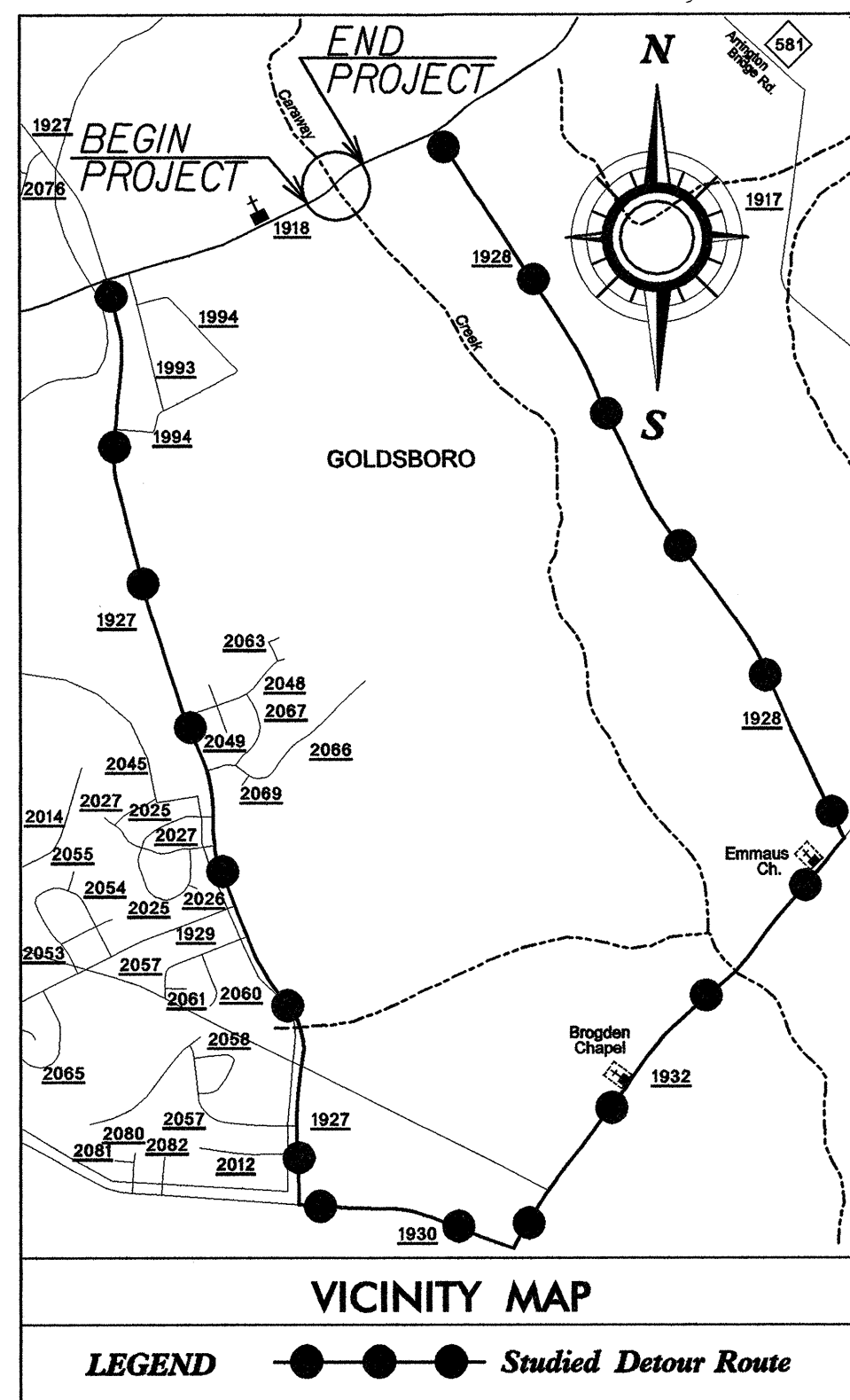


CONTRACT: C201621 TIP PROJECT: B-4321

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



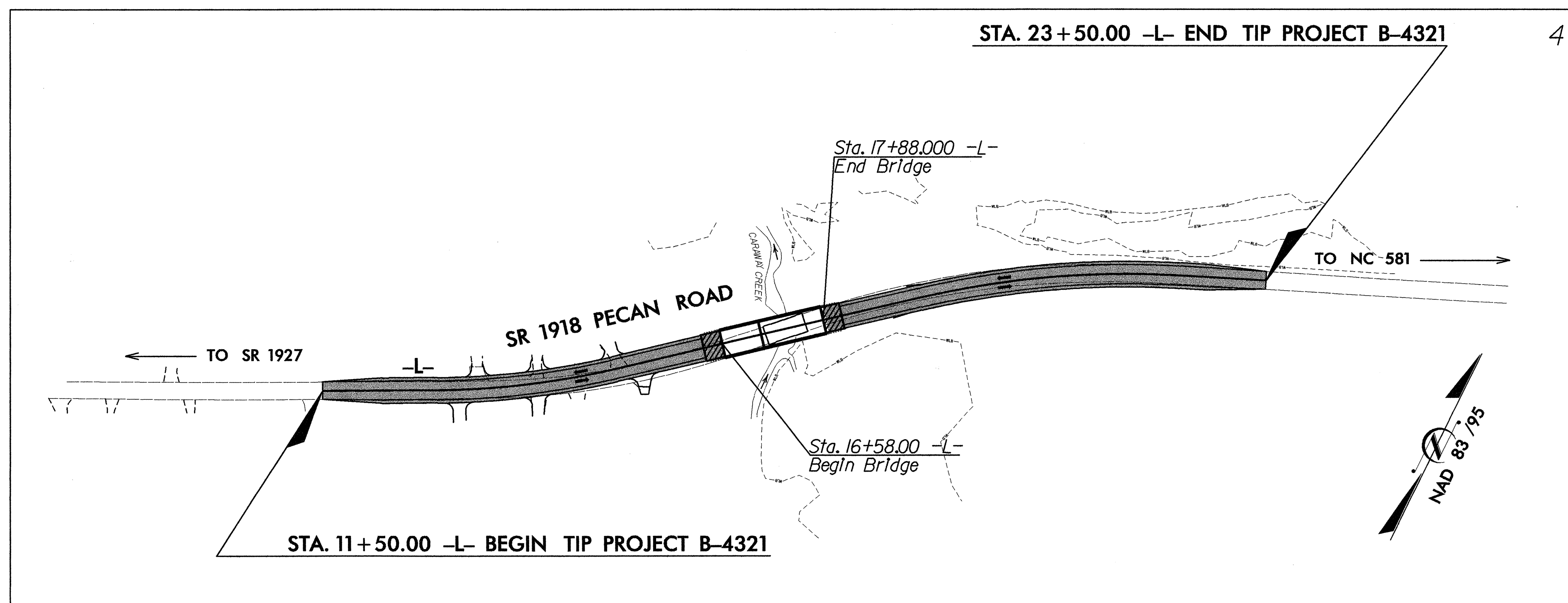
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAYNE COUNTY

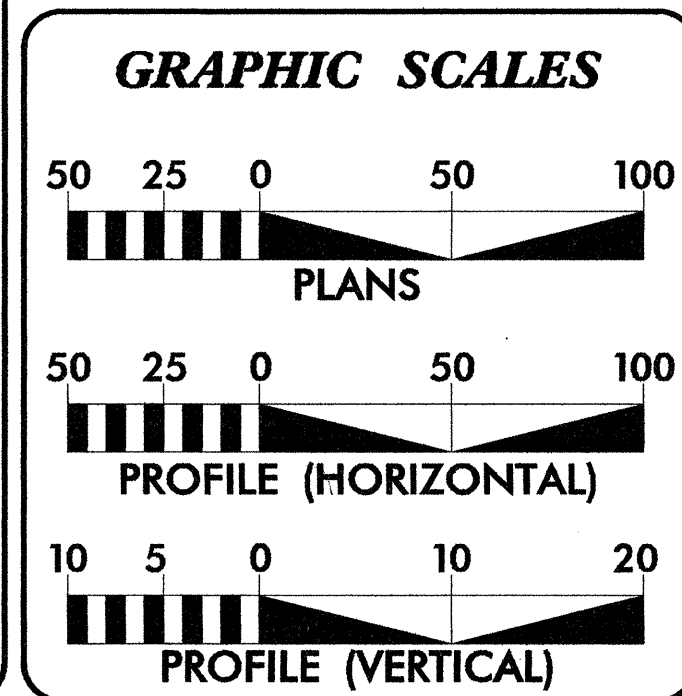
**LOCATION: BRIDGE NO. 17 OVER CARAWAY CREEK
ON SR 1918 (PECAN ROAD) IN GOLDSBORO**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4321	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33658.1.1	BRSTP-1918(2)	P.E.	
33658.2.1	BRSTP-1918(2)	RW & UTIL.	
33658.3.1	BRSTP-1918(2)	CONST.	



NCDOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN



DESIGN DATA

ADT 2007 =	6,200
ADT 2030 =	10,800
DHV =	60 %
D =	10 %
T =	5 % *
V =	50 MPH
FUNC. CLASS =	URBAN COLLECTOR
* TTST 3 %	DUAL 2 %

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4321	=	0.202 mi.
LENGTH STRUCTURE TIP PROJECT B-4321	=	0.025 mi.
TOTAL LENGTH TIP PROJECT B-4321	=	0.227 mi.

Prepared in the Office of:
WANG ENGINEERING COMPANY, INC.
CARY, N.C.
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: June 21, 2006
LETTING DATE: April 15, 2008

JAMES SJ WANG, P. E.
PROJECT ENGINEER

SCOTT L. KENNEDY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SUNGATE DESIGN GROUP, P.A.
SEAL 9334
HENRY WELLS III, P.E.
1123108
SIGNATURE:

ROADWAY DESIGN ENGINEER
WANG ENGINEERING
SEAL 17821
JAMES S.J. WANG, P.E.
1-17-08
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

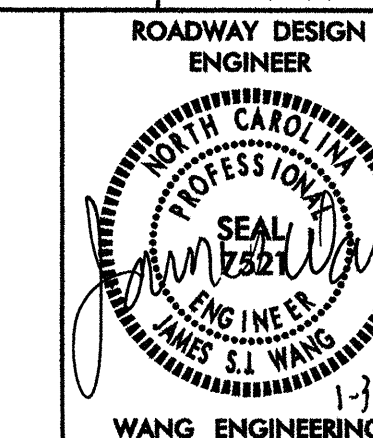
Scott L. Kennedy
STATE HIGHWAY DESIGN ENGINEER

2006 ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

SHEET NUMBER	INDEX OF SHEETS SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
1-C	SURVEY CONTROL SHEET
2	TYPICAL SECTIONS, PAVEMENT SCHEDULE, AND PREFORMED SCOUR HOLE DETAIL
2-A	DETAIL 1 OF ANCHORAGE FOR FRAMES
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF EARTHWORK SUMMARY OF GUARDRAIL, SUMMARY OF DRAINAGE QUANTITIES ASPHALT PAVEMENT REMOVAL SUMMARY, AND BREAKING ASPHALT PAVEMENT SUMMARY
4	PLAN/PROFILE SHEET
TCP-1 THRU TCP-4	TRAFFIC CONTROL PLANS
SD-1	SPECIAL SIGN DESIGN PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
RF-1	REFORESTATION PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
UD-1 THRU UD-2	UTILITY BY OTHERS PLANS
X-1	CROSS SECTION INDEX AND SUMMARY SHEET
X-2 THRU X-6	CROSS-SECTIONS
S-1 THRU S-23	STRUCTURE PLANS

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Method III
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation - Method 'A'
310.10	Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES	
422.10	Reinforced Bridge Approach Fills
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
806.01	Concrete Right-of-Way Marker
806.02	Granite Right-of-Way Marker
815.03	Pipe Underdrain and Blind Drain
816.04	Markers for Drainage Structure and Concrete Pad
840.00	Concrete Base Pad for Drainage Structures
840.29	Frames and Narrow Slot Flat Grates
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.46	Traffic Bearing Precast Drainage Structure
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
862.04	Anchoring End of Guardrail - B-77 and B-83 Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap



GENERAL NOTES:

2006 SPECIFICATIONS
EFFECTIVE: 07-18-06
REVISED: 07-18-06

GRADE LINE:

GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PARTICULAR ITEMS INVOLVED.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR APPROACHING A BRIDGE.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

Power - Progress Energy

Telephone - AT&T

Cable - Time Warner

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	_____
County Line	_____
Township Line	_____
City Line	_____
Reservation Line	_____
Property Line	_____
Existing Iron Pin	○ EIP
Property Corner	_____
Property Monument	□ EDM
Parcel/Sequence Number	123
Existing Fence Line	_____
Proposed Woven Wire Fence	_____
Proposed Chain Link Fence	_____
Proposed Barbed Wire Fence	_____
Existing Wetland Boundary	_____ WLB
Proposed Wetland Boundary	_____ WLB
Existing Endangered Animal Boundary	_____ EAB
Existing Endangered Plant Boundary	_____ EPB

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○
Small Mine	⋈
Foundation	_____
Area Outline	_____
Cemetery	_____
Building	_____
School	_____
Church	_____
Dam	_____

HYDROLOGY:

Stream or Body of Water	_____
Hydro, Pool or Reservoir	_____
Jurisdictional Stream	_____ JS
Buffer Zone 1	_____ BZ 1
Buffer Zone 2	_____ BZ 2
Flow Arrow	_____
Disappearing Stream	_____
Spring	_____
Wetland	_____
Proposed Lateral, Tail, Head Ditch	_____
False Sump	_____

RAILROADS:

Standard Gauge	_____
RR Signal Milepost	_____
Switch	_____
RR Abandoned	_____
RR Dismantled	_____

RIGHT OF WAY:

Baseline Control Point	_____
Existing Right of Way Marker	_____
Existing Right of Way Line	_____
Proposed Right of Way Line	_____
Proposed Right of Way Line with Iron Pin and Cap Marker	_____
Proposed Right of Way Line with Concrete or Granite Marker	_____
Existing Control of Access	_____
Proposed Control of Access	_____
Existing Easement Line	_____ E
Proposed Temporary Construction Easement	_____ E
Proposed Temporary Drainage Easement	_____ TDE
Proposed Permanent Drainage Easement	_____ PDE
Proposed Permanent Utility Easement	_____ PUE

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	_____
Existing Curb	_____
Proposed Slope Stakes Cut	_____ C
Proposed Slope Stakes Fill	_____ F
Proposed Wheel Chair Ramp	_____ WCR
Proposed Wheel Chair Ramp Curb Cut	_____ WCC
Curb Cut for Future Wheel Chair Ramp	_____ CCFR
Existing Metal Guardrail	_____
Proposed Guardrail	_____
Existing Cable Guiderail	_____
Proposed Cable Guiderail	_____
Equality Symbol	_____
Pavement Removal	_____

VEGETATION:

Single Tree	_____
Single Shrub	_____
Hedge	_____
Woods Line	_____
Orchard	_____
Vineyard	_____ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	_____ CONC
Bridge Wing Wall, Head Wall and End Wall	_____ CONC WW
MINOR:	
Head and End Wall	_____ CONC HW
Pipe Culvert	_____
Footbridge	_____
Drainage Box: Catch Basin, DI or JB	_____ CB
Paved Ditch Gutter	_____
Storm Sewer Manhole	_____ S
Storm Sewer	_____ S

UTILITIES:

POWER:	
Existing Power Pole	_____
Proposed Power Pole	_____
Existing Joint Use Pole	_____
Proposed Joint Use Pole	_____
Power Manhole	_____ P
Power Line Tower	_____
Power Transformer	_____
U/G Power Cable Hand Hole	_____ PH
H-Frame Pole	_____
Recorded U/G Power Line	_____ P
Designated U/G Power Line (S.U.E.*)	_____ P

TELEPHONE:

Existing Telephone Pole	_____
Proposed Telephone Pole	_____
Telephone Manhole	_____ T
Telephone Booth	_____
Telephone Pedestal	_____ T
Telephone Cell Tower	_____
U/G Telephone Cable Hand Hole	_____ PH
Recorded U/G Telephone Cable	_____ T
Designated U/G Telephone Cable (S.U.E.*)	_____ T
Recorded U/G Telephone Conduit	_____ TC
Designated U/G Telephone Conduit (S.U.E.*)	_____ TC
Recorded U/G Fiber Optics Cable	_____ T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	_____ T FO

WATER:

Water Manhole	_____
Water Meter	_____
Water Valve	_____
Water Hydrant	_____
Recorded U/G Water Line	_____ W
Designated U/G Water Line (S.U.E.*)	_____ W
Above Ground Water Line	_____ A/G Water

TV:

TV Satellite Dish	_____
TV Pedestal	_____
TV Tower	_____
U/G TV Cable Hand Hole	_____ PH
Recorded U/G TV Cable	_____ TV
Designated U/G TV Cable (S.U.E.*)	_____ TV
Recorded U/G Fiber Optic Cable	_____ TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	_____ TV FO

GAS:

Gas Valve	_____
Gas Meter	_____
Recorded U/G Gas Line	_____ G
Designated U/G Gas Line (S.U.E.*)	_____ G
Above Ground Gas Line	_____ A/G Gas

SANITARY SEWER:

Sanitary Sewer Manhole	_____
Sanitary Sewer Cleanout	_____
U/G Sanitary Sewer Line	_____ SS
Above Ground Sanitary Sewer	_____ A/G Sanitary Sewer
Recorded SS Forced Main Line	_____ FSS
Designated SS Forced Main Line (S.U.E.*)	_____ FSS

