

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-BR	JEFFERSON	B	1
JEFFERSON CO. ROAD DISTRICT				

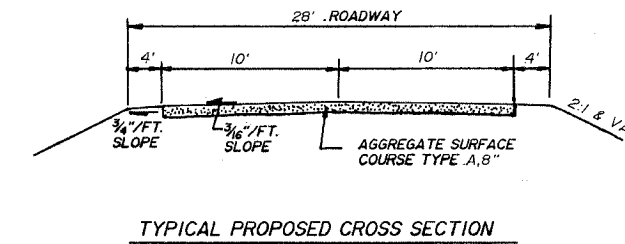
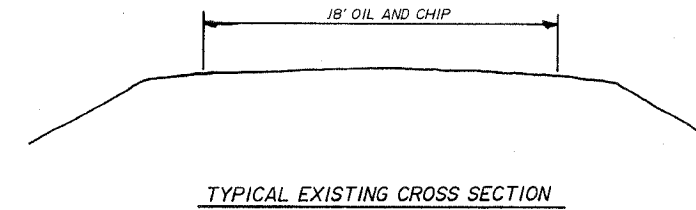
INDEX OF SHEETS

1. COVER SHEET- INDEX OF SHEETS, TYPICAL EXISTING AND PROPOSED CROSS-SECTIONS, SUMMARY OF QUANTITIES, LOCATION MAP, GENERAL NOTES
2. PLAN AND PROFILE
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5. END ELEVATION AND DETAILS
6. BRIDGE PLAN AND DETAILS
7. MANUFACTURE AND INSTALLATION DETAILS
8. CROSS-SECTIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
BRIDGE REPLACEMENT AND REHABILITATION PROGRAM

CONTRACT 95432



STANDARDS

1. 0000001-04
2. 515001-02
3. 630001-05
4. 631011-02
5. 635006-02
6. 701006-02
7. 702001-05
8. BLR 21-6
9. BLR 23-1

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2001 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, ALL APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE SPECIAL PROVISIONS FOR THIS PROJECT.

PLAN ELEVATIONS ARE U.S.G.S. DATUM AND ARE THE ELEVATIONS OF THE FINISHED SURFACE

ANY EXCAVATION DEEMED SUITABLE FOR USE BY THE ENGINEER SHALL BE USED IN THE EMBANKMENT.

THE CONTRACTOR SHALL SALVAGE FROM THE EXISTING STRUCTURE ANY MATERIALS DEEMED SALVAGEABLE BY THE ENGINEER AND SHALL STORE SAME ON THE RIGHT-OF-WAY FOR LATER REMOVAL BY THE JEFFERSON COUNTY HIGHWAY DEPARTMENT.

THE WORK IN THIS SECTION SHALL CONSIST OF THE CONSTRUCTION OF A THREE SIDED PRECAST CONCRETE STRUCTURE AND ANY AND ALL INCIDENTAL WORK NECESSARY TO COMPLETE THE SECTION.

SECTION 03-00180-00-BR
C.H. 27 JEFFERSON CO.
PROJECT NO. BROS-081(45)
JOB NO. C-97-035-05

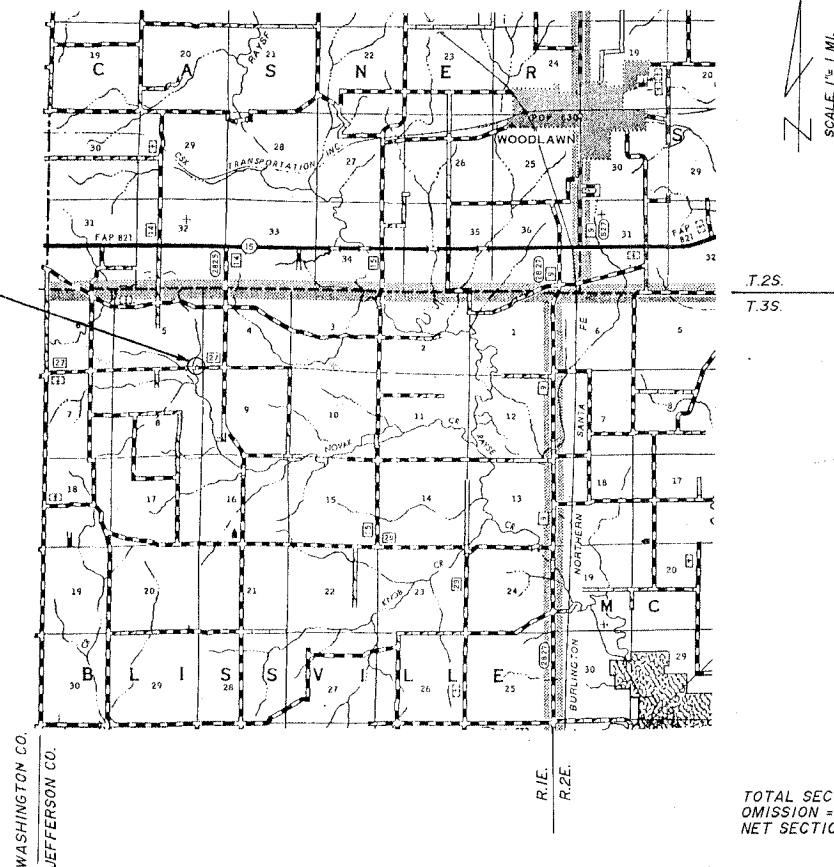
J.U.L.I.E.
1-800-892-0123
CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION

SUMMARY OF QUANTITIES

Quantity	Unit	Item	Code Number
50	FOOT	THREE SIDED PRECAST CONCRETE STRUCTURE	XK003551
68	CU. YD.	CONTROLLED LOW-STRENGTH MATERIAL	Z0013825
535	CU. YD.	TURNISHED EXCAVATION	20402800
80	TON	STONE DUMPED REGRAD, CLASS M	28100807
1	EACH	REMOVE EXISTING STRUCTURES	S0100100
561	CU. YD.	STRUCTURE EXCAVATION (SPECIAL)	S0200200
132.5	FOOT	STEEL PLATE BEAM GUARDRAIL, TYPE A	63000200
1	EACH	TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	63100167
2	EACH	TRAFFIC BARRIER TERMINAL, TYPE 2	63100045
62	TON	AGGREGATE SURFACE COURSE, TYPE A	40200100
1	EACH	NAME PLATES	51500100
1	EACH	TERMINAL MARKER DIRECTLY APPLIED	78201000
1	EACH	TRAFFIC BARRIER TERMINAL, TYPE 1	LR631020

SECTION 03-00180-00-BR BEGINS STA. 8+50 ENDS STA. 10+37.50
EXIST. STR. # 041-3056
PROP. STR. # 041-3662

COLLECTOR
275/400 ADT
40 M.P.H.



