10:57AM charvill

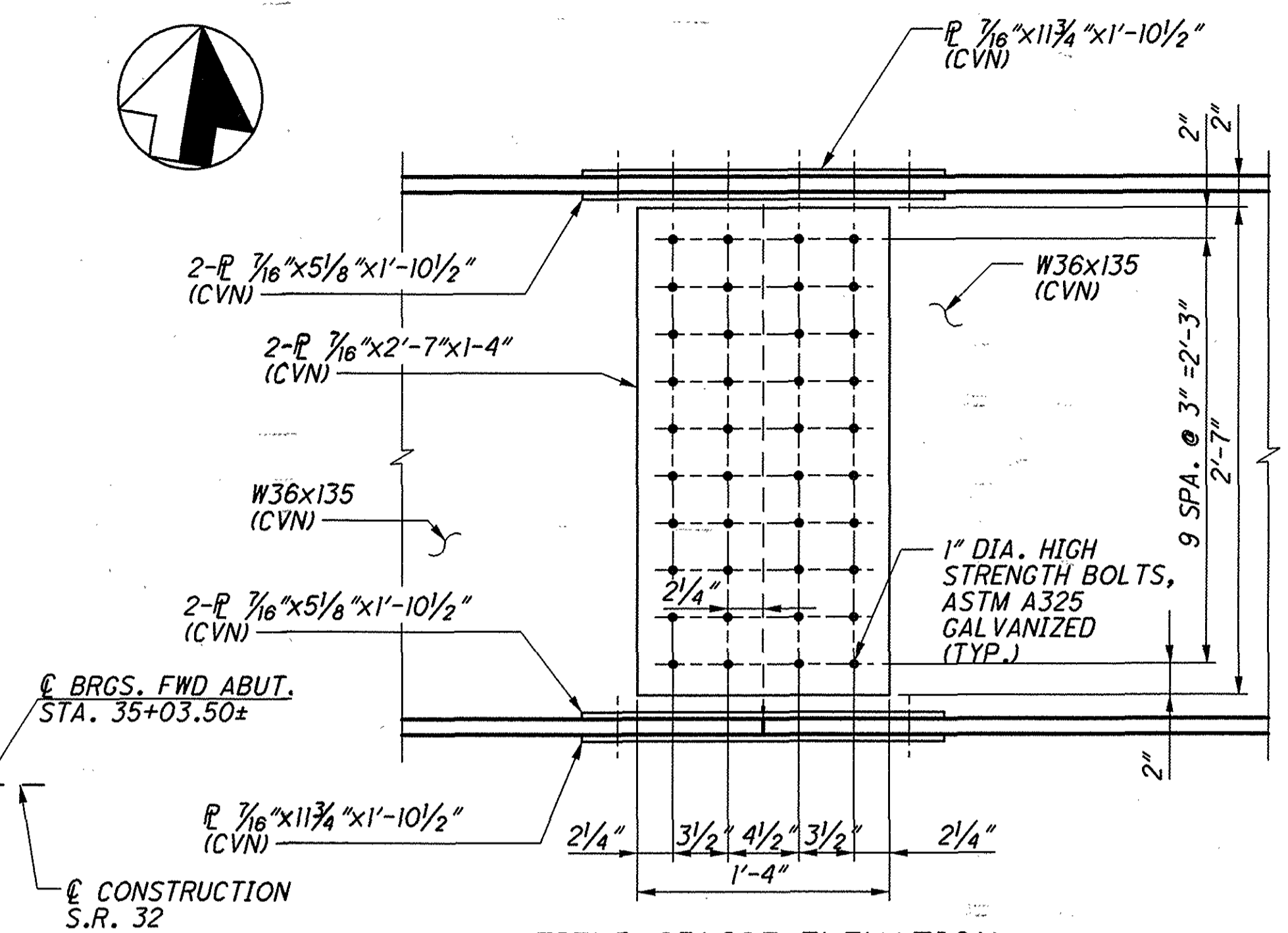
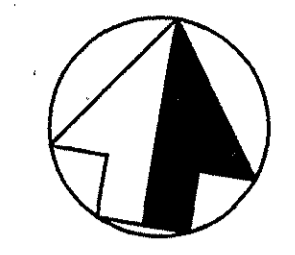
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CSD001.dgn 30-JAN-2007 1:40PM char.vll



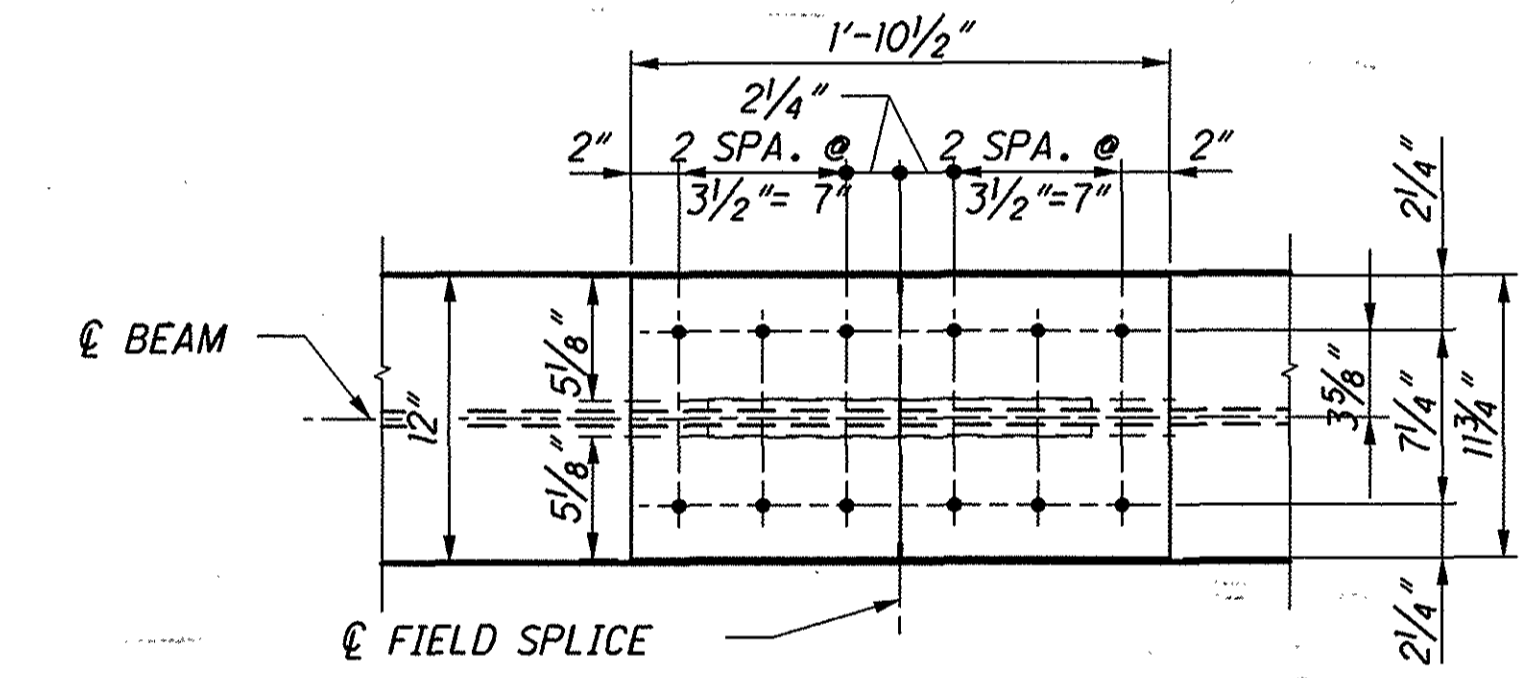
FRAMING PLAN



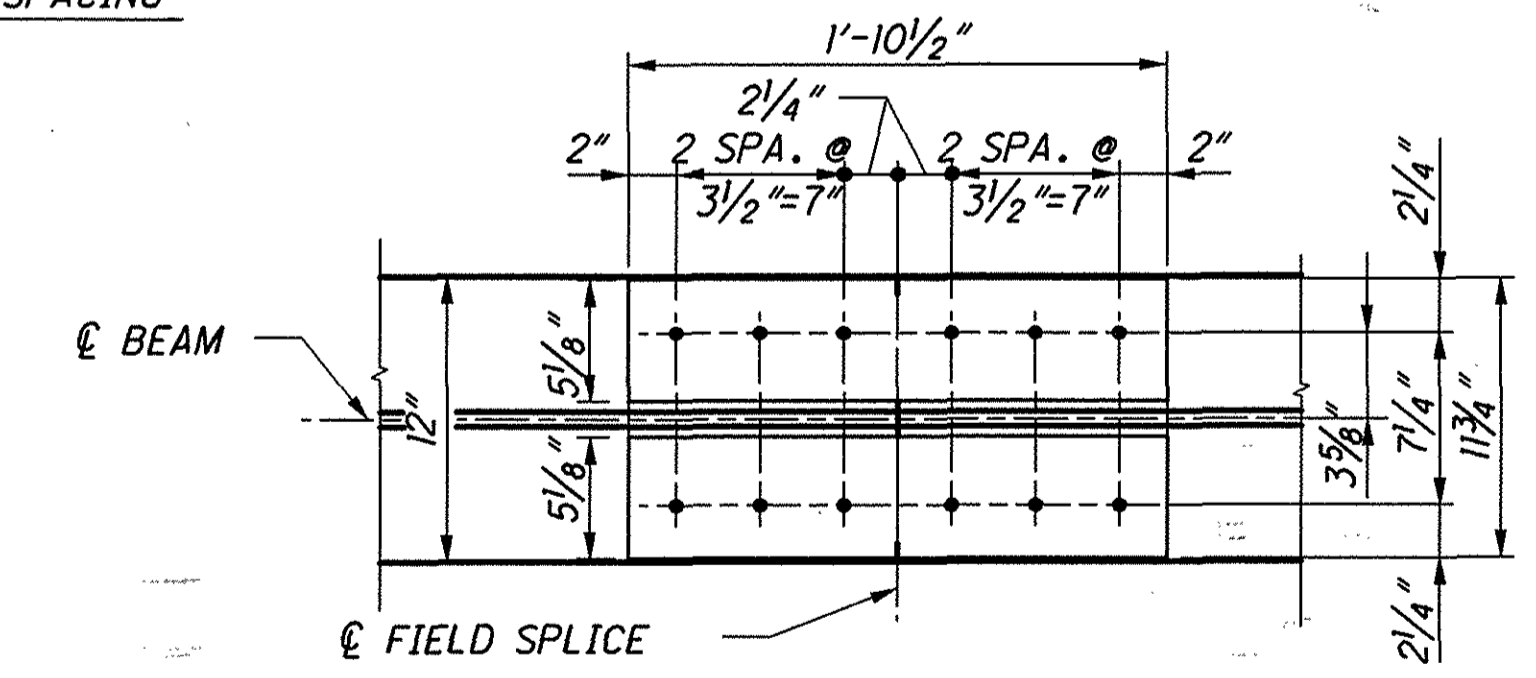
PARTIAL SECTION
(AT C OF BEAM SPLICE)



FIELD SPLICE ELEVATION
FOR BEAMS B11 & B12 ONLY



TOP FLANGE PLAN



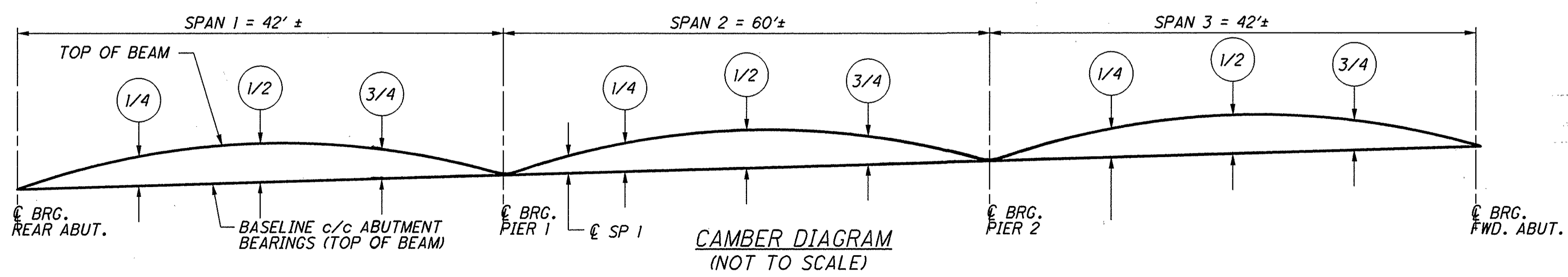
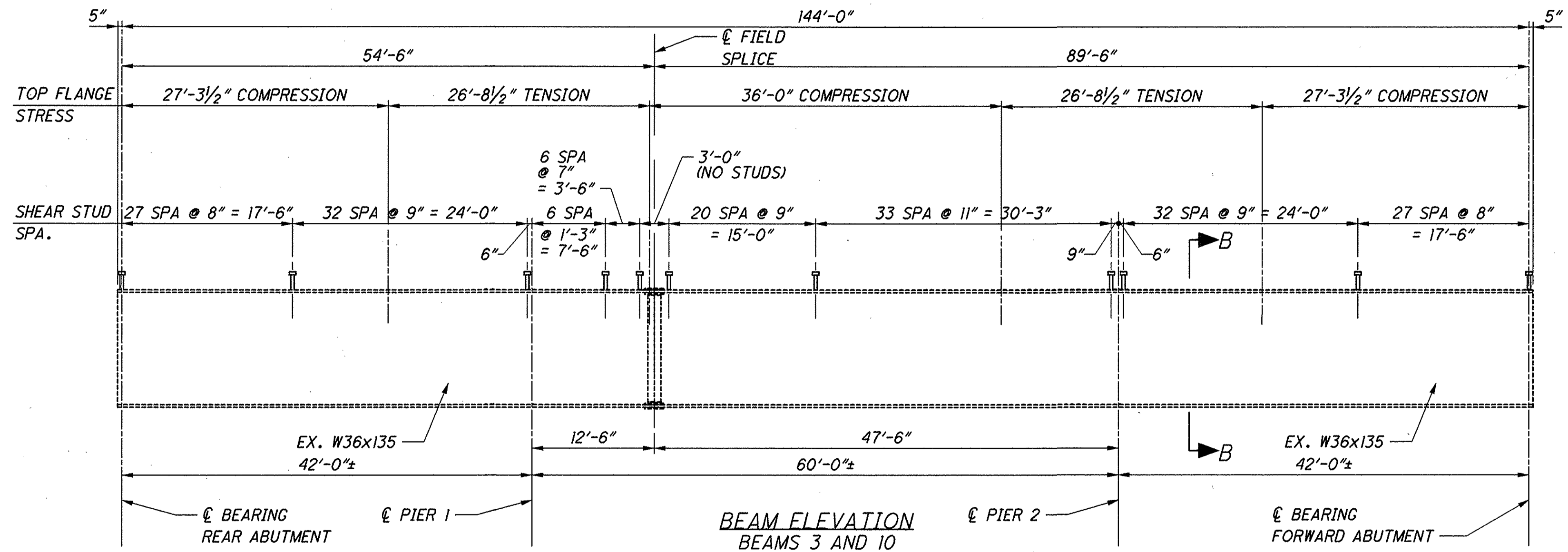
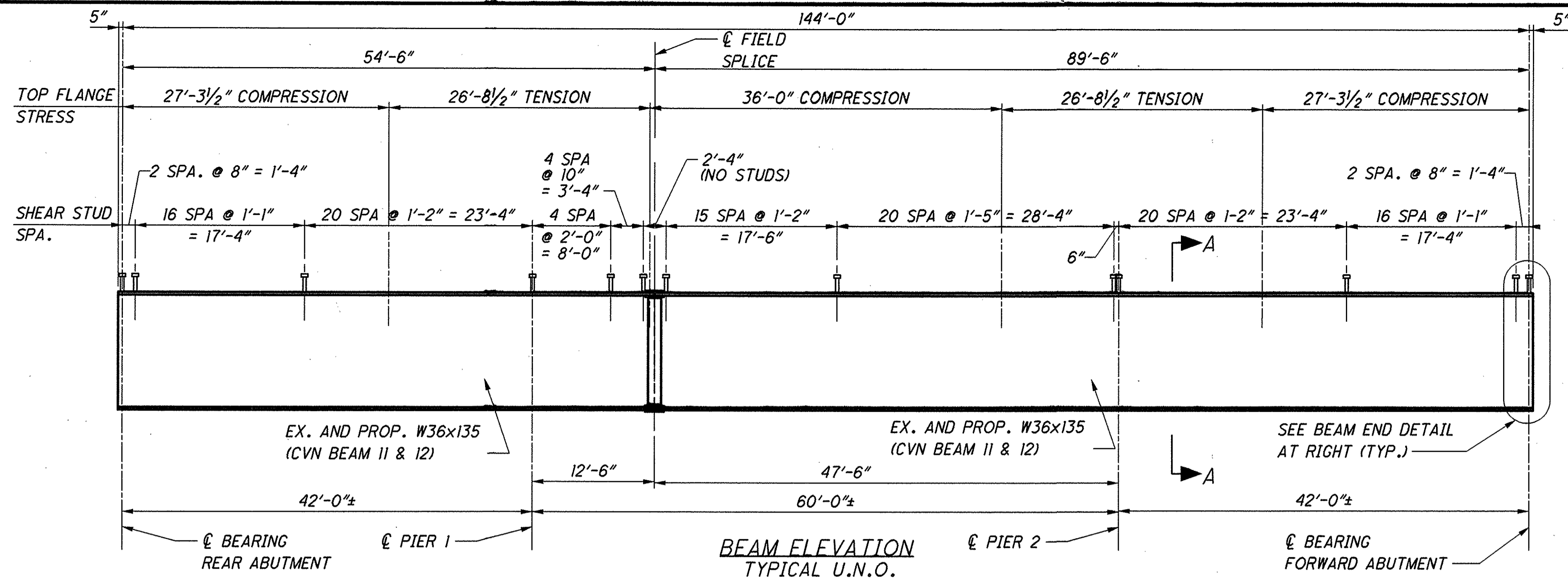
BOTTOM FLANGE PLAN

NOTES:

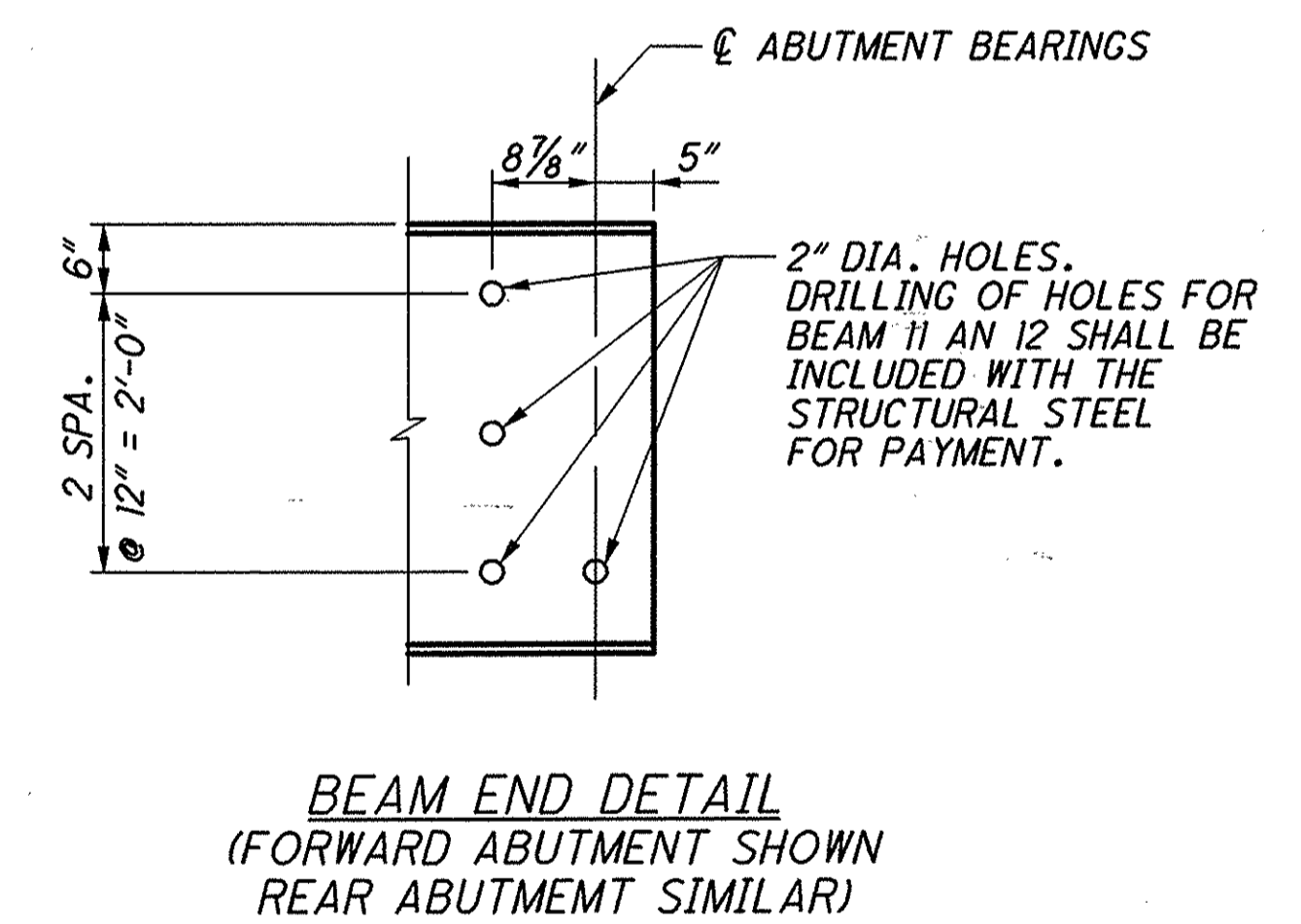
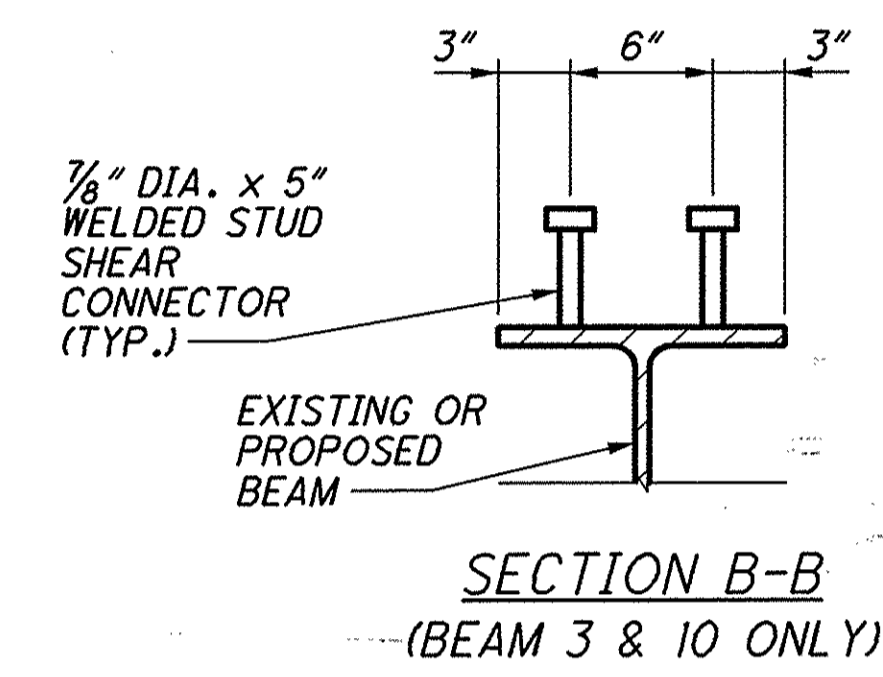
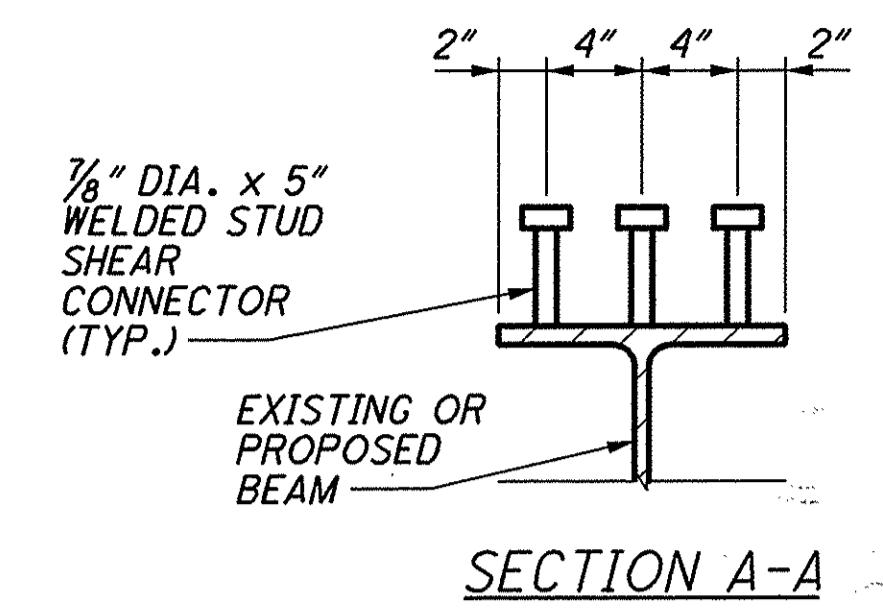
1. MATCH EXISTING CROSSFRAME ALIGNING CROSSFRAME LEGS ON OPPOSITE SIDES OF WEBS.
2. STANDARD INTERMEDIATE CROSSFRAME SHALL BE TYPE 1 PER SHEET 1 OF 3 ON STANDARD DRAWING GSD-1-96, UNLESS NOTED OTHERWISE.
3. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER A325, TYPE 1, DESIGN SLIP RESISTANCE EQUALS 21 KSI. USE AASHTO CLASS A CONTACT SURFACES.
4. WHERE A SHAPE OF PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
5. FOR BEARING DETAILS, SEE SHEET 11/18.
6. FOR BEAM DETAILS, SEE SHEET 13/18.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300326	DESIGNED XAC
DRAWN KML	CHECKED SJA
FRAMING PLAN AND SUPERSTRUCTURE DETAILS	
BRIDGE NO. CLE-32-0682	
OVER S.R. 32 RAMP A	
CLE-32-3.57 / 6.82	PID No. 24955
6.94 / 7.32	
12 / 18	
104	
156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CSD002.dgn 30-JAN-2007 1:41PM charvill



BEAM(S)	DESCRIPTION	RA	SPAN 1			PIER 1	SPAN 2			PIER 2	SPAN 3			FA
			1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN	
B11 & B12	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	1/16	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/16	1/16	0	0	3/16	3/16	5/16	3/16	0	0	1/16	1/16
	TOTAL REQUIRED SHOP CAMBER	0	1/16	1/16	0	0	3/16	3/16	5/16	3/16	0	0	1/16	1/16



NOTES:

- WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
- CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
- CLEAN AND PAINT BEAM ENDS THAT ARE EMBEDDED IN THE INTEGRAL DIAPHRAGM WITH PRIMER ONLY.
- FOR BOLTED SPLICE DETAILS, SEE SHEET 12/18.

DESIGN AGENCY: **BURGESS & NIPLE**

DATE: 8-14-06

REVIEWED: JSB

DRAWN: KML

DESIGNED: XAC

CHECKED: SJA

STRUCTURE FILE NUMBER: 1300326

BEAM DETAILS

BRIDGE NO. CLE-32-0682

OVER S.R. 32 RAMP A

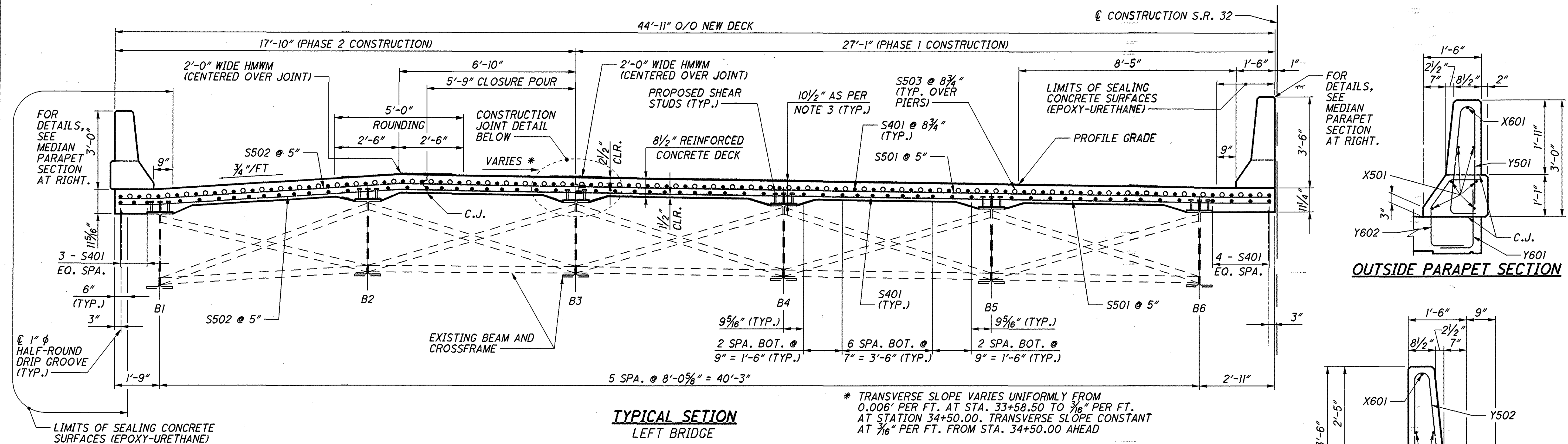
CLE-32-3.57/6.82 / 6.94/7.32

PID No. 24955

13/18

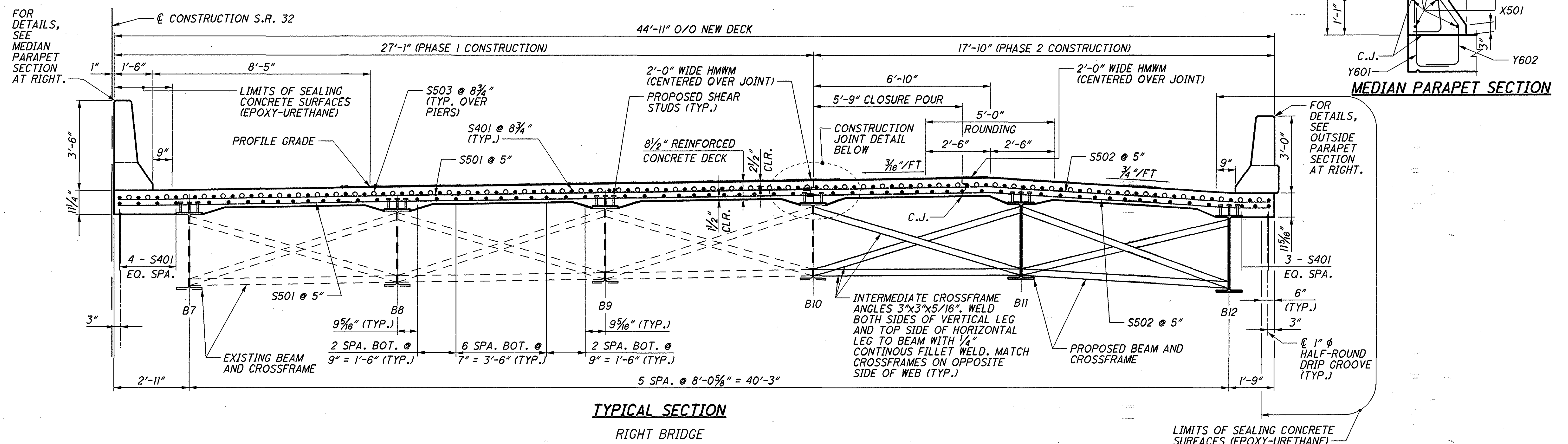
105/156

I:\projects\CLE_sr032_06.82_PID24955\Consult\Final Tracings\ODOT Mod_032_0682CTS002.dgn 30-JAN-2007 1:57PM charvill

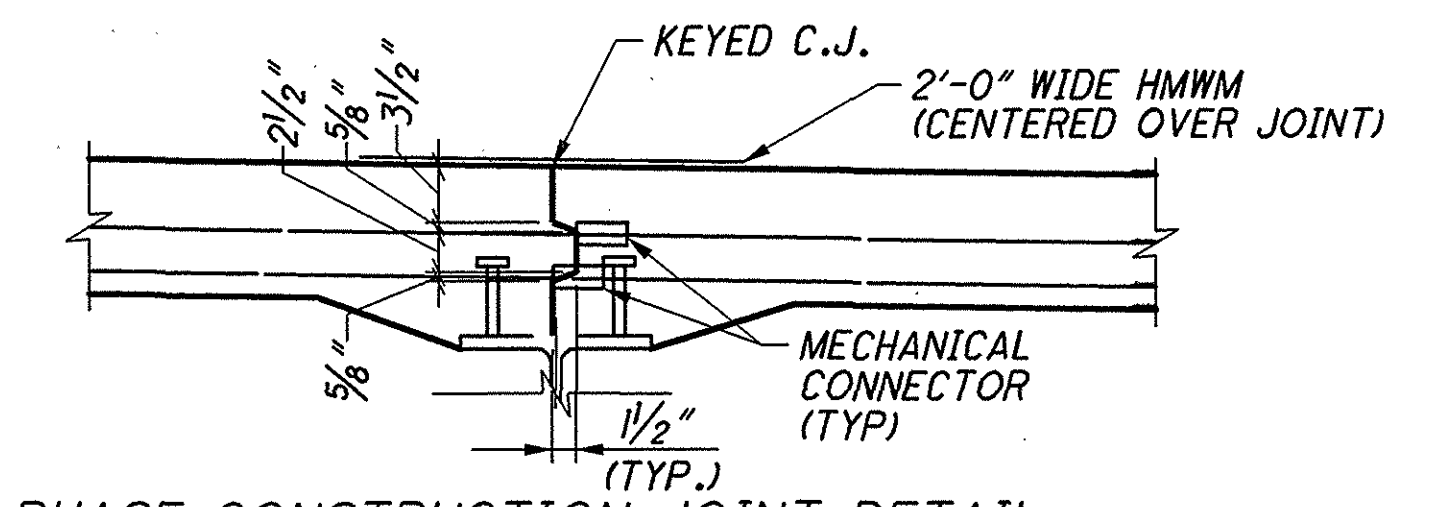


**TYPICAL SECTION
LEFT BRIDGE**

* TRANSVERSE SLOPE VARIES UNIFORMLY FROM 0.006' PER FT. AT STA. 33+58.50 TO 3/16" PER FT. AT STATION 34+50.00. TRANSVERSE SLOPE CONSTANT AT 3/16" PER FT. FROM STA. 34+50.00 AHEAD



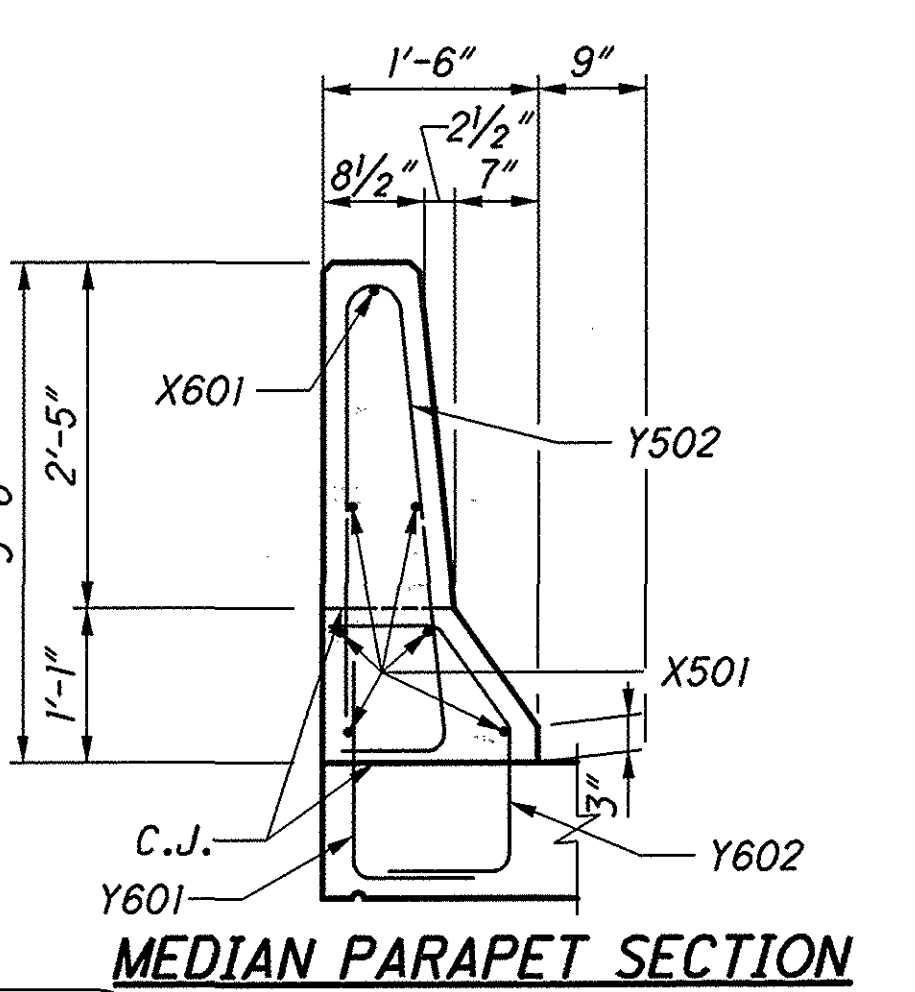
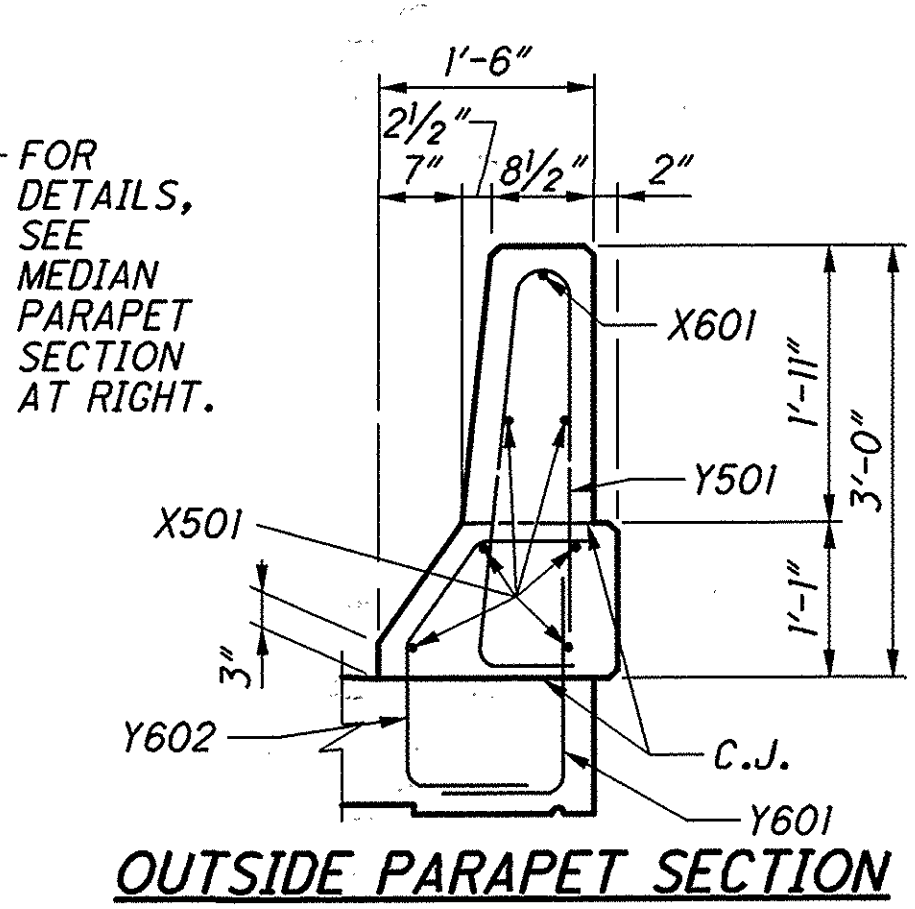
**TYPICAL SECTION
RIGHT BRIDGE**



**PHASE CONSTRUCTION JOINT DETAIL
LONGITUDINAL DECK BAR NOT SHOWN**

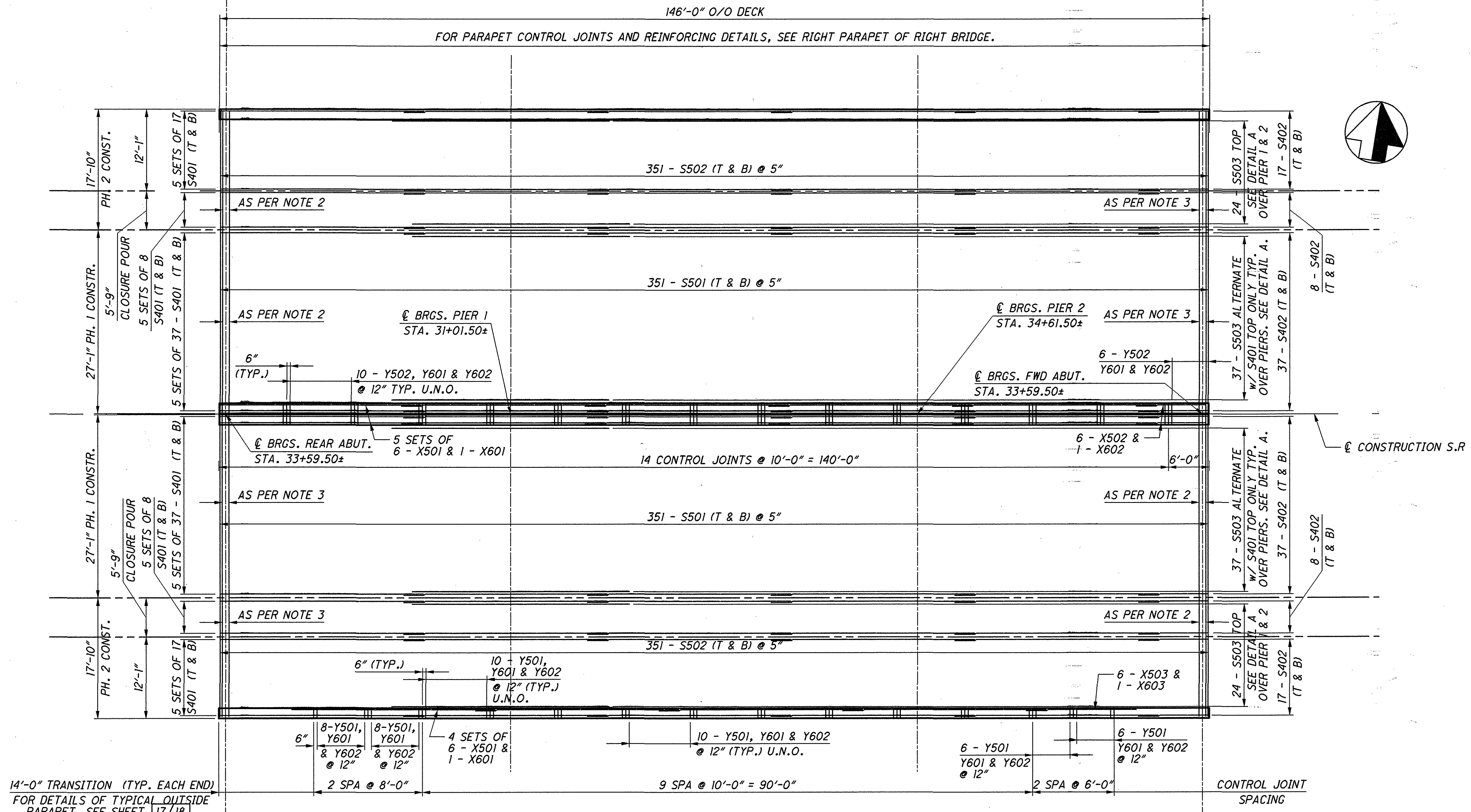
NOTES:

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A MINIMUM HAUNCH THICKNESS OF 2 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES.
2. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ± 3 INCHES.
3. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE TOP OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

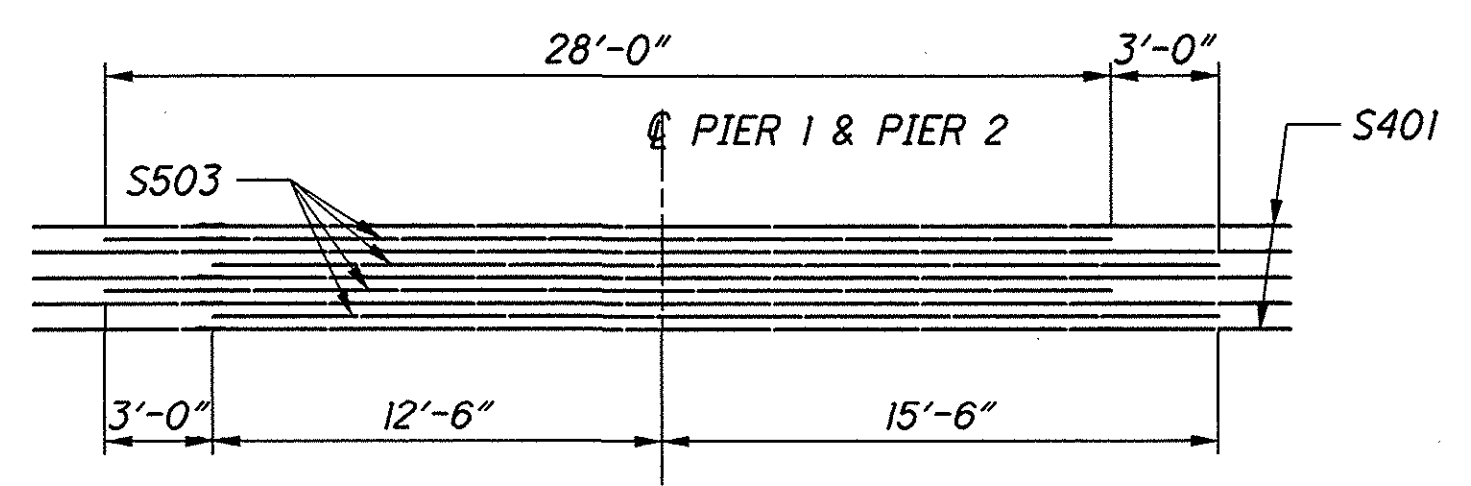


BURGESS & NIPLE <small>30 Plus Street, 4th Floor Cincinnati, Ohio 45202</small>	DESIGN AGENCY	DATE 8-14-06 REVIEWED JSB STRUCTURE FILE NUMBER 1300326	DRAWN KML CHECKED SJA DESIGNED XAC
TYPICAL SECTION BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A			
CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955		14 / 18 106 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CDP001.dgn 30-JAN-2007 12:33PM charvill



DECK PLAN



DETAIL A
S503 TO ALTERNATE
WITH S401

- NOTES:**
- MIN. STEEL LAP LENGTH:
NO. 5 BAR = 3'-3"
NO. 6 BAR = 3'-10"
 - FOR DIAPHRAGM REINFORCING DETAILS, SEE SHEET 9/18.
 - FOR DIAPHRAGM REINFORCING DETAILS, SEE SHEET 10/18.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300326	DESIGNED XAC
DRAWN KML	CHECKED SJA
REVISIONS	
<p>DECK PLAN BRIDGE NO. CLE-32-0682 OVER S.R. 32 RAMP A</p>	
<p>CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955</p>	
15	18
107	156

I:\projects\CLE\sfr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CSD004.dgn 30-JAN-2007 1:53PM charvill

DECK SCREED ELEVATION - LEFT STRUCTURE

LOCATION / STATION	RA	SPAN 1			PIER 1	SPAN 2				PIER 2	SPAN 3			FA
		1/4 SPAN	1/2 SPAN	3/4 SPAN		¢ SP 1	1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN	
33+59.50	33+70.00	33+80.50	33+91.00	34+01.50	34+14.00	34+16.50	34+31.50	34+46.50	34+61.50	34+72.00	34+82.50	34+93.00	35+03.50	
LT TOE OF PARAPET	594.95	595.30	595.64	595.98	596.32	596.74	596.82	597.32	597.80	598.24	598.56	598.88	599.19	599.50
B1	594.97	595.32	595.66	596.00	596.34	596.76	596.84	597.34	597.82	598.26	598.57	598.89	599.21	599.52
B2	595.46	595.81	596.15	596.49	596.83	597.25	597.33	597.83	598.31	598.75	599.06	599.38	599.70	600.01
BREAK POINT	595.55	595.90	596.24	596.57	596.91	597.33	597.42	597.92	598.39	598.83	599.15	599.47	599.79	600.09
PHASE CJ	595.53	595.87	596.21	596.55	596.89	597.31	597.39	597.89	598.36	598.80	599.12	599.44	599.75	600.06
B3	595.51	595.85	596.18	596.51	596.84	597.25	597.34	597.82	598.29	598.73	599.04	599.36	599.68	599.99
B4	595.46	595.79	596.11	596.43	596.76	597.16	597.24	597.71	598.17	598.60	598.92	599.24	599.55	599.86
B5	595.41	595.73	596.05	596.36	596.67	597.06	597.14	597.60	598.04	598.48	598.79	599.11	599.43	599.74
PROFILE GRADE	595.40	595.72	596.04	596.35	596.66	597.05	597.13	597.59	598.03	598.46	598.78	599.10	599.41	599.72
B6	595.36	595.67	595.98	596.28	596.59	596.96	597.04	597.49	597.92	598.35	598.67	598.99	599.30	599.61
RT TOE OF PARAPET	595.35	595.66	595.97	596.27	596.57	596.95	597.03	597.47	597.90	598.33	598.64	598.96	599.28	599.59


DECK SCREED ELEVATION - RIGHT STRUCTURE

LOCATION / STATION	RA	SPAN 1			PIER 1	SPAN 2				PIER 2	SPAN 3			FA
		1/4 SPAN	1/2 SPAN	3/4 SPAN		¢ SP 1	1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN	
33+59.50	33+70.00	33+80.50	33+91.00	34+01.50	34+14.00	34+16.50	34+31.50	34+46.50	34+61.50	34+72.00	34+82.50	34+93.00	35+03.50	
LT TOE OF PARAPET	595.27	595.59	595.90	596.21	596.53	596.92	597.00	597.46	597.90	598.33	598.64	598.96	599.28	599.59
B7	595.29	595.61	595.93	596.24	596.55	596.94	597.02	597.48	597.92	598.35	598.67	598.99	599.30	599.61
PROFILE GRADE	595.40	595.72	596.04	596.35	596.66	597.05	597.13	597.59	598.03	598.46	598.78	599.10	599.41	599.72
B8	595.42	595.74	596.05	596.36	596.68	597.06	597.14	597.60	598.04	598.48	598.79	599.11	599.43	599.74
B9	595.54	595.86	596.18	596.49	596.80	597.19	597.27	597.73	598.17	598.60	598.92	599.24	599.55	599.86
B10	595.67	595.99	596.30	596.61	596.93	597.32	597.39	597.86	598.29	598.73	599.04	599.36	599.68	599.99
PHASE CJ	595.74	596.06	596.38	596.69	597.00	597.39	597.47	597.93	598.37	598.80	599.12	599.44	599.75	600.06
BREAK POINT	595.77	596.10	596.41	596.72	597.03	597.42	597.50	597.96	598.40	598.83	599.15	599.47	599.79	600.09
B11	595.69	596.01	596.32	596.63	596.95	597.33	597.41	597.87	598.31	598.75	599.06	599.38	599.70	600.01
B12	595.20	595.52	595.83	596.14	596.46	596.84	596.92	597.38	597.82	598.26	598.57	598.89	599.21	599.52
RT TOE OF PARAPET	595.18	595.50	595.82	596.13	596.44	596.83	596.91	597.37	597.81	598.24	598.56	598.88	599.19	599.50

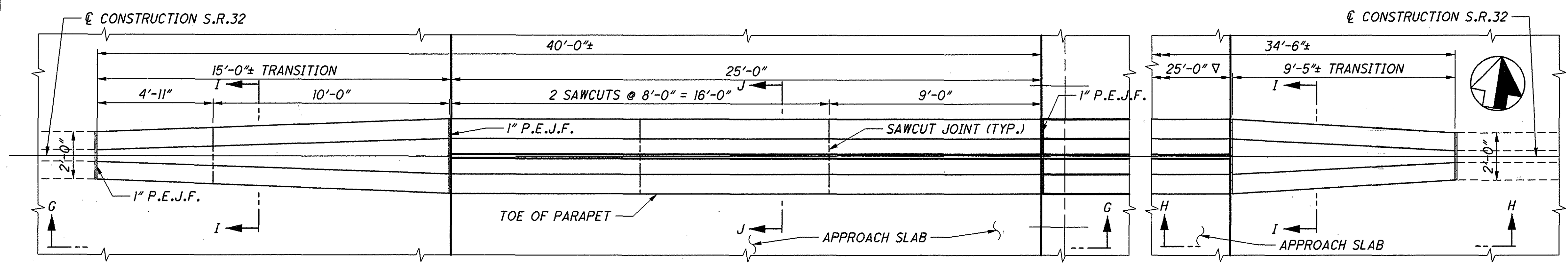
NOTE:

1. SCREED ELEVATIONS SHOWN ARE FOR THE TOP OF DECK SLAB PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR THE ANTICIPATED DEAD LOAD DEFLECTIONS.

DESIGNED		DRAWN		REVIEWED		DATE	
XAC	KML	JSB	KML	JSB	JSB	8-14-06	
CHECKED	REVISION	STRUCTURE FILE NUMBER					
SJA		1300326					
SCREED ELEVATIONS							
BRIDGE NO. CLE-32-0682							
OVER S.R. 32 RAMP A							
CLE-32-3.57/6.82							
/ 6.94/7.32							
PID No. 24955							
16	18						
108	156						

DESIGN AGENCY

 207 Pine Street, 20th Floor
 Cincinnati, OH 45222

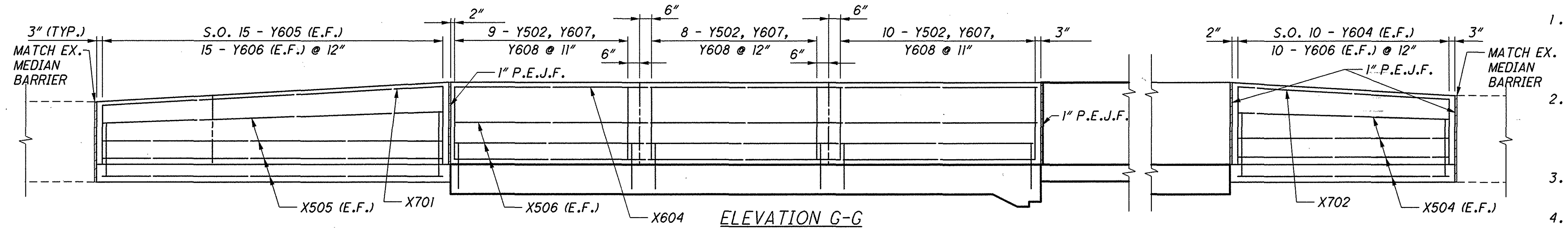
\projects\CLE\s032_06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0682CSD003.dgn 30-JAN-2007 1:51PM charvill



REAR MEDIAN BARRIER PLAN

FORWARD MEDIAN BARRIER PLAN

∇ SIMILAR TO REAR MEDIAN BARRIER

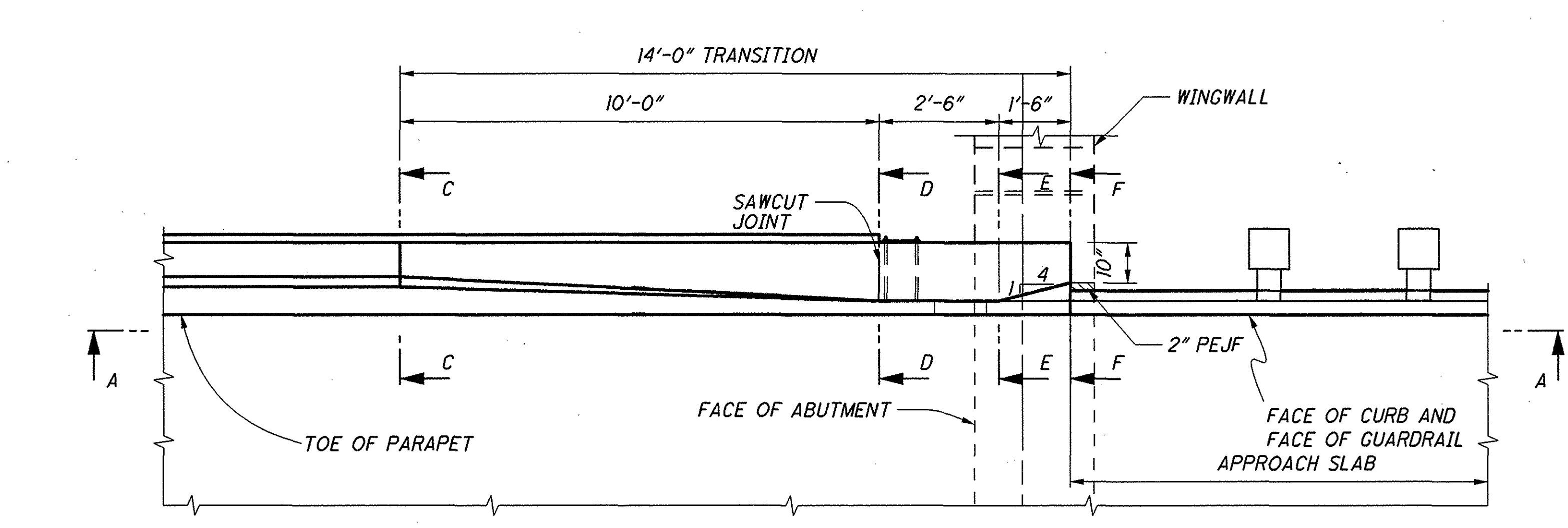


ELEVATION G-G

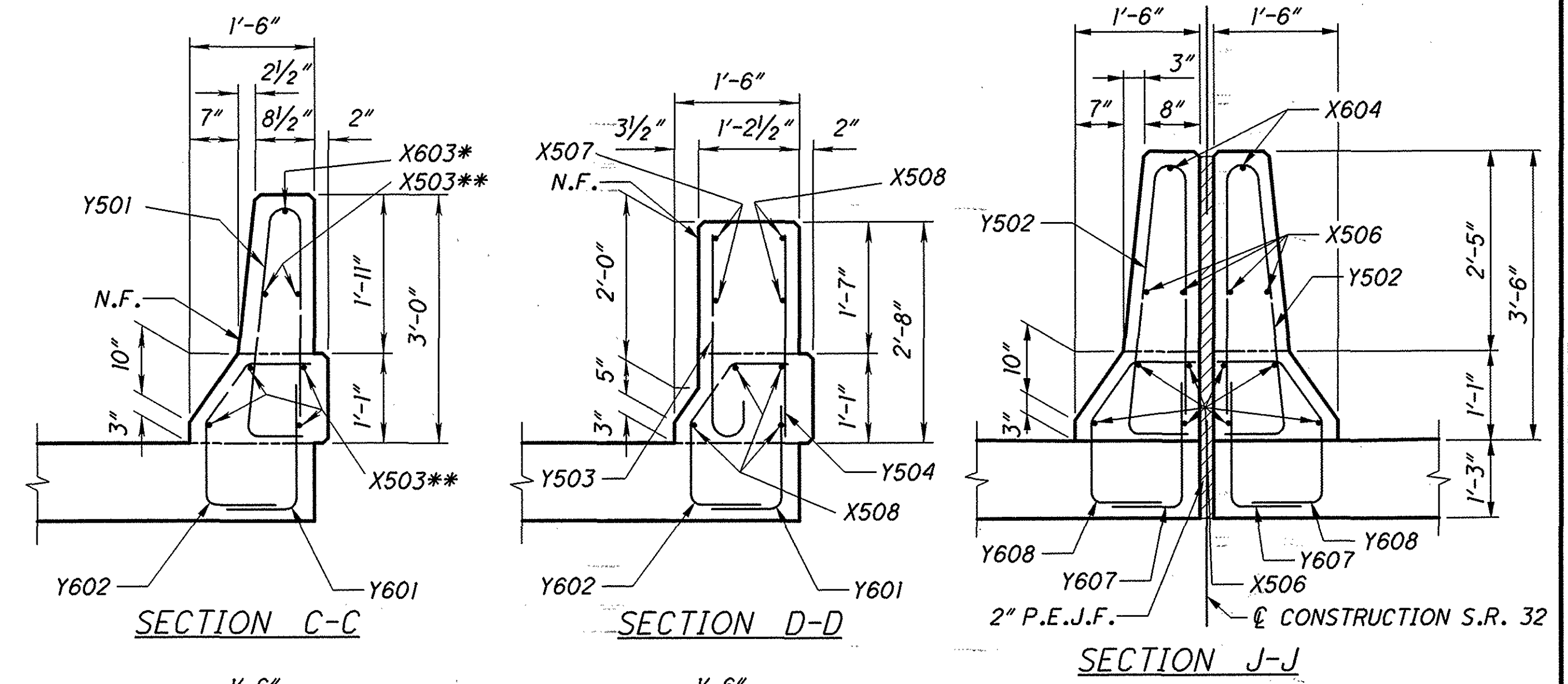
ELEVATION H-H

NOTES:

1. MEDIAN BARRIER TRANSITIONS, INCLUDING CONCRETE, REINFORCING STEEL AND JOINT SEALERS, WILL BE INCLUDED IN THE COST OF ROADWAY ITEM 622, BARRIER TRANSITION.
2. MEDIAN BARRIER ON THE APPROACH SLAB WILL BE PAID FOR UNDER ITEM 898, QC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN. FOR MORE DETAILS, SEE GENERAL NOTE.
3. MIN. REINFORCING CLEAR COVER IS 2" UNLESS NOTED OTHERWISE.
4. FOR MORE DETAILS, SEE STANDARD DRAWING BR-1.



