F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 63471		

INDEX OF SHEETS AND LIST OF STATE STANDARDS LOCATED ON SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.U. 2592 (WEST FRONTAGE RD) AND F.A.U. 2594 (EAST FRONTAGE RD) IL ROUTE 53
BRIDGE REHABILITATION OVER SALT CREEK
SECTION 04-00091-00-BR
PROJECT NO. BHM-8003(492)
CITY OF ROLLING MEADOWS
COOK COUNTY
C-91-015-05

LOCATION OF SECTION INDICATED THUS: –■–

PROJECT LOCATED IN THE CITY OF ROLLING MEADOWS

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123 OR 811
T41N, R11E, SECTION 6, 7
T41N, R10E, SECTION 1, 12
T42N, R10E, SECTION 26, 35

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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.

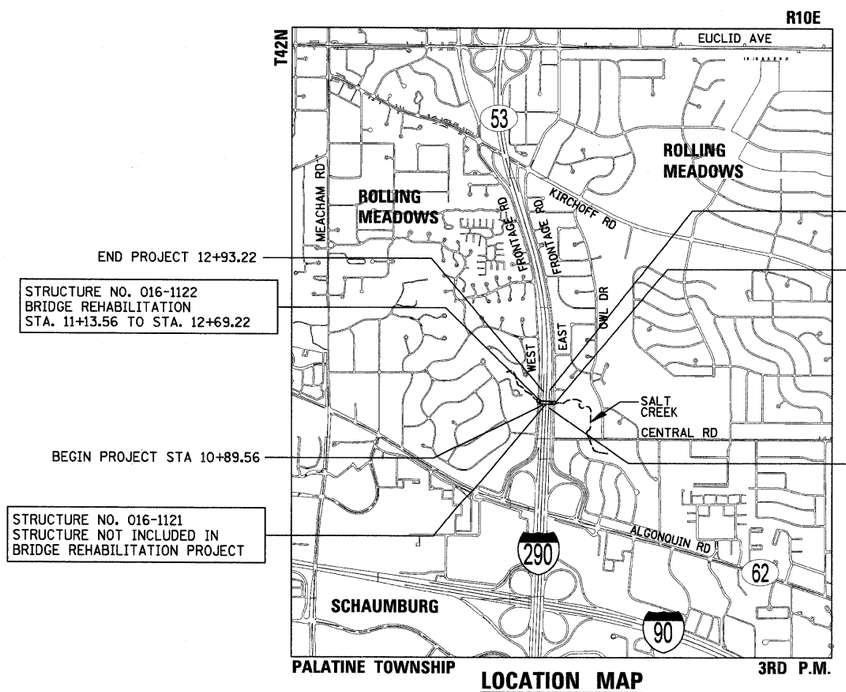
DESIGN DESIGNATION
COLLECTORS

TRAFFIC DATA:
WEST FRONTAGE
ADT = 3,250
POSTED/DESIGN SPEED = VARIES 35 MPH
EAST FRONTAGE
ADT = 2,750
POSTED/DESIGN SPEED = VARIES 35 MPH

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFESSIONAL DESIGN FIRM NO.: 184-001175
EXPIRATION DATE: APRIL 30, 2011

CONTRACT NO. 63471



END PROJECT 12+93.22

STRUCTURE NO. 016-1122
BRIDGE REHABILITATION
STA. 11+13.56 TO STA. 12+69.22

BEGIN PROJECT STA 10+89.56

STRUCTURE NO. 016-1121
STRUCTURE NOT INCLUDED IN
BRIDGE REHABILITATION PROJECT

END PROJECT 22+72.76

STRUCTURE NO. 016-1123
BRIDGE REHABILITATION
STA. 21+13.50 TO STA. 22+48.76

BEGIN PROJECT 20+89.50

LOCATION MAP

GROSS LENGTH OF PROJECT = 571.89 LINEAL FEET (0.108 MILES)
NET LENGTH OF PROJECT = 571.89 LINEAL FEET (0.108 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED May 10 ,20 10
Fred A. Vaught Director of Public Works
CITY OF ROLLING MEADOWS (TITLE)

PASSED MAY 27 ,2010
Christopher Hoyt
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW MAY 27, ,20 10
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

STATE OF ILLINOIS
MAJID MOBASSERI
081-005058
CHAMPAIGN, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Majid Mobasseri 5/11/10
STRUCTURAL ENGINEER DATE

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058
EXPIRATION DATE: 11-30-2010

JASON G. SOUDEN
062-050850
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS

Jason G. Souden 5/11/10
ENGINEER DATE

JASON G. SOUDEN
ILLINOIS REGISTRATION No. 062-050850
EXPIRATION DATE: 11-30-2011

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

ASSOCIATE FIELD ENGINEER: KEVIN STALLWORTH, (847) 705-4169

SOIL, EROSION AND SEDIMENTATION CONTROL

A. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF THE ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL, AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL.

B. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE.

C. STABILIZATION MEASURES SHOULD BE INITIATED WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. AREAS OF THE SITE (INCLUDING SOIL STOCKPILES) THAT WILL REMAIN IDLE FOR 14 CALENDAR DAYS OR MORE SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 CALENDAR DAYS. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER. ONCE CONSTRUCTION ACTIVITY IN AN AREA HAS PERMANENTLY CEASED, THAT AREA SHOULD BE PERMANENTLY STABILIZED. TEMPORARY PERIMETER CONTROLS SHOULD BE REMOVED AFTER FINAL STABILIZATION OF THOSE PORTIONS OF THE SITE UPWARD OF THE PERIMETER CONTROL.

D. BEFORE STARTING CLEARING AND SITE GRADING WORK, A STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCES(PERIMETER EROSION BARRIER) SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL INSTALL ADDITIONALSILT FENCES AS DIRECTED BY THE RESIDENT ENGINEER.

E. THE CONSTRUCTION ENTRANCE TO THE SITE SHALL BE STABILIZED AS DETAILED PRIOR TO ANY WORK ON THE SITE. THE ENTRANCE SHALL BE MONITORED PERIODICALLY FOR ITS EFFECTIVENESS TO COLLECT DIRT, WHICH COULD LEAVE THE SITE VIA CONSTRUCTION VEHICLES. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.

F. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASHDOWN FACILITIES SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY.

G. ANY PUBLIC AND/OR PRIVATE ROADS THAT ARE ADJACENT TO THE SITE AND USED FOR INGRESS AND EGRESS, SHALL BE MONITORED AND SWEPT WHEN DIRTY AT THE DIRECTION OF THE RESIDENT ENGINEER.

H. OWNER IS RESPONSIBLE FOR PROVIDING EROSION CONTROL INSPECTOR FOR INSPECTING ALL SEDIMENT AND EROSION CONTROL MEASURES AT A MINIMUM OF EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5-INCH (OR GREATER) RAIN EVENT, OR SNOWFALL EQUIVALENT.

I. AT THE COMPLETION OF THE PROJECT, ALL STORM SEWER PIPES AND STRUCTURES SHALL BE CLEANED AND FREE OF DIRT AND DEBRIS. THE SEDIMENTATION SHALL BE REMOVED FROM THE STORM SEWER SYSTEM AND SHALL NOT BE WASHED OUT IN THE STORM SEWER SYSTEM.

1. SEE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.

2. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.

3. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

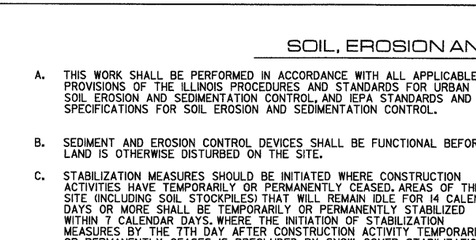
4. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES.

5. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE). THE WORK WILL BE INCLUDED IN THE COST OF STRUCTURAL EXCAVATION.

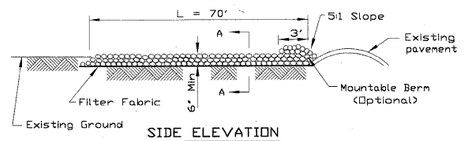
6. THE CONTRACTOR SHALL INSTALL/MAINTAIN/REMOVE INLET FILTERS IN ALL OPEN LID DRAINAGE STRUCTURES IN THE PAVEMENT THAT ARE WITHIN THE WORK ZONE OR ACCEPT STORMWATER THAT FLOWS OUT OF THE WORK ZONE, AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.

7. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS AND IN THE STORM WATER POLLUTION PREVENTION PLAN ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW

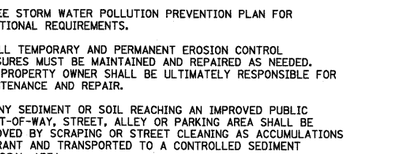


SIDE ELEVATION

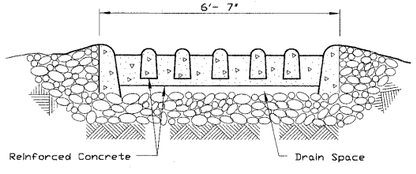
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE			STANDARD DWG. NO.
Project		NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____			SHEET 1 OF 2
Checked ____ Date ____			DATE 8-18-94
Approved ____ Date ____			

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



SECTION B-B

REFERENCE			STANDARD DWG. NO.
Project		NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____			SHEET 2 OF 2
Checked ____ Date ____			DATE 8-18-94
Approved ____ Date ____			

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2007; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2010; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD), "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JULY 2009 SIXTH EDITION, THE "DETAILS" IN THE PLANS, LATEST EDITION OF THE MANUAL OF TEST PROCEDURE OF MATERIALS, THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS, THE AMERICANS WITH DISABILITIES ACT OF 1990 ACCESSIBILITY GUIDELINES, THE "DRAFT" REHABILITATION ACT OF 1973 (SECTION 504), AND THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES.

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

3. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

   A. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.

   B. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE, MAINTAIN AND RE-ERECT SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS.

   C. THE CONTRACTOR WILL REMOVE ALL UNUSED SIGNS NOT CALLED OUT TO BE RELOCATED. ALL UNUSED SIGNS WILL BE RETURNED TO THE OWNER OR DISPOSED OF AS DIRECTED BY THE ENGINEER. THE WORK WILL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, LOCATION 1, AND LOCATION 2.

   D. SIGNS WILL BE INSTALLED PER IDOT HIGHWAY STANDARD 720006 AT TEMPORARY AND PERMANENT LOCATIONS.

4. EARTH EXCAVATION

   A. ALL EMBANKMENT WIDENING SHALL BE SUFFICIENTLY BENCHED INTO EXISTING EMBANKMENTS/SLOPES PER ARTICLE 205 OF THE STANDARD SPECIFICATIONS, AND AS APPROVED BY THE ENGINEER. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE FOR EARTH EXCAVATION..

   B. ALL EXCESS MATERIAL WHICH MEET SECTION 205 OF THE STANDARD SPECIFICATIONS SHALL BE USED AS EMBANKMENT PER SECTION 205 OF THE STANDARD SPECIFICATIONS.

   C. EARTH EXCAVATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE STANDARD SPECIFICATIONS, IN ADDITION TO ITEMS SPECIFIED IN SECTION 202 AND AS NOTED IN THE PLANS AND SPECIAL PROVISIONS, EARTH EXCAVATION SHALL CONSIST OF:

      1. EXCAVATION TO SUBGRADE ELEVATION.
      2. PLACING AND COMPACTING SUITABLE EXCAVATED MATERIAL FOR FILL AREAS IN ACCORDANCE WITH SECTION 205 OF THE "STANDARD SPECIFICATIONS".

   D. EARTH MOVED MORE THAN ONCE DUE TO CONSTRUCTION STAGING AND/OR PROCEDURES SELECTED BY THE CONTRACTOR WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.

5. DRAINAGE

   A. DURING THE CONSTRUCTION OPERATIONS WHEN LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, DETOUR 1, AND DETOUR 2.

   B. DEWATERING REQUIRED TO KEEP EXCAVATIONS DRY SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO SEPERATE PAYMENT WILL BE MADE FOR THIS WORK.

6. ALL REFERENCES TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE LATEST STANDARDS OF THE DEPARTMENT.

7. SOME QUANTITIES ARE GIVEN IN BOTH SUMMARY FORM AND ON THE PLAN SHEETS. CARE SHOULD BE TAKEN TO AVOID DUPLICATION OF QUANTITIES.

8. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS IN ACCORDANCE WITH SECTION 107.

9. UTILITIES

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. CONTRACTOR SHALL CONTACT AND COORDINATE WITH UTILIY COMPANIES FOR ALL UTILITY ADJUSTMENTS THAT ARE REQUIRED DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE SPECIAL PROVISIONS.

   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ALL UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

   C. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 811 OR 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATION IS REQUIRED.)

   D. PUBLIC AND PRIVATE UTILITIES: THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE LOCATIONS OF UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM IN ACCORDANCE WITH ARTICLE 105.07.

10. WATER, STORM SEWER, AND SANITARY SEWER

   A. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE/SHE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE/SHE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF STRUCTURE EXCAVATION.

   B. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE CITY WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

Index of Sheets

LIST OF HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420101-04	24' (7.2 m) JOINTED PCC PAVEMENT
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATE FOR BRIDGES
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONC CURB AND GUTTER
609006-05	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-08	STEEL PLATE BEAM GUARDRAIL
631006-07	TRAFFIC BARRIER TERMINAL, TYPE 1B
631011-06	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
664001-02	CHAIN LINK FENCE
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TYPICAL PAVEMENT MARKINGS
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
780001-02	TRAFFIC CONTROL DEVICES
BLR17-4	TRAFFIC CONTROL DEVICES - DAY LABOR CONSTRUCTION
BLR18-5	TRAFFIC CONTROL DEVICES - DAY LABOR MAINTENANCE

11. MISCELLANEOUS

   A. ALL PEDESTRIAN ROUTES CONSTRUCTED AS PART OF THIS PROJECT SHALL BE ADA COMPLIANT.

   B. ALL SAWCUTTING SHALL BE INCLUDED IN THE COST OF THE ADJACENT REMOVAL ITEM AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

   C. THE PROTECTIVE COATING SHALL BE APPLIED TO THE EXPOSED SURFACES OF THE CONCRETE CURB AND GUTTER, SIDEWALK, AND ROADWAY. CONCRETE CURING SHALL BE LIMITED TO METHODS SPECIFIED IN ARTICLE 1020.13 (A) [1], [2], AND [3].

   D. CONTRACTOR WILL REPAIR, TO THE SATISFACTION OF THE ENGINEER, ALL DAMAGE TO EXISTING ITEMS NOT SHOWN FOR REMOVAL. THIS WORK WILL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.

12. THE CONTRACT DOCUMENTS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DOCUMENTS IS TO ILLUSTRATE THE DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DOCUMENTS BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.

13. DETOURS AND ROAD CLOSURES; SEE DETOUR PLAN SHEETS FOR REQUIREMENTS.

14. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.

15. ALL EQUIPMENT SHALL REMAIN AT BRIDGE DECK ELEVATION. ONLY WORKERS WITH PORTABLE EQUIPMENT SHALL ENTER BELOW BRIDGE DECK ELEVATION.

16. BRIDGES SHALL BE OPEN TO TWO-WAY TRAFFIC DURING WINTER SHUT-DOWN.

NOTE: BOXED ITEMS ARE INCLUDED IN THE COST OF ASSOCIATED PAY ITEM

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\ROLLINGMEADOWS\98361BR86\Civil\NOT_98361BR86_01.SHT	USER NAME = PRAZALAN	DESIGNED - RCB	REVISED -	
		DRAWN - PMM	REVISED -	
	PLOT SCALE = 1'	CHECKED - JGS	REVISED -	
	PLOT DATE = 6/16/2010	DATE - 5/10/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 2592 AND F.A.U. 2594
GENERAL NOTES, EROSION CONTROL NOTES & DETAILS, SHEET INDEX AND LIST OF HIWHAY STANDARDS

SCALE: N.T.S | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	2
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT ------		

LOCATION OF PROJECT: F.A.U. 2594 (EAST FRONTAGE RD) AND F.A.U. 2592 (WEST FRONTAGE RD) COOK COUNTY

* SPECIALTY ITEM
\+ SPECIAL PROVISION

SUMMARY OF QUANTITIES

		PAY CODE	DESCRIPTION	UNIT	QUANTITY	CONSTRUCTION TYPE CODE W. FRONTAGE RD SN 016-1122 QUANTITY J000-1A	W. FRONTAGE RD SN 016-1122 QUANTITY X081	CONSTRUCTION TYPE CODE E. FRONTAGE RD SN 016-1123 QUANTITY J000-1A	E. FRONTAGE RD SN 016-1123 QUANTITY X081
		20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	30	20	---	10	---
		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	40	20	---	20	---
		20200100	EARTH EXCAVATION	CU YD	200	100	---	100	---
+		20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	21	---	21	---	0
+		20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	100	50	---	50	---
+		20800250	TRENCH BACKFILL, SPECIAL	CU YD	2	---	0	---	2
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	395	301	---	94	---
		25000210	SEEDING, CLASS 2A	ACRE	0.09	0.07	---	0.02	---
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	20	10	---	10	---
		25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	20	10	---	10	---
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	20	10	---	10	---
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20	10	---	10	---
		28000400	PERIMETER EROSION BARRIER	FOOT	1224	802	---	422	---
		28000510	INLET FILTERS	EACH	1	0	---	1	---
		28100105	STONE RIPRAP, CLASS A3	SQ YD	4	---	0	---	4
		28200200	FILTER FABRIC	SQ YD	4	---	0	---	4
		35100120	AGGREGATE BASE COURSE, TYPE A 2"	SQ YD	117	93	---	24	---
		42001300	PROTECTIVE COAT	SQ YD	512	394	---	118	---
		42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	90	47	---	43	---
		42000530	PORTLAND CEMENT CONCRETE PAVEMENT 11 1/2"	SQ YD	322	160	---	162	---
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1054	836	---	218	---
		44000100	PAVEMENT REMOVAL	SQ YD	400	200	---	200	---
		44000300	CURB REMOVAL	FOOT	120	0	---	120	---
		44000600	SIDEWALK REMOVAL	SQ FT	1721	1191	---	530	---
+		44000700	APPROACH SLAB REMOVAL	SQ YD	330	165	---	165	---
		44004250	PAVED SHOULDER REMOVAL	SQ YD	160	80	---	80	---
		48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	356	249	---	107	---
		50102400	CONCRETE REMOVAL	CU YD	45	---	39	---	6
+		50104000	BRIDGE RAIL REMOVAL	FOOT	280	---	160	---	120
		50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	2	---	1	---	1
		50200100	STRUCTURE EXCAVATION	CU YD	132	---	132	---	0
		50300225	CONCRETE STRUCTURES	CU YD	101.1	---	72.6	---	28.5
		50300255	CONCRETE SUPERSTRUCTURE	CU YD	410.2	---	218.2	---	192.0
		50300260	BRIDGE DECK GROOVING	SQ YD	799	---	430	---	369
		50300300	PROTECTIVE COAT	SQ YD	1183	---	637	---	546
+		50300540	FLOOR DRAINS (SPECIAL)	EACH	7	---	4	---	3
+		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	103420	---	57570	---	45850
		50900105	ALUMINUM RAILING, TYPE L	FOOT	202	---	111	---	91

SUMMARY OF QUANTITIES

		PAY CODE	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE W. FRONTAGE RD SN 016-1122 QUANTITY J000-1A	W. FRONTAGE RD SN 016-1122 QUANTITY X081	CONSTRUCTION TYPE CODE E. FRONTAGE RD SN 016-1123 QUANTITY J000-1A	E. FRONTAGE RD SN 016-1123 QUANTITY X081
		51500100	NAME PLATES	EACH	2	---	1	---	1
		52000110	PREFORMED JOINT STRIP SEAL	FOOT	169	---	95	---	74
+		54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	---	0	---	1
+		550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	12	---	0	---	12
		58700300	CONCRETE SEALER	SQ FT	530	---	290	---	240
	*	59000200	EPOXY CRACK INJECTION	FOOT	80	---	35	---	45
		59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	28	---	28	---	0
		60265700	VALVE VAULTS TO BE ADJUSTED	EACH	1	---	1	---	0
+		60500050	REMOVING CATCH BASINS	EACH	1	---	0	---	1
		60600605	CONCRETE CURB, TYPE B	FOOT	142	94	---	48	---
+		60900140	TYPE B INLET BOX, STANDARD 609006	EACH	1	0	---	1	---
		60900515	CONCRETE THRUST BLOCKS	EACH	1	---	0	---	1
	*	63000003	STEEL PLATE BEAM GUARD RAIL, TYPE A, 9 FOOT POSTS	FOOT	50	25	---	25	---
	*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2	---	0	---
	*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	4	---	4	---
+	*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	6	4	---	2	---
		63200310	GUARDRAIL REMOVAL	FOOT	642	347	---	295	---
		66400305	CHAIN LINK FENCE, 6'	FOOT	395	218	---	177	---
+		67100100	MOBILIZATION	L SUM	1	0.5	---	0.5	---
+		70101900	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	L SUM	1	0	---	1	---
+		70102000	TRAFFIC CONTROL AND PROTECTION (DETOUR 2)	L SUM	1	1	---	0	---
+		70106450	TRAFFIC CONTROL AND PROTECTION, LOCATION 01	L SUM	1	0	---	1	---
+		70106451	TRAFFIC CONTROL AND PROTECTION, LOCATION 02	L SUM	1	1	---	0	---
		70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	2	---	2	---
+		78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	875	460	---	415	---
+		78200455	BIDIRECTIONAL GUARD RAIL REFLECTORS	EACH	30	18	---	12	---
+	*	X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	34	---	16	---	18
+		Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	240	120	---	120	---
+	*	X0323818	CLEANING AND PAINTING EXPOSED REBAR	SQ FT	48	---	39	---	9
+	*	X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	907	---	387	---	520
+	*	X0326331	CLEANING AND PAINTING BEARINGS	EACH	13	---	7	---	6
+		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	---	0.5	---
+		Z0018905	DRILL AND GROUT BARS	EACH	138	---	100	---	38
+		Z0019600	DUST CONTROL WATERING	UNIT	6	3	---	3	---
+		Z0076600	TRAINEES FUND CODE Y080	HOUR	500	---	---	---	---

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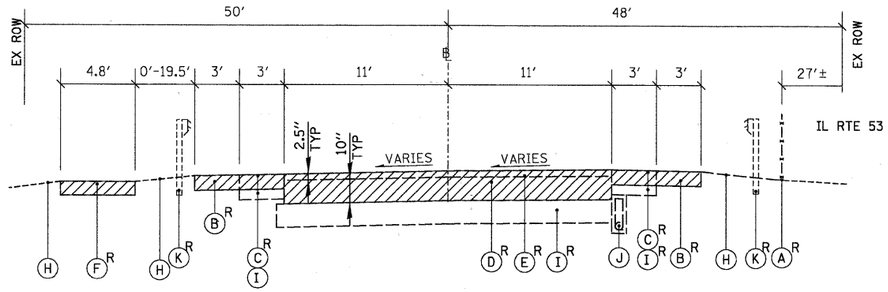
FILE NAME = N:\ROLLINGMEADOWS\98361BR86\Civil\QUA_98361BR86_01.SHT	USER NAME = PRAZALAN	DESIGNED - RCB	REVISED -
		DRAWN - PMM	REVISED -
	PLOT SCALE = 1'	CHECKED - JGS	REVISED -
	PLOT DATE = 6/16/2010	DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 2592 AND F.A.U. 2594
SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

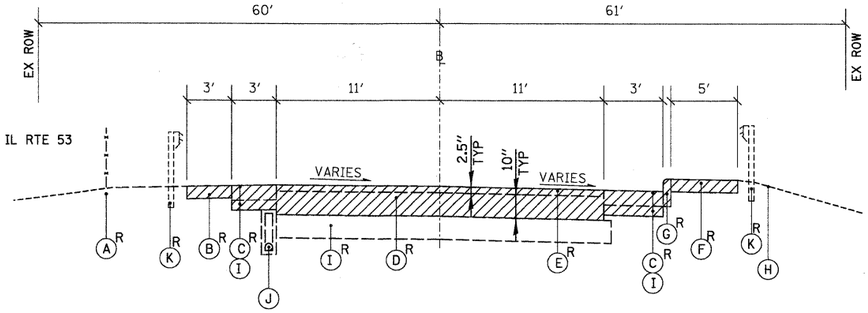
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	3
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION

FAU 2592 (WEST FRONTAGE ROAD IL RTE 53)

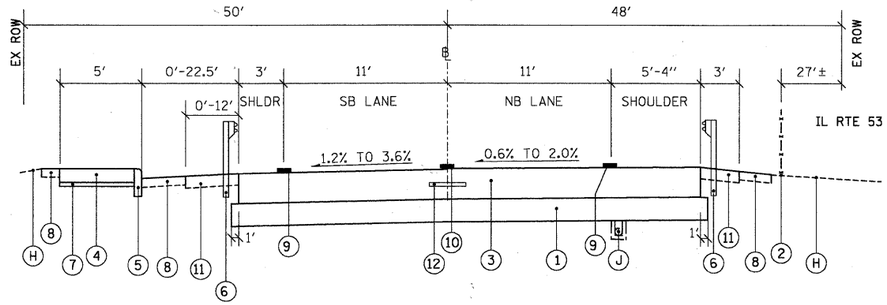
STA 10+89.56 TO STA 11+49.56
[BRIDGE STA 11+49.56 TO STA 12+33.22 SEE STRUCTURAL SHEETS FOR INFORMATION]
STA 12+33.22 TO STA 12+93.22



EXISTING TYPICAL SECTION

FAU 2594 (EAST FRONTAGE ROAD IL RTE 53)

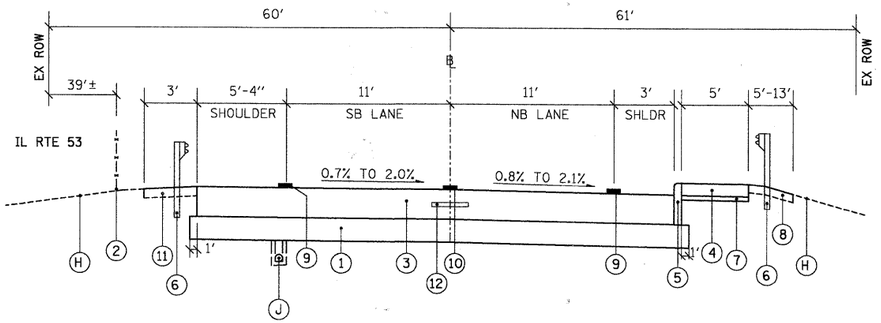
STA 20+89.50 TO STA 21+49.50
[BRIDGE STA 21+49.50 TO STA 22+12.76 SEE STRUCTURAL SHEETS FOR INFORMATION]
STA 22+12.76 TO STA 22+72.76



PROPOSED TYPICAL SECTION

FAU 2592 (WEST FRONTAGE ROAD IL RTE 53)

STA 10+89.56 TO STA 11+13.56
[BRIDGE STA 11+13.56 TO STA 12+69.22 SEE STRUCTURAL SHEETS FOR INFORMATION]
STA 12+69.22 TO STA 12+93.22



PROPOSED TYPICAL SECTION

FAU 2594 (EAST FRONTAGE ROAD IL RTE 53)

STA 20+89.50 TO STA 21+13.50
[BRIDGE STA 21+13.50 TO STA 22+48.76 SEE STRUCTURAL SHEETS FOR INFORMATION]
STA 22+48.76 TO STA 22+72.76

LEGEND:

- (A) EXISTING FENCE
- (B) EXISTING AGGERGATE SHOULDER
- (C) EXISTING HMA SHOULDER
- (D) EXISTING CONCRETE PAVEMENT
- (E) EXISTING HMA OVERLAY
- (F) EXISTING SIDEWALK
- (G) EXISTING CONCRETE CURB
- (H) EXISTING GROUND
- (I) EXISTING AGGREGATE BASE
- (J) EXISTING PIPE UNDERDRAIN
- (K) EXISTING GUARDRAIL

/// , R = REMOVAL

NOTE: AGGREGATE REMOVAL PAID FOR AS "EARTH EXCAVATION."

- (1) AGGREGATE SUBGRADE, 12"
- (2) CHAIN LINK FENCE, 6'
- (3) PORTLAND CEMENT CONCRETE PAVEMENT 11 1/2"
- (4) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- (5) CONCRETE CURB, TYPE B
- (6) STEEL PLATE BEAM GUARDRAIL, TYPE A AND TERMINALS
- (7) AGGREGATE BASE COURSE, TYPE A, 2"
- (8) LANDSCAPE RESTORATION
  EROSION CONTROL BLANKET
  SEEDING, CLASS 2A
  FERTILIZER
  TOPSOIL FURNISH AND PLACE, 4"
- (9) POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (WHITE)
- (10) POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (YELLOW: 10' DASH, 30' SKIP)
- (11) AGGREGATE SHOULDERS, TYPE A 6"
- (12) TIE BARS AND DOWEL BAR PER HIGHWAY STD 210101 (INCLUDED IN THE COST OF PCC PVMT 11.5")

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FILE NAME = n:\rollingmeadows\98361br86\civil\TYP_98361BR86_01.SHT	USER NAME = MCZUPOWS	DESIGNED - RCB	REVISED -
		DRAWN - PMM	REVISED -
	PLOT SCALE = 1'	CHECKED - JGS	REVISED -
	PLOT DATE = 5/11/2010	DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 2592 AND F.A.U. 2594
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	4
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT -------		

STAGE 1

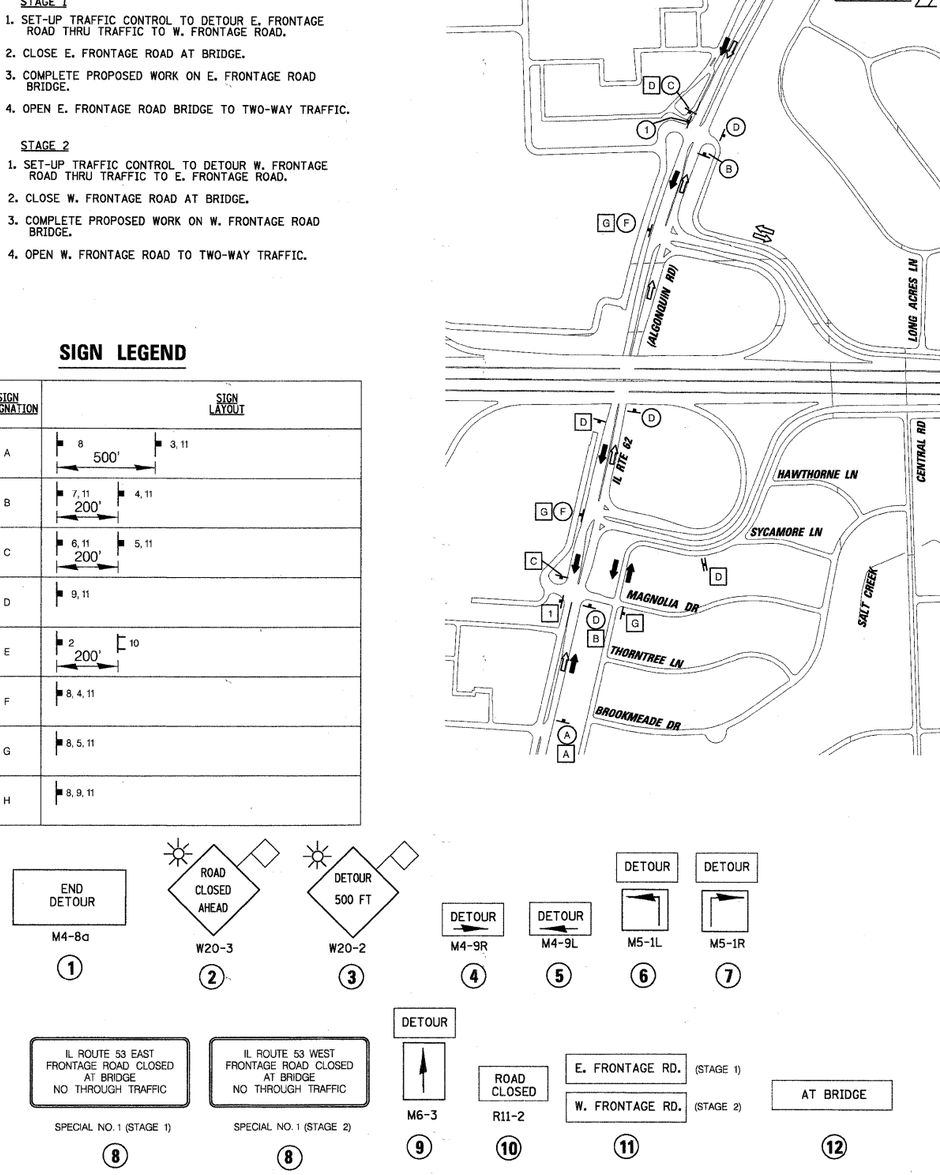
1. SET-UP TRAFFIC CONTROL TO DETOUR E. FRONTAGE ROAD THRU TRAFFIC TO W. FRONTAGE ROAD.
2. CLOSE E. FRONTAGE ROAD AT BRIDGE.
3. COMPLETE PROPOSED WORK ON E. FRONTAGE ROAD BRIDGE.
4. OPEN E. FRONTAGE ROAD BRIDGE TO TWO-WAY TRAFFIC.

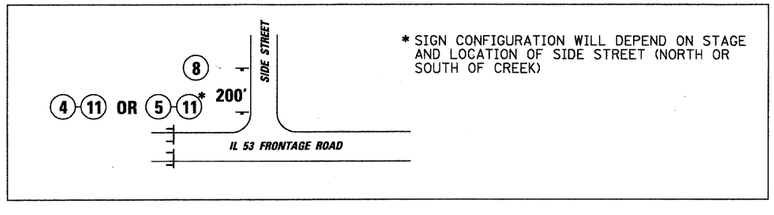
STAGE 2

1. SET-UP TRAFFIC CONTROL TO DETOUR W. FRONTAGE ROAD THRU TRAFFIC TO E. FRONTAGE ROAD.
2. CLOSE W. FRONTAGE ROAD AT BRIDGE.
3. COMPLETE PROPOSED WORK ON W. FRONTAGE ROAD BRIDGE.
4. OPEN W. FRONTAGE ROAD TO TWO-WAY TRAFFIC.

SIGN LEGEND

SIGN DESIGNATION	SIGN LAYOUT
A	8 — 500' — 3, 11
B	7, 11 — 200' — 4, 11
C	6, 11 — 200' — 5, 11
D	9, 11
E	2 — 200' — 10
F	8, 4, 11
G	8, 5, 11
H	8, 9, 11





* SIGN CONFIGURATION WILL DEPEND ON STAGE AND LOCATION OF SIDE STREET (NORTH OR SOUTH OF CREEK)

(4) STAGE 1 TRAFFIC SIGN LEGEND NUMBER/LETTER (EAST FRONTAGE ROAD CLOSED - DETOUR 1)

[12] STAGE 2 TRAFFIC SIGN LEGEND NUMBER/LETTER (WEST FRONTAGE ROAD CLOSED - DETOUR 2)

TYPE III BARRICADE (PER IDOT STANDARD 701901)

DIRECTION OF STAGE 1 DETOURED TRAFFIC

DIRECTION OF STAGE 2 DETOURED TRAFFIC

CONSTRUCTION SIGN

DOUBLE SIDED CONSTRUCTION SIGN

SUGGESTED TRAFFIC CONTROL PLAN GENERAL NOTES

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2007", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2004", THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION.

2. IF DEEMED NECESSARY BY THE ENGINEER, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.

3. LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS, WITH THE APPROVAL OF THE ENGINEER.

4. THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION (DETOUR 1)" AND "TRAFFIC CONTROL AND PROTECTION (DETOUR 2)".

5. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

6. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY THE CONTRACTOR ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.

8. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS/HER REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS/HER REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK.

9. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.

10. ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.

11. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION OF THE SIGNS. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.

12. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

13. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.

14. WHEN REQUIRED THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18" X 18".

15. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8 FEET IN WIDTH EACH, FOR A SINGLE APPROACH LANE.

16. THE "ROAD CLOSED" (R11-2), SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.

17. THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN SHALL BE A 9" X VARIABLE OR A 12" X VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.

18. DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.

19. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED WITHIN 25 FT BEHIND THE TYPE III BARRICADES. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.

21. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

22. THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

23. IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT, THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.

24. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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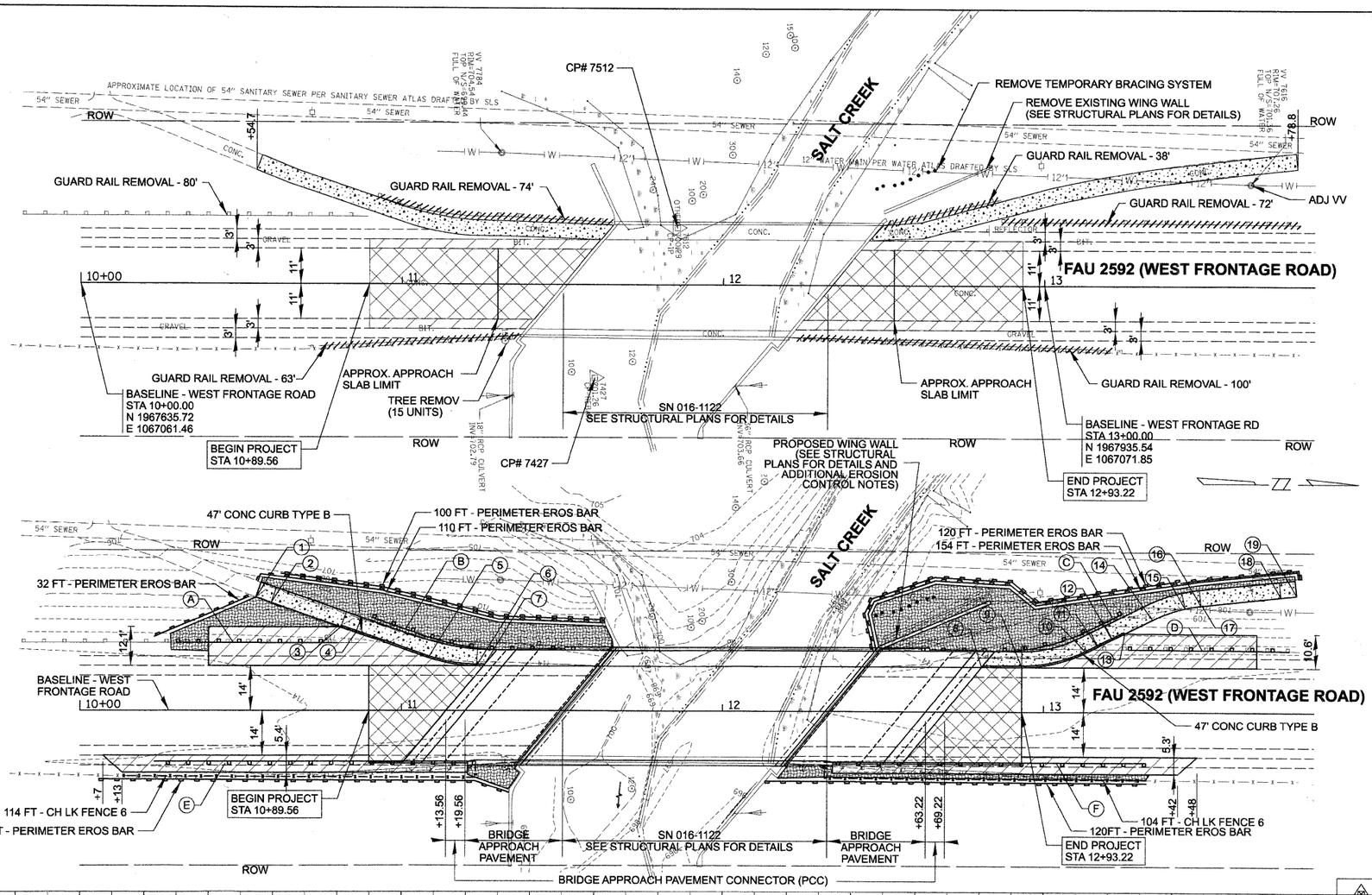
FILE NAME = N:\ROLLINGMEADOWS\98361BR86\Civil\DETOUR_98361BR86_01.SHT	USER NAME = JBARNETT	DESIGNED - RCB	REVISED -
		DRAWN - PMM	REVISED -
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -
	PLOT DATE = 5/26/2010	DATE - 5/10/2010	REVISED -

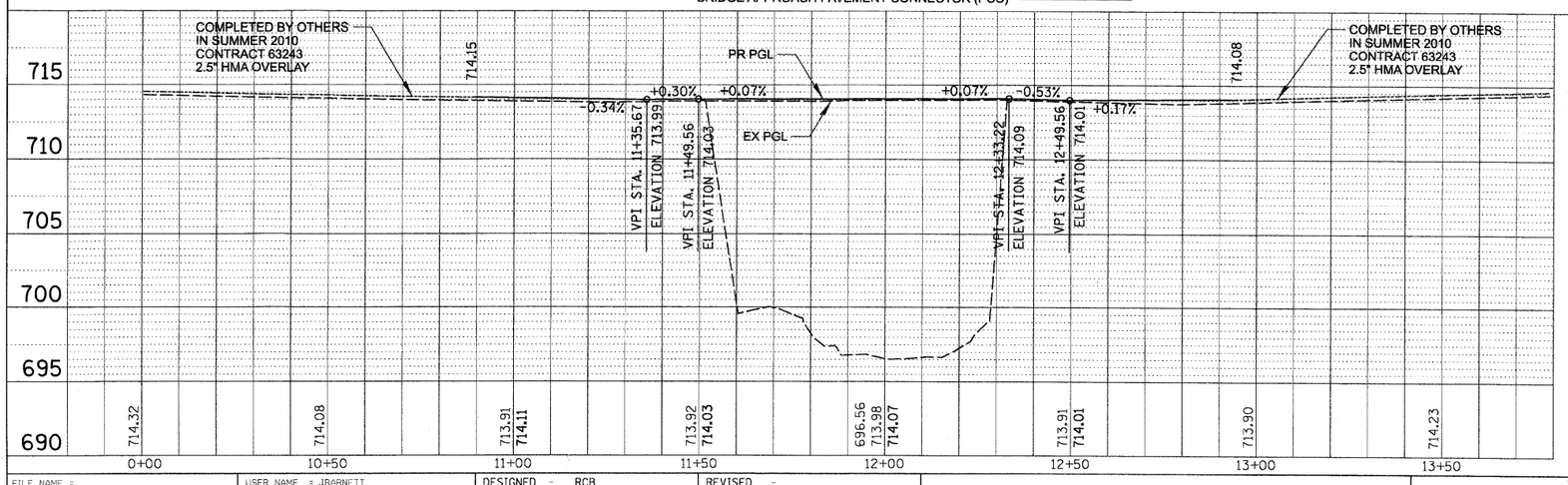
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU 2592 AND FAU 2594
DETOUR ROUTE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	5
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT _____		





LEGEND

PAVEMENT REMOVAL / APPROACH SLAB REMOVAL
PC CONC PVMT, 11.5"

PAVED SHOULDER REMOVAL
AGGREGATE SHLDS A 6

SIDEWALK REMOVAL

PC CONC SIDEWALK 5
ON AGG BASE COURSE TY A 2"

LANDSCAPE RESTORATION

STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS

LOCATION		STA.	OFFSET
A	END, CONNECTING TO EXISTING SPBGR	10+80.0	21.1' LT
	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	10+30.0	21.1' LT
B	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	11+54.0	19.0' LT
	BEGIN 75' RADIUS	11+37.3	19.0' LT
	END 75' RADIUS	11+07.5	23.2' LT
	END TRAFFIC BARRIER TERMINAL, TYPE 2	10+91.0	29.0' LT
C	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	12+62.1	19.0' LT
	BEGIN 65' RADIUS	12+85.6	19.0' LT
	END 65' RADIUS	13+14.9	26.0' LT
	END TRAFFIC BARRIER TERMINAL, TYPE 2	13+24.4	30.9' LT
D	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	13+26.4	19.6' LT
	END, CONNECTING TO EXISTING SPBGR	13+76.4	19.3' LT
E	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	10+23.2	15.8' RT
	END TRAFFIC BARRIER TERMINAL, TYPE 6	11+23.2	15.8' RT
F	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	12+31.8	15.8' RT
	END TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	13+31.8	15.8' RT

NOTES:

1. CONTRACTOR SHALL TIE INTO THE EXISTING GUARDRAIL AT AN EXISTING GUARD RAIL POST. POST SPACING SHALL NOT EXCEED THE DISTANCE SHOWN ON THE HIGHWAY STANDARD.

2. CONTRACTOR SHALL BEND GUARDRAIL TO THE RADIUS SHOWN ON THE PLANS AND PROVIDE EXTRA POSTS AS REQUIRED. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR THE TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED.

3. ALL TRAFFIC BARRIER TERMINAL POSTS SHALL BE 9 FOOT POSTS.

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

LOCATION	NOTES	STATION (AT INSIDE FACE OF CURB OR SIDEWALK)	OFFSET (AT INSIDE FACE OF CURB OR SIDEWALK)	AGGREGATE SHOULDER ELEV.	TOP OF CURB ELEV	SIDEWALK ELEV
1	-	10+54.7	35.3' LT	N/A	N/A	MATCH EX
2	-	10+59.4	33.7' LT	N/A	N/A	710.10
3	-	10+81.1	26.1' LT	712.10	712.10	712.10
4	-	10+85.8	24.4' LT	712.20	712.80	712.20
5	BEGIN 45.5' RADIUS	11+08.4	16.6' LT	713.40	713.90	713.40
6	END 45.5' RADIUS	11+23.4	14.0' LT	713.67	714.16	714.16
7	-	11+25.0	14.0' LT	NA	714.18	714.18
8	-	12+80.7	14.0' LT	NA	714.11	714.11
9	BEGIN 45' RADIUS	12+93.2	14.0' LT	713.57	714.07	714.07
10	END 45' RADIUS	13+13.3	18.7' LT	712.34	712.84	712.34
11	-	13+16.9	20.5' LT	711.99	712.49	711.99
12	-	13+21.4	22.7' LT	711.89	712.39	711.89
13	-	13+25.2	24.6' LT	711.53	711.53	711.53
14	BEGIN 45' RADIUS	13+33.9	28.9' LT	N/A	N/A	710.37
15	-	13+44.0	32.5' LT	N/A	N/A	709.81
16	-	13+49.0	33.4' LT	N/A	N/A	709.71
17	END 45' RADIUS	13+49.4	33.4' LT	N/A	N/A	709.66
18	-	13+73.8	36.0' LT	N/A	N/A	706.60
19	-	13+78.8	36.5' LT	N/A	N/A	MATCH EX

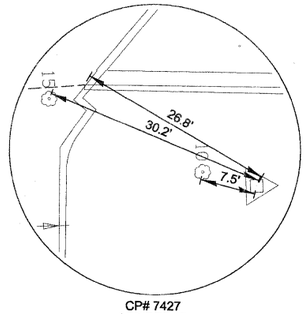
INSTALL EXPANSION JOINTS AT LOCATION 4 AND 12

CONTROL POINTS
DATUM: NAD '83 ('97) ROLLING MEADOWS CITY DATUM

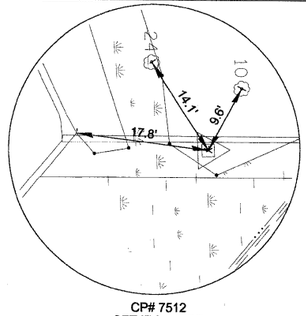
NO.	STATION	OFFSET	NORTHING	EASTING
CP# 7000	21+96.49	16.78 RT	1967801.53	1067401.20
CP# 7427	11+60.06	29.42 RT	1967794.67	1067096.40
CP# 7512	11+85.69	17.72 LT	1967821.91	1067050.18

ELEVATION BENCHMARKS
DATUM: NGVD 1929

NO.	DESCRIPTION	ELEV.
RM-184-4	SQUARE CUT ON TOP OF SOUTHWEST HEADWALL OF WEST FRONTAGE ROAD BRIDGE OVER SALT CREEK	714.49
RM-184-5	SQUARE CUT ON SOUTHEAST CORNER OF EAST HEADWALL OF FRONTAGE ROAD BRIDGE ±500' NORTH OF CENTRAL ROAD	714.29
OSBM 1	BOLT ON FIRE HYDRANT ±180' SOUTH OF SALT CREEK ON EAST SIDE OF FRONTAGE ROAD	714.52



CP# 7427
SET REBAR



CP# 7512
SET IRON PIPE

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — DETECTED / PLOTTED / ALIGNMENT CHECKED / NEW ROW PLOTTED / CADD FILE NAME / NOTE BOOK / NO. / BY / DATE

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / NEW ROW PLOTTED / STRUCTURE NO. ATTNS CHKD / NOTE BOOK / NO. / BY / DATE

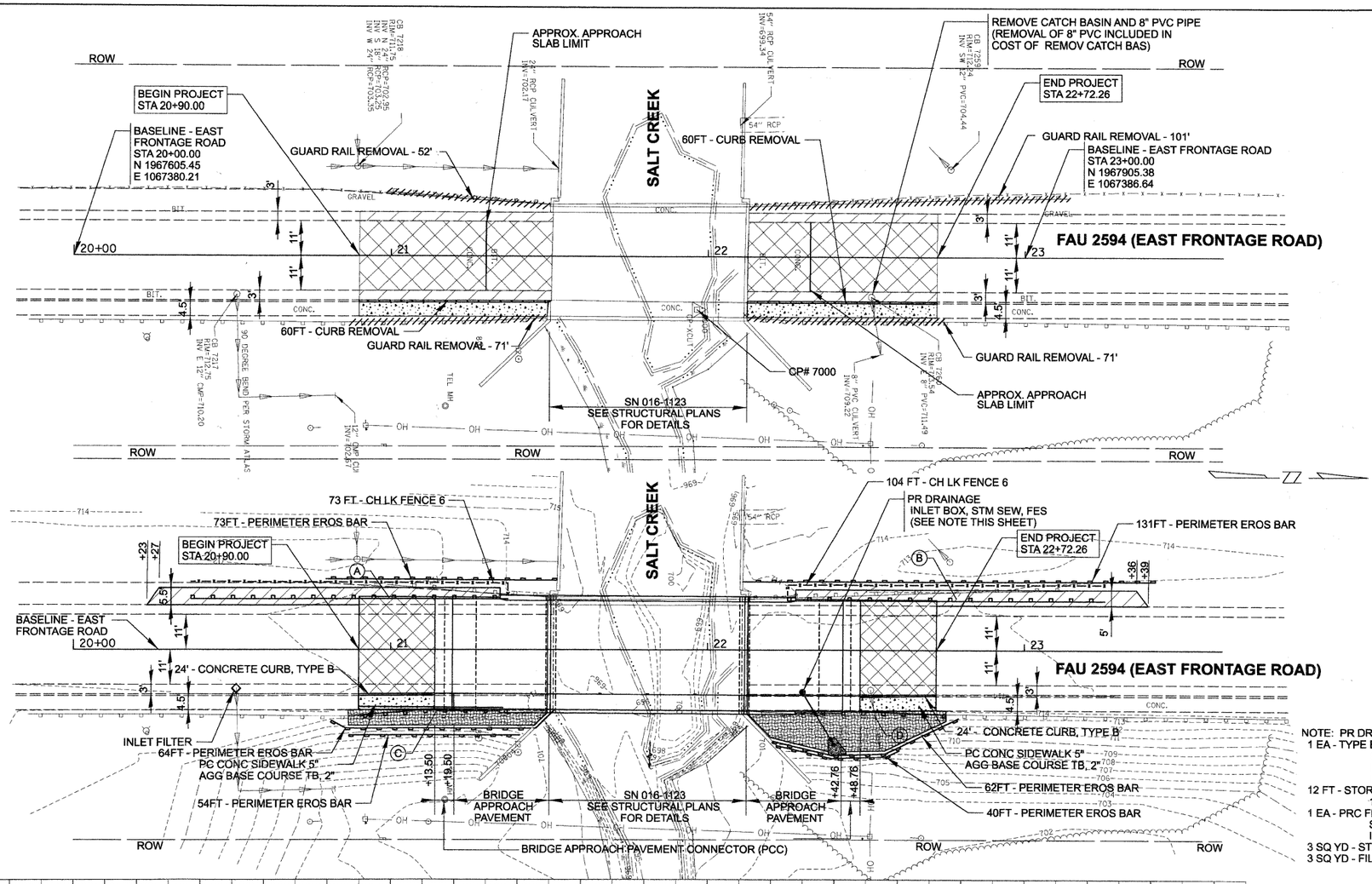
FILE NAME = N:\ROLLINGMEADOWS\98361BR86\Civil\PLN_98361BR86_01.SHT	USER NAME = JBARNETT	DESIGNED - RCB	REVISED -
		DRAWN - PMM	REVISED -
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -
	PLOT DATE = 5/26/2010	DATE - 5/10/2010	REVISED -

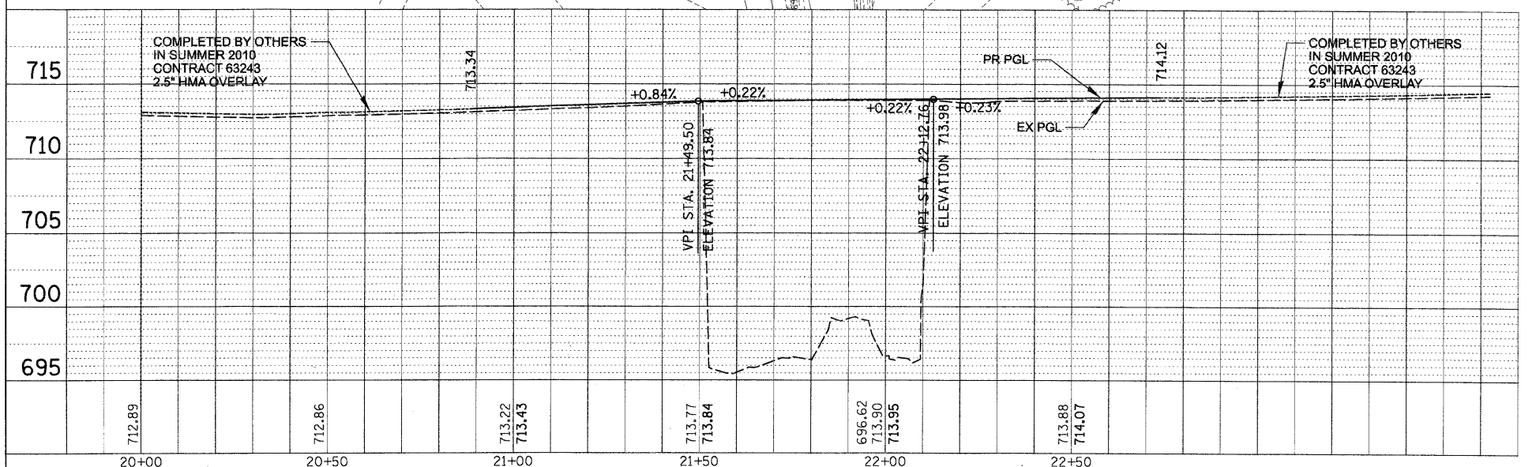
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU 2592 (WEST FRONTAGE ROAD)
EXISTING AND PROPOSED CONDITIONS

SCALE: 20 | SHEET NO. OF SHEETS | STA. | TO STA.

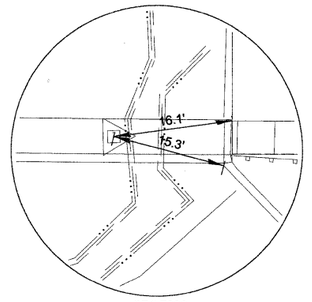
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	6
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT -------		





LEGEND

- PAVEMENT REMOVAL / APPROACH SLAB REMOVAL — PC CONC PVMT, 11.5"
- PAVED SHOULDER REMOVAL — AGGREGATE SHLDS A 6
- SIDEWALK REMOVAL — PC CONC SIDEWALK 5 ON AGG BASE COURSE TY A 2"
- LANDSCAPE RESTORATION



CP# 7000
SET X-CUT

NOTE: PR DRAINAGE
1 EA - TYPE B INLET BOX, STANDARD 609006
STA 22+30.0, 13.5 ' RT (CENTER OF STR)
RIM 713.65
INV 709.44
12 FT - STORM SEW CL A 1 12
1.0% GRADE, 2 CYTBF
1 EA - PRC FLAR END SEC 12 (1 EA)
STA 22+39.8, 29.8' RT (OUTLET END)
INV 709.20
3 SQ YD - STONE RIPRAP CL A3
3 SQ YD - FILTER FABRIC

CONTROL POINTS
DATUM: NAD 83 ('97) ROLLING MEADOWS CITY DATUM

NO.	STATION	OFFSET	NORTHING	EASTING
CP# 7000	21+96.49	16.78 RT	1967801.53	1067401.20
CP# 7427	11+60.06	29.42 RT	1967794.67	1067096.40
CP# 7512	11+85.69	17.72 LT	1967821.91	1067050.18

ELEVATION BENCHMARKS
DATUM: NGVD 1929

NO.	DESCRIPTION	ELEV.
RM-184-4	SQUARE CUT ON TOP OF SOUTHWEST HEADWALL OF WEST FRONTAGE ROAD BRIDGE OVER SALT CREEK	714.49
RM-184-5	SQUARE CUT ON SOUTHEAST CORNER OF EAST HEADWALL OF FRONTAGE ROAD BRIDGE ±500' NORTH OF CENTRAL ROAD	714.29
OSBM 1	BOLT ON FIRE HYDRANT ±180' SOUTH OF SALT CREEK ON EAST SIDE OF FRONTAGE ROAD	714.52

STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS

LOCATION		STA.	OFFSET
A	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	20+37.1	15.9' LT
	END TRAFFIC BARRIER TERMINAL, TYPE 6	21+37.1	15.9' LT
B	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	22+25.3	15.5' LT
	END TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	23+25.3	15.5' LT
C	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	21+36.9	18.9' RT
		21+13.9	18.8' RT
	END, CONNECTING TO EXISTING SPBGR	20+86.9	20.9' RT
D	BEGIN TRAFFIC BARRIER TERMINAL, TYPE 6	22+25.2	19.3' RT
		22+48.2	19.4' RT
	END, CONNECTING TO EXISTING SPBGR	22+75.5	20.4' RT

NOTES:

1. CONTRACTOR SHALL TIE INTO THE EXISTING GUARDRAIL AT AN EXISTING GUARD RAIL POST. POST SPACING SHALL NOT EXCEED THE DISTANCE SHOWN ON THE HIGHWAY STANDARD.

2. ALL TRAFFIC BARRIER TERMINAL POSTS SHALL BE 9 FOOT POSTS.

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NO(TATN'S CHKD, NOTE BOOK, NO., BY, DATE

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = N:\ROLLINGMEADOWS\98361BR86\Civil\PLN_98361BR86_02.SHT	USER NAME = JBARNETT	DESIGNED - RCB	REVISED -
		DRAWN - PMM	REVISED -
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -
	PLOT DATE = 5/26/2010	DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU 2594 (EAST FRONTAGE ROAD)
EXISTING AND PROPOSED CONDITIONS

SCALE: 20 | SHEET NO. OF SHEETS | STA. TO STA.

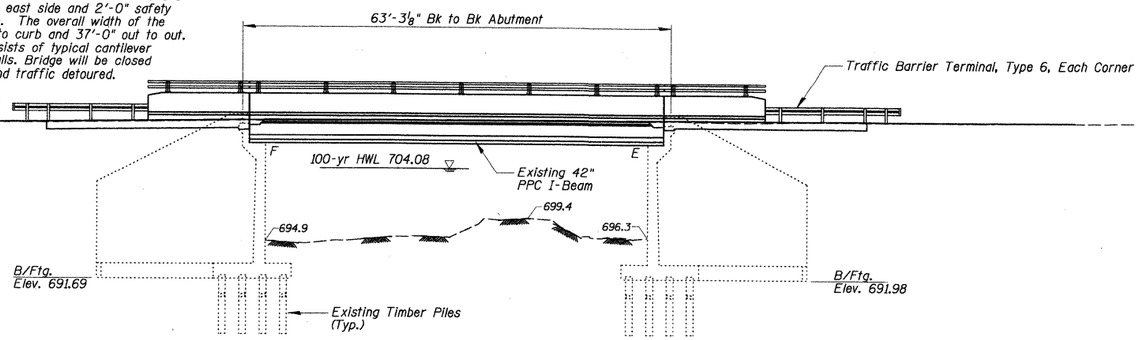
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2592 & 2594	04-00091-00-BR	COOK	50	7
		CONTRACT NO. 63471		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT ------		

Bench Mark: RM-184-5 Square cut on top of southeast wingwall of east frontage road bridge over salt creek. Elevation = 714.29

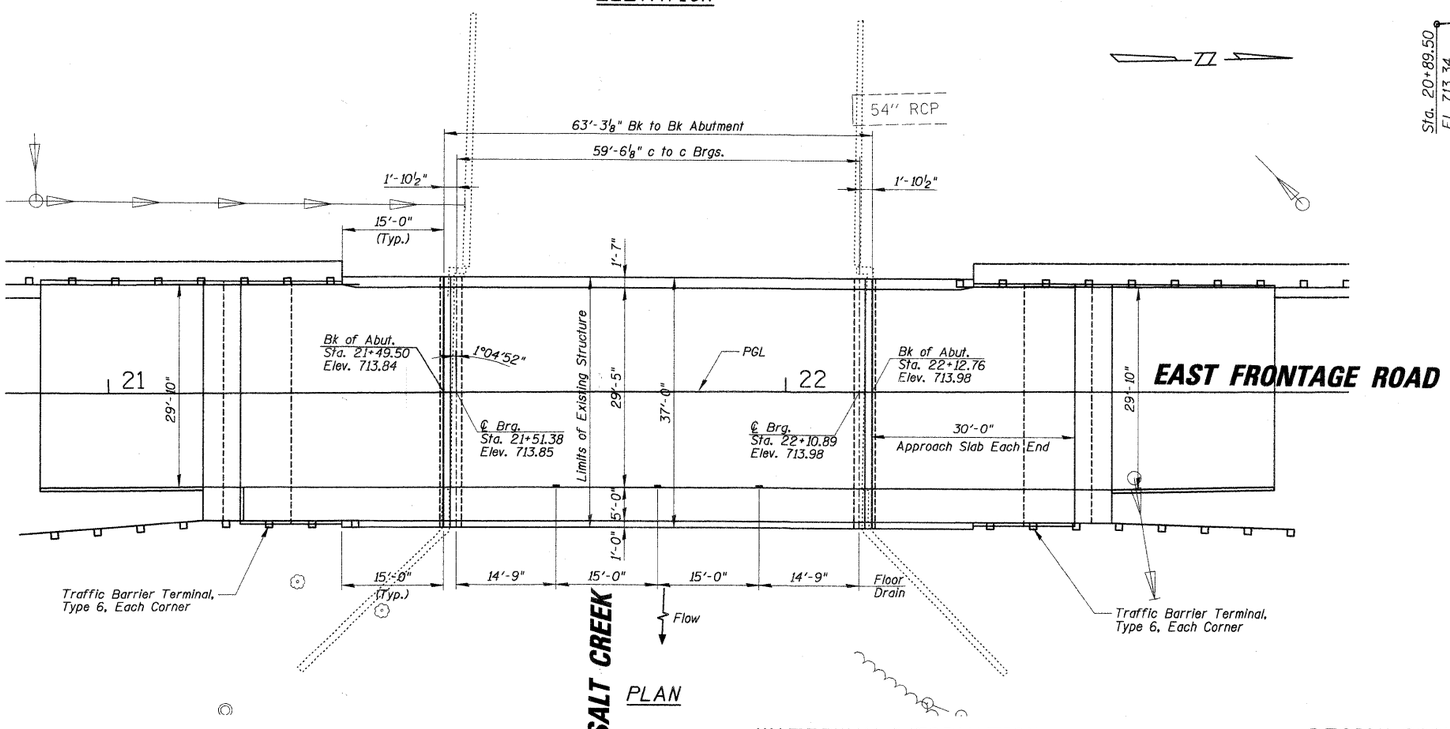
Existing Structure: SN 016-1123 The bridge was constructed in 1962 under Relocation of S.B.I Route 53 (F.A. Route 61) Section 531-I-B-7. The bridge is a single span structure with a span length of 59'-6" center to center of bearings and 63'-3" bk. to bk. of abutments. The bridge has a 1°-04'-52" skew. The superstructure consists of a 7" concrete deck supported by six 42" PPC I-Beams at 6'-3" on center. The deck provides two 11'-0" lanes of traffic with 3'-0" shoulders on each side and a 5'-0" sidewalk on the east side and 2'-0" safety walk on the west side. The overall width of the deck is 28'-0" curb to curb and 37'-0" out to out. The substructure consists of typical cantilever abutments and wingwalls. Bridge will be closed during construction and traffic detoured.

Salvage: Existing bridge railing

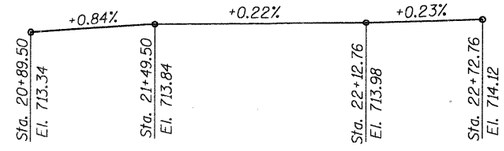
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION



PLAN



PROFILE GRADE

SALT CREEK
BUILT BY
COOK COUNTY
SEC. 04-00091-00-BR
F.A.U. RT. 2594 STA. 21+81.13
STR. NO. 016-1123 LOADING HS-20

NAME PLATE

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 Syle Of Structure And Complies With Requirements Of The Current "AASHTO Standard Specification For Highway And Bridges".

STATE OF ILLINOIS
MAJID MOBASSERI
081-005058
CHAMPAIGN, ILLINOIS
REGISTERED STRUCTURAL ENGINEER

5/11/, 2010

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058
STRUCTURAL ENGINEER
EXPIRATION DATE: 11/30/10

INDEX OF SHEETS

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

Reinforced Concrete:
f'c = 2,500 psi (Existing)
f'c = 3,500 psi (New)

Reinforcement:
fy = 40 ksi (Existing)
fy = 60 ksi (New)

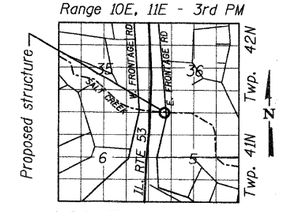
PRESTRESSED PRECAST UNITS

Existing:
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 248,000 psi
f'si = 173,000 psi
fs = 2,000 psi

SEISMIC DATA

Seismic Performance Zone (SPZ) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.036g
Site Coefficient (S) = 1.2

Range 10E, 11E - 3rd PM



LOCATION SKETCH

WATERWAY INFORMATION

Ex. Low Beam 709.35 @ 21+50.24 Ex. Low Grade 713.56 @ 11+21+50.24 Drainage Area = 17.0 mi²
Prop. Low Beam Elv. 709.35 @ 21+50.24 Prop. Low Grade Elv. 713.56 @ 21+50.24

Flood	Freq. Yr.	Q cfs	Opening ft² Exist.	Opening ft² Prop.	Nat. H.W.E.	Head - ft Exist.	Head - ft Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	577	332	332	702.51	0.01	0.01	702.52	702.52
Design	30	837	364	364	703.22	0.04	0.04	703.26	703.26
	50	947	395	395	703.60	0.04	0.04	703.64	703.64
Base	100	1129	427	427	704.08	0.05	0.05	704.13	704.13
Max. Calc.	500	1547	476	476	704.91	0.07	0.07	704.98	704.98

DESIGN SCOUR ELEVATION TABLE

Flood Frequency/ Scour Elevation	North Abut.	South Abut.
100 year Scour Elevation (ft.)	682.23	684.64
500 year Scour Elevation (ft.)	677.27	681.76

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-1 SHEETS	2594	04-00091-00-BR	COOK	50	8
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions..
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete.
4. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
5. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal".
6. All construction joints shall be bonded.
7. Any reinforcement bars that are damaged during concrete removal operation or construction shall be repaired with an approved bar splicer or anchorage system. Cost shall be included in "Concrete Removal".
8. Cleaning and painting of the existing bearings shall be as specified in the special provision for "Cleaning and Painting Bearings". All bearings shall be cleaned per Near White Blast Cleaning - SSPC - SP10.
9. The designated areas cleaned per Near White Blast Cleaning shall be painted according to requirements of Paint System 1 - Organic Zinc/Epoxy/Urethane (OZ/E/U). The color of final finish coat for all steel bearings shall be gray, Munsell No. 5B 7/1.
10. The cost of Containment and Disposal of Lead Paint Cleaning Residue is included with "Cleaning and Painting Bearing".
11. The Contractor's certifications SSPC-QP1 and QP2 are not required for this project

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Approach Slab Removal	Sq Yd	165		165
Concrete Removal	Cu Yd		6	6
Bridge Rail Removal	Foot	120		120
Removal of Existing Concrete Deck	Each	1		1
Concrete Structures	Cu Yd		28.5	28.5
Concrete Superstructure	Cu Yd	192.0		192.0
Bridge Deck Grooving	Sq Yd	369		369
Protective Coat	Sq Yd	546		546
Floor Drains (Special)	Each	3		3
Reinforcement Bars, Epoxy Coated	Pound	41,470	4,380	45,850
Aluminum Railing, Type L	Foot	91		91
Name Plates	Each		1	1
Preformed Joint Strip Seal	Foot	74		74
Epoxy Crack Injection	Foot		45	45
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches	Sq Ft		520	520
Cleaning and Painting Bearings	Each		6	6
Drill and Grout Bars	Each		38	38
Polymer Modified Portland Cement Mortar	Sq Ft	18		18
Concrete Sealer	Sq Ft		240	240
Cleaning And Painting Exposed Rebar	Sq Ft	9		9

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

GENERAL NOTES
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-2 SHEETS	2594	04-00091-00-BR	COOK	50	9
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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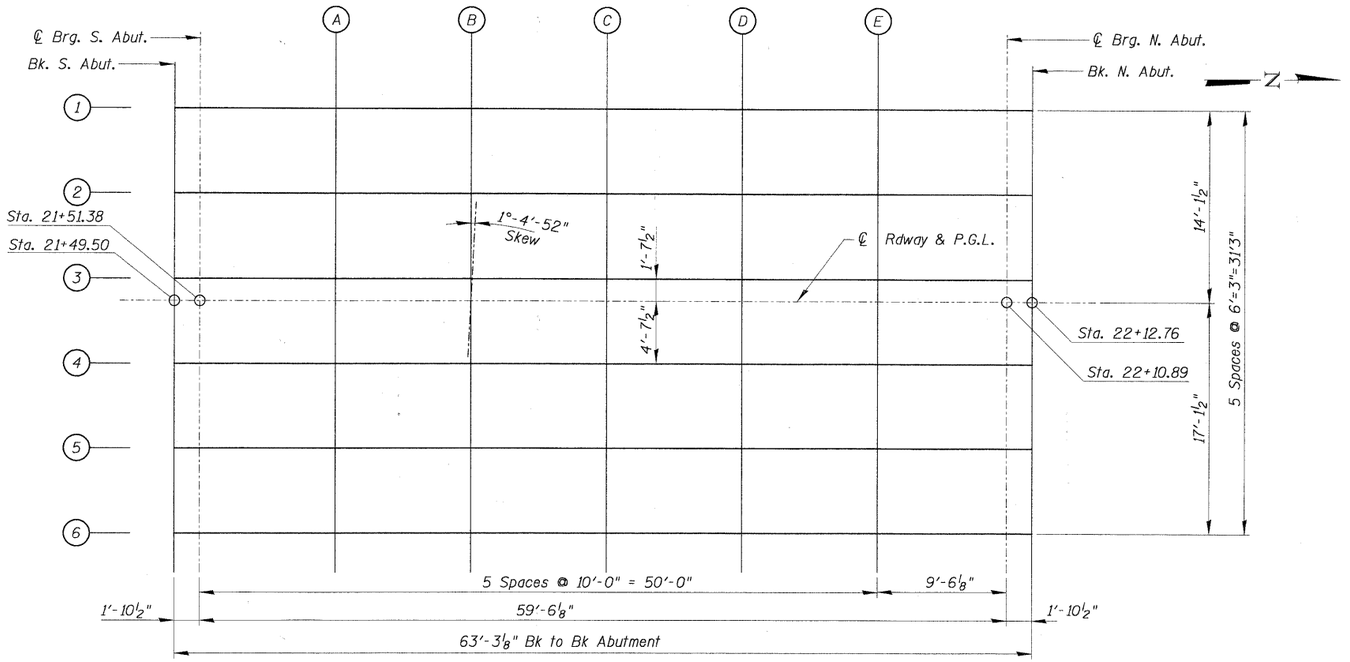
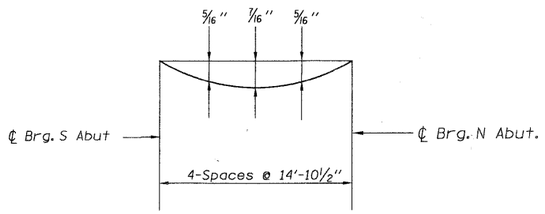
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes Weight of Concrete Deck And All Superimposed Dead Load Except Future Wearing Surfaces)

NOTE:

1. The deflections given above are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflection as shown on Sheet S-4.
2. Offsets Are Positive West Of The Profile Gradeline.

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

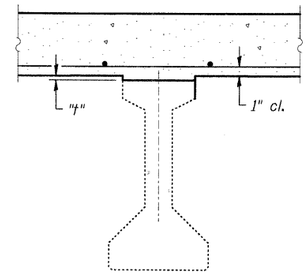
\- 200

EXAMINED

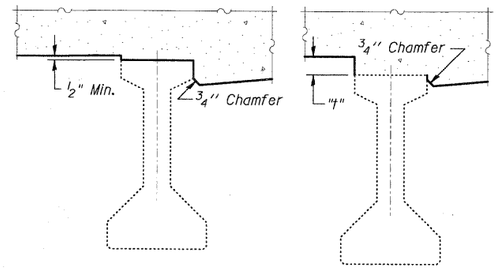
ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES



INTERIOR BEAMS



At Minimum Fillet At Maximum Fillet

EXTERIOR BEAMS

METHOD OF DETERMINING FILLET HEIGHTS "t"

To determine "t": After the existing deck has been removed and prior to placing the proposed deck, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection"shown on Drawing No. S-4 minus slab thickness, equals the fillet heights "t" above top flange of beams.

