

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

TRAFFIC DATA

DESIGN DESIGNATION:
F.A.U. 3799 (RIVER RD.) = COLLECTOR

ADT:
DESIGN
F.A.U. 3799 (RIVER RD.) = 7,600 (2030)

POSTED SPEED:
F.A.U. 3799 (RIVER RD.) = 30 MPH

DESIGN SPEED:
F.A.U. 3799 (RIVER RD.) = 30 MPH

BENCHMARK DATA

BENCHMARK #1:
R.R. SPIKE 2ND P.P. W. OF BRIDGE
40.3' RT., STA. 96+84.8, ELEV. 580.37

BENCHMARK #2:
CHSLD. "C" S.W. HDWL. OF BRIDGE
19.3' RT., STA. 99+58.9, ELEV. 587.24

BENCHMARK #3:
CHSLD. "C" N.E. COR. RET. WALL AT RIVER RD. & KING ST.
19.1' RT., STA. 102+80.9, ELEV. 596.00

UTILITY CONTACT INFORMATION

ELECTRIC:
COMMONWEALTH EDISON
ATTN: MR. JOSEPH STACHO
1N423 SWIFT RD.
LOMBARD, IL 60148
1-630-961-4645

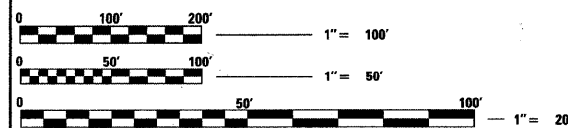
TELEPHONE:
A.T.&T.
ATTN: MR. BRUCE ROBBINS
65 WEST WEBSTER - FLOOR 2E
JOLIET, IL 60432
1-815-722-0349

GAS:
NICOR GAS
ATTN: MS. CONNIE LANE
1844 FERRY ROAD
NAPERVILLE, IL. 60563
(630) 388-3830

CABLE T.V.:
COMCAST CABLE COMMUNICATIONS
ATTN: MS. MARTHA GIERAS
688 INDUSTRIAL DRIVE
ELMHURST, IL. 60126
(630) 600-6352

WATER & SEWER:
UNITED CITY OF YORKVILLE
ATTN: MR. BRAD SANDERSON
800 GAME FARM RD.
YORKVILLE, IL 60560
1-630-553-4350

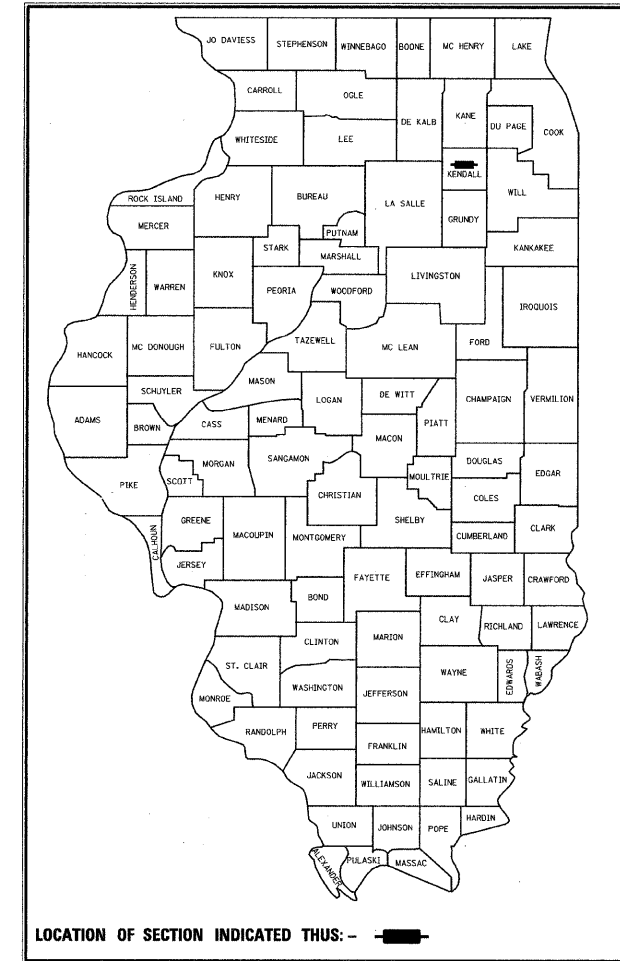
J.U.L.I.E. DIG NO:
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATION
1-800-892-0123



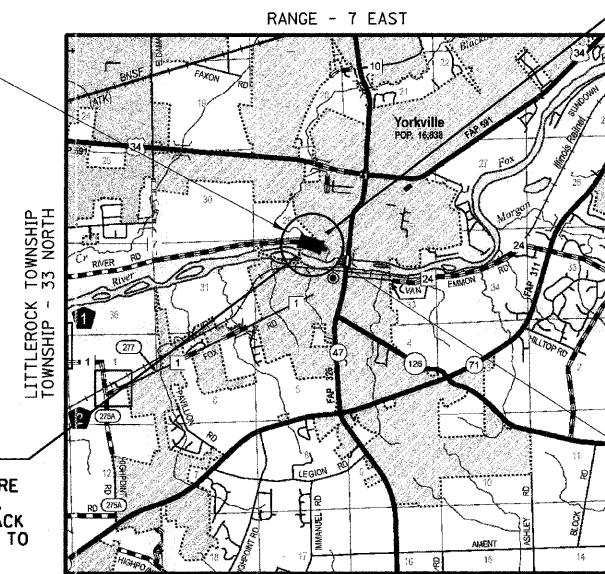
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

UNITED CITY OF YORKVILLE
F.A.U. 3799 (RIVER RD.) OVER BLACKBERRY CREEK
BRIDGE REPLACEMENT
SECTION 08-00036-00-BR
PROJECT BRM-9003 (883)
JOB C-93-038-12
KENDALL COUNTY



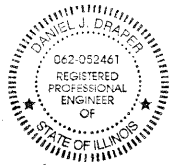
SECTION 08-00036-00-BR
BEGINS
STATION 95+00.00



EXISTING STRUCTURE 047-3007
TWO SPAN PPC DECK BEAM WITH HOT-MIX ASPHALT OVERLAY ON CLOSED ABUTMENTS SUPPORTED ON CONCRETE FOOTINGS. THE STRUCTURE IS 82'-3 1/2" BACK TO BACK OF ABUTMENTS, 28'-4" OUT TO OUT OF DECK.

PROPOSED STRUCTURE NO. 047-6500
STA. 99+98.81
SINGLE SPAN STEEL I-BEAM STRUCTURE WITH 8" REINFORCED CONCRETE DECK. THE STRUCTURE LENGTH IS 99'-3" BACK TO BACK OF ABUTMENTS, 33'-6" OUT TO OUT OF DECK.

SECTION 08-00036-00-BR
ENDS
STATION 104+50.00



Daniel J. Draper 12-22-2011
PROFESSIONAL ENGINEER, P.E.
NO. 062-052461
EXPIRES: 11/30/13
DANIEL J. DRAPER

PROJECT GROSS AND NET LENGTH:
F.A.U. 3799 (RIVER RD.) = 950.00 FEET (0.18 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED December 27 2011
Nancy J. Holm
MAYOR, UNITED CITY OF YORKVILLE

PASSED 12-30-2011
John H. ...
PROJECT IMPLEMENTATION ENGINEER

RELEASING FOR BID
BASED ON LIMITED
REVIEW 12-30-2011
Eric S. ...
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

Illinois Professional Design Firm # 184-000825

Hutchison Engineering, Inc.
Jacksonville - Since 1945 - Shorewood

FILE NAME = v:\2987\2987c\001.dgn	USER NAME = shughes	DESIGNED	REVISED -	KENDALL COUNTY DEPARTMENT OF HIGHWAYS	F.A.U. 3799 (RIVER RD.) COVER SHEET	F.A.U. RTE. 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 1		
	PLOT SCALE = 1,000' / IN.	DRAWN	REVISED -			SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87509		
	PLOT DATE = 12/22/2011	CHECKED -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT						
		DATE -	REVISED -									

GENERAL NOTES

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION. HE WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.

THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO THE LUMP SUM PAY ITEMS.

THE LOCATIONS OF KNOWN UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE AND DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THESE UTILITIES AND THE EXISTENCE AND LOCATION OF ANY UTILITY NOT SHOWN ON THE PLANS.

THE CONTRACTOR SHALL NOTIFY THE UTILITIES AT LEAST TEN (10) DAYS PRIOR TO ANY CONSTRUCTION IN THE AREA AND SHALL COMPLY WITH ALL RESTRICTIONS FOR EQUIPMENT MOVEMENTS AND CLEARANCES AS REGARDS TO THEIR FACILITIES.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR MUST CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRICAL, TELEPHONE, GAS FACILITIES, AND ALL PUBLIC UTILITIES. A 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWER AND APPURTENANCES THAT MUST BE KEPT IN OPERATION. IN PARTICULAR, THE CONTRACTOR WILL TAKE ADEQUATE MEASURES TO PREVENT THE UNDERMINING OF UTILITIES AND SEWERS WHICH ARE STILL IN SERVICE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE OR BASES ON WHICH THE HOT-MIX ASPHALT MIXTURES ARE TO BE PLACED.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

IF ANY LOOSE MATERIAL IS DEPOSITED DURING CONSTRUCTION OPERATIONS IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THAT IT RESTRICTS THE NATURAL FLOW OF WATER, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SO AFFECTED SHALL BE FREE FROM ALL DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THIS CONTRACT.

ALL FRAMES, GRATES, SIGNS, FENCES AND DELINEATORS, NEW OR EXISTING, DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

THE COST OF ADDITIONAL LABOR AND MATERIALS NOT ACCOUNTED FOR ON THE PLANS, WHICH MIGHT BE INVOLVED IN CONNECTING EXISTING DRAIN TILE OR STORM SEWERS TO PROPOSED DRAINAGE STRUCTURES, SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

EXISTING PAVEMENT, SIDEWALK, DRIVEWAY PAVEMENT, CURB AND GUTTER AND EXISTING DRAINAGE STRUCTURES NOT INCLUDED IN THE PLANS FOR REMOVAL, BUT DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

TRAFFIC SIGNS REMOVED MUST BE RESET AT THEIR PERMANENT LOCATIONS IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC ON THE ROADWAY AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL BE RESET BEFORE THE ROADWAY IS OPEN TO TRAFFIC. COST OF SUCH WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY (E.P.A.) REGULATIONS WHICH APPLY TO STORM SEWER CONSTRUCTION REGARDING THE HORIZONTAL AND VERTICAL SEPARATION OF A STORM SEWER LINE FROM ANY EXISTING OR PROPOSED WATERMAIN. AT LOCATIONS WHERE THE SEPARATION IS INADEQUATE, THE CONTRACTOR SHALL ADJUST THE WATERMAIN TO PROVIDE THE REQUIRED SEPARATION OR CONSTRUCT THE STORM SEWER OF THE MATERIAL SPECIFIED IN THE E.P.A. REGULATIONS.

NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

DURING THE CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED, AT HIS EXPENSE, TO HAVE AVAILABLE A WATER TRUCK OR SIMILAR EQUIPMENT TO CONTROL DUST. IF NECESSARY, THE CONTRACTOR SHALL BE REQUIRED TO CONTROL DUST DURING NON-WORKING HOURS.

FOR INLETS AND MANHOLES CONSTRUCTED IN CONJUNCTION WITH THE CURB AND GUTTER, THE STATION, OFFSET AND ELEVATION SHOWN IS AT THE FLOWLINE.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL EXISTING CULVERT, STORM SEWERS OR DRAINAGE STRUCTURES MARKED FOR REMOVAL ON THE PLANS OR DESIGNATED IN THE FIELD BY THE ENGINEER TO BE REMOVED SHALL BE REMOVED AND ANY EXCAVATION SHALL BE BACKFILLED WITH A GRANULAR MATERIAL MEETING THE SPECIFICATIONS FOR FA-1 OR FA-2. THE COST OF ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES FOR STORM SEWER REMOVAL OR PIPE CULVERT UNLESS REMOVAL PAID FOR AS A SPECIFIC ITEM.

ALL EXISTING GRANULAR MATERIAL AND HOT-MIX ASPHALT MATERIALS TO BE REMOVED AND NOT PAID AS A SPECIFIC ITEM SHALL BE CONSIDERED EARTH EXCAVATION AND WILL BE PAID FOR AT THE UNIT PRICE FOR EARTH EXCAVATION. THE CONTRACTOR WILL HAVE THE OPTION OF REMOVING THE EXISTING HOT-MIX ASPHALT MATERIAL BY GRINDING OR EXCAVATING THE MATERIAL. IF THE HOT-MIX ASPHALT MATERIAL IS REMOVED BY EXCAVATION, NO SUCH MATERIAL MAY BE USED IN EMBANKMENT AREAS UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.

THE CONTRACTOR SHALL NOT CROSS COMPLETED BASE COURSE OR EXISTING PAVEMENTS, NOT SCHEDULED TO BE REMOVED, WITH LOADED SCRAPERS.

ALL EMBANKMENTS AND SUB-GRADE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACING SUB-BASE GRANULAR MATERIAL.

UTILITY POLES, PEDESTALS, MANHOLES AND FIRE HYDRANTS TO REMAIN IN PLACE SHALL NOT BE DISTURBED BY THE CONTRACTOR. FINISHING AROUND THESE POLES, PEDESTALS, MANHOLES OR HYDRANTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

SAW CUT CONSTRUCTION JOINTS SHALL BE PROVIDED AT PAVED COMMERCIAL OR PRIVATE ENTRANCES AND AT ALL SIDE ROADS. THIS SHALL BE INCLUDED IN THE COST OF HOT-MIX ASPHALT SURFACE COURSE.

THE MAXIMUM COMPACTED THICKNESS OF A LIFT OF BASE COURSE WILL BE 4" UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

ADJUSTMENTS OF STRUCTURES MAINTAINED BY OTHER AGENCIES SHALL BE MADE TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY MAINTAINING THE SYSTEM OF THE STRUCTURE INVOLVED.

ALL FIELD TILES ENCOUNTERED SHALL BE CAREFULLY PRESERVED AND CONNECTED TO PROPOSED DRAINAGE STRUCTURES, SEWERS OR DITCHES AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID IN ACCORDANCE WITH ARTICLE 109.04.

TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF ARTICLE 201.05.

ALL CLEARING, REMOVAL OF BUSHES, HEDGES AND TREES UNDER 6" DIAMETER WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

TOPSOIL SHALL BE PLACED AT A DEPTH OF FOUR INCHES (4").

THE CROSS SECTIONS INDICATE THE FINISHED GRADE OF TOP SOIL.

TOPSOIL SHALL NOT BE STOCKPILED WITHIN THE LIMITS OF CONSTRUCTION. THE LOCATIONS OF TOPSOIL TO BE STOCKPILED WITHIN THE RIGHT-OF-WAY MUST BE APPROVED BY THE ENGINEER.

ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT ORANGE VESTS AND HARD HATS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05 TONS/CU YD		
BITUMINOUS MATERIALS PRIME COAT	0.08 GAL/SQ YD OR		
	0.375 GAL/SQ YD		
AGGREGATE PRIME COAT	0.002 TONS/SQ YD		
HOT-MIX ASPHALT SURFACE COURSE	112 LBS/SQ YD/INCH		
HOT-MIX ASPHALT BINDER COURSE	115 LBS/SQ YD/INCH		
LEVELING BINDER (MACHINE METHOD)	112 LBS/SQ YD/INCH		
NITROGEN FERTILIZER NUTRIENT	60 LBS/ACRE (SODDING)	90 LBS/ACRE (SEEDING)	
PHOSPHORUS FERTILIZER NUTRIENT	60 LBS/ACRE (SODDING)	90 LBS/ACRE (SEEDING)	
POTASSIUM FERTILIZER NUTRIENT	60 LBS/ACRE (SODDING)	90 LBS/ACRE (SEEDING)	

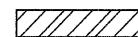
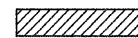

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STANDARDS, GENERAL NOTES AND LEGEND
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8-9	SCHEDULES OF QUANTITIES
10	TIE POINTS
11-13	PLAN & PROFILES
14	EROSION CONTROL PLAN
15	RIGHT OF WAY PLAT
16	INTERSECTION DETAIL
17	PAVEMENT MARKING PLAN
18	ENTRANCE DETAILS
19-21	SPECIAL DETAILS
22-45	STRUCTURE PLANS
46-49	IDNR PLANS
50-54	CROSS SECTIONS

LIST OF STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATE FOR BRIDGES
602701-02	MANHOLE STEPS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606401-01	PAVED DITCH
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-10	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS-DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
780001-03	TYPICAL PAVEMENT MARKINGS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO-WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

LEGEND

	PROPOSED HOT-MIX ASPHALT ENTRANCE
	PROPOSED AGGREGATE ENTRANCE
	HOT-MIX ASPHALT SURFACE REMOVAL

FILE NAME = v:\2987\2987g001.dgn	USER NAME = bdeor-ane	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.) INDEX OF SHEETS, LIST OF STANDARDS, GENERAL NOTES AND LEGEND				F.A.U. RTE. 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 2	
	PLOT SCALE = 1,000' / IN.	CHECKED -	REVISED -		SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87509					
	PLOT DATE = 12/19/2011	DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT									

SUMMARY OF QUANTITIES

SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	CONSTRUCTION CODE 0011 TOTAL QUANTITY	SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	CONSTRUCTION CODE 0011 TOTAL QUANTITY
	20100500	TREE REMOVAL, ACRES	ACRE	0.2		50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1
	20200100	EARTH EXCAVATION	CU YD	403		50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1
	20200200	ROCK EXCAVATION	CU YD	9		50300225	CONCRETE STRUCTURES	CU YD	349.1
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	64		50300255	CONCRETE SUPERSTRUCTURE	CU YD	217
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1313		50300260	BRIDGE DECK GROOVING	SQ YD	307
BDE	25000210	SEEDING, CLASS 2A	ACRE	0.3		50300280	CONCRETE ENCASEMENT	CU YD	25.0
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	27		50300300	PROTECTIVE COAT	SQ YD	658
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	27	GBSP	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	27		50500505	STUD SHEAR CONNECTORS	EACH	1062
BDE	25100630	EROSION CONTROL BLANKET	SQ YD	939		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	70880
BDE	25100115	MULCH, METHOD 2	ACRE	0.6		50800515	BAR SPLICERS	EACH	65
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	120		51100300	SLOPE WALL 6 INCH	SQ YD	120
	28000400	PERIMETER EROSION BARRIER	FOOT	1302		51201600	FURNISHING STEEL PILES HP12X53	FOOT	102
	28000500	INLET AND PIPE PROTECTION	EACH	1		51201900	FURNISHING STEEL PILES HP14X89	FOOT	536
	28100209	STONE RIPRAP, CLASS A5	TON	90		51500100	NAME PLATES	EACH	2
	28200200	FILTER FABRIC	SQ YD	60		51604000	DRILLED SHAFT IN ROCK	CU YD	3
	35101600	AGGREGATE BASE COURSE, TYPE B, 4"	SQ YD	132		52000110	PREFORMED JOINT STRIP SEAL	FOOT	33
	40200500	AGGREGATE SURFACE COURSE, TYPE B, 6"	SQ YD	17		52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6
SP	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	205		52100520	ANCHOR BOLTS, 1"	EACH	24
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	679		54002110	EXPANSION BOLTS 7/8 INCH	EACH	45
BDE	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	14		542A1933	PIPE CULVERTS, CLASS A, TYPE 3 48"	FOOT	100
BDE	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	711		58700300	CONCRETE SEALER	SQ FT	165
BDE	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	261	GBSP	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	162
	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	15		60255500	MANHOLES TO BE ADJUSTED	EACH	2
	42001300	PROTECTIVE COAT	SQ YD	242		60603800	COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12	FOOT	298
	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	35		60605000	COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24	FOOT	661
	44000100	PAVEMENT REMOVAL	SQ YD	1452		61100605	MISCELLANEOUS CONCRETE	CU YD	1
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	125	SI, BDE	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	104	SI	63100167	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	EACH	2
	44000600	SIDEWALK REMOVAL	SQ FT	98	SI	63200310	GUARDRAIL REMOVAL	FOOT	457
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	162		66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	4
GBSP	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		66700205	PERMANENT SURVEY MARKERS TYPE I	EACH	4
	50102400	CONCRETE REMOVAL	CU YD	11.0		67100100	MOBILIZATION	L SUM	1
GBSP	50200100	STRUCTURE EXCAVATION	CU YD	90		72000100	SIGN PANEL - TYPE 1	SQ FT	6.3
	50200300	COFFERDAM EXCAVATION	CU YD	715		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	13

SP=SPECIAL PROVISION

SI=SPECIALITY ITEM

BDE=BUREAU OF DESIGN AND ENVIRONMENT

GBSP=GUIDE BRIDGE SPECIAL PROVISION

RSP = RECURRING SPECIAL PROVISION

FILE NAME =
vt\2987\2987q001.dgn

USER NAME = shughes
PLOT SCALE = 1/8" = 1' / IN.
PLOT DATE = 12/22/2011

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 3799 (RIVER RD.) SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. N/A TO STA. N/A

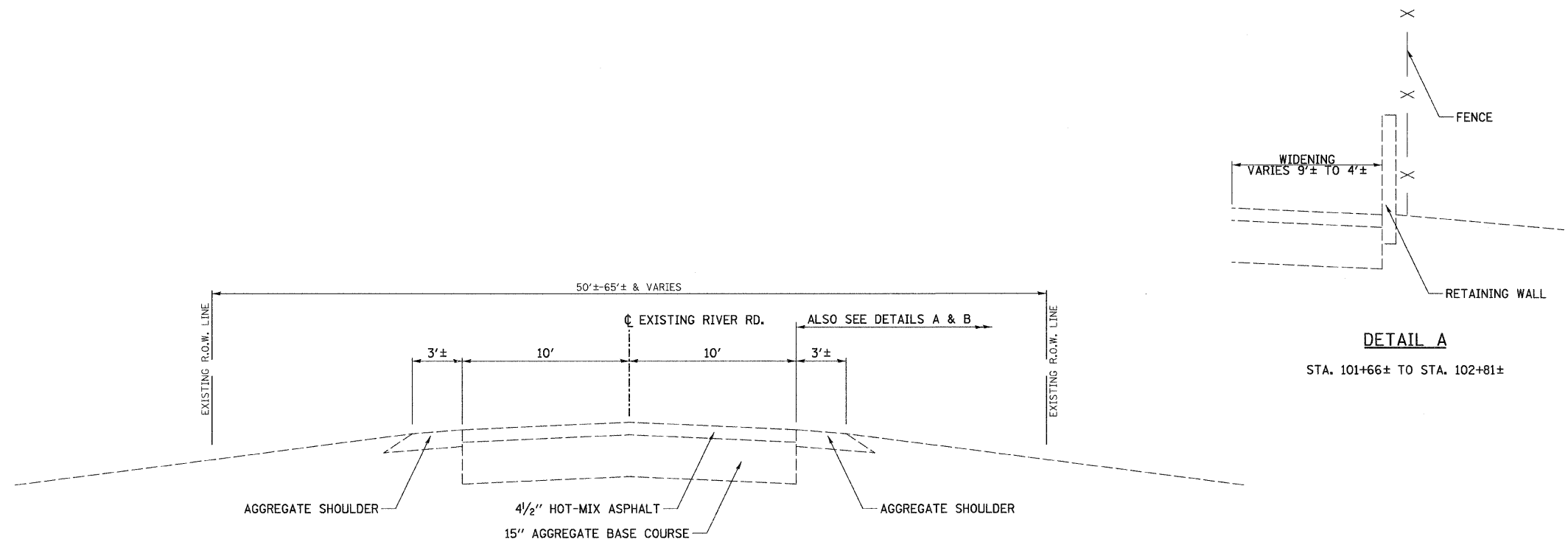
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	3
CONTRACT NO. 87509			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES

SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	CONSTRUCTION CODE 0011 TOTAL QUANTITY	SPECIALTY ITEM &/OR SPECIAL PROVISION	CODE NO.	DESCRIPTION	UNIT	CONSTRUCTION CODE 0011 TOTAL QUANTITY
SI	78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	2460					
SI	78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	18					
SI, RSP	78200410	GUARDRAIL MARKERS, TYPE A	EACH	8					
SI, RSP	78201000	TERMINAL MARKER DIRECT APPLIED	EACH	2					
GBSP	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CJ YD	190					
SP	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	922					
SP	X6026056	SANITARY MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1					
SP	X6020182	DRAINAGE STRUCTURE SPECIAL	L SUM	1					
SP	X6061460	PAVED DITCH (SPECIAL)	FOOT	102					
SP	X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1					
SP	XX007218	SANITARY MANHOLES TO BE RECONSTRUCTED (SPECIAL)	EACH	1					
SP	Z0001050	AGGREGATE SUBGRADE, 12"	SQ YD	1778					
SP	Z0013200	CONCRETE REFERENCE MARKERS	EACH	6					
GBSP	Z0013302	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	400					
SP	Z0013798	CONSTRUCTION LAYOUT	L SUM	1					
GBSP	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	66					
GBSP	Z0065000	SETTING PILES IN ROCK	EACH	26					
BDE	Z0076600	TRAINEES	HOUR	1000*					

*CONSTRUCTION CODE 0042

SP=SPECIAL PROVISION SI=SPECIALITY ITEM BDE=BUREAU OF DESIGN AND ENVIRONMENT GBSP=GUIDE BRIDGE SPECIAL PROVISION RSP = RECURRING SPECIAL PROVISION



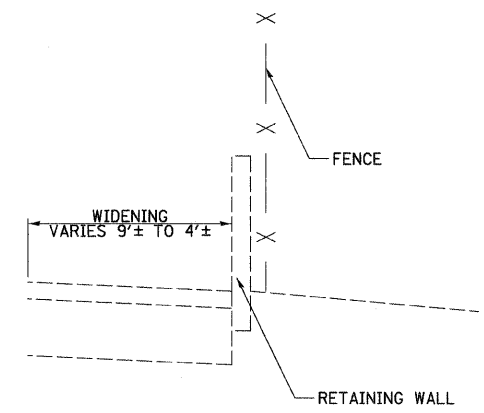
EXISTING TYPICAL SECTION

F.A.U. 3799 (RIVER RD.)

STA. 95+00.00 TO STA. 99+59.48
 STA. 100+40.54 TO STA. 104+50.00

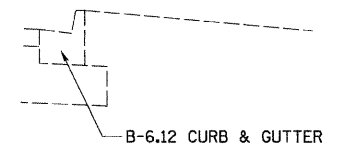
(SEE BRIDGE PLANS FOR TYPICAL SECTION.)
EXISTING BRIDGE TYPICAL SECTION

STA. 99+59.48 TO STA. 100+40.54



DETAIL A

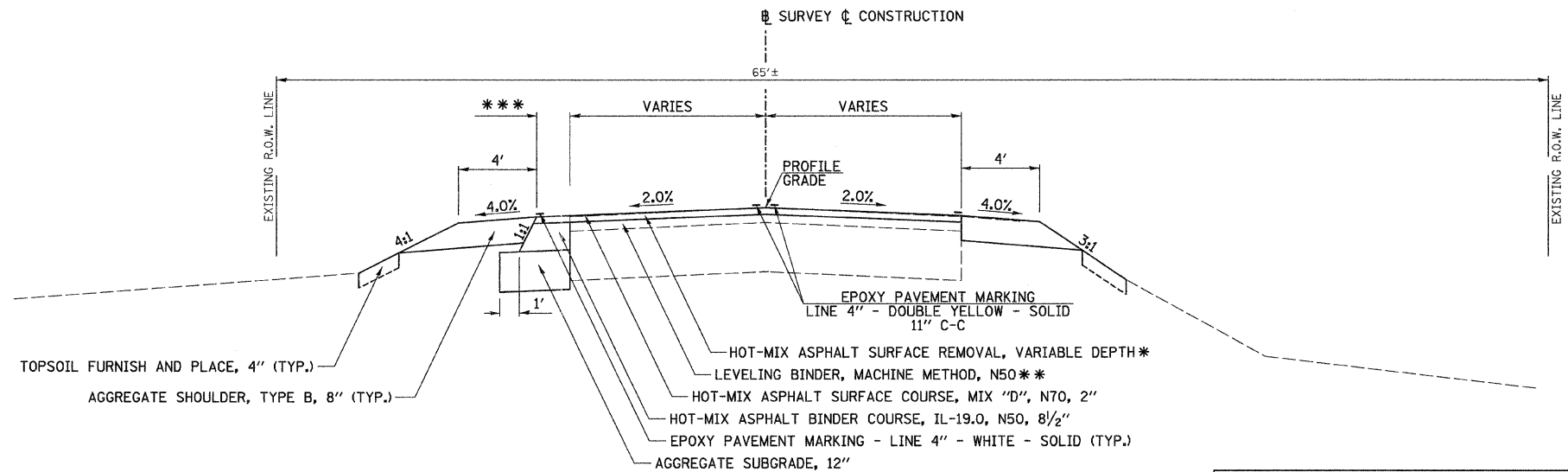
STA. 101+66± TO STA. 102+81±



DETAIL B

STA. 102+81± TO STA. 105+50±

FILE NAME = V:\2987\2987\001.dgn	USER NAME = bdecrone	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.), EXISTING TYPICAL SECTION	F.A.U. RTE. 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 5		
	PLOT SCALE = 4.000' / IN.	CHECKED -	REVISED -			SCALE: N/A	SHEET NO. 1 OF 3 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87509		
	PLOT DATE = 12/16/2011	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						



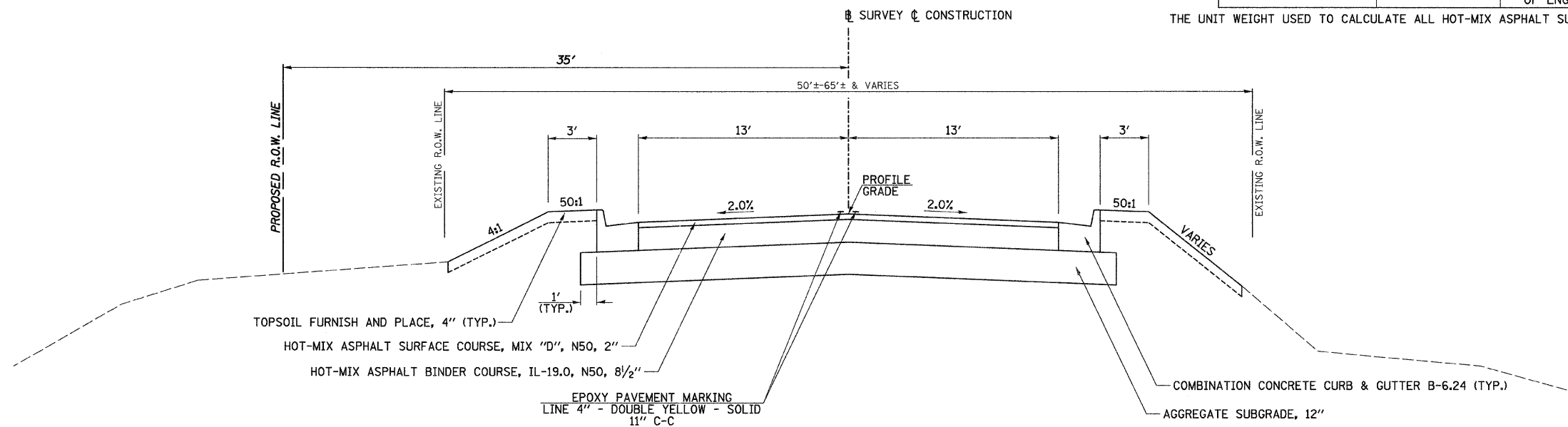
*** VARIES FROM 0' AT 95+00.00 TO 5' AT STA. 97+50.00

**PROPOSED TYPICAL SECTION
F.A.U. 3799 (RIVER RD.)**

STA. 95+00.00 TO STA. 97+50.00 *
STA. 97+50.00 TO STA. 98+00.00 **

LOCATION: F.A.U. 3799 (RIVER RD.)			
	HOT-MIX ASPHALT BINDER	HOT-MIX ASPHALT LEVELING BINDER	HOT-MIX ASPHALT SURFACE
PG GRADE	PG64-22	PG64-22	PG64-22
DESIGN AIR Voids	4% @ N50	4% @ N50	4% @ N50
MIXTURE COMPOSITION	IL-19.0	IL-9.5	IL-9.5
FRICTION AGGREGATE	N/A	N/A	MIX "D"
DENSITY TEST METHOD	CORES	SATISFACTION OF ENGINEER	CORES

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SQ YD/IN.



**PROPOSED TYPICAL SECTION
F.A.U. 3799 (RIVER RD.)**

STA. 98+00.00 TO STA. 99+13.18

(SEE BRIDGE PLANS FOR TYPICAL SECTION.)

PROPOSED TYPICAL BRIDGE CROSS SECTION

STA. 99+13.18 TO STA. 99+19.18 (CONNECTOR PAVEMENT)
STA. 99+19.18 TO STA. 99+49.18 (BRIDGE APPROACH)
STA. 99+49.18 TO STA. 100+49.43 (BRIDGE)
STA. 100+48.43 TO STA. 100+78.43 (BRIDGE APPROACH)
STA. 100+78.43 TO STA. 100+84.43 (CONNECTOR PAVEMENT)

F.A.U. 3799 (RIVER RD.) STRUCTURAL PAVEMENT DESIGN

STRUCTURAL DESIGN TRAFFIC (S.D.T.) YEAR 2020

PV = 4972 SU = 396 MU = 283

CLASS II ROAD
SUB-GRADE SUPPORT RATING: POOR
PERCENT OF S.D.T. IN DESIGN LANE: 50%

TRAFFIC FACTOR = 1.54

PAVEMENT STRUCTURE MATERIALS RECONSTRUCTION:

SURFACE COURSE TYPE: HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
BASE COURSE TYPE: HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 8 1/2"
SUB-BASE TYPE: AGGREGATE SUBGRADE, 12"

FILE NAME =
V:\2987\2987.dgn

USER NAME = bdeoraone

DESIGNED -

REVISED -

PLOT SCALE = 4,000' / IN.

DRAWN -

REVISED -

PLOT DATE = 12/16/2011

CHECKED -

REVISED -

DATE -

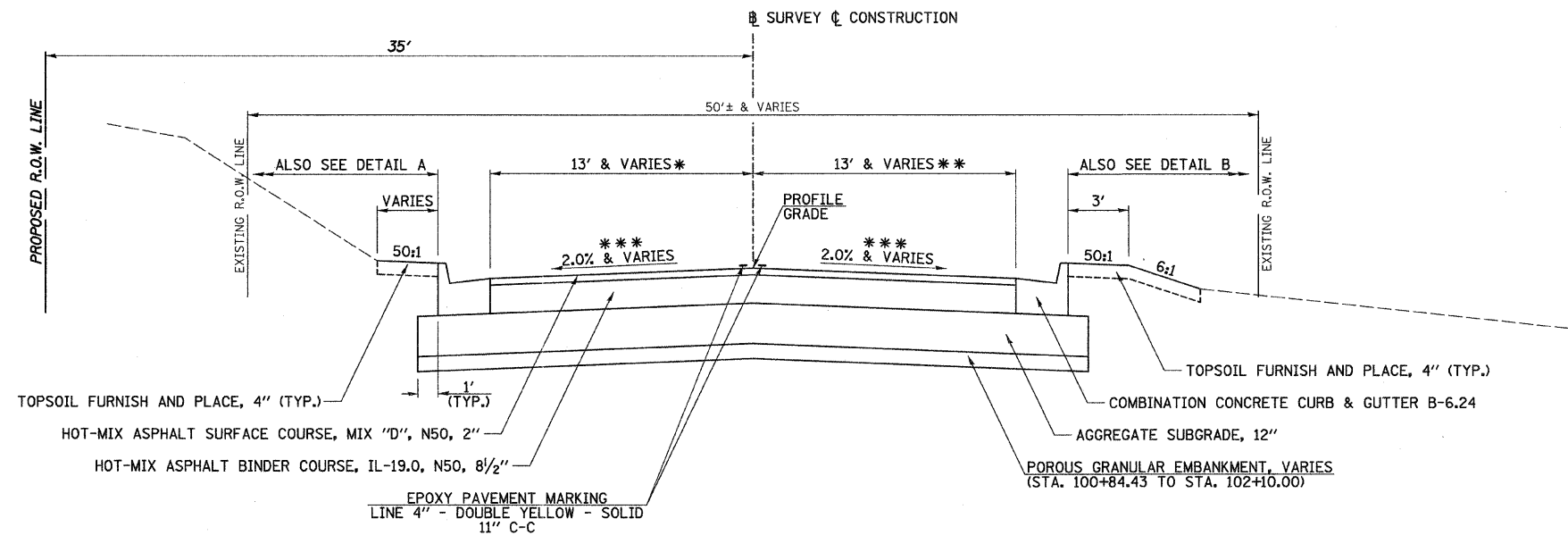
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.U. 3799 (RIVER RD.), PROPOSED TYPICAL SECTIONS

SCALE: N/A SHEET NO. 2 OF 3 SHEETS STA. N/A TO STA. N/A

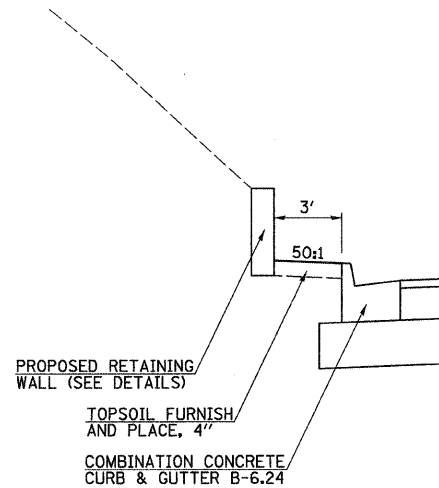
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	6
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 87509	



**PROPOSED TYPICAL SECTION
F.A.U. 3799 (RIVER RD.)**

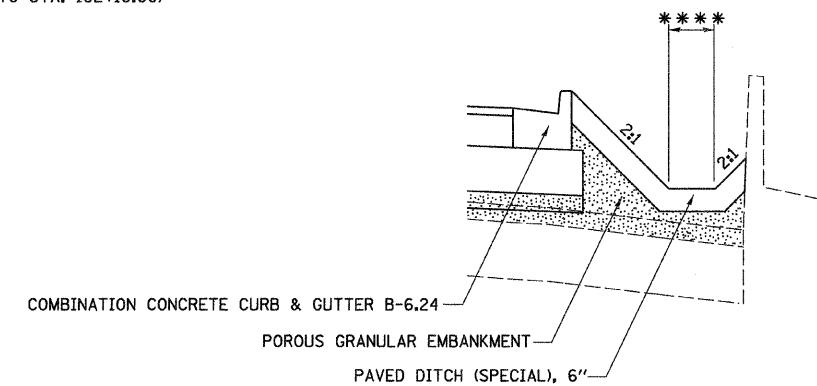
STA. 100+84.43 TO STA. 103+33.93
(INCLUDE KING ST.)