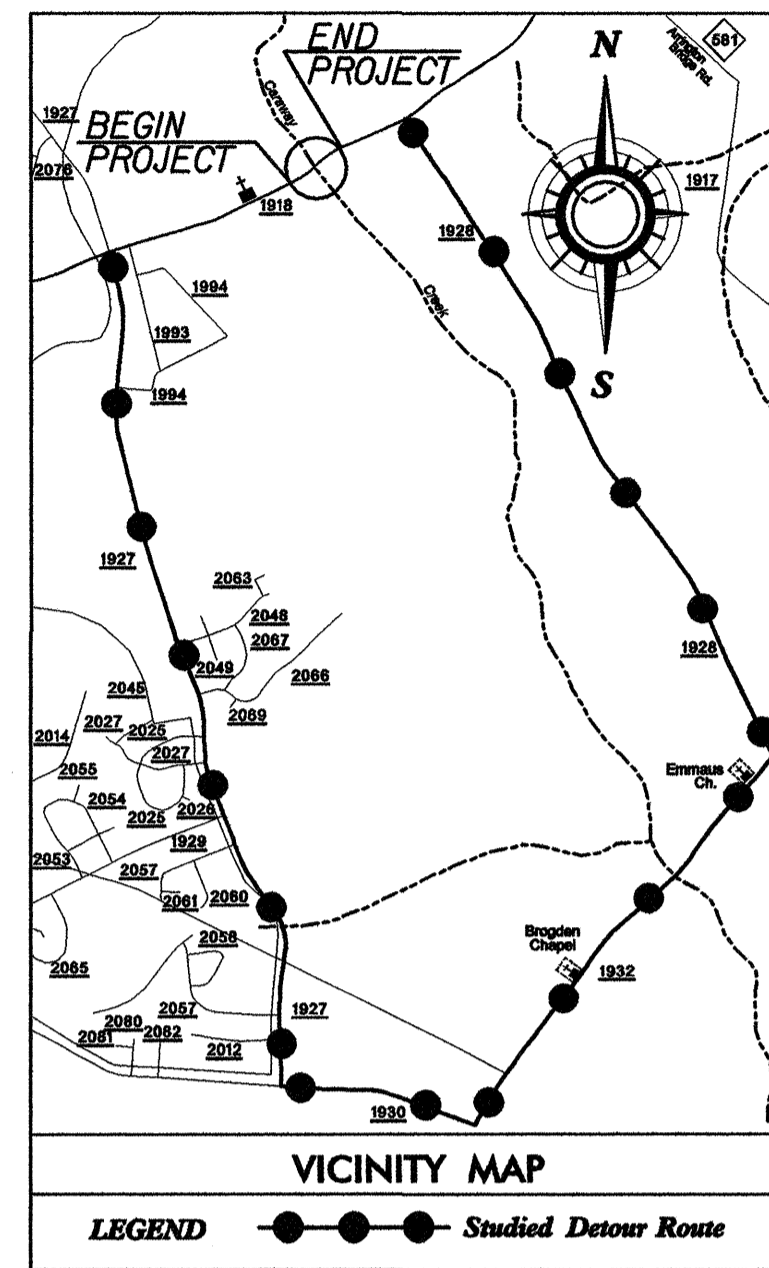
MISCELLANEOUS:

Utility Pole	_____
Utility Pole with Base	_____
Utility Located Object	_____
Utility Traffic Signal Box	_____ S
Utility Unknown U/G Line	_____ UTL
U/G Tank; Water, Gas, Oil	_____
A/G Tank; Water, Gas, Oil	_____
U/G Test Hole (S.U.E.*)	_____
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

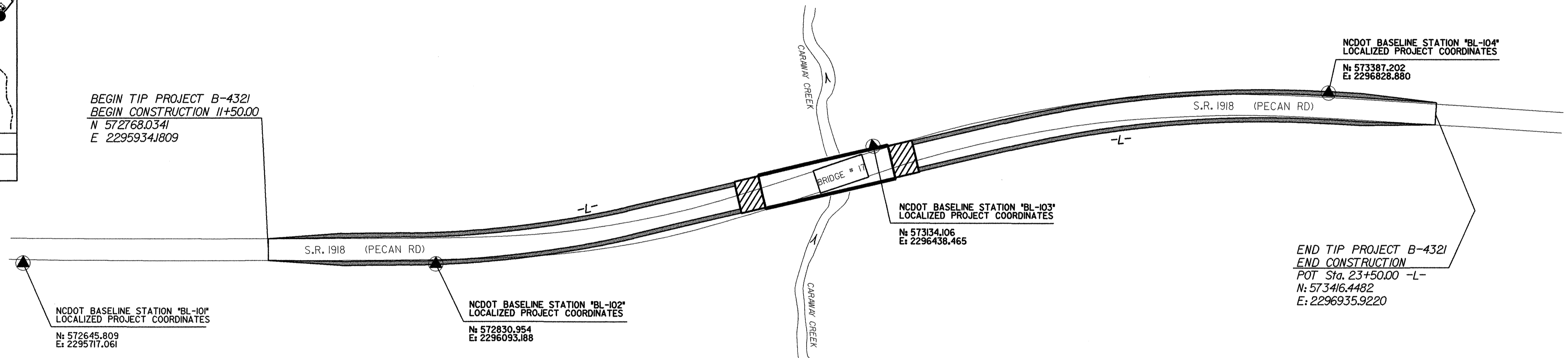
SURVEY CONTROL SHEET B-4321

PROJECT REFERENCE NO.	SHEET NO.
B-4321	1C
Location and Surveys	

See Sheet 1-A For Index of Sheets



WAYNE COUNTY BRIDGE 17 OVER CARAWAY CREEK ON SR 1918



BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
101	BL-101	572645.8090	2295717.0610	114.78	OUTSIDE PROJECT LIMITS	
102	BL-102	572830.9540	2296093.1880	96.80	13+19.92	15.55 RT
103	BL-103	573134.1060	2296438.4650	80.27	17+77.39	19.58 LT
104	BL-104	573387.2020	2296828.8800	89.21	22+40.05	14.71 LT
2	GPS B4321-2	573601.6750	2297437.7280	114.59	OUTSIDE PROJECT LIMITS	

 TBM1 ELEVATION = 119.26
 N 572734 E 2295795
 L STATION 10+10 31 LEFT
 R/R SPIKE IN BASE OF 18" PINE

 TBM2 ELEVATION = 76.12
 N 573132 E 2296509
 L STATION 18+31 27 RIGHT
 R/R SPIKE IN BASE OF 20" SYCAMORE

 TBM3 ELEVATION = 118.09
 N 573652 E 2297425
 L STATION 26+54
 S 27° 28' 44.0" E DIST 453.56
 R/R SPIKE IN BASE OF 15" GUM

▲ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEM.
 NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION.
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES

DRAWING NOT TO SCALE

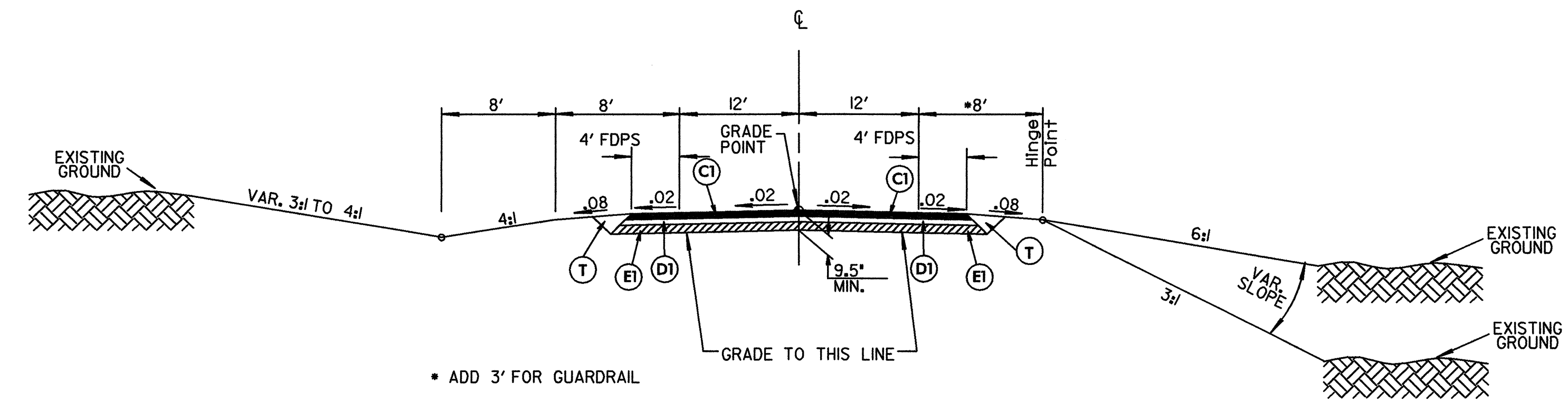
NOTE: DRAWING NOT TO SCALE

NOTES

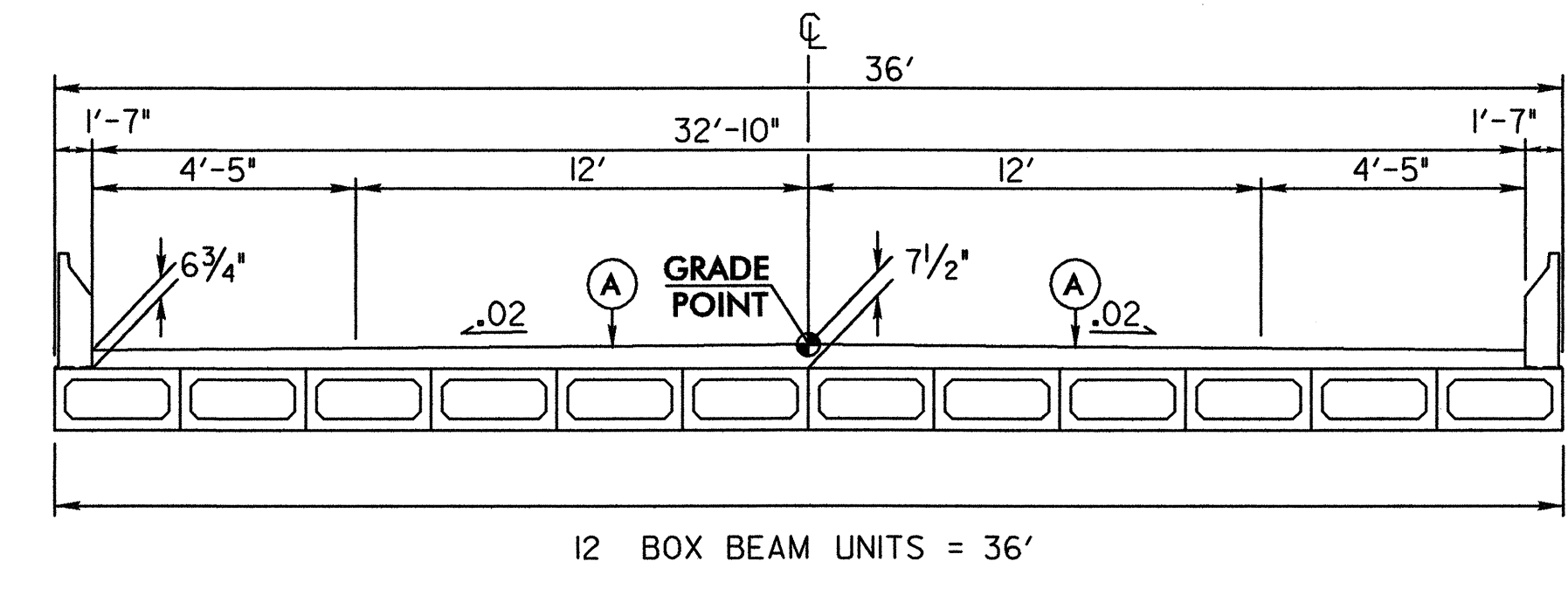
- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT [HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/](http://www.ncdot.org/doh/preconstruct/highway/location/) THE FILES TO BE FOUND ARE AS FOLLOWS:
 U4321-LS_CONTROL_050707.TXT
 SITE CALIBRATION DATA HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B-4321-2" WITH STATE PLANE GRID COORDINATES OF NORTHING: 573601.675(1) EASTING: 2297437.728(1) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987311 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B-4321-2" TO L- STATION 11+50.00 IS S 60°59'38" W 17.19.19' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS MVD 88



TYPICAL SECTION NO. 1
 USE TYPICAL SECTION NO. 1 AS FOLLOWS
 -L- Sta. 11+50.00 to Sta. 16+58.00 (BEGIN BRIDGE)
 -L- Sta. 17+88.00 (END BRIDGE) to Sta. 23+50.00



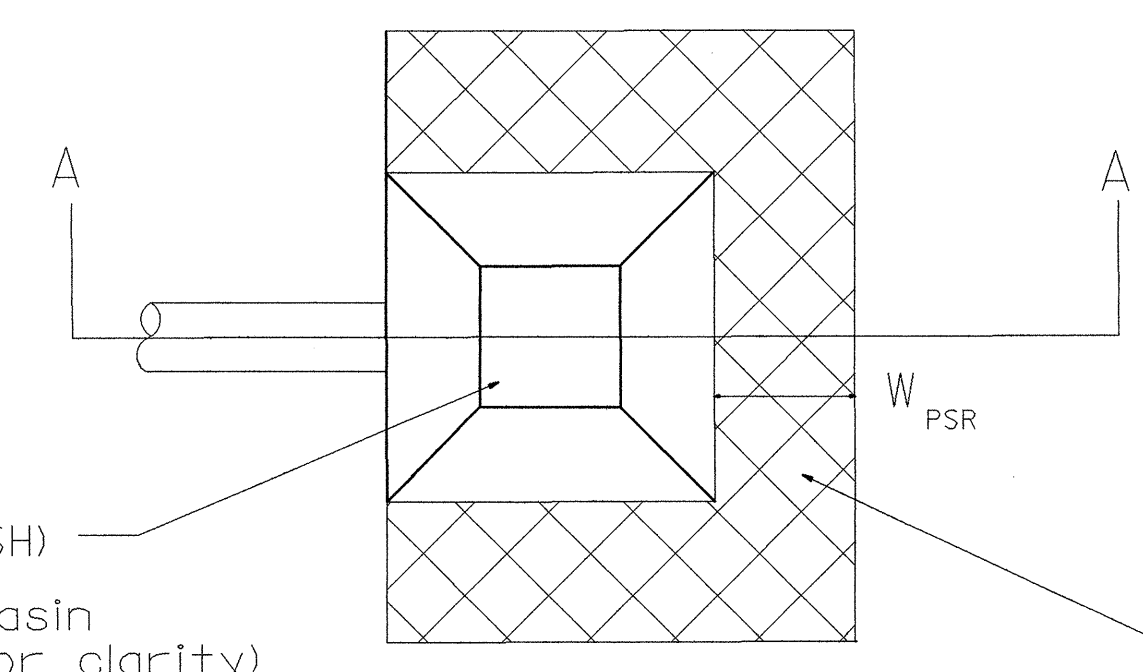
TYPICAL BRIDGE SECTION
 -L- Sta. 16+58.00 to Sta. 17+88.00

PAVEMENT SCHEDULE	
A	PROP. PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS PER SQ. YD.
E1	PROP. APPROX. 4" ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD.
T	EARTH MATERIAL

NOTE: ALL SLOPES 1:1 UNLESS OTHERWISE SPECIFIED

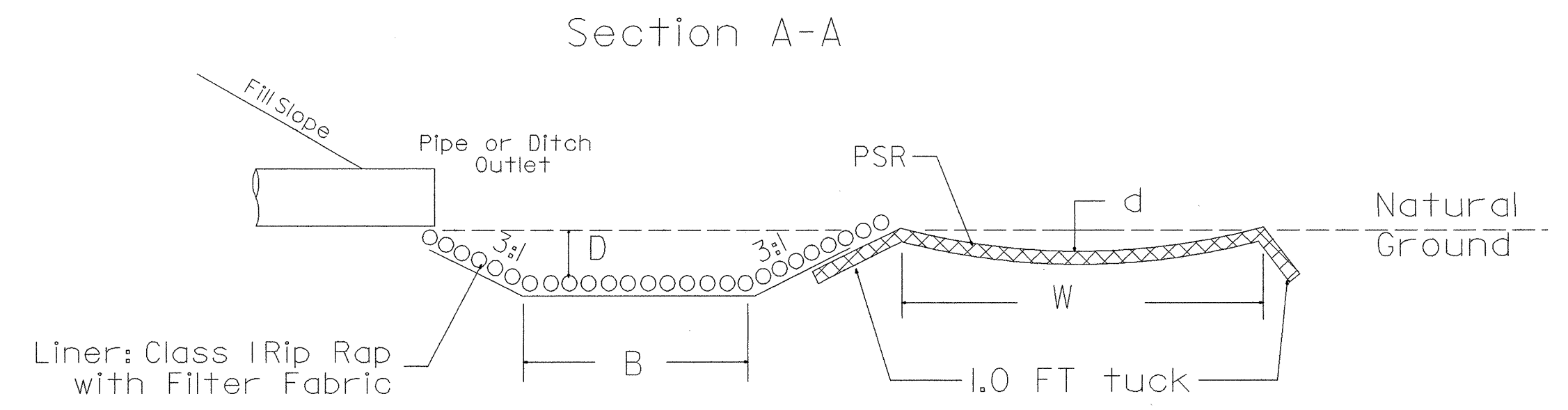
PREFORMED SCOUR HOLE

(Not to scale)



Preformed Scour Hole (PSH)
 (Rip Rap in basin not shown for clarity)

3.0 ft. to 10.0 ft. of Permanent Soil Reinforcement matting (PSR) to be prescribed around perimeter of scour hole (see plan views); Shall be graded level.