(Sheet 1 of 2)

TOP OF DECK ELEVATIONS PLAN
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO. S-3 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	10
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 1

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.767	14.13	714.126	714.126
CL Brg S. Abut.	21+51.642	14.13	714.130	714.130
A	21+61.642	14.13	714.152	714.190
B	21+71.642	14.13	714.174	714.238
C	21+81.642	14.13	714.197	714.270
D	21+91.642	14.13	714.219	714.282
E	22+01.642	14.13	714.241	714.277
CL Brg N. Abut.	22+11.152	14.13	714.262	714.262
Bk. N. Abutment	22+13.027	14.13	714.266	714.266

PGL

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.500	0.00	713.843	713.843
CL Brg S. Abut.	21+51.375	0.00	713.847	713.847
A	21+61.375	0.00	713.869	713.890
B	21+71.375	0.00	713.891	713.931
C	21+81.375	0.00	713.914	713.960
D	21+91.375	0.00	713.936	713.975
E	22+01.375	0.00	713.958	713.978
CL Brg N. Abut.	22+10.885	0.00	713.979	713.979
Bk. N. Abutment	22+12.761	0.00	713.983	713.983

BEAM 2

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.649	7.88	714.001	714.001
CL Brg S. Abut.	21+51.524	7.88	714.005	714.005
A	21+61.524	7.88	714.027	714.048
B	21+71.524	7.88	714.049	714.089
C	21+81.524	7.88	714.071	714.118
D	21+91.524	7.88	714.094	714.133
E	22+01.524	7.88	714.116	714.136
CL Brg N. Abut.	22+11.034	7.88	714.137	714.137
Bk. N. Abutment	22+12.909	7.88	714.141	714.141

BEAM 4

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.413	-4.63	713.750	713.750
CL Brg S. Abut.	21+51.288	-4.63	713.754	713.754
A	21+61.288	-4.63	713.776	713.798
B	21+71.288	-4.63	713.799	713.839
C	21+81.288	-4.63	713.821	713.868
D	21+91.288	-4.63	713.843	713.882
E	22+01.288	-4.63	713.865	713.885
CL Brg N. Abut.	22+10.798	-4.63	713.886	713.886
Bk. N. Abutment	22+12.673	-4.63	713.890	713.890

BEAM 3

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.531	1.63	713.875	713.875
CL Brg S. Abut.	21+51.406	1.63	713.880	713.880
A	21+61.406	1.63	713.902	713.923
B	21+71.406	1.63	713.924	713.964
C	21+81.406	1.63	713.946	713.993
D	21+91.406	1.63	713.968	714.007
E	22+01.406	1.63	713.990	714.010
CL Brg N. Abut.	22+10.916	1.63	714.012	714.012
Bk. N. Abutment	22+12.791	1.63	714.016	714.016

BEAM 5

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.295	-10.88	713.625	713.625
CL Brg S. Abut.	21+51.170	-10.88	713.629	713.629
A	21+61.170	-10.88	713.651	713.672
B	21+71.170	-10.88	713.673	713.713
C	21+81.170	-10.88	713.696	713.742
D	21+91.170	-10.88	713.718	713.757
E	22+01.170	-10.88	713.740	713.760
CL Brg N. Abut.	22+10.680	-10.88	713.761	713.761
Bk. N. Abutment	22+12.555	-10.88	713.765	713.765

BEAM 6

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	21+49.177	-17.13	713.671	713.671
CL Brg S. Abut.	21+51.052	-17.13	713.675	713.675
A	21+61.052	-17.13	713.697	713.734
B	21+71.052	-17.13	713.719	713.783
C	21+81.052	-17.13	713.741	713.814
D	21+91.052	-17.13	713.764	713.826
E	22+01.052	-17.13	713.786	713.821
CL Brg N. Abut.	22+10.562	-17.13	713.807	713.807
Bk. N. Abutment	22+12.438	-17.13	713.811	713.811

(Sheet 2 of 2)
TOP OF DECK ELEVATIONS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-4 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	11
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.80	15.83' LT	713.91
A	21+29.80	15.83' LT	713.99
B	21+39.82	17.00' LT	714.10
Bk. S. Abutment	21+49.82	17.00' LT	714.18

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.71	11.00' LT	713.81
A	21+29.71	11.00' LT	713.90
B	21+39.71	11.00' LT	713.98
Bk. S. Abutment	21+49.71	11.00' LT	714.06

PGL

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.50	0.00	713.59
A	21+29.50	0.00	713.67
B	21+39.50	0.00	713.76
Bk. S. Abutment	21+49.50	0.00	713.84

EAST EDGE OF PAVEMENT

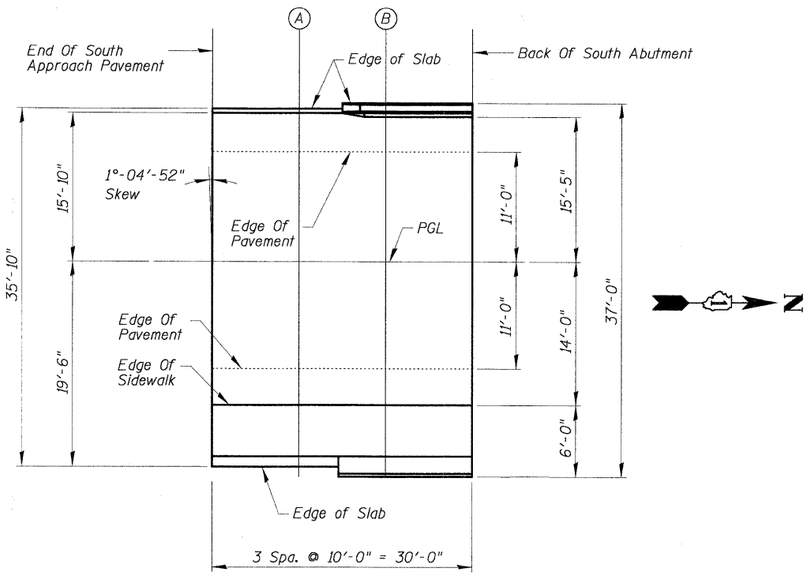
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.29	11.00' RT	713.37
A	21+29.29	11.00' RT	713.45
B	21+39.29	11.00' RT	713.53
Bk. S. Abutment	21+49.29	11.00' RT	713.62

EAST EDGE OF SIDEWALK

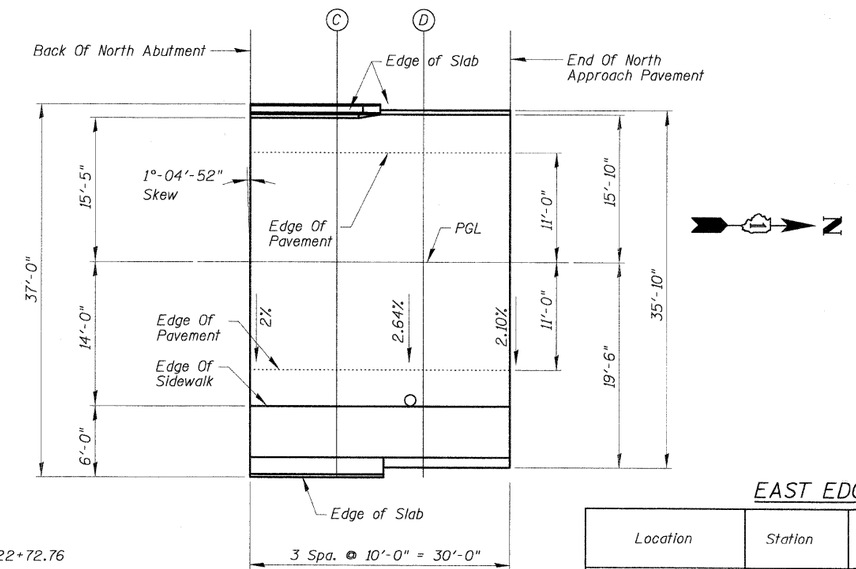
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.24	14.00' RT	713.31
A	21+29.24	14.00' RT	713.39
B	21+39.24	14.00' RT	713.47
Bk. S. Abutment	21+49.24	14.00' RT	713.56

EAST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	21+19.13	19.50' RT	713.20
A	21+29.13	19.50' RT	713.28
B	21+39.12	20.00' RT	713.35
Bk. S. Abutment	21+49.12	20.00' RT	713.44



SOUTH APPROACH PAVEMENT



East Side Cross Slope Data:
2% @ 22+12.76
2.64% @ 22+30
Match Existing (±0.82%) @ 22+72.76

NORTH APPROACH PAVEMENT

WEST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+13.08	17.00' LT	714.32
C	22+23.08	17.00' LT	714.34
D	22+33.06	15.83' LT	714.34
End N. Appr. Pav't	22+43.06	15.83' LT	714.37

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+12.97	11.00' LT	714.20
C	22+22.97	11.00' LT	714.22
D	22+32.97	11.00' LT	714.25
End N. Appr. Pav't	22+42.97	11.00' LT	714.27

PGL

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+12.76	0.00	713.98
C	22+22.76	0.00	714.00
D	22+32.76	0.00	714.03
End N. Appr. Pav't	22+42.76	0.00	714.05

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+12.55	11.00' RT	713.76
C	22+22.55	11.00' RT	713.74
D	22+32.55	11.00' RT	713.75
End N. Appr. Pav't	22+42.55	11.00' RT	713.82

EAST EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+12.50	14.00' RT	713.70
C	22+22.50	14.00' RT	713.67
D	22+32.50	14.00' RT	713.67
End N. Appr. Pav't	22+42.50	14.00' RT	713.76

EAST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	22+12.38	20.00' RT	713.58
C	22+22.38	20.00' RT	713.53
D	22+32.39	19.50' RT	713.53
End N. Appr. Pav't	22+42.49	19.50' RT	713.64

TOP OF APPROACH SLAB ELEVATIONS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-5 SHEETS	2594	04-00091-00-BR	COOK	50	12
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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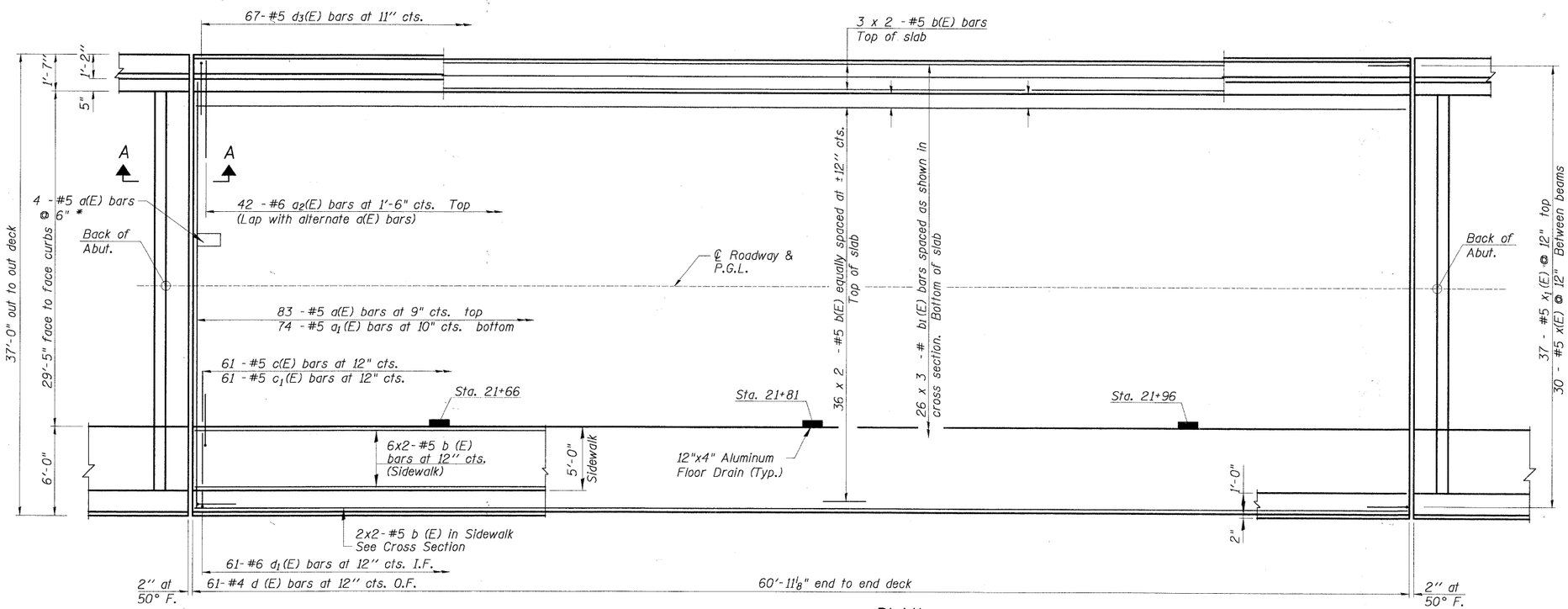
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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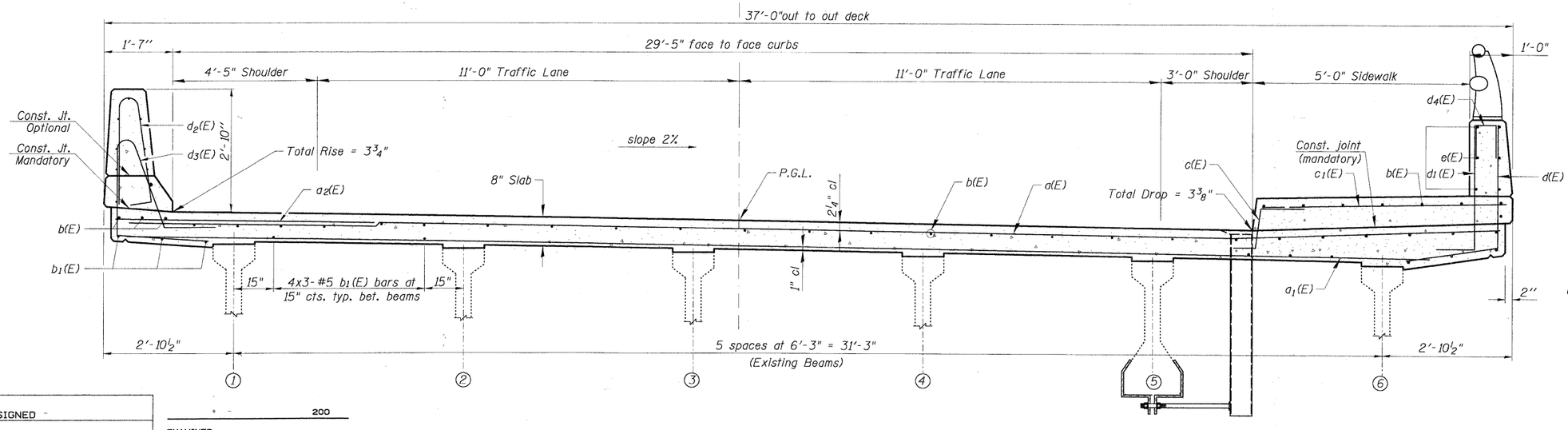
PLAN

* 4 -# d(E) bars @ 6"
place under long bars



CROSS SECTION
(Looking North)

Notes:
See Sheet S-7 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet S-7 for parapet reinforcement.
See Sheet S-8 for Section A-A.

LEGEND:
O.F. Outside Face
I.F. Inside Face

MIN. BAR LAP	
#5	1'-8"

DECK PLAN AND CROSS SECTION
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

0 - 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-6 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	13
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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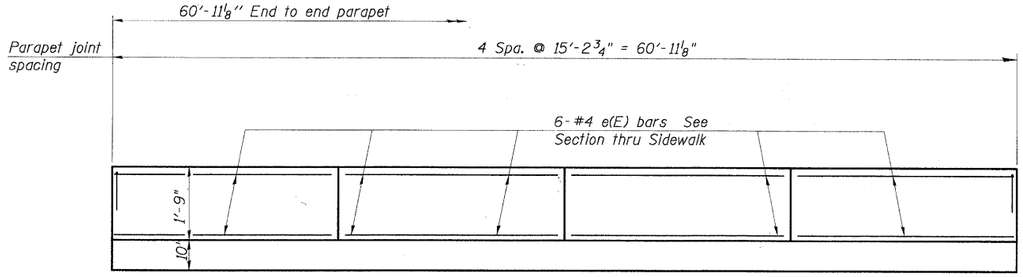
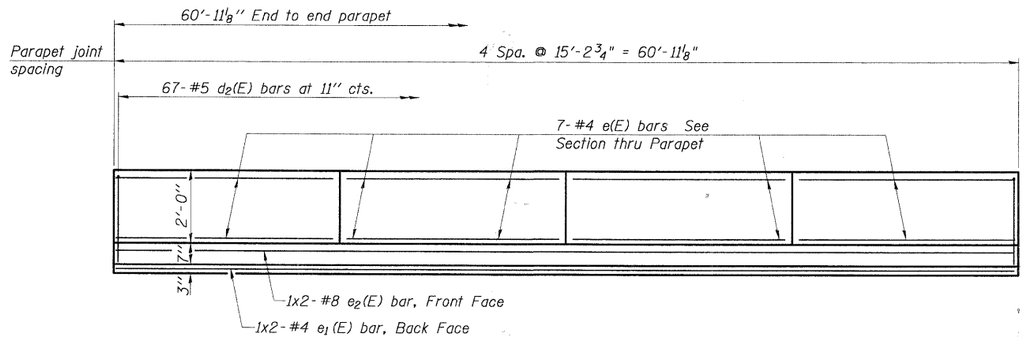
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

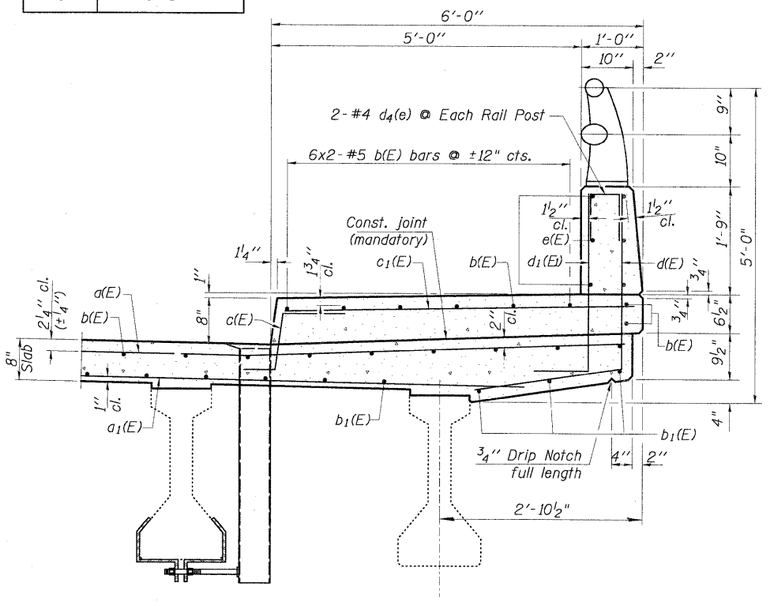




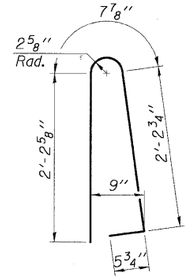
INSIDE ELEVATION OF SIDEWALK

(See Sheet S-8 For Aluminum Railing Post Spacing)

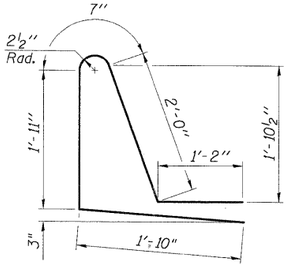
MINIMUM BAR LAP	
#4	1'-4"
#8	3'-5"



INSIDE ELEVATION OF PARAPET



BAR $d_2(E)$



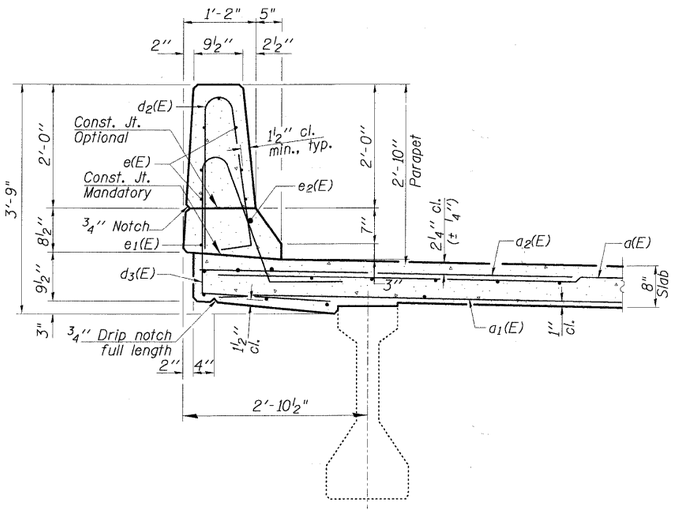
BAR $d_3(E)$

SUPERSTRUCTURE BILL OF MATERIAL

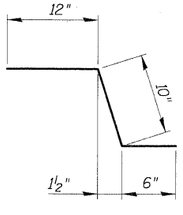
Bar	No.	Size	Length	Shape
a(E)	91	#5	36'-4"	——
a_1(E)	74	#5	36'-0"	——
a_2(E)	42	#6	6'-0"	——
a_3(E)	30	#5	5'-7"	——
b(E)	94	#5	31'-4"	——
b_1(E)	78	#5	21'-6"	——
c(E)	61	#5	2'-4"	⌐
c_1(E)	61	#5	5'-6"	——
d(E)	61	#4	4'-8"	L
d_1(E)	61	#6	3'-9"	⌐
d_2(E)	67	#5	5'-7"	⌐
d_3(E)	67	#5	7'-6"	⌐
d_4(E)	24	#4	2'-0"	⊓
e(E)	52	#4	15'-0"	——
e_1(E)	2	#4	31'-2"	——
e_2(E)	2	#8	32'-3"	——
x(E)	60	#5	7'-4"	⌐
x_1(E)	74	#5	4'-1"	⌐
Reinforcement Bars, Epoxy Coated		Pound	15,090	
Concrete Superstructure		Cu. Yds.	77.3	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

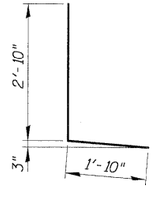
SECTION THRU PARAPET



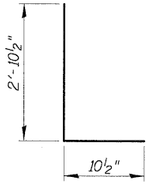
SECTION THRU SIDEWALK



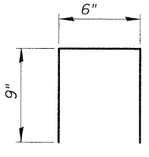
BAR c(E)



BAR d(E)



BAR d_1(E)



BAR d_4(E)

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO. S-7 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	14
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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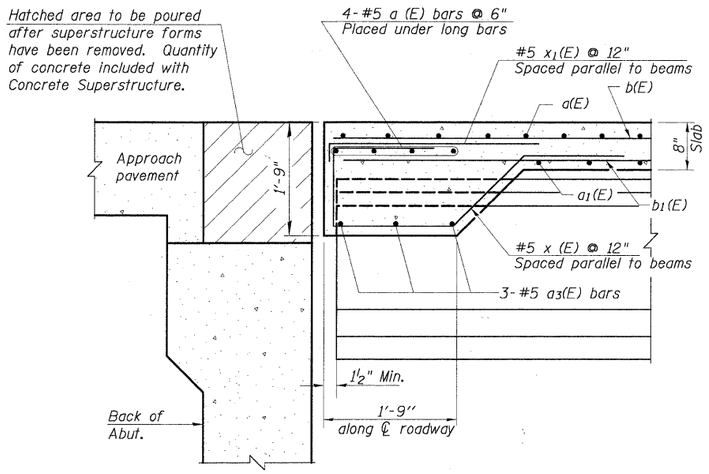
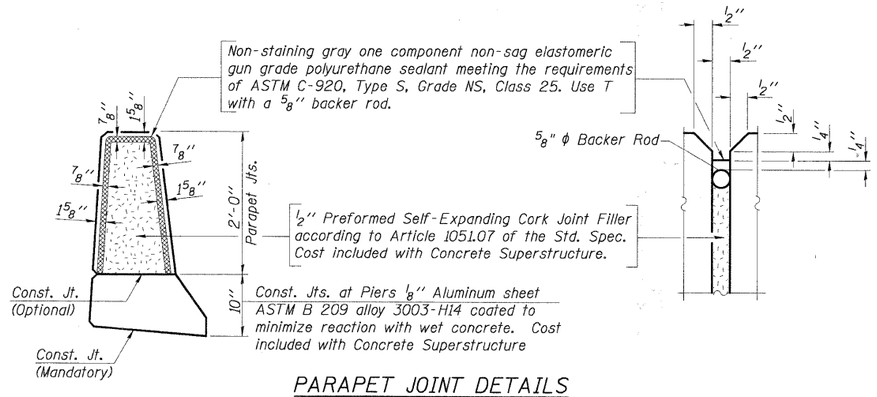
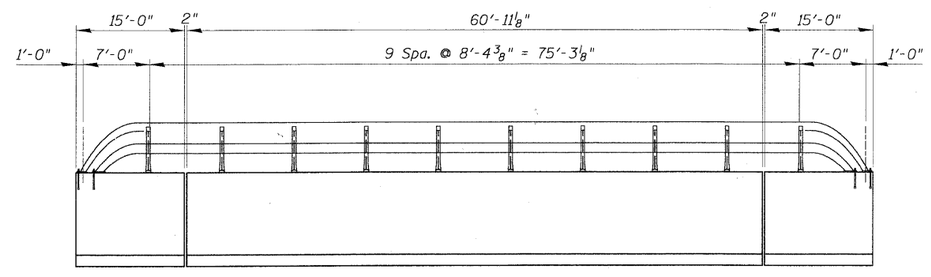
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



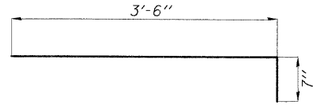
SECTION A-A



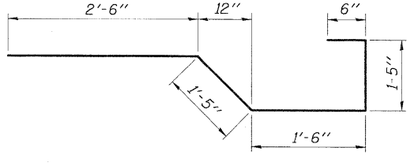
PARAPET JOINT DETAILS



RAIL POST SPACING



BAR $x_1(E)$



BAR x(E)

DECK DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-8 SHEETS	2594	04-00091-00-BR	COOK	50	15
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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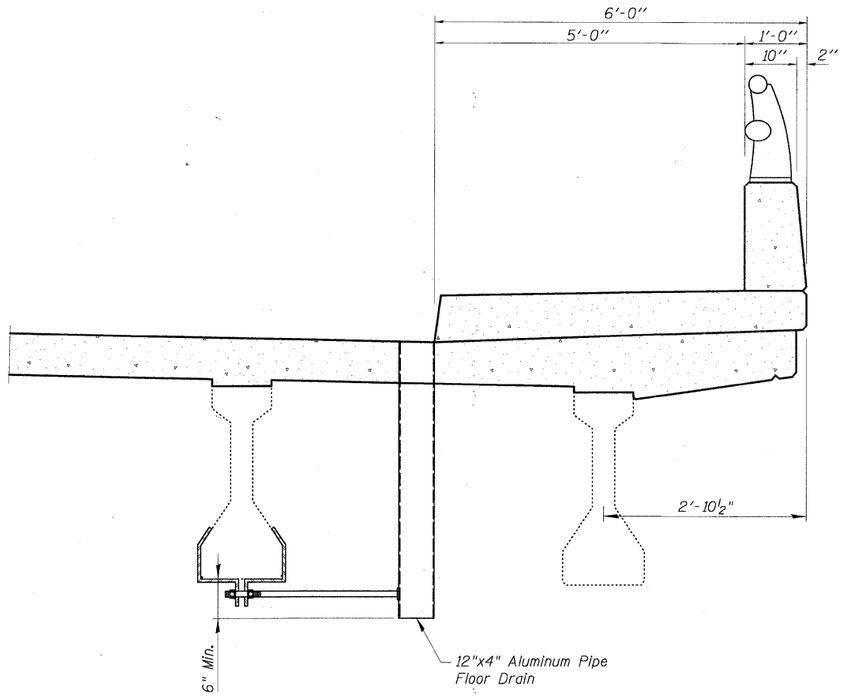
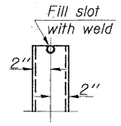
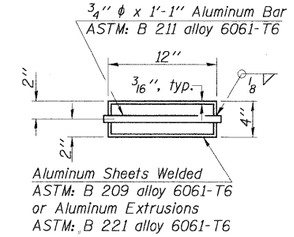
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



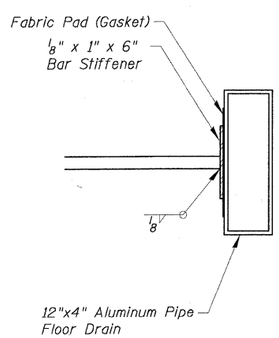
SECTION AT SIDEWALK



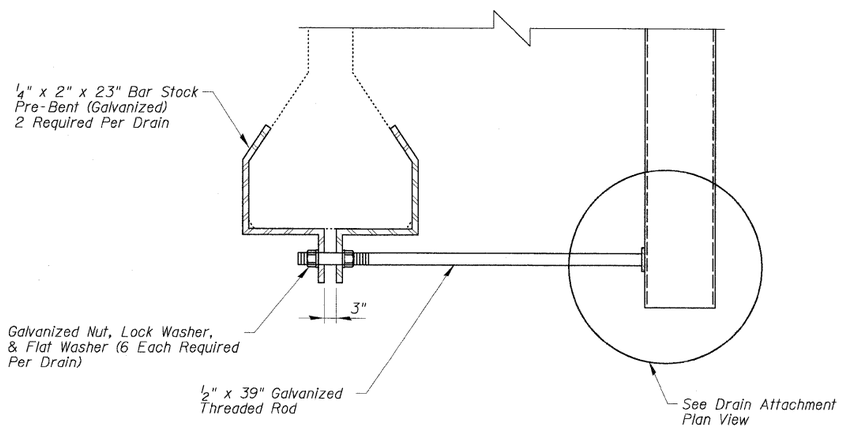


TOP PLAN OF FLOOR DRAIN

Notes:
Drains shall be located clear of all diaphragms.
Floor 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 (Special)".

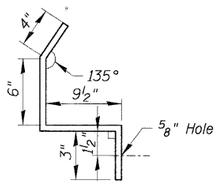


DRAIN ATTACHMENT PLAN VIEW



ATTACHMENT DETAILS

Notes:
Pop Rivet the 1/8" x 1" Bar to Floor Drain. Weld or Securely Attach Rod to Both the Bracket and Bar Stiffener. Use 3/16" Stainless Steel Pop Rivets of Sufficient Length.
Cost of Floor Drain Attachments is Included with "Floor Drains (Special)".



BRACKET DETAIL

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

\- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

FLOOR DRAIN DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO. S-9 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	16
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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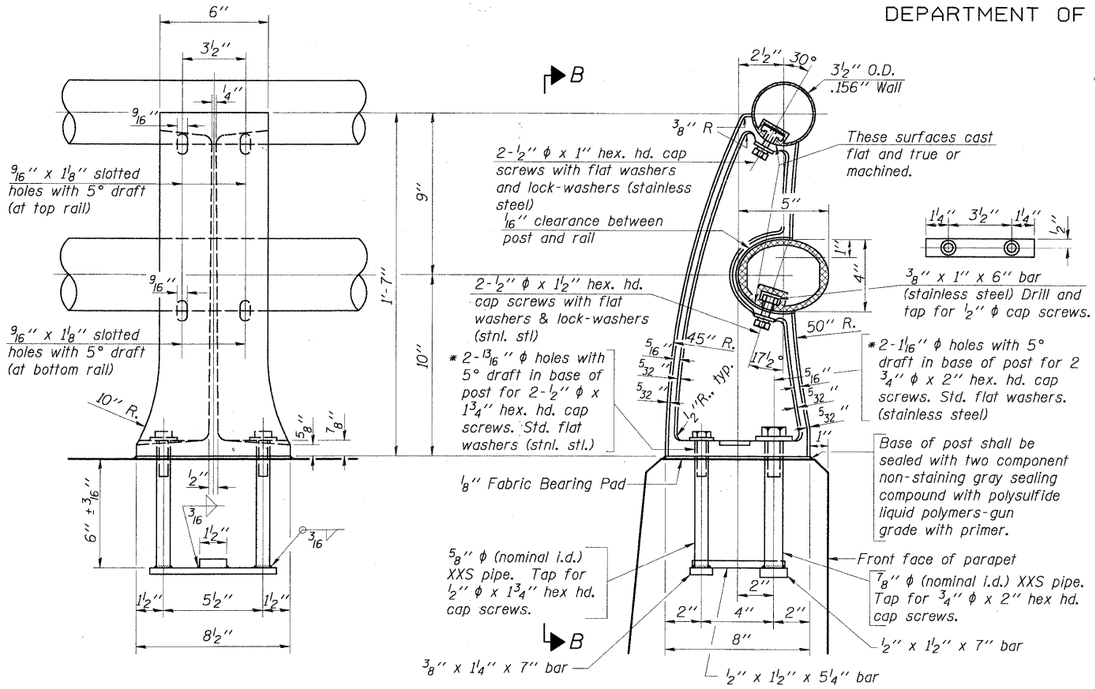
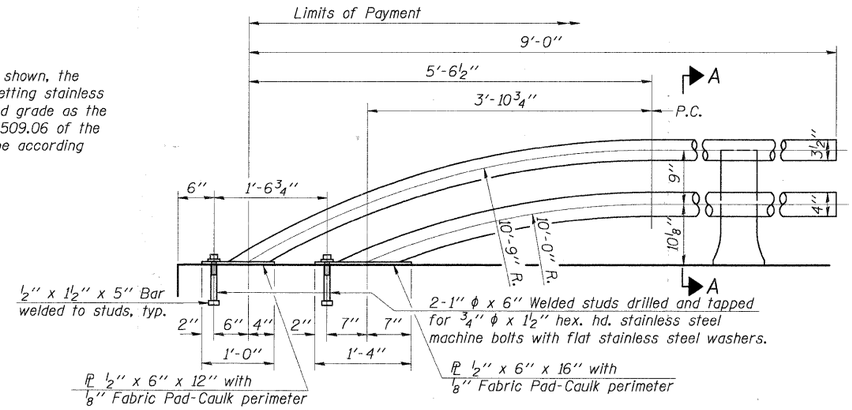
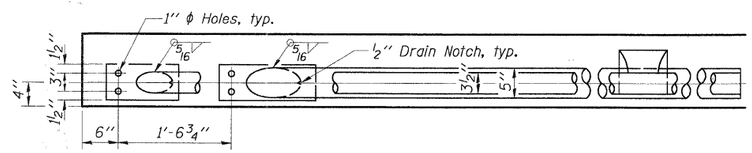
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.





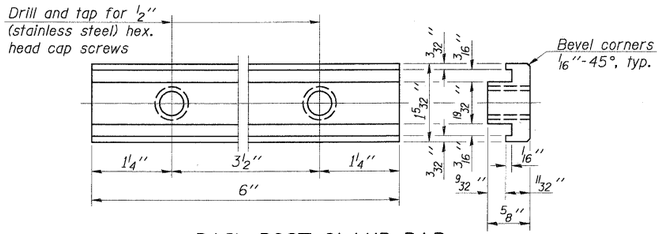
RAIL TERMINAL SECTION

Note:
The end rail post shall be set back as required for the terminal rail section.