- * 13' FROM STA. 100+84.43 TO STA. 102+55.00
VARIES FROM STA. 102+55.00 TO STA. 103+33.93
- ** 13' FROM STA. 100+84.43 TO STA. 103+12.96
VARIES FROM STA. 103+12.96 TO STA. 103+33.93
- *** SEE CROSS SECTIONS FOR PAVEMENT CROSS-SLOPES.
- **** VARIES FROM 3' AT STA. 101+77.55 TO 1' AT STA. 102+25.12
- ***** VARIES FROM 4.3' AT STA. 103+33.93 TO 0' AT STA. 104+50.00



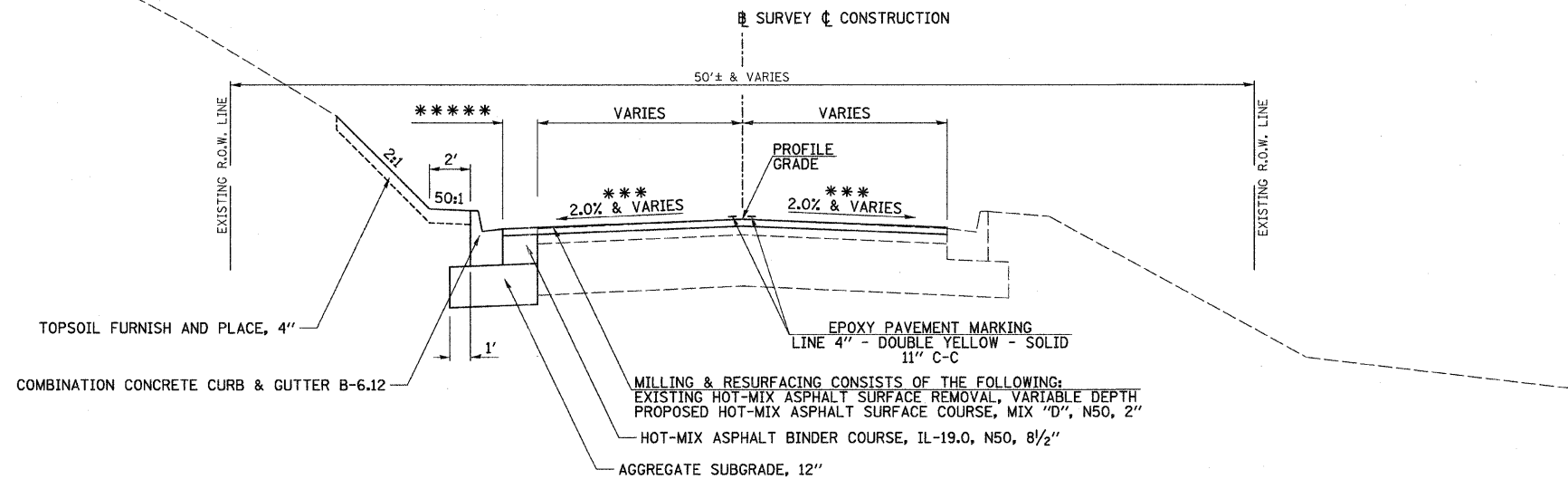
DETAIL A

STA. 101+70.00 TO STA. 102+45.00



DETAIL B

STA. 101+77.55 TO STA. 102+79.98



**PROPOSED TYPICAL SECTION
F.A.U. 3799 (RIVER RD.)**

STA. 103+33.93 TO STA. 104+50.00

FILE NAME = v:\2987\2987.dgn	USER NAME = bdeoraene	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.), PROPOSED TYPICAL SECTIONS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 4,000' / IN.	CHECKED -	REVISED -	3799					08-00036-00-BR	KENDALL	54	7	
PLOT DATE = 12/19/2011	DATE -	REVISED -	SCALE: N/A			SHEET NO. 3 OF 3 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 87509			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT												

TREE REMOVAL, ACRES					
STATION +/-	TO	STATION +/-	SIDE	SQ FT	ACRE
95+00.0	TO	96+28.0	LT	477.9	0.01
98+29.0	TO	99+60.0	LT	3010.0	0.07
100+38.0	TO	102+72.0	LT	3690.3	0.08
103+09.0	TO	104+05.0	LT	462.1	0.01
TOTAL					0.2

EROSION CONTROL BLANKET						
LOCATION			LENGTH	WIDTH	AREA	
STATION +/-	TO	STATION +/-	FOOT	FOOT	SQ YD	
97+50	TO	99+30	LT	180	VAR	191
97+50	TO	99+50	RT	200	VAR	166
100+40	TO	102+74	LT	234	VAR	346
100+50	TO	101+36	RT	86	VAR	100
103+02	TO	104+50	LT	148	VAR	136
TOTAL					939	

EARTHWORK						
1		2		3	4	5
STATION	TO	STATION	EARTH EXCAVATION	EARTH EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE(+) OR SHORTAGE(-)
						CU YD
95+00.0	TO	104+50.0	403.0	302.3	276.0	26.3
TOTAL			403	302	276	26

SHRINKAGE FACTORS: 25%
EARTH EXCAVATION:
COLUMN 1, 2, 3 & 4 - LOCATION AND QUANTITIES FROM CROSS SECTIONS.
CUT = EARTH EXCAVATION AND FILL = EMBANKMENT
COLUMN 3 = COLUMN 2 x (1 - EARTH EXCAVATION SHRINKAGE FACTOR)
COLUMN 5 = COLUMN 3 - COLUMN 4

PAY ITEM:
COLUMN 2 IS EARTH EXCAVATION = 403 CU YD

TEMPORARY EROSION CONTROL SEEDING								
STATION +/-	TO	STATION +/-	SIDE	ACRES	POUNDS PER APPLICATION PER ACRE	NUMBER OF APPLICATIONS	TOTAL POUND	MULCH METHOD 2 ACRE
95+00.0	TO	104+50.0	LT & RT	0.3	100.0	4	120	0.3
TOTAL							120	0.3

MULCH METHOD 2 IS USED FOR TEMPORARY MULCHING, ONLY ONE APPLICATION OF MULCHING HAS BEEN INCLUDED. SEEDING CLASS 7 WILL BE USED FOR TEMPORARY EROSION CONTROL SEEDING.

PERIMETER EROSION BARRIER				
STATION	TO	STATION	SIDE	LENGTH FOOT
95+00.00	TO	99+50.00	LT	503
95+00.00	TO	99+50.00	RT	484
100+50.00	TO	102+51.31	LT	205
100+50.00	TO	101+25.00	RT	110
TOTAL				1302

PERIMETER EROSION BARRIER IS SILT FENCE.

TOPSOIL, SEEDING, MULCH & NUTRIENTS									
STATION +/-	TO	STATION +/-	SIDE	TOPSOIL FURNISH AND PLACE, 4"	SEEDING, CLASS 2A	MULCH, METHOD 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
				SQ YD	ACRE	ACRE	POUND	POUND	POUND
95+00.0	TO	104+50.0	LT & RT	1312.5	0.3	0.3	27.0	27.0	27.0
TOTAL				1313	0.3	0.3	27	27	27

FERTILIZER NUTRIENTS ARE FIGURED AT THE RATE OF APPLICATION OF 90 POUNDS/ACRE.

PERMANENT SURVEY MARKERS AND CONCRETE REFERENCE MARKERS				
STATION	OFFSET	DESCRIPTION	PERMANENT SURVEY MARKERS, TYPE 1	CONCRETE REFERENCE MARKER
89+83.41	CL	POT	1	3
96+96.09	CL	PC	1	•
104+68.03	CL	PT	1	•
110+97.07	CL	POT	1	3
TOTAL			4	6

• REFERENCE MARKERS SHALL BE MARKED ON TOP OF CURB.

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS			
STATION	SIDE	OFFSET FOOT	EACH
97+50.00	LT	21.85	1
97+50.00	LT	35.00	1
100+90.42	LT	35.00	1
102+51.31	LT	35.00	1
TOTAL			4

INLET AND PIPE PROTECTION				
STATION	LOCATION	SIDE	OFFSET FOOT	EACH
101+74.2	INLET	RT	22.6	1
TOTAL				1

MANHOLES TO BE ADJUSTED				
STATION	OFFSET (+/-FT)	SIDE	TYPE	EACH
102+98.20	2.5	RT	WATER	1
103+07.31	15.8	LT	WATER	1
TOTAL				2

SANITARY MANHOLES				
STATION	OFFSET (+/-)	SIDE	TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	TO BE RECONSTRUCTED (SPECIAL)
			EACH	EACH
101+55.95	15.2	RT		1
102+85.30	9.2	RT	1	
TOTAL			1	1

FILE NAME = v:\2987\2987q003.dgn

USER NAME = bdeoraene
PLOT SCALE = 1.0000' / IN.
PLOT DATE = 12/16/2011

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 3799 (RIVER RD.) SCHEDULES OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. N/A TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	8
				CONTRACT NO. 87509
ILLINOIS FED. AID PROJECT				

PAVEMENT												
STATION	TO	STATION	BITUMINOUS MATERIALS (PRIME COAT) (0.08 GAL/SY)	BITUMINOUS MATERIALS (PRIME COAT) (0.375 GAL/SY)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	AGGREGATE SUBGRADE, 12"	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	LEVELING BINDER (MACHINE METHOD), N50	POROUS GRANULAR EMBANKMENT	AGGREGATE SHOULDERS TYPE B	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
			GALLON	GALLON	TON	TON	SQ YD	SQ YD	TON	CU YD	TON	SQ YD
F.A.U. 3799 (RIVER RD.) & KING ST.												
95+00.00	TO	98+00.00	69.5	84.0	82	97	224	656	14		162	
98+00.00	TO	99+13.18		122.6	160	37	417					
99+13.18	TO	99+19.18					22					17.3
BRIDGE												
100+78.43	TO	100+84.43					22			2		17.3
100+84.43	TO	103+33.93		317.9	414	95	1040			62		
103+33.93	TO	104+50.00	21.3	13.7	10	32	53	266				
TOTAL			91	538	665	261	1778	922	14	64	162	35

NOTES: STA. 100+84.43 TO STA. 103+33.93 INCLUDE QUANTITIES FOR KING ST.
AGGREGATE SUBGRADE QUANTITIES ARE INCLUDED FOR UNDER CONNECTOR PAVEMENT - 44 SQ YDS

COMBINATION CONCRETE CURB AND GUTTER						
LOCATION		SIDE	TYPE B-6.12	TYPE B-6.24	PROTECTIVE COAT	NOTES
STATION	TO STATION		FOOT	FOOT	SQ YD	
98+00.0	TO	99+19.2		119.2	34.2	
98+00.0	TO	99+19.2		119.2	34.2	
100+78.4	TO	103+12.96	32.1	202.4	63.7	
ENTRANCE @ STA. 101+55.9		RT	97.0		17.0	
100+78.4	TO	104+50.0	169.0	219.7	92.6	INCLUDES KING ST.
TOTAL			298	661	242	

*SEE SPECIAL PROVISIONS AND SPECIAL DETAILS.

AGGREGATE FOR TEMPORARY ACCESS					
STATION	SIDE	WIDTH	LENGTH	THICKNESS	TON
		FOOT			
101+55.9	RT	16	224	0.75	204.1
TOTAL					205

ENTRANCE							
STATION	SIDE	TYPE	AGGREGATE BASE COURSE, TYPE B, 4"	AGGREGATE SURFACE COURSE, TYPE B, 6"	HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50	INCIDENTAL HOT-MIX ASPHALT SURFACING	BITUMINOUS MATERIALS (PRIME COAT) 0.375 G/SY
			SQ YD	SQ YD	TON	TON	GAL
101+55.90	RT	CE	131		45	15	49.2
103+05.90	RT	PE		17			
TOTAL			132	17	46	15	50

PAVEMENT REMOVAL			
LOCATION			AREA
STATION	TO	STATION	SQ YD
95+00.00	TO	98+00.00 RT. EDGE AREA	79.4
98+00.00	TO	EXISTING BRIDGE	431.4
EXISTING BRIDGE		TO 103+33.80	859.9
SHOULDER AREA IN FRONT OF WALL, RT. SIDE			80.9
TOTAL			1452

WHERE IT IS REQUIRED TO REMOVE ANY OR ALL OF THE EXISTING SUB-BASE IT IS TO BE CONSIDERED INCLUDED IN THE COST OF THE PAVEMENT REMOVAL.

COMBINATION CURB & GUTTER REMOVAL				
LOCATION		SIDE	FOOT	
STATION +/-	TO STATION +/-			
ENTRANCE STA. 101+55.9		RT	31.0	
ENTRANCE STA. 101+55.9		RT	41.0	
102+81.0	TO 103+13.0	RT	32.0	
TOTAL			104	

SIDEWALK REMOVAL			
STATION	SIDE	AREA	
		SQ FT	
102+54.8	LT	98	
TOTAL		98	

DRIVEWAY PAVEMENT REMOVAL			
STATION	SIDE	HOT-MIX ASPHALT	
		SQ YD	
101+55.9	RT	124.5	
TOTAL		125	

PAVED DITCH (SPECIAL)				
STATION	TO	STATION	SIDE	FOOT
101+77.67	TO	102+79.94	RT	102.3
TOTAL				102

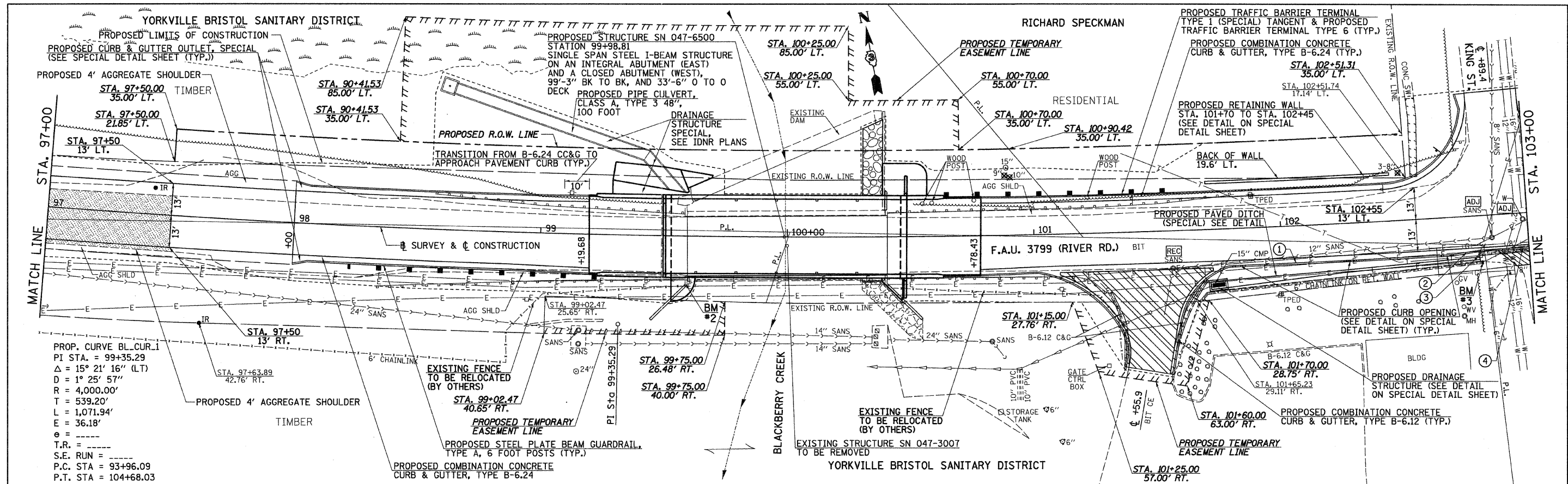
STEEL PLATE BEAM GUARDRAIL					
LOCATION	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL TYPE 6	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL MARKERS, TYPE A	GUARDRAIL REMOVAL
	EACH	EACH	EACH	EACH	FOOT
SOUTHWEST SIDE	1	1	1	4	125
SOUTHEAST SIDE					91
NORTHWEST SIDE					101
NORTHEAST SIDE	1	1	1	4	140
TOTAL					457

TELESCOPING STEEL SIGN SUPPORTS AND SIGN PANELS				
LOCATION		TYPE	TELESCOPING STEEL SIGN SUPPORT	SIGN PANEL
STATION +/-	SIDE		FOOT	SQ FT
102+65.00	LT	RI-1	12.5	6.3
TOTAL			13	6.3

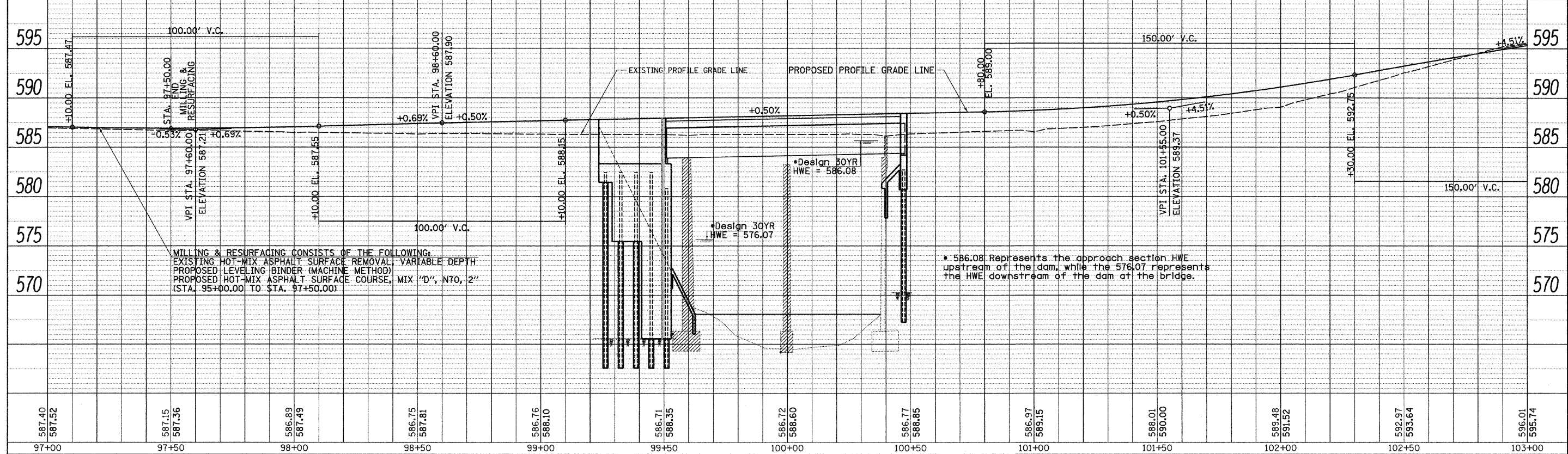
EPOXY PAVEMENT MARKING						
STATION	TO	STATION	SIDE	LINE		
				4" DOUBLE YELLOW CENTERLINE	4" SOLID WHITE EDGE LINE	24" SOLID WHITE STOP
			FOOT			
95+00.0	TO	98+00.00		600		
95+00.0	TO	104+50.00		1860		18
SUB-TOTAL				1860	600	18
TOTAL				2460		18

PLAN	SURVEYED	DATE
	PLOTTED	BY
	REVISIONS	
	NO. DATE	
	NO. DATE	
	NO. DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	REVISIONS	
	NO. DATE	
	NO. DATE	
	NO. DATE	



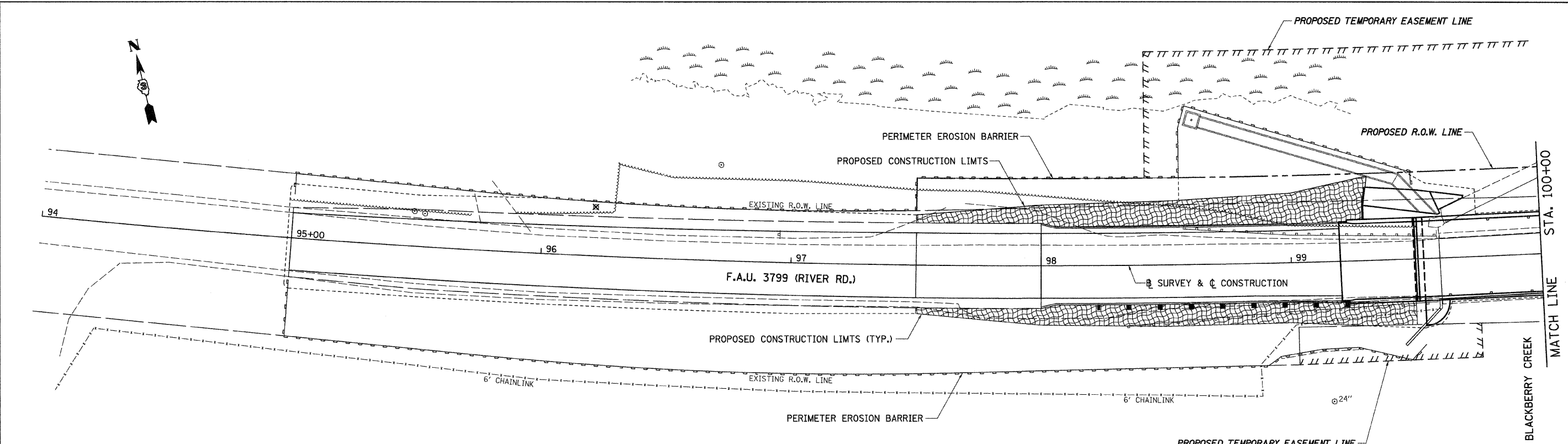
- 1 PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- 2 TRANSITION FROM PROPOSED TYPE B-6.24 CURB & GUTTER TO EXISTING TYPE B-6.12 CURB & GUTTER IN 10'
- 3 POWER POLE TO REMAIN
- 4 PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12



MILLING & RESURFACING CONSISTS OF THE FOLLOWING:
 EXISTING HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
 PROPOSED LEVELING BINDER (MACHINE METHOD)
 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
 (STA. 95+00.00 TO STA. 97+50.00)

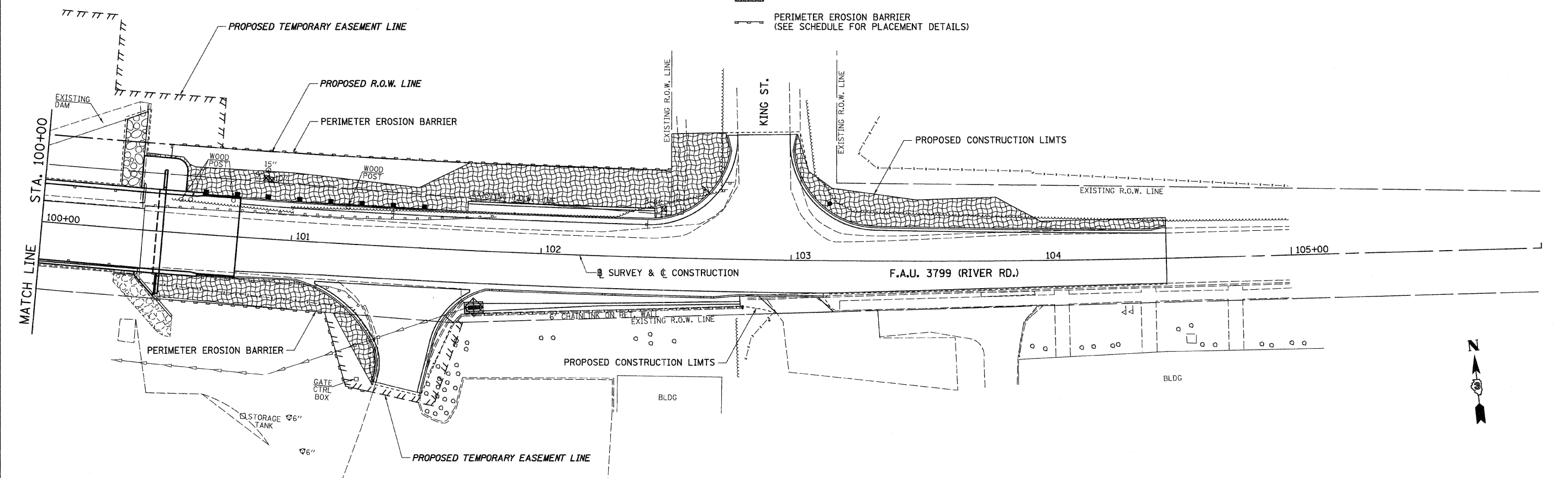
* 586.08 Represents the approach section HWE upstream of the dam, while the 576.07 represents the HWE downstream of the dam at the bridge.

FILE NAME = v:\2987\2987p002.dgn	USER NAME = shughes	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.) PLAN & PROFILE	F.A.U. RTE. 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 12	CONTRACT NO. 87509		
PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISOR -	SCALE: H=20 V=5			SHEET NO. 2 OF 3 SHEETS	STA. 97+00 TO STA. 103+00	ILLINOIS FED. AID PROJECT					
PLOT DATE = 12/22/2011	DATE -	REVISOR -											



TEMPORARY EROSION CONTROL LEGEND

- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET
- PERIMETER EROSION BARRIER (SEE SCHEDULE FOR PLACEMENT DETAILS)

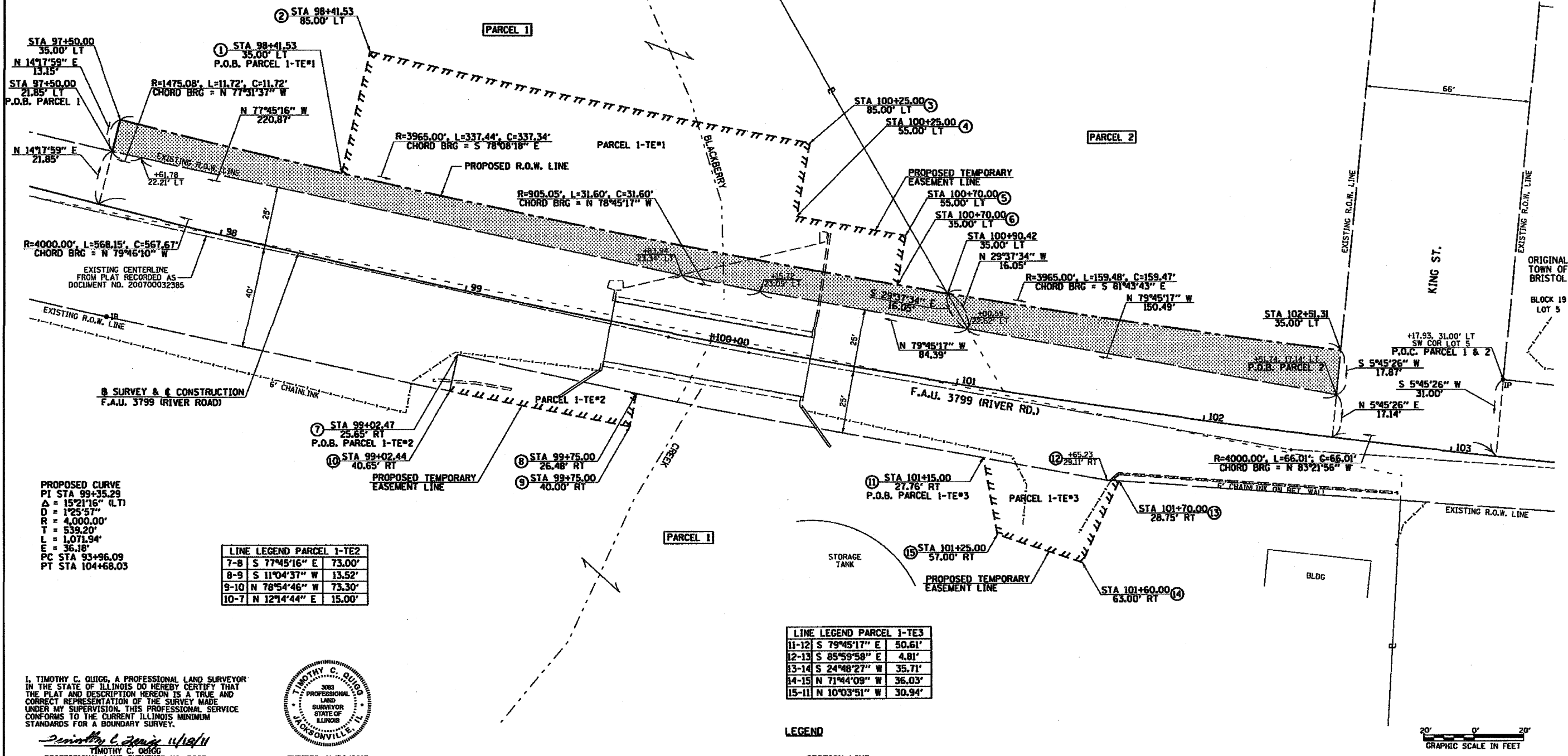


FILE NAME = v:\2987\2987e001.dgn	USER NAME = bdeoraene	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.) EROSION CONTROL PLAN			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20,0000 ' / IN.	DRAWN -	REVISED -					3799	08-00036-00-BR	KENDALL	54	14
	PLOT DATE = 12/16/2011	CHECKED -	REVISED -					CONTRACT NO. 87509				
		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				
					SCALE: 1"=20'	SHEET NO. 1 OF 1 SHEETS	STA. 94+00	TO STA. 106+00				

NOTES:
 BEARINGS ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (CORS 96) - EAST ZONE
 DISTANCES ARE IN GRID ENGLISH. TO CONVERT GRID TO GROUND, DIVIDE BY CONVERSION FACTOR
 CONVERSION FACTOR = 0.9999335

LINE LEGEND PARCEL 1-TE1		
1-2	N 12°59'19" E	50.00'
2-3	R=3915.00', L=179.57', C=179.56'	CHORD BRG = S 78°19'31" E
3-4	S 10°21'38" W	30.00'
4-5	S 79°57'42" E	44.38'
5-6	S 9°42'58" W	20.00'
6-1	R=3965.00', L=226.47', C=226.44'	CHORD BRG = N 78°38'51" W

SEC 32, T 37 N, R 7 E OF THE 3RD P.M.



PROPOSED CURVE
 PI STA 99+35.29
 $\Delta = 15^{\circ}21'16''$ (LT)
 $D = 1^{\circ}25'57''$
 $R = 4,000.00'$
 $T = 539.20'$
 $L = 1,071.94'$
 $E = 36.18'$
 PC STA 93+96.09
 PT STA 104+68.03

LINE LEGEND PARCEL 1-TE2		
7-8	S 77°45'16" E	73.00'
8-9	S 11°04'37" W	13.52'
9-10	N 78°54'46" W	73.30'
10-7	N 12°14'44" E	15.00'

LINE LEGEND PARCEL 1-TE3		
11-12	S 79°45'17" E	50.61'
12-13	S 85°59'58" E	4.81'
13-14	S 24°48'27" W	35.71'
14-15	N 71°44'09" W	36.03'
15-11	N 10°03'51" W	30.94'

LEGEND

- SECTION LINE
- PROPERTY (DEED) LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- ////// PROPOSED PERMANENT EASEMENT LINE
- ||||| PROPOSED TEMPORARY EASEMENT LINE
- ▨ NET ROW REQUIRED

I, TIMOTHY C. QUIGG, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ILLINOIS DO HEREBY CERTIFY THAT THE PLAT AND DESCRIPTION HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY SUPERVISION. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



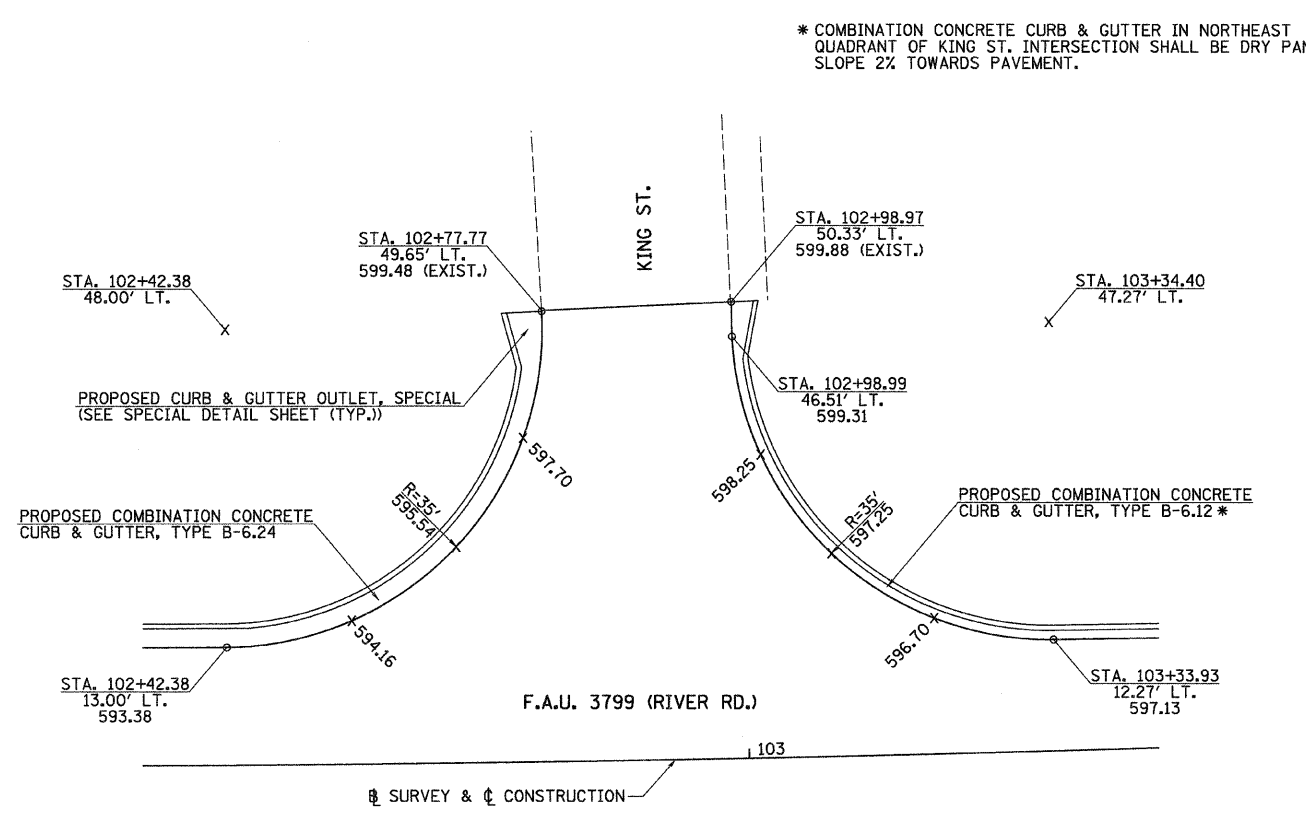
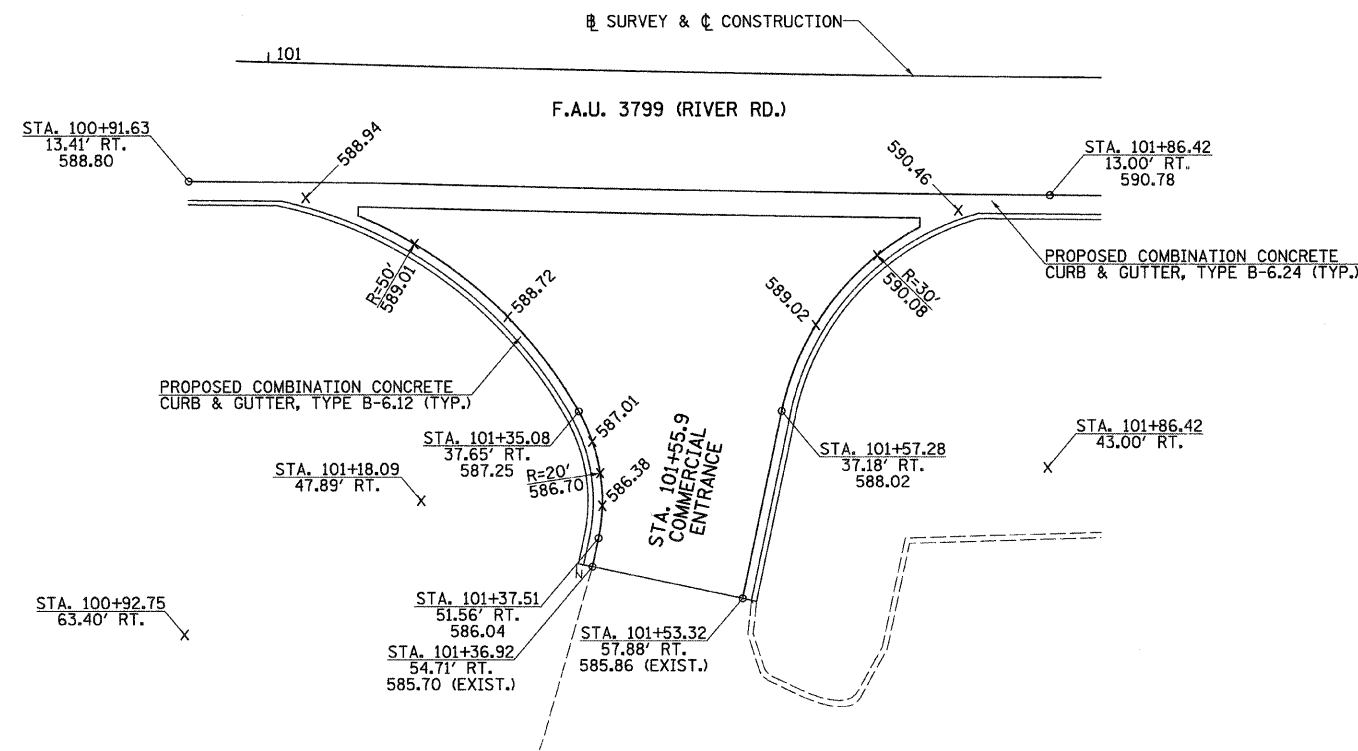
Timothy C. Quigg 11/18/11
 TIMOTHY C. QUIGG
 PROFESSIONAL LAND SURVEYOR NO. 3063

EXPIRES: 11/30/2012

PARCEL	OWNER	PERMANENT TAX NUMBER	R.O.W. AREA DEDICATED	TEMPORARY EASEMENT	EASEMENT PURPOSE
			ACRES	ACRES	
1	YORKVILLE-BRISTOL SANITATION DISTRICT	02-32-231-002, 02-32-231-001, 02-32-231-008, 02-32-201-001	0.091	TE*1 = 0.228 TE*2 = 0.024 TE*3 = 0.033	TE*1 = RIPRAP & DRAINAGE TE*2 = STRUCTURE REMOVAL TE*3 = ENTRANCE RECONSTRUCTION
2	RICHARD O. SPECKMAN & ANDREA I. SPECKMAN	02-32-228-004	0.052		N/A

HUTCHISON ENGINEERING, INC
 1801 West Lafayette
 PO Box 820
 Jacksonville, Illinois 62651
 Phone : (217)245-7164
 ILLINOIS PROFESSIONAL DESIGN
 FIRM NO. 184-000825

CITY OF YORKVILLE
 RIGHT OF WAY DEDICATION
 ROUTE F.A.U. 3799 (RIVER ROAD)
 SECTION 08-00036-00-BR
 COUNTY KENDALL
 SEC 32, T 37 N, R 7 E OF 3RD PM
 STA 97+50.00 TO STA 102+51.31
 SCALE: 1"=20' SHEET NO. 1 OF 1



* COMBINATION CONCRETE CURB & GUTTER IN NORTHEAST QUADRANT OF KING ST. INTERSECTION SHALL BE DRY PAN. SLOPE 2% TOWARDS PAVEMENT.

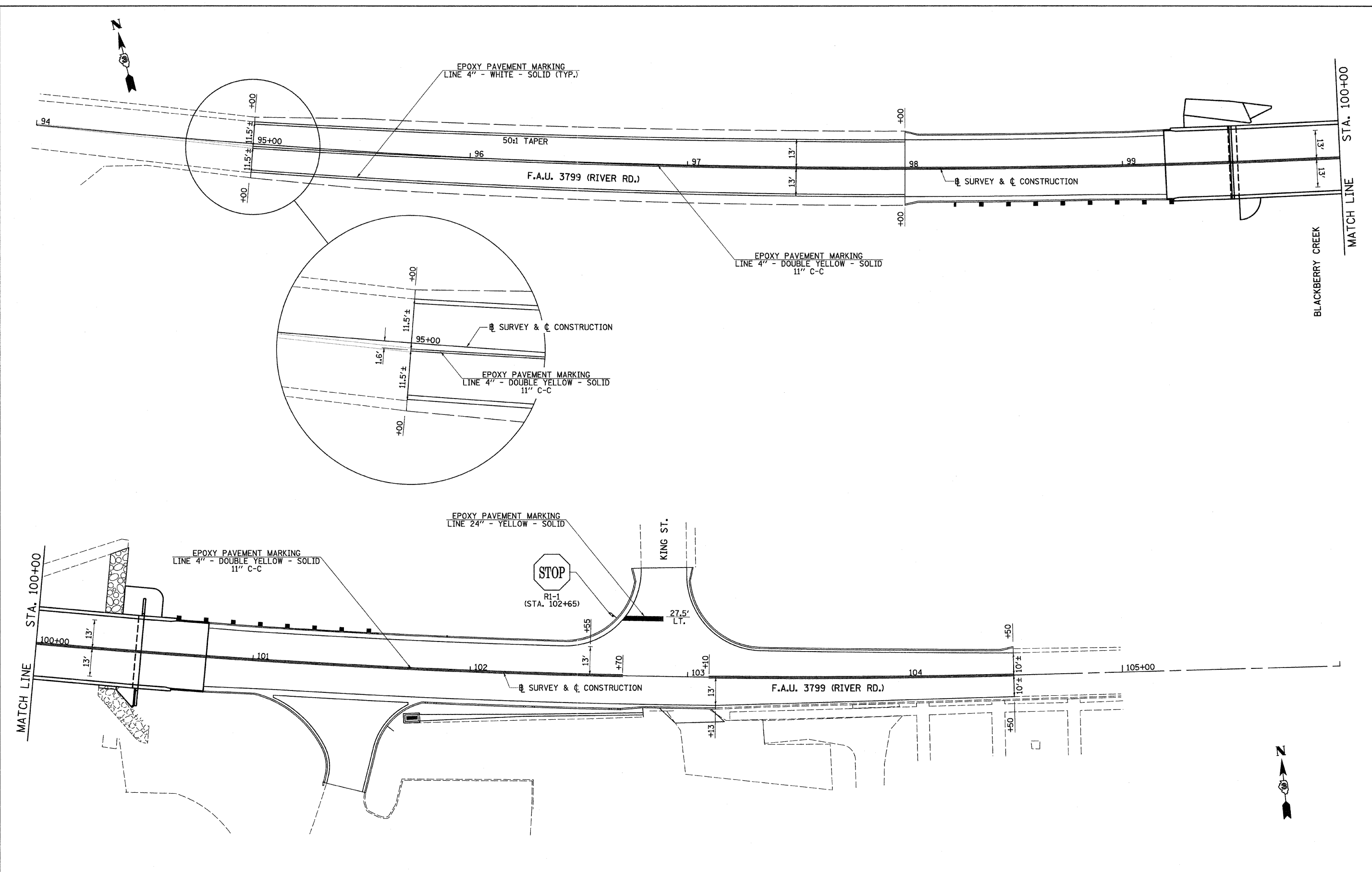
NOTE:
UNLESS OTHERWISE SHOWN, ELEVATIONS LABELED ALONG THE EDGE OF PAVEMENT RADIUS ARE QUARTER POINTS OF THAT RADIUS.

