

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60F60		

D-91-145-09



**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROPOSED**  
**HIGHWAY PLANS**  
**FAP ROUTE 305 (PALATINE ROAD)**  
**SECTION: 1415 B**  
**WEST AND EAST FRONTAGE ROAD**  
**BRIDGE SUPERSTRUCTURE REPLACEMENT**  
**COOK COUNTY**  
**C-91-145-09**

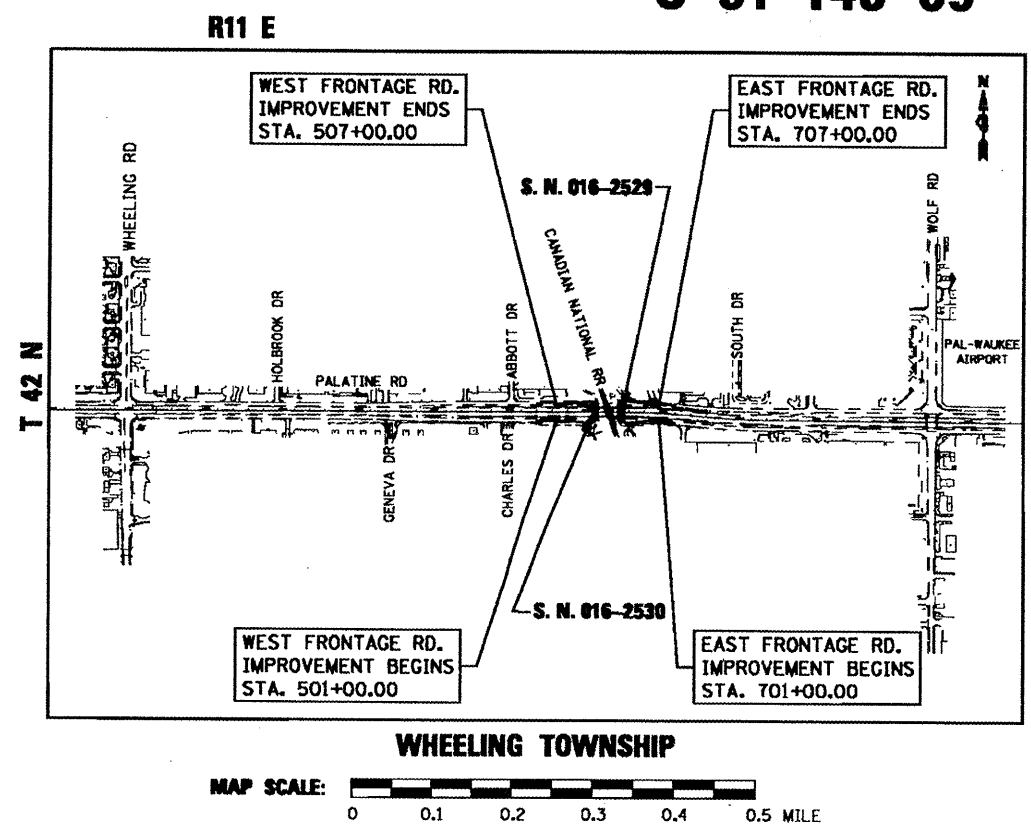
FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION**  
 PALATINE ROAD: FC 30 - OTHER PRINCIPAL ARTERIAL  
 FRONTAGE ROAD: FC 90 - LOCAL ROAD

**TRAFFIC DATA**  
 2006 ADT = 30,000 - PALATINE ROAD  
 2026 ADT = 54,000 - PALATINE ROAD

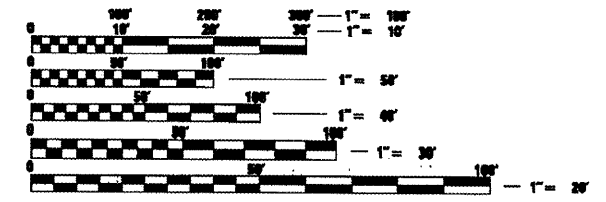
**POSTED SPEED LIMIT**  
 PALATINE MAINLINE (W OF R.R.) - 55 MPH  
 PALATINE MAINLINE (E OF R.R.) - 45 MPH  
 FRONTAGE ROADS - 30 MPH

**PROJECT LOCATED IN  
THE VILLAGE OF WHEELING**



**WEST FRONTAGE RD OVER PALATINE RD**  
 STATION 684+00.00  
 STRUCTURE NO 016-2530  
 BRIDGE SUPERSTRUCTURE REPLACEMENT

**EAST FRONTAGE RD OVER PALATINE RD**  
 STATION 704+00.00  
 STRUCTURE NO 016-2529  
 BRIDGE SUPERSTRUCTURE REPLACEMENT



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.

**J.U.L.I.E.**  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 011

**PROJECT MANAGER: ISAAC KWARTENG**  
 847-705-4230  
**PROJECT ENGINEER: RON L ZENAROSA**  
 847-705-4212  
**CONTRACT NO. 60F60**

GROSS LENGTH OF IMPROVEMENTS = 1,200.00 LIN. FT. (= 0.227 MILES)  
 NET LENGTH OF IMPROVEMENTS = 1,200.00 LIN. FT. (= 0.227 MILES)



*Thomas M. Hein*  
 THOMAS M. HEIN, P. E.  
 IL. LIC. NO. 062-053199  
 EXP 11/30/09  
 DATE 1/29/09



*Gary S. Powell*  
 GARY S. POWELL, S.E.  
 IL. LIC. NO. 081-004771  
 EXP 11-30-2010  
 DATE 01-28-2009



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED JANUARY 28, 2009  
*Diane M. O'Keefe*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 2009  
*Charles G. Ingensoll*  
 ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009  
*Christine M. Reed*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

# INDEX OF SHEETS, GENERAL NOTES AND HIGHWAY STANDARDS

**INDEX OF DRAWINGS**

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*****	*****
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6	TYPICAL SECTIONS
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14 - 15	ROADWAY DETAILS
16	MAINTENANCE OF TRAFFIC-DETOUR PLAN
17 - 19	MAINTENANCE OF TRAFFIC-FRONTAGE ROAD CLOSURE
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**GENERAL NOTES - ROADWAY**

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ALL ELEVATIONS REFER TO 1929 N.G.V.D. DATUM.

THE CONTRACTOR WILL BE PROVIDED COPIES OF ALL PERMITS ISSUED TO DATE.

THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS, AND THE AREA IMMEDIATELY ADJACENT TO PROPOSED CURB LINES. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.

THE CONTRACTOR'S PERSONNEL SHALL NOT BE ALLOWED TO PARK PERSONAL VEHICLES IN THE WORK AREA AND/OR CONSTRUCTION LIMITS.

WHERE ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, ADJOINING RESIDENTIAL AREAS AND AIRPORT OPERATIONS.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF .035 GAL. PER SQ. YD.

SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

TWO (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT 847-715-8419.

THE RESIDENT 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.

PERIODIC CLEANING OF THE INLET FILTERS, AS DIRECTED BY THE ENGINEER, SHALL CONSIST OF INSPECTION, CLEANING (INCLUDES REMOVAL AND PROPER DISPOSAL OF DEBRIS AND SILT THAT HAS ACCUMULATED IN THE FILTER FABRIC BAG), BY VACTORING, REMOVING AND DUMPING, OR ANY OTHER METHOD APPROVED BY THE ENGINEER. THE COST FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE INLET FILTERS.