VIEW B-B

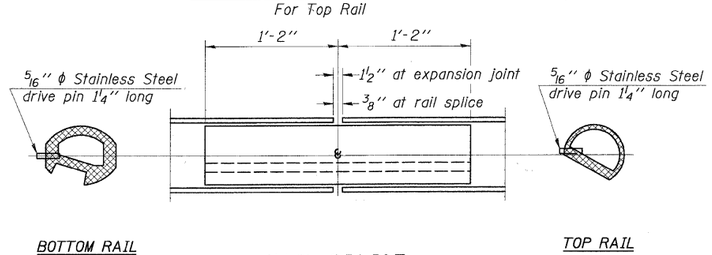
SECTION A-A

RAIL POST DETAILS

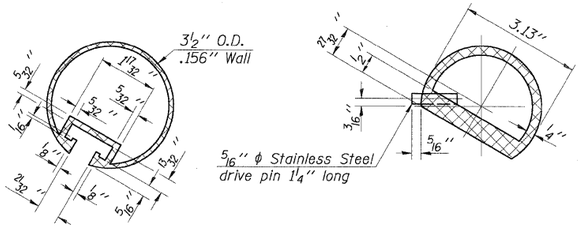


RAIL POST CLAMP BAR

For Top Rail



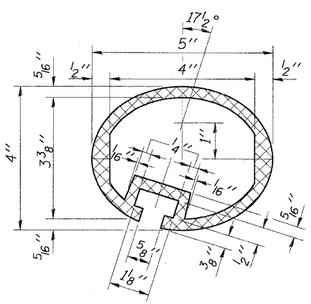
RAIL SPLICE



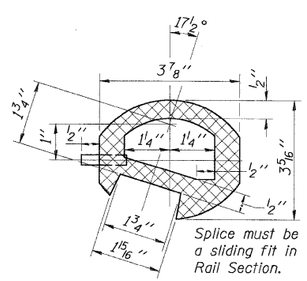
SECTION THRU TOP RAIL

SECTION THRU SPLICE

For Top Rail



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	91

ALUMINUM RAILING, TYPE L
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-10 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	17
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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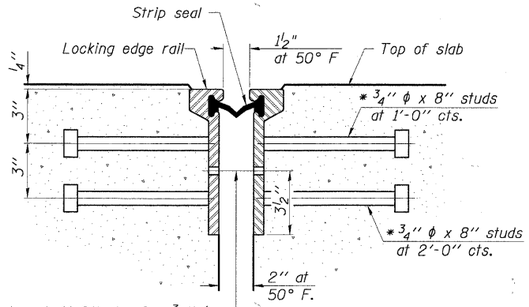
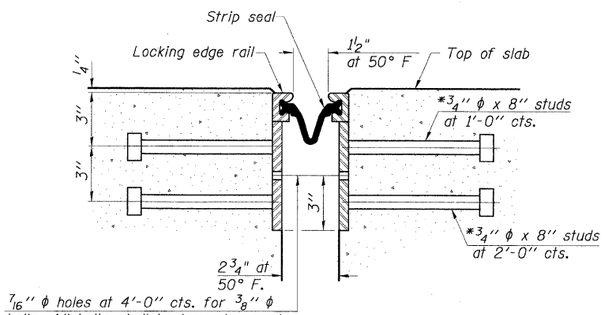
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



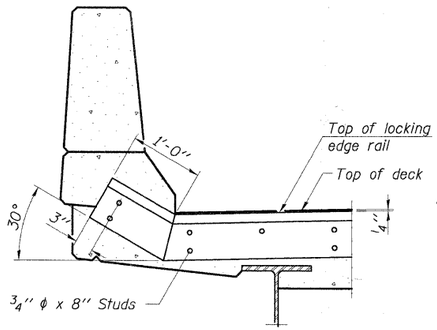
7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT



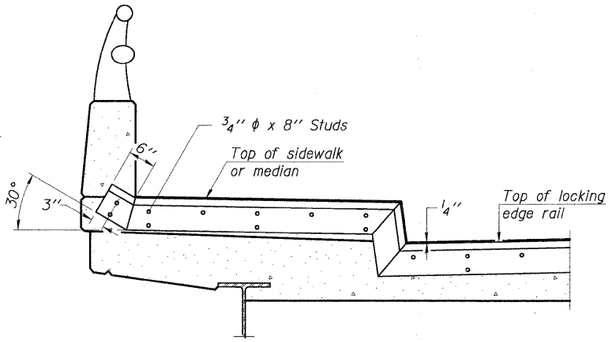
7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT



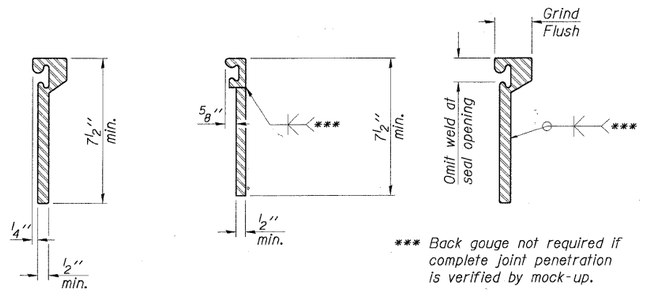
AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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

ROLLED EXTRUDED RAIL

WELDED RAIL

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". 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.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	74

PREFORMED JOINT STRIP SEAL
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK, COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-11 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	18
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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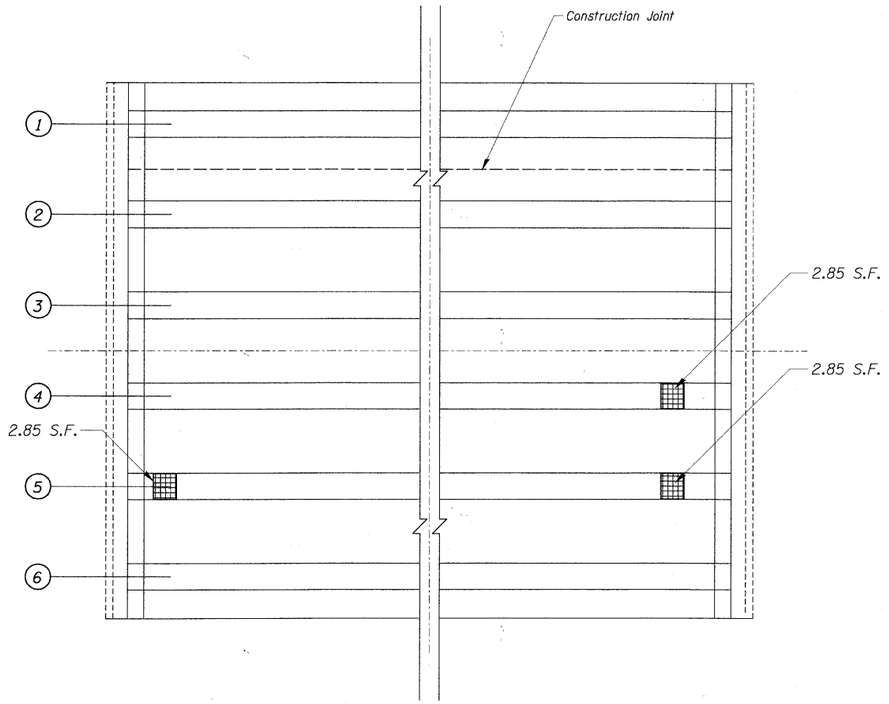
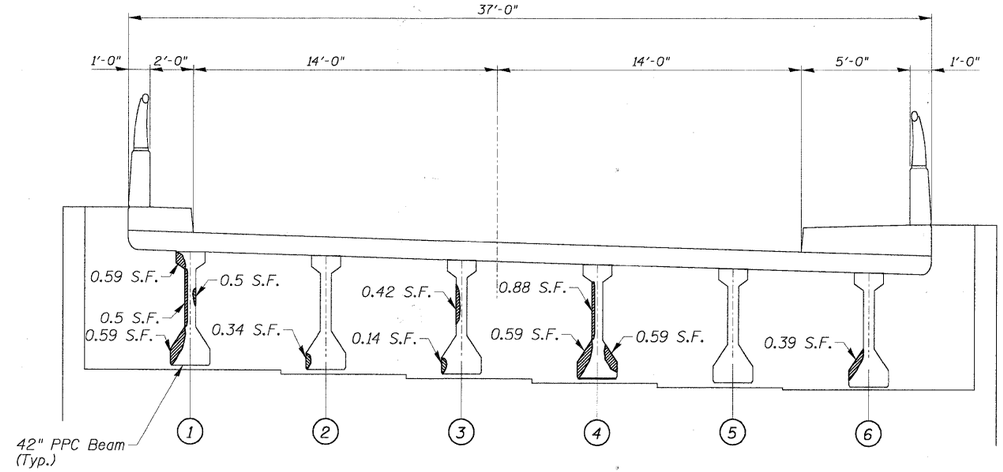
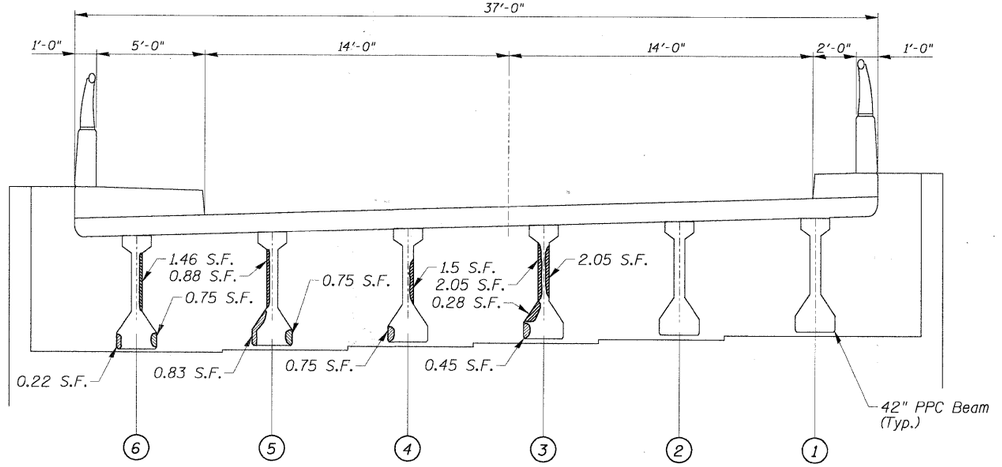
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN - UNDERSIDE OF DECK



NORTH ABUTMENT



SOUTH ABUTMENT

LEGEND:

- Spalled Area With Exposed Rebar
- Spalled or Unsound Area
- Exposed Rebar

NOTES:

1. It shall be the Contractor's responsibility to use extreme caution when removing deteriorated concrete from the PPC Beams, avoiding the prestressing strands. Any damage to the prestressing strands shall be repaired or the PPC Beams replaced as directed by the Engineer at the Contractor's expense.
2. Stirrups of the existing beams shall be blast cleaned to grey metal and incorporated into new work. Cost included with "Polymer Modified Portland Cement Mortar".

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymer Modified Portland Cement Mortar	Sq. Ft.	18
Cleaning And Painting Exposed Rebar	Sq. Ft.	9

PPC I-BEAM CONCRETE REPAIR
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-12 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	19
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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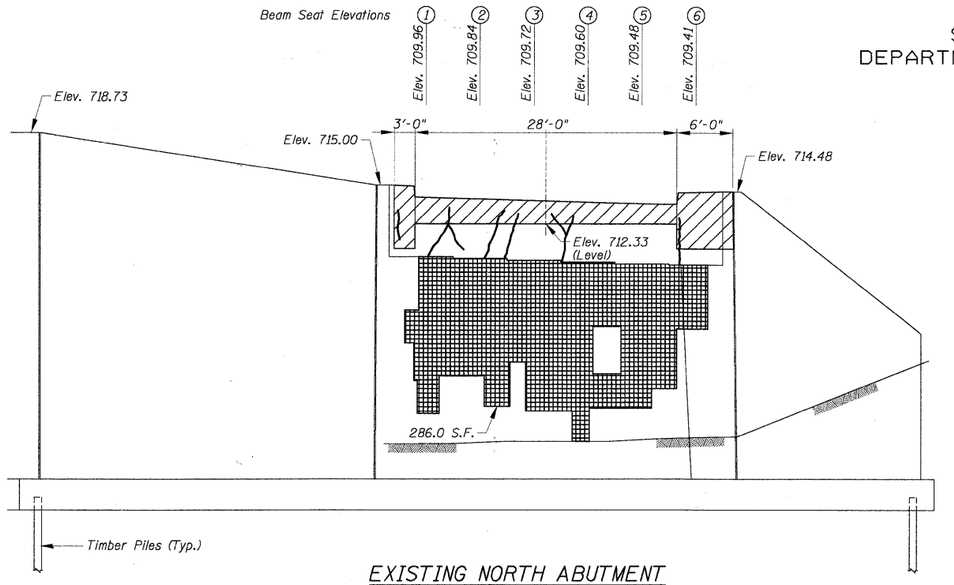
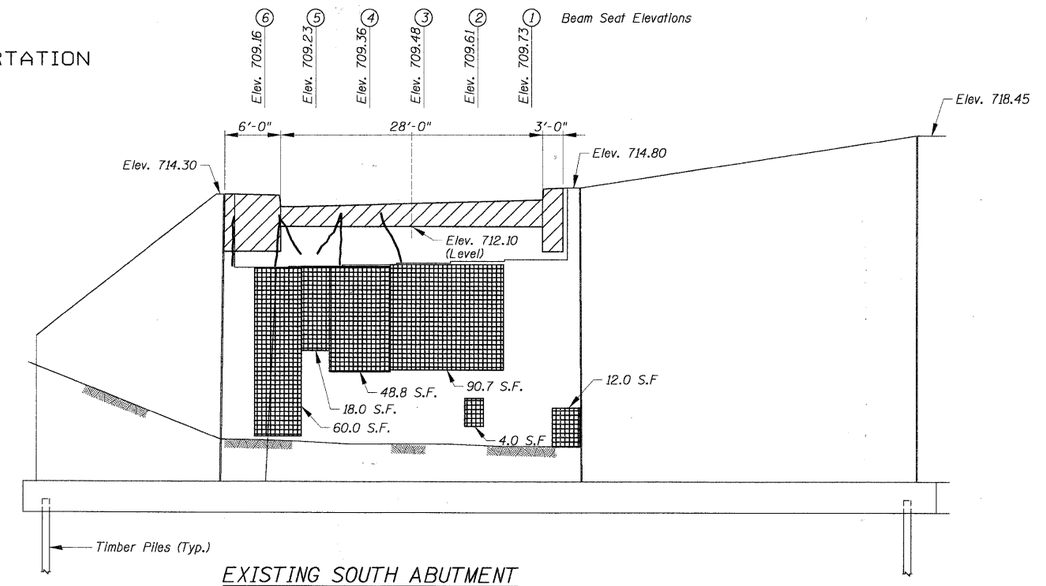
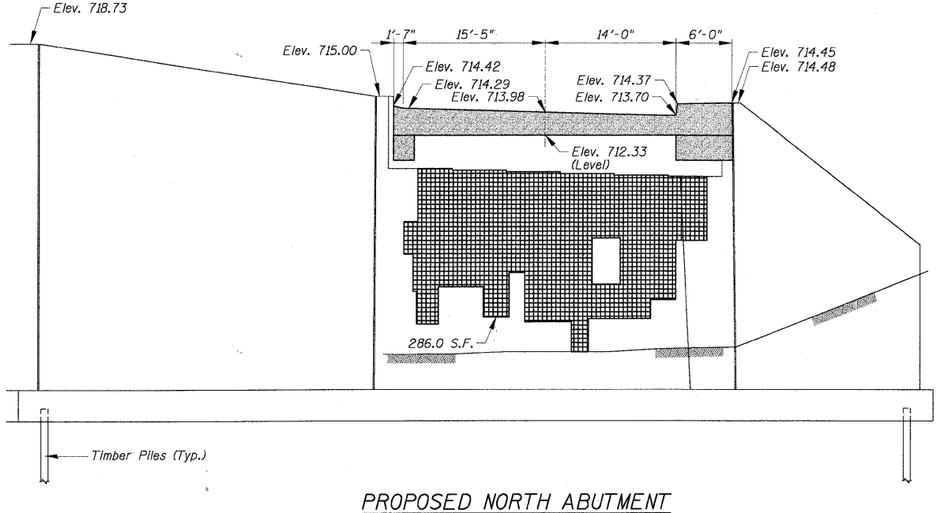
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



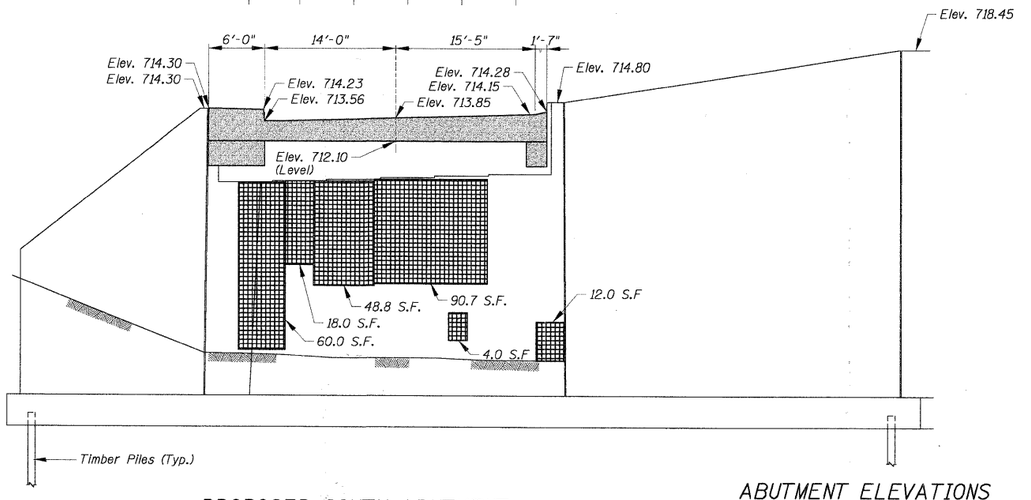
EXISTING NORTH ABUTMENT



EXISTING SOUTH ABUTMENT



PROPOSED NORTH ABUTMENT



PROPOSED SOUTH ABUTMENT

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	520
Epoxy Crack Injection	Lin. Ft.	45

Concrete Repair
Concrete Removal
New Concrete
Cracks

ABUTMENT ELEVATIONS
CONCRETE REPAIR
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-13 SHEETS	2594	04-00091-00-BR	COOK	50	20
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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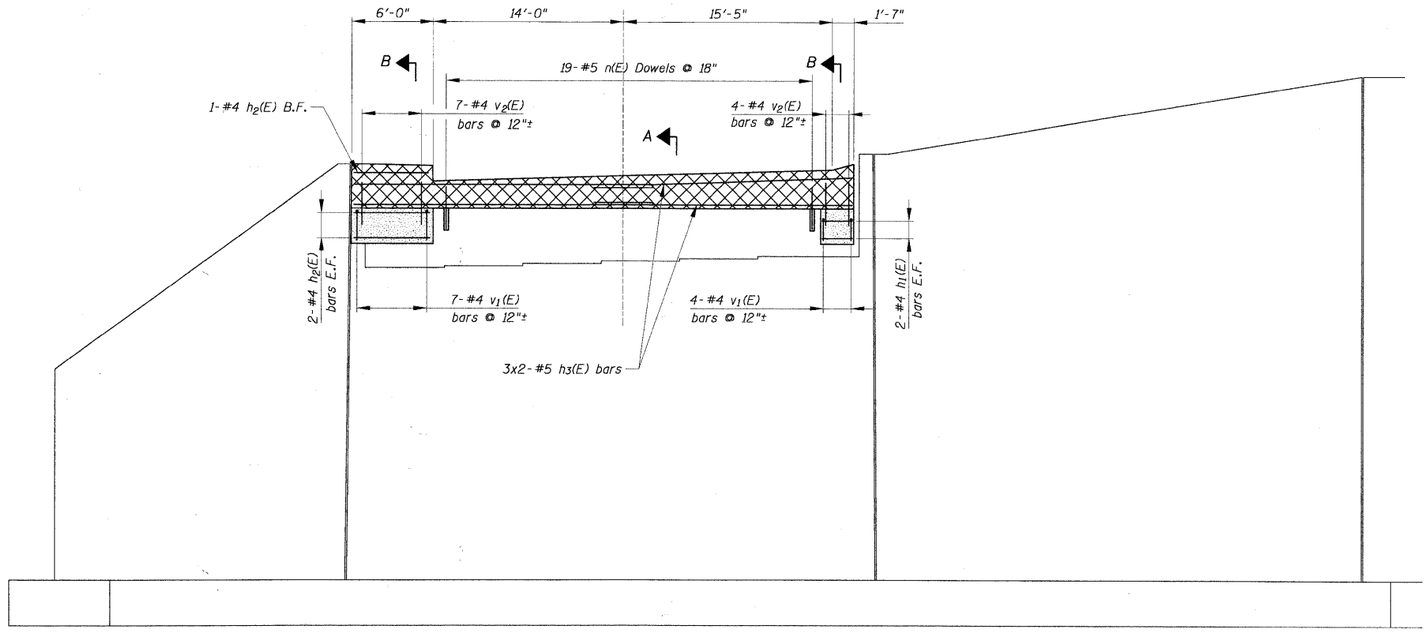
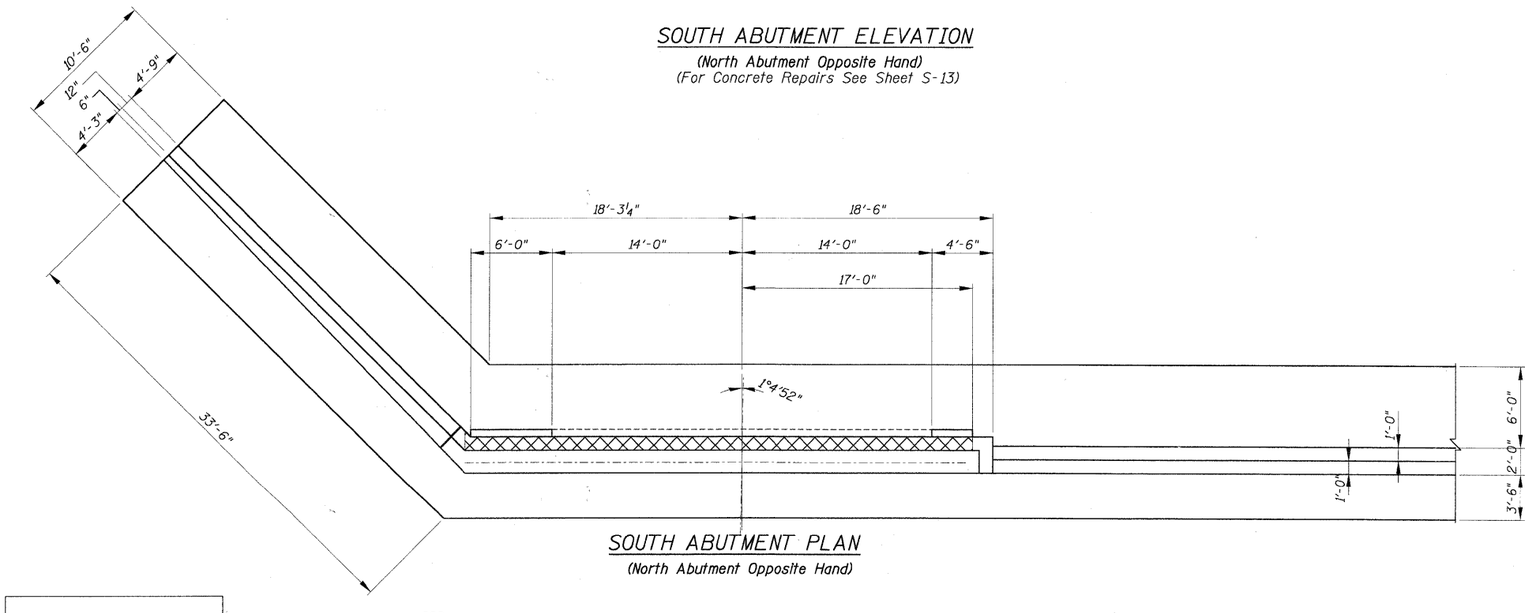
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOUTH ABUTMENT ELEVATION

(North Abutment Opposite Hand)
(For Concrete Repairs See Sheet S-13)

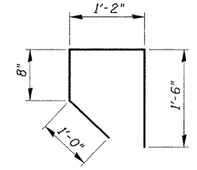


SOUTH ABUTMENT PLAN

(North Abutment Opposite Hand)

NOTES:

1. See Sheet S-15 For Notes.



BAR $v_1(E)$

NORTH AND SOUTH ABUTMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	8	#4	2'-5"	——
$h_2(E)$	10	#4	5'-9"	——
$h_3(E)$	12	#5	19'-7"	——
n(E)	38	#5	1'-6"	——
$v_1(E)$	22	#4	4'-4"	⌐
$v_2(E)$	22	#5	1'-9"	——
Reinforcement Bars, Epoxy Coated			Pound	460
Concrete Structure			Cu. Yds.	6.4
Drill and Grout Bars			Each	38

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

LEGEND:

- New Concrete
- To Be Poured After Deck Slab Forms Have Been Removed

ABUTMENT PLANS AND ELEVATIONS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-14 SHEETS	2594	04-00091-00-BR	COOK	50	21
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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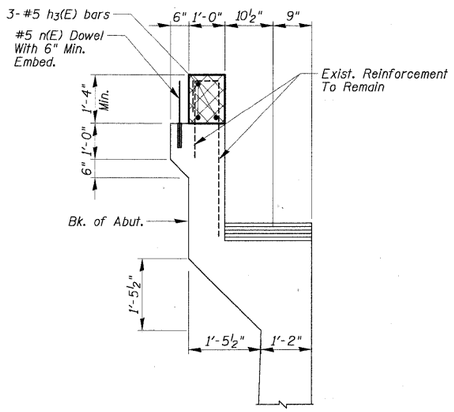
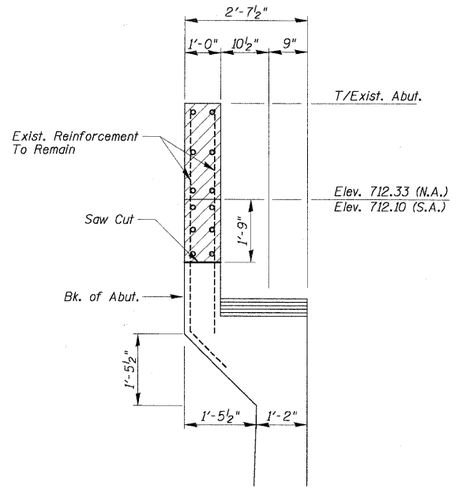
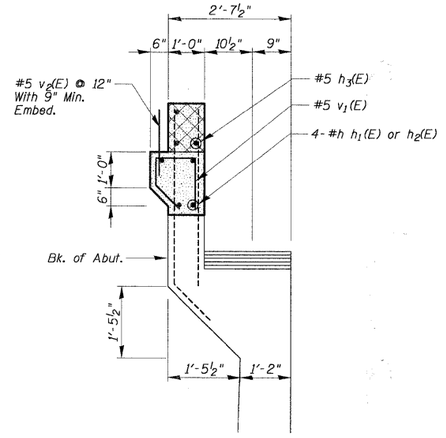
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION A-A



EXISTING SECTION B-B



PROPOSED SECTION B-B

NOTES:

1. Remove The Top Of The Existing Abutments As Shown.
2. Bonded Construction Joints Shall Be In Accordance With The Standard Specifications.
3. Existing Reinforcement Bars Shall Be Extended Into New Concrete. See General Notes On S-2.
4. All Edges Shall Have Standard ¾" Chamfers Except As Noted.
5. Hatched Area To be Poured After Deck Slab Forms Have Been Removed.
6. Reinforcement Bars Designated (E) Shall Be Epoxy Coated.

LEGEND:

- New Concrete
- Concrete Removal
- To Be Poured After Deck Slab Forms Have Been Removed

ABUTMENT DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

\- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-15 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	22
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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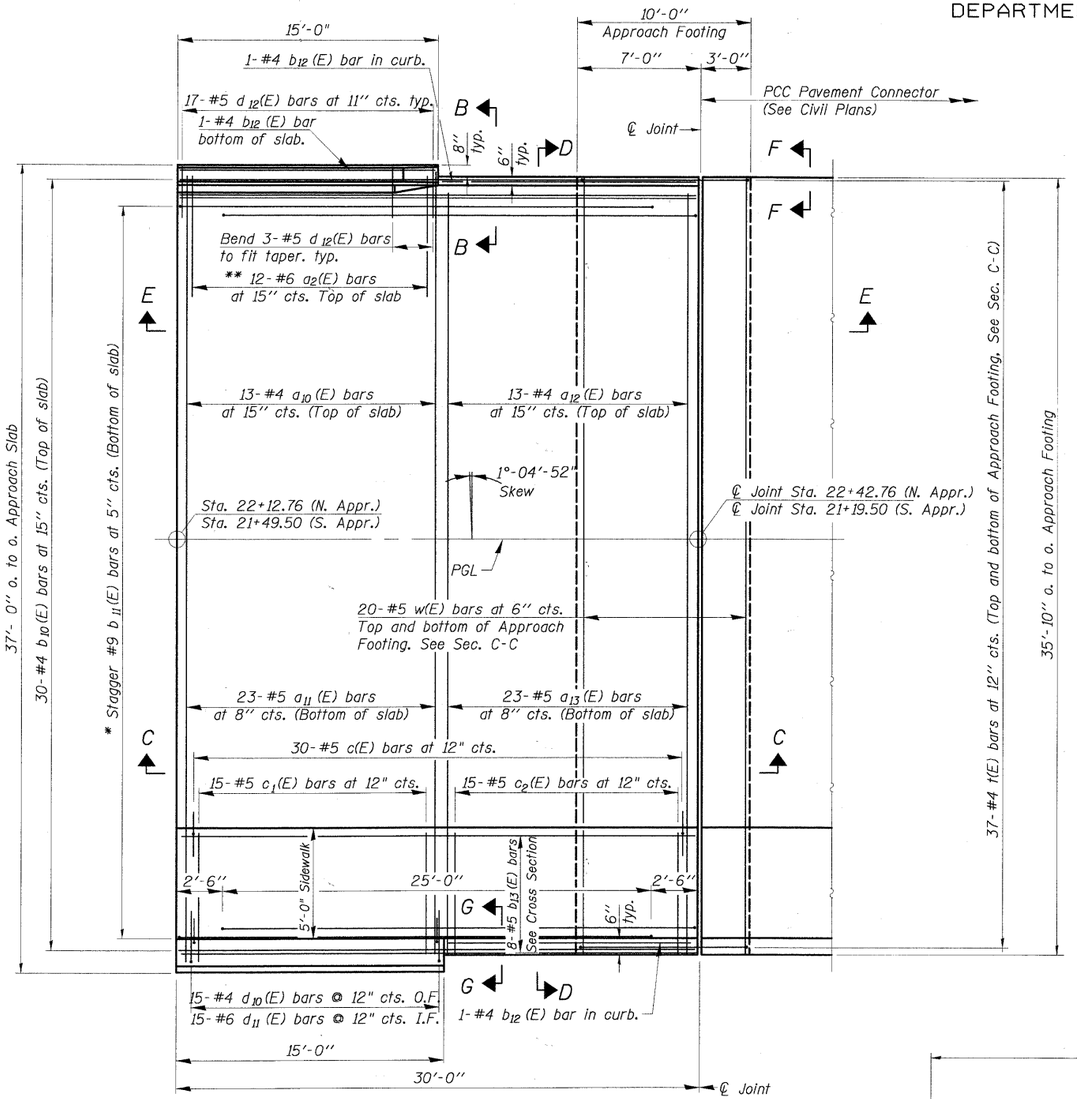
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

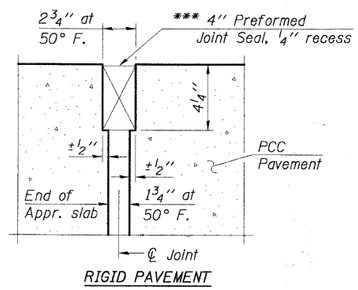
Notes:
See sheet S-17 for Sections C-C & D-D.
a_{10}(E), a_{11} (E), a_{12} (E), a_{13} (E) and w(E) bar spacings measured perpendicular to ℄ Rdwy.



PLAN

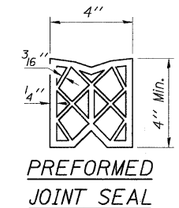
* Tilt #9 b_{11} (E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

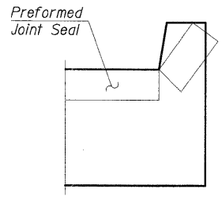


RIGID PAVEMENT

DETAIL A

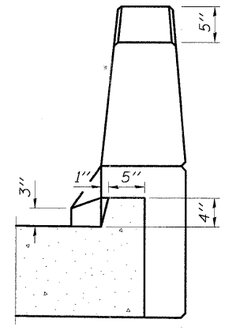


PREFORMED JOINT SEAL



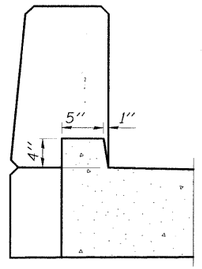
VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

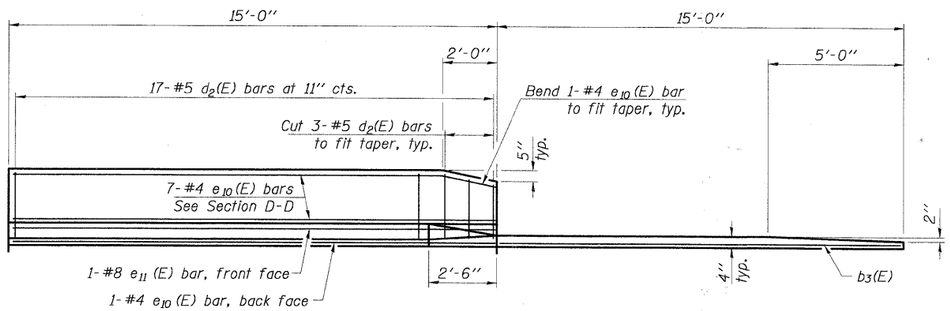


VIEW B-B

(Exit ends only)



VIEW G-G



VIEW E-E

(Sheet 1 of 2)
BRIDGE APPROACH SLAB DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-16 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	23
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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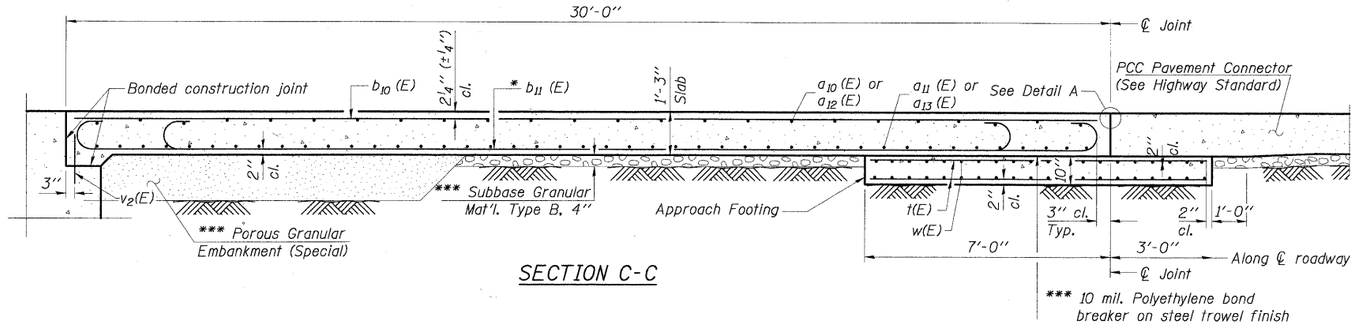
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



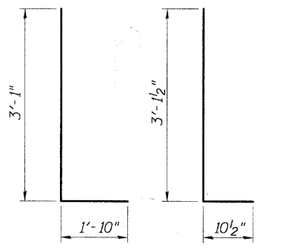
SECTION C-C

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

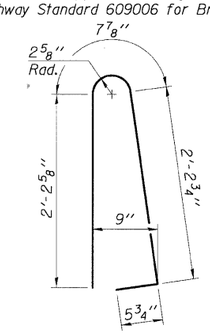
*** Cost included with Concrete Superstructure.

*** 10 mil. Polyethylene bond breaker on steel trowel finish

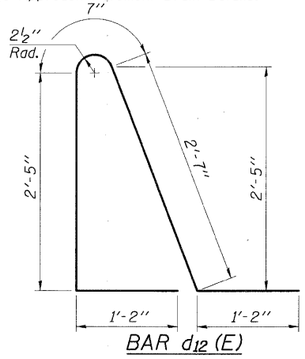
Notes:
See sheet S-16 for Detail A.
Approach slab, sidewalk and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v_2(E) bar details, see sheet S-14.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
See IDOT Highway Standard 609006 for Bridge Approach Pavement Drain Details.



