

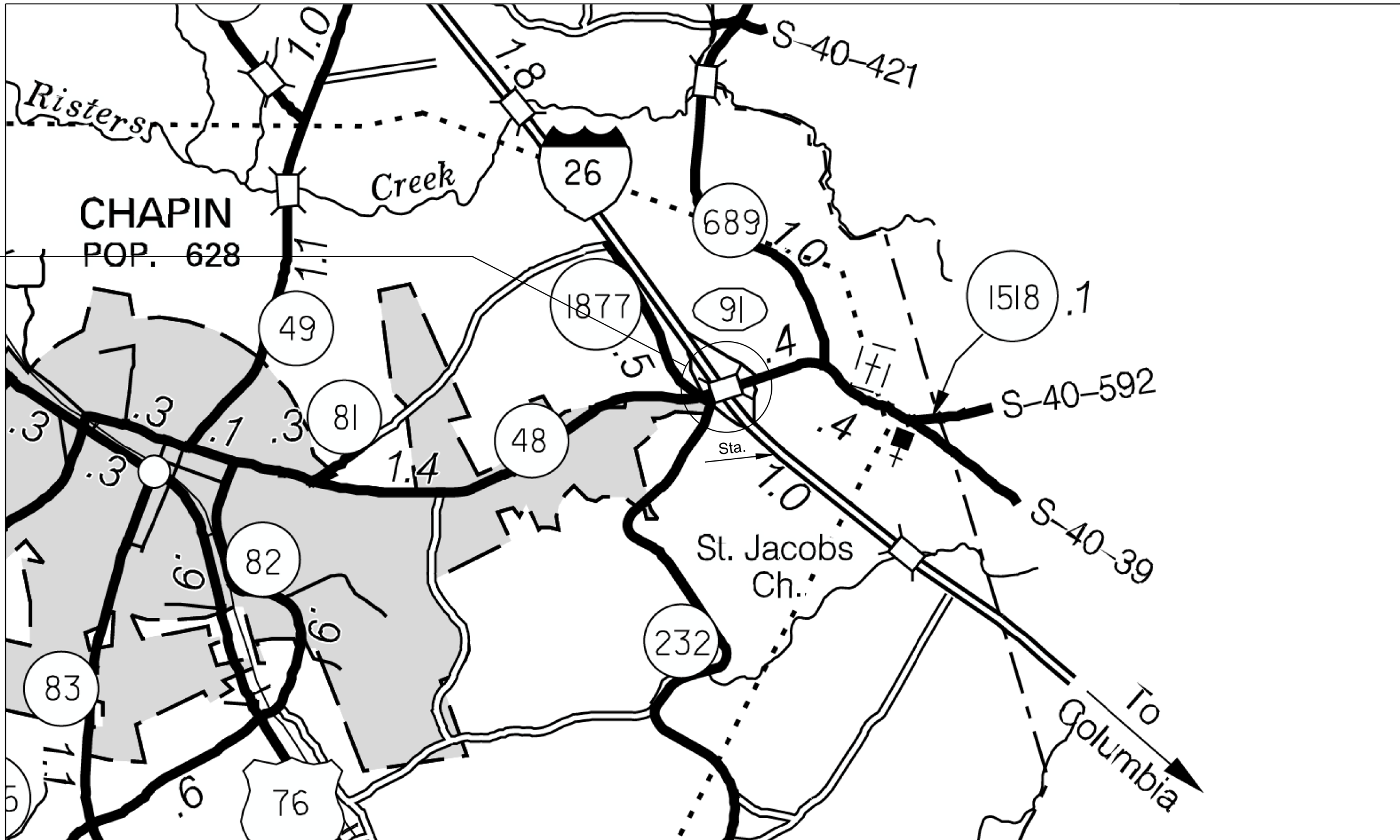


PROPOSED PLANS
FOR
LEXINGTON COUNTY
PROJECT ID 0042383
S-48 (COLUMBIA AVENUE)
REPLACE BRIDGE OVER I-26

INDEX OF SHEETS

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SITE LOCATION



SUBMIT SHOP PLANS TO:

MEAD & HUNT, INC.
878 SOUTH LAKE DRIVE
LEXINGTON, SC 29072

TELEPHONE: (803) 996-2900

APPROXIMATE LOCATION OF BRIDGE IS

LATITUDE 34° 10' - 38"
LONGITUDE 81° 19' - 22"

SCDOT REVIEW	FOR CONSTRUCTION	
	INITIAL	DATE
PRECONSTRUCTION SUPPORT - ROAD		
PRECONSTRUCTION SUPPORT - STRUCTURES		
RPG - DESIGN MANAGER		
RPG - PROGRAM MANAGER		

THE INITIALS ABOVE DO NOT RELIEVE THE ENGINEER OF RECORD OF THE RESPONSIBILITY TO DESIGN THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE CRITERIA.

3 DAYS BEFORE DIGGING IN
SOUTH CAROLINA

CALL 811

SOUTH CAROLINA 811 (SC811)
WWW.SC811.COM
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

ASSET ID 3032

TRAFFIC DATA

2020 ADT 15,260 V.P.D.

2040 ADT 24,490 V.P.D.

TRUCKS 2%

LAYOUT

NET LENGTH OF ROADWAY	0.000	MILES
NET LENGTH OF BRIDGES	0.035	MILES
NET LENGTH OF PROJECT	0.035	MILES
LENGTH OF EXCEPTIONS	0.000	MILES
GROSS LENGTH OF PROJECT	0.035	MILES

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

CONSULTING ENGINEERING FIRM

Mead&Hunt

878 SOUTH LAKE DRIVE
LEXINGTON, SC 29072
(803) 996-2900

ENGINEER OF RECORD

FOR CONSTRUCTION : _____
DATE

MATERIAL & WORKMANSHIP

PROVIDE ALL MATERIAL AND WORKMANSHIP IN ACCORDANCE WITH THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION 2007 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, UNLESS OTHERWISE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS.

COORDINATION OF PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS

GENERALLY, IN CASE OF DISCREPANCY, THIS GENERAL NOTES SHEET GOVERNS OVER THE STANDARD SPECIFICATIONS BUT THE REMAINDER OF THE PLANS GOVERN OVER NOTES ON THIS SHEET AND SPECIAL PROVISIONS GOVERN OVER ALL. SEE SUBSECTION 105.4 OF THE STANDARD SPECIFICATIONS.

WATER ELEVATIONS

THE WATER ELEVATIONS SHOWN IN THE PLANS ARE FOR INFORMATION ONLY AND THE ACTUAL WATER ELEVATION DURING CONSTRUCTION MAY VARY DEPENDING ON WEATHER CONDITIONS AND SEASONAL FLUCTUATIONS.

COMPLETION DATES

ON INSIDE FACE OF RIGHT SIDE BARRIER PARAPET/RAILING AT BEGINNING OF BRIDGE AND ON LEFT SIDE BARRIER PARAPET/RAILING AT END OF BRIDGE, PLACE YEAR OF COMPLETION ADJACENT TO GUARDRAIL ATTACHMENT. PLACE THIS COMPLETION DATE SO THAT IT WILL NOT BE COVERED BY THE GUARDRAIL CONNECTOR WHEN IT IS INSTALLED. RECESS NUMBERS IN THE CONCRETE USING NUMBERS FABRICATED FROM REUSABLE/DURABLE MATERIAL THAT IS APPROVED BY THE RCE. PROVIDE NUMBERS IN ACCORDANCE WITH SCDOT STANDARD DRAWING NO. 702-305-00.

REINFORCING STEEL

FABRICATE REINFORCING BARS IN ACCORDANCE WITH THE CURRENT C.R.S.I. MANUAL OF STANDARD PRACTICE EXCEPT FOR TIES, STIRRUPS, AND WELDED HOOPS.

PROVIDE ALL TIES AND STIRRUPS WITH 135° HOOKS THAT HAVE EXTENSIONS NO LESS THAN THE LARGER OF TEN BAR DIAMETERS OR SIX INCHES. THIS 135° HOOK REQUIREMENT DOES NOT APPLY TO STIRRUPS EXTENDING FROM PRESTRESSED CONCRETE BEAMS.

THE FABRICATION TOLERANCE FOR OUT-TO-OUT DIMENSION OF WELDED HOOP DIAMETER IS ± 1/2 INCH.

DO NOT USE LAP SPLICES IN COLUMN AND SHAFT REINFORCING STEEL.

PRESTRESSED CONCRETE BEAMS

BEAM LENGTHS GIVEN ARE BASED ON HORIZONTAL SPAN ONLY. INCREASE LENGTHS TO CORRECT FOR CONCRETE SHRINKAGE, CONCRETE SHORTENING WHEN THE STRANDS ARE CUT, AND FOR BEAMS BEING ON A GRADE.

ALL OVERHANG BRACKETS IN THE TOP FLANGE OF EXTERIOR BEAMS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111, AASHTO M 232, OR ASTM F 2329 AS APPROPRIATE AND SHALL BE DETAILED ACCORDINGLY IN THE SHOP PLANS.

CONCRETE

PROVIDE THE CLASS OF CONCRETE AS NOTED IN THE CONTRACT DOCUMENTS. FOR CAST-IN-PLACE STRUCTURAL ELEMENTS, USE CLASS 4000 CONCRETE WHERE THE CLASS OF CONCRETE IS NOT SPECIFIED IN THE CONTRACT DOCUMENTS.

WHEN HOLES ARE CAST IN BEAMS TO ACCOMMODATE FALSEWORK, FILL THE HOLES WITH A NON-SHRINK STRUCTURAL GROUT SUITABLE FOR OVERHEAD REPAIRS AFTER FALSEWORK IS REMOVED.

AFTER ERECTION OF THE BEAMS AND PRIOR TO THE ERECTION OF THE DECK SLAB FALSEWORK, MEASURE BEAM CAMBERS. COMPARE THE MEASURED BEAM CAMBERS TO THE VALUES SHOWN ON THE PLANS TO AID IN DETERMINING IF FIELD ADJUSTMENTS ARE NEEDED. SUBMIT BEAM CAMBER MEASUREMENTS AND ANY PROPOSED FIELD ADJUSTMENTS TO THE RCE FOR APPROVAL. ALL COST OF PERFORMING THIS WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION IS ALLOWED FOR THE PERFORMANCE OF THIS WORK.

PAYMENT FOR CONCRETE IN SLAB IS BASED ON THEORETICAL PLAN QUANTITY. NO ADJUSTMENT IS MADE FOR VARIATION IN CAMBER.

CHAMFER ALL EXPOSED EDGES 3/4" UNLESS OTHERWISE NOTED.

THE MINIMUM ACCEPTABLE CONCRETE COVER FOR REINFORCING STEEL IS 1/2" LESS THAN THE PLAN DIMENSIONS WHEN REQUIRED BY REINFORCING BAR FABRICATION TOLERANCES.

CAST BUILD-UPS AND SHEAR KEYS ON BENT CAPS MONOLITHIC WITH THE CAP UNLESS INDICATED OTHERWISE IN THESE PLANS. CONSTRUCT THE TOP OF EACH BUILD-UP LEVEL.

GRINDING & TEXTURING CONCRETE DECKS

FOR BRIDGE STAGE CONSTRUCTION PROJECTS, GRIND AND TEXTURE THE BRIDGE DECKS AS NECESSARY NEAR THE STAGE LONGITUDINAL CONSTRUCTION JOINTS IN ORDER TO MEET THE LONGITUDINAL AND TRANSVERSE RIDEABILITY AND ROLLING STRAIGHTEDGE REQUIREMENTS OF THE CONTRACT.

PRIOR TO CASTING ANY CLOSURE POUR, GRINDING, OR TEXTURING, MAKE PROFILE LINE SURVEYS (2 TO 6 AS DETERMINED BY THE RCE) OF EACH STAGE OF THE BRIDGE DECKS. MAKE ONE OF THESE PROFILE LINE SURVEYS FOR EACH STAGE ALONG THE EDGE OF THE DECK ADJACENT TO THE CLOSURE POUR. COMPARE THE SURVEYS WITHIN EACH STAGE AND COMPARE THE SURVEYS OF EACH STAGE TO SURVEYS OF THE ADJACENT STAGE TO AID IN DETERMINING THE AMOUNT OF GRINDING AND TEXTURING NEEDED TO MEET THE RIDEABILITY AND ROLLING STRAIGHTEDGE REQUIREMENTS. SUBMIT ALL GRINDING AND TEXTURING PROCEDURES, PLOTTED SURVEY PROFILES, AND PROPOSED GRINDING DEPTHS TO THE RCE FOR APPROVAL. MAINTAIN A FINAL COVER OF 2" MINIMUM OVER THE BRIDGE DECK REINFORCING STEEL.

FOLLOW THE ABOVE PROCEDURES FOR ALL STAGES OF THE WORK. FOR ALL SURVEYS PERFORMED ON THE SAME BRIDGE, USE IDENTICAL STATIONS FOR SURVEY SHOTS IN ORDER TO FACILITATE SURVEY COMPARISONS. ALL COSTS FOR PERFORMING, EVALUATING, AND SUBMITTING THE SURVEYS ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION IS ALLOWED FOR THE PERFORMANCE OF THIS WORK.

PAYMENT FOR GRINDING AND TEXTURING CONCRETE BRIDGE DECKS AT THE JUNCTION OF NEW AND EXISTING BRIDGE DECK SLABS IS DETERMINED IN ACCORDANCE WITH SUBSECTION 702.6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT IS MADE FOR GRINDING AND TEXTURING OF NEW BRIDGE DECKS TO CORRECT IRREGULARITIES AND EXCESSIVE DEVIATIONS.

ALLOWANCE FOR DEAD LOAD DEFLECTION & SETTLEMENT

IN SETTING FORMS FOR STRUCTURAL STEEL OR PRESTRESSED CONCRETE BEAM SPANS, APPLY AN ALLOWANCE TO THE DESIGN FINISHED GRADE TO COMPENSATE FOR COMPUTED DEAD LOAD DEFLECTIONS.

PRIOR TO MAKING DECK POURS ON ANY STAGE CONSTRUCTION WORK, AND BRIDGE WIDENING PROJECTS, CONSIDER AND MAKE ADJUSTMENTS AS NECESSARY FOR PARTIALLY LOADED BEAMS ADJACENT TO CLOSURE POUR AREAS. VERIFY THAT ANY PROPOSED ADJUSTMENT ON PARTIALLY LOADED BEAMS DOES NOT CREATE A CHANGE IN THE DECK THICKNESS OR A REDUCTION IN THE CONCRETE COVER OVER THE REINFORCING STEEL. WELDED STUDS ON STEEL BEAMS AND REINFORCING STEEL EXTENDING UP OUT OF PRESTRESSED BEAMS SHALL MEET THE REQUIREMENTS FOR A COMPOSITE SECTION (EXTEND UP INTO THE DECK PAST THE BOTTOM MAT OF REINFORCING STEEL) REGARDLESS OF ANY ADJUSTMENTS.

IN SETTING FALSEWORK FOR REINFORCED CONCRETE SPANS, MAKE AN ALLOWANCE FOR THE DEFLECTION OF THE FALSEWORK, FOR ANY SETTLEMENT OF THE FALSEWORK, FOR THE INSTANTANEOUS DEAD LOAD DEFLECTION OF THE SPAN, AND FOR THE LONG-TIME DEAD LOAD DEFLECTION OF THE SPAN SUCH THAT ON REMOVAL OF THE FALSEWORK THE TOP OF THE STRUCTURE SHALL CONFORM TO THEORETICAL FINISHED GRADE PLUS THE ALLOWANCE FOR LONG-TIME DEFLECTION.

FOR INSTANTANEOUS AND LONG-TIME DEAD LOAD DEFLECTION, USE A CAMBER OF 1/8" FOR CONCRETE FLAT SLAB SPANS 22 FEET IN LENGTH, 3/16" FOR CONCRETE FLAT SLAB SPANS 30 FEET IN LENGTH, AND 3/8" FOR CONCRETE FLAT SLAB SPANS 40 FEET IN LENGTH, UNLESS OTHERWISE DIRECTED BY THE RCE. ADJUST THESE CAMBERS AS NECESSARY TO ALLOW FOR FALSEWORK DEFLECTION, FALSEWORK SETTLEMENT, AND VERTICAL CURVE ORDINATES.

PERMANENT STEEL BRIDGE DECK FORMS

PERMANENT STAY-IN-PLACE STEEL BRIDGE DECK FORMS FOR CONCRETE DECK SLABS MAY BE USED AT THE CONTRACTOR'S OPTION.

NOTIFY THE DEPARTMENT AND THE FABRICATOR OF THE BEAMS IF USING THIS OPTION SO THAT SHOP PLANS CAN BE PROPERLY DETAILED.

DRIVEN PILE FOUNDATIONS

WHERE PILES OCCUR IN FILL, PLACE FILL BEFORE DRIVING PILES.

WHERE PRESTRESSED CONCRETE PILES ARE TO BE DRIVEN THROUGH FILL, INSTALL PILES IN PRE-BORED HOLES EXTENDING TO THE ORIGINAL GROUND. FOR SQUARE PRESTRESSED CONCRETE PILES, BORE HOLES HAVING A MINIMUM DIAMETER OF 1.25 TIMES THE NOMINAL PILE SIZE. INCLUDE ALL COST OF PRE-BORING FILLS FOR PILE INSTALLATION IN THE UNIT PRICE BID FOR THE PILES.

EXCAVATION FOR END BENTS

INCLUDE ALL COST OF EXCAVATION NECESSARY TO CONSTRUCT END BENTS AND TO REMOVE MATERIAL UNDER SUPERSTRUCTURE TO AN ELEVATION TWELVE INCHES BELOW TOPS OF END BENT CAPS, IN THE UNIT PRICE BID FOR CLASS OF CONCRETE SPECIFIED IN THE PLANS.

IF A CONCRETE FOOTING IS USED FOR THE END BENT, THE EXCAVATION BELOW THAT INCLUDED FOR THE CAP AND BERM IN THE ABOVE PARAGRAPH IS PAID FOR AT THE UNIT PRICE BID FOR EXCAVATION. INCLUDE EXCAVATION ABOVE THIS IN THE UNIT PRICE BID FOR CLASS OF CONCRETE SPECIFIED IN THE PLANS.

STRUCTURAL STEEL

LAYOUT DIMENSIONS AND STANDARD LENGTHS OF BEAMS SHOWN ARE HORIZONTAL DIMENSIONS WHICH MUST BE INCREASED WHEN BRIDGE IS ON GRADE.

WHEN HOLES ARE PLACED IN WEBS TO ACCOMMODATE FALSEWORK, INSTALL HIGH STRENGTH BOLTS IN THE HOLES AFTER FALSEWORK IS REMOVED.

NOTIFY THE DEPARTMENT OF THE NAME AND ADDRESS OF THE FABRICATOR OF THE STRUCTURAL STEEL AS SOON AS THE FABRICATOR HAS BEEN GIVEN THE CONTRACT TO FABRICATE SO THAT THE INSPECTION PROCEDURE CAN BE SET UP.

DO NOT FIELD OR SHOP WELD ERECTION HARDWARE TO THE STRUCTURAL STEEL MEMBERS.

MAKE ALL BOLTED CONNECTIONS WITH 7/8" DIA. ASTM A 325 BOLTS UNLESS OTHERWISE INDICATED.

GENERALLY, HOLES FOR 7/8" DIA. BOLTS SHALL BE 15/16" DIA. HOWEVER, OVERSIZE HOLES, 3/16" LARGER THAN BOLT DIA., MAY BE USED IN DIAPHRAGMS AND/OR CROSSFRAMES AND THEIR CONNECTION PLATES PROVIDED HARDENED WASHERS ARE INSTALLED OVER OVERSIZE HOLES IN THE OUTER PLY OF THE MATERIAL GRIPPED. HARDENED WASHERS ARE REQUIRED UNDER DTIS ON OVERSIZED HOLES. IN EVERY CASE INSTALL A HARDENED WASHER UNDER THE ELEMENT TURNED FOR EACH BOLT OF A BOLTED CONNECTION. INDICATE ON THE SHOP PLANS WHICH HOLES ARE TO BE OVERSIZE AND WHERE HARDENED WASHERS ARE REQUIRED. NO ADDITIONAL PAYMENT IS MADE FOR THE COSTS ASSOCIATED WITH THE USE OF OVERSIZE HOLES AND FURNISHING ADDITIONAL HARDENED WASHERS AS NECESSARY.

PAINT FOR STRUCTURAL STEEL

PAINT STRUCTURAL STEEL IN ACCORDANCE WITH SECTION 710 OF THE STANDARD SPECIFICATIONS.

BEARING ASSEMBLIES

IF BEARING ASSEMBLIES SUPPORT WEATHERING STEEL BEAMS OR GIRDERS, FABRICATE BEARING ASSEMBLY COMPONENTS FROM WEATHERING STEEL AND PAINT THEM USING THE NS2 PAINT SYSTEM. GALVANIZE ALL OTHER BEARING ASSEMBLIES IN ACCORDANCE WITH AASHTO M 111, AASHTO M 232, OR ASTM F 2329 AS APPLICABLE.

AFTER THE REQUIRED FIELD WELDING OF PAINTED BEARING ASSEMBLIES, FIELD REPAIR THE WELD AREAS AND/OR ANY DAMAGED AREAS TO THE PAINT IN ACCORDANCE WITH SUBSECTION 710.4.2 OF THE STANDARD SPECIFICATIONS. AFTER THE REQUIRED FIELD WELDING OF GALVANIZED BEARING ASSEMBLIES, FIELD REPAIR THE WELD AREAS AND/OR DAMAGED AREAS OF THE GALVANIZED COATING IN ACCORDANCE WITH ASTM A 780.

INCLUDE ALL COST OF FURNISHING AND INSTALLING STEEL BEARING ASSEMBLY COMPONENTS IN THE LUMP SUM PRICE BID FOR STRUCTURAL STEEL IF A BID ITEM FOR STRUCTURAL STEEL IS INCLUDED IN THE PROJECT. OTHERWISE, INCLUDE THE COST IN THE UNIT PRICE BID FOR PRESTRESSED BEAMS.

ANCHOR BOLTS

GALVANIZE ALL COMPONENTS OF ANCHOR BOLT ASSEMBLIES IN ACCORDANCE WITH AASHTO M 232 OR ASTM F 2329 AS APPLICABLE. THE WEIGHT OF ANCHOR BOLT ASSEMBLIES IS INCLUDED IN THE BENT QUANTITIES FOR REINFORCING STEEL. INCLUDE ALL COSTS OF FURNISHING AND INSTALLING ANCHOR BOLT ASSEMBLIES IN THE UNIT PRICE BID FOR REINFORCING STEEL.

ORIENTATION IN RELATION TO STATIONING

LEFT AND RIGHT SIDES, WHERE REFERRED TO IN THESE PLANS, ARE IN RELATION TO DIRECTION OF STATIONING.

SPECIFICATIONS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, WITH INTERIM REVISIONS THROUGH 2016.

ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE (LATEST EDITION) WITH ADDITIONS AND REVISIONS AS STATED IN THE STANDARD SPECIFICATIONS.

DESIGN DATA

LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD

LIVE LOAD: AASHTO HL-93 LOADING

THE TOP 1/4" OF ALL CONCRETE SLABS IS CONSIDERED AS A WEARING SURFACE AND IS NOT INCLUDED IN THE SLAB DEPTH USED FOR THE CALCULATION OF SECTION PROPERTIES.

ALL BOLTED CONNECTIONS, EXCEPT FOR STEEL DIAPHRAGM MEMBERS USED WITH PRESTRESSED CONCRETE BEAMS, ARE DESIGNED AS SLIP-CRITICAL CONNECTIONS HAVING CLASS "B" CONTACT SURFACES.

AN EXTRA DEAD LOAD OF 0.016 KSF IS INCORPORATED INTO THE DESIGN OF THIS STRUCTURE TO ACCOMMODATE THE USE OF STEEL STAY-IN-PLACE FORMS.

AN EXTRA DEAD LOAD OF 0.015 KSF IS INCORPORATED INTO THE DESIGN OF THIS STRUCTURE AS AN ALLOWANCE FOR A FUTURE WEARING SURFACE.

SEISMIC DESIGN IS IN ACCORDANCE WITH THE 2008 SCDOT "SEISMIC DESIGN SPECIFICATIONS FOR HIGHWAY BRIDGES", VERSION 2.0, WITH THE FOLLOWING PARAMETERS:

- SEISMIC DESIGN CATEGORY: B
- ANALYSIS METHOD: MULTIMODAL SPECTRAL ANALYSIS
- OPERATIONAL CLASSIFICATION: I
- SITE CLASS: C
- DESIGN ACCELERATION COEFFICIENTS:

PGA (FEE): 0.06 g

Sps (FEE): 0.10 g

S01 (FEE): 0.05 g

PGA (SEE): 0.16 g

Sps (SEE): 0.25 g

S01 (SEE): 0.13 g

VALUES DETERMINED FROM THREE-POINT METHOD

FINAL FINISH OF EXPOSED CONCRETE SURFACES

APPLY THE FINAL SURFACE FINISH ON THE BRIDGE(S) ONLY TO THE FOLLOWING CHECKED AND DESIGNATED BRIDGE AREAS:

- ☒ A)

ENTIRE SURFACE OF ALL BARRIER RAILS, PARAPET WALLS, APPROACH SLAB CURBS, CONCRETE UTILITY SUPPORTS, AND WING WALLS; OUTSIDE VERTICAL EDGE OF BRIDGE DECK SLABS AND SIDEWALKS.
- ☐ B)

OUTSIDE FACE OF EXTERIOR PRESTRESSED GIRDERS.
- ☒ C)

ENTIRE SURFACE OF DESIGNATED SUBSTRUCTURE UNITS, EXCEPT TOP OF BENT CAPS AND PIERS.

☒ ALL UNITS

☐ DESIGNATED UNITS:
- ☐ D)

NO FINAL SURFACE FINISH REQUIRED.

PLANS PREPARED BY:

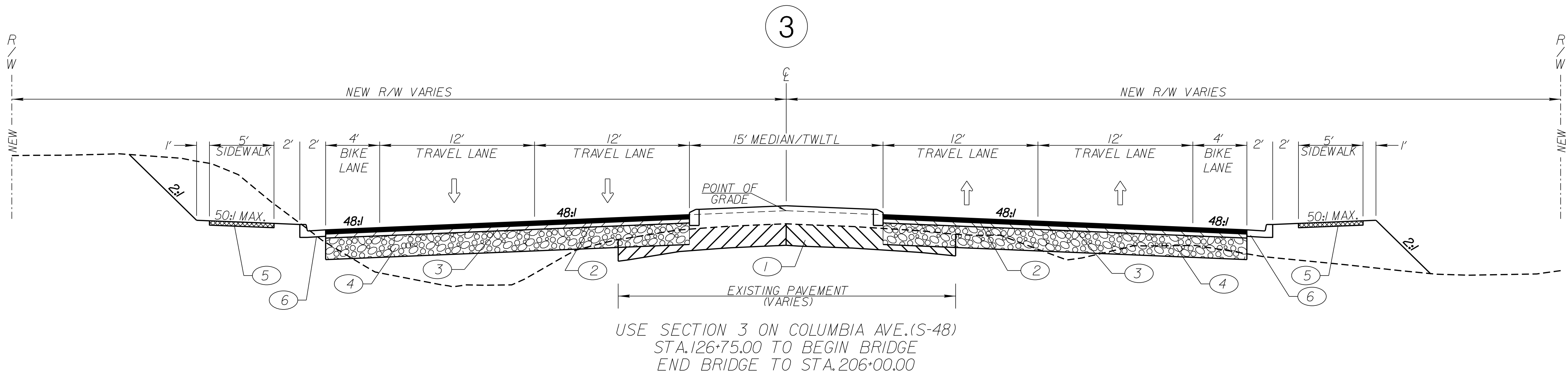
MEAD & HUNT, INC.
878 SOUTH LAKE DR.
LEXINGTON, SC 29072
(803) 996-2900

MEAD&HUNT

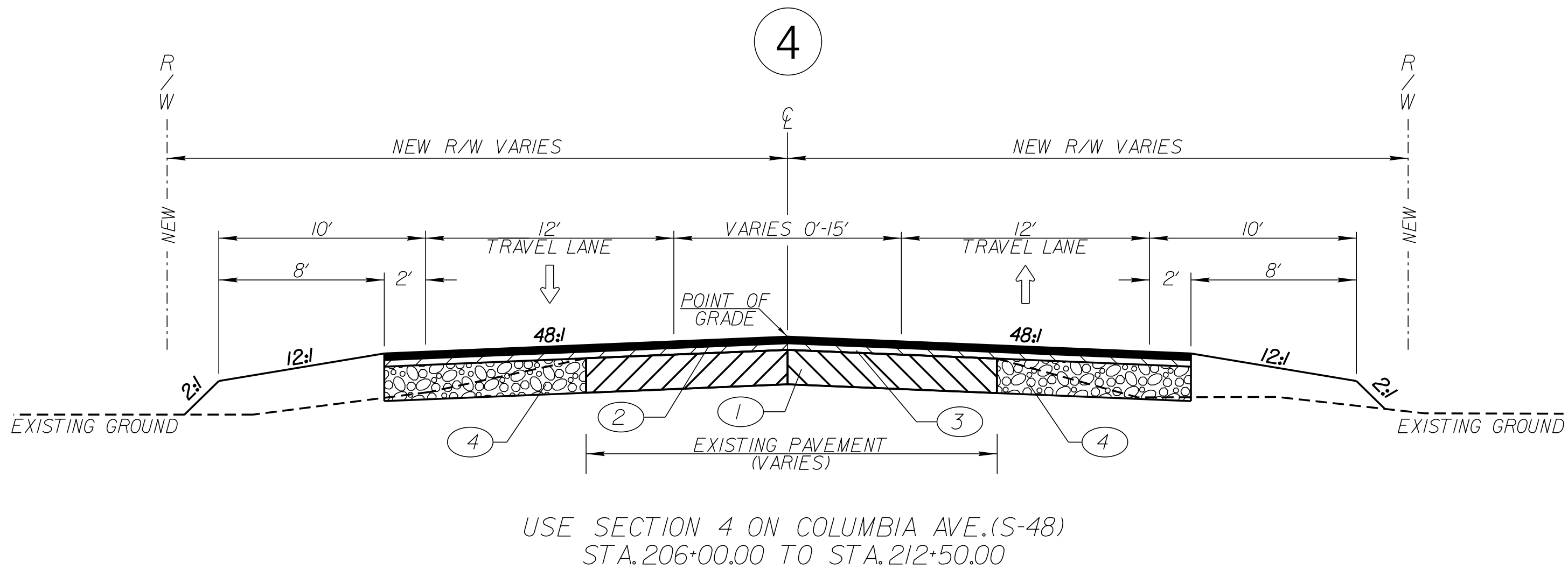
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REV.	GAR	LEM	5-15	
	ADDED PCB NOTE			
REV.	JXY	SAN	3-14	
	NEW BORDER			
REVIEWED				
QUAN.				
DR.	GFD	SAN	8-07	
DES.				
	BY	CHK.	DATE	

COUNTY LEXINGTON	ROUTE S-48
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TYPICAL SECTION OF IMPROVEMENT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION



FOR INFORMATION ONLY



NO PAVEMENT DESIGN PROVIDED BY SCDOT

LEGEND

- 1 EXISTING PAVEMENT
- 2 HOTMIX ASPHALT SURFACE COURSE TYPE (LBS./S.Y.)
- 3 HOTMIX ASPHALT INTERMEDIATE COURSE TYPE (LBS./S.Y.)
- 4 HOTMIX ASPHALT BASE COURSE TYPE (LBS./S.Y.)
- 5 4" CONC. SIDEWALK
- 6 2' CURB & GUTTER (SEE STD.DRAWING 720-105-01)

NOTE:

**** INCREASE ADDITIONAL 3.5' WHERE GUARDRAIL IS REQUIRED.**

*** TYPICAL FILL SLOPES**
0-5' HEIGHT 6:1
5'-10' HEIGHT 4:1
OVER 10' HEIGHT 2:1

DITCH SLOPES MAY BE VARIED WHEN A DEEPER DITCH IS NECESSARY FOR DRAINAGE PURPOSES, USING A MINIMUM SLOPE OF 12:1 AND A MAXIMUM SLOPE OF 4:1. WHERE A DEEPER DITCH THAN PROVIDED BY A 4:1 IS NECESSARY, THE DITCH SHALL BE PLACED FARTHER FROM THE CL CONTINUING THE 4:1 SLOPE TO PROVIDE FOR THE NECESSARY DEPTH. SEE PROFILE FOR THE SPECIAL DITCH GRADES

ALL PAVEMENT SLOPES AND SHOULDER SLOPES ON TYPICAL SECTIONS ARE SHOWN SLOPES.

PAVEMENT SLOPES, SHOULDER SLOPES, DITCH FORESLOPES, AND DITCH BACKSLOPES MAY VARY FROM THOSE SHOWN ON TYPICAL SECTIONS (SEE CROSS SECTIONS).

SEE STANDARD DRAWING 805-105-00 FOR GUARDRAIL.