TEN FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

NOMINAL QUANTITY FOR PAY ITEMS, POROUS GRANULAR EMBANKMENT, SUBGRADE, AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAVE BEEN ADDED TO BE USED AT THE DISCRETION OF THE RESIDENT ENGINEER.

**GENERAL NOTES - UTILITIES**

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BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 TO HAVE EXISTING UNDERGROUND UTILITIES LOCATED IN THE FIELD (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES, WHEN CONSIDERED NECESSARY BY THE ENGINEER BY METHODS APPROVED BY THE ENGINEER AND SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES AND THE LOCAL AGENCIES INVOLVED.

**GENERAL NOTES - FEDERAL AVIATION ADMINISTRATION**

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IT IS REQUIRED THAT THE MANAGER OF THE PALWAUKEE AIRPORT AT 847-537-8580 AND AIR TRAFFIC CONTROL TOWER MANAGER AT 847-229-6000 BE NOTIFIED AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE TEMPORARY STRUCTURE BEING ERRECTED AND AGAIN WHEN THE STRUCTURE IS REMOVED FROM THE SITE.

PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS. IF THE FLOODLIGHTS HAVE ADVERSE EFFECTS ON OPERATIONS AT THE AIRPORT, THEY WILL BE REPOSITIONED/HOODED, ETC. TO MITIGATE THE ADVERSE EFFECT. IF THIS IS NOT POSSIBLE, NIGHTTIME OPERATIONS SHALL BE TERMINATED UPON REQUEST OF THE AIRPORT MANAGER.

CRANE(S) SHALL BE LOWERED AT THE REQUEST OF THE AIR TRAFFIC CONTROL TOWER, AIRPORT MANAGER OR THE CHICAGO FLIGHT PROCEDURES OFFICE UPON REQUEST DUE TO OPERATIONAL ISSUES, SUCH AS EMERGENCIES, INCLEMENT WEATHER, OR OTHER SAFETY CONCERNS.

PALWAUKEE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. LOCAL COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION.

**HIGHWAY STANDARDS**

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280001-04 TEMPORARY EROSION CONTROL SYSTEMS

420001-07 PAVEMENT JOINTS

420401-07 BRIDGE APPROACH PAVEMENT CONNECTOR

515001-03 NAME PLATE FOR BRIDGES

606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

606301-04 PC CONCRETE ISLANDS AND MEDIANS

630001-08 STEEL PLATE BEAM GUARDRAIL

635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT

635011-02 REFLECTOR MARKER AND MOUNTING DETAILS

664001-02 CHAIN LINK FENCE

701400-03 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY

701401-05 LANE CLOSURE, FREEWAY/EXPRESSWAY

701411-05 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH

701421-02 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH TO 55 MPH

701501-05 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701601-06 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

701901-01 TRAFFIC CONTROL DEVICES

720001-01 SIGN PANEL MOUNTING DETAILS

720006-02 SIGN PANEL ERECTION DETAILS

728001-01 TELESCOPING STEEL SIGN SUPPORT

731001-01 BASE FOR TELESCOPING STEEL SIGN SUPPORT

000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

001001-02 AREAS OF REINFORCEMENT BARS

001006 DECIMAL OF AN INCH AND OF A FOOT

FILE NAME =	USER NAME = 2piemid	DESIGNED - DLP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST AND EAST FRONTAGE ROADS</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
G:\Project\2002305\CADD\Civil1\Sht\003\03PLMLIN_01.dgn		DRAWN - ENTRAN	REVISED -		<b>INDEX OF SHEETS, GENERAL NOTES AND HIGHWAY STANDARDS</b>		305	1415 B	COOK	75	2
		CHECKED - TMH	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60F60
		DATE - 1/09	REVISED -								

# SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE (WEST FRONTAGE ROAD)	BRIDGE (EAST FRONTAGE ROAD)	CONSTRUCTION TYPE CODE (100% STATE)													
				1000-2A	X201-2A	X201-2A														
20200100	EARTH EXCAVATION	CU YD	663	663	0	0														
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	402	402	0	0														
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	130	130	0	0														
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	196	196	0	0														
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	5,590	5,590	0	0														
25000210	SEEDING, CLASS 2A	ACRE	0.73	0.73	0.00	0.00														
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	66	66	0	0														
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	66	66	0	0														
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	66	66	0	0														
25100630	EROSION CONTROL BLANKET	SQ YD	3,517	3,517	0	0														
25200110	SODDING, SALT TOLERANT	SQ YD	2,037	2,037	0	0														
25200200	SUPPLEMENTAL WATERING	UNIT	1	1	0	0														
28000400	PERIMETER EROSION BARRIER	FOOT	1,210	1,210	0	0														
28000500	INLET AND PIPE PROTECTION	EACH	22	22	0	0														
28000510	INLET FILTERS	EACH	7	7	0	0														
35101500	AGGREGATE BASE COURSE, TYPE B	CU YD	57	57	0	0														
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	69	69	0	0														
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	390	390	0	0														
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	0	0														
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	24	24	0	0														
40701861	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9"	SQ YD	2,699	2,699	0	0														
42001300	PROTECTIVE COAT	SQ YD	469	469	0	0														
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	76	76	0	0														
44000100	PAVEMENT REMOVAL	SQ YD	3,079	3,079	0	0														
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	98	98	0	0														
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	270	270	0	0														
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2,175	2,175	0	0														
44000600	SIDEWALK REMOVAL	SQ FT	569	569	0	0														
44000700	APPROACH SLAB REMOVAL	SQ YD	389	389	0	0														
44003100	MEDIAN REMOVAL	SQ FT	3,577	3,577	0	0														
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	50	50	0	0														
50101700	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1	EACH	1	0	1	0														
50101800	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 2	EACH	1	0	0	1														
50102400	CONCRETE REMOVAL	CU YD	75.8	0.0	40.8	35.0														

\* SPECIALTY ITEM

FILE NAME =	USER NAME = 2piend	DESIGNED - DLP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST AND EAST FRONTAGE ROADS SUMMARY OF QUANTITIES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Di:\projects\20022005\CADD\Civ1\Sheet\003\03PLM.LSM_01.dgn		DRAWN - ENTRAN	REVISED -			305	1415 B	COOK	75	3	
PLOT SCALE = 50.00' / IN.		CHECKED - TMH	REVISED -			CONTRACT NO. 60F60					
PLOT DATE = 2/4/2009		DATE - 1/09	REVISED -			SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

# SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE (WEST FRONTAGE ROAD)	BRIDGE (EAST FRONTAGE ROAD)	CONSTRUCTION TYPE CODE (100% STATE)													
				1000-2A	X201-2A	X201-2A														
50200100	STRUCTURE EXCAVATION	CU YD	110	0	60	50														
50300225	CONCRETE STRUCTURES	CU YD	133.5	0.0	69.7	63.8														
50300255	CONCRETE SUPERSTRUCTURE	CU YD	437.4	0.0	248.9	188.5														
50300260	BRIDGE DECK GROOVING	SQ YD	1,197	0	615	582														
50300300	PROTECTIVE COAT	SQ YD	1,559	0	864	695														
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	5,786	0	3,192	2,594														
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	110,060	0	59,320	50,740														
50800515	BAR SPLICERS	EACH	162	0	96	66														
50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	164.0	0.0	97.5	66.5														
51500100	NAME PLATES	EACH	2	0	1	1														
52000110	PREFORMED JOINT STRIP SEAL	FOOT	88	0	48.5	39.5														
58700300	CONCRETE SEALER	SQ FT	1,442	0	801	641														
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	18	18	0	0														
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	5	5	0	0														
60405740	FRAMES AND GRATES TO BE REMOVED	EACH	2	2	0	0														
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2	0	0														
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,244	1,244	0	0														
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	876	876	0	0														
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	3,577	3,577	0	0														
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	115	115	0	0														
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1	0	0														
63200310	GUARDRAIL REMOVAL	FOOT	103	103	0	0														
66400505	CHAIN LINK FENCE, 8'	FOOT	275	275	0	0														
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	0	0														
67100100	MOBILIZATION	L SUM	1	1	0	0														
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	0	0														
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6	0	0														
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,582	1,582	0	0														
72000100	SIGN PANEL - TYPE 1	SQ FT	25.5	25.5	0.0	0.0														
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1	0	0														
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	77.5	77.5	0.0	0.0														
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	233.9	233.9	0.0	0.0														
73304000	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	14	14	0	0														
73602000	REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	2	2	0	0														

\* SPECIALTY ITEM

FILE NAME =	USER NAME = Zpiend	DESIGNED - DLP	REVISED -
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		CHECKED - TMH	REVISED -
		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>WEST AND EAST FRONTAGE ROADS SUMMARY OF QUANTITIES</b>	
SCALE: 1"=50'	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	4
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60F60		

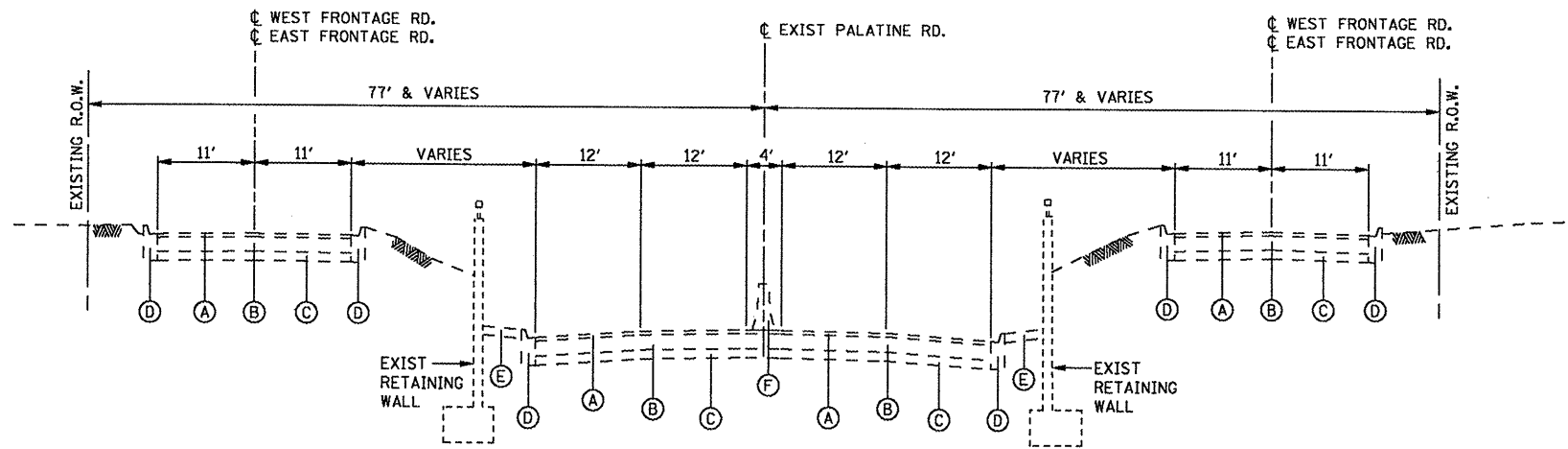


# SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE (WEST FRONTAGE ROAD)	BRIDGE (EAST FRONTAGE ROAD)	CONSTRUCTION TYPE CODE (100% STATE)															
				1000-2A	X281-2A	X281-2A																
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	320	320	0	0																
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	500	500	0	0																
* 78004240	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 8"	FOOT	1,324	1,324	0	0																
* 78004250	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 12"	FOOT	415	415	0	0																
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	24	24	0	0																
* 78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	4	4	0	0																
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	16	16	0	0																
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	1	1	0	0																
78300100	PAVEMENT MARKING REMOVAL	SQ FT	80	80	0	0																
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	24	24	0	0																
* B2000362	TREE, ACER GINNALA FLAME (FLAME AMUR MAPLE), 4' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	10	10	0	0																
* C2011830	SHRUB, VIBURNUM DENTATUM MORTON (NORTHERN BURGUNDY ARROWWOOD VIBURNUM), 2-1/2' HEIGHT, BALLED AND BURLAPPED	EACH	100	100	0	0																
X0321472	REMOVE TEMPORARY CONCRETE BARRIER	FOOT	60	60	0	0																
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	32	32	0	0																
X0325236	BICYCLE RAILING TO BE REMOVED AND REINSTALLED	FOOT	66.5	0.0	66.5	0.0																
X0712400	TEMPORARY PAVEMENT	SQ YD	779	779	0	0																
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	2	2	0	0																
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1	0	0																
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	649.6	0.0	357.1	292.5																
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1	0	0																
X7030104	WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 4 INCH	FOOT	3,706	3,706	0	0																
X7030108	WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 8 INCH	FOOT	374	374	0	0																
X7030112	WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 12 INCH	FOOT	61	61	0	0																
X7030124	WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 24 INCH	FOOT	19	19	0	0																
XX001758	WOOD FENCE REMOVAL	FOOT	32	32	0	0																
XX006571	REMOVE AND REPLACE BOLLARDS	EACH	14	14	0	0																
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	3,407	3,407	0	0																
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	52	0	26	26																
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	0	0																
Z0029999	IMPACT ATTENUATOR REMOVAL	EACH	1	1	0	0																
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	0	0																

\* SPECIALTY ITEM

FILE NAME = G:\proje\2082305\CADD\Civil\Sheet\083\083PLM.LSM_01.dgn	USER NAME = zpried	DESIGNED - DLP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST AND EAST FRONTAGE ROADS SUMMARY OF QUANTITIES</b>	F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 5
PLOT SCALE = 50.00' / IN.	CHECKED - TMH	DATE - 1/09	REVISED -	SCALE: 1"=50'	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 60F60				
PLOT DATE = 2/4/2009	DATE - 1/09	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