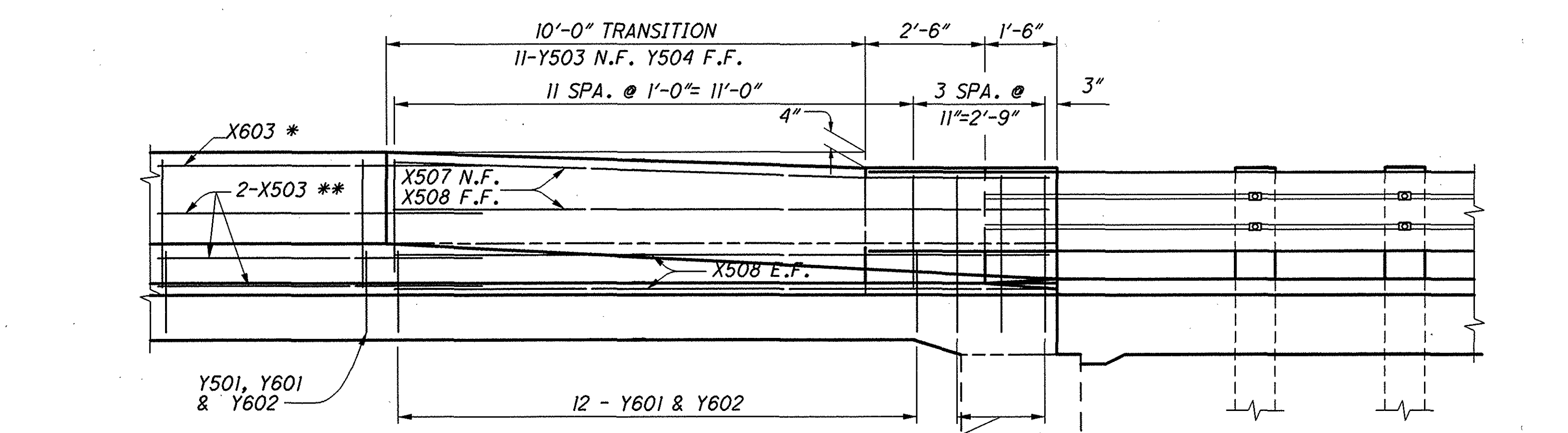
OUTSIDE PARAPET TRANSITION
LEFT FWD SHOWN; OTHERS SIMILAR



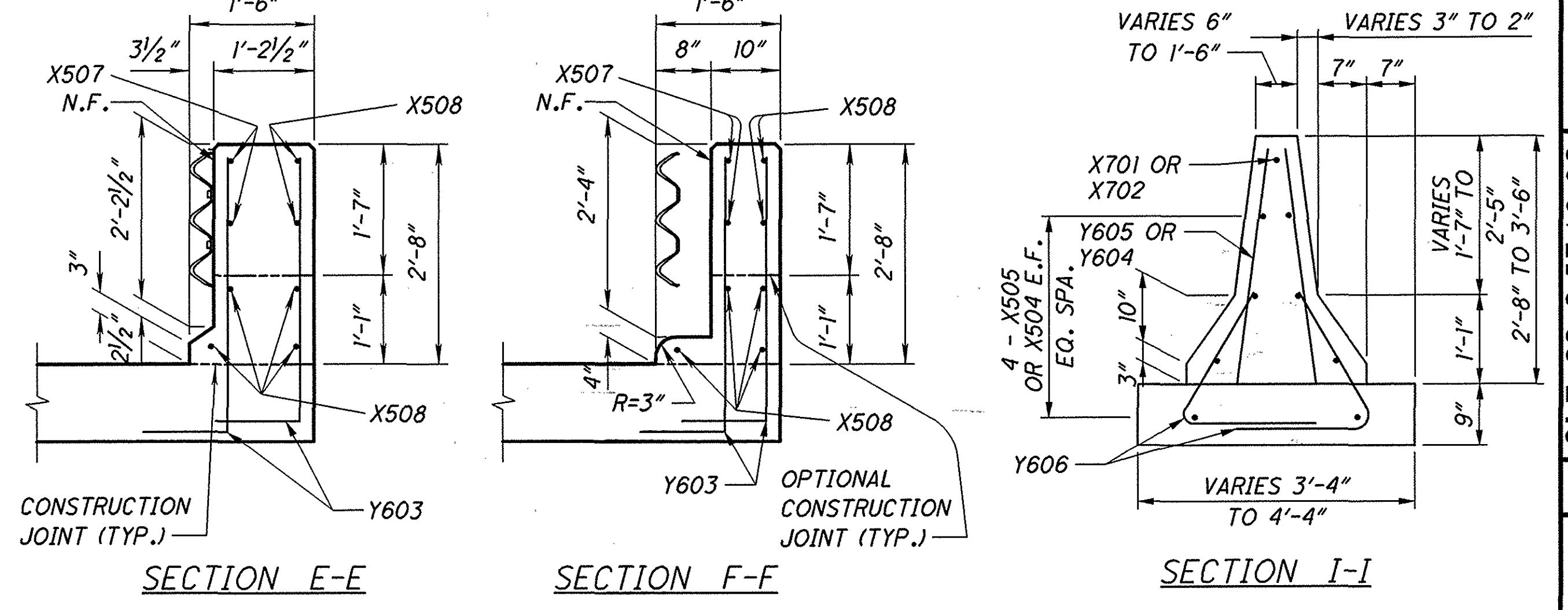
SECTION C-C

SECTION D-D

SECTION J-J



ELEVATION A-A



SECTION E-E

SECTION F-F

SECTION I-I

* X603, FWD. LT. FWD. RT.
 X601, REAR LT. REAR RT.
 ** X503, FWD. LT. FWD. RT.
 X501, REAR LT. REAR RT.

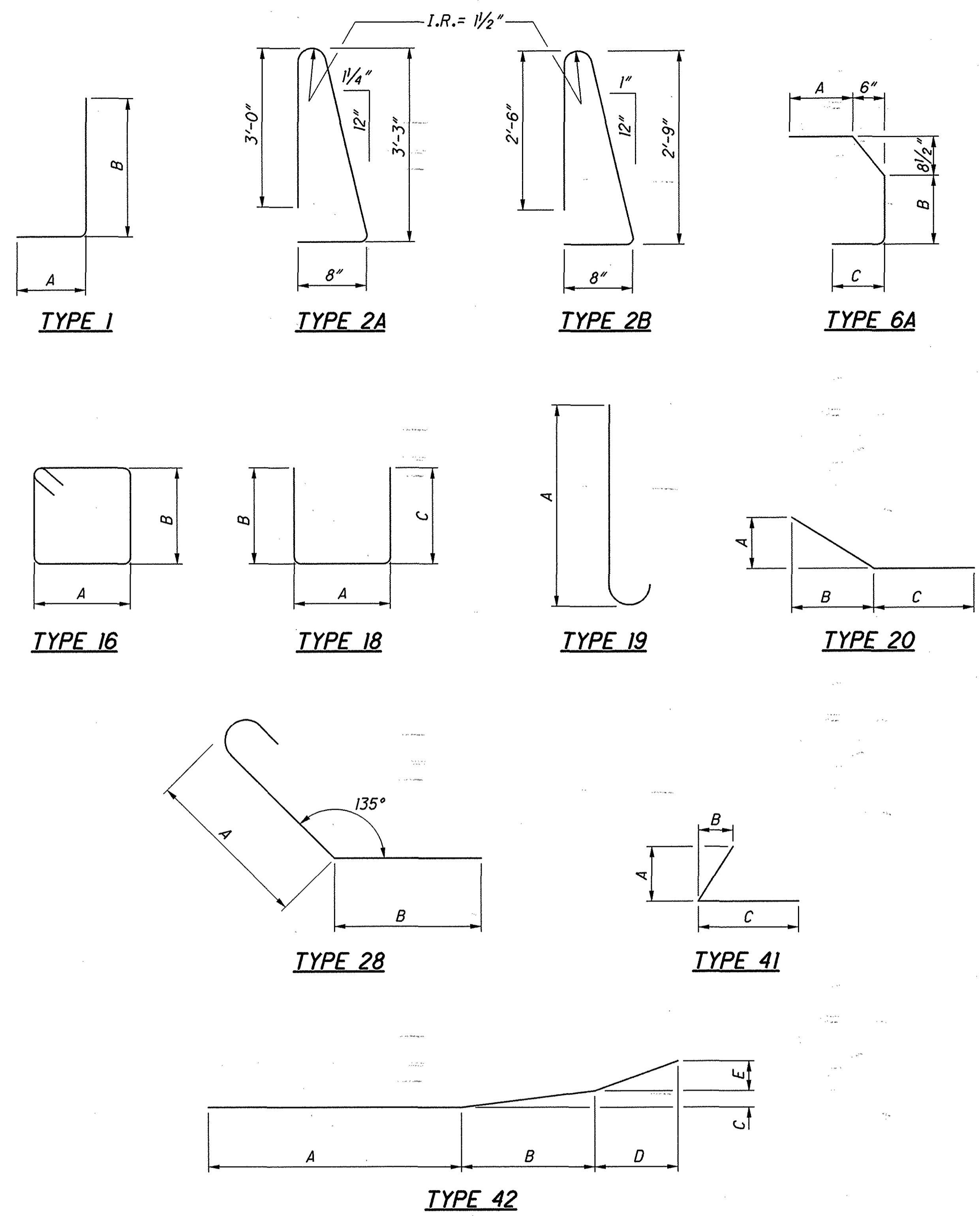
DESIGN AGENCY BURGESS & NIPLE	DATE	8-14-06
	REVIEWED	JSB
DRAWN	KML	REVIS
	XAC	CHECKED
DESIGNED	SJA	FILE NUMBER
STRUCTURE FILE NUMBER	1300326	
PARAPET DETAILS	BRIDGE NO. CLE-32-0682	
	OVER S.R. 32 RAMP A	
CLE-32-3.57/6.82	17	18
/ 6.94/7.32		
PID No. 24955		
	109	156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Drawings\ODOT Mod\032_0682CRL001.dgn 30-JAN-2007 1:36PM chorvill

PARAPET REINFORCING STEEL NOT PAID UNDER ITEM 509										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
X504	8	9'-1"	75	STR						
X505	8	14'-7"	121	STR						
X506	24	24'-8"	617	STR						
X604	4	24'-8"	148	STR						
Y502	108	6'-10"	769	2A						
	2	2'-6"								
Y604	S.O.	TO	87	STR						0'-1 1/8"
	10	3'-4"								
	2	2'-6"								
Y605	S.O.	TO	131	STR						0'-0 3/4"
	15	3'-4"								
Y606	50	3'-8"	275	41	1'-10"	1'-0"	1'-9"			
Y607	108	3'-8"	594	1	1'-0"	2'-10"				
Y608	108	3'-6"	567	6A	0'-9"	1'-3"	0'-10 1/2"			
X701	1	14'-7"	29	STR						
X702	1	9'-1"	18	STR						
		SUBTOTAL	3,431							

SUPERSTRUCTURE REINFORCING STEEL LIST										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
S401	1240	30'-0"	24849	STR						
S402	248	10'-3"	1698	STR						
S501*	1404	26'-11"	39416	STR						
S502*	1404	17'-8"	25870	STR						
S503	244	28'-0"	7125	STR						
X501	108	30'-0"	3379	STR						
X502	12	11'-11"	149	STR						
X503	12	17'-10"	223	STR						
X507	8	13'-10"	115	42	10'-0"	2'-5"	0'-1 1/2"	1'-5"	0'-5"	
X508	24	13'-8"	342	STR						
X601	18	30'-0"	811	STR						
X602	2	14'-10"	44	STR						
X603	2	21'-4"	64	STR						
Y501	236	5'-10"	1435	2B						
Y502	292	6'-10"	2081	2A						
Y503	44	3'-0"	137	19	2'-5"					
Y504	44	2'-5"	110	STR						
Y601	576	3'-6"	3028	1	1'-0"	2'-8"				
Y602	576	3'-2"	2739	6A	0'-9"	0'-11"	0'-10 1/2"			
Y603	24	3'-11"	141	1	0'-10"	3'-3"				
D501	8	6'-11"	57	18	2'-2"	2'-6"	2'-6"			
D502	184	9'-2"	1759	16	2'-2"	2'-2"				
D503	168	6'-5"	1124	18	1'-8"	2'-6"	2'-6"			
D801*	48	26'-11"	3449	STR						
D802*	48	7'-3"	929	STR						
D803	32	18'-8"	1594	STR						
D804*	16	18'-7"	793	20	0'-7"	12'-10"	5'-9"			
D805	124	5'-0"	1655	28	2'-8"	1'-5"				
		SUBTOTAL	125,116							

* REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.



NOTE:
1. ALL BARS SHALL BE EPOXY COATED.

DESIGN AGENCY
BURGESS & NIPLE
30 Park Street, 17th Floor
Newport, RI 02840

DATE: 8-14-06
REVIEWED: JSB
DRAWN: GTT
DESIGNED: XAC
CHECKED: SJA

STRUCTURE FILE NUMBER: 1300326

REINFORCING STEEL LIST

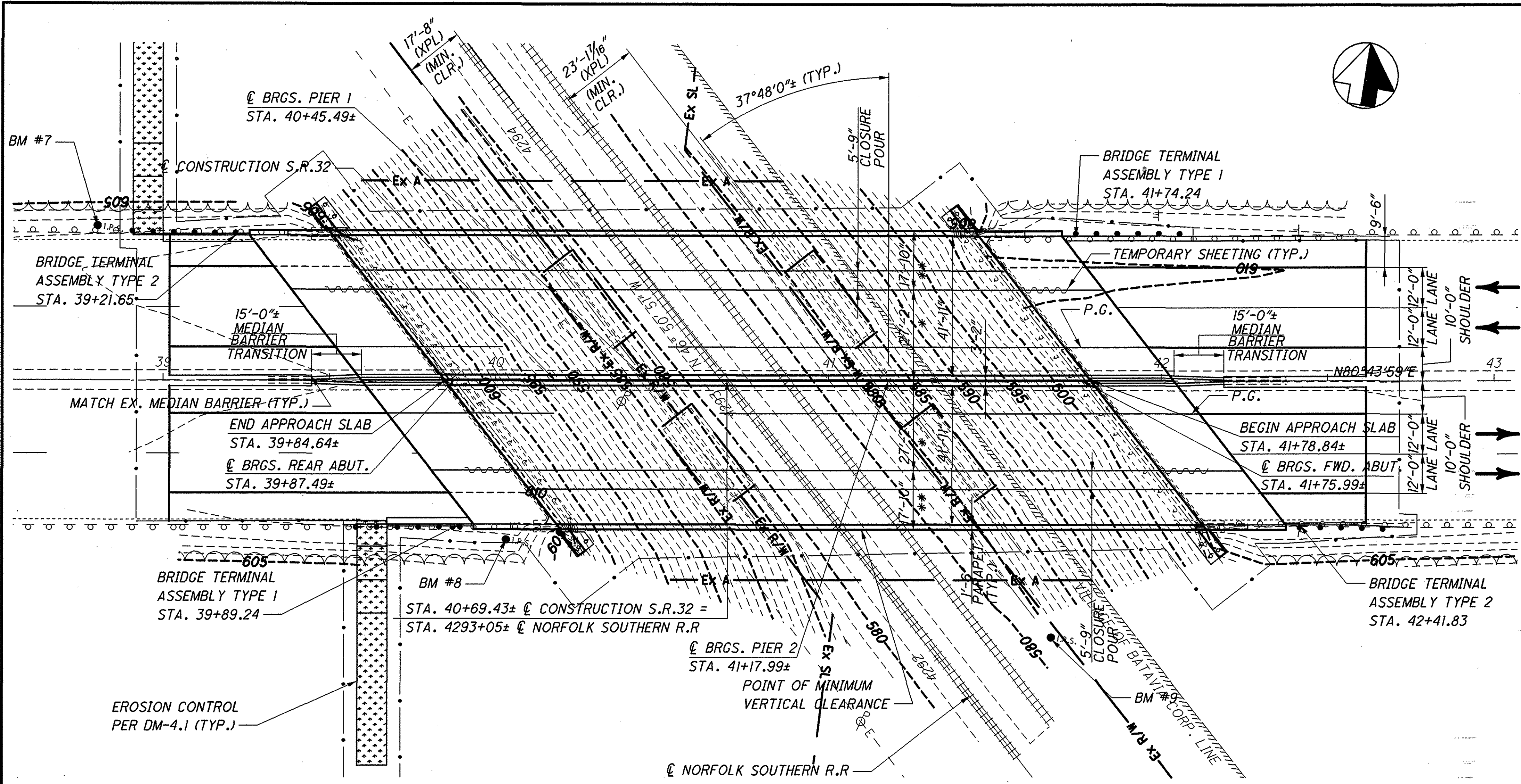
BRIDGE NO. CLE-32-0682
OVER S.R. 32 RAMP A

CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

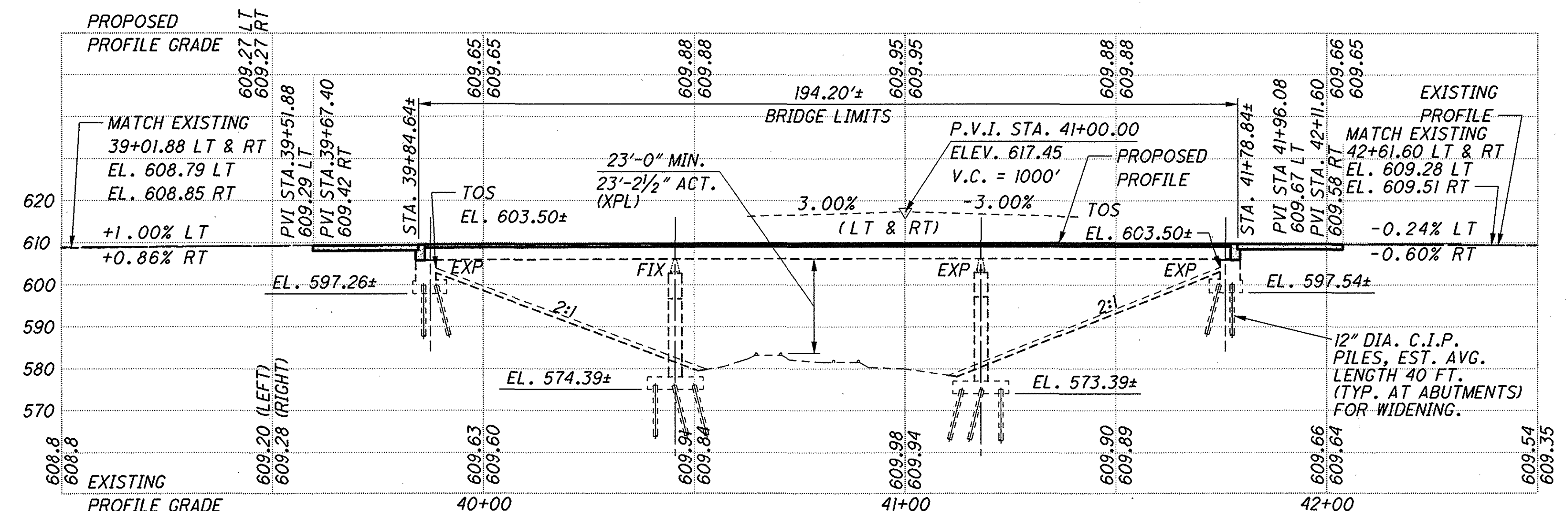
18 / 18

110
156

I:\projects\CLE-sr032\06.82_P1D24955\Consult\Final Tracings\ODOT_Mod\032_0694\CSF001.dgn 05-FEB-2007 8:37AM charvill



PLAN



PROFILE ALONG C/NORFOLK S.R. 32

BENCHMARK DATA

BM #7 STA. 38+80.12, ELEV. 607.39, OFFSET 46.46, LEFT
 BM #8 STA. 40+03.11, ELEV. 609.07, OFFSET 48.03, RIGHT
 BM #9 STA. 41+66.90, ELEV. 580.58, OFFSET 77.24, RIGHT
 ALL BENCHMARKS ARE IRON PINS SET

NOTES

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

DESIGN TRAFFIC:
 2008 ADT = 34,910 2008 ADTT = 1822
 2028 ADT = 43,540 2028 ADTT = 2773
 DIRECTIONAL DISTRIBUTION = 0.58

LEGEND

- * - PHASE 1 CONSTRUCTION
- ** - PHASE 2 CONSTRUCTION
- BRGS. = BEARINGS
- @ = BASE LINE
- EXP = EXPANSION
- ABUT. = ABUTMENT
- FWD. = FORWARD
- P.G. = PROFILE GRADE
- MIN. = MINIMUM
- CLR. = CLEARANCE
- TOS = TOP OF SLOPE
- XPL = EXISTING PLANS

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS BEAM BRIDGE WITH REINFORCED CONCRETE SUPERSTRUCTURE AND REINFORCED CONCRETE SUBSTRUCTURE

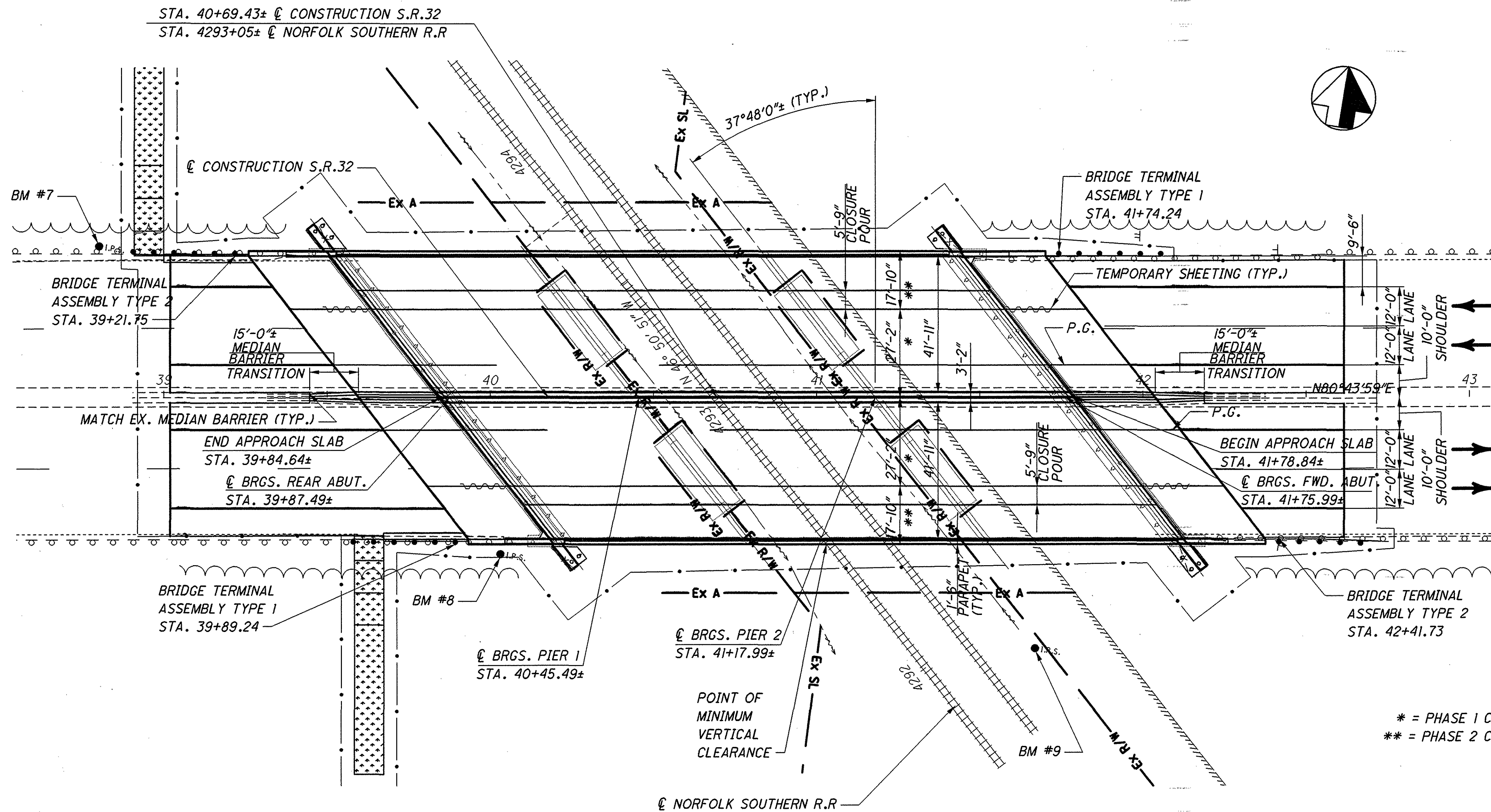
SPANS: 58'-0", 72'-6", 58'-0" C/C BEARINGS
 ROADWAY: 88'-0" F/F PARAPETS
 LOADING: HS20-44
 SKEW: 37°48'00" RT. FWD.
 APPROACH SLABS: AS-1-67 (25' LONG)
 ALIGNMENT: TANGENT
 CROWN: 0.0156 FT/FT
 STRUCTURAL FILE NUMBER: 1300342
 DATE BUILT: 1969
 WEARING SURFACE: 1 3/4" SUPERPLASTICIZED DENSE CONCRETE OVERLAY

PROPOSED STRUCTURE

PROPOSED WORK: REPLACE EXISTING SUPERSTRUCTURE w/ COMPOSITE CONCRETE DECK ON EXISTING STEEL BEAMS AND CONVERT ABUTMENT TO SEMI-INTEGRAL, PAINTING OF EXISTING BEAMS.

SPANS: 58'-0"±, 72'-6"±, 58'-0"± C/C BEARINGS
 ROADWAY: 87'-0" TOE/TOE PARAPET INCLUDING MEDIAN
 LOADING: HS20-44 CASE II AND ALTERNATE MILITARY LOADING
 SKEW: 37°48'00"± RT. FWD.
 APPROACH SLABS: (AS-1-81) 25'-0" LONG (MODIFIED)
 ALIGNMENT: TANGENT
 CROWN: 0.0156 FT/FT
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 COORDINATES: LATITUDE 39°05'03"N
 LONGITUDE 84°11'10"W

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 DRAWN: KML
 DESIGNED: XAC
 CHECKED: SJA
 CLERMONT COUNTY STA. 39+84.64 STA. 41+7C.84
 SITE PLAN
 BRIDGE NO. CLE-32-0694
 OVER NORFOLK SOUTHERN R.R.
 CLE-32-3.57 / 6.82 / 6.94 / 7.32
 PID No. 24955
 1 / 21
 111
 156



GENERAL PLAN

DESIGN AGENCY 30 Plus Street, 5th Floor Cincinnati, Ohio 45202	DATE 8-14-06
	REVIEWED JSB STRUCTURE FILE NUMBER 1300342
	DRAWN SDC DESIGNED XAC CHECKED SJA
CLERMONT COUNTY STA. 39+84.64 STA. 41+78.84	
GENERAL PLAN BRIDGE NO. CLE-32-0694 OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/ 6.82/6.94/7.32 PID No. 24955	
2 / 21	
112 156	

DESIGN REFERENCES:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

- AS-1-81 REVISED 07-19-2002
- BR-1 REVISED 07-19-2002
- GSD-1-96 REVISED 07-19-2002
- SICD-1-96 REVISED 07-19-2002
- PCB-91 REVISED 07-19-2002

AND TO SUPPLEMENTAL SPECIFICATIONS:

898, DATED 7-21-06

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

HS20-44, CASE II, AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE OF 60 PSF

DESIGN DATA:

CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4,500 PSI (SUPERSTRUCTURE).

CONCRETE, CLASS QSC1 - COMPRESSIVE STRENGTH 4,000 PSI (SUBSTRUCTURE).

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI.

STRUCTURAL STEEL A709 GRADE 36 - YIELD STRENGTH 36,000 PSI.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2 1/2 INCH CONCRETE COVER
SEALING OF CONCRETE SURFACES

WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ONE (1) INCH THICK.

MAINTENANCE OF TRAFFIC:

ONE (1) LANE OF THRU TRAFFIC IN EACH DIRECTION WITH A MINIMUM HORIZONTAL WIDTH OF TEN AND A HALF (10.5) FEET SHALL BE MAINTAINED ON SR 32 AT ALL TIMES. REFER TO THE ROADWAY PLANS FOR OTHER TRAFFIC REQUIREMENTS AND PAYMENT PROVISIONS. FOR MAINTENANCE OF TRAFFIC DETAILS, SEE ROADWAY PLANS.

COLORS:

THE COLOR FOR ITEM - 514, FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU, SHALL BE FEDERAL COLOR NUMBER 14277, GREEN.

THE COLOR FOR ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE FEDERAL COLOR NUMBER 17778, LIGHT NEUTRAL.

EXISTING STRUCTURE PLANS:

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE, 505 SOUTH STATE ROUTE 741, LEBANON, OHIO AND ARE AVAILABLE FOR REFERENCE.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

INSPECTION OF EXISTING STRUCTURAL STEEL:

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES, AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO 511.10, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511, SUPERSTRUCTURE CONCRETE. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

PROPOSED WORK:

1. PROTECT AND MAINTAIN ALL SR 32 TRAFFIC DURING ALL PHASES OF CONSTRUCTION.
2. EXCAVATE BEHIND THE ABUTMENT, REMOVE THE APPROACH SLABS AND ABUTMENT BACKWALL. REMOVE CONCRETE DECK AND PARAPET.
3. REPLACE ABUTMENT BEARINGS, INSTALL SHEAR CONNECTORS ON ALL BEAMS.
4. CONSTRUCT CONCRETE DECK AND PARAPETS.
5. BACKFILL BEHIND THE ABUTMENTS AND CONSTRUCT NEW ABUTMENT DIAPHRAGM AND APPROACH SLABS.
6. SEAL ABUTMENTS AS SHOWN IN THE PLANS.
7. SEAL PARAPET AND DECK TO THE LIMITS SHOWN.
8. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU.

CONSTRUCTION SEQUENCE:

THE FOLLOWING IS THE SUGGESTED ORDER OF WORK, THE CONTRACTOR IS NOT REQUIRED TO COMPLETE THE WORK IN THE ORDER LISTED.

1. REDIRECT TRAFFIC AND INSTALL PORTABLE CONCRETE BARRIER PER MAINTENANCE OF TRAFFIC PLANS.
2. REMOVE THE SUPERSTRUCTURE CONCRETE TO THE LIMITS SHOWN. REMOVE THE SCUPPERS, GRIND ALL WELDS SMOOTH.
3. REMOVE THE EXISTING APPROACH SLABS AND ROADWAY PAVEMENT TO THE LIMITS SHOWN.
4. REPLACE ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS, RETROFIT ENDS OF COVER PLATES.
5. INSTALL SHEAR CONNECTORS ON THE BEAMS. BUILD ABUTMENT DIAPHRAGM. PLACE DECK AND PARAPET.
6. CONSTRUCT APPROACH SLABS AND PAVEMENT TO THE LIMITS SHOWN.

OTHER WORK:

WORK NOT LISTED IN THE SEQUENCE MAY BE PERFORMED ACCORDING TO THE CONTRACTOR'S TIMING IN ACCORDANCE WITH CONTRACT PROVISIONS.

REMOVE THE TEMPORARY PROTECTION AND SUPPORTS PRIOR TO PAINTING.

PILE DESIGN LOADS:

THE ULTIMATE BEARING VALE IS 27 TONS PER PILE FOR THE ABUTMENT PILES.

ABUTMENT PILES:

10 PILES 45 FEET LONG, ORDER LENGTH
NO DYNAMIC LOAD TESTING REQUIRED

BATTERED PILES:

THE BLOW COUNT FOR BATTERED PILES SHALL BE THE BLOW COUNT DETERMINED FOR VERTICAL PILES OF THE SAME ULTIMATE BEARING VALUE DIVIDED BY AN EFFICIENCY FACTOR (D). COMPUTE THE EFFICIENCY FACTOR (D) AS FOLLOWS:

$$D = \frac{1 - UG}{\sqrt{(1 + G^2)}}$$

U = COEFFICIENT OF FRICTION (ESTIMATED AT 0.05 FOR DOUBLE-ACTING AIR OPERATED OR DIESEL HAMMERS; 0.1 FOR SINGLE-ACTING AIR OPERATED OR DIESEL HAMMERS; AND 0.2 FOR DROP HAMMERS)

G = RATE OF BATTER (1/3, 1/4, ETC.)

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

DESCRIPTION:

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF ABUTMENTS AND OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS, AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVAL TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS, AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS:

BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS:

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND-OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL-TYPE TOOLS. FOR REMOVALS OVER STEEL GIRDER BRIDGE MEMBERS, THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS (UNLESS APPROVED BY THE ENGINEER). REMOVAL METHODS OVER BRIDGE MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS.

DECK REMOVALS:

DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRINGERS WHICH ARE TO REMAIN. REPLACE OR REPAIR STRINGERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS:

REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

MEASUREMENT & PAYMENT:

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

(CONTINUED ON GENERAL NOTES 2, SHEET 4/21)

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0694CGN001.dgn 31-JAN-2007 3:05PM charvill

DESIGN AGENCY		DATE	
BURGESS & NIPLÉ		8-14-06	
DESIGNED	DRAWN	REVIEWED	DATE
XAC	KML	JSB	8-14-06
CHECKED	REVISION	STRUCTURE FILE NUMBER	
SJA		1300342	
GENERAL NOTES 1			
BRIDGE NO. CLE-32-0694			
OVER NORFOLK SOUTHERN RAILROAD			
CLE-32-3.57/6.82		/ 6.94/7.32	
PID No. 24955			
3 / 21			
113			
156			

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE, IF REQUIRED IN THE PLANS. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE DUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER AND/OR AIR PRESSURE OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING ONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMER EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 509 - EPOXY COATED REINFORCING STEEL:

MECHANICAL CONNECTORS FOR REINFORCING STEEL: AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED WHERE REQUIRED. INSTALLATION OF CONNECTORS SHALL CONFORM TO MANUFACTURER'S RECOMMENDED PROCEDURES. MECHANICAL CONNECTORS SHALL BE CAPABLE OF DEVELOPING 125 PERCENT OF THE YIELD STRENGTH OF THE BARS CONNECTED AND SHALL BE EPOXY COATED. COATING FOR BOTH THE CONNECTORS AND REINFORCING BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. ALL EXPENSES INVOLVED IN REPAIR OR REPLACEMENT SHALL BE BORN BY THE CONTRACTOR. THE CONNECTORS SHALL CONFORM AND BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN FOR PAYMENT.

ITEM 510 - DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT, AS PER PLAN:

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. PRIOR TO DRILLING DOWEL HOELS, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE DOWEL HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, THE DOWEL HOLE SHALL BE MOVED TO EITHER SIDE OF THE EXISTING BAR.

ITEM 513 - STRUCTURAL STEEL, MISC.: FATIGUE RETROFITTING OF EXISTING COVER PLATES, AS PER PLAN:

THIS ITEM INCLUDES THE FATIGUE RETROFITTING OF THE EXISTING WELDED COVER PLATE AS SHOWN IN PLAN. ALL LABOR AND MATERIAL REQUIRED TO FINISH THE TASK ARE INCLUDED WITH THE ITEM.

ITEM 516. JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF

CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH ODOT'S PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN:

AFTER COMPLETION OF MAJOR MODIFICATION ITEMS, EXISTING EMBANKMENT SURFACES SHALL BE RESTORED TO A UNIFORM PLANE SURFACE WITH CRUSHED AGGREGATE SLOPE PROTECTION. REMOVE BRUSH AND DEBRIS UNDER THE STRUCTURE AND TO 10 FEET ON EACH SIDE OF THE STRUCTURE. PROTECTION SHALL EXTEND LONGITUDINALLY FROM FACE OF ABUTMENT TO TOE OF SLOPE AND Laterally TO AT LEAST 3'-0" BEYOND DECK FASCIAS. THE MINIMUM TOTAL THICKNESS OF PROTECTION (RESTORED AND NEW) SHALL BE 1'-0".

ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN:

FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QC/QA CONCRETE, CLASS QSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING. IN ADDITION, THE PARAPET TRANSITIONS ON THE APPROACH SLABS, INCLUDING THE CONCRETE, REINFORCING STEEL, HMWM, AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE INCLUDED IN THE COST OF THE APPROACH SLABS. 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 - QC/QA CONCRETE, CLASS QSC2, 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 ADHESIVELY 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 METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 * 0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS-MINIMUM	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 F, 180 D2136 BEND WITHOUT CRACKING		NO CRACKING OF COATING
LOW TEMP. BRITTLINESS, 1 HR, D2136 -40 F, BEND AROUND 1/4" MANDREL		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.

CONSTRUCTION CLEARANCE:

MAINTAIN A CONSTRUCTION CLEARANCE OF 13'-0" HORIZONTALLY FROM THE CENTER OF TRACKS AND 22'-0" VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AT ALL TIMES.

LEGEND:

- ABUT. = ABUTMENT
- BRGS. = BEARINGS
- BTW. = BETWEEN
- CJ = CONSTRUCTION JOINT
- CONST. = CONSTRUCTION
- E.F. = EACH FACE
- EL. = ELEVATION
- EX. = EXISTING
- FA = FORWARD ABUTMENT
- FTG. = FOOTING
- F.F. = FAR FACE
- FWD. = FORWARD
- NCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE
- N.F. = NEAR FACE
- PCPP = PERFORATED CORRUGATED PLASTIC PIPE
- PEJF = PREFORMED EXPANSION JOINT FILLER
- P.G. = PROFILE GRADE
- PROP = PROPOSED
- RA = REAR ABUTMENT
- SO = SERIES OF
- T & B = TOP AND BOTTOM
- TYP. = TYPICAL
- UNO = UNLESS NOTED OTHERWISE

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0694CGN002.dgn 31-JAN-2007 3:10PM charvill

DESIGN AGENCY: BURGESS & NIPLÉ

DATE: 8-14-06

REVIEWED: JSB

DRAWN: KML

DESIGNED: XAC

STRUCTURE FILE NUMBER: 1300342

CHECKED: SUA

GENERAL NOTES 2

BRIDGE NO. CLE-32-0694

OVER NORFOLK SOUTHERN RAILROAD

CLE-32-3.57/6.82 / 6.94/7.32

PID No. 24955

4 / 21

114

156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0694CEQ001.dgn 05-FEB-2007 10:15AM charvill

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIERS	SUPER.	CALC.		DATE	CHK'D	DATE
								XAC	02-07-06	SJA	08-01-06	
								APPROACH	SLAB	GENERAL	SHT. REF.	
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN								
202	22900	267	SQ YD	APPROACH SLAB REMOVED				267				[3/21]
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING								
503	21100	188	CU YD	UNCLASSIFIED EXCAVATION	188							
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION								
507	00500	400	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	400							
507	00550	450	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	450							
509	10000	16132	POUND	EPOXY COATED REINFORCING STEEL	2643		158669					
510	10001	60	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	60							[4/21]
512	10100	780	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	51		729					
512	10300	173	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			173					
512	33000	9	SQ YD	TYPE 2 WATERPROOFING	9							
513	20000	5374	EACH	WELDED STUD SHEAR CONNECTORS			5374					
513	95030	48	EACH	STRUCTURAL STEEL, MISC.: FATIGUE RETROFITTING OF EXISTING COVER PLATES			48					
514	00050	21596	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			21596					
514	00056	21596	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			21596					
514	00060	21153	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			21153					
514	00066	21153	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			21153					
514	00504	144	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			144					
514	10000	22	EACH	FINAL INSPECTION REPAIR			22					
516	13600	35	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	35							
516	13900	60	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	60							
516	14021	253	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	253							[4/21]
516	44200	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2 3/8"x1'-4 1/2"x11" BEARING WITH 1 1/2"x1'-5 1/2"x1'-0" LOAD PLATE)	24							
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN								LUMP
518	21200	96	CU YD	POROUS BACKFILL WITH FILTER FABRIC	96							[4/21]
518	40000	37	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	37							
518	40011	24	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	24							[9/21]
523	20000	1	EACH	DYNAMIC LOAD TESTING	1							
601	20001	152	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	152							[4/21]
898	10200	570	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			570					
898	10705	500	SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN				500				[4/21]
898	11000	93	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			93					
898	20160	52	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	52							

DESIGN AGENCY
BURGESS & NIPLE
30 Plus Street, 20th Floor
Baltimore, MD 21202

DATE
8-14-06

REVIEWED
JSB

DRAWN
KML

DESIGNED
XAC

STRUCTURE FILE NUMBER
1300342

CHECKED
SJA

ESTIMATED QUANTITIES

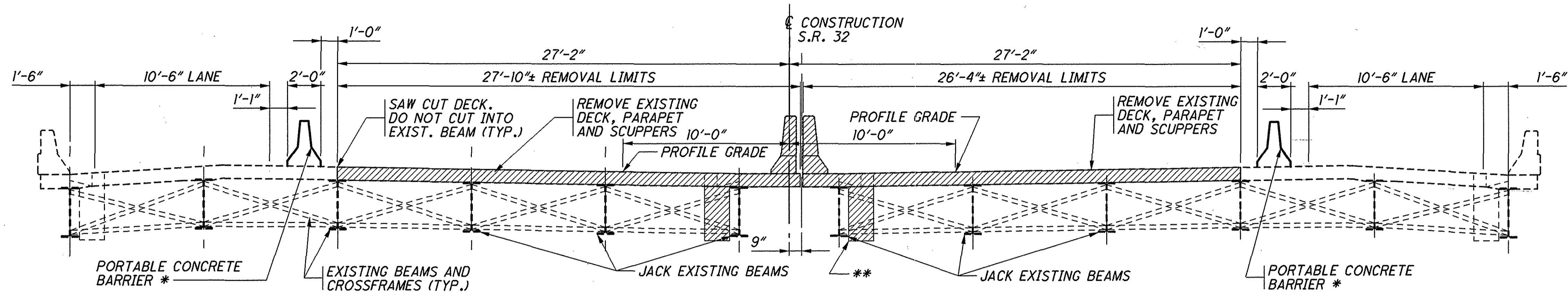
BRIDGE NO. CLE-32-0694
OVER NORFOLK SOUTHERN RAILROAD

CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

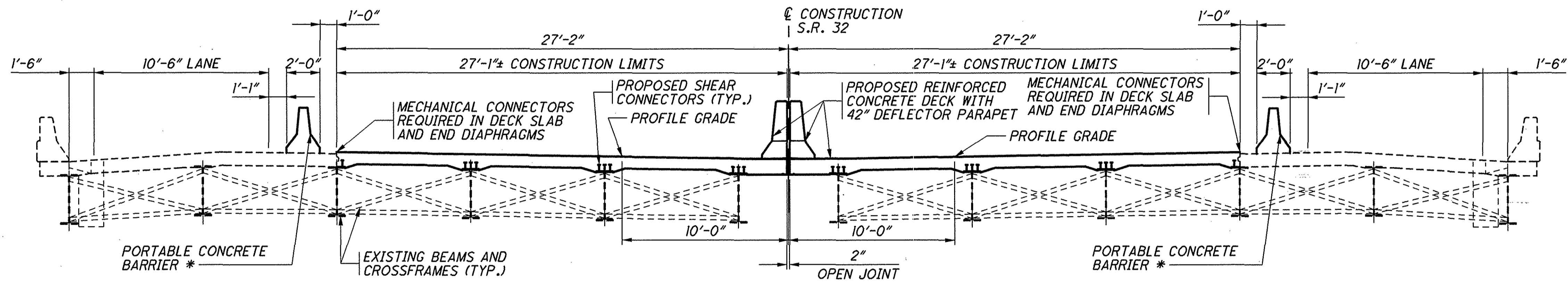
5 / 21

115
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0694CPC001.dgn 31-JAN-2007 3:32PM charvill



PHASE 1 REMOVAL



PHASE 1 CONSTRUCTION

PHASE 1

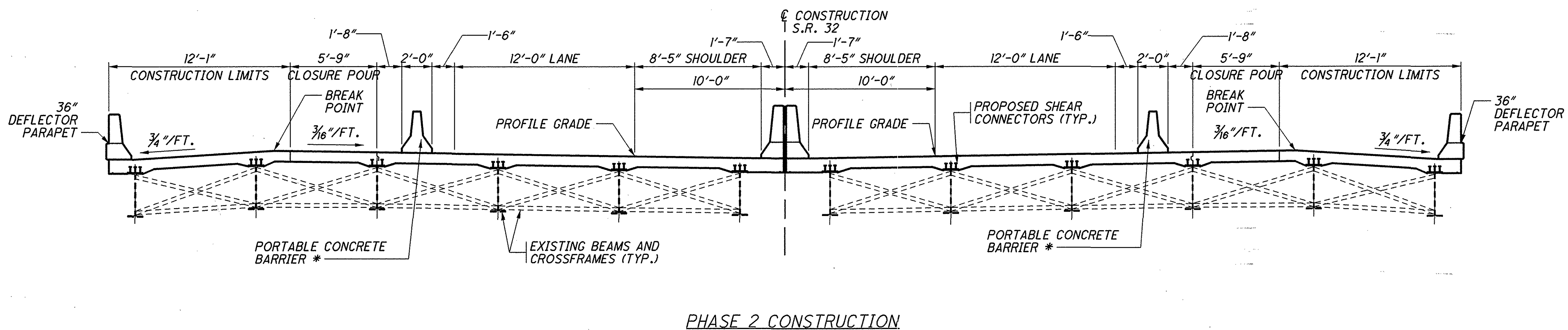
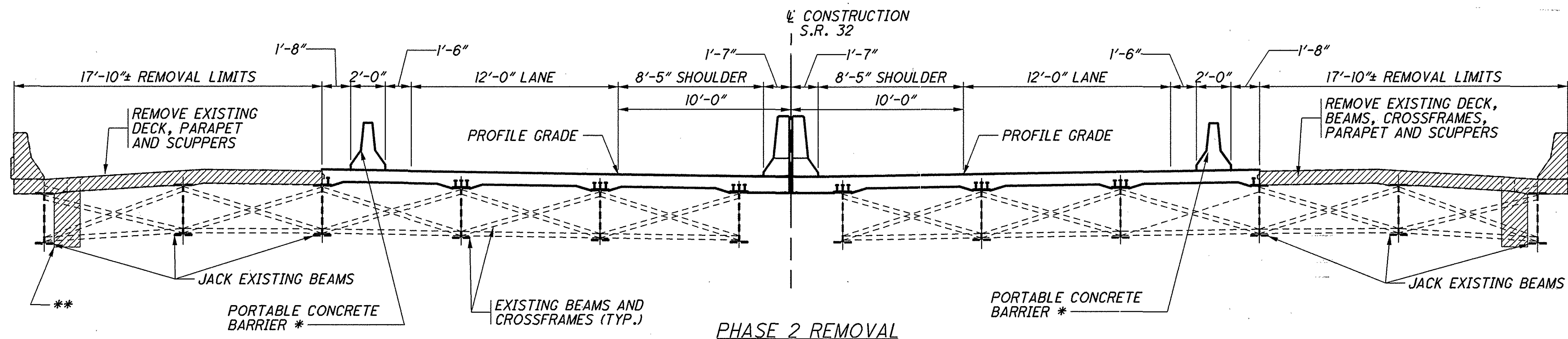
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB.
- C) REMOVE PORTION OF EXISTING ABUTMENT BACKWALL AND WINGWALL.
- D) JACK BEAMS AND INSTALL NEW ABUTMENT BEARINGS.
- E) CONSTRUCT PORTION OF ABUTMENT DIAPHRAGMS AND NEW STRAIGHT WINGWALL.
- F) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91. FOR DETAILS, SEE ROADWAY PLAN. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300342	DRAWN KML
DESIGNED XAC	CHECKED SJA
SEQUENCE OF CONSTRUCTION 1	
BRIDGE NO. CLE-32-0694	
OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/6.82	6/21
/6.94/7.32	
PID No. 24955	
116 156	

I:\Projects\CLE\032\06.82_PID24955\Consult\Final Tracings\DOT Mod\032_0694PC002.dgn 31-JAN-2007 3:33PM charvill



PHASE 2

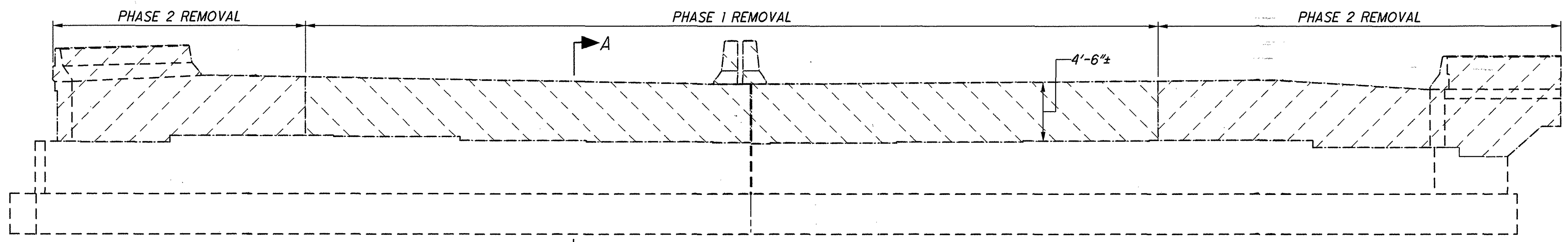
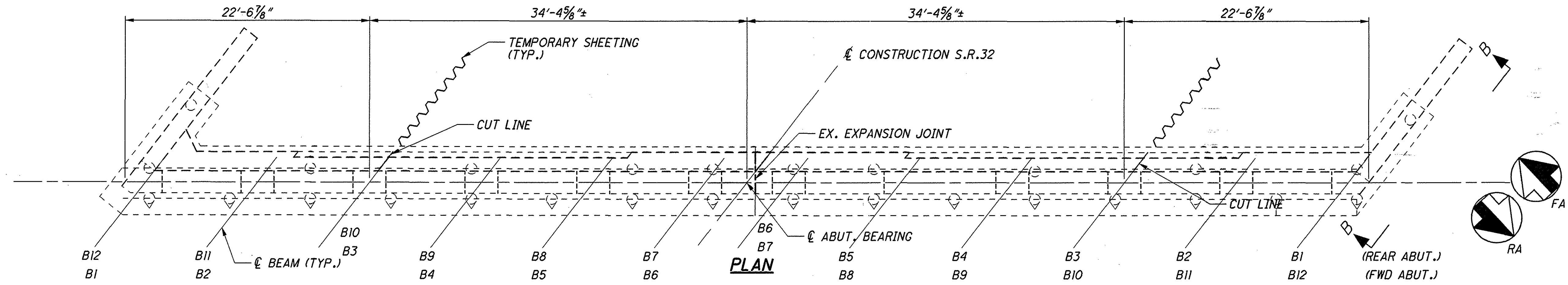
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB.
- C) REMOVE PORTION OF EXISTING ABUTMENT BACKWALL AND WINGWALL.
- D) JACK BEAMS AND INSTALL NEW ABUTMENT BEARINGS.
- E) CONSTRUCT PORTION OF ABUTMENT DIAPHRAGMS AND NEW STRAIGHT WINGWALL.
- F) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91. PARTIAL DEPTH ANCHORS REQUIRED FOR NEW SLAB. FILL THE HOLES LEFT IN THE BRIDGE DECK WITH GROUT AS PER CMS 705.20. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

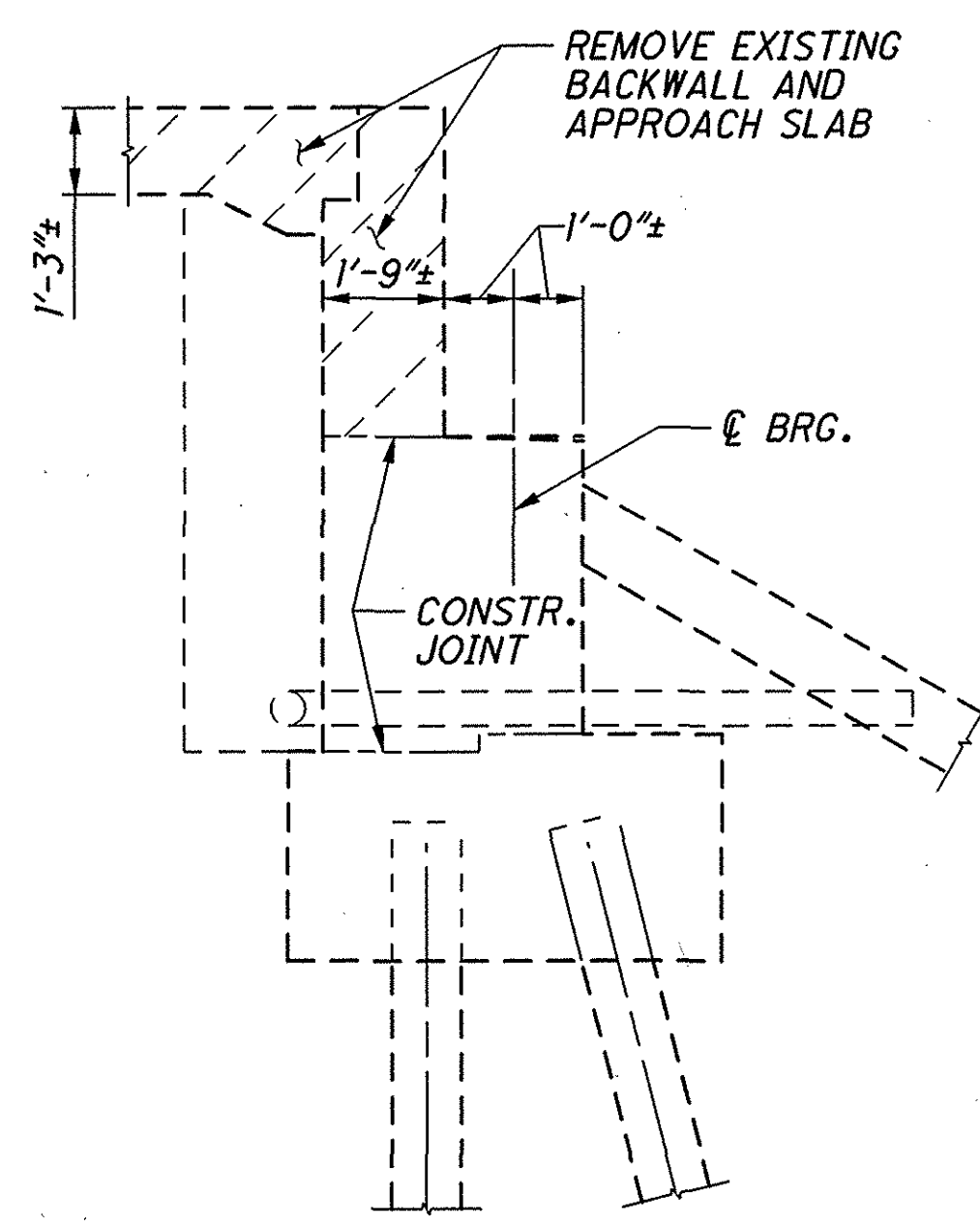
DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	STRUCTURE FILE NUMBER 1300342
REVIEWED JSB	DRAWN KML
CHECKED XAC	REVISOR SJA
SEQUENCE OF CONSTRUCTION 2	
BRIDGE NO. CLE-32-0694	
OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/6.82	PID No. 24955
6.94/7.32	
7/21	
117	156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0694CRE001.dgn 31-JAN-2007 3:34PM charvill

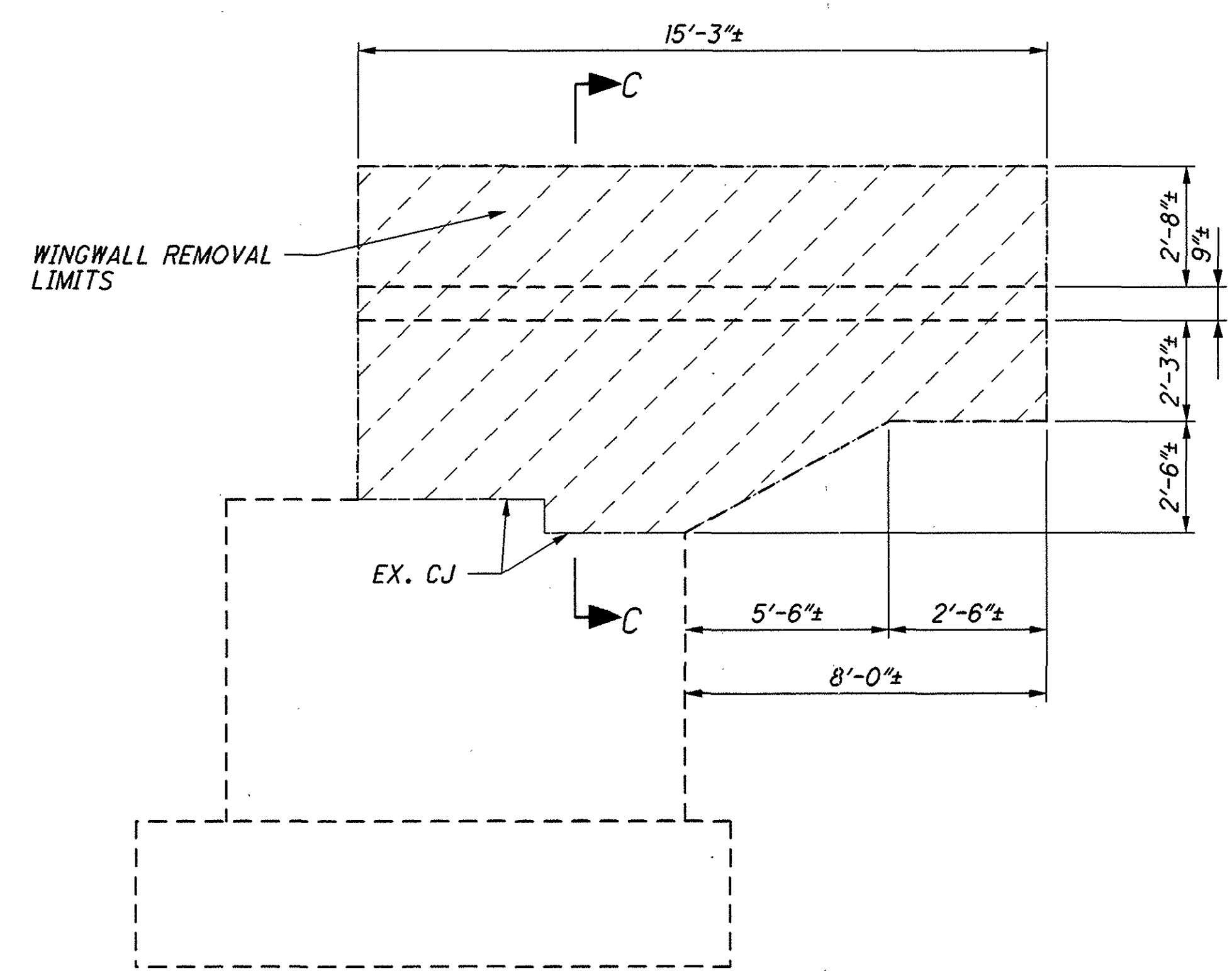


ELEVATION
 REAR ABUTMENT SHOWN;
 FORWARD ABUTMENT SIMILAR

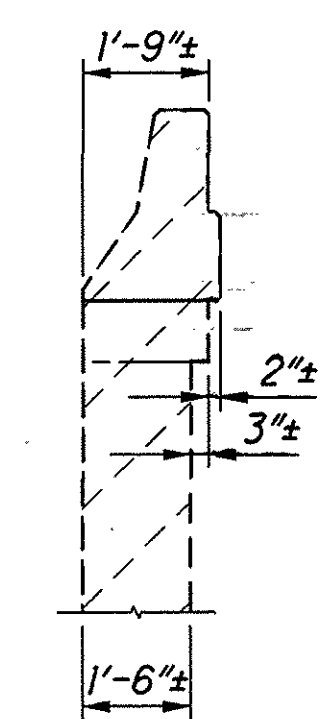
- PORTIONS OF EXISTING STRUCTURE TO BE REMOVED



SECTION A-A



VIEW B-B
 RIGHT REAR WINGWALL SHOWN;
 (ALL OTHERS SIMILAR)

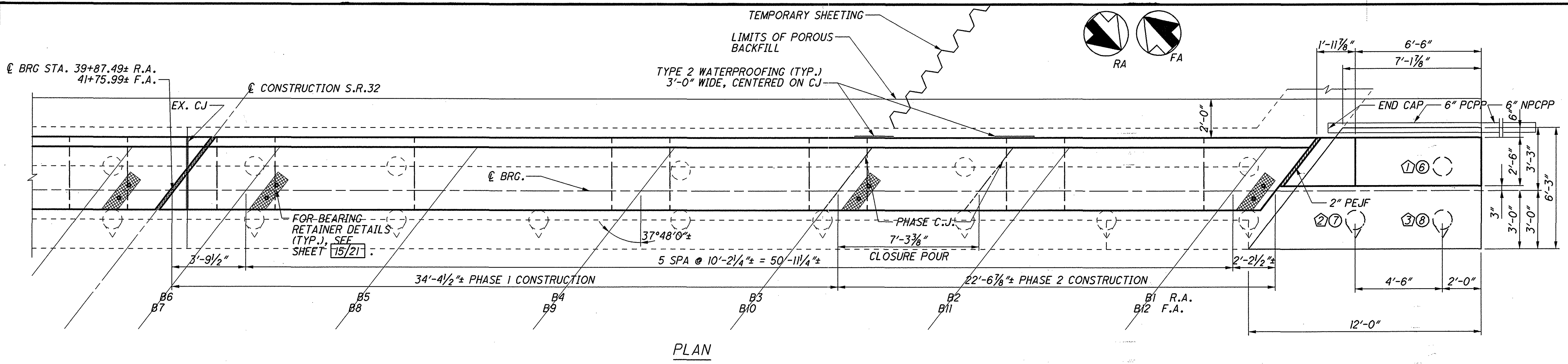


SECTION C-C

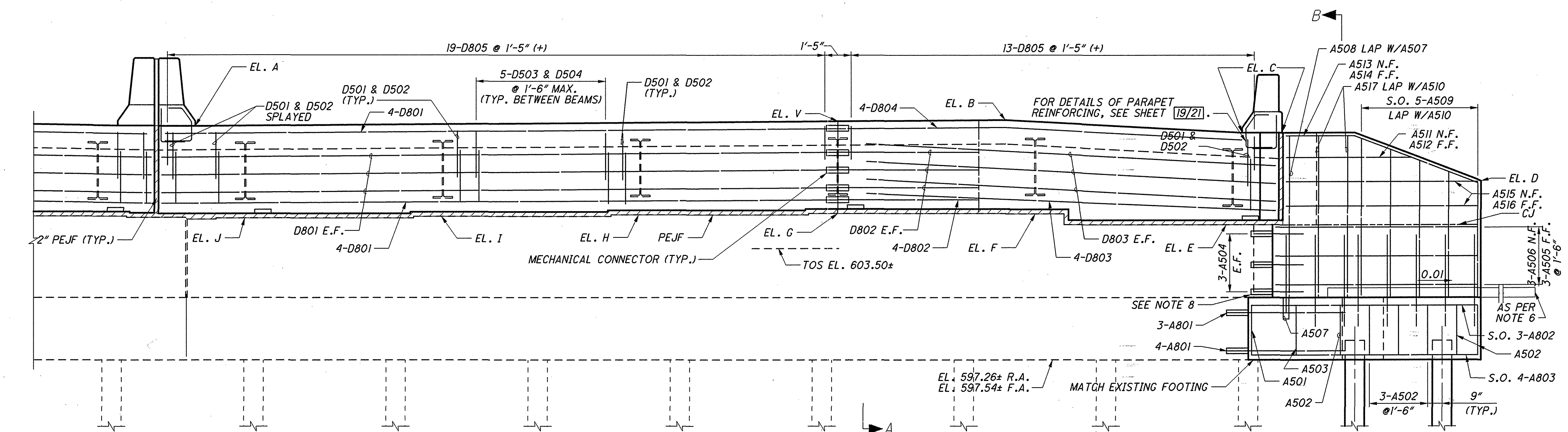
- NOTES:**
- TEMPORARY SHEETING SHALL BE PAID FOR UNDER ITEM 503 COFFER DAMS, CRIBS AND SHEETING.
 - FOR PORTIONS OF STRUCTURE REMOVED NOTE AND EXISTING STRUCTURE VERIFICATION NOTE, SEE GENERAL NOTES SHEET 3/21.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300342	DESIGNED XAC
DRAWN KML	CHECKED SJA
ABUTMENT REMOVAL DETAIL	
BRIDGE NO. CLE-32-0694 OVER NORFOLK SOUTHERN R.R.	
CLE-32-3.57/ 6.82/6.94/7.32 PID No. 24955	
8 / 21	
118 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0694CAR001.dgn 30-JAN-2007 2:47PM charvill



PLAN



ELEVATION

LEFT REAR ABUTMENT SHOWN;
RIGHT FWD. ABUTMENT SIMILAR

ELEVATION		
LOCATION	R.A.	F.A.
EL. A	609.41	609.63
EL. B	609.72	609.99
EL. C	609.06	609.35
EL. D	606.56	606.85
EL. E	604.38±	604.68±
EL. F	604.91±	605.21±
EL. G	604.94±	605.21±
EL. H	604.86±	605.13±
EL. I	604.78±	605.04±
EL. J	604.72±	604.94±
EL. V	609.67	609.93

NOTES:

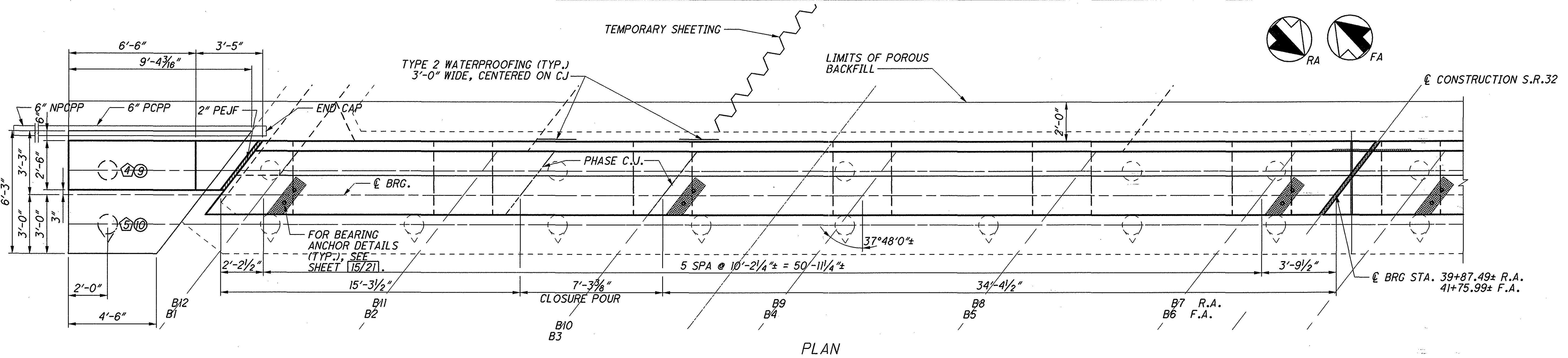
- MIN. LAP LENGTH:
NO. 5 BAR = 2'-7"
NO. 8 BAR = 7'-3"
- PLACE D801 BARS PARALLEL TO ROADWAY.
- REINFORCING A504 & A801 SHALL BE INSTALLED 1'-0" INTO EXISTING CONCRETE USING EPOXY GROUT PER 510. DOWEL HOLE WILL BE PAID FOR UNDER ITEM 510, DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT, AS PER PLAN. REINFORCING SHALL BE PAID FOR UNDER ITEM 509, EPOXY COATED REINFORCING STEEL, AS PER PLAN.
- PLACE TYPE 2 WATERPROOFING, 3'-0" WIDE CENTERED ON VERTICAL JOINT, FROM BOTTOM OF APPROACH SLAB TO TOP OF ABUTMENT SEAT.
- PLACE THE CONCRETE IN THE ABUTMENT DIAPHRAGM ENCASEING STRUCTURAL STEEL MEMBERS OF AN INDIVIDUAL PHASE SEPARATELY OR WITH THE DECK CONCRETE OF THAT PHASE. IF THE DIAPHRAGM CONCRETE IS PLACED SEPARATELY, ALLOW AT LEAST 48 HOURS OF SET TIME BEFORE PLACING DECK CONCRETE. LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.
- 6'-0" LONG, 6" DIA. NON-PERFORATED CORRUGATED PLASTIC PIPE AT TOP OF FOOTING (707.33 TYPE S), PROVIDE ANIMAL GUARD AS PER STANDARD ROADWAY DRAWING DM-1.1. FOR PAYMENT, INCLUDE WITH 6" DIA. NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN.
- FOR ADDITIONAL DETAILS AND NOTES, REFER TO STANDARD DRAWING SICD-1-96.
- FOR SECTIONS A AND B, SEE SHEET 11/21.