FUNCTIONAL CLASSIFICATION:
S-48 COLUMBIA AVE. - MINOR ARTERIAL

RTE.	DESIGN SPEED		PAVEMENT DESIGN		SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
	MPH	FROM STA.	TO STA.		
S-48	40	100 + 50.00	212 + 50.00	APPROVED BY	
				DATE	
	EXCEPTIONS TO DESIGN SPEED			DWG. _____ DATE _____	TYPICAL SECTIONS
				CKD. _____ DATE _____	
				FILE _____	
				\$DATES X:\4035500\121734.01\42383\structures\Bridge # or Name\sheet\BR01_42383_RD_01.dgn 12:04:26 PM	SHEET

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	S.C.	LEXINGTON	0042383	S-48	4

TYPICAL SECTION OF IMPROVEMENT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION







I-26 TYPICAL SECTION PLACE HOLDER

** WILL BE PROVIDED BY DESIGN-BUILD GROUP FOR FINAL PLANS **

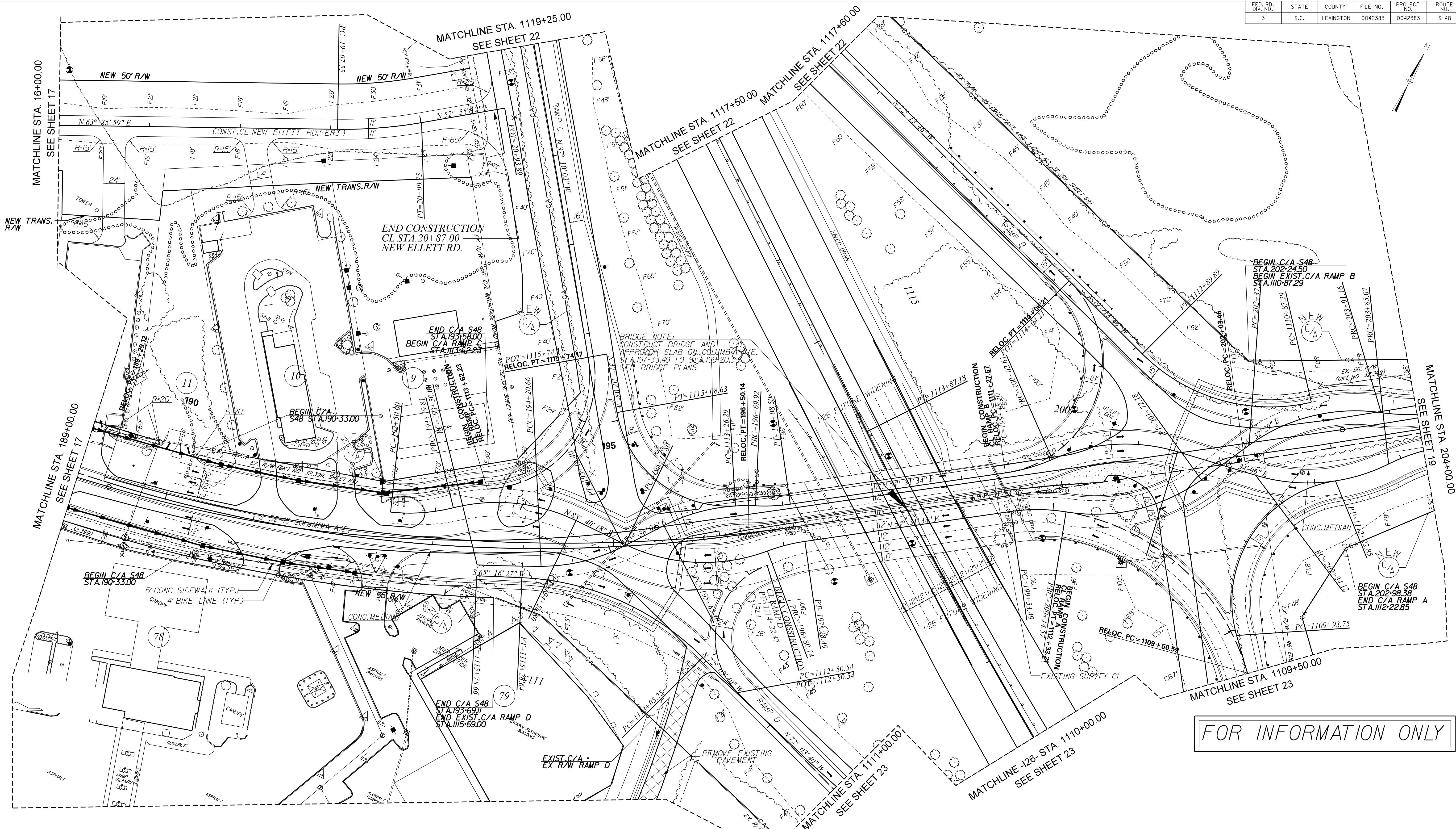
FOR INFORMATION ONLY

NO PAVEMENT DESIGN PROVIDED BY SCDOT

LEGEND

-  ① EXISTING PAVEMENT
-  ② HOTMIX ASPHALT SURFACE COURSE TYPE (LBS./S.Y.)
-  ③ HOTMIX ASPHALT INTERMEDIATE COURSE TYPE (LBS./S.Y.)
-  ④ HOTMIX ASPHALT BASE COURSE TYPE (LBS./S.Y.)
-  ⑤ 4" CONC. SIDEWALK
-  ⑥ 2' CURB & GUTTER (SEE STD.DRAWING 720-105-01)

RTE.	DESIGN SPEED			PAVEMENT DESIGN	SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
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				APPROVED BY	
	EXCEPTIONS TO DESIGN SPEED			DATE	TYPICAL SECTIONS
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				CKD. _____ DATE _____	
				FILE _____	TYPICAL SECTIONS
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					SHEET



PRELIMINARY
NOT FOR CONSTRUCTION

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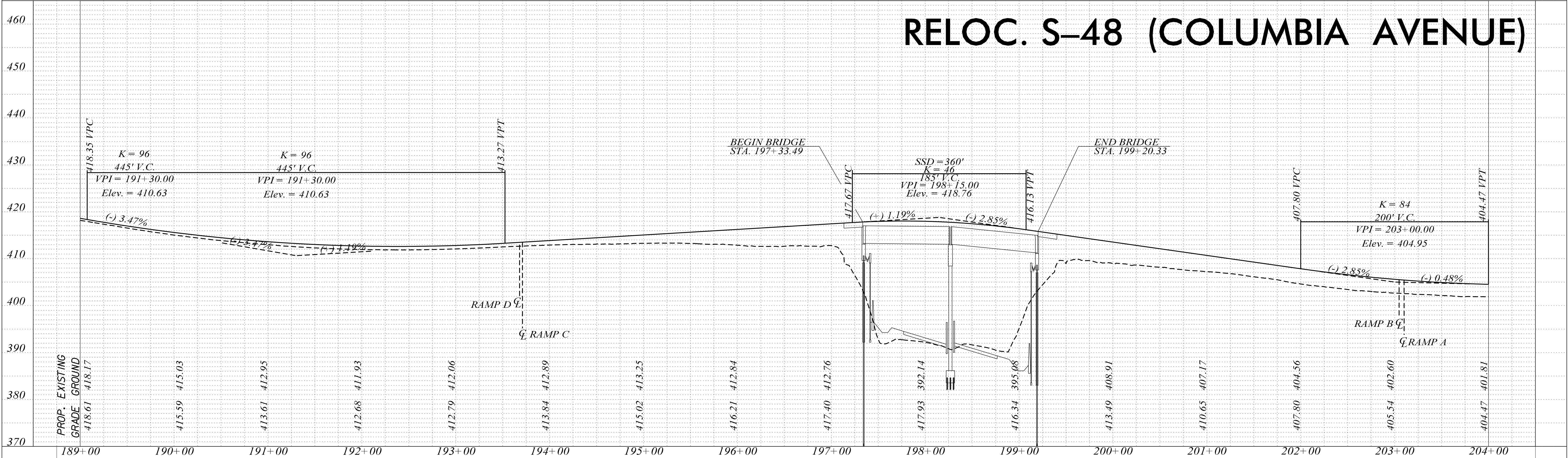
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DWG.	DATE		FILE	
CKD.	DATE		DATES	

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
COLUMBIA, S.C.

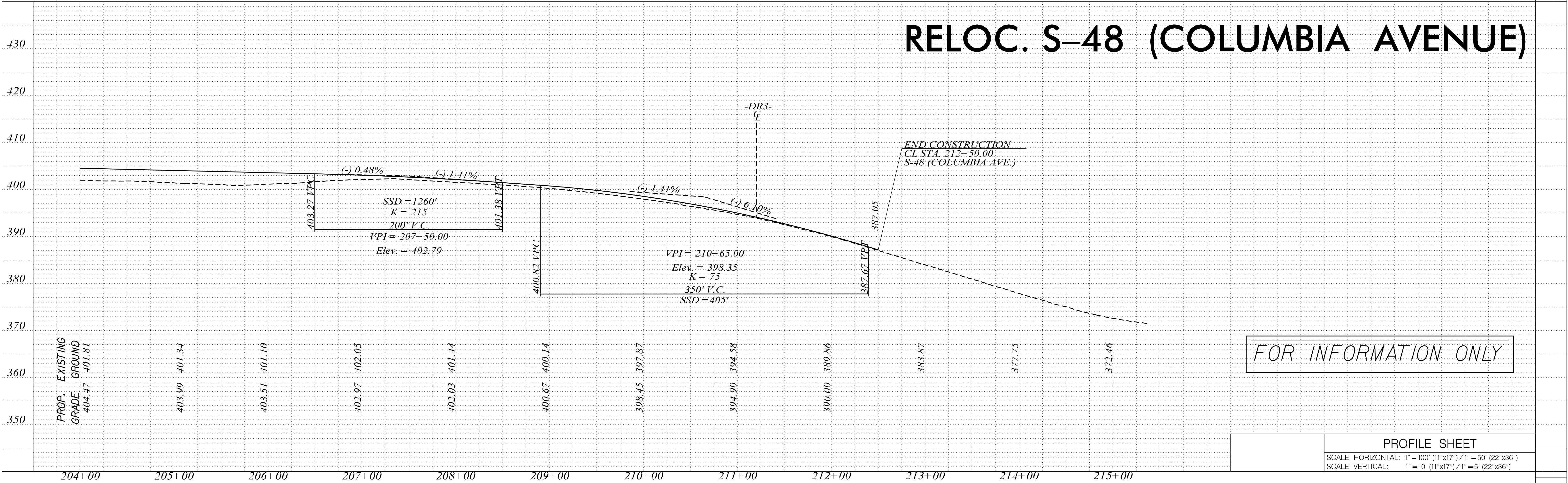
PLAN SHEET

SHEET

RELOC. S-48 (COLUMBIA AVENUE)



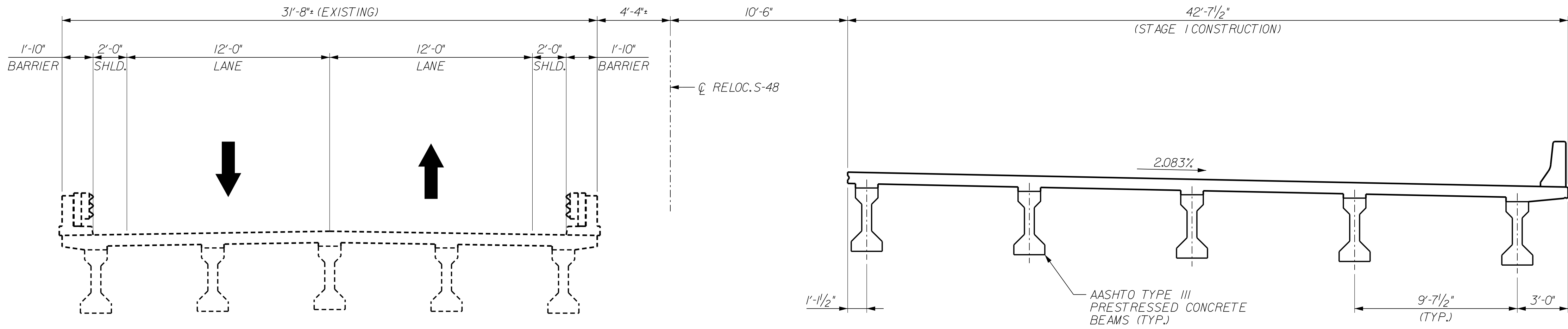
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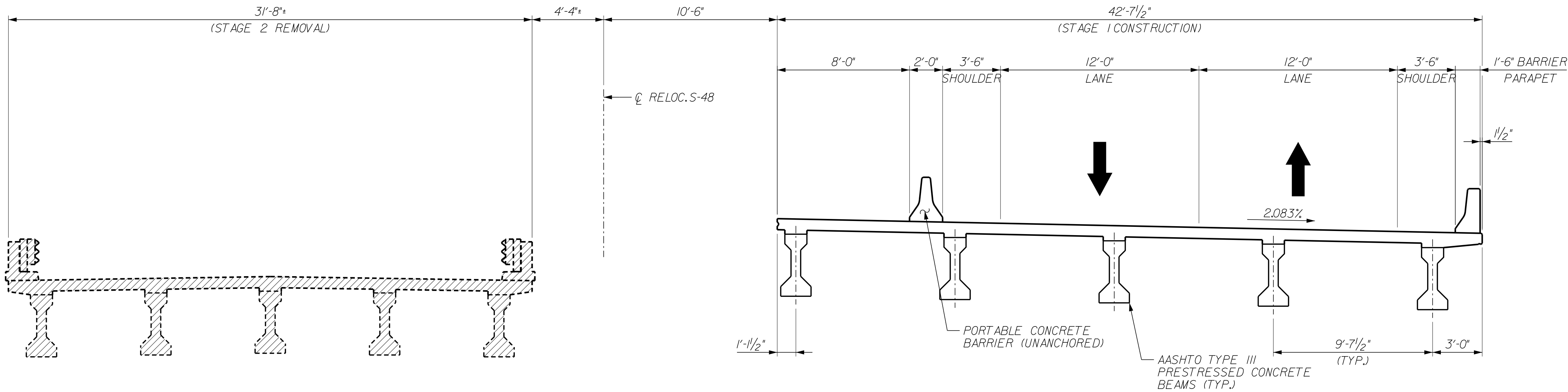
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	S.C.	LEXINGTON	0042383	S-48	7

I-26 PROFILE PLACE HOLDER
*** WILL BE PROVIDED BY DESIGN-BUILD GROUP FOR FINAL PLANS ***

FOR INFORMATION ONLY



STAGE 1 TRAFFIC & CONSTRUCTION



STAGE 2 TRAFFIC & REMOVAL

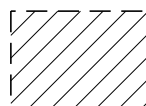
STAGE 1 CONSTRUCTION

1. CONSTRUCT PROPOSED WIDENED RIGHT PORTION OF THE S-48 (COLUMBIA AVE.) OVERPASS AS SHOWN AND DETAILED IN THESE PLANS.

STAGE 2 REMOVAL

1. SHIFT TRAFFIC TO THE CONFIGURATION SHOWN.
2. REMOVE EXISTING S-48 (COLUMBIA AVE.) STRUCTURE AS SHOWN IN THESE PLANS.

LEGEND:



- DENOTES STRUCTURE TO BE REMOVED

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(803) 996-2900

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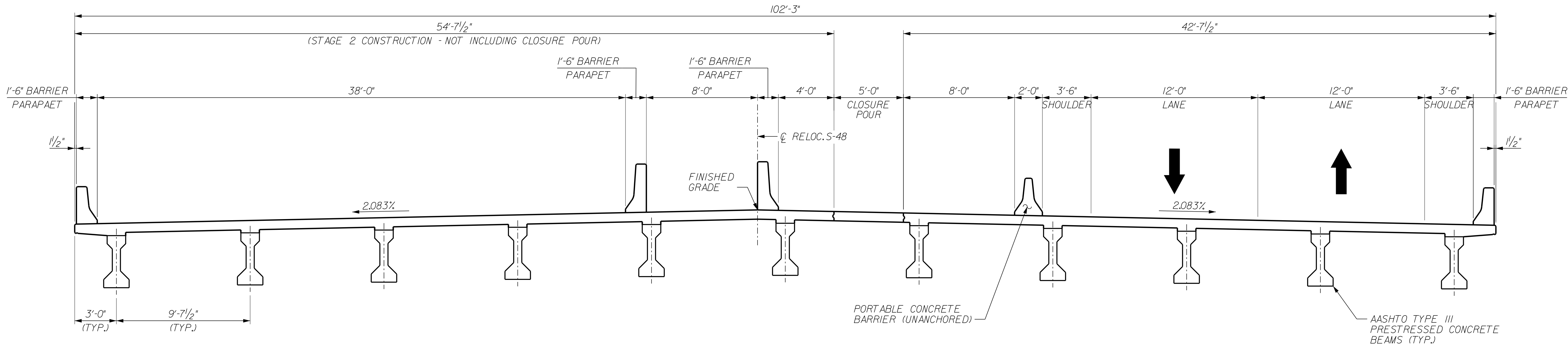
STAGE CONSTRUCTION
DETAILS - 1

PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

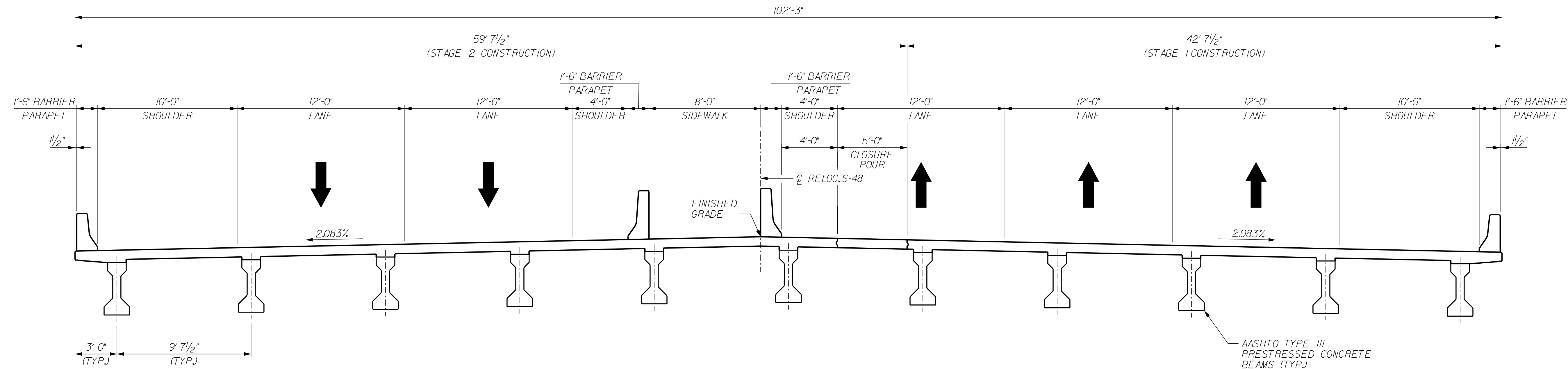
REV.			
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REVIEWED	AJS	01/17	
QUAN.			
DR.	CMH	KVB	01/17
DES.	CMH	KVB	01/17
BY	CHK.	DATE	

COUNTY
LEXINGTON

ROUTE
S-48



STAGE 2 TRAFFIC & CONSTRUCTION



FINAL CONDITION

STAGE 2 CONSTRUCTION

1. CONSTRUCT PROPOSED WIDENED LEFT PORTION OF THE S-48 (COLUMBIA AVE.) OVERPASS AS SHOWN AND DETAILED IN THESE PLANS.

FINAL CONFIGURATION

1. SHIFT TRAFFIC TO THE CONFIGURATION SHOWN.

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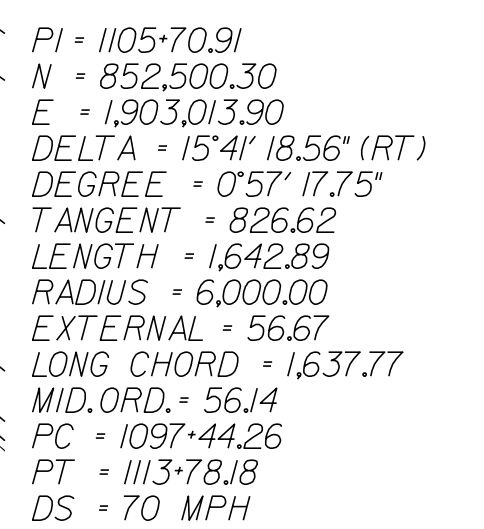
STAGE CONSTRUCTION
DETAILS - 2

COUNTY LEXINGTON ROUTE S-48

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DES.	CMH	KVB	01/17
BY	CHK.	DATE	

PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

SHLD.- SHOULDER



NOTES:

1. DECK DRAINS NOT REQUIRED.
2. BRIDGE END DRAINAGE WILL BE INCLUDED WITH FINAL ROADWAY PLANS.

SECTION ALONG \mathbb{C} RELOC. S-48

BORING LOCATIONS		
BORING	STATION	OFFSET
B-29	196+81.90	59.9' LT.
B-30	197+18.35	34.9' RT.
B-31	198+09.63	52.9' LT.
B-32	198+46.07	50.6' RT.
B-33	199+23.13	50.7' LT.
B-34	199+57.95	35.6' RT.



PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

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	DES.	CGB	KVB	01/17
	BY	CHK.	DATE	

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BRIDGE PLAN & PROFILE REPLACE BRIDGE OVER I-26

COUNTY	ROUTE
LEXINGTON	S-48

PI = 192°55.86
 N = 852,614.76
 E = 1,901,982.74
 DELTA = 25°49' 10.56" (RT)
 DEGREE = 3°34' 51.55"
 TANGENT = 366.74
 LENGTH = 721.02
 RADIUS = 1,600.00
 EXTERNAL = 41.49
 LONG CHORD = 714.93
 MID. ORD. = 40.44
 PC = 189+29.12
 PT = 196+50.14
 DS = 40 MPH

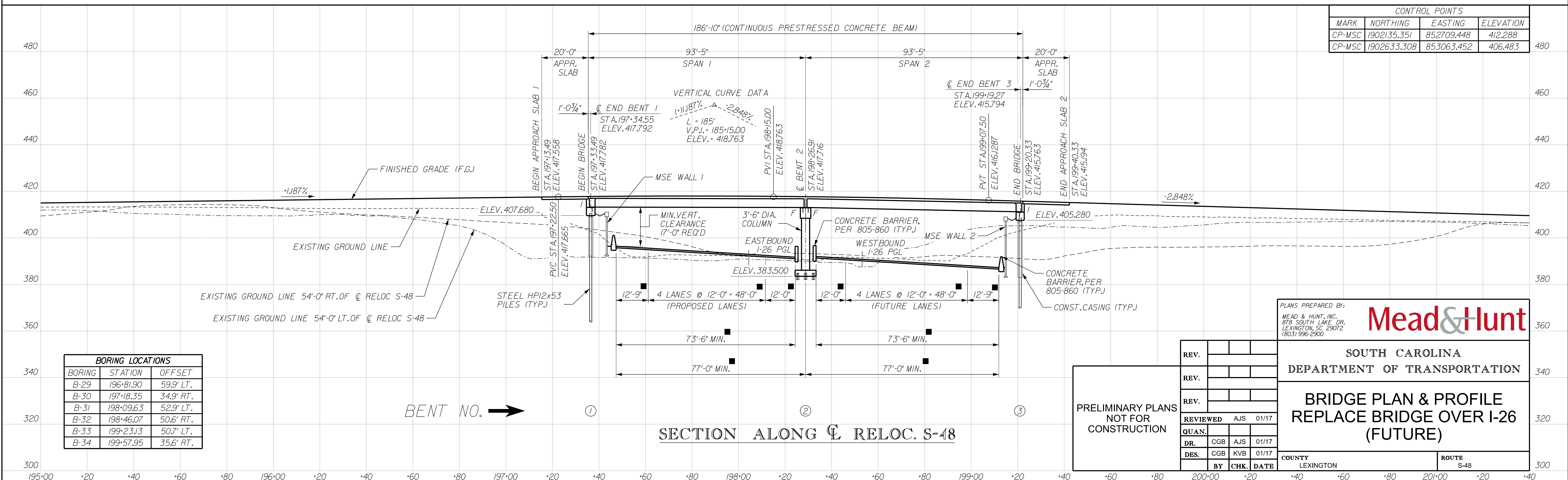
SHLD.- SHOULDER

$PI = 1105.70.91$
 $N = 852.500.30$
 $E = 1903.013.90$
 $DELTA = 15'41'' 18.56'' (RT)$
 $DEGREE = 0'57'' 17.75''$
 $TANGENT = 826.62$
 $LENGTH = 1,642.89$
 $RADIUS = 6,000.00$
 $EXTERNAL = 56.67$
 $LONG\ CHORD = 1,637.77$
 $MID.ORD. = 56.14$
 $PC = 1097.44.26$
 $PT = 1113.78.18$
 $DS = 70\ MPH$

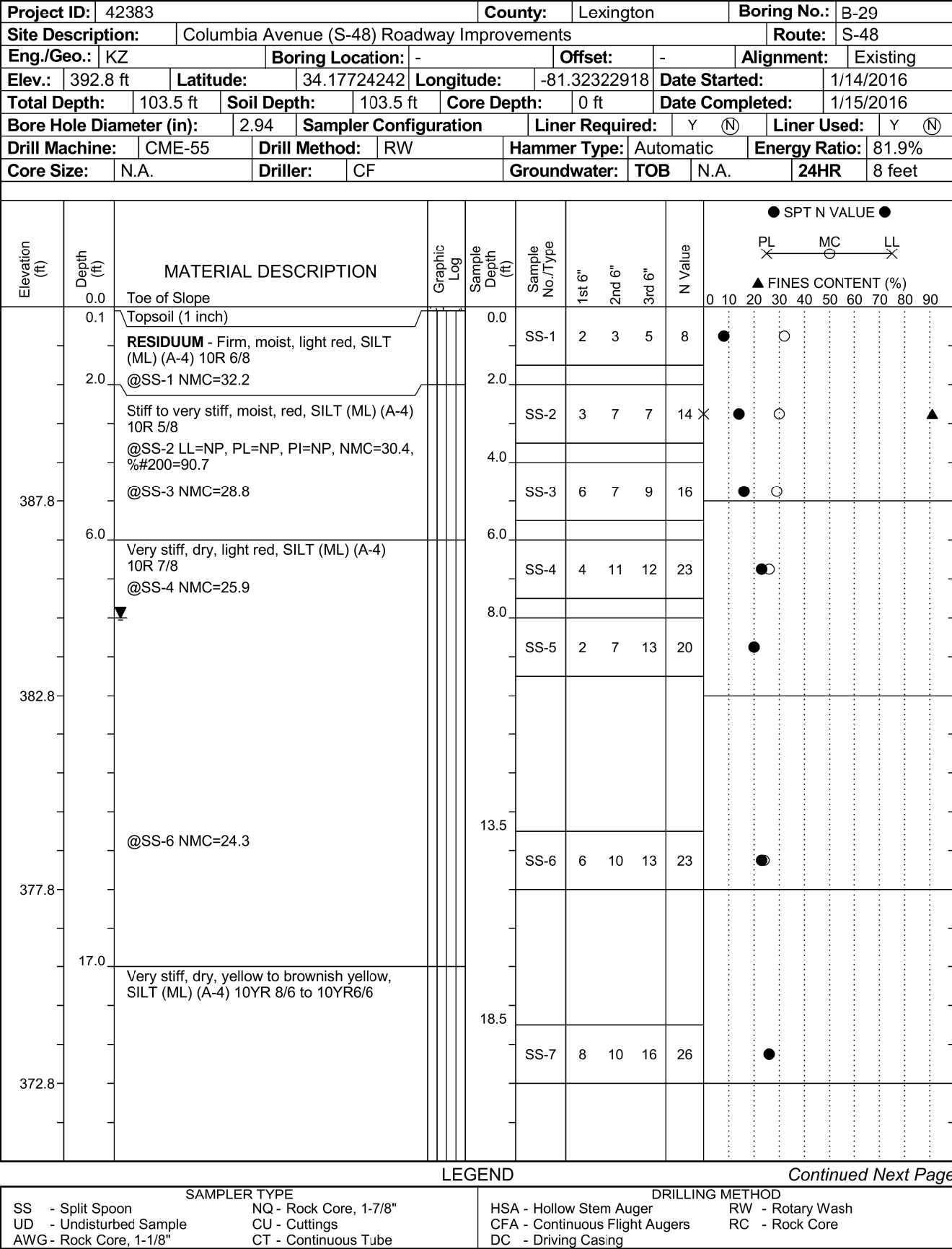
NOTES:
1. DECK DRAINS NOT REQUIRED.
2. BRIDGE END DRAINAGE WILL BE INCLUDED WITH FINAL ROADWAY PLANS.

PLAN

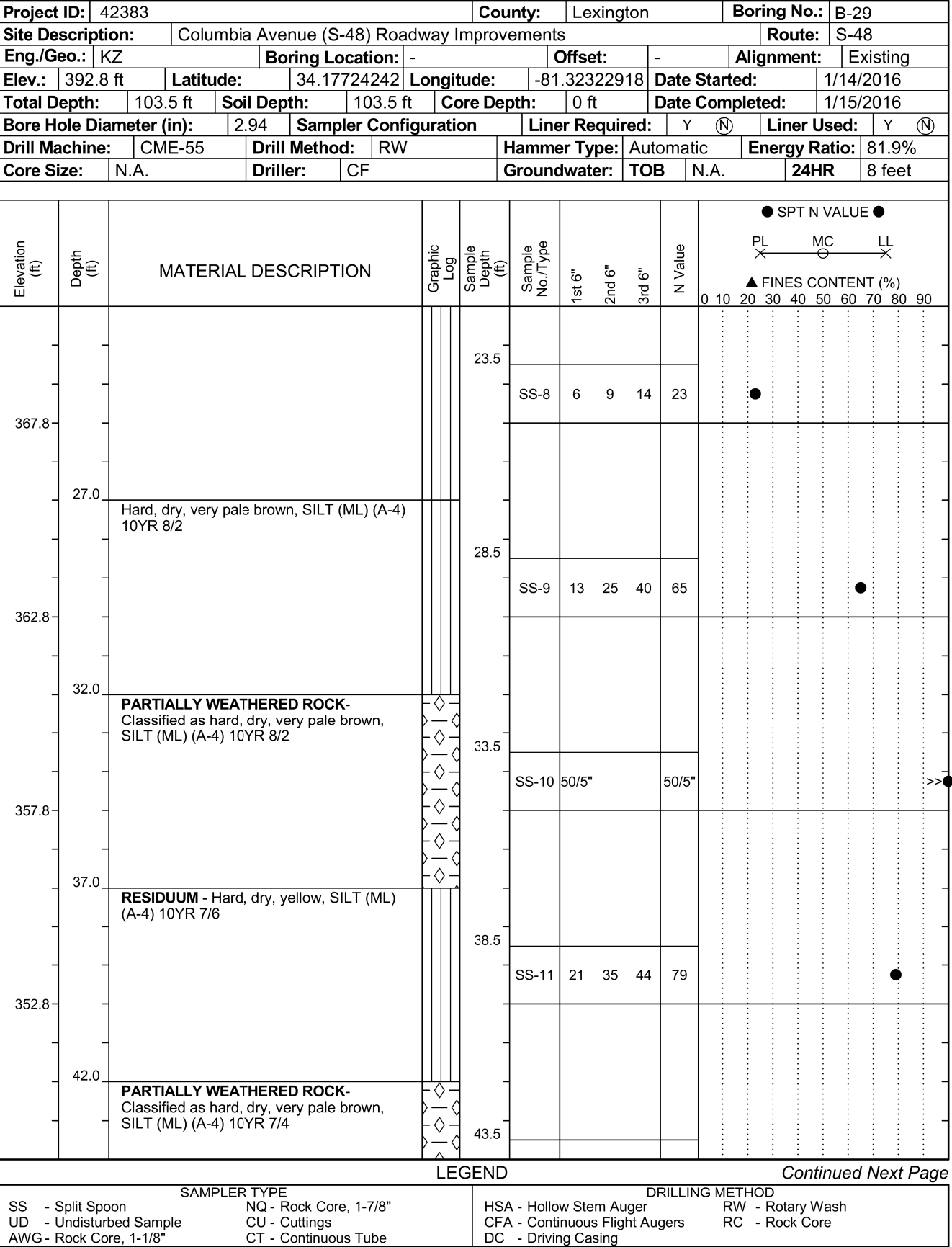
CONTROL POINTS			
MARK	NORTHING	EASTING	ELEVATION
CP-MSC	1902135.351	852709.448	412.288
CP-MSC	1902633.308	853063.452	406.483



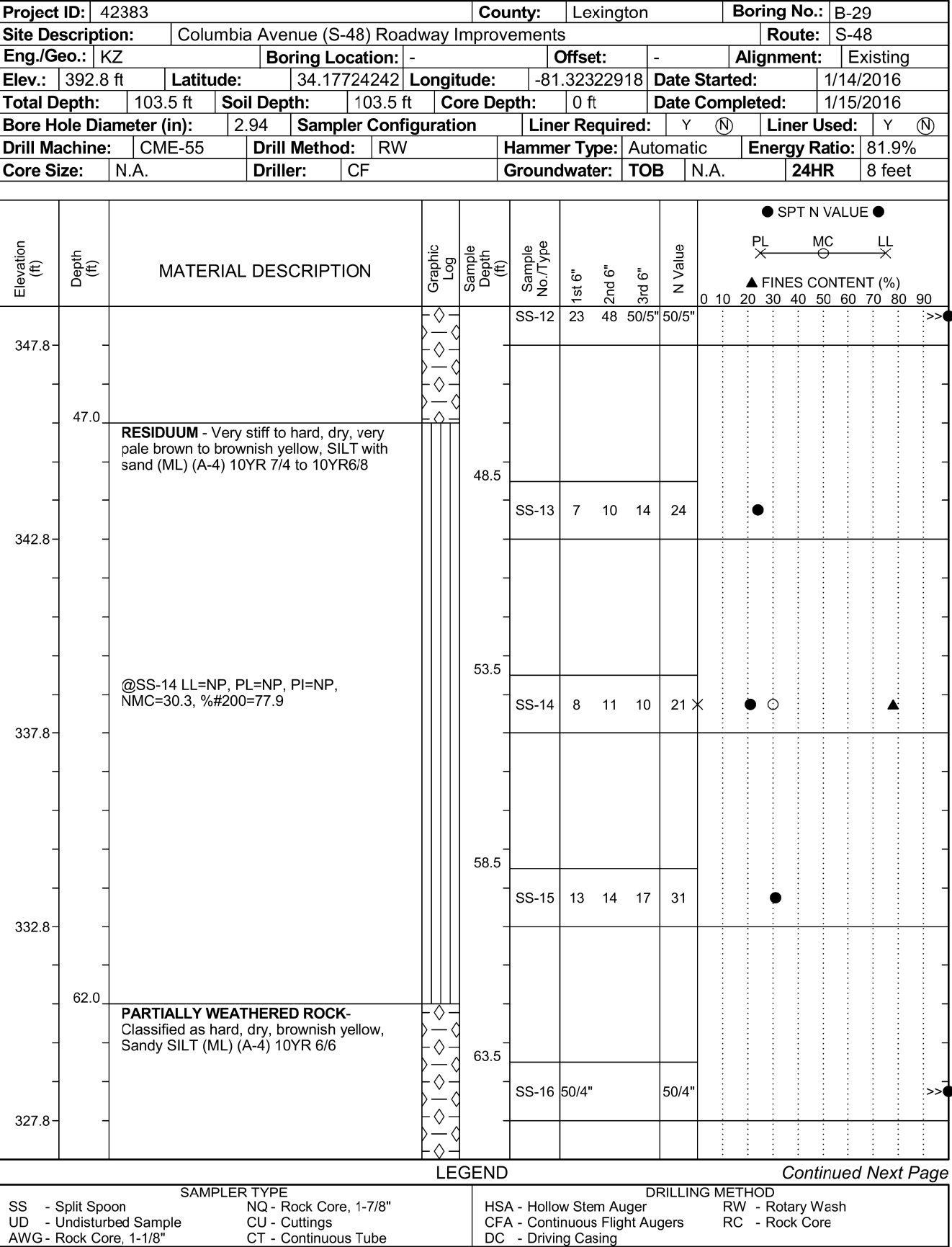
SCDOT Soil Test Log



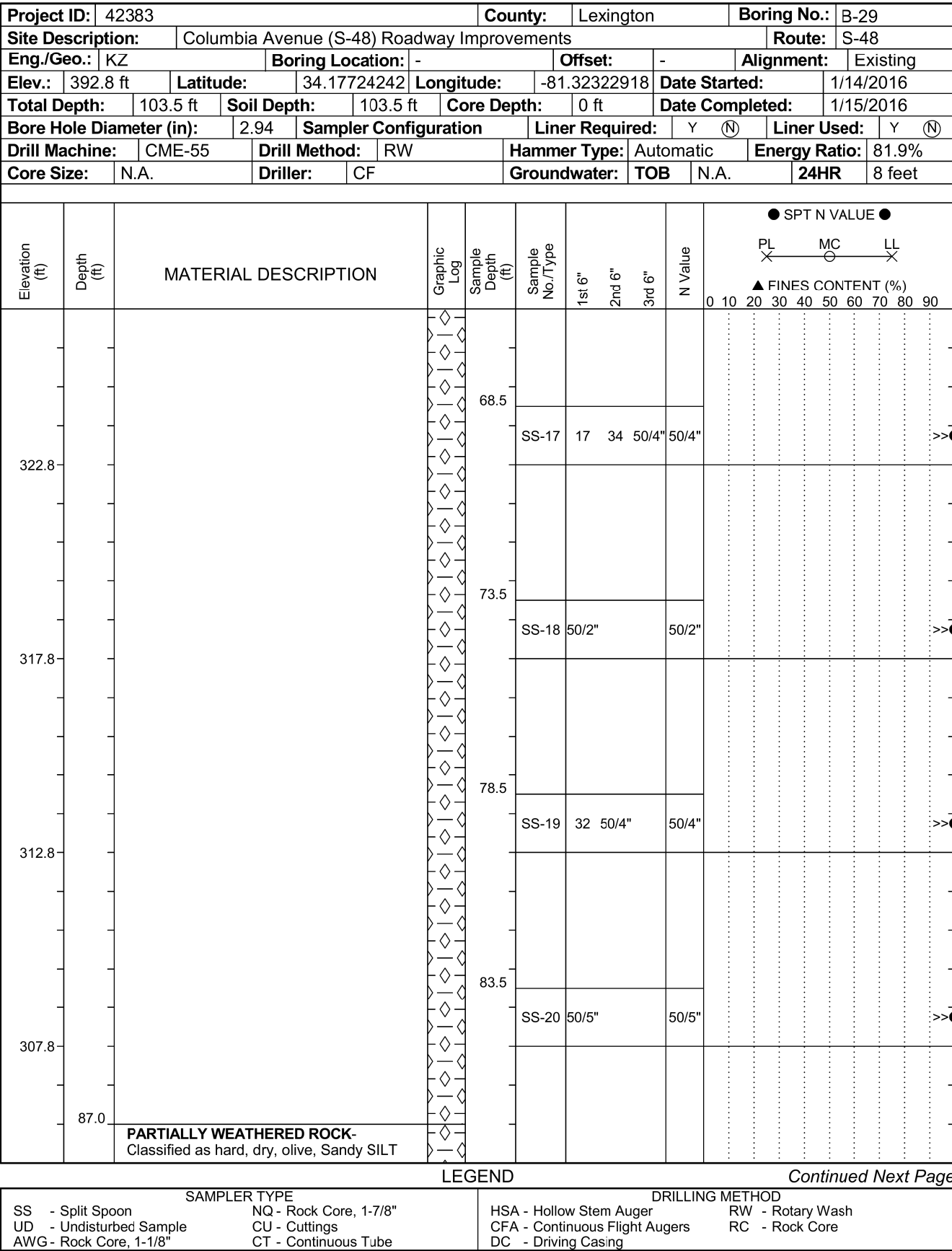
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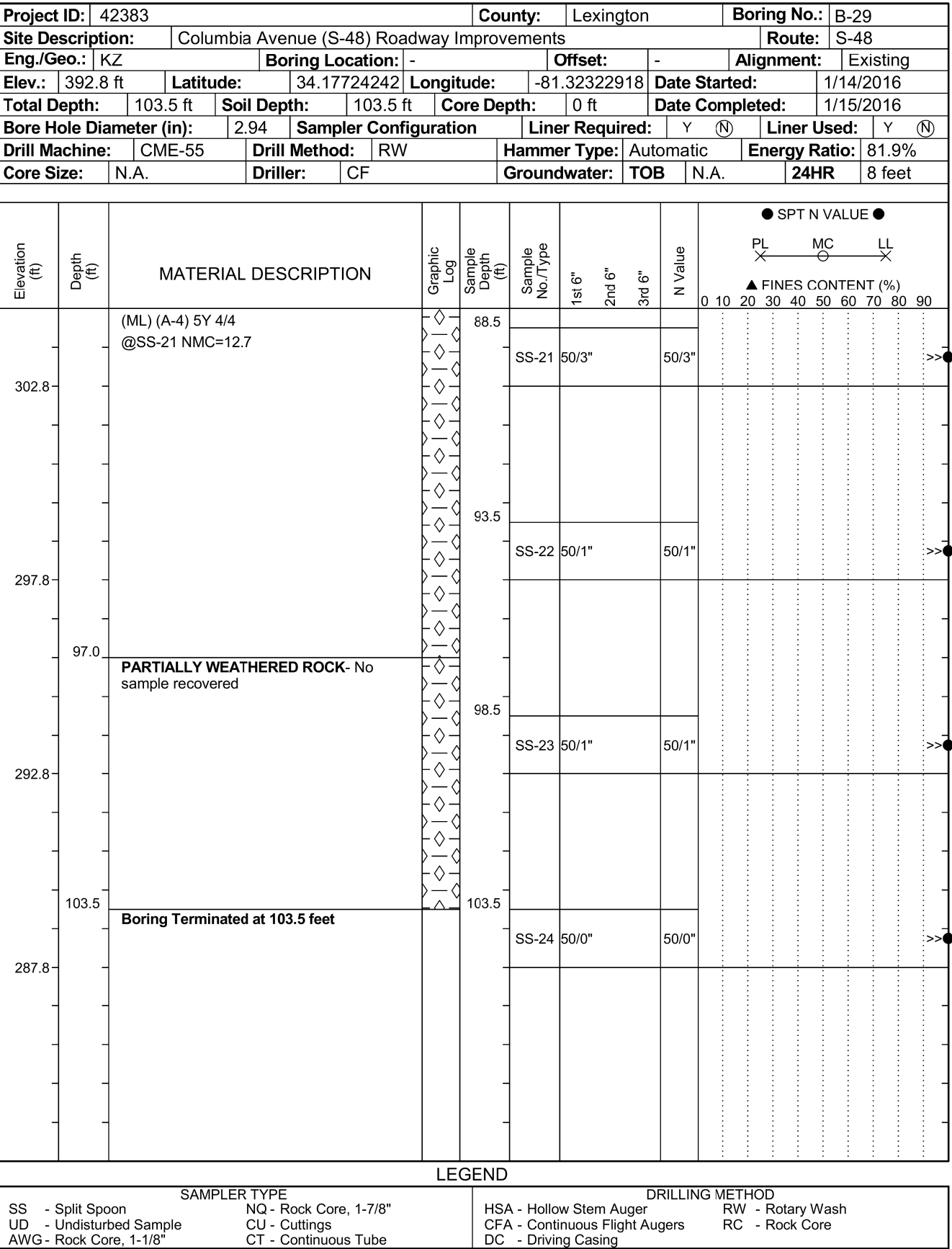
SCDOT Soil Test Log