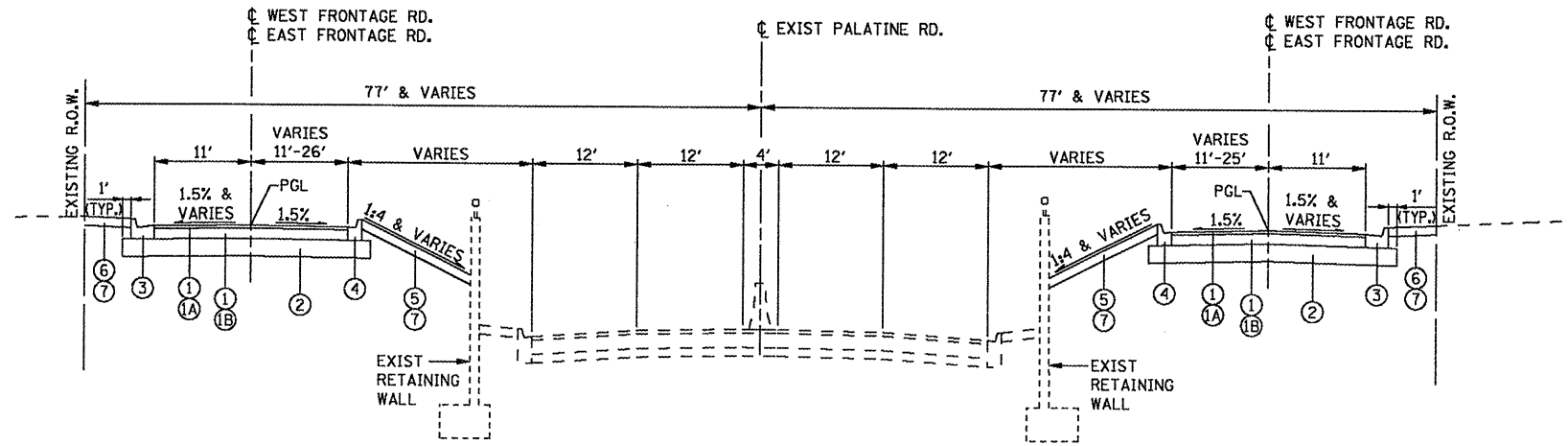


**EXISTING TYPICAL SECTION**  
 WEST FRONTAGE ROAD  
 STA 501+00 TO STA 507+00  
 EAST FRONTAGE ROAD  
 STA 701+00 TO STA 707+00

**PALATINE ROAD**  
 STA 1318+27 TO STA 1325+00

**EXISTING TYPICAL SECTION**  
 WEST FRONTAGE ROAD  
 STA 501+00 TO STA 507+00  
 EAST FRONTAGE ROAD  
 STA 701+00 TO STA 707+00

- EXISTING LEGEND**
- (A) BITUMINOUS CONCRETE SURFACE (2.5-INCH AND VARIES)
  - (B) PORTLAND CEMENT CONCRETE PAVEMENT (10-INCH AND VARIES)
  - (C) SUB-BASE GRANULAR MATERIAL (6-INCH AND VARIES)
  - (D) COMBINATION CONCRETE CURB AND GUTTER (VARIES)
  - (E) BITUMINOUS/CONCRETE MEDIAN SURFACE
  - (F) CONCRETE BARRIER & BASE



**PROPOSED TYPICAL SECTION**  
 WEST FRONTAGE ROAD  
 STA 501+00 TO STA 507+00  
 EAST FRONTAGE ROAD  
 STA 701+00 TO STA 707+00

**PALATINE ROAD**  
 STA 1318+27 TO STA 1325+00

**PROPOSED TYPICAL SECTION**  
 WEST FRONTAGE ROAD  
 STA 501+00 TO STA 507+00  
 EAST FRONTAGE ROAD  
 STA 701+00 TO STA 707+00

- PROPOSED LEGEND**
- (1) HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 9 INCH
  - (1A) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2 INCH
  - (1B) HOT-MIX ASPHALT BINDER COURSE, N70, IL-19.0, 7 INCH
  - (2) AGGREGATE SUBGRADE, 12 INCH
  - (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
  - (4) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
  - (5) SEEDING, CLASS 2A
  - (6) SODDING, SALT TOLERANT
  - (7) TOPSOIL FURNISH & PLACE, 6"

MIX DESIGNS	AC TYPE	AIR VOIDS
<b>FULL DEPTH PAVEMENT</b>		
HMA SURFACE COURSE, MIX "D" N70	PG64-22	4% @ 70 GYR.
HMA BINDER COURSE, IL-19.0 N70	PG64-22*	4% @ 70 GYR.
<b>BIKE PATH</b>		
HMA SURFACE COURSE, MIX "C" N50	PG64-22	4% @ 50 GYR.
<b>TEMPORARY PAVEMENT</b>		
HMA SURFACE COURSE, MIX "D" N50	PG64-22	4% @ 50 GYR.
HMA BINDER COURSE IL-19.0	PG64-22*	4% @ 50 GYR.
<b>DRIVEWAYS</b>		
HMA SURFACE COURSE, MIX "C" N50	PG64-22	4% @ 50 GYR.
HMA BASE COURSE (BINDER IL-19MM)	PG64-22*	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT MIXTURES IS 112 LBS/SY/IN.  
 \* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

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		CHECKED - TMH	REVISED -
		DATE - 1/09	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**WEST AND EAST FRONTAGE ROADS**  
**TYPICAL SECTIONS**

SCALE: 1"=50'      SHEET NO. OF SHEETS      STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	6
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F60	

# SCHEDULE OF QUANTITIES

20700420 POROUS GRANULAR EMBANKMENT, SUBGRADE		
STATION	CUT/FILL(SF)	CU YD
NOMINAL QUANTITY ESTIMATED FOR EACH QUADRANT 22' WIDE X 20' LONG X 2' DEEP		
WEST FRONTAGE ROAD SW QUAD		32.6
NW QUAD		32.6
EAST FRONTAGE ROAD SE QUAD		32.6
NE QUAD		32.6
TOTAL =		130

21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION		
STATION	WIDTH(FT)	SQ YD
NOMINAL QUANTITY ESTIMATED FOR EACH QUADRANT 22' WIDE X 20' LONG X 2' DEEP		
WEST FRONTAGE ROAD SW QUAD		48.9
NW QUAD		48.9
EAST FRONTAGE ROAD SE QUAD		48.9
NE QUAD		48.9
TOTAL =		196

21101625 TOPSOIL FURNISH AND PLACE, 6"		
STATION	WIDTH(FT)	SQ YD
WEST FRONTAGE ROAD (LEFT SIDE)		
501+00.0	10.3	63.0
501+50.0	12.4	68.7
502+00.0	12.4	62.4
502+50.0	10.1	61.6
503+00.0	12.1	8.8
503+50.0	8.8	15.3
503+65.7	8.8	16.8
504+00.0	0.0	17.6
504+34.3	9.3	16.1
504+50.0	9.3	11.5
505+00.0	11.5	9.9
505+50.0	9.9	61.6
506+00.0	12.2	68.1
506+50.0	12.3	68.1
WEST FRONTAGE ROAD (RIGHT SIDE)		
501+00.0	10.1	45.5
501+50.0	6.3	32.3
502+00.0	5.3	30.1
502+50.0	5.6	33.3
503+00.0	6.4	40.5
503+50.0	8.2	14.2
503+65.7	8.2	15.6
504+00.0	0.0	19.5
504+34.3	10.2	17.8
504+50.0	10.2	46.5
505+00.0	6.5	31.7
505+50.0	4.9	25.8
506+00.0	4.4	20.7