BAR d_{10} (E) BAR d_{11} (E)



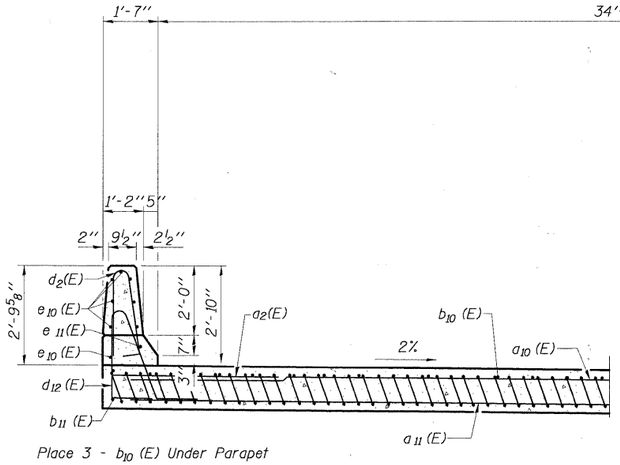
BAR d_2(E)



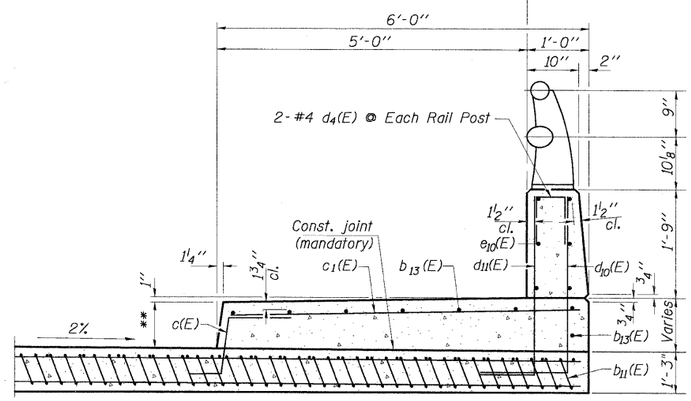
BAR d_{12} (E)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	24	#6	6'-0"	
a_{10} (E)	26	#4	36'-6"	
a_{11} (E)	46	#5	36'-6"	
a_{12} (E)	26	#4	35'-9"	
a_{13} (E)	46	#5	35'-4"	
b_{10} (E)	66	#4	29'-8"	
b_{11} (E)	178	#9	29'-9"	
b_{12} (E)	4	#4	14'-8"	
b_{13} (E)	16	#5	29'-8"	
c(E)	60	#5	2'-4"	
c_1(E)	30	#5	5'-6"	
c_2(E)	30	#5	5'-5"	
d_2(E)	34	#5	5'-7"	
d_4(E)	8	#4	2'-0"	
d_{10} (E)	30	#4	4'-11"	
d_{11} (E)	30	#6	4'-0"	
d_{12} (E)	34	#5	7'-11"	
e_{10} (E)	28	#4	14'-8"	
e_{11} (E)	2	#8	14'-8"	
t(E)	148	#4	9'-8"	
w(E)	80	#5	35'-6"	
Concrete Superstructure		Cu. Yd.	114.7	
Concrete Structures		Cu. Yd.	22.1	
Reinforcement Bars, Epoxy Coated		Pound	30,300	

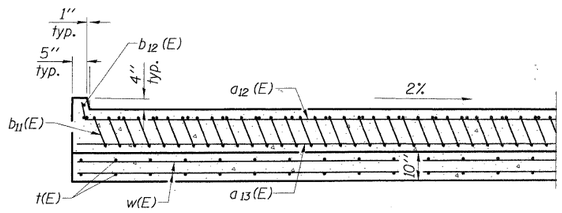


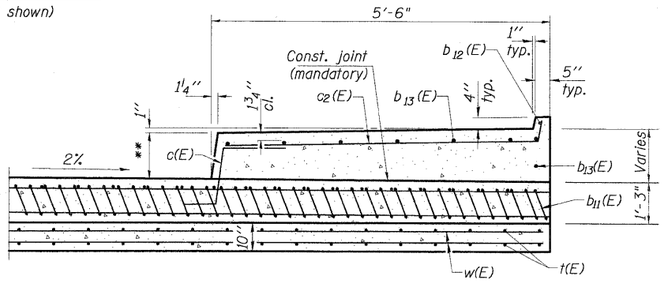
Place 3 - b_{10} (E) Under Parapet



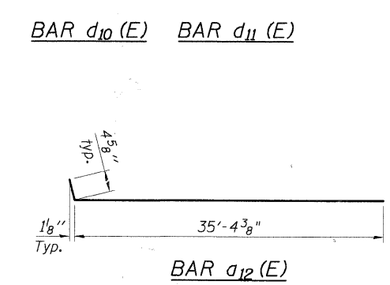
** Vary sidewalk thickness. Thickness is 8" at abutments and decreases to 6" at the ends of the approach pavement.

SECTION D-D - NEAR ABUTMENT
(See Plan for dimensions not shown)

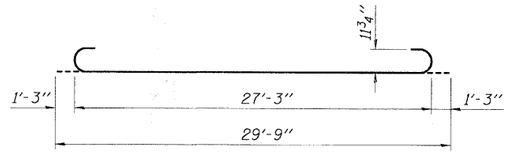




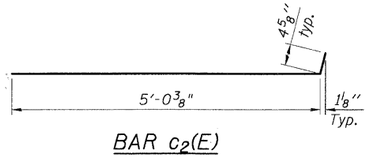
SECTION D-D - AT APPROACH FOOTING
(See Plan for dimensions not shown)



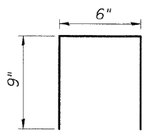
BAR a_{12} (E)



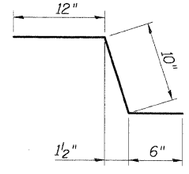
BAR b_{11} (E)



BAR c_2(E)



BAR d_4(E)



BAR c(E)

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

(Sheet 2 of 2)
BRIDGE APPROACH SLAB DETAILS
IL RTE 53 E. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
STATION 21+81.13
STRUCTURE NO. 016-1123

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-17 SHEETS	2594	04-00091-00-BR	COOK	50	24
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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Bench Mark: RM-184-4 Square cut on top of southwest headwall of west frontage road bridge over salt creek. Elevation = 714.49

Existing Structure: SN 016-1122 The bridge was constructed in 1962 under Relocation of S.B.I Rte. 53 (F.A. Route 61) Section 531-I-B-7. The bridge is a single span structure with a span length of 77'-8" center to center of bearings and 83'-8" bk. to bk. of abutments. The bridge has a 39°-15' skew. The superstructure consists of a 7" concrete deck supported by seven 48" PPC I-Beams at 5'-1" on center. The deck provides two 11'-0" lanes of traffic with 3'-0" shoulders on each side and a 5'-0" sidewalk on the west side and 2'-0" safety walk on the east side. The overall width of the deck is 28'-0" curb to curb and 37'-0" out to out. The substructure consists of typical cantilever abutments and wingwalls. Bridge will be closed during construction and traffic detoured.

Salvage: Existing bridge railing

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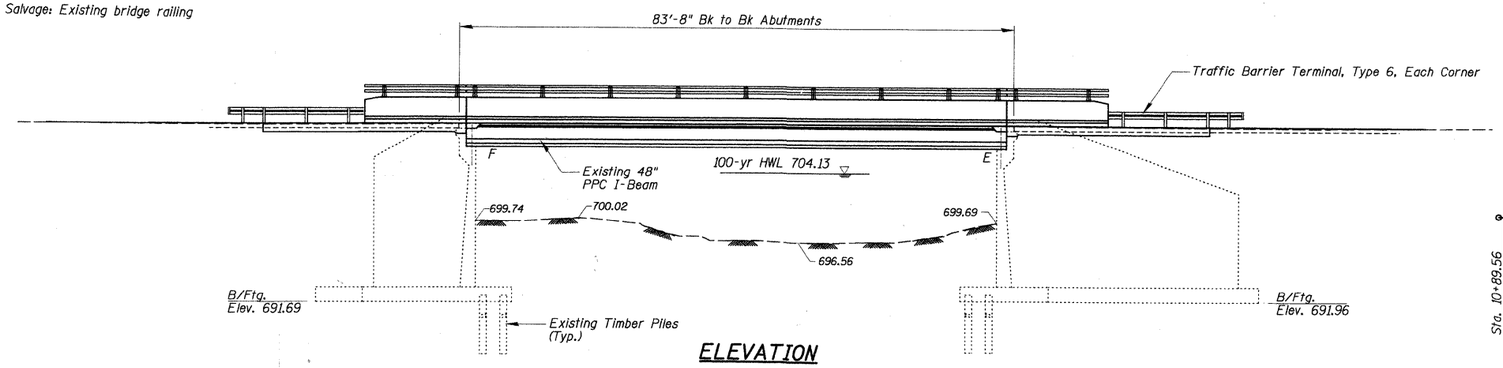
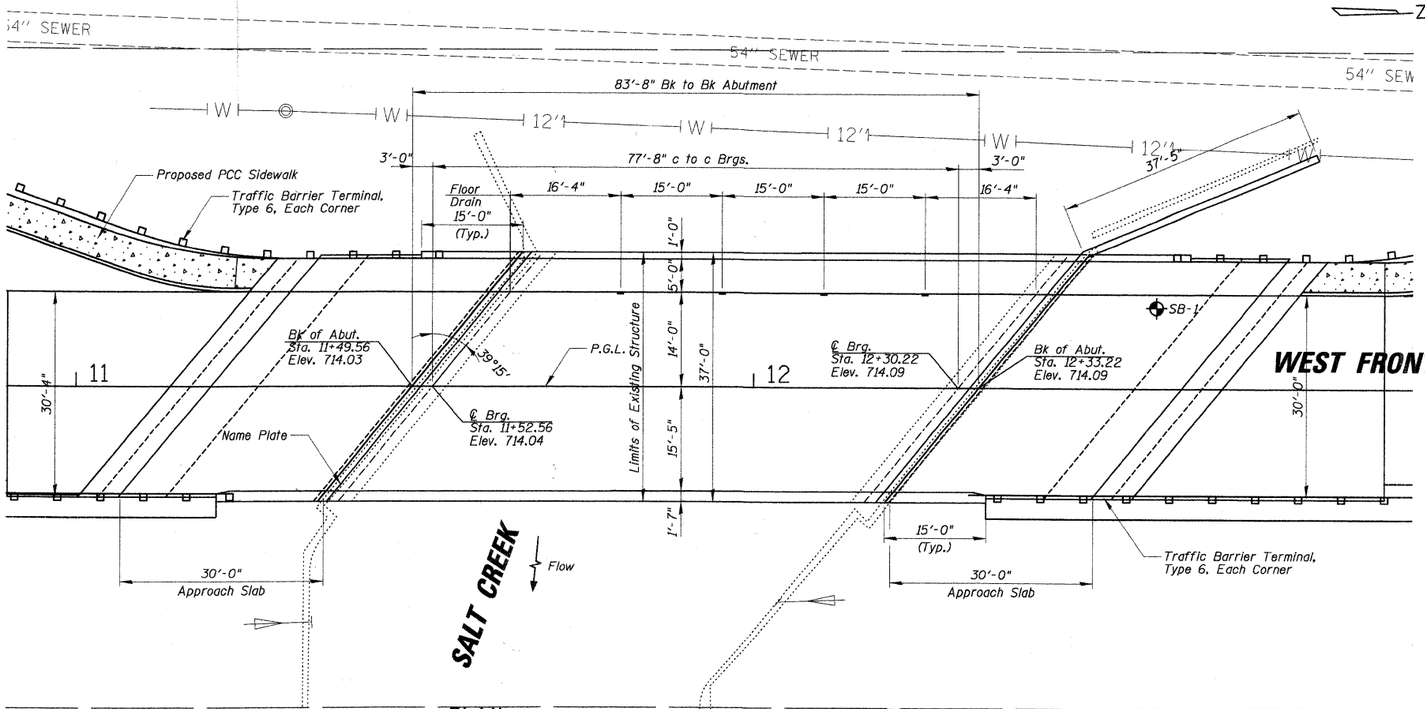
DEPARTMENT OF TRANSPORTATION

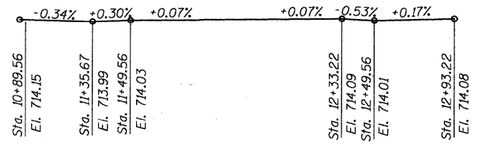


ELEVATION



PLAN

INDEX OF SHEETS



PROFILE GRADE

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

Reinforced Concrete:
f'c = 2,500 psi (Existing)
f'c = 3,500 psi (New)
Reinforcement:
fy = 40 ksi (Existing)
fy = 60 ksi (New)

PRESTRESSED PRECAST UNITS

Existing:
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 248,000 psi
f'si = 173,000 psi
fs = 2,000 psi

SALT CREEK
BUILT BY
COOK COUNTY
SEC. 04-00091-00-BR
F.A.U. RT. 2592 STA. 11+91.39
STR. NO. 016-1122 LOADING HS-20

NAME PLATE

SEISMIC DATA

Seismic Performance Zone (SPZ) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.036g
Site Coefficient (S) = 1.2

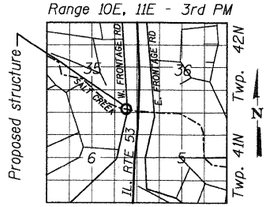
I Certify That To The Best Of My Knowledge, Information And Belief, This Bridge Design Is Structurally Adequate For The Design Loading Shown On The Plans. The Design Is An Economical One For The Syle Of Structure And Complies With Requirements Of The Current "AASHTO Standard Specification For Highway And Bridges".

STATE OF ILLINOIS
MAJID MOBASSERI
081-005058
CHAMPAIGN, ILLINOIS
LICENSED STRUCTURAL ENGINEER

5/11/, 2010

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058
STRUCTURAL ENGINEER
EXPIRATION DATE: 11/30/10

Range 10E, 11E - 3rd PM



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

WATERWAY INFORMATION

Ex. Low Beam 709.08 @ 11+62.29 Ex. Low Grade 713.76 @ 11+62.29 Drainage Area = 17.0 mi²
Prop. Low Beam Elv. 709.08 @ 11+62.29 Prop. Low Grade Elv. 713.76 @ 11+62.29

Flood	Freq. Yr.	Q cfs	Opening ft²		Nat. H.W.E.	Head - ft		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	577	366	366	702.55	0.01	0.01	702.56	702.56
Design	30	837	407	407	703.26	0.04	0.04	703.30	703.30
	50	947	447	447	703.64	0.03	0.03	703.67	703.67
Base	100	1129	484	484	704.13	0.05	0.05	704.18	704.18
Max. Calc.	500	1547	564	564	704.97	0.07	0.07	705.04	705.04

DESIGN SCOUR ELEVATION TABLE

Flood Frequency/ Scour Elevation	North Abut.	South Abut.
100 year Scour Elevation (ft.)	683.73	689.34
500 year Scour Elevation (ft.)	678.77	686.46

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-1 SHEETS	2592	04-00091-00-BR	COOK	50	25
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions..
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete.
4. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
5. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
6. All construction joints shall be bonded.
7. Any reinforcement bars that are damaged during concrete removal operation or construction shall be repaired with an approved bar splicer or anchorage system. Cost shall be included in "Concrete Removal".
8. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
9. Cleaning and painting of the existing bearings shall be as specified in the special provision for "Cleaning and Painting Bearings". All bearings shall be cleaned per Near White Blast Cleaning - SSPC - SP10.
10. The designated areas cleaned per Near White Blast Cleaning shall be painted according to requirements of Paint System 1 - Organic Zinc/Epoxy/Urethane (OZ/E/U). The color of final finish coat for all steel bearings shall be gray, Munsell No. 5B 7/1.
11. The cost of Containment and Disposal of Lead Paint Cleaning Residue is included with "Cleaning and Painting Bearing".
12. The Contractor's certifications SSPC-QP1 and QP2 are not required for this project

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd		21	21
Approach Slab Removal	Sq Yd	165		165
Concrete Removal	Cu Yd		39	39
Bridge Rail Removal	Foot	160		160
Removal of Existing Concrete Deck	Each	1		1
Structure Excavation	Cu Yd		132	132
Concrete Structures	Cu Yd		72.6	72.6
Concrete Superstructure	Cu Yd	218.2		218.2
Bridge Deck Grooving	Sq Yd	430		430
Protective Coat	Sq Yd	637		637
Floor Drains (Special)	Each	4		4
Reinforcement Bars, Epoxy Coated	Pound	47,360	10,210	57,570
Aluminum Railing, Type L	Foot	111		111
Name Plates	Each		1	1
Preformed Joint Strip Seal	Foot	95		95
Epoxy Crack Injection	Foot		35	35
Geocomposite Wall Drain	Sq Yd	28		28
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft		387	387
Cleaning and Painting Bearings	Each		7	7
Drill and Grout Bars	Each		100	100
Polymer Modified Portland Cement Mortar	Sq Ft	16		16
Concrete Sealer	Sq Ft		290	290
Cleaning And Painting Exposed Rebar	Sq Ft	39		39

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

GENERAL NOTES
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-2 SHEETS	2592	04-00091-00-BR	COOK	50	26
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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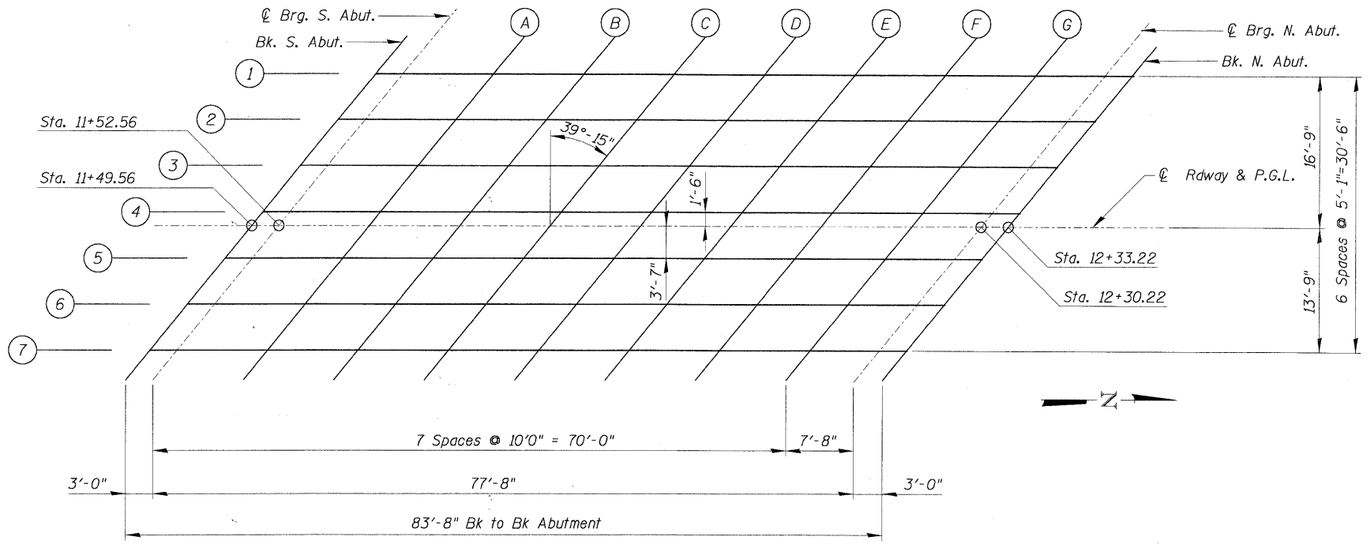
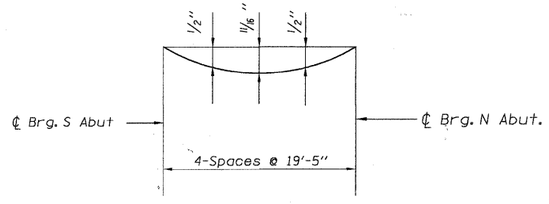
DEPARTMENT OF TRANSPORTATION



PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes Weight of Concrete Deck And All Superimposed Dead Load Except Future Wearing Surfaces)

NOTE:

1. The deflections given above are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflection as shown on Sheet S-4.
2. Offsets Are Positive East Of The Profile Gradeline.

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

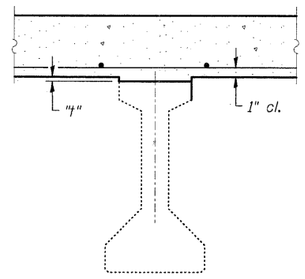
- 200

EXAMINED

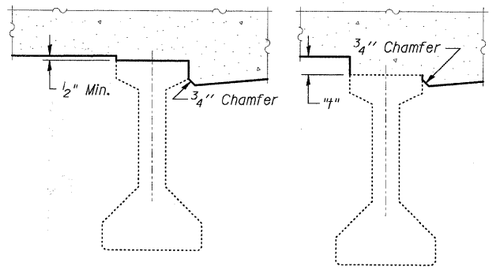
ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES



INTERIOR BEAMS



At Minimum Fillet At Maximum Fillet

EXTERIOR BEAMS

METHOD OF DETERMINING FILLET HEIGHTS "t"

To determine "t": After the existing deck has been removed and prior to placing the proposed deck, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection"shown on Drawing No. S-4 minus slab thickness, equals the fillet heights "t" above top flange of beams.

(Sheet 1 of 2)

TOP OF DECK ELEVATIONS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-3 SHEETS	2592	04-00091-00-BR	COOK	50	27
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 1

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+63.245	-16.75	713.858	713.858
CL Brg S. Abut.	11+66.245	-16.75	713.860	713.860
A	11+76.245	-16.75	713.867	713.888
B	11+86.245	-16.75	713.874	713.914
C	11+96.245	-16.75	713.881	713.934
D	12+06.245	-16.75	713.888	713.945
E	12+16.245	-16.75	713.895	713.946
F	12+26.245	-16.75	713.902	713.938
G	12+36.245	-16.75	713.891	713.907
CL Brg N. Abut.	12+43.912	-16.75	713.851	713.851
Bk. N. Abutment	12+46.912	-16.75	713.835	713.835

BEAM 2

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+59.095	-11.67	713.807	713.807
CL Brg S. Abut.	11+62.095	-11.67	713.809	713.809
A	11+72.095	-11.67	713.816	713.836
B	11+82.095	-11.67	713.823	713.858
C	11+92.095	-11.67	713.830	713.874
D	12+02.095	-11.67	713.837	713.884
E	12+12.095	-11.67	713.844	713.887
F	12+22.095	-11.67	713.851	713.883
G	12+32.095	-11.67	713.858	713.874
CL Brg N. Abut.	12+39.762	-11.67	713.824	713.824
Bk. N. Abutment	12+42.762	-11.67	713.809	713.809

BEAM 3

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+54.936	-6.58	713.906	713.906
CL Brg S. Abut.	11+57.936	-6.58	713.908	713.908
A	11+67.936	-6.58	713.915	713.935
B	11+77.936	-6.58	713.922	713.957
C	11+87.936	-6.58	713.929	713.973
D	11+97.936	-6.58	713.936	713.983
E	12+07.936	-6.58	713.943	713.986
F	12+17.936	-6.58	713.950	713.982
G	12+27.936	-6.58	713.957	713.973
CL Brg N. Abut.	12+35.603	-6.58	713.948	713.948
Bk. N. Abutment	12+38.603	-6.58	713.932	713.932

BEAM 4

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+50.786	-1.50	714.005	714.005
CL Brg S. Abut.	11+53.786	-1.50	714.007	714.007
A	11+63.786	-1.50	714.014	714.034
B	11+73.786	-1.50	714.021	714.056
C	11+83.786	-1.50	714.028	714.072
D	11+93.786	-1.50	714.035	714.082
E	12+03.786	-1.50	714.042	714.084
F	12+13.786	-1.50	714.049	714.081
G	12+23.786	-1.50	714.056	714.071
CL Brg N. Abut.	12+31.453	-1.50	714.061	714.061
Bk. N. Abutment	12+34.453	-1.50	714.056	714.056

PGL

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+49.560	0.000	714.034	714.034
CL Brg S. Abut.	11+52.560	0.000	714.036	714.036
A	11+62.560	0.000	714.043	714.063
B	11+72.560	0.000	714.050	714.085
C	11+82.560	0.000	714.057	714.101
D	11+92.560	0.000	714.064	714.111
E	12+02.560	0.000	714.071	714.114
F	12+12.560	0.000	714.078	714.110
G	12+22.560	0.000	714.085	714.100
CL Brg N. Abut.	12+30.227	0.000	714.090	714.090
Bk. N. Abutment	12+33.227	0.000	714.092	714.092

BEAM 5

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+46.635	3.58	714.096	714.096
CL Brg S. Abut.	11+49.635	3.58	714.105	714.105
A	11+59.635	3.58	714.112	714.132
B	11+69.635	3.58	714.119	714.154
C	11+79.635	3.58	714.126	714.171
D	11+89.635	3.58	714.133	714.180
E	11+99.635	3.58	714.140	714.183
F	12+09.635	3.58	714.147	714.179
G	12+19.635	3.58	714.154	714.170
CL Brg N. Abut.	12+27.302	3.58	714.160	714.160
Bk. N. Abutment	12+30.302	3.58	714.162	714.162

BEAM 6

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+42.476	8.67	714.185	714.185
CL Brg S. Abut.	11+45.476	8.67	714.194	714.194
A	11+55.476	8.67	714.211	714.231
B	11+65.476	8.67	714.218	714.253
C	11+75.476	8.67	714.225	714.270
D	11+85.476	8.67	714.232	714.279
E	11+95.476	8.67	714.239	714.282
F	12+05.476	8.67	714.246	714.278
G	12+15.476	8.67	714.253	714.269
CL Brg N. Abut.	12+23.143	8.67	714.259	714.259
Bk. N. Abutment	12+26.143	8.67	714.261	714.261

BEAM 7

Locations	Stations	Offset	Theoretical Grade Elevations	Elevations Adjusted For DL Deflections
Bk. S. Abutment	11+38.326	13.75	714.274	714.274
CL Brg S. Abut.	11+41.326	13.75	714.283	714.283
A	11+51.326	13.75	714.310	714.339
B	11+61.326	13.75	714.317	714.367
C	11+71.326	13.75	714.324	714.387
D	11+81.326	13.75	714.331	714.398
E	11+91.326	13.75	714.338	714.399
F	12+01.326	13.75	714.345	714.391
G	12+11.326	13.75	714.352	714.375
CL Brg N. Abut.	12+18.993	13.75	714.357	714.357
Bk. N. Abutment	12+21.993	13.75	714.359	714.359

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

(Sheet 2 of 2)

TOP OF DECK ELEVATIONS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-4 SHEETS	2592	04-00091-00-BR	COOK	50	28
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+35.49	19.50' LT	713.60
A	11+45.49	19.50' LT	713.63
B	11+55.90	20.00' LT	713.63
Bk. S. Abutment	11+65.90	20.00' LT	713.64

WEST EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+31.00	14.00' LT	713.70
A	11+41.00	14.00' LT	713.73
B	11+51.00	14.00' LT	713.75
Bk. S. Abutment	11+61.00	14.00' LT	713.76

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+28.55	11.00' LT	713.76
A	11+38.55	11.00' LT	713.78
B	11+48.55	11.00' LT	713.81
Bk. S. Abutment	11+58.55	11.00' LT	713.82

PGL

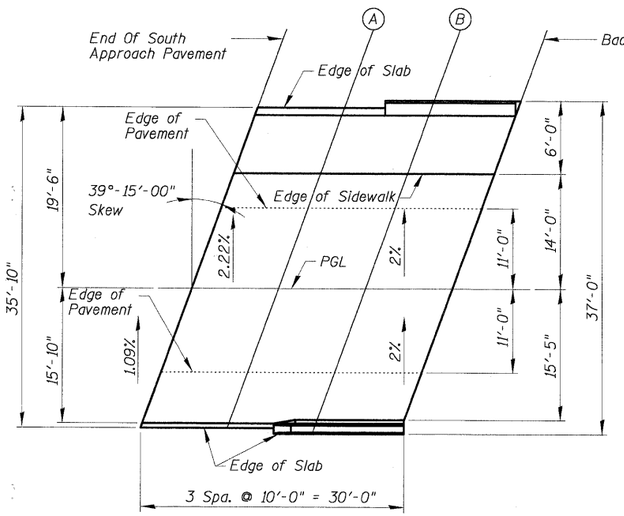
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+19.56	0.00	714.05
A	11+29.56	0.00	714.02
B	11+39.56	0.00	714.00
Bk. S. Abutment	11+49.56	0.00	714.03

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+10.57	11.00' RT	714.21
A	11+20.57	11.00' RT	714.21
B	11+30.57	11.00' RT	714.21
Bk. S. Abutment	11+40.57	11.00' RT	714.22

EAST EDGE OF SLAB

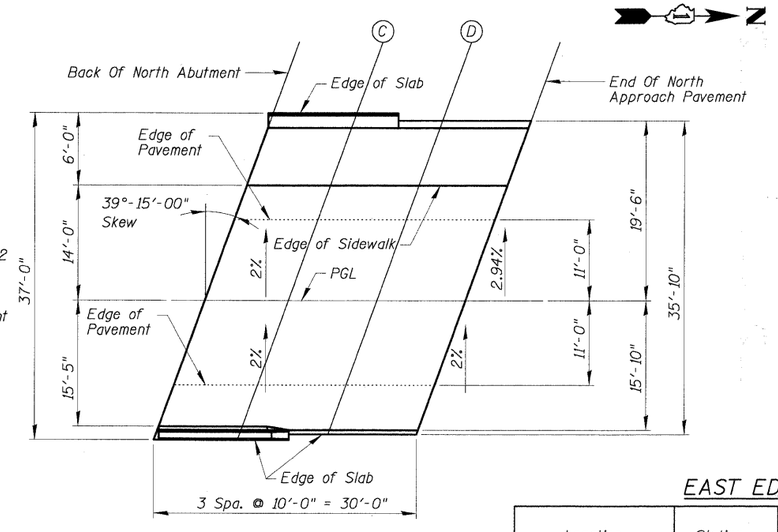
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't	11+06.62	15.83' RT	714.26
A	11+16.62	15.83' RT	714.28
B	11+25.67	17.00' RT	714.31
Bk. S. Abutment	11+35.67	17.00' RT	714.33



SOUTH APPROACH SLAB

West Side Cross Slope Data:
2% @ 11+35.67
2.57% @ 11+23.40
Match Existing (±1.18%) @ 10+89.56

East Side Cross Slope Data:
2% @ 11+35.67
Match Existing (±0.55%) @ 10+89.56



NORTH APPROACH SLAB

West Side Cross Slope Data:
2% @ 12+49.56
2.94% @ 12+74.66
Match Existing (±3.64%) @ 12+93.22

East Side Cross Slope Data:
2% constant over approach pavement

WEST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+49.56	20.00' LT	713.61
C	12+59.56	20.00' LT	713.55
D	12+69.15	19.50' LT	713.51
End N. Appr. Pav't	12+79.15	19.50' LT	713.41

WEST EDGE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+44.66	14.00' LT	713.75
C	12+54.66	14.00' LT	713.71
D	12+64.66	14.00' LT	713.68
End N. Appr. Pav't	12+74.66	14.00' LT	713.64

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+42.21	11.00' LT	713.83
C	12+52.21	11.00' LT	713.78
D	12+62.21	11.00' LT	713.76
End N. Appr. Pav't	12+72.21	11.00' LT	713.73

PGL

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+33.22	0.00	714.09
C	12+43.22	0.00	714.04
D	12+53.22	0.00	714.02
End N. Appr. Pav't	12+63.22	0.00	714.03

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+24.23	11.00' RT	714.30
C	12+34.23	11.00' RT	714.31
D	12+44.23	11.00' RT	714.26
End N. Appr. Pav't	12+54.23	11.00' RT	714.24

EAST EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abutment	12+19.33	17.00' RT	714.42
C	12+29.33	17.00' RT	714.43
D	12+40.28	15.83' RT	714.37
End N. Appr. Pav't	12+50.28	15.83' RT	714.33

TOP OF APPROACH SLAB ELEVATIONS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-5 SHEETS	2592	04-00091-00-BR	COOK	50	29
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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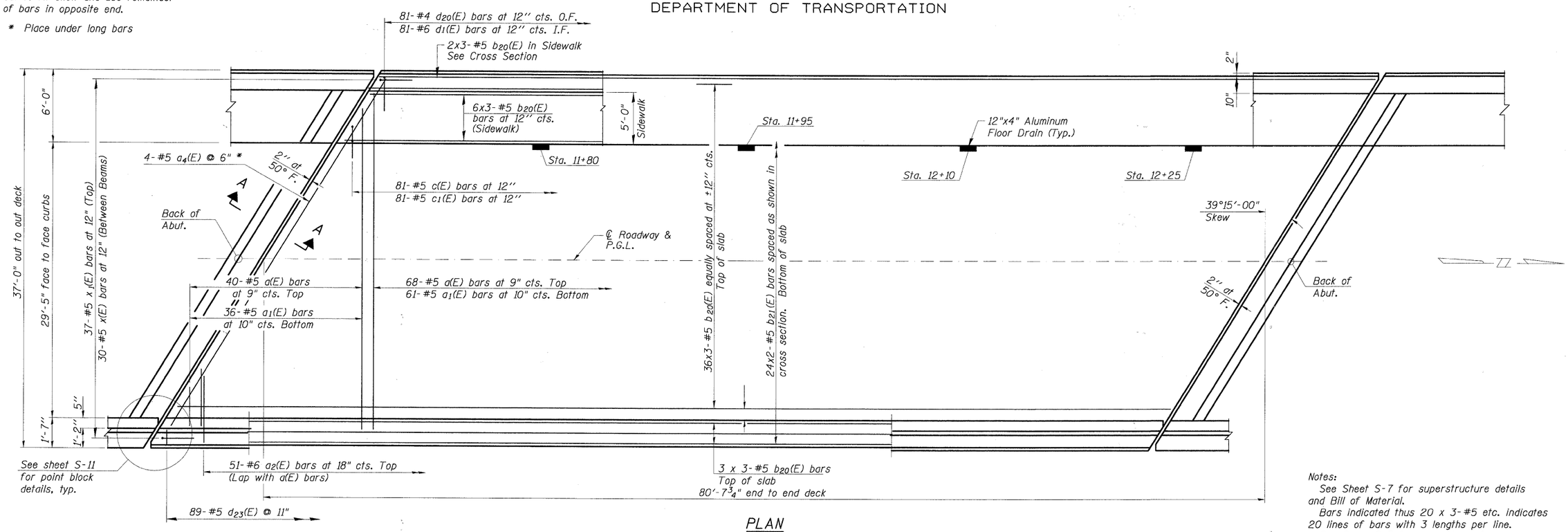
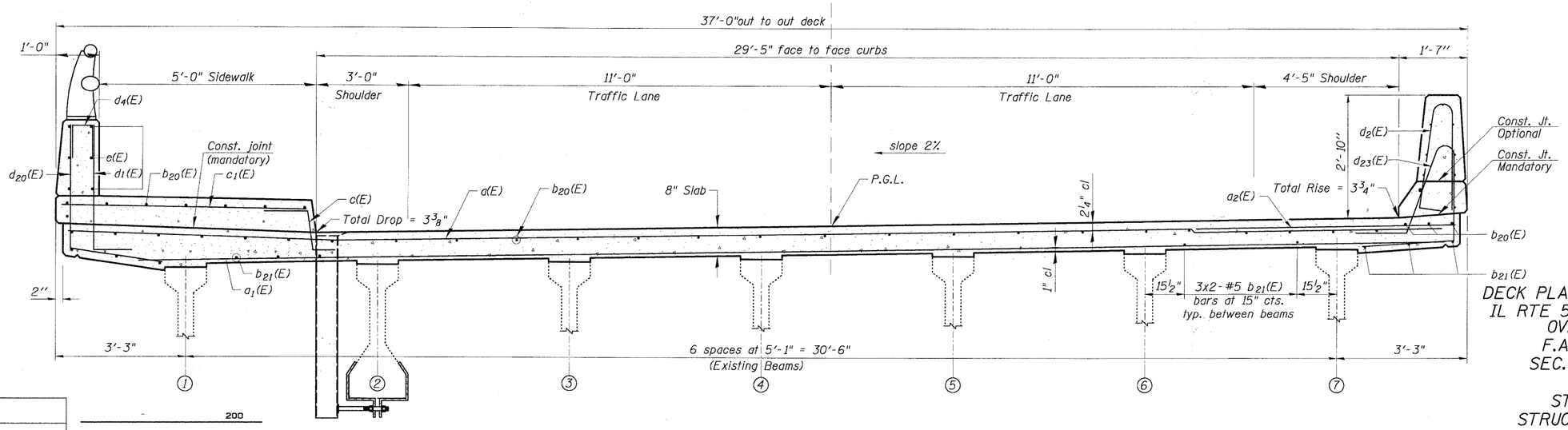
Note: Order a(E) & a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

* Place under long bars

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



CROSS SECTION
(Looking North)

Notes:
See Sheet S-7 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet S-7 for parapet reinforcement.
See Sheet S-8 for Section A-A.