SCDOT Soil Test Log



SCDOT Soil Test Log



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PRELIMINARY PLANS
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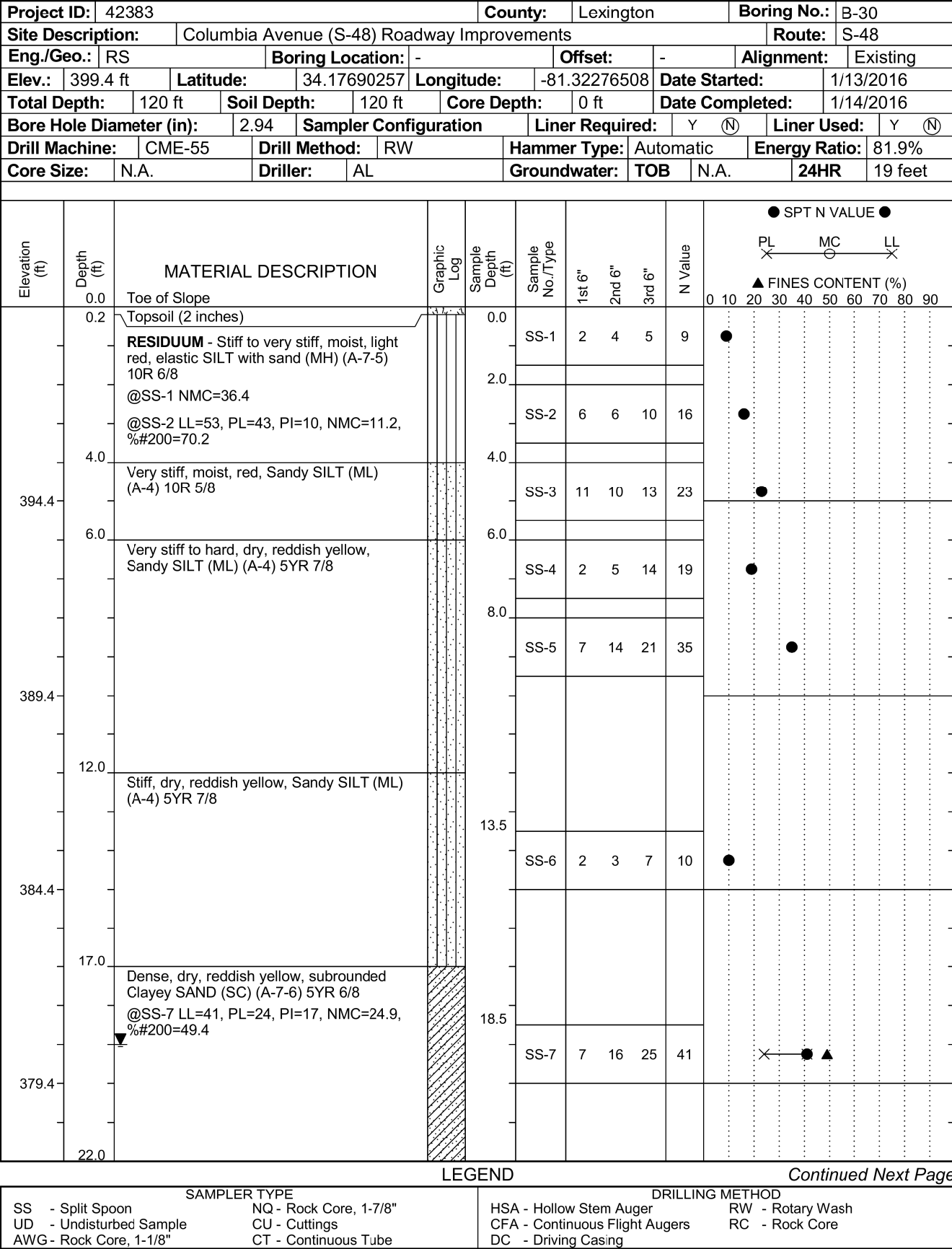
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REVIEWED	AJS	01/17	
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DR.	CGB	AJS	01/17
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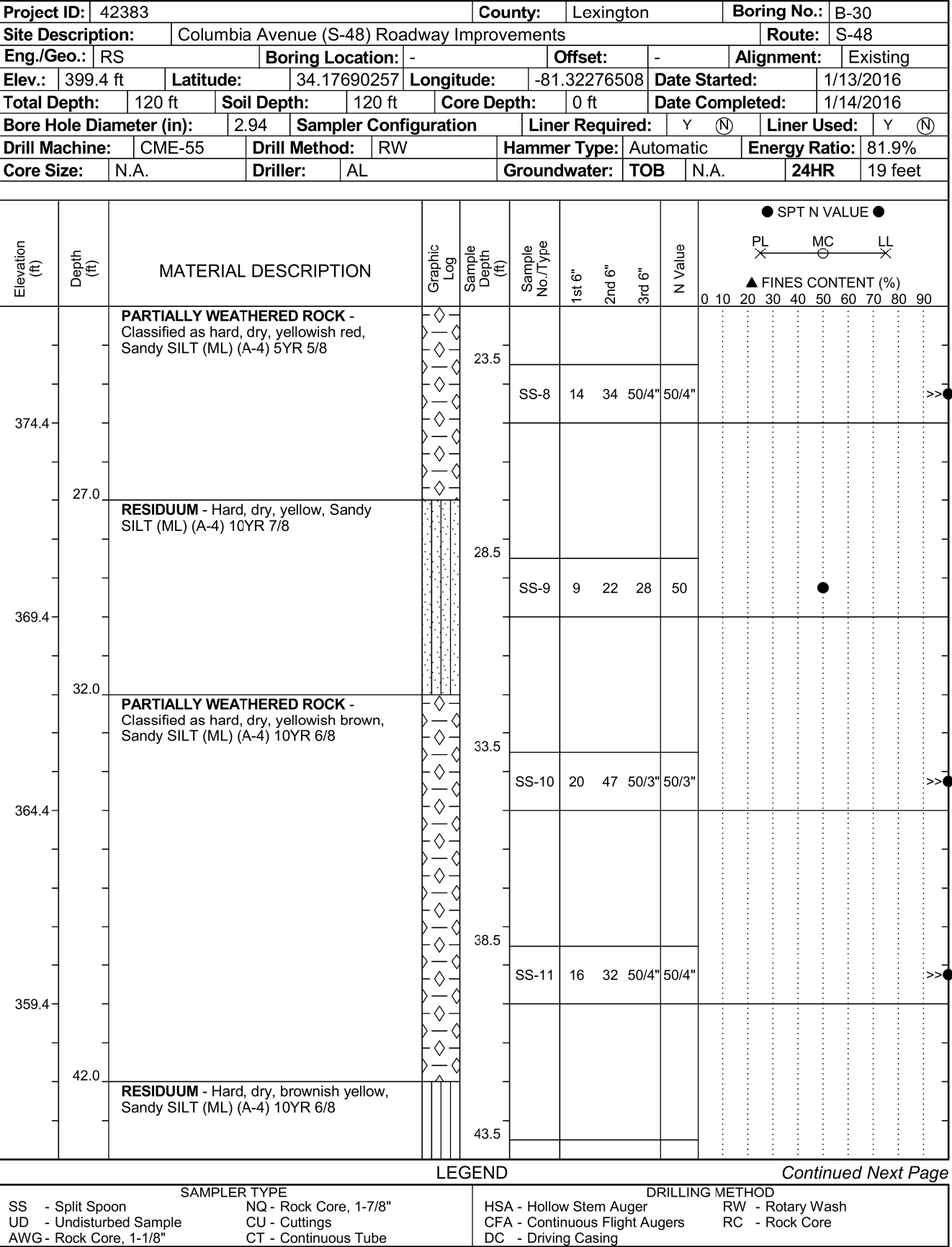
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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
BORING LOGS (1 OF 6)	
COUNTY LEXINGTON	ROUTE S-48

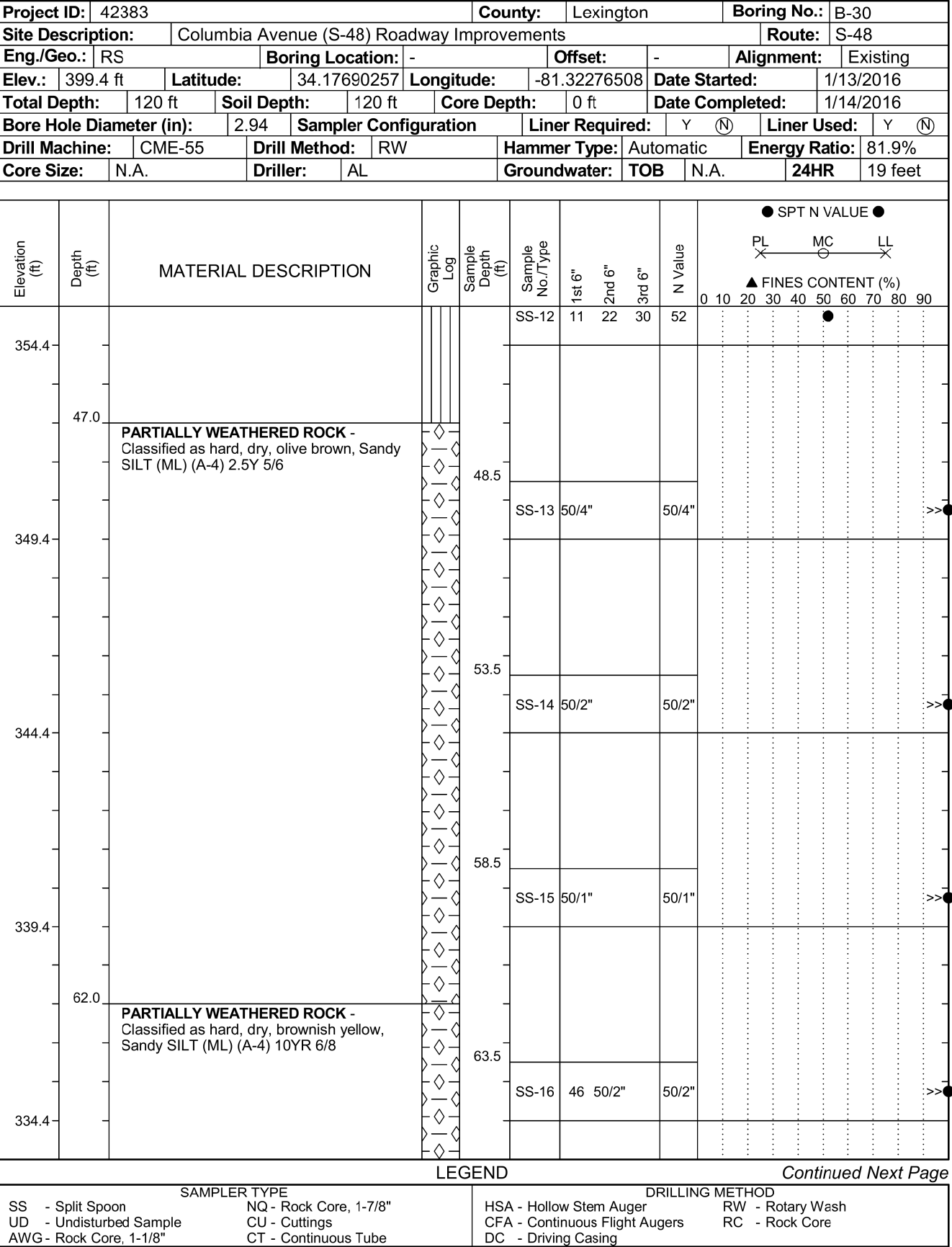
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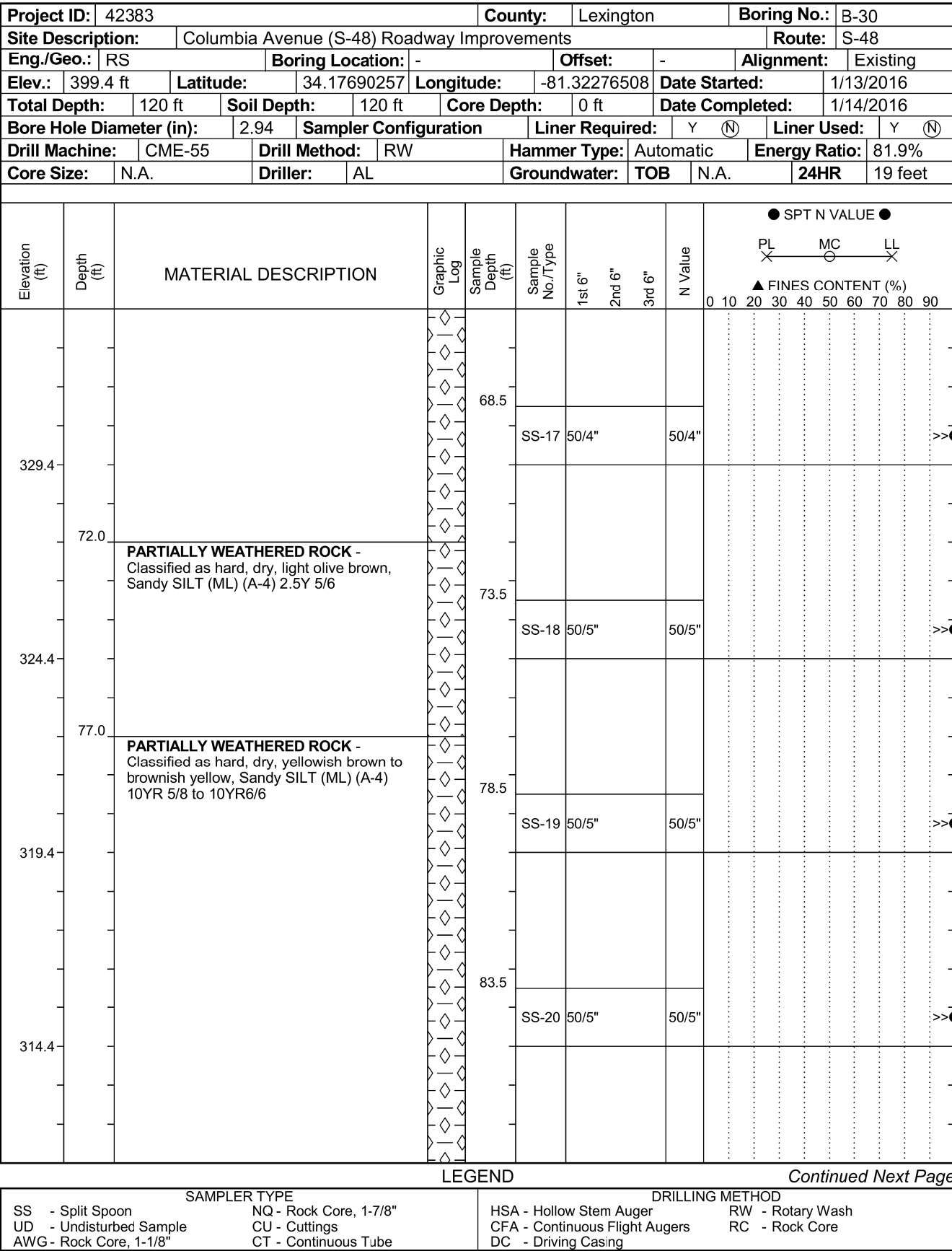
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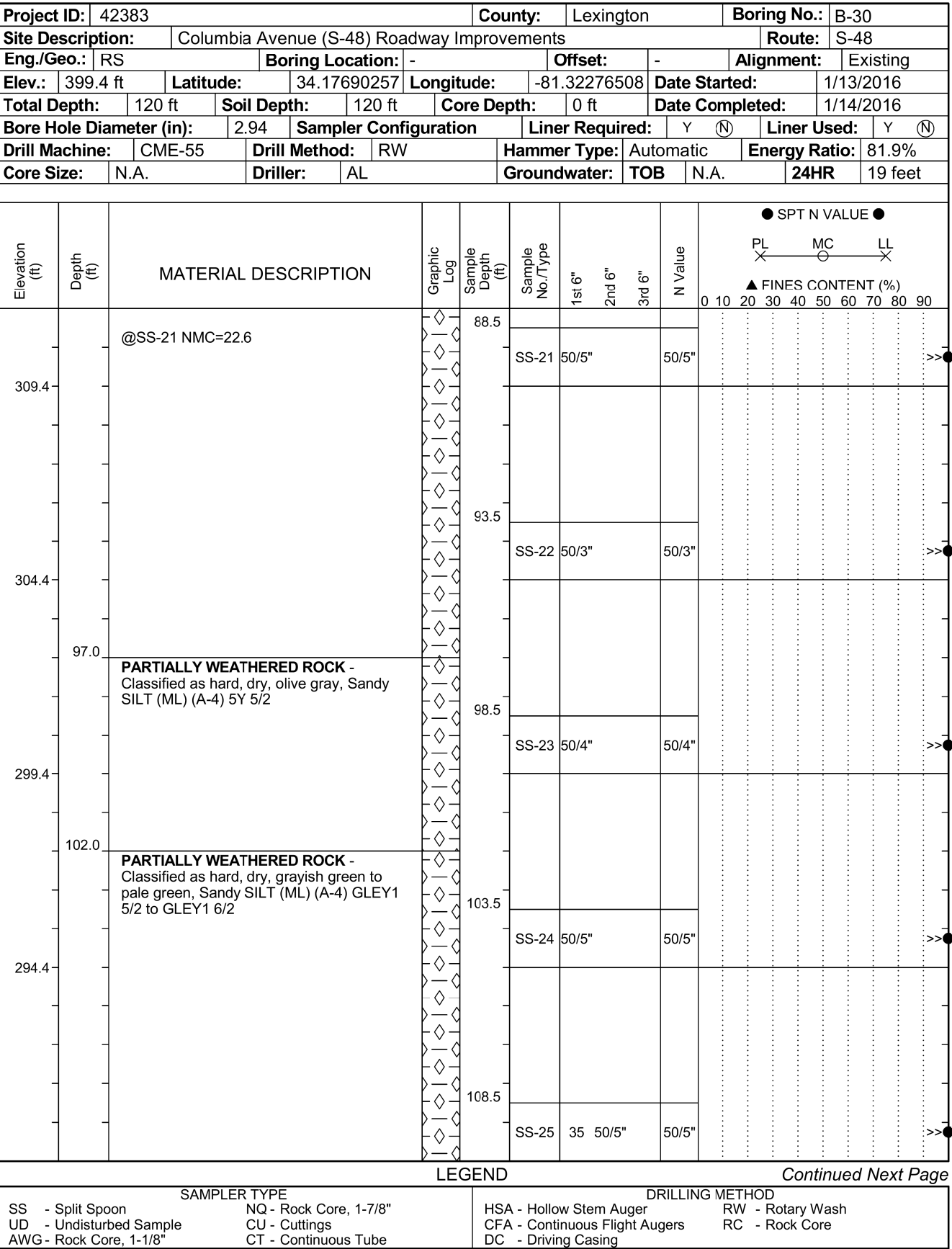
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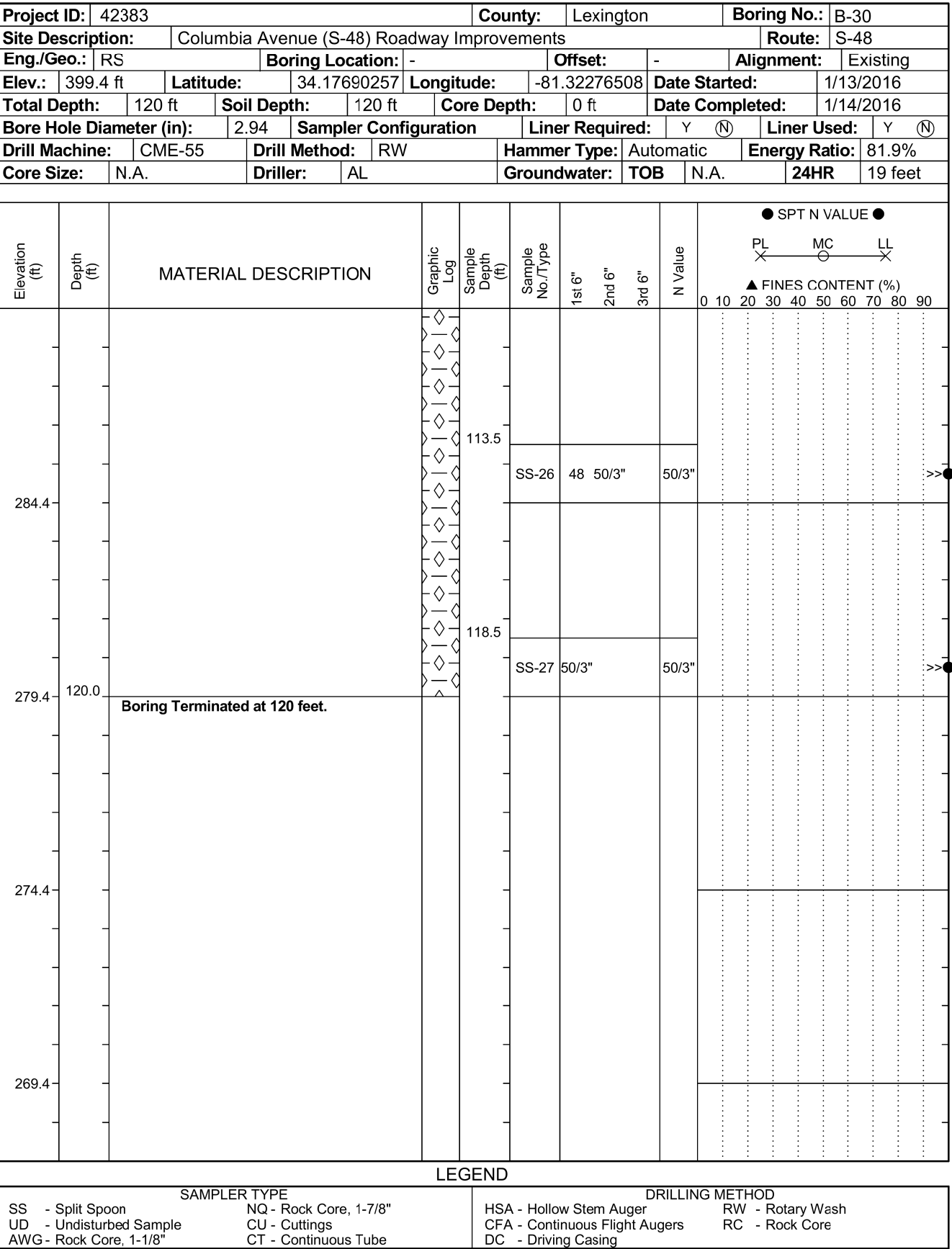
SCDOT Soil Test Log



SCDOT Soil Test Log



SCDOT Soil Test Log



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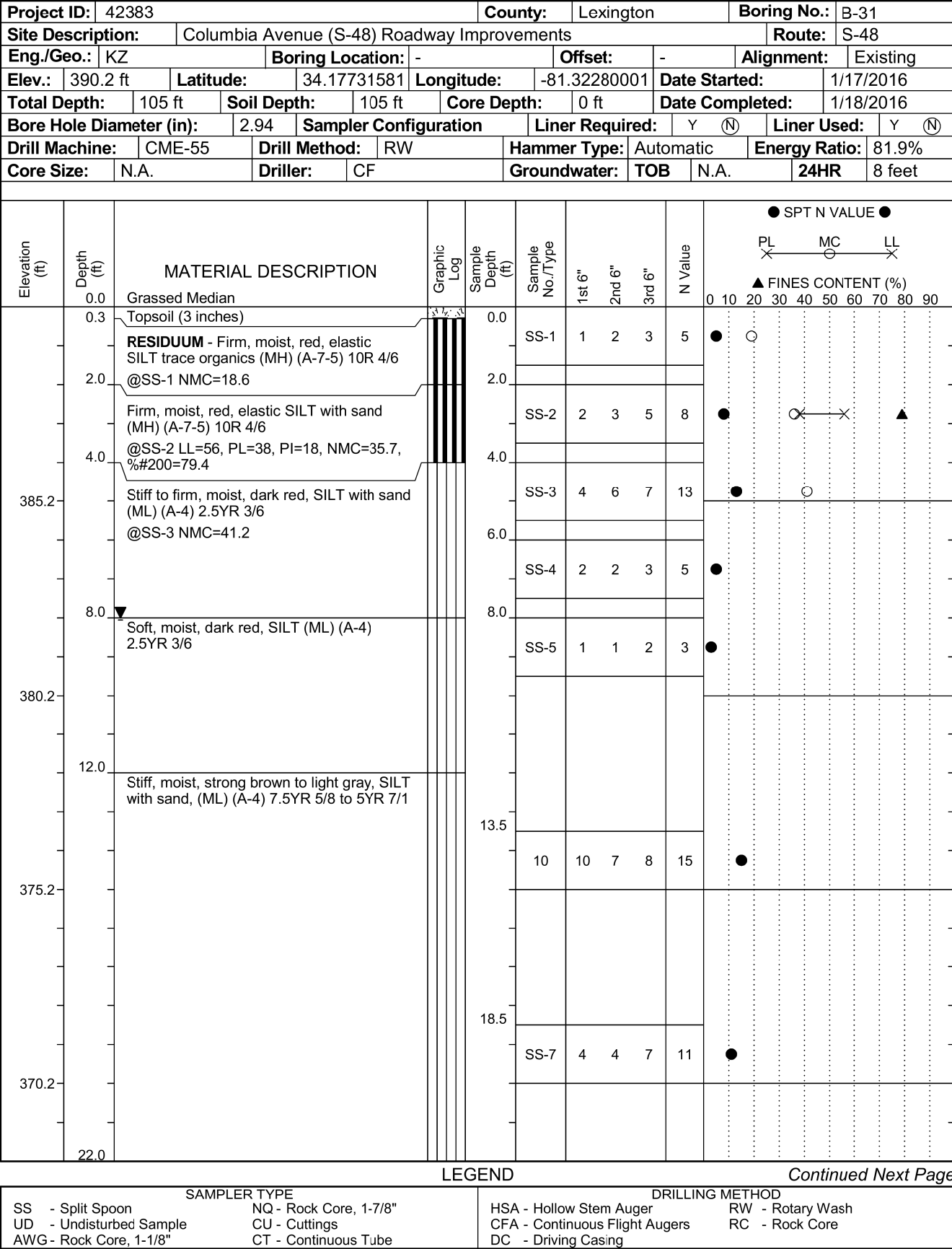
BORING LOGS
(2 OF 6)