LEGEND:

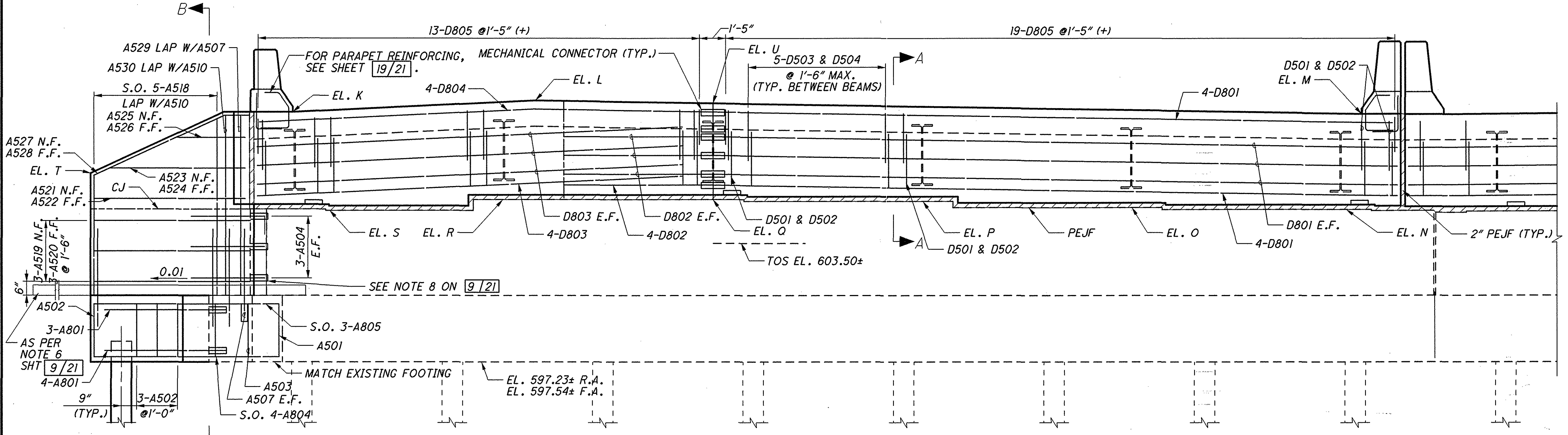
- ⊠ = PILE NO. FOR R.A.
- ⊙ = PILE NO. FOR F.A.
- ⊕ = PROPOSED 12" CAST-IN-PLACE CONCRETE PILE
- ⊖ = PROPOSED 12" CAST-IN-PLACE CONCRETE PILE (BATTERED 4:1)

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 DRAWN: KML
 DESIGNED: XAC
 CHECKED: SJA
 STRUCTURE FILE NUMBER: 1300342
 ABUTMENT DETAIL 1
 BRIDGE NO. CLE-32-0694
 OVER NORFOLK SOUTHERN R.R.
 CLE-32-3.57 / 6.82 / 6.94 / 7.32
 PID No. 24955
 9 / 21
 119 / 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\DDOT Mod\032_0694CAR002.dgn 08-FEB-2007 7:20AM charvill



PLAN



ELEVATION
RIGHT REAR ABUTMENT SHOWN;
LEFT FWD. ABUTMENT SIMILAR

ELEVATION		
LOCATION	R.A.	F.A.
EL. K	609.53	609.67
EL. L	610.09	610.24
EL. M	609.43	609.64
EL. N	604.71±	604.96±
EL. O	604.88±	605.09±
EL. P	605.02±	605.25±
EL. Q	605.18±	605.40±
EL. R	605.27±	605.43±
EL. S	604.79±	604.97±
EL. T	607.04	607.27
EL. U	609.97	610.14

LEGEND:

- Ⓜ = PILE NO. FOR R.A.
- Ⓢ = PILE NO. FOR F.A.

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 9/21.
2. FOR SECTIONS A-A AND B-B, SEE SHEET 11/21.

DESIGN AGENCY
BURGESS & NIPLE
300 Main Street, 21th Floor
Cincinnati, Ohio 45202

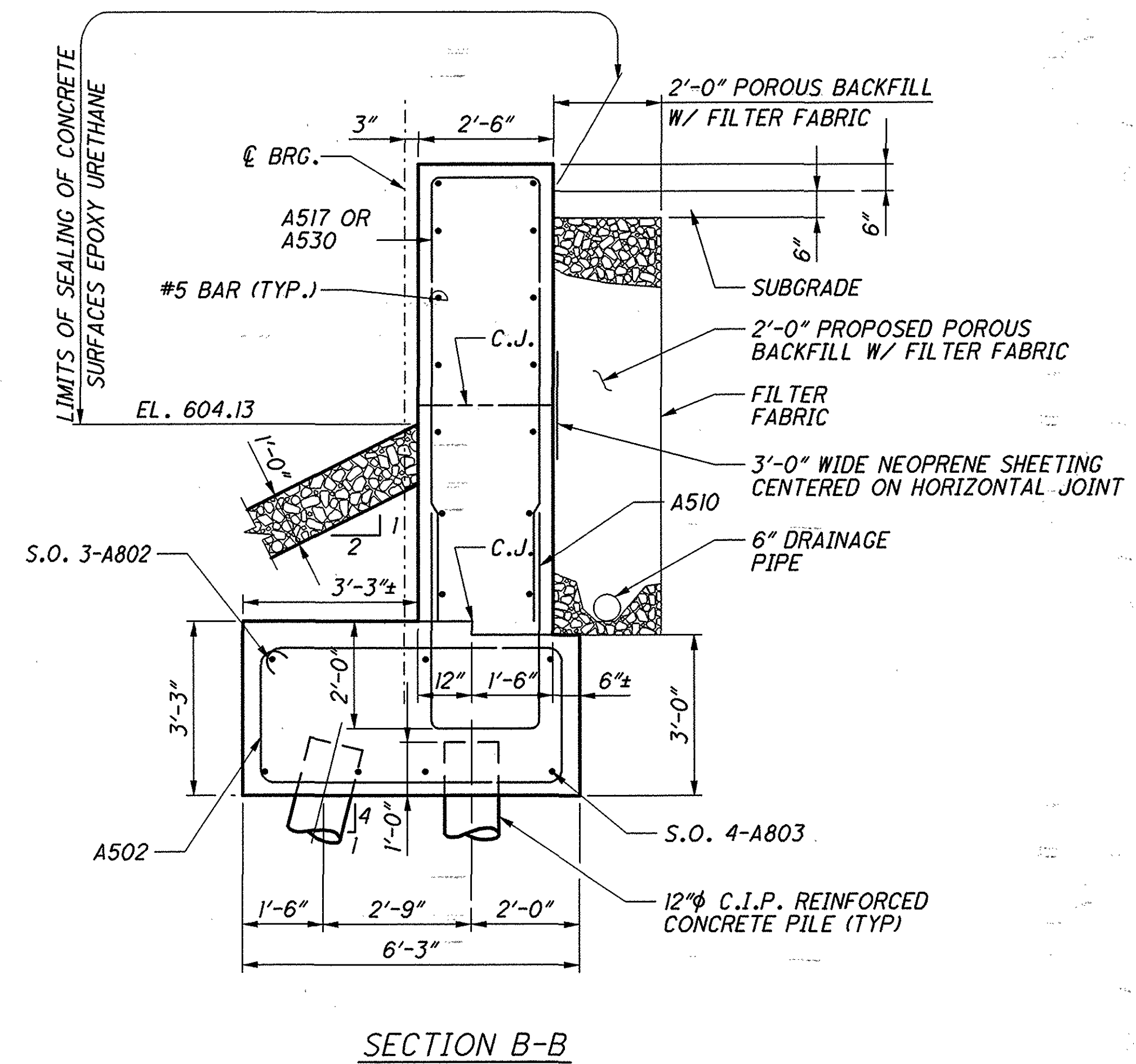
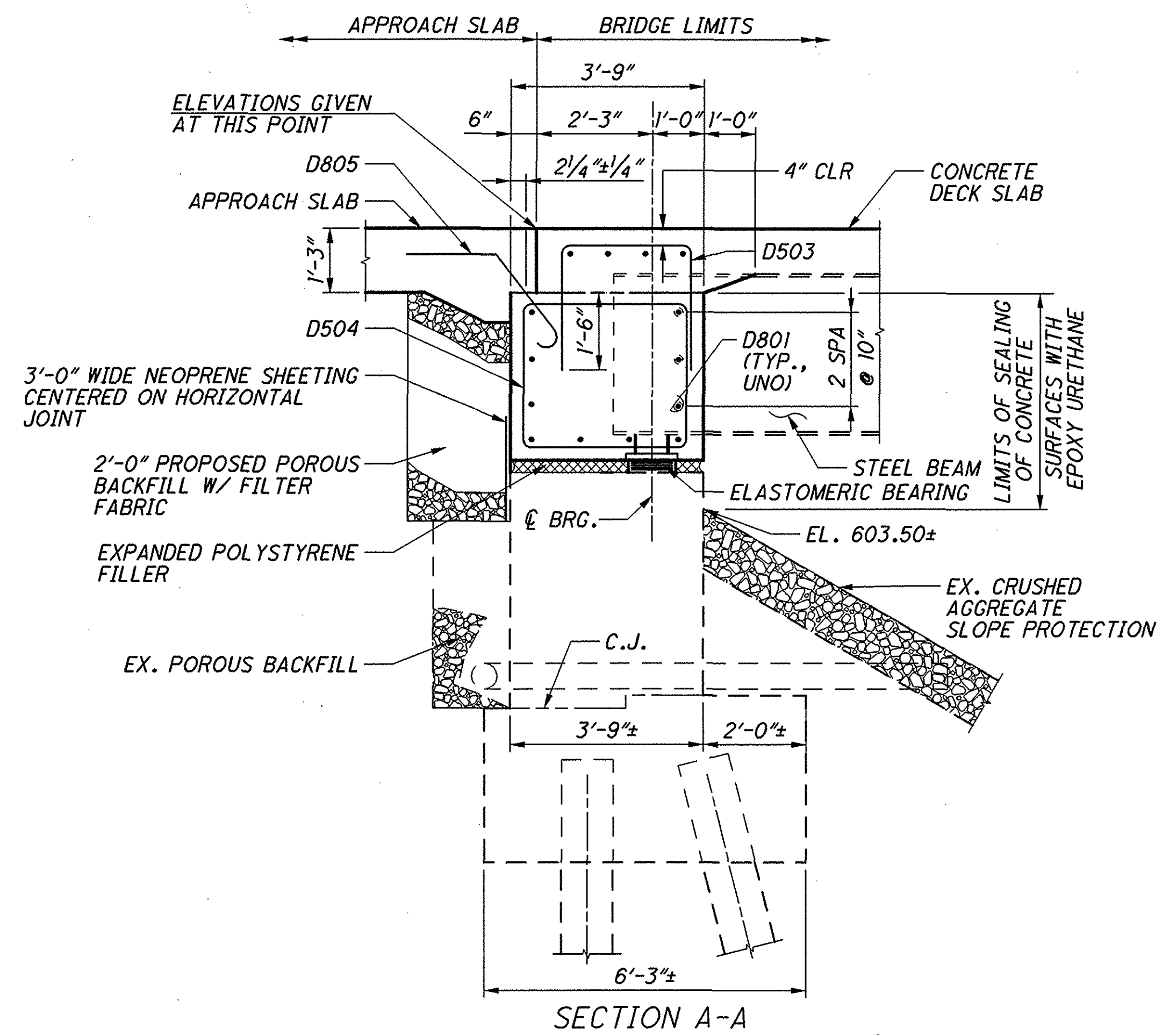
DATE: 8-14-06
REVIEWED: JSB
DRAWN: KML
DESIGNED: XAC
CHECKED: SJA

STRUCTURE FILE NUMBER: 1300342
REVISED: SJA

ABUTMENT DETAIL 2
BRIDGE NO. CLE-32-0694
OVER NORFOLK SOUTHERN R.R.

CLE-32-3.57/
6.82/6.94/7.32
PID No. 24955

10 / 21
120
156

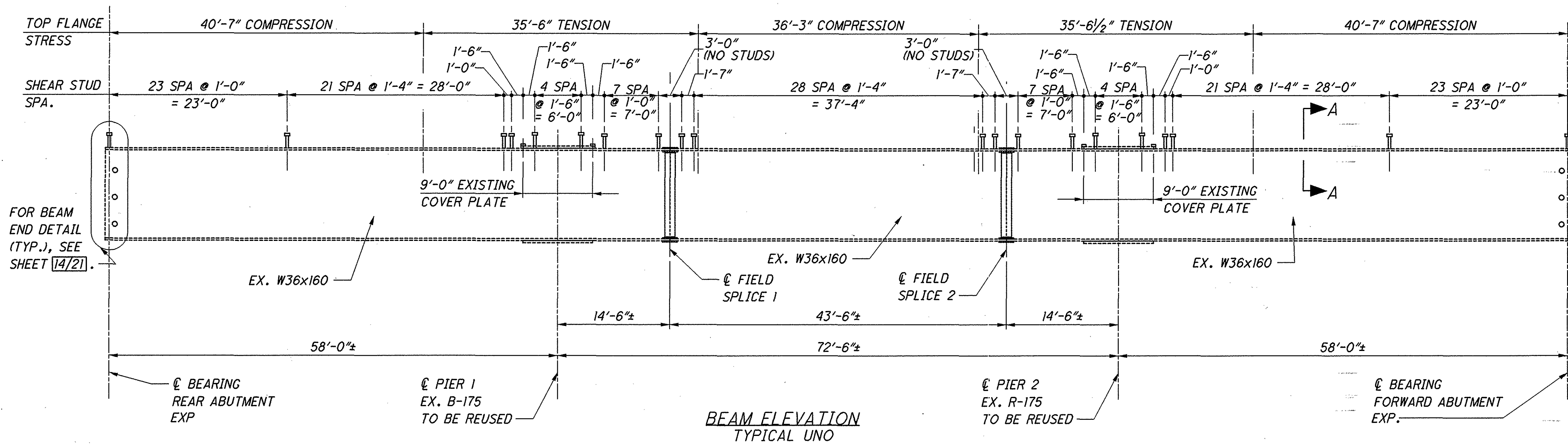


NOTES:

1. MIN. LAP LENGTH:
NO. 5 BAR = 2'-7"
NO. 8 BAR = 6'-4"
2. 2'-0" THICK POROUS BACKFILL WITH FILTER FABRIC SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE AND LATERALLY TO THE ENDS OF THE WINGWALLS.
3. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS RELEVANT REMOVAL.
4. FOR ABUTMENT PLAN AND ELEVATIONS, SEE SHEETS 9/21 THRU 10/21.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
DESIGNED XAC	DRAWN KML
CHECKED SJA	REVISION 1300342
ABUTMENT DETAIL 3 BRIDGE NO. CLE-32-0694 OVER NORFOLK SOUTHERN R.R.	
CLE-32-3.57 / 6.82 / 6.94 / 7.32 PID No. 24955	
11 / 21	121 / 156

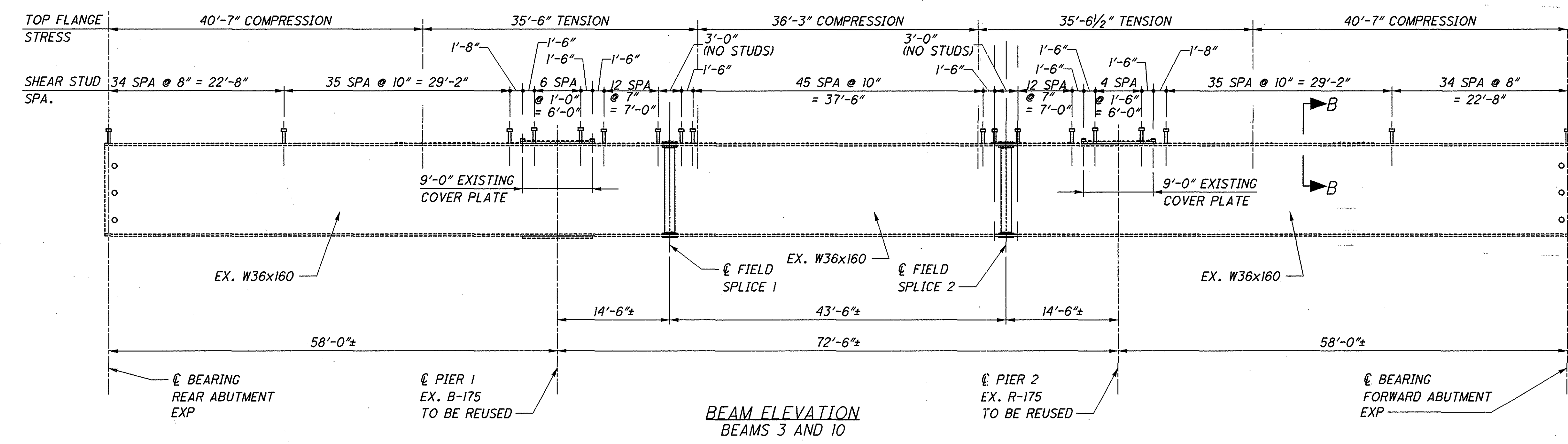
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0694CSD002.dgn 05-FEB-2007 8:33AM charvill



BEAM ELEVATION
TYPICAL UNO

NOTES:

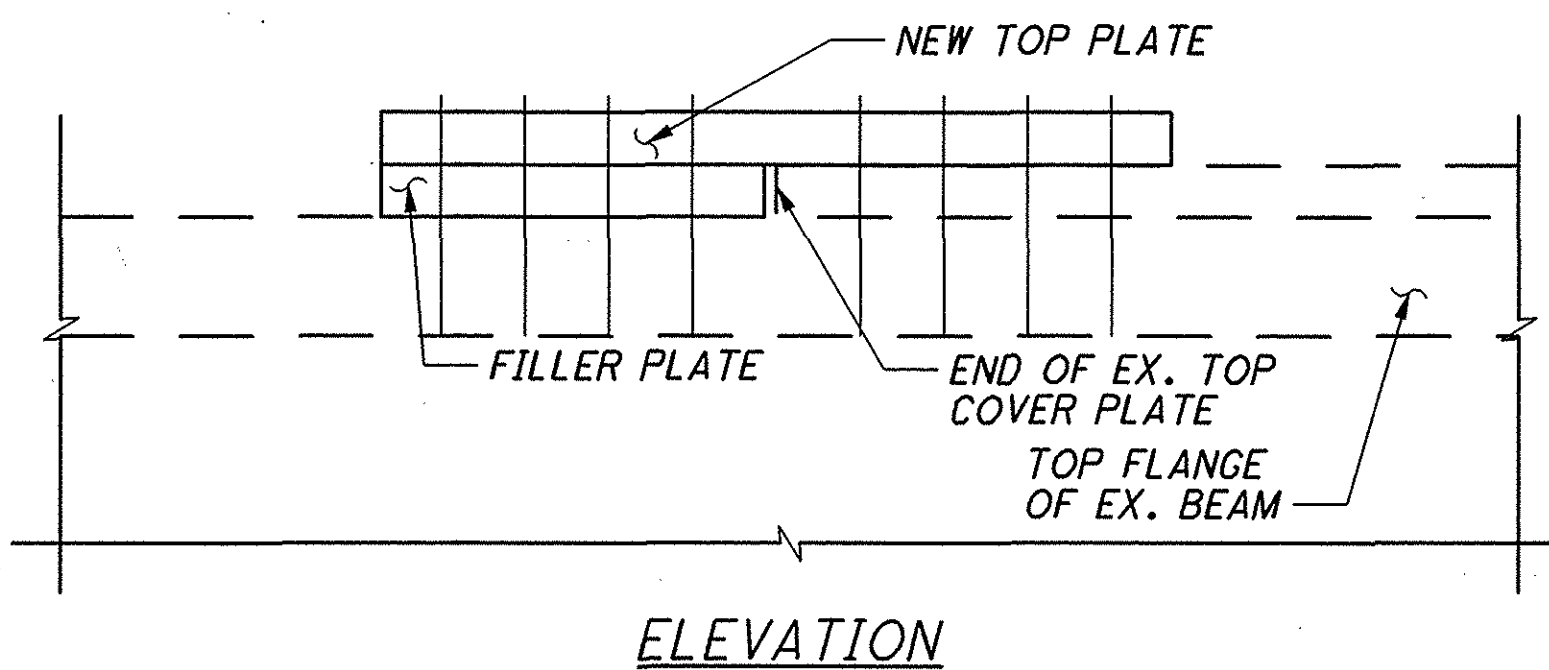
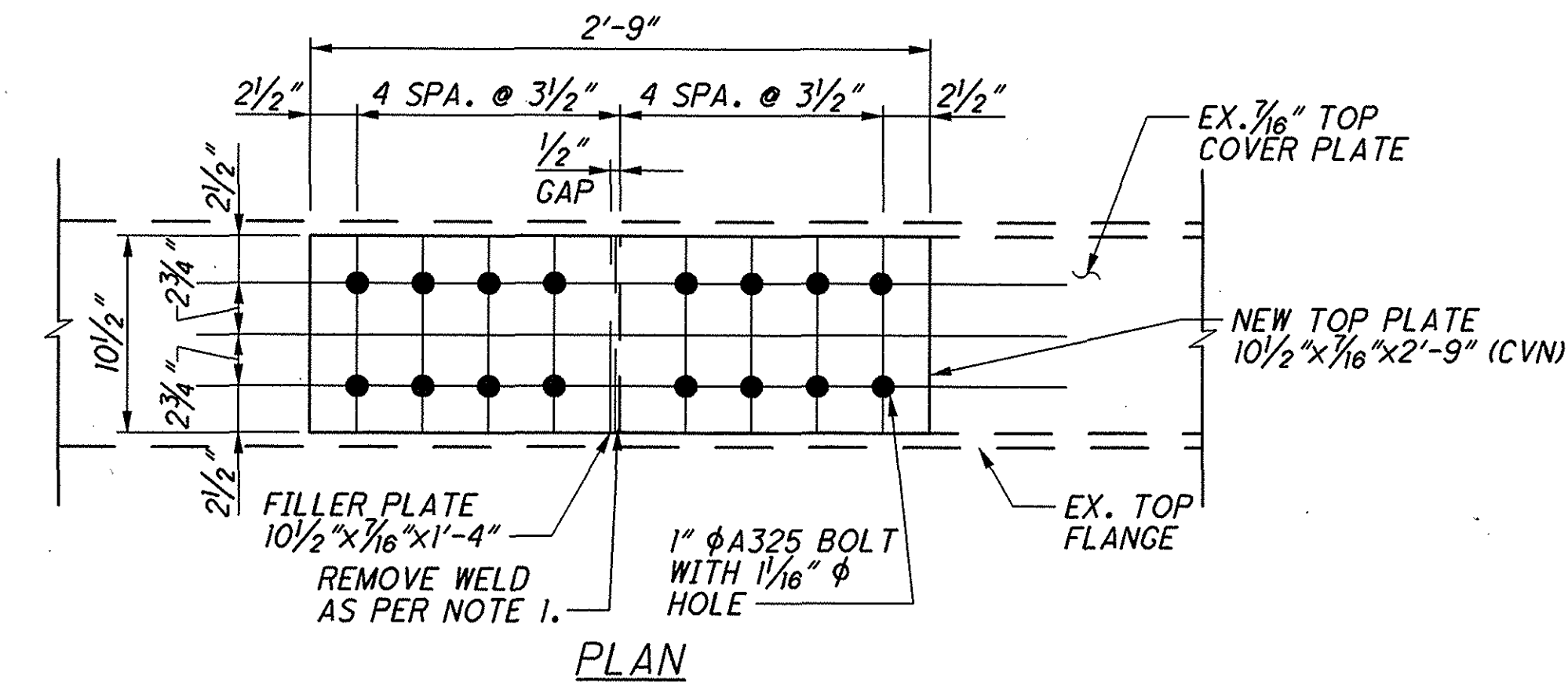
1. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 3/8" FOR GREATER THAN 3/4" THICK.
2. FOR SECTIONS A-A AND B-B, SEE SHEET 14/21.



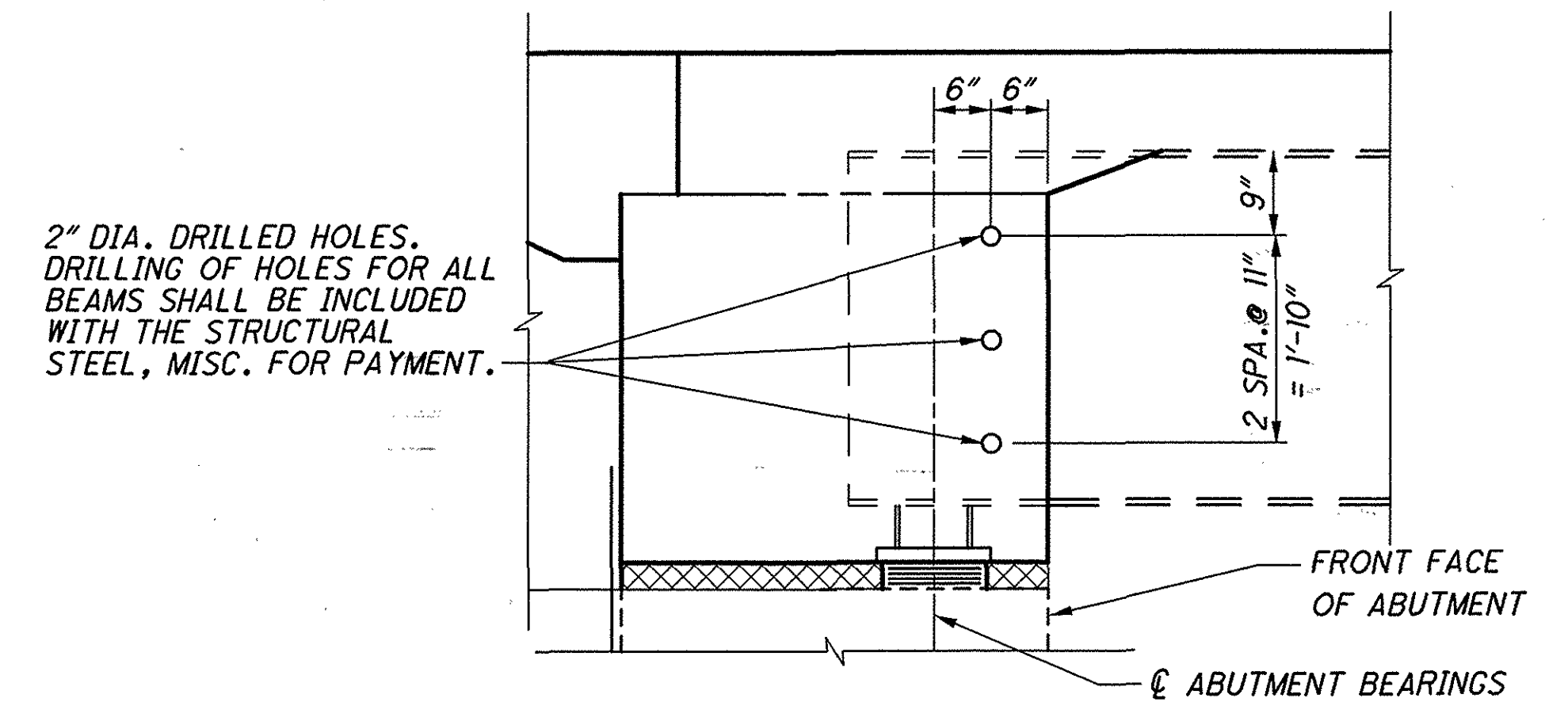
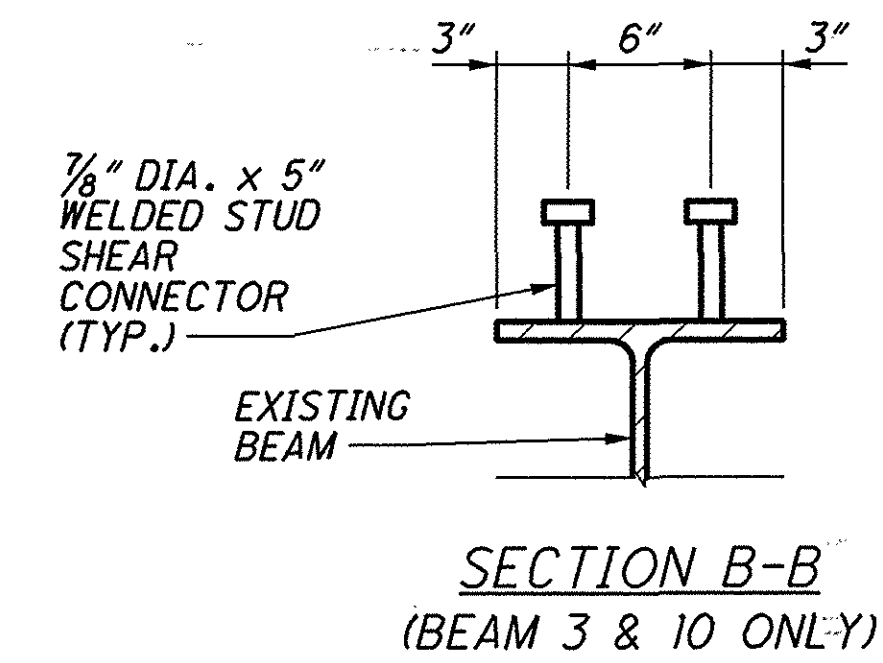
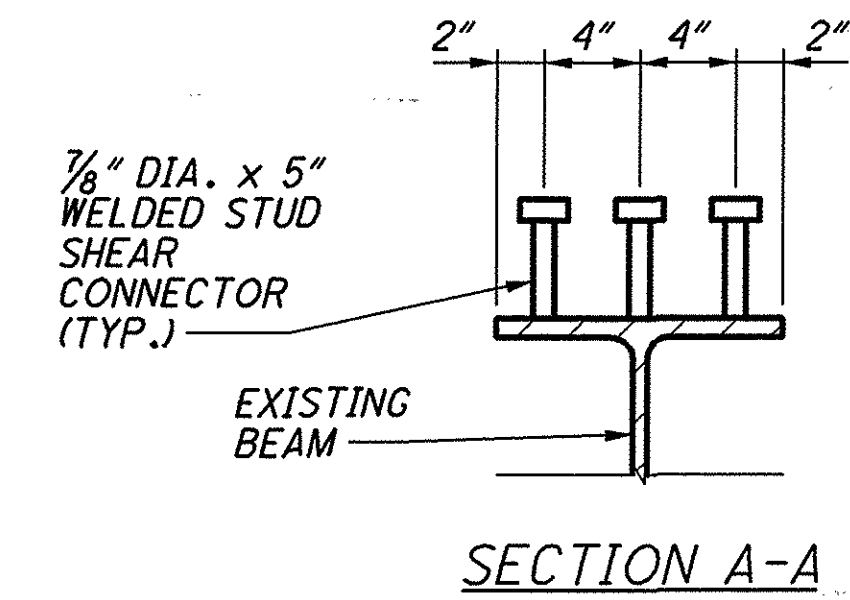
BEAM ELEVATION
BEAMS 3 AND 10

DESIGN AGENCY	BURGESS & NIPLE
DATE	8-14-06
REVIEWED	JSB
DRAWN	KML
DESIGNED	XAC
CHECKED	SJA
STRUCTURE FILE NUMBER	1300342
BRIDGE NO.	CLE-32-0694
OVER	NORFOLK SOUTHERN RAILROAD
CLE-32-3.57 / 6.82	
/ 6.94 / 7.32	
PID NO.	24955
13 / 21	
123	
156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Drawings\ODOT Mod\032_0694CSD004.dgn 05-FEB-2007 8:35AM charvill



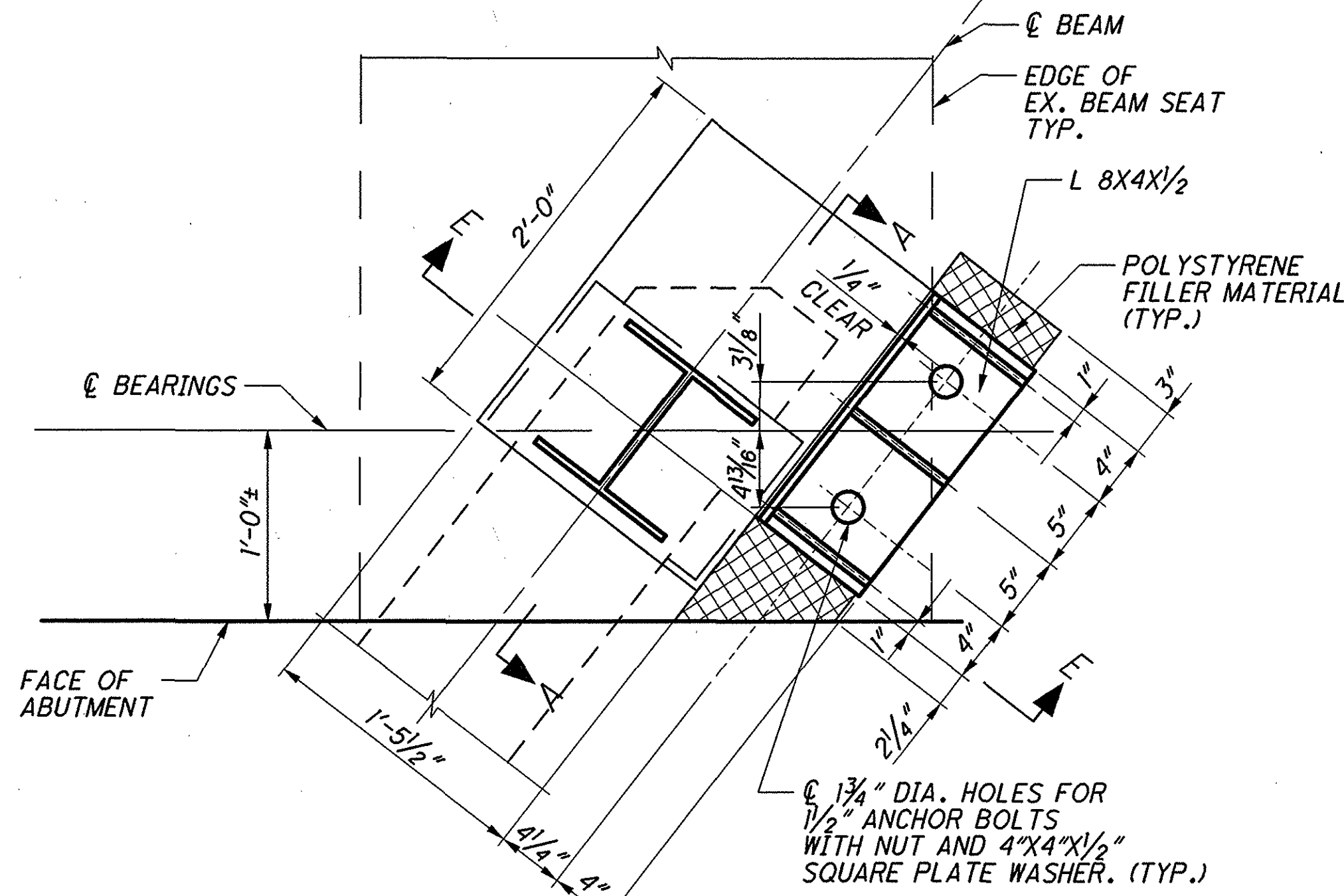
BOLTED COVERPLATE RETROFIT TYPICAL AT EACH END OF ALL TOP COVER PLATES; NOT REQUIRED FOR BOTTOM COVER PLATES



NOTES:

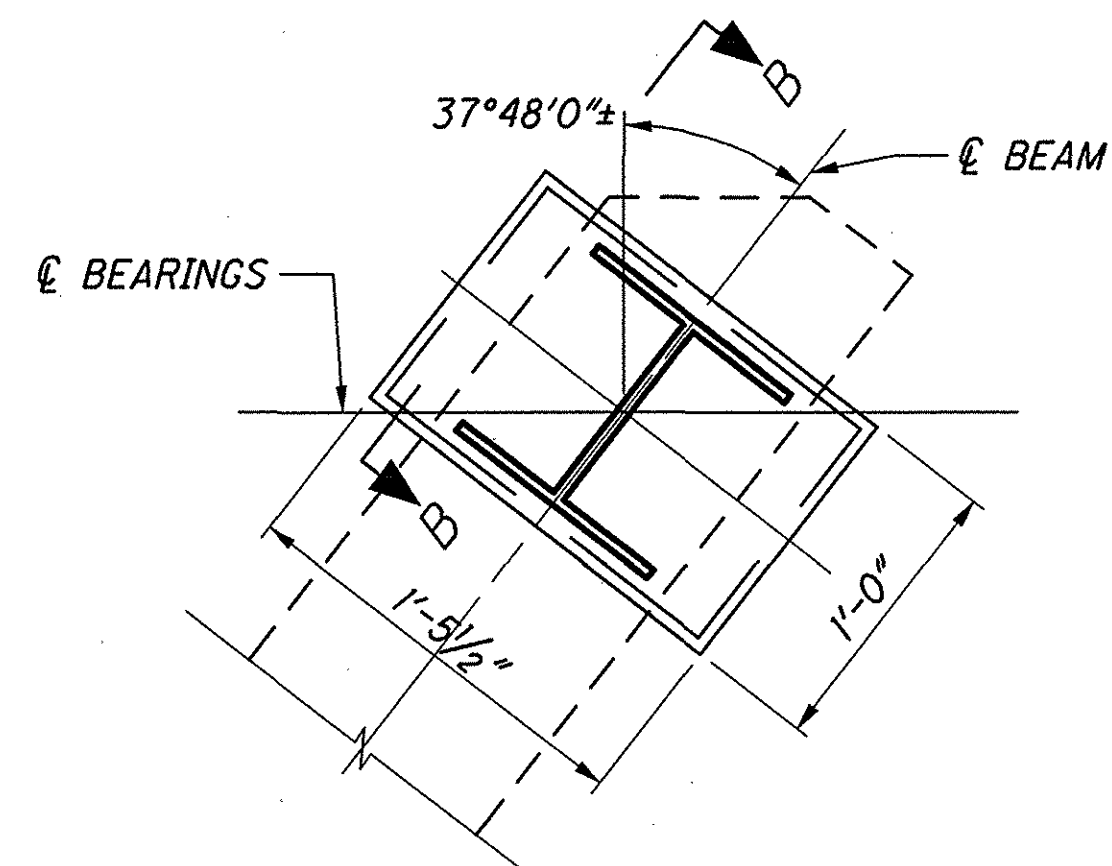
1. THE TRANSVERSE END WELD BETWEEN EXISTING COVERPLATE AND TOP FLANGE SHALL BE REMOVED BY GRINDING. BLAST CLEAN EXPOSED STEEL SURFACES AND SEAL WITH POLYURETHANE CAULK.
2. ALL BOLTS ARE 1" φ A325 BOLTS WITH 1/16" HOLE.
3. ALL MATERIAL AND LABOR FOR COVERPLATE RETROFIT SHALL BE PAID UNDER ITEM 513, STRUCTURAL STEEL, MISC.
4. WHERE A SHAPE OF PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
5. CLEAN AND PAINT BEAM ENDS THAT ARE EMBEDDED IN THE CONCRETE DIAPHRAGM WITH PRIMER ONLY.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300342	DRAWN KML
DESIGNED XAC	CHECKED SJA
BEAM DETAILS	
BRIDGE NO. CLE-32-0694	
OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/6.82	14/21
/6.94/7.32	124
PID No. 24955	156

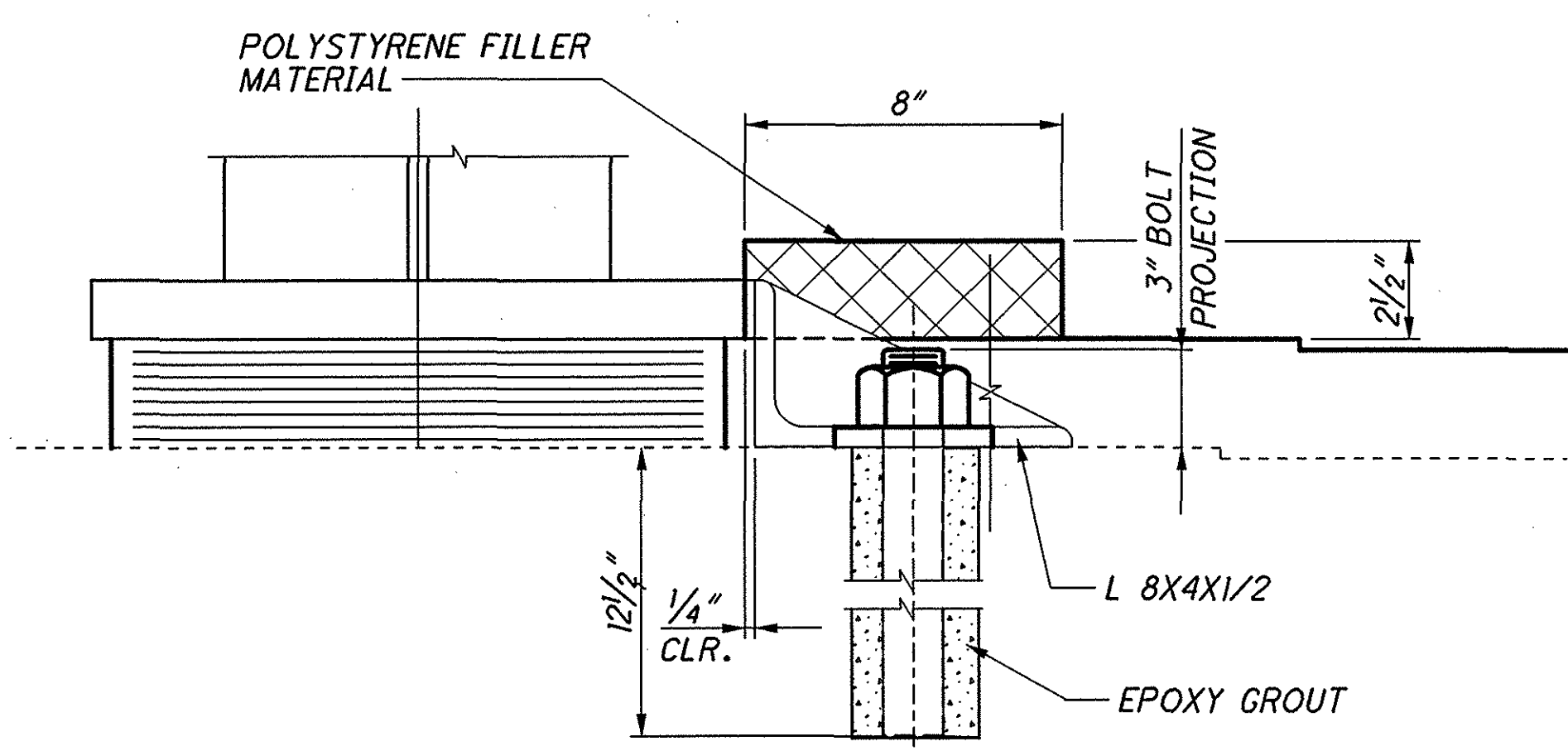


ABUTMENT BEARING WITH RETAINERS

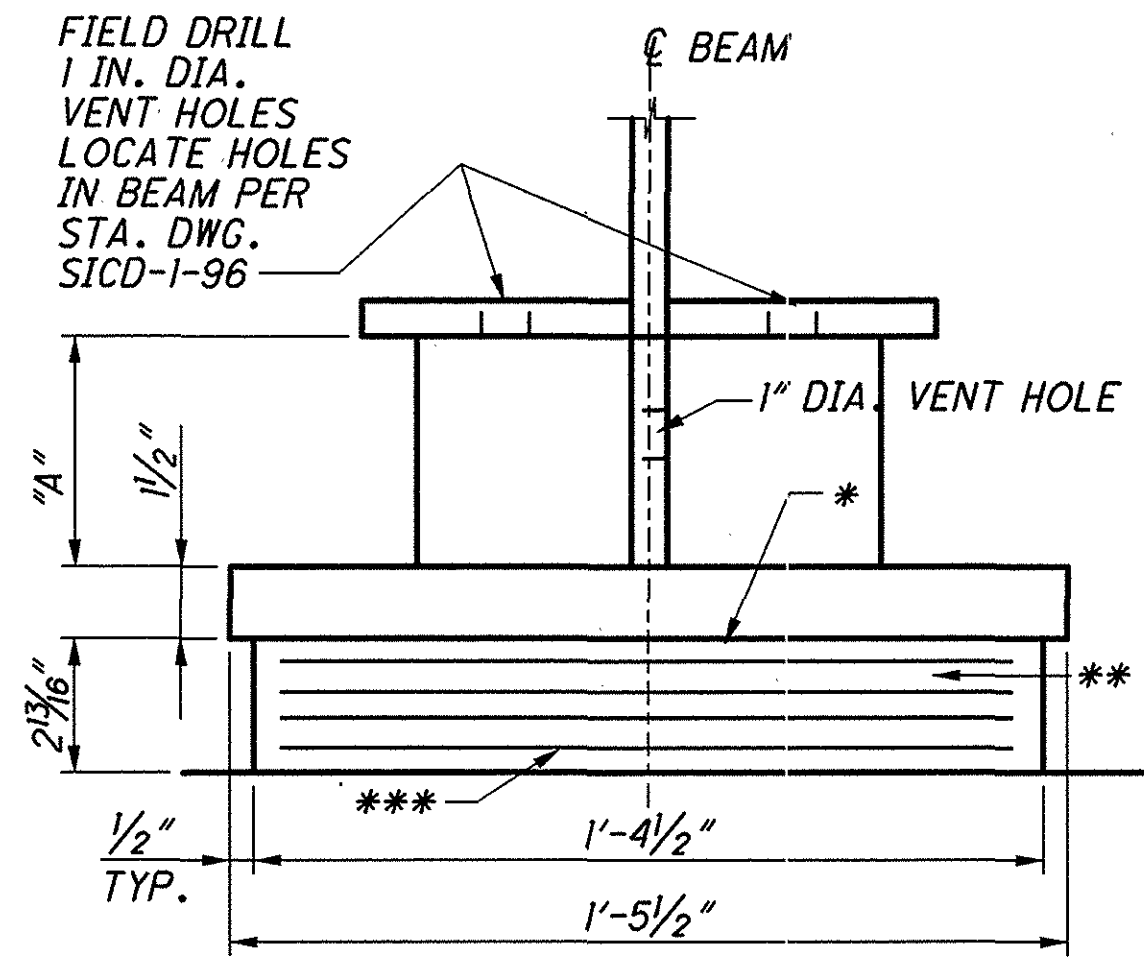
FOR LOCATIONS, SEE SHEETS [9/21] AND [10/21].
 FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-96.



ABUTMENT BEARING PLAN TYPICAL FOR NON-RETAINER LOCATIONS

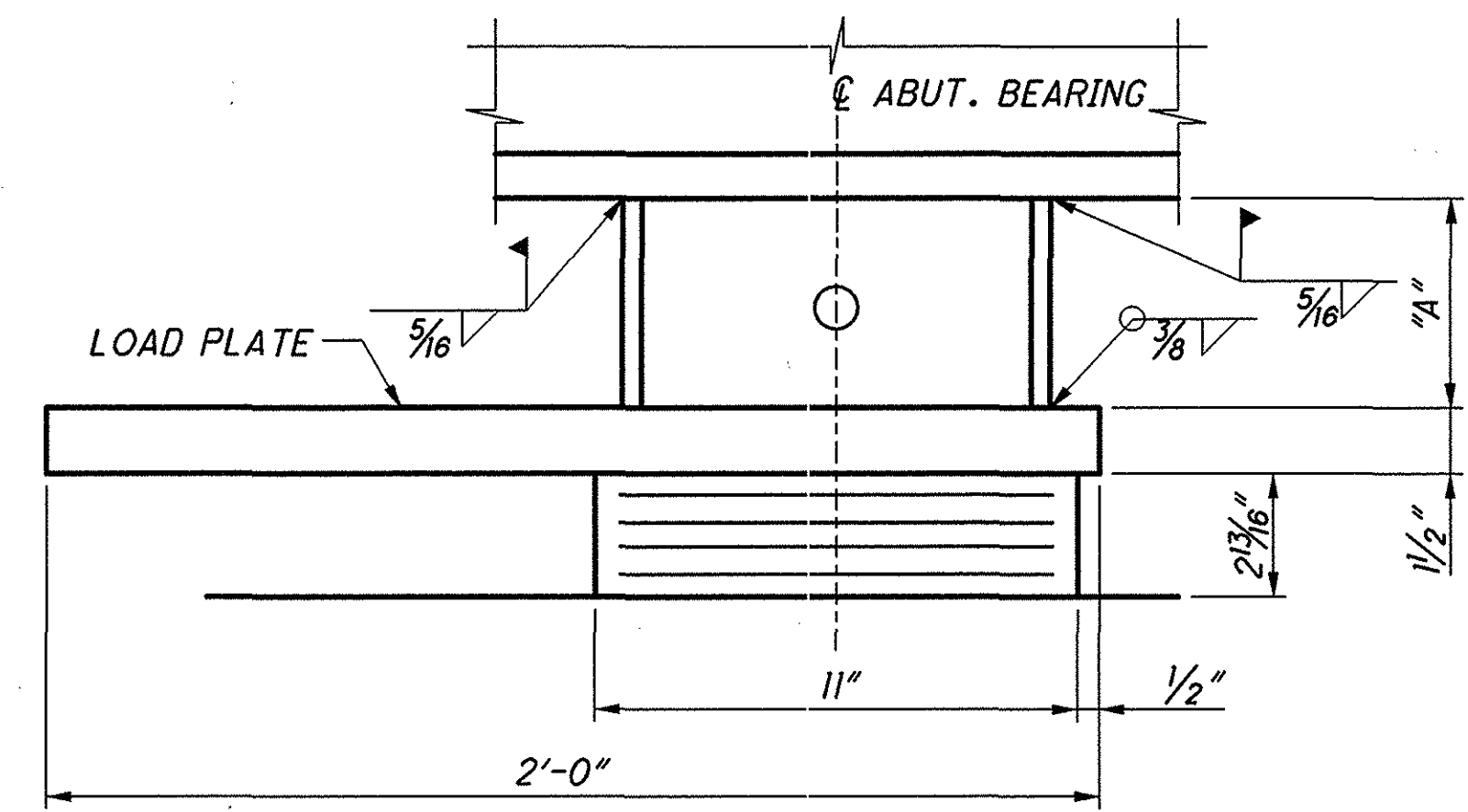


SECTION E-E

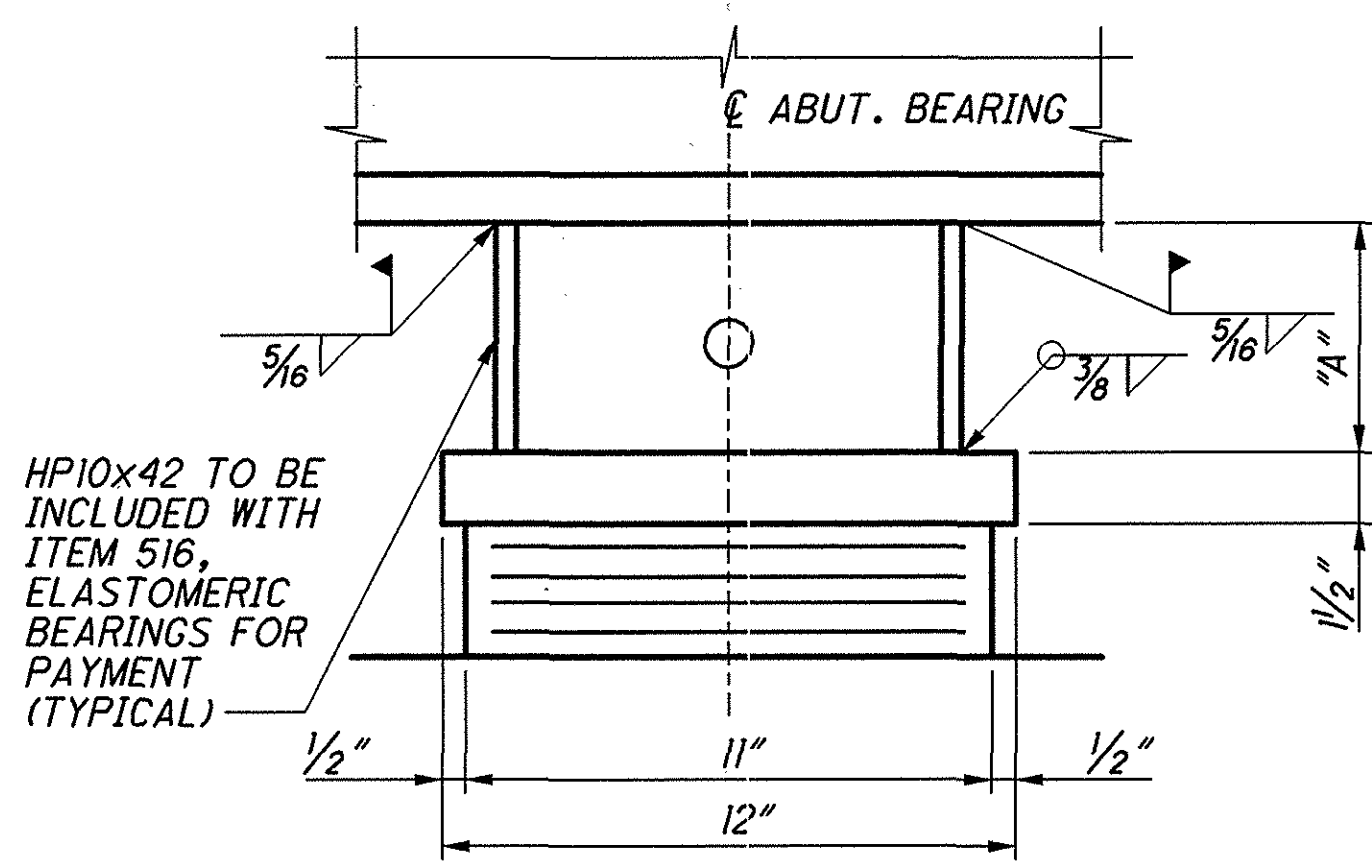


- * - 2 EXTERNAL ELASTOMER LAYER THICKNESS = 0.364 IN./LAYER
- ** - 4 INTERNAL ELASTOMER LAYERS THICKNESS = 0.52 IN./LAYER
- *** - 5 INTERNAL STEEL LAMINATES THICKNESS = 0.0747 IN./LAMINATE

ABUTMENT BEARING ELEVATION



SECTION A-A TYPICAL FOR BEARINGS WITH RETAINERS



SECTION B-B TYPICAL FOR NON-RETAINER LOCATIONS

DIMENSION "A" LEFT BRIDGE

BEAM #	R.A.	F.A.
B1	5 1/8"	5 1/8"
B2	6 1/16"	5 1/8"
B3	6 1/16"	5 1/8"
B4	6 1/8"	6"
B5	6 1/8"	6 1/16"
B6	5 1/8"	5 7/8"

DIMENSION "A" RIGHT BRIDGE

BEAM #	R.A.	F.A.
B7	6 1/16"	5 1/8"
B8	6 5/16"	5 1/8"
B9	6 5/8"	5 1/8"
B10	6 5/8"	5 7/8"
B11	6 3/16"	5 1/16"
B12	6 1/16"	5 1/16"

NOTES:

EACH BEARING ASSEMBLY SHALL BE SHOP MARKED WITH THE FOLLOWING INFORMATION: TOP, FORWARD STATION DIRECTION, LOCATION (REAR ABUTMENT, FORWARD ABUTMENT) AND BEAM LINE NUMBER.

ELASTOMERIC BEARINGS: ELASTOMERIC BEARINGS SHALL COMPLY WITH 516 AND AASHTO SECTION 18, BEARINGS, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50-DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS OF ARTICLE 18.7.4.5. BEARINGS WERE DESIGNED UNDER ARTICLE 14.6.6 (METHOD A) OF SECTION 14, BEARING, DIVISION I, DESIGN. TESTING SHALL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS.

BEARING REPOSITIONING: IF BEAMS ARE PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60°F ± 10°F, THE BEAMS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F ± 10°F.

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.

LOAD PLATES: STEEL LOAD PLATES AND HP SECTIONS SHALL BE ASTM A36 STEEL. COATING SHALL BE SYSTEM OZEU PAINT INCLUDED WITH THE BEARING FOR PAYMENT.

THE STEEL LOAD PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. WELDING OF THE PLATES TO THE STRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

BEARING RETAINER: THE STEEL RETAINER ASSEMBLY AND SQUARE WASHER SHALL BE THE ASTM A36 STEEL. ANCHOR BOLTS, NUTS, SQUARE PLATE WASHERS, LOAD PLATE (EXCEPT TOP SURFACE AND ELASTOMERIC PAD BOND AREA) AND STEEL RETAINER SYSTEM SHALL BE GALVANIZED AS PER 711.02. SEE STANDARD DRAWING SICD-1-96 FOR ADDITIONAL NOTES AND DETAILS. BEARING RETAINER AND HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS.