506+50.0 3.0 - 507+00.0 3.2 17.2				
EAST FRONTAGE ROAD (LEFT SIDE)				
701+00.0	4.6	7.2	32.9	
701+50.0	7.2	6.3	37.7	
702+00.0	6.3	0.0	17.6	
702+50.0	0.0	6.6	18.3	
703+00.0	6.6	6.0	35.0	
703+50.0	6.0	6.0	10.4	
703+65.6	6.0		11.5	
704+00.0		7.3	13.9	
704+34.3	7.3	7.3	12.6	
704+50.0	7.3	0.0	20.2	
705+00.0	0.0	7.7	21.5	
705+50.0	7.7	5.2	36.0	
706+00.0	5.2	0.0	14.5	
706+50.0	0.0	2.9	8.1	
EAST FRONTAGE ROAD (RIGHT SIDE)				
701+00.0	6.7	6.0	35.1	
701+50.0	6.0	13.7	54.5	
702+00.0	13.7	13.7	76.1	
702+50.0	13.7	11.7	70.5	
703+00.0	11.7	4.4	44.5	
703+50.0	4.4	4.4	7.6	
703+65.6	4.4		8.4	
704+00.0		5.7	10.9	
704+34.3	5.7	5.7	9.9	
704+50.0	5.7	6.0	32.6	
705+00.0	6.0	11.5	48.7	
705+50.0	11.5	11.9	65.0	
706+00.0	11.9	11.5	64.9	
706+50.0	11.5	11.8	64.7	
ADD TOPSOIL FOR MOT RESTORATION AND OUTSIDE OF PROJECT LIMITS				
TOTAL =				5.590
25000210 SEEDING, CLASS 2A				
STATION	WIDTH(FT)		ACRE	
WEST FRONTAGE ROAD RIGHT				
502+65.0			0.02	
503+33.0			0.05	
504+26.0			0.06	
LEFT				
500+75.0	12.0	12.0	0.07	
503+14.0	12.0	6.0	0.00	
504+78.0	6.0	12.0	0.00	
504+84.0	12.0	12.0	0.07	
EAST FRONTAGE ROAD LEFT				
699+67.0			0.06	
704+33.0			0.07	
705+02.0			0.03	
RIGHT				
700+75.0	12.8	12.0	0.07	
703+18.0	12.0	6.0	0.00	
703+18.0	12.0	6.0	0.00	
704+77.0	6.0	12.0	0.00	
704+83.0	12.0	12.0	0.07	
PALATINE ROAD				
1333+75.0	11.5	28.2	0.07	
1335+24.5	28.2	28.8	0.09	
TOTAL =				0.73

25100630 EROSION CONTROL BLANKET				
STATION	WIDTH(FT)	STATION	WIDTH(FT)	SQ YD
WEST FRONTAGE ROAD RIGHT				
502+65.0		503+51.0		102.78
503+33.0		503+65.0		259.00
504+26.0		505+91.0		276.56
LEFT				
500+75.0	12.0	503+14.0	12.0	318.7
503+14.0	12.0	503+20.0	6.0	6.0
504+78.0	6.0	504+84.0	12.0	6.0
504+84.0	12.0	507+25.0	12.0	321.3
EAST FRONTAGE ROAD LEFT				
699+67.0		703+67.0		276.56
704+33.0		704+75.0		349.11
705+02.0		706+41.0		155.89
RIGHT				
700+75.0	12.8	703+18.0	12.0	334.8
703+18.0	12.0	703+24.0	6.0	6.0
704+77.0	6.0	704+83.0	12.0	6.0
704+83.0	12.0	707+25.0	12.0	322.7
PALATINE				
1333+75.0	11.5	1335+24.5	28.2	329.7
1335+24.5	28.2	1336+65.4	28.8	446.2
TOTAL =				3.517
25200110 SODDING, SALT TOLERANT				
STATION	WIDTH(FT)	STATION	WIDTH(FT)	SQ YD
WEST FRONTAGE ROAD SOUTH				
499+72.0	0.0	500+10.0	16.2	34.2
500+10.0	16.2	501+00.0	15.5	158.5
501+00.0	15.5	501+72.0	10.6	104.4
501+72.0	10.6	502+21.8	9.6	55.9
502+21.8	9.6	502+66.0	5.6	37.3
LEFT				
508+77.2	21.5	508+06.0	21.5	170.1
508+06.0	21.5	508+00.0	20.5	14.0
508+00.0	20.5	506+30.2	20.5	386.8
506+30.2	25.3	505+92.5	27.1	109.7
EAST FRONTAGE ROAD NORTH				
706+80.9	0.0	706+87.4	7.4	2.7
706+87.4	7.4	707+00.0	11.8	13.4
707+00.0	11.8	708+08.4	9.3	127.1
708+08.4	9.3	708+24.4	6.2	13.8
708+24.4	6.2	708+31.9	0.0	2.6
MOT RESTORATION				
1333+75.0	14.0	1335+24.5	28.8	355.5
1335+24.5	28.8	1336+65.4	28.8	450.8
TOTAL =				2.037

28000400 PERIMETER EROSION BARRIER				
STATION	OFFSET(FT)	STATION	OFFSET(FT)	FOOT
WEST FRONTAGE ROAD SOUTH				
499+28.0	34.3 RT	502+26.8	23.7 RT	299.0
503+02.0	21.0 RT	503+29.0	32.0 RT	46.1
503+32.4	39.9 RT	503+32.3	86.2 RT	56.3
NORTH				
507+77.0	33.6 RT	506+30.3	33.6 RT	146.7
506+30.3	33.6 RT	506+20.8	38.8 RT	10.8
506+20.8	38.8 RT	504+87.0	34.7 RT	133.9
504+86.0	34.7 RT	504+70.2	46.4 RT	44.3
EAST FRONTAGE ROAD SOUTH				
700+84.0	21.6 LT	701+86.8	29.0 LT	103.1
701+86.8	29.0 LT	702+73.3	24.1 LT	86.6
702+91.0	22.0 LT	703+03.8	22.0 LT	12.8
703+03.8	22.0 LT	703+29.0	35.5 LT	45.6
NORTH				
706+30.0	26.2 LT	704+91.0	21.0 LT	139.1
704+82.0	24.0 LT	704+55.0	81.5 LT	85.4
TOTAL =				1,210

28000500 INLET AND PIPE PROTECTION		
STATION	OFFSET(FT)	EACH
WEST FRONTAGE ROAD		
500+21.0	11.7 RT	1.0
501+01.0	12.0 RT	1.0
501+09.0	1.0 RT	1.0
501+21.0	12.0 RT	1.0
506+78.0	11.6 RT	1.0
506+90.0	1.0 RT	1.0
507+79.0	11.8 RT	1.0
500+22.0	22.5 LT	1.0
500+23.0	11.0 LT	1.0
501+21.0	13.0 LT	1.0
501+61.0	27.0 LT	1.0
506+37.0	23.0 LT	1.0
506+79.0	11.0 LT	1.0
507+78.0	24.0 LT	1.0
507+79.0	10.0 LT	1.0
EAST FRONTAGE ROAD		
701+29.0	1.0 RT	1.0
701+29.0	24.0 RT	1.0
706+54.0	17.0 RT	1.0
701+35.0	11.0 LT	1.0
706+28.0	12.0 LT	1.0
706+52.0	9.0 LT	1.0
706+62.0	4.0 LT	1.0
TOTAL =		22