COUNTY
LEXINGTON

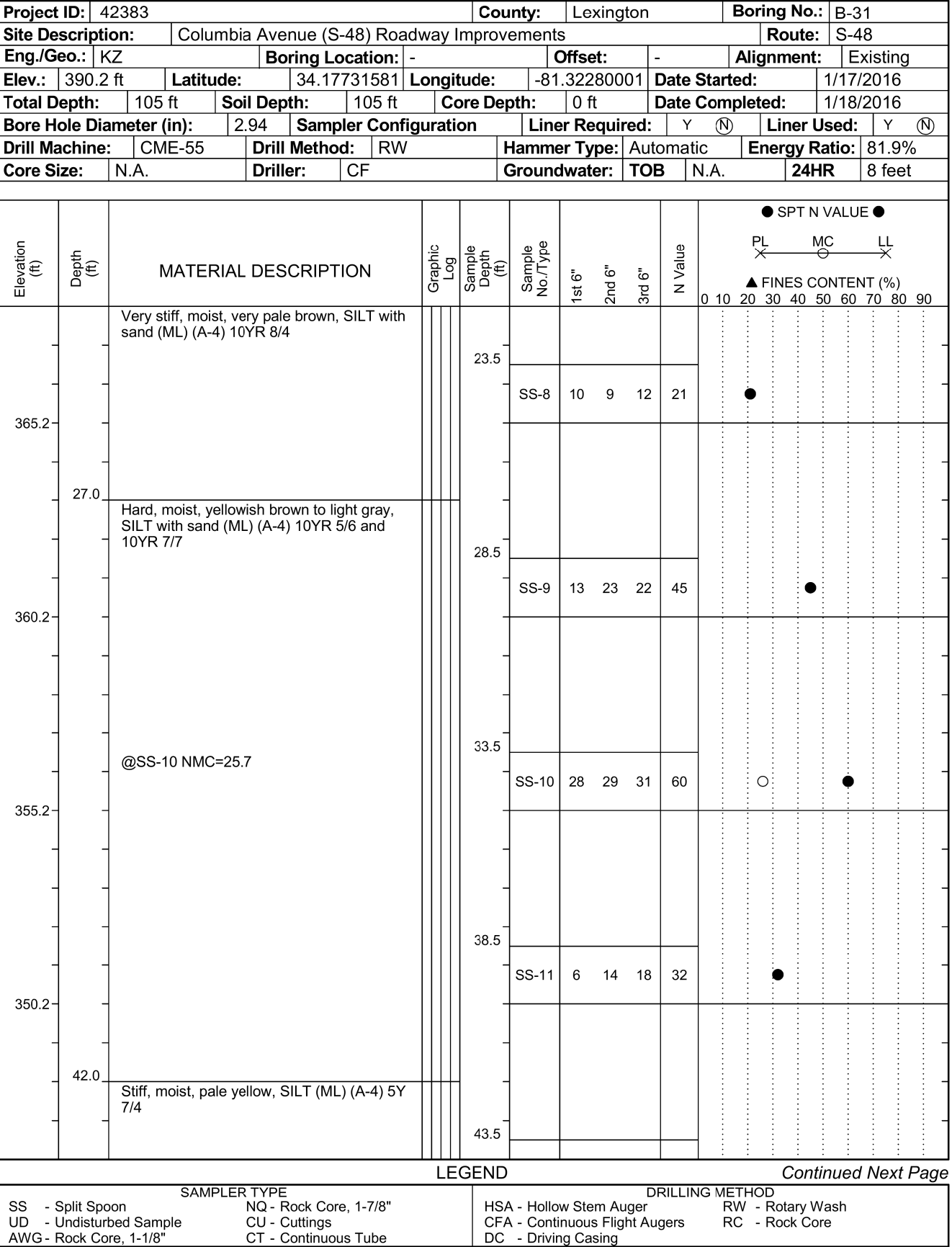
ROUTE
S-48

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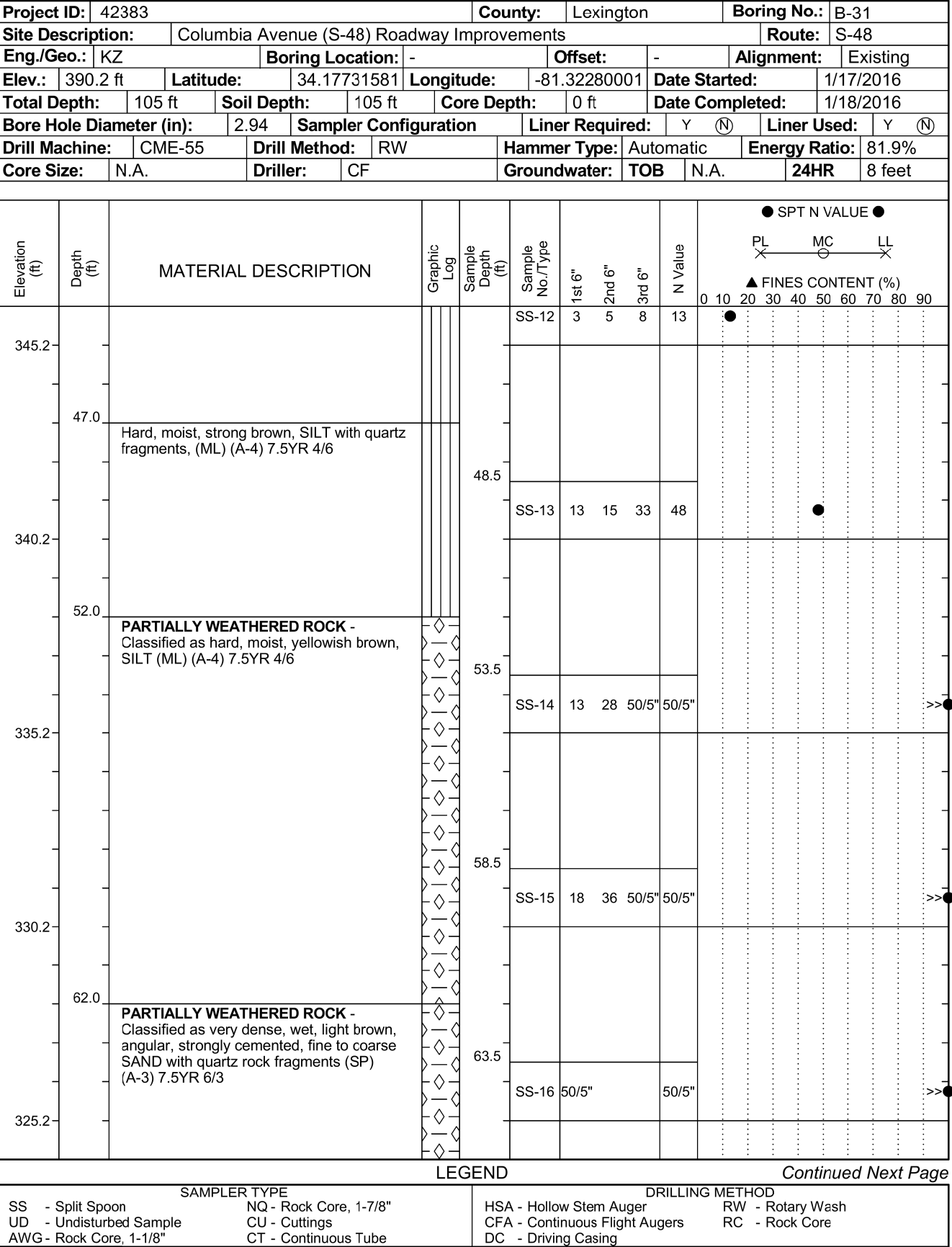
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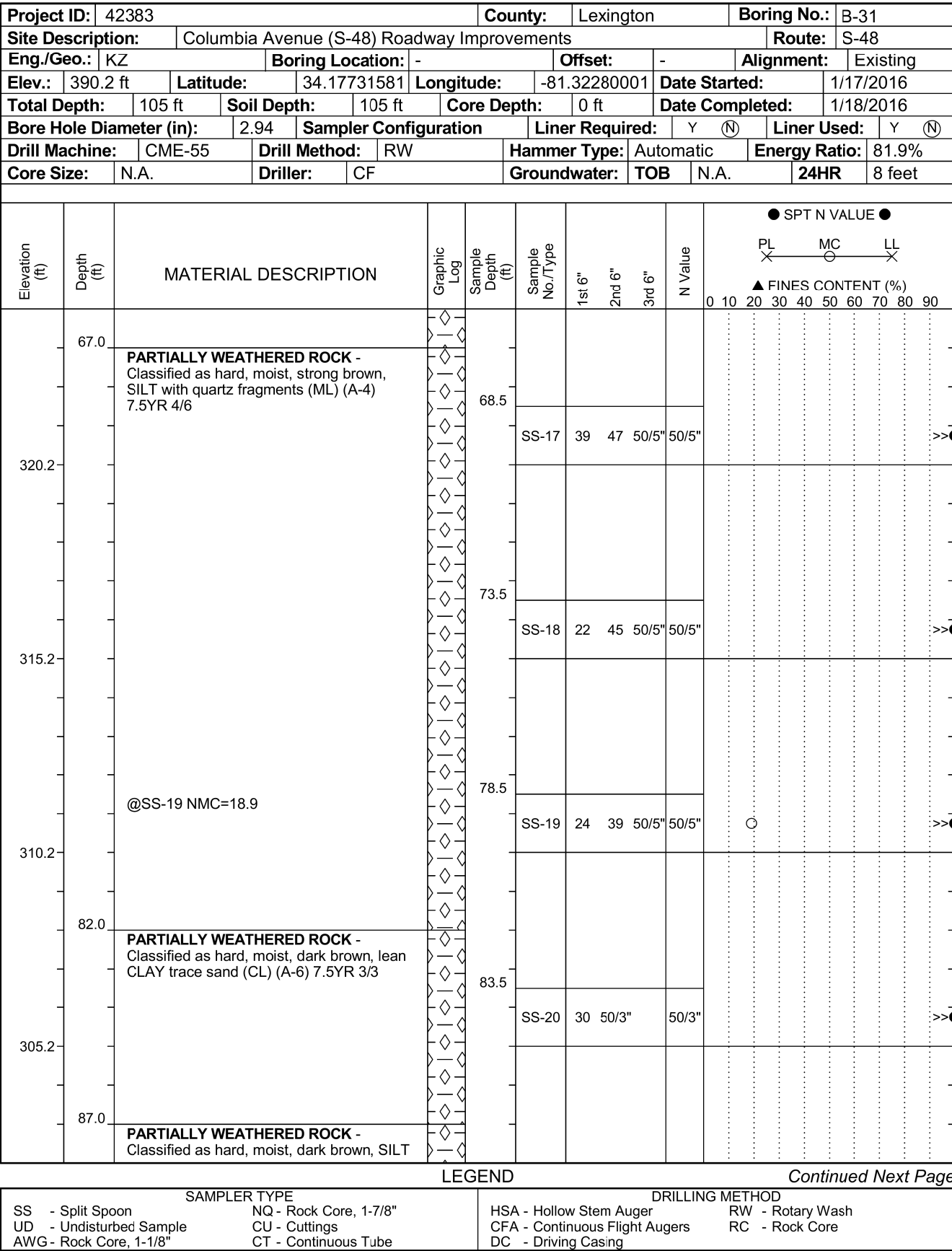
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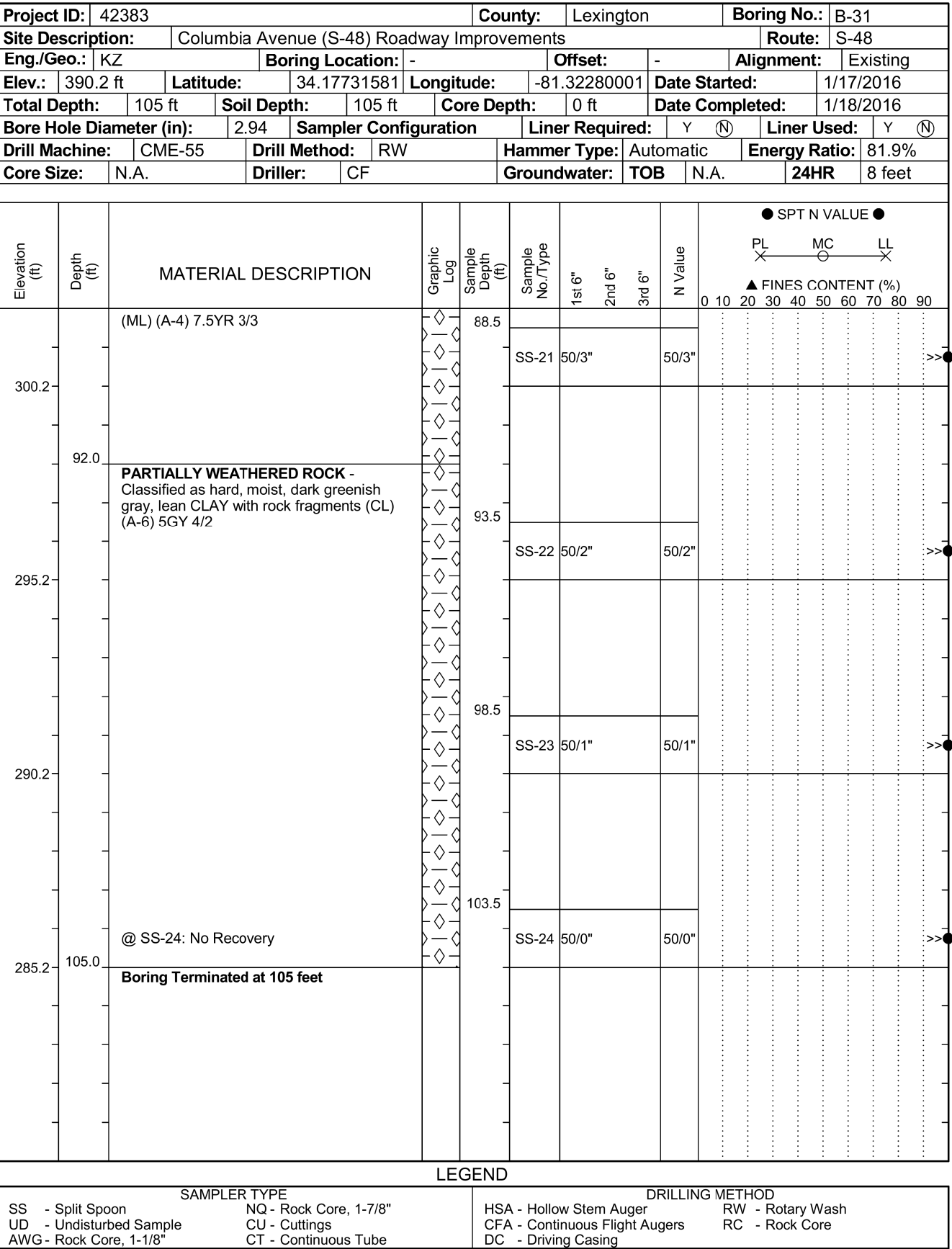
SCDOT Soil Test Log



SCDOT Soil Test Log



SCDOT Soil Test Log



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PRELIMINARY PLANS
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BORING LOGS
(3 OF 6)

COUNTY
LEXINGTON

ROUTE
S-48

55C DOT 73155095.GPJ SCDOT DATA TEMPLATE 12 30 2014 DOT 5/20/16

3BC_DOT 73155095.GPJ SCDOT DATA TEMPLATE_12_30_2014.GDT 5/20/16

56C DOT 73155095.GPJ SCDOT DATA TEMPLATE 12 30 2014.GDT 5/20/16

C DOT 73155095.GPJ SCOOT DATA TEMPLATE 12 30 2014.GDT 5/20/16

C_DOT 73155095.GPJ SCOOT DATA TEMPLATE_12_30_2014.GDT 5/20/16

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ROUTE
S-48

PRELIMINARY PLANS
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DR.	CGB	AJS	01/17
DES.			
	BY	CHK.	DATE

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

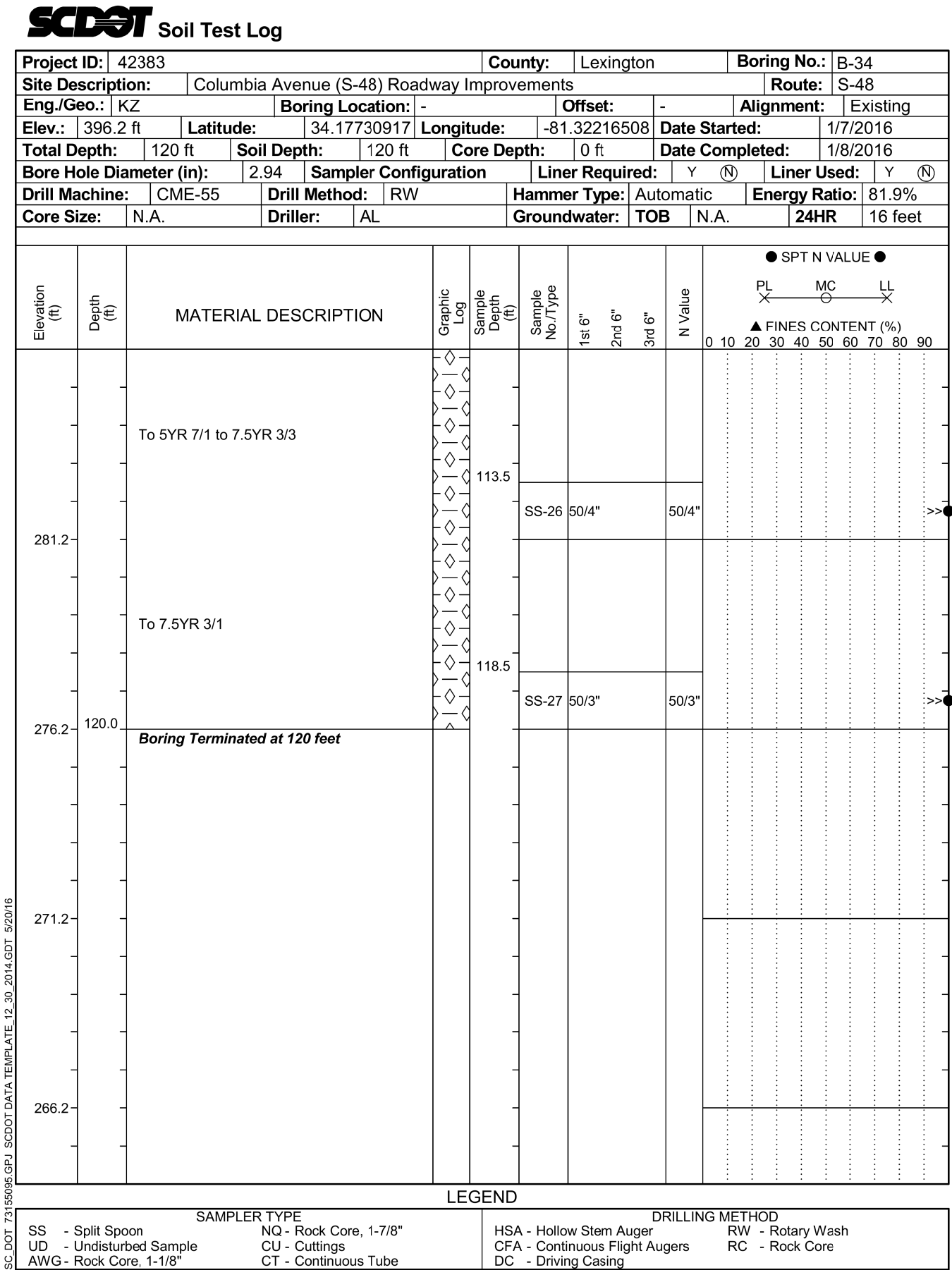
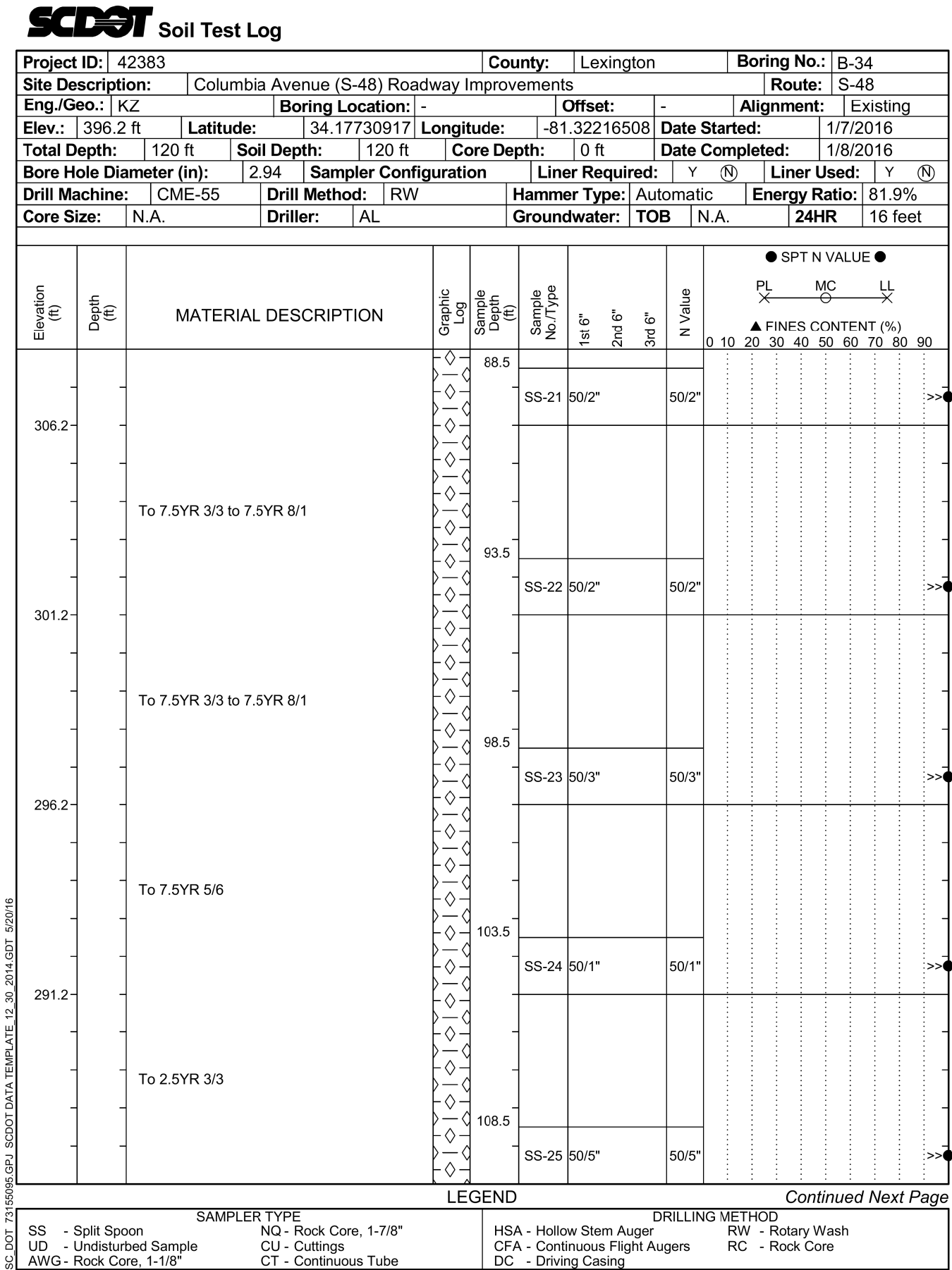
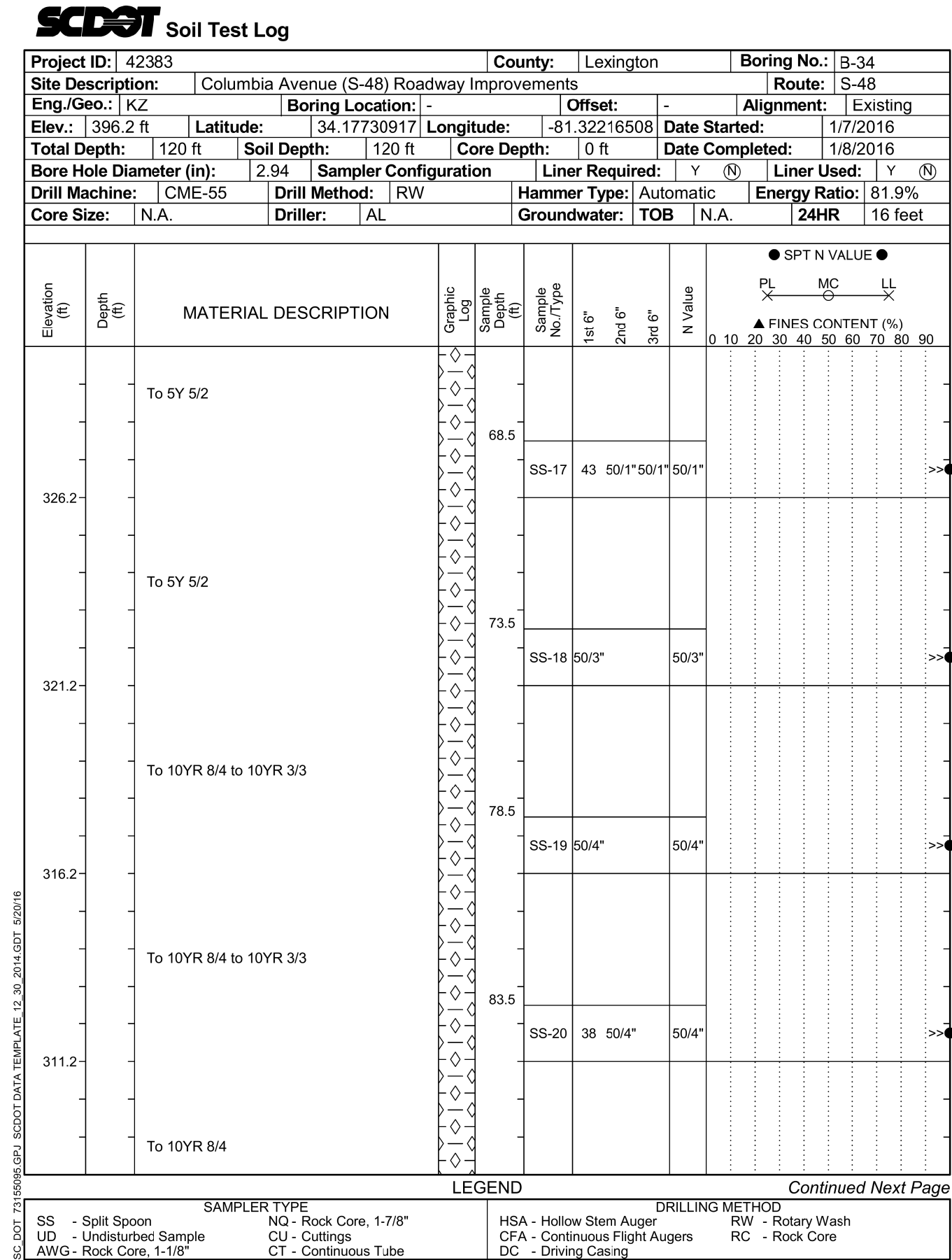
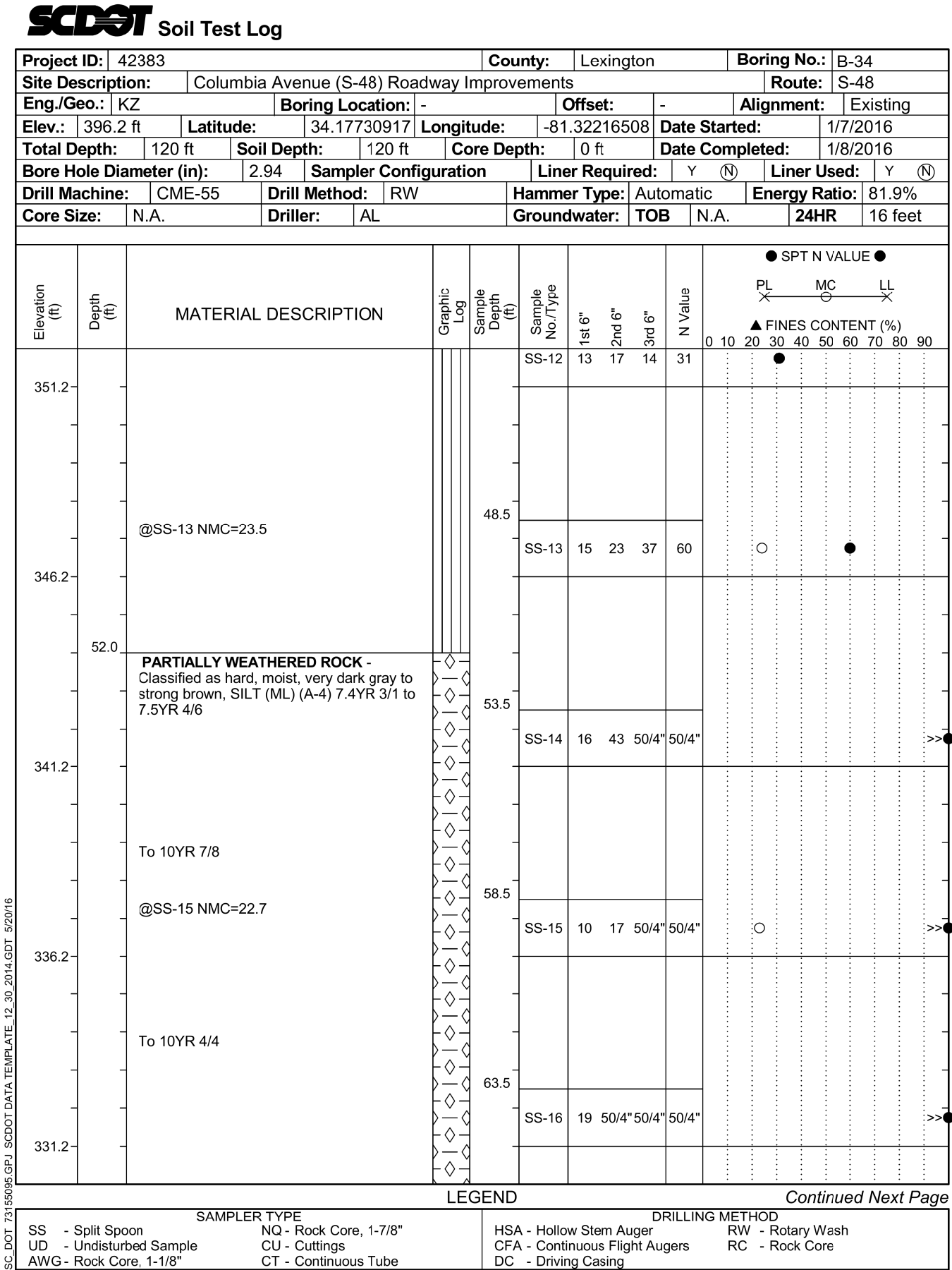
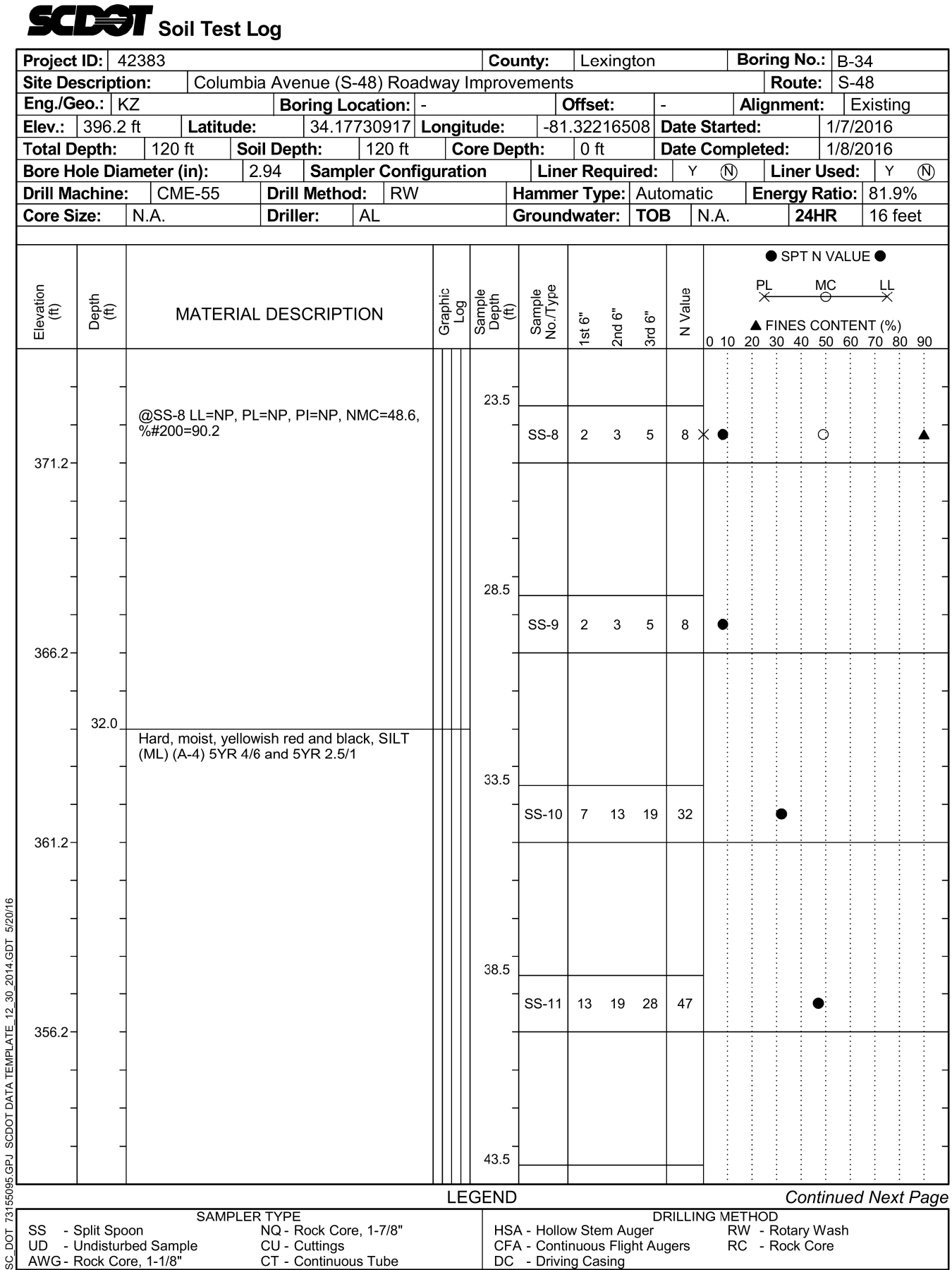
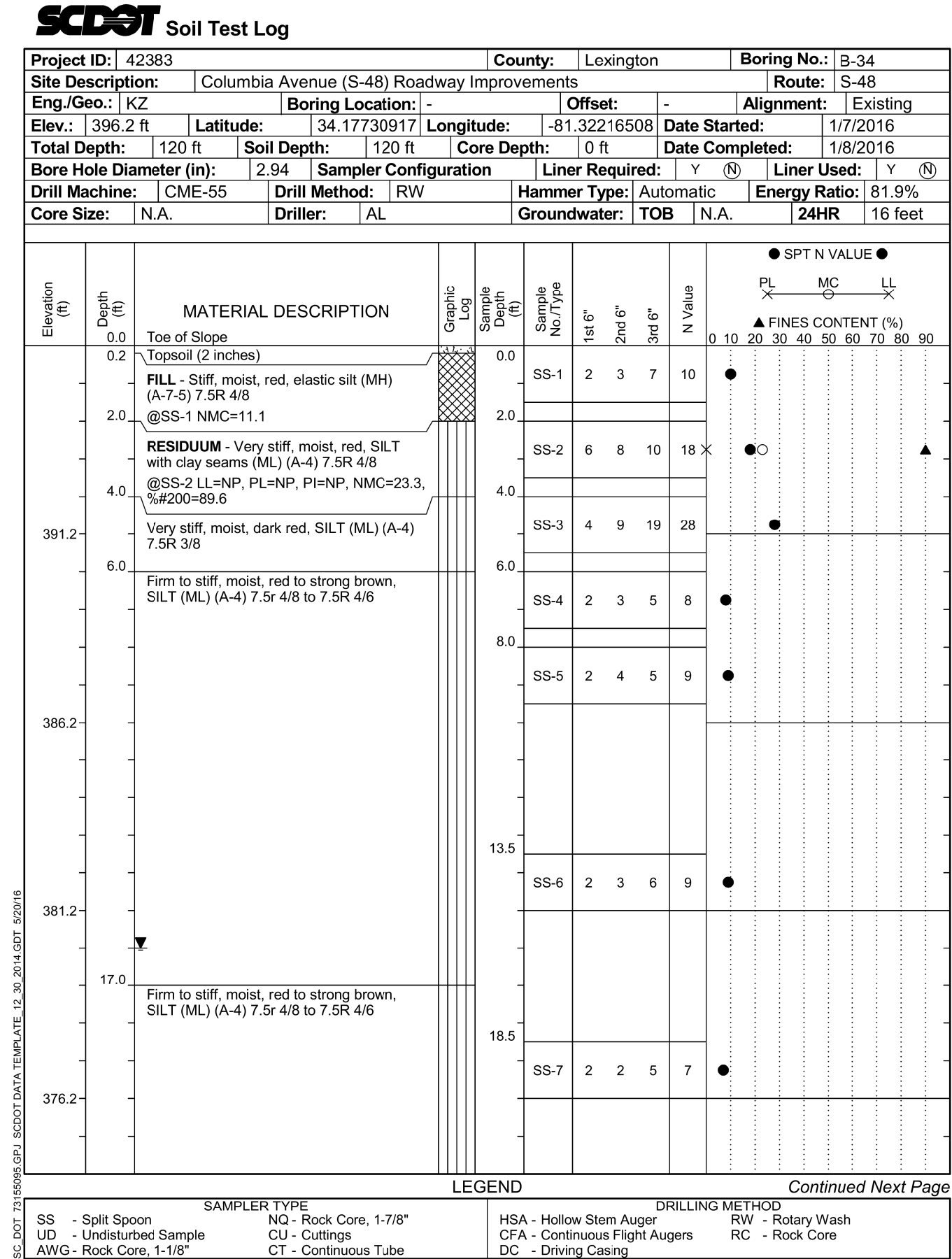
SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CA - Continuous Flight Augers	RC - Rock Core
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SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casinq	

LEGEND			
SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
UD - Undisturbed Sample	CU - Cuttings	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	DC - Driving Casing	

ROUTE
S-48

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REVIEWED		AJS	01/17
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DR.	CGB	AJS	01/17
DES.			
	BY	CHK.	DATE



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PRELIMINARY PLANS
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REVIEWED	AJS	01/17	
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DR.	CGB	AJS	01/17
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BY	CHK.	DATE	

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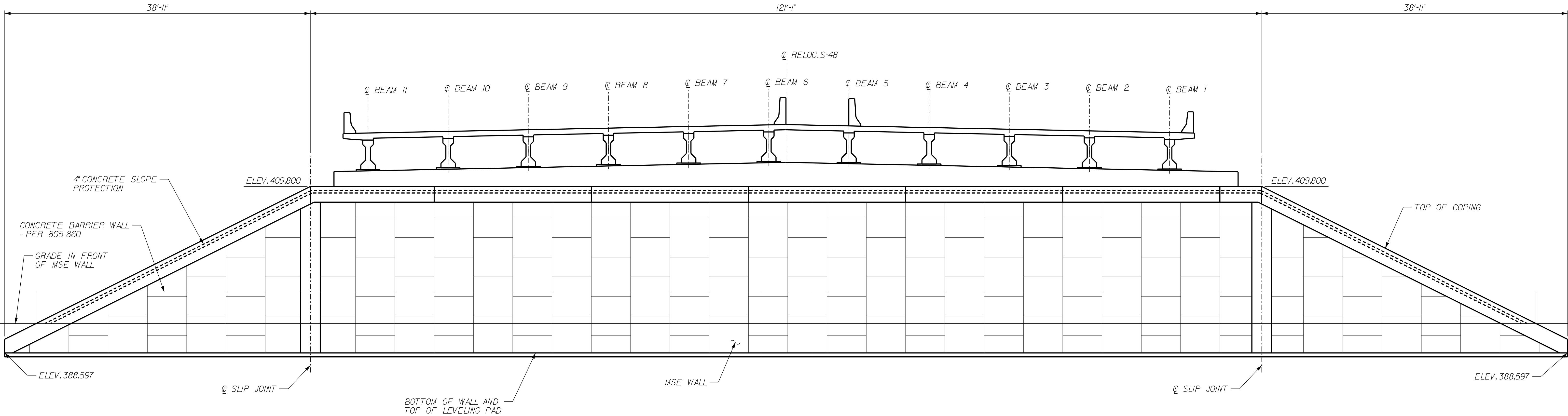
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SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BORING LOGS
(6 OF 6)

COUNTY
LEXINGTON

ROUTE
S-48



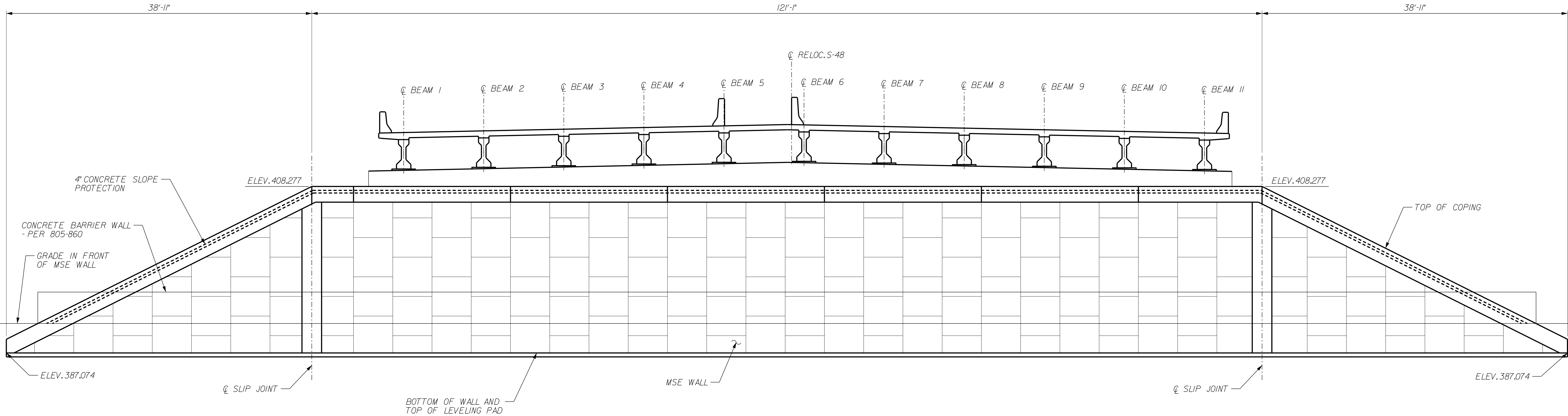
ELEVATION

(LOOKING OPPOSITE DIRECTION OF STATIONING)