TOTAL SECTION LENGTH=187.5±0.035 MI.
OMISSION = 0'
NET SECTION LENGTH=187.5±0.035 MI.

THE ACCEPTANCE OF THIS PROJECT IS BASED ON THE MINIMUM DESIGN CRITERIA FOR A FEDERAL AID SECONDARY IMPROVEMENT ON THE COUNTY HIGHWAY SYSTEM.

Maureen D. Kastl
DIST. ENGR. LOCAL RDS & STS.

THESE PLANS WERE PREPARED BY ME OR A FULL TIME MEMBER OF MY STAFF WORKING UNDER MY PERSONAL SUPERVISION.

John S. Schake
COUNTY ENGINEER

750 OLD FAIRFIELD RD.
MT. VERNON, IL
618-244-8031
LIC. EXP. 11-30-05



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PASSED 4/12 2005
Maureen D. Kastl
DISTRICT ENGR., LOCAL ROADS & STREETS

APPROVED 4/12 2005
Christine M. Reed
CHRISTINE M. REED, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION FOUR ENGINEER

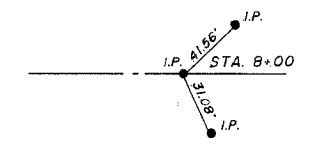
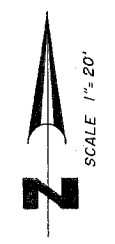
ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-BR	JEFFERSON	B	2
JEFFERSON COUNTY ROAD DISTRICT				

CONTRACT 95432

BILLY J. AND BARBARA McNAIL
PT. SE¼ SE¼ SEC. 5, T.3S, R.1E, 3rd P.M.

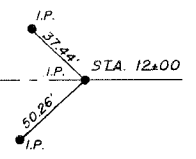
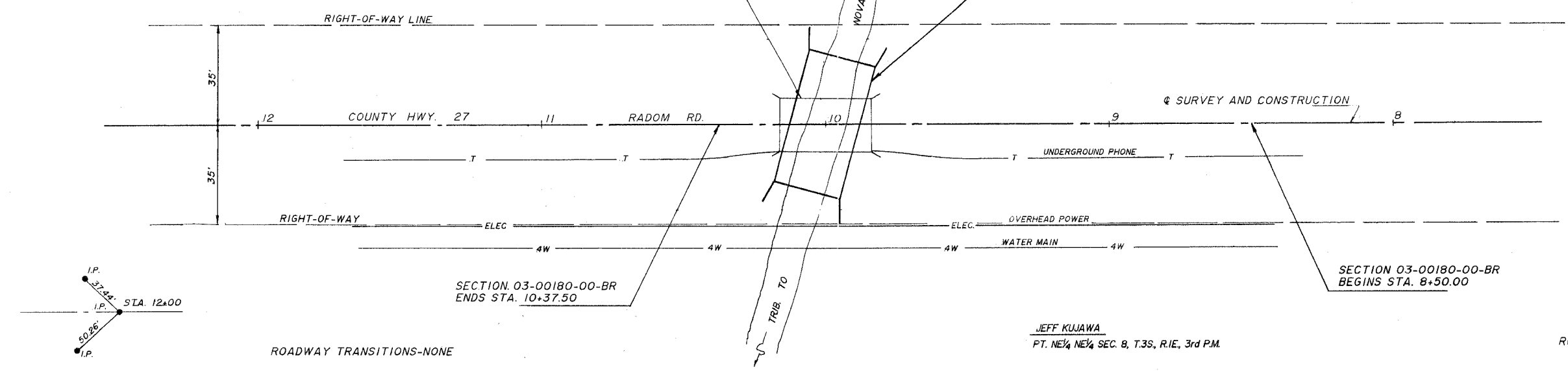
EXISTING STRUCTURE #041-3056
TO BE REMOVED
5-32" CONCRETE CHANNEL BEAMS,
CONCRETE CAPS, TIMBER PILES,
OLD CONCRETE ABUTMENTS
FROM PREVIOUS BRIDGE

STA. 10+00 PROPOSED STRUCTURE
#041-3662
THREE SIDED PRECAST CONCRETE STRUCTURE
24x9', 50' LONG



PLAN

DATE	
SCALE	
PROJECT	
DESIGNER	
CHECKER	
IN CHARGE	
APPROVED	
NOTED	
REVISIONS	



ROADWAY TRANSITIONS-NONE

JEFF KUJAWA
PT. NE¼ NE¼ SEC. 8, T.3S, R.1E, 3rd P.M.