FILE NAME = v:\2987\2987\001.dgn	USER NAME = bdeoraene	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

C.E. STA. 101+55.9 & KING ST. WITH F.A.U. 3799 (RIVER RD.)
INTERSECTION DETAILS
SCALE: 1"=10'
SHEET NO. 1 OF 1 SHEETS
STA. N/A TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	16
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 87509	



FILE NAME =
vt\2987\2987m001.dgn

USER NAME = bdeorens
PLOT SCALE = 20.0000' / IN.
PLOT DATE = 12/19/2011

DESIGNED -
DRAWN -
CHECKED -
DATE -

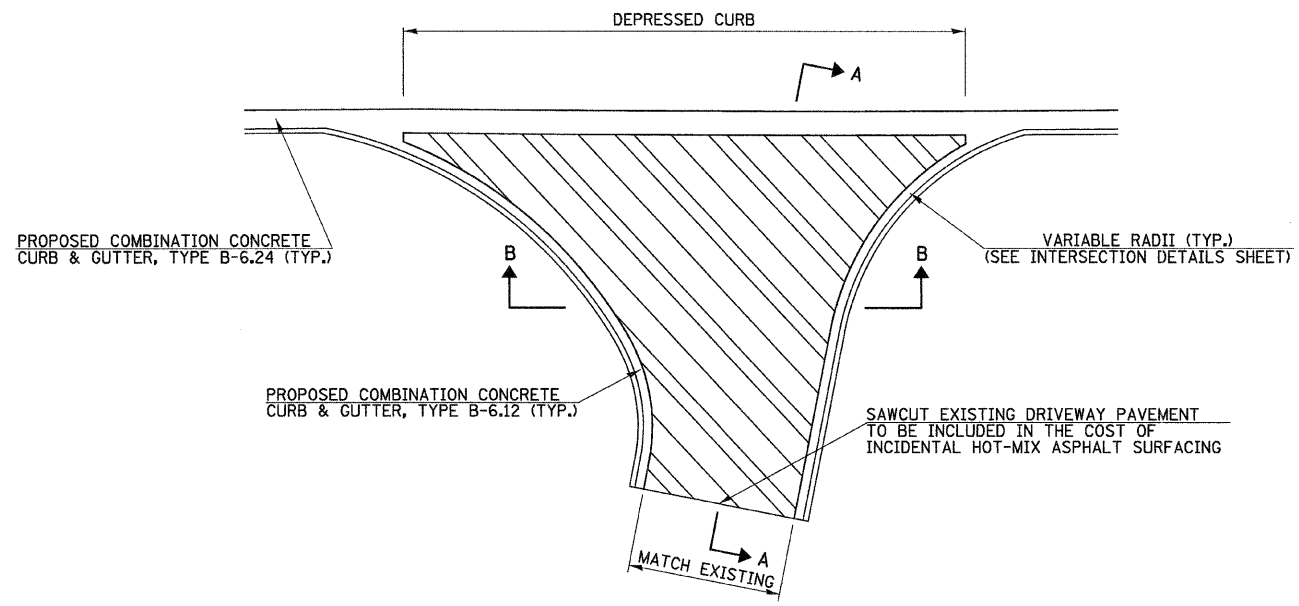
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

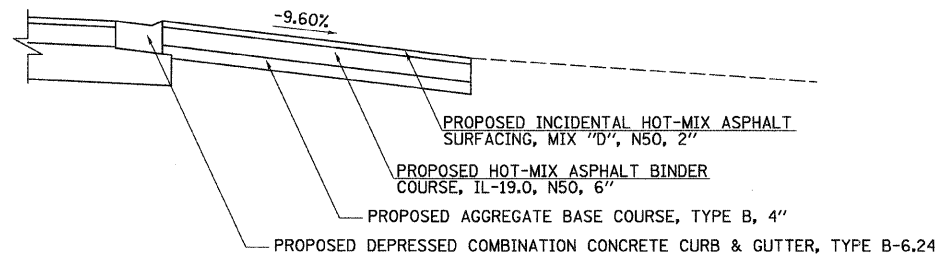
F.A.U. 3799 (RIVER RD.) PAVEMENT MARKING PLAN

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. 94+00 TO STA. 106+00

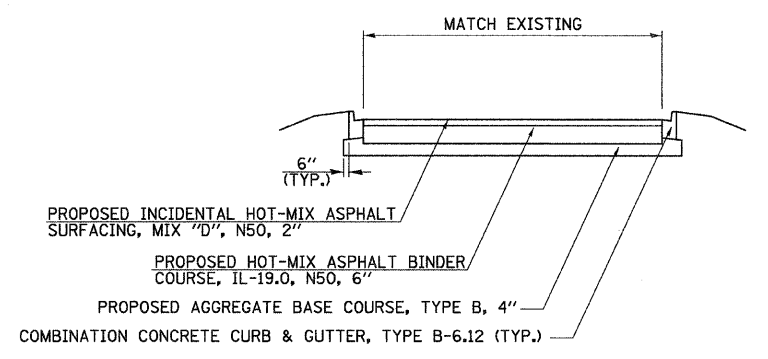
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	53	17
CONTRACT NO. 87509			ILLINOIS FED. AID PROJECT	



PLAN

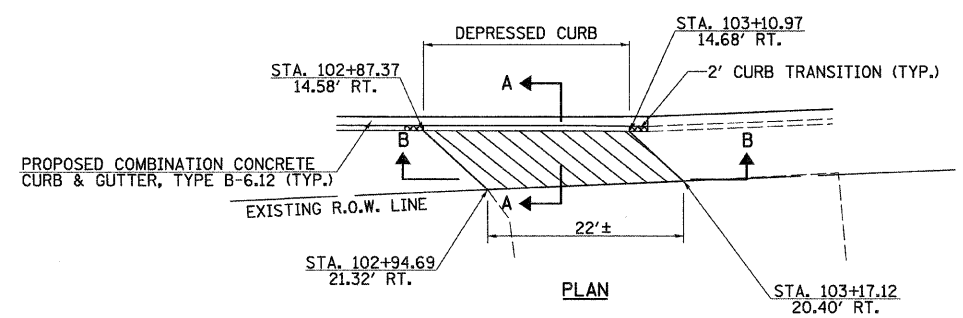


SECTION A-A

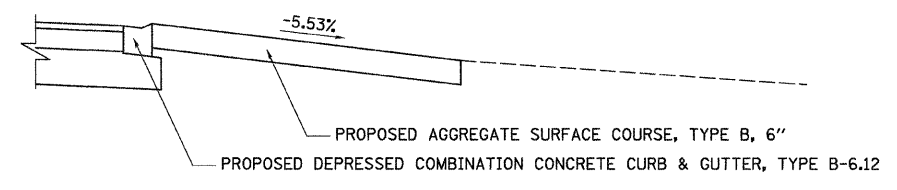


SECTION B-B

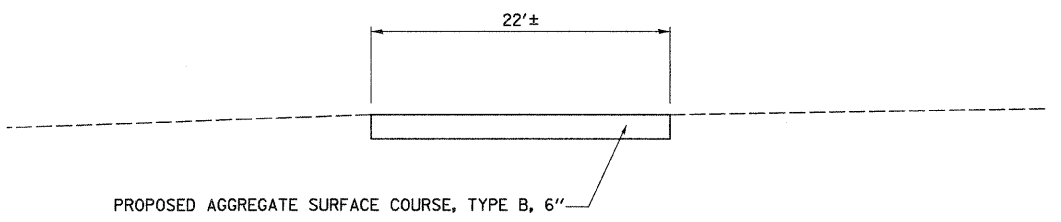
COMERIAL ENTRANCE WITH CURB
(STA. 101+55.9)



PLAN



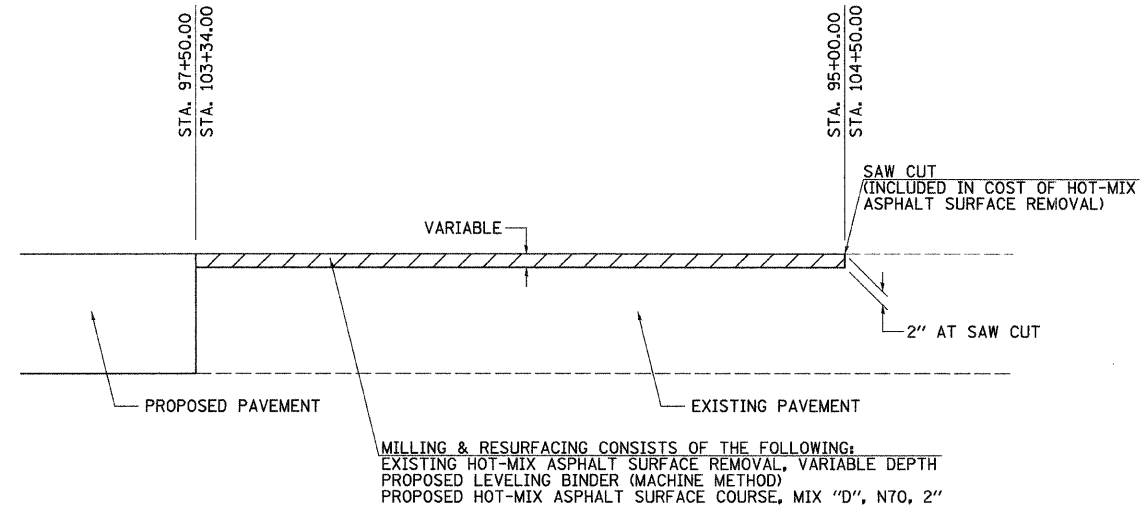
SECTION A-A



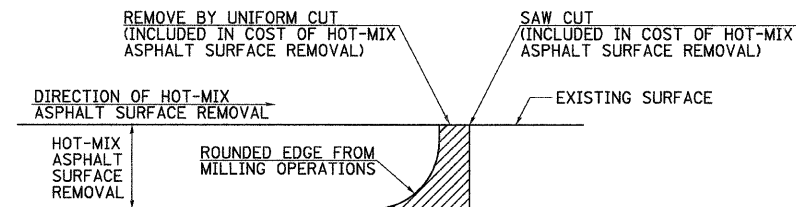
SECTION B-B

PRIVATE ENTRANCE
(STA. 103+07.1)

FILE NAME = v:\2987\2987\002.dgn	USER NAME = bdearone	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.), ENTRANCE DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 28.000000' / IN.	DRAWN -	REVISED -				3799	08-00036-00-BR	KENDALL	54	18
	PLOT DATE = 12/16/2011	CHECKED -	REVISED -				CONTRACT NO. 87509				
		DATE -	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. N/A TO STA. N/A					

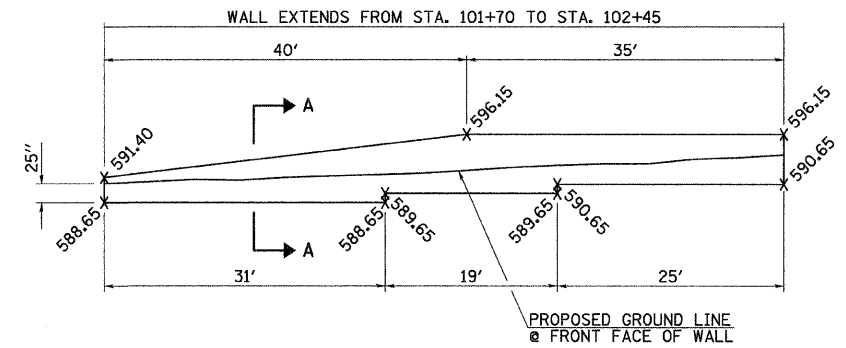


MILLING & RESURFACING @ BEGIN/END PROJECT DETAIL

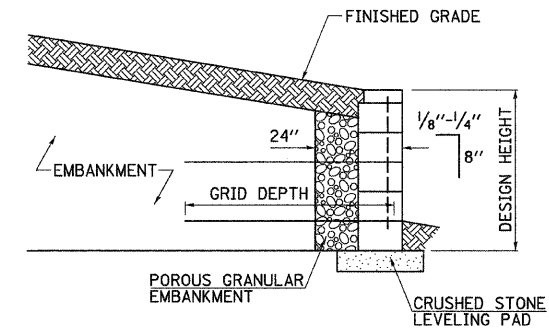


NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

HOT-MIX ASPHALT DETAIL AT BUTT-JOINTS



ELEVATION



SECTION A-A

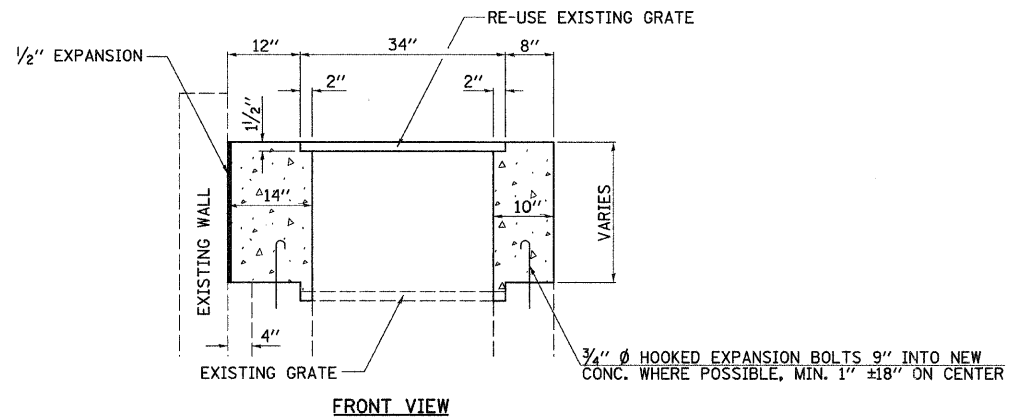
OFFSET TABLE

STATION	101+70	102+45
OFFSET	18.58' LT.	18.58' LT.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
SEGMENTAL CONCRETE BLOCK WALL	SQ FT	400

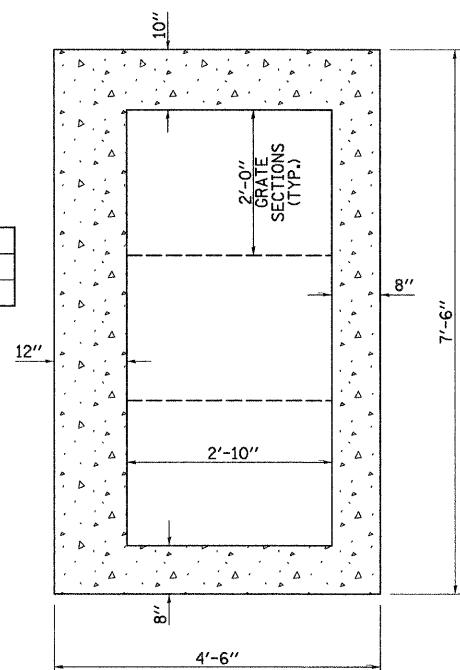
RETAINING WALL DETAIL



FRONT VIEW

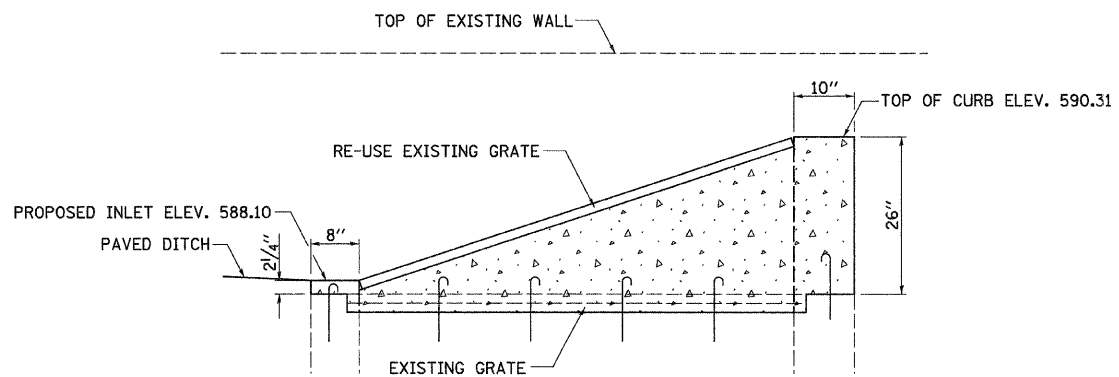
LIST OF MATERIALS

ITEM	UNIT	TOTAL
MISC. CONCRETE	CU YD	1.0
3/4" EXPANSION BOLTS	EACH	14



TOP VIEW

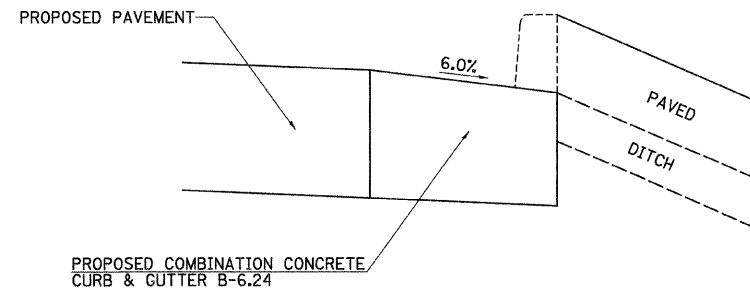
NOTE: GRATES SIT ON 2" LIP ON SIDES (NO LIP ON TOP OR BOTTOM).



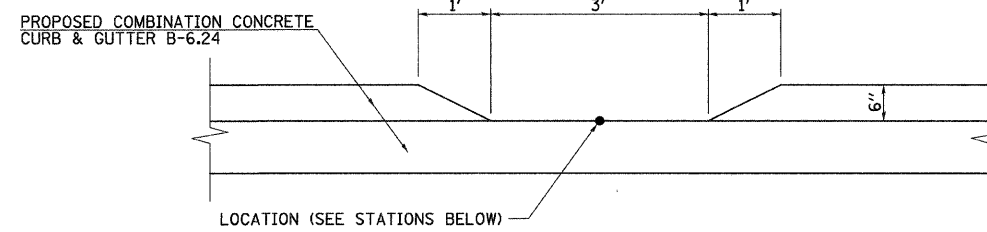
SIDE VIEW

DRAINAGE STRUCTURE

STA. 101+74.05



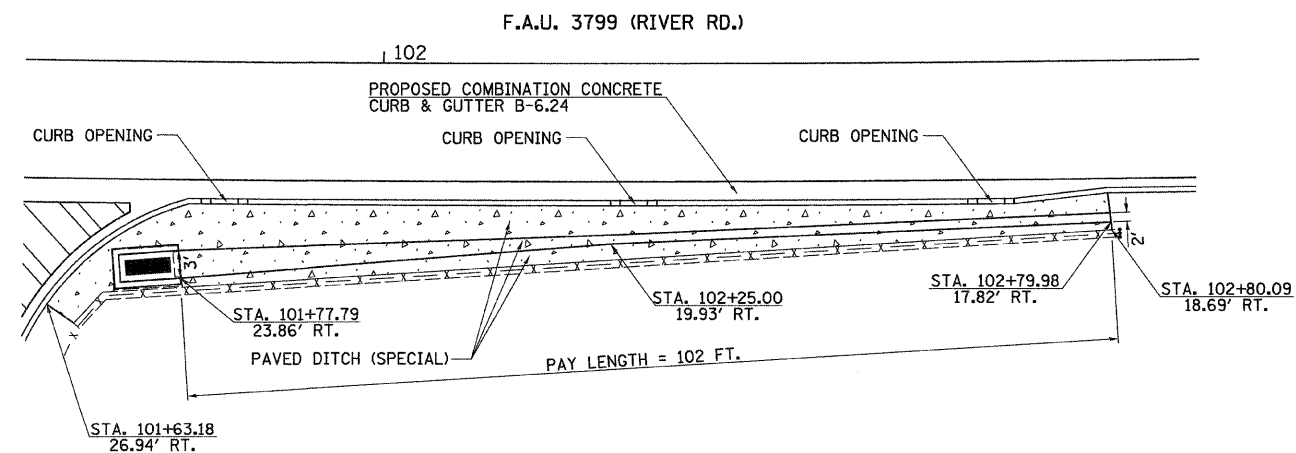
SIDE VIEW



FRONT VIEW

CURB OPENINGS

STA. 101+82.55
STA. 102+27.55
STA. 102+66.83



PAVED DITCH (SPECIAL) WITH CURB OPENINGS DETAIL

FILE NAME =
v:\2987\2987h004.dgn

USER NAME = bdeoraene
PLOT SCALE = 10.000000' / IN.
PLOT DATE = 12/16/2011

DESIGNED -
DRAWN -
CHECKED -
DATE -

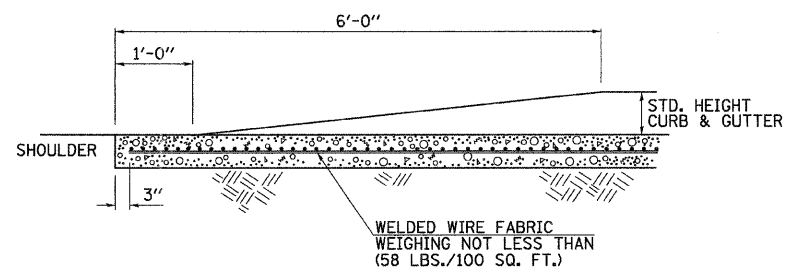
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

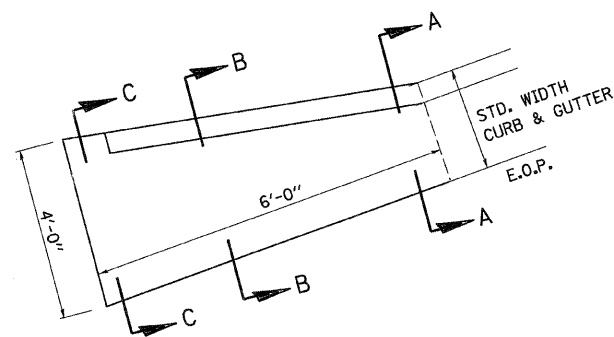
F.A.U. 3799 (RIVER RD.), SPECIAL DETAILS

SCALE: N/A SHEET NO. 2 OF 3 SHEETS STA. N/A TO STA. N/A

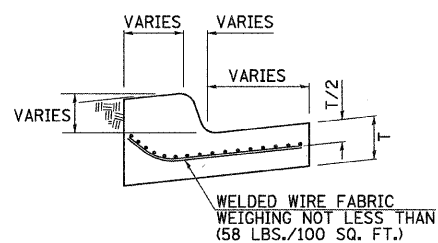
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	20
CONTRACT NO. 87509				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



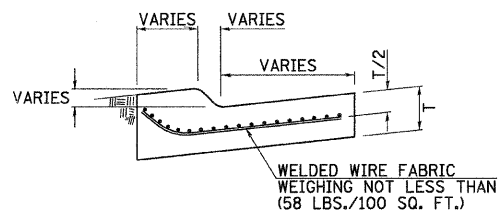
CURB DETAIL



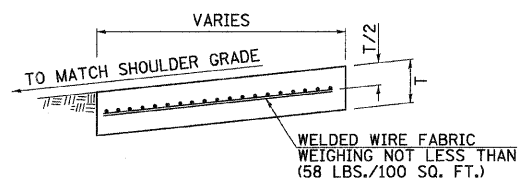
PLAN



SECTION A-A



SECTION B-B



SECTION C-C

CURB & GUTTER OUTLET, SPECIAL

(TO BE PAID FOR AS COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 OR B-6.24)

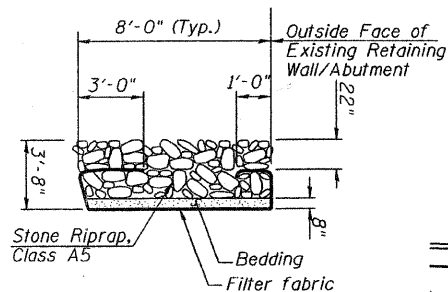
FILE NAME = V:\2987\2987h005.dgn	USER NAME = bdecrane	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3799 (RIVER RD.), SPECIAL DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		3799	08-00036-00-BR	KENDALL	54	21			
		CHECKED -	REVISED -		SCALE: N/A			SHEET NO. 3 OF 3 SHEETS		STA. N/A	TO STA. N/A	
		DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
								CONTRACT NO. 87509				

- B.M. #1: RR Spike in Power Pole
Sta. 96+85, 40' RT.
Elev. = 580.37
- B.M. #2: Chisled "□" on S.W. Corner of Existing Bridge
Sta. 99+60, 19' RT.
Elev. = 587.24
- B.M. #3: Chisled "□" on Conc. Ret. Wall
Sta. 102+81, 19' RT.
Elev. = 596.00

Existing Structure: Two span PPC deck beam with HMA overlay on closed concrete abutments supported on concrete footings. The structure is 82'-3 1/2" back to back of abutments, 28'-4" out to out of deck with a 24'-0" driving surface, no skew. Structure Number 047-3007

Salvage: None

Road to be closed to traffic during construction.



SECTION A-A

**BLACKBERRY CREEK
BUILT 2011 BY
KENDALL COUNTY
SEC. 08-00036-00-BR
FAU 3799 STATION 99+98.81
F.A. PROJ. BRM-9003(883)
STR. NO. 047-6500 LOADING HL-93**

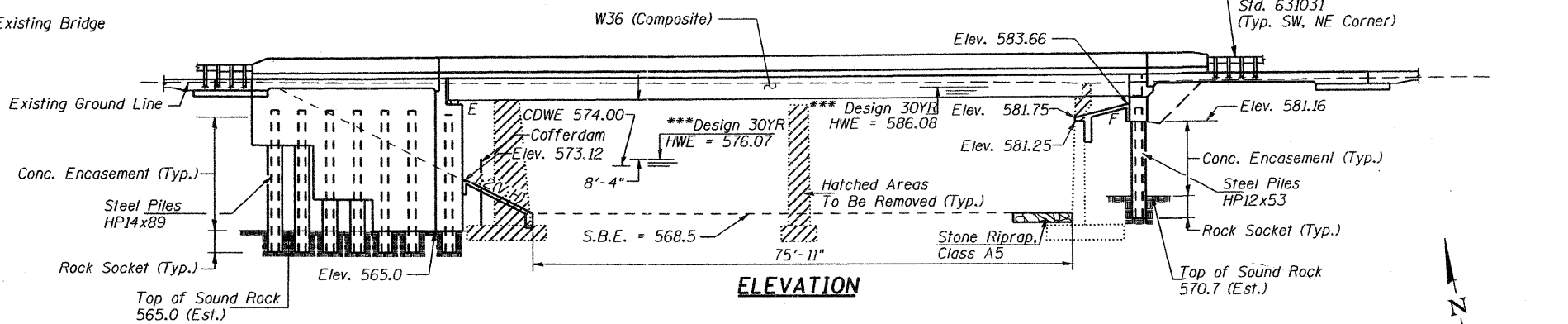
NAME PLATE

Locate Name Plate on parapet at S.W. Corner of Bridge (See Std. 515001)

SEISMIC DATA

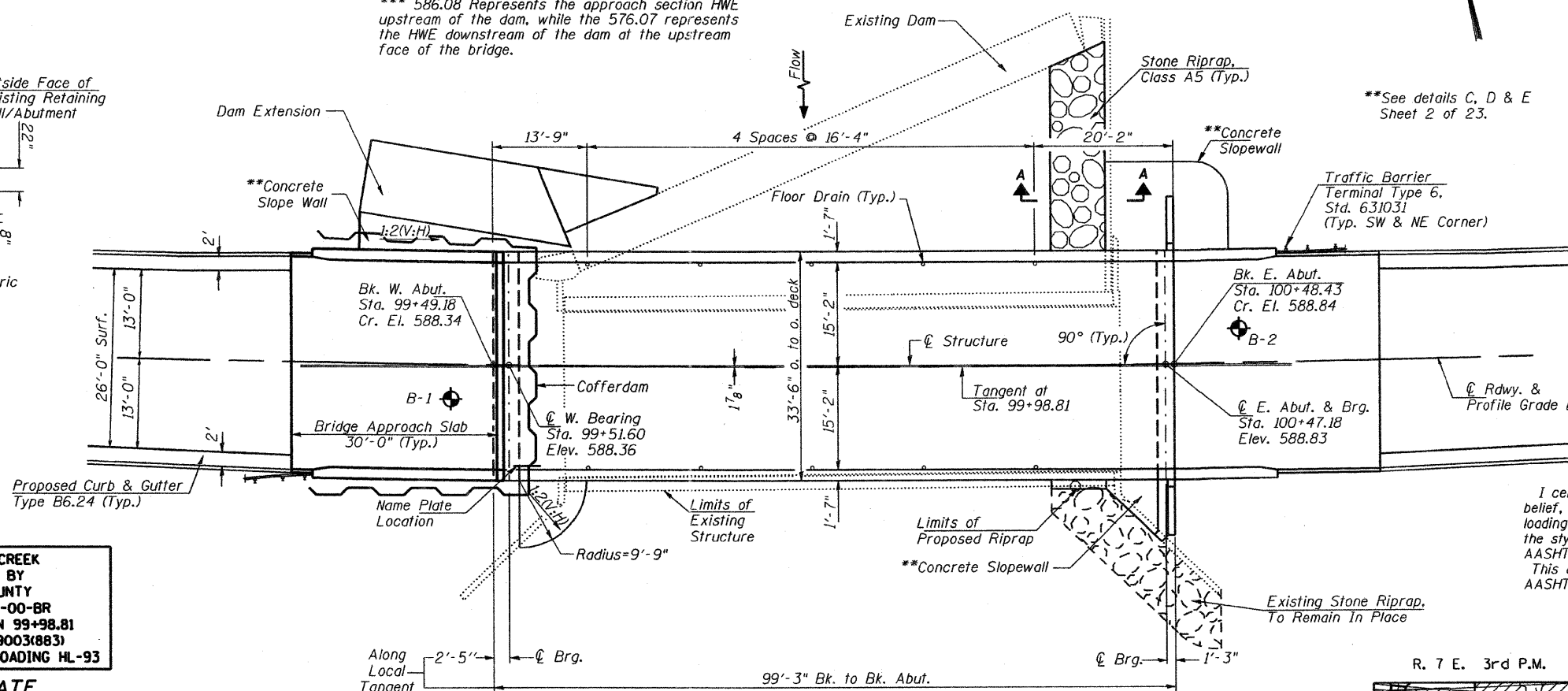
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.07g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.13g
Soil Site Class = C

DESIGNED	NPH/CTM
CHECKED	BAN
DRAWN	NPH/RMD
CHECKED	BAN



ELEVATION

*** 586.08 Represents the approach section HWE upstream of the dam, while the 576.07 represents the HWE downstream of the dam at the upstream face of the bridge.



PLAN

DESIGN SCOUR TABLE

Location	W. Abut	E. Abut
Design Scour Elevation	565.00	579.24

WATERWAY INFORMATION

Drainage Area = 73.6 Sq. Mi.		Low Grade Elev. = 587.32 @ Sta. 97+42.00		Flood		Design		Base	
Freq. Yr.	0 C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.	
30	2,234	511*	620*	576.07* 586.08	0.00	0.00	586.08	586.08	
100	2,894	555*	669*	576.65* 586.76	0.00	0.00	586.76	586.76	

*Denotes calculation based on high water elevations at the upstream face of the proposed bridge. IDNR has issued Permit No. DS2011110 for the construction of this project.

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Design Specifications
5th Edition with 2010 Interims.

LOADING HL-93

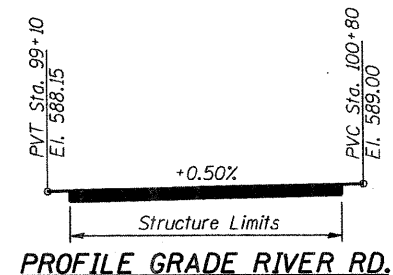
Allow 50# / sq. ft. future wearing surface.

DESIGN STRESSES

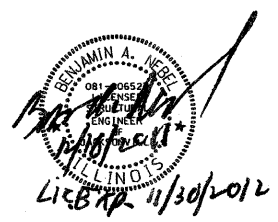
(FIELD UNITS)
 $f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i. (Reinforcement)
 $f_y = 50,000$ p.s.i. (Structural Steel)
(AASHTO M270 Grade 50W)

PROP CURVE

PI STA. = 99+35.29
 $\Delta = 15^\circ 21' 16''$ (LT)
 $D = 1^\circ 25' 57''$
 $R = 4,000.00'$
 $T = 539.20'$
 $L = 1,071.94'$
 $E = 36.18'$
 $e = \text{none}$
P.C. STA = 93+96.09
P.T. STA = 104+68.03

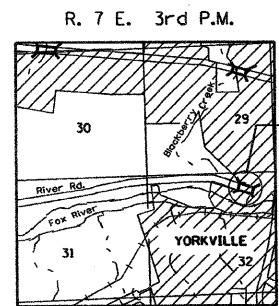


PROFILE GRADE RIVER RD.



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

Benjamin A. Nereb 12/14/2011
Illinois Structural No. 6527
Expires 11/30/2012

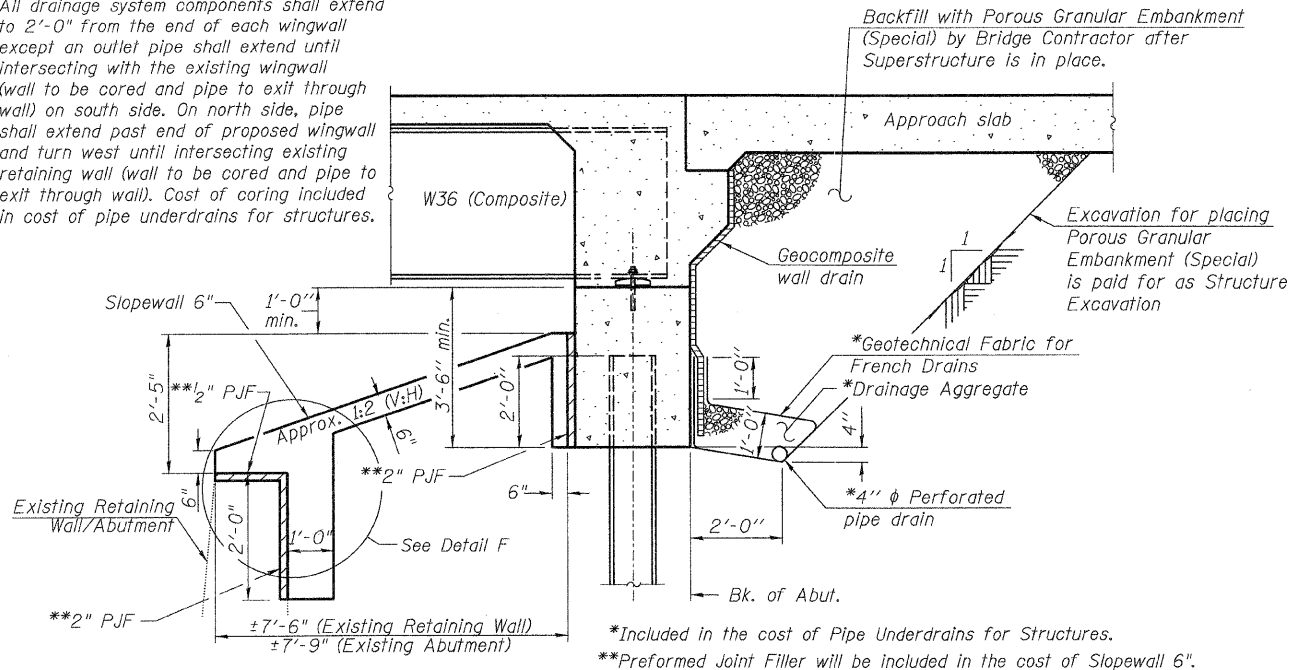


LOCATION SKETCH

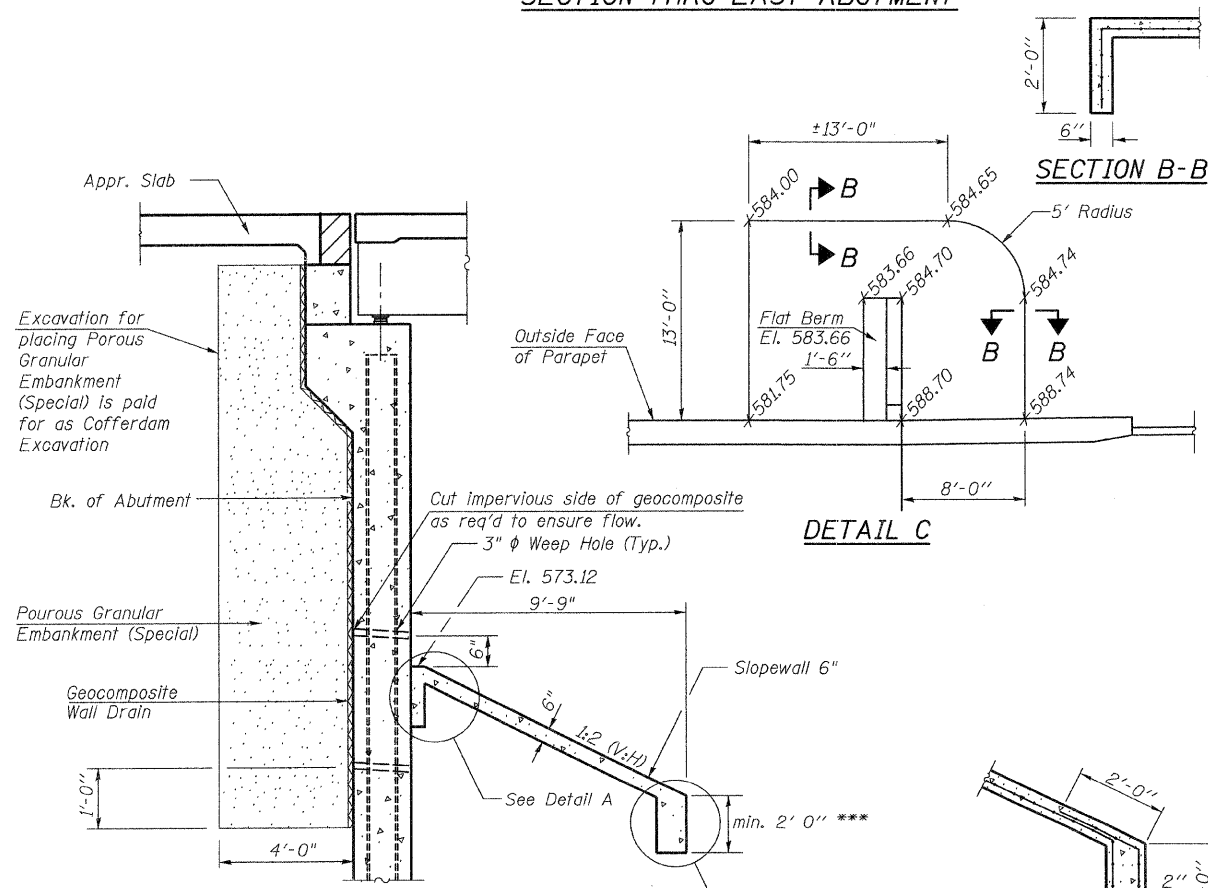
GENERAL PLAN
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81
STR. NO. 047-6500

SHEET NO. 1	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	22
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)		

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the existing wingwall (wall to be cored and pipe to exit through wall) on south side. On north side, pipe shall extend past end of proposed wingwall and turn west until intersecting existing retaining wall (wall to be cored and pipe to exit through wall). Cost of coring included in cost of pipe underdrains for structures.