LEGEND:
O.F. Outside Face
I.F. Inside Face

MIN. BAR LAP	
#5	1'-8"

DECK PLAN AND CROSS SECTION
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-6 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	30
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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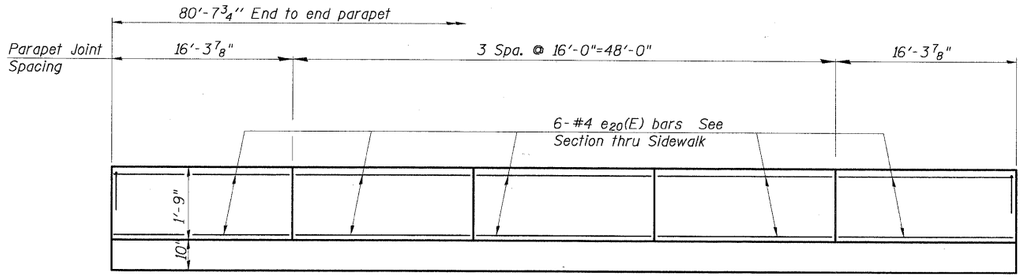
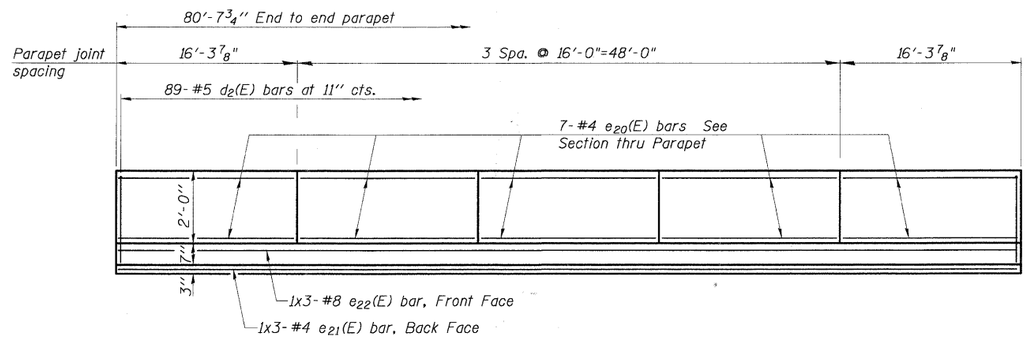
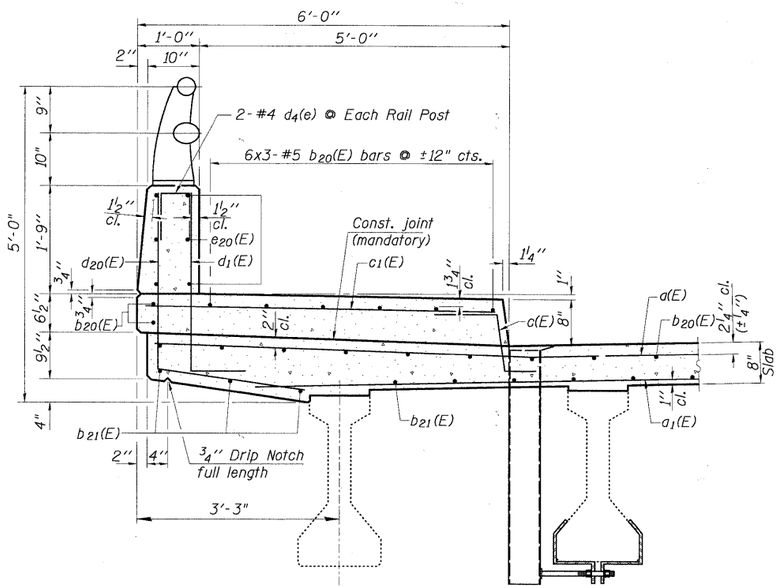
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





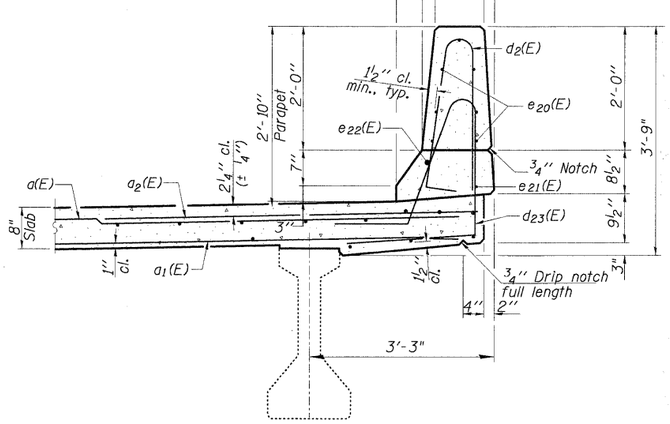
INSIDE ELEVATION OF SIDEWALK



SECTION THRU SIDEWALK

MINIMUM BAR LAP	
#4	1'-4"
#8	3'-5"

INSIDE ELEVATION OF PARAPET

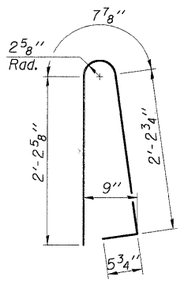


SECTION THRU PARAPET

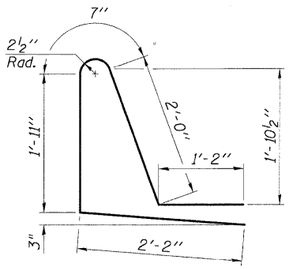
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	108	#5	36'-4"	——
a1(E)	97	#5	36'-0"	——
a2(E)	51	#6	6'-0"	——
a3(E)	36	#5	5'-7"	——
a4(E)	8	#5	47'-0"	——
b20(E)	141	#5	28'-0"	——
b21(E)	48	#5	41'-3"	——
c(E)	81	#5	2'-4"	~
c1(E)	81	#5	5'-6"	——
d1(E)	81	#6	3'-9"	L
d2(E)	89	#5	5'-7"	⌐
d4(E)	18	#4	2'-0"	⊓
d20(E)	81	#4	5'-0"	⌐
d23(E)	89	#5	7'-10"	⌐
e20(E)	65	#4	15'-9"	——
e21(E)	3	#4	28'-0"	——
e22(E)	3	#8	29'-0"	——
x(E)	60	#5	7'-4"	~
x1(E)	74	#5	4'-1"	——
Reinforcement Bars, Epoxy Coated		Pound	19,380	
Concrete Superstructure		Cu. Yds.	103.5	

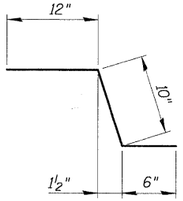
Bars indicated thus 1 x 3 -#8 etc. indicates 1 line of bars with 3 lengths per line.



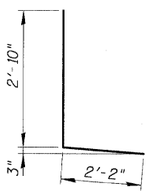
BAR $d_2(E)$



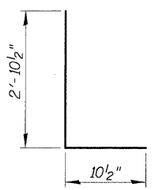
BAR $d_{23}(E)$



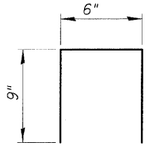
BAR c(E)



BAR $d_{20}(E)$



BAR d (E)



BAR $d_4(E)$

SUPERSTRUCTURE DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-7 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	31
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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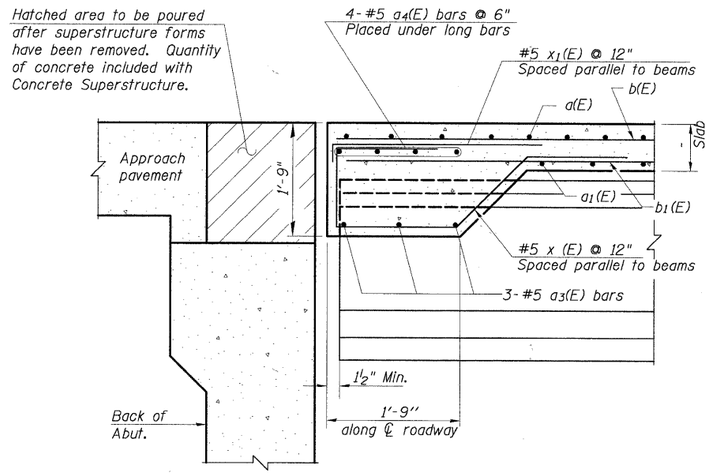
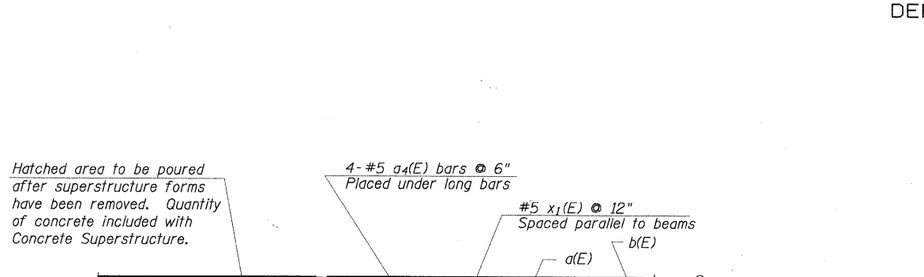
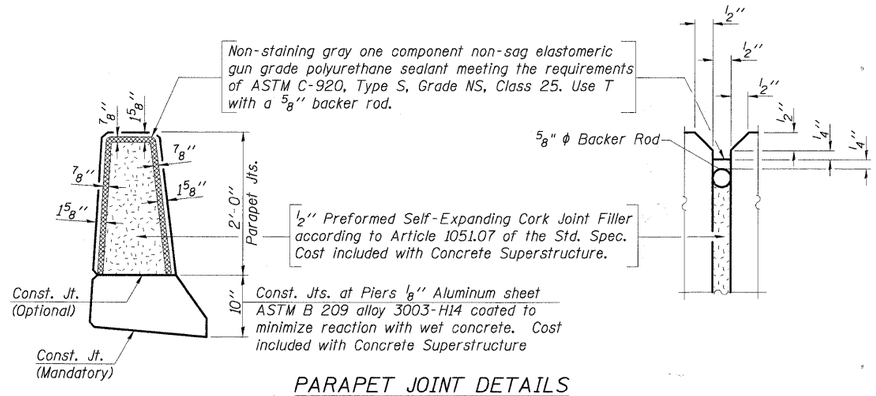
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



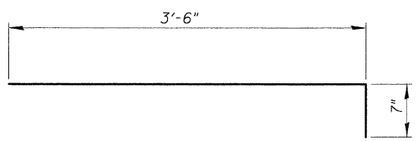
SECTION A-A



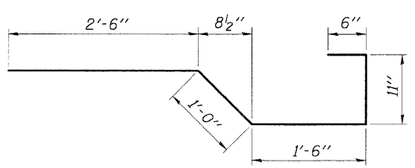
RAIL POST SPACING



PARAPET JOINT DETAILS



BAR x1(E)



BAR x(E)

DECK DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-8 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	32
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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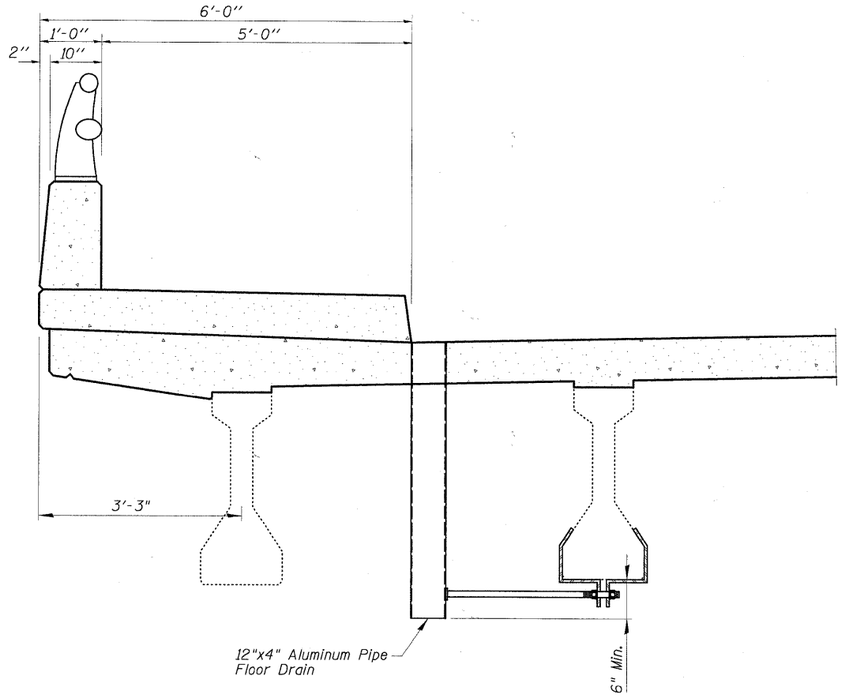
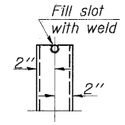
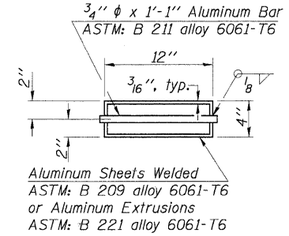
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



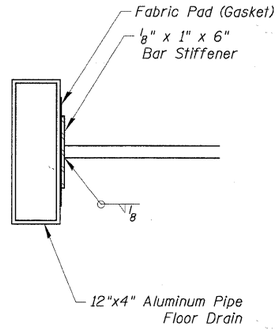
SECTION AT SIDEWALK



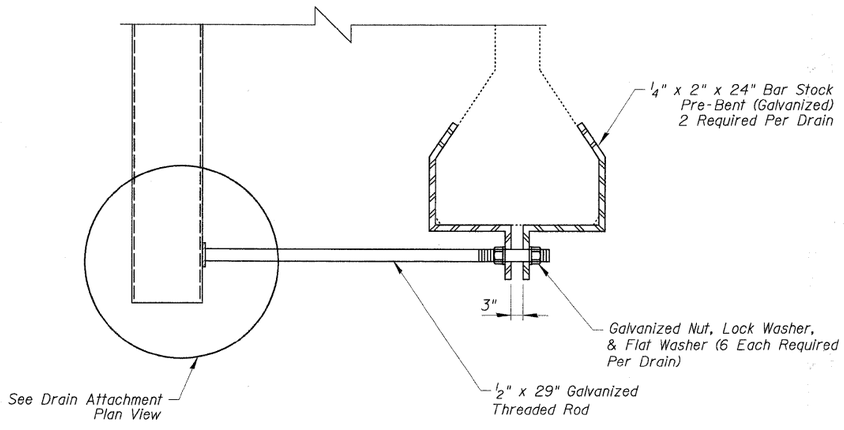


TOP PLAN OF FLOOR DRAIN

Notes:
Drains shall be located clear of all diaphragms.
The floor 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 (Special)".



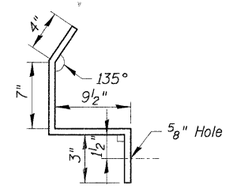
DRAIN ATTACHMENT PLAN VIEW



ATTACHMENT DETAILS

Notes:
Pop Rivet the 1/8" x 1" Bar to Floor Drain. Weld or Securely Attach Rod to Both the Bracket and Bar Stiffener.
Use 3/16" Stainless Steel Pop Rivets of Sufficient Length.

Cost of Floor Drain Attachments is Included with "Floor Drains (Special)".



BRACKET DETAIL

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

FLOOR DRAINS DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-9 SHEETS	2592	04-00091-00-BR	COOK	50	33
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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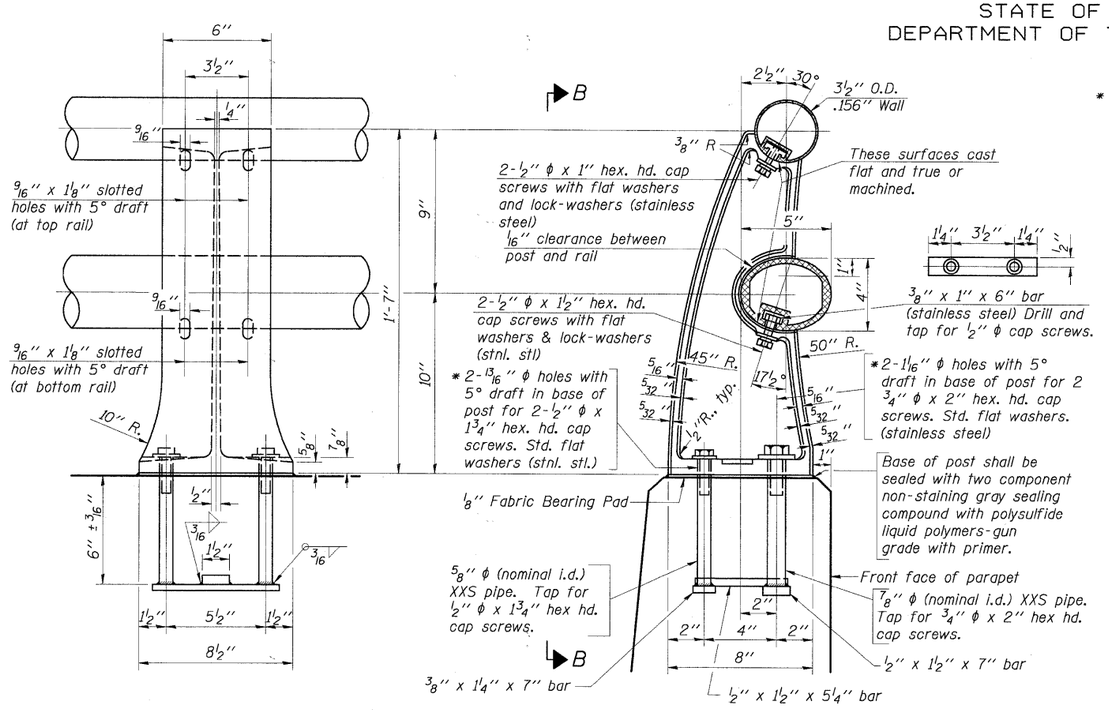
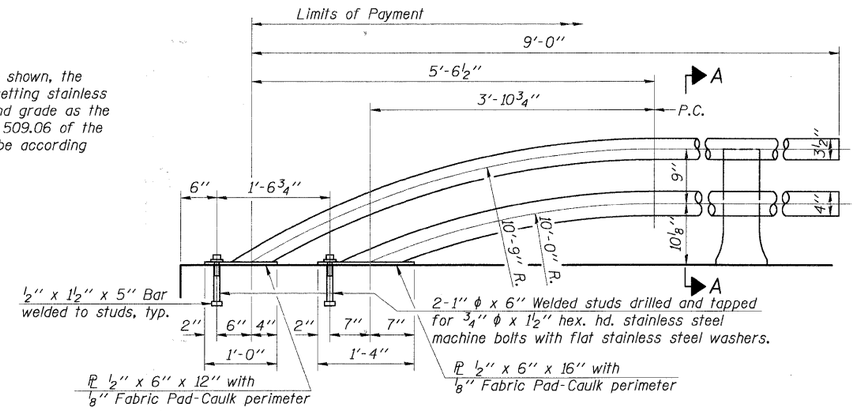
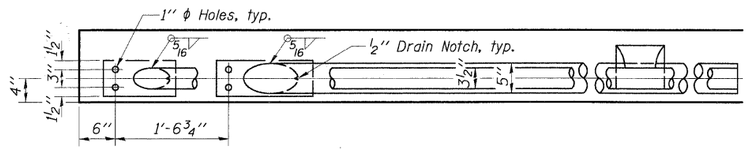
DEPARTMENT OF TRANSPORTATION



* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.





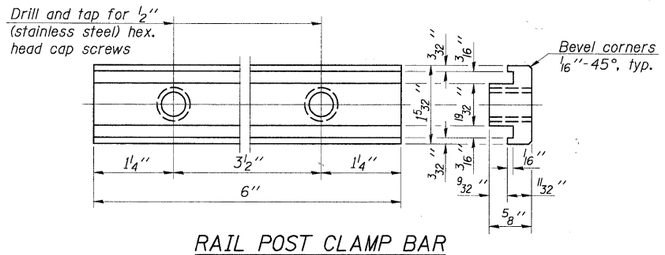
RAIL TERMINAL SECTION

Note:
The end rail post shall be set back as required for the terminal rail section.

VIEW B-B

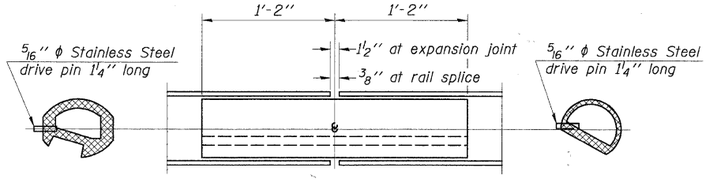
SECTION A-A

RAIL POST DETAILS



RAIL POST CLAMP BAR

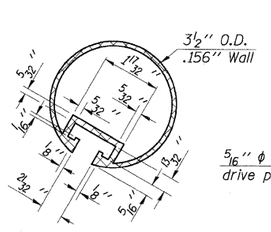
For Top Rail



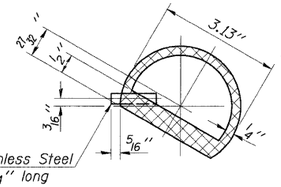
BOTTOM RAIL

TOP RAIL

RAIL SPLICE

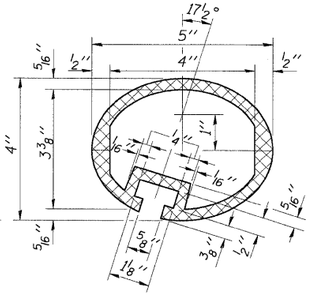


SECTION THRU TOP RAIL

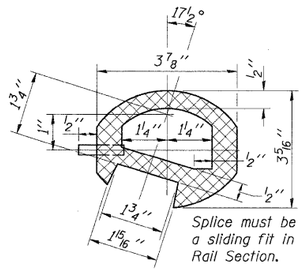


SECTION THRU SPLICE

For Top Rail



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	111

ALUMINUM RAILING, TYPE L
W. FRONTAGE ROAD OVER
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-					
CHECKED	-					
DRAWN	-					
CHECKED	-					

- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-10 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	34
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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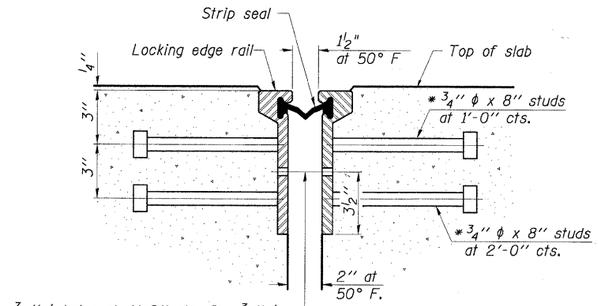
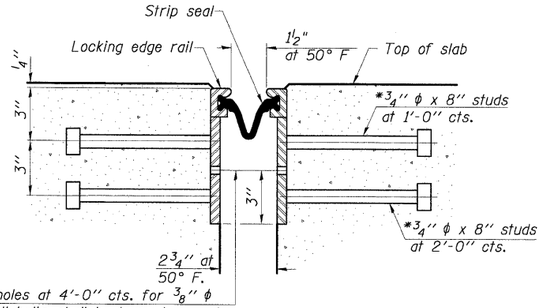
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

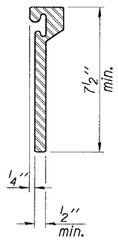


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

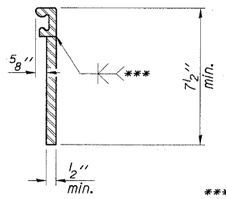


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

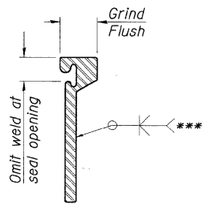
SECTION THRU ROLLED RAIL JOINT



ROLLED EXTRUDED RAIL



WELDED RAIL



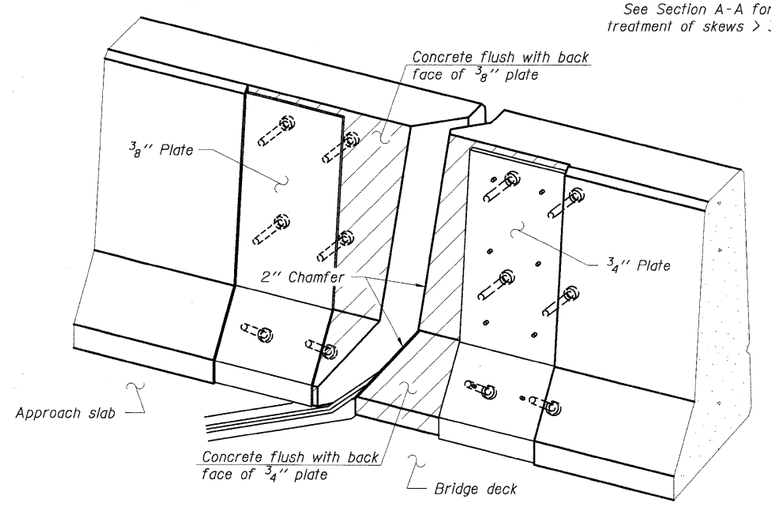
*** Back gouge not required if complete joint penetration is verified by mock-up.

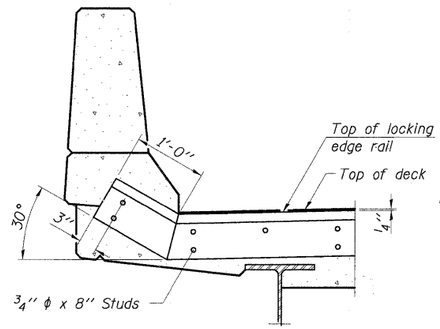
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

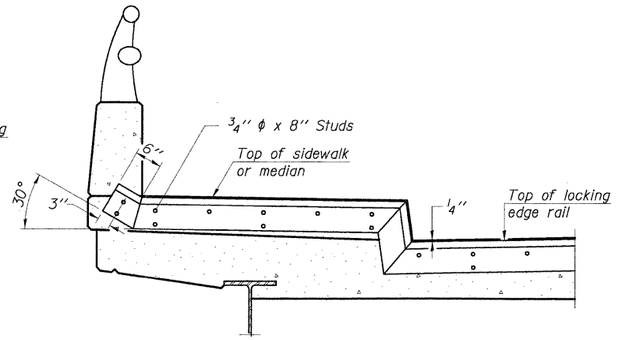
SECTION THRU WELDED RAIL JOINT





AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

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.

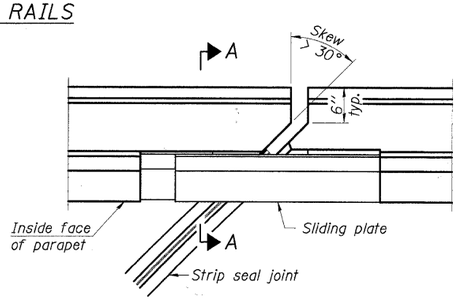
The manufacturer's recommended installation methods shall be followed.

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.

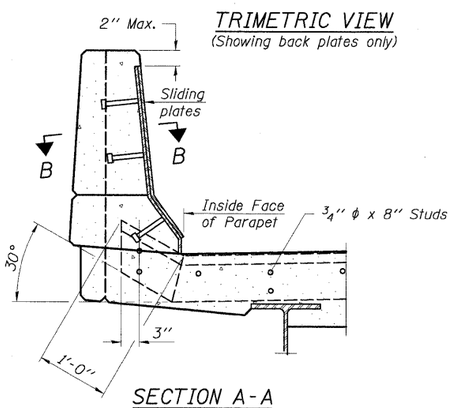
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

LOCKING EDGE RAILS



PLAN



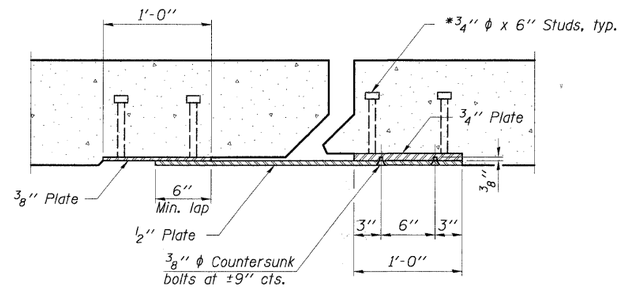
TRIMETRIC VIEW

(Showing back plates only)

SECTION A-A

POINT BLOCK DETAILS

(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	95

PREFORMED JOINT STRIP SEAL
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-11 SHEETS	2592	04-00091-00-BR	COOK	50	35
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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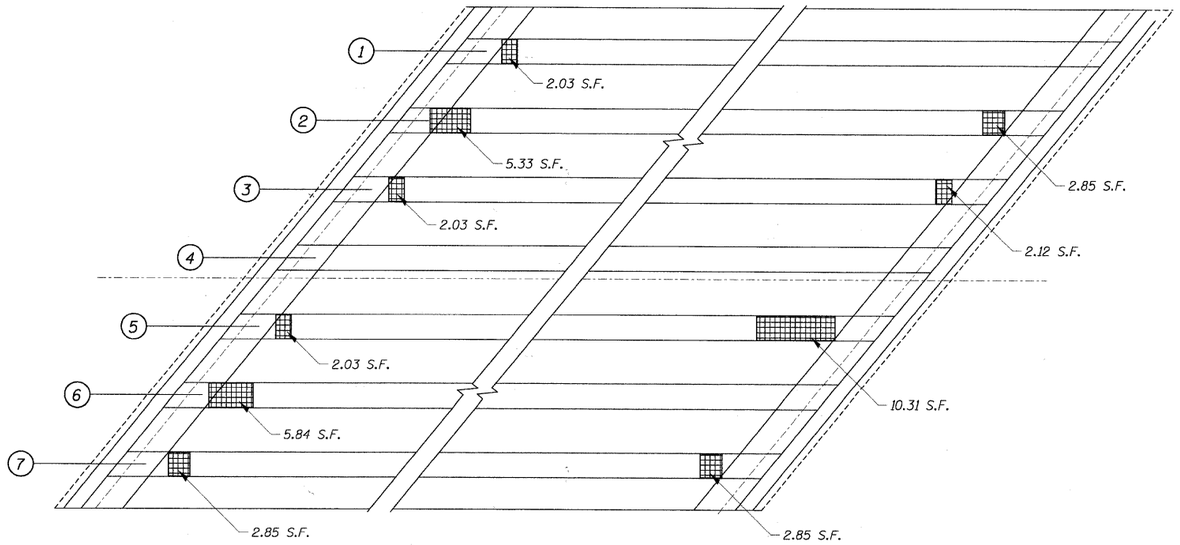
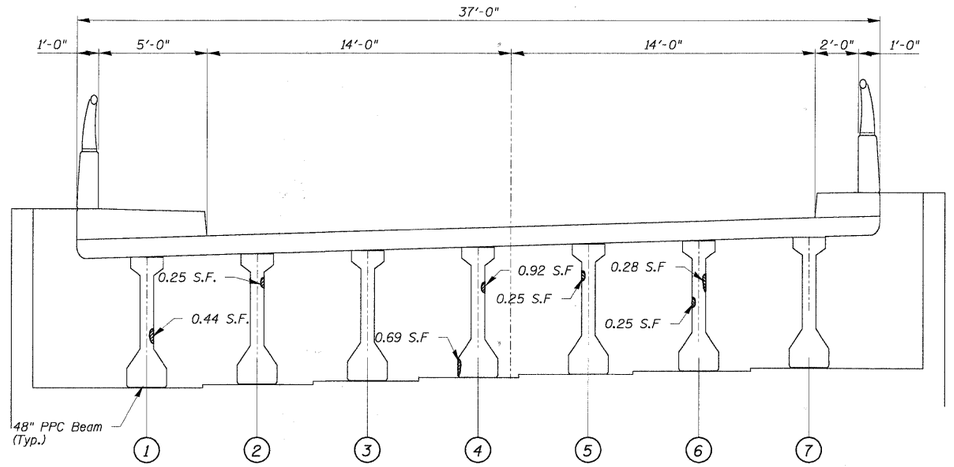
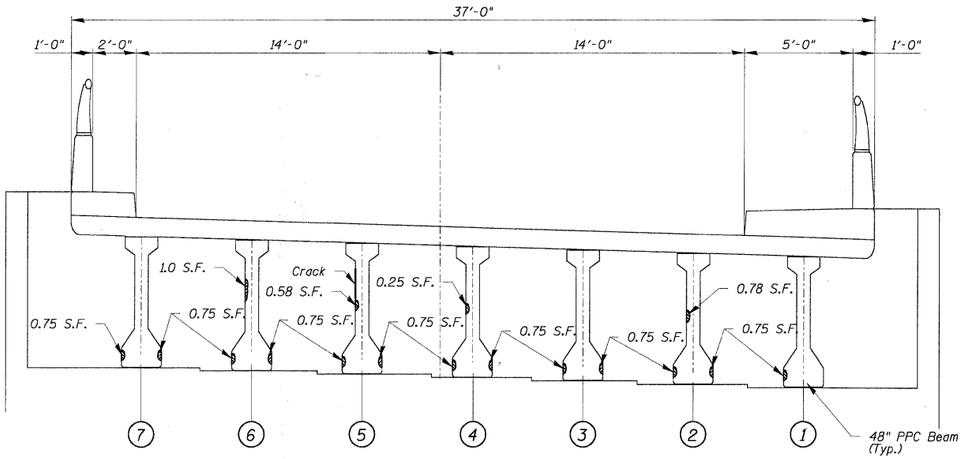
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN - UNDERSIDE OF DECK



NORTH ABUTMENT



SOUTH ABUTMENT

LEGEND:

- Spalled Area With Exposed Rebar
- Spalled or Unsound Area
- Exposed Rebar

NOTES:

1. It shall be the Contractor's responsibility to use extreme caution when removing deteriorated concrete from the PPC Beams, avoiding the prestressing strands. Any damage to the prestressing strands shall be repaired or the PPC Beams replaced as directed by the Engineer at the Contractor's expense.
2. Stirrups of the existing beams shall be blast cleaned to grey metal and incorporated into new work. Cost included with "Polymer Modified Portland Cement Mortar".

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymer Modified Portland Cement Mortar	Sq. Ft.	16
Cleaning And Painting Exposed Rebar	Sq. Ft.	39

PPC I-BEAM CONCRETE REPAIR
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

\- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-12 SHEETS	2592	04-00091-00-BR	COOK	50	36
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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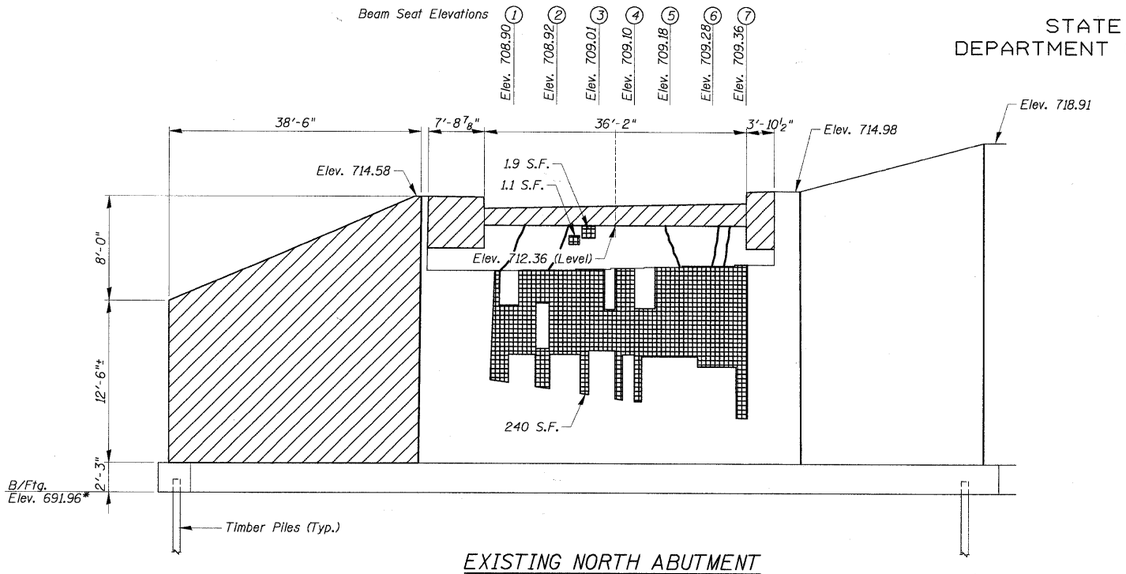
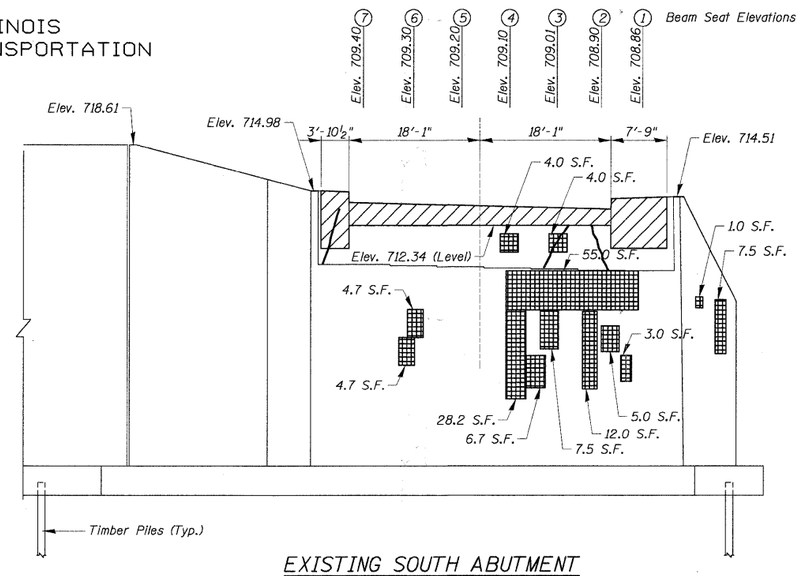
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



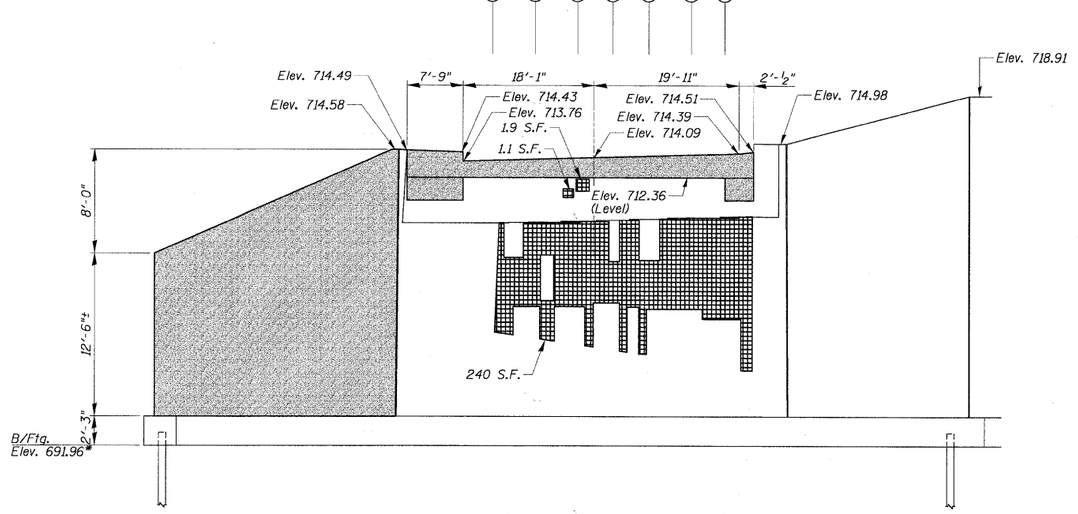
EXISTING NORTH ABUTMENT

Note: Removal of Existing Temporary Bracing System Associated With This Wingwall is Included in the Cost of "Concrete Removal."