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(803) 996-2900

Mead & Hunt

PRELIMINARY PLANS NOT FOR CONSTRUCTION	REV.				SOUTH CAROLINA	
	REV.				DEPARTMENT OF TRANSPORTATION	
	REV.				MSE WALL 1	
	REVIEWED	AJS	01/17			
	QUAN.					
	DR.	CGB	AJS	01/17		
		DES.			COUNTY	ROUTE
		BY	CHK.	DATE	LEXINGTON	S-48



ELEVATION
(LOOKING IN THE DIRECTION OF STATIONING)

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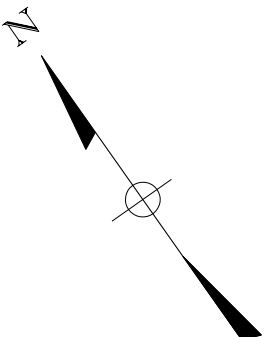
SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MSE WALL 2

COUNTY LEXINGTON ROUTE S-48

PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

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BY	CHK.	DATE	



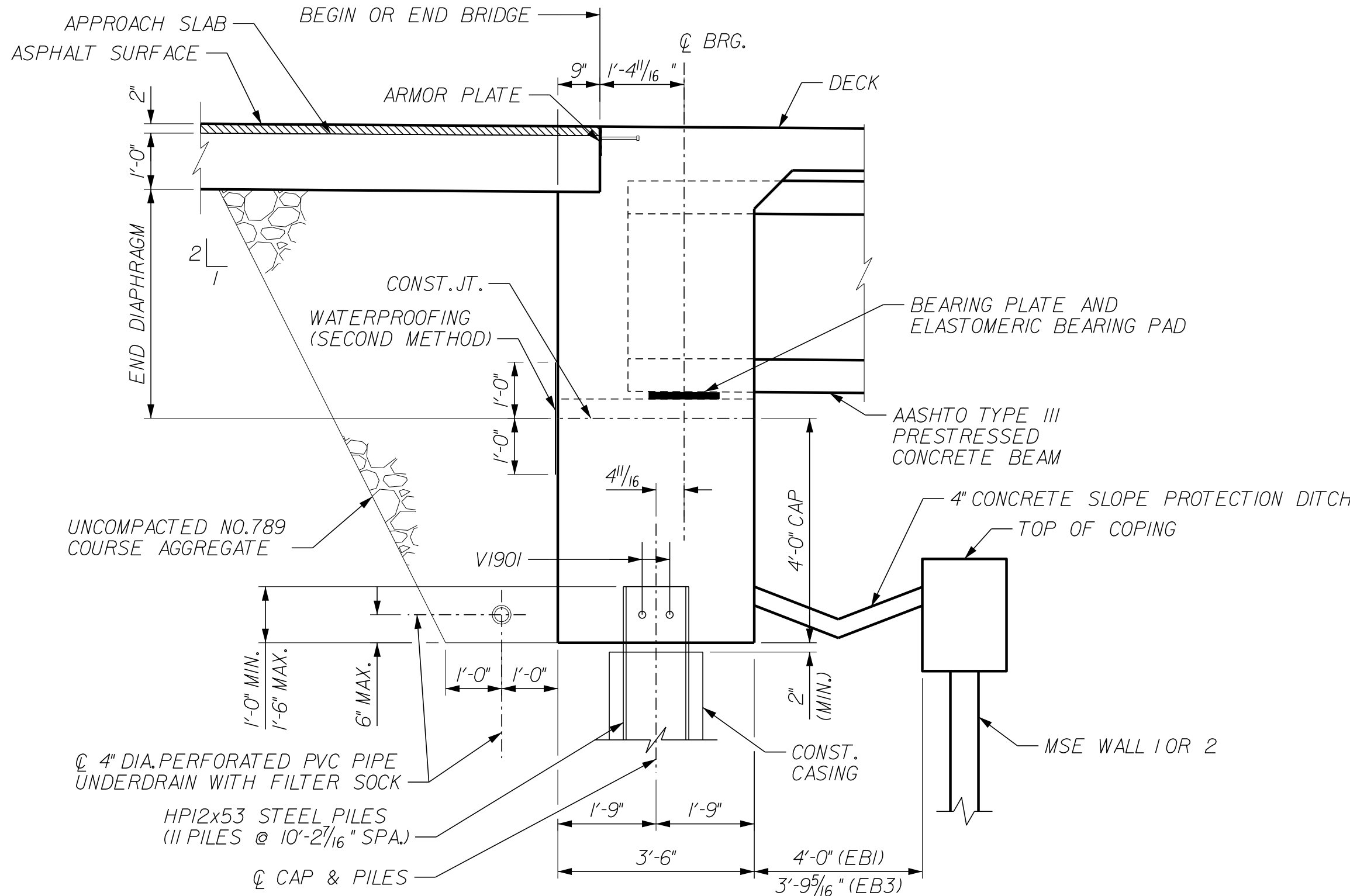
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QUAN.			
DR.	CGB	AJS	01/17
DES.	CGB	KVB	01/17
	BY	CHK.	DATE

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

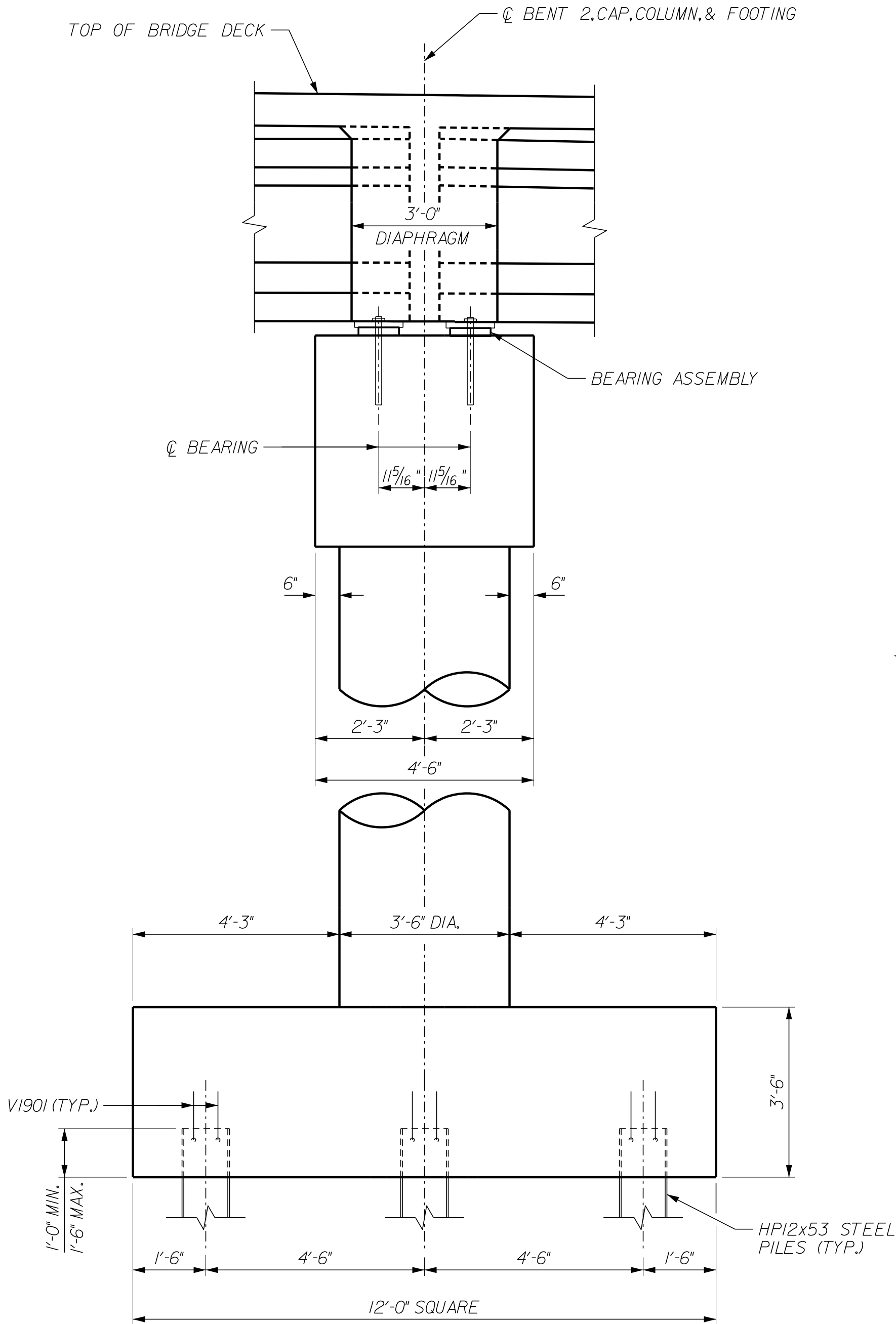
INTERIOR BENT 2

COUNTY LEXINGTON	ROUTE S-48
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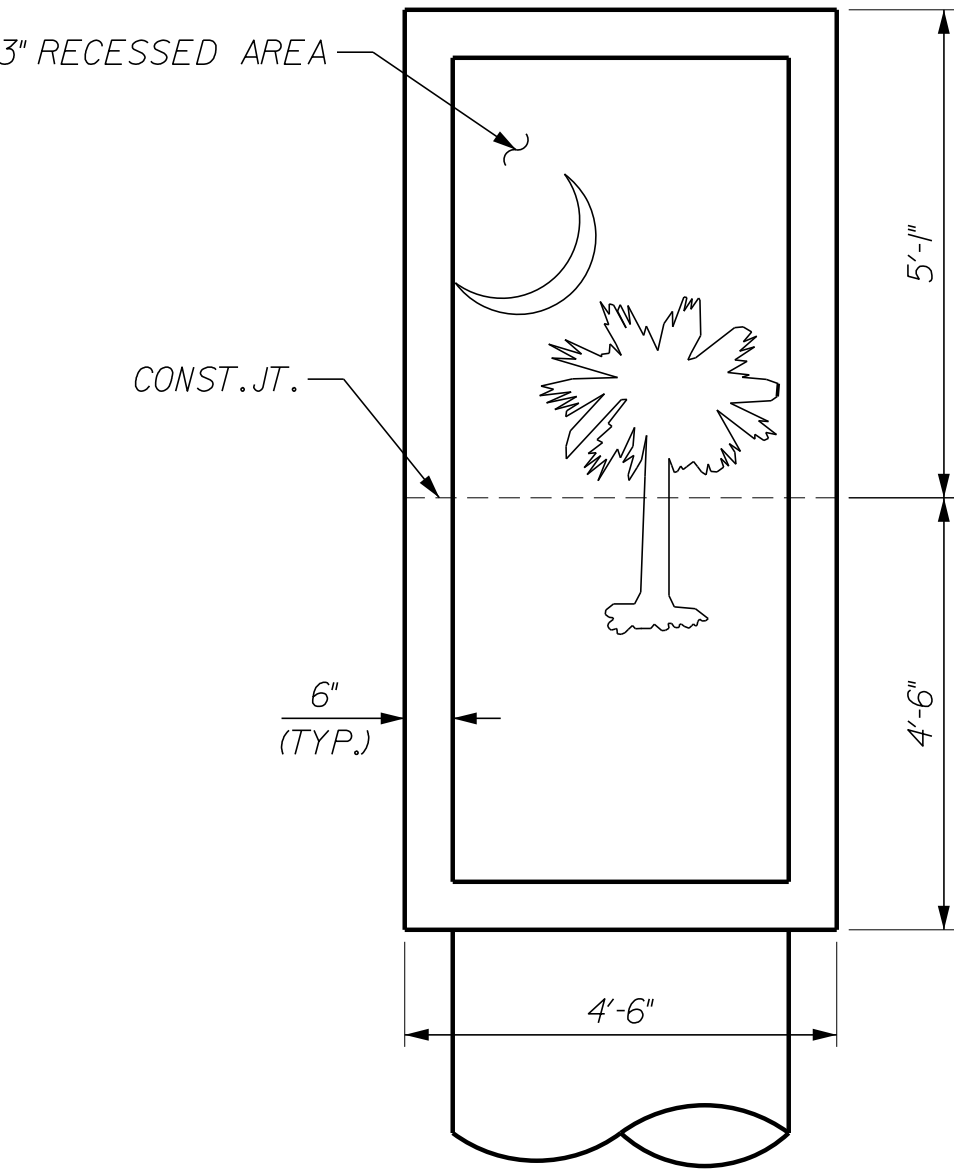
PRELIMINARY PLANS
NOT FOR
CONSTRUCTION



END BENT
SECTION



INTERIOR BENT
SECTION



PIER CAP END
PEDESTAL DETAIL

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REV.

REV.

REV.

REVIEWED

QUAN.

DR.

DES.

BY

CHK.

DATE

AJS

01/17

01/17

KVB

01/17

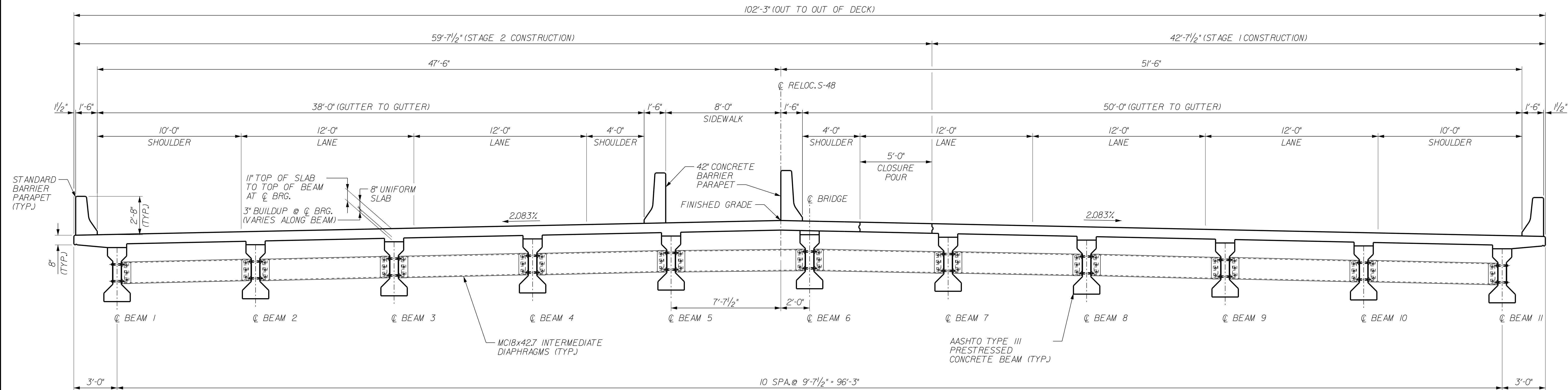
SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BENT DETAILS

COUNTY
LEXINGTON

ROUTE
S-48

PRELIMINARY PLANS
NOT FOR
CONSTRUCTION



TYPICAL SECTION

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DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

COUNTY LEXINGTON ROUTE S-48

REV.			
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REVIEWED	AJS	01/17	
QUAN.			
DR.	CGB	AJS	01/17
DES.	CGB	KVB	01/17
BY	CHK.	DATE	

PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

FED. RD. DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	LEXINGTON	32.400	I-26	10	18

24

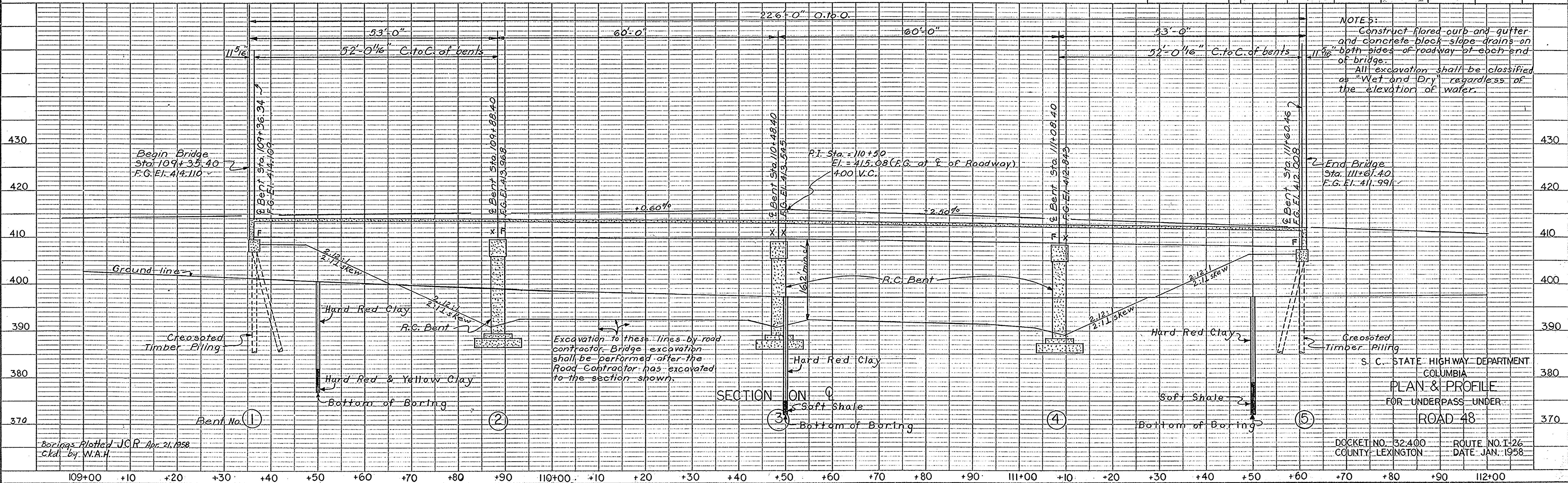
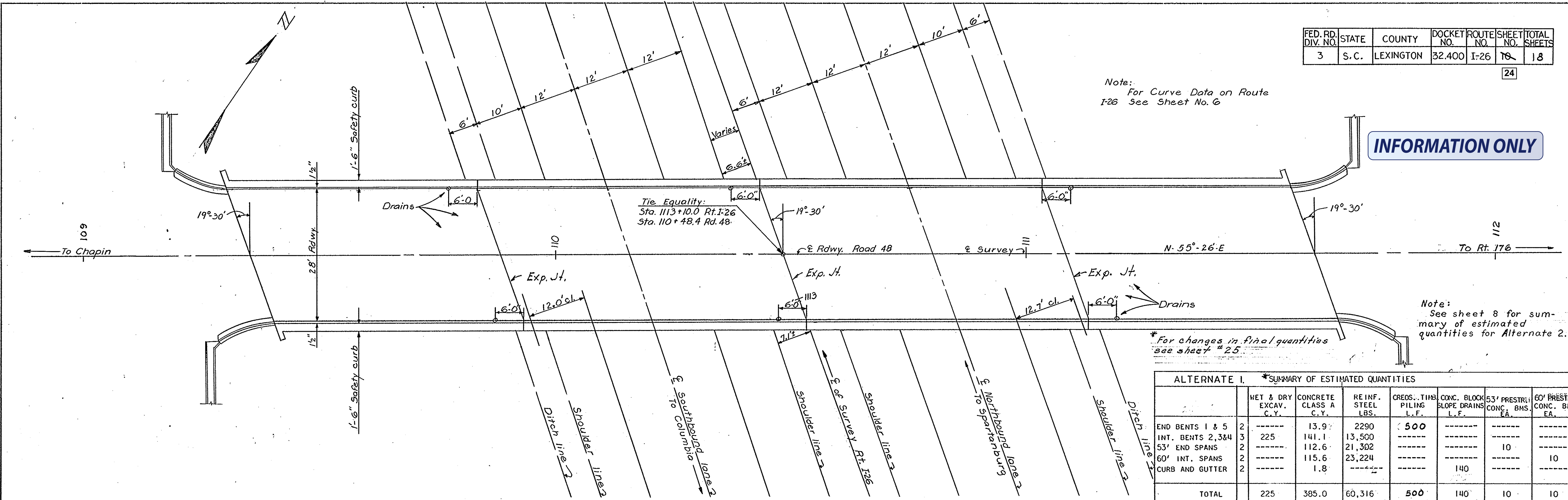
Note:
For Curve Data on Route
I-26 See Sheet No. 6

INFORMATION ONLY

Note:
See sheet 8 for sum-
mary of estimated
quantities for Alternate 2.

* For changes in final quantities
see sheet # 25.

ALTERNATE I. *SUMMARY OF ESTIMATED QUANTITIES							
	WET & DRY EXCAV. C.Y.	CONCRETE CLASS A C.Y.	REINF. STEEL LBS.	CREOS. TIMB. PILING L.F.	CONC. BLOCK SLOPE DRAINS L.F.	53' PRESTR. CONC. BHS. EA.	60' PRESTR. CONC. BHS. EA.
END BENTS 1 & 5	2	13.9	2290	500	-----	-----	-----
INT. BENTS 2, 3 & 4	3	141.1	13,500	-----	-----	-----	-----
53' END SPANS	2	112.6	21,302	-----	-----	10	-----
60' INT. SPANS	2	115.6	23,224	-----	-----	-----	10
CURB AND GUTTER	2	1.8	-----	-----	140	-----	-----
TOTAL	225	385.0	60,316	500	140	10	10



NOTE:
Construct flared curb and gutter
and concrete block slope drains on
both sides of roadway of each end
of bridge.
All excavation shall be classified
as "Wet and Dry" regardless of
the elevation of water.

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA
PLAN & PROFILE
FOR UNDERPASS UNDER
ROAD 48
DOCKET NO. 32.400
COUNTY LEXINGTON
ROUTE NO. I-26
DATE JAN. 1958

INFORMATION ONLY

DESIGN DATA

SPECIFICATIONS: A.A.S.H.O. 1953 with rev. thru. 1955 and "Criteria for Prestressed Concrete Bridges, Bureau of Public Roads" 1954.

LIVE LOAD: H 20-S16-44 Includes provision for alternate loading of 2 axles 4' apart with each axle weighing 75 % of rear loading for spans under 40'.

STRUCTURAL STEEL AND REINFORCED CONCRETE	
UNIT	$f_s(\text{struct.}) = 18,000 \text{ psi}$ $f_s(\text{reinf.}) = 20,000 \text{ psi}$ $f_c = 1,200 \text{ psi}, n = 10; v = 225 \text{ psi}; v = 300 \text{ psi}$
STRESSES	PRESTRESSED CONCRETE $f_c = 5,000 \text{ psi}, f_{ci} = 4,000 \text{ psi}; f_c = 2,000 \text{ psi}$ PRESTRESSING STEEL: $f_s = 250,000 \text{ psi};$ $f_{si} = 175,000 \text{ psi};$

MATERIAL AND WORKMANSHIP

Except as may otherwise be specified on plans or in the Special Provisions, all material and workmanship shall be in accordance with the South Carolina Highway Department Standard Specifications for Highway Construction dated November 1, 1955.

CONCRETE

All concrete shall be Class "A" unless noted below or on other plans.
Buildups on bent caps shall be cast monolithic with cap. Top of buildup shall be level.
Payment for Concrete in slab will be based on theoretical plan quantity.
Any necessary adjustment for Camber shall be at the Contractor's expense.
All exposed edges shall be chamfered 3/4", unless otherwise noted.

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

STANDARD NOTES

DOCKET NO. 32.400 ROUTE NO. I-26
COUNTY: LEXINGTON DATE: JAN., 1958

WIDENING EXISTING CONCRETE STRUCTURES

Existing structure is indicated on the plans by light lines, new structure by heavy lines.

All dimensions of new construction are subject to existing conditions.

Connecting surfaces of the old concrete shall be thoroughly roughened, cleaned of loose material, wetted and flushed with 1:2 cement mortar immediately before pouring new concrete, except as noted on plan sheet.

All reinforcing steel protruding beyond surface after chipping shall be left in place and imbedded in new concrete if feasible. Reinforcing steel which can not be imbedded in new concrete shall be cut off flush with surface of concrete where asphalt surfacing will cover. Where exposed the old reinforcing shall be cut off 1/2" below the exposed concrete surface and the hole patched with dry 1:3 mortar to the satisfaction of the Engineer.

If expansion anchor bolts are called for they shall be similar and equal to Rawl Anchors as manufactured by the Rawlplug Co., Inc., and shall be installed in accordance with the manufacturer's directions except that two lead anchors shall be used for 1/2" diameter anchors and three lead anchors for 1" dia. anchors.

The Contractor shall repair or replace at his own expense, and in a manner satisfactory to the Engineer, any portion of the existing structure damaged as a result of his carelessness or negligence.

The entire cost of the above work including all drilling and chipping, and removing and disposing of portions of old structure necessary to construct new structure shall be included in the unit price bid for Class "A" Concrete.

Expansion anchor bolts will be paid for at unit price bid for reinforcing steel.

SPECIAL NOTE

Generally, in case of discrepancy, this standard sheet of notes shall govern over the Specifications, but the remainder of the plans shall govern over notes hereon, and Special Provisions shall govern over all. See standard Specifications paragraph 5.04.

ALLOWANCE FOR DEAD LOAD DEFLECTION AND SETTLEMENT

Bridges shall be built on the grade or vertical curve shown on plans. Handrails, slabs, and curbs shall conform to the grade or curve.

In setting forms for structural steel or prestressed concrete beam bridges, an allowance shall be made for dead load deflections in addition to the elevations shown.

In setting falsework and forms for reinforced concrete spans an allowance shall be made for dead load deflections, settlement of falsework, and permanent camber which shall be provided for in addition to the elevations shown. After removal of the falsework, the finished structure shall conform to the elevations shown plus the allowance for permanent camber specified by the Engineer.

EXCAVATION FOR PILE TYPE END BENT

All cost of excavation necessary to construct end bents and to remove material under superstructure to an elevation 1'-0" below tops of end bent caps shall be included in the unit price bid for Class "A" Concrete.

DRIVING PILES THROUGH FILL

Where piles occur in fill exceeding 10ft. in height, the fill shall be in place before piles are driven.

BEARINGS

For concrete beams bearing on concrete, the top of caps, or tops of buildups, under bearing areas of beams shall receive a steel trowel finish to insure a smooth and level bearing surface. See Standard Specifications paragraph 71 D22.

STRUCTURAL STEEL

Beams shall be cambered for vertical curve and dead load deflection either in mill or shop.

Anchor bolt assemblies will be paid for as reinforcing steel and are included in the bent quantities. ~~Unless specifically stated elsewhere as included in the structural steel quantities~~

Shims shall be placed between beam flange and rocker plate where required and shall be adjusted to bring top of beam to theoretical grade.

All rivets shall be 5/8" unless noted.

All high-tensile-strength bolts shall be 3/4" unless noted.

All holes shall be 1/8" unless noted.

Holes in all main member splices shall be sub-punched, the connecting members shop assembled in their proper positions, and the holes reamed to full size while assembled.

Floor beam connections shall be reamed to a metal template.

All stiffeners at floor beams and at pier reactions shall have fills. All interior stiffeners between floor beams, shall be crimped or filled.

Bearing plates and rocker plates to be rolled steel.

COMPOSITE BEAMS

A 5 day interval shall be allowed between time of pouring slab and sidewalk.

Tops of beam flanges shall not be painted.

All equipment, materials and workmanship for electric arc welded stud shear connectors shall be in accordance with the recommendations of the manufacturer and Special Provisions.

Alternate for welded studs: an approved alternate method of securing composite action between beams and slab may be used, at no additional cost to the Dept. Details must be submitted for approval in advance of making the change.

PRESTRESSED BEAMS

Tops of beams shall be rough floated. At the approximate time of initial set, entire top of beam shall be scrubbed with a coarse wire brush to remove all laitance, and to produce a roughened surface for bonding slab.

Concrete in prestressed beams shall be class "X" as described in the Special Provisions.

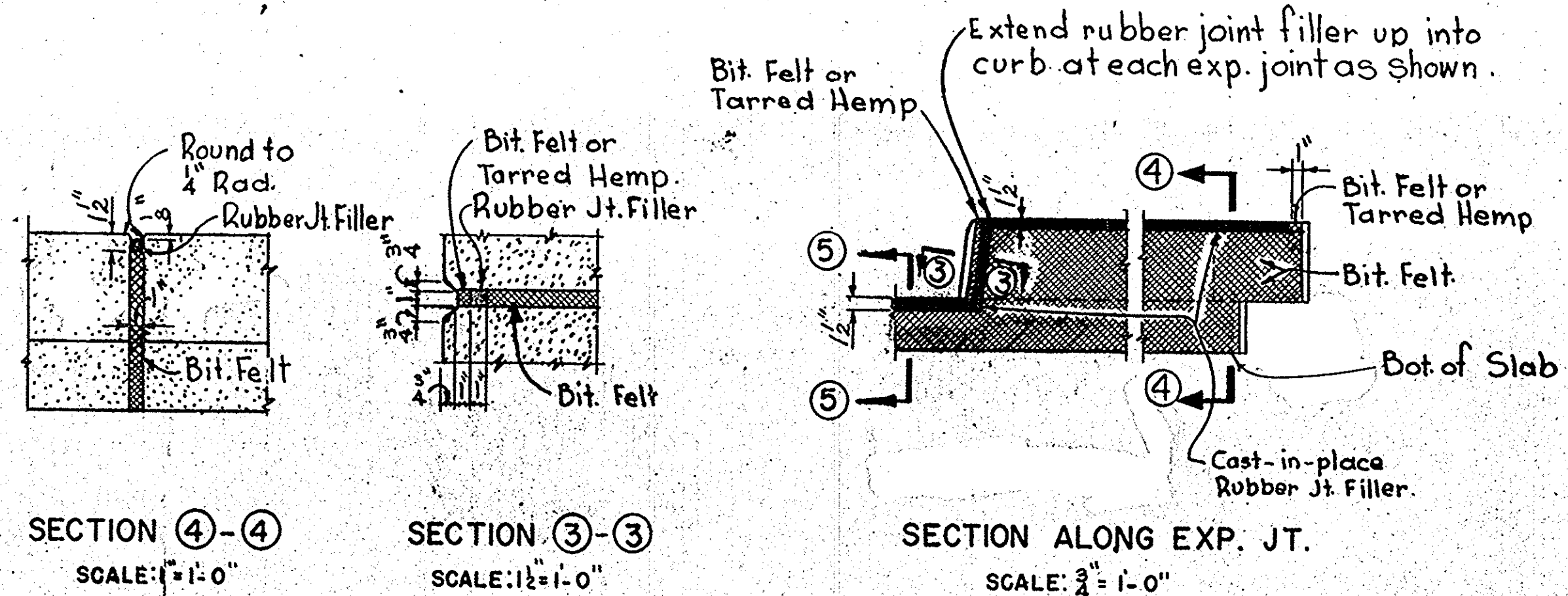
The prestressing strands, wire or bars, must be thoroughly cleaned of any loose rust, dirt, grease, form lubricant, or other deleterious substances, to the satisfaction of the Engineer, before the concrete is placed.

Beams shall not be transported to the bridge site until concrete has cured for at least 6 days.

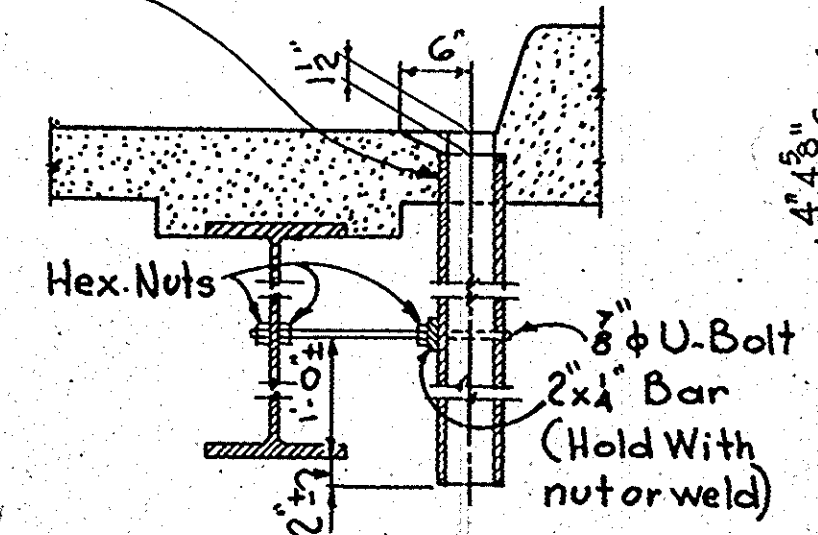
Membrane curing compound shall not be used on tops of beams.

REV.	QUAN.	TR.	THH.	J.C.C.	12-66
		DR.	AGW.	RWA.	10-56
DES.					
BY	CHK	DATE			

INFORMATION ONLY

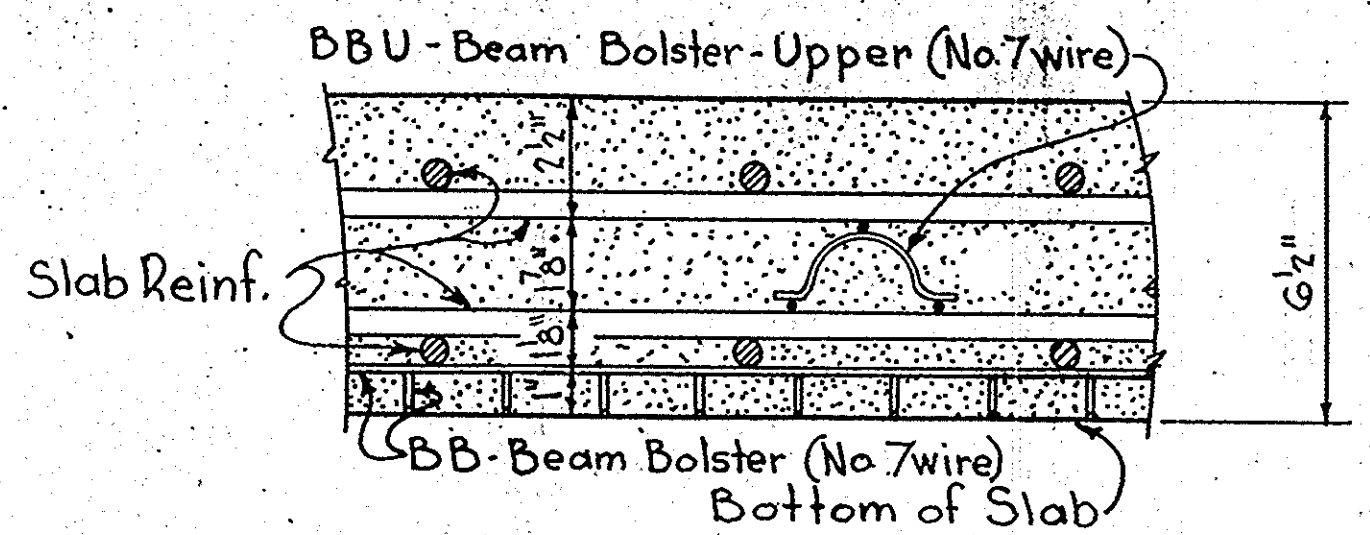
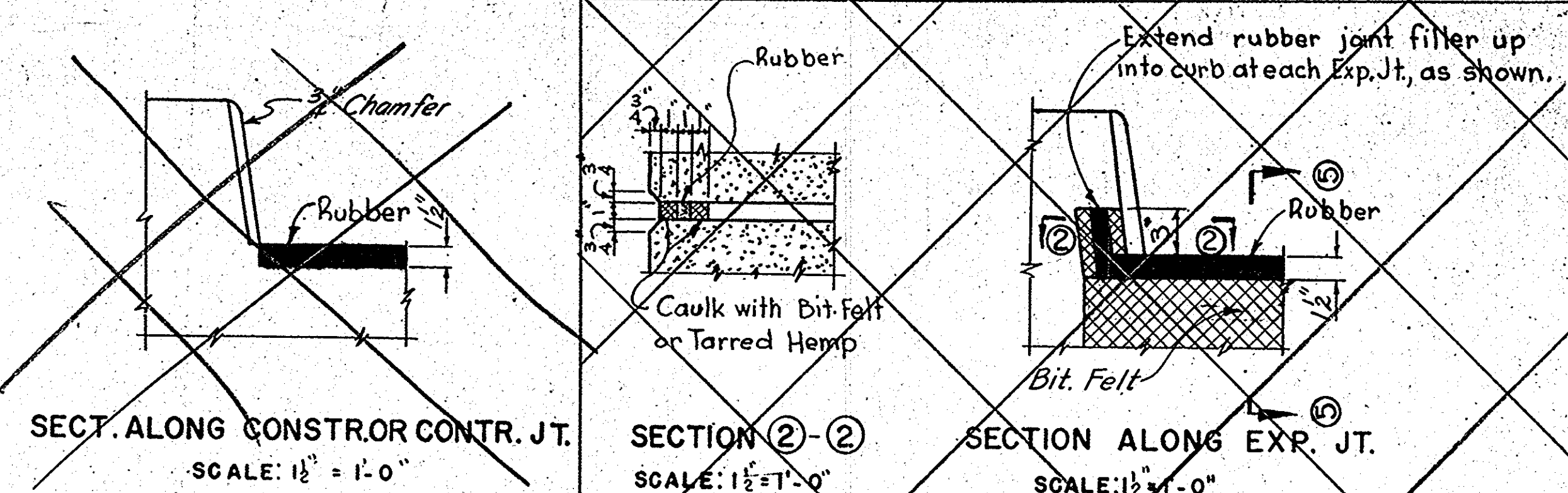


4" (A44-41 Class 150)
C.I. Pipe
To be unpainted before placing.