NOTE: "B" denotes size of basin; For example: 5.0ft.x 5.0ft. PSH, B=5.0

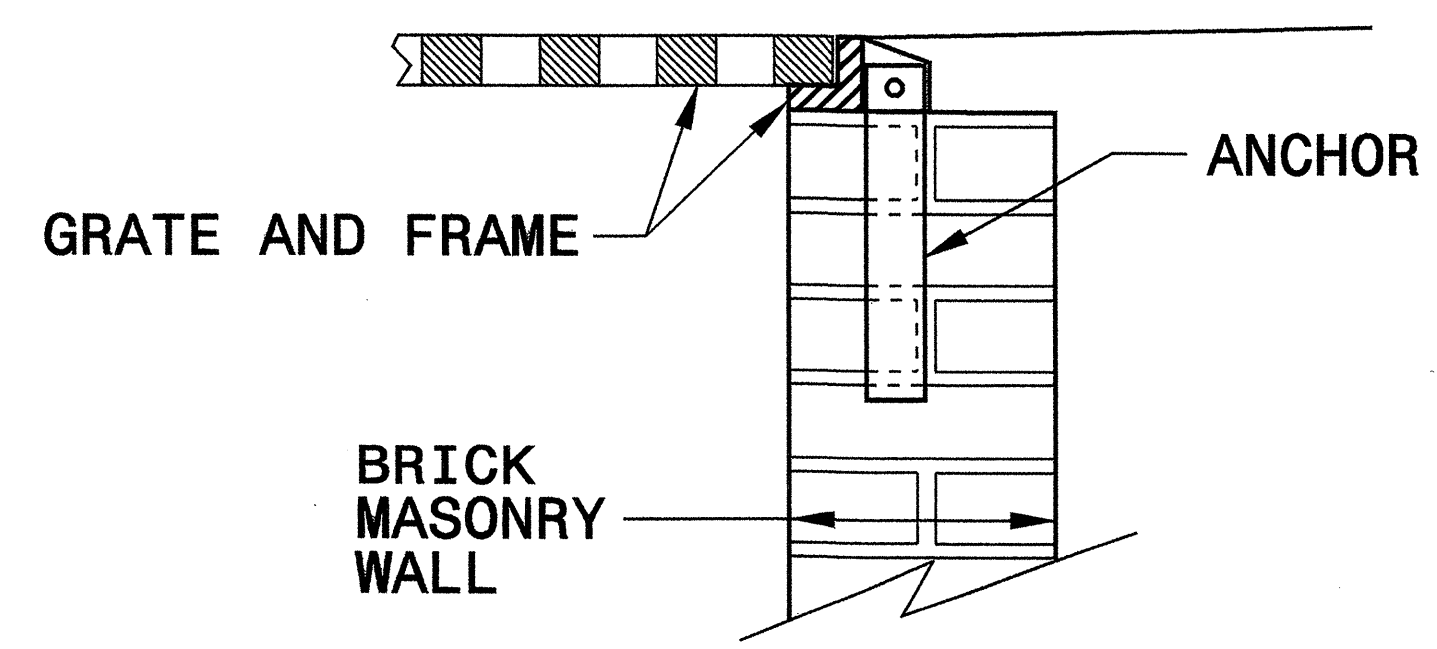
NOTE: The Permanent Soil Reinforcement matting (PSR) shall be seeded with native grasses at installation.

STATION	B FT.	D FT.	W _{PSR} FT.	d FT.	CLASS I RIP RAP TONS	DDE (CU YD)	FILTER FABRIC (SQ YD)
16+68 -L-	5	1.5	5	0.5	11	22	15
17+92 -L-	5	1.5	5	0.5	11	22	15

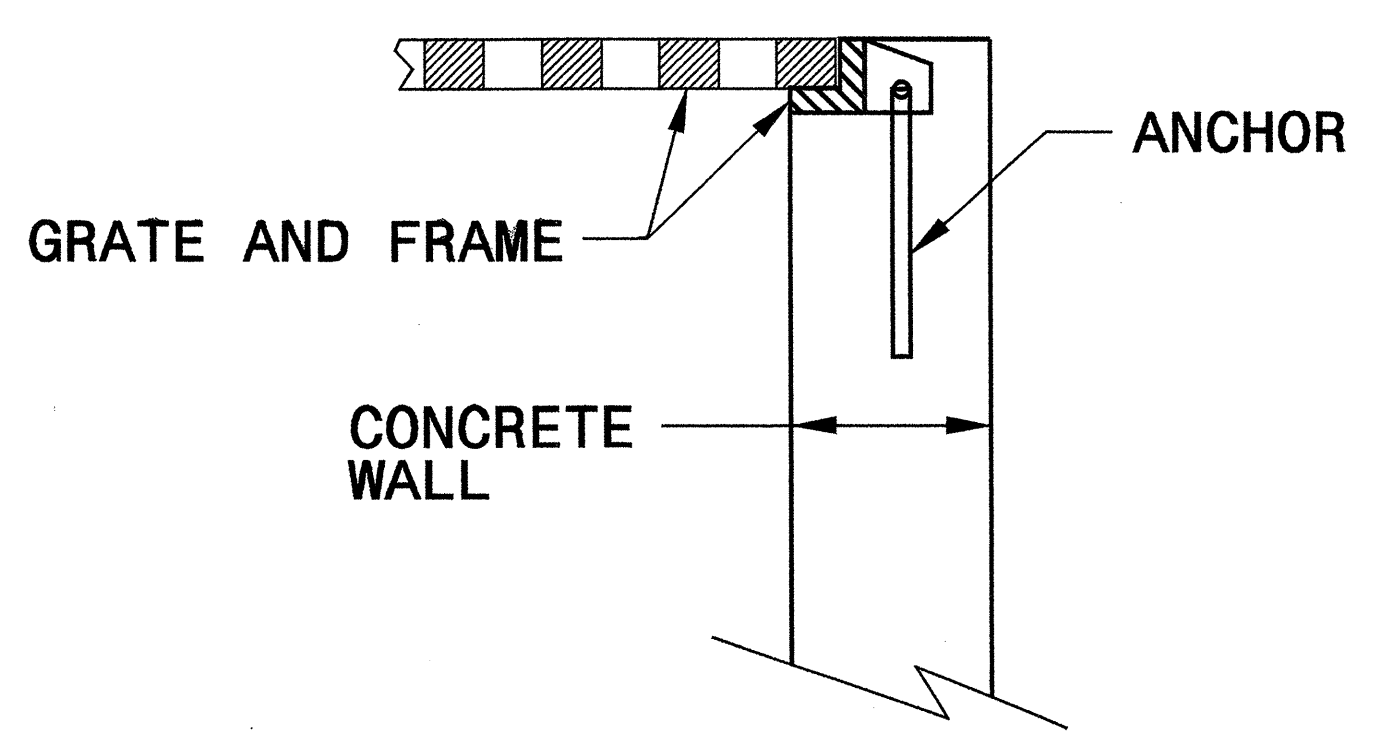
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