28000510 INLET FILTERS			
STATION	OFFSET(FT)	EACH	
PALATINE ROAD			
1303+33.4	23.6 RT	1.0	
1304+50.0	28.7 RT	1.0	
1304+68.0	24.7 RT	1.0	
1306+04.0	23.8 RT	1.0	
1306+70.0	32.3 RT	1.0	
1333+12.5	32.8 LT	1.0	
1335+04.4	54.3 LT	1.0	
TOTAL =		7	







# SCHEDULE OF QUANTITIES

X7030112 WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 12 INCH

\*\*\*\*\*

STATION	OFFSET(FT)		STATION	OFFSET(FT)	FOOT
PALATINE ROAD WHITE					
1335+24.4	60.0 LT	-	1335+32.4	68.0 LT	11.3
1335+35.4	61.0 LT	-	1335+42.3	68.0 LT	9.8
1335+46.5	62.0 LT	-	1335+52.4	68.0 LT	8.4
1335+57.3	62.8 LT	-	1335+62.4	68.0 LT	7.3
1335+68.1	63.7 LT	-	1335+72.4	68.0 LT	6.1
1335+78.8	64.4 LT	-	1335+82.4	68.1 LT	5.2
1335+89.4	65.1 LT	-	1335+92.4	68.2 LT	4.3
1336+00.0	65.8 LT	-	1336+02.4	68.2 LT	3.4
1336+10.5	66.3 LT	-	1336+12.4	68.3 LT	2.8
1336+20.9	66.9 LT	-	1336+22.4	68.4 LT	2.1
TOTAL =					61

X7030124 WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III, 24 INCH

\*\*\*\*\*

STATION	OFFSET(FT)		STATION	OFFSET(FT)	FOOT
PALATINE WHITE					
1334+34.5	56.8 LT	-	1334+34.5	66.3 LT	9.5
1335+32.5	68.0 LT	-	1335+32.5	77.5 LT	9.5
TOTAL =					19

XX001758 WOOD FENCE REMOVAL

\*\*\*\*\*

STATION	OFFSET(FT)		STATION	OFFSET(FT)	FOOT
WEST FRONTAGE ROAD					
503+57.5	30.6 RT	-	503+65.5	30.6 RT	8.0
503+34.5	30.6 RT	-	503+50.5	30.6 RT	16.0
503+50.5	30.6 RT	-	503+57.2	35.0 RT	8.0
TOTAL =					32

Z0001050 AGGREGATE SUBGRADE 12"

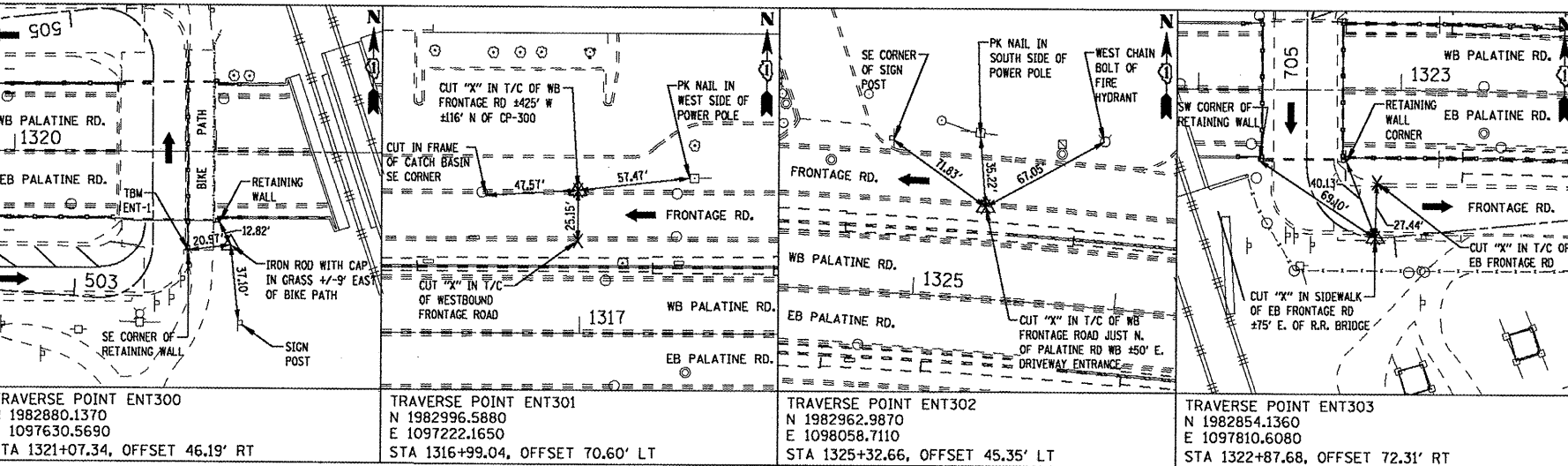
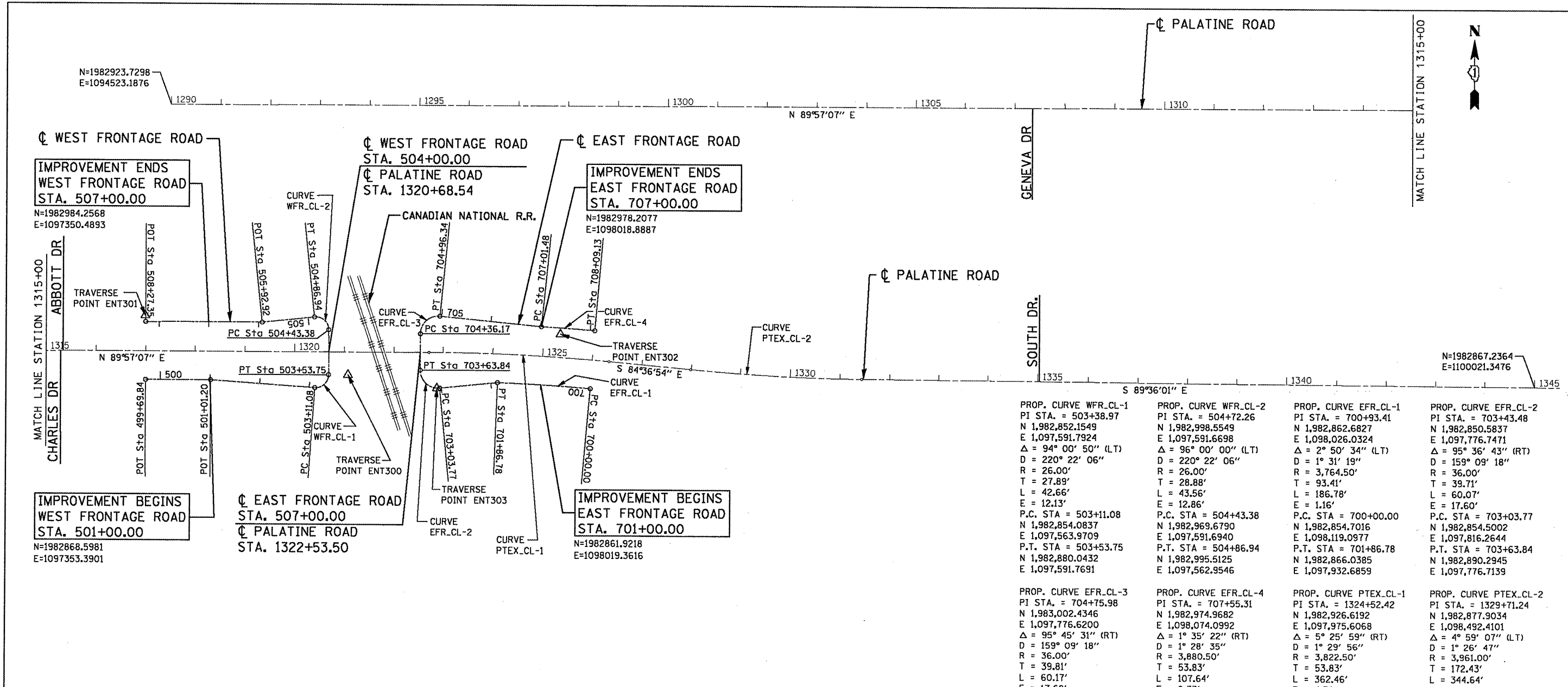
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STATION	WIDTH(FT)		STATION	WIDTH(FT)	SQ YD
WEST FRONTAGE ROAD					
501+00.0	28.2	-	501+08.6	28.2	26.9
501+08.6	28.2	-	503+15.9	43.2	821.4
504+81.2	42.2	-	505+92.9	28.2	436.4
505+92.9	28.2	-	507+00.0	28.2	335.1
EAST FRONTAGE ROAD					
700+97.9	28.2	-	701+85.9	38.2	324.2
701+85.9	38.2	-	703+20.6	42.2	601.1
704+79.4	42.2	-	707+00.0	28.2	861.8
TOTAL =					3,407