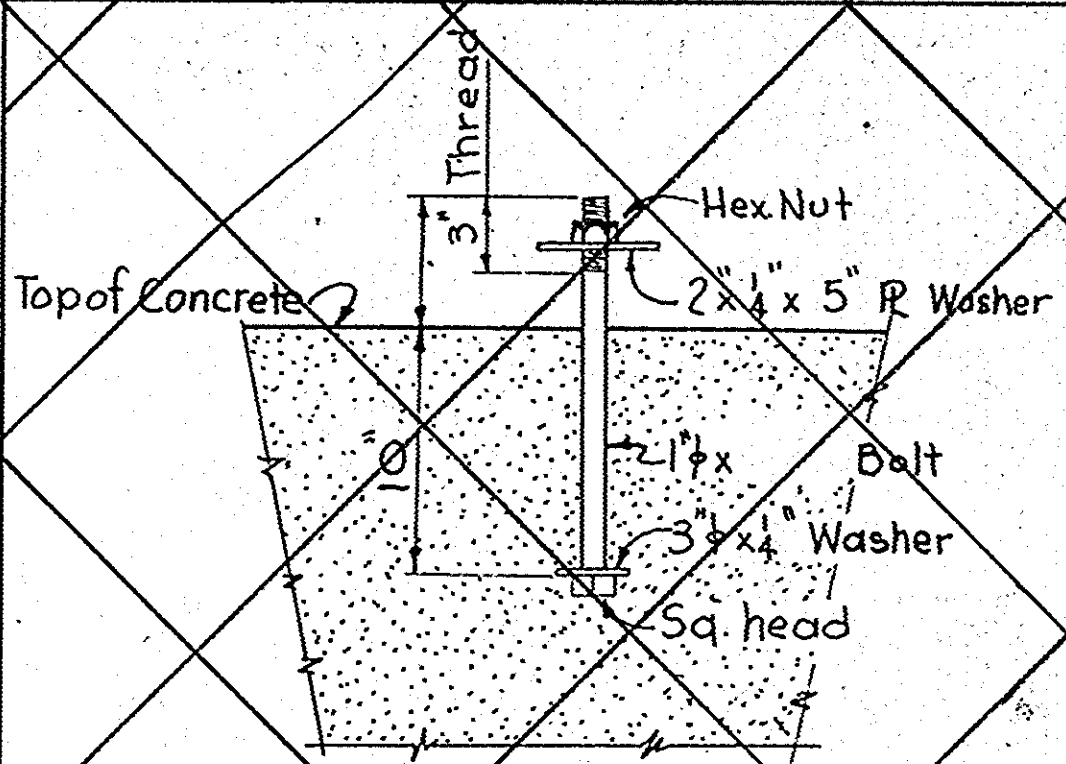


PLAN
DRAIN DETAILS
SCALE: 3/4" = 1'-0"

SECTION ①-①
For Alternate 1



Note:
Bolsters shall be spaced so that they provide adequate support for the slab reinforcing steel. The BBU bolsters shall be spaced at approx. 3'-0" ctrs. The BB bolsters shall be placed with one row near each edge of slab & with a max. spacing of approx. 3'-0" between.
Bolsters shall be equal to beam bolsters BB and BBU as Mfg'd by Meadow Steel Co. or Richmond Screw Anchor Co.
The lengths of bolsters shown in reinforcing steel schedules are approximate. Weights are included in the reinforcing steel quantities and payment will be made at the unit price bid for Reinforcing Steel.

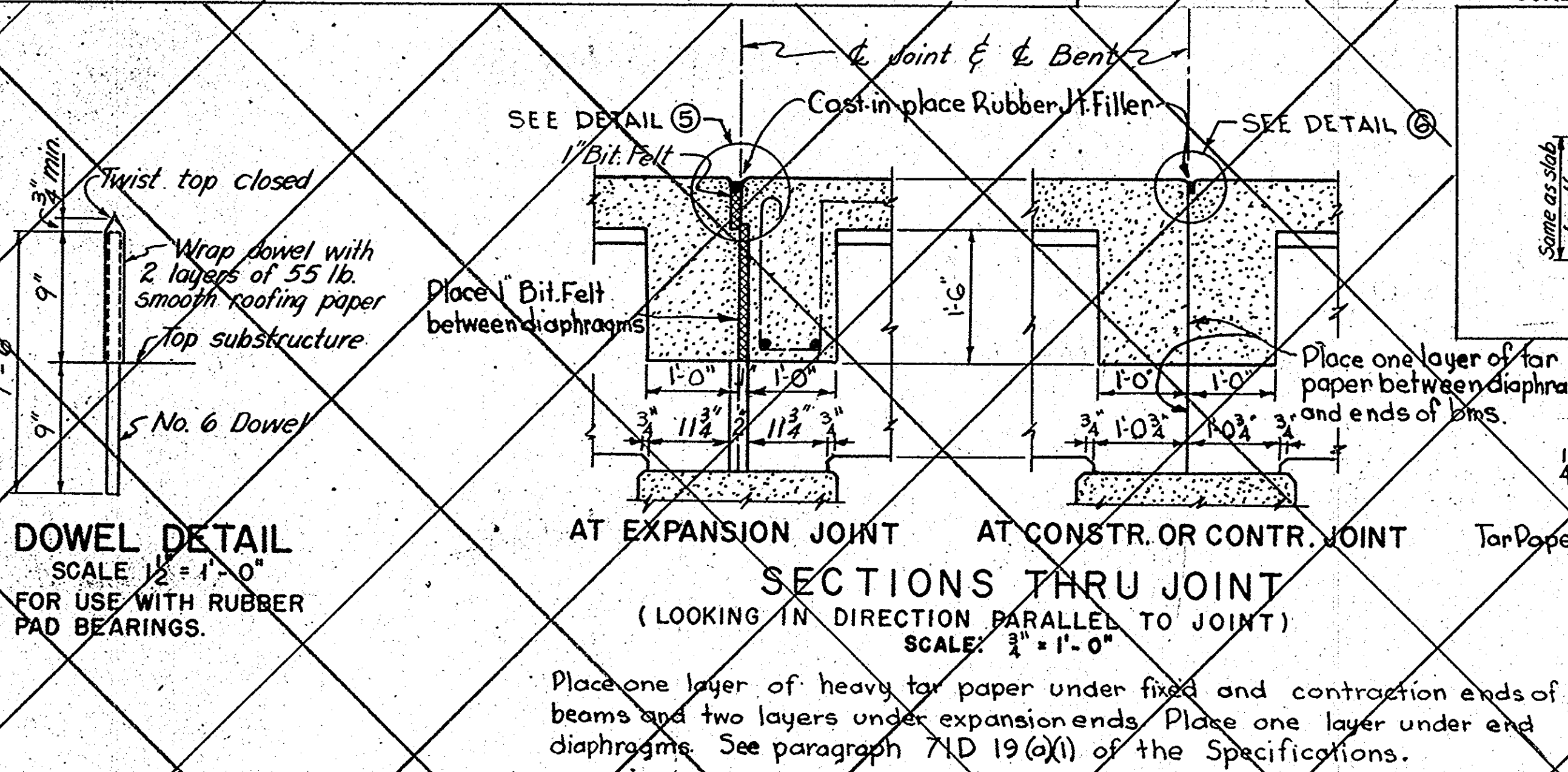


ANCHOR BOLT SCHEDULE				
Bent No.	No. per Bent	Size	Length	*Wt. per Bent Lbs.

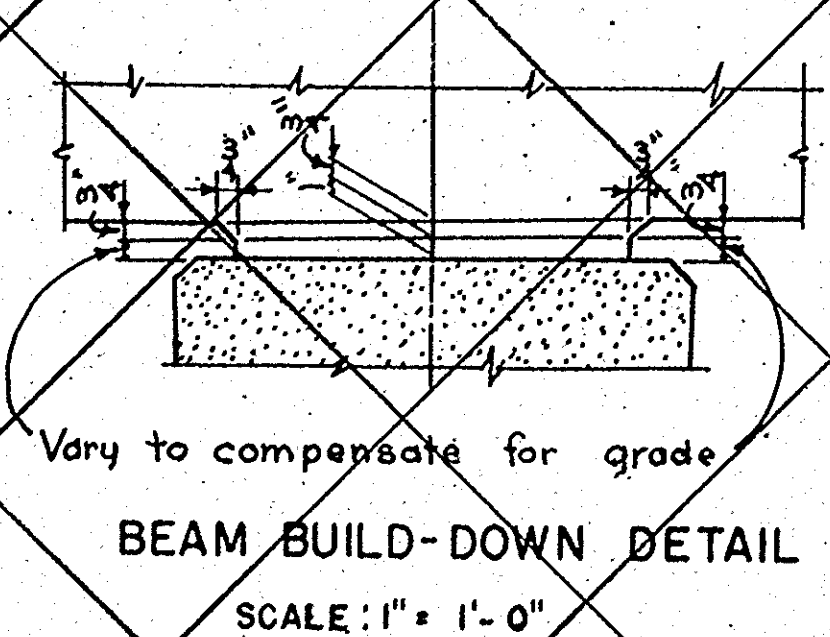
*Complete Assembly
Note:
Anchor bolt assemblies will be paid for as reinforcing steel and are included in the bent quantities, unless specifically stated elsewhere as included in the structural steel quantities.

1 1/2" For No. 4 and Smaller add 6" per hook
2" For No. 5 and No. 6 add 8" per hook
3" For No. 7 and larger add 12" per hook

HOOK DETAILS
FOR STEEL REINFORCING BARS



JOINT DETAILS



Rev.	RWH AEH 7-57
Quon.	WCF EAS 12-56
Dr.	JCW EAS 12-56
Des.	By CHK'D DATE

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

STANDARD DETAILS

DOCKET NO. 32.400
COUNTY: LEXINGTON

ROUTE NO. I-26
DATE: JAN. 1958

SCALE AS NOTED

INFORMATION ONLY

ELEVATIONS		REINFORCING		STEEL		SCHEDULE	
BENT 1		BENT 5		MARK		BENDING DETAILS	
A	407.209	407.065		A	8	3	3
B	407.245	407.143		B	6	4	4
C	407.206	407.148		C	4	35	35
D	407.206	407.148		D	4	10	10
E	407.075	406.914		E	3	20	20
F	407.075	406.914		F	8	2	2
DIMENSIONS							
a	1 1/2"	1 1/2"					
b	1 1/2"	2 3/4"					
c	1 1/2"	2 3/4"					
d	1 1/2"	2 3/4"					
e	2"	2"					

HOOK DETAILS

12" For #4 & Smaller Bors add 6" per Hook
2" For #5 & #6 add 8" per Hook
3 1/2" For #7 & Larger add 12" per Hook

SUMMARY OF QUANTITIES

ITEM	6.94	BENT 1	BENT 5
Concrete, Class "A"		6.94 cu yd	7.00 cu yd
Reinforcing Steel		1,145 Lbs	1,145 Lbs
Cresosoted Timber Piling			See Summary

* INCLUDES 52 LBS. FOR ANCHOR BOLT ASSEMBLIES

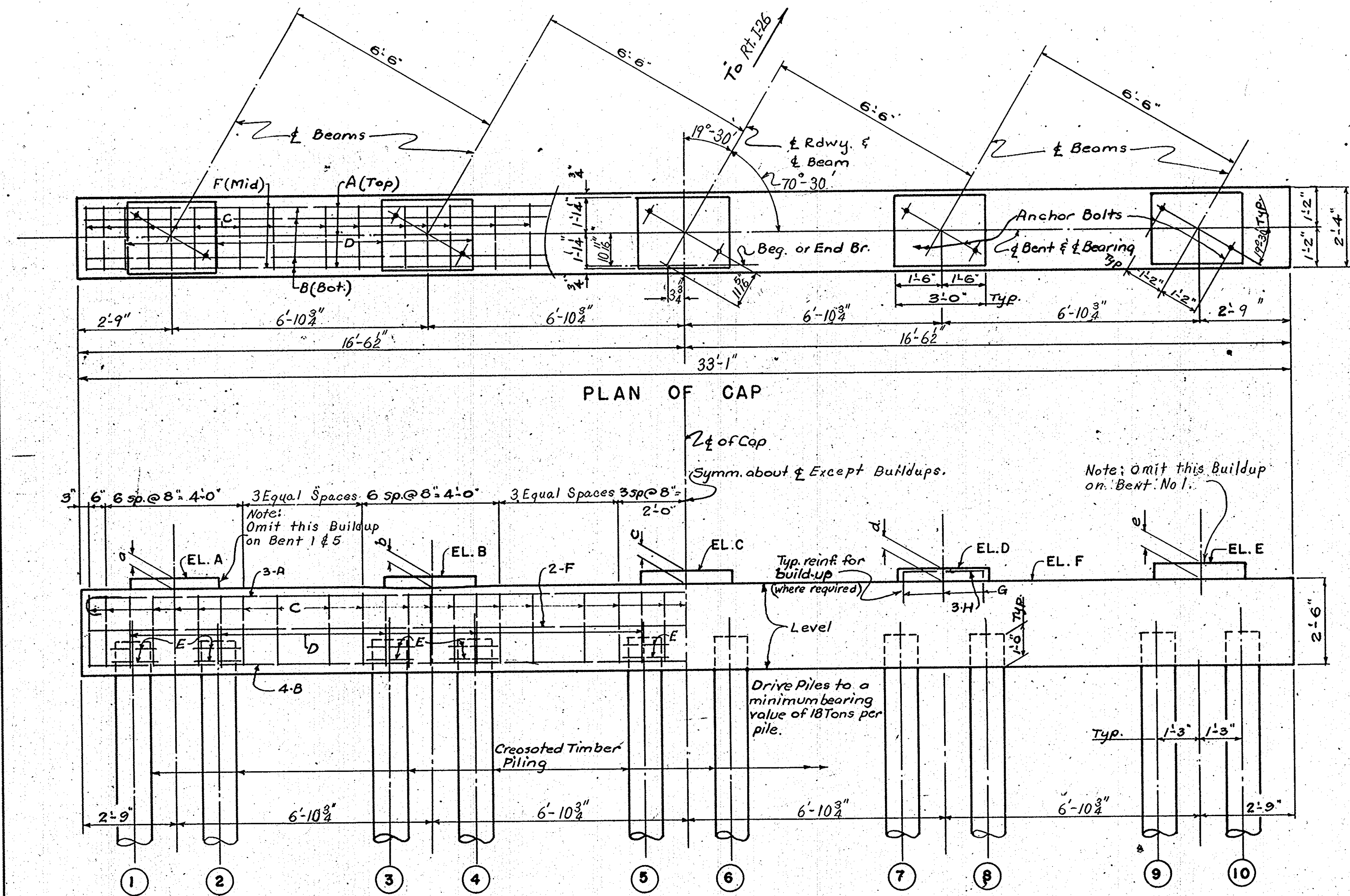
NOTES:
For General Notes see Sh. No. 11.
All concrete shall be Class "A".
All exposed concrete edges shall be chamfered 3/4" unless noted otherwise.
Build-ups to be cast monolithic with cap.
Tops of build-ups shall be level.
Anchor Bolt Assemblies to be paid for as reinforcing steel and are included in Bent Quantities.

ALL ELEVATIONS SHOWN ON THIS SHEET MUST BE RAISED BY THE AMOUNT OF 1.365 FT. IF ALTERNATE 2 IS USED

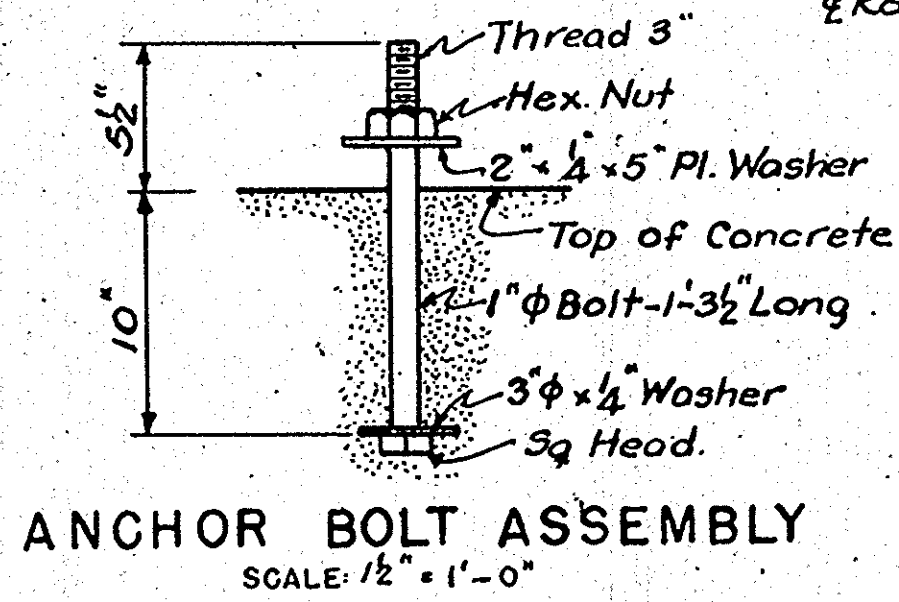
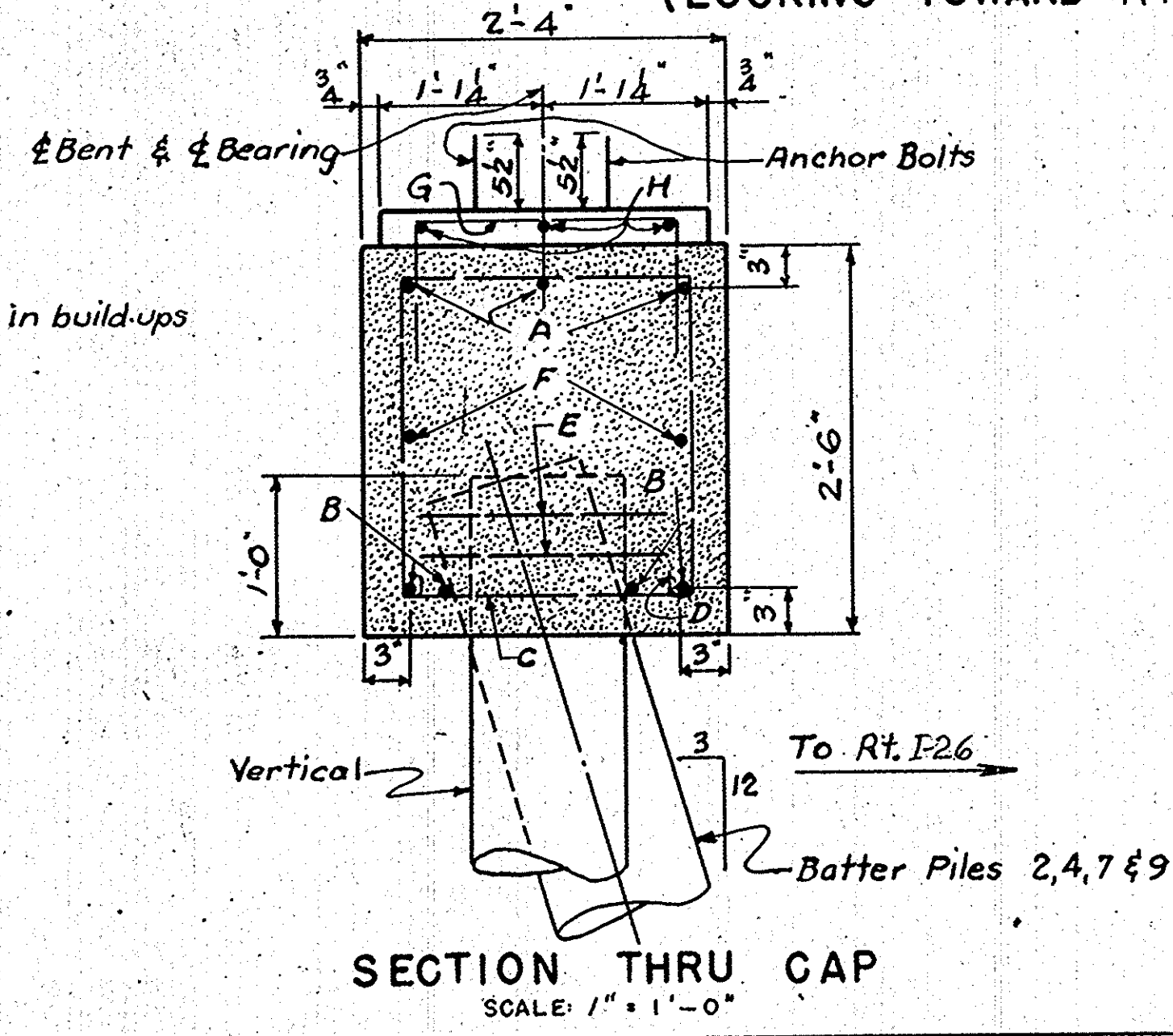
Note: Concrete Quantity = 6.9 cu yd exclusive of build-ups.
Reinf. Steel Quantity = 1,145 Lbs. exclusive of G & H bars, but including 52 Lbs for Anchor Bolt Assemblies.

Bent for 60' Span of Rte. 126 (Prestressed Concrete Beams, H 20-S13LL)

Rev	WEM/J.H.F. 1-58
For Dkt.	32.400
Drawn	H.D.L. J.H.F. 1-57
Tr.	F.M.Q. C.M.S. 4-13-57
Des.	H.D.L. J.H.F. 1-57
Des.	From Dkt. 42.449
By	CHKD Date

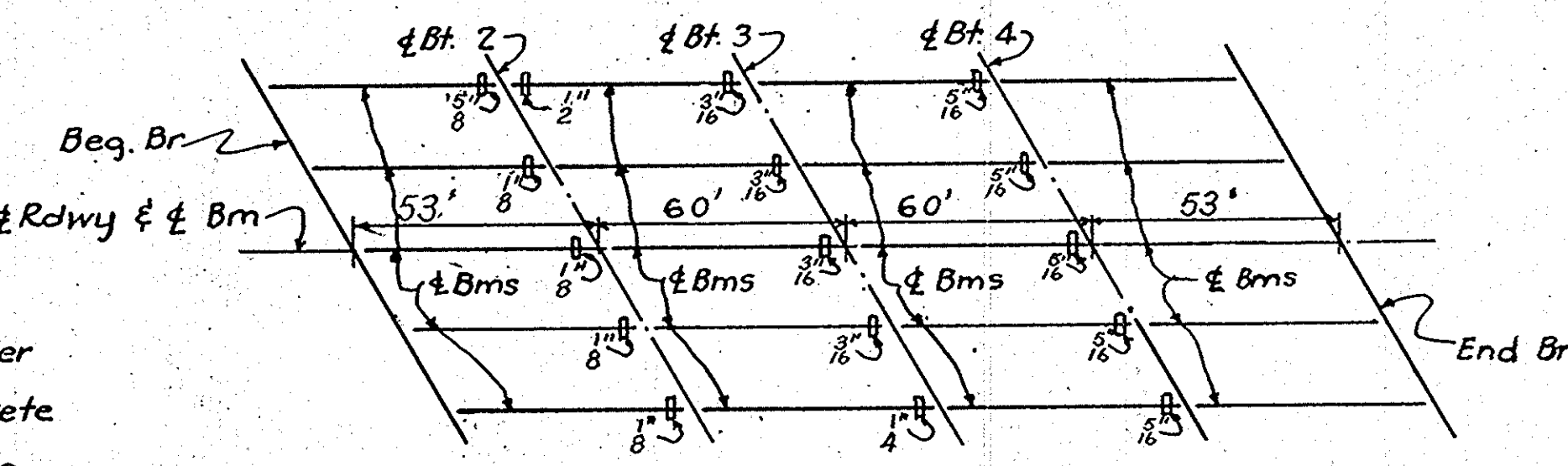


ELEVATION (LOOKING TOWARD RT. 126)



ANCHOR BOLT ASSEMBLY

SCALE: 1/2" = 1'-0"



BOOSTER LAYOUT

NO SCALE

FOR PRESTRESSED BEAMS (ALTERNATE 1.)
See sheet 18 for Boosters for steel beams (Alternate 2.)

ANCHOR BOLT SCHEDULE				
BENT NO.	NO. PER BENT	SIZE	LENGTH	WT. PER BENT
1 or 5	10	1"φ	1'-3 1/2"	52 Lbs.
2, 3 or 4	20	1"φ	1'-3 1/2"	104 Lbs.

1" ASSEMBLY WEIGHS 5.2 LBS.

ALTERNATE 1 & ALTERNATE 2
S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

END BENTS 1 & 5
FOR UNDERPASS UNDER
ROAD 48

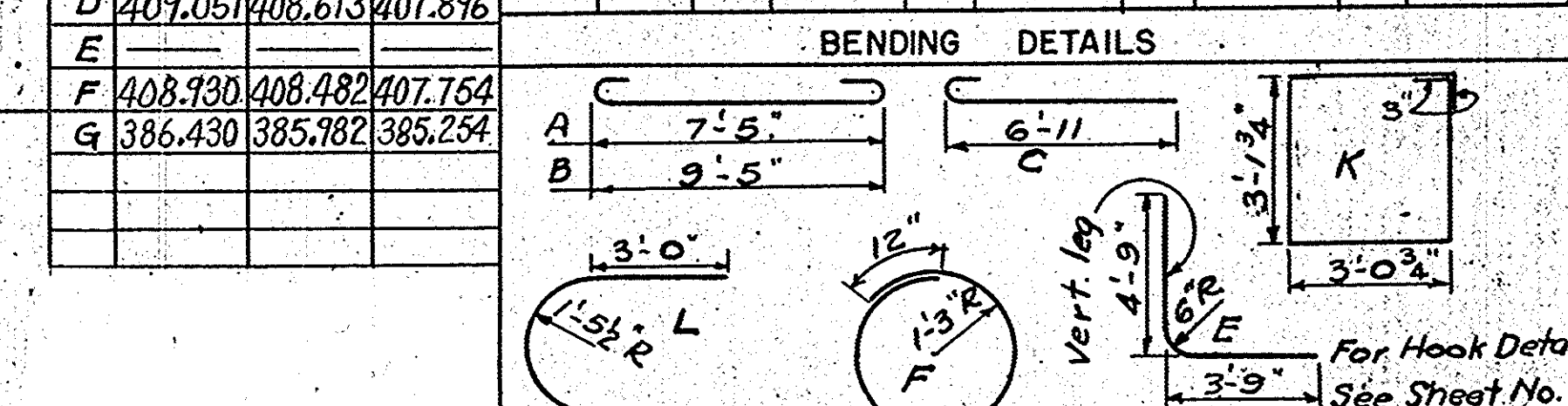
DOCKET NO. 32.400 ROUTE NO. I-26
COUNTY LEXINGTON DATE JAN. 1958

INFORMATION ONLY

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	LEXINGTON	32.400	126	14	18

DIMENSIONS				REINFORCING STEEL SCHEDULE			
BT. NO. 2	BT. NO. 3	BT. NO. 4	MARK	SIZE	NO.	LENGTH	D
a	1 1/2"	1 1/2"	A	4'	44	8'-5"	B
b	1 1/2"	1 1/2"	B	6	28	10'-9"	B
c	1 1/2"	1 1/2"	C	9	24	7'-11"	B
d	1 1/2"	1 1/2"	D	9	24	19'-0"	S
e	1 1/2"	1 1/2"	E	9	6	8'-3"	B
f	1 1/2"	1 1/2"	F	3	36	8'-11"	B
g	1 1/2"	1 1/2"	G	10	4	29'-0"	S
			H	10	2	31'-5"	S
			I	10	2	10'-0"	S
			J	9	4	9'-0"	S
			K	4	16	12'-11"	B
			L	6	6	10'-7"	B

ELEVATIONS			
ALT. 1	408.568	407.883	
B	407.073	408.651	407.761
C	407.079	408.672	407.965
D	407.051	408.613	407.896
E			
F	408.730	408.482	407.754
G	386.430	385.782	385.254



SUMMARY OF QUANTITIES			
ITEM	BENT NO. 2	BENT NO. 3	BENT NO. 4
CLASS "A" CONCRETE	C.Y. 47.0	47.0	47.1
REINFORCING STEEL	LBS. 4,500 *	4,500 *	4,500 *
WET & DRY EXCAVATION	C.Y. 75	80	70

* INCLUDES 104 LBS. FOR ANCHOR BOLT ASSEMBLIES.

ALT. 2	CLASS "A" CONCRETE	C.Y. 48.1	48.1	48.2
	REINFORCING STEEL	LBS. 4,619 *	4,619 *	4,619 *
	WET & DRY EXCAVATION	C.Y. 75	80	70

Notes: Footings may be lowered a maximum of 2'-0" without providing additional vertical column steel by reducing length of splices. For Standard details see Sh. No. 12. For Standard Notes see Sh. No. 11.

MAXIMUM FOOTING REACTION - INT. EXT.		
DEAD LOAD - SUPERSTRUCTURE	186.9	119.1 KIPS
LIVE LOAD - SUPERSTRUCTURE	90.3	42.6
DEAD LOAD - BENT	88.8	59.6
BACKFILL - 3 FT. NET WEIGHT	29.9	18.3
TOTAL OF ABOVE	395.9	239.6
AVERAGE BEARING	2.0 1/2	1.9 1/2

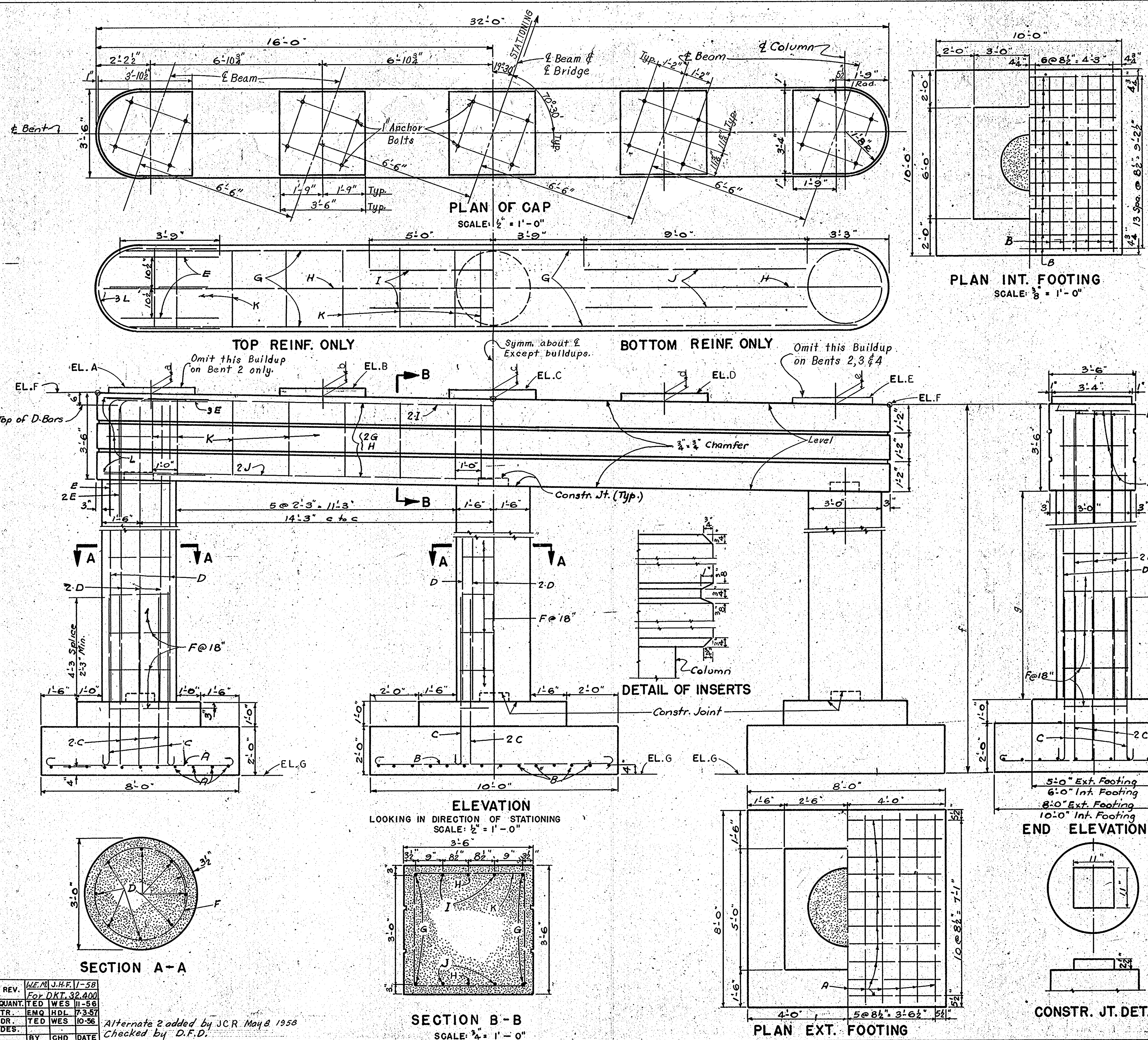
MAX. BEARING DUE TO WIND		
LONGITUDINAL ON SUPERSTRUCTURE	0.3 1/2	0.6 1/2
LONGITUDINAL ON SUBSTRUCTURE	0.2 1/2	0.3 1/2

MAXIMUM CONDITION - INT. FOOTING - (2.5 1/2 + 1.25) + 2.0 NORM. STR.		
	EXT. FOOTING - (2.8 1/2 + 1.25) = 2.2 1/2	

NOTE: THE FOLLOWING CHANGES MUST BE MADE ON THIS SHEET: IF ALTERNATE 2 IS USED. 1. RAISE ALL ELEVATIONS A THRU F. INCL. BY THE AMOUNT OF 1.35' FOR BENTS 2 & 3, AND BY 1.365' FOR BENT 4. INCREASE DIMENSIONS f and g BY 1'-4" FOR BENTS 2 & 3, AND BY 1'-4 1/2" FOR BENT 4. 2. INCREASE THE LENGTH OF ALL D BARS BY 1'-0" AND PROVIDE 3 ADDITIONAL F BARS PER BENT. NO ADJUSTMENT IN COMPENSATION WILL BE MADE FOR CHANGES IN QUANTITIES THAT RESULT FROM SUBSTITUTING THE ACTUAL TYPE STRUCTURAL STEEL SUPERSTRUCTURE CHANGES IN QUANTITIES THAT RESULT FROM CHANGES IN FOOTING ELEVATIONS DUE TO FOUNDATION CONDITIONS WILL BE ADJUSTED AT THE UNIT PRICE BID FOR THE ITEMS AFFECTED.

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

INT. BENTS 2, 3 & 4
FOR UNDERPASS UNDER
ROAD 48



Note: Concrete Quantity: 46.8 C.Y. exclusive of build-ups. Steel Quantity: 4,500 Lbs. Includes 104 Lbs. for Anchor Bolt Assemblies.

Bent for 53' 60 Spans (Prestressed Concrete Beams 4.20-S/16 L.L.)