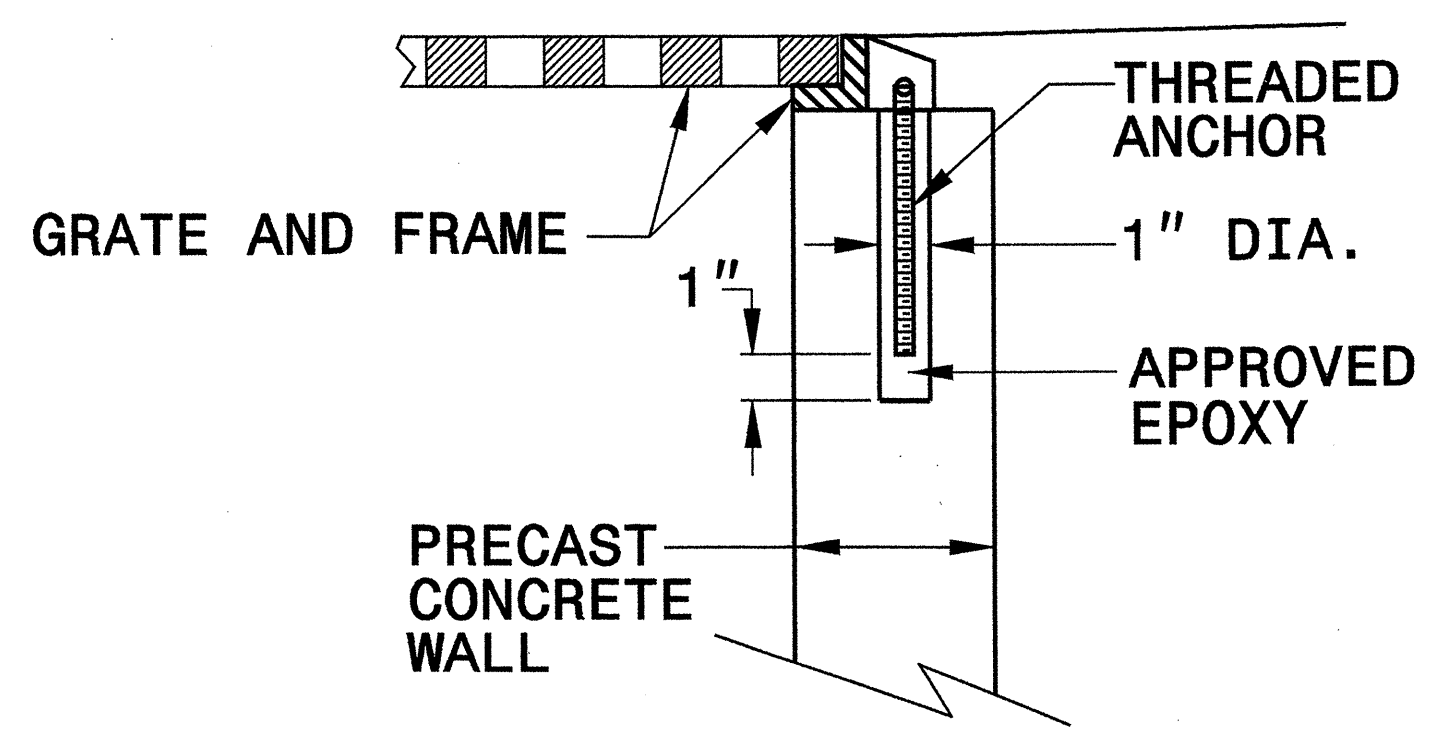
SHEET 1 OF 1
840D25



BRICK MASONRY CONSTRUCTION



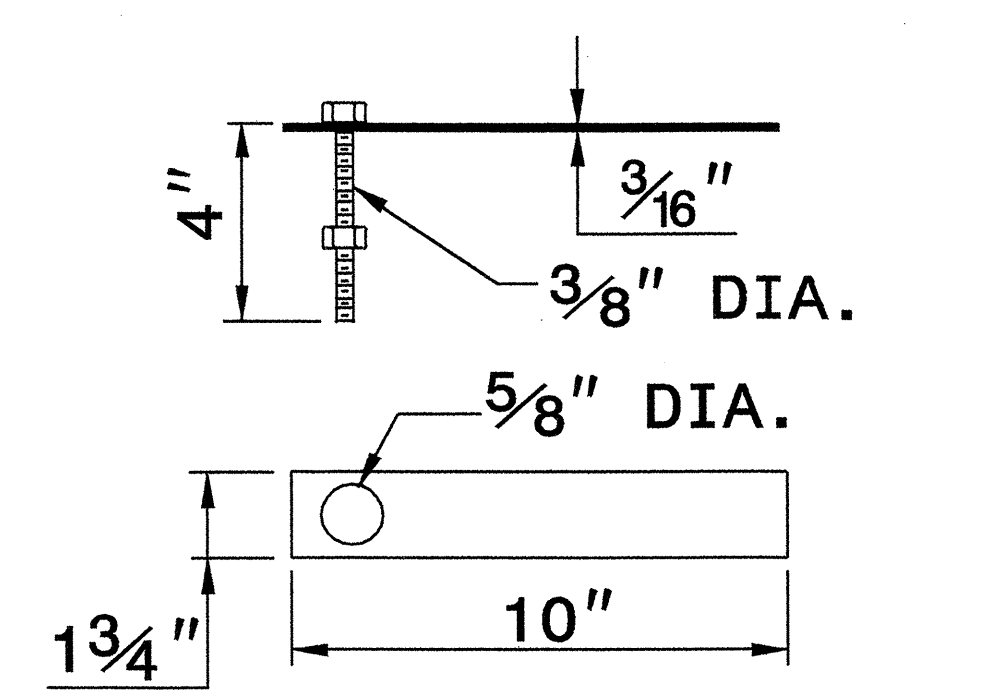
CONCRETE CONSTRUCTION



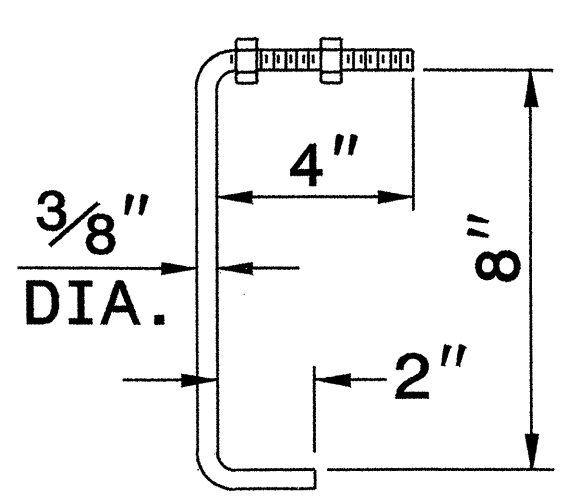
PRECAST CONCRETE CONSTRUCTION

DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

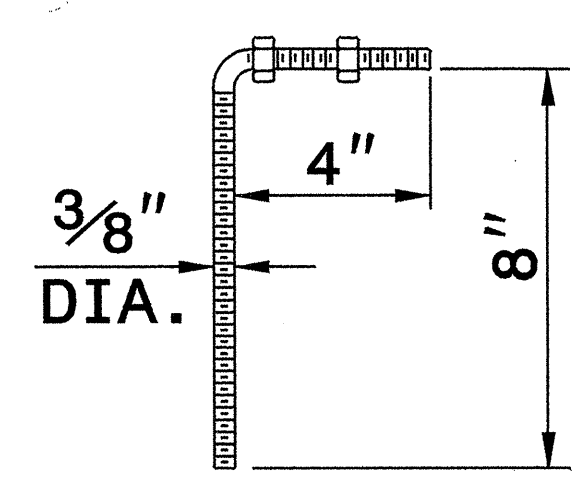
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



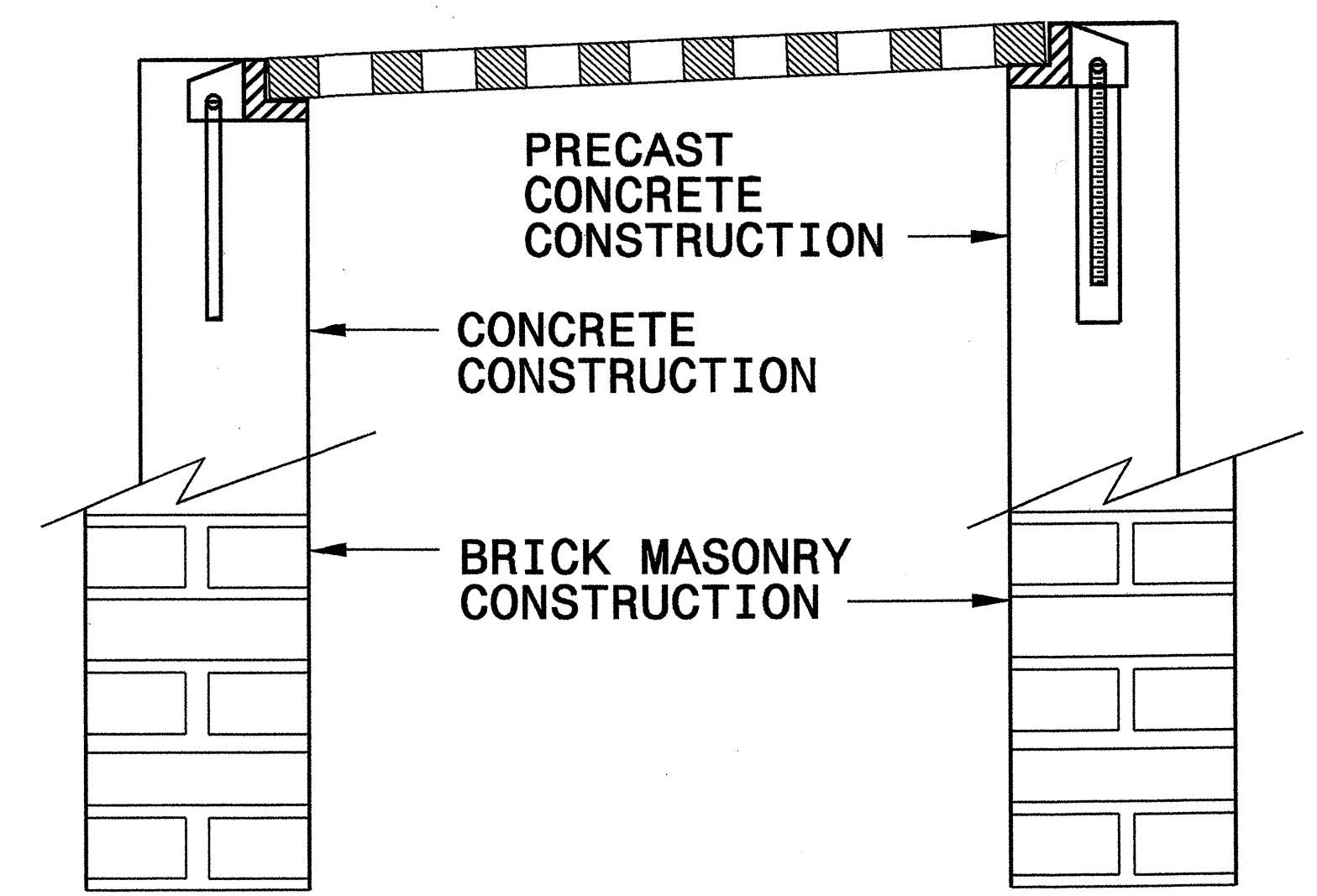
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR



PRECAST CONCRETE ANCHOR
3/8" DIA. BENT BAR



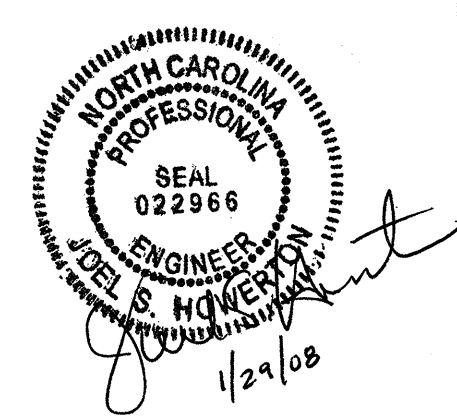
FRAME AND GRATE INSTALLATION FOR NORMAL CROWN AND SUPERELEVATED SECTIONS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

SHEET 1 OF 1
840D25

01-MAR-2007 09:04 s:\contracts\contractstds\stds\06 stds to special details\84025 anchorage For Frames\0840d25.dgn Jhowerton AT PS212260



**PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN**
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2006 STD 840.25 DATE: 07/18/06
MODIFIED BY: E.E. WARD DATE: 9/25/06
CHECKED BY: DATE:
FILE SPEC.:

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS SUMMARY OF QUANTITIES

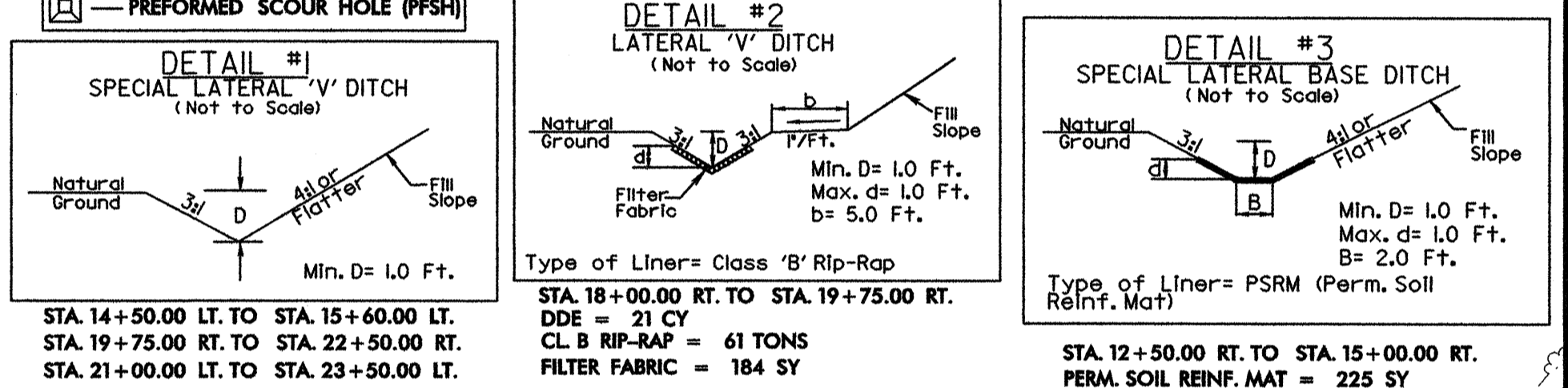
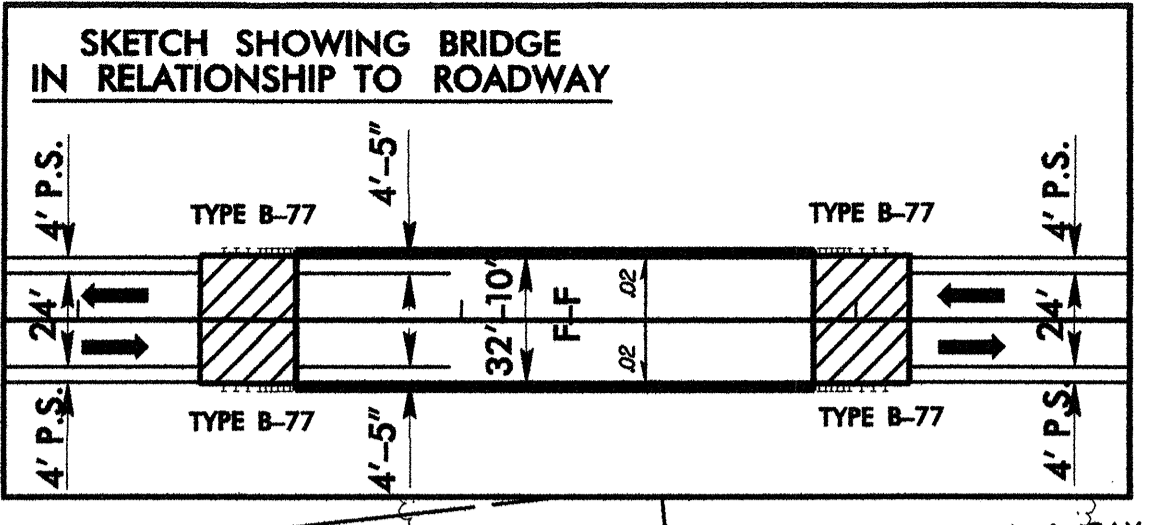
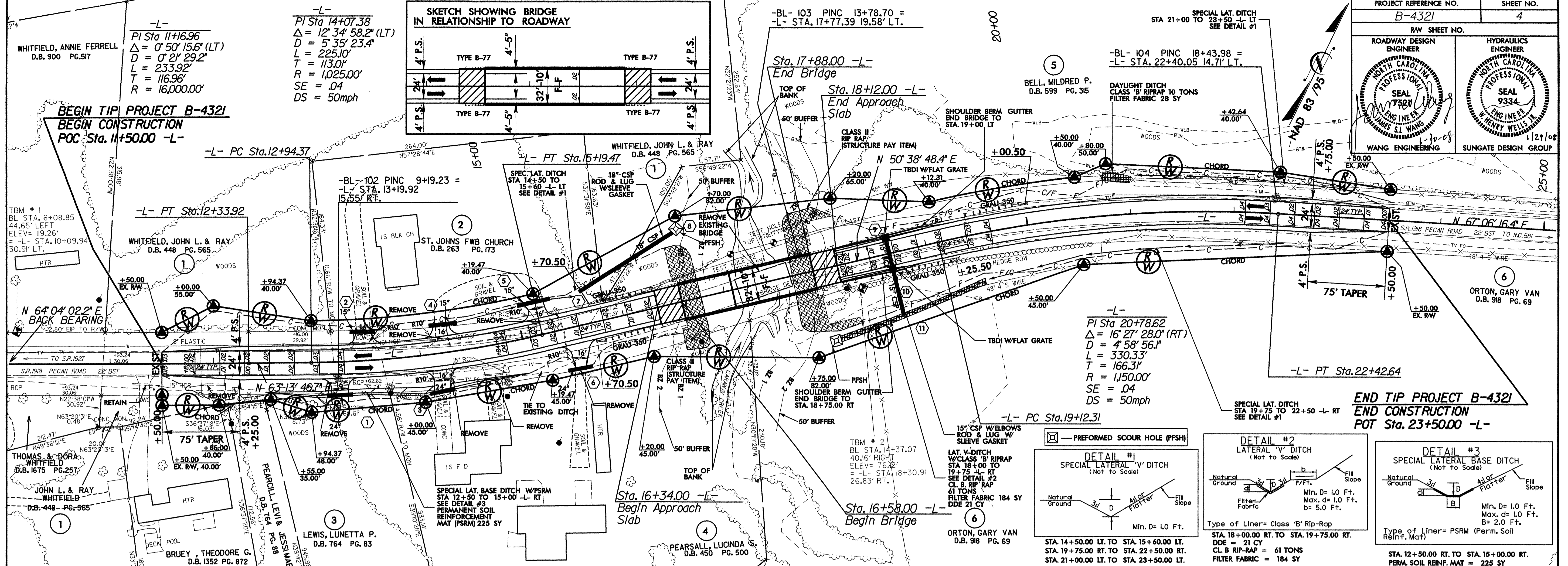
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201621

ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION	2044000000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE	6000000000-E	1605	1,540	LF	TEMPORARY SILT FENCE
0029000000-N	SP	Lump Sum		REINFORCED BRIDGE APPROACH FILL, STATION ***** (17+23.00)	2055000000-E	815	3	EA	6" SUBDRAIN PIPE WYES, TEES, & ELBOWS	6006000000-E	1610	75	TON	STONE FOR EROSION CONTROL, CLASS A
0043000000-N	226	Lump Sum		GRADING	2066000000-N	815	1	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	6009000000-E	1610	535	TON	STONE FOR EROSION CONTROL, CLASS B
0050000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUB-BING	2077000000-E	815	6	LF	6" OUTLET PIPE (SUBDRAINS)	6012000000-E	1610	220	TON	SEDIMENT CONTROL STONE
0057000000-E	226	200	CY	UNDERCUT EXCAVATION	2286000000-N	840	2	EA	MASONRY DRAINAGE STRUCTURES	6015000000-E	1615	2.5	ACR	TEMPORARY MULCHING
0134000000-E	240	21	CY	DRAINAGE DITCH EXCAVATION	2367000000-N	840	2	EA	FRAME WITH TWO GRATES, STD 840.29	6018000000-E	1620	100	LB	SEED FOR TEMPORARY SEEDING
0195000000-E	265	100	CY	SELECT GRANULAR MATERIAL	2556000000-E	846	200	LF	SHOULDER BERM GUTTER	6021000000-E	1620	0.5	TON	FERTILIZER FOR TEMPORARY SEEDING
0196000000-E	270	100	SY	FABRIC FOR SOIL STABILIZATION	3030000000-E	862	250	LF	STEEL BM GUARDRAIL	6024000000-E	1622	100	LF	TEMPORARY SLOPE DRAINS
0318000000-E	300	35	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	3150000000-N	862	5	EA	ADDITIONAL GUARDRAIL POSTS	6027000000-N	1622	2	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
0343000000-E	310	80	LF	15" SIDE DRAIN PIPE	3270000000-N	SP	4	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	6029000000-E	SP	300	LF	SAFETY FENCE
0345000000-E	310	72	LF	24" SIDE DRAIN PIPE	3317000000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE B-77	6030000000-E	1630	1,230	CY	SILT EXCAVATION
0366000000-E	310	24	LF	15" RC PIPE CULVERTS, CLASS III	3649000000-E	876	72	TON	RIP RAP, CLASS B	6036000000-E	1631	740	SY	MATTING FOR EROSION CONTROL
0708000000-E	310	42	LF	15" BIT COAT CS PIPE CULVERTS, TYPE B 0.064" THICK	3656000000-E	876	623	SY	FILTER FABRIC FOR DRAINAGE	6037000000-E	SP	20	SY	COIR FIBER MAT
0714000000-E	310	108	LF	18" BIT COAT CS PIPE CULVERTS, TYPE B 0.064" THICK	3659000000-N	SP	2	EA	PERFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	6038000000-E	SP	643	SY	PERMANENT SOIL REINFORCEMENT MAT
0806000000-E	310	2	EA	15" BIT COAT CS PIPE ELBOWS, TYPE B 0.064" THICK	4025000000-E	901	8.5	SF	CONTRACTOR FURNISHED, TYPE *** SIGN (E)	6042000000-E	1632	40	LF	1/4" HARDWARE CLOTH
0995000000-E	340	163	LF	PIPE REMOVAL	4072000000-E	903	16	LF	SUPPORTS, 3-LB STEEL U-CHANNEL	6070000000-N	SP	4	EA	SPECIAL STILLING BASINS
1220000000-E	545	150	TON	INCIDENTAL STONE BASE	4102000000-N	904	2	EA	SIGN ERECTION, TYPE E	6071030000-E	SP	340	LF	COIR FIBER BAFFLES
1489000000-E	610	838	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B	4155000000-N	907	11	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	6071050000-E	SP	3	EA	*** SKIMMER (1-1/2")
1498000000-E	610	515	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	4400000000-E	1110	359	SF	WORK ZONE SIGNS (STATIONARY)	6084000000-E	1660	2.5	ACR	SEEDING & MULCHING
1519000000-E	610	601	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	4410000000-E	1110	94	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)	6087000000-E	1660	1.5	ACR	MOWING
1560000000-E	620	97	TON	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	4445000000-E	1145	80	LF	BARRICADES (TYPE III)	6090000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
2000000000-N	806	22	EA	RIGHT OF WAY MARKERS	4685000000-E	1205	2,400	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	6093000000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
2022000000-E	815	23	CY	SUBDRAIN EXCAVATION	4686000000-E	1205	2,400	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	6096000000-E	1662	75	LB	SEED FOR SUPPLEMENTAL SEEDING
2033000000-E	815	17	CY	SUBDRAIN FINE AGGREGATE	4900000000-N	1251	20	EA	PERMANENT RAISED PAVEMENT MARKERS	6108000000-E	1665	1.75	TON	FERTILIZER TOPDRESSING
										6114000000-N	SP	2	HR	SPECIALIZED HAND MOWING
										6117000000-N	SP	12	EA	RESPONSE FOR EROSION CONTROL
										6123000000-E	1670	0.1	ACR	REFORESTATION

5/28/99

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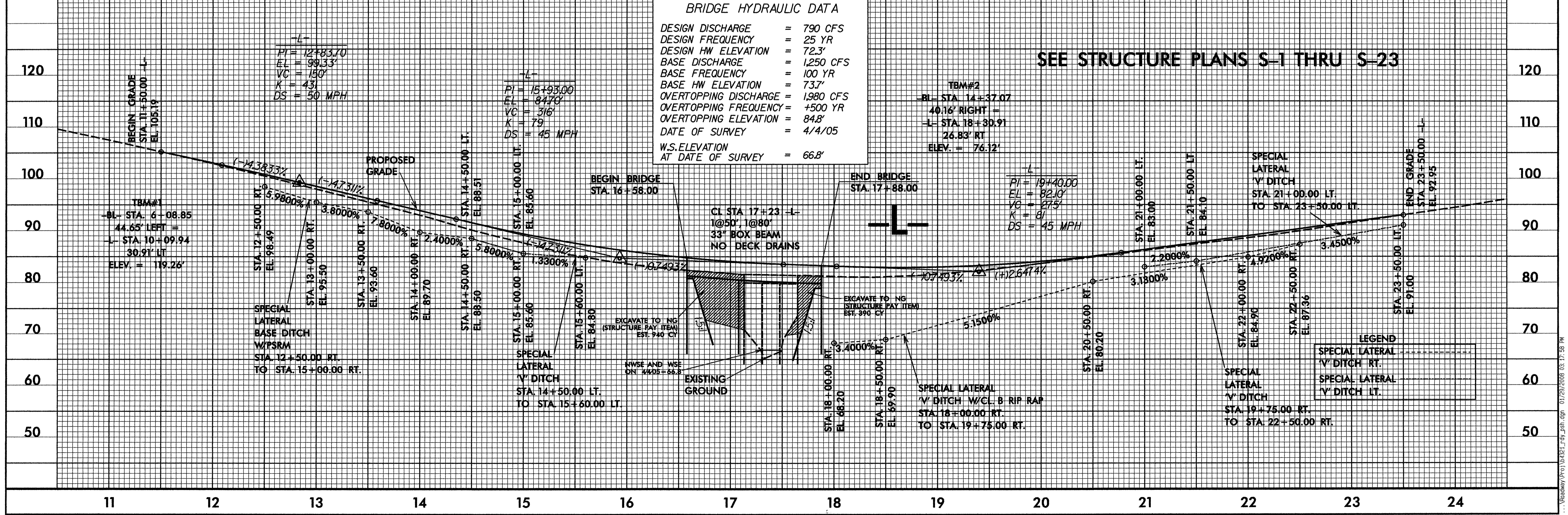
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BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 790 CFS
DESIGN FREQUENCY	= 25 YR
DESIGN HW ELEVATION	= 72.3'
BASE DISCHARGE	= 1250 CFS
BASE FREQUENCY	= 100 YR
BASE HW ELEVATION	= 73.7'
OVERTOPPING DISCHARGE	= 1980 CFS
OVERTOPPING FREQUENCY	= +500 YR
OVERTOPPING ELEVATION	= 84.8'
DATE OF SURVEY	= 4/4/05
W.S. ELEVATION AT DATE OF SURVEY	= 66.8'

SEE STRUCTURE PLANS S-1 THRU S-23



LEGEND

---	SPECIAL LATERAL 'V' DITCH - RT.
---	SPECIAL LATERAL 'V' DITCH - LT.