EARTHWORK TABLE

Frontage Roads											
STATION	EARTH EXCAVATION	AVG	CY	EARTH EXCAVATION ADJUSTED FOR EMBANKMENT *	EMBANKMENT	AVG	CY	EARTHWORK BALANCE WASTE (+) SHORTAGE (-)	REMOVAL OF UNSUITABLE	AVG	CY
<b>WEST FRONTAGE ROAD</b>											
501+00	23.2	23.0	42.6	36.3	2.7	4.3	8.0	28.3	10.6	10.2	18.9
501+50	22.7	23.9	44.3	37.7	5.9	6.1	11.3	26.4	9.8	11.3	20.9
502+00	25.0	26.1	48.4	41.2	6.3	6.2	11.5	29.7	12.8	13.3	24.8
502+50	27.2	24.6	45.6	38.8	6.1	5.9	11.0	27.8	13.9	14.5	26.9
503+00	21.9	13.7	25.5	21.7	5.8	15.7	29.1	-7.4	15.0	11.1	20.7
503+50	5.6	2.8	1.7	1.5	25.6	25.6	14.9	-13.4	7.2	7.2	4.3
503+66	5.6		0.0	0.0	25.6		0.0	0.0	7.2		0.0
504+00			0.0	0.0			0.0	0.0			0.0
504+34	1.0	1.0	0.6	0.6	35.4	35.4	20.6	-20.0	8.4	8.4	5.0
504+50	1.0	5.8	10.8	9.2	35.4	22.1	41.0	-31.8	8.4	11.2	20.8
505+00	10.6	12.5	23.2	19.8	8.8	8.7	16.1	3.7	13.9	12.3	22.8
505+50	14.4	13.3	24.7	21.0	8.5	10.0	18.6	2.4	10.6	9.8	18.1
506+00	12.2	15.3	28.4	24.2	11.5	9.8	18.1	6.1	8.9	8.7	16.1
506+50	18.4	20.7	38.4	32.7	8.0	6.3	11.6	21.1	8.4	8.4	15.6
507+00	23.0		0.0		4.5		0.0		8.4		0.0
<b>EAST FRONTAGE ROAD</b>											
701+00	23.8	21.1	39.1	33.3	5.1	6.2	11.6	21.7	6.0	6.2	11.6
701+50	18.3	17.2	31.9	27.2	7.3	8.3	15.3	11.9	6.4	8.7	16.2
702+00	16.1	17.9	33.2	28.3	9.2	5.6	10.4	17.9	11.1	12.2	22.7
702+50	19.7	21.7	40.2	34.2	2.0	4.9	9.2	25.0	13.4	15.0	27.9
703+00	23.6	14.7	27.3	23.3	7.9	8.2	15.3	8.0	16.6	11.1	20.5
703+50	5.8	5.8	3.4	2.9	8.6	8.6	5.0	-2.1	5.5	5.5	3.2
703+66	5.8		0.0	0.0	8.6		0.0	0.0	5.5		0.0
704+00	0.0		0.0	0.0			0.0	0.0			0.0
704+34	4.3	4.3	2.5	2.2	8.6	8.6	5.0	-2.8	5.8	5.8	3.4
704+50	4.3	9.4	17.5	14.9	8.6	6.4	11.9	3.0	5.8	4.5	8.4
705+00	14.6	16.2	30.0	25.5	4.2	9.1	16.8	8.7	3.3	9.7	17.9
705+50	17.8	19.0	35.2	30.0	14.0	12.4	23.0	7.0	16.0	14.0	26.0
706+00	20.2	17.6	32.7	27.8	10.9	8.3	15.5	12.3	12.0	8.9	16.4
706+50	15.0	19.4	35.9	30.6	5.8	6.5	12.1	18.5	5.7	7.0	13.1
707+00	23.7		0.0		7.2		0.0		8.3		0.0
<b>TOTALS</b>											
			663	565			363	202			402

\* A SHRINKAGE FACTOR OF 15% WAS APPLIED



PROP. CURVE WFR.CL-1	PROP. CURVE WFR.CL-2	PROP. CURVE EFR.CL-1	PROP. CURVE EFR.CL-2
PI STA. = 503+38.97	PI STA. = 504+72.26	PI STA. = 700+93.41	PI STA. = 703+43.48
N 1,982,852.1549	N 1,982,998.5549	N 1,982,862.6827	N 1,982,850.5837
E 1,097,591.7924	E 1,097,591.6698	E 1,098,026.0324	E 1,097,776.7471
$\Delta = 94^\circ 00' 50''$ (LT)	$\Delta = 96^\circ 00' 00''$ (LT)	$\Delta = 2^\circ 50' 34''$ (LT)	$\Delta = 95^\circ 36' 43''$ (RT)
D = 220' 22' 06"	D = 220' 22' 06"	D = 1° 31' 19"	D = 159° 09' 18"
R = 26.00'	R = 26.00'	R = 3,764.50'	R = 36.00'
T = 27.89'	T = 28.88'	T = 93.41'	T = 39.71'
L = 42.66'	L = 43.56'	L = 186.78'	L = 60.07'
E = 12.13'	E = 12.86'	E = 1.16'	E = 17.60'
P.C. STA = 503+11.08	P.C. STA = 504+43.38	P.C. STA = 700+00.00	P.C. STA = 703+03.77
N 1,982,854.0837	N 1,982,969.6790	N 1,982,854.7016	N 1,982,854.5002
E 1,097,563.9709	E 1,097,591.6940	E 1,098,119.0977	E 1,097,816.2644
P.T. STA = 503+53.75	P.T. STA = 504+86.94	P.T. STA = 701+86.78	P.T. STA = 703+63.84
N 1,982,880.0432	N 1,982,995.5125	N 1,982,866.0385	N 1,982,890.2945
E 1,097,591.7691	E 1,097,562.9546	E 1,097,932.6859	E 1,097,776.7139