REV.	MEMO	J.H.F.	1-58
QUANT.	TED	WES	11-56
TR.	ENQ	HDL	7-3-57
DR.	TED	WES	10-56
DES.	BY	GHD	DATE

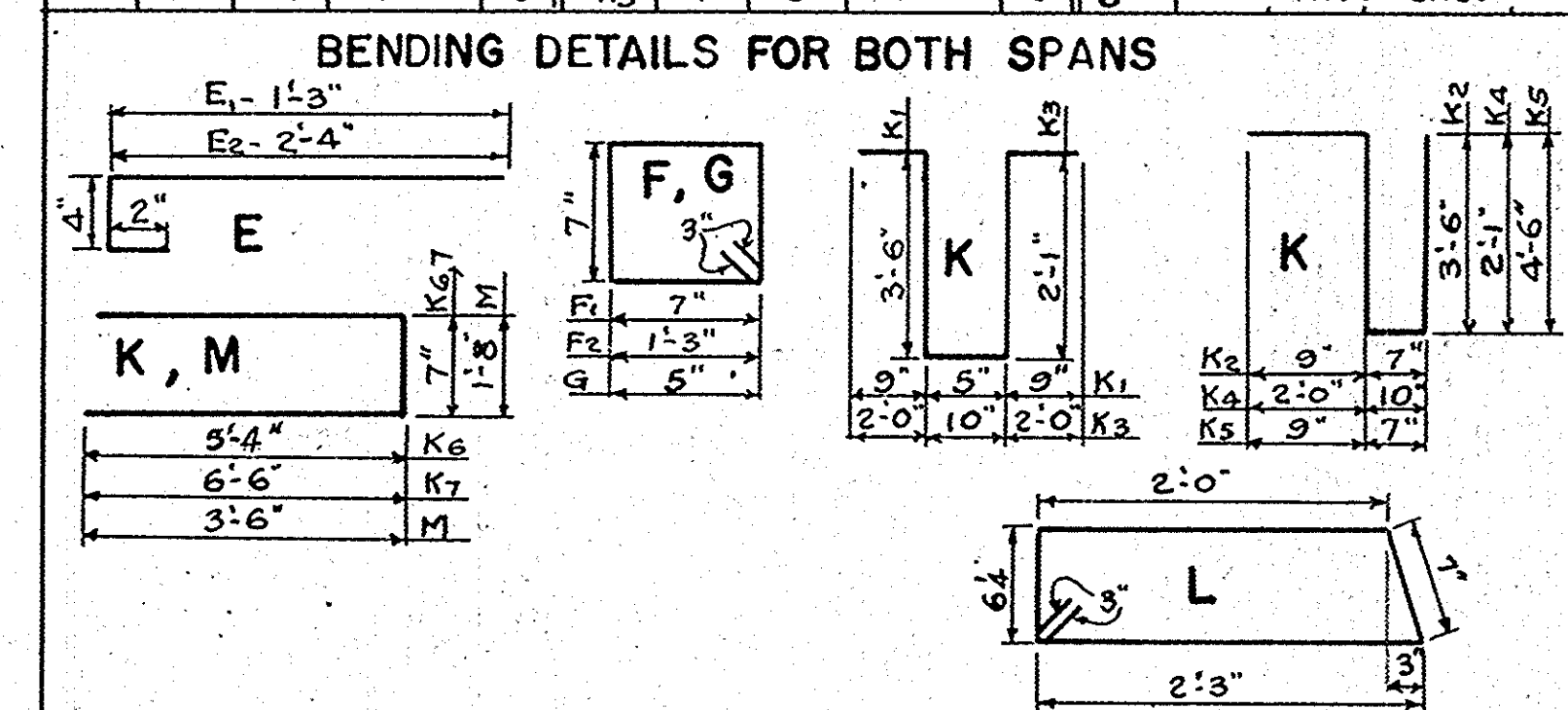
Alternate 2 added by JCR May 8 1958
Checked by D.F.D.

INFORMATION ONLY

FED. RD. DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	LEXINGTON	32,400	I-26	75	18

REINFORCING SCHEDULE 53'-0" END SPAN											
MARK	SIZE	NO. REQD.	LENGTH	D	MARK	SIZE	NO. REQD.	LENGTH	D	MARK	SIZE
A	5	98	33'-9"	S	G	2	72	2'-6"	B	K ₅	4
B	4	96	33'-9"	S	H ₁	4	4	25'-1"	S	K ₆	4
C ₁	4	44	52'-8"	S	H ₂	4	8	26'-1"	S	K ₇	4
C ₂	4	4	53'-0"	S	H ₃	4	4	27'-0"	S	L	4
C ₃	4	2	53'-3"	S	J ₁	4	56	5'-11"	S	M	2
C ₄	4	4	53'-7"	S	J ₂	4	3	27'-5"	S	N	4
C ₅	4	4	52'-4"	S	J ₃	4	5	45'-0"	S	BB	1 HT
C ₆	4	2	52'-4"	S	J ₄	4	10	7'-2"	S	BBU	1 HT
C ₇	4	4	51'-9"	S	J ₅	4	2	6'-1"	S	16	φ
D	5	106	0'-10"	S	J ₆	4	2	5'-6"	S		
E ₁	3	84	1'-9"	B	K ₁	4	40	8'-11"	B		
E ₂	3	34	2'-10"	B	K ₂	4	24	8'-4"	B		
F ₁	2	42	2'-10"	B	K ₃	4	8	9'-0"	B		
F ₂	2	6	4'-2"	B	K ₄	4	8	7'-0"	B		

REINFORCING SCHEDULE 60'-0" INT. SPAN											
MARK	SIZE	NO. REQD.	LENGTH	D	MARK	SIZE	NO. REQD.	LENGTH	D	MARK	SIZE
A	5	112	33'-9"	S	G	2	84	2'-6"	B	K ₄	4
B	4	110	33'-9"	S	H ₂	4	16	29'-7"	S	L	4
C ₁	4	64	59'-8"	S	J ₁	4	56	5'-11"	S	N	4
D	5	120	0'-10"	S	J ₂	4	6	27'-5"	S	N	4
E ₁	3	108	1'-9"	B	K ₁	4	40	8'-11"	B	BB	1 HT
E ₂	3	32	2'-10"	B	K ₂	4	48	8'-4"	B	BBU	1 HT
F ₁	2	48	2'-10"	B	K ₃	4	8	9'-0"	B	16	φ



QUANTITIES		
ITEM	53'-0" END SPAN	60'-0" INT. SPAN
CLASS "A" CONCRETE	56.3 C.Y.	57.8 C.Y.
REINFORCING STEEL	10,651 LBS	11,612 LBS
PRESTRESSED CONC. BMS	5 BMS	5 BMS

NOTES:
 *Diaphragms between beams shall be cast at least 7 days before the slab. Wings below constr. it shall be cast monolithic with end diaphragms. The quantities for concrete and reinforcing steel shown on this sheet are exclusive of the quantities in the prestressed beams, for which see Sheet No. 16. For Standard Notes see Sheet No. 12.
 *THE DIAPHRAGMS MAY BE POURED MONOLITHIC WITH THE SLAB PROVIDED THE PRESTRESSED BEAMS ARE TEMPORARILY STRUTTED APART AT BOTTOM FLANGE AND TOP FLANGE AND RODS ARE REASONABLY TIGHT DURING THE SLAB AND DIAPHRAGM POURING.

ALTERNATE I.

THIS SHEET TO ACCOMPANY
SH. NO. 16.

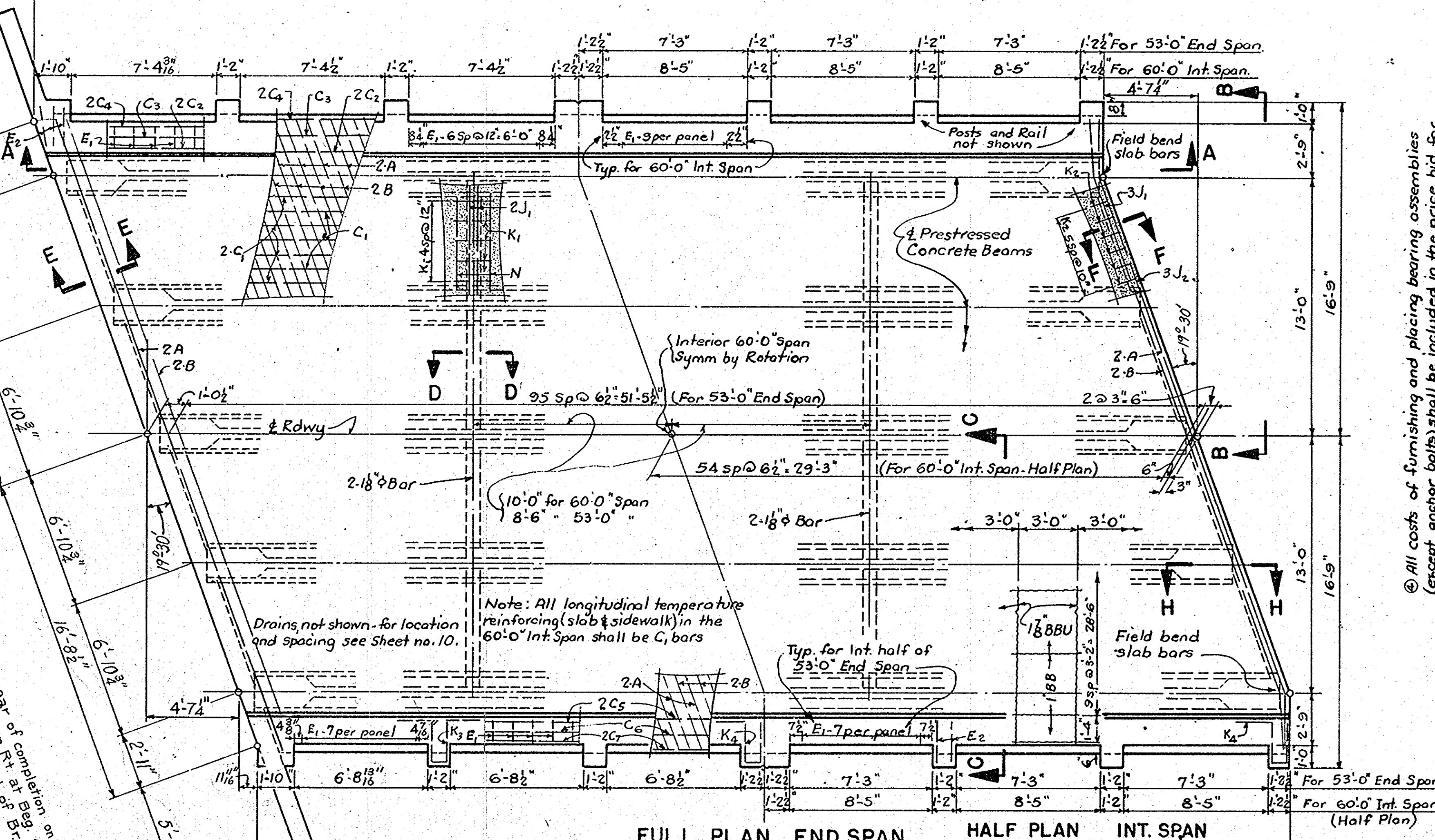
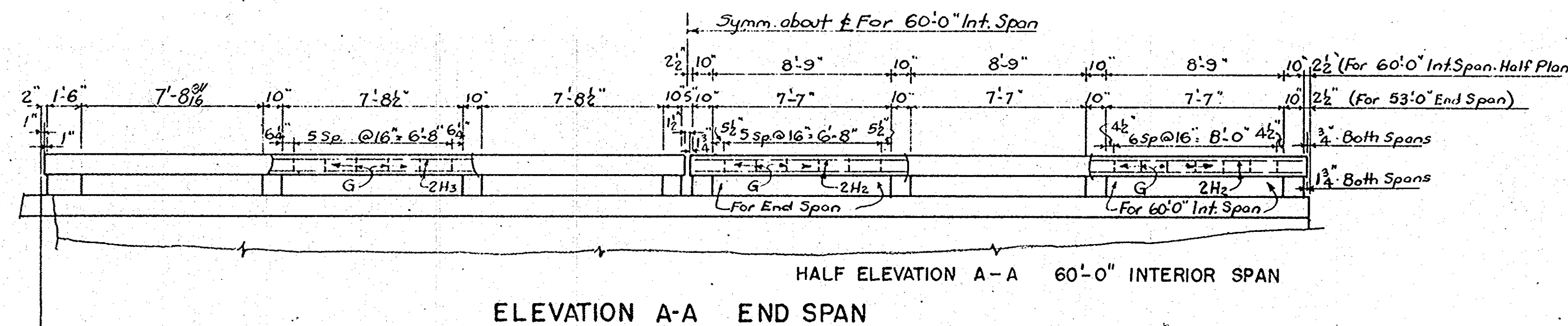
S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

SUPERSTRUCTURE

(53'-0" & 60'-0" END & INT. SPANS)

FOR UNDERPASS UNDER
ROAD 48

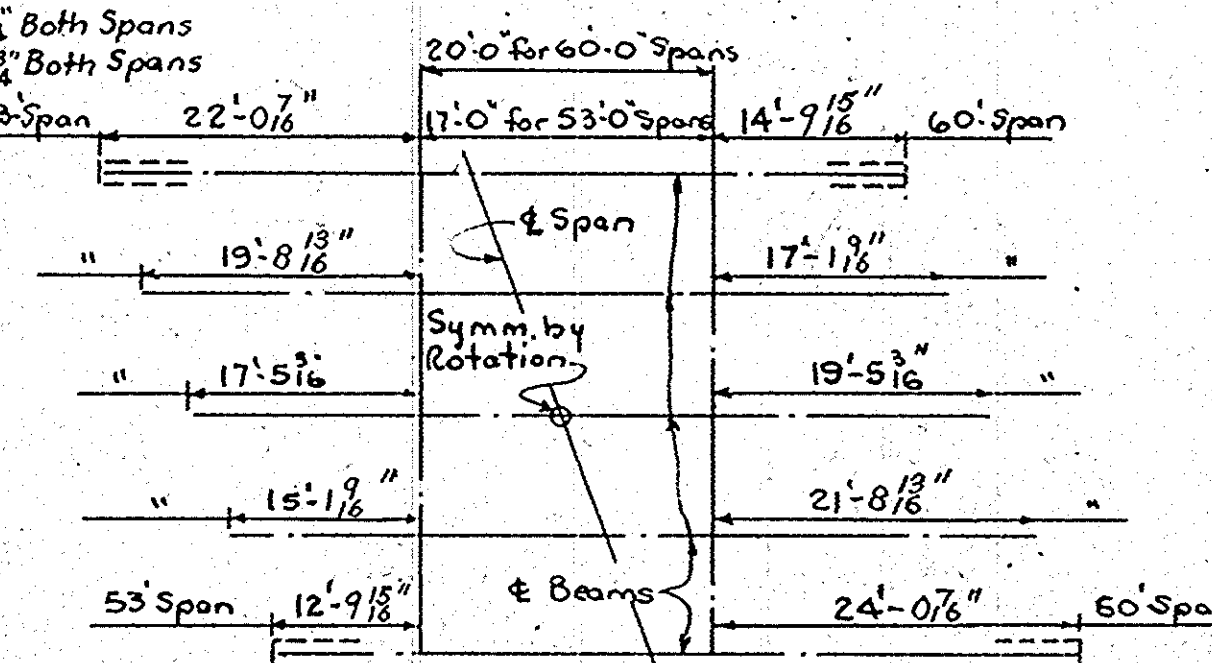
DOCKET NO. 32,400 ROUTE NO. I-26
COUNTY LEXINGTON DATE JAN. 1958
SCALE: 1/4" = 1'-0" OR AS NOTED.



FULL ELEV. END SPAN

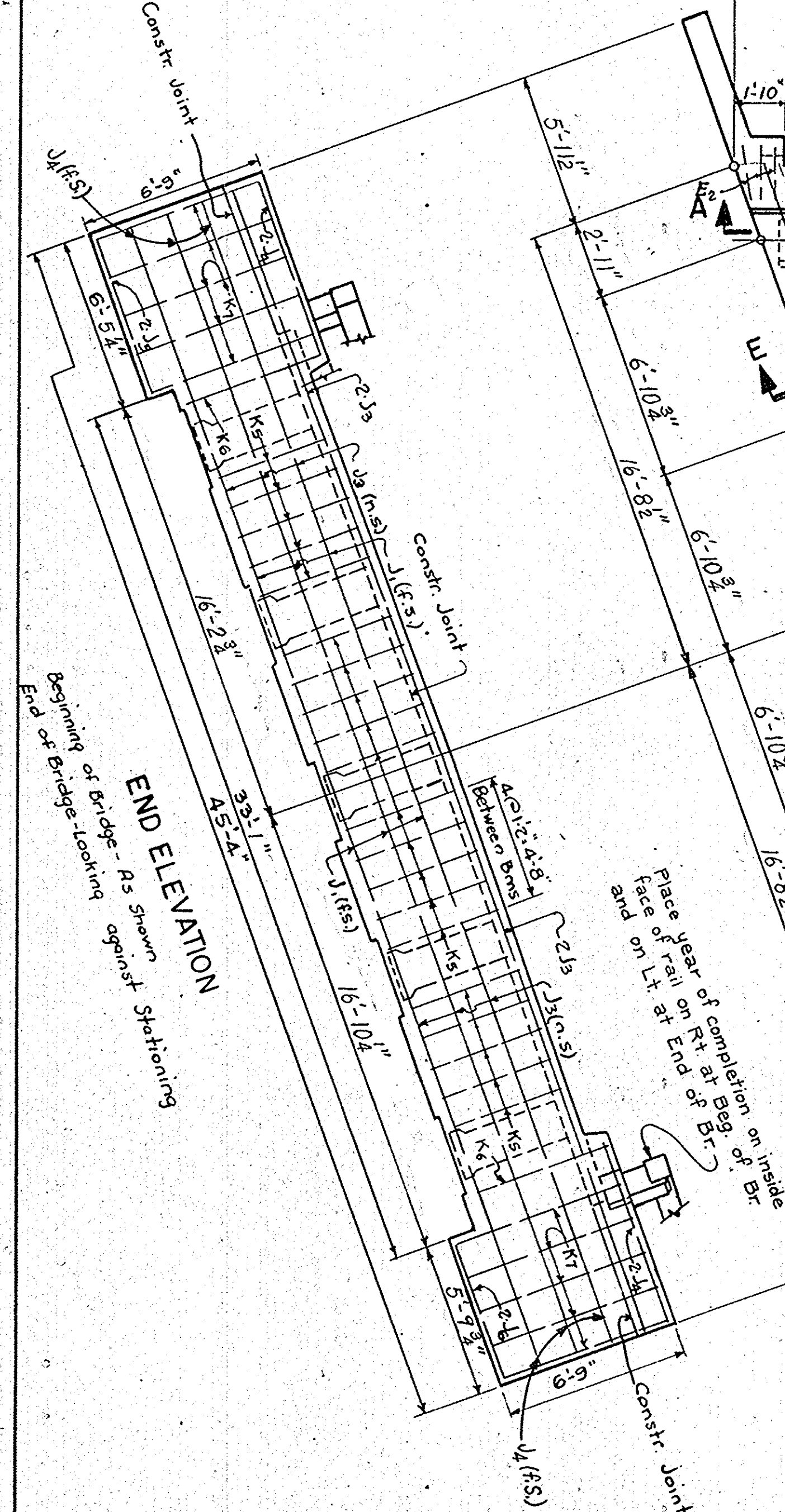
HALF ELEV. 60'-0" INT. SPAN

Note: Handrail Posts and Brackets may be constructed normal to grade



Sketch showing location of points where 2(2' x 4') 22 ga. cores pass thru beam webs (See Sect. X-X Sh. 16)
No scale

LL-H20-S16-44
 f'_c (rein) = 20,000 psi
 f'_c = 1200 psi, n = 10, V = 225 psi, U = 300 psi



Rev.	WEM J.H.E.I.-58
For Dkt.	32,400
Quant.	WES TED II-56
Tr.	EMO HDL 42457
Dr.	WES TED II-56
Des.	From 42,442
By	CHKD Date

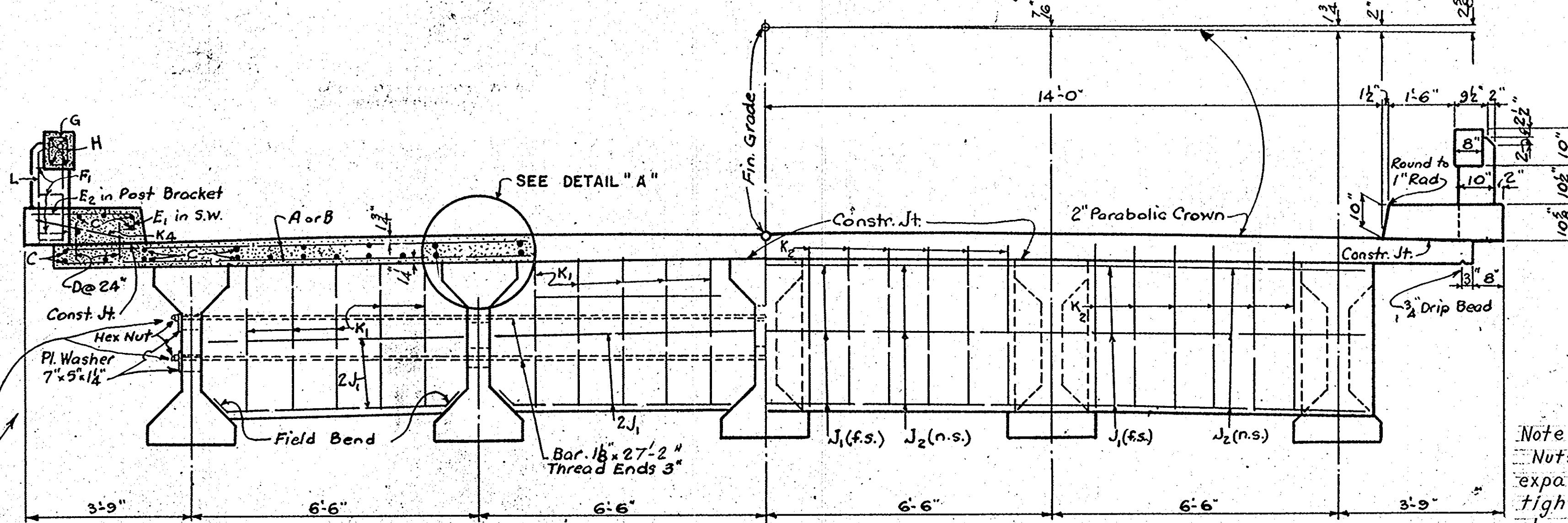
Quantities by WEM
Checked by

Note: Partial Payment for Prestressed Concrete Beams.
When prestressed concrete beams are delivered to the bridge site the Engineer will enter 80% of the Contract Unit Price on the current estimate and after erection 100% of the Contract Unit Price. Such percentages shall be subject to the usual 10% retainage.

INFORMATION ONLY

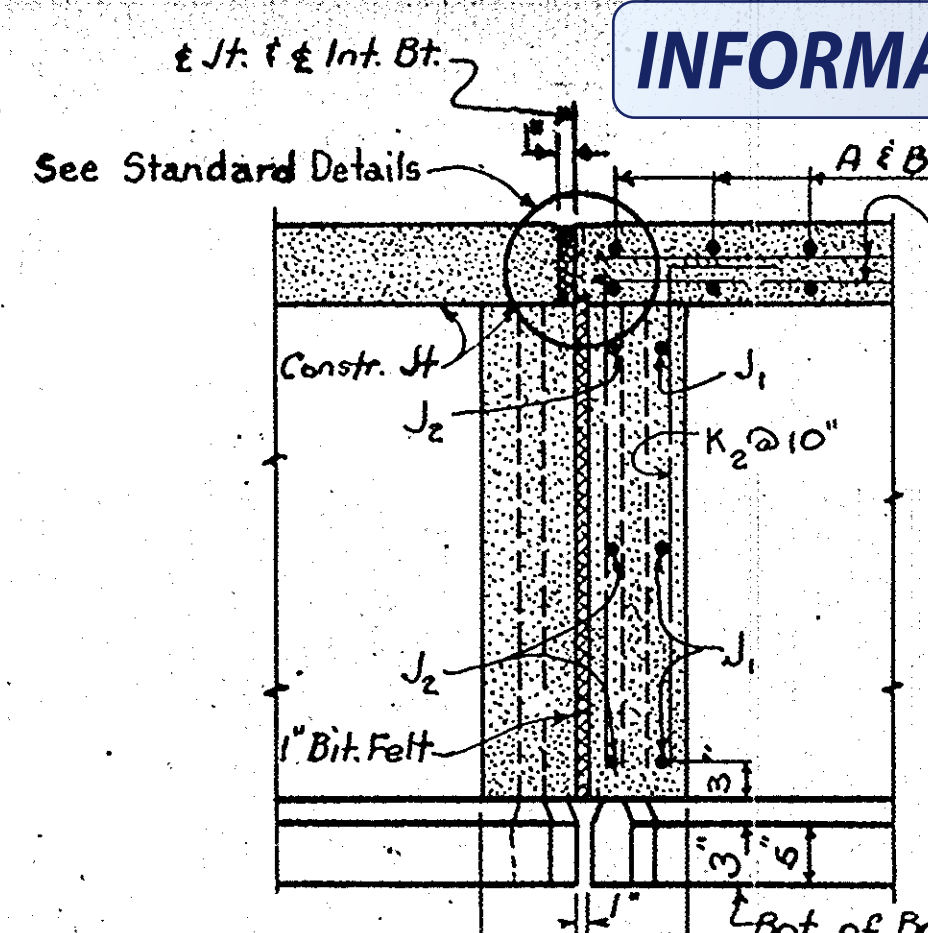
FED. RD. DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	LEXINGTON	32.400	I-26	16	18

Diaphragm bars shall be tightened snug before diaphragms are cast. Nuts shall be reasonably tightened not earlier than 48 hours after pouring diaphragms.
Paint Bar end nut and washer before assembly with two coats of red lead. After nut is put on, all exposed portions of bar nut and washer shall be painted with two coats of aluminum paint.



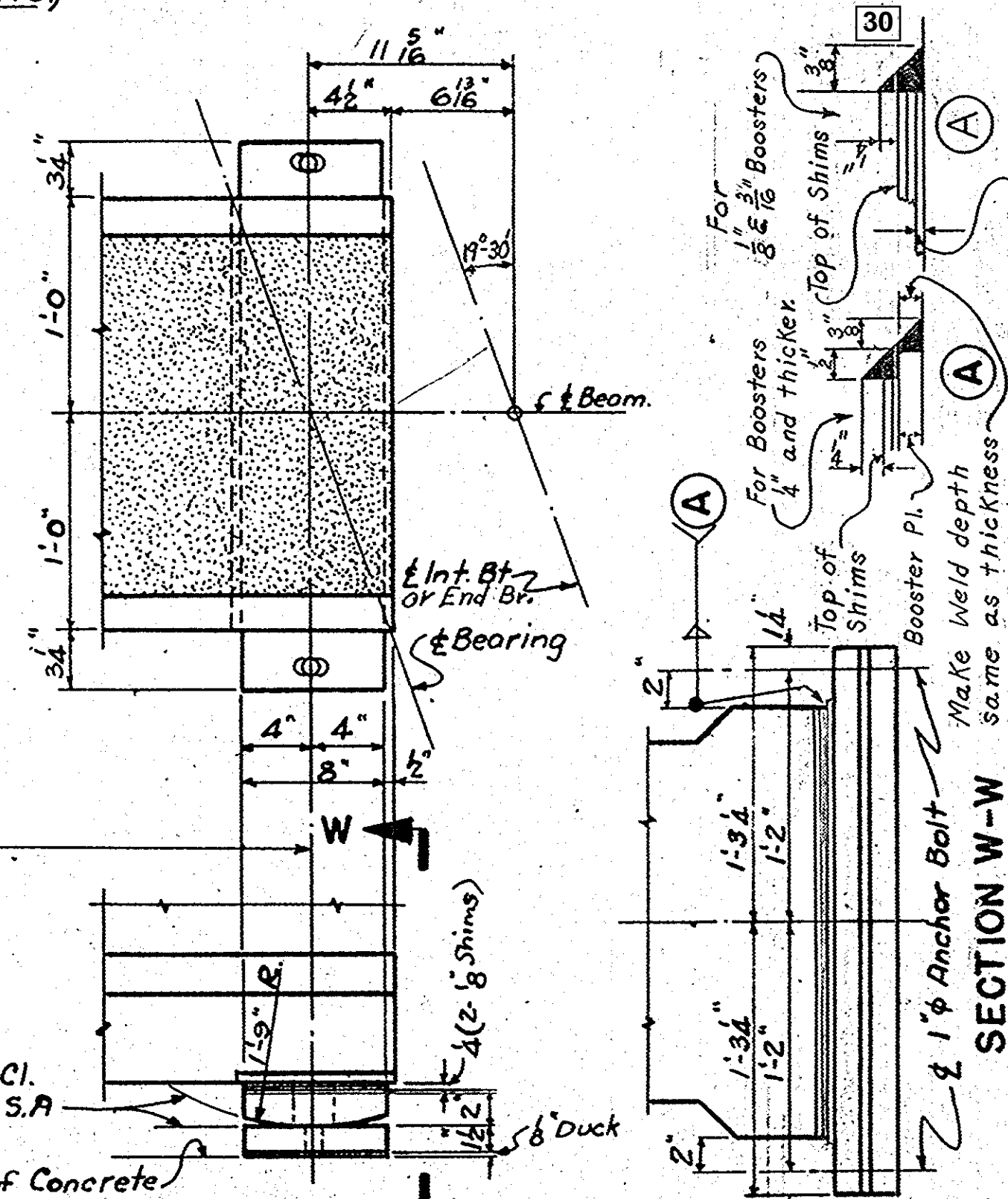
SECTION C-C

SECTION B-B

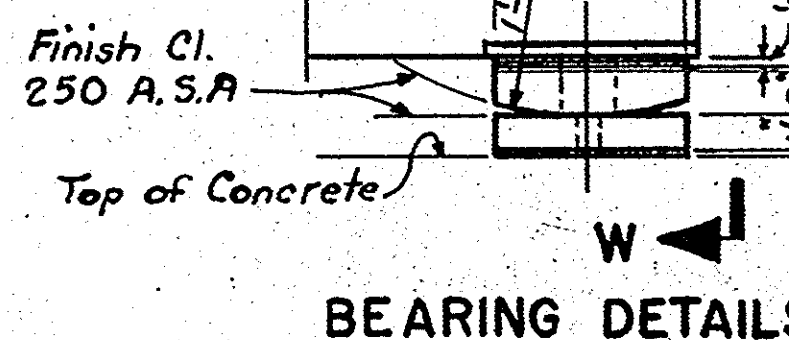


SECTION F-F
SCALE: 1/4" = 1'-0"

Note: Nuts on anchor bolts at expansion end shall be tightened to allow 1/16" clear for movement.



SECTION W-W



BEARING DETAILS

SPAN	LENGTH
53'-0"	60'-0"
Estimated Camber of top surface of Beams expected when strands are released	+ 3/8"
Estimated Deflection of top surface of Beams due to D.L. weight of slab when poured	- 1/4"

The top surface of the beam is to be finished off level. The top of slab is to be finished off 1/4" above the theoretical finished grade at 9 span, and at theoretical grade at ends of span. Theoretical slab thickness is to be retained by lowering the bottom of slab below top of beam if necessary.

MARK	SIZE	LENGTH	D	NO. REQUIRED
A	5	3'-10"	B	49
B	4	5'-4"	B	58
C	4	6'-0"	B	16
D1	6	15'-0"	S	4
D2	4	15'-0"	S	4

REINFORCING STEEL SCHEDULE I-BM.	BENDING DETAILS
MARK SIZE LENGTH D NO. REQUIRED	2'-8"
A 5 3'-10" B 49	1'-1"
B 4 5'-4" B 58	2'-3"
C 4 6'-0" B 16	1'-0"
D1 6 15'-0" S 4	3'-9"
D2 4 15'-0" S 4	9"

QUANTITIES	ONE BEAM
ITEM	53'-0" BM. 60'-0" BM.
Class "x" Concrete	C.Y. 7.8 8.8
Reinforcing Steel	Lbs. 557 552
Prestressing Cable	L.F. 1743 2580
Struct. Steel (Sole Pl. & Lifting Device)	Lbs. 169 169
Struct. Steel (Bearing Assemblies)	Lbs. 510 510

Note: The price bid for Prestressed Concrete Beams shall include S.R. Wires, bearing plates, reinforcing steel, sole plates and all other necessary material (except Anchor Bolt Assemblies which are paid for as reinforcing steel) complete in place.
All dimensions relative to bar, reinforcing steel and to prestressing strands are to centers of bar or strand.
The prestressed beams must always be maintained in an upright position when being stored. Care must be taken to eliminate interior supports which cause negative moments.
For Standard details see Sh. No. 12.
For Standard Notes see Sh. No. 11.

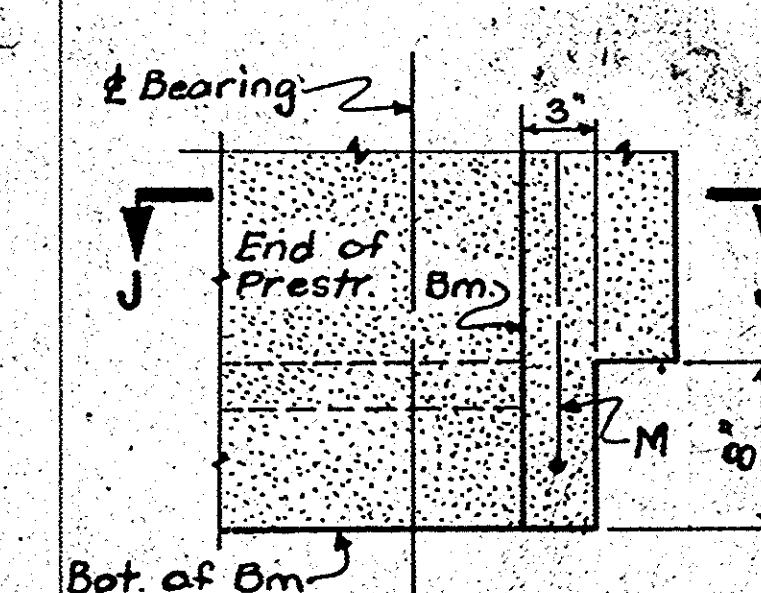
* Includes 11 lbs. for Booster Plates.
The prestressing strands are to be maintained in an upright position when being stored. Care must be taken to eliminate interior supports which cause negative moments.
For Standard details see Sh. No. 12.
For Standard Notes see Sh. No. 11.