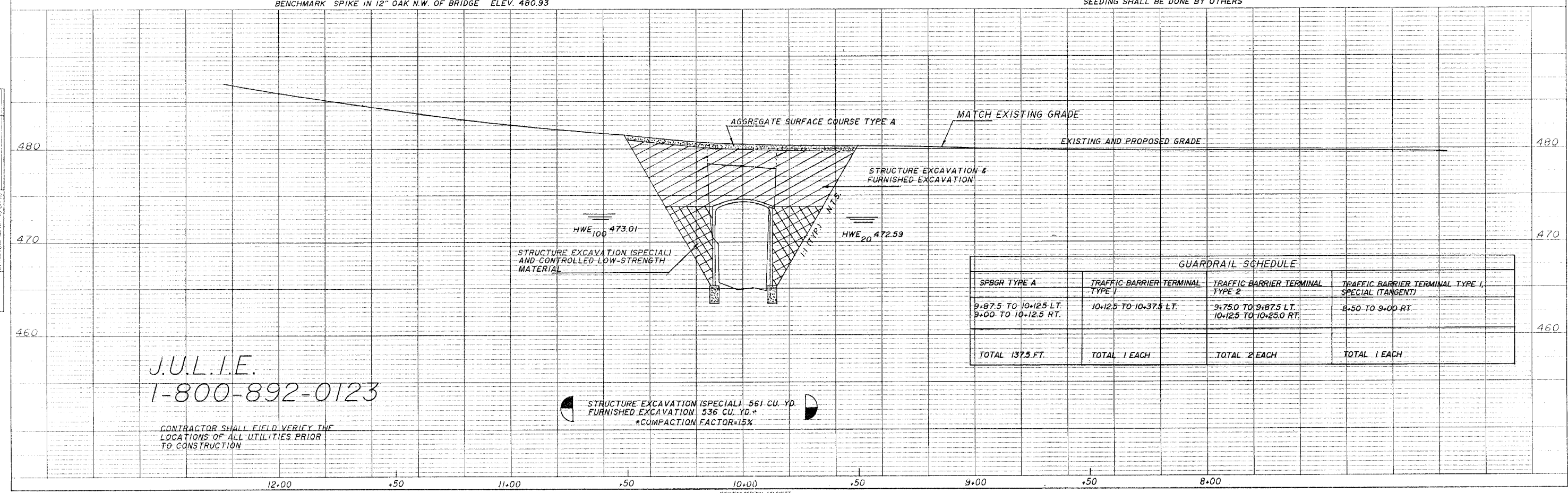
ROADWAY TRANSITIONS-NONE

BENCHMARK SPIKE IN 12" OAK N.W. OF BRIDGE ELEV. 480.93

SEEDING SHALL BE DONE BY OTHERS

PROFILE

DATE	
SCALE	
PROJECT	
DESIGNER	
CHECKER	
IN CHARGE	
APPROVED	
NOTED	
REVISIONS	



J.U.L.I.E.
1-800-892-0123

CONTRACTOR SHALL FIELD VERIFY THE
LOCATIONS OF ALL UTILITIES PRIOR
TO CONSTRUCTION

STRUCTURE EXCAVATION (SPECIAL) 561 CU. YD.
FURNISHED EXCAVATION 536 CU. YD.
*COMPACTION FACTOR=15%

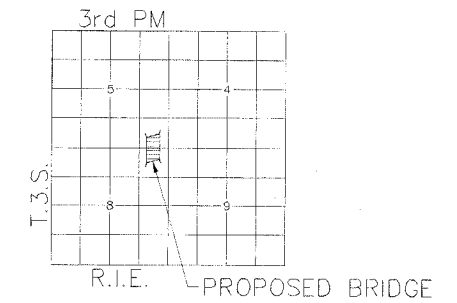
SALVAGE:
 THE CONTRACTOR SHALL SALVAGE FROM THE EXISTING BRIDGE ANY MATERIALS SO DEEMED BY THE ENGINEER AND STORE THEM ON THE ADJACENT R.O.W. FOR LATER REMOVAL BY THE JEFFERSON COUNTY HIGHWAY DEPARTMENT

TOTAL BILL OF MATERIAL

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHIT.
C.H. 27	03-00180-00-BR	JEFFERSON	B	3
JEFFERSON COUNTY ROAD DISTRICT				

CONTRACT 95432

ITEM	UNIT	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH	1
NAME PLATES	EACH	1
THREE SIDED PRECAST CONCRETE STRUCTURES 24' x 9'	FOOT	50
CONTROLLED LOW STRENGTH MATERIAL	CU. YD.	68
STRUCTURE EXCAVATION (SPECIAL)	CU. YD.	561
FURNISHED EXCAVATION	CU. YD.	536
AGGREGATE SURFACE COURSE TYPE "A"	TON	62
STONE DUMPED RIPRAP CLASS A4	TON	80



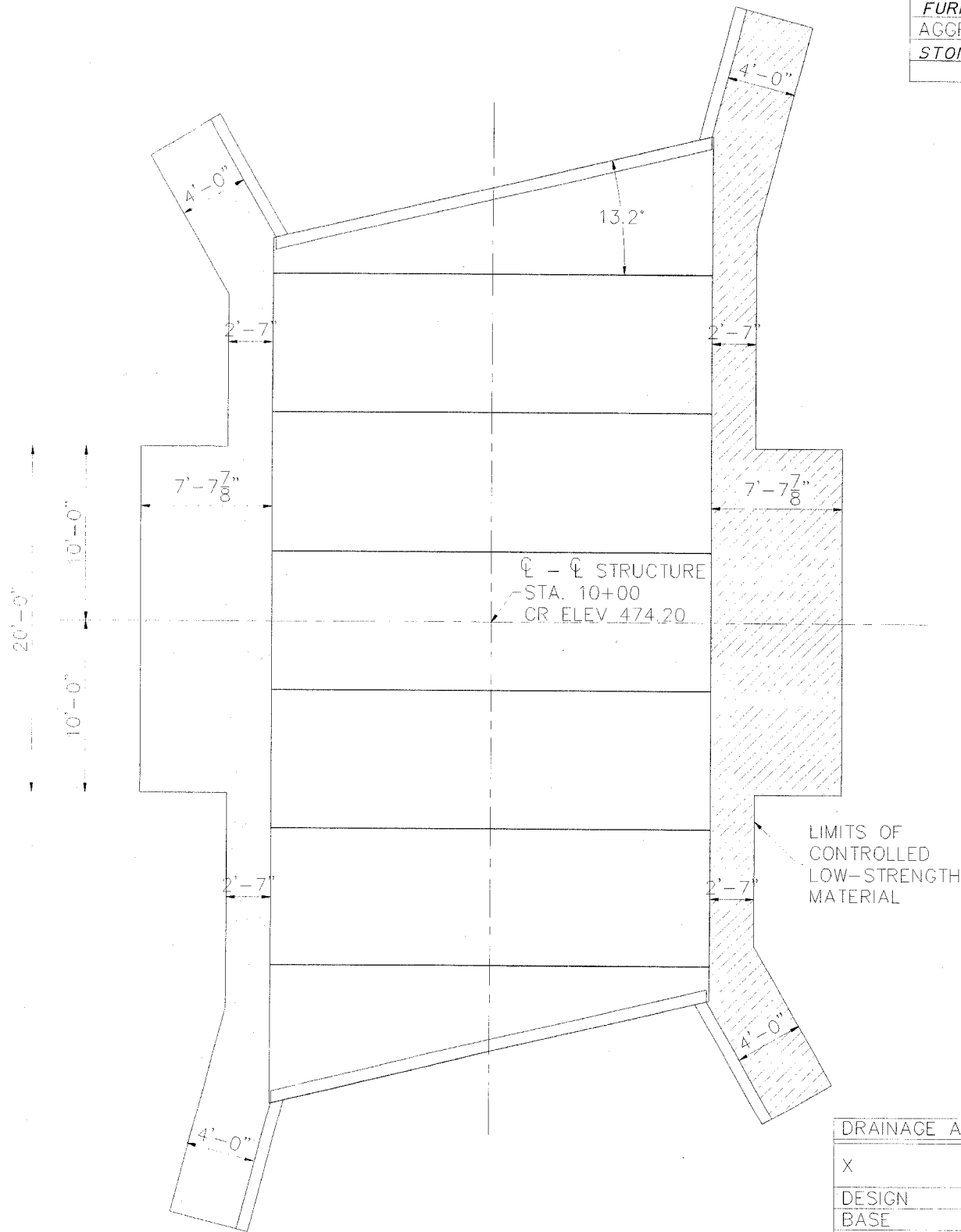
GENERAL NOTES

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42, OR M-53, GRADE 60.