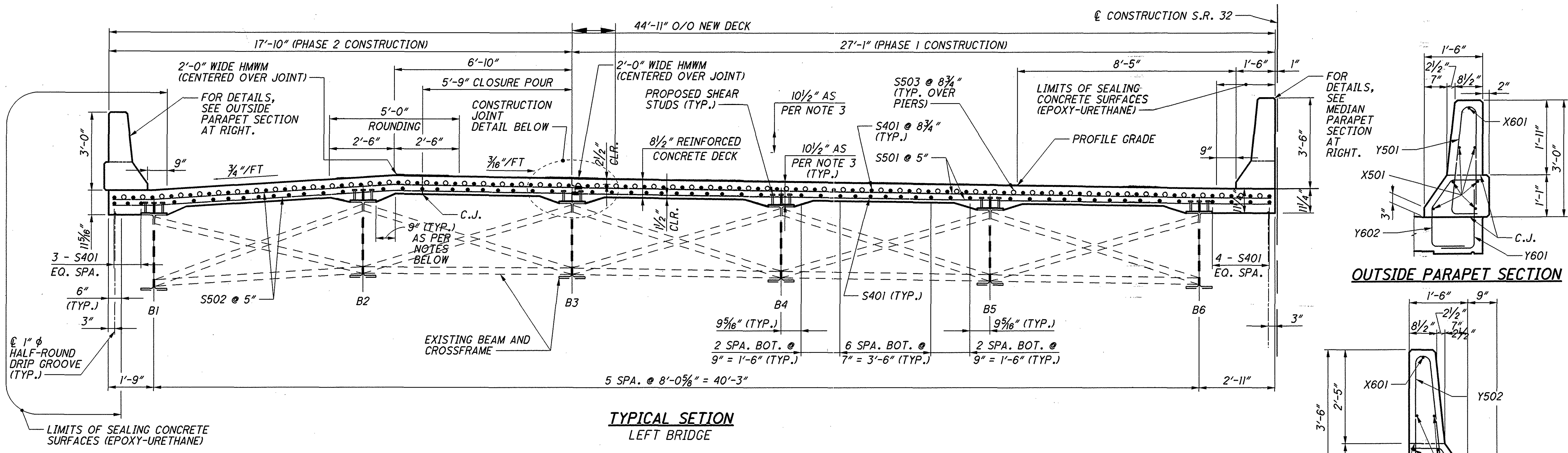
DESIGN LOADING: BEARINGS ARE DESIGNED FOR THE FOLLOWING LOADS (KIPS)

DEAD LOAD	61 KIPS
LIVE LOAD W/O IMPACT	47 KIPS
TOTAL DESIGN LOAD	108 KIPS

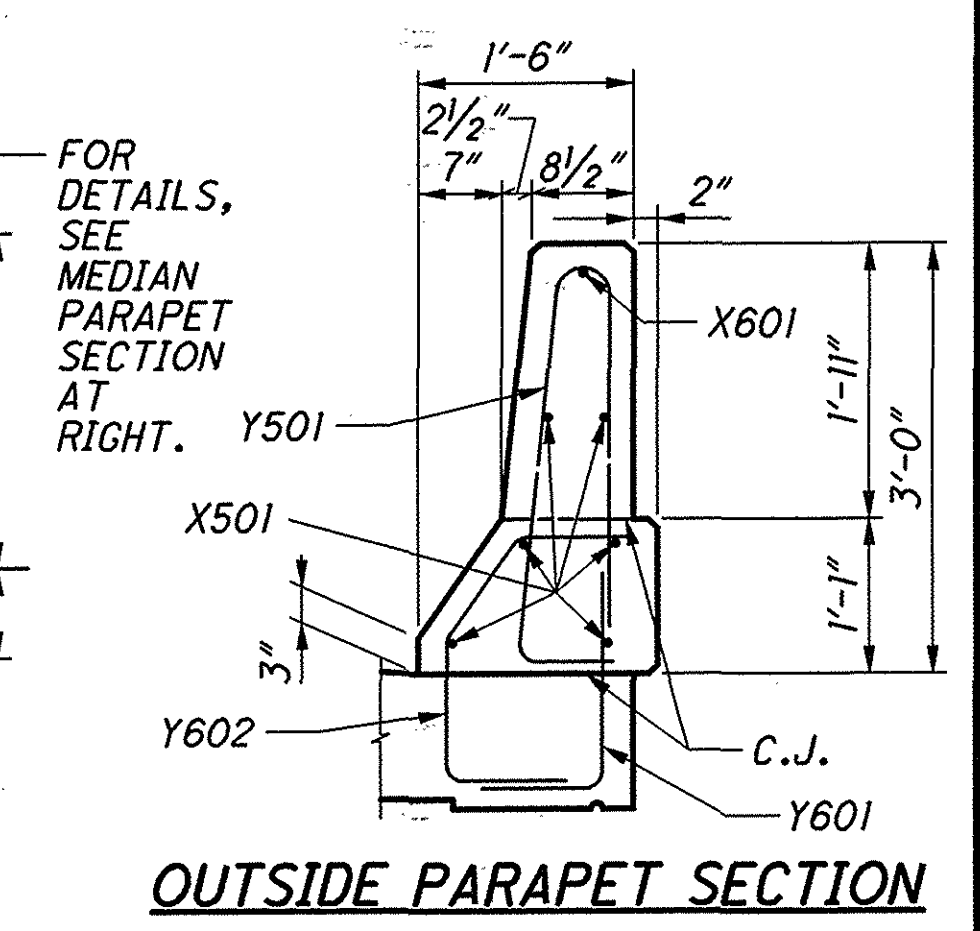
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0694CBR001.dgn 30-JAN-2007 2:51PM charvill

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 DRAWN: XAC
 DESIGNED: XAC
 CHECKED: SJA
 STRUCTURE FILE NUMBER: 1300377
 BRIDGE NO. CLE-32-0694
 OVER NORFOLK SOUTHERN RAILROAD
CLE-32-3.57/6.82
6.94/7.32
 PID No. 24955
 15 / 21
 125
 156

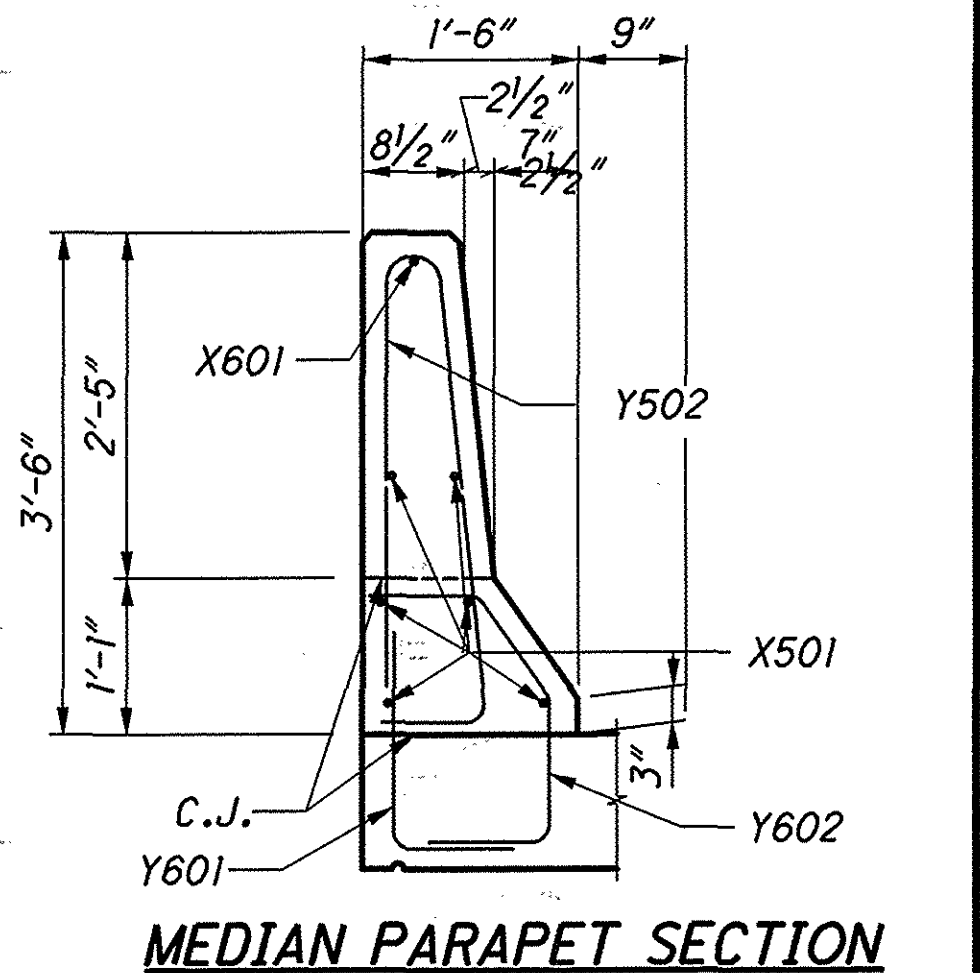
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0694CTS002.dgn 05-FEB-2007 8:38AM charvill



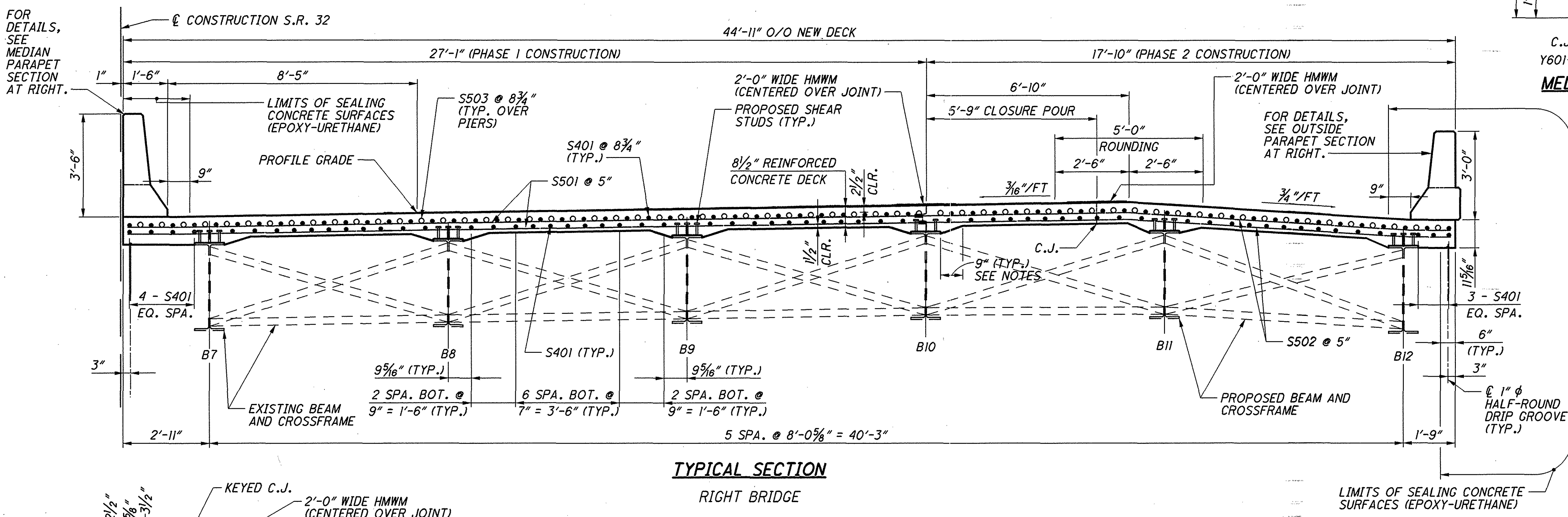
**TYPICAL SECTION
LEFT BRIDGE**



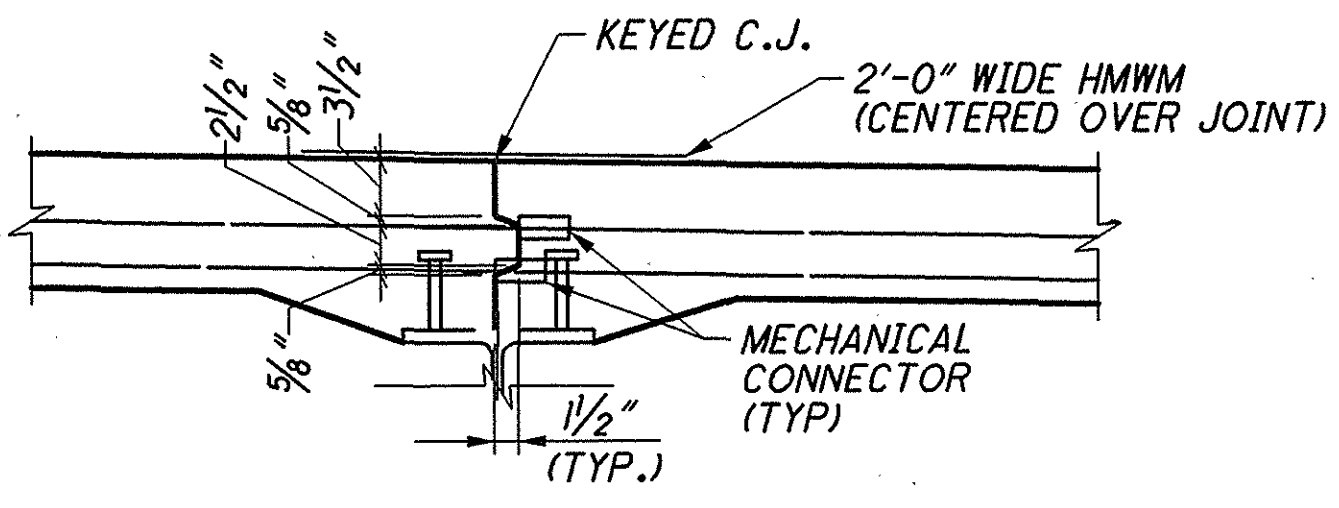
OUTSIDE PARAPET SECTION



MEDIAN PARAPET SECTION



**TYPICAL SECTION
RIGHT BRIDGE**



**PHASE CONSTRUCTION JOINT DETAIL
LONGITUDINAL DECK BAR NOT SHOWN**

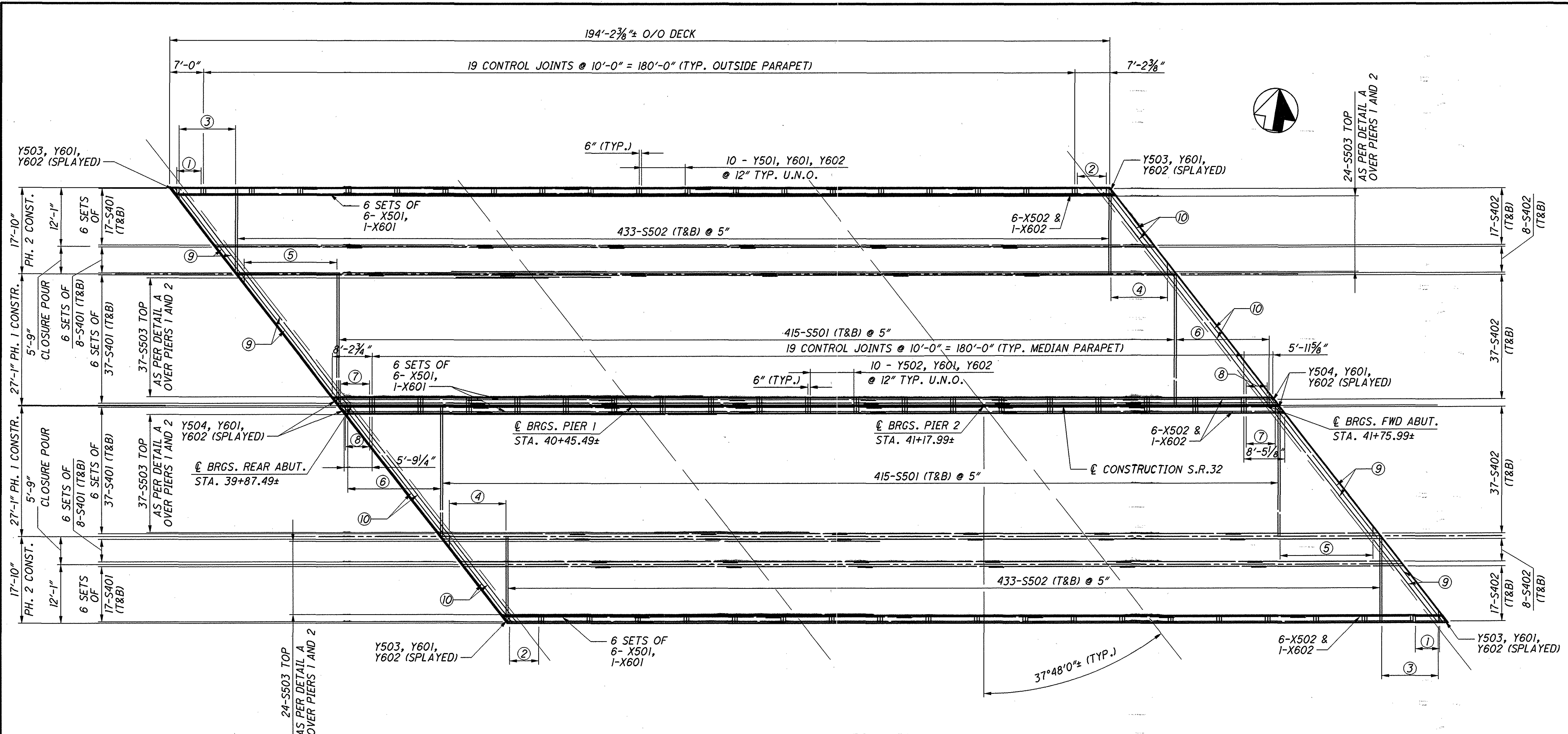
LEGEND:
BOT. = BOTTOM
C.J. = CONSTRUCTION JOINT

NOTES:

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A MINIMUM HAUNCH THICKNESS OF 2 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES.
2. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ± 3 INCHES.
3. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE TOP OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

DESIGN AGENCY BURGESS & NIPLE	DATE 8-14-06
REVIEWED JSB	STRUCTURE FILE NUMBER 1300342
DRAWN KML	REVISED
DESIGNED XAC	CHECKED SJA
TYPICAL SECTION BRIDGE NO. CLE-32-0694 OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/6.82 / 6.94/7.32 PID No. 24955	
16 / 21	
126 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0694CDP002.dgn 31-JAN-2007 3:04PM charvill

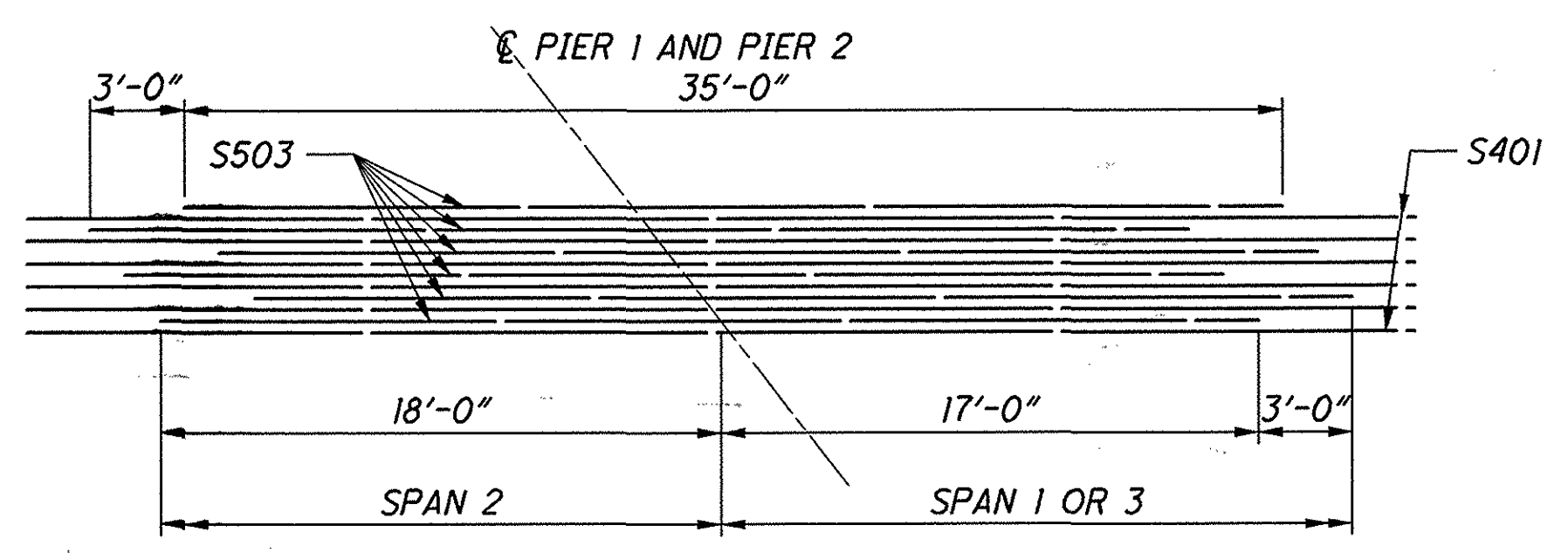


DECK PLAN

- ① 6-Y501, Y601 & Y602 @ 12" ⑤ S.O. 47-S506 (T&B) @ 5"
- ② 7-Y501, Y601 & Y602 @ 12" ⑥ S.O. 47-S507 (T&B) @ 5"
- ③ S.O. 29-S504 (T&B) @ 5" ⑦ 7-Y502, Y601 & Y602 @ 12"
- ④ S.O. 29-S505 (T&B) @ 5" ⑧ 6-Y502, Y601 & Y602 @ 12"
- ⑨ END DIAPHRAGM REINFORCING AS PER SHEET 9/21.
- ⑩ END DIAPHRAGM REINFORCING AS PER SHEET 10/21.

NOTE:

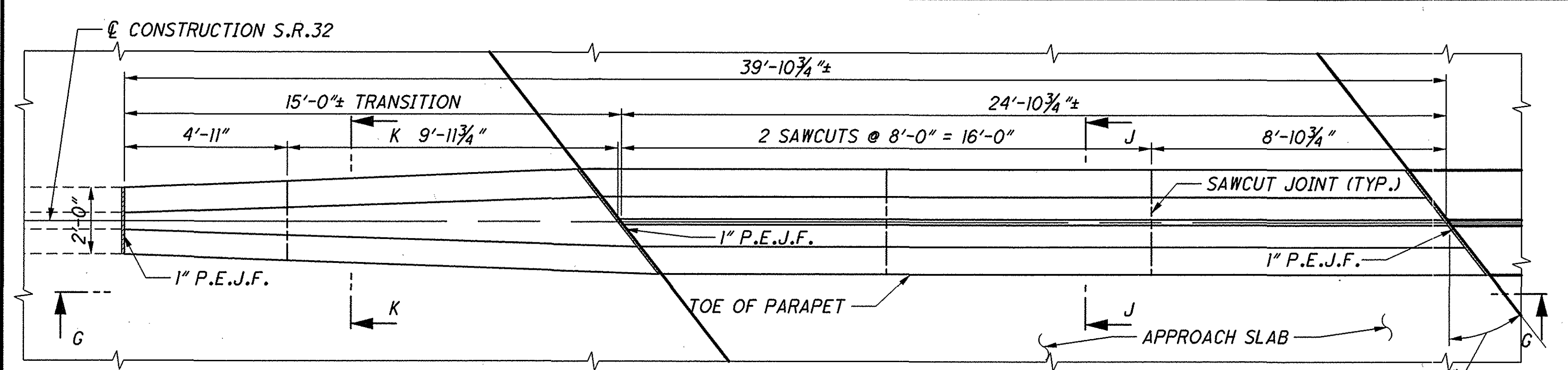
- 1. MIN. STEEL LAP LENGTH:
 NO. 5 BAR = 3'-3"
 NO. 6 BAR = 3'-10"



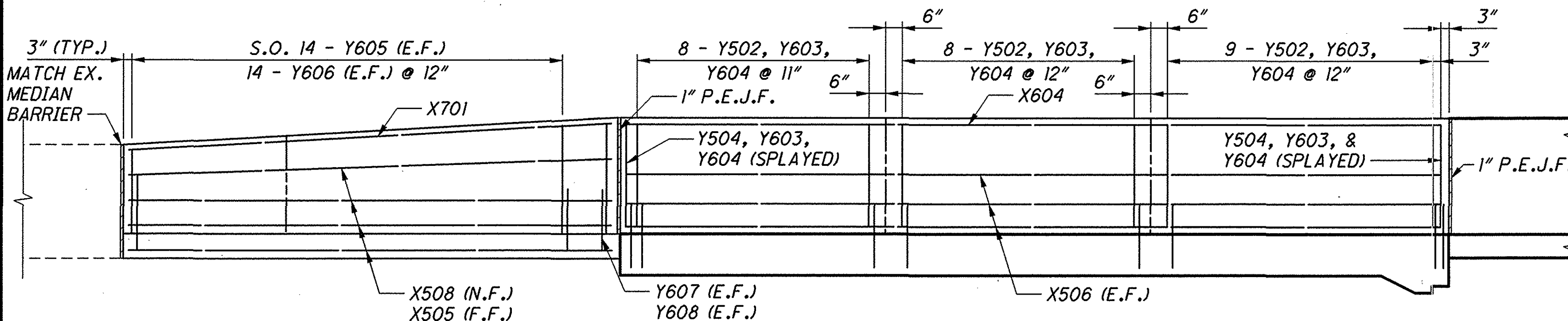
DETAIL A
 S503 TO ALTERNATE WITH S401

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 DRAWN: KML
 CHECKED: SJA
 STRUCTURE FILE NUMBER: 1300342
 DESIGNED: XAC
 CHECKED: SJA
DECK PLAN
 BRIDGE NO. CLE-32-0694
 OVER NORFOLK SOUTHERN RAILROAD
CLE-32-3.57/6.82
6.94/7.32
 PID No. 24955
 17 / 21
 127
 156

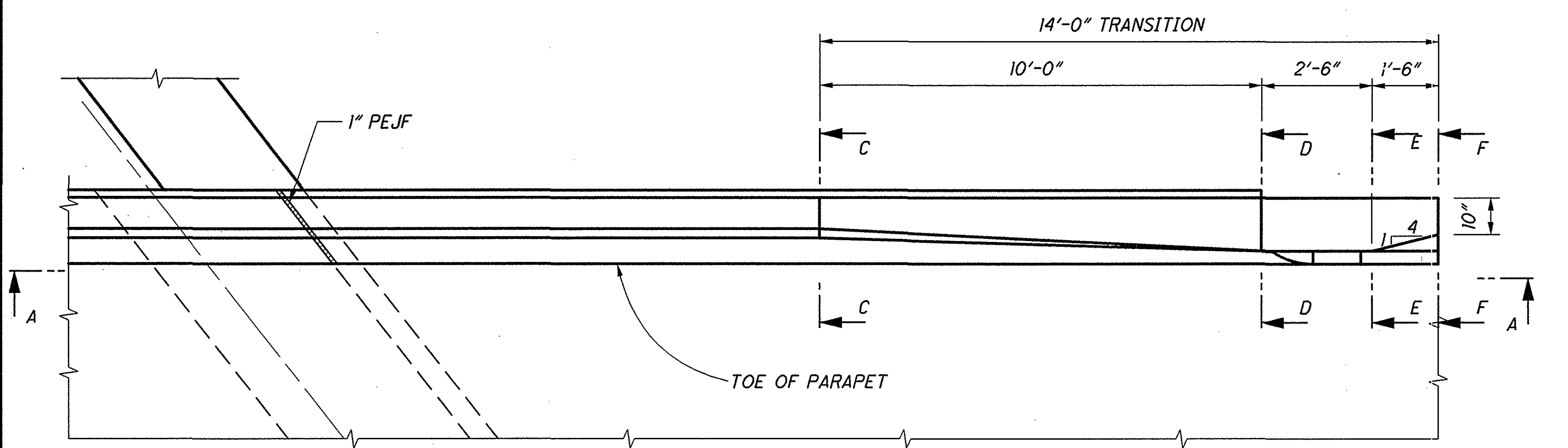
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\DDOT_Med\032_0694CSD003.dgn 05-FEB-2007 8:34AM charvill



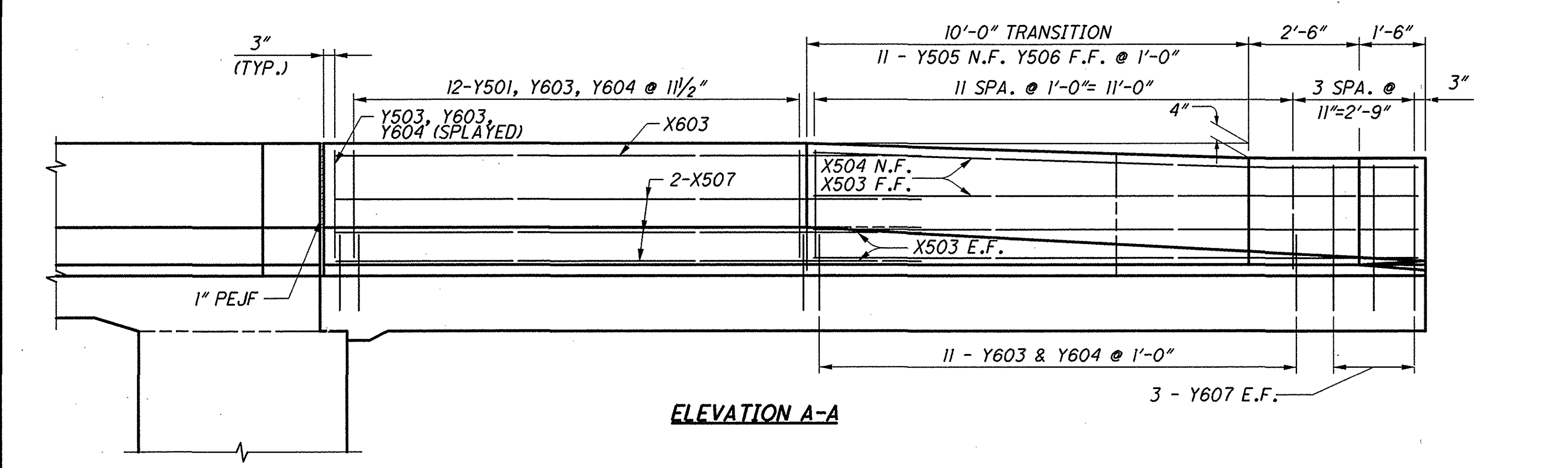
MEDIAN BARRIER PLAN
REAR SHOWN; FORWARD SIMILAR



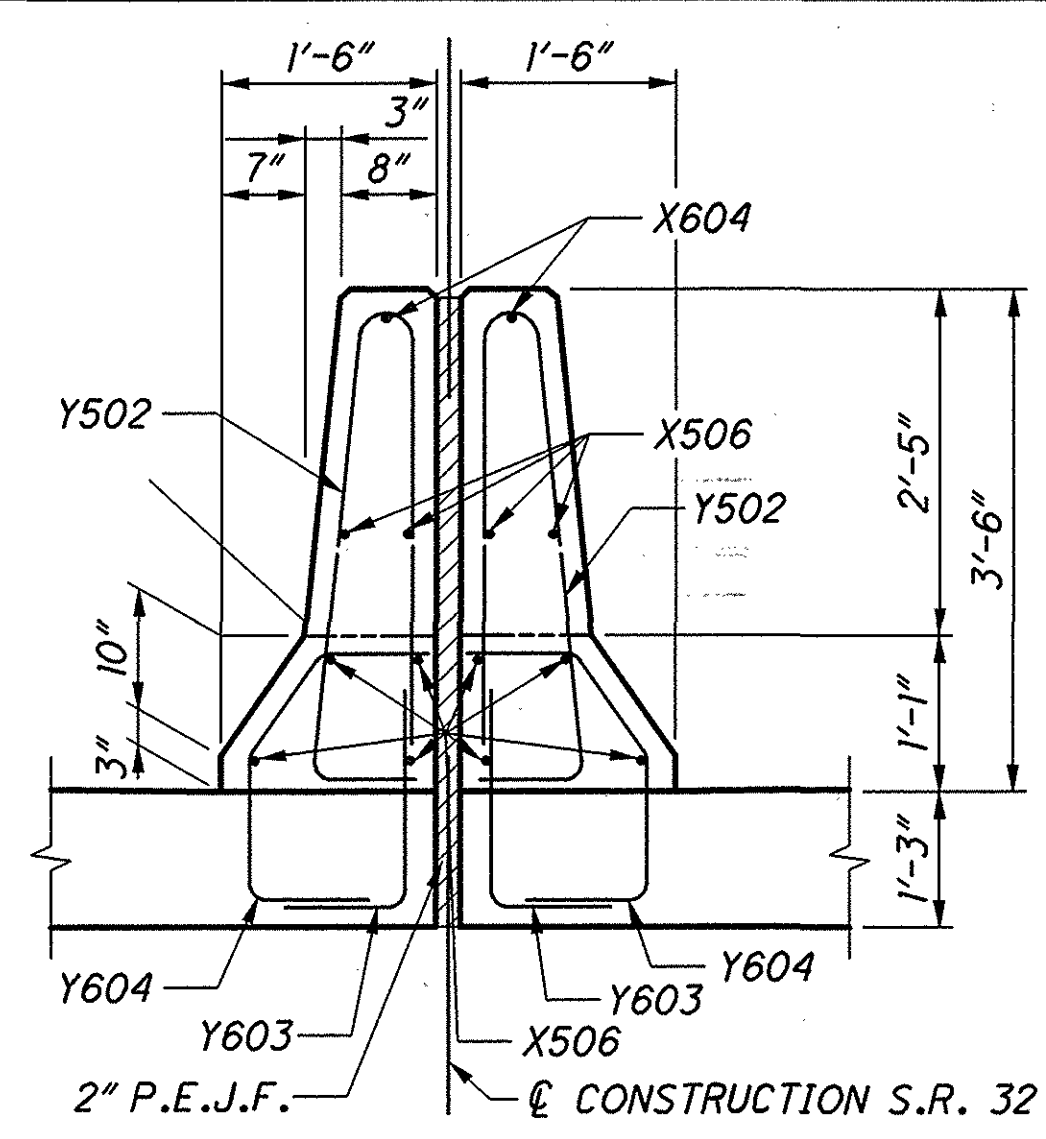
ELEVATION G-G



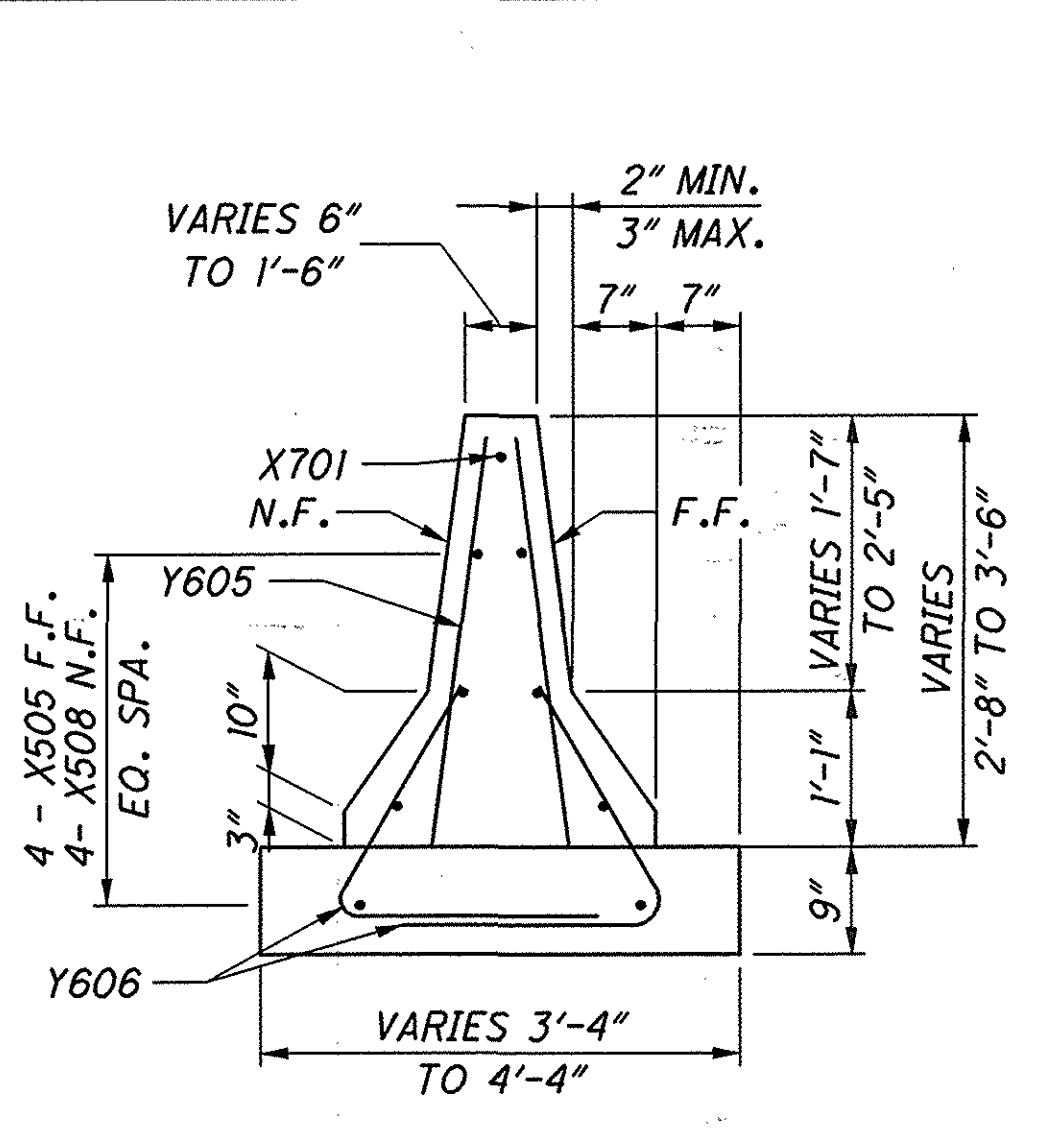
OUTSIDE PARAPET TRANSITION PLAN
LEFT FWD SHOWN; RIGHT FWD, LEFT REAR AND RIGHT REAR SIMILAR



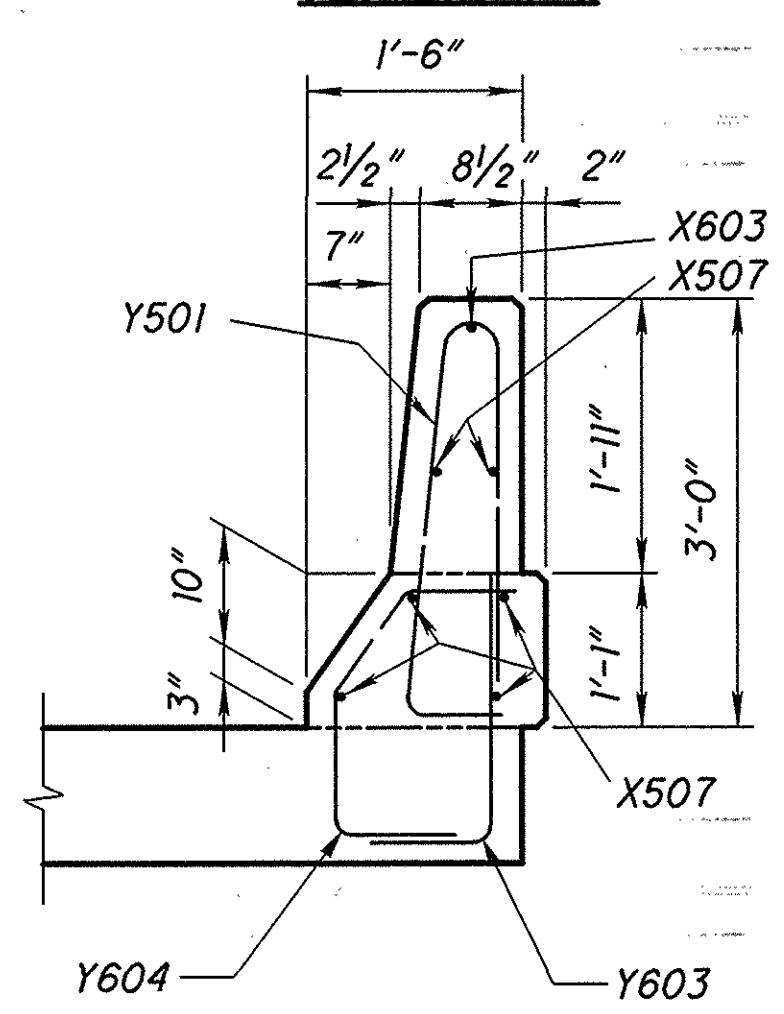
ELEVATION A-A



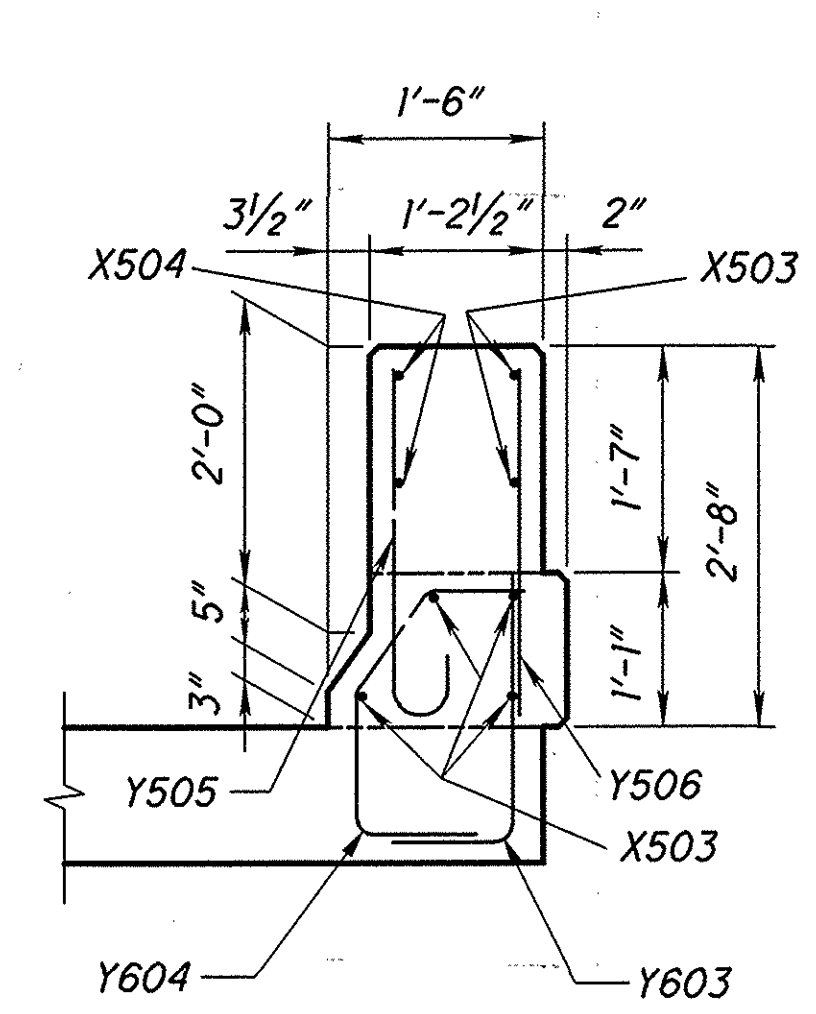
SECTION J-J



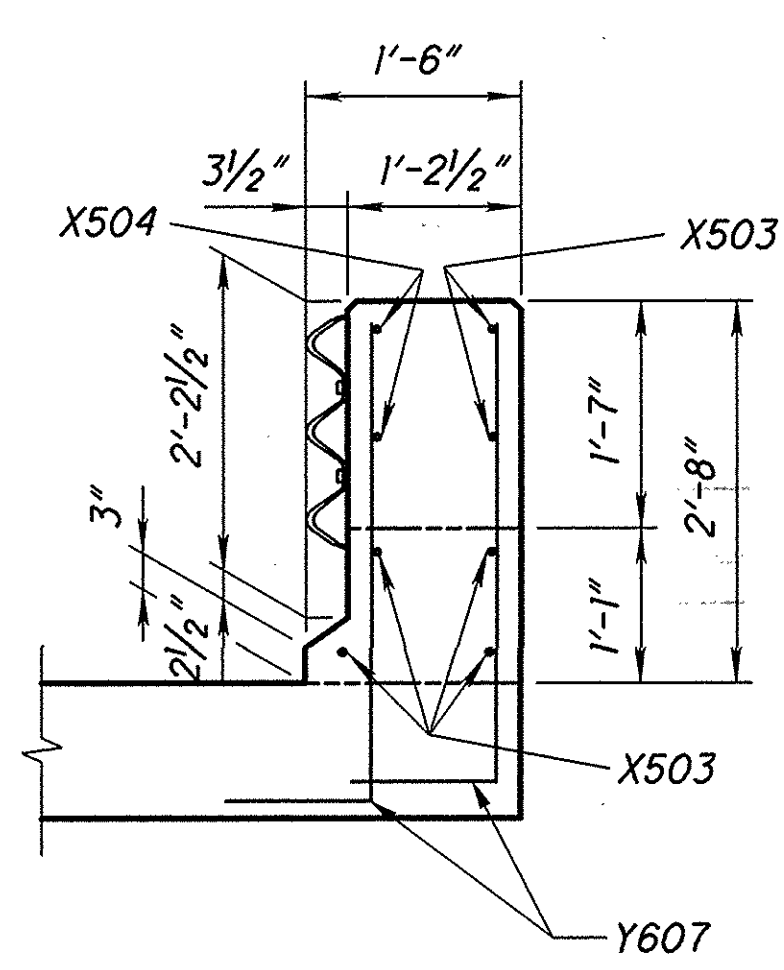
SECTION K-K



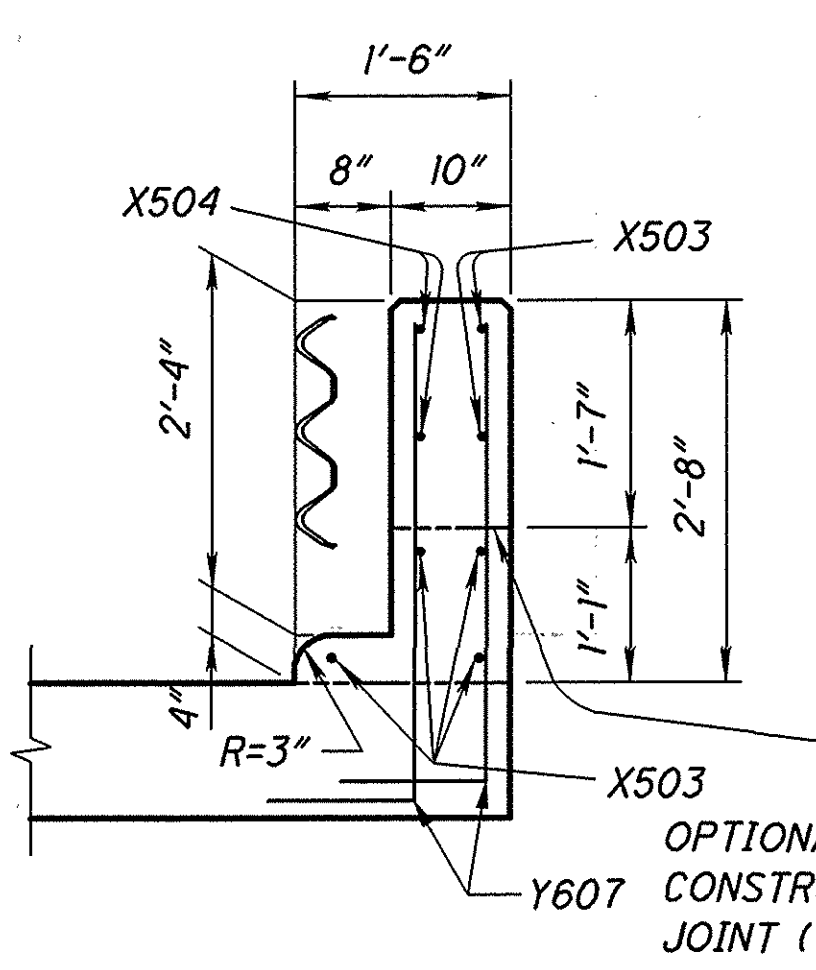
SECTION C-C



SECTION D-D



SECTION G-G



SECTION F-F

NOTES:

1. MEDIAN BARRIER TRANSITIONS, INCLUDING CONCRETE, REINFORCING STEEL AND JOINT SEALERS, WILL BE INCLUDED IN THE COST OF ROADWAY ITEM 622, BARRIER TRANSITION.
2. MIN. REINFORCING CLEAR COVER IS 2" UNLESS NOTED OTHERWISE.
3. MEDIAN BARRIER ON THE APPROACH SLAB WILL BE PAID FOR UNDER ITEM 898, QC/OA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN. FOR MORE INFORMATION, SEE GENERAL NOTE.
4. FOR MORE DETAILS, SEE STANDARD DRAWING BR-1.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300342	DESIGNED XAC
DRAWN KML	CHECKED SJA
PARAPET DETAILS BRIDGE NO. CLE-32-0694 OVER NORFOLK SOUTHERN RAILROAD	
CLE-32-3.57/6.82 /6.94/7.32 PID No. 24955	
19	21
129	156

I:\projects\CLE\sr032\06.82_P1D24955\Consult\Final Tracings\ODOT_Mod\032_0694CFL001.dgn 31-JAN-2007 3:37PM charvill

ABUTMENT REINFORCING STEEL LIST										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
A501	4	20'-10"	86	16	7'-7"	2'-7"				
A502	18	17'-7"	329	16	5'-11"	2'-7"				
A503	4	13'-8"	57	16	4'-0"	2'-7"				
A504	24	3'-7"	89	STR						
A505	6	8'-5"	52	STR						
A506	6	9'-9"	61	STR						
A507	8	3'-7"	29	STR						
A508	2	19'-3"	40	18	2'-10"	8'-4"	8'-4"			
	2	13'-6"				5'-10"	5'-10"			
A509	S.O.	TO	166	18	2'-2"	TO	TO			1'-2 1/2"
	5	18'-4"				8'-3"	8'-3"			
A510	28	11'-1"	323	18	2'-2"	4'-7"	4'-7"			
A511	2	9'-4"	19	STR						
A512	2	8'-0"	16	STR						
A513	2	9'-9"	20	20	2'-5"	6'-4"	3'-0"			
A514	2	8'-5"	17	20	2'-5"	6'-4"	1'-8"			
A515	2	9'-6"	19	STR						
A516	2	7'-11"	16	STR						
A517	4	18'-6"	77	18	2'-2"	8'-4"	8'-4"			
	2	14'-5"				6'-3"	6'-3"			
A518	S.O.	TO	173	18	2'-2"	TO	TO			1'-1 1/4"
	5	18'-10"				8'-6"	8'-6"			
A519	6	7'-10"	49	STR						
A520	6	9'-5"	58	STR						
A521	2	8'-0"	16	STR						
A522	2	9'-7"	19	STR						
A523	2	6'-7"	13	STR						
A524	2	8'-2"	17	STR						
A525	2	3'-7"	7	STR						
A526	2	5'-0"	10	STR						
A527	2	8'-1"	16	20	2'-11"	6'-4"	1'-2"			
A528	2	9'-7"	20	20	2'-11"	6'-4"	2'-8"			
A529	2	19'-11"	41	18	2'-10"	8'-8"	8'-8"			
A530	2	19'-3"	40	18	2'-2"	8'-8"	8'-8"			
A801	28	6'-1"	454	STR						
	1	7'-8"								
A802	S.O.	TO	74	STR						1'-8"
	3	11'-0"								
	1	7'-8"								
A803	S.O.	TO	99	STR						1'-1 1/4"
	4	11'-0"								
	1	4'-2"								
A804	S.O.	TO	66	STR						1'-4 1/4"
	4	8'-3"								
	1	5'-8"								
A805	S.O.	TO	55	STR						1'-3 1/2"
	3	8'-3"								
		SUBTOTAL	2,643							

* REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

NOTE:
1. ALL BARS SHALL BE EPOXY COATED.

PARAPET REINFORCING STEEL NOT PAID UNDER ITEM 509										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
X503	24	13'-8"	342	STR						
X504	8	13'-10"	116	42	10'-0"	2'-5"	0'-1 1/2"	1'-5"	0'-5"	
X505	8	14'-0"	116	STR						
X506	24	24'-6"	613	STR						
X507	24	14'-9"	369	STR						
X508	8	15'-2"	126	STR						
X603	4	15'-3"	91	STR						
X604	4	24'-6"	147	STR						
X701	2	14'-7"	59	STR						
Y501	48	6'-0"	300	2B						
Y502	100	7'-1"	739	2A						
Y503	4	6'-0"	25	2	2'-6"	2'-9"	0'-10"	0'-4"	0'-1 7/8"	
Y504	4	7'-0"	29	2	3'-0"	3'-3"	0'-10"	0'-5 1/8"	0'-1 7/8"	
Y505	44	3'-0"	137	19	2'-5"					
Y506	44	2'-5"	110	STR						
Y603	204	3'-0"	919	1	1'-0"	2'-2"				
Y604	204	3'-6"	1072	6A	0'-9"	1'-3"	0'-10 1/2"			
	2	2'-6"								
Y605	S.O.	TO	122	STR						0'-0 3/4"
	14	3'-4"								
Y606	56	3'-8"	308	41	1'-10"	1'-0"	1'-9"			
Y607	4	4'-8"	28	1	3'-4"	1'-6"				
Y608	4	4'-5"	26	41	1'-10"	1'-0"	2'-6"			
		SUBTOTAL	5,794							

SUPERSTRUCTURE REINFORCING STEEL LIST										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
S401	1488	30'-0"	29819	STR						
S402	248	4'-4"	717	STR						
S501*	1660	26'-11"	46602	STR						
S502*	1732	17'-8"	31914	STR						
S503	244	35'-0"	8907	STR						
	4	2'-1"								
S504	S.O.	TO	1159	STR						0'-6 3/8"
	29	17'-1"								
	4	2'-3"								
S505*	S.O.	TO	1179	STR						0'-6 3/8"
	29	17'-3"								
	4	1'-10"								
S506*	S.O.	TO	2769	STR						0'-6 3/8"
	47	26'-5"								
	4	1'-10"								
S507	S.O.	TO	2802	STR						0'-6 1/2"
	47	26'-9"								
X501	144	30'-0"	4505	STR						
X502	24	33'-4"	834	STR						
X601	24	30'-0"	1081	STR						
X602	4	36'-10"	221	STR						
Y501	386	6'-0"	2416	2B						
Y502	386	7'-1"	2852	2A						
Y503	4	5'-11"	24	2	2'-5"	2'-9"	0'-10"	0'-4"	0'-1 7/8"	
Y504	4	7'-0"	29	2	3'-0"	3'-3"	0'-10"	0'-5 1/8"	0'-1 7/8"	
Y601	780	2'-6"	2928	1	1'-0"	1'-8"				
Y602	780	3'-2"	3709	6A	0'-9"	0'-11"	0'-10 1/2"			
D501	52	8'-4"	451	18	3'-7"	2'-6"	2'-6"			
D502	52	13'-4"	723	16	4'-3"	2'-2"				
D503	100	7'-7"	790	18	2'-10"	2'-6"	2'-6"			
D504	100	11'-8"	1216	16	3'-5"	2'-2"				
D801*	56	34'-4"	5133	STR						
D802*	40	7'-3"	774	STR						
D803	40	21'-2"	2260	STR						
D804*	16	20'-10"	890	20	0'-9"	12'-2"	8'-8"			
D805	128	5'-9"	1965	28	3'-5"	1'-5"				
		SUBTOTAL	158,669							

DESIGN AGENCY
BURGESS & NIPLE
32 Plus Street, 17th Floor
Cincinnati, Ohio 45202

DATE: 8-14-06
REVIEWED: JSB
DRAWN: GTT
DESIGNED: XAC
CHECKED: SUA

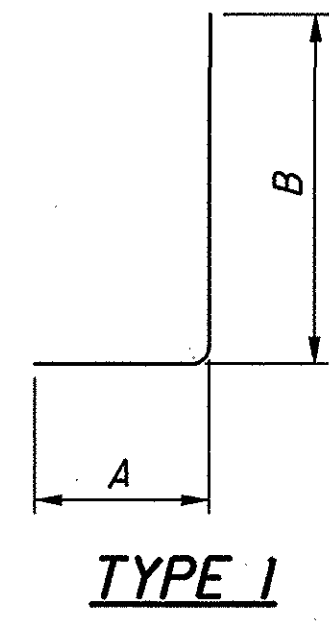
STRUCTURE FILE NUMBER: 1300342

REINFORCING STEEL LIST 1
BRIDGE NO. CLE-32-0694
OVER NORFOLK SOUTHERN RAILROAD

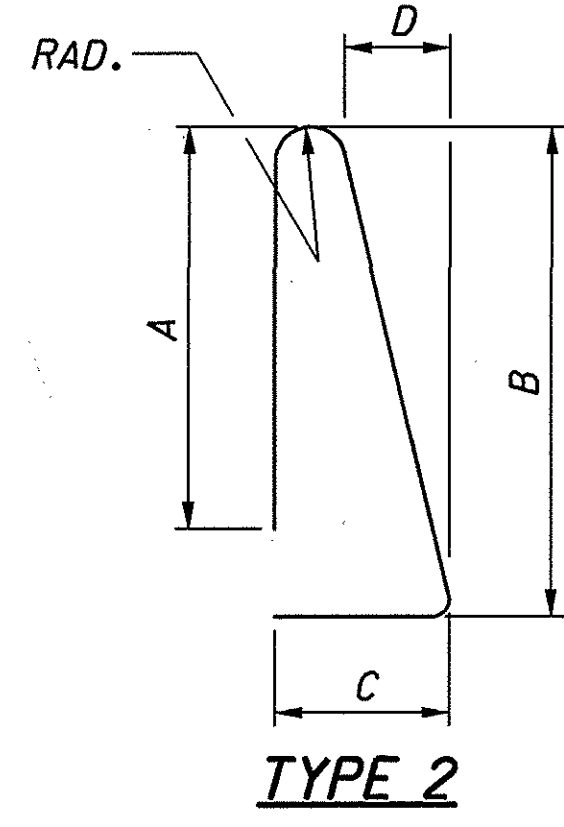
CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

20 / 21

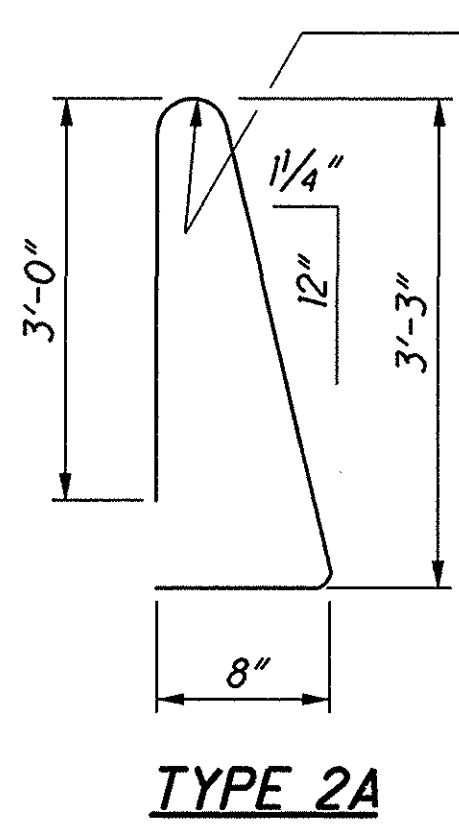
130
156



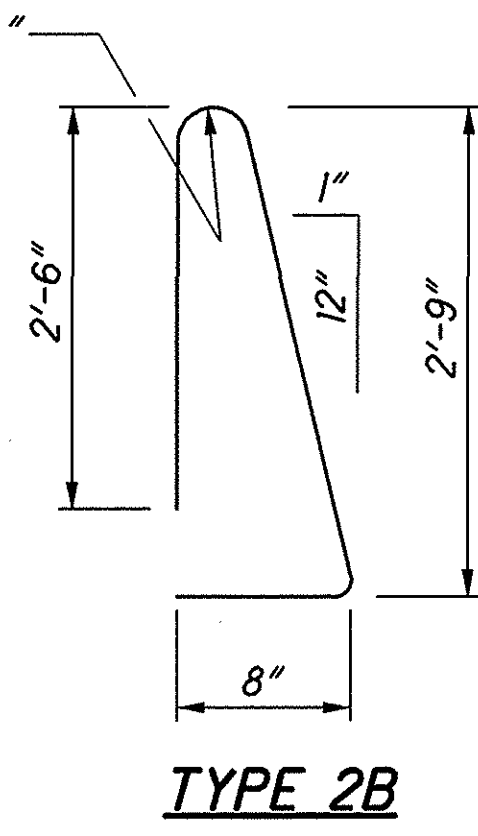
TYPE 1



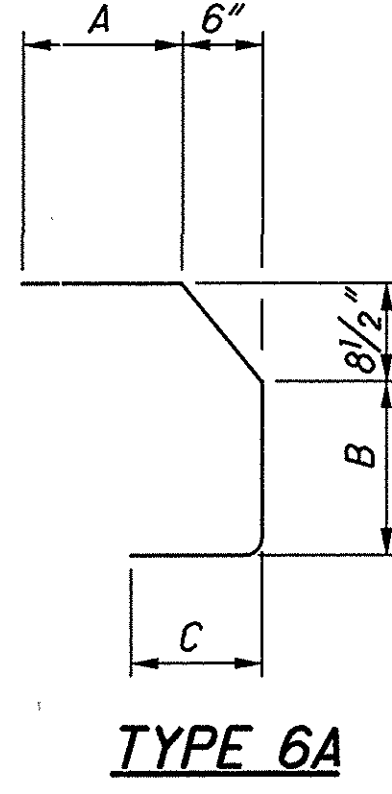
TYPE 2



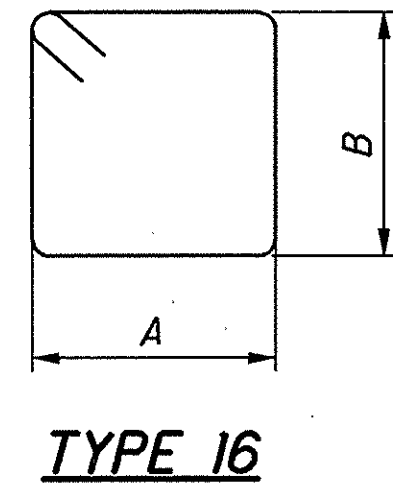
TYPE 2A



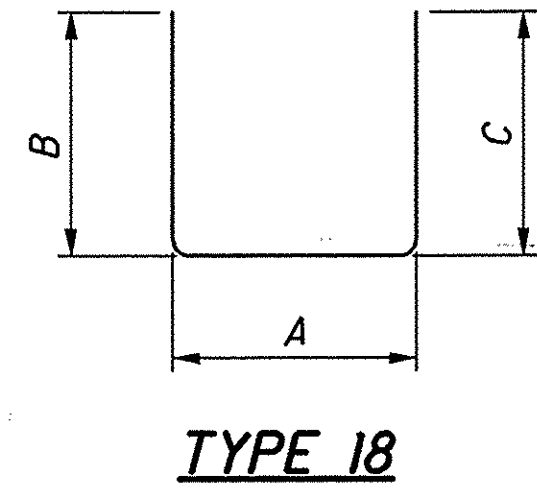
TYPE 2B



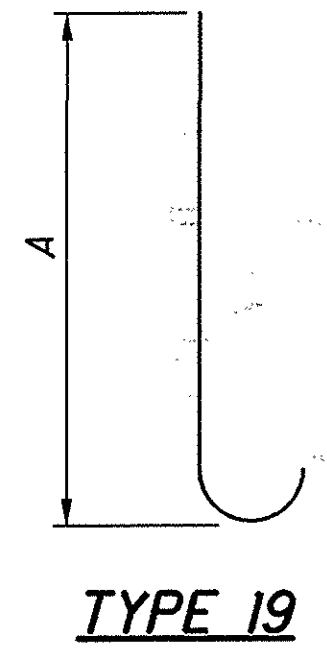
TYPE 6A



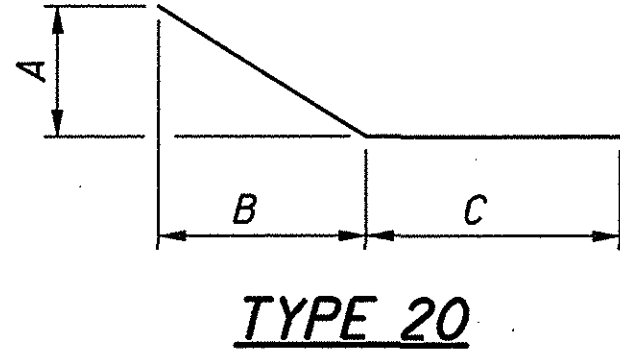
TYPE 16



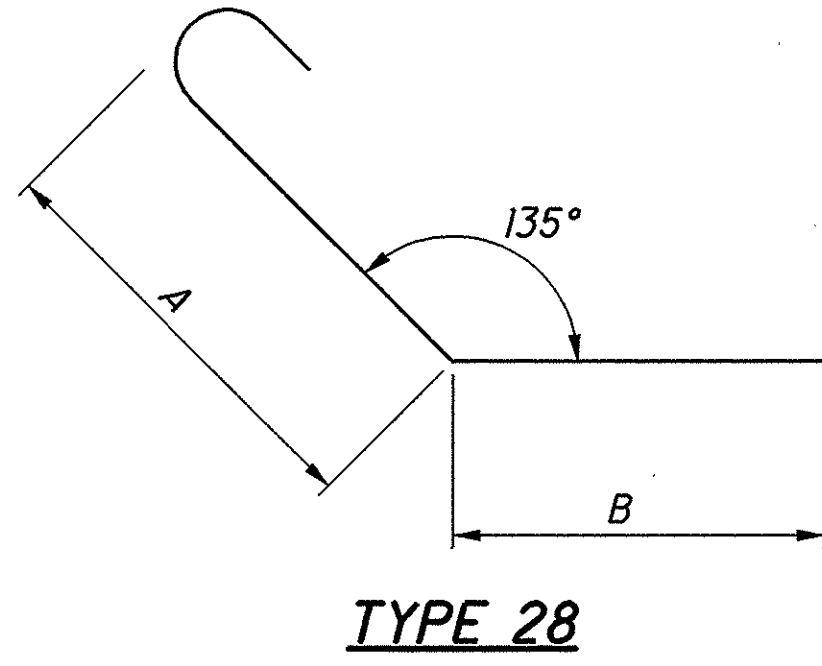
TYPE 18



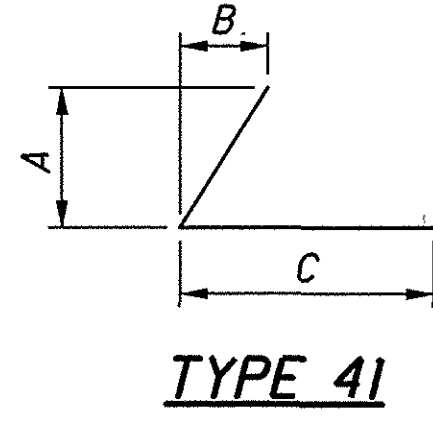
TYPE 19



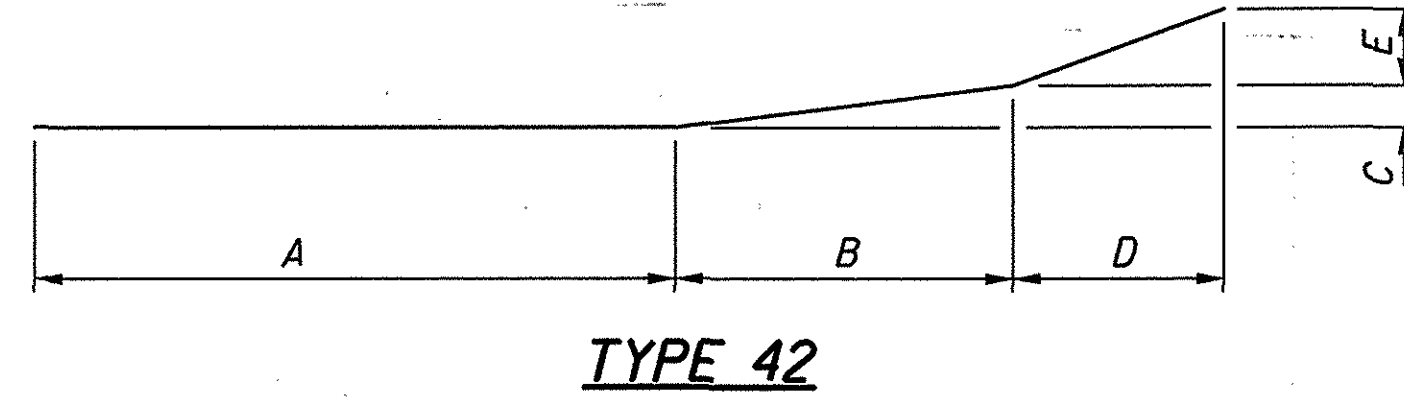
TYPE 20



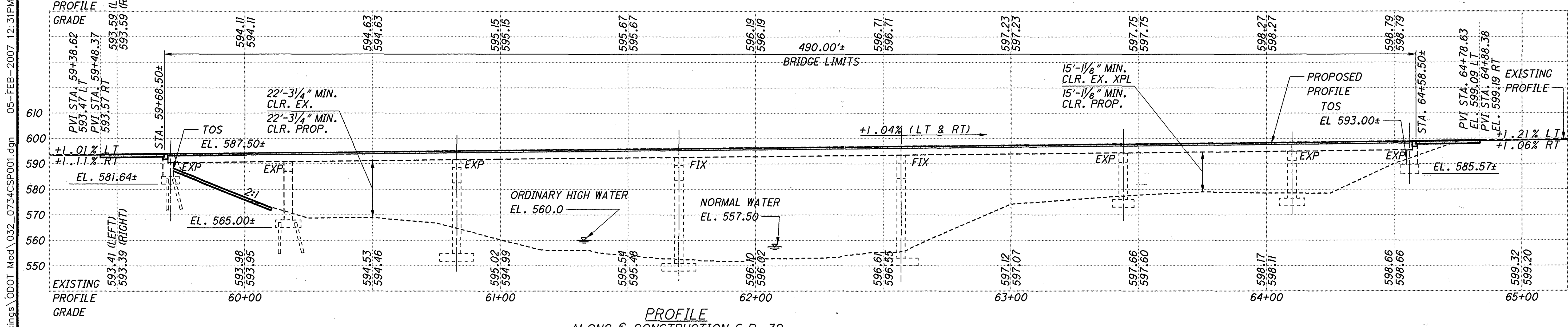
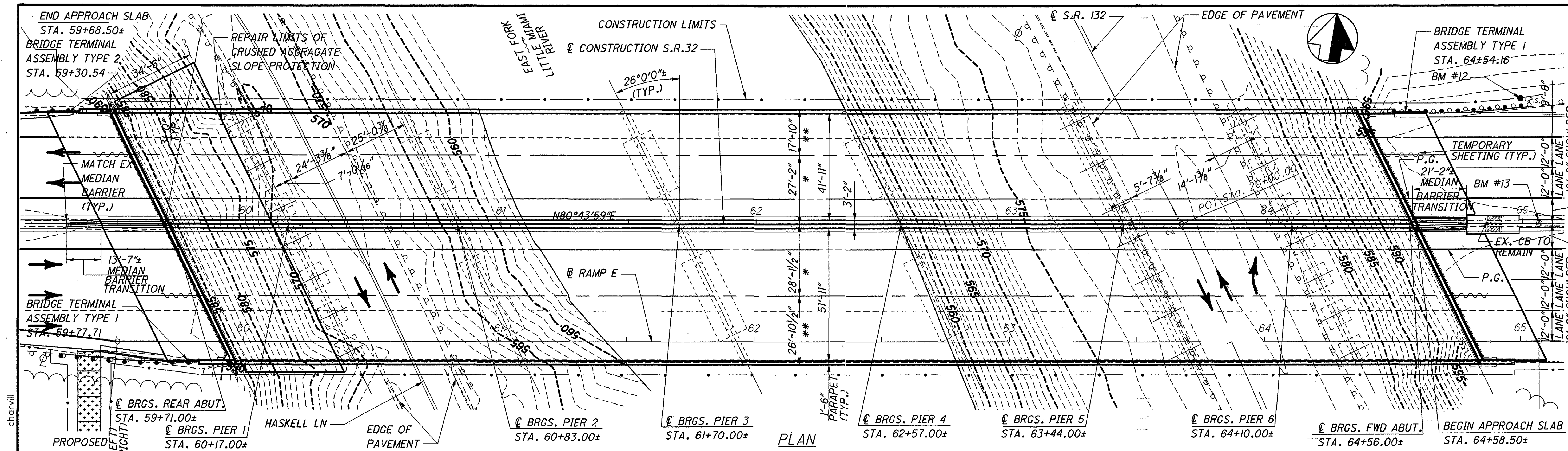
TYPE 28