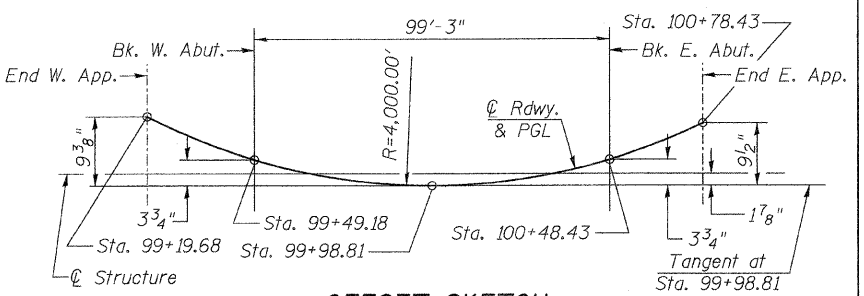
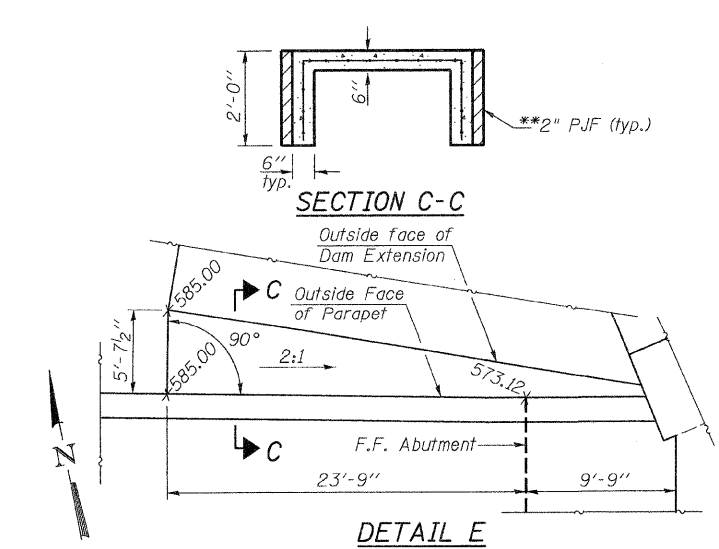
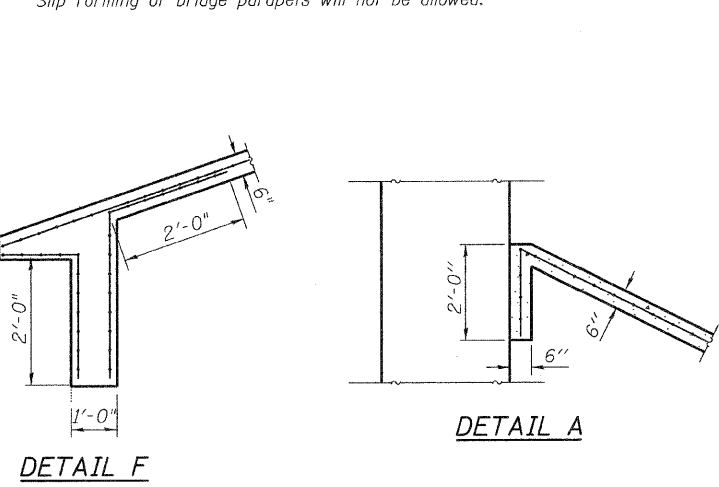
SECTION THRU EAST ABUTMENT



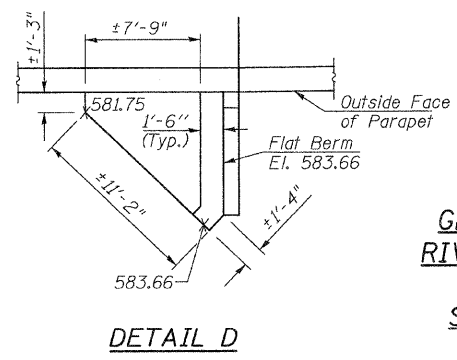
SECTION THRU WEST ABUTMENT
(Drainage Detail behind wingwalls similar to abutment)

DESIGNED	NPH/CTM
CHECKED	BAN
DRAWN	NPH/RMD
CHECKED	BAN

***The Toe of the Slope Wall will be at least 2'-0" long and extend further where required to reach bed rock.



OFFSET SKETCH



DETAIL D

GENERAL NOTES & DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

SHEET NO. 2	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	23
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

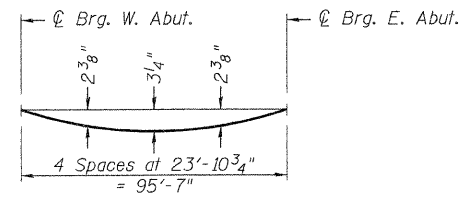
GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M 270 Grade 50. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
Calculated weight of Structural Steel = 129,740 lbs, Grade 50W.
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts 3/4 in. φ, holes 15/16 in. φ, unless otherwise noted.
No field welding is permitted except as specified in the contract documents.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. Reinforcement bars designated (E) shall be epoxy coated.
Structural steel at east abutment beam end shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 in. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
Concrete Sealer shall be applied to the bearing seats and backwall of the west abutment.
All structural steel and exposed surfaces of bearings within a distance of 9 ft. each way from the west abutment deck joint shall be painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost included with Slopewall.
Proposed Dam Extension shall be completed prior to removal of existing structure. (See Dam Extension Plans).
Slip forming of bridge parapets will not be allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
① Removal of Existing Structures	EACH	—	—	1
Concrete Removal	CU YD	—	11.0	11.0
Structure Excavation	CU YD	—	90	90
Concrete Superstructure	CU YD	217.0	—	217.0
Concrete Structures	CU YD	—	166.5	166.5
Furnishing Steel Piles HP 12x53	FOOT	—	102	102
Furnishing Steel Piles HP 14x89	FOOT	—	536	536
① Setting Piles in Rock	EACH	—	26	26
Concrete Encasement	CU YD	—	25.0	25.0
Furnishing and Erecting Structural Steel	L SUM	1	—	1
Concrete Sealer	SQ FT	—	165	165
Bar Splicers	EACH	34	31	65
Anchor Bolts, 1"	EACH	—	24	24
Reinforcement Bars, Epoxy Coated	POUND	50,590	17,800	68,390
Stone Riprap, Class A5	TON	—	90	90
Filter Fabric	SQ YD	—	60	60
Protective Coat	SQ YD	658	—	658
Bridge Deck Grooving	SQ YD	307	—	307
Stud Shear Connectors	EACH	1,062	—	1,062
Name Plates	EACH	1	—	1
① Porous Granular Embankment, Special	CU YD	—	190	190
① Pipe Underdrains For Structures 4"	FOOT	—	66	66
① Geocomposite Wall Drain	SQ YD	—	162	162
① Slope Wall 6 Inch	SQ YD	—	120	120
Preformed Joint Strip Seal	FOOT	33	—	33
Elastomeric Bearing Assembly, Type I	EACH	—	6	6
① Cofferdam (Type 2) (Location - 2)	EACH	—	1	1
Cofferdam Excavation	CU YD	—	465	465

① See Special Provisions



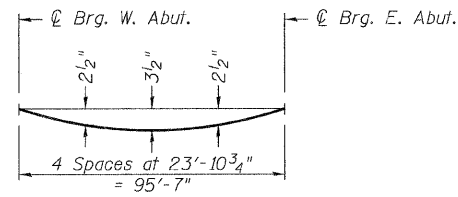
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

INTERIOR BEAMS

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 4 of 23.



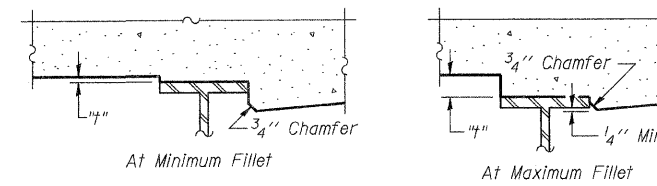
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

EXTERIOR BEAMS

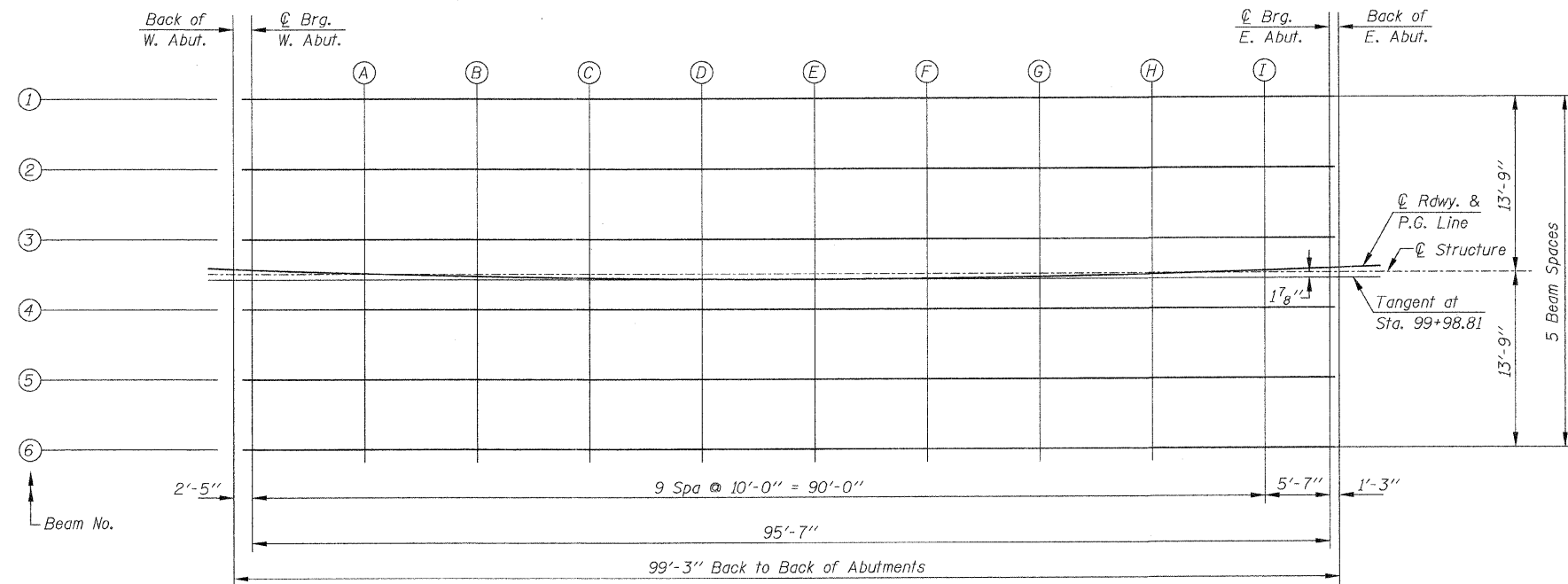
Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 4 of 23.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



TOP OF SLAB ELEVATIONS

**TOP OF SLAB ELEVATIONS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 3 23 SHEETS	ROUTE NO. FAU 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 24
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.01	-13.60	588.12	588.12
CL Brg W. Abut.	99+51.44	-13.63	588.13	588.13
A	99+61.47	-13.73	588.18	588.28
B	99+71.50	-13.81	588.23	588.41
C	99+81.54	-13.87	588.28	588.52
D	99+91.57	-13.90	588.33	588.61
E	100+01.61	-13.91	588.38	588.67
F	100+11.64	-13.89	588.43	588.69
G	100+21.68	-13.84	588.48	588.69
H	100+31.71	-13.77	588.53	588.67
I	100+41.75	-13.68	588.58	588.64
CL Brg E. Abut.	100+47.35	-13.61	588.61	588.61
Bk E. Abutment	100+48.60	-13.60	588.62	588.62

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.08	-8.10	588.22	588.22
CL Brg W. Abut.	99+51.50	-8.13	588.23	588.23
A	99+61.52	-8.23	588.28	588.37
B	99+71.54	-8.31	588.33	588.50
C	99+81.56	-8.37	588.38	588.60
D	99+91.58	-8.40	588.42	588.69
E	100+01.60	-8.41	588.47	588.75
F	100+11.63	-8.39	588.53	588.77
G	100+21.65	-8.34	588.58	588.77
H	100+31.67	-8.27	588.63	588.76
I	100+41.69	-8.18	588.68	588.73
CL Brg E. Abut.	100+47.28	-8.11	588.71	588.71
Bk E. Abutment	100+48.53	-8.10	588.71	588.71

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.15	-2.60	588.30	588.30
CL Brg W. Abut.	99+51.57	-2.63	588.31	588.32
A	99+61.57	-2.73	588.36	588.45
B	99+71.58	-2.81	588.41	588.58
C	99+81.59	-2.87	588.46	588.69
D	99+91.59	-2.90	588.51	588.77
E	100+01.60	-2.91	588.56	588.83
F	100+11.61	-2.89	588.61	588.86
G	100+21.61	-2.84	588.66	588.86
H	100+31.62	-2.77	588.71	588.85
I	100+41.63	-2.68	588.76	588.81
CL Brg E. Abut.	100+47.21	-2.61	588.79	588.79
Bk E. Abutment	100+48.47	-2.60	588.80	588.80

PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.18	0.00	588.34	588.34
CL Brg W. Abut.	99+51.60	0.00	588.36	588.36
A	99+61.60	0.00	588.41	588.50
B	99+71.60	0.00	588.46	588.63
C	99+81.60	0.00	588.51	588.74
D	99+91.60	0.00	588.56	588.82
E	100+01.60	0.00	588.61	588.88
F	100+11.60	0.00	588.66	588.90
G	100+21.60	0.00	588.71	588.90
H	100+31.60	0.00	588.76	588.89
I	100+41.60	0.00	588.81	588.86
CL Brg E. Abut.	100+47.18	0.00	588.83	588.83
Bk E. Abutment	100+48.43	0.00	588.84	588.84

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.22	2.90	588.30	588.30
CL Brg W. Abut.	99+51.63	2.87	588.31	588.31
A	99+61.62	2.77	588.36	588.45
B	99+71.62	2.69	588.41	588.58
C	99+81.61	2.63	588.47	588.69
D	99+91.60	2.60	588.52	588.78
E	100+01.60	2.60	588.57	588.84
F	100+11.59	2.61	588.62	588.86
G	100+21.58	2.66	588.66	588.86
H	100+31.58	2.73	588.71	588.85
I	100+41.57	2.82	588.76	588.81
CL Brg E. Abut.	100+47.15	2.89	588.79	588.79
Bk E. Abutment	100+48.40	2.90	588.79	588.79

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.28	8.40	588.21	588.21
CL Brg W. Abut.	99+51.70	8.37	588.23	588.23
A	99+61.67	8.27	588.28	588.37
B	99+71.65	8.19	588.33	588.50
C	99+81.63	8.13	588.38	588.61
D	99+91.61	8.10	588.43	588.69
E	100+01.59	8.10	588.48	588.75
F	100+11.57	8.11	588.53	588.78
G	100+21.55	8.16	588.58	588.77
H	100+31.53	8.23	588.63	588.76
I	100+41.51	8.32	588.67	588.73
CL Brg E. Abut.	100+47.08	8.39	588.70	588.70
Bk E. Abutment	100+48.33	8.40	588.71	588.71

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	99+49.35	13.90	588.12	588.12
CL Brg W. Abut.	99+51.76	13.87	588.13	588.13
A	99+61.73	13.77	588.18	588.28
B	99+71.69	13.69	588.23	588.41
C	99+81.66	13.63	588.29	588.53
D	99+91.62	13.60	588.34	588.61
E	100+01.59	13.60	588.39	588.67
F	100+11.56	13.61	588.43	588.70
G	100+21.52	13.66	588.48	588.69
H	100+31.49	13.73	588.53	588.67
I	100+41.45	13.82	588.58	588.63
CL Brg E. Abut.	100+47.02	13.89	588.61	588.61
Bk E. Abutment	100+48.26	13.90	588.61	588.61

TOP OF SLAB ELEVATIONS
 RIVER RD. (F.A.U. 3799) OVER
 BLACKBERRY CREEK
 SECTION 08-00036-00-BR
 KENDALL COUNTY
 STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 4	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	25
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)		

EDGE OF NORTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach Pvmf.	99+19.38	-14.97	587.95
A	99+29.42	-15.02	588.00
B	99+39.46	-15.04	588.05
Bk W. Abutment	99+48.99	-15.03	588.09

NORTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach Pvmf.	99+19.44	-12.00	588.01
A	99+29.47	-12.00	588.06
B	99+39.50	-12.00	588.11
Bk W. Abutment	99+49.03	-12.00	588.16

☉ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach Pvmf.	99+19.68	0.00	588.20
A	99+29.68	0.00	588.25
B	99+39.68	0.00	588.30
Bk W. Abutment	99+49.18	0.00	588.34

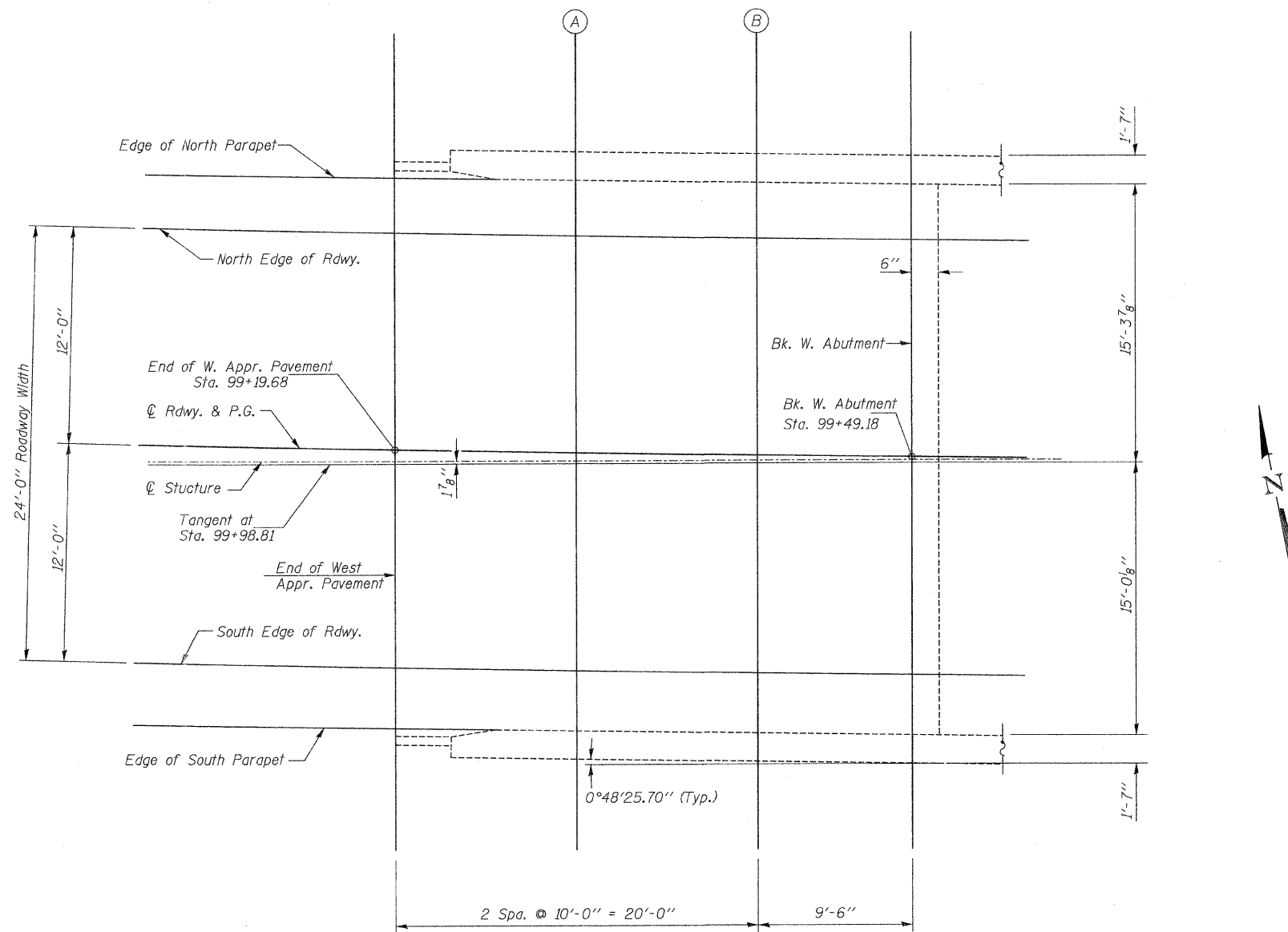
SOUTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach Pvmf.	99+19.92	12.00	588.01
A	99+29.89	12.00	588.06
B	99+39.86	12.00	588.11
Bk W. Abutment	99+49.33	12.00	588.16

EDGE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach Pvmf.	99+19.99	15.36	587.94
A	99+29.94	15.31	587.99
B	99+39.91	15.29	588.04
Bk W. Abutment	99+49.37	15.30	588.09

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN



PLAN WEST APPROACH PAVEMENT

**TOP OF WEST APPROACH PAVEMENT ELEVATIONS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**

SHEET NO. 5 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	26
SN 047-6500			CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)			

EDGE OF NORTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	100+48.62	-15.01	588.59
A	100+58.66	-15.01	588.64
B	100+68.70	-14.97	588.69
End E. Approach Pvmnt.	100+78.73	-14.92	588.74

NORTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	100+48.58	-12.00	588.65
A	100+58.61	-12.00	588.70
B	100+68.64	-12.00	588.75
End E. Approach Pvmnt.	100+78.67	-12.00	588.80

☉ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	100+48.43	0.00	588.84
A	100+58.43	0.00	588.89
B	100+68.44	0.00	588.94
End E. Approach Pvmnt.	100+78.43	0.00	588.99

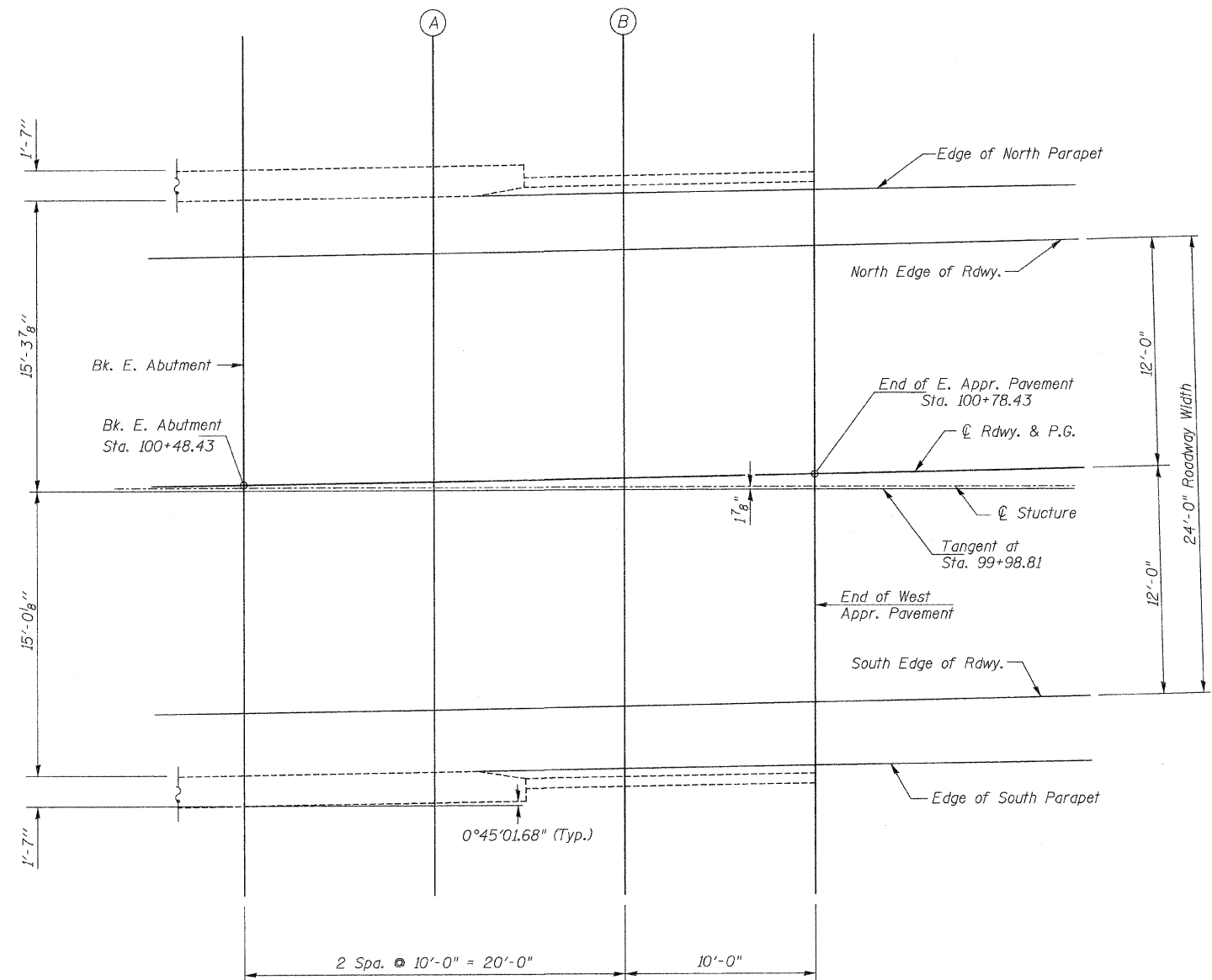
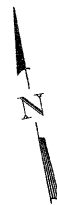
SOUTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	100+48.28	12.00	588.65
A	100+58.26	12.00	588.70
B	100+68.23	12.00	588.75
End E. Approach Pvmnt.	100+78.20	12.00	588.80

EDGE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	100+48.24	15.32	588.58
A	100+58.21	15.32	588.63
B	100+68.17	15.35	588.68
End E. Approach Pvmnt.	100+78.13	15.41	588.73

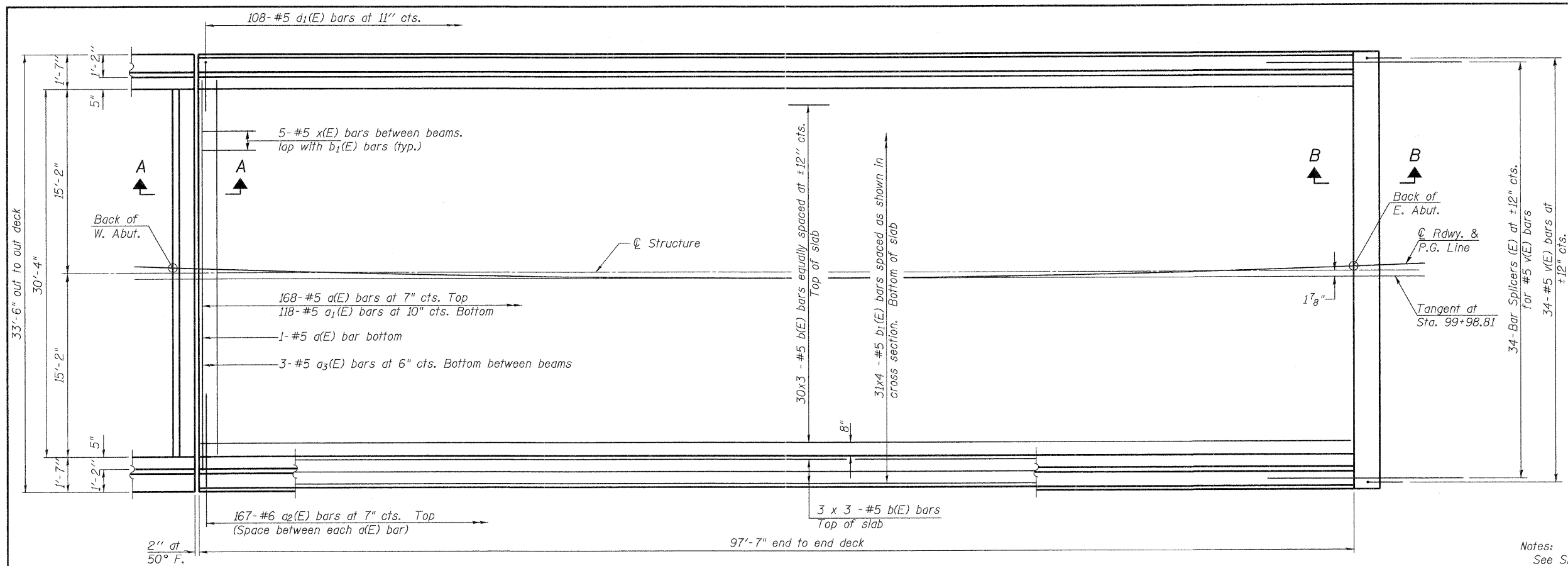
DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN



PLAN EAST APPROACH PAVEMENT

TOP OF EAST APPROACH PAVEMENT ELEVATIONS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

SHEET NO. 6 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	27
	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)		

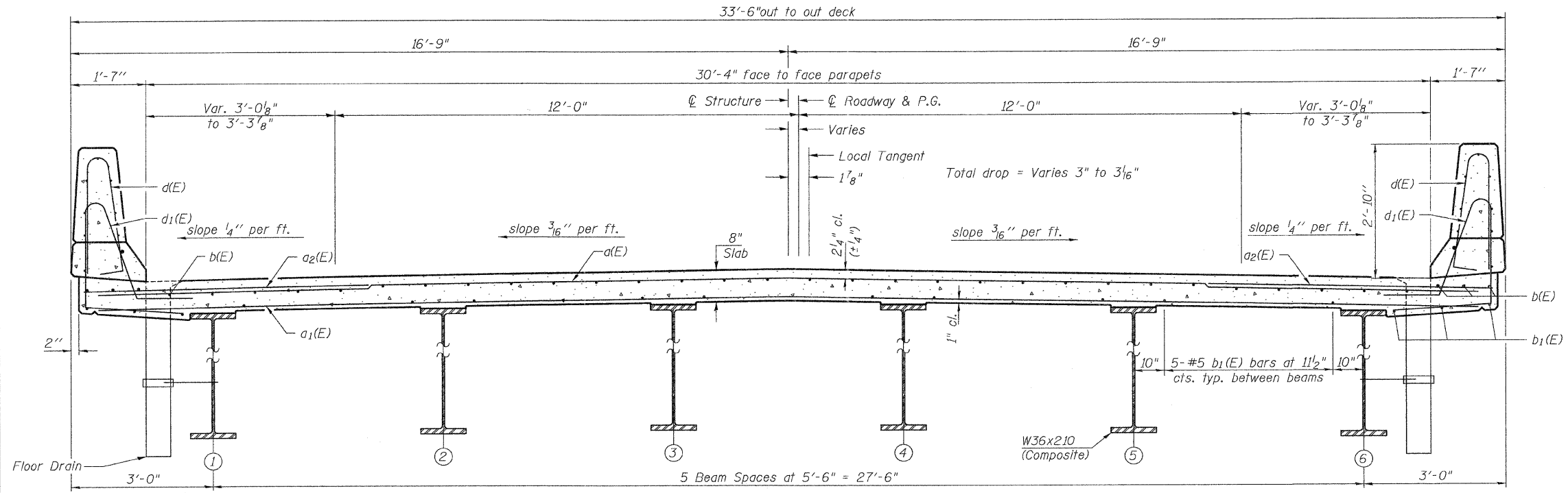


PLAN

Notes:
 See Sheet 1 of 23 for Floor Drain locations.
 See Sheet 8 of 23 for superstructure details, parapet reinforcement, Section A-A and Bill of Material.
 See Sheet 9 of 23 for Section B-B.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MIN. BAR LAP
 #5 = 3'-3"

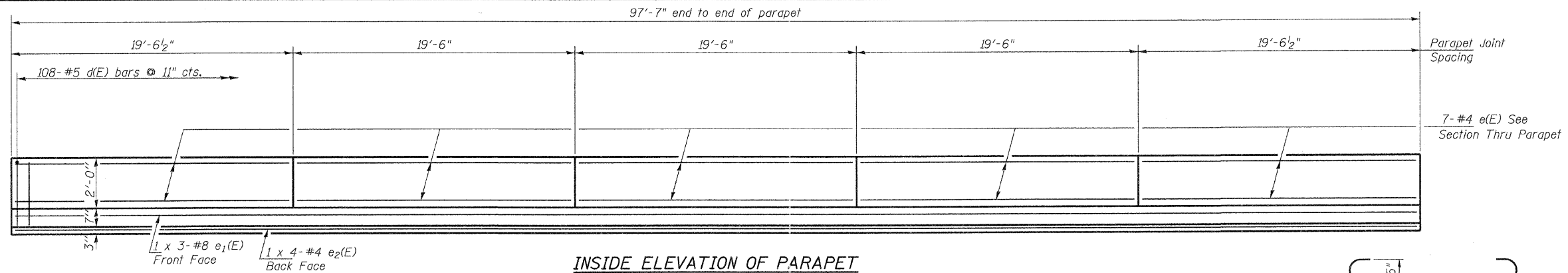
SUPERSTRUCTURE
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81



CROSS SECTION
 (Looking East)

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 7 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	28
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)			



INSIDE ELEVATION OF PARAPET

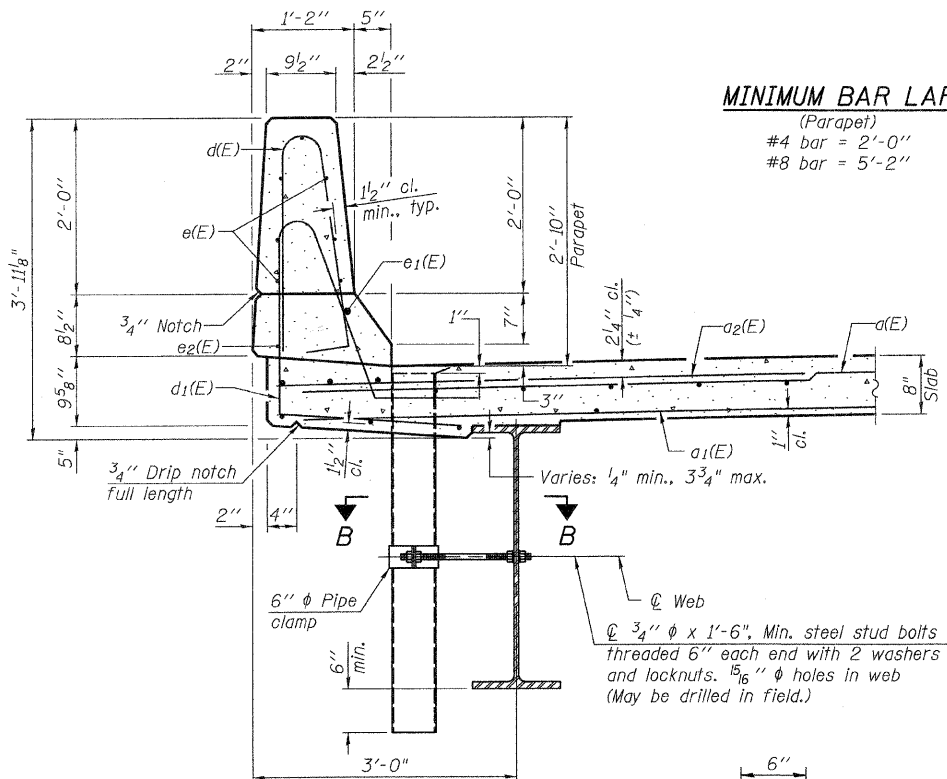
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	169	#5	32'-11"	—
a1(E)	118	#5	31'-11"	—
a2(E)	334	#6	6'-6"	—
a3(E)	15	#5	6'-5"	⌋
b(E)	108	#5	34'-8"	—
b1(E)	124	#5	26'-10"	—
d(E)	216	#5	5'-7"	⌋
d1(E)	216	#5	7'-9"	⌋
e(E)	70	#4	19'-3"	—
e1(E)	6	#8	35'-11"	—
e2(E)	8	#4	25'-10"	—
m(E)	5	#6	33'-2"	—
m1(E)	12	#6	8'-5"	—
m2(E)	5	#6	5'-3"	—
m3(E)	2	#6	2'-8"	—
s(E)	36	#5	6'-10"	⌋
s1(E)	31	#4	9'-10"	⌋
v(E)	34	#5	3'-10"	⌋
x(E)	25	#5	6'-5"	—
Reinforcement Bars, Epoxy Coated		Pound	26,300	
Concrete Superstructure		Cu. Yds.	121.9	

Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

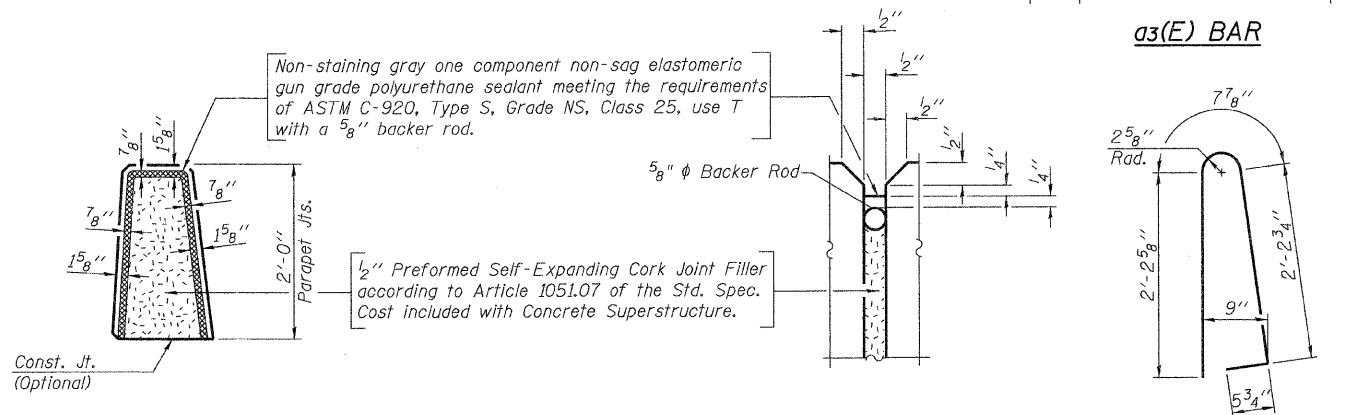
MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



SECTION THRU PARAPET

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, use T with a 5/8" backer rod.