SEE SPECIAL PROVISIONS FOR BORING LOGS.

CLASS S1 CONCRETE SHALL BE USED THROUGHOUT.

THE PRECAST CONCRETE BRIDGE SYSTEM SHALL MATCH THE STYLE, DIMENSIONS, AND HYDRAULIC OPENING AS SHOWN HEREIN. THE PRECAST ALTERNATE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.



**STATION 10+00
 NOVAK CREEK
 SEC 03-00180-00-BR
 PROJECT BROS-081(45)
 JEFFERSON COUNTY
 LOADING HS-20
 STRUCTURE NO. 041-3662**

LETTERING FOR NAME PLATE

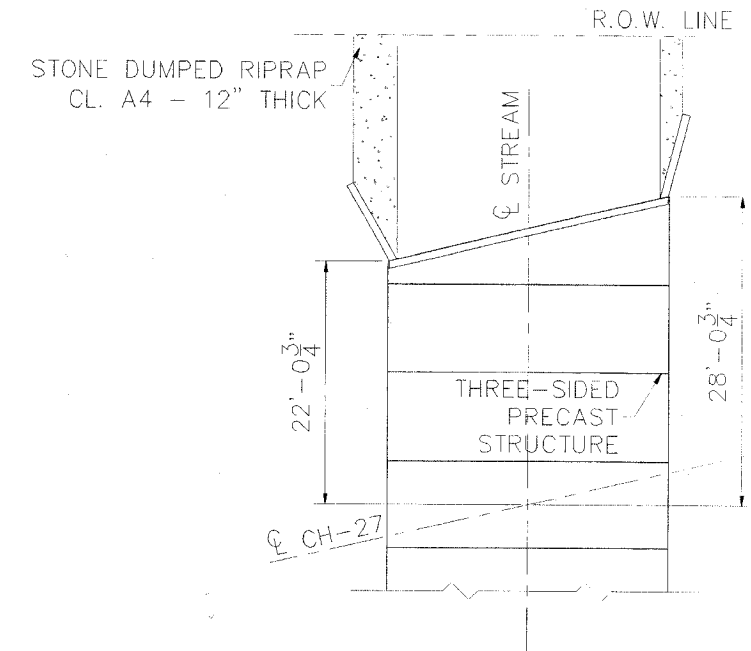
LOCATE NAME PLATE ON OUTSIDE FACE OF SOUTHWEST WINGWALL SEE STD. 515001

DESIGN SPECIFICATIONS

1996 AASHTO & 1997 INTERIMS
 HS20-44 LOADING LOAD FACTOR DESIGN

WATERWAY INFORMATION

X	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT H.W.E.	HEAD-FT.		HEADWATER EL.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
DESIGN	20	1082	143	159	472.59				
BASE	100	1544	154	163	473.01	0.28	0.28		
OVERTOPPING									
MAX CALC.	500								



RIPRAP DETAIL

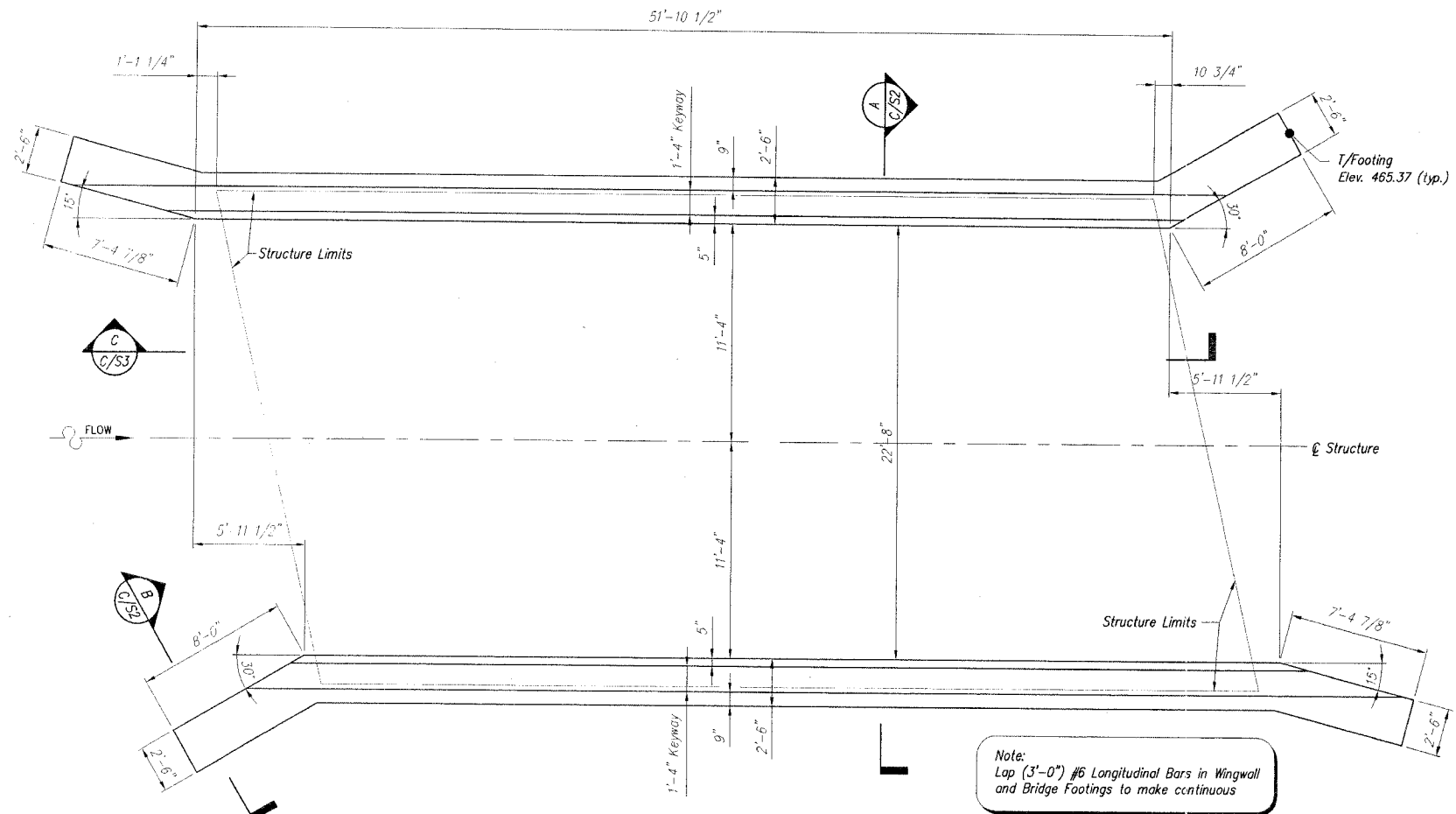
(TYP. BOTH ENDS)