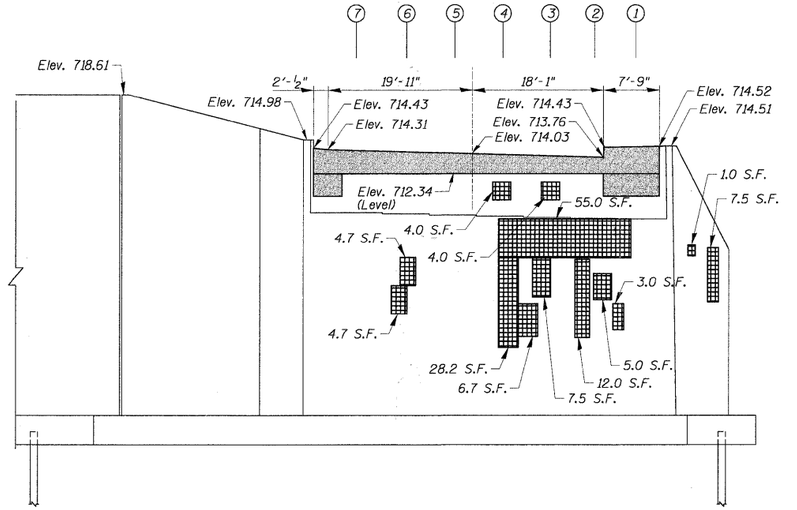
EXISTING SOUTH ABUTMENT

LEGEND:
- Concrete Repair
- Concrete Removal
- New Concrete
- Cracks



PROPOSED NORTH ABUTMENT

* Bottom of Footing Elevations and Dimensions are from Original Design Plans



PROPOSED SOUTH ABUTMENT

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	387
Epoxy Crack Injection	Lin. Ft.	35

ABUTMENT ELEVATIONS
CONCRETE REPAIR
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-13 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	37
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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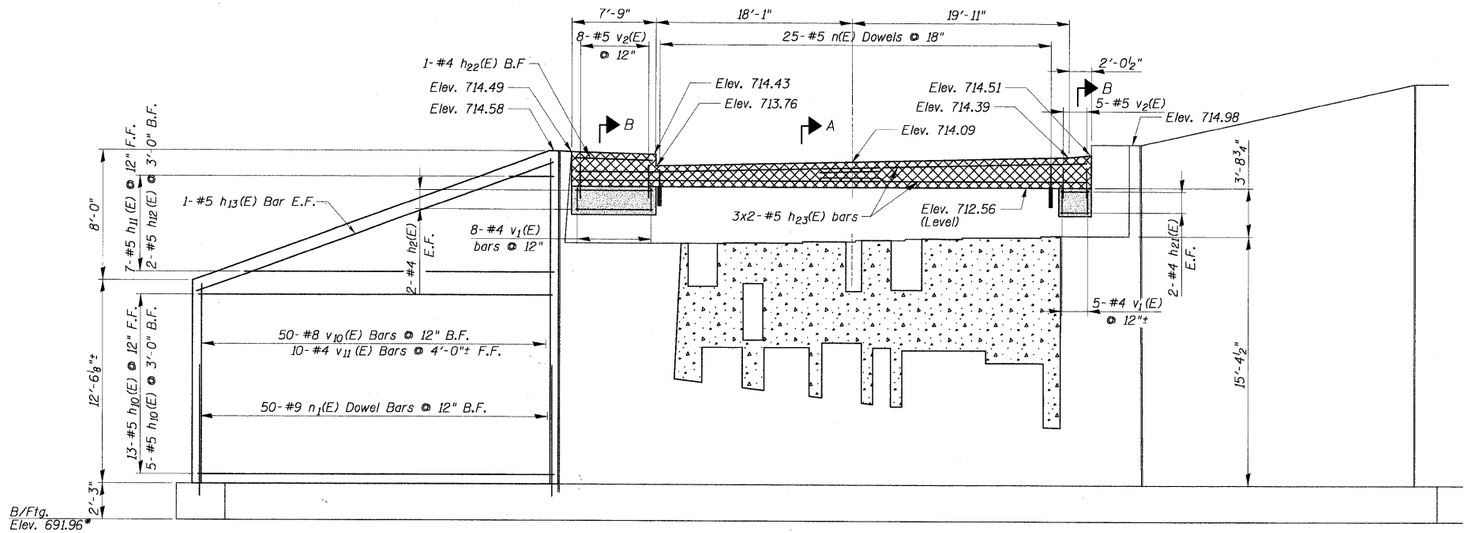
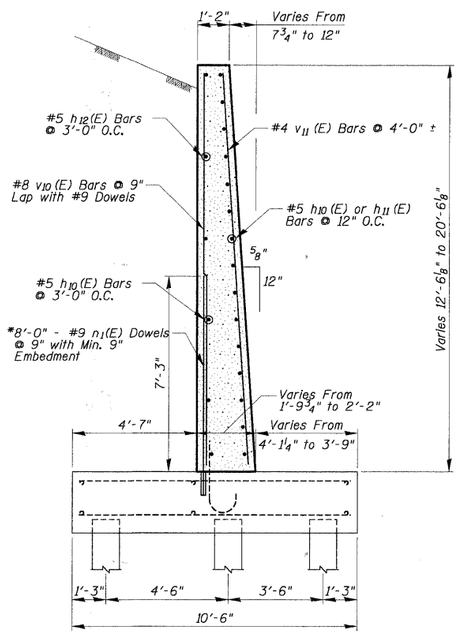
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



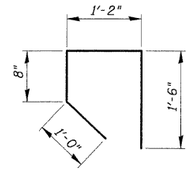
ELEVATION

* Bottom of Footing Elevations and Dimensions are from Original Design Plans



SECTION C-C

* Dowel Bars Shall Be Installed With Hilti HIT RE500 Epoxy Grout, Or An Approved Equal, To Fully Develop Yield Strength Of Rebar.



BAR v1(E)

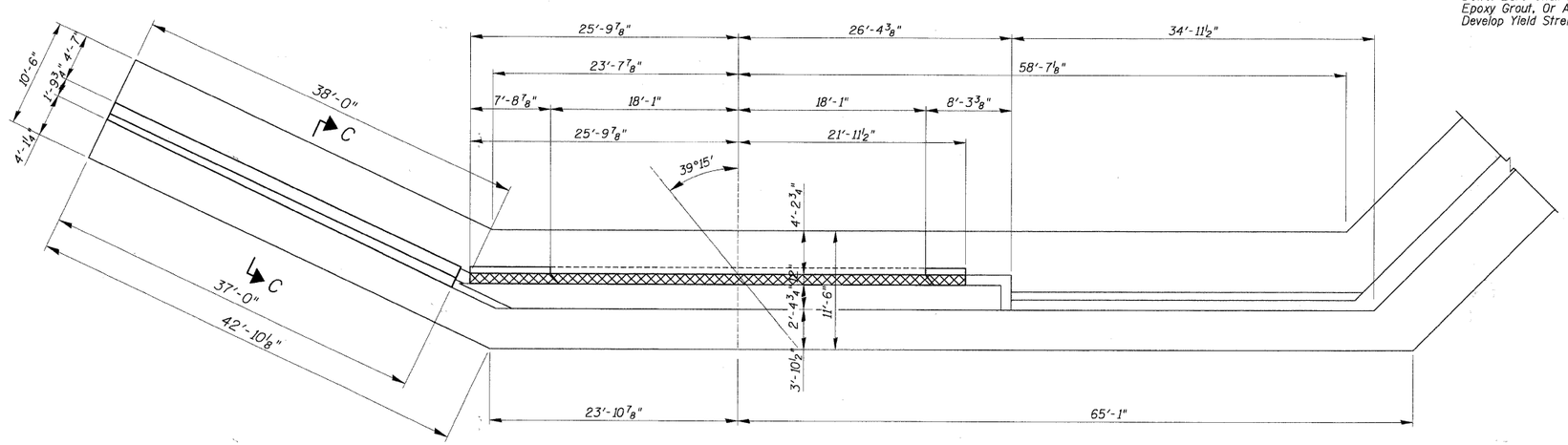
NOTES:

1. See Sheet S-16 For Notes.
2. See Sheet S-16 For Retaining Wall Wall Drainage Details.

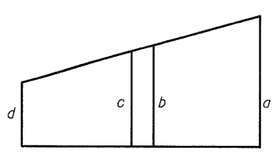
NORTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h10(E)	18	#5	36'-8"	——
h11 (E)	4	#5	32'-1"	——
h12(E)	1	#5	32'-3"	——
h13(E)	2	#5	37'-6"	——
h21(E)	4	#4	1'-9"	——
h22(E)	5	#4	7'-6"	——
h23(E)	6	#5	25'-0"	——
n(E)	25	#5	1'-6"	——
n1(E)	50	#9	8'-0"	——
v1(E)	13	#4	4'-4"	⌐
v2(E)	13	#5	1'-9"	——
v 10(E)	25	#8	32'-8"	——
v 11(E)	5	#5	32'-8"	——
Reinforcement Bars, Epoxy Coated		Pound	4,870	
Concrete Structure		Cu. Yds.	40.0	
Drill and Grout Bars		Each	75	

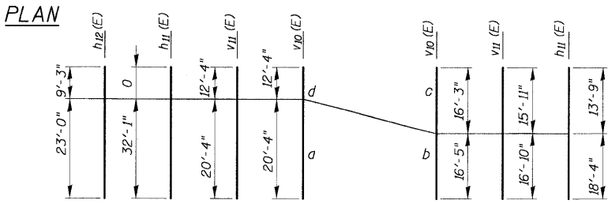
Bars indicated thus 1 x 3 -#8 etc. indicates 1 line of bars with 3 lengths per line.



PLAN



PLACEMENT DIAGRAM



FIELD CUTTING DIAGRAM

LEGEND:

- Concrete Repair
- New Concrete
- To Be Poured After Deck Slab Forms Have Been Removed

NORTH ABUTMENT PLAN & ELEVATION
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-14 SHEETS	2592	04-00091-00-BR	COOK	50	38
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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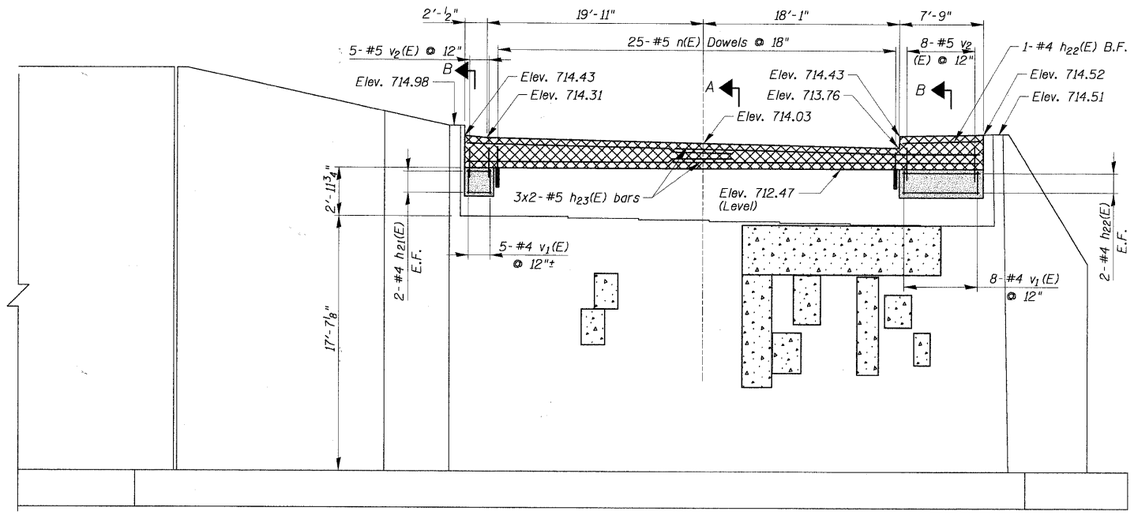
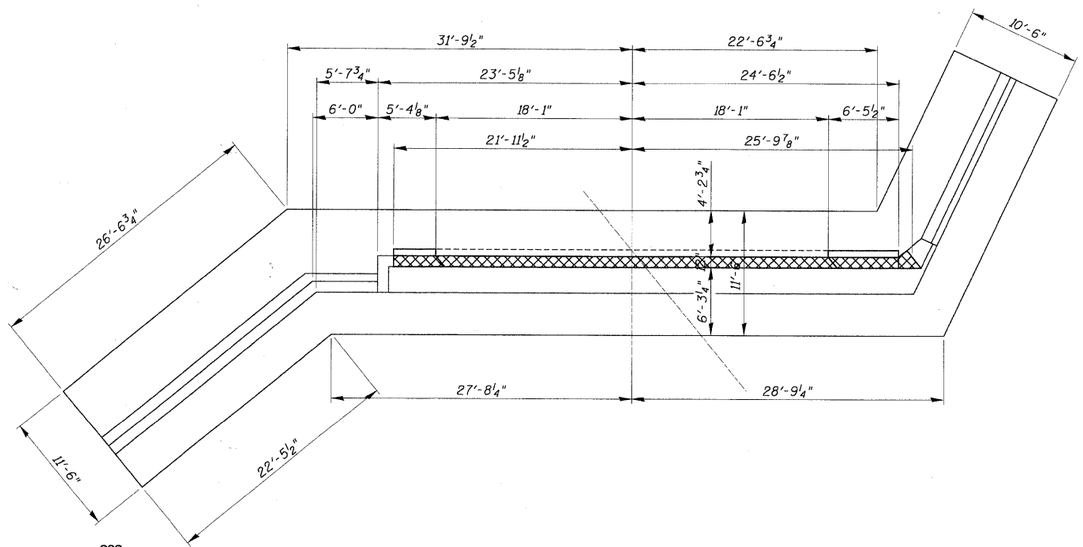
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



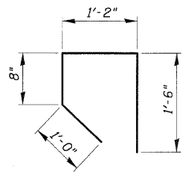
ELEVATION



PLAN

NOTES:

1. See Sheet S-16 For Notes.



BAR $v_1(E)$

SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{21}(E)$	4	#4	1'-9"	———
$h_{22}(E)$	5	#4	7'-6"	———
$h_{23}(E)$	6	#5	25'-0"	———
$n(E)$	25	#5	1'-6"	———
$v_1(E)$	13	#4	4'-4"	⌐¬
$v_2(E)$	13	#5	1'-9"	———
Reinforcement Bars, Epoxy Coated			Pound	290
Concrete Structure			Cu. Yds.	4.0
Drill and Grout Bars			Each	25

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

LEGEND:

- Concrete Repair
- New Concrete
- To Be Poured After Deck Slab Forms Have Been Removed

SOUTH ABUTMENT PLAN & ELEVATION
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S-15 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	39
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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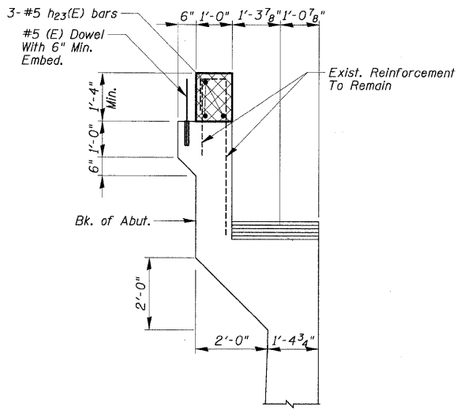
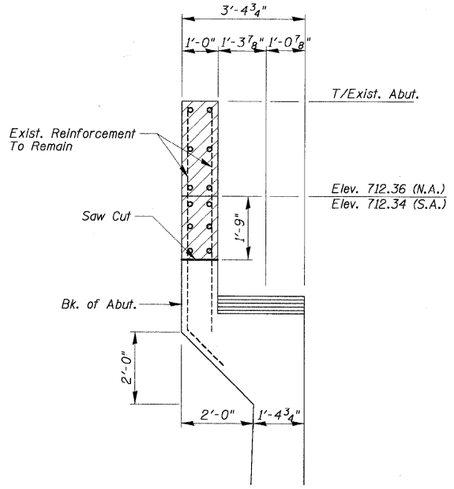
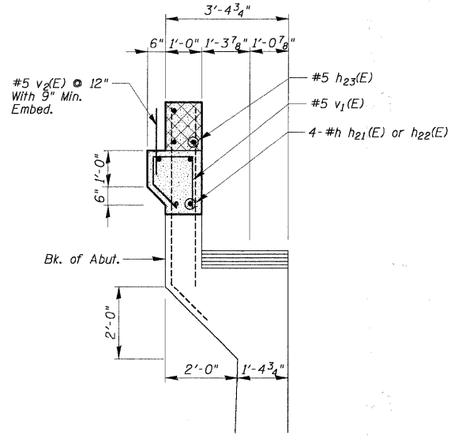
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION A-A



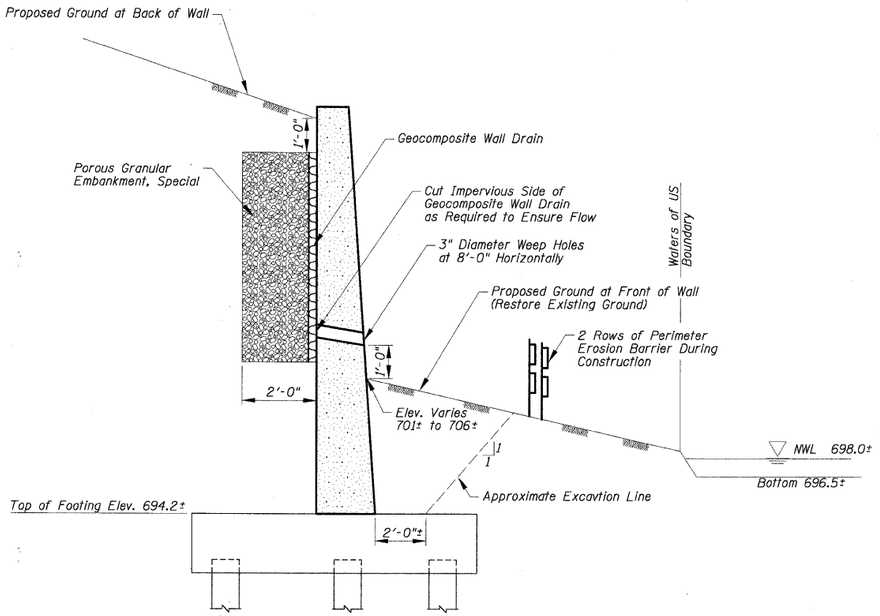
EXISTING SECTION B-B



PROPOSED SECTION B-B

NOTES:

1. Remove The Top Of The Existing Abutments As Shown.
2. Bonded Construction Joints Shall Be In Accordance With The Standard Specifications.
3. Existing Reinforcement Bars Shall Be Extended Into New Concrete. See General Notes On S-2.
4. All Edges Shall Have Standard 3/4" Chamfers Except As Noted.
5. Hatched Area To be Poured After Deck Slab Forms Have Been Removed.
6. Reinforcement Bars Designated (E) Shall Be Epoxy Coated.



SECTION C-C - DRAINAGE DETAILS

LEGEND:

- New Concrete
- Concrete Removal
- To Be Poured After Deck Slab Forms Have Been Removed

ABUTMENT DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

\- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-16 SHEETS	2592	04-00091-00-BR	COOK	50	40
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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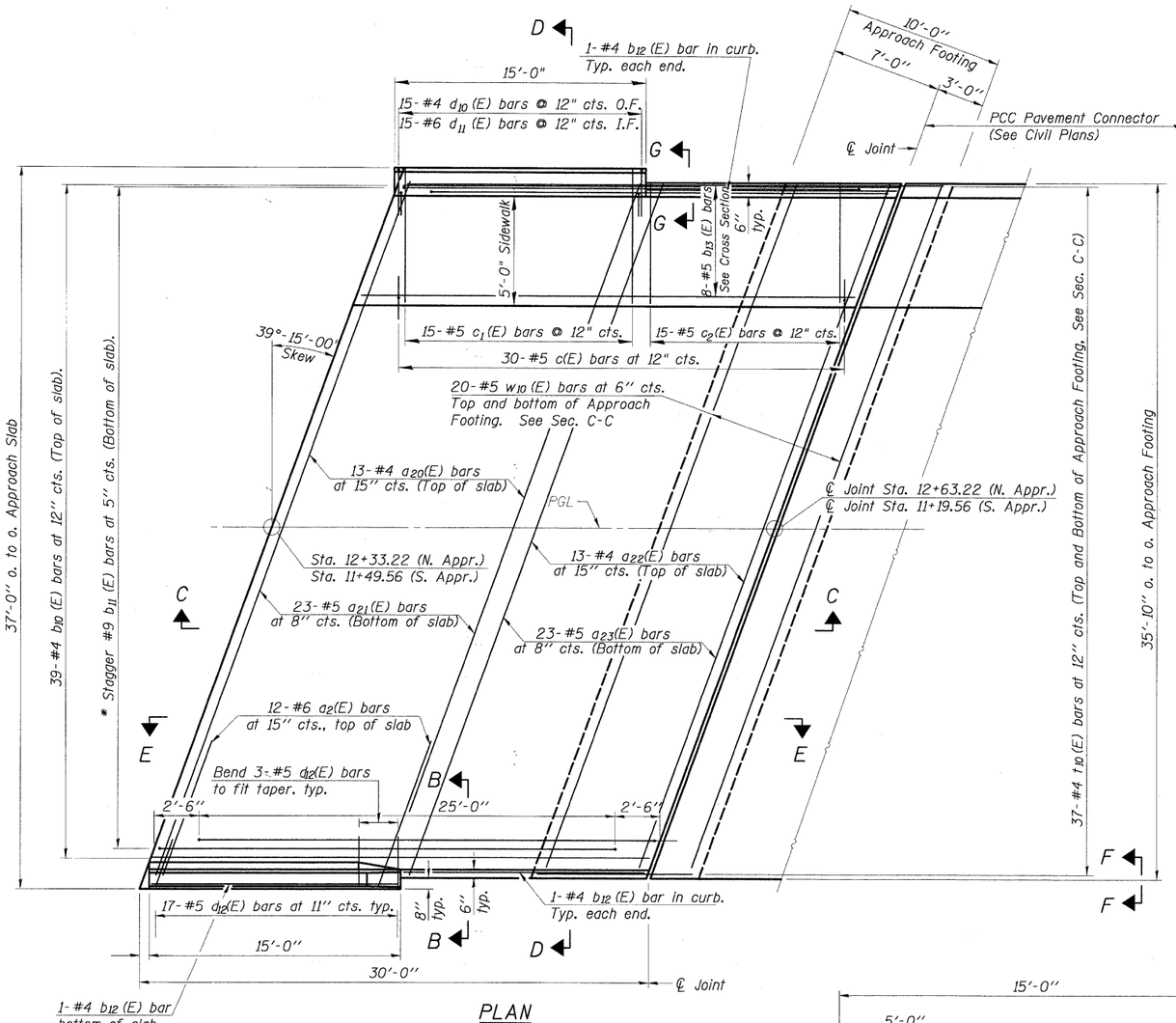
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

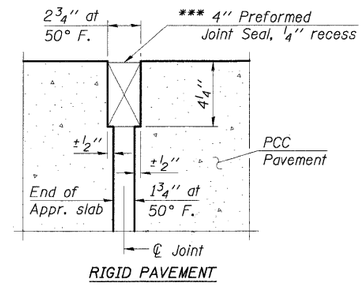
Notes:
See sheet S-18 for Sections C-C & D-D.
a_{10} (E), a_{11} (E), a_{12} (E), a_{13} (E) and w(E) bar spacings measured perpendicular to ℄ Rdwy.



PLAN

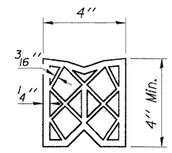
* Tilt #9 b_1 (E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

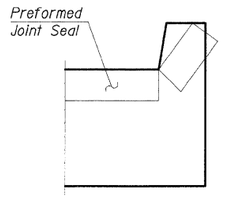


RIGID PAVEMENT

DETAIL A

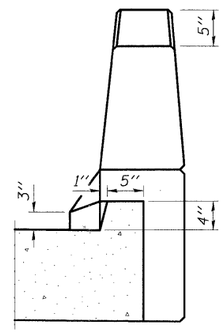


PREFORMED JOINT SEAL



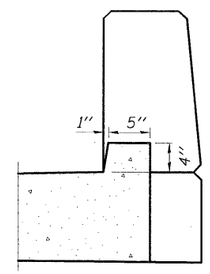
VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

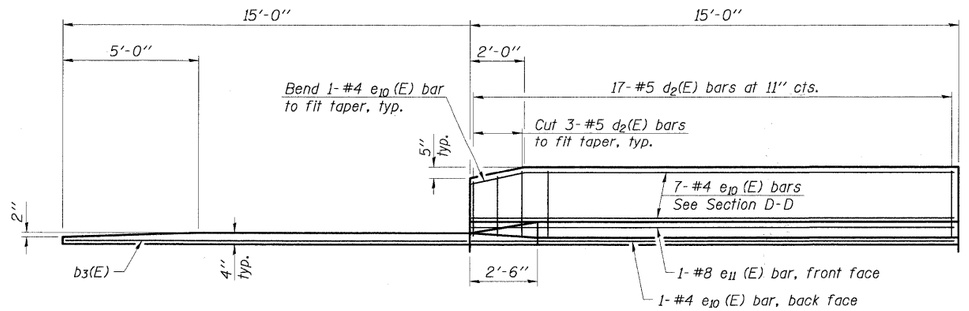


VIEW B-B

(Exit ends only)



VIEW G-G



VIEW E-E

(Sheet 1 of 2)
BRIDGE APPROACH SLAB DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-17 SHEETS	2592	04-00091-00-BR	COOK	50	41
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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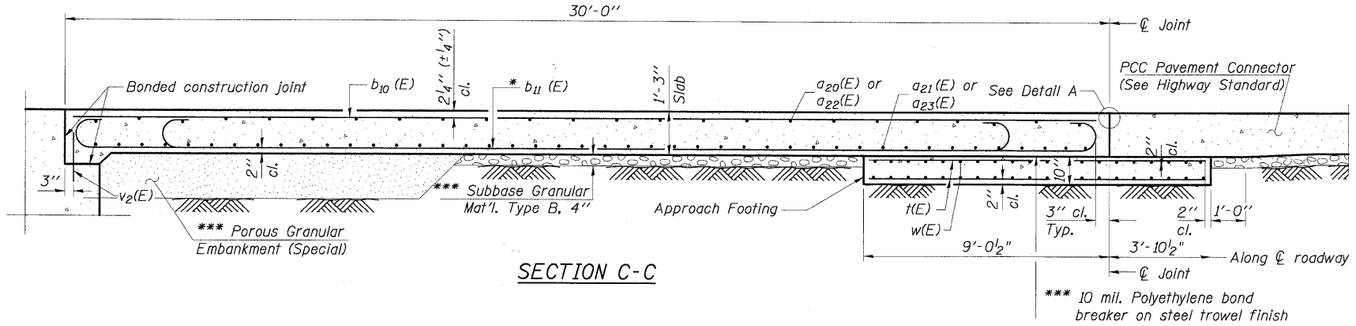
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



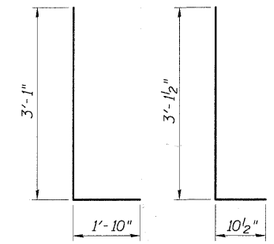
SECTION C-C

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

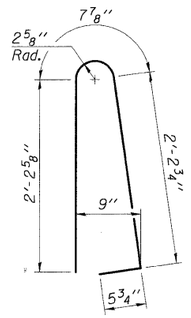
*** 10 mil. Polyethylene bond breaker on steel trowel finish

Notes:
See sheet S-17 for Detail A
Approach slab, sidewalk 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.
For v_2(E) bar details, see sheet S-16.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.

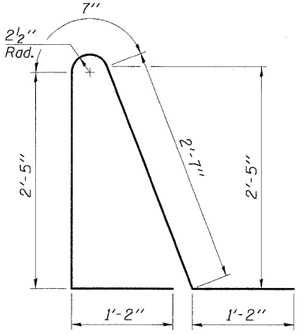


BAR d_{10} (E)

BAR d_{11} (E)



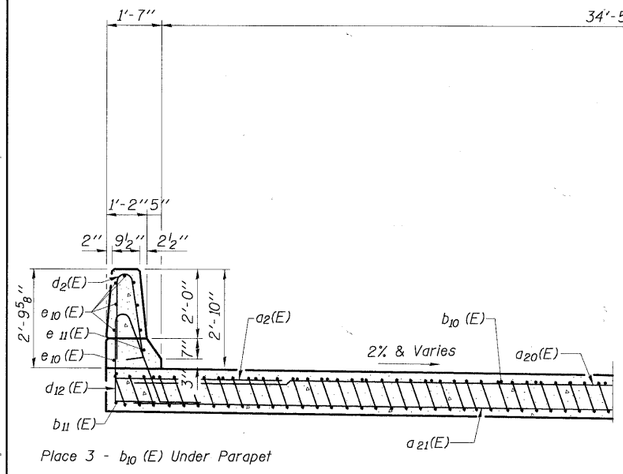
BAR d_2(E)



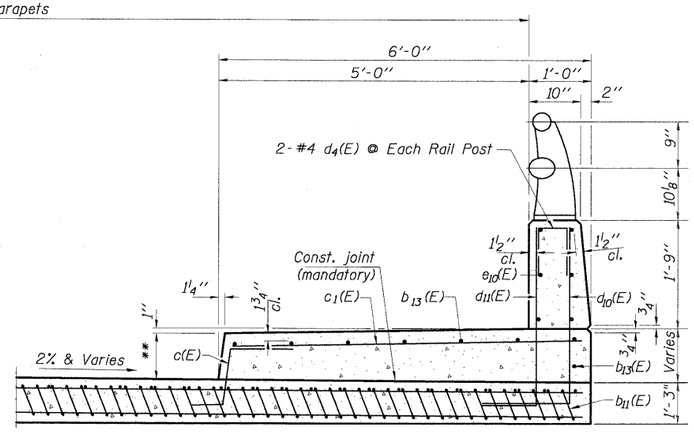
BAR d_{12} (E)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	24	#6	6'-0"	
a_{20}(E)	26	#4	47'-2"	
a_{21}(E)	46	#5	47'-2"	
a_{22}(E)	26	#4	46'-2"	
a_{23}(E)	46	#5	45'-8"	
b_{10} (E)	78	#4	29'-8"	
b_{11} (E)	178	#9	29'-9"	
b_{12} (E)	4	#4	14'-8"	
b_{13} (E)	16	#5	29'-8"	
c(E)	60	#5	2'-4"	
c_1(E)	30	#5	5'-6"	
c_2(E)	30	#5	5'-5"	
d_2(E)	34	#5	5'-7"	
d_4(E)	8	#4	2'-0"	
d_{10} (E)	30	#4	4'-11"	
d_{11} (E)	30	#6	4'-0"	
d_{12} (E)	34	#5	7'-11"	
e_{10} (E)	28	#4	14'-8"	
e_{11} (E)	2	#8	14'-8"	
f_{10} (E)	148	#4	12'-6"	
w_{10} (E)	80	#5	46'-6"	
Concrete Superstructure			Cu. Yd.	114.7
Concrete Structures			Cu. Yd.	28.6
Reinforcement Bars, Epoxy Coated			Pound	33,030

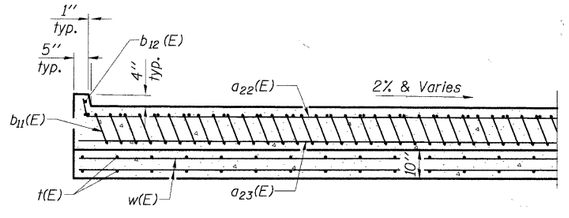


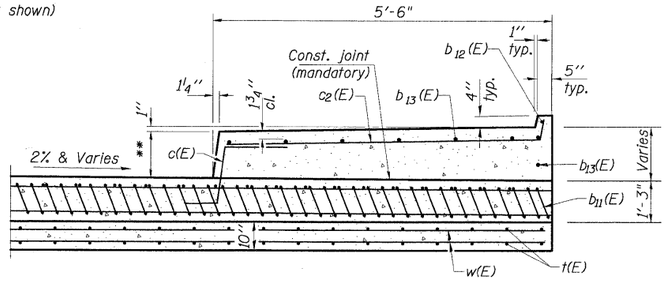
Place 3 - b_{10} (E) Under Parapet



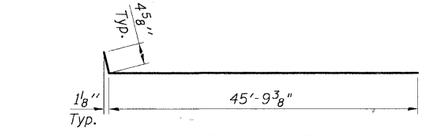
** Vary sidewalk thickness. Thickness is 9" at abutments and decreases to 6" at the ends of the approach pavement.

SECTION D-D - NEAR ABUTMENT
(See Plan for dimensions not shown)

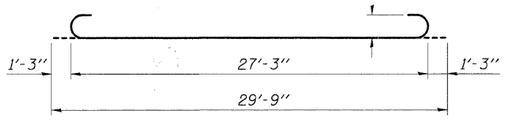




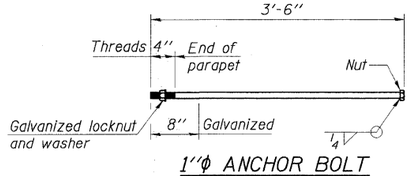
SECTION D-D - AT APPROACH FOOTING
(See Plan for dimensions not shown)



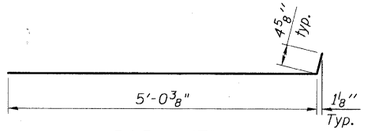
BAR a_{12} (E)



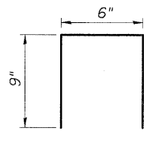
BAR b_{11} (E)



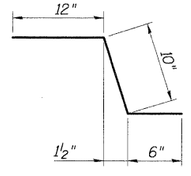
1"ϕ ANCHOR BOLT
(Cost included with Concrete Superstructure)



BAR c_2(E)



BAR d_4(E)



BAR c(E)

(Sheet 2 of 2)

BRIDGE APPROACH SLAB DETAILS
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-18 SHEETS	2592	04-00091-00-BR	COOK	50	42
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT **West Frontage Road Bridge, IL-53 at Salt Creek, Rolling Meadows, Illinois**

CLIENT **Christopher B. Burke Engineering, Ltd., Rosemont, Illinois**

BORING **1** DATE STARTED **1-17-07** DATE COMPLETED **1-17-07** JOB **L-67,877**

ELEVATIONS

GROUND SURFACE **713.8**

END OF BORING **681.3**

WATER LEVEL OBSERVATIONS

▼ WHILE DRILLING **6.0 '**

▽ AT END OF BORING **18.0 '**

▼ 24 HOURS

17' North of North Abutment
12' West of Centerline

DISTANCE BELOW SURFACE IN FEET

LENGTH RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Qu	γDRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
							0.6	713.2	7" Bituminous Concrete
							1.0	712.8	5" Sand and Gravel Base
	1	SS	9	15.0	1.0*	115			▼ FILL - Brown, gray and black silty CLAY, little sand and gravel, trace organic, occasional sand seams, very moist to moist (CL)
	2	SS	9	19.0	0.5*	111			
	3	SS	9	20.9	1.5*	108			
	4	SS	12	22.3	1.0*	105			
	5	SS	16	18.6	4.0*	110			
	6	SS	12	20.1	2.0*	109			
	7	SS	47	167					Sample 7: Tree root
	8	SS	12	21.0	2.75*	104			▽
	9	SS	10	28.3	0.90 1.0*		20.0	693.8	Stiff gray silty CLAY, trace sand, trace organic, very moist (CL/CH)
	10	SS	14	17.2			23.0	690.8	Firm brown and gray silty/clayey SAND, occasional sand seams, very moist to wet (SM/SC)
	11	SS	10	16.5					
	12	SS	17	18.2	2.94 3.5*		28.0	685.8	Very tough gray silty CLAY, little sand and gravel, moist (CL)
	13	SS	20	18.1	3.5*				End of Boring at 32.5'

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

DRILL RIG NO. **315**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 6787.GPJ TSC_ALLSOIL 2/28/07

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

\- 200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SOIL BORING
IL RTE 53 W. FRONTAGE ROAD
OVER SALT CREEK
F.A.U. ROUTE 2592
SEC. 04-00091-00-BR
COOK COUNTY
STATION 11+91.39
STRUCTURE NO. 016-1122

SHEET NO. S-19 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2592	04-00091-00-BR	COOK	50	43
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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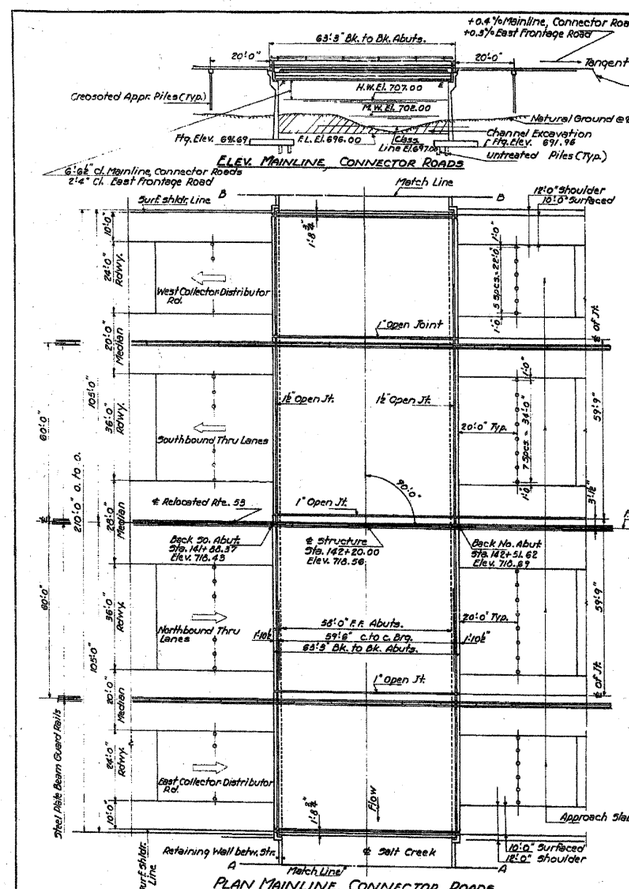
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 53	53(1-1-B)T	COOK	26	11
F.A.U.				