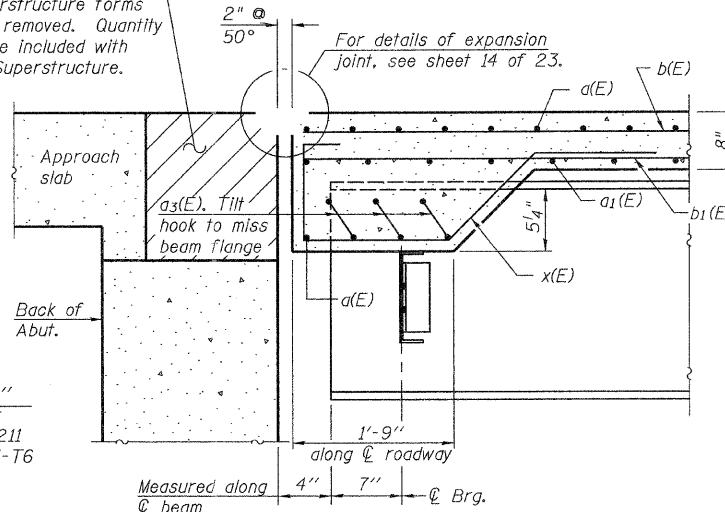


PARAPET JOINT DETAILS

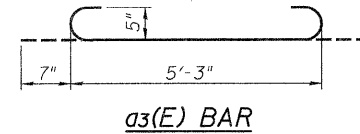
Notes:

Drains shall be located clear of all diaphragms.
Drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

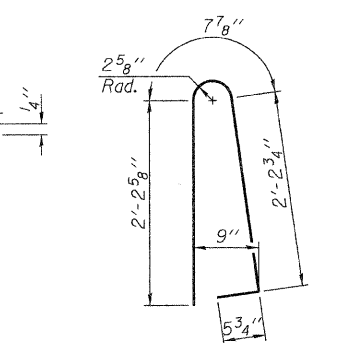
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



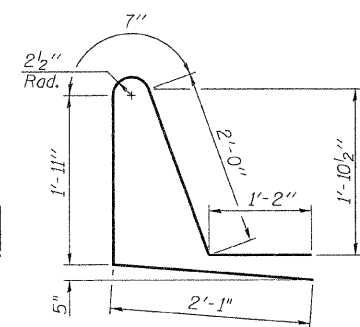
SECTION A-A



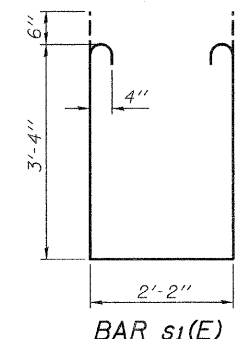
a3(E) BAR



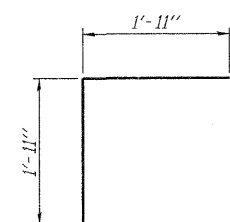
BAR d(E)



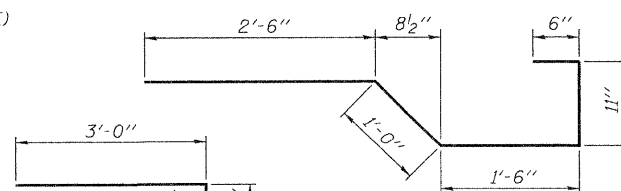
BAR d1(E)



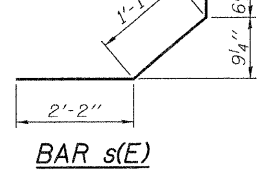
BAR s1(E)



BAR v(E)

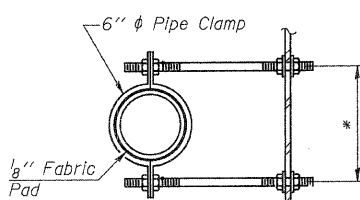


BAR x(E)

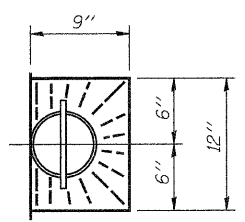


BAR s(E)

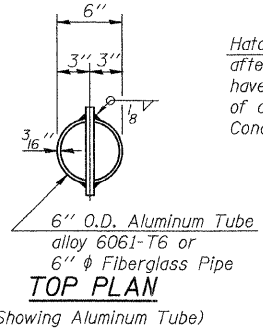
**SUPERSTRUCTURE DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**



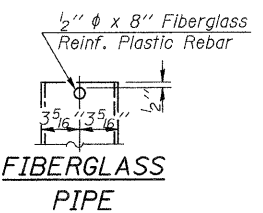
SECTION B-B
* Dimension as required by Pipe Clamp



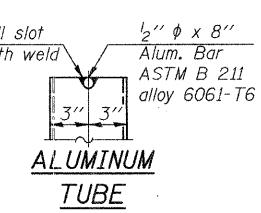
TOP PLAN



TOP PLAN
(Showing Aluminum Tube)



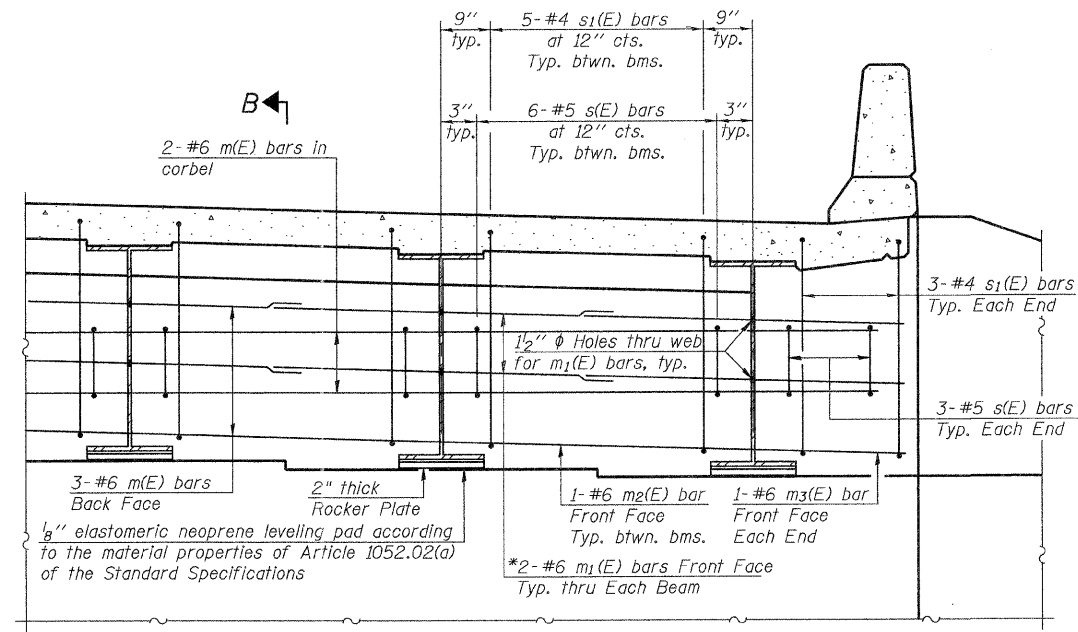
FIBERGLASS PIPE



ALUMINUM TUBE

DESIGNED	NPH
CHECKED	BAN
DRAWN	NPH
CHECKED	BAN

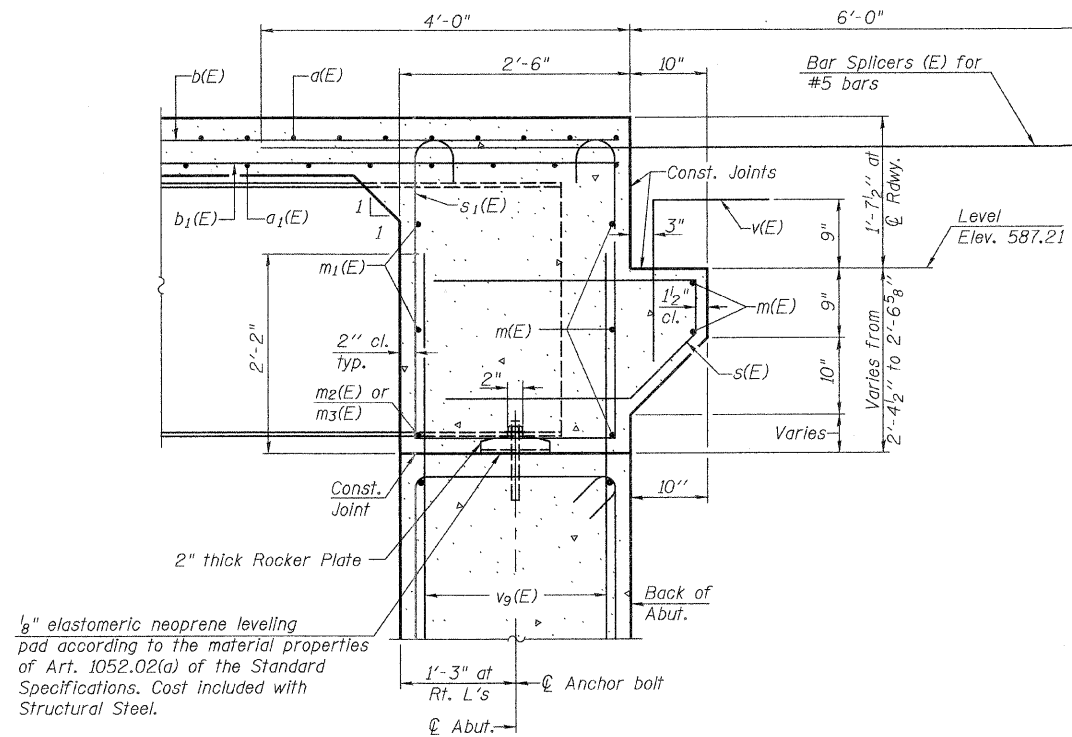
SHEET NO. 8 23 SHEETS	ROUTE NO. FAU 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 29
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



DIAPHRAGM ELEVATION AT EAST ABUTMENT
(Looking East)

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 23.
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 23.
See Sheet 8 of 23 for details of s(E) & s1(E) bars.
See Sheet 21 of 23 for placement of v9(E) bars.

MIN. BAR LAP
#6 bar = 3'-4"



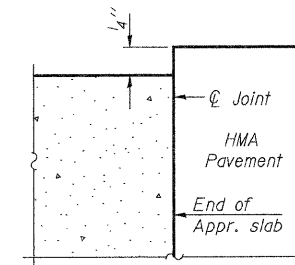
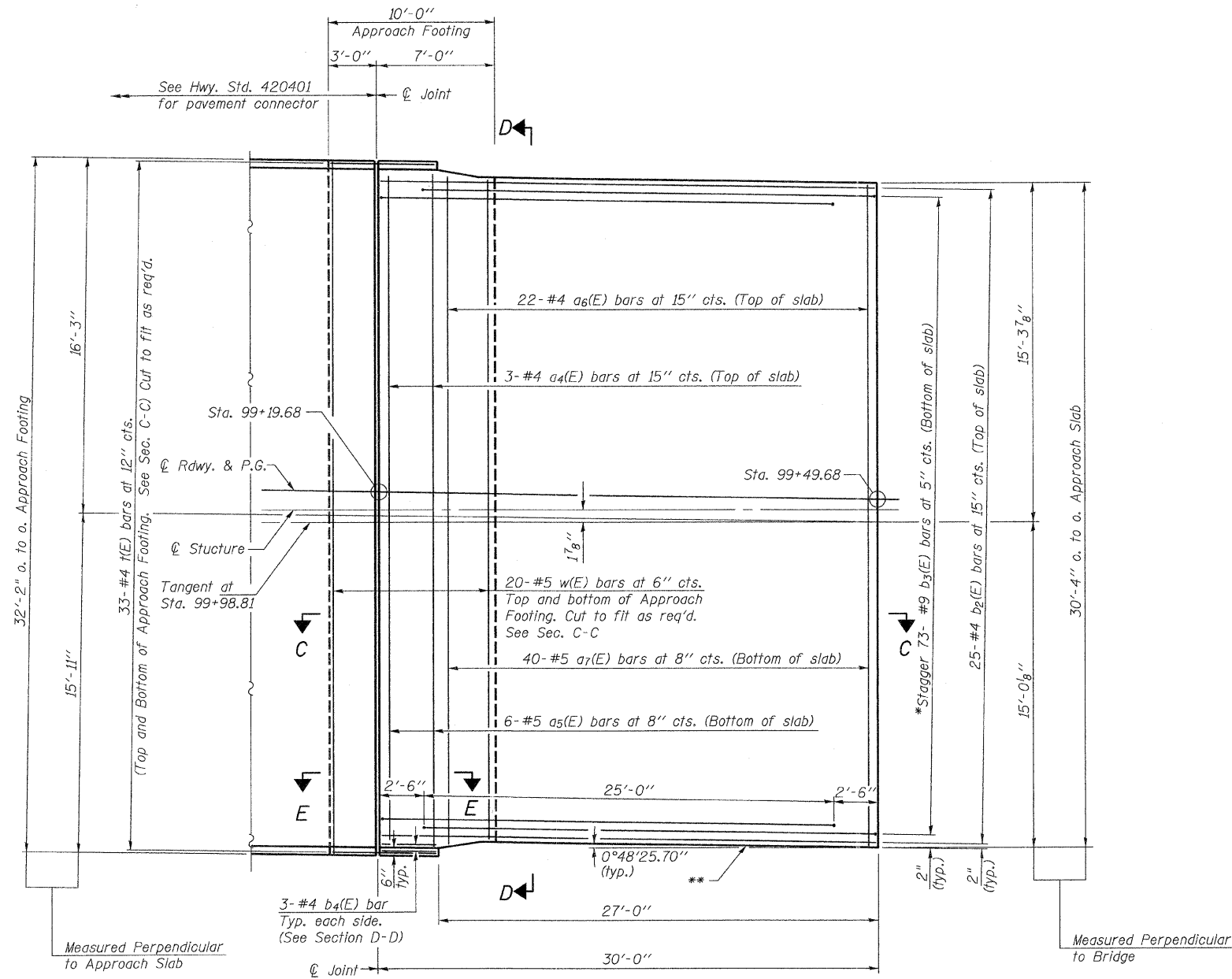
SECTION B-B

DIAPHRAGM DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 9	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	30
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(683)		

Notes:
 See sheet 11 of 23 for Sections C-C & D-D and View E-E.
 $a_4(E)$, $a_5(E)$, $a_6(E)$ and $a_7(E)$ bar spacings measured along C App. Pvmt.
 See Sheet 2 of 23 for offset sketch.



FLEXIBLE PAVEMENT
 DETAIL A

PLAN

* Tilt #9 $b_3(E)$ bars as required to maintain clearance.

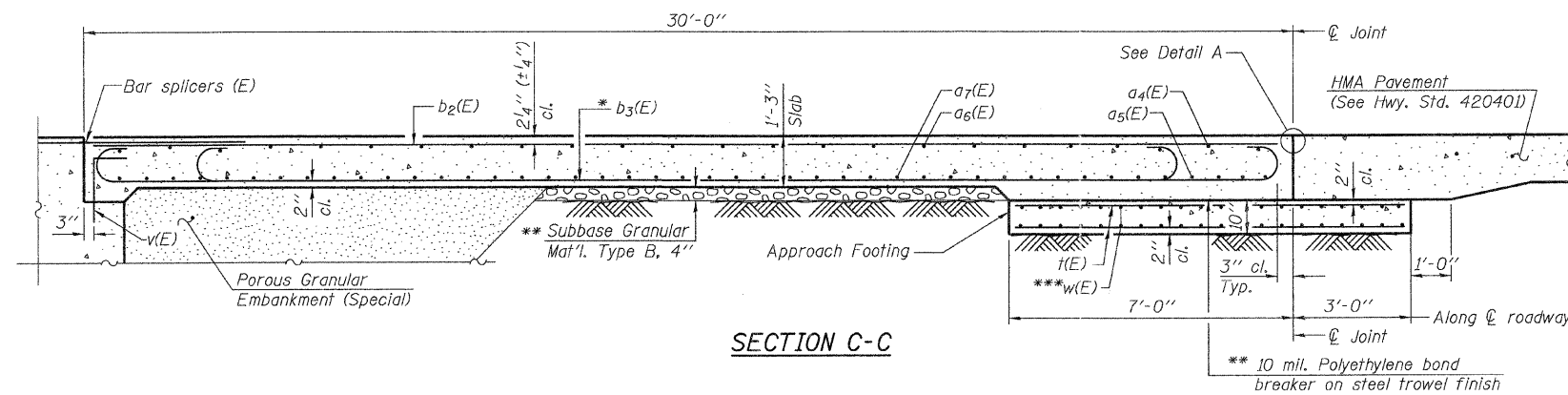
** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of the Std. Specifications; full depth of slab, full length of parapet. Typ. each parapet.

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

2987B010

WEST BRIDGE APPROACH SLAB DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

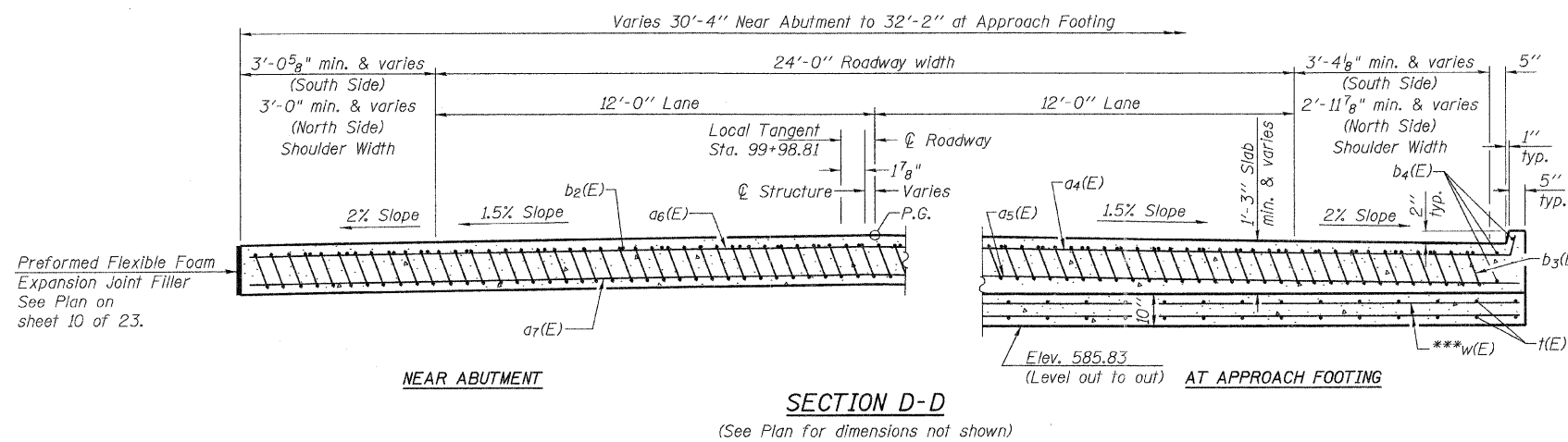
SHEET NO. 10 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	31
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



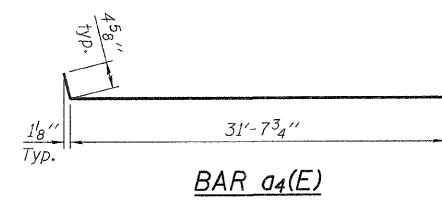
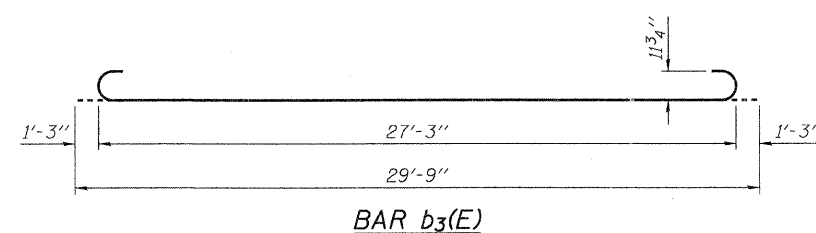
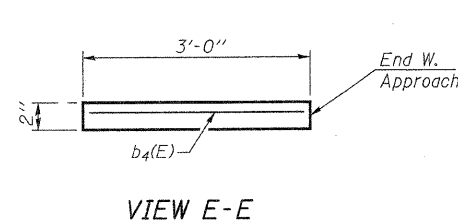
Notes:
 See Sheet 10 of 23 for Detail A.
 Approach slab concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 See Sheet 19 of 23 for v(E) bar details.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 See Sheet 22 of 23 for bar splicer details.
 Cost of excavation for approach footing included with Concrete Structures.
 See Sheet 2 of 23 for Porous Granular Embankment (Special) and drainage treatment details.

**WEST APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	3	#4	32'-5"	—
a5(E)	6	#5	31'-10"	—
a6(E)	22	#4	30'-0"	—
a7(E)	40	#5	30'-0"	—
b2(E)	25	#4	29'-8"	—
b3(E)	73	#9	29'-9"	—
b4(E)	6	#4	2'-8"	—
t(E)	33	#4	9'-8"	—
w(E)	40	#5	31'-10"	—
Concrete Superstructure		Cu. Yd.	44.2	
Concrete Structures		Cu. Yd.	9.9	
Reinforcement Bars, Epoxy Coated		Pound	11,390	



* Tilt #9 b3(E) bars as required to maintain clearance.
 ** Cost included with Concrete Superstructure.
 *** Cut to fit as required.

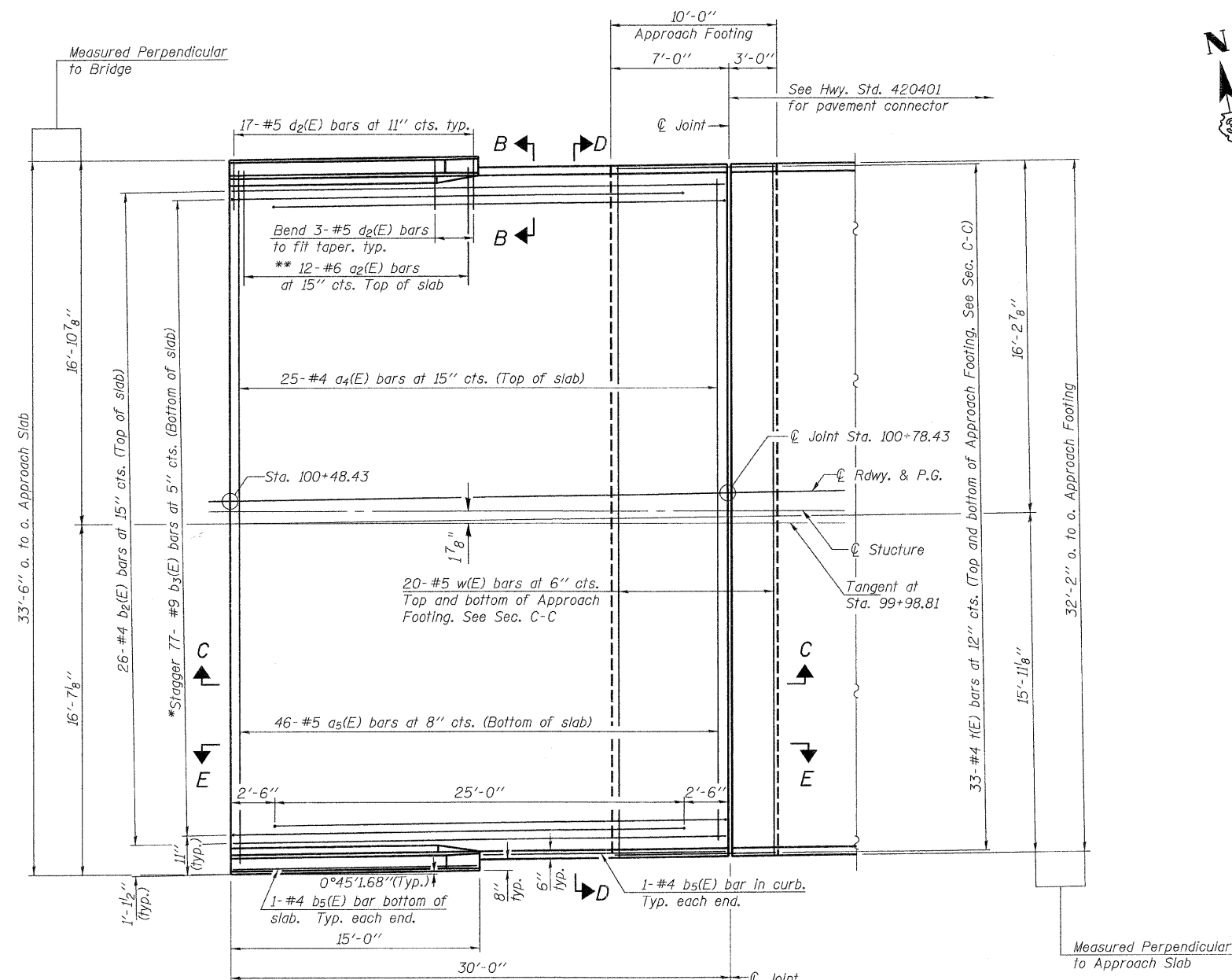


**WEST BRIDGE APPROACH SLAB DETAILS
 RIVER RD. (F.A.U. 3799) OVER
 BLACKBERRY CREEK
 SECTION 08-00036-00-BR
 KENDALL COUNTY
 STATION 99+98.81**

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

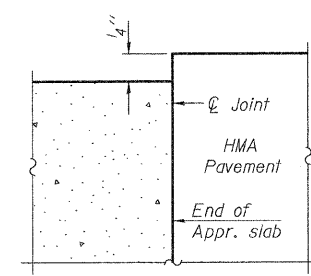
SHEET NO. 11 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	32
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

Notes:
 See sheet 13 of 23 for Sections C-C & D-D and View E-E.
 a₄(E) and a₅(E) bar spacings measured along ϕ App. Fvmt.
 See sheet 2 of 23 for offset sketch.

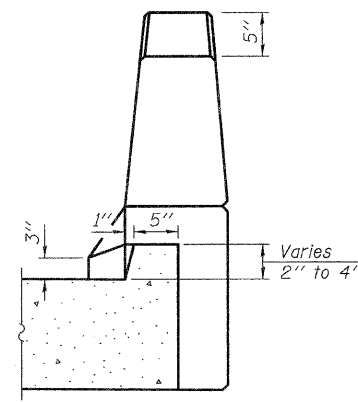


PLAN

* Tilt #9 b₃(E) bars as required to maintain clearance.
 ** Space between a₄(E) bars, typ. ea. parapet.



FLEXIBLE PAVEMENT
 DETAIL A

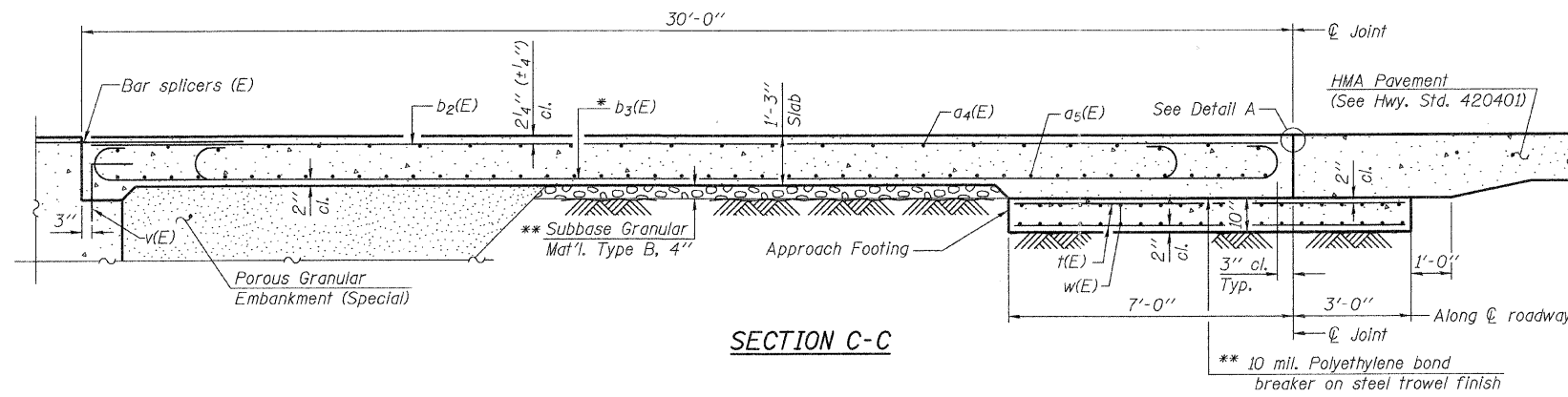


VIEW B-B

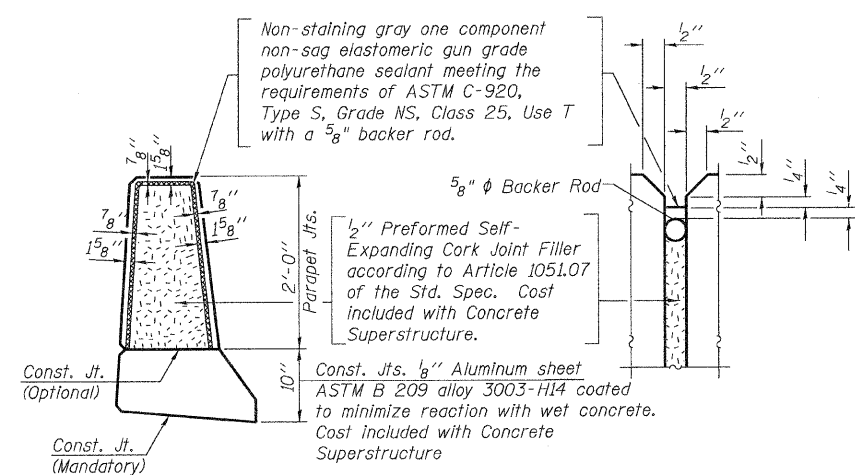
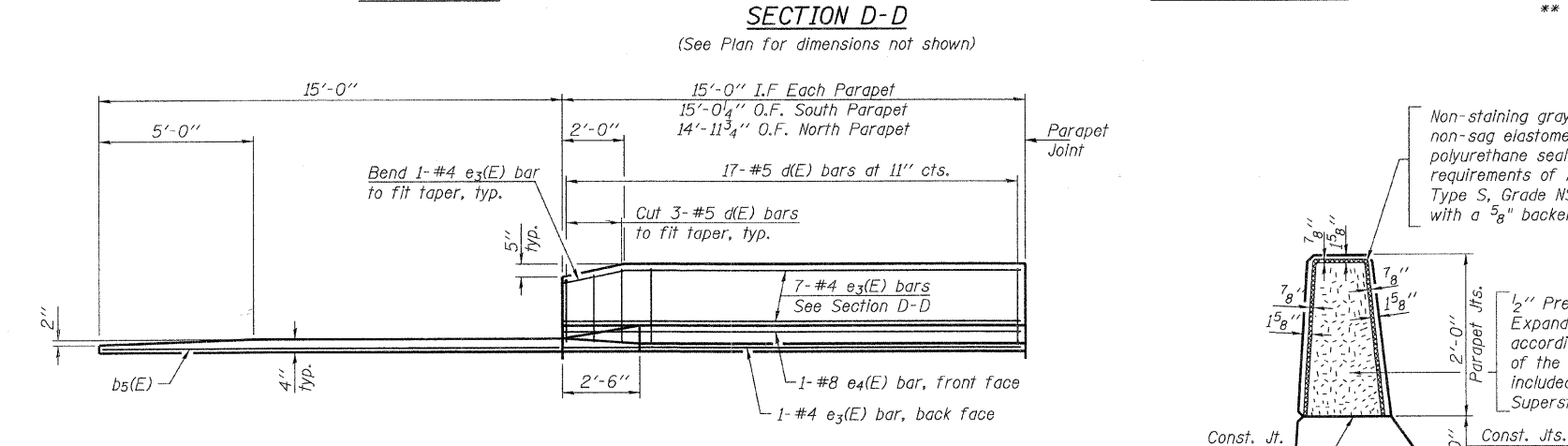
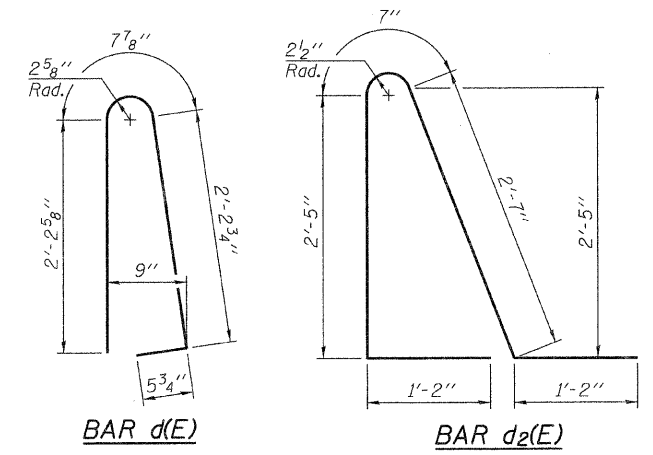
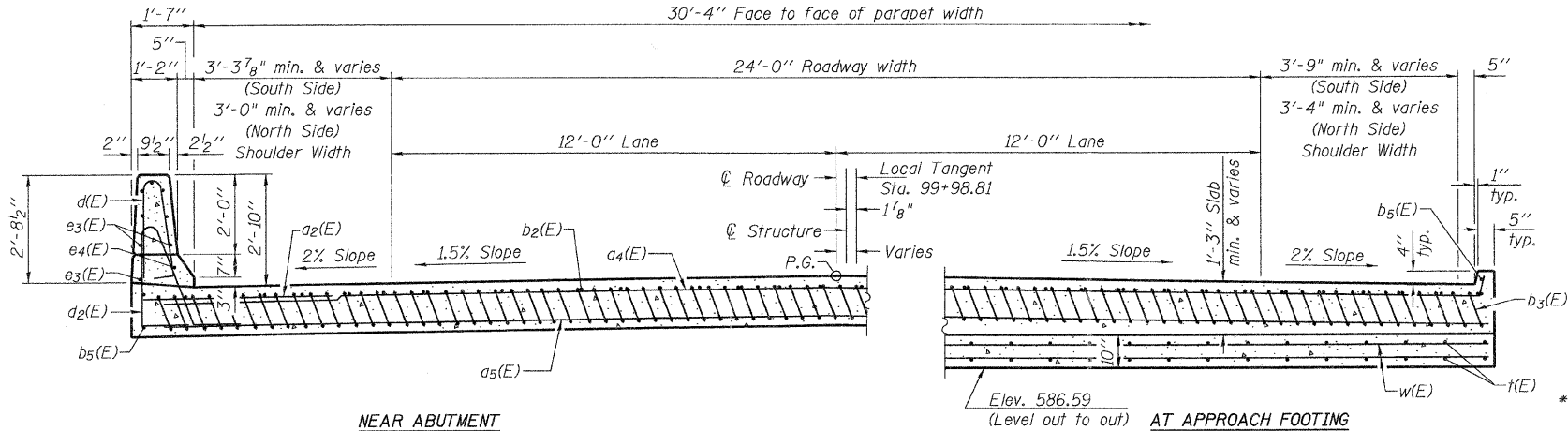
EAST BRIDGE APPROACH SLAB DETAILS
 RIVER RD. (F.A.U. 3799) OVER
 BLACKBERRY CREEK
 SECTION 08-00036-00-BR
 KENDALL COUNTY
 STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 12 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	33
SN 047-6500			CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

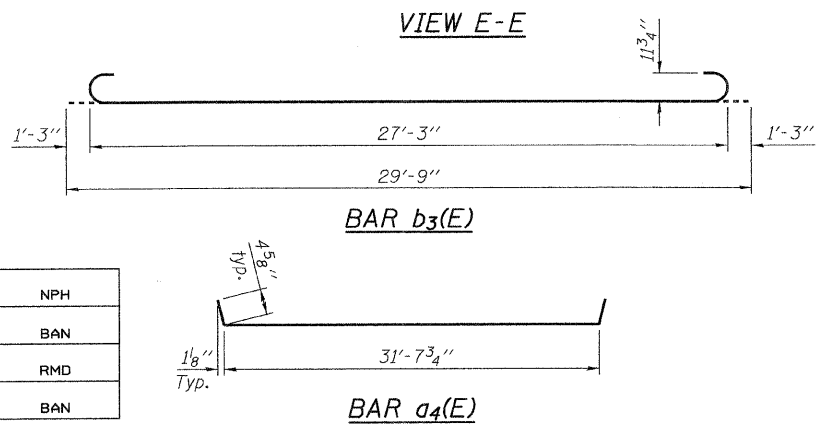


Notes:
 See sheet 12 of 23 for Detail A.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 See sheet 8 of 23 for v(E) bar details.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 See sheet 22 of 23 for bar splicer details.
 Cost of excavation for approach footing included with Concrete Structures.
 See sheet 2 of 23 for Porous Granular Embankment (Special) and drainage treatment details.
 See sheet 8 of 23 for additional parapet details.



**EAST APPROACH
BILL OF MATERIAL**

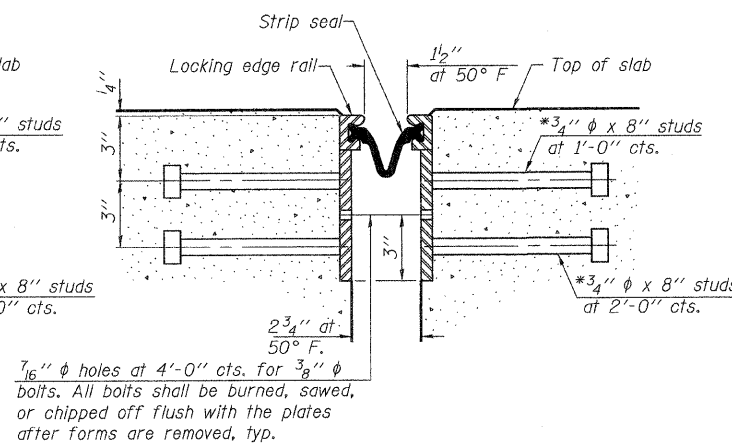
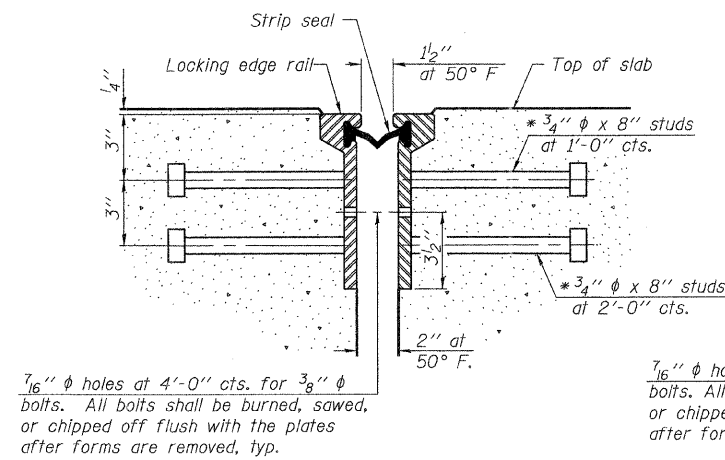
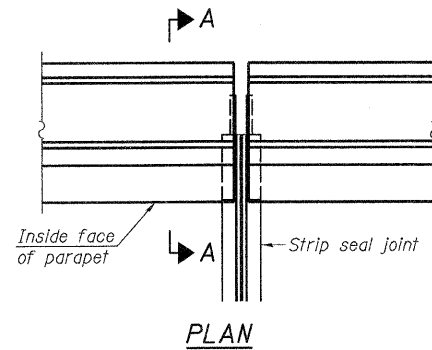
Bar	No.	Size	Length	Shape
a2(E)	24	#6	6'-6"	—
a4(E)	25	#4	32'-5"	—
a5(E)	46	#5	31'-10"	—
b2(E)	26	#4	29'-8"	—
b3(E)	77	#9	29'-9"	—
b5(E)	4	#4	14'-8"	—
d(E)	34	#5	5'-7"	U
d2(E)	34	#5	7'-11"	U
e3(E)	16	#4	14'-8"	—
e4(E)	2	#8	14'-8"	—
f(E)	33	#4	9'-8"	—
w(E)	40	#5	31'-10"	—
Concrete Superstructure			Cu. Yd.	50.9
Concrete Structures			Cu. Yd.	9.9
Reinforcement Bars, Epoxy Coated			Pound	12,900



**EAST BRIDGE APPROACH SLAB DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 13 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	34
SN 047-6500			CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

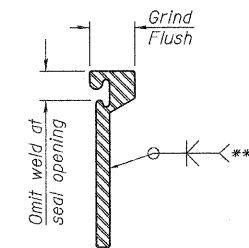
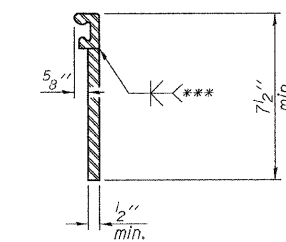
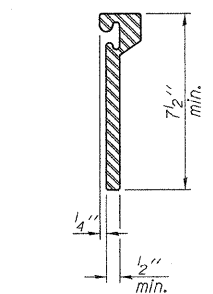
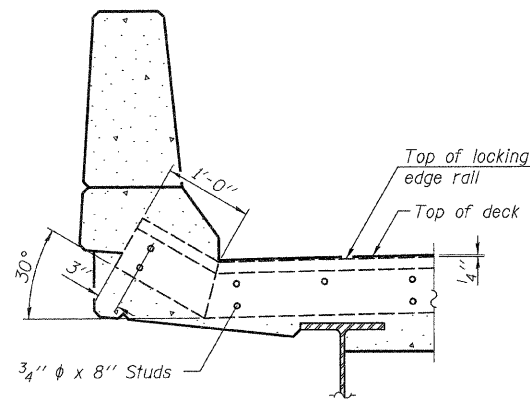
Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAILS

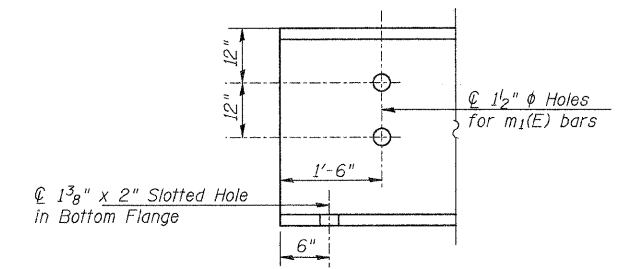
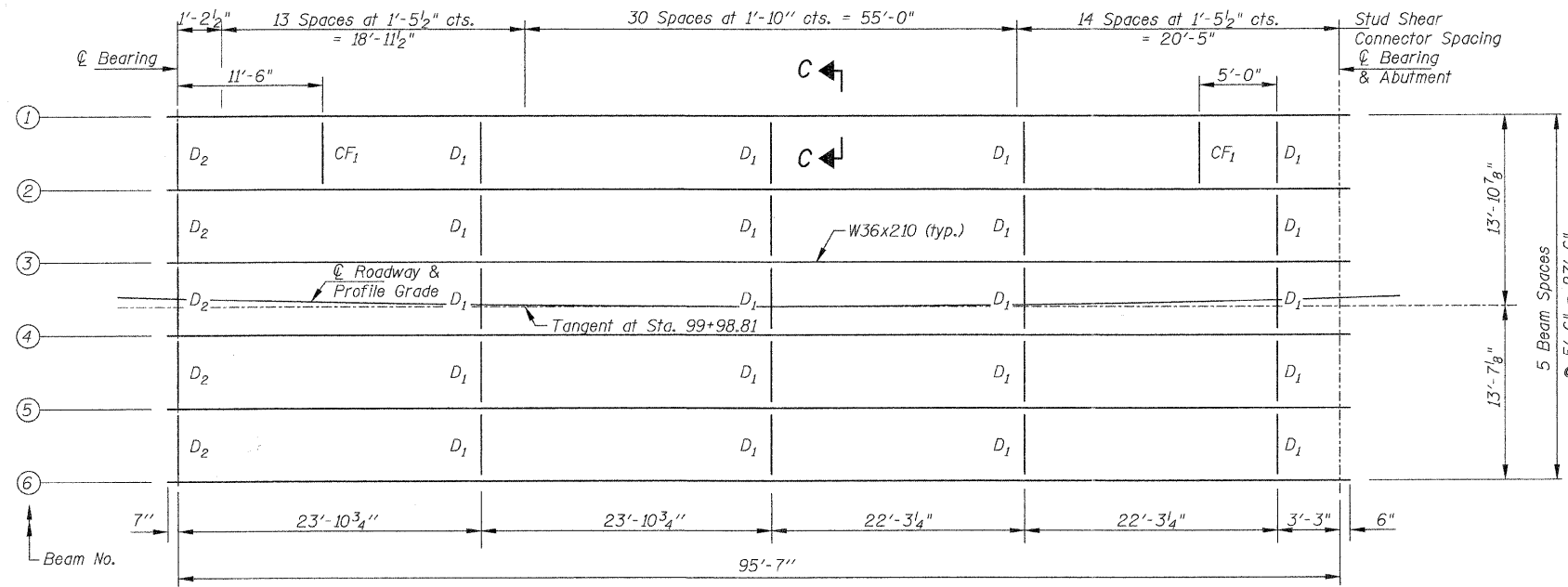
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	33

PREFORMED JOINT STRIP SEAL
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

SHEET NO. 14 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	35
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



EAST END OF BEAM DETAIL

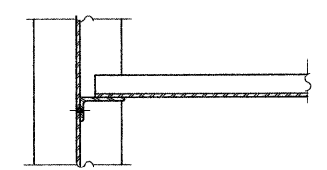
**** TOP OF BEAM ELEVATIONS

LOCATION	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
W. Abut.	587.43	587.52	587.61	587.60	587.52	587.42
E. Abut.	587.90	588.00	588.08	588.08	587.99	587.90

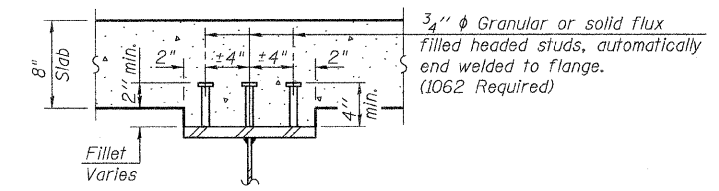
****For fabrication only.