CH-27 OVER NOVAK CREEK
 SECTION 03-00180-00-BR
 JEFFERSON COUNTY
 STATION 10+00

GENERAL PLAN & ELEVATION

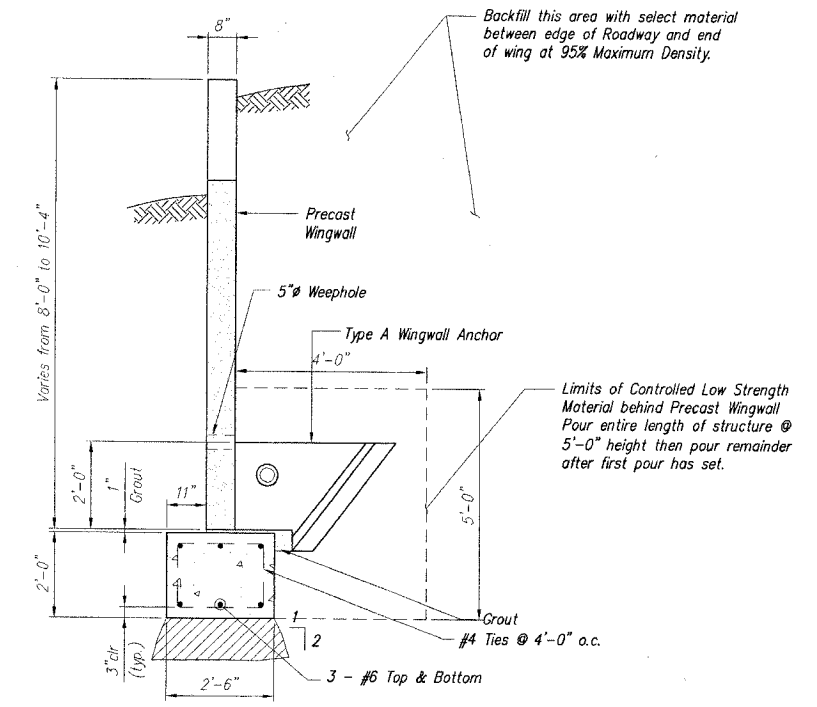
ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-BR	JEFFERSON	B	4
JEFFERSON COUNTY ROAD DISTRICT				

CONTRACT 95432



Note:
Lap (3'-0") #6 Longitudinal Bars in Wingwall and Bridge Footings to make continuous

FOUNDATION PLAN

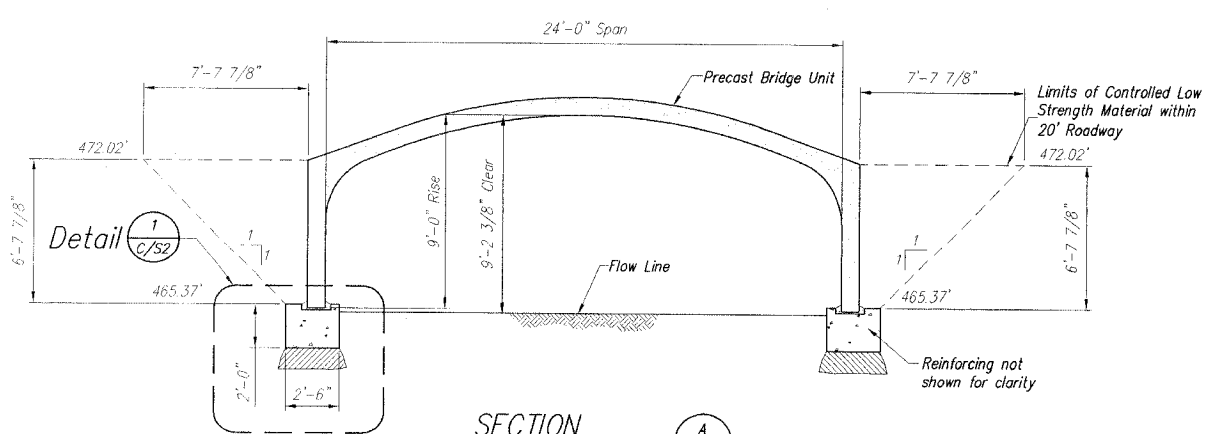


SECTION B

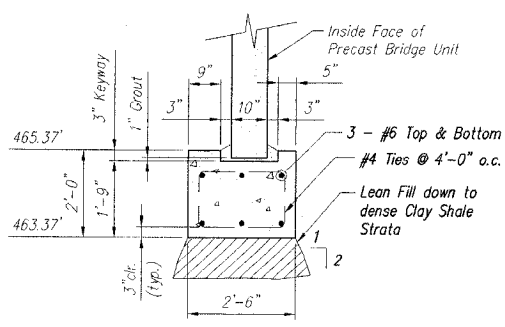


MATERIALS

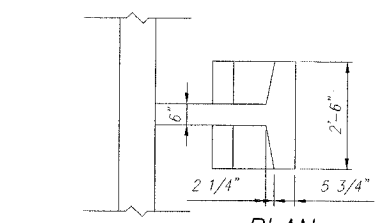
Precast units shall be constructed and installed in accordance with Manufacturer's Specifications. Concrete for Footings and Wingwalls shall have a minimum compressive strength of 4,000psi. Reinforcing steel for Footings and Wingwalls shall conform to ASTM A615, A616, or A617-Grade 60