TYPE 41



TYPE 42



BENCHMARK DATA	
BM # 12	STA. 64+99.27, ELEV. 598.66, OFFSET 49.27, LEFT
BM # 13	STA. 65+06.60, ELEV. 601.50, OFFSET 0.00, @
BM # 14	STA. 65+32.58, ELEV. 599.17, OFFSET 63.43, RIGHT
BENCHMARKS #12 AND #14 ARE IRON PINS SET	

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

DESIGN TRAFFIC:
 2008 ADT = 34,910 2008 ADTT = 1822
 2028 ADT = 43,540 2028 ADTT = 2773
 DIRECTIONAL DISTRIBUTION = 0.58

LEGEND

* - PHASE 1 CONSTRUCTION	P.G. = PROFILE GRADE
** - PHASE 2 CONSTRUCTION	TOS = TOP OF SLOPE
@ = BASELINE	EX. = EXISTING
BRGS. = BEARINGS	EL. = ELEVATION
EXP = EXPANSION	MIN. = MINIMUM
FIX = FIXED	CLR.. = CLEARANCE
ABUT. = ABUTMENT	
FWD. = FORWARD	

EXISTING STRUCTURE

TYPE: 7 SPAN CONTINUOUS BEAM BRIDGE WITH REINFORCED CONCRETE SUPERSTRUCTURE AND REINFORCED CONCRETE SUBSTRUCTURE

SPANS: 46'-0", 66'-0", 87'-0", 87'-0", 87'-0", 66'-0", 46'-0"
 C/C BEARING

ROADWAY: 98'-0" F/F PARAPETS
 LOADING: HS20-44
 SKEW: 26°00' RT. FWD.
 APPROACH SLABS: AS-1-67 (25'-0" LONG)
 ALIGNMENT: TANGENT
 CROWN: 0.0156 FT/FT
 STRUCTURAL FILE NUMBER: 1300377
 DATE BUILT: 1969
 WEARING SURFACE: 1 3/4" SUPERPLASTICIZED DENSE CONCRETE OVERLAY

PROPOSED STRUCTURE

PROPOSED WORK: REPLACE EXISTING SUPERSTRUCTURE w/COMPOSITE CONCRETE DECK ON EXISTING STEEL BEAMS. PAINTING OF EXISTING BEAMS

SPANS: 46'-0"±, 66'-0"±, 87'-0"±, 87'-0"±, 87'-0"±, 66'-0"±, 46'-0"±
 C/C BEARING

ROADWAY: 97'-0" TOE/TOE PARAPET INCLUDING MEDIAN
 LOADING: HS20-44 CASE II AND ALTERNATE MILITARY
 SKEW: 26°00'± RT. FWD.
 APPROACH SLABS: (AS-1-81) 25'-0" LONG (MODIFIED)
 ALIGNMENT: TANGENT
 CROWN: 0.0156 FT/FT
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 COORDINATES: LATITUDE 39°05'07"N
 LONGITUDE 84°10'44"W

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CSP001.dgn 05-FEB-2007 12:31PM charvill

S I T E P L A N

CLERMONT COUNTY
 STA. 59+88.50
 STA. 64+58.50

BRIDGE NO. CLE-32-0734
 OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132

DESIGNED BY: XAC
 CHECKED BY: SJA

DRAWN BY: KML
 REVISED BY:

REVIEWED BY: JSB
 STRUCTURE FILE NUMBER: 1300377

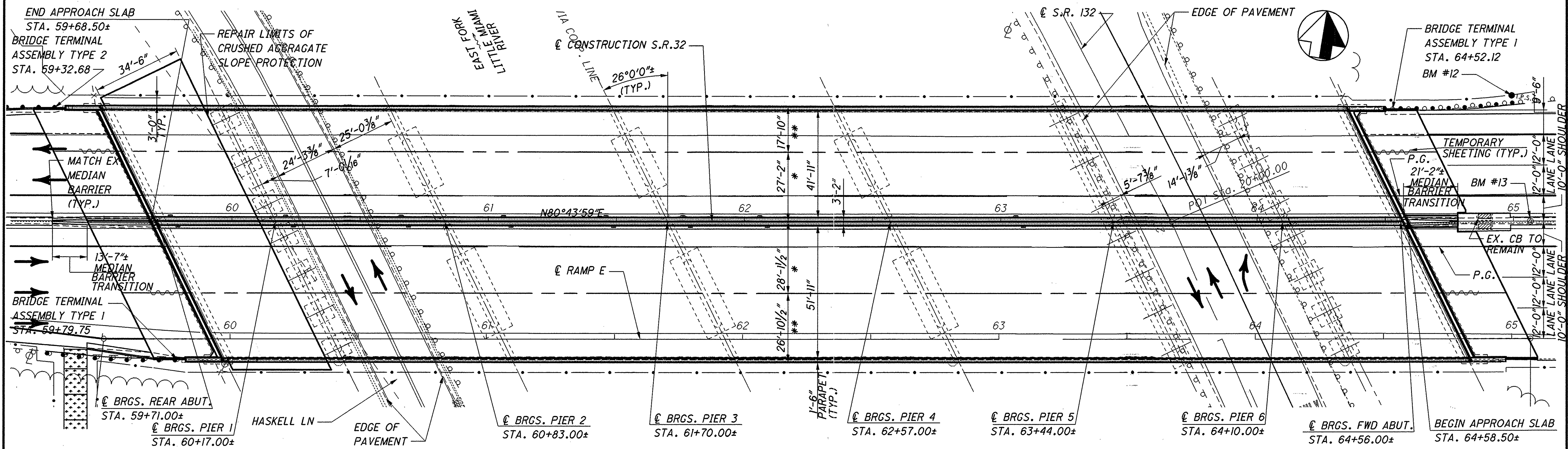
DATE: 8-14-06

DESIGN AGENCY: **BURGESS & NIPLE**
 30 Plus Street, 6th Floor
 Cincinnati, Ohio 45202

CLE-32-357/
 6.82/6.94/7.32
 PID No. 24955

1 / 25

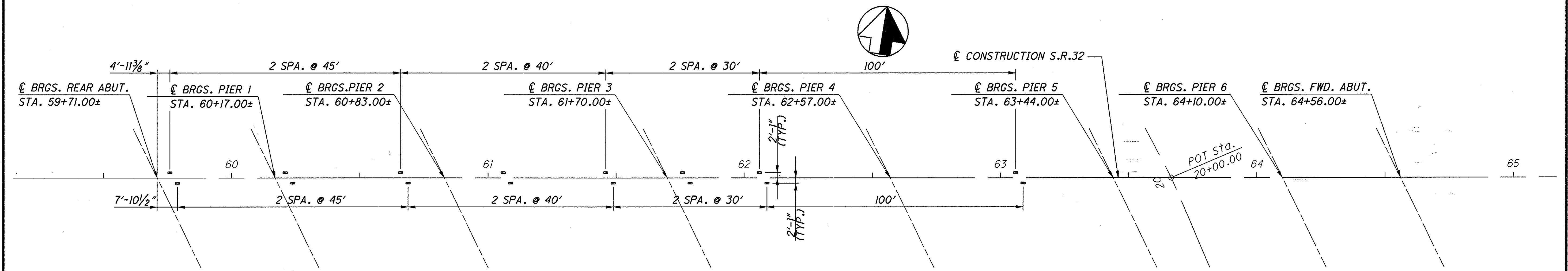
132
 156



GENERAL PLAN

LEGEND

- * - PHASE 1 CONSTRUCTION
- ** - PHASE 2 CONSTRUCTION



SCUPPER SCHEMATIC PLAN

NOTES

1. FOR SCUPPER DETAILS, SEE SHEET 14/25.

	BURGESS & NIPL <small>INCORPORATED</small>
DESIGN AGENCY DATE: 8-14-06 REVIEWED: JSB DRAWN: KML CHECKED: XAC DESIGNED: SJA	STRUCTURE FILE NUMBER: 1300377 REVISED: SJA COUNTY: CLERMONT COUNTY STA. 59+68.50 STA. 64+58.50
GENERAL PLAN BRIDGE NO. CLE-32-0734 S.R. 32 OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132	
CLE-32-357/ 6.82/6.94/7.32 PID No. 24955	2 / 25 <div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 133 156 </div>

DESIGN REFERENCES:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

- AS-1-81 REVISED 07-19-2002
- BR-1 REVISED 07-19-2002
- EXJ-4-87 REVISED 07-19-2002
- GSD-1-96 REVISED 07-19-2002
- PCB-91 REVISED 07-19-2002
- RB-1-55 REVISED 02-02-1959

AND TO SUPPLEMENTAL SPECIFICATIONS:

898, DATED 7-21-06

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

HS20-44, CASE II, AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE OF 60 PSF

DESIGN DATA:

- CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4,500 PSI (SUPERSTRUCTURE).
- CONCRETE, CLASS QSC1 - COMPRESSIVE STRENGTH 4,000 PSI (SUBSTRUCTURE).
- REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI.
- STRUCTURAL STEEL A709 GRADE 36 - YIELD STRENGTH 36,000 PSI.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2 1/2 INCH CONCRETE COVER
SEALING OF CONCRETE SURFACES

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

MAINTENANCE OF TRAFFIC:

ONE (1) LANE OF THRU TRAFFIC IN EACH DIRECTION WITH A MINIMUM HORIZONTAL WIDTH OF TEN AND A HALF (10.5) FEET SHALL BE MAINTAINED ON SR 32 AT ALL TIMES. REFER TO THE ROADWAY PLANS FOR OTHER TRAFFIC REQUIREMENTS AND PAYMENT PROVISIONS. FOR MAINTENANCE OF TRAFFIC DETAILS, SEE ROADWAY PLANS.

COLORS:

- THE COLOR FOR ITEM - 514, FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU, SHALL BE FEDERAL COLOR NUMBER 14277, GREEN.
- THE COLOR FOR ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE FEDERAL COLOR NUMBER 17778, LIGHT NEUTRAL.

EXISTING STRUCTURE PLANS:

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE, 505 SOUTH STATE ROUTE 741, LEBANON, OHIO AND ARE AVAILABLE FOR REFERENCE.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

INSPECTION OF EXISTING STRUCTURAL STEEL:

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB, HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO 511.10, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511, SUPERSTRUCTURE CONCRETE. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

PROPOSED WORK:

1. PROTECT AND MAINTAIN ALL SR 32 TRAFFIC DURING ALL PHASES OF CONSTRUCTION.
2. EXCAVATE BEHIND THE ABUTMENT, REMOVE THE APPROACH SLABS AND PORTIONS OF ABUTMENT BACKWALL. REMOVE CONCRETE DECK AND PARAPETS.
3. INSTALL SHEAR CONNECTORS AND EXPANSION JOINTS. RETROFIT ENDS OF COVER PLATES.
4. REFURBISH ABUTMENT BEARINGS.
5. CONSTRUCT NEW CONCRETE DECK AND PARAPETS, INSTALL SCUPPERS.
6. BACKFILL BEHIND THE ABUTMENTS AND CONSTRUCT NEW APPROACH SLABS.
7. SEAL PIERS AND ABUTMENTS AS SHOWN IN THE PLANS.
8. SEAL PARAPET AND DECK TO THE LIMITS SHOWN.
9. PAINT STRUCTURAL STEEL WITH SYSTEM OZEU.
10. REPAIR SLOPE PROTECTION AT REAR ABUTMENT.

CONSTRUCTION SEQUENCE:

THE FOLLOWING IS THE SUGGESTED ORDER OF WORK, THE CONTRACTOR IS NOT REQUIRED TO COMPLETE THE WORK IN THE ORDER LISTED

1. REDIRECT TRAFFIC AND INSTALL PORTABLE CONCRETE BARRIER PER MAINTENANCE OF TRAFFIC PLANS.
2. REMOVE THE SUPERSTRUCTURE CONCRETE TO THE LIMITS SHOWN. REMOVE THE SCUPPERS, EXPANSION JOINTS. GRIND ALL WELDS SMOOTH.
3. REMOVE THE EXISTING APPROACH SLABS AND ROADWAY PAVEMENT TO THE LIMITS SHOWN.
4. JACK THE EXISTING BEAM. RESET BEARINGS AND BEAMS, REFURBISH ABUMENT BEARINGS.
5. INSTALL SHEAR CONNECTORS ON THE BEAMS. RETROFIT ENDS OF COVER PLATES. BUILD ABUTMENT BACKWALL, INSTALL EXPANSION JOINT STEEL. PLACE DECK AND PARAPET.
6. CONSTRUCT APPROACH SLABS AND PAVEMENT TO THE LIMITS SHOWN.

OTHER WORK:

WORK NOT LISTED IN THE SEQUENCE MAY BE PERFORMED ACCORDING TO THE CONTRACTOR'S TIMING IN ACCORDANCE WITH CONTRACT PROVISIONS.

REMOVE THE TEMPORARY PROTECTION AND SUPPORTS PRIOR TO PAINTING.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

DESCRIPTION:

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF ABUTMENTS AND CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND / OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS:

BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS:

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STEEL GIRDER BRIDGE MEMBERS THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER BRIDGE MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS.

DECK REMOVALS:

DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRINGERS WHICH ARE TO REMAIN. REPLACE OR REPAIR STRINGERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS:

REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

MEASUREMENT & PAYMENT:

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

(CONTINUED ON GENERAL NOTES 2, SHEET 4/25)

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0734CGN001.dgn 05-FEB-2007 8:51 AM charvill

DESIGN AGENCY	DATE	REVIEWED	DRAWN	DESIGNED
BURGESS & NIPLE	8-14-06	JSB	KLM	XAC
32 Pine Street, 6th Floor Cincinnati, Ohio 45202	STRUCTURE FILE NUMBER	1300377	REVISED	SJA
GENERAL NOTES 1				
BRIDGE NO. CLE-32-0734				
OVER EAST FORK LITTLE MIAMI RIVER AND S.R.132				
CLE-32-3.57/ 6.82/6.94/7.32		PID No. 24955		
3/25		134 156		

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE, IF REQUIRED IN THE PLANS. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE DUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL:

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMER EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN:

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 509 - EPOXY COATED REINFORCING STEEL:

MECHANICAL CONNECTORS FOR REINFORCING STEEL:

AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED WHERE REQUIRED. INSTALLATION OF CONNECTORS SHALL CONFORM TO MANUFACTURER'S RECOMMENDED PROCEDURES. MECHANICAL CONNECTORS SHALL BE CAPABLE OF DEVELOPING 125 PERCENT OF THE YIELD STRENGTH OF THE BARS CONNECTED AND SHALL BE EPOXY COATED. COATING FOR BOTH THE CONNECTORS AND REINFORCING BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. ALL EXPENSES INVOLVED IN REPAIR OR REPLACEMENT SHALL BE BORN BY THE CONTRACTOR. THE CONNECTORS SHALL CONFORM AND BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL FOR PAYMENT.

ITEM 516 - REFURBISHING BEARING DEVICE, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEADWITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AND MATERIAL AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN.

REFURBISH ALL BEARINGS AT EACH ABUTMENT.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH ODOT'S PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN:

FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QC/QA CONCRETE, CLASS QSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING. IN ADDITION, THE PARAPET TRANSITIONS ON THE APPROACH SLABS, INCLUDING THE CONCRETE, REINFORCING STEEL, HMWM AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE INCLUDED IN THE COST OF THE APPROACH SLABS. 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 - QC/QA CONCRETE, CLASS QSC2, 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 601 - CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN:

AFTER COMPLETION OF MAJOR MODIFICATION ITEMS, EXISTING EMBANKMENT SURFACES SHALL BE RESTORED TO A UNIFORM PLANE SURFACE WITH CRUSHED AGGREGATE SLOPE PROTECTION. REMOVE BRUSH AND DEBRIS UNDER THE STRUCTURE AND TO 10 FEET EACH SIDE OF STRUCTURE. PROTECTION SHALL EXTEND LONGITUDINALLY FROM FACE OF ABUTMENT TO TOE OF SLOPE AND Laterally TO AT LEAST 3'-0" BEYOND DECK FASCIAS. THE MINIMUM TOTAL THICKNESS OF PROTECTION (RESTORED AND NEW) SHALL BE 1'-0".

ITEM 510 - DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT, AS PER PLAN:

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE DOWEL HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, THE DOWEL HOLE SHALL BE MOVED TO EITHER SIDE OF THE EXISTING BAR.

LEGEND:

- ABUT. = ABUTMENT
- BOT. = BOTTOM
- BRGS. = BEARINGS
- BTW. = BETWEEN
- CJ = CONSTRUCTION JOINT
- CLR. = CLEAR
- CONST. = CONSTRUCTION
- E.F. = EACH FACE
- EL. = ELEVATION
- EX. = EXISTING
- EQ. = EQUAL
- FA = FORWARD ABUTMENT
- FTG. = FOOTING
- F.F. = FAR FACE
- FWD. = FORWARD
- NCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE
- N.F. = NEAR FACE
- PCPP = PERFORATED CORRUGATED PLASTIC PIPE
- PEJF = PREFORMED EXPANSION JOINT FILLER
- P.G. = PROFILE GRADE
- PH. = PHASE
- PROP = PROPOSED
- RA = REAR ABUTMENT
- REF. = REFERENCE
- SHT. = SHEET
- S.O. = SERIES OF
- SPA. = SPACE
- T & B = TOP AND BOTTOM
- TYP. = TYPICAL
- UNO = UNLESS NOTED OTHERWISE

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CGN002.dgn 05-FEB-2007 9:12AM charvill

DESIGN AGENCY		DATE		REVIEWED		DRAWN		DESIGNED	
BURGESS & NIPLE		8-14-06		JSB		KML		XAC	
312 Plus Street, 6th Floor Cincinnati, Ohio 45202		STRUCTURE FILE NUMBER		1300377		REVISED		CHECKED	
								SJA	
GENERAL NOTES 2									
BRIDGE NO. CLE-32-0734									
OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132									
CLE-32-3.57/		6.82/6.94/7.32		PID No. 24955					
4/25									
								135 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\0001_Mod\032_0734CEQ001.dgn 05-FEB-2007 10:17AM charvill

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIERS	SUPER.	CALC.		DATE	CHK'D	DATE
								XAC	SLAB	02-07-06	SJA	08-01-06
								APPROACH	GENERAL	SHT. REF.		
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN								
202	22900	334	SQ YD	APPROACH SLAB REMOVED				334				3/25
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING								
503	21100	17	CU YD	UNCLASSIFIED EXCAVATION	17							
509	10000	426174	POUND	EPOXY COATED REINFORCING STEEL	6587		419587					
509	20001	200	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	200							4/25
510	10001	604	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	604							4/25
512	10100	2564	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	202	639	1723					
512	10300	218	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			218					
512	33000	2	SQ YD	TYPE 2 WATERPROOFING	2							
513	20000	15150	EACH	WELDED STUD SHEAR CONNECTORS			15150					
513	95030	156	EACH	STRUCTURAL STEEL, MISC.: FATIGUE RETROFITTING OF EXISTING COVER PLATES			156					
514	00050	63076	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			63076					
514	00056	63076	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			63076					
514	00060	63076	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			63076					
514	00066	63076	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			63076					
514	00504	421	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			421					
514	10000	60	EACH	FINAL INSPECTION REPAIR			60					
516	11210	223	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			223					
516	13900	10	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	10							
516	45305	26	EACH	REFURBISH BEARING DEVICE, AS PER PLAN		26						3/25
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN								3/25
518	12200	16	EACH	SCUPPERS, INCLUDING SUPPORTS			16					
518	21200	18	CU YD	POROUS BACKFILL WITH FILTER FABRIC	18							
601	20001	486	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	486							4/25
898	10200	1393	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			1393					
898	10705	537	SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN				537				4/25
898	11000	231	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			231					

DESIGN AGENCY: BURGESS & NIPLE
 30 Pine Street, 15th Floor
 Cincinnati, OH 45202

DATE: 8-14-06
 REVIEWED: JSB
 STRUCTURE FILE NUMBER: 1300377

DESIGNED: XAC
 CHECKED: SJA

DRAWN: KML
 REVISED:

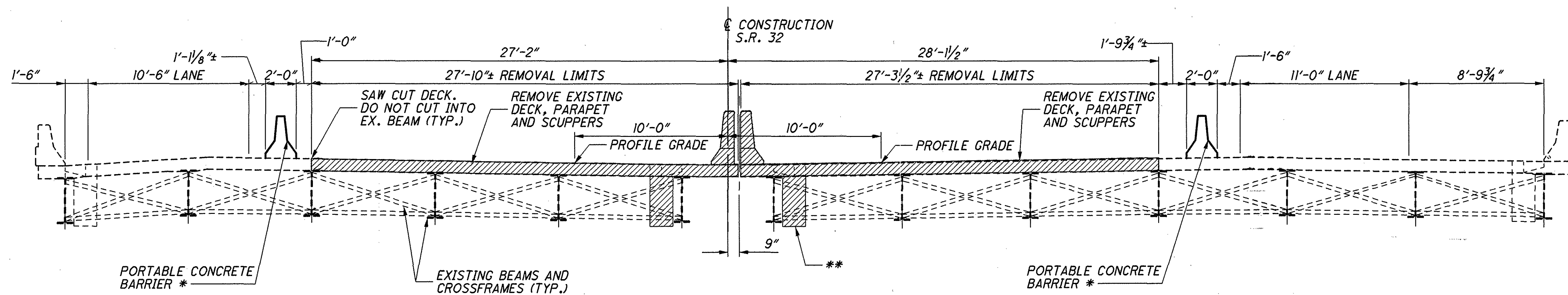
ESTIMATED QUANTITIES
 BRIDGE NO. CLE-32-0734
 OVER EAST FORK LITTLE MIAMI RIVER AND S.R.132

CLE-32-3.57/6.82
 / 6.94/7.32
 PID No. 24955

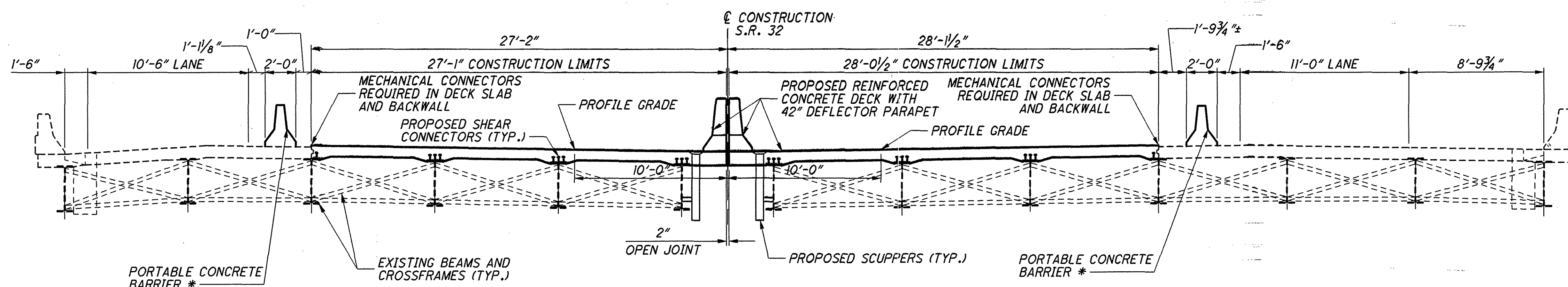
5 / 25

136
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734PC001.dgn 05-FEB-2007 9:04AM charvill



PHASE I REMOVAL



PHASE I CONSTRUCTION

PHASE I

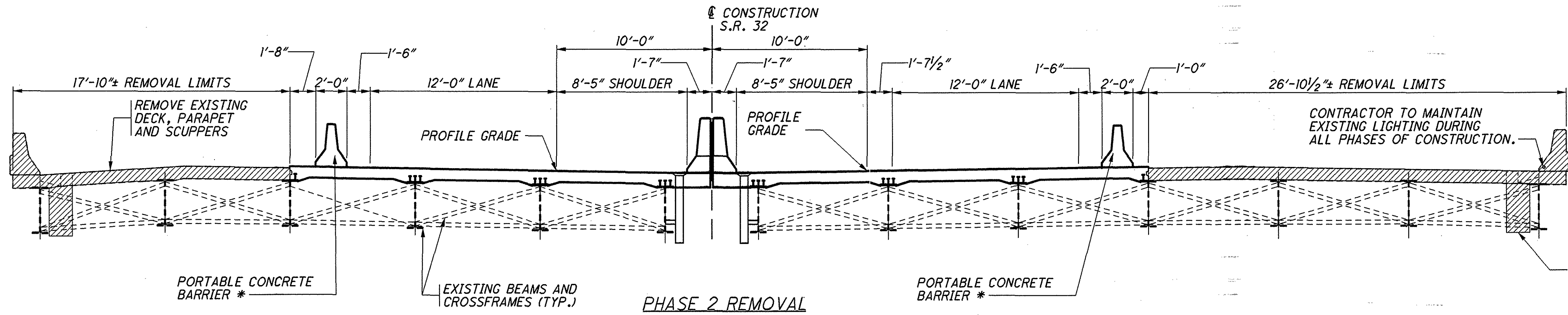
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.
- C) REMOVE PORTION OF EXISTING ABUTMENT BACKWALL TO 1'-0" BELOW APPROACH SLAB SEAT.
- D) CONSTRUCT PORTION OF ABUTMENT BACKWALL.
- E) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91. FOR DETAILS, SEE ROADWAY PLAN. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

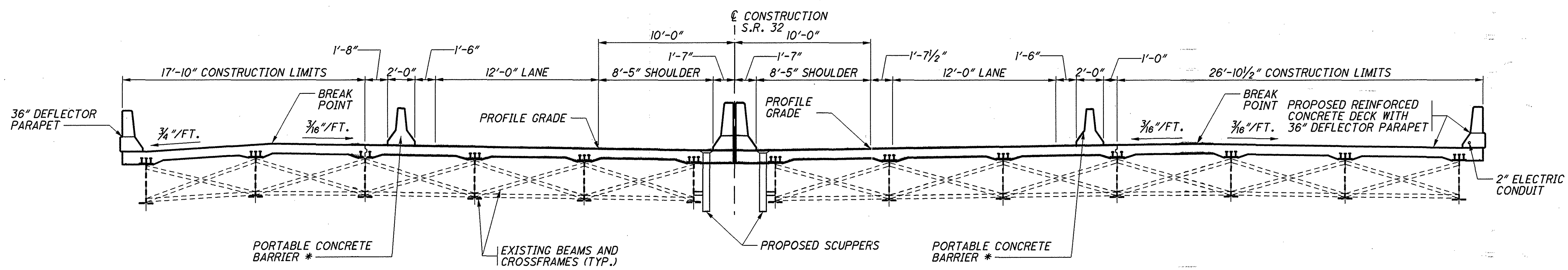
** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

DESIGN AGENCY BURGESS & NIPLE <small>300 Main Street, 20th Floor Cincinnati, Ohio 45202</small>	DATE 8-14-06	REVIEWED JSB	STRUCTURE FILE NUMBER 1300377
DRAWN KML	DESIGNED XAC	CHECKED SJA	REVISED
SEQUENCE OF CONSTRUCTION 1 BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132			
CLE-32-3.57/6.82 / 6.94/7.32		PID No. 24955	
6 / 25			
137 156			

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734PCF002.dgn 05-FEB-2007 9:05AM char.vll



PHASE 2 REMOVAL



PHASE 2 CONSTRUCTION

PHASE 2

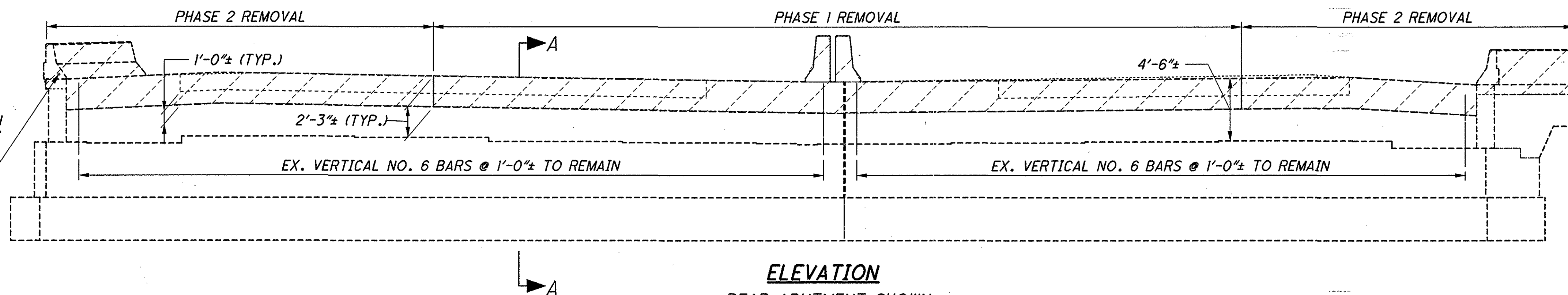
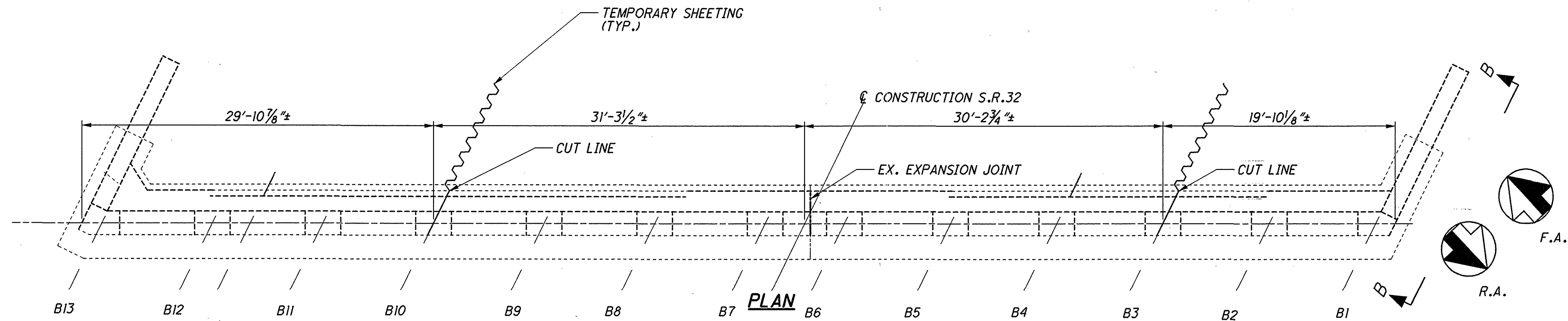
- A) INSTALL PORTABLE CONCRETE BARRIER AND MAINTAIN ONE LANE OF TRAFFIC AS SHOWN.
- B) REMOVE PORTION OF EXISTING SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.
- C) REMOVE PORTION OF EXISTING ABUTMENT BACKWALL TO 1'-0" BELOW APPROACH SLAB SEAT.
- D) CONSTRUCT PORTION OF ABUTMENT BACKWALL.
- E) CONSTRUCT PORTION OF SUPERSTRUCTURE AND APPROACH SLAB AS SHOWN.

* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED AT TWO LOCATIONS PER SEGMENT FOR LEFT BRIDGE AND FOUR LOCATIONS PER SEGMENT FOR RIGHT BRIDGE, AND SHALL CONFORM TO STANDARD DRAWING PCB-91. PARTIAL DEPTH ANCHORS REQUIRED FOR NEW SLAB. FILL THE HOLES LEFT IN THE BRIDGE DECK WITH GROUT 705.20. PORTABLE CONCRETE BARRIER AND ANCHORS SHALL BE INCLUDED WITH ITEM 622 FOR PAYMENT.

** REMOVE BARS CONNECTING SCUPPERS TO BEAMS AND GRIND THE NEWLY CUT SURFACE SMOOTH.

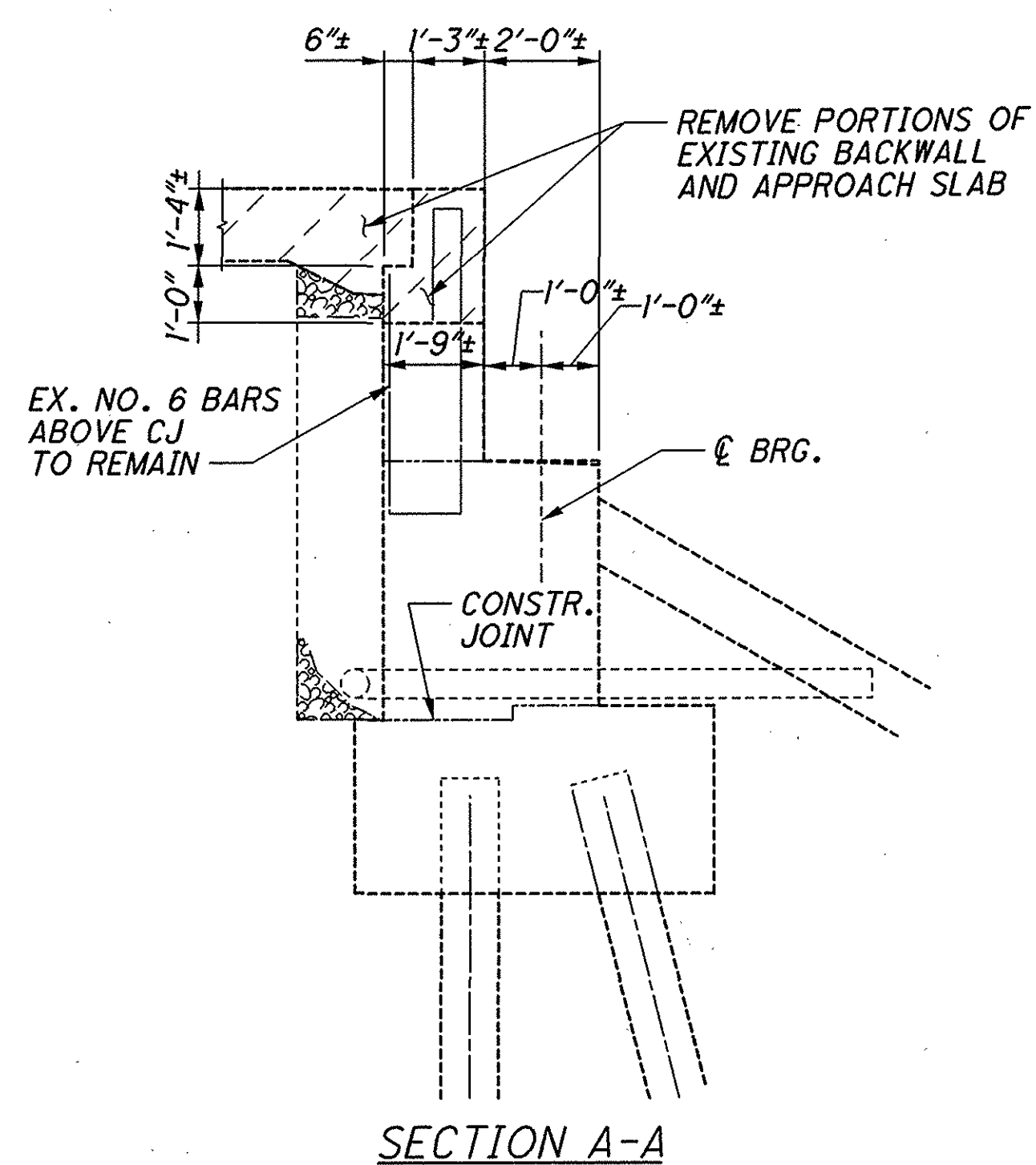
DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	STRUCTURE FILE NUMBER 1300377
REVIEWED JSB	DESIGNED XAC
DRAWN KML	CHECKED SJA
SEQUENCE OF CONSTRUCTION 2	
BRIDGE NO. CLE-32-0734	
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132	
CLE-32-3.57/6.82	PID No. 24955
6.94/7.32	
7/25	
138	
156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CRE001.dgn 05-FEB-2007 9:06AM charvill

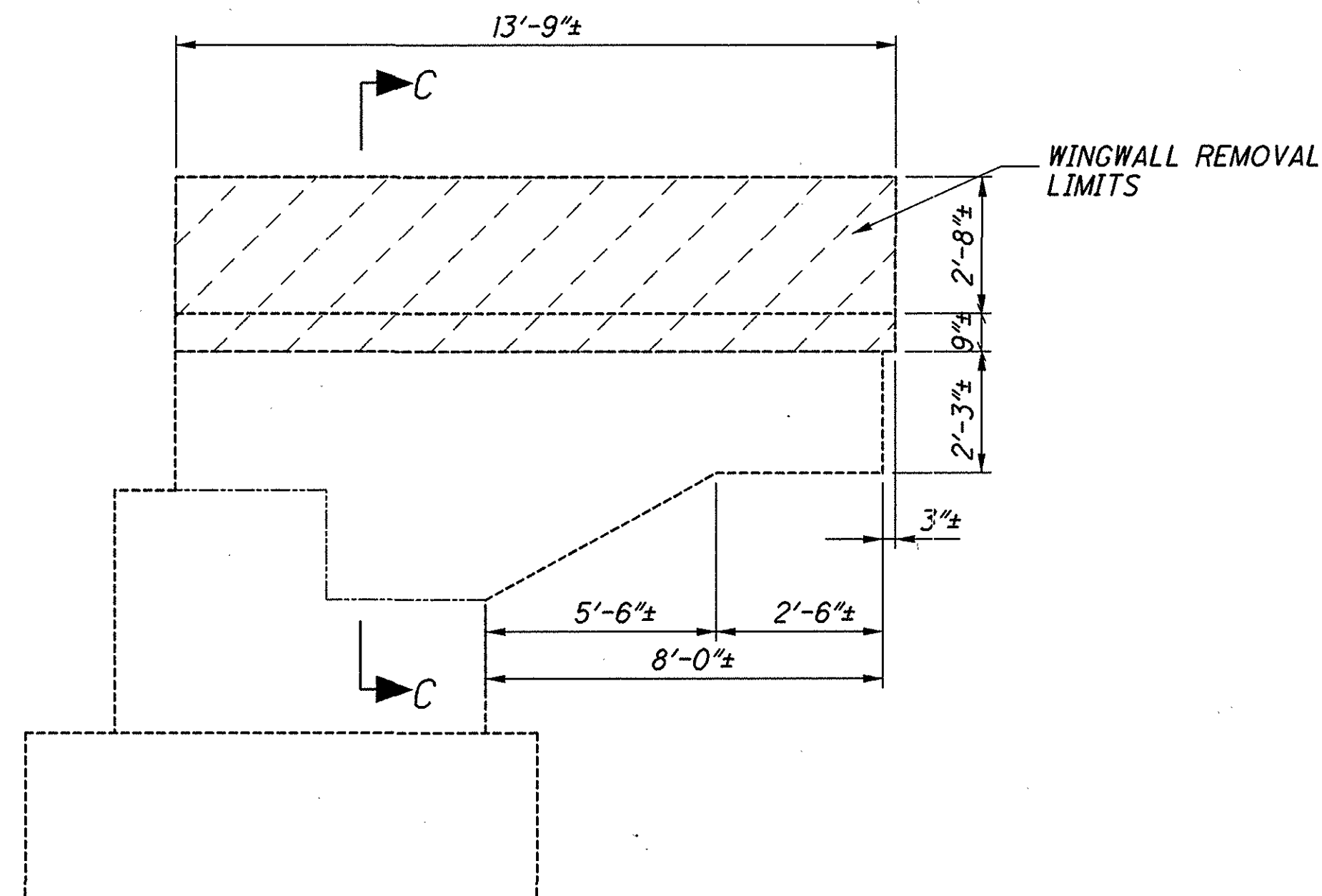


ELEVATION
REAR ABUTMENT SHOWN;
FORWARD ABUTMENT OPPOSITE HAND

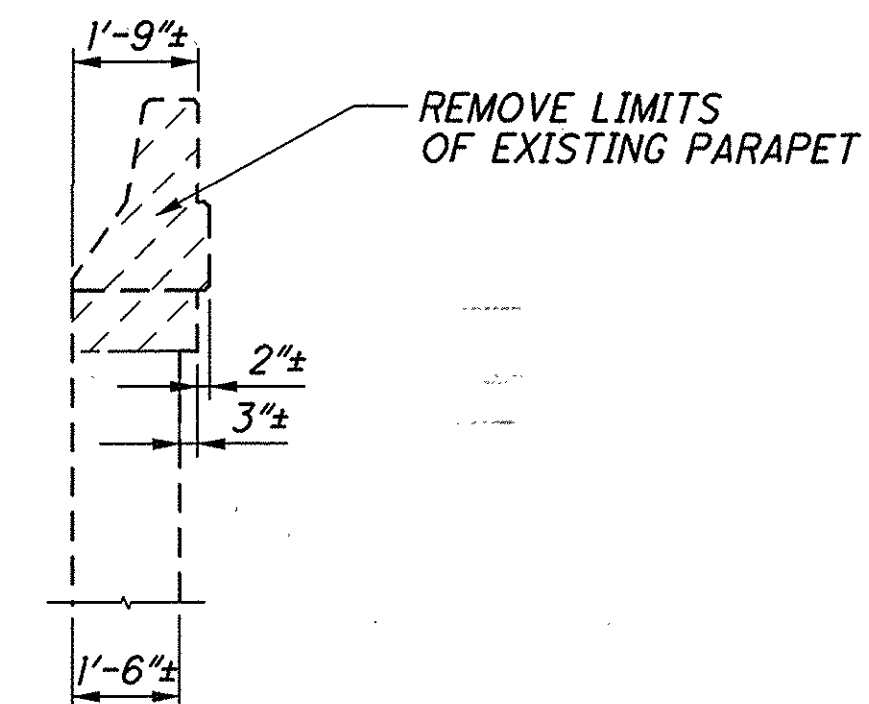
▨ - PORTIONS OF EXISTING STRUCTURE TO BE REMOVED.



SECTION A-A



VIEW B-B
RIGHT REAR WINGWALL SHOWN;
ALL OTHERS SIMILAR



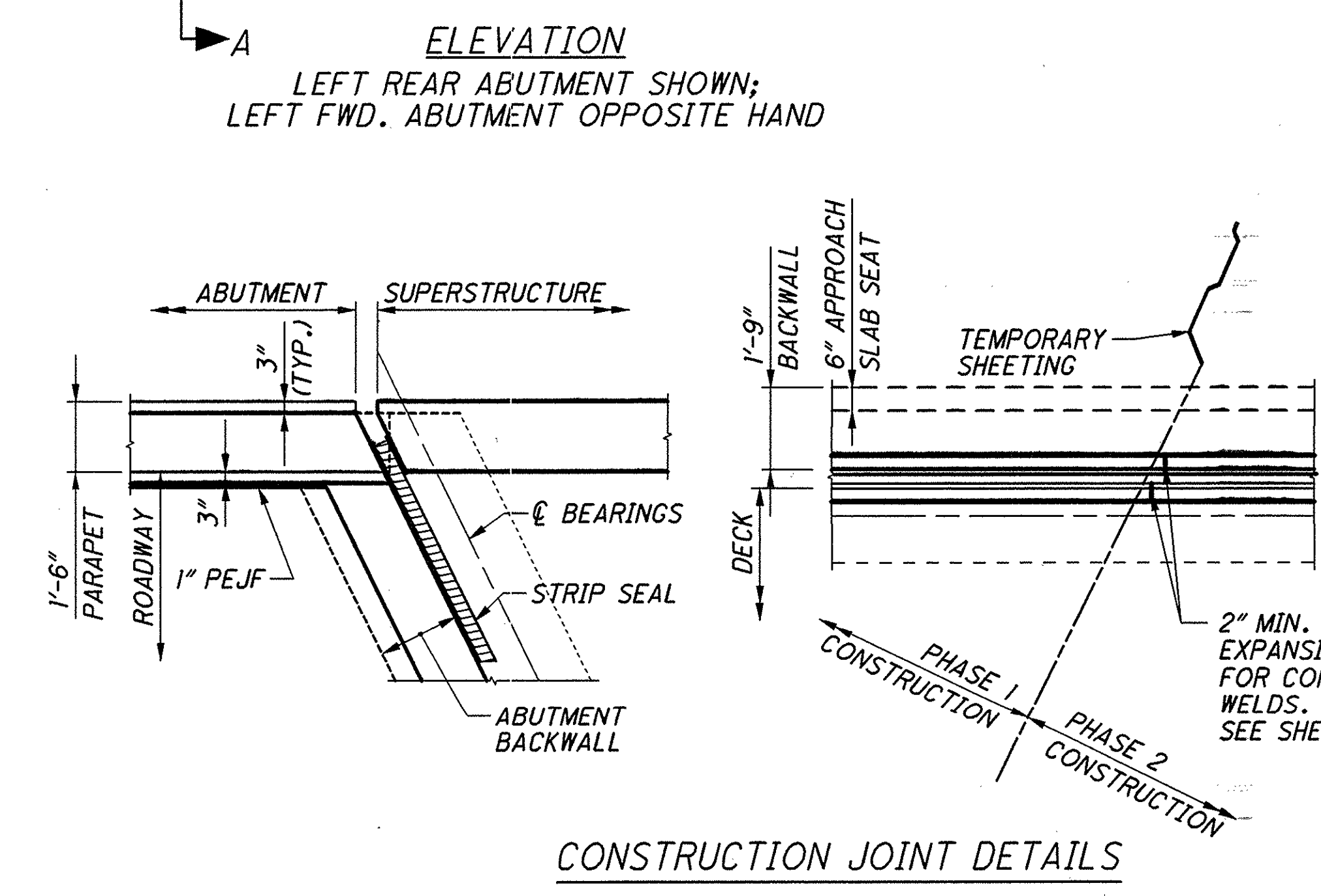
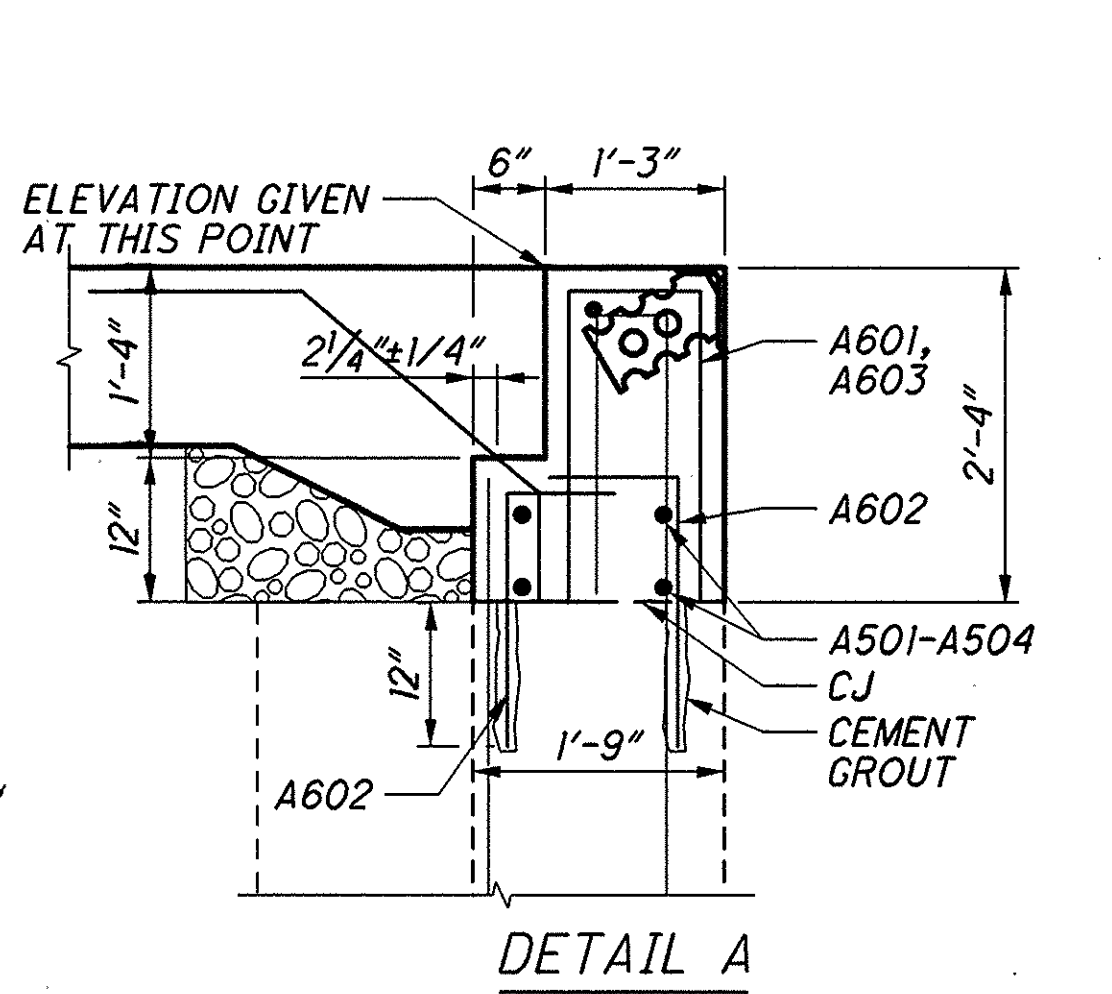
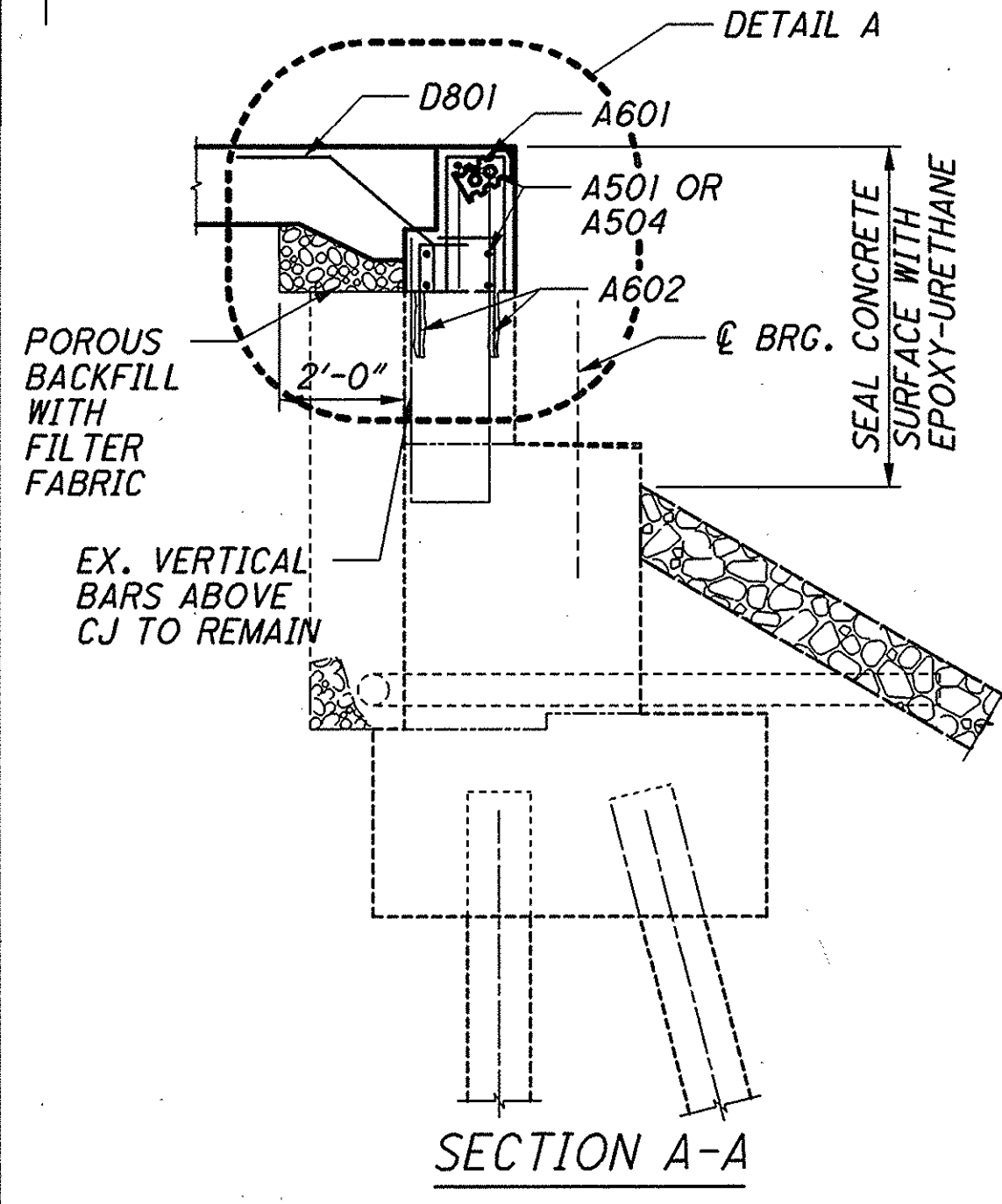
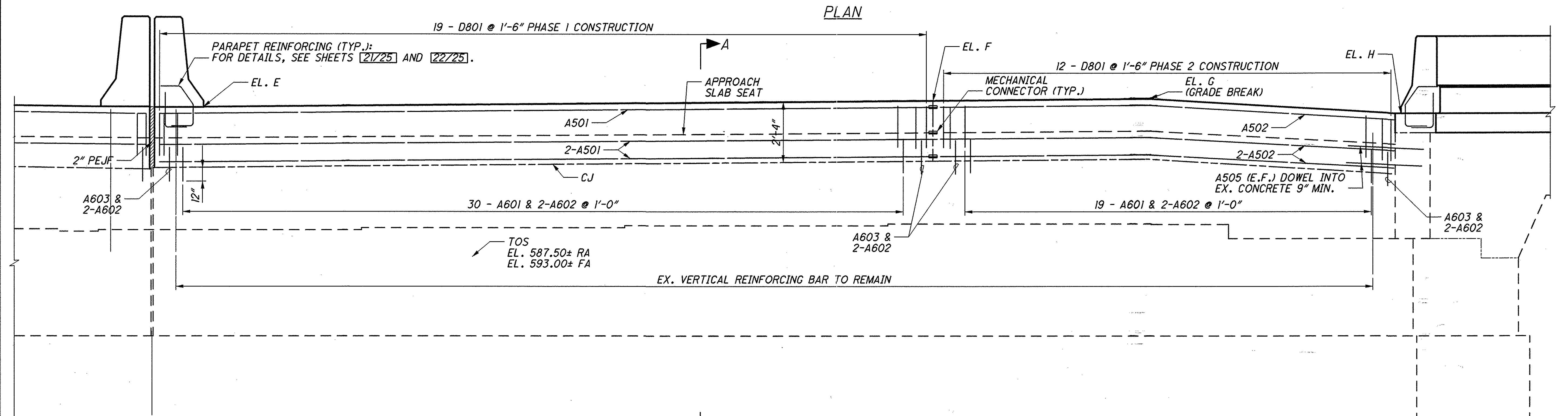
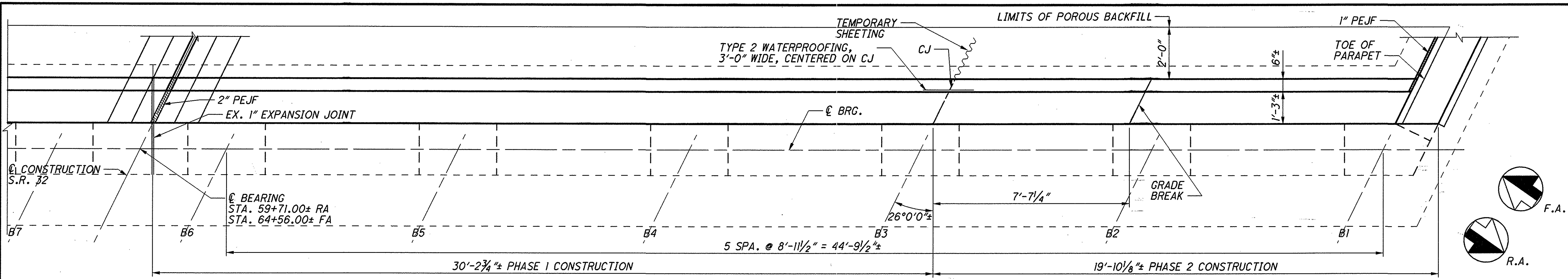
SECTION C-C

NOTES:

- TEMPORARY SHEETING SHALL BE PAID FOR UNDER ITEM 503 COFFER DAMS, CRIBS AND SHEETING.
- THE EXISTING REINFORCING STEEL THAT IS TO REMAIN AND CAN BE INCORPORATED INTO THE PROPOSED WORK SHALL NOT BE CUT.
- FOR PORTIONS OF STRUCTURE REMOVED NOTE AND EXISTING STRUCTURE VERIFICATION NOTE, SEE GENERALNOTES SHEET 3/25.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	DESIGNED XAC
REVIEWED JSB	CHECKED SJA
STRUCTURE FILE NUMBER 1300377	DESIGNED SJA
ABUTMENT REMOVAL DETAIL BRIDGE NO. CLE-32-0734 S.R. 32 OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132	
CLE-32-3.57/ 6.82/6.94/7.32 PID No. 24955	
8 / 25	
139 156	

I:\projects\CLE\sr032\06.82_PID2.4955\Consult\Final Tracings\000T_Mod\032_0734CAR001.dgn 05-FEB-2007 1:17PM charvill



- NOTES:**
- MIN. LAP LENGTH:
NO. 5 BAR = 2'-5"
 - 2'-0" THICK POROUS BACKFILL WITH FILTER FABRIC 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 A505 SHALL BE INSTALLED 1'-0" INTO EXISTING CONCRETE USING EPOXY GROUT PER 510. DOWEL HOLE WILL BE PAID FOR UNDER ITEM 510, DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT, AS PER PLAN. RESTEEL SHALL BE PAID FOR UNDER ITEM 509, EPOXY COATED REINFORCING, AS PER PLAN.