Note:
All beams are W36x210 AASHTO M270 Gr. 50W NTR.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements of Notch Toughness, Zone 2.

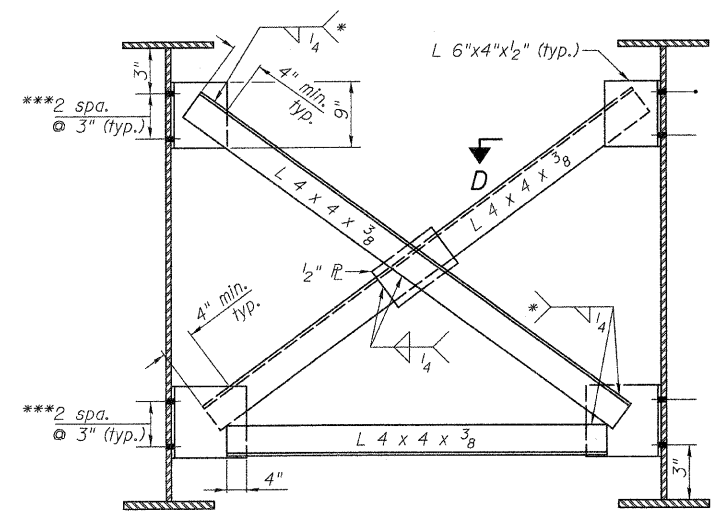
FRAMING PLAN



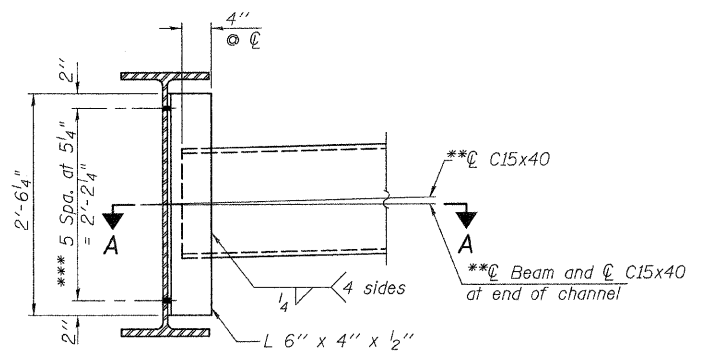
SECTION A-A



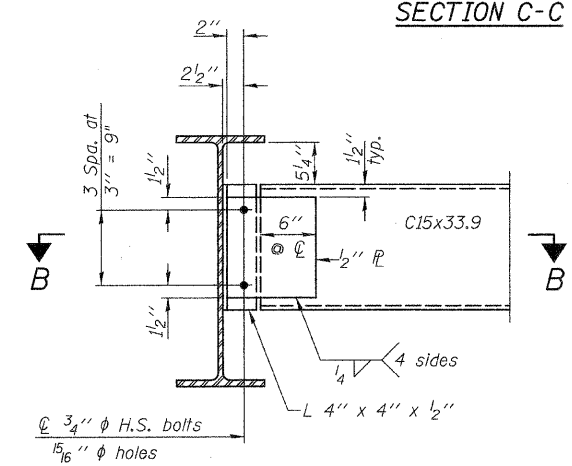
SECTION C-C



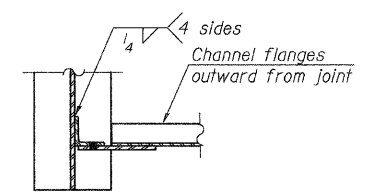
CROSS FRAME CF₁
(2 req'd)



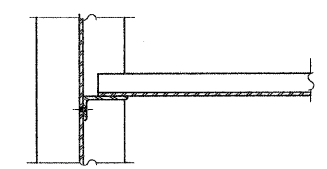
INTERIOR DIAPHRAGM D₁
(20 req'd)



END DIAPHRAGM D₂
(5 req'd)



SECTION B-B



SECTION D-D

Note:
Two hardened washers required for each set of oversized holes.
**Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, C15x50 if utilized, shall be provided at no additional cost to the City.
***3/4 inch HS bolts, 1 5/16 inch holes

Note:
Two hardened washers required for each set of oversized holes.

Notes:
Two hardened washers required for each set of oversized holes.

* Fillet weld angles along 3 sides on one face of bolted angle.
*** 3/4 inch HS bolts, 1 5/16 inch Holes

FRAMING PLAN AND STRUCTURAL STEEL
RIVER RD. (F.A.U. 3799) OVER BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	NPH/RMD
CHECKED	BAN

SHEET NO. 15	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	36
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)		

INTERIOR GIRDER MOMENT TABLE		
0.5 Sp. 1		
I_s	(in ⁴)	13200
$I_c(n)$	(in ⁴)	29227
$I_c(3n)$	(in ⁴)	21060
$I_c(cr)$	(in ⁴)	-
S_s	(in ³)	719
$S_c(n)$	(in ³)	991
$S_c(3n)$	(in ³)	883
$S_c(cr)$	(in ³)	-
DC1	(k/')	0.830
M _{DC1}	('k)	948
DC2	(k/')	0.150
M _{DC2}	('k)	171
DW	(k/')	0.275
M _{DW}	('k)	314
M _{ℓ + IM}	('k)	1297
M _u (Strength I)	('k)	4140
φ _r M _n	('k)	4838
f _s DC1	(ksi)	15.82
f _s DC2	(ksi)	2.33
f _s DW	(ksi)	4.27
f _s (ℓ+IM)	(ksi)	15.70
f _s (Service II)	(ksi)	42.83
0.95R _h F _{yf}	(ksi)	47.50
f _s (Total)(Strength I)	(ksi)	-
φ _r F _n	(ksi)	-
V _r	(k)	48.6

INTERIOR GIRDER REACTION TABLE		
Abutments		
R _{DC1}	(k)	39.7
R _{DC2}	(k)	7.2
R _{DW}	(k)	13.1
R _{ℓ + IM}	(k)	74.6
R _{Total}	(k)	134.6

EXTERIOR GIRDER MOMENT TABLE		
0.5 Sp. 1		
I_s	(in ⁴)	13200
$I_c(n)$	(in ⁴)	29353
$I_c(3n)$	(in ⁴)	21151
$I_c(cr)$	(in ⁴)	-
S_s	(in ³)	719
$S_c(n)$	(in ³)	993
$S_c(3n)$	(in ³)	885
$S_c(cr)$	(in ³)	-
DC1	(k/')	0.867
M _{DC1}	('k)	990
DC2	(k/')	0.224
M _{DC2}	('k)	256
DW	(k/')	0.208
M _{DW}	('k)	238
M _{ℓ + IM}	('k)	1419
M _u (Strength I)	('k)	4396
φ _r M _n	('k)	4851
f _s DC1	(ksi)	16.52
f _s DC2	(ksi)	3.47
f _s DW	(ksi)	3.22
f _s (ℓ+IM)	(ksi)	17.14
f _s (Service II)	(ksi)	45.50
0.95R _h F _{yf}	(ksi)	47.50
f _s (Total)(Strength I)	(ksi)	-
φ _r F _n	(ksi)	-
V _r	(k)	44.9

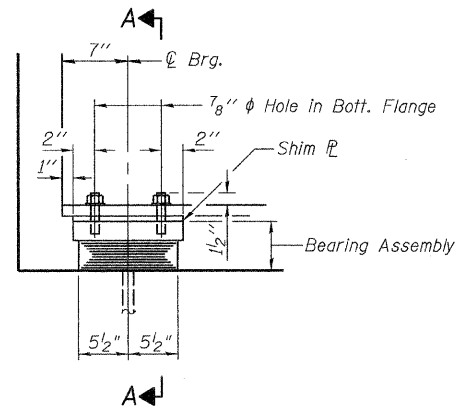
EXTERIOR GIRDER REACTION TABLE		
Abutments		
R _{DC1}	(k)	41.4
R _{DC2}	(k)	10.7
R _{DW}	(k)	9.9
R _{ℓ + IM}	(k)	63.1
R _{Total}	(k)	125.1

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to short-term composite live loads (in⁴ and in³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in⁴ and in³).
- $I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite dead loads (in⁴ and in³).
- DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_{ℓ + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}
φ_rM_n: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}
f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
M_{DC2} / S_{c(3n)} or M_{DC2} / S_{c(cr)} as applicable.
f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
M_{DW} / S_{c(3n)} or M_{DW} / S_{c(cr)} as applicable.
f_s (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
M_{ℓ + IM} / S_{c(3n)} or M_{ℓ + IM} / S_{c(cr)} as applicable.
f_s (Service II): Sum of stresses as computed below (ksi).
f_sDC1 + f_sDC2 + f_sDW + 1.3 f_s(ℓ + IM)
0.95R_hF_{yf}: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (f_sDC1 + f_sDC2) + 1.5 f_sDW + 1.75 f_s(ℓ + IM)
φ_rF_n: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).
V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

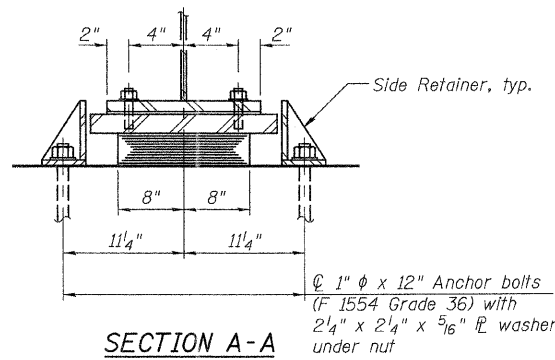
STRUCTURAL STEEL
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

DESIGNED	NPH
CHECKED	BAN
DRAWN	NPH/RMD
CHECKED	BAN

SHEET NO. 16	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	37
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRM-9003(883)		



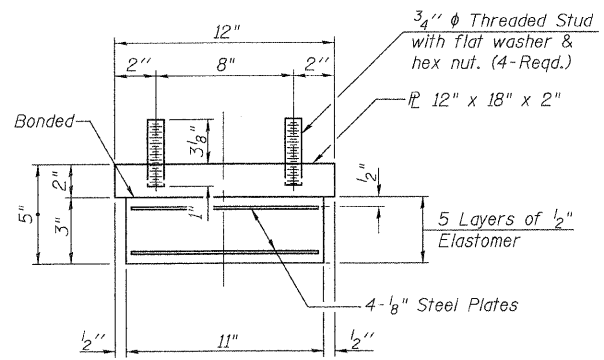
ELEVATION AT WEST ABUTMENT



SECTION A-A

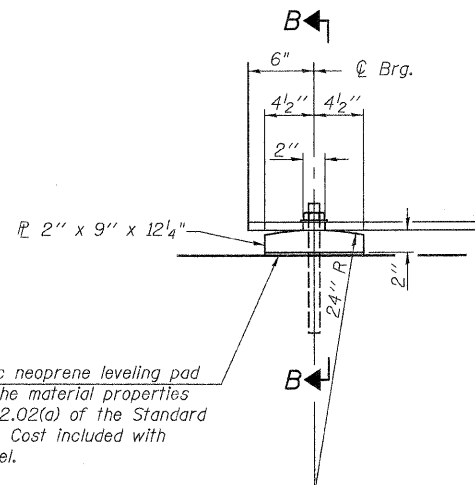
TYPE I ELASTOMERIC EXP. BRG.

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 The structural steel plates of the Bearing Assembly and the fixed bearing shall conform to the requirements of AASHTO M270, Grade 50W.

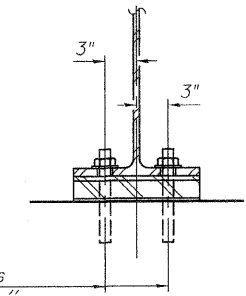


BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.



ELEVATION AT EAST ABUTMENT



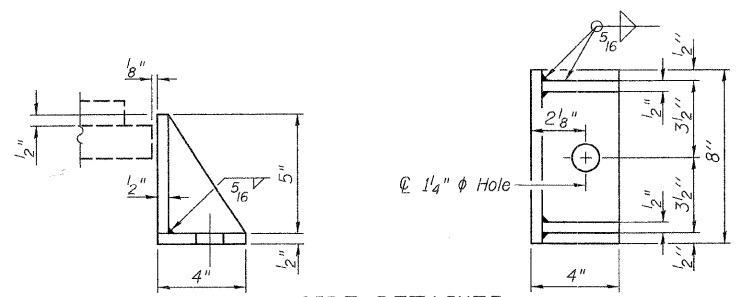
SECTION B-B

1" x 12" Anchor bolts (F 1554 Grade 36) with 2 1/4" x 2 1/4" x 5/16" washer under nut. 1 1/2" holes in bearing plate.

FIXED BEARING

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Anchor Bolts, 1"	Each	24



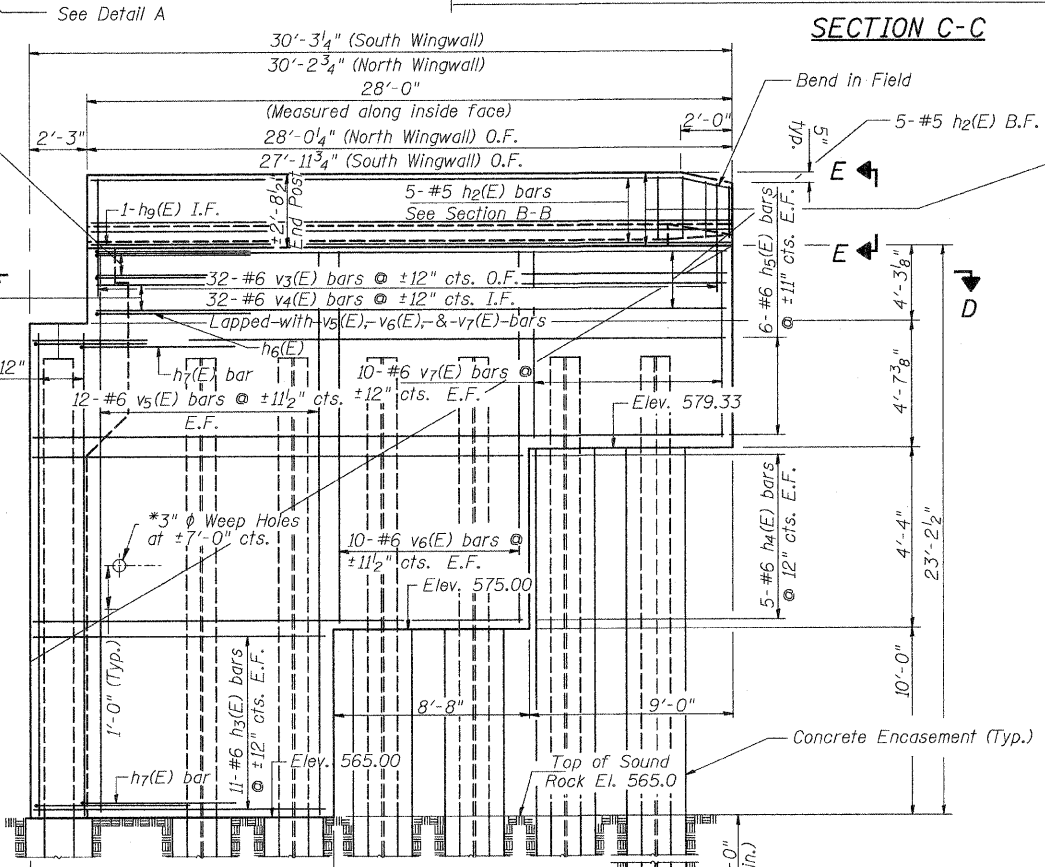
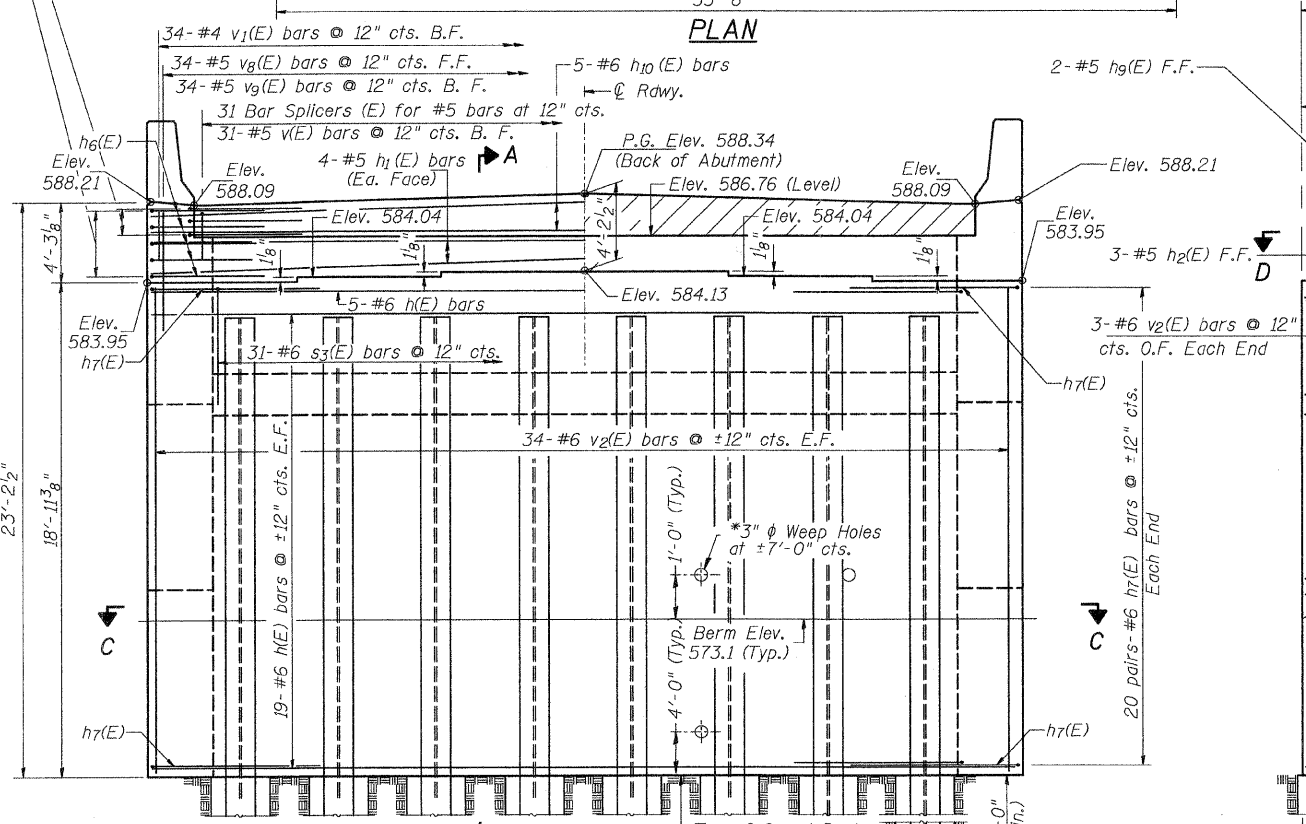
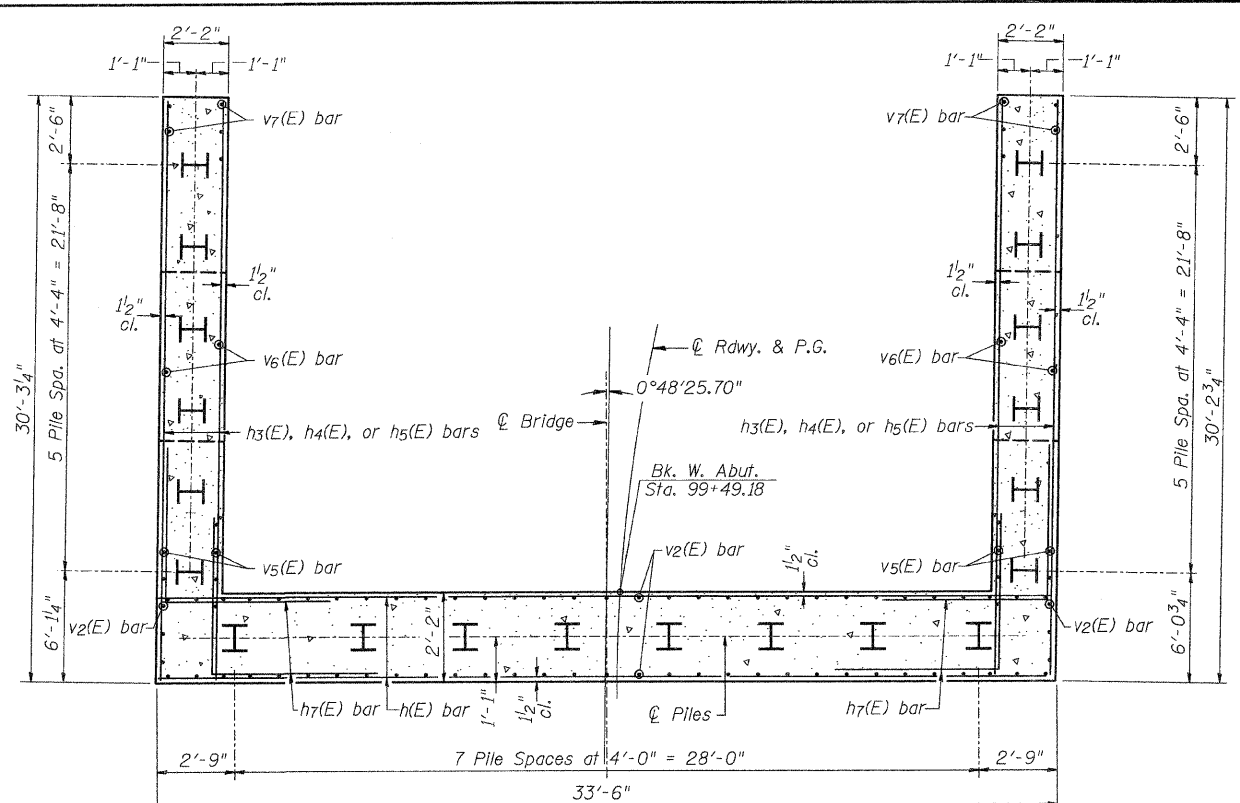
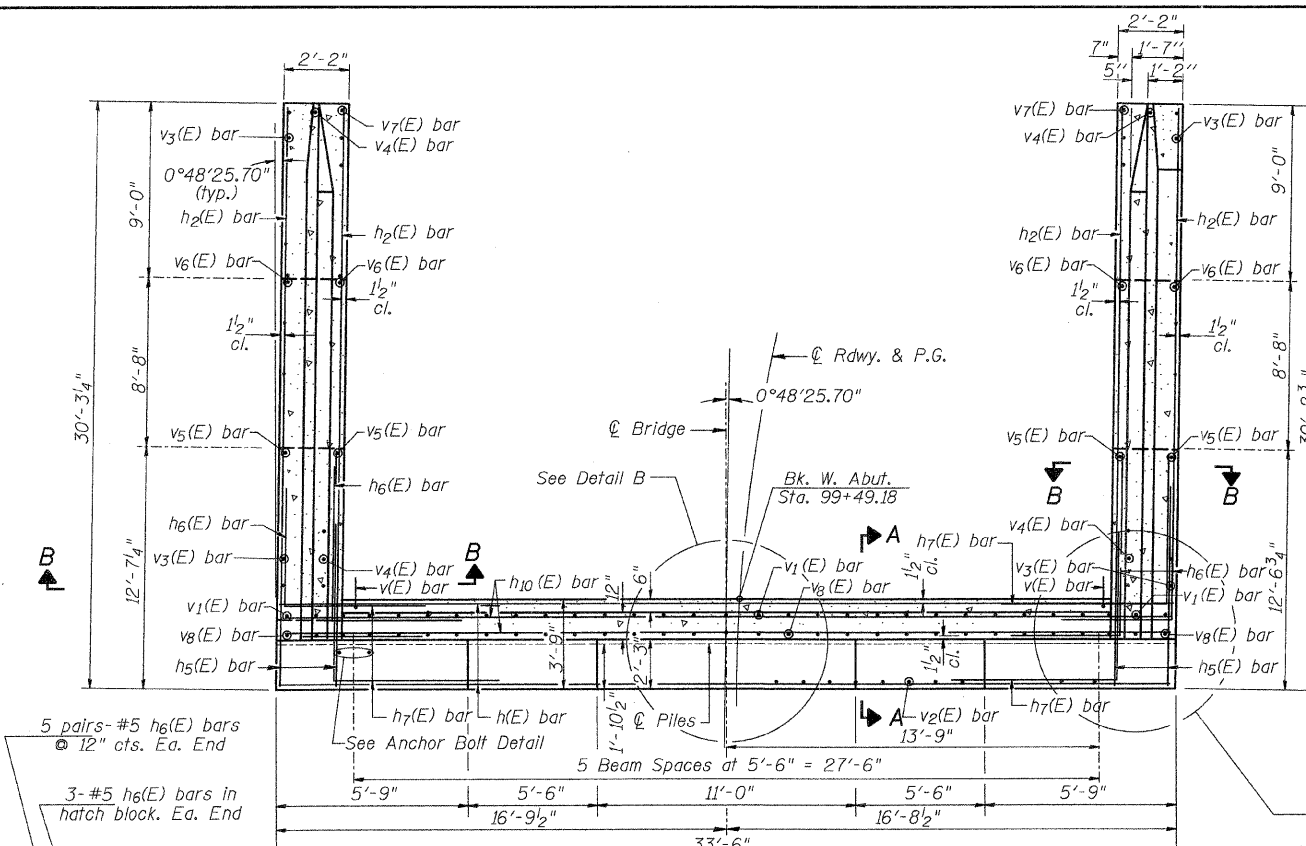
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

BEARING DETAILS
 RIVER RD. (F.A.U. 3799) OVER
 BLACKBERRY CREEK
 SECTION 08-00036-00-BR
 KENDALL COUNTY
 STATION 99+98.81

SHEET NO. 17 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	38
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



Notes:
 The bottom of stem/wings elevation may be adjusted in the field to match the top of rock elevation as verified in the field. Reinforcement shall be adjusted accordingly in regards to the length of the vertical reinforcement and number required of horizontal reinforcement. The bottom of the stem/wings shall be level. Any minor rock excavation required to provide for a level bearing shall be included in the cost of Concrete Structures.
 Weep Holes shall be constructed in accordance with Std. 503.11 of the Standard Specifications. Cost included with Concrete Structures
 See Sheet 18 of 23 for Sections A-A, B-B, C-C, D-D, E-E, & Details A & B.
 All edges shall have standard $\frac{3}{4}$ " chamfer.
 See Sheet 23 of 23 for Pile, Rock Socket, & Concrete Encasement Details.
 See Sheet 18 of 23 for Anchor Bolt Detail.

WEST ABUTMENT
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

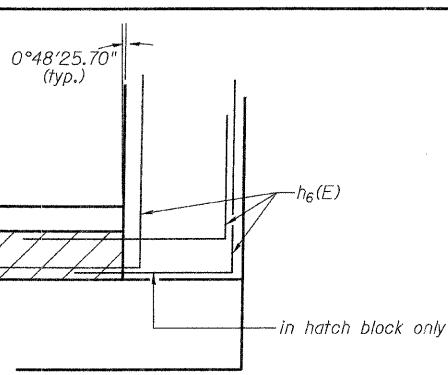
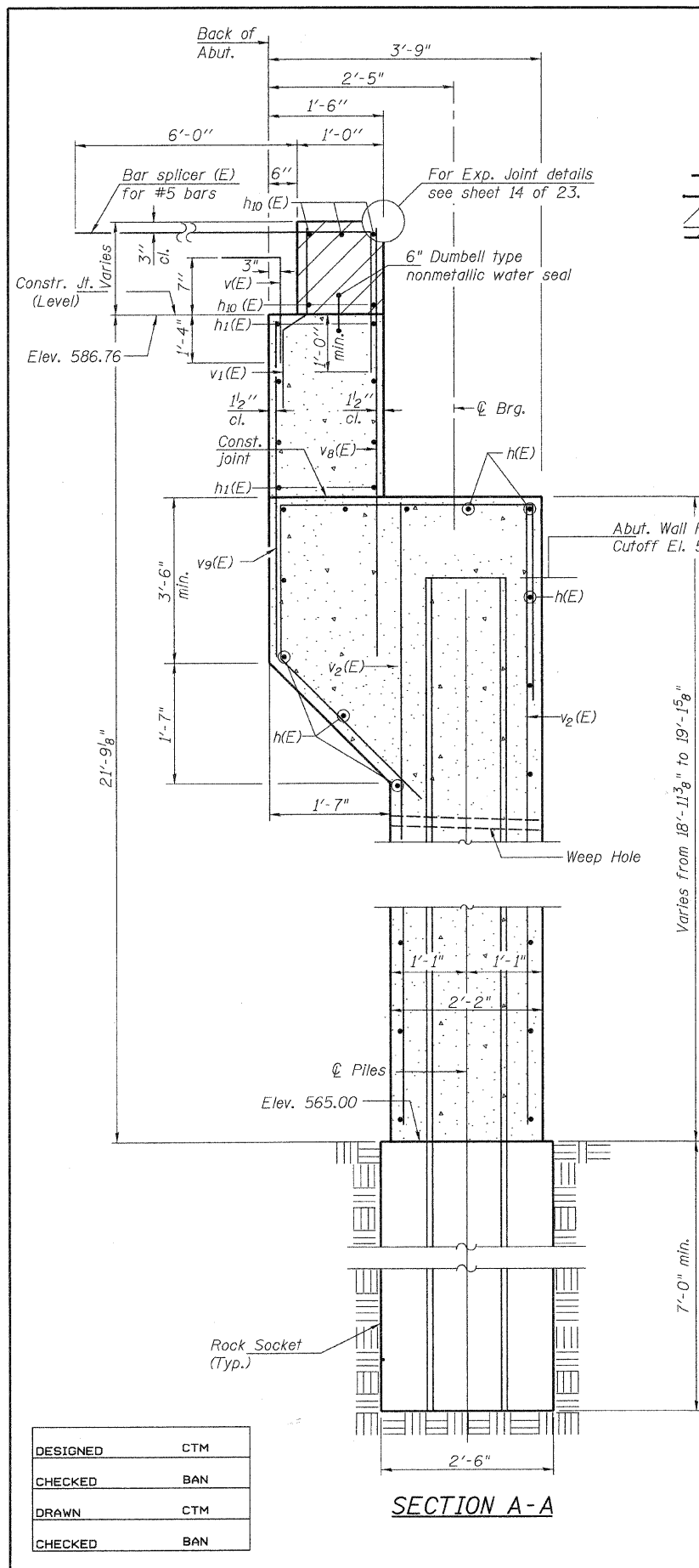
DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM/TAC
CHECKED	BAN

ELEVATION
 (Front View of Abutment)

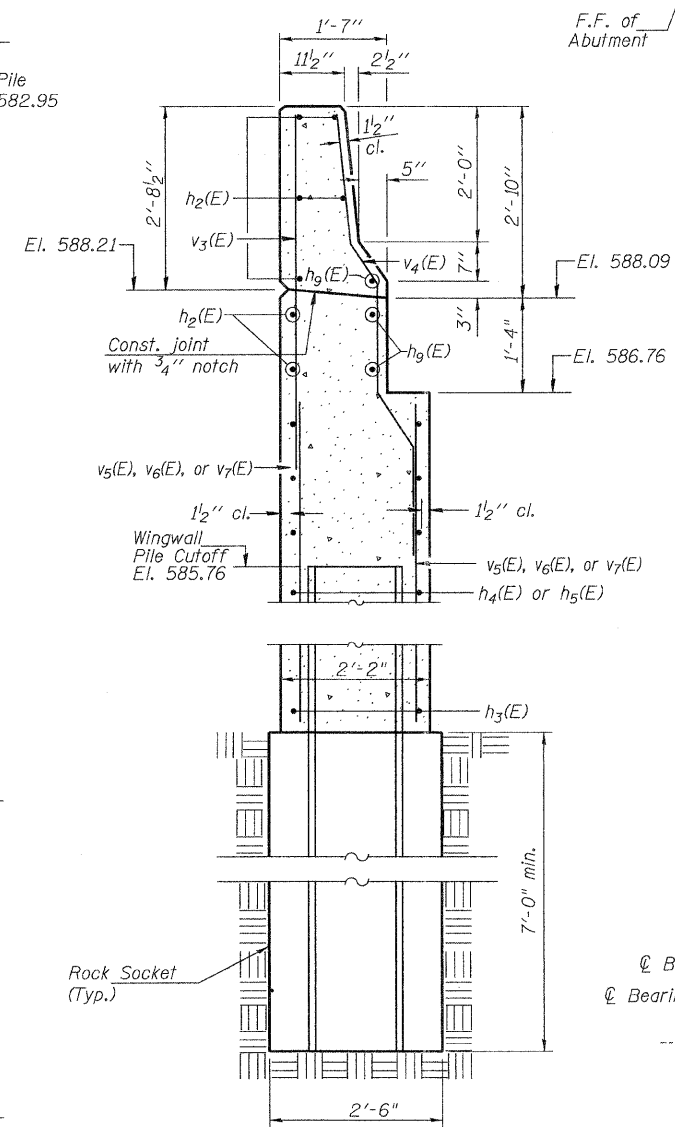
PILE DATA
 Type: Steel HP14x89
 Nominal Required Bearing: Set in Rock (705 kips)
 Factored Resistance Available: 388 kips
 Est. Length: 25' (abut.)
 28' (wings)
 No. Required: 20

WINGWALL ELEVATION
 *Dimensions shown along \perp Abut.