PROP. CURVE EFR.CL-3	PROP. CURVE EFR.CL-4	PROP. CURVE PTEX.CL-1	PROP. CURVE PTEX.CL-2
PI STA. = 704+75.98	PI STA. = 707+55.31	PI STA. = 1324+52.42	PI STA. = 1329+71.24
N 1,983,002.4346	N 1,982,974.9682	N 1,982,926.6192	N 1,982,877.9034
E 1,097,776.6200	E 1,098,074.0992	E 1,097,975.6068	E 1,098,492.4101
$\Delta = 95^\circ 45' 31''$ (RT)	$\Delta = 1^\circ 35' 22''$ (RT)	$\Delta = 5^\circ 25' 59''$ (RT)	$\Delta = 4^\circ 59' 07''$ (LT)
D = 159° 09' 18"	D = 1° 28' 35"	D = 1° 29' 56"	D = 1° 26' 47"
R = 36.00'	R = 3,880.50'	R = 3,822.50'	R = 3,961.00'
T = 39.81'	T = 53.83'	T = 53.83'	T = 172.43'
L = 60.17'	L = 107.64'	L = 362.46'	L = 344.64'
E = 17.68'	E = 0.37'	E = 4.30'	E = 3.75'
P.C. STA = 704+36.17	P.C. STA = 707+01.48	P.C. STA = 1322+71.05	P.C. STA = 1327+98.81
N 1,982,962.6216	N 1,982,978.0603	N 1,982,926.4674	N 1,982,894.0857
E 1,097,776.6533	E 1,098,020.3629	E 1,097,794.2393	E 1,098,320.7399
P.T. STA = 704+96.34	P.T. STA = 708+09.13	P.T. STA = 1326+33.52	P.T. STA = 1331+43.46
N 1,982,998.4731	N 1,982,970.3869	N 1,982,909.5983	N 1,982,876.7004
E 1,097,816.2354	E 1,098,127.7290	E 1,098,156.1740	E 1,098,664.8371

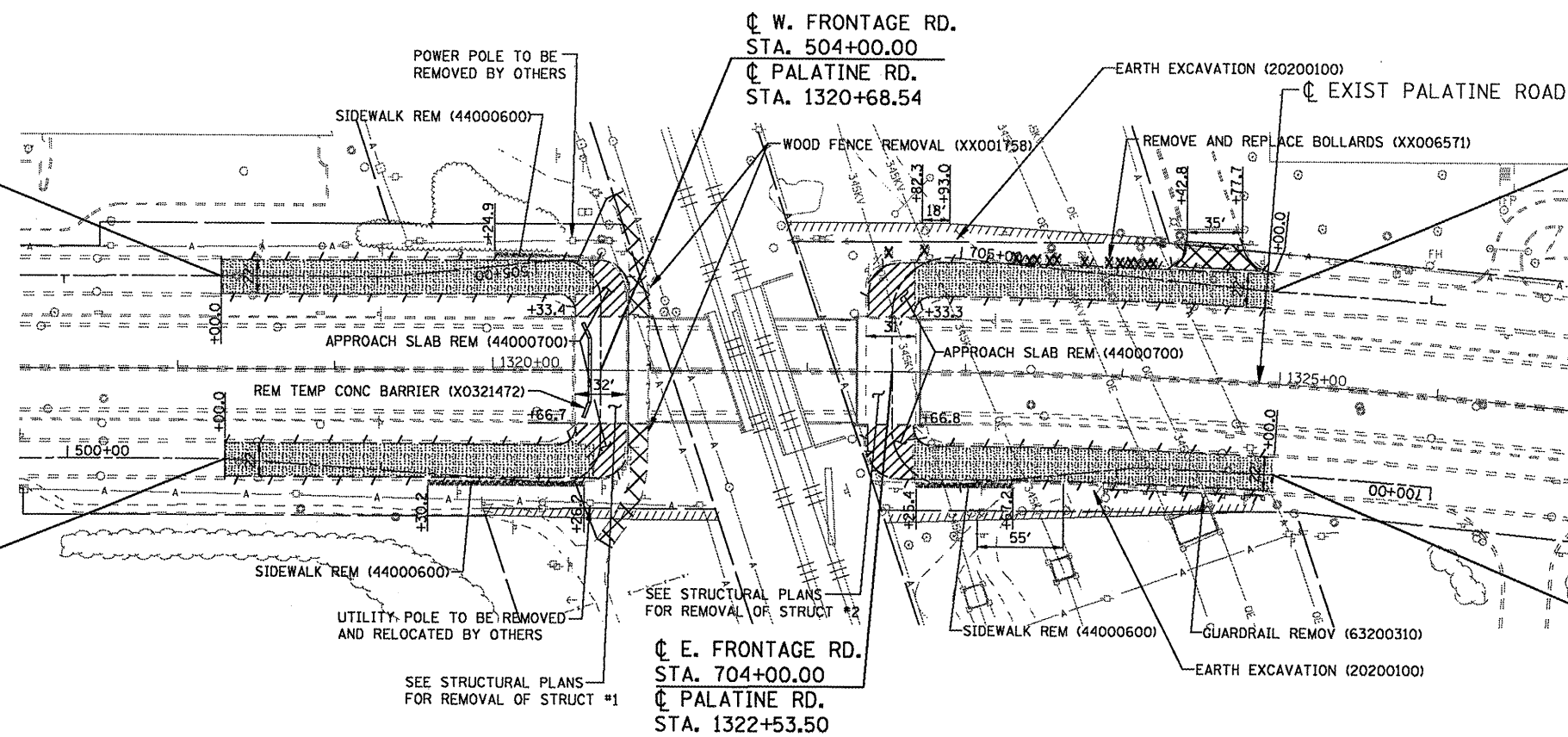
**BENCHMARKS**

- TBM-A CHISLED "X" IN SW BOLT OF FIRE HYDRANT ±1000' WEST OF THE N-S RAILROAD BRIDGE AND SOUTH OF THE EASTBOUND PALATINE ROAD FRONTAGE ROAD STA. 1311+16 O/S 71.0' RT. ELEV = 655.60
- TBM-ENT-1 CUT "T" AT SW CORNER OF CONCRETE PARAPET WALL SEPARATING THE BIKE PATH AND THE WEST FRONTAGE ROAD BRIDGE OVER PALATINE ROAD. THE BRIDGE IS WEST OF AND ADJACENT TO THE N-S RAILROAD BRIDGE. STA. 1320+85 O/S 49.0' RT. ELEV = 654.67
- TBM-ENT-2 CUT "T" AT SE CORNER OF THE SOUTH ABUTMENT WALL OF THE N-S RAILROAD BRIDGE OVER PALATINE ROAD. RAILROAD BRIDGE IS LOCATED +/- 2100 FT WEST OF THE CENTERLINE OF WOLF ROAD. STA. 1322+16.9 O/S 44.4' RT. ELEV = 654.66

NOTE: BENCHMARK ELEVATIONS ARE ON THE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29).  
 BASIS OF BEARING IS ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE (1201) (NAD83) ADJUSTED TO GROUND.  
 ALL MEASUREMENTS ARE IN FEET AND DECIMAL PARTS THEREOF.