SHEET NO. 1
12 SHEETS

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT: U-184(20)



PILE DATA - APPROACH SLAB PILES

Type	Creosoted
Capacity	15 Tons
Est. Length	15 Ft.
No. Req'd.	78

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Channel Excavation	Cu. Yds.		1770	1770
Removal of Existing Structure	Each		1	1
Class A Excavation for Structures	Cu. Yds.		1320	1320
Class B Excavation for Structures	Cu. Yds.		2040	2040
Structural Steel	Lbs.	30050		30050
Precast Prestressed Conc. I Beams 42"	Lin. Ft.	2891		2891
Precast Prestressed Conc. I Beams 45"	Lin. Ft.	552		552
Class X Concrete	Cu. Yds.	571.8	1968.6	2540.4
Reinforcement Bars	Lbs.	103490	294910	398400
Aluminum Handrail	Lin. Ft.	420		420
Untreated Piles	Lin. Ft.		14850	14850
Creosoted Piles	Lin. Ft.		1170	1170
Test Piles, Timber	Each		6	6
Protective Coat	Sq. Yds.	2100		2100
Name Plates	Each	2		2

STATION 142+20.00
BUILT 196 BY
STATE OF ILLINOIS
S.B.I. RTE. 53 - SEC. 53(1-B-7
PROJECT F-184 (20)
LOADING H20-S16 ALT.

NAME PLATE.
See Standard 2113

PRESTRESSED PRECAST UNITS
f'c - - - - 5000 #/in.²
f'ci - - - - 4000 #/in.²
fs - - - - 248000 #/in.² (Cables)
f'si - - - - 173800 #/in.²
fs - - - - 20000 #/in.² Struck

DESIGN STRESSES
fc - - - - 1400 #/in.² Super, f'c = 1000 #/in.² Sub.
Vc - - - - 75 #/in.² Appr.
fs - - - - 20000 #/in.² - Reinf. → f'c = 2500 lb/in², fy = 40 ksi
fs - - - - 20000 #/in.² Struck
n - - - - 10

Loading H20-S16 & Alt.

DESIGNED	Mario F. Fiorelli
CHECKED	W. Hartbarger
DRAWN	M. Miller
CHECKED	P. Kinnel

Sept. 24, 1962

EXAMINED W. E. Simmons
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

PROJECT F-184 (20)
GENERAL PLAN & ELEVATION
RELOCATED ROUTE 53 MAINLINE CONNECTOR ROADS AND FRONTAGE ROADS OVER SALT CREEK
S.B.I. ROUTE 53 — SEC. 53(1-1-B-7
COOK COUNTY
STATION 142+20.00

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL PLANS

DESIGNED -					
CHECKED -					
DRAWN -					
CHECKED -					

200

EXAMINED
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	2594	04-00091-00-BR	COOK	50	44
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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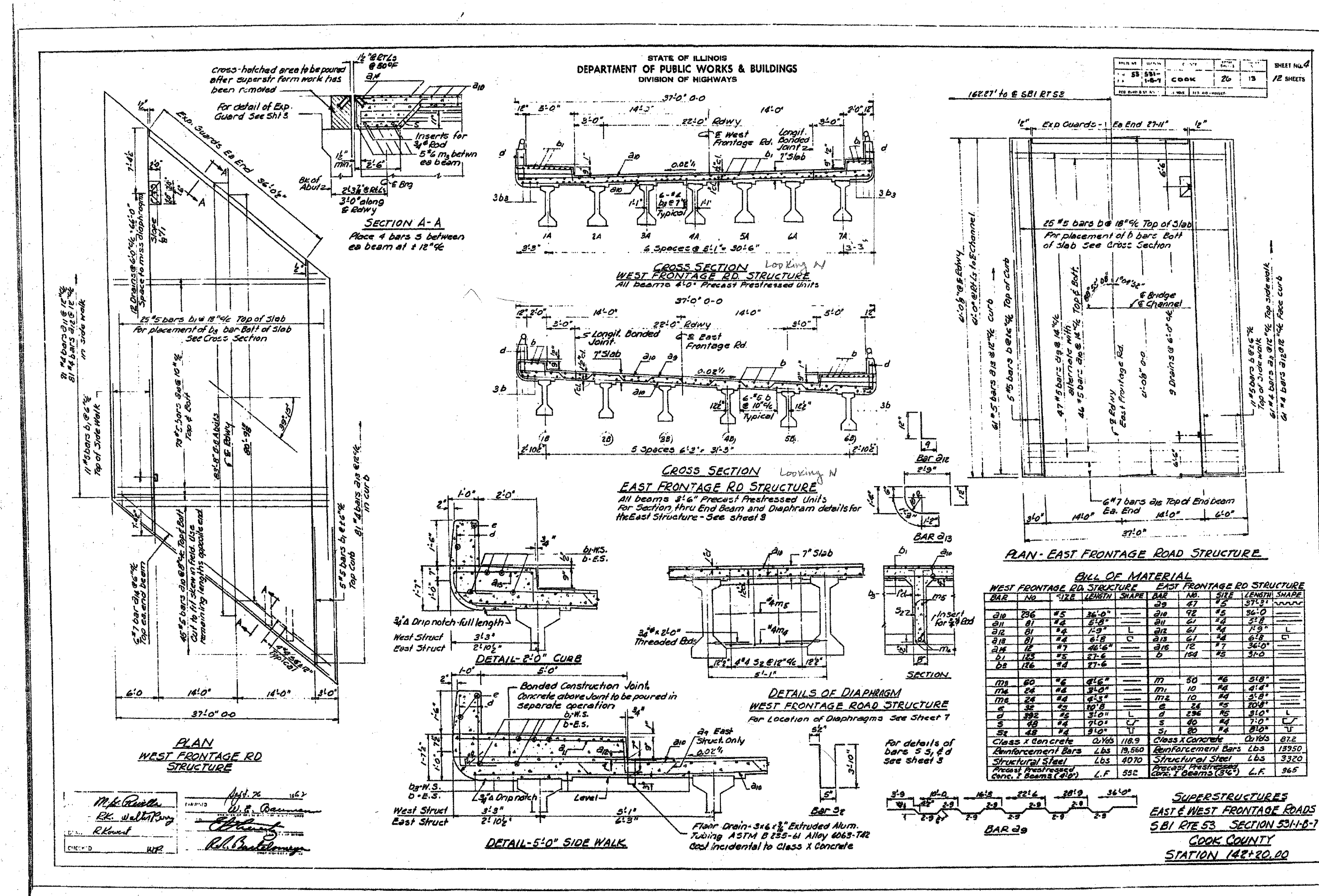
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BILL OF MATERIAL

WEST FRONTAGE RD. STRUCTURE BAR	NO	SIZE	LENGTH	SHAPE	EAST FRONTAGE RD STRUCTURE BAR	NO.	SIZE	LENGTH	SHAPE
					a9	47	#5	37'-3"	~
a10	236	#5	36'-0"	—	a10	92	#5	36'-0	—
a11	81	#4	5'-8"	—	a11	61	#4	5'-8	—
a12	81	#4	1'-9"	L	a12	61	#4	1'-9"	L
a13	81	#4	6'-8	⊏	a13	61	#4	6'-8	⊏
a14	12	#7	46'-6"	—	a16	12	#7	36'-0"	—
b1	123	#5	27-6	—	b	154	#5	31-0	—
b2	126	#4	27-6	—					
m3	60	#6	4'-6"	—	m	50	#6	5'-8"	—
m4	24	#4	3'-0"	—	m1	10	#4	4'-4"	—
m5	24	#4	4'-3"	—	m2	10	#4	3'-8"	—
e	32	#5	20'-8	—	e	24	#5	20'-8"	—
d	392	#5	3'-0"	L	d	296	#5	3'-0"	L
s	48	#4	7'-0"	⊔	s	40	#4	7'-0"	⊔
s2	48	#4	9'-0"	⊔	s1	20	#4	8'-0"	⊔
Class X Concrete		Cu Yds	118.9		Class X Concrete		Cu Yds	87.2	
Reinforcement Bars		Lbs	19,560		Reinforcement Bars		Lbs	13950	
Structural Steel		Lbs	4070		Structural Steel		Lbs	3320	
Precast Prestressed Conc. I Beams (4'-0")		L.F.	552		Precast Prestressed Conc. I Beams (3'-6")		L.F.	365	

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL
PLANS

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	45
SHEETS			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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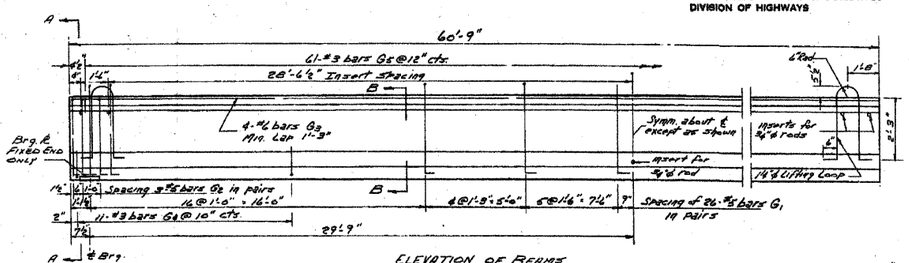
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

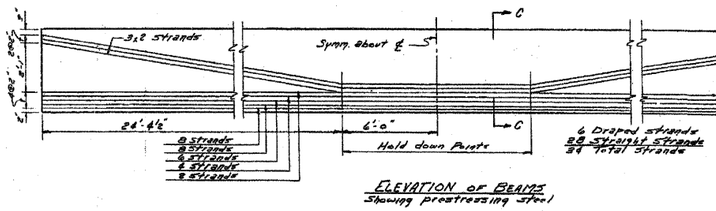
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 53	531-1-B-7	COOK	26	15
F.A.U.				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

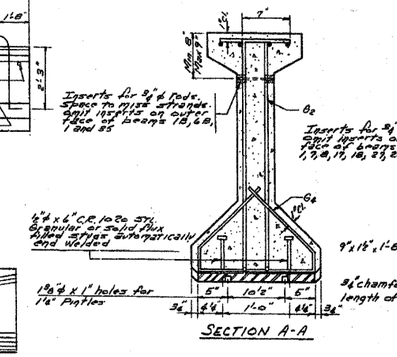
SHEET NO. 6
12 SHEETS



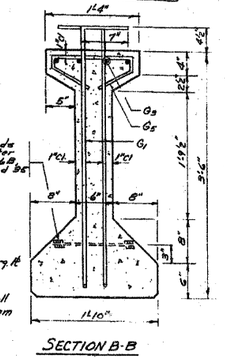
ELEVATION OF BEAMS
Showing reinforcement and dimensions



ELEVATION OF BEAMS
Showing prestressing steel

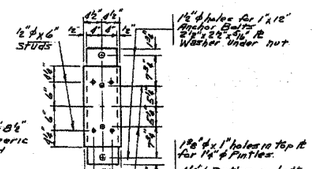


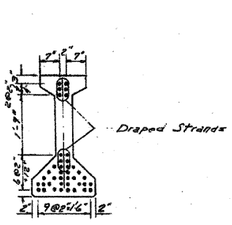
SECTION A-A



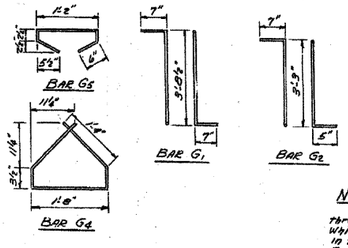
SECTION B-B

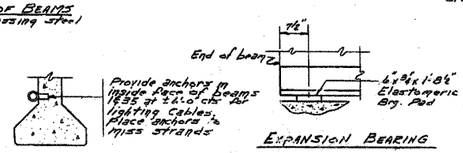
9"x15"x1'-8½" Brg.℄
¾" chamfer full length of beam





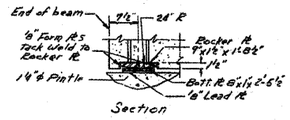
SECTION C-C



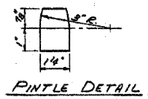


ANCHOR DETAIL FOR LIGHTING CABLES

EXPANSION BEARING



FIXED BEARING



PINTLE DETAIL

BAR SCHEDULE

Bar	No.	Size	Length	Shape
G1	4264	#5	4'-10½"	1L
G2	472	#5	4'-3"	1L
G3	1268	#6	29'-9"	—
G4	902	#3	1'-11"	△
G5	2501	#3	2'-7"	□

NOTES:

All reinforcement and prestressing steel, steel rocker ℄, inserts and threaded rods for inserts, anchors for lighting cables, and other items which are cast into the precast concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams".

All bottom plates, pintles, anchor bolts, plate washers and lead plates are included as structural steel.

Prestressing steel shall have a nominal diameter of ½ inches.

Inserts for ¾"ϕ threaded rods are to be two strut coil type and flared loop type.

Alternate steel banding .035x¾" meeting the approval of the Engineer may be substituted for the G4 bars.

Steel for lifting hooks shall be non-deformed bars of structural or intermediate grade billet steel.

DESIGNED	F.K. Yaseen	Sept. 76
CHECKED	Hyse	
DRAWN	F.K.S.	
CHECKED	P.K.	

EXAMINED (W. E. Bamesberger) 1967
ENGINEER OF BRIDGE DESIGN
STATE OF ILLINOIS

42" BEAM DETAILS
MAIN STRUCTURE & EAST FRONTAGE ROAD STRUCTURE
S.B.I. RTE. 53 SEC 531-1-B-7
COOK COUNTY
STATION 142+20.00

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL PLANS

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	2594	04-00091-00-BR	COOK	50	46
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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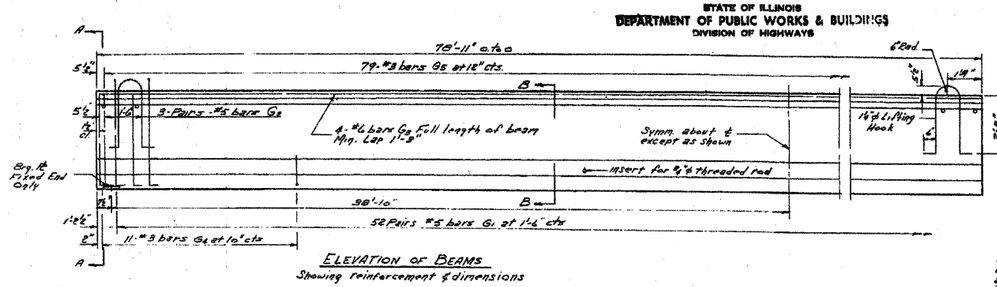
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

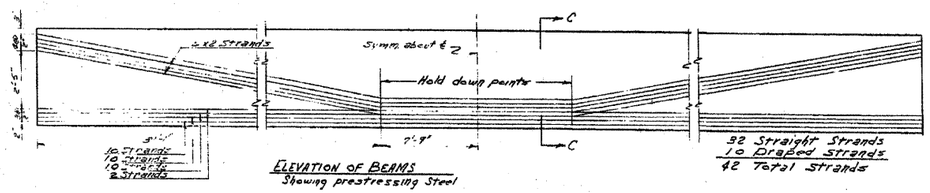
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

STATE ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	531-1-B-7	COOK	26	16
F.A.U.				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

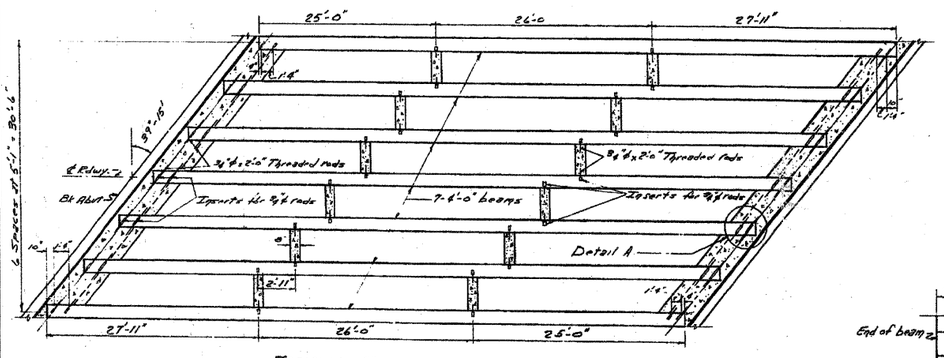
SHEET NO. 7
12 SHEETS



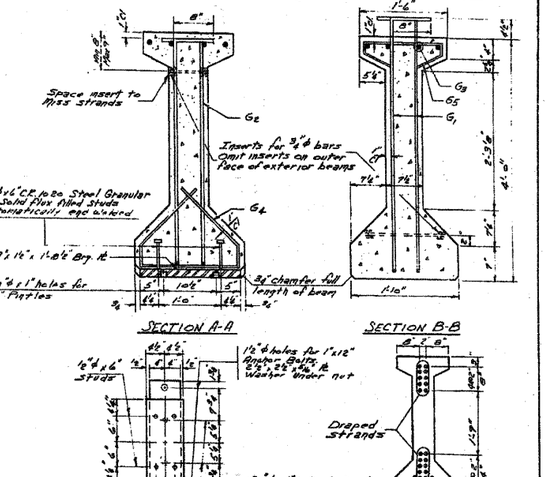
ELEVATION OF BEAMS
Showing reinforcement & dimensions



ELEVATION OF BEAMS
Showing prestressing Steel



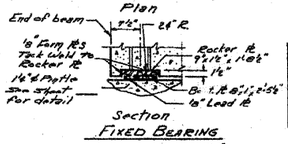
FRAMING PLAN
Showing location of inserts and diaphragms



SECTION A-A

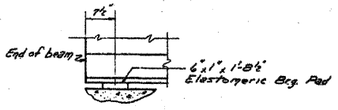
SECTION B-B

SECTION C-C

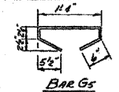


BAR SCHEDULE

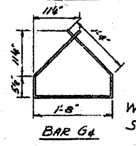
Bar	No.	Size	Length	Shape
G1	728	#5	5'-6½"	TL
G2	84	#8	41'-10"	TL
G3	52	#6	80'-0"	—
G4	154	#3	2'-3"	⌂
G5	558	#8	2'-9"	⌂



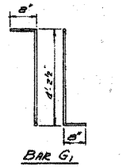
EXPANSION BEARING



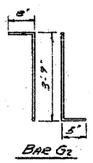
BAR G5



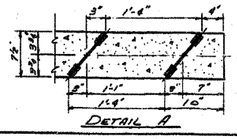
BAR G4



BAR G1



BAR G2



DETAIL A

NOTES: See Sheet 4

48" BEAM DETAILS
WEST FRONTAGE ROAD
S.B.I RTE. 53 SEC. 531-1-B-7
COOK COUNTY
STATION 1421+20.00

DESIGNED	F.K. Jourdan Sept. 86
CHECKED	WBR
DRAWN	F.K.J.
CHECKED	R.K.

EXAMINED	W. B. Reimann
PASSED	
APPROVED	

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL PLANS

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	2594	04-00091-00-BR	COOK	50	47
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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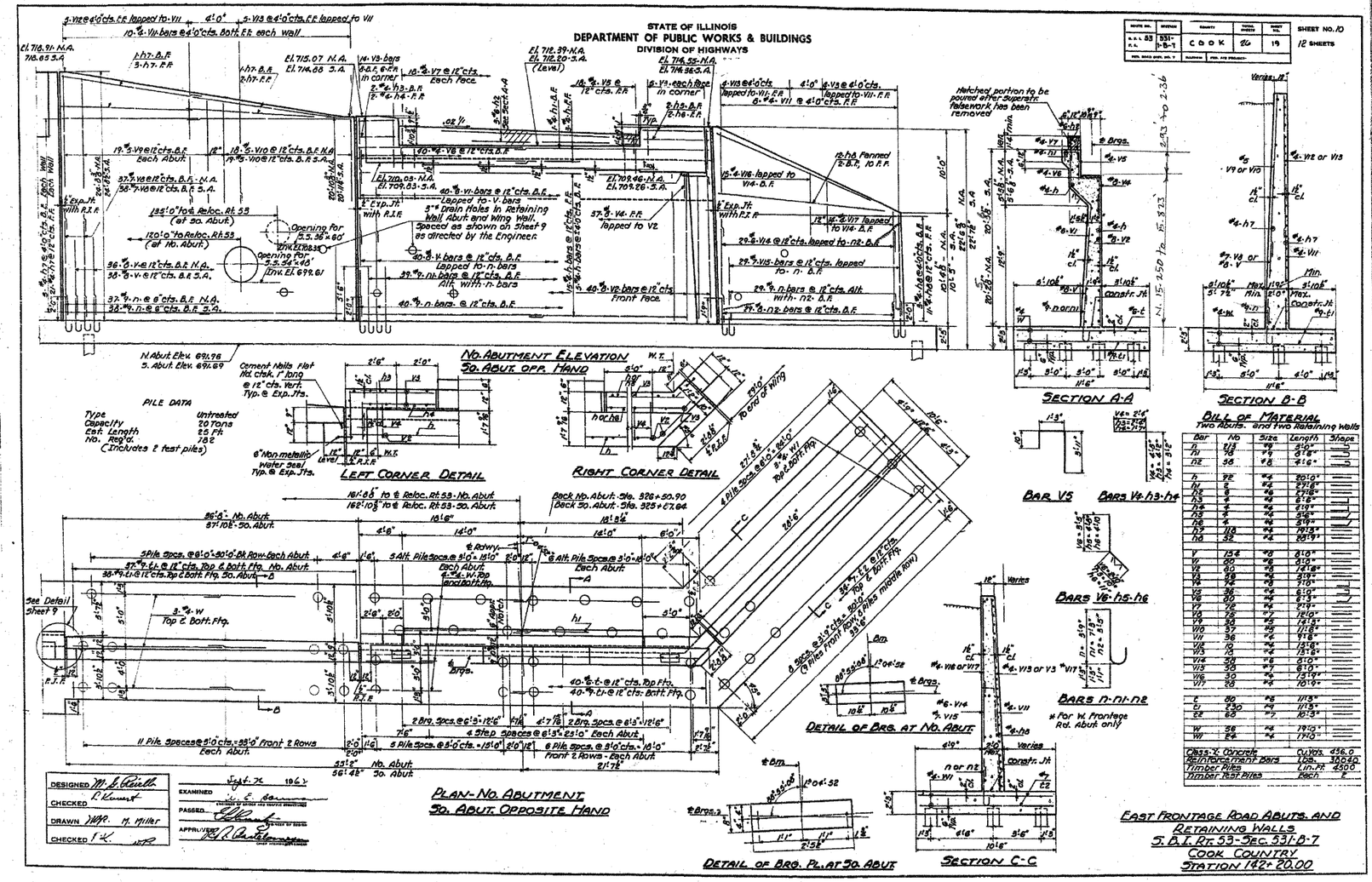
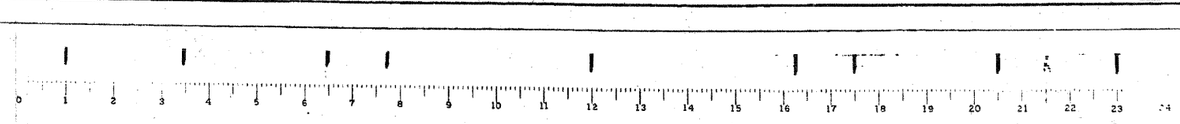
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 83	531-B-7	COOK	20	19
F.A.				
DIST. BRIDGE ENGR. INIT.		RAILROAD	DIST. FED. PROJECT	

SHEET NO. 10
12 SHEETS





FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL PLANS

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	2594	04-00091-00-BR	COOK	50	48
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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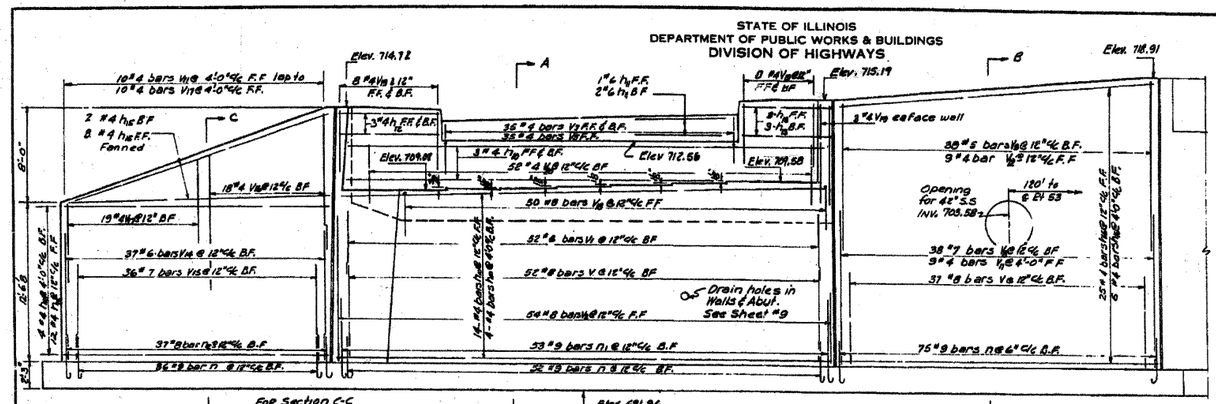
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

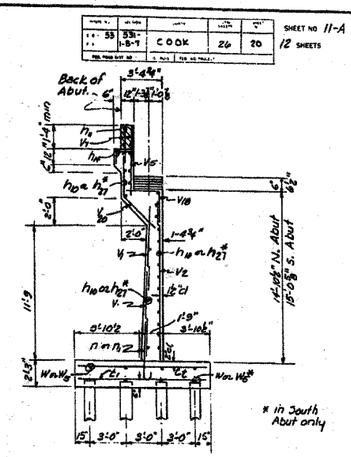
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

1-58	53	53-1-8-7	COOK	26	20

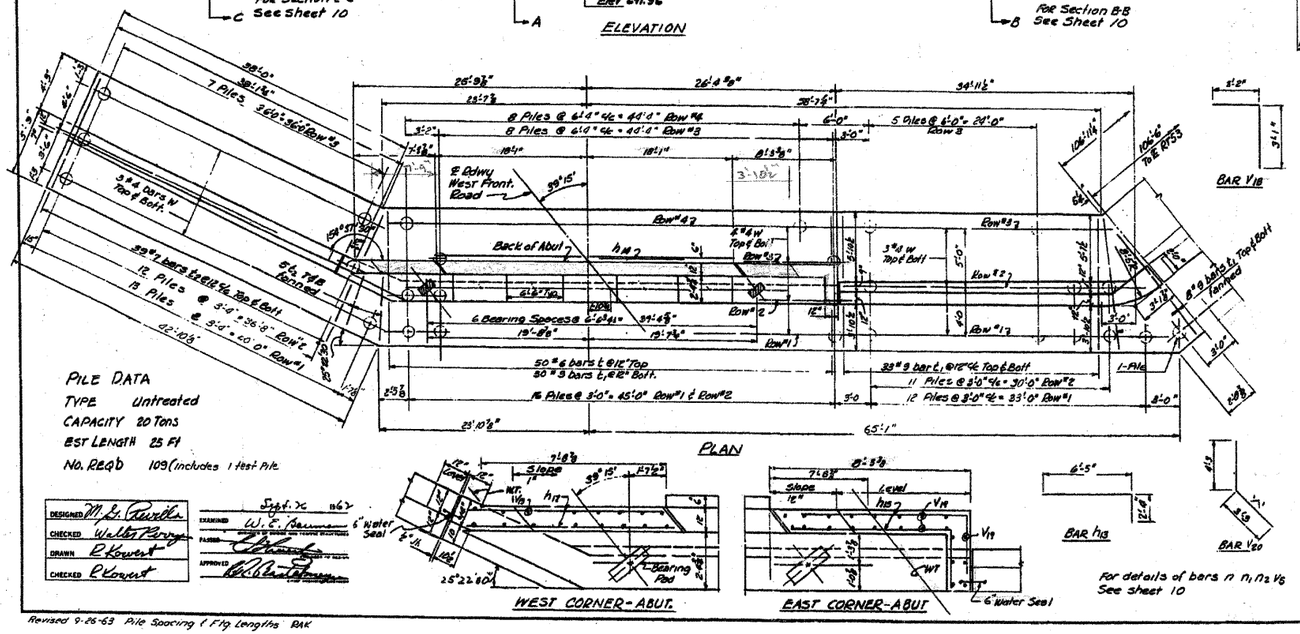
SHEET NO 11-A
12 SHEETS



ELEVATION



SECTION A-A



PLAN

PILE DATA
TYPE Untreated
CAPACITY 20 Tons
EST LENGTH 25 Ft
NO. REQ'D 109 (includes 1 test Pile)

WEST CORNER-ABUT.

EAST CORNER-ABUT

For details of bars n, n1, n2 V8 See sheet 10

BILL OF MATERIAL

BAR	No	SIZE	LENGTH	SHAPE
n	163	#9	51'0	
n1	53	#9	8'6	
n2	37	#7	4'6	
h10	48	#4	26'-6"	
h11	6	#6	18'6"	
h12	6	#4	8'10"	
h13	6	#4	8'-9"	
h14	2	#4	18'6	
h15	58	#4	19'0"	
h16	62	#4	18'0"	
W	48	#4	19'0	
V	89	#8	8'0"	
V1	52	#6	8'0	
V2	54	#8	14'6	
V3	35	#8	6'0	
V7	70	#4	2'9	
V8	32	# 7	18'0	
V9	98	#4	14'3	
V11	19	#4	11'0	
V12	9	#4	15'6	
V14	37	#6	8'0"	
V15	34	#7	6'0"	
V16	18	#4	15'0"	
V17	28	#4	10'9	
V18	50	#8	6'3	
V19	38	#6	6'3	
V20	52	#4	7'6	
L	50	#6	11'3	
L1	116	#9	11'3	
L2	18	#7	10'3	
Class X Concrete				8879
Reinforcement Bars				23740
Untreated Piles				2700
Test Piles (Timber)				1

(REVISED)
NORTH ABUTMENT & RETAIN. WALL
WEST FRONTAGE ROAD
SBI RT 53 SEC. 531-1-8-7
COOK COUNTY

Revised 9-26-63 Pile Spacing & Fig Lengths BAK

DESIGNED	-
CHECKED	-
DRAWN	-
CHECKED	-

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL PLANS

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	2594	04-00091-00-BR	COOK	50	49
			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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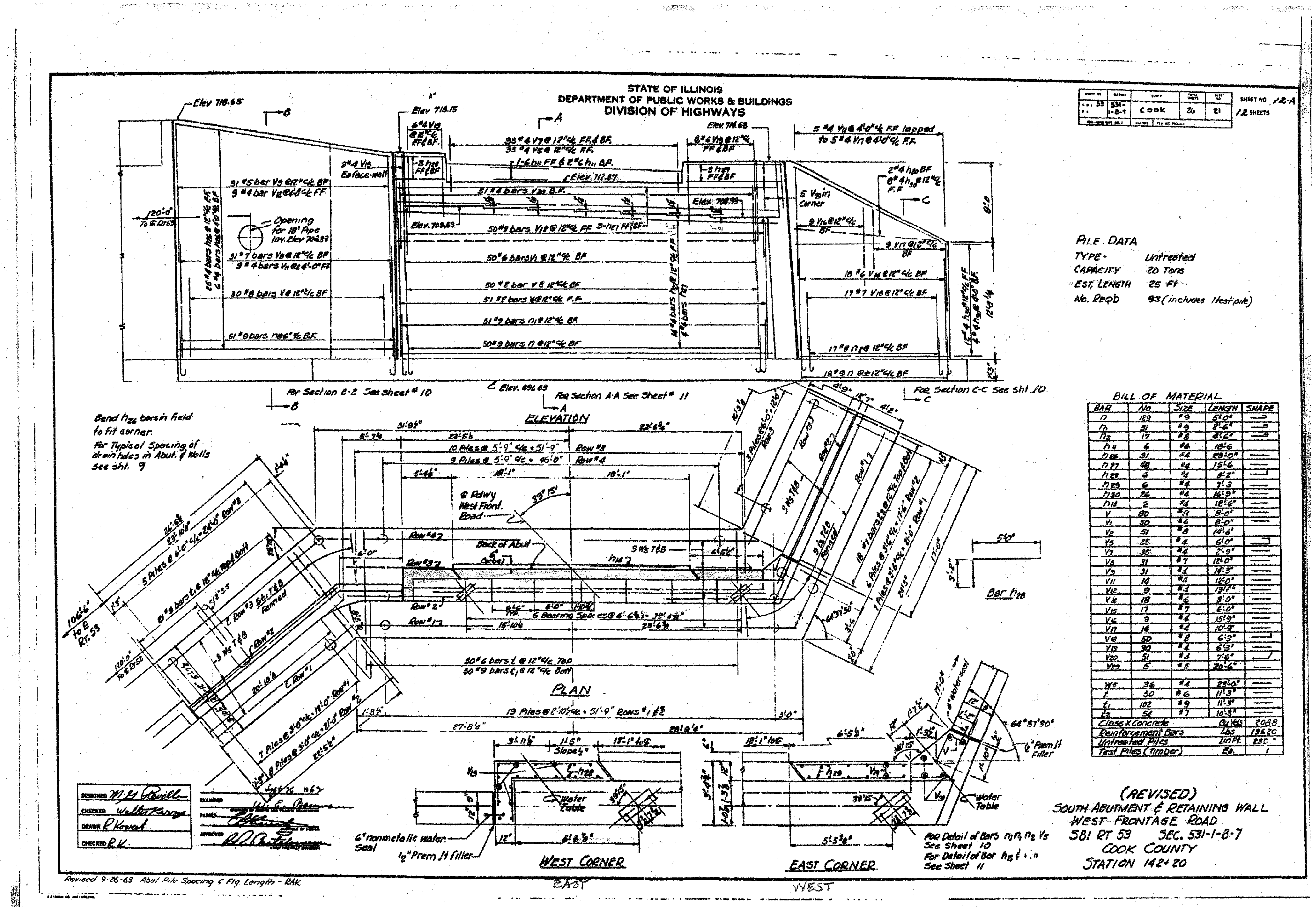
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BILL OF MATERIAL

BAR	No	SIZE	LENGTH	SHAPE
n	129	#9	5'-0"	
n1	51	#9	8'-6"	
n2	17	#8	4'-6"	
h11	6	#6	18'-6	
h26	31	#4	29'-0"	
h27	48	#4	15'-6	
h28	6	#4	6'-2"	
h29	6	#4	7'-3	
h30	26	#4	16'-9"	
h14	2	#4	18'-6"	
V	80	#8	8'-0"	
V1	50	#6	8'-0"	
V2	51	#8	14'-6"	
V5	35	#4	6'-0"	
V7	35	#4	2'-9"	
V8	31	#7	12'-0"	
V9	31	#4	14'-3"	
V11	14	#4	12'-0"	
V12	9	#3	13'-8"	
V14	18	#6	8'-0"	
V15	17	#7	6'-0"	
V16	9	#4	15'-9"	
V17	14	#4	10'-9"	
V18	50	#8	6'-3"	
V19	30	#4	6'-3"	
V20	51	#4	7'-6"	
V29	5	#5	20'-6"	
W5	36	#4	23'-0"	
t	50	#6	11'-3"	
t1	102	#9	11'-3"	
t2	54	#7	10'-3"	
Class X Concrete			Cu Yds	208.8
Reinforcement Bars			Lbs	19620
Untreated Piles			Lin Ft.	2350
Test Piles (Timber)			Ea.	1

OVER SALT CREEK
F.A.U. ROUTE 2594
SEC. 04-00091-00-BR
COOK COUNTY
HISTORICAL STRUCTURAL
PLANS

FOR INFORMATION ONLY
FULL PLAN SET AVAILABLE AT IDOT DISTRICT 1 OFFICE

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

EXAMINED 200
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2594	04-00091-00-BR	COOK	50	50
SHEETS			CONTRACT NO. 63471		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		