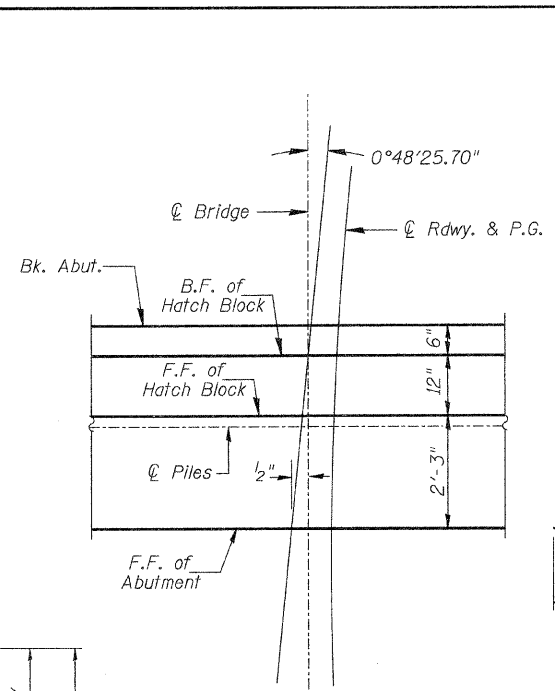
SHEET NO. 18 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	39
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT BRM-9003(883)		



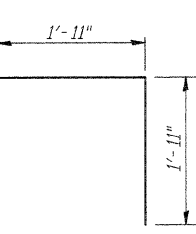
DETAIL A
(Showing h6(E) bar locations)



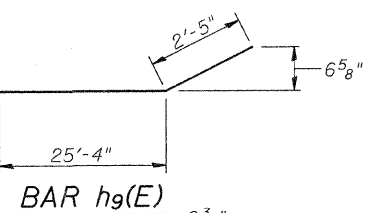
SECTION B-B



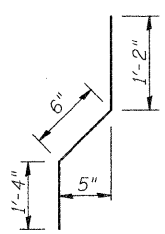
DETAIL B



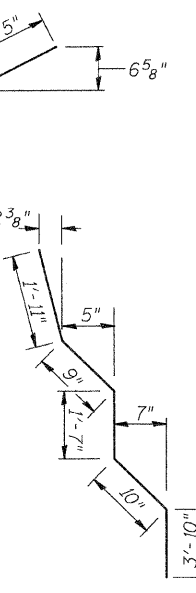
BAR v(E)



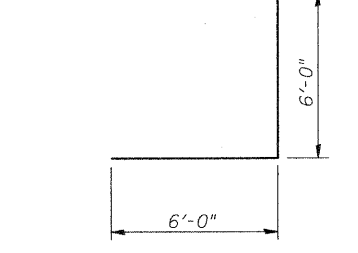
BAR h9(E)



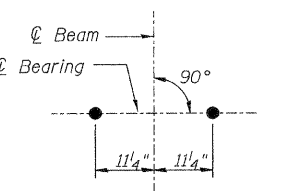
BAR v1(E)



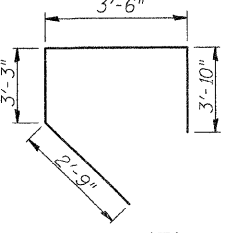
BAR v4(E)



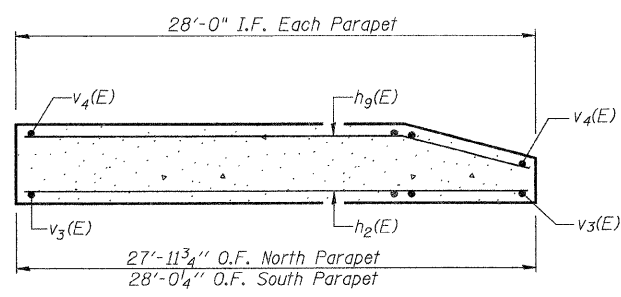
BARS h6(E) & h7(E)



ANCHOR BOLT DETAIL



BAR s3(E)



SECTION D-D
BILL OF MATERIAL

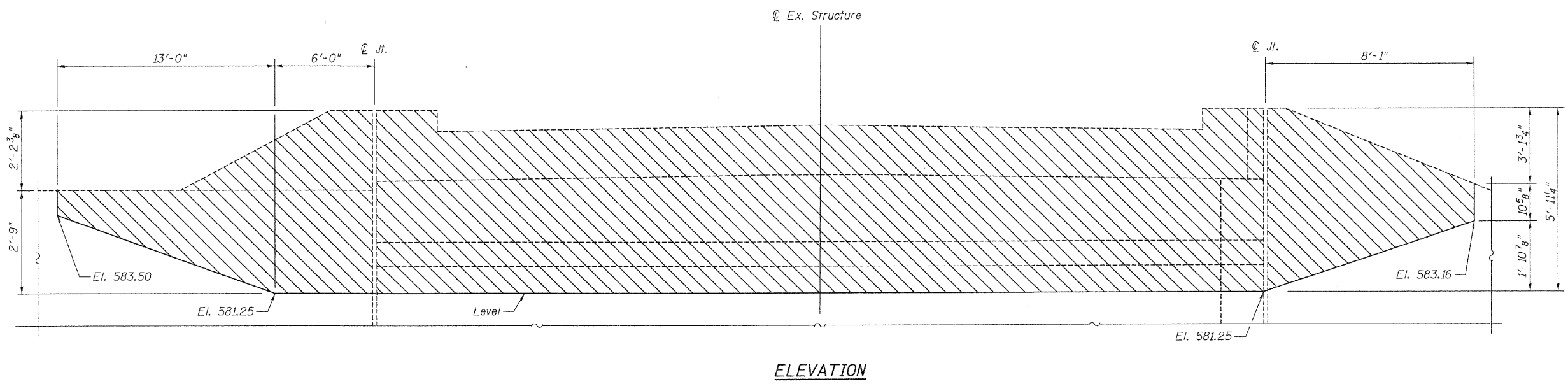
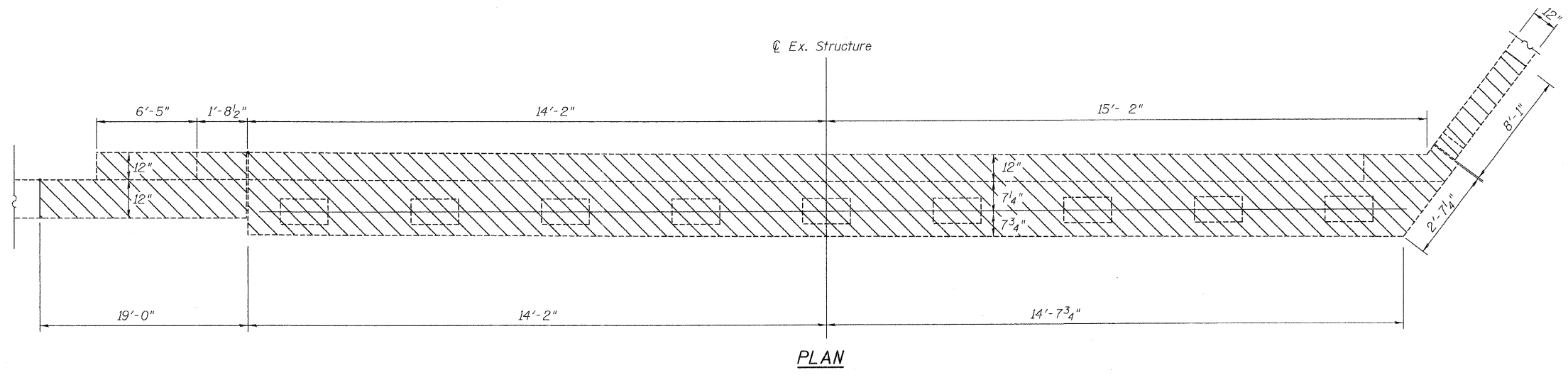
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	43	#6	33'-3"	—
h1(E)	8	#5	33'-3"	—
h2(E)	26	#5	27'-9"	—
h3(E)	44	#6	12'-3"	—
h4(E)	20	#6	20'-11"	—
h5(E)	24	#6	30'-0"	—
h6(E)	24	#5	12'-0"	L
h7(E)	80	#6	12'-0"	L
h9(E)	6	#5	27'-9"	—
h10(E)	5	#6	30'-1"	—
s3(E)	31	#6	13'-4"	—
v(E)	31	#5	3'-10"	L
v1(E)	34	#4	3'-0"	—
v2(E)	74	#6	18'-8"	—
v3(E)	64	#6	6'-11"	—
v4(E)	64	#6	8'-11"	—
v5(E)	48	#6	21'-7"	—
v6(E)	40	#6	11'-7"	—
v7(E)	40	#6	7'-3"	—
v8(E)	34	#5	7'-2"	—
v9(E)	34	#5	6'-0"	—
Concrete Structures			CU YD	132.0
Reinforcement Bars, Epoxy Coated			POUND	15,400
Furnishing Steel Piles HP14x89			FOOT	536
① Setting Piles in Rock			EACH	20
Cofferdam Excavation			CU YD	465
Concrete Encasement			CU YD	17.7
Concrete Sealer			SQ FT	165

Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap. Quantity of concrete in end post included with Concrete Superstructure on sheet 8 of 23. See Sheet 22 of 23 for Bar Splicer Details. See Sheet 23 of 23 for Pile, Concrete Encasement, and Rock Socket Details.

WEST ABUTMENT DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81

DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM
CHECKED	BAN

SHEET NO. 19	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	40
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRM-9003(883)		



* Existing rebar is to be burned flush with existing concrete surface. Grind existing rebar smooth and seal with epoxy. Cost included with Concrete Removal.

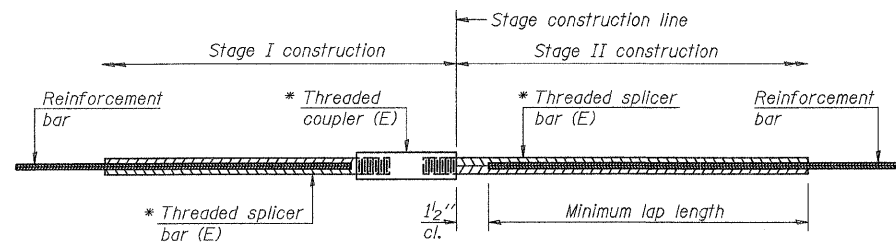
**EAST ABUTMENT
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**

DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM
CHECKED	BAN

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	CU YD	11.0

SHEET NO. 20 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	41
	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



STANDARD BAR SPLICER ASSEMBLY

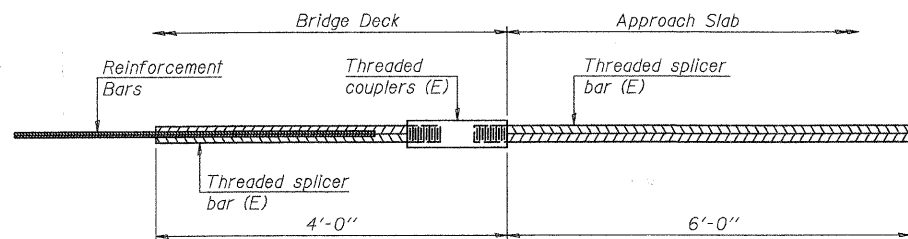
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1/2" + thread length

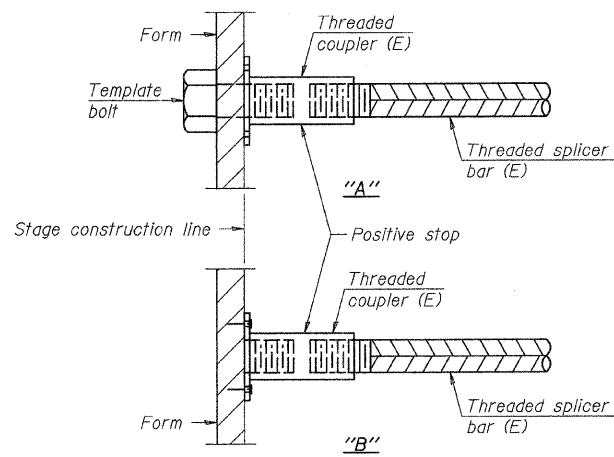
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



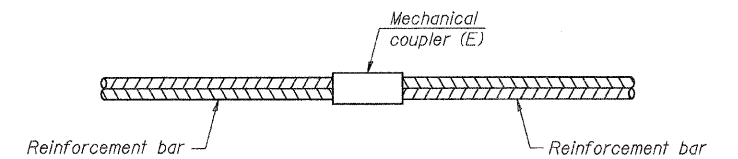
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 34



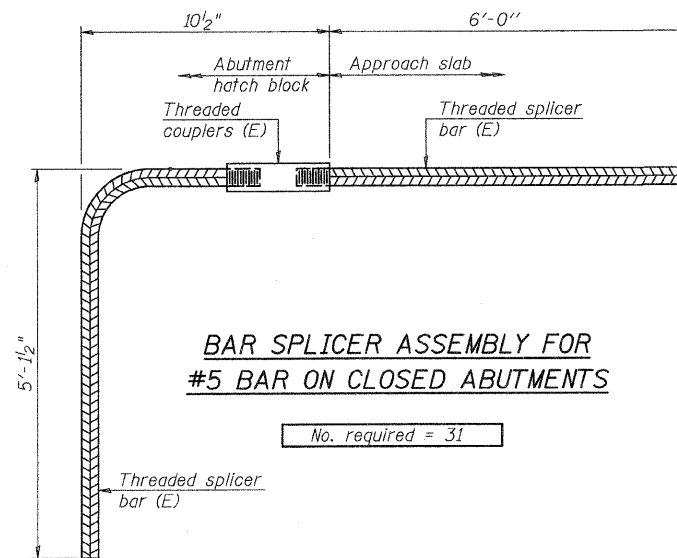
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
 "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON CLOSED ABUTMENTS

No. required = 31

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See special provision for Mechanical Splicers.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER DETAILS
 RIVER RD. (F.A.U. 3799) OVER
 BLACKBERRY CREEK
 SECTION 08-00036-00-BR
 KENDALL COUNTY
 STATION 99+98.81**

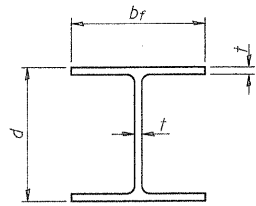
DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM
CHECKED	BAN

BSD-1

7-1-10

29875022

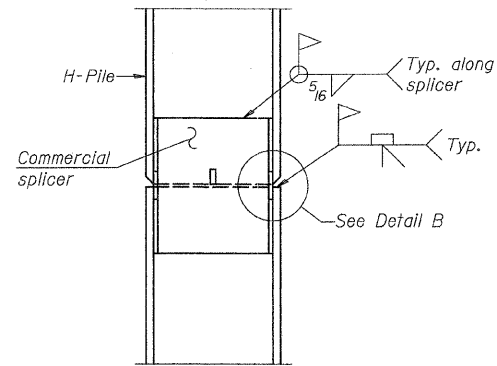
SHEET NO. 22	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	43
23 SHEETS	SN 047-6500		CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		



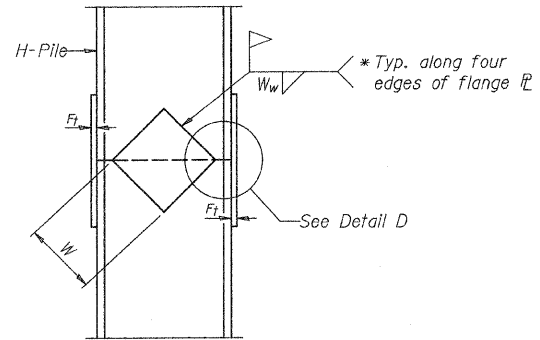
STEEL PILE TABLE

Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

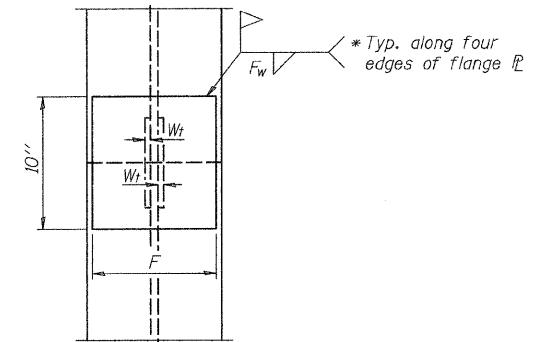
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



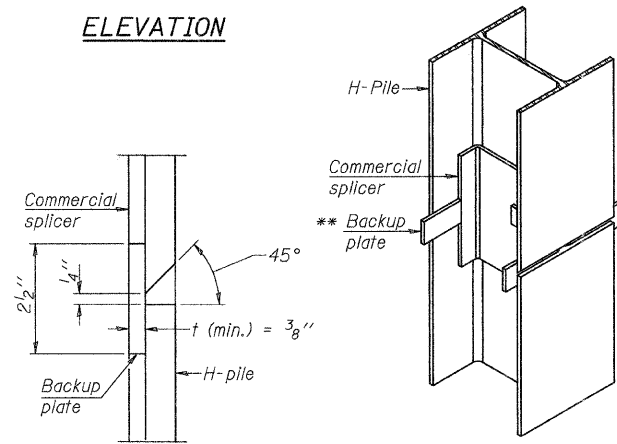
ELEVATION



ELEVATION

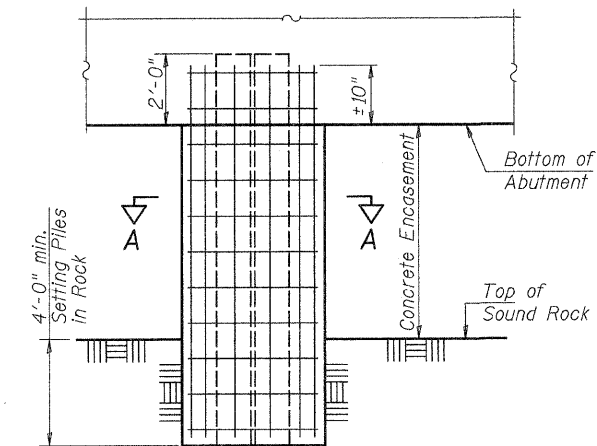


DETAIL D



DETAIL "B"

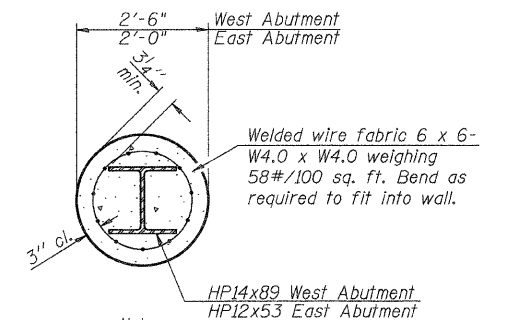
ISOMETRIC VIEW



**EAST ABUTMENT ELEVATION
ROCK SOCKET & PILE ENCASEMENT**

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 8/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 8/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 8/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

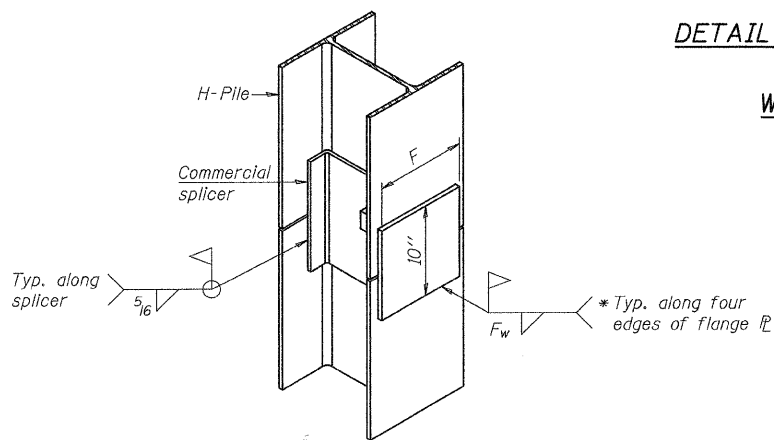
WELDED PLATE FIELD SPLICE



Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

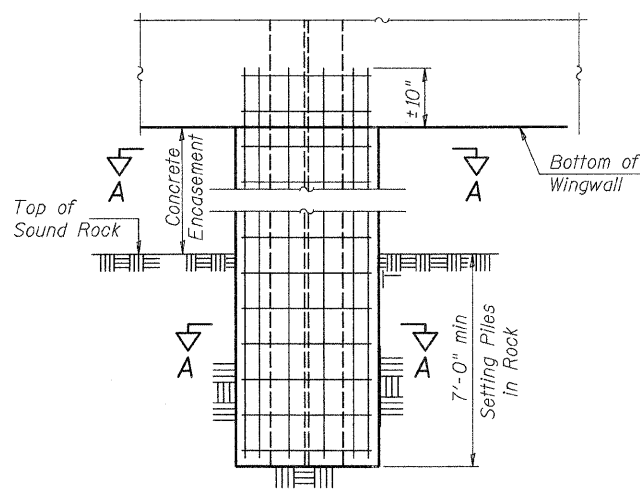
**HP PILE DETAILS
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY
STATION 99+98.81**



ISOMETRIC VIEW

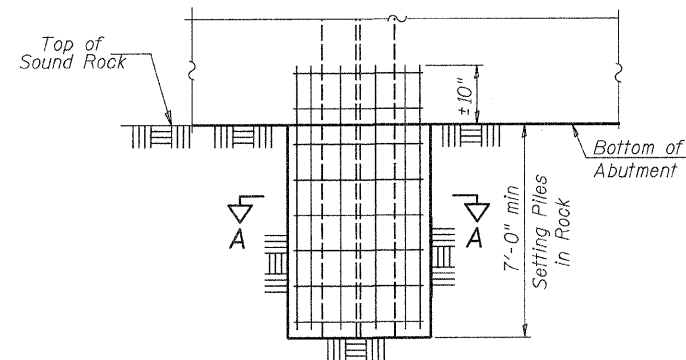
WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



**WEST ABUTMENT WINGWALL ELEVATION
ROCK SOCKET & PILE ENCASEMENT**

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



**WEST ABUTMENT ELEVATION
ROCK SOCKET**

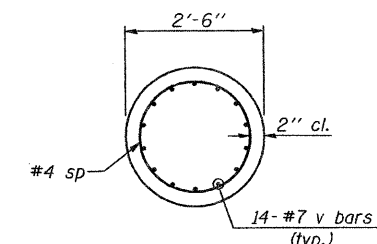
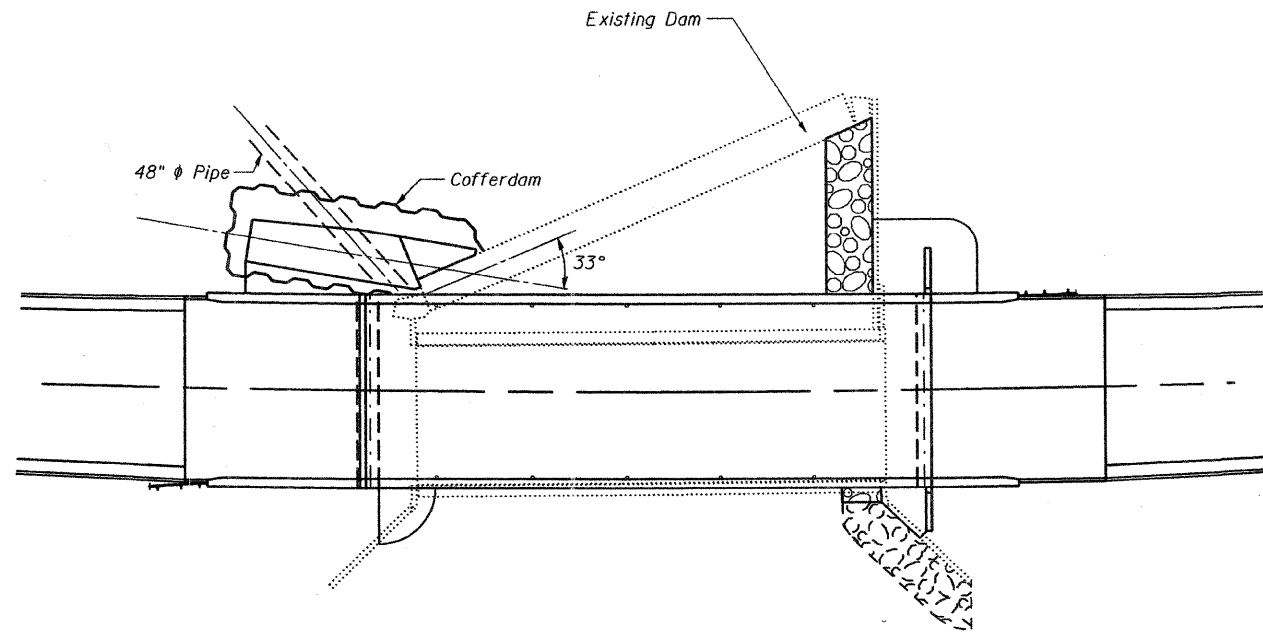
DESIGNED	CTM
CHECKED	BAN
DRAWN	CTM
CHECKED	BAN

SHEET NO. 23 23 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	44
SN 047-6500			CONTRACT NO. 87509		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

- B.M. #1: RR Spike in Power Pole
Sta. 96+85, 40' RT.
Elev. = 580.37
- B.M. #2: Chisled "□" on S.W. Corner of Existing Bridge
Sta. 99+60, 19' RT.
Elev. = 587.24
- B.M. #3: Chisled "□" on Conc. Ret. Wall
Sta. 102+81, 19' RT.
Elev. = 596.00

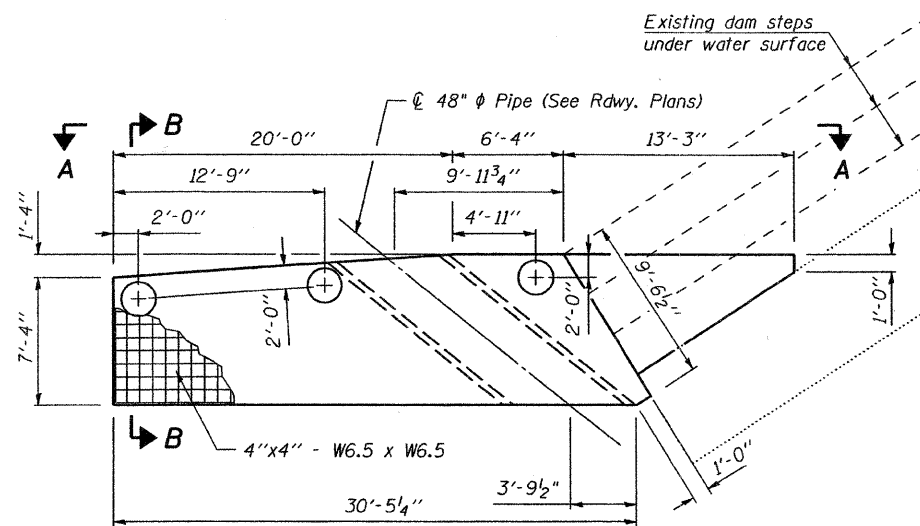
DESIGN STRESSES

(FIELD UNITS)
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)

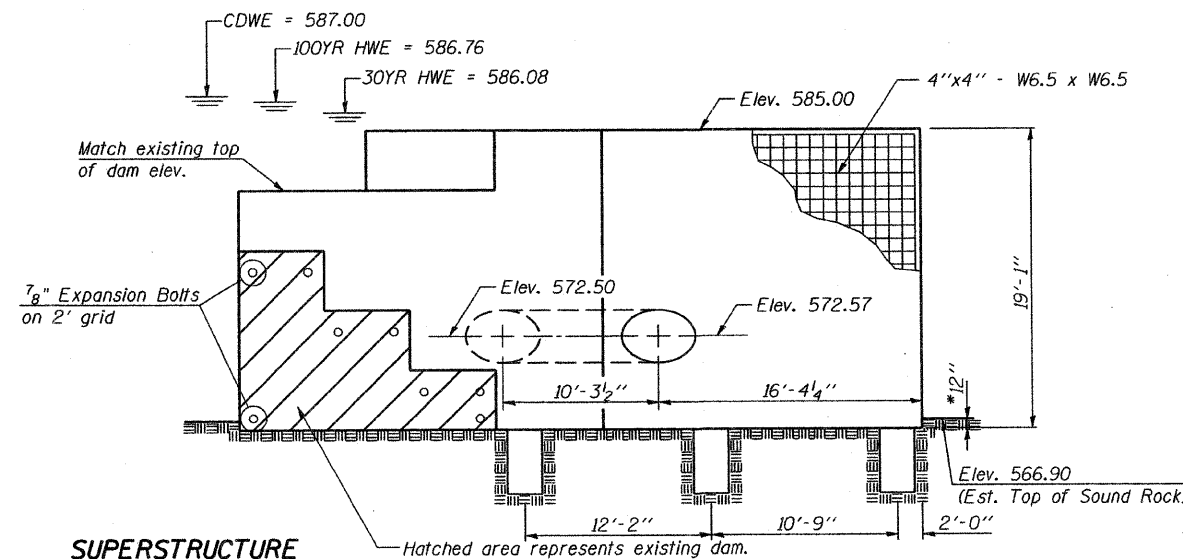


SECTION C-C

MINIMUM MESH LAP
4"x4" - W6.5 x W6.5 = 8"

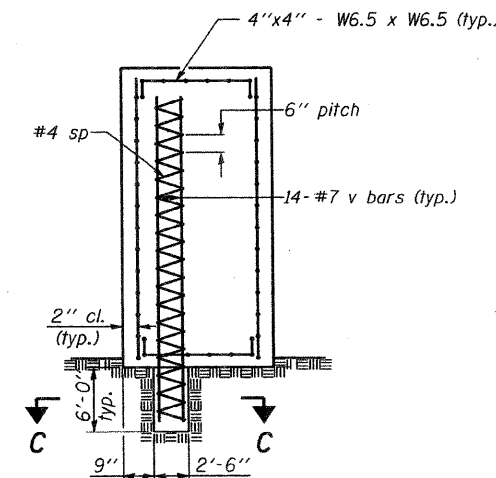


PLAN



VIEW A-A

* Key into Rock 12"



SECTION B-B

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
v	42	#7	22'-0"	
sp	3	#4	22'-0"	wwwww
① Cofferdam (Type 2) (Location-1)		EACH	1	
① Concrete Structures		CU YD	182.6	
Cofferdam Excavation		CU YD	250	
Rock Excavation		EACH	9	
*** Expansion Bolts 7/8" Inch		CU YD	45	
Drilled Shaft in Rock		CU YD	3.3	
Reinforcement Bars, Epoxy Coated		POUND	2,490	

- ① See Special Provisions
- ** Length is height of spiral.
- *** Quantity is estimated. may require different quantity based on the geometry of the existing dam.

Notes:
Structure shall be reinforced with welded wire fabric, 4'x4" - W6.5 x W6.5, weighing 133 lbs. per 100 sq. ft. (or equivalent).
Welded wire fabric included in cost of Concrete Structures. See Special Provision "Portland Cement Concrete," Section 1020.15 for Heat of Hydration Control.
Existing dam geometry is unknown below water and ground surfaces.
Place mesh on all concrete faces.
Concrete in Dam shall be Class SI concrete.
Lap spiral 2 full turns.

DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN

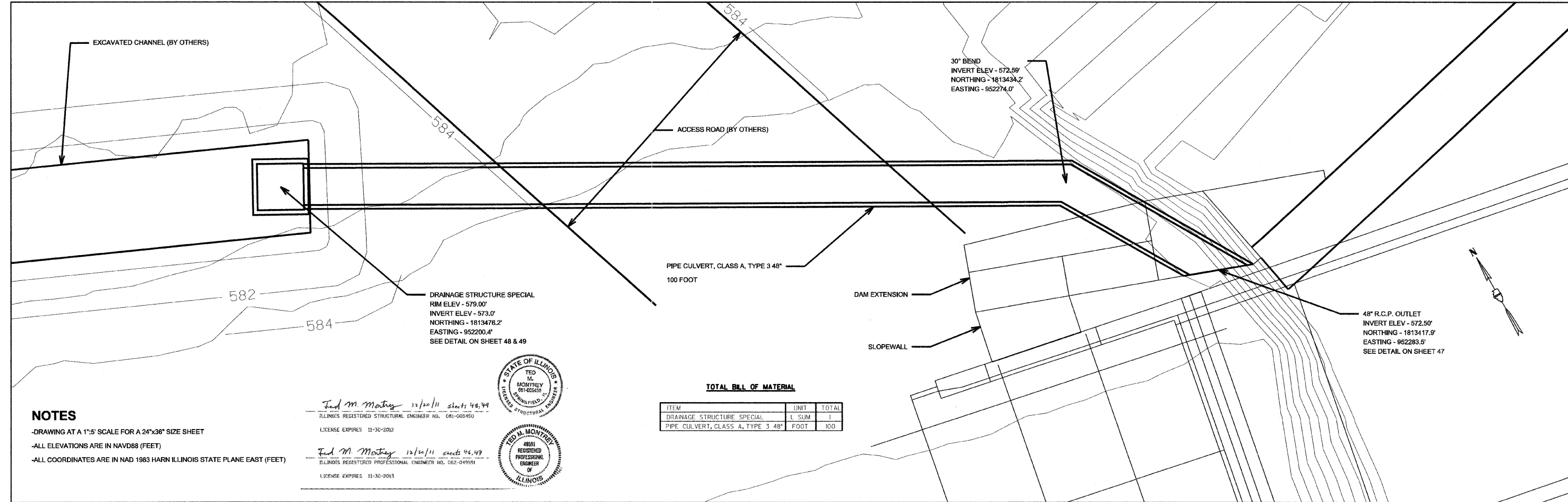


Lic. Exp. 11/30/2012

**DAM EXTENSION
RIVER RD. (F.A.U. 3799) OVER
BLACKBERRY CREEK
SECTION 08-00036-00-BR
KENDALL COUNTY**

SHEET NO. 1 1 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAU 3799	08-00036-00-BR	KENDALL	54	45
CONTRACT NO. 87509					
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRM-9003(883)		

S:\HDDATA\OwrPlanning\Dams_in_Illinois\Blackberry_Creek\CAD\Sheets\PI-grading&P.dgn



NOTES

- DRAWING AT A 1"=5' SCALE FOR A 24"x36" SIZE SHEET
- ALL ELEVATIONS ARE IN NAVD88 (FEET)
- ALL COORDINATES ARE IN NAD 1983 HARN ILLINOIS STATE PLANE EAST (FEET)

Ted M. Montney 12/20/11 sheets 48,49
ILLINOIS REGISTERED STRUCTURAL ENGINEER NO. 061-005450
LICENSE EXPIRES 11-30-2012



Ted M. Montney 12/20/11 sheets 48,49
ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-049591
LICENSE EXPIRES 11-30-2013



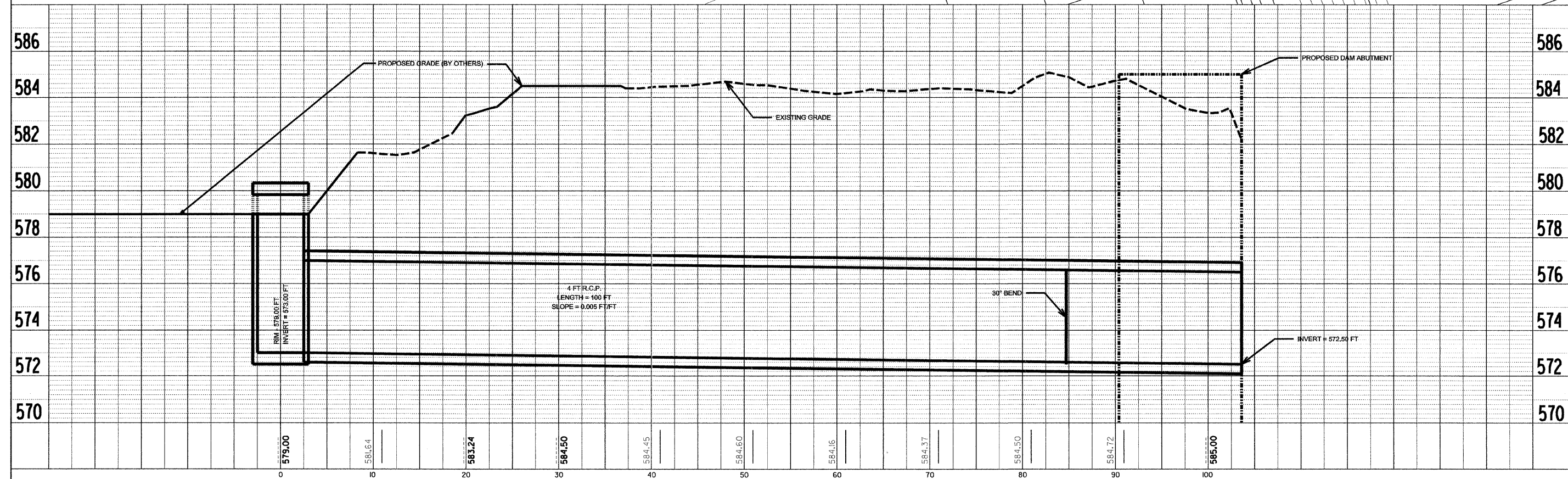
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
DRAINAGE STRUCTURE SPECIAL	L	1
PIPE CULVERT, CLASS A, TYPE 3 48"	FOOT	100

DESIGNED BY: WIC
DRAWN BY: WIC

12/20/2011 1:09:23 PM

CHECKED BY: IMM
CHECKED BY: IMM



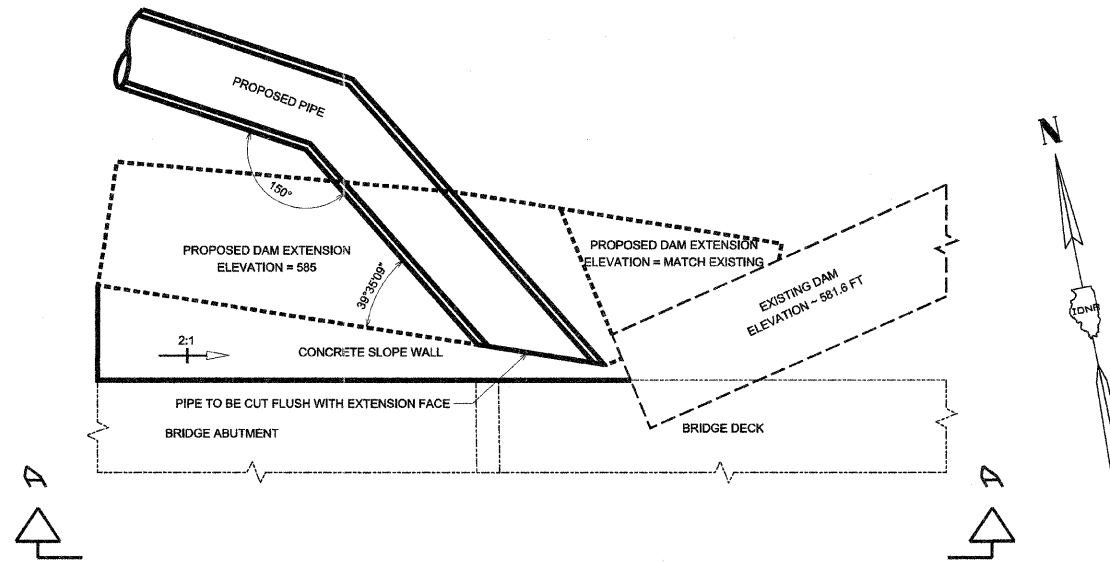
DRAINAGE STRUCTURE SPECIAL - PLAN AND ELEVATION

S:\HDDATA\DrawPlanning\Dams_in_Illinois\Blackberry_Creek\CAD\Sheets\Outlet_Detail.dgn

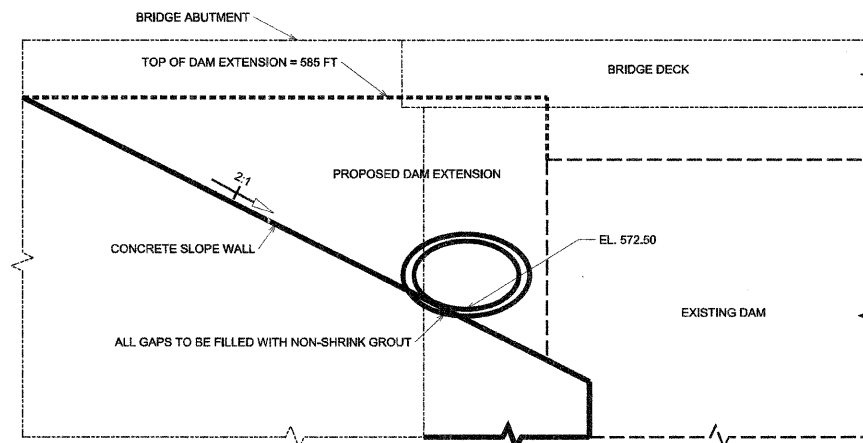
11:52:51 AM

12/20/2011

Designed By WTC Checked By TMM
Drawn By WTC Checked By TMM



PLAN VIEW



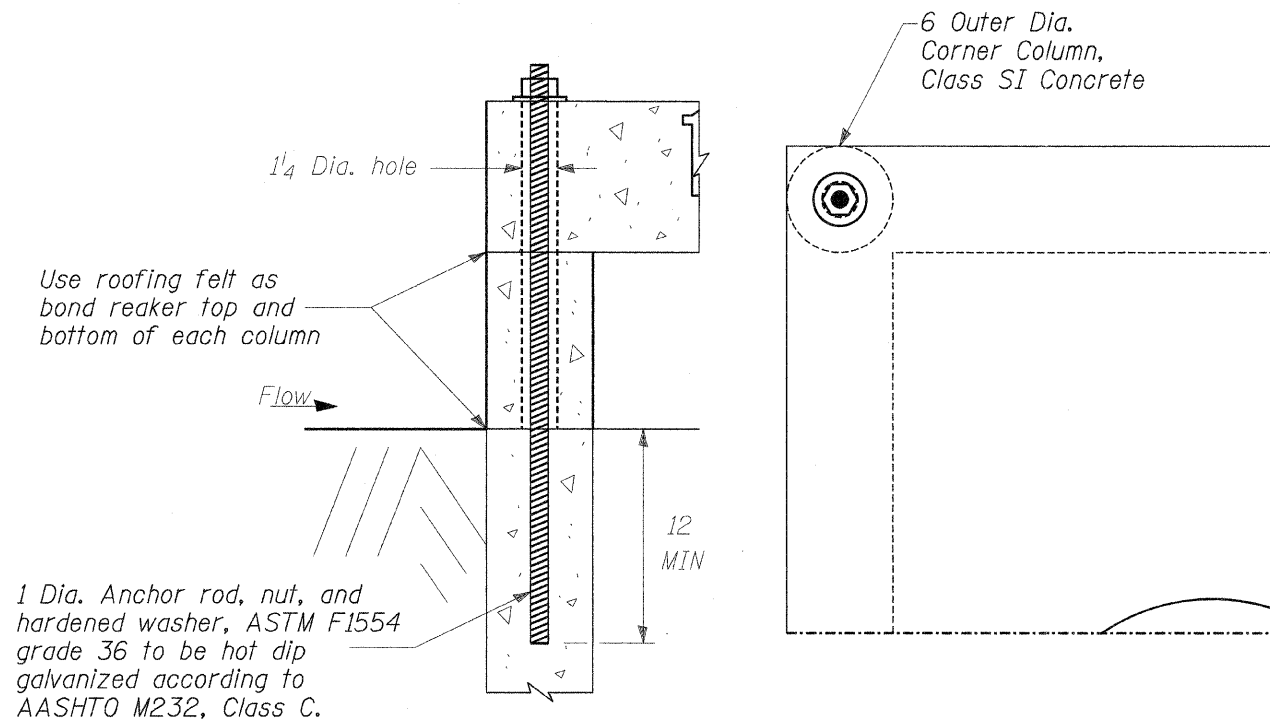
PROFILE VIEW A-A

S:\HODATA\OwrPlanning\Draws_in_illinois\Blackberry_Creek\CAD\Owr_COE_plans\206-602701-01_DrainStruc_OWR_IDOT_STD.dgn