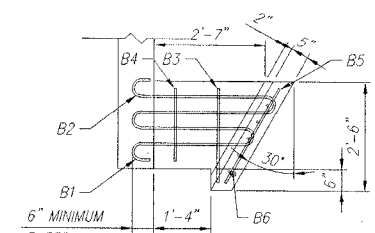
SECTION A



DETAIL 1



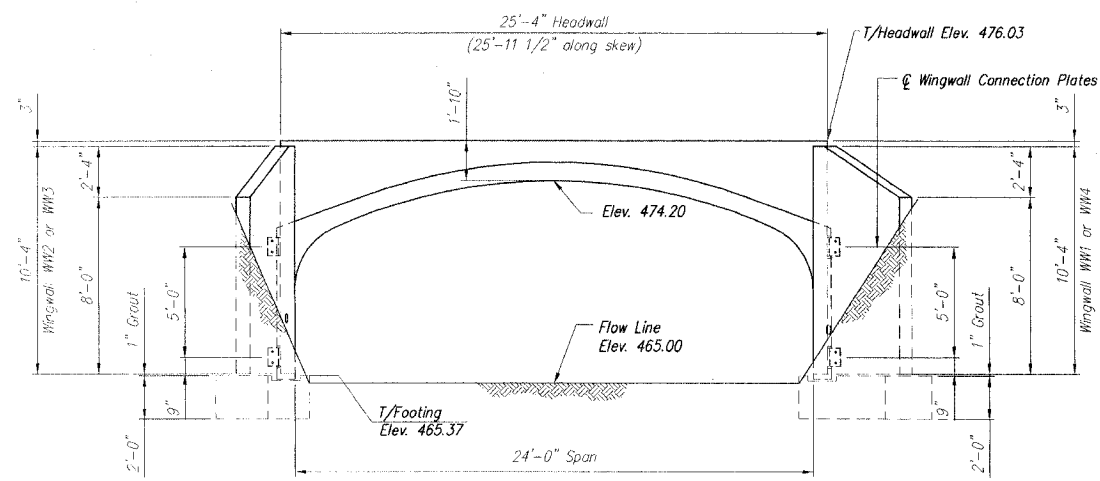
PLAN



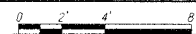
SECTION PRECAST WINGWALL TYPE A

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-BR	JEFFERSON	8	5
JEFFERSON COUNTY ROAD DISTRICT				

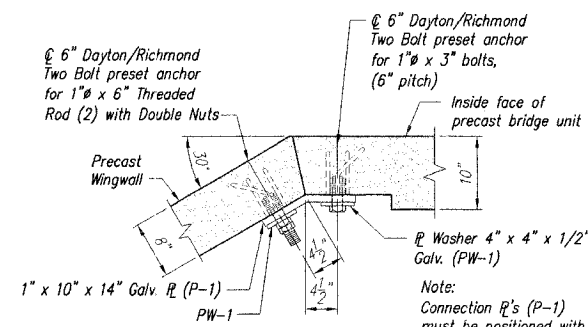
CONTRACT 95432



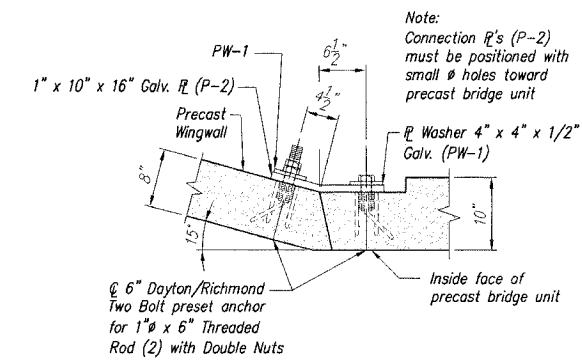
TYPICAL END ELEVATION



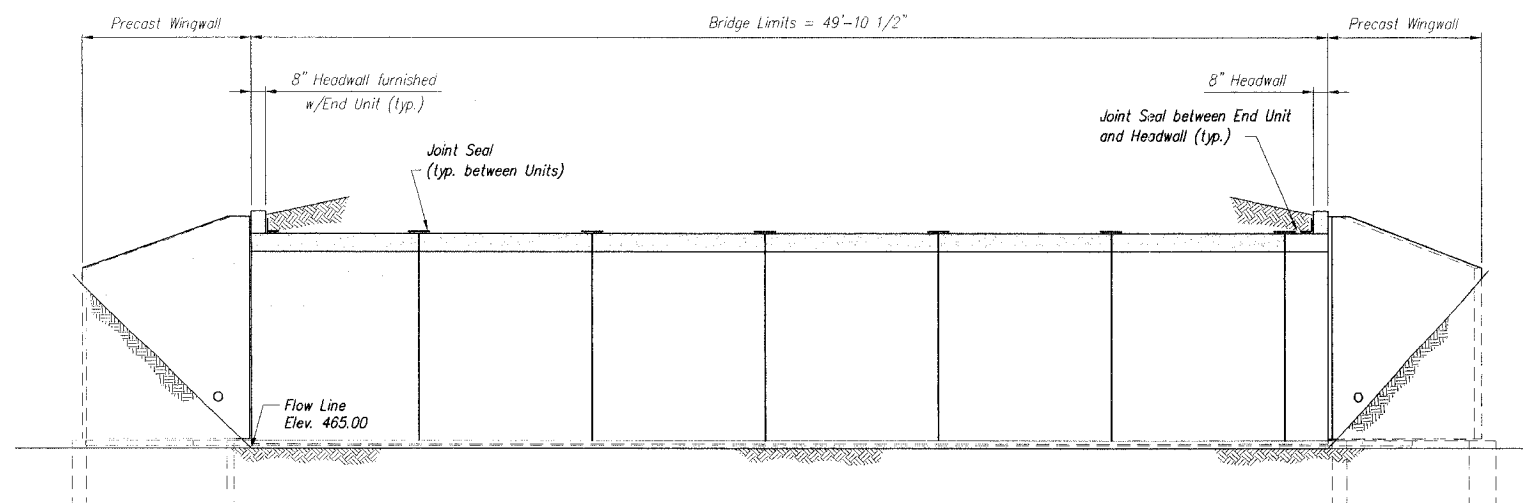
* Slope Stability by others



DETAIL 2



DETAIL 3



SECTION



C
C/S1

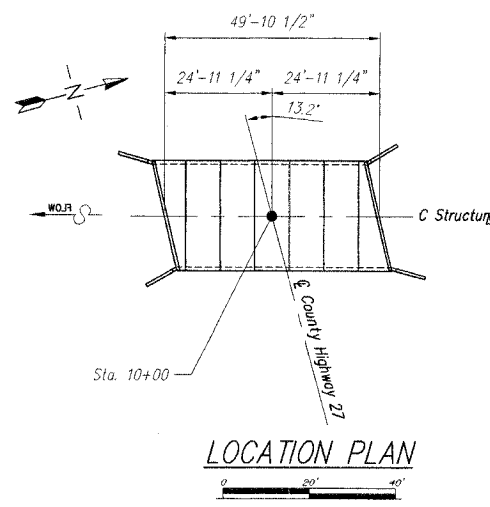
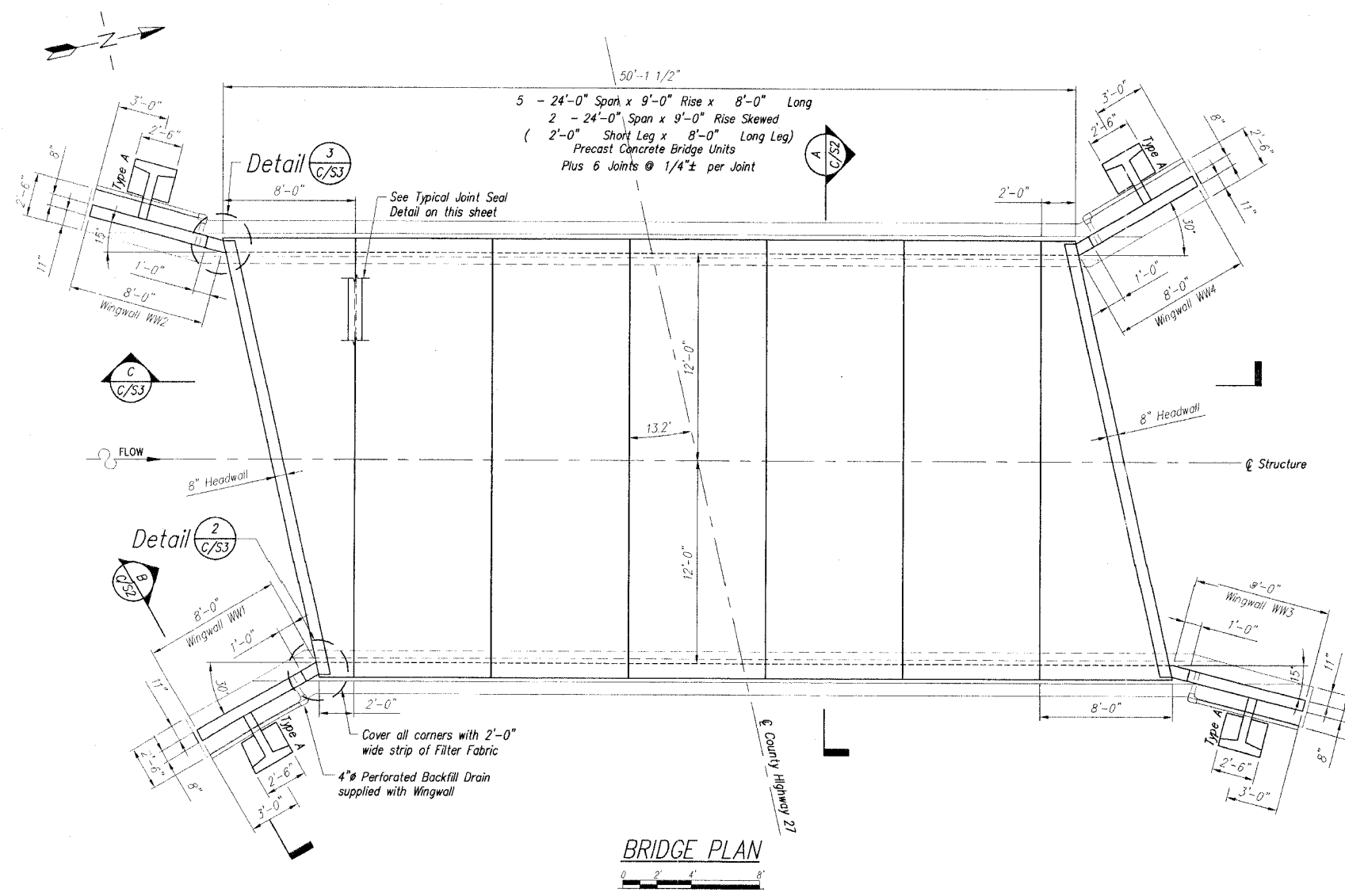
ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-BR	JEFFERSON	8	6
JEFFERSON COUNTY ROAD DISTRICT				

CONTRACT 95432

NOTES

GENERAL NOTES:

- This bridge has been designed for general site conditions. The project engineer shall be responsible for the structure's suitability to the existing site conditions and for the hydraulic evaluation -- including scour and confirmation of soil conditions.
- Prior to construction, contractor must verify all elevations shown through the engineer.



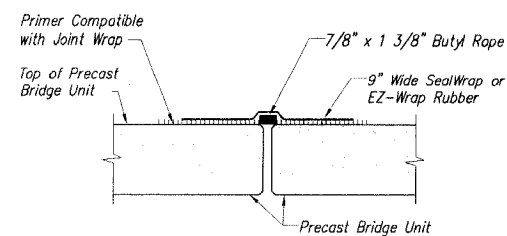
DESIGN DATA

Design Loading:
 Bridge Units: **HS20-44**
 Headwalls: **Earth Pressure Only**
 Wingwalls: **Earth Pressure Only**
 Design Fill Height: **Varies from 1'-0" min. to 5'-6" max.**
 from top of crown to top of pavement.
 Design Method: Load factor per AASHTO Specification
 Assumed net allowable soil bearing pressure: **8000 PSF ***
 Assumed gross allowable soil bearing pressure: **8000 PSF ***

*Bearing capacity is based upon soils borings provided by the Jefferson County Highway Department. If actual site conditions vary from the borings and a shale strata is not encountered, then the engineers must be notified for a revised foundation design.