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

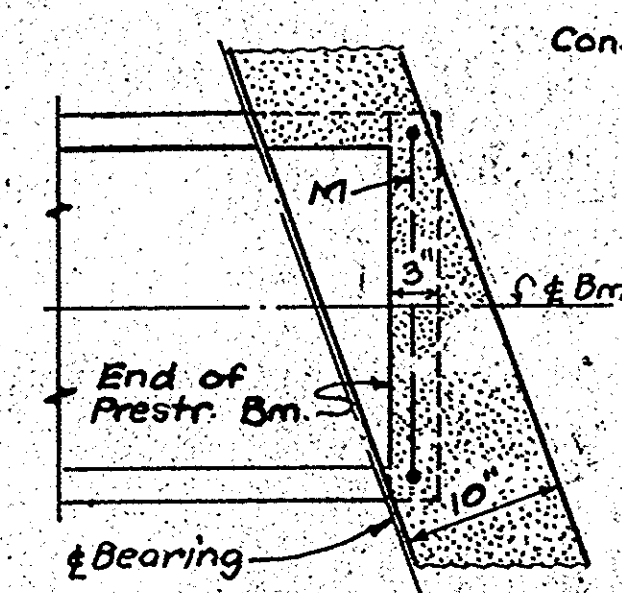
SUPERSTRUCTURE DETAILS

FOR UNDERPASS UNDER
ROAD 48

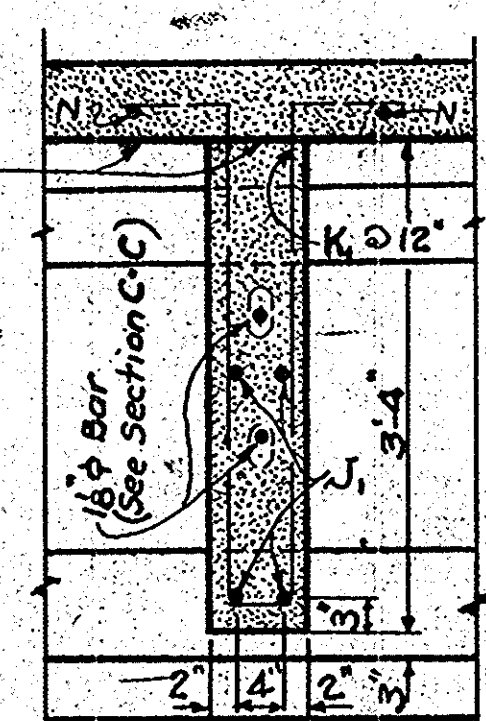
DOCKET NO. 32.400 ROUTE NO. I-26
COUNTY LEXINGTON DATE JAN. 1958



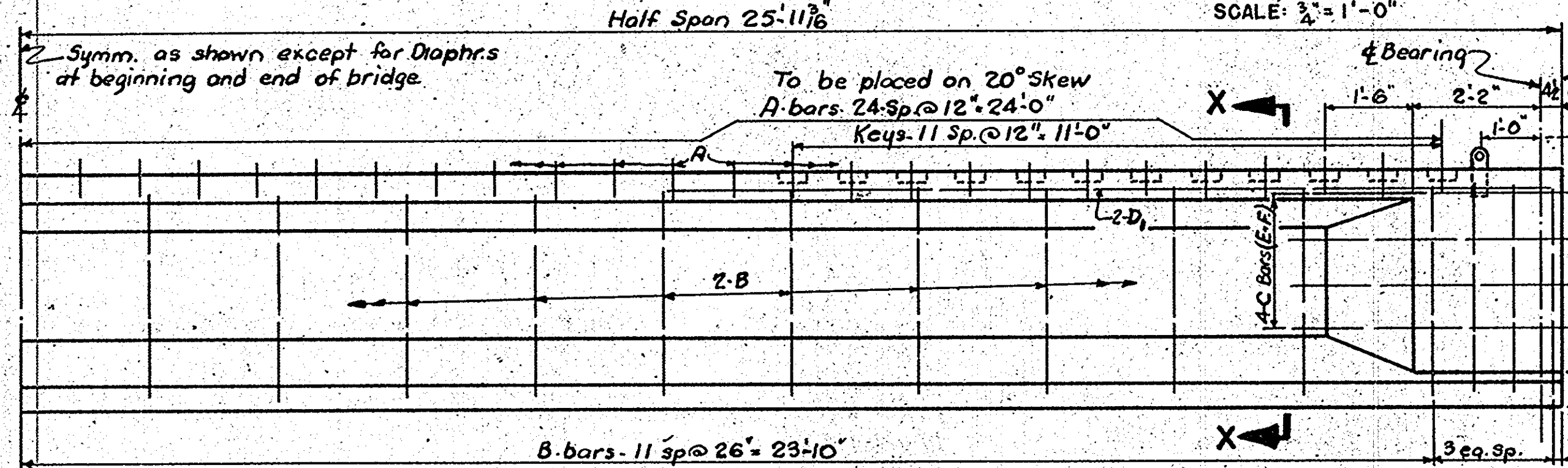
SECTION H-H
SCALE: 1/2" = 1'-0"



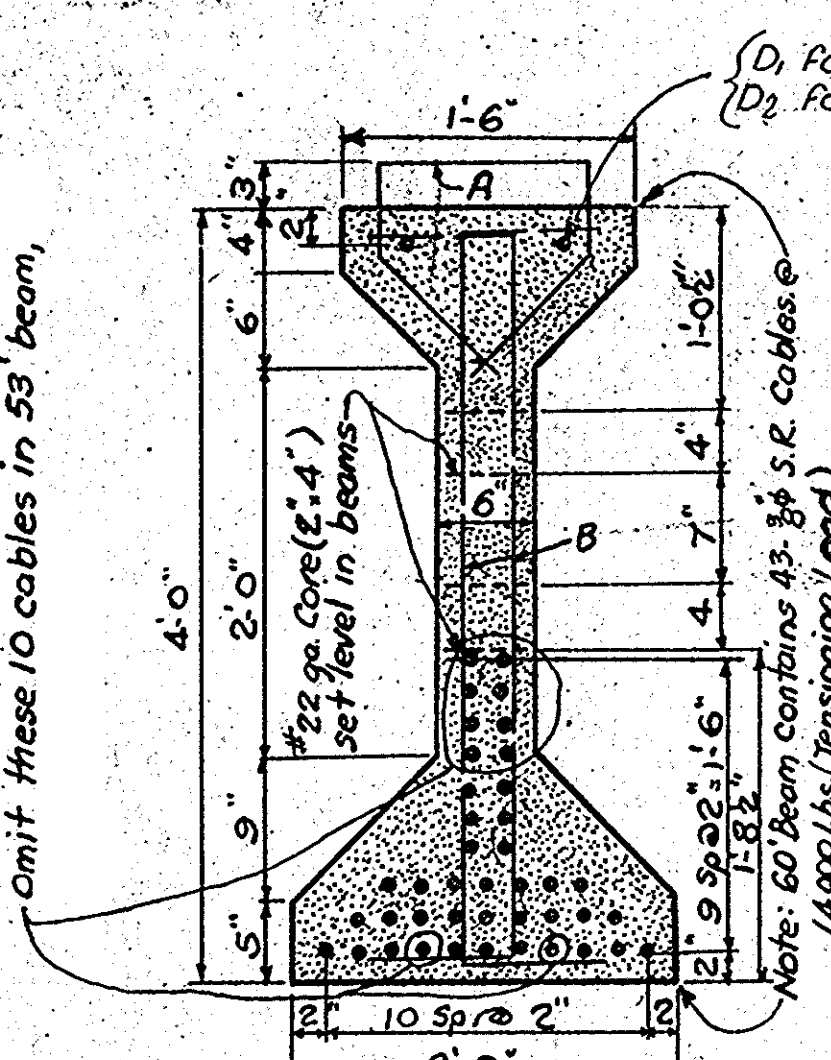
SECTION J-J
SCALE: 1" = 1'-0"



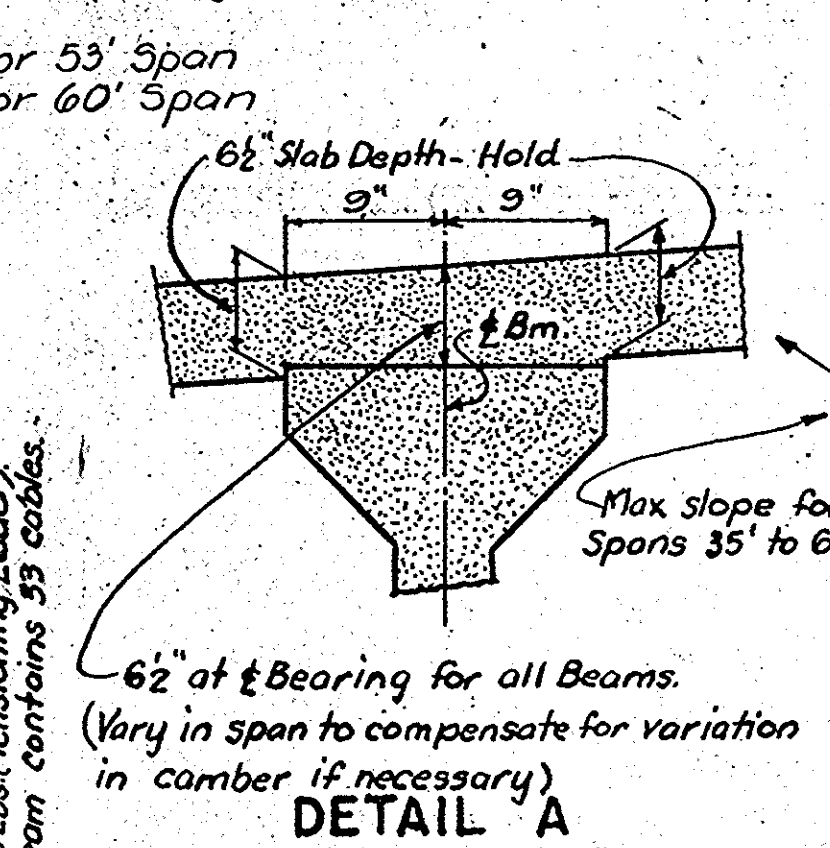
SECTION D-D
SCALE: 3/4" = 1'-0"



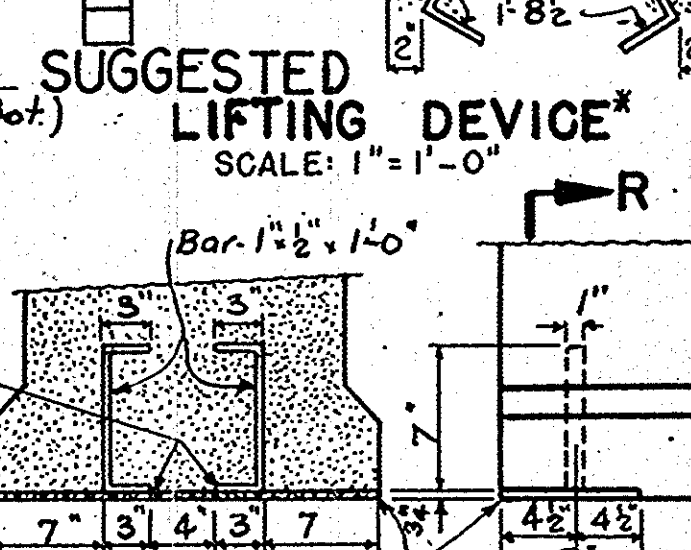
HALF ELEVATION
BEAMS FOR 53'-0" SPAN



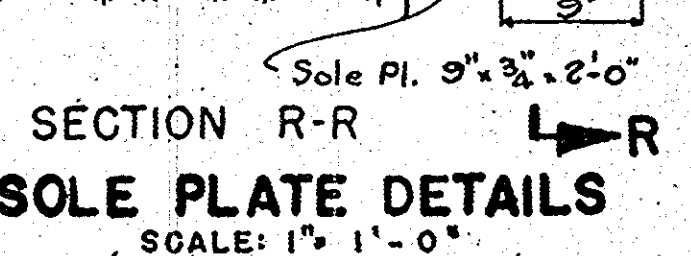
SECTION X-X
SCALE: 1" = 1'-0"



DETAIL A
SCALE: 1" = 1'-0"



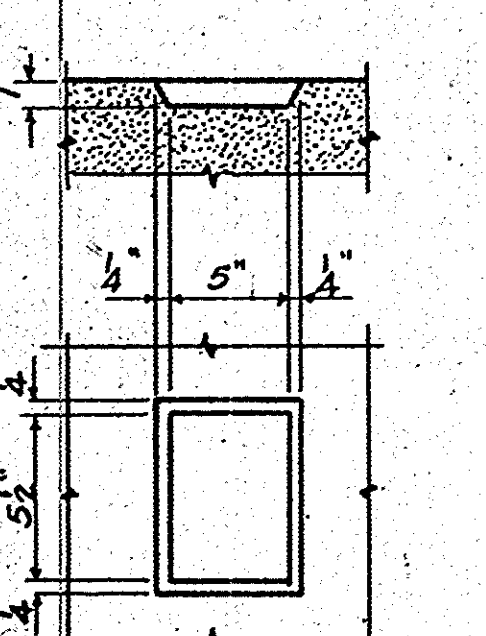
SUGGESTED LIFTING DEVICE
SCALE: 1" = 1'-0"



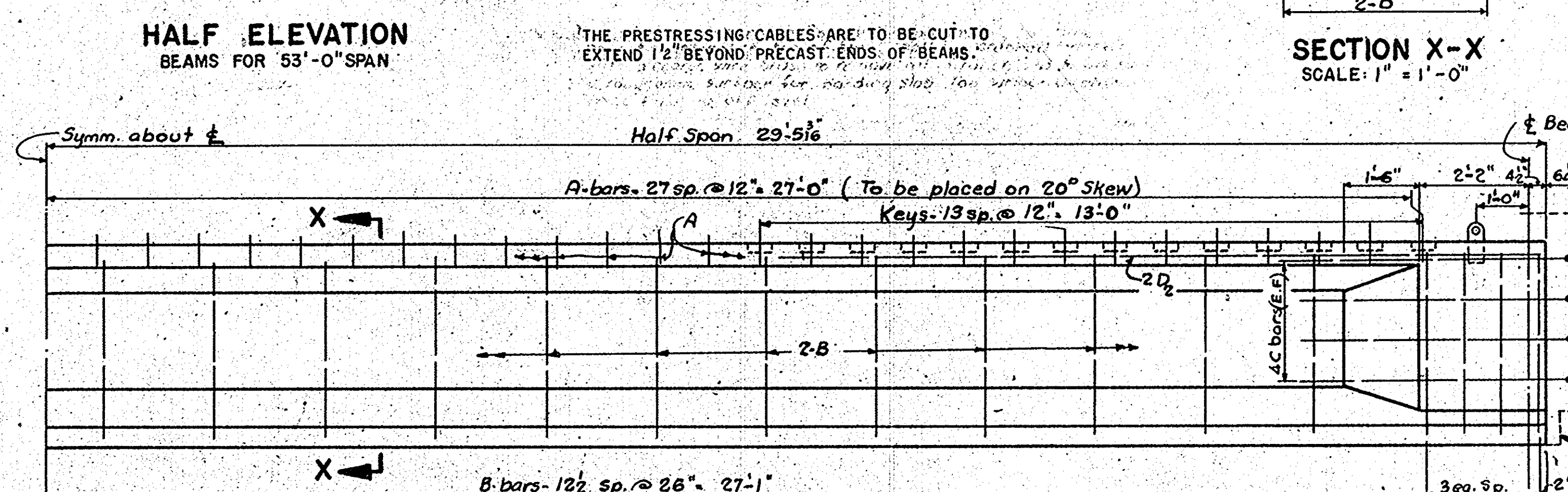
SECTION R-R
SCALE: 1" = 1'-0"

SOLE PLATE DETAILS

Note: Alternate suggested type lifting device may utilize a 2" diameter pipe with a 1/2" diameter mild steel pin through the end block located approximately 1/3 to 1/2 the depth of the beam below the top.



SHEAR KEY DETAILS
NO SCALE



HALF ELEVATION
BEAMS FOR 60'-0" SPAN

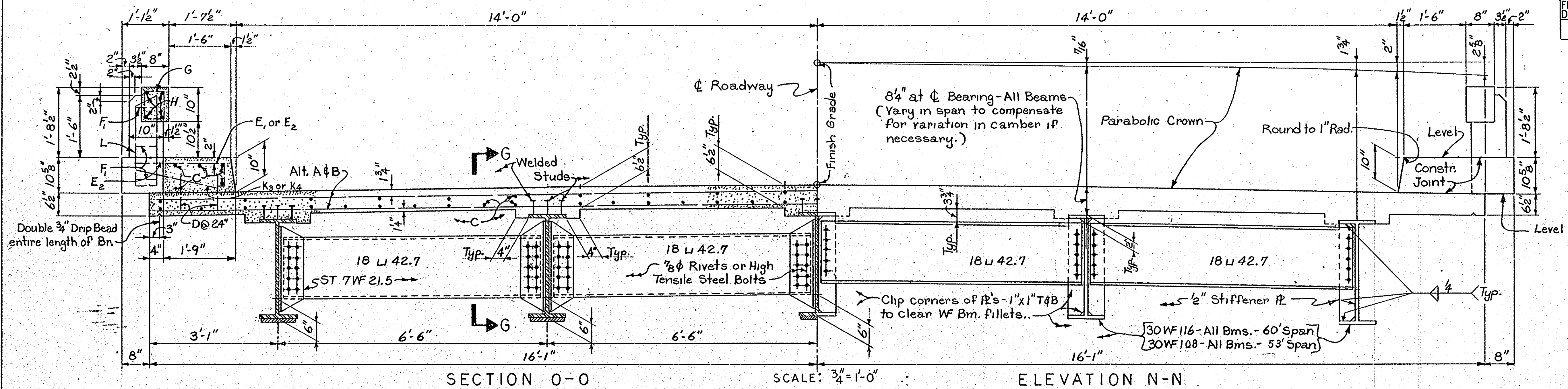
REV.	WESTED 12-56
FROM	42.449
QUANTITY	ESTIMATED 11-56
TR.	EMCHDL 6-6-57
DR.	WESTED 10-56
DES.	BY CHKD. DATE

Revised for DKT. 32.400 By W.E.M.
Checked by J.H.F.

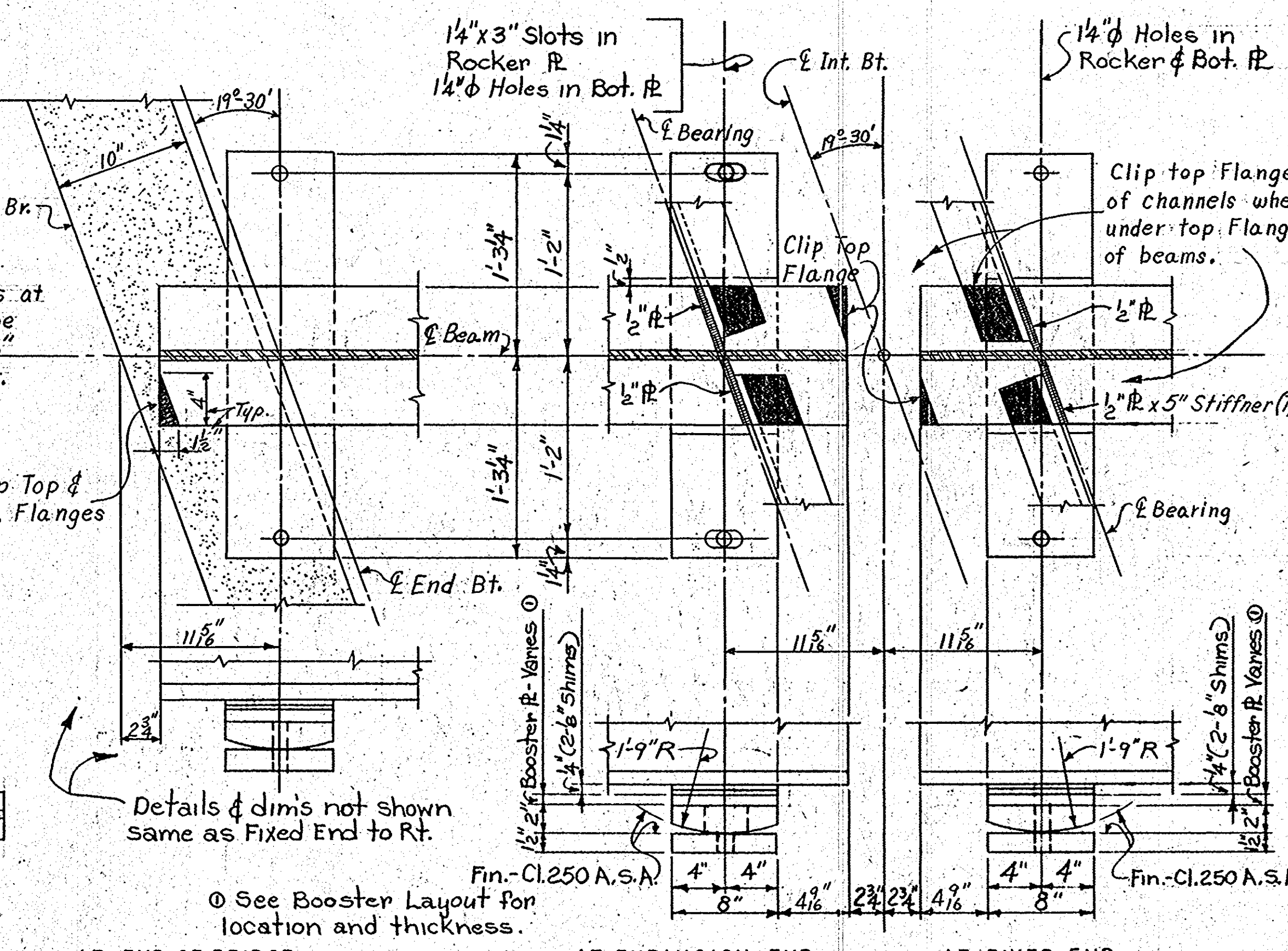
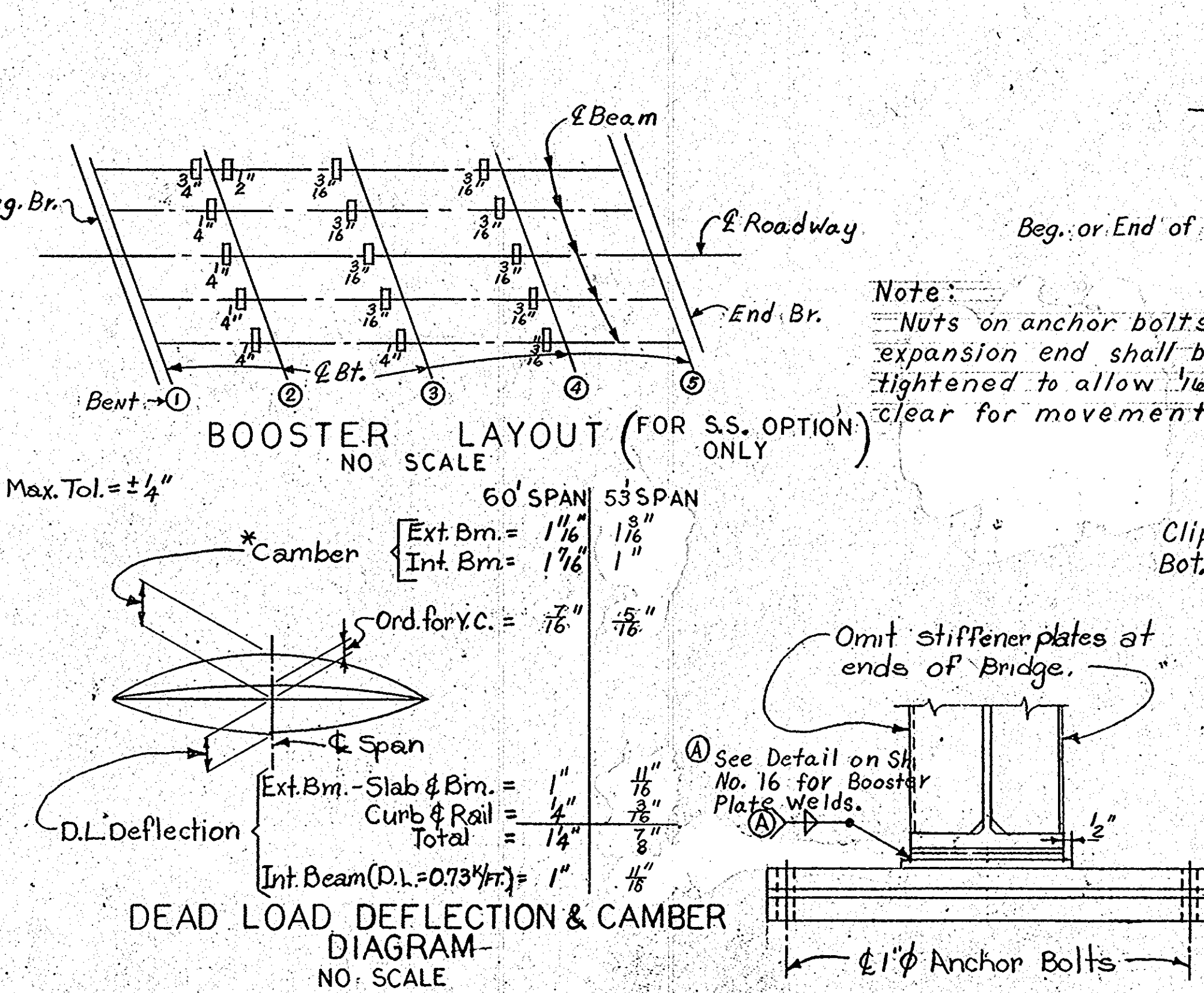
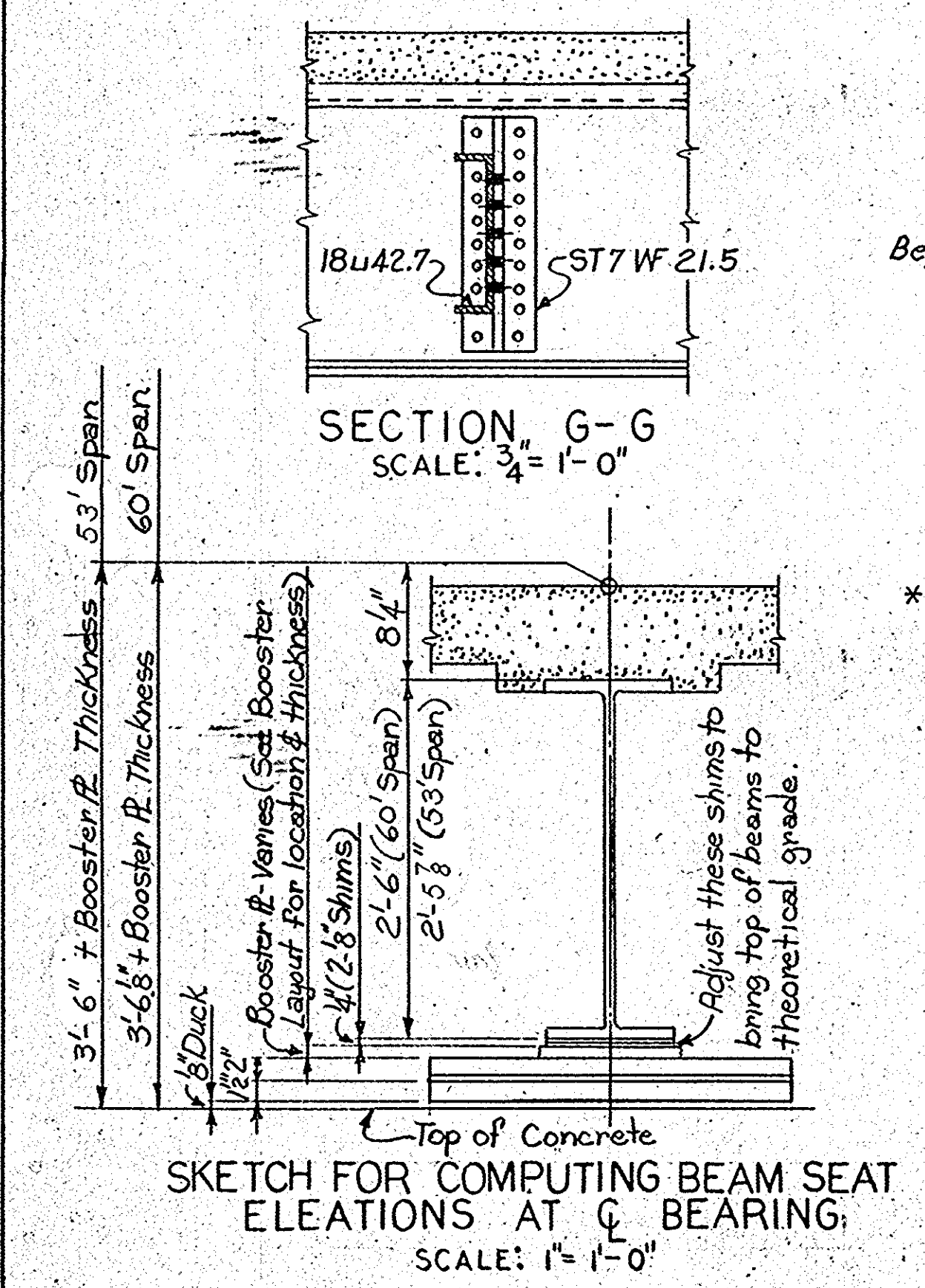
S. C. STATE HIGHWAY DEPARTMENT
APPROVED FOR FABRICATION

31

Rev	W.E.M	J.H.F	2-58
QT.	For DKT. 32.400		
T.R.			
DR.	HDL	AEH	1-58
Des.	HDL AEH 12-57		
	60'Em From 32.394		
	BY CHKDATE		



MARK	SIZE	NO.	ONE END SPAN		ONE INT. SPAN	
			REQ'D	LENGTH	REQ'D	LENGTH
A	5	S	98	33'-9"	112	33'-9"
B	4	S	96	33'-9"	110	33'-9"
C ₁	4	S	44	52'-8"	64	59'-8"
C ₂	4	S	4	53'-0"	—	—
C ₃	4	S	2	53'-3"	—	—
C ₄	4	S	4	53'-7"	—	—
C ₅	4	S	4	52'-4"	—	—
C ₆	4	S	2	52'-1"	—	—
C ₇	4	S	4	51'-9"	—	—
D	5	S	106	0'-10"	120	0'-10"
E ₁	3	B	84	1'-9"	108	1'-9"
E ₂	3	B	34	2'-10"	32	2'-10"
F ₁	2	B	42	2'-10"	48	2'-10"
F ₂	2	B	6	4'-2"	—	—
G	2	B	72	2'-6"	84	2'-6"
H ₁	4	S	4	25'-1"	—	—
H ₂	4	S	8	26'-1"	16	29'-7"
H ₃	4	S	4	27'-0"	—	—
J ₁	4	S	12	6'-6"	—	—
J ₂	4	S	5	45'-0"	—	—
J ₃	4	S	10	7'-2"	—	—
J ₄	4	S	2	6'-1"	—	—
J ₅	4	S	2	5'-6"	—	—
K ₁	4	B	8	9'-0"	8	9'-0"
K ₂	4	B	8	7'-0"	8	7'-0"
K ₃	4	B	20	7'-8"	—	—
K ₄	4	B	2	8'-7"	—	—
K ₅	4	B	10	10'-9"	—	—
L	4	B	84	5'-10"	32	5'-10"
^B BB	1" HT	—	REQ'D	632'-0"	REQ'D	716'-0"
^B BBU	1" HT	—	REQ'D	573'-0"	REQ'D	636'-8"



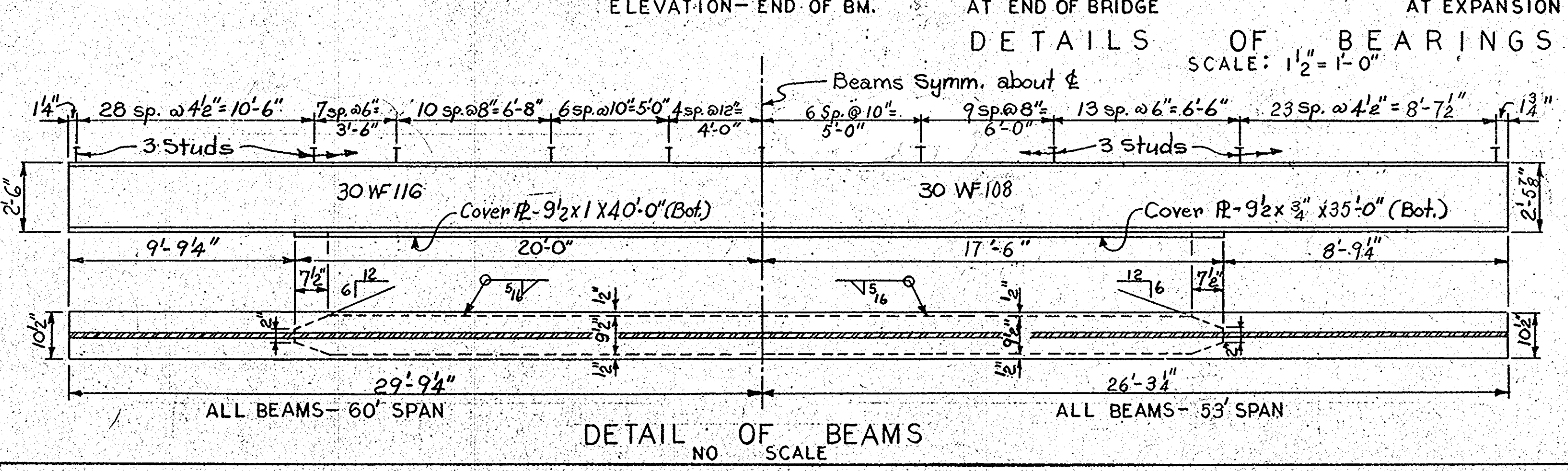
BENDING DETAILS

Hand-drawn bending details for reinforcement bars. The details include dimensions for span, height, and bend lengths.

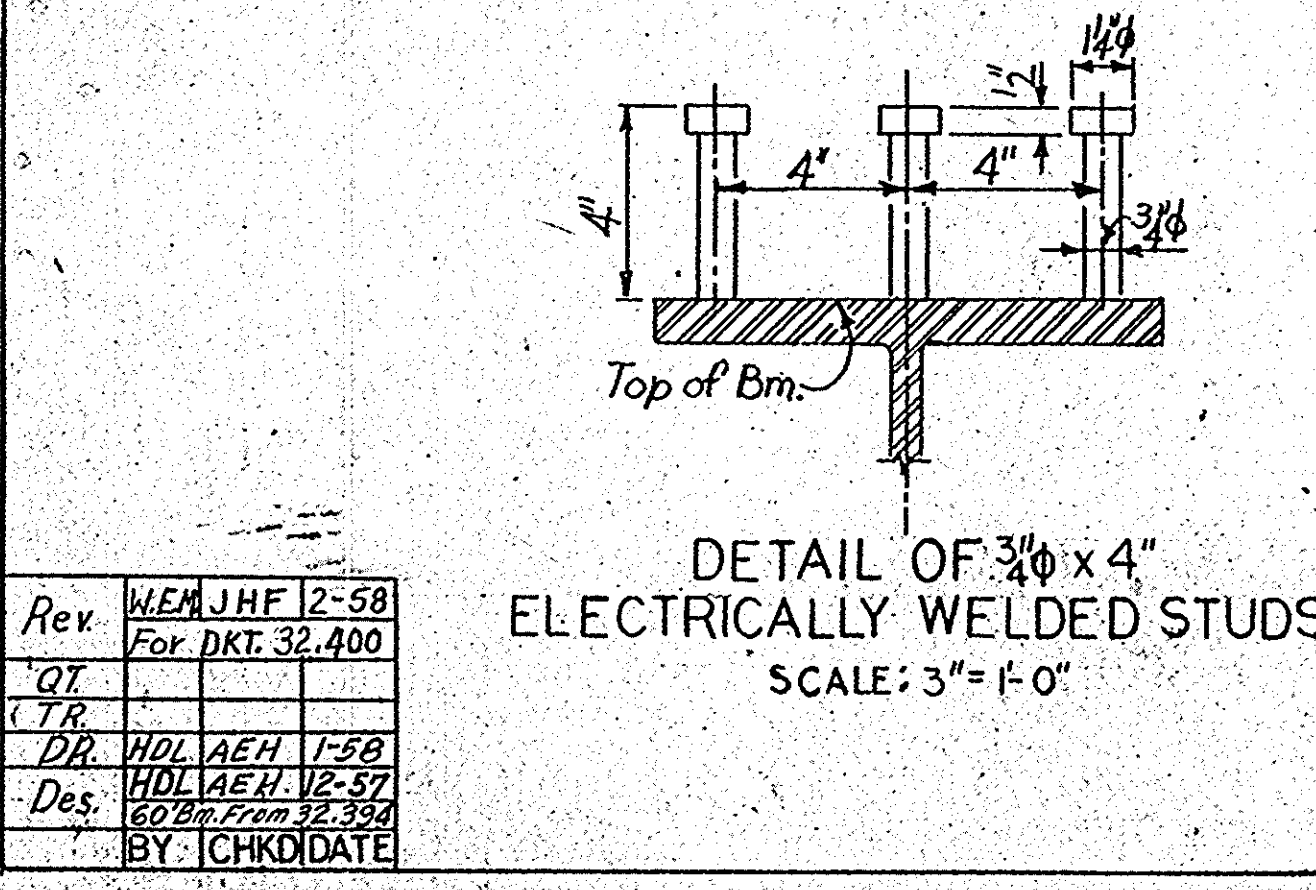
- E₁**: Top bar, span 1'3", height 4", bend length 3".
- E₂**: Top bar, span 2'4", height 2", bend length 2".
- F₁**: Bottom bar, span 7", height 3", bend length 3".
- F₂**: Bottom bar, span 1'3", height 3", bend length 3".
- G**: Bottom bar, span 5", height 3", bend length 3".
- K₁**: Vertical bar, span 4'-0", height 5'-1", bend length 7".
- K₂**: Vertical bar, span 2'-0", height 2'-0", bend length 2'-0".
- K₃**: Vertical bar, span 2'-0", height 2'-0", bend length 2'-0".
- K₄**: Vertical bar, span 2'-0", height 2'-0", bend length 2'-0".
- K₅**: Vertical bar, span 2'-0", height 2'-0", bend length 2'-0".
- L**: Vertical bar, span 2'0", height 2'3", bend length 3".

QUANTITIES

		ONE END SPAN	ONE INT. SPAN
CONCRETE CLASS "A"	C.Y.	52.0	52.4
REINFORCING STEEL	LBS.	29,451	10,215
STRUCTURAL STEEL	LBS.	44,700	51,400



	ONE END SPAN	ONE INT. SPAN
CONCRETE CLASS "A" C.Y.	52.0	52.4
REINFORCING STEEL LBS.	29,451	30,215
STRUCTURAL STEEL LBS.	41,700	51,400



THIS SHEET TO ACCOMPANY SH. NO. 17.

ALTERNATE 2. STRUCTURAL STEEL SUPERSTRUCTURE

S C STATE-HIGHWAY DEPARTMENT
COLUMBIA

SUPERSTRUCTURE DETAILS
53' END SPANS & 60' INT. SPANS
FOR UNDERPASS UNDER
ROAD 48

DOCKET NO: 32.400 ROUTE NO: I-26
COUNTY: LEXINGTON DATE: FEB. 1958
SCALE AS NOTED

Rev.	WEM JHF 2-58
For	DKT. 32.400
QTY	
TR	
DR	HDL AEH 1-58
Des.	HDL AEH 12-57
	60 Sp. from 12-58
	BY: CHK DATE