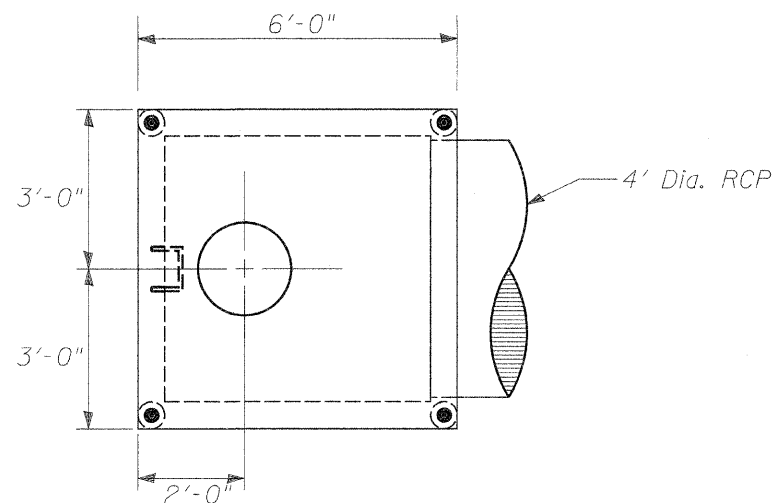
9:32:06 AM

12/2/2011

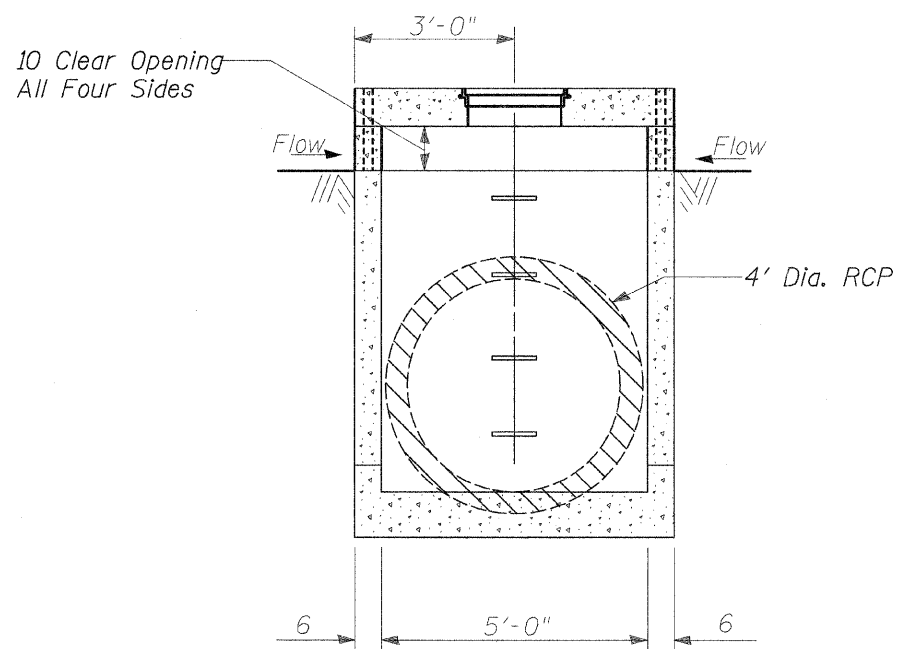
Designed By BAW Checked By TMM
Drawn By BAW Checked By TMM



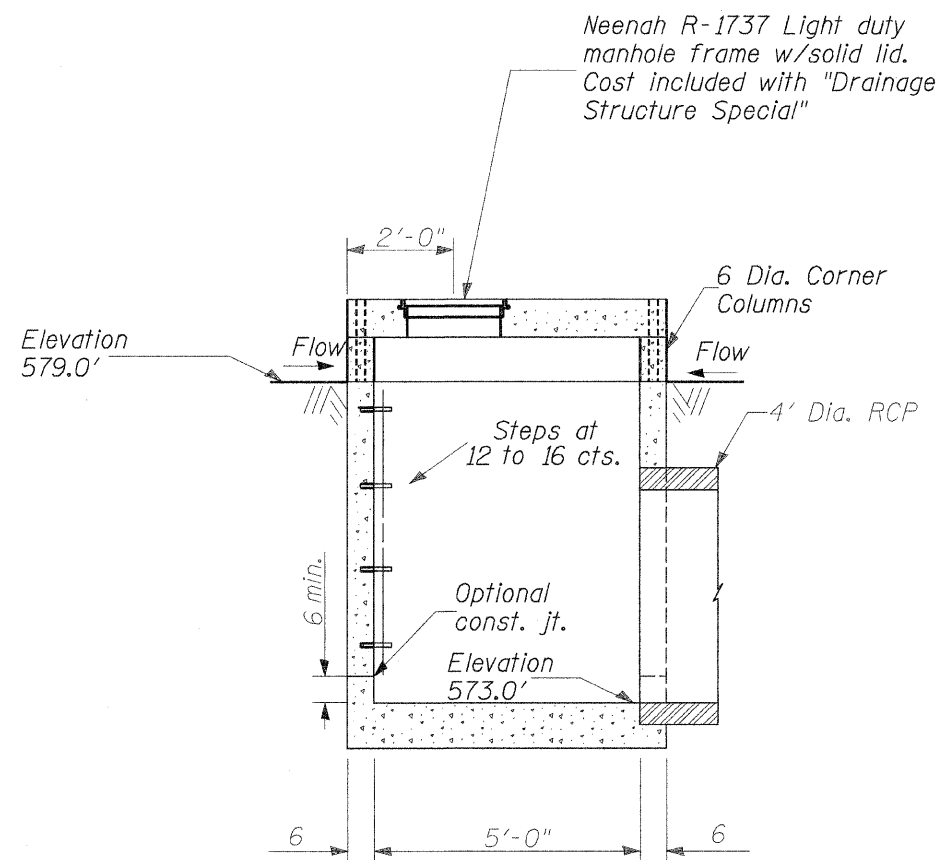
CORNER DETAIL



PLAN



FRONT ELEVATION



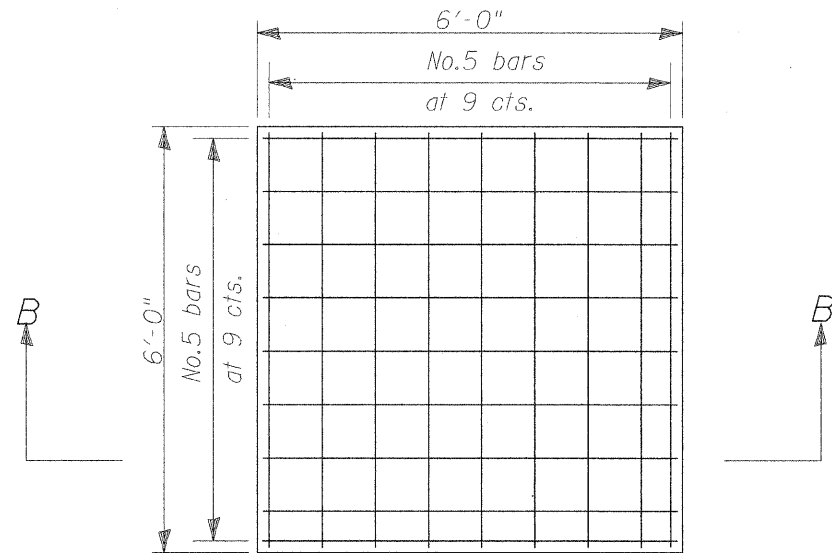
SIDE ELEVATION

GENERAL NOTES

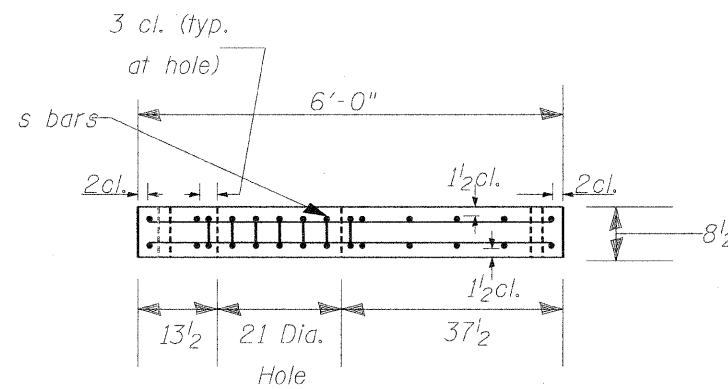
- 1) Reinforcement bars shall conform to the requirements of ASTM GR.60. See Special Provisions.
- 2) Precast alternative is not allowed.
- 3) Class SI concrete shall be used throughout.
- 4) The Contractor shall verify that the soils bearing capacity is not less than 2,300 psf, notify the Engineer if less than 2,300 psf.
- 5) Concrete shall have a minimum compressive strength f_c' of 3,500 psi.
- 6) Unless otherwise noted all construction joints shall be bonded.
- 7) See Standard 602701 for details of steps.
- 8) Exposed edges shall be beveled $\frac{3}{4}$ ".
- 9) All dimensions are in inches unless otherwise shown.

CONTRACT NO. 87509

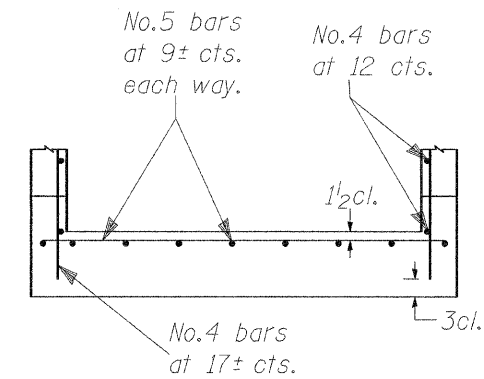
S:\HDATA\OwrPlanning\Draws in Illinois\Blackberry_Creek\CAD\Owr_COE_Plans\206-602101-01_DrainStruc_OWR_IDOT_STD.dgn
 9:31:20 AM
 10/21/2011
 Designed By BAW Checked By TMM
 Drawn By BAW Checked By TMM



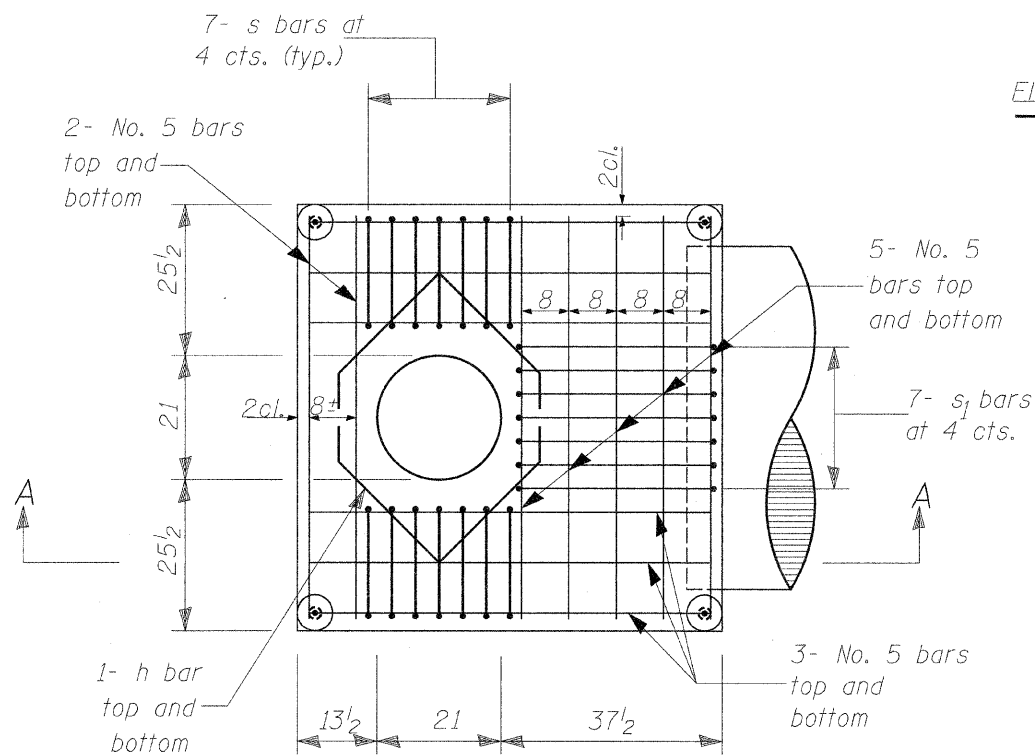
**PLAN-BOTTOM SLAB
REBAR DETAIL**



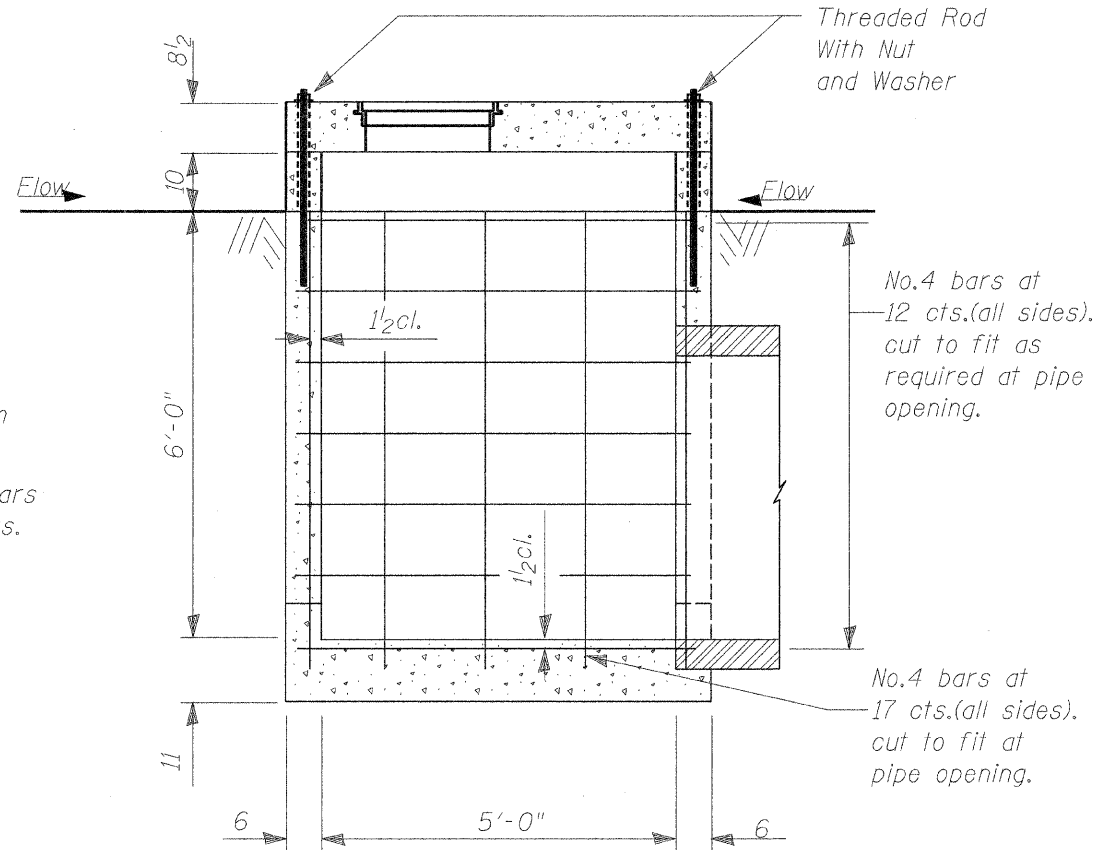
SECTION A-A



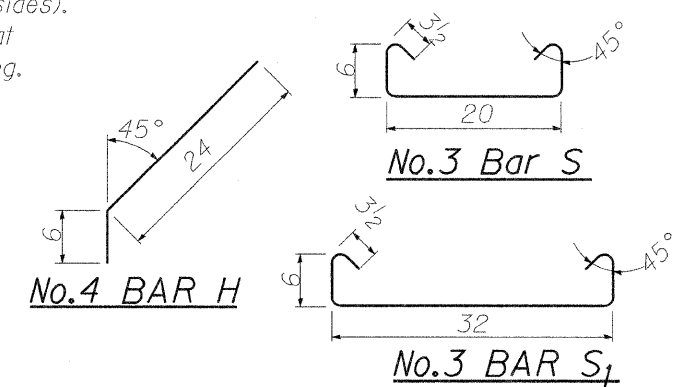
SECTION B-B



**PLAN-TOP SLAB
REBAR DETAIL**



**SIDE ELEVATION
REBAR DETAIL**



*** BILL OF MATERIAL**
(For Information Only)

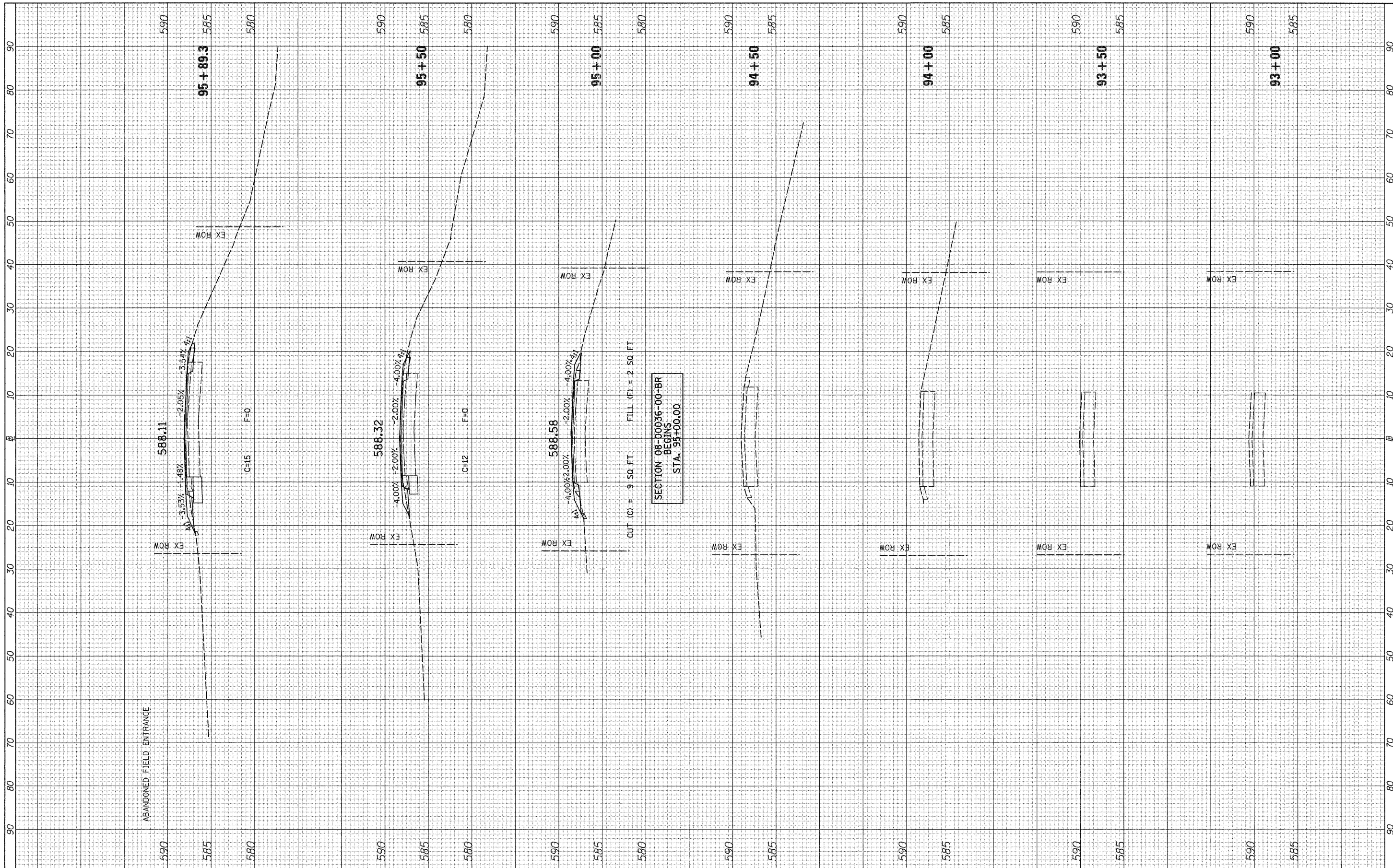
Bar No.	Size	Length	Shape	
h	8	#4	2'-6"	
s	14	#3	3'-3"	
s1	7	#3	4'-3"	
lid_x	12	#5	5'-8"	—
lid_y	14	#5	5'-8"	—
base	18	#5	5'-8"	—
box_x	28	#4	5'-8"	—
box_y	20	#4	6'-6"	—
1" Threaded Rod		33" length	Ea.	4
Nut for 1" Threaded Rod			Ea.	4
Washer for 1" Threaded Rod			Ea.	4
2' Dia. Manhole Frame With Solid Lid			Ea.	1
10" Concrete Spacers 6" Dia.			Ea.	4
Concrete for Lid			Cu. Yd.	0.9
Concrete for Box			Cu. Yd.	3.4
Steps			Ea.	4
Structure Excavation			Cu. Yd.	25.6

* Cost of all items listed in Bill of Material included with "Drainage Structure Special"

All dimensions are in inches unless otherwise shown.

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	DATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	DATE	
	AREAS CHECKED	



FILE NAME = v:\2987\2987xshs.dgn

USER NAME = bdeor-aena
 PLOT SCALE = 10.0000' / IN.
 PLOT DATE = 12/16/2011

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

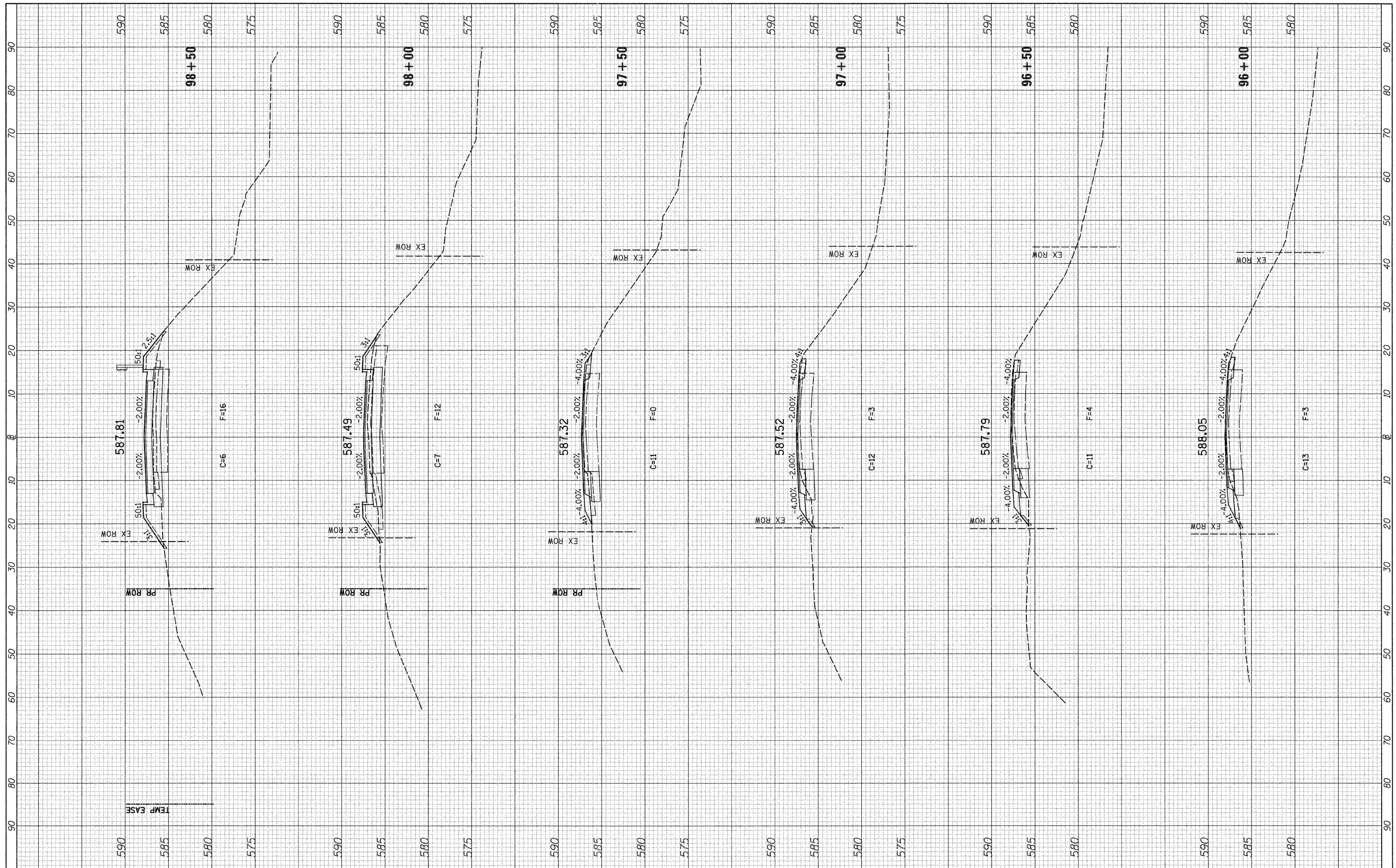
F.A.U. 3799 (RIVER RD.) CROSS SECTIONS

SCALE: H=10 V=5 SHEET NO. 1 OF 5 SHEETS STA. 93+00 TO STA. 95+89.3

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	50
			CONTRACT NO. 87509	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



FILE NAME =
v:\2987\2987xshs.dgn

USER NAME = bdecr-neve
DESIGNED -
DRAWN -
CHECKED -
DATE -

DESIGNED -
DRAWN -
CHECKED -
DATE -

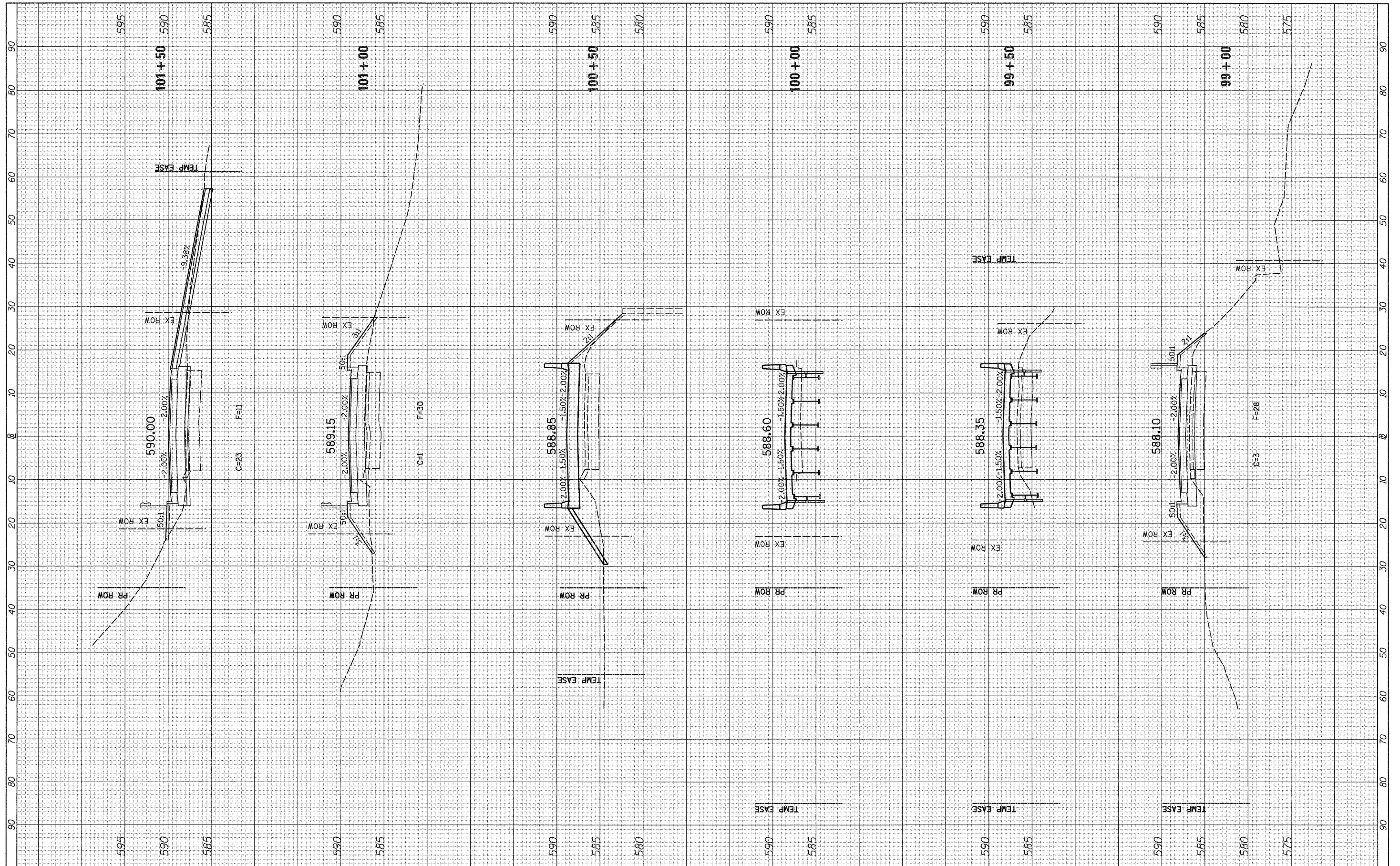
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 3799 (RIVER RD.) CROSS SECTIONS
SCALE: H=10 V=5 SHEET NO. 2 OF 5 SHEETS STA. 96+00 TO STA. 98+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	51
			CONTRACT NO. 87509	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	TEMPLATE	
	AREAS CHECKED	



FILE NAME =
 v:\2987\2987xsh1a.dgn

USER NAME = bdecrane
 DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

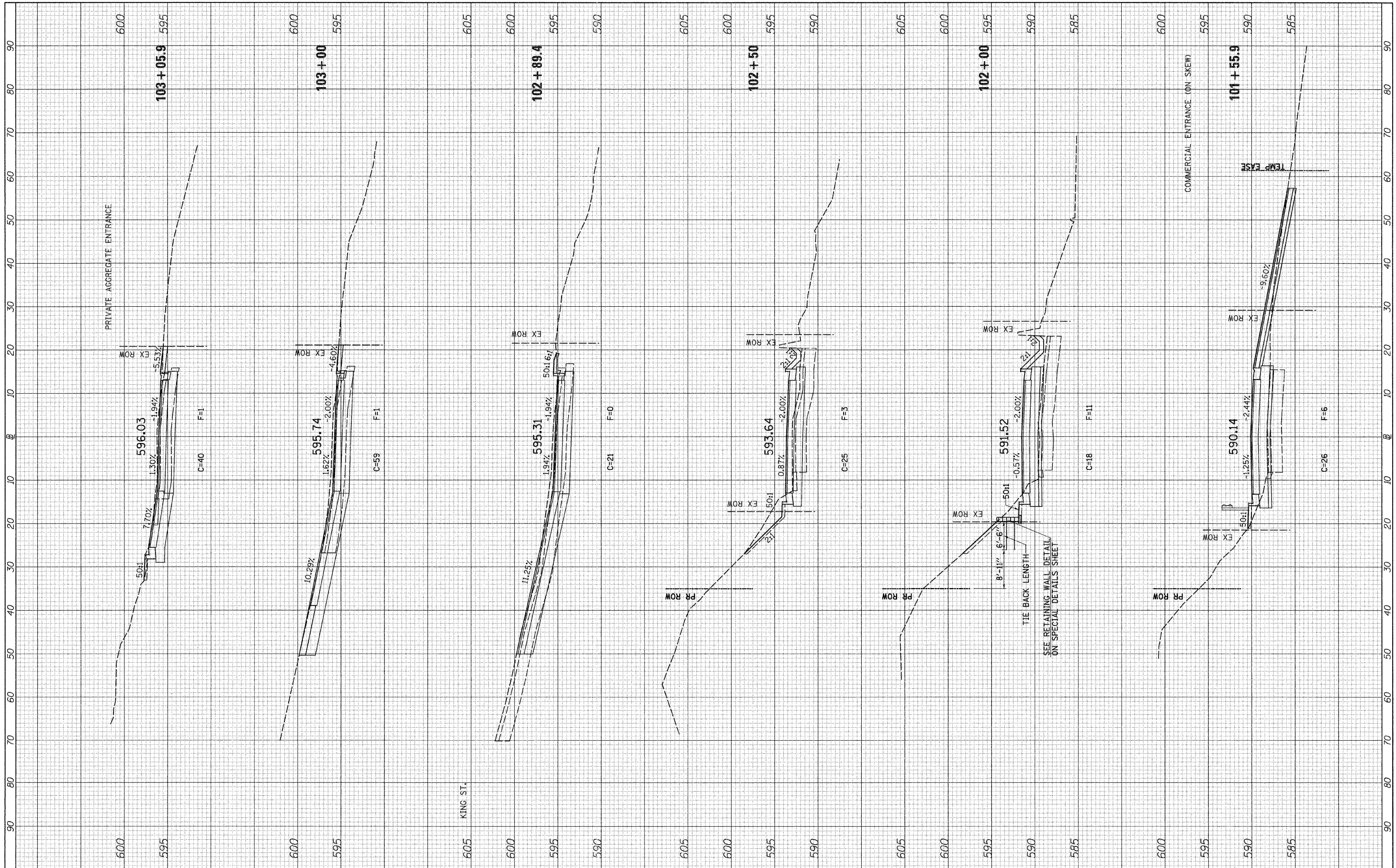
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

F.A.U. 3799 (RIVER RD.) CROSS SECTIONS
 SCALE: H=10 V=5 SHEET NO. 3 OF 5 SHEETS STA. 101+55.9 TO STA. 101+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	52
			CONTRACT NO. 87509	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	TEMPLATE	
	AREAS CHECKED	



FILE NAME =
 v:\2987\2987xahs.dgn

USER NAME = bdeorane
 DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISIONS
 REVISION NO. | DATE | BY | DESCRIPTION

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

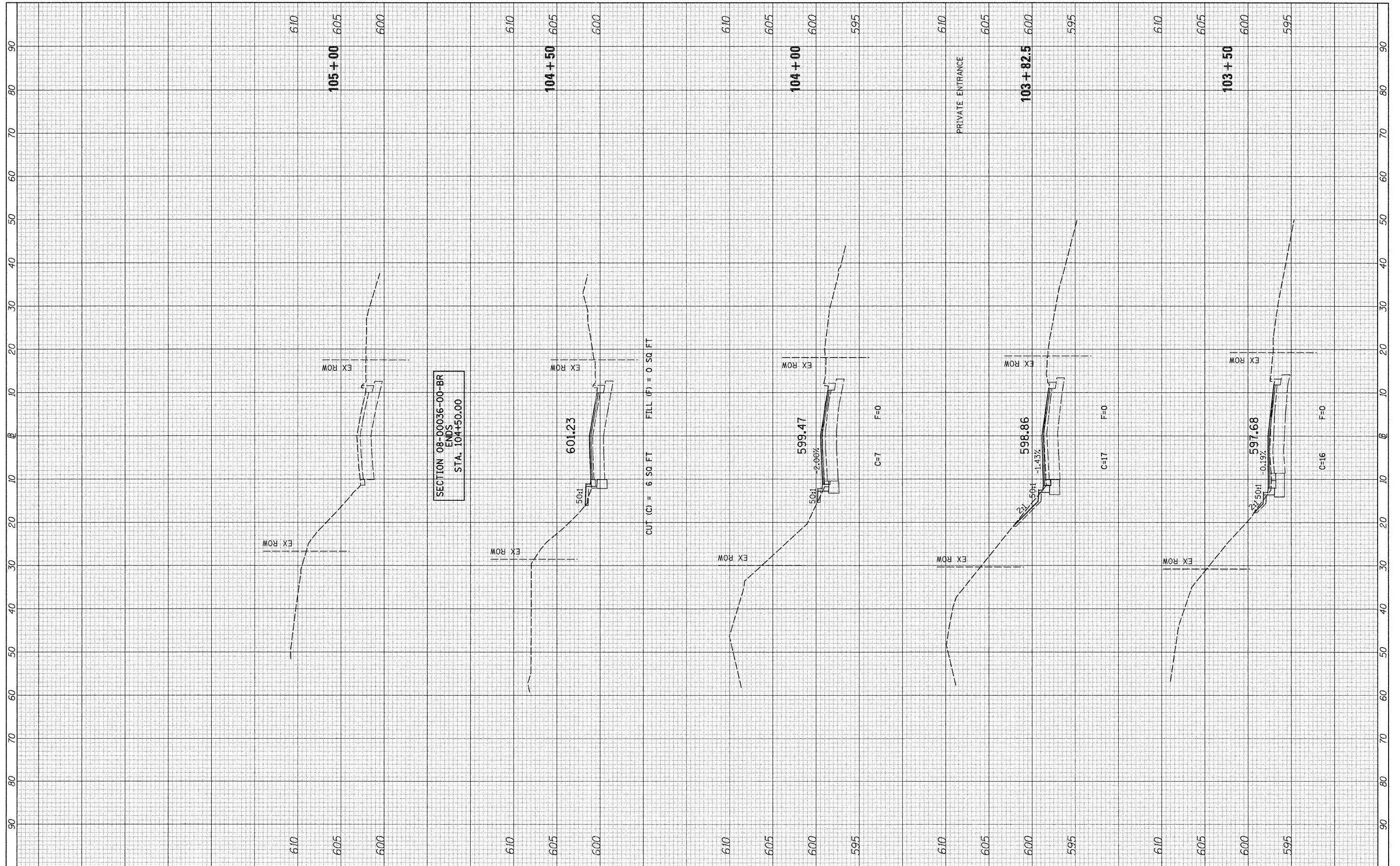
F.A.U. 3799 (RIVER RD.) CROSS SECTIONS

SCALE: H=10 V=5 SHEET NO. 4 OF 5 SHEETS STA. 101+00 TO STA. 103+5.91

F.A.U. RTE. 3799	SECTION 08-00036-00-BR	COUNTY KENDALL	TOTAL SHEETS 54	SHEET NO. 53
CONTRACT NO. 87509			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED	BY	DATE
NOTE BOOK NO.	TEMPLATE AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED PLOTTED	BY	DATE
NOTE BOOK NO.	TEMPLATE AREAS CHECKED		



SECTION 08-00036-00-BR
ENDS
STA. 104+50.00

CUT (C) = 6 SQ. FT. FILL (F) = 0 SQ. FT.

C=7 F=0

C=17 F=0

C=16 F=0

FILE NAME = v:\2987\2987xshsta.dgn

USER NAME = bdecroene
PLOT SCALE = 18.0000' / IN.
PLOT DATE = 12/16/2011

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.U. 3799 (RIVER RD.) CROSS SECTIONS

SCALE: H=10 V=5 SHEET NO. 5 OF 5 SHEETS STA. 103+50 TO STA. 105+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3799	08-00036-00-BR	KENDALL	54	54
CONTRACT NO. 87509			ILLINOIS FED. AID PROJECT	