ELEVATION		
LOCATION	R.A.	F.A.
EL. E	593.64	598.75
EL. F	593.91	599.02
EL. G	593.98	599.09
EL. H	593.34	598.45

DESIGN AGENCY: **BURGESS & NIPLE**

DATE: 8-14-06

REVIEWED: JSB

STRUCTURE FILE NUMBER: 1300377

DRAWN: KML

DESIGNED: XAC

CHECKED: SJA

ABUTMENT DETAIL 1

BRIDGE NO. CLE-32-0734

OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132

CLE-32-3.57/

6.82/6.94/7.32

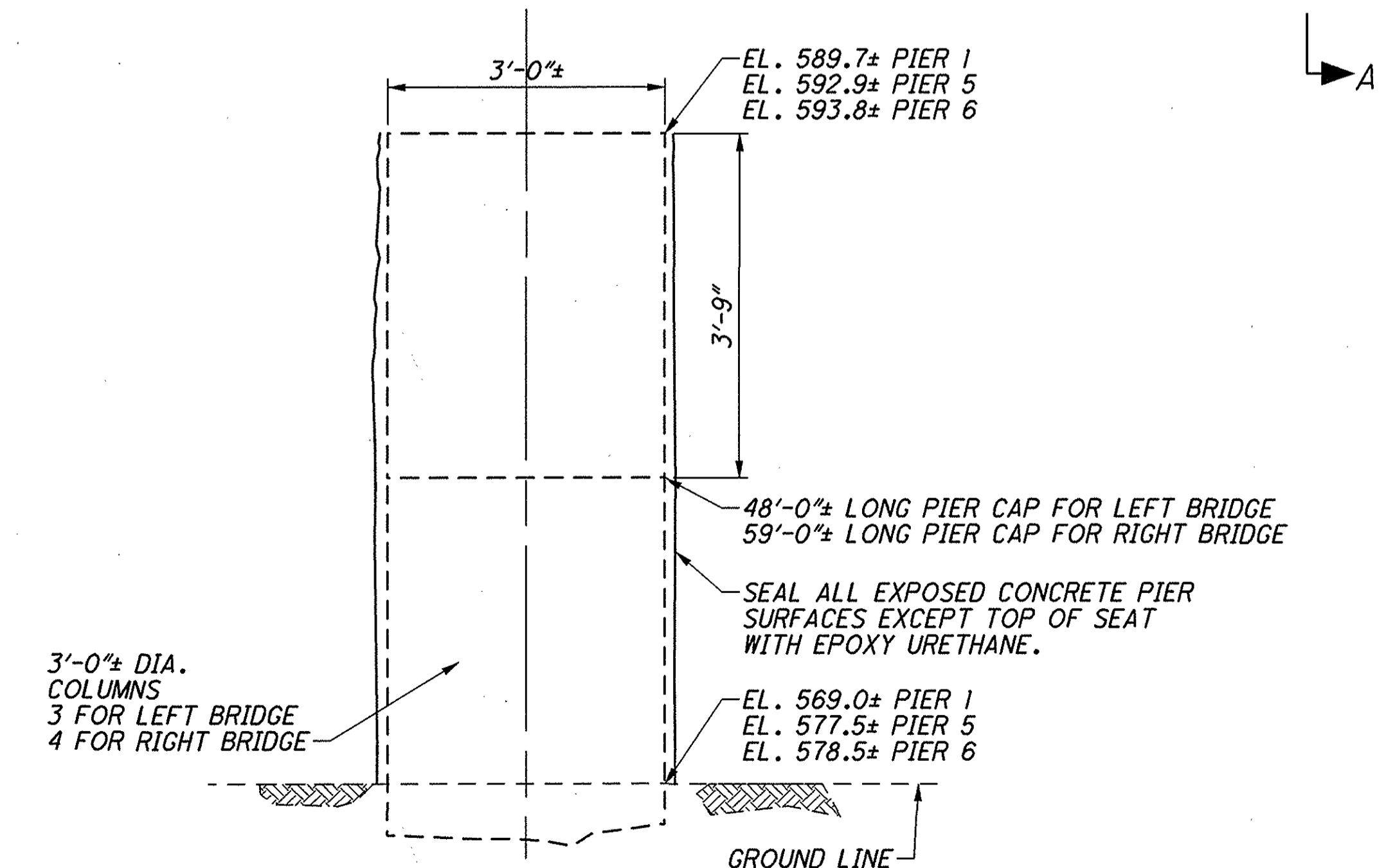
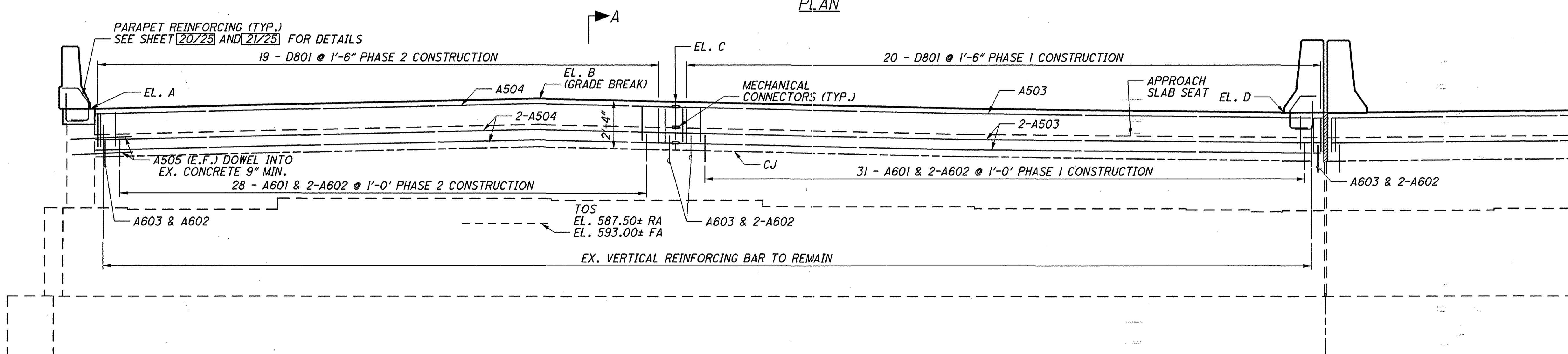
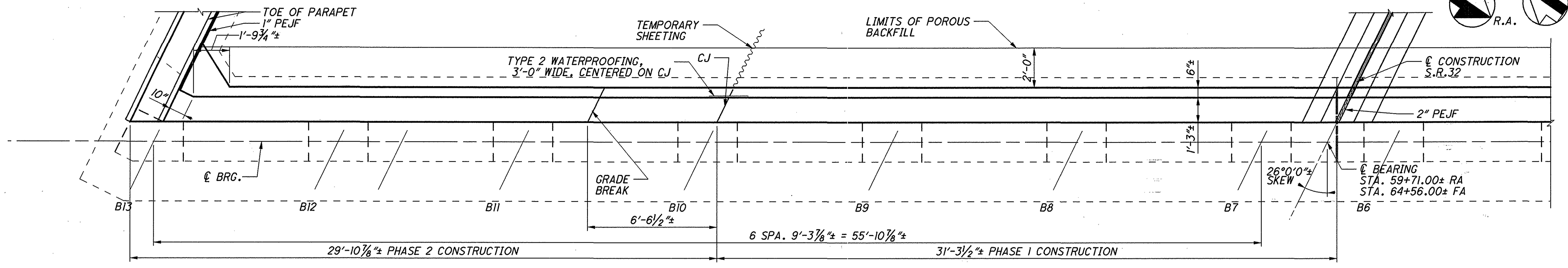
PID No. 24955

9 / 25

140

156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CAR002.dgn 05-FEB-2007 1:18PM charvill



ELEVATION		
LOCATION	R.A.	F.A.
EL. A	594.12	599.23
EL. B	594.33	599.43
EL. C	594.22	599.31
EL. D	593.66	598.75

- NOTES:
- FOR SECTION A-A, SEE SHEET 9/25.
 - FOR ADDITIONAL NOTES, SEE SHEET 9/25.

DESIGN AGENCY
BURGESS & NIPLE
30 Pine Street, 27th Floor
Cincinnati, Ohio 45202

DATE 8-14-06
REVIEWED JSB
DRAWN KML
DESIGNED XAC
CHECKED SJA

STRUCTURE FILE NUMBER 1300377

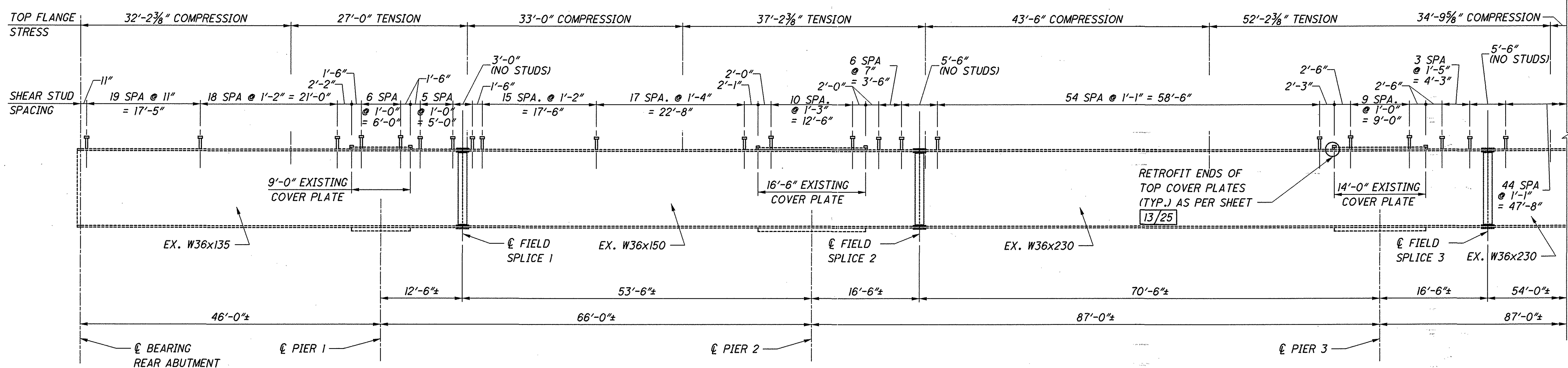
ABUTMENT DETAIL 2
BRIDGE NO. CLE-32-0734
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132

CLE-32-3.57/
6.82/6.94/7.32
PID No. 24955

10/25

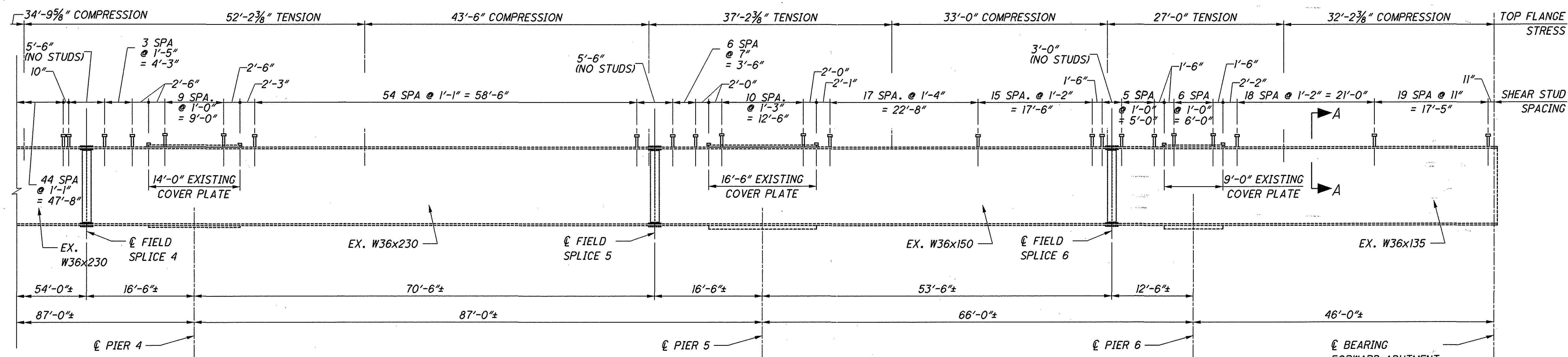
141
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CSD003.dgn 05-FEB-2007 1:21PM charvill



NOTES:

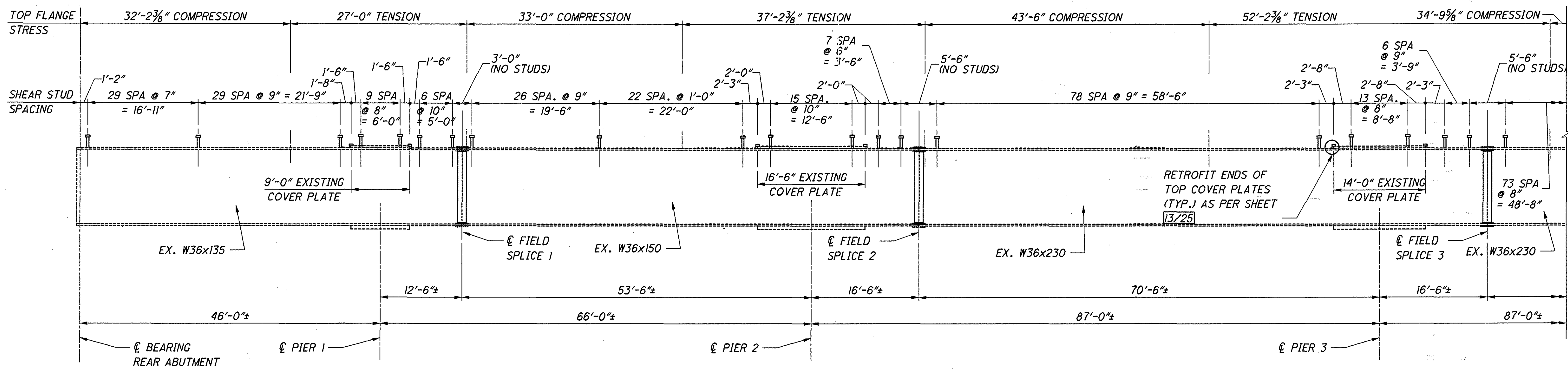
1. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
2. FOR SECTION A-A, SEE SHEET 13/25.
3. FOR SCUPPER DETAILS, SEE SHEET 14/25.



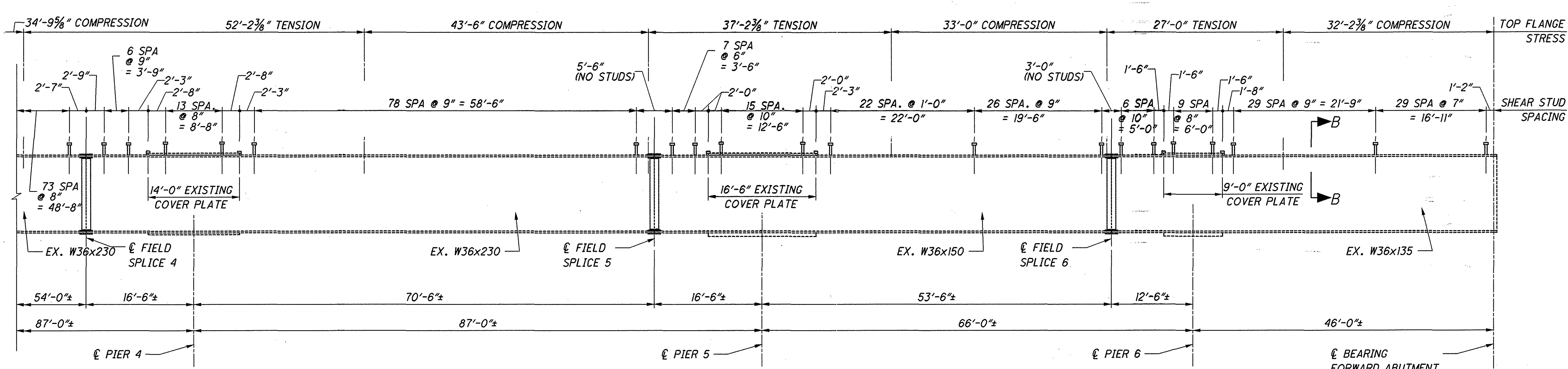
BEAM ELEVATION
TYPICAL EXCEPT BEAM 3 & 10

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300377	DRAWN KML
DESIGNED XAC	CHECKED SJA
BEAM ELEVATIONS 1 BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132	
CLE-32-3.57/6.82 /6.94/7.32 PID No. 24955	11 / 25 142 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CSD005.dgn 05-FEB-2007 1:38PM charvill



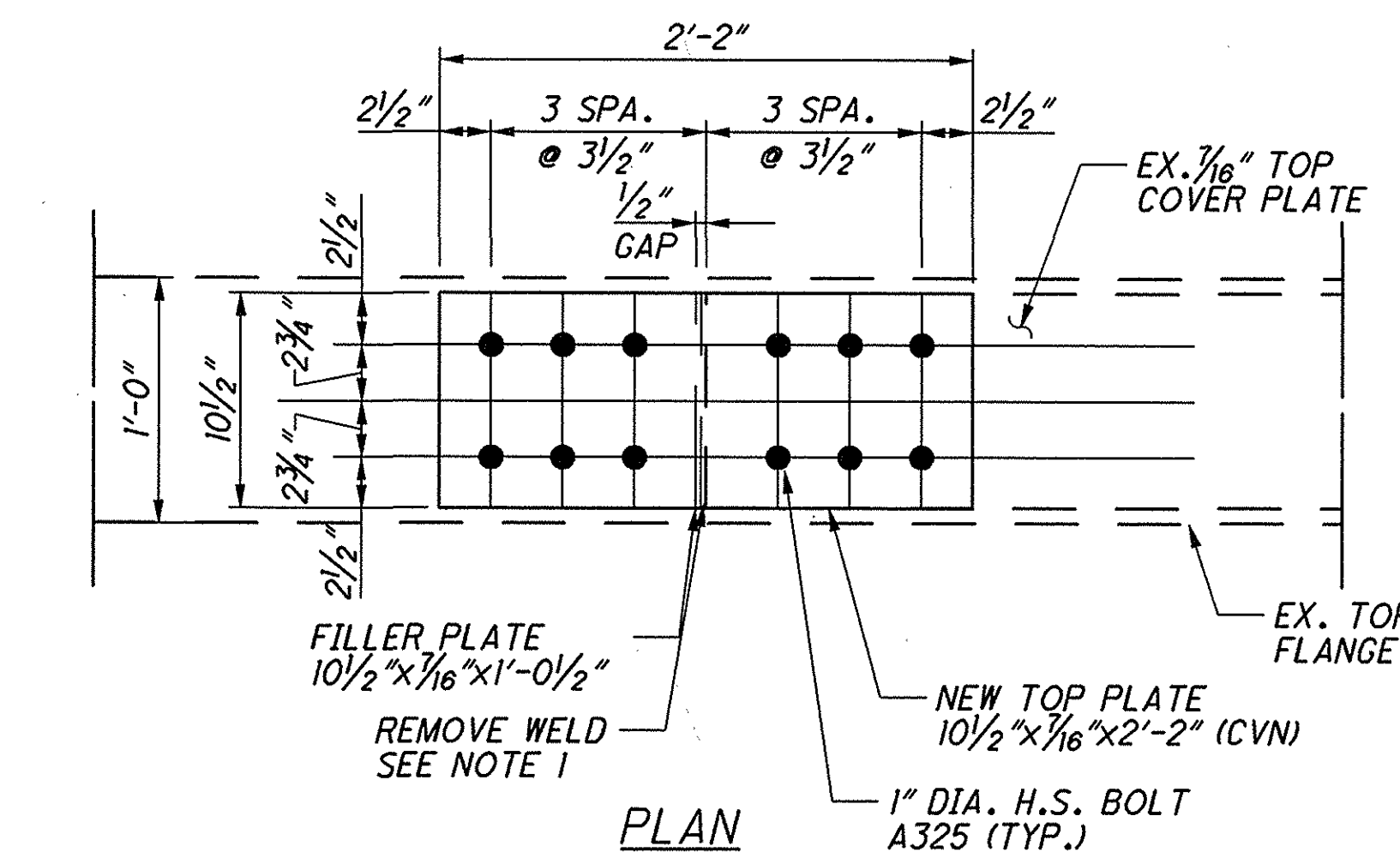
- NOTES:**
- WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
 - FOR SECTION B-B, SEE SHEET 13/25.



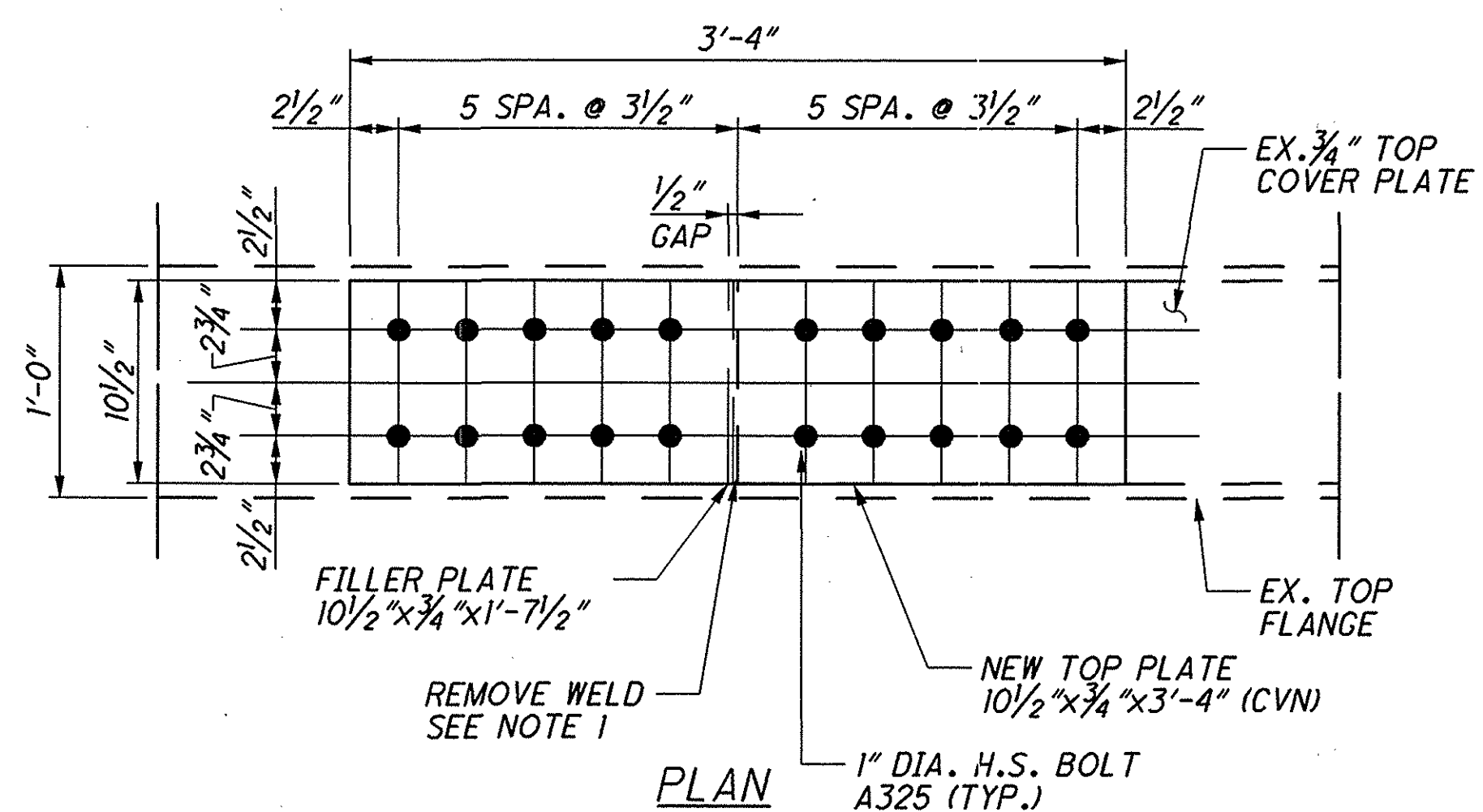
BEAM ELEVATION
BEAMS 3 & 10

DESIGN AGENCY	BURGESS & NIPLE
DATE	8-14-06
REVIEWED	JSB
DRAWN	KML
DESIGNED	XAC
CHECKED	SJA
STRUCTURE FILE NUMBER	1300377
BRIDGE NO.	CLE-32-0734
LOCATION	OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132
PROJECT NO.	CLE-32-3.57/6.82
DATE	6.94/7.32
PID NO.	24955
PAGE	12 / 25
SCALE	143 / 156

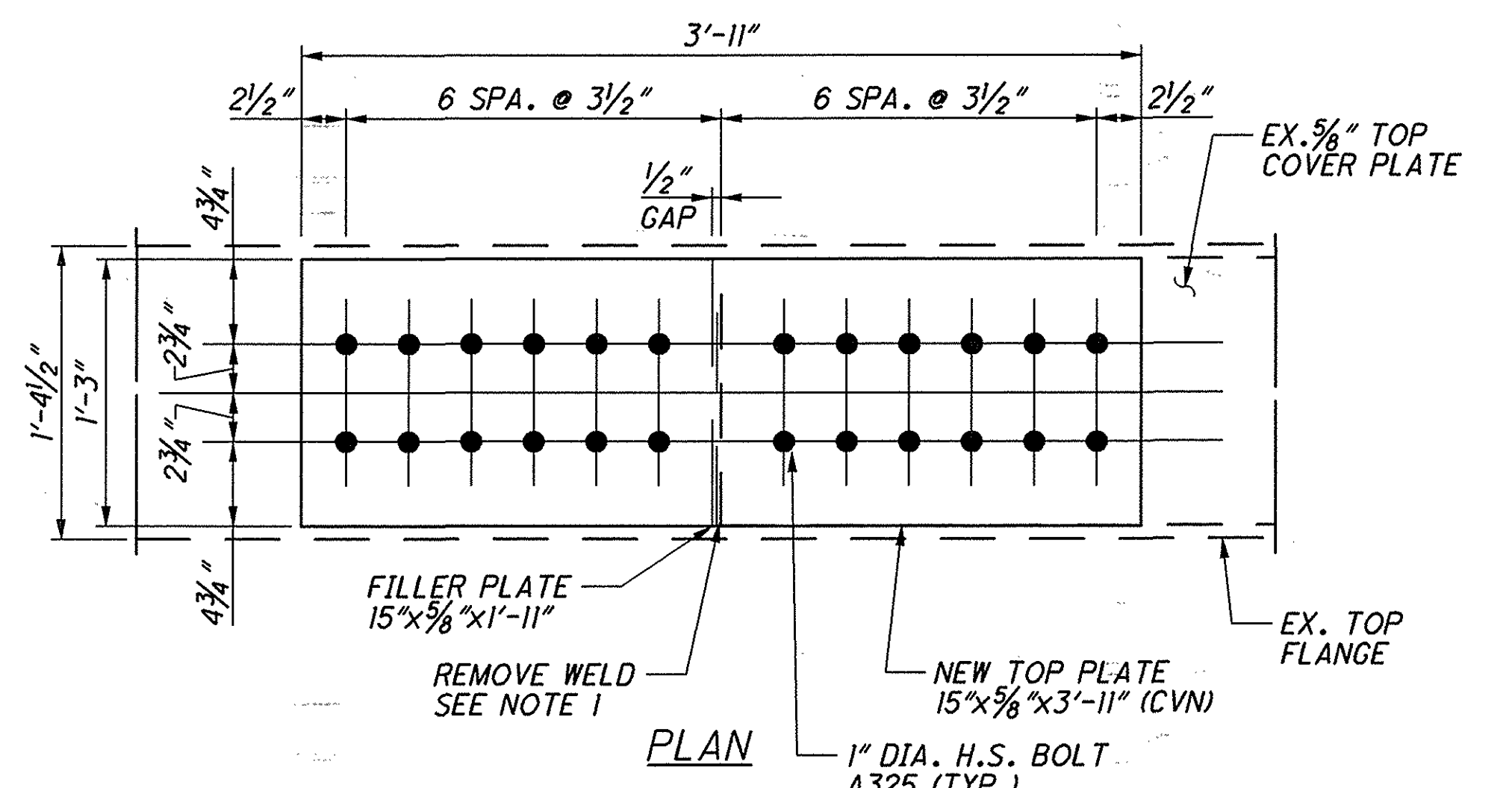
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CSD006.dgn 05-FEB-2007 1:50PM charvill



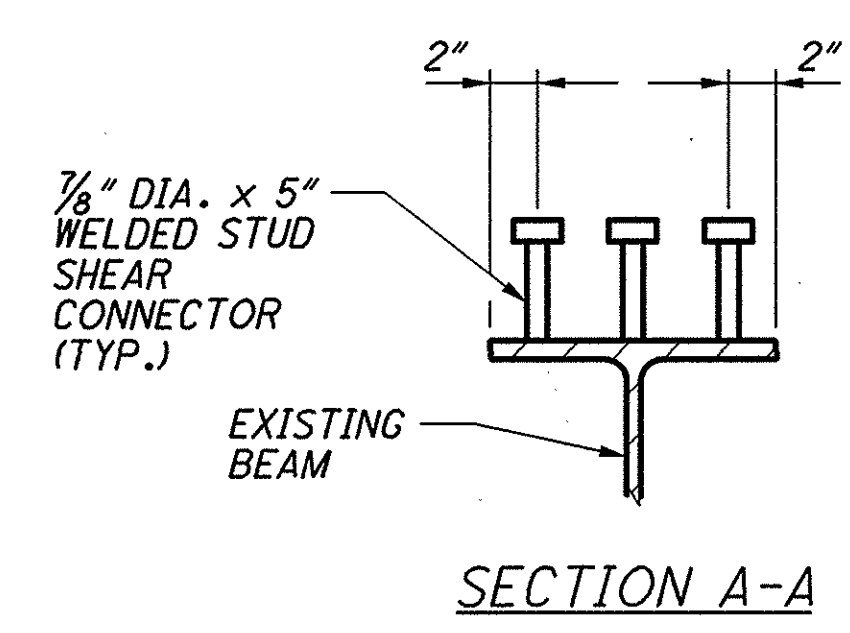
ELEVATION
 BOLTED COVERPLATE RETROFIT
 TYPICAL AT EACH END OF ALL
 TOP COVER PLATES OVER PIER 1 & 2.
 NOT REQUIRED FOR BOTTOM
 OVER PLATES



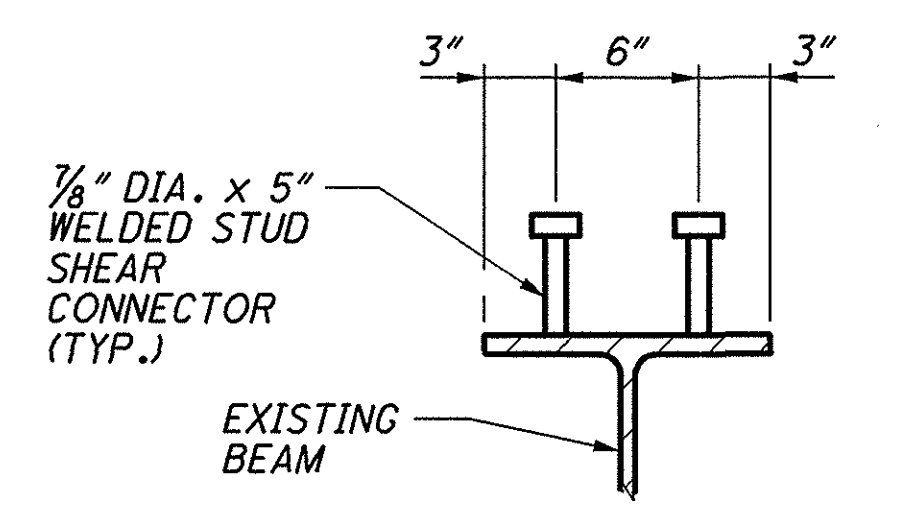
ELEVATION
 BOLTED COVERPLATE RETROFIT
 TYPICAL AT EACH END OF ALL
 TOP COVER PLATES OVER PIER 2 & 5.
 NOT REQUIRED FOR BOTTOM
 OVER PLATES



ELEVATION
 BOLTED COVERPLATE RETROFIT
 TYPICAL AT EACH END OF ALL
 TOP COVER PLATES OVER PIER 3 & 4.
 NOT REQUIRED FOR BOTTOM
 OVER PLATES



SECTION A-A



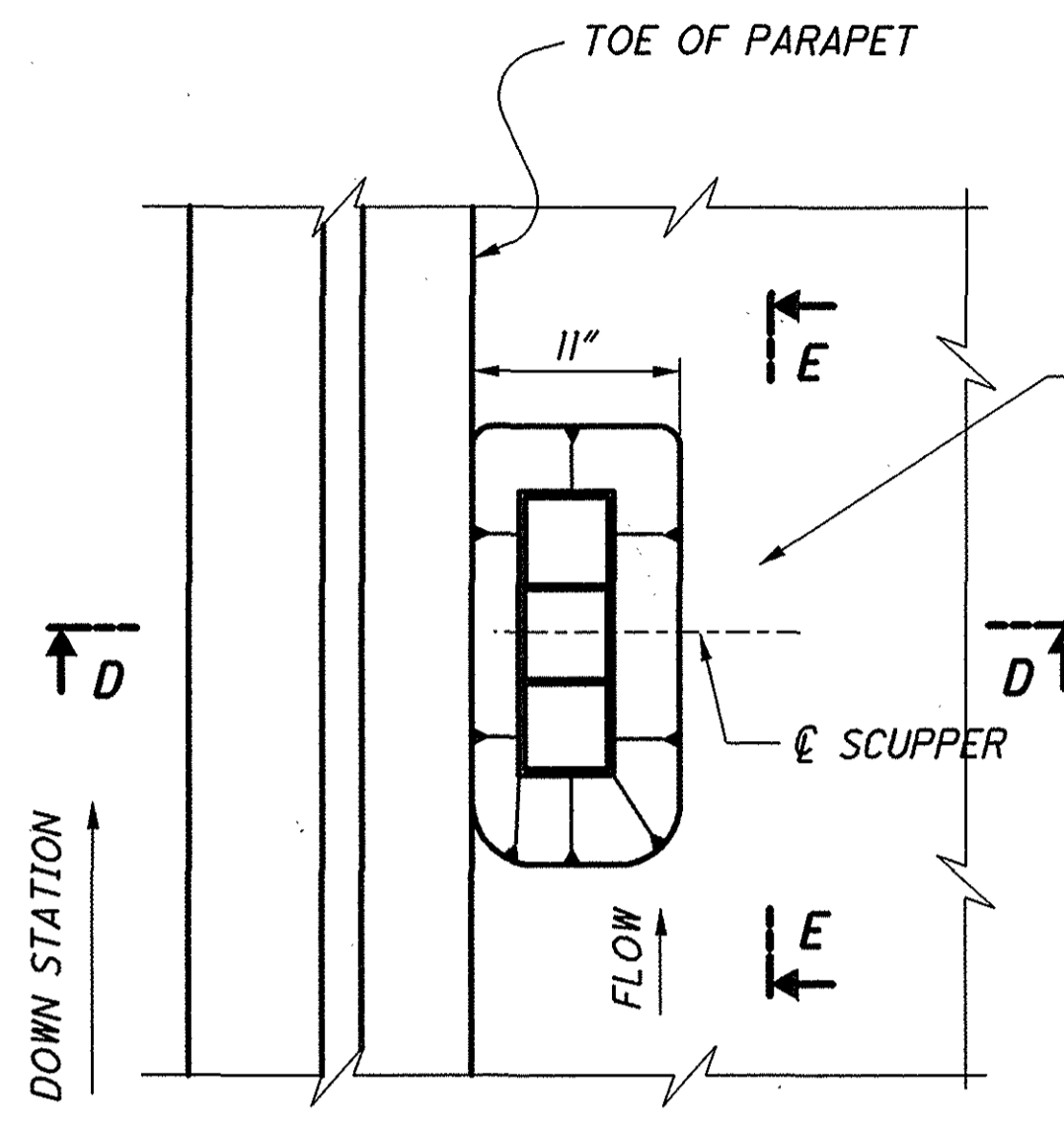
SECTION B-B
 (BEAMS 3 & 10 ONLY)

NOTES:

1. THE TRANSVERSE END WELD BETWEEN EXISTING COVERPLATE AND TOP FLANGE SHALL BE REMOVED BY GRINDING. BLAST CLEAN THE EXPOSED SURFACE AND SEAL WITH POLYURETHANE CAULK.
2. ALL BOLTS ARE 1"φ A325 BOLTS WITH 1/16" HOLE.
3. ALL MATERIAL AND LABOR FOR COVERPLATE RETROFIT SHALL BE PAID UNDER ITEM 513, STRUCTURAL STEEL MISC.
4. WHERE A SHAPE OF PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.

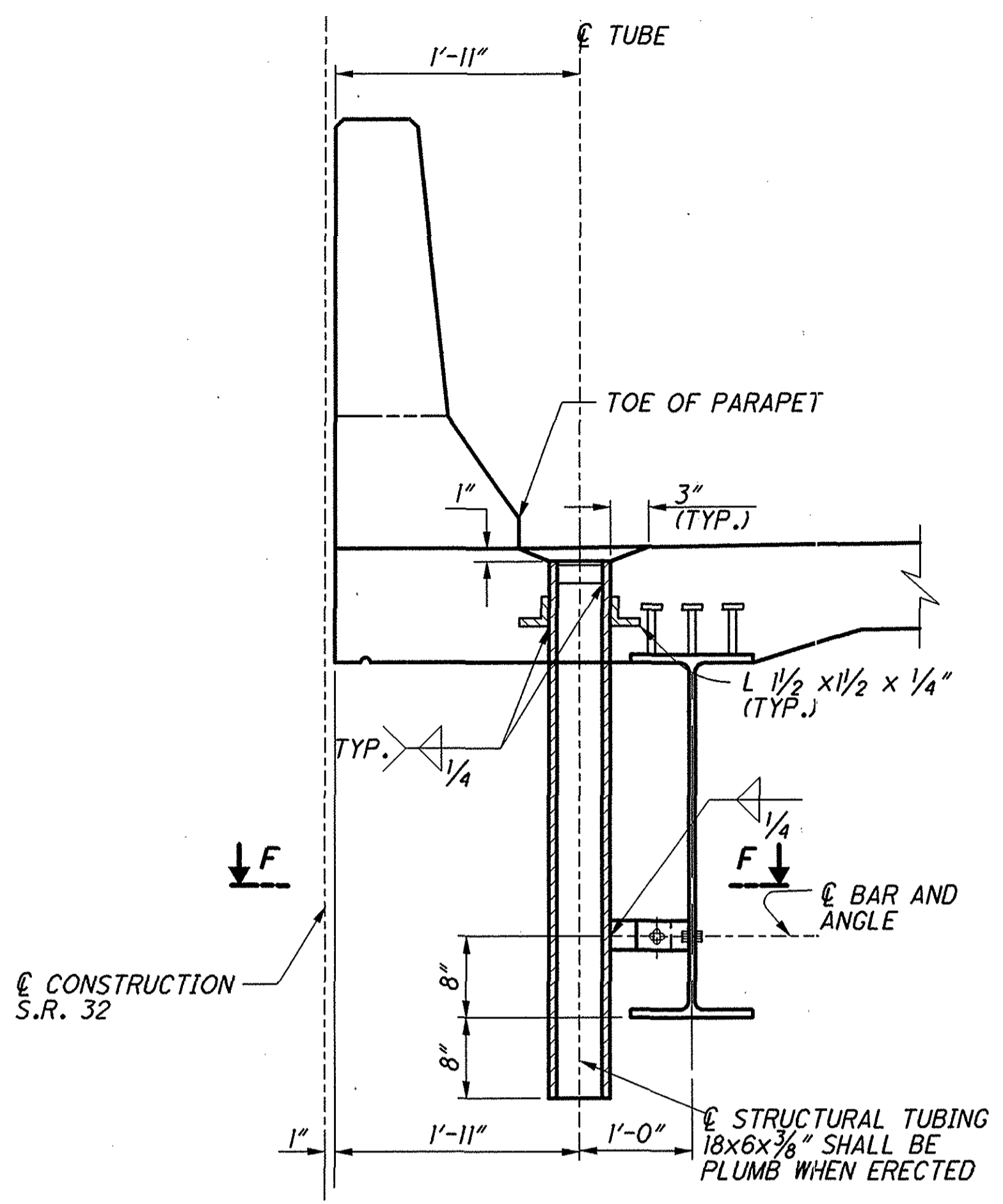
DESIGNED XAC		DATE 8-14-06	DESIGN AGENCY BURGESS & NIPLE
DRAWN KML		REVIEWED JSB	DATE 8-14-06
CHECKED SJA		STRUCTURE FILE NUMBER 1300377	DATE 8-14-06
REVISIONS		FILE NUMBER 1300377	DATE 8-14-06
COVER PLATE RETROFIT DETAILS			
BRIDGE NO. CLE-32-0734			
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132			
CLE-32-3.57/6.82		/ 6.94/7.32	
PID No. 24955			
13 / 25			
144			
156			

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CSD009.dgn 05-FEB-2007 1:52PM charvill

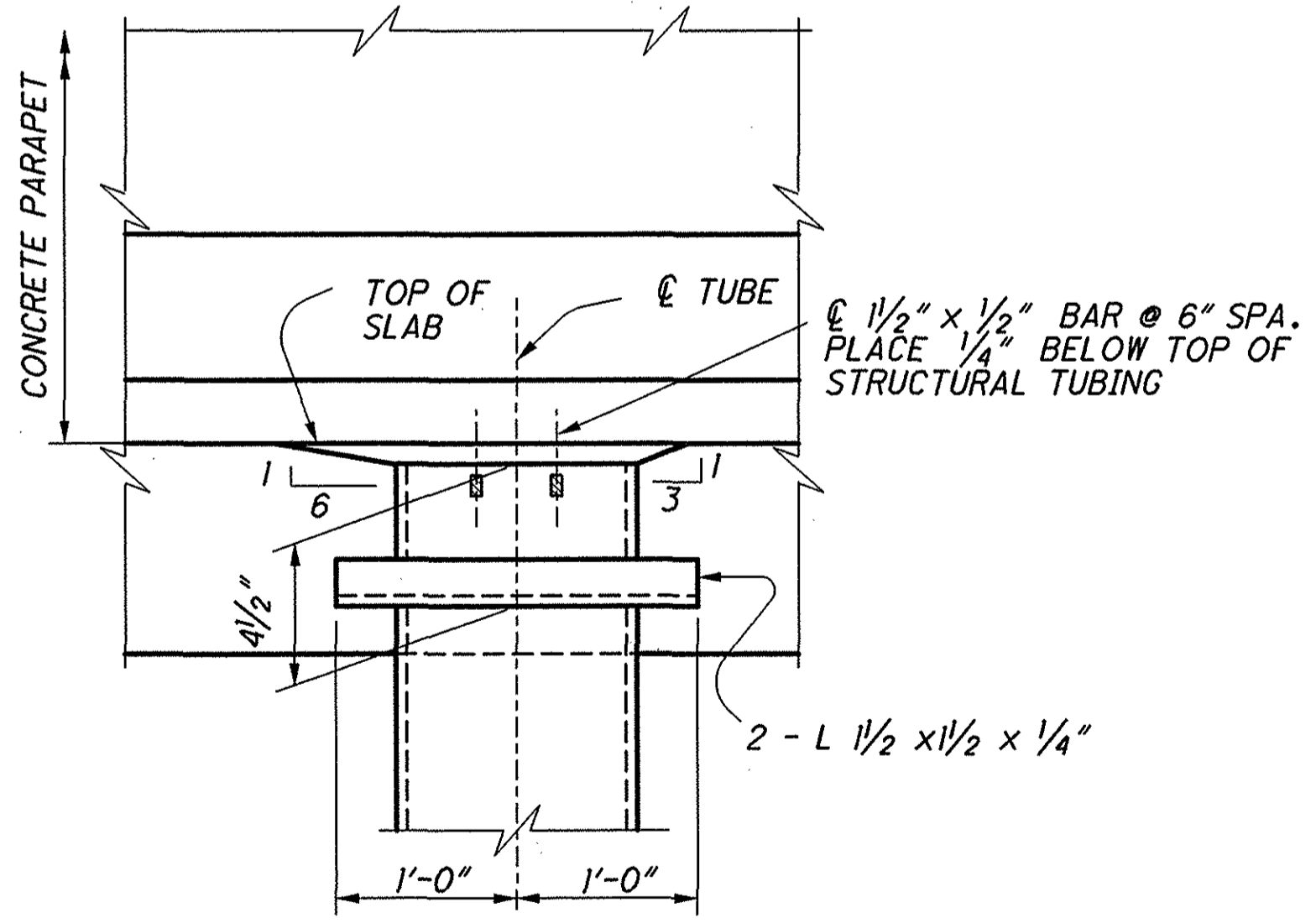


PLAN
LEFT BRIDGE MEDIAN SHOWN;
RIGHT BRIDGE MEDIAN OPPOSITE HAND
TOTAL OF 16 SCUPPERS

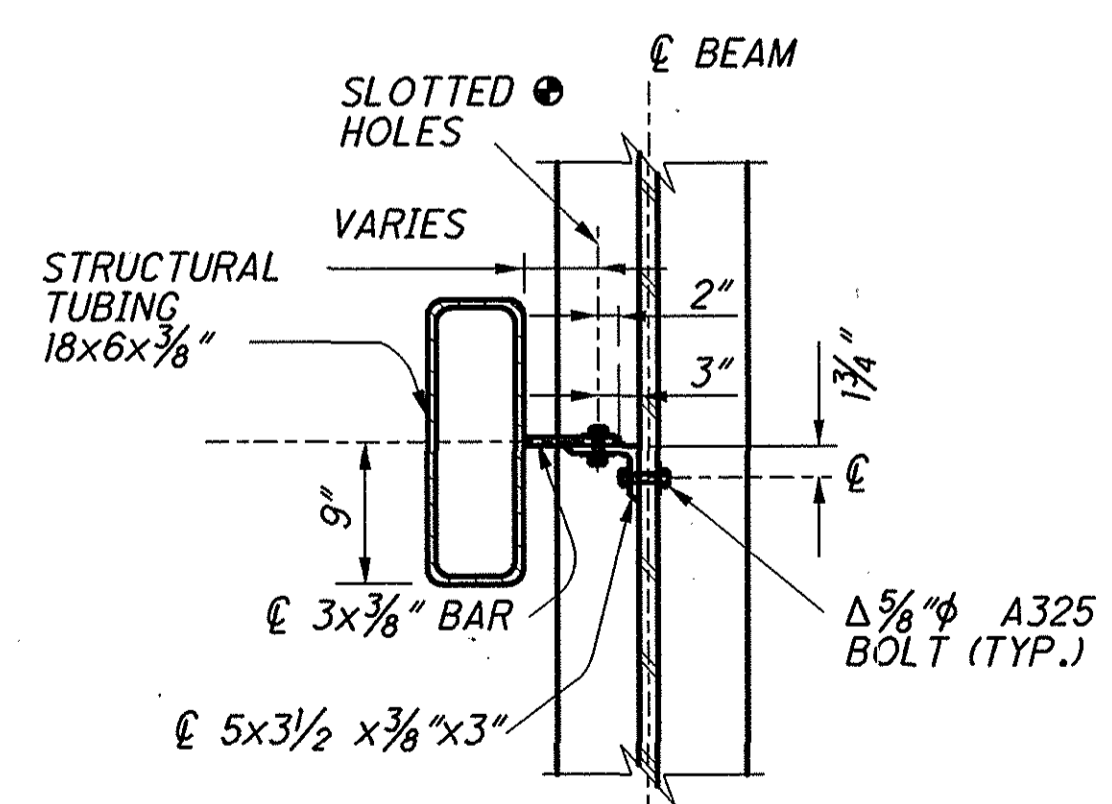
S403, TYP. OF 2
EACH SCUPPER,
TOTAL OF 32 EACH.
FOR MORE DETAILS,
SEE SUPPLEMENTAL
REINFORCEMENT
NOTE.



SECTION D-D



SECTION E-E



SECTION F-F

⊙ - AS PER FASTENER NOTE 1.
Δ - AS PER FASTENER NOTE 2.

SCUPPERS:

SUPPLEMENTAL REINFORCEMENT: REINFORCE THE CONCRETE DECK AT THE TWO SCUPPER CORNERS OPPOSITE THE CURB LINE WITH ONE #4 BAR, 3'-0" LONG ORIENTED AT 45° TO THE LONG AXIS OF THE SCUPPER AND LOCATED JUST BELOW THE TRANSVERSE BARS IN THE TOP MAT OF STEEL.

MATERIAL: FURNISH STRUCTURAL STEEL TUBING ACCORDING TO 707.10. TOUGHNESS TESTING IN ACCORDANCE WITH ASTM E436 IS NOT REQUIRED. ALL OTHER MATERIAL SHALL BE ASTM A709 GRADE 36, 50 OR 50W. GALVANIZE SUPPORT ANGLES, BARS, BOLTS, NUTS AND WASHERS IN ACCORDANCE WITH 711.02

DECK CROWN/SUPERELEVATION: CUT THE TOP OF THE STEEL TUBING SQUARE FOR CROSS SLOPES 1/2" PER FOOT AND LESS. CUT THE TOP OF THE TUBING PARALLEL TO THE DECK SURFACE FOR CROSS SLOPES GREATER THAN 1/2" PER FOOT.

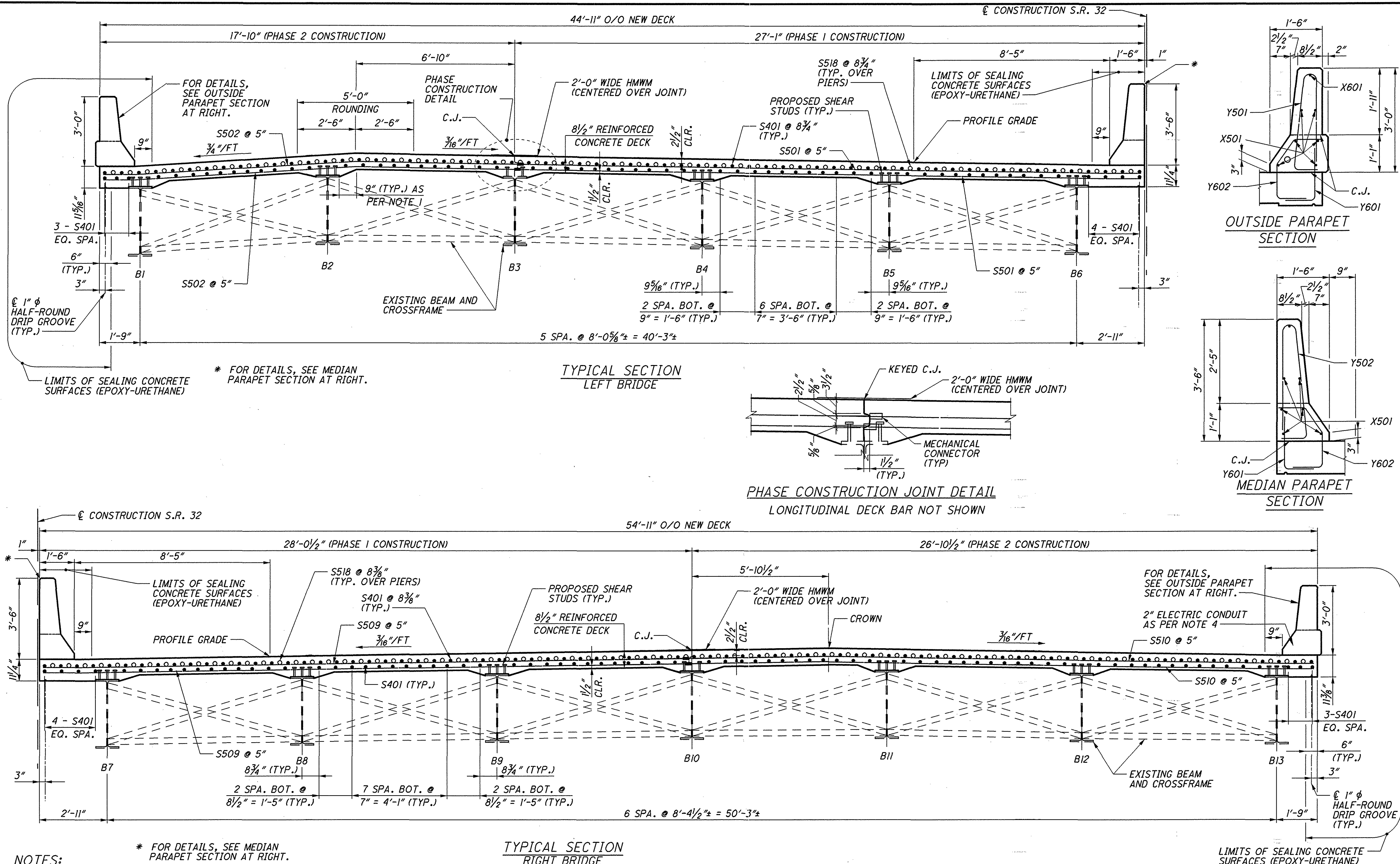
FASTENER NOTES:

1. THE SIZE OF THE SLOTTED HOLES SHALL BE 1/8" x 1 9/16". THE SLOT SHALL BE HORIZONTAL IN THE 3" x 3/8" BAR AND VERTICAL IN THE ANGLE. BOLTS SHALL BE 5/8" DIAMETER A325 TYPE 1, GALVANIZED, WITH HEX NUT AND TWO WASHERS. TIGHTEN ACCORDING TO 513.
2. THE BOLTS SHALL BE 5/8" DIAMETER A325 TYPE 1 GALVANIZED FOR GALVANIZED, METALIZED OR PAINTED STRUCTURES OR A325 TYPE 3 FOR BARE WEATHERING STEEL STRUCTURES. EACH ASSEMBLY SHALL INCLUDE A BOLT, NUT AND TWO WASHERS. TIGHTEN ACCORDING TO 513. FOR WEATHERING STEEL STRUCTURES, PROVIDE A 3 1/2" x 3 1/2" x 1/8" PREFORMED BEARING PAD, 711.21, WITH A 5/16" DIAMETER HOLE, BETWEEN THE BEAM WEB AND THE ANGLE. AFTER THE DECK CONCRETE HAS BEEN POURED, FIELD DRILL THE 1/8" DIAMETER HOLE IN THE WEB.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR THE SUPPLEMENTAL REINFORCEMENT DESCRIBED ABOVE SEPARATELY UNDER ITEM 509.

DESIGN AGENCY		DATE	
BURGESS & NIPLE		8-14-06	
DESIGNED	DRAWN	REVIEWED	DATE
XAC	KML	JSB	8-14-06
CHECKED	REVISED	STRUCTURE FILE NUMBER	
SJA		1500377	
SCUPPER DETAILS			
BRIDGE NO. CLE-32-0734			
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132			
CLE-32-3.57/6.82		PID No. 24955	
/ 6.94/7.32			
14 / 25			
145			
156			

projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT Mod\032_0734CIS002.dgn 06-FEB-2007 8:02AM charvill



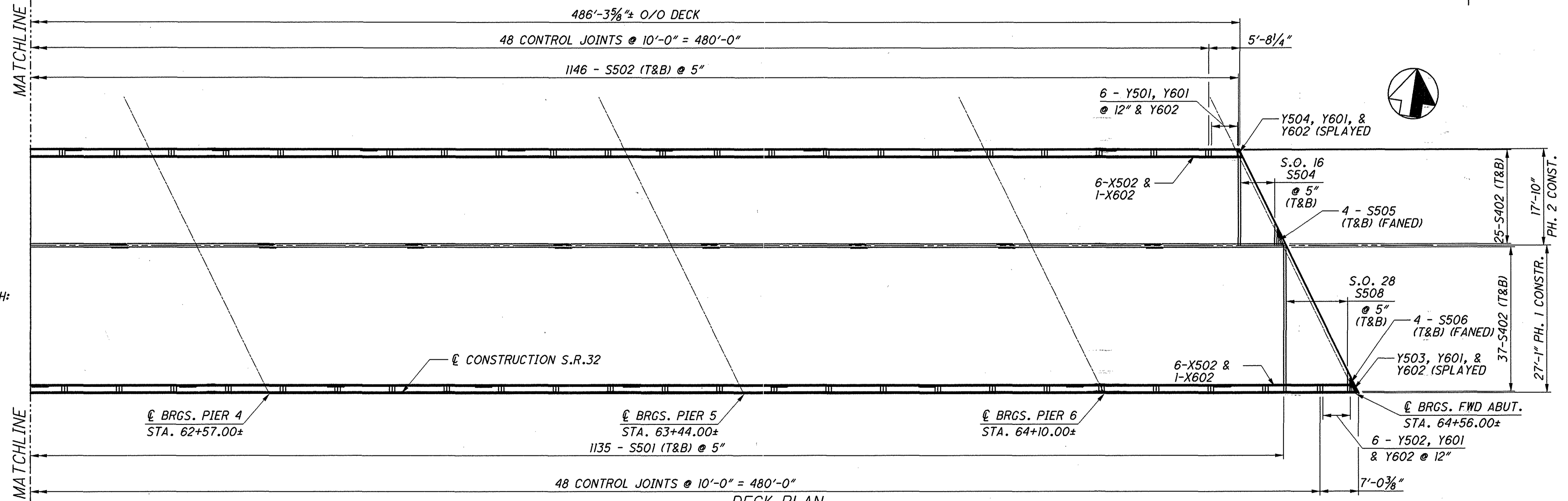
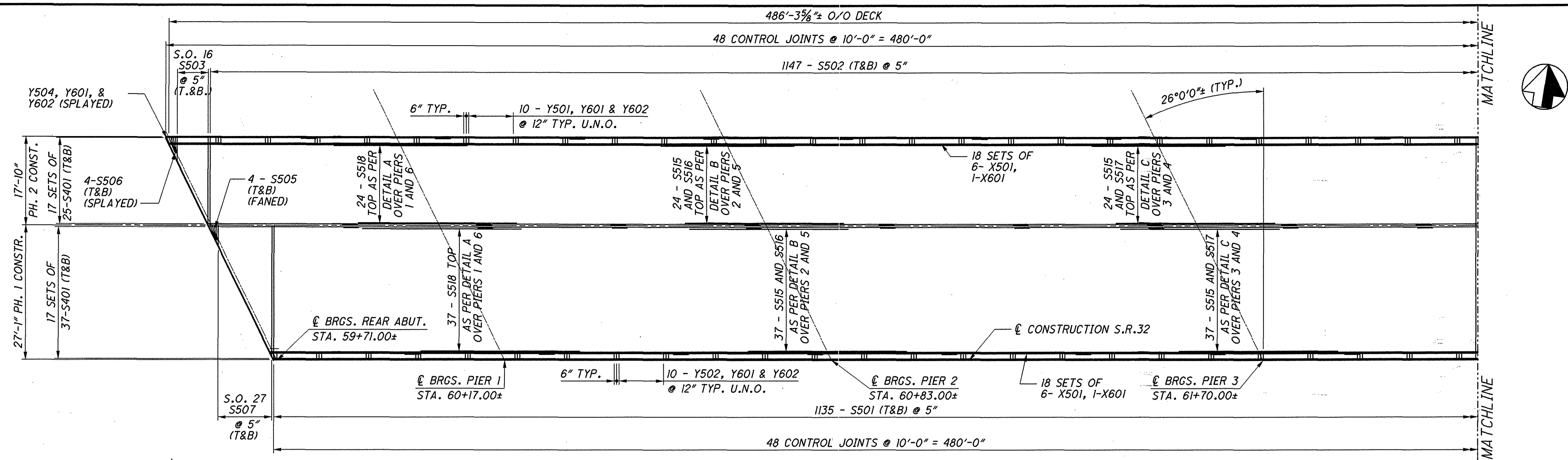
NOTES:

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A MINIMUM HAUNCH THICKNESS OF 2 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES.
2. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ± 3 INCHES.
3. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE TOP OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

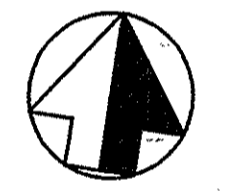
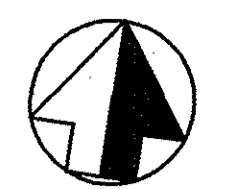
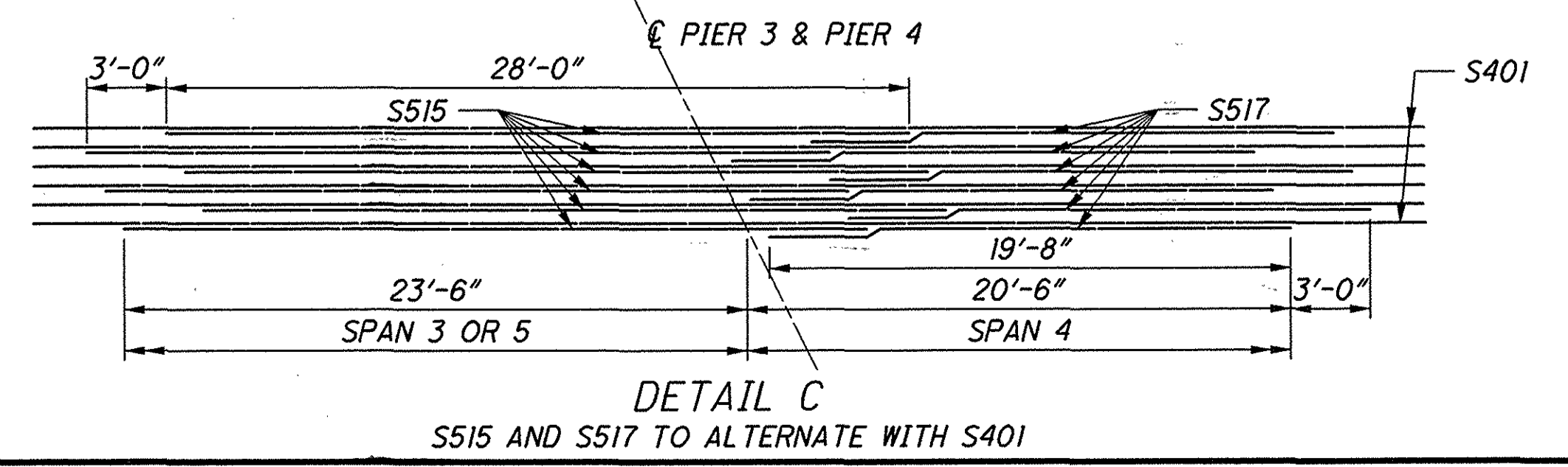
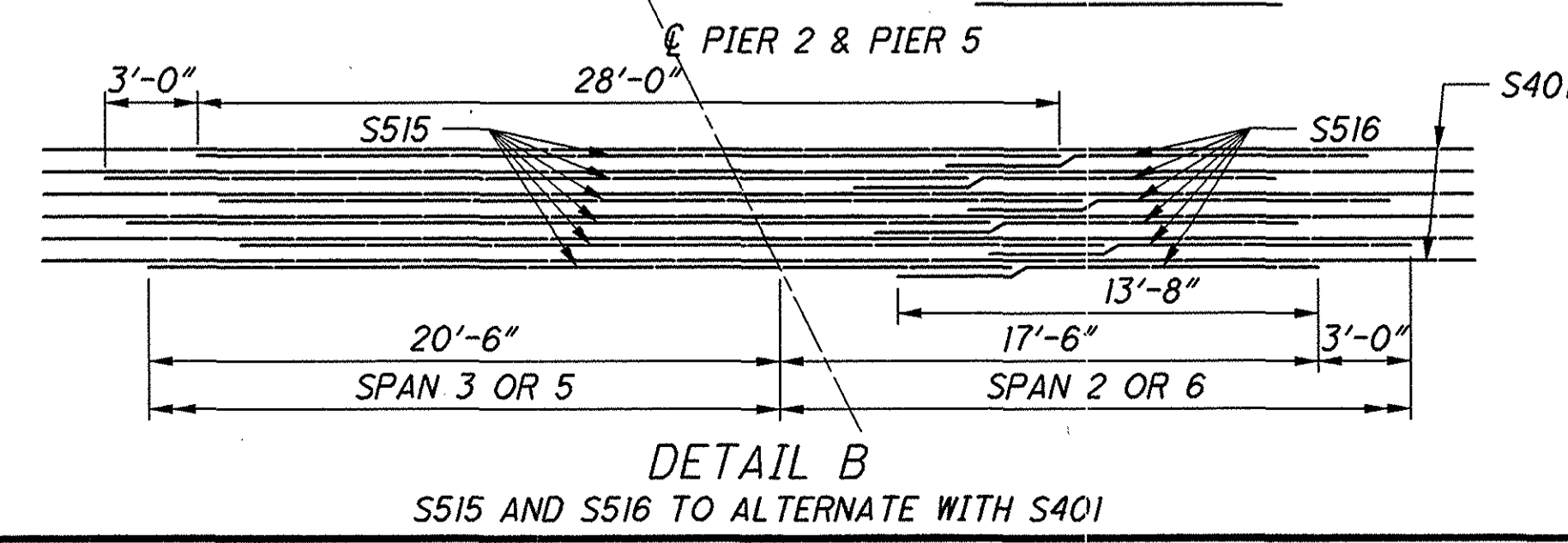
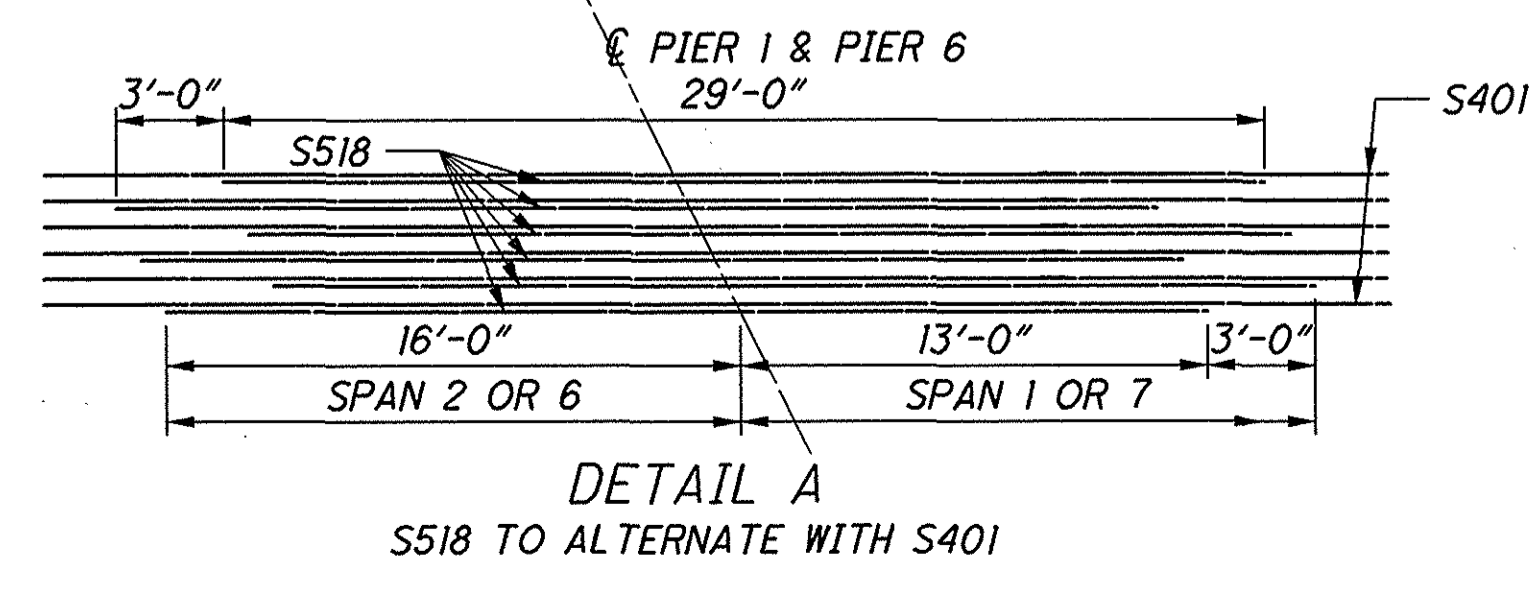
4. 2" ELECTRIC CONDUIT WILL BE PAID FOR UNDER ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET).