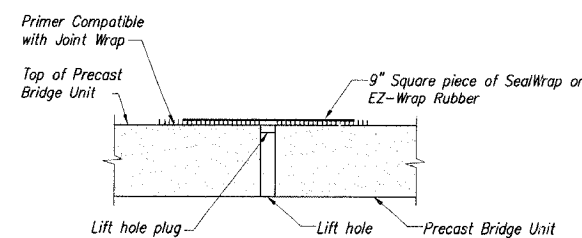
MATERIALS

Concrete for Footings shall have a minimum compressive strength of 4000 psi. Reinforcing steel for footings shall conform to ASTM A615, A616 or A617-Grade 60.

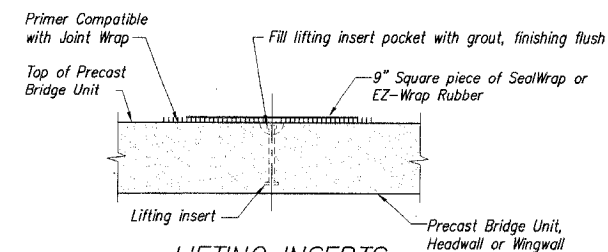


TYPICAL JOINT SEAL DETAIL

not to scale



LIFTING HOLES



LIFTING INSERTS

TYPICAL LIFT POINT SEALING DETAIL

not to scale

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
C.H. 27	03-00180-00-B	JEFFERSON	8	8

JEFFERSON CO. ROAD DISTRICT

CONTRACT 95432

ORIGINAL SURVEY
DATE: 10/1/00

ORIGINAL SURVEY
DATE: 10/1/00

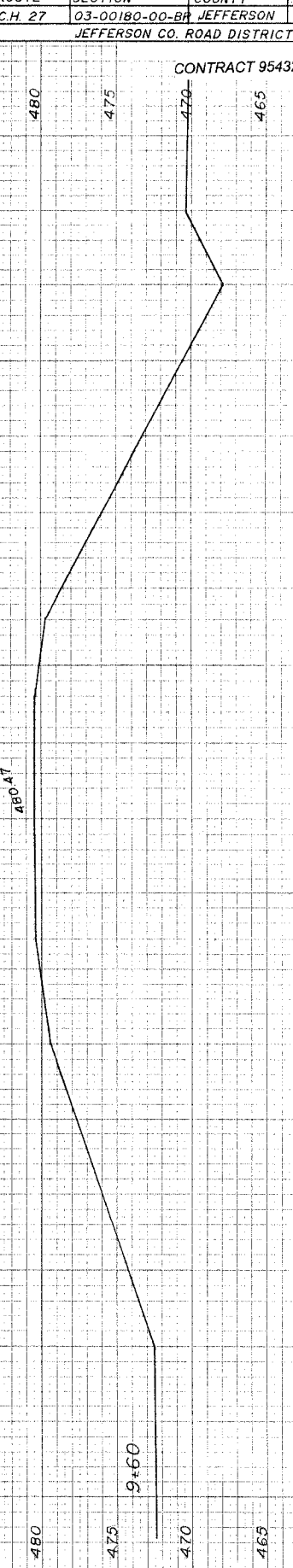
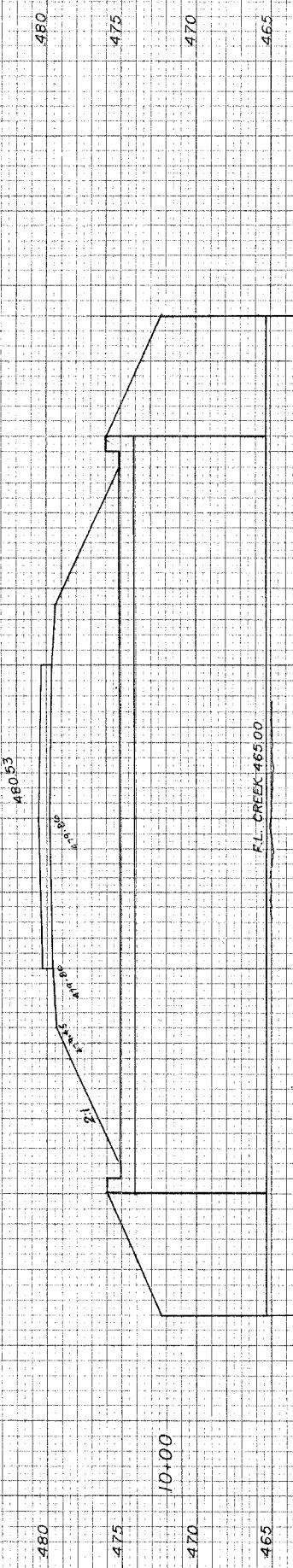
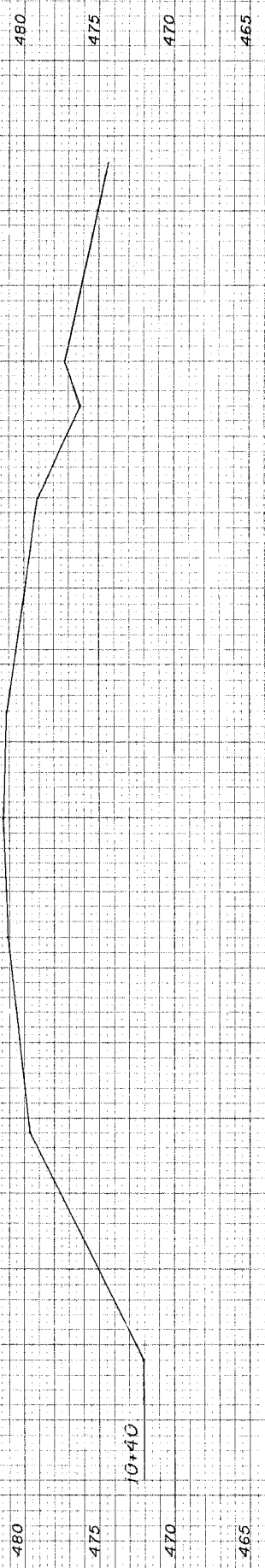


PLATE 3-FULL CROSS SECTION-FULL LINE
DATE: 10/1/00