DESIGNED XAC	DRAWN KML	REVIEWED JSB	DESIGN AGENCY
			DATE
			STRUCTURE FILE NUMBER
			PROJECT NUMBER
DESIGNED XAC	DRAWN KML	REVIEWED JSB	BRIDGE NO. CLE-32-0734
CHECKED SJA	DESIGNED SJA	REVIEWED SJA	BRIDGE NO. CLE-32-0734
			OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132
			BRIDGE NO. CLE-32-0734
			PID NO. 24955
			CLE-32-3.57/6.82
			6.94/7.32
			15/25
			146
			156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT Mod\032_0734CDP001.dgn 05-FEB-2007 1:19PM charvill

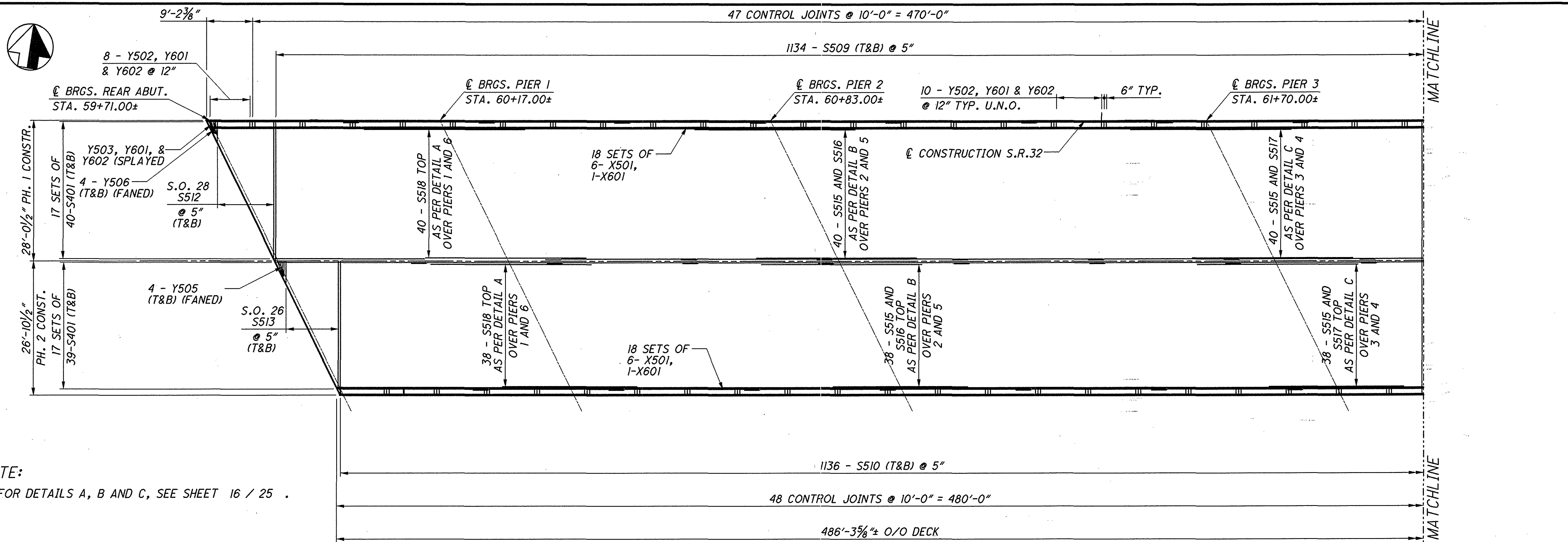


NOTES:
MIN. STEEL LAP LENGTH:
NO. 5 BAR = 3'-3"
NO. 6 BAR = 3'-10"

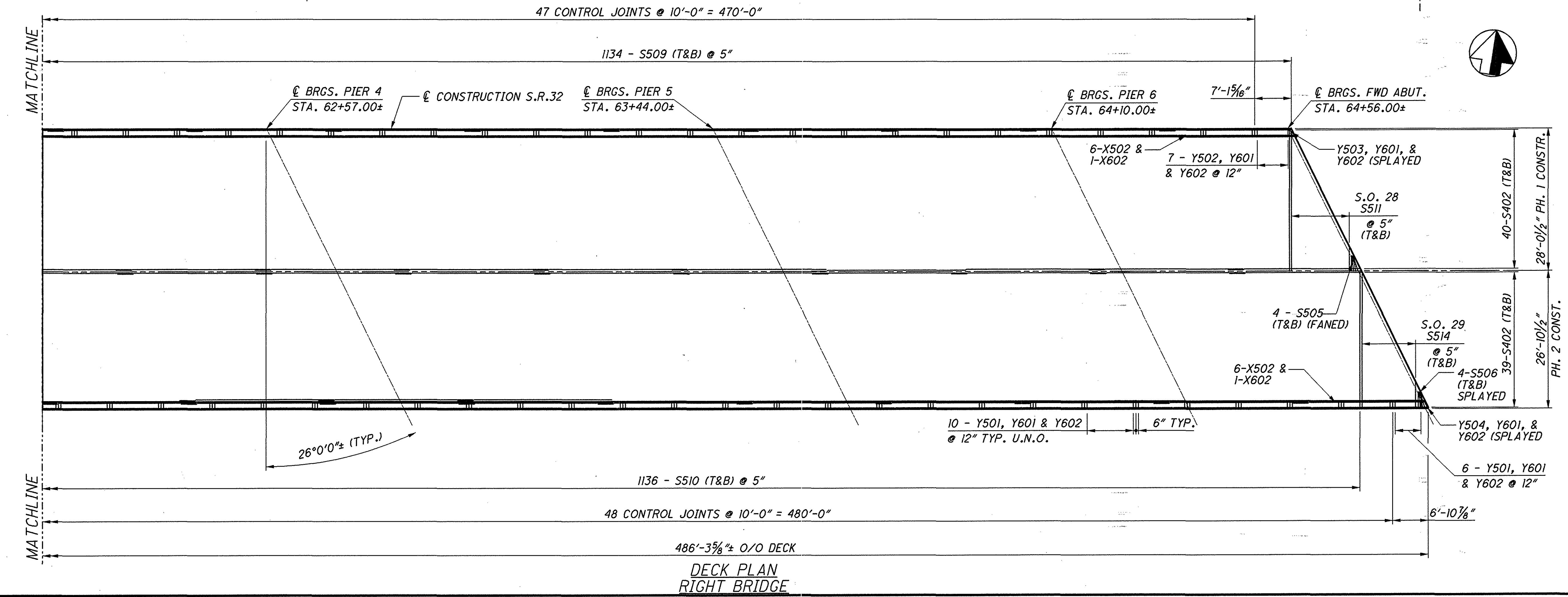


DESIGN AGENCY BURGESS & NIPLE 300 Plaza Street, 17th Floor Cincinnati, Ohio 45202	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300377	CHECKED SJA
DRAWN KML	DESIGNED XAC
REVISED	CHECKED
REVISION	REVISION
DECK PLAN 1 BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132	
CLE-32-3.57/6.82	16 / 25
6.94/7.32	147
PID No. 24955	156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CDP002.dgn 05-FEB-2007 1:20PM charvill



NOTE:
1. FOR DETAILS A, B AND C, SEE SHEET 16 / 25 .



DECK PLAN
RIGHT BRIDGE

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	REVIEWED JSB
STRUCTURE FILE NUMBER 1300377	DRAWN KML
DESIGNED XAC	CHECKED SJA
DECK PLAN 2 BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132	
CLE-32-3.57 / 6.82 / 6.94 / 7.32 PID No. 24955	
17 / 25	
<div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> 148 156 </div>	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0734\CDSD001.dgn 05-FEB-2007 9:08AM charvill

DECK SCREED ELEVATION - RIGHT STRUCTURE

LOCATION / STATION	RA		SPAN 1			PIER 1	SPAN 2									
	STATION	ELEVATION	1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN							
LT Toe of Parapet	59+71.77	593.69	59+83.27	593.82	59+94.77	593.94	60+06.27	594.05	60+17.77	594.17	60+34.27	594.35	60+50.77	594.53	60+67.27	594.69
B7	59+72.46	593.72	59+83.96	593.85	59+95.46	593.97	60+06.96	594.08	60+18.46	594.20	60+34.96	594.38	60+51.46	594.56	60+67.96	594.72
Profile Grade	59+75.88	593.86	59+87.38	593.99	59+98.88	594.12	60+10.38	594.23	60+21.88	594.34	60+38.38	594.52	60+54.88	594.70	60+71.38	594.86
B8	59+76.55	593.89	59+88.05	594.02	59+99.55	594.14	60+11.05	594.26	60+22.55	594.37	60+39.05	594.55	60+55.55	594.73	60+72.05	594.89
B9	59+80.63	594.06	59+92.13	594.20	60+03.63	594.32	60+15.13	594.43	60+26.63	594.54	60+43.13	594.73	60+59.63	594.90	60+76.13	595.06
B10	59+84.72	594.24	59+96.22	594.37	60+07.72	594.49	60+19.22	594.60	60+30.72	594.72	60+47.22	594.90	60+63.72	595.08	60+80.22	595.24
Break Point	59+87.58	594.36	59+99.08	594.49	60+10.58	594.61	60+22.08	594.72	60+33.58	594.84	60+50.08	595.02	60+66.58	595.20	60+83.08	595.36
B11	59+88.80	594.33	60+00.30	594.46	60+11.80	594.58	60+23.30	594.70	60+34.80	594.81	60+51.30	594.99	60+67.80	595.17	60+84.30	595.33
B12	59+92.89	594.24	60+04.39	594.38	60+15.89	594.50	60+27.39	594.61	60+38.89	594.72	60+55.39	594.91	60+71.89	595.08	60+88.39	595.24
B13	59+96.97	594.16	60+08.47	594.29	60+19.97	594.41	60+31.47	594.52	60+42.97	594.63	60+59.47	594.82	60+75.97	595.00	60+92.47	595.15
RT Toe of Parapet	59+97.09	594.15	60+08.59	594.28	60+20.09	594.41	60+31.59	594.52	60+43.09	594.63	60+59.59	594.82	60+76.09	594.99	60+92.59	595.15

DECK SCREED ELEVATION - RIGHT STRUCTURE (CONTINUED)

LOCATION / STATION	PIER 2		SPAN 3			PIER 3	SPAN 4									
	STATION	ELEVATION	1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN							
LT Toe of Parapet	60+83.77	594.85	61+05.52	595.12	61+27.27	595.37	61+49.02	595.57	61+70.77	595.76	61+92.52	596.00	62+14.27	596.25	62+36.02	596.45
B7	60+84.46	594.88	61+06.21	595.15	61+27.96	595.40	61+49.71	595.60	61+71.46	595.79	61+93.21	596.03	62+14.96	596.28	62+36.71	596.48
Profile Grade	60+87.88	595.03	61+09.63	595.29	61+31.38	595.54	61+53.13	595.74	61+74.88	595.93	61+96.63	596.18	62+18.38	596.42	62+40.13	596.62
B8	60+88.55	595.06	61+10.30	595.32	61+32.05	595.57	61+53.80	595.77	61+75.55	595.96	61+97.30	596.20	62+19.05	596.45	62+40.80	596.65
B9	60+92.63	595.23	61+14.38	595.50	61+36.13	595.75	61+57.88	595.94	61+79.63	596.13	62+01.38	596.38	62+23.13	596.62	62+44.88	596.82
B10	60+96.72	595.40	61+18.47	595.67	61+40.22	595.92	61+61.97	596.12	61+83.72	596.31	62+05.47	596.55	62+27.22	596.80	62+48.97	597.00
Break Point	60+99.58	595.52	61+21.33	595.79	61+43.08	596.04	61+64.83	596.24	61+86.58	596.43	62+08.33	596.67	62+30.08	596.92	62+51.83	597.12
B11	61+00.80	595.50	61+22.55	595.76	61+44.30	596.01	61+66.05	596.21	61+87.80	596.40	62+09.55	596.65	62+31.30	596.89	62+53.05	597.09
B12	61+04.89	595.41	61+26.64	595.68	61+48.39	595.93	61+70.14	596.12	61+91.89	596.31	62+13.64	596.56	62+35.39	596.80	62+57.14	597.00
B13	61+08.97	595.32	61+30.72	595.59	61+52.47	595.84	61+74.22	596.03	61+95.97	596.23	62+17.72	596.47	62+39.47	596.71	62+61.22	596.91
RT Toe of Parapet	61+09.09	595.32	61+30.84	595.58	61+52.59	595.83	61+74.34	596.03	61+96.09	596.22	62+17.84	596.47	62+39.59	596.71	62+61.34	596.91

DECK SCREED ELEVATION - RIGHT STRUCTURE (CONTINUED)

LOCATION / STATION	PIER 4		SPAN 5			PIER 5	SPAN 6									
	STATION	ELEVATION	1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN							
LT Toe of Parapet	62+57.77	596.66	62+79.52	596.92	63+01.27	597.18	63+23.02	597.38	63+44.77	597.57	63+61.27	597.74	63+77.77	597.93	63+94.27	598.09
B7	62+58.46	596.69	62+80.21	596.95	63+01.96	597.21	63+23.71	597.41	63+45.46	597.60	63+61.96	597.77	63+78.46	597.96	63+94.96	598.12
Profile Grade	62+61.88	596.84	62+83.63	597.10	63+05.38	597.35	63+27.13	597.56	63+48.88	597.74	63+65.38	597.92	63+81.88	598.10	63+98.38	598.27
B8	62+62.55	596.87	62+84.30	597.13	63+06.05	597.38	63+27.80	597.58	63+49.55	597.77	63+66.05	597.95	63+82.55	598.13	63+99.05	598.30
B9	62+66.63	597.04	62+88.38	597.30	63+10.13	597.55	63+31.88	597.76	63+53.63	597.94	63+70.13	598.12	63+86.63	598.30	64+03.13	598.47
B10	62+70.72	597.21	62+92.47	597.47	63+14.22	597.73	63+35.97	597.93	63+57.72	598.12	63+74.22	598.29	63+90.72	598.48	64+07.22	598.64
Break Point	62+73.58	597.33	62+95.33	597.59	63+17.08	597.85	63+38.83	598.05	63+60.58	598.24	63+77.08	598.41	63+93.58	598.60	64+10.08	598.76
B11	62+74.80	597.31	62+96.55	597.57	63+18.30	597.82	63+40.05	598.03	63+61.80	598.21	63+78.30	598.39	63+94.80	598.57	64+11.30	598.74
B12	62+78.89	597.22	63+00.64	597.48	63+22.39	597.73	63+44.14	597.94	63+65.89	598.12	63+82.39	598.30	63+98.89	598.48	64+15.39	598.65
B13	62+82.97	597.13	63+04.72	597.39	63+26.47	597.65	63+48.22	597.85	63+69.97	598.04	63+86.47	598.21	64+02.97	598.40	64+19.47	598.56
RT Toe of Parapet	62+83.09	597.13	63+04.84	597.39	63+26.59	597.64	63+48.34	597.85	63+70.09	598.03	63+86.59	598.21	64+03.09	598.39	64+19.59	598.56

DECK SCREED ELEVATION - RIGHT STRUCTURE (CONTINUED)

LOCATION / STATION	PIER 6		SPAN 7			FA				
	STATION	ELEVATION	1/4 SPAN	1/2 SPAN	3/4 SPAN					
LT Toe of Parapet	64+10.77	598.25	64+22.27	598.38	64+33.77	598.51	64+45.27	598.62	64+56.77	598.73
B7	64+11.46	598.28	64+22.96	598.41	64+34.46	598.54	64+45.96	598.65	64+57.46	598.76
Profile Grade	64+14.88	598.43	64+26.38	598.55	64+37.88	598.68	64+49.38	598.80	64+60.88	598.91
B8	64+15.55	598.46	64+27.05	598.58	64+38.55	598.71	64+50.05	598.83	64+61.55	598.93
B9	64+19.63	598.63	64+31.13	598.75	64+42.63	598.88	64+54.13	599.00	64+65.63	599.11
B10	64+23.72	598.80	64+35.22	598.93	64+46.72	599.06	64+58.22	599.17	64+69.72	599.28
Break Point	64+26.58	598.92	64+38.08	599.05	64+49.58	599.18	64+61.08	599.29	64+72.58	599.40
B11	64+27.80	598.90	64+39.30	599.02	64+50.80	599.15	64+62.30	599.27	64+73.80	599.38
B12	64+31.89	598.81	64+43.39	598.93	64+54.89	599.06	64+66.39	599.18	64+77.89	599.29
B13	64+35.97	598.72	64+47.47	598.85	64+58.97	598.97	64+70.47	599.09	64+81.97	599.20
RT Toe of Parapet	64+36.09	598.72	64+47.59	598.84	64+59.09	598.97	64+70.59	599.09	64+82.09	599.20

NOTE:

- SCREED ELEVATIONS SHOWN ARE FOR THE TOP OF DECK SLAB PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR THE ANTICIPATED DEAD LOAD DEFLECTIONS.

DESIGNED XAC CHECKED SJA	DRAWN KML REVISED	REVIEWED JSB STRUCTURE FILE NUMBER 1300377	DATE 8-14-06	DESIGN AGENCY BURGESS & NIPLE 327 N.W. 27th Ave. Fort Lauderdale, FL 33307
	SCREED ELEVATION RIGHT BRIDGE BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132			
	CLE-32-3.57 / 6.82 / 6.94 / 7.32 PID No. 24955			
	18 / 25	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 149 156 </div>		

I:\projects\CLE_sr032\06.82_PID24955\Consult\Final Tracings\DDOT_Mod\032_0734CSD002.dgn 05-FEB-2007 9:09AM char.vill

DECK SCREED ELEVATION - LEFT STRUCTURE

LOCATION / STATION	RA		SPAN 1						SPAN 2							
	STATION	ELEVATION	1/4 SPAN		1/2 SPAN		3/4 SPAN		PIER 1		1/4 SPAN		1/2 SPAN		3/4 SPAN	
			STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LT Toe of Parapet	59+49.78	593.37	59+61.28	593.50	59+72.78	593.62	59+84.28	593.74	59+95.78	593.85	60+12.28	594.03	60+28.78	594.21	60+45.28	594.37
B1	59+49.91	593.39	59+61.41	593.52	59+72.91	593.64	59+84.41	593.75	59+95.91	593.87	60+12.41	594.05	60+28.91	594.23	60+45.41	594.39
B2	59+53.83	593.93	59+65.33	594.06	59+76.83	594.19	59+88.33	594.30	59+99.83	594.41	60+16.33	594.59	60+32.83	594.77	60+49.33	594.93
Break Point	59+54.42	594.01	59+65.92	594.14	59+77.42	594.27	59+88.92	594.38	60+00.42	594.49	60+16.92	594.68	60+33.42	594.85	60+49.92	595.01
B3	59+57.76	593.94	59+69.26	594.07	59+80.76	594.19	59+92.26	594.31	60+03.76	594.42	60+20.26	594.60	60+36.76	594.78	60+53.26	594.94
B4	59+61.68	593.86	59+73.18	593.99	59+84.68	594.11	59+96.18	594.22	60+07.68	594.34	60+24.18	594.52	60+40.68	594.70	60+57.18	594.85
B5	59+65.61	593.77	59+77.11	593.90	59+88.61	594.02	60+00.11	594.14	60+11.61	594.25	60+28.11	594.43	60+44.61	594.61	60+61.11	594.77
Profile Grade	59+66.12	593.76	59+77.62	593.89	59+89.12	594.01	60+00.62	594.13	60+12.12	594.24	60+28.62	594.42	60+45.12	594.60	60+61.62	594.76
B6	59+69.54	593.69	59+81.04	593.82	59+92.54	593.94	60+04.04	594.05	60+15.54	594.17	60+32.04	594.35	60+48.54	594.53	60+65.04	594.69
RT Toe of Parapet	59+70.23	593.67	59+81.73	593.80	59+93.23	593.93	60+04.73	594.04	60+16.23	594.15	60+32.73	594.33	60+49.23	594.51	60+65.73	594.67

DECK SCREED ELEVATION - LEFT STRUCTURE (CONTINUED)

LOCATION / STATION	PIER 2		SPAN 3						PIER 3		SPAN 4					
	STATION	ELEVATION	1/4 SPAN		1/2 SPAN		3/4 SPAN		PIER 3		1/4 SPAN		1/2 SPAN		3/4 SPAN	
			STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LT Toe of Parapet	60+61.78	594.54	60+83.53	594.80	61+05.28	595.05	61+27.03	595.25	61+48.78	595.44	61+70.53	595.68	61+92.28	595.93	62+14.03	596.13
B1	60+61.91	594.55	60+83.66	594.82	61+05.41	595.07	61+27.16	595.27	61+48.91	595.46	61+70.66	595.70	61+92.41	595.95	62+14.16	596.15
B2	60+65.83	595.10	60+87.58	595.36	61+09.33	595.61	61+31.08	595.81	61+52.83	596.00	61+74.58	596.25	61+96.33	596.49	62+18.08	596.69
Break Point	60+66.42	595.18	60+88.17	595.45	61+09.92	595.69	61+31.67	595.89	61+53.42	596.08	61+75.17	596.33	61+96.92	596.57	62+18.67	596.77
B3	60+69.76	595.11	60+91.51	595.37	61+13.26	595.62	61+35.01	595.82	61+56.76	596.01	61+78.51	596.25	62+00.26	596.50	62+22.01	596.70
B4	60+73.68	595.02	60+95.43	595.29	61+17.18	595.54	61+38.93	595.74	61+60.68	595.93	61+82.43	596.17	62+04.18	596.41	62+25.93	596.61
B5	60+77.61	594.94	60+99.36	595.20	61+21.11	595.45	61+42.86	595.65	61+64.61	595.84	61+86.36	596.09	62+08.11	596.33	62+29.86	596.53
Profile Grade	60+78.12	594.93	60+99.87	595.19	61+21.62	595.44	61+43.37	595.64	61+65.12	595.83	61+86.87	596.07	62+08.62	596.32	62+30.37	596.52
B6	60+81.54	594.85	61+03.29	595.12	61+25.04	595.37	61+46.79	595.57	61+68.54	595.76	61+90.29	596.00	62+12.04	596.25	62+33.79	596.45
RT Toe of Parapet	60+82.23	594.84	61+03.98	595.10	61+25.73	595.35	61+47.48	595.55	61+69.23	595.74	61+90.98	595.99	62+12.73	596.23	62+34.48	596.43

DECK SCREED ELEVATION - LEFT STRUCTURE (CONTINUED)

LOCATION / STATION	PIER 4		SPAN 5						PIER 5		SPAN 6					
	STATION	ELEVATION	1/4 SPAN		1/2 SPAN		3/4 SPAN		PIER 5		1/4 SPAN		1/2 SPAN		3/4 SPAN	
			STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LT Toe of Parapet	62+35.78	596.35	62+57.53	596.61	62+79.28	596.86	63+01.03	597.07	63+22.78	597.25	63+39.28	597.43	63+55.78	597.61	63+72.28	597.78
B1	62+35.91	596.36	62+57.66	596.62	62+79.41	596.88	63+01.16	597.08	63+22.91	597.27	63+39.41	597.44	63+55.91	597.63	63+72.41	597.79
B2	62+39.83	596.91	62+61.58	597.17	62+83.33	597.42	63+05.08	597.63	63+26.83	597.81	63+43.33	597.99	63+59.83	598.17	63+76.33	598.34
Break Point	62+40.42	596.99	62+62.17	597.25	62+83.92	597.50	63+05.67	597.71	63+27.42	597.89	63+43.92	598.07	63+60.42	598.25	63+76.92	598.42
B3	62+43.76	596.92	62+65.51	597.18	62+87.26	597.43	63+09.01	597.64	63+30.76	597.82	63+47.26	598.00	63+63.76	598.18	63+80.26	598.35
B4	62+47.68	596.83	62+69.43	597.09	62+91.18	597.35	63+12.93	597.55	63+34.68	597.74	63+51.18	597.91	63+67.68	598.10	63+84.18	598.26
B5	62+51.61	596.75	62+73.36	597.01	62+95.11	597.26	63+16.86	597.47	63+38.61	597.65	63+55.11	597.83	63+71.61	598.01	63+88.11	598.18
Profile Grade	62+52.12	596.74	62+73.87	597.00	62+95.62	597.25	63+17.37	597.45	63+39.12	597.64	63+55.62	597.82	63+72.12	598.00	63+88.62	598.17
B6	62+55.54	596.66	62+77.29	596.92	62+99.04	597.18	63+20.79	597.38	63+42.54	597.57	63+59.04	597.74	63+75.54	597.93	63+92.04	598.09
RT Toe of Parapet	62+56.23	596.65	62+77.98	596.91	62+99.73	597.16	63+21.48	597.37	63+43.23	597.55	63+59.73	597.73	63+76.23	597.91	63+92.73	598.08

DECK SCREED ELEVATION - LEFT STRUCTURE (CONTINUED)

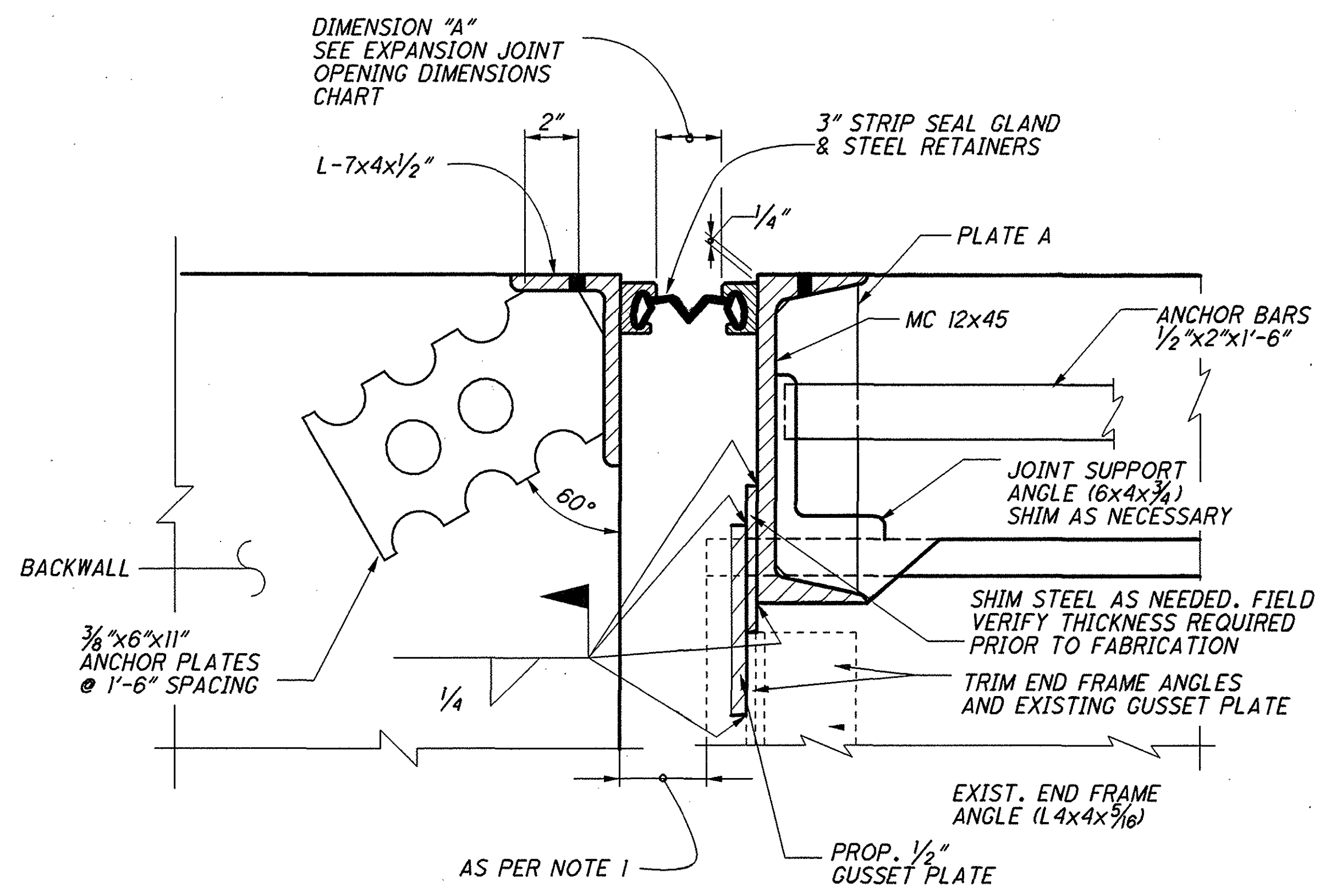
LOCATION / STATION	PIER 6		SPAN 7						FA	
	STATION	ELEVATION	1/4 SPAN		1/2 SPAN		3/4 SPAN		FA	
			STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LT Toe of Parapet	63+88.78	597.94	64+00.28	598.06	64+11.78	598.19	64+23.28	598.31	64+34.78	598.42
B1	63+88.91	597.95	64+00.41	598.08	64+11.91	598.21	64+23.41	598.32	64+34.91	598.43
B2	63+92.83	598.50	64+04.33	598.62	64+15.83	598.75	64+27.33	598.87	64+38.83	598.98
Break Point	63+93.42	598.58	64+04.92	598.70	64+16.42	598.83	64+27.92	598.95	64+39.42	599.06
B3	63+96.76	598.51	64+08.26	598.63	64+19.76	598.76	64+31.26	598.88	64+42.76	598.99
B4	64+00.68	598.42	64+12.18	598.55	64+23.68	598.68	64+35.18	598.79	64+46.68	598.90
B5	64+04.61	598.34	64+16.11	598.46	64+27.61	598.59	64+39.11	598.71	64+50.61	598.82
Profile Grade	64+05.12	598.33	64+16.62	598.45	64+28.12	598.58	64+39.62	598.70	64+51.12	598.81
B6	64+08.54	598.25	64+20.04	598.38	64+31.54	598.51	64+43.04	598.62	64+54.54	598.73
RT Toe of Parapet	64+09.23	598.24	64+20.73	598.36	64+32.23	598.49	64+43.73	598.61	64+55.23	598.72

NOTE:

1. SCREED ELEVATIONS SHOWN ARE FOR THE TOP OF DECK SLAB PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR THE ANTICIPATED DEAD LOAD DEFLECTIONS.

DESIGN AGENCY: **BURGESS & NIPLE**
 DATE: 8-14-06
 REVIEWED: JSB
 DRAWN: KML
 CHECKED: SJA
 STRUCTURE FILE NUMBER: 1300377
 DESIGNED: XAC
 REVISIONS: [None]
SCREED ELEVATION LEFT BRIDGE
 BRIDGE NO. CLE-32-0734
 OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132
CLE-32-3.57/6.82
/6.94/7.32
PID No. 24955
 19 / 25
 150
 156

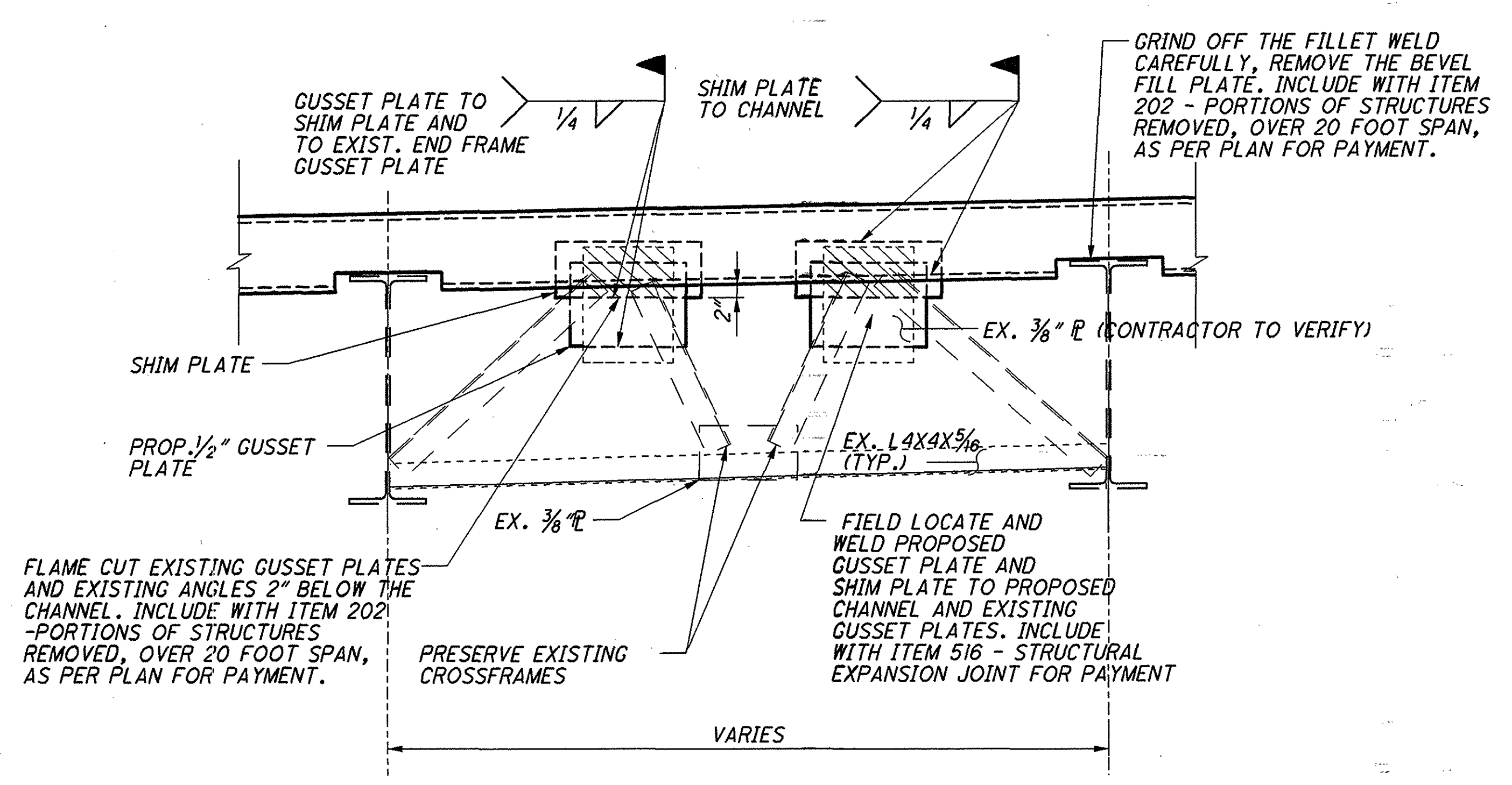
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0734\CD008.dgn 05-FEB-2007 1:52PM charvill



EXPANSION JOINT DETAIL

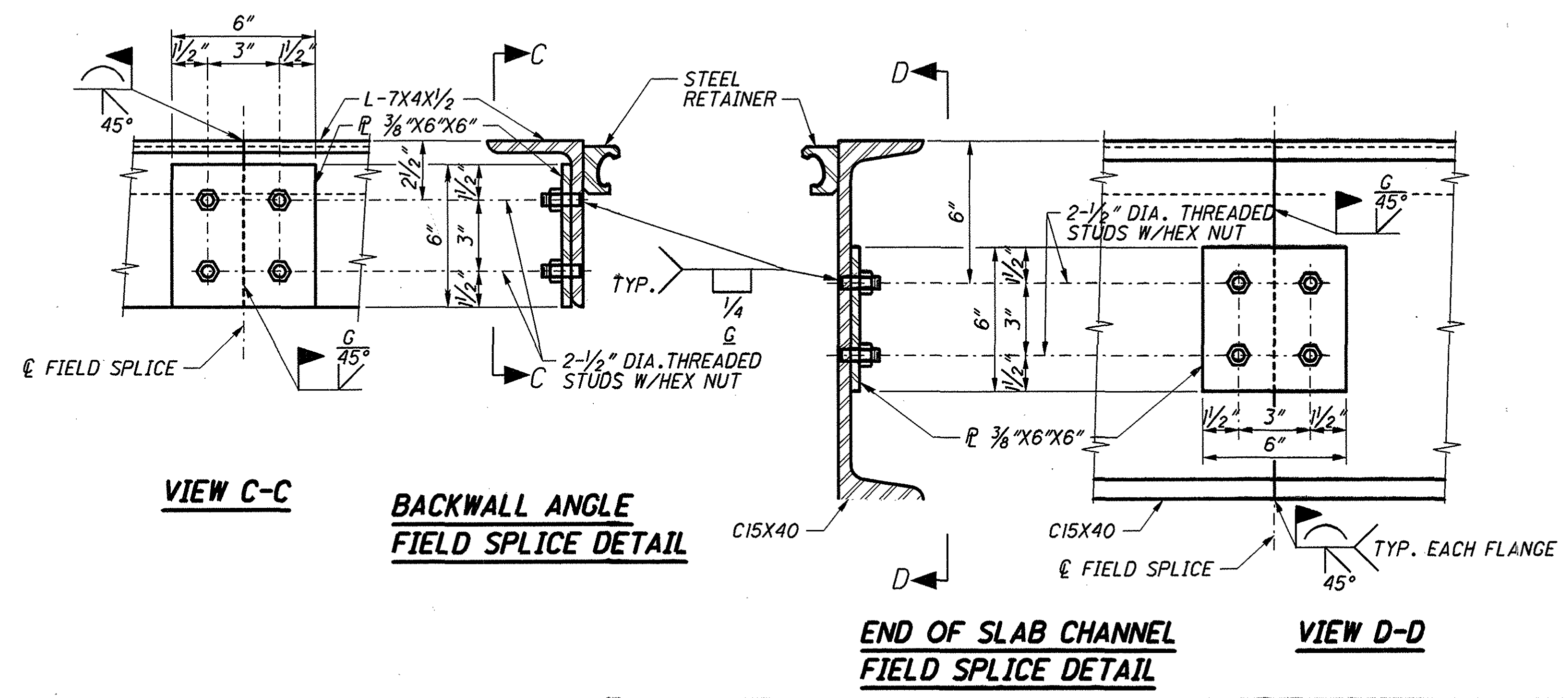
EXPANSION JOINT OPENING DIMENSIONS, "A"

TEMPERATURE						
30° F	40° F	50° F	60° F	70° F	80° F	90° F
2"	1 13/16"	1 11/16"	1 1/2"	1 5/16"	1 3/16"	1"



TYPICAL END CROSSFRAME

REMOVE EXISTING END DAM FROM BEAM END. DO NOT DAMAGE BEAM FLANGE. BRACE THE BEAM DURING THE REMOVAL OF THE END DAM TO ENSURE STABILITY. INCLUDE WITH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN FOR PAYMENT.



END DAM NOTES

1. INSTALLATION OF SEAL: DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEATING OF BEAMS ON BEARINGS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER ELEVATION OF THE SUPPORT/ARMOR SHALL BE ACHIEVED BY ADJUSTING THE CONNECTION ANGLES AND BOLTS BETWEEN BEAM AND EXPANSION JOINT.
2. FOR ADDITIONAL END DAM DETAILS, SEE STD. DWG. EXJ-4-87.
3. FOR LOCATION OF FIELD SPLICE, SEE ABUTMENT PLAN SHEET 9/25.

DESIGN AGENCY
BURGESS & NIPLE
30 Park Street, 21st floor
Cleveland, Ohio 44102

DESIGNED	DESIGNED	DATE	FILE NUMBER
XAC	KML	8-14-06	1300377
CHECKED	REVIEWED	STRUCTURE FILE NUMBER	
SJA	JSB		

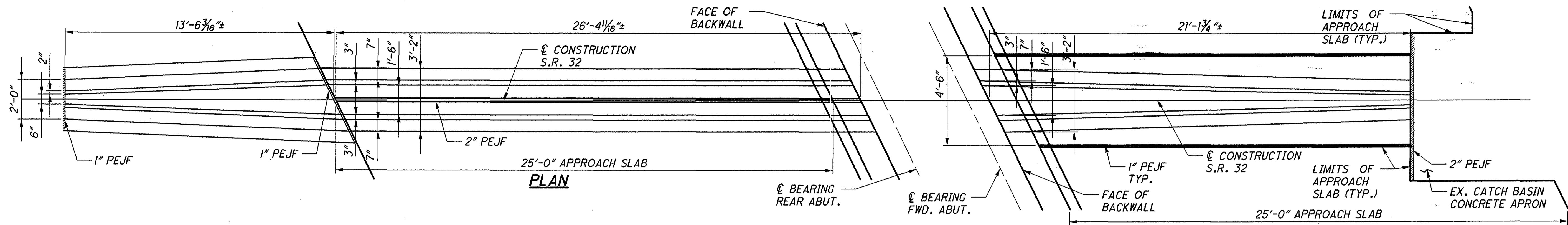
EXPANSION JOINT DETAILS
BRIDGE NO. CLE-32-0734
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132

CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

20 / 25

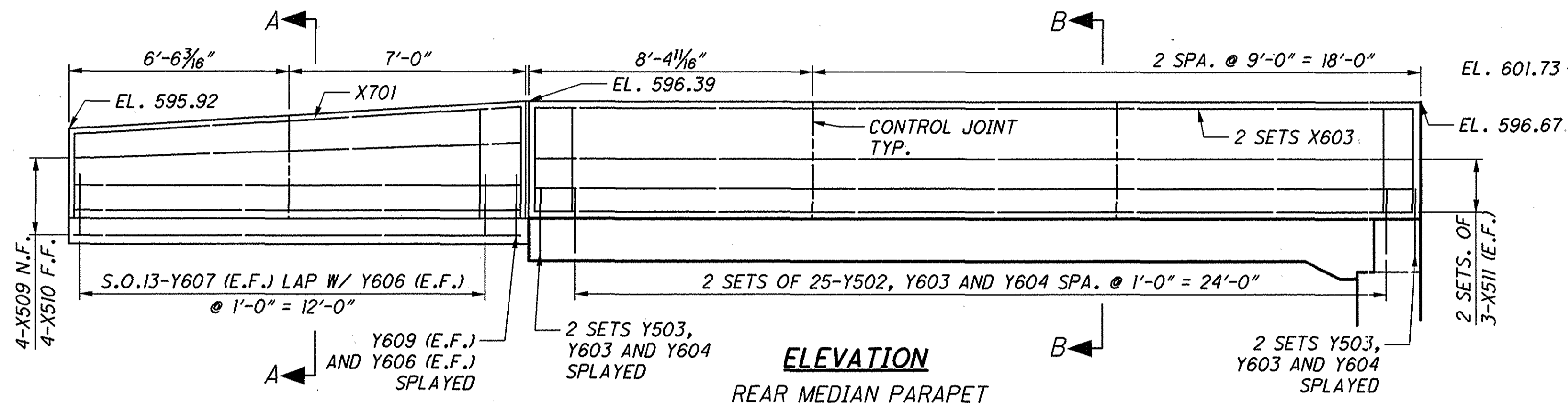
151
156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final\Tracings\ODOT_Mod\032_0734CSD004.dgn 05-FEB-2007 1:37PM charvill

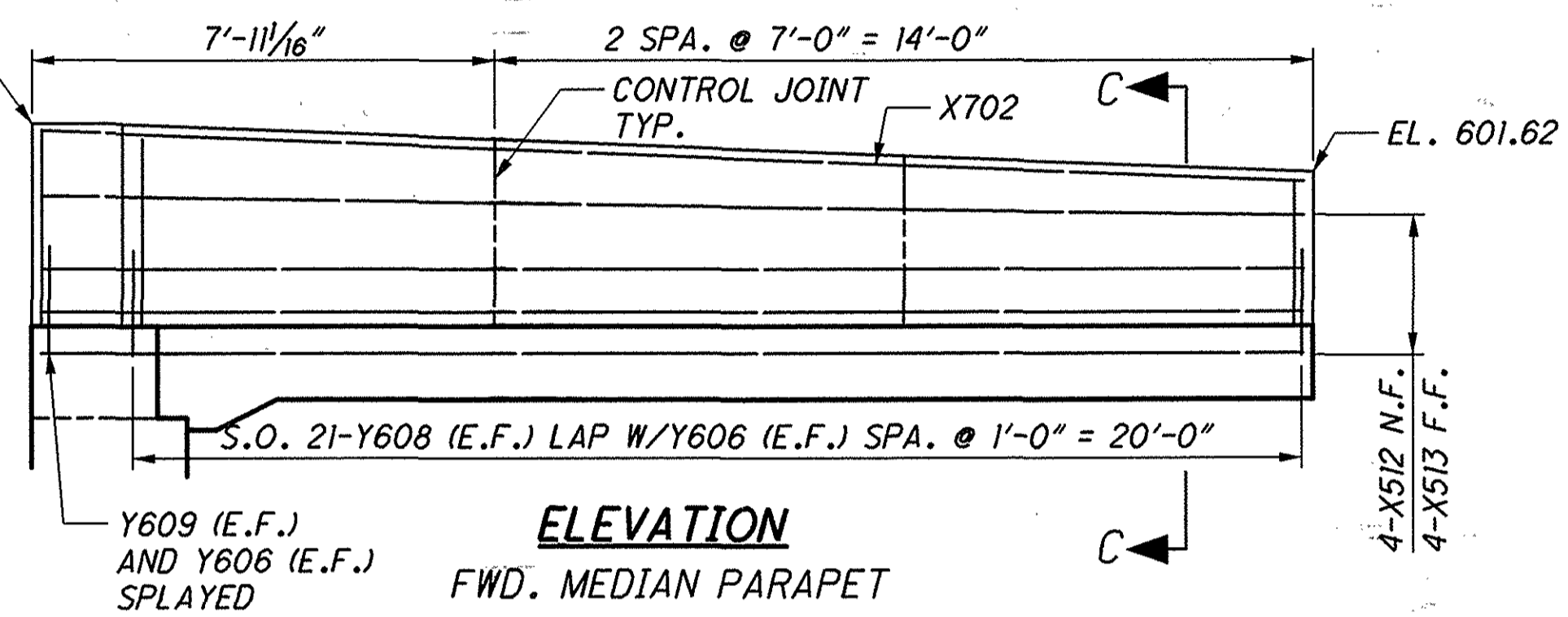


PLAN

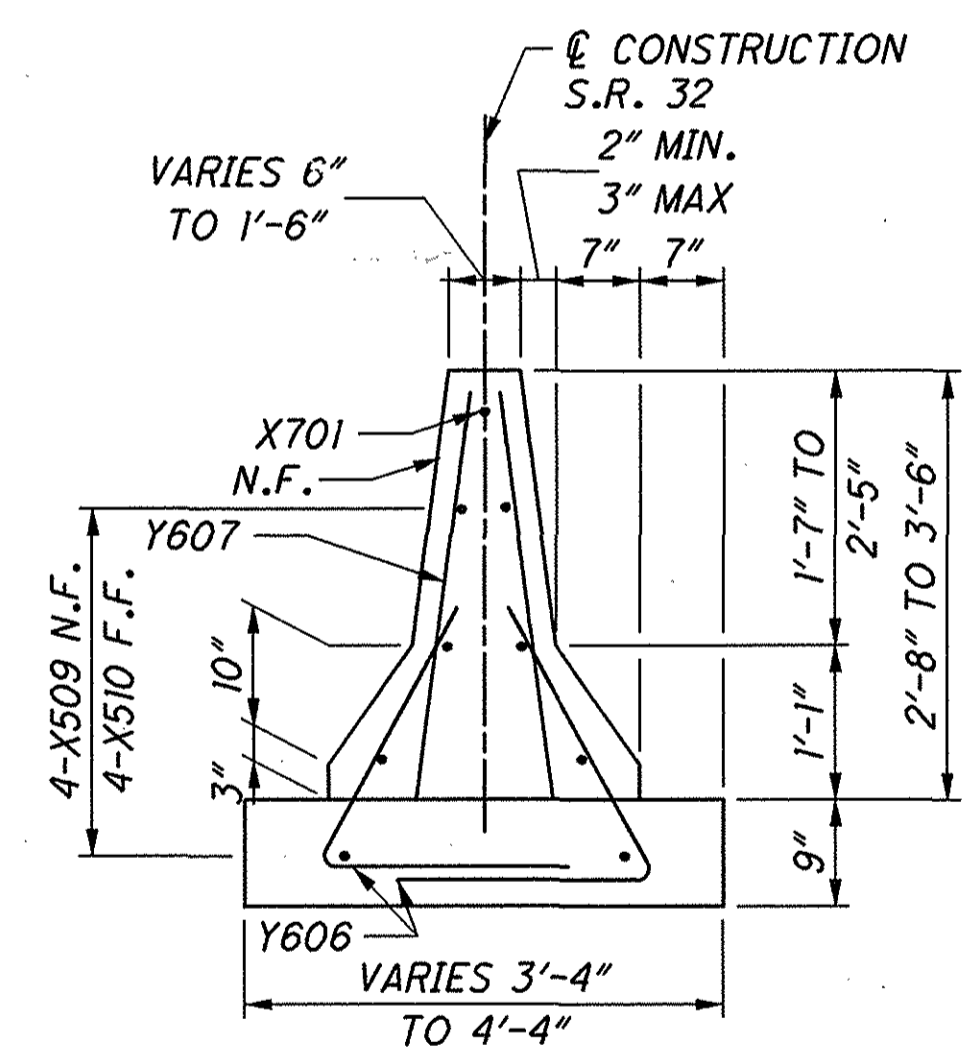
PLAN



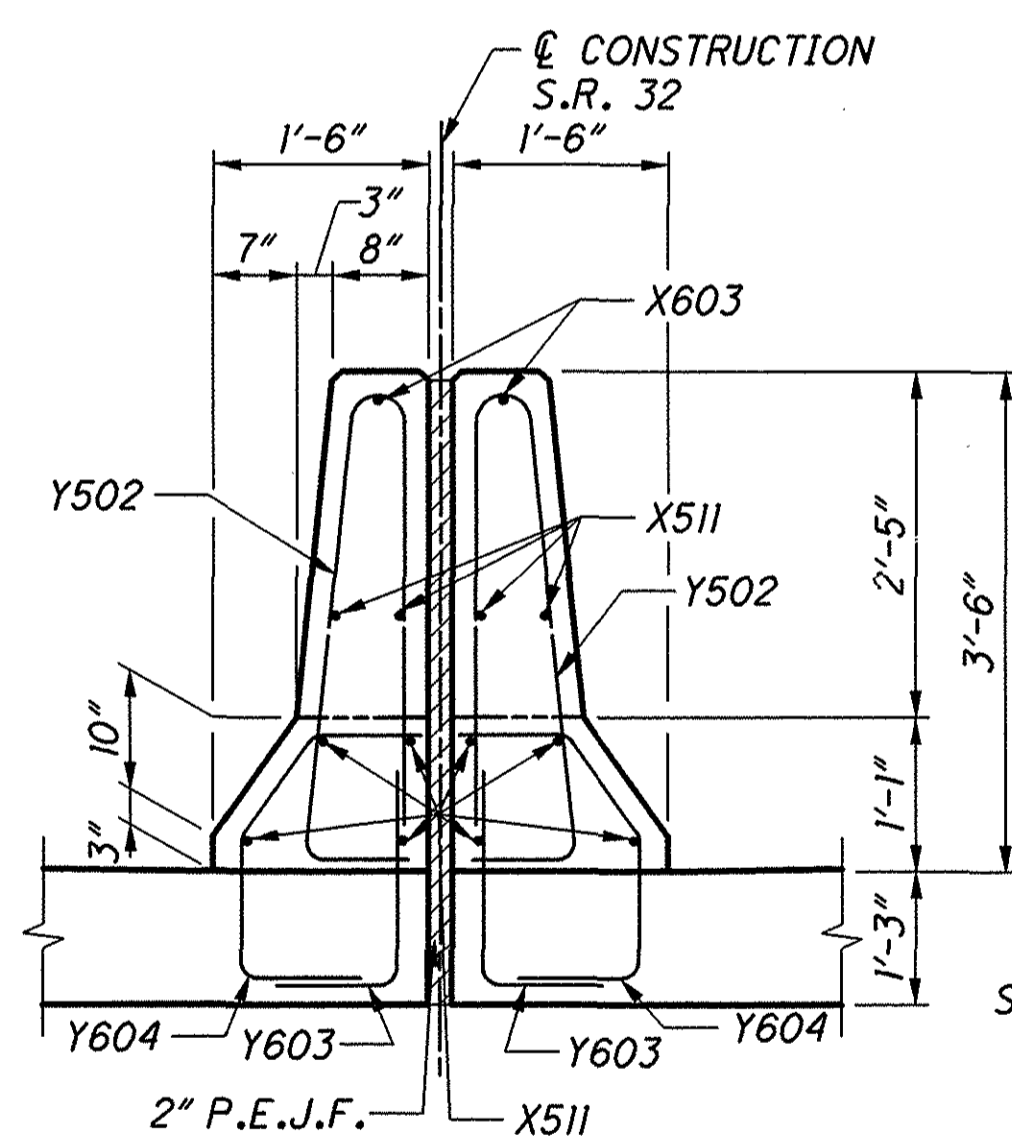
ELEVATION
REAR MEDIAN PARAPET



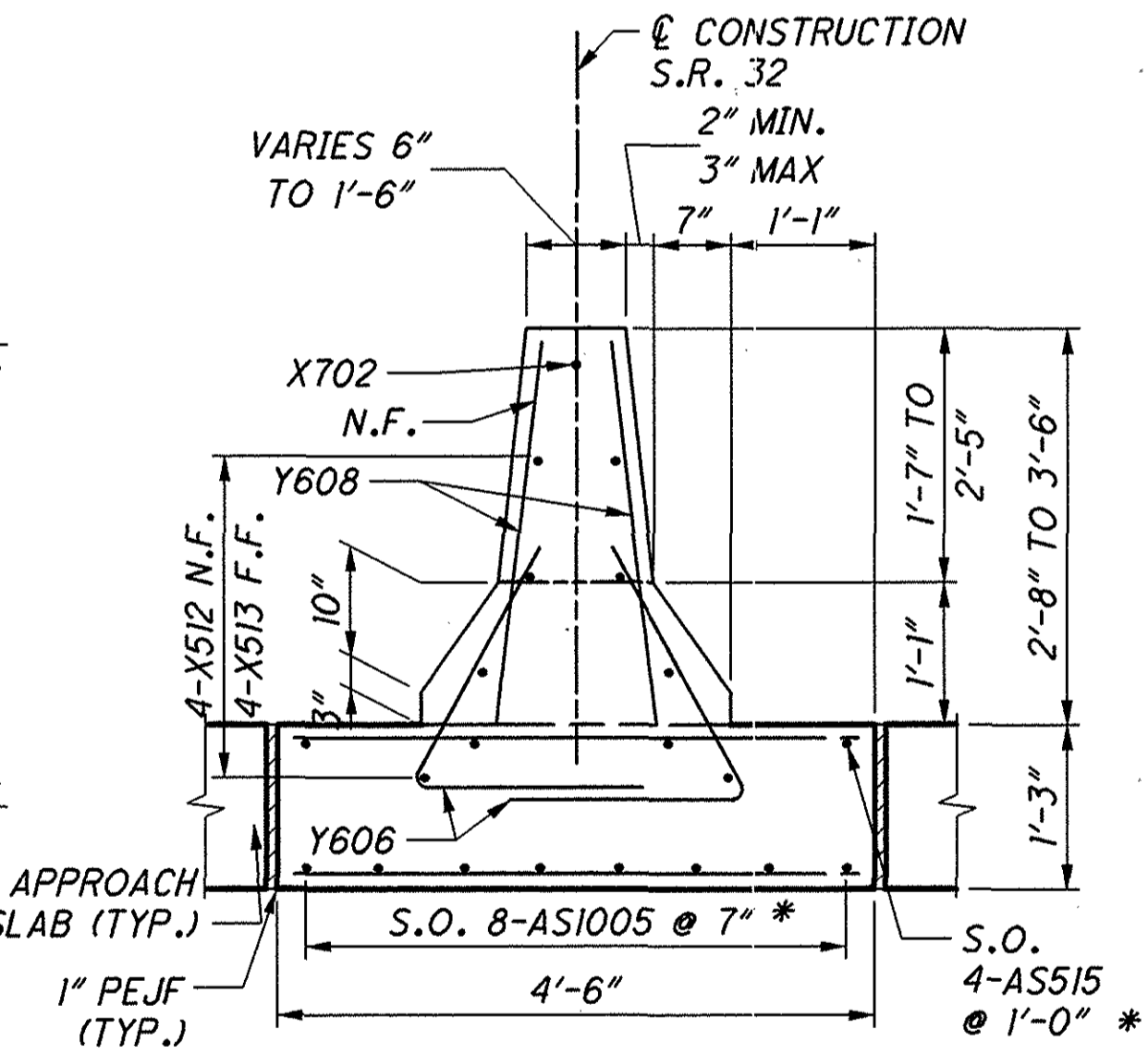
ELEVATION
FWD. MEDIAN PARAPET



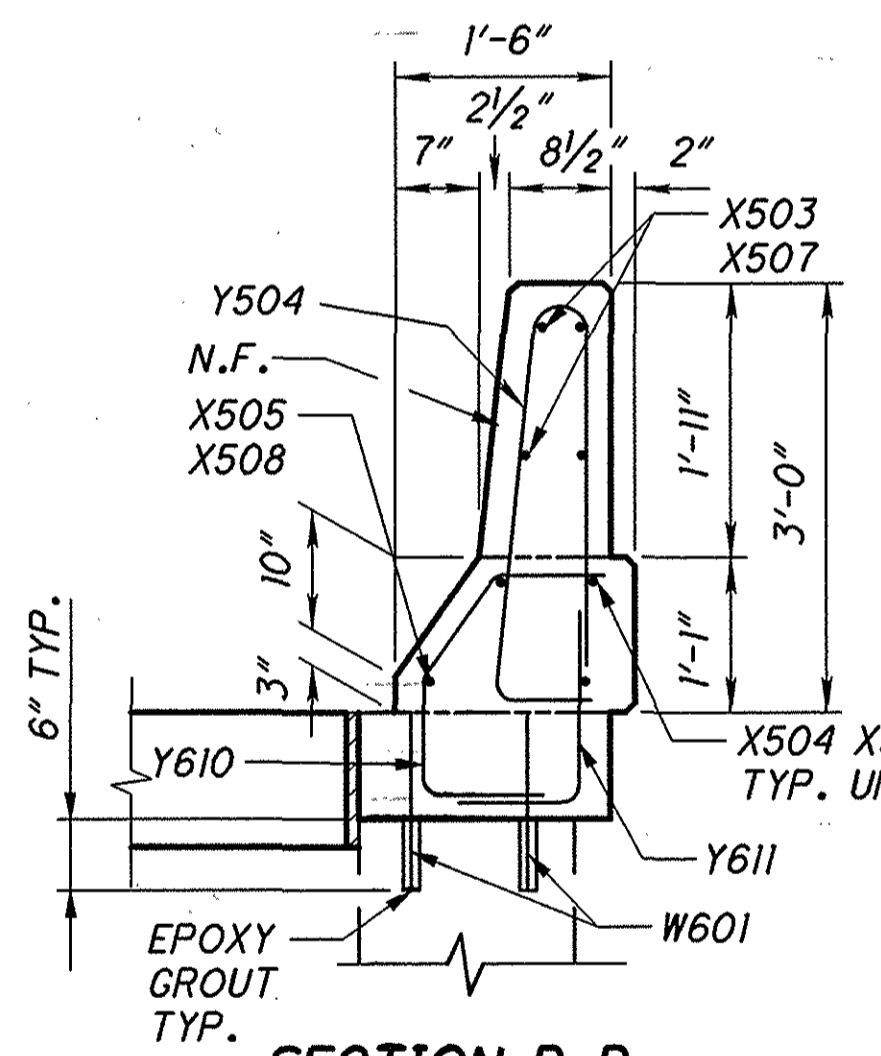
SECTION A-A



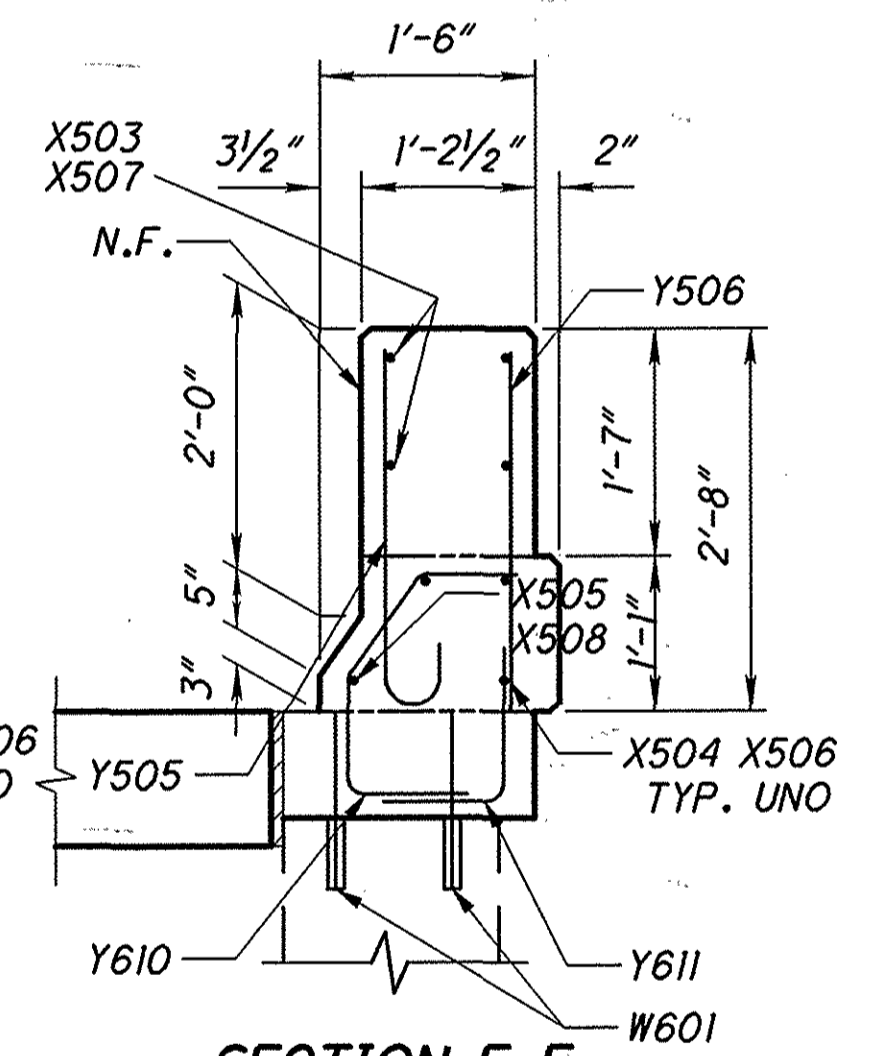
SECTION B-B



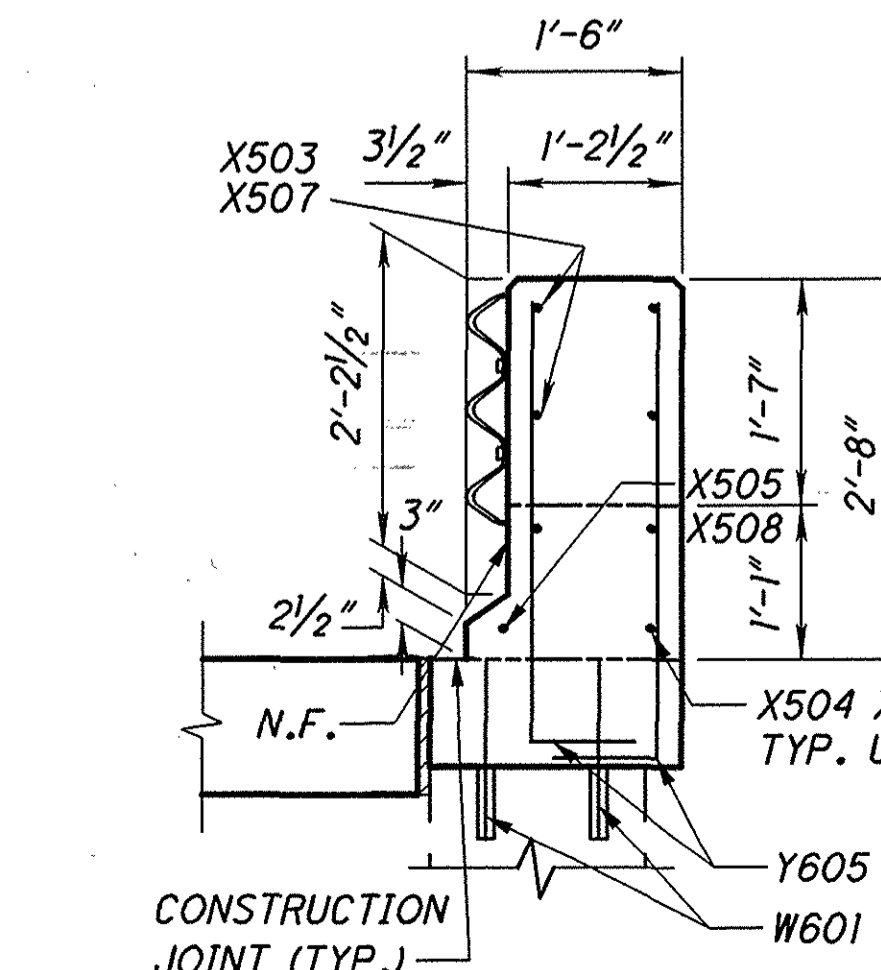
SECTION C-C



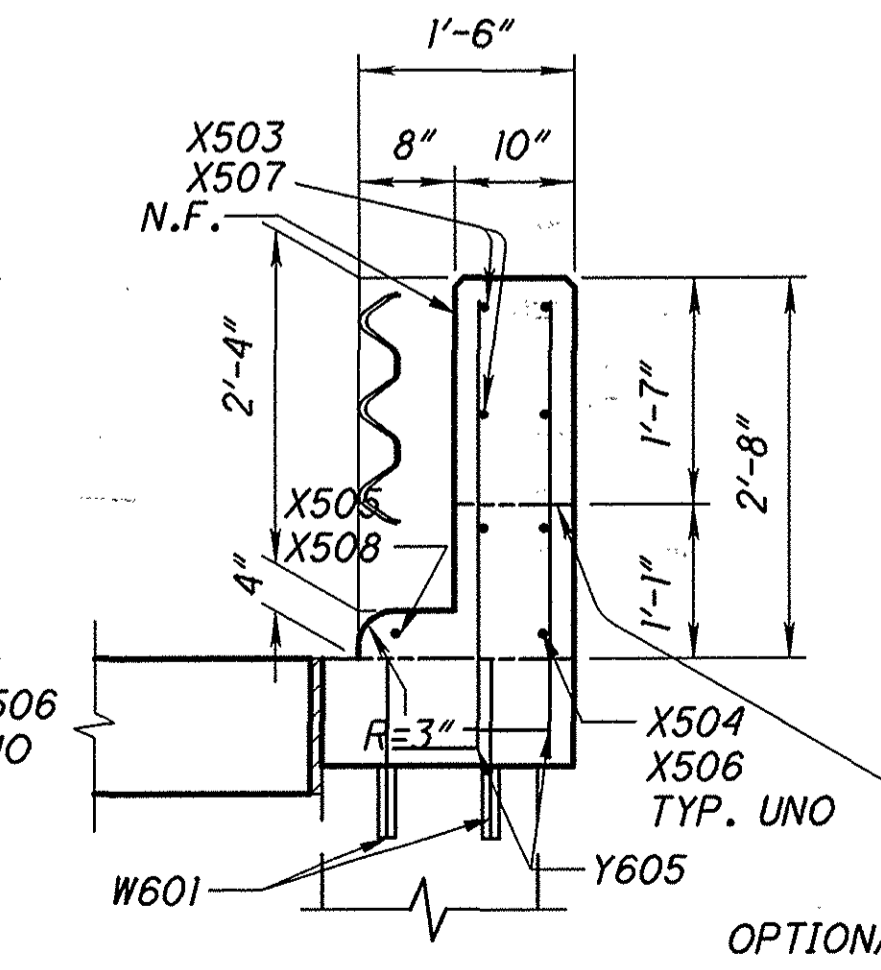
SECTION D-D



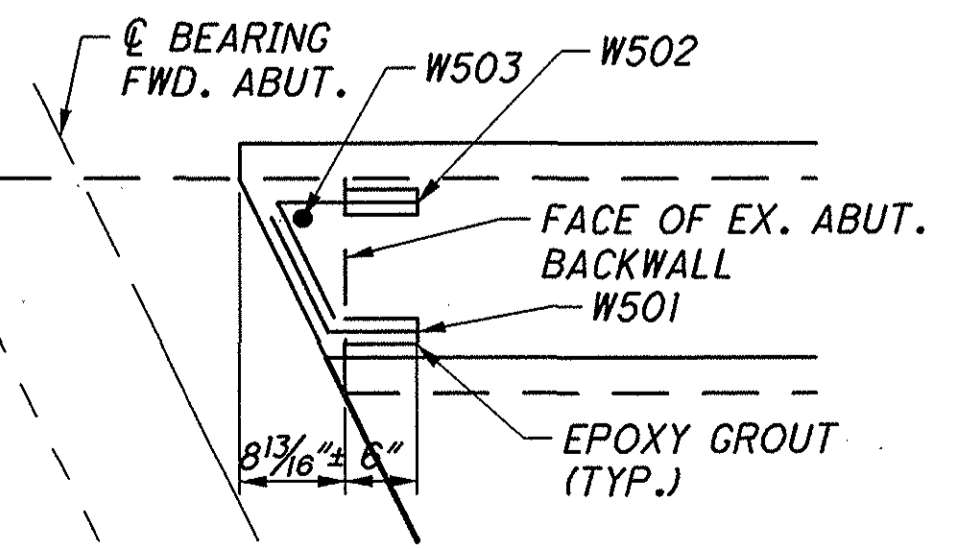
SECTION E-E



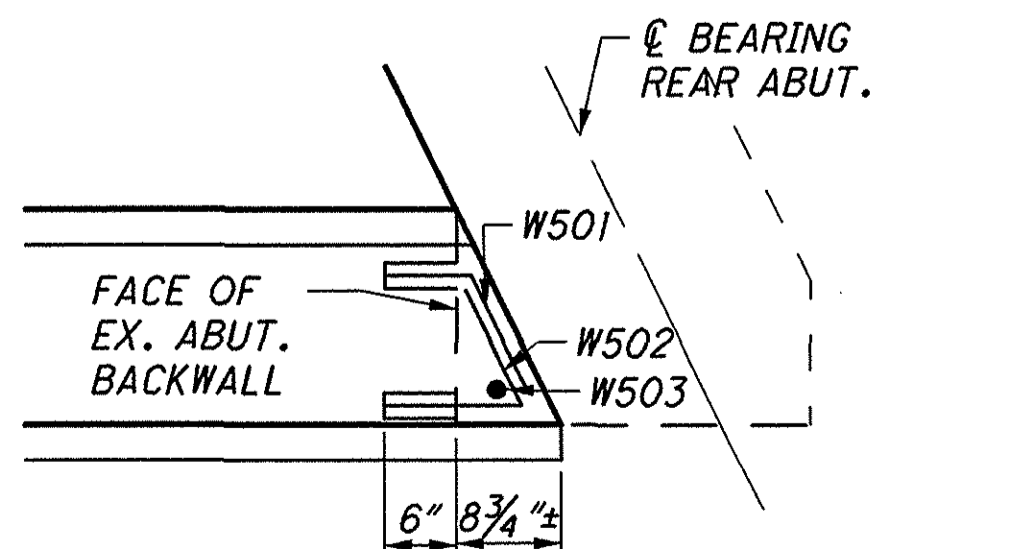
SECTION F-F



SECTION G-G



SECTION H-H



SECTION J-J

* FOR MORE DETAILS, SEE SHEET 23/25.

NOTES:

1. MIN. REINFORCING CLEAR COVER IS 2" UNLESS NOTED OTHERWISE.
2. MEDIAN BARRIER TRANSITIONS, INCLUDING CONCRETE, REINFORCING STEEL AND JOINT SEALERS, WILL BE INCLUDED IN THE COST OF ROADWAY ITEM 622, BARRIER TRANSITION.
3. MEDIAN BARRIER ON THE APPROACH SLAB WILL BE PAID FOR UNDER ITEM 898, QC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (APPROACH SLAB) (T=15"), AS PER PLAN. FOR MORE DETAILS, SEE GENERAL NOTE.
4. FOR MORE DETAILS, SEE STANDARD DRAWING BR-1.
5. FOR LOCATION OF SECTIONS D-D THRU G-G, SEE SHEET 22/25.

DESIGNED	XAC	CHECKED	SJA
DRAWN	KML	REVISED	
REVIEWED	JSB	STRUCTURE FILE NUMBER	1300377
DATE	8-14-06	DESIGN AGENCY	BURGESS & NIPLÉ

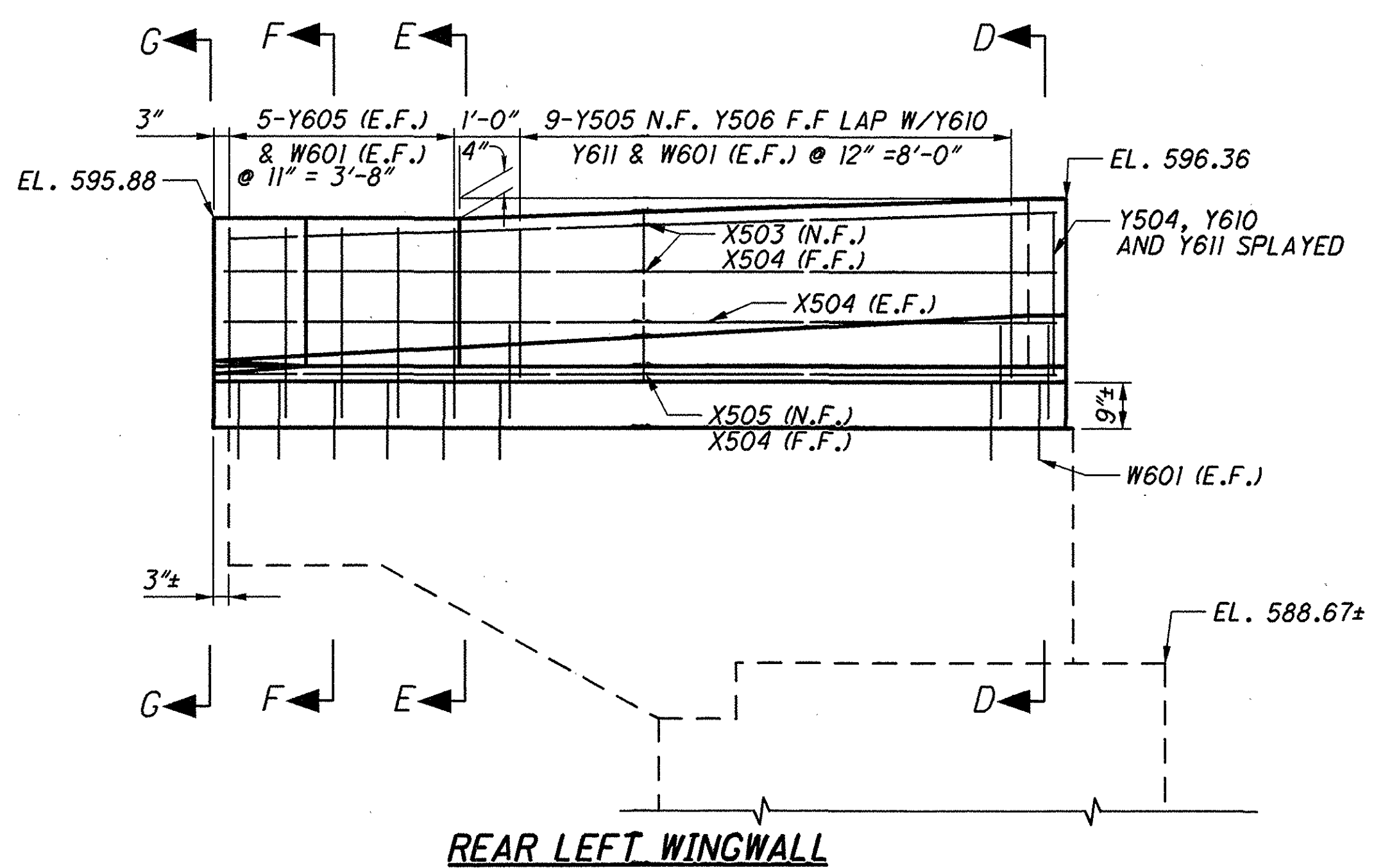
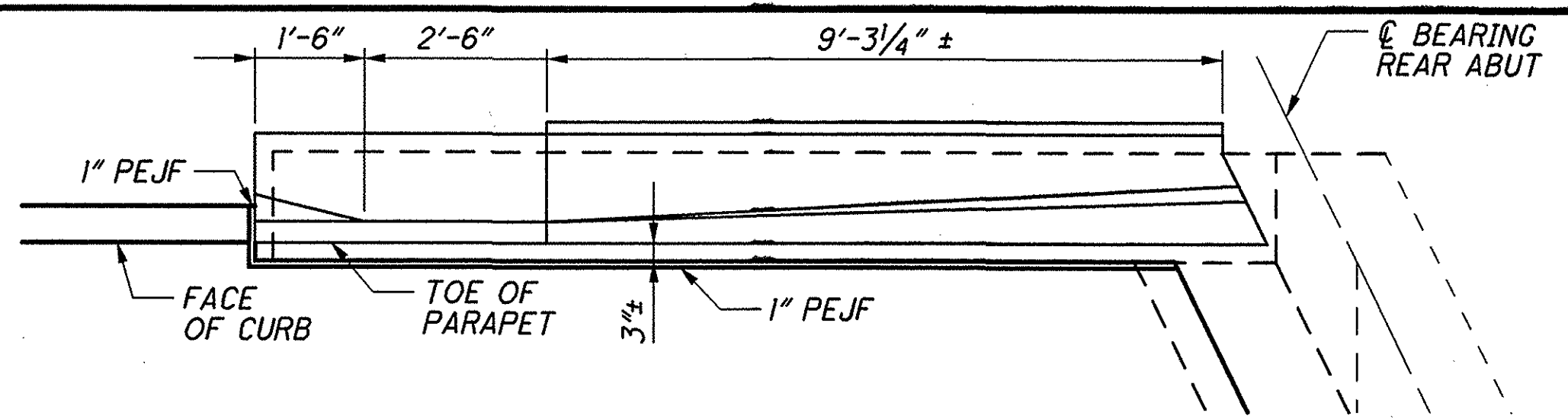
BRIDGE NO. CLE-32-0734
OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132

CLE-32-3.57/
6.82/6.94/7.32
PID No. 24955

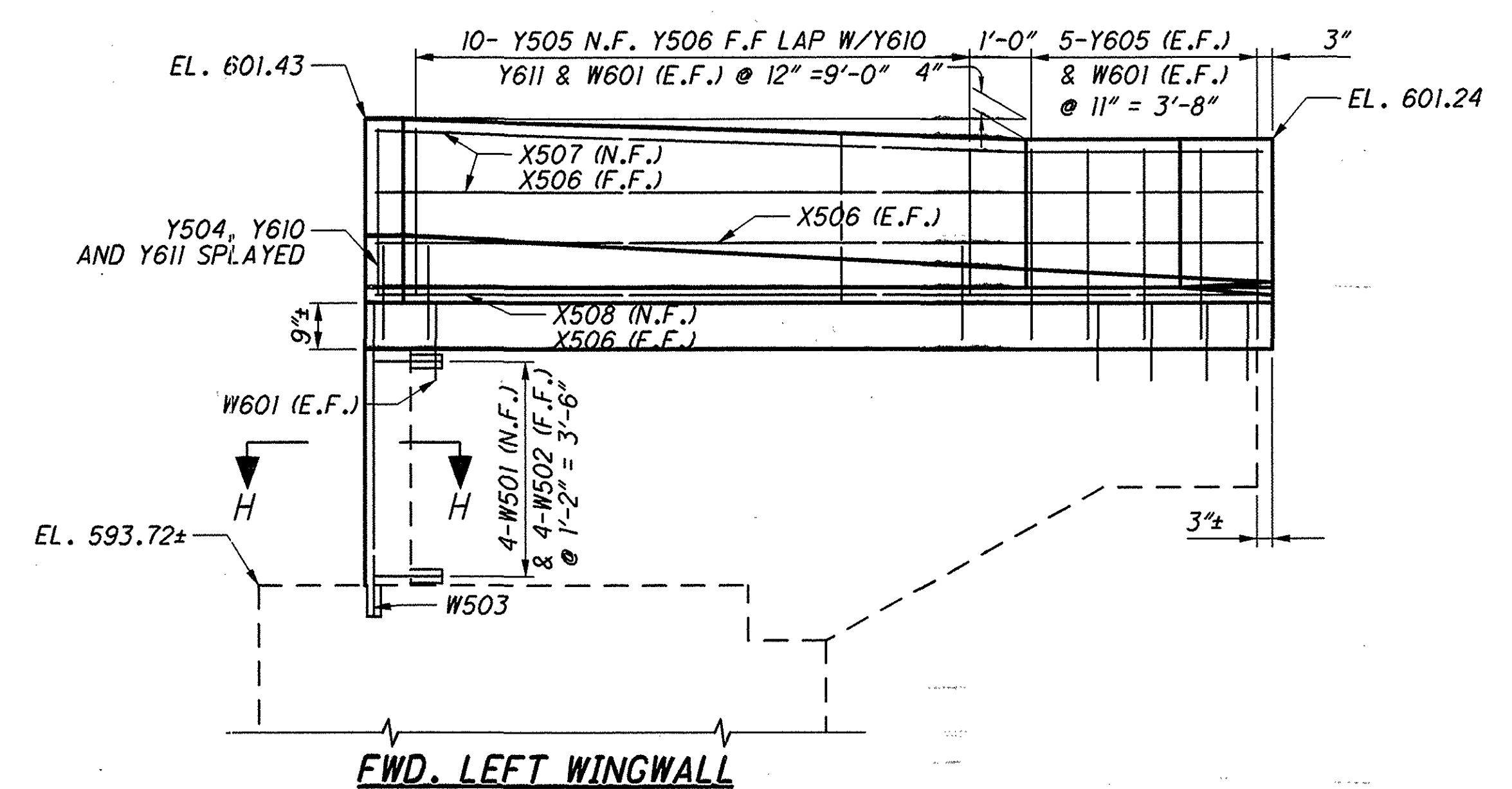
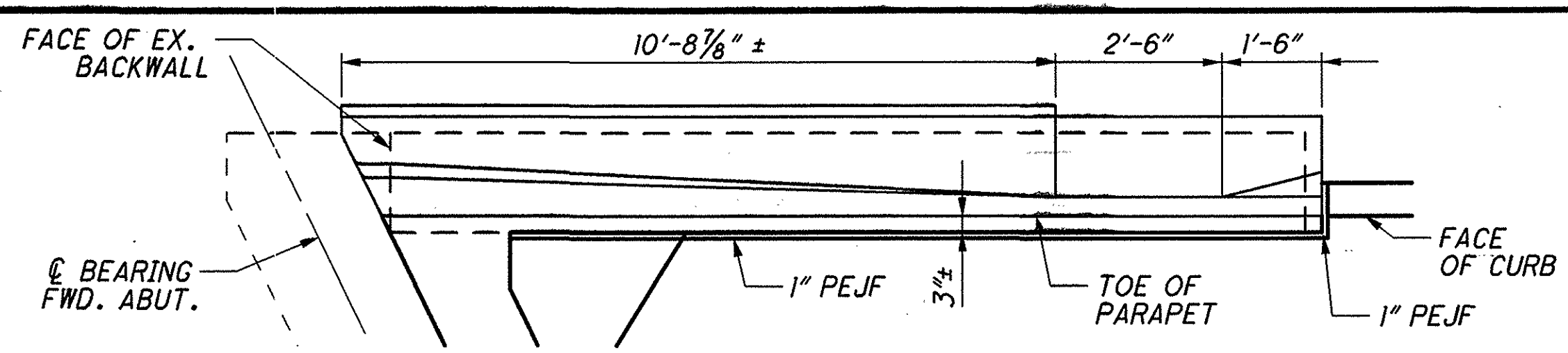
21 / 25

152
156

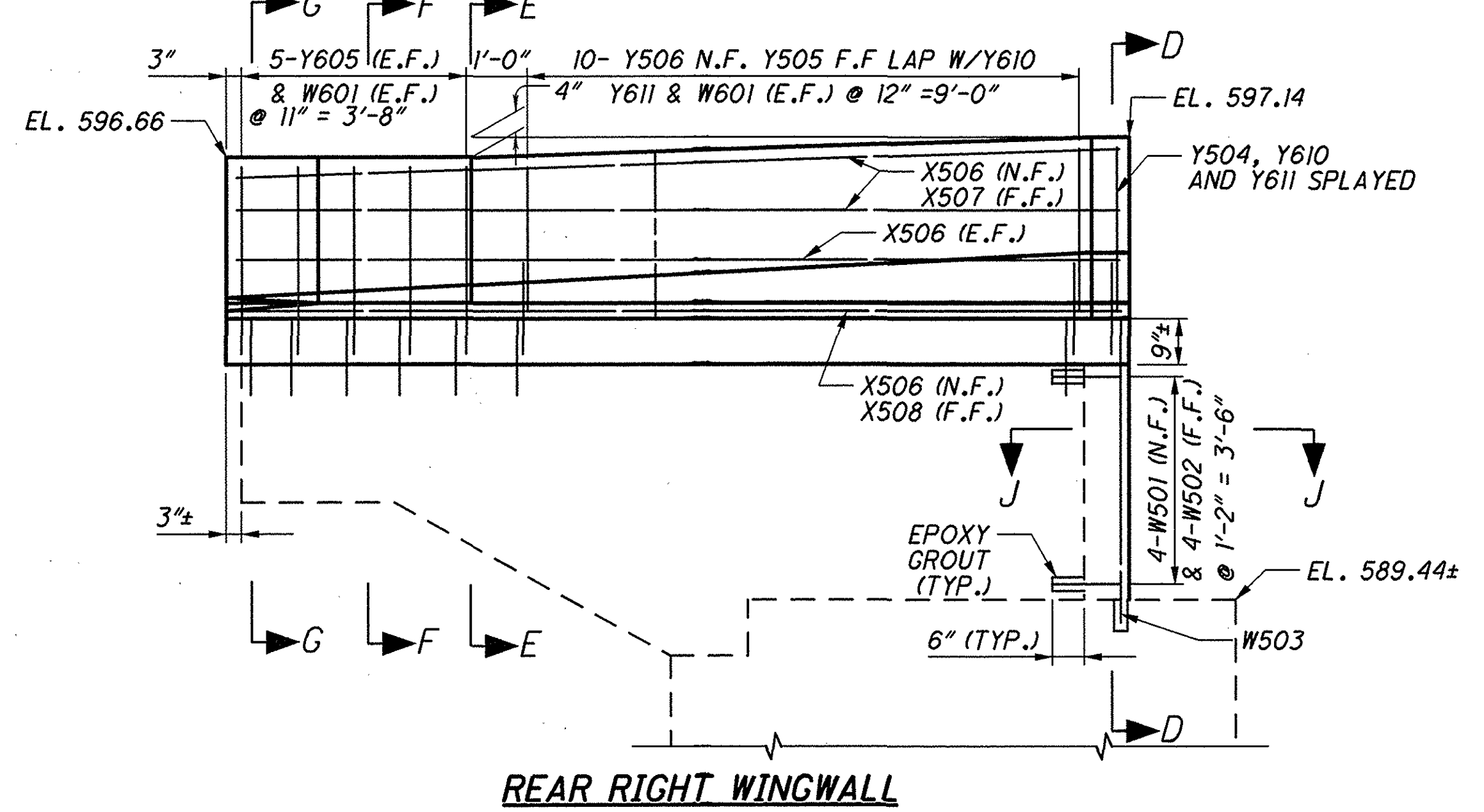
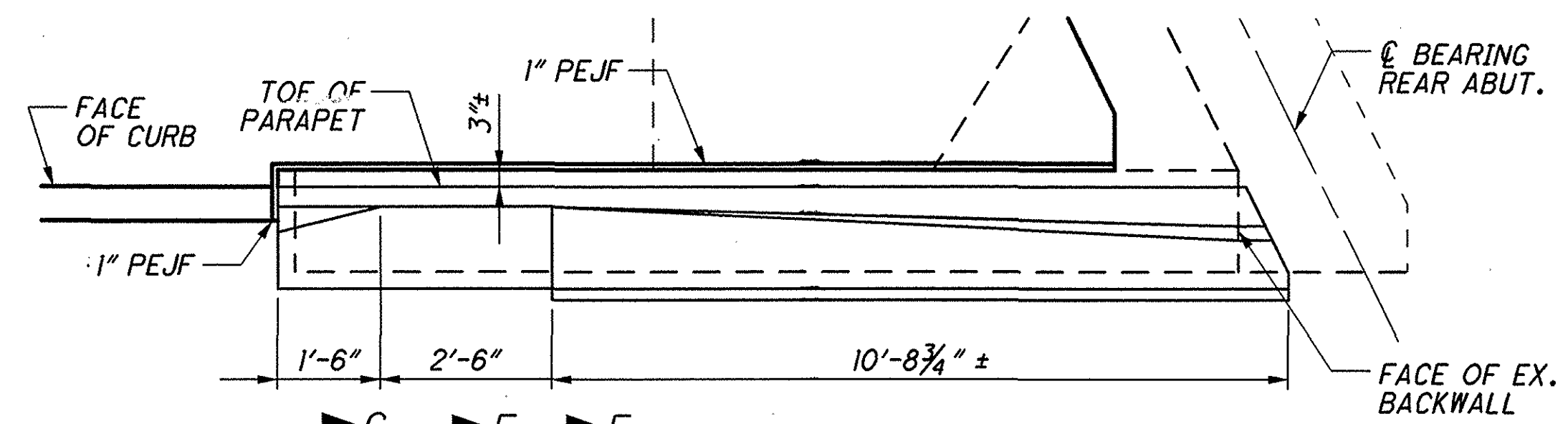
I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CSD007.dgn 05-FEB-2007 1:51PM charvill



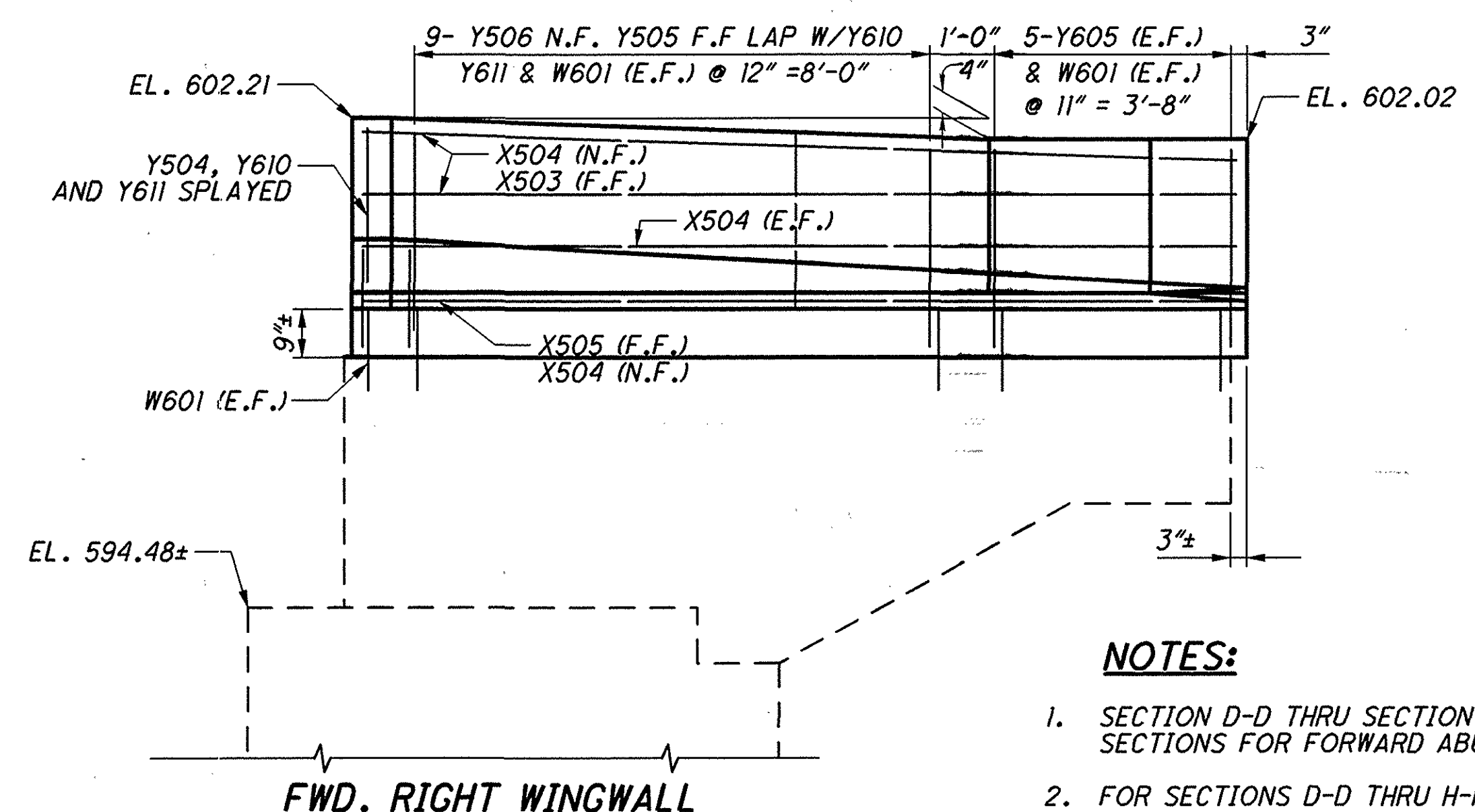
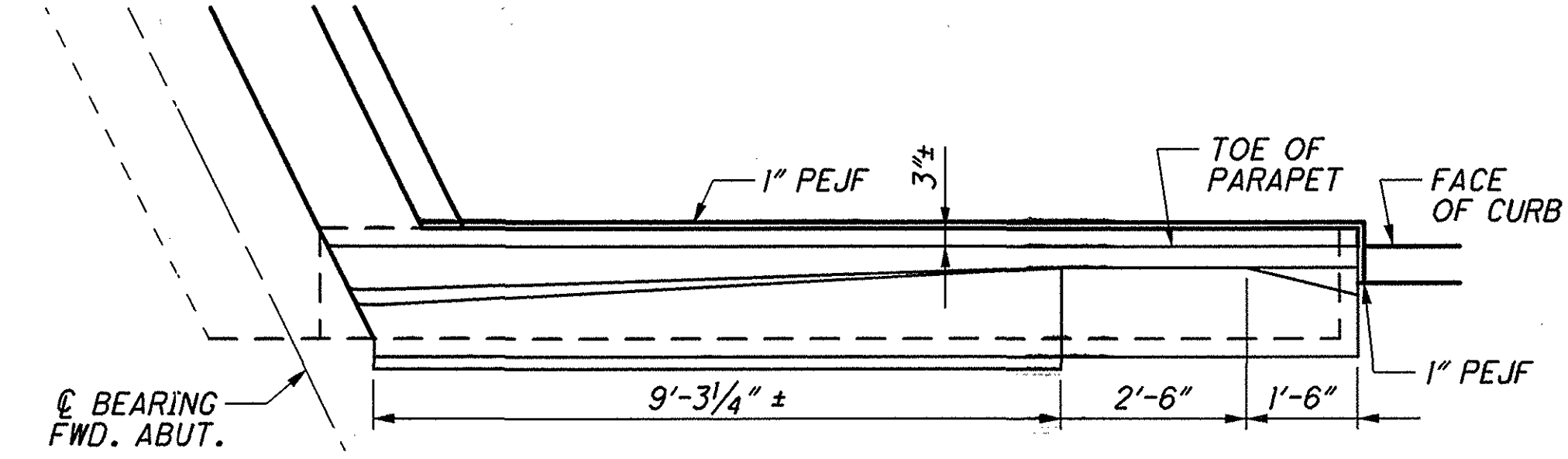
REAR LEFT WINGWALL



FWD. LEFT WINGWALL



REAR RIGHT WINGWALL



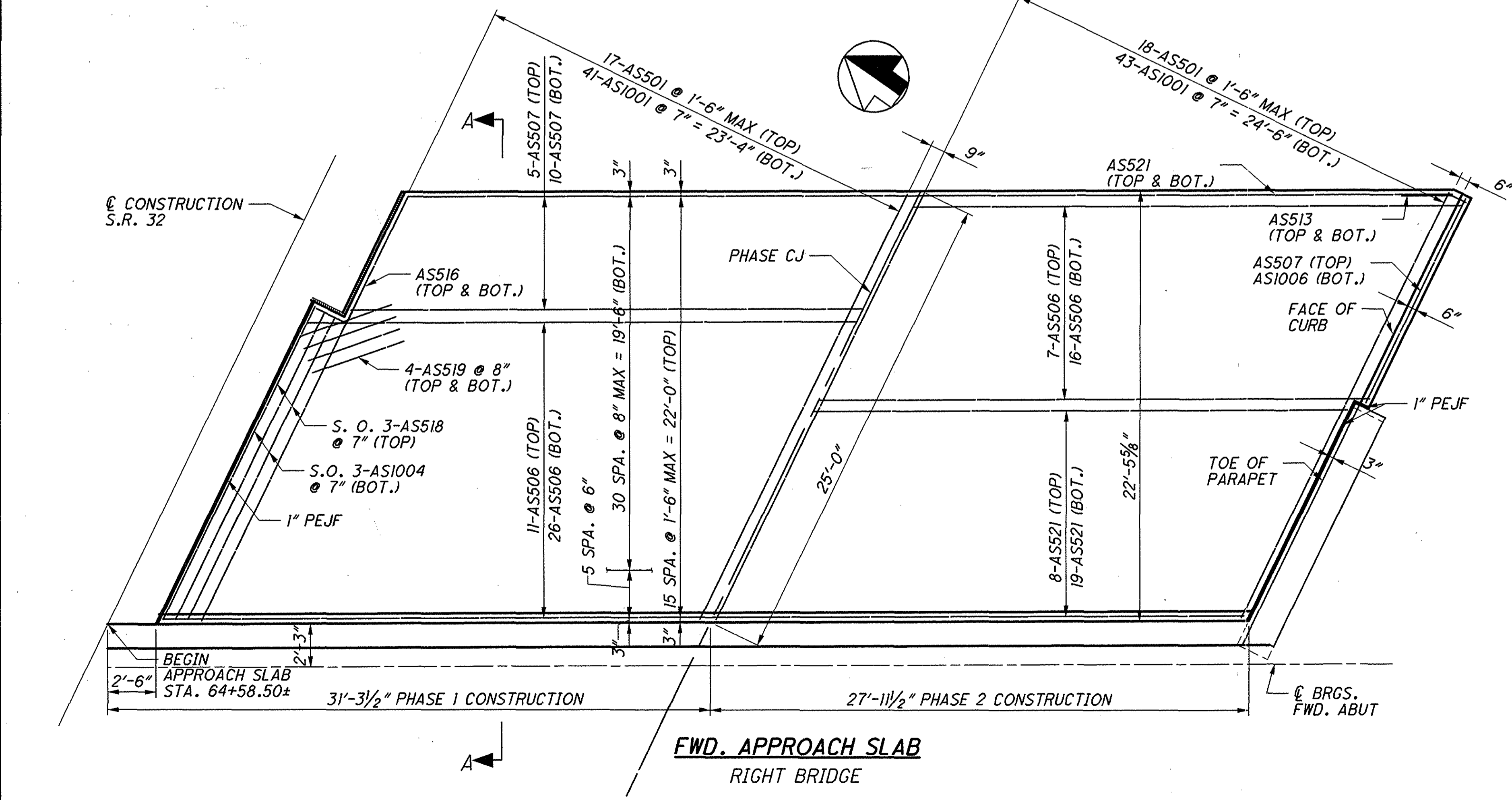
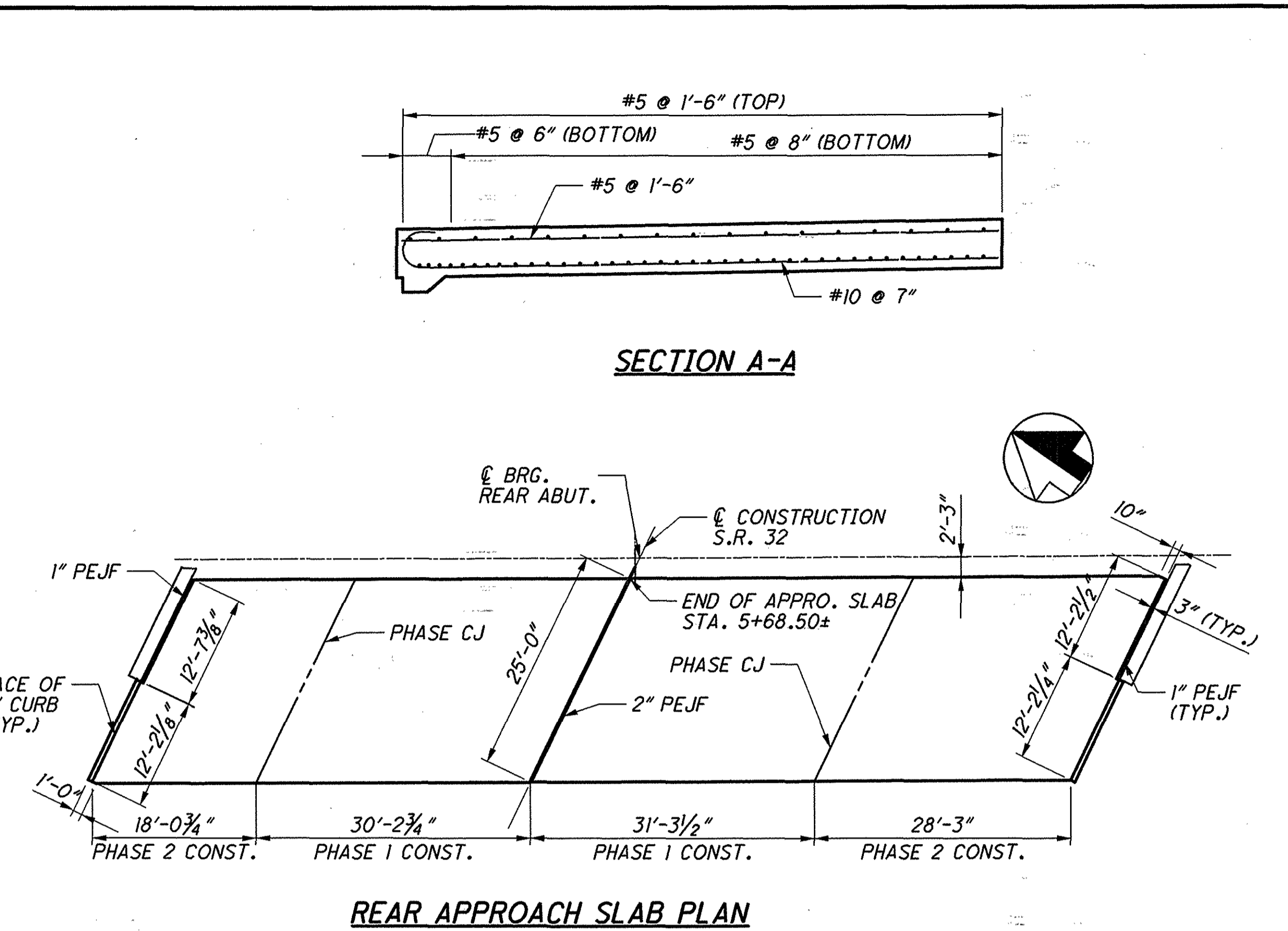
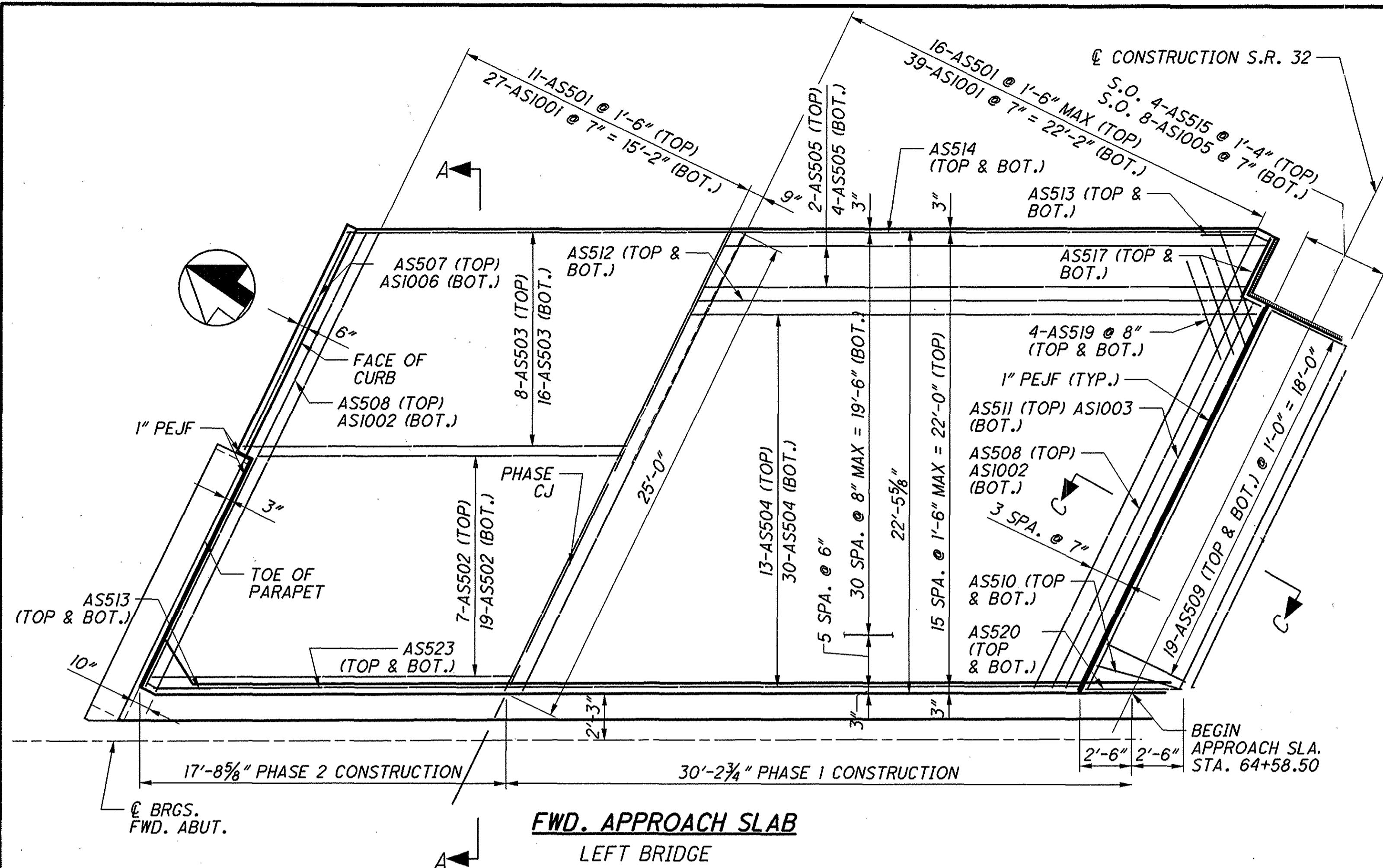
FWD. RIGHT WINGWALL

NOTES:

- SECTION D-D THRU SECTION G-G ARE FOR REAR ABUTMENT WINGWALL; SECTIONS FOR FORWARD ABUTMENT WINGWALL ARE SIMILAR.
- FOR SECTIONS D-D THRU H-H AND J-J, SEE SHEET 21/25.

DESIGN AGENCY BURGESS & NIPLE	
DATE 8-14-06	STRUCTURE FILE NUMBER 1300377
REVIEWED JSB	CHECKED SJA
DRAWN KML	DESIGNED XAC
BRIDGE NO. CLE-32-0734 OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132	
PROJECT NO. CLE-32-3.57/ 6.82/6.94/7.32 PID No. 24955	
22 / 25	
153 156	

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT_Mod\032_0734CAS001.dgn 05-FEB-2007 1:18PM charvill



- NOTES:**
1. SEAL THE PHASE CONSTRUCTION JOINT WITH HMMW, 2'-0" WIDE, CENTERED ON JOINT. PAYMENT TO BE INCLUDED WITH ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB) (T-15), AS PER PLAN. FOR MORE DETAILS, SEE GENERAL NOTE.
 2. FOR MORE APPROACH SLAB DETAILS, SEE SHEETS 21/25 AND 22/25 AND STANDARD DRAWING AS-1-81.
 3. FOR SECTION C-C, SEE SHEET 22/25.

DESIGN AGENCY: **BURGESS & NIPLE**
 32 Pine Street, 2nd Floor
 Concord, MA 03301

DESIGNED	XAC	CHECKED	SJA
DRAWN	KML	REVISED	
REVIEWED	JSB	STRUCTURE FILE NUMBER	1300377
DATE	8-14-06		

BRIDGE NO. CLE-32-0734
 OVER EAST FORK LITTLE MIAMI RIVER AND S.R. 132

CLE-32-3.57/
 6.82/ 6.94/ 7.32
 PID No. 24955

23 / 25

154
 156

I:\projects\CLE\sr032\06.82_PID24955\Consult\Final Tracings\ODOT Mod\032_0734CRL001.dgn 05-FEB-2007 9:07AM charwill

FORWARD APPROACH SLAB REINFORCING STEEL PAID UNDER APPRO. SLAB										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
AS501	62	24'-6"	1584	STR						
AS502*	26	17'-6"	474	STR						
AS503*	24	18'-6"	463	STR						
AS504*	43	27'-4"	1225	STR						
AS505*	6	26'-2"	163	STR						
AS506*	60	28'-6"	1783	STR						
AS507*	2	11'-8"	24	STR						
AS508	2	24'-3"	50	STR						
AS509	38	4'-0"	158	STR						
AS510	2	4'-3"	8	STR						
AS511	1	20'-8"	21	STR						
AS512*	2	26'-8"	55	STR						
AS513	6	3'-3"	20	20	0'-3"	0'-7"	2'-7"			
AS514*	2	25'-4"	52	STR						
	1	18'-3"								
AS515	S.O.	TO	80	STR						0'-7 5/8"
	4	20'-2"								
AS516	2	4'-8"	9	1	1'-11"	2'-11"				
AS517	2	4'-0"	8	1	1'-3"	2'-11"				
	1	17'-5"								
AS518	S.O.	TO	55	STR						0'-3 1/2"
	3	18'-0"								
AS519	16	5'-0"	83	STR						
AS520	2	4'-6"	9	STR						
AS521*	29	27'-7"	834	STR						
AS522	15	26'-5"	413	STR						
AS523	2	16'-10"	35	STR						
AS1001	150	25'-11"	16727	19	24'-6"					
AS1002	2	25'-8"	220	19	24'-3"					
AS1003	1	22'-1"	95	19	20'-8"					
	1	18'-10"			17'-5"					
AS1004	S.O.	TO	246	19	TO					0'-3 1/2"
	3	19'-5"			18'-0"					
	1	19'-8"			18'-3"					
AS1005	S.O.	TO	709	19	TO					0'-3 1/4"
	8	21'-7"			20'-2"					
AS1006	2	13'-1"	112	19	11'-8"					
		SUBTOTAL	25,715							

ABUTMENT REINFORCING STEEL LIST										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
A501*	10	30'-0"	312	STR						
A502*	10	17'-9"	185	STR						
A503*	10	31'-0"	323	STR						
A504*	10	27'-8"	288	STR						
A505	8	3'-4"	27	STR						
A601	216	4'-11"	1595	18	0'-11"	2'-2"	2'-2"			
A602	464	3'-1"	2148	1	1'-10"	1'-5"				
A603	16	5'-0"	120	18	1'-0"	2'-2"	2'-2"			
D801	140	4'-3"	1589	26	0'-6"	0'-6"	2'-2"	1'-0"	1'-0"	
		SUBTOTAL	6,587							

* REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

PARAPET REINFORCING STEEL NOT PAID UNDER ITEM 509										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
X503	4	13'-1"	55	42	9'-3"	2'-5"	0'-1 1/2"	1'-5"	0'-5"	
X504	10	12'-10"	133	STR						
X505	2	13'-4"	27	STR						
X506	10	14'-1"	146	STR						
X507	4	13'-11"	58	42	10'-1"	2'-5"	0'-1 1/2"	1'-5"	0'-5"	
X508	2	13'-10"	28	STR						
X509	4	13'-6"	56	STR						
X510	4	12'-4"	51	STR						
X511	12	26'-0"	325	STR						
X512	4	20'-5"	85	STR						
X513	4	21'-1"	87	STR						
X603	2	25'-11"	77	STR						
X701	1	13'-3"	27	STR						
X702	1	20'-8"	42	STR						
Y502	50	7'-1"	369	2A						
Y503	4	6'-11"	28	2	3'-0"	3'-3"	0'-9"	0'-4 5/8"	0'-1 5/8"	
Y504	4	6'-0"	25	2	2'-6"	2'-9"	0'-10"	0'-4"	0'-1 7/8"	
Y505	38	3'-0"	118	19	2'-5"					
Y506	38	2'-5"	95	STR						0'-0 3/8"
Y603	54	3'-0"	243	1	1'-0"	2'-2"				
Y604	54	3'-7"	290	6A	0'-10"	1'-3"	0'-10 1/2"			
Y605	20	3'-11"	117	1	3'-1"	1'-0"				0'-0 3/8"
Y606	72	3'-8"	397	41	1'-10"	1'-0"	1'-9"			
	2	3'-0"								
Y607	S.O.	TO	122	STR						0'-0 1/4"
	13	3'-3"								
	2	2'-5"								
Y608	S.O.	TO	160	STR						0'-0 1/8"
	21	2'-8"								
Y609	4	3'-7"	21	STR						
Y610	42	3'-0"	189	6A	0'-9"	0'-9"	0'-10 1/2"			
Y611	42	2'-3"	141	1	0'-11"	1'-6"				
W501	8	1'-5"	11	20	0'-9"	0'-5"	0'-7"			
W502	8	1'-6"	13	41	0'-9"	0'-4"	0'-11"			
W503	2	5'-0"	10	STR						
W601	124	1'-3"	232	STR						
		SUBTOTAL	3,778							

NOTE:
1. ALL BARS SHALL BE EPOXY COATED.

DESIGN AGENCY
BURGESS & NIPLÉ
38 Plus Street, 20th Floor
Cincinnati, Ohio 45202

DATE
8-14-06

REVIEWED
JSB

DRAWN
GTT

DESIGNED
XAC

CHECKED
SJA

STRUCTURE FILE NUMBER
1300377

REINFORCING STEEL LIST 1
BRIDGE NO. CLE-32-0734
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132

CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

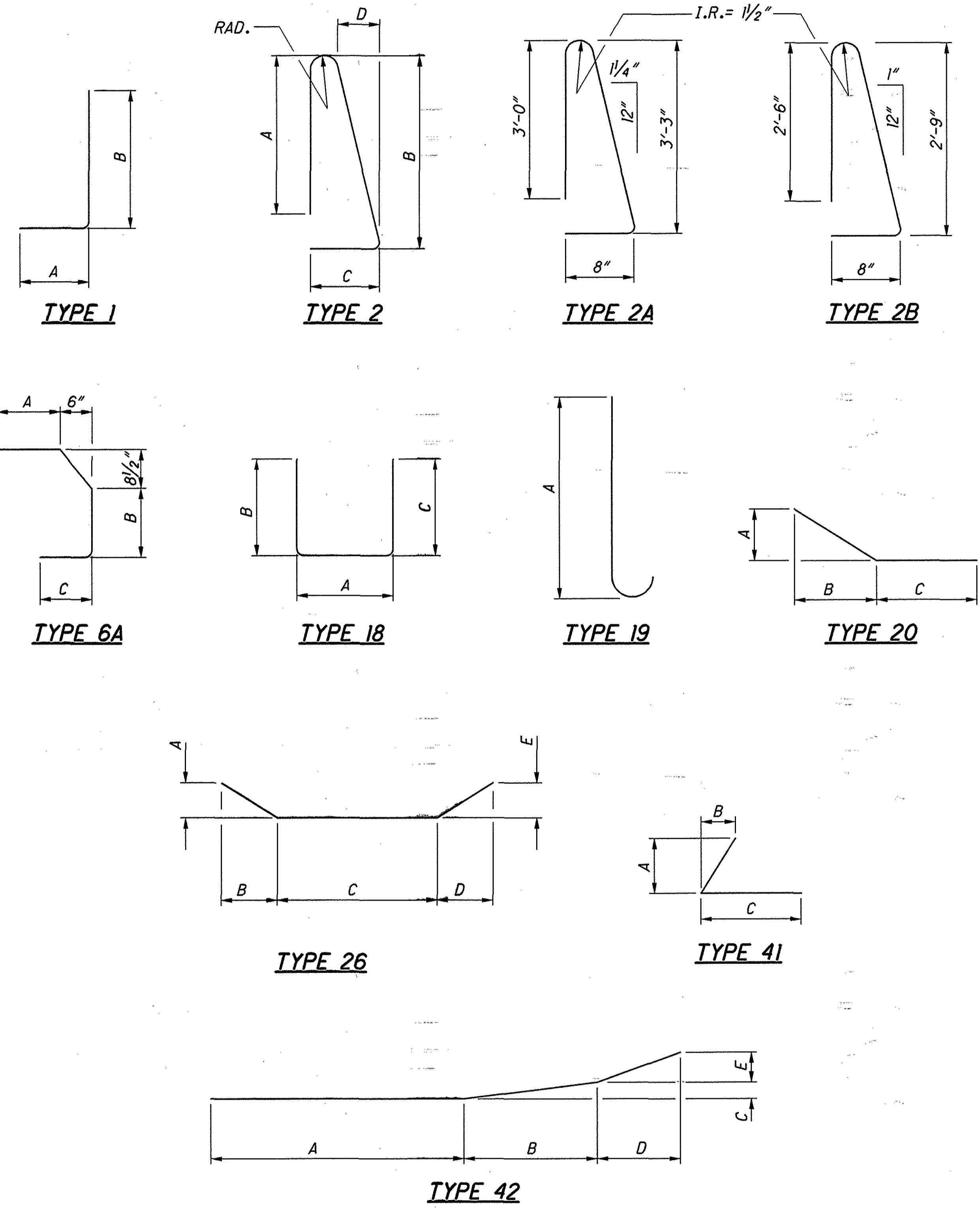
24 / 25

155
156

I:\projects\CLE\sr032\06.82_PID2.4955\Consult\Final Tracings\ODOT Mod\032_0734CRL002.dgn 05-FEB-2007 9:08AM charvill

SUPERSTRUCTURE REINFORCING STEEL LIST										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM A.	DIM B	DIM C	DIM D	DIM E/RAD	INCR.
S401	4794	30'-0"	96071	STR						
S402	282	4'-4"	816	STR						
S403	32	3'-0"	64	STR						
S501*	2270	26'-11"	63728	STR						
S502*	2292	17'-8"	42233	STR						
	2	4'-10"								
S503	S.O.	TO	368	STR						0'-9 7/8"
	16	17'-3"								
	2	4'-0"								
S504*	S.O.	TO	333	STR						0'-9 5/8"
	16	16'-0"								
S505*	32	3'-0"	100	STR						
S506	32	6'-2"	205	STR						
	2	3'-10"								
S507*	S.O.	TO	840	STR						0'-10 1/4"
	27	26'-0"								
	2	3'-8"								
S508	S.O.	TO	885	STR						0'-10 1/4"
	28	26'-8"								
S509	2268	27'-10"	65840	STR						
S510	2272	26'-8"	63191	STR						
	2	4'-6"								
S511*	S.O.	TO	934	STR						0'-10 1/4"
	28	27'-6"								
	2	4'-0"								
S512	S.O.	TO	905	STR						0'-10 1/4"
	28	27'-0"								
	2	4'-3"								
S513*	S.O.	TO	809	STR						0'-10 1/4"
	26	25'-7"								
	2	2'-0"								
S514	S.O.	TO	846	STR						0'-10 1/4"
	29	26'-0"								
S515	556	28'-0"	16237	STR						
S516	278	13'-8"	3962	STR						
S517	278	19'-8"	5702	STR						
S518	278	29'-0"	8408	STR						
X501	432	30'-0"	13517	STR						
X502	24	4'-2"	104	STR						
X501	72	30'-0"	3244	STR						
X602	4	14'-7"	87	STR						
Y501	972	6'-0"	6083	2B						
Y502	971	7'-1"	7173	2A						
Y503	4	6'-11"	28	2	3'-0"	3'-3"	0'-9"	0'-4 5/8"	0'-1 5/8"	
Y504	4	6'-0"	25	2	2'-6"	2'-9"	0'-10"	0'-4"	0'-1 7/8"	
Y601	1951	2'-6"	7326	1	1'-0"	1'-8"				
Y602	1951	3'-3"	9523	6A	0'-9"	1'-0"	0'-10 1/2"			
		SUBTOTAL	419,587							

* REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.



NOTE:
1. ALL BARS SHALL BE EPOXY COATED.

DESIGN AGENCY
BURGESS & NIPLE
38 Pias Street, 2nd Floor
Cincinnati, Ohio 45202

DATE: 8-14-06
REVIEWED: JSB
DRAWN: GTT
DESIGNED: XAC
CHECKED: SJA
STRUCTURE FILE NUMBER: 1300377

REINFORCING STEEL LIST 2
BRIDGE NO. CLE-32-0734
OVER EAST FORK LITTLE MIAMI RIVER & S.R. 132

CLE-32-3.57/6.82
/ 6.94/7.32
PID No. 24955

25 / 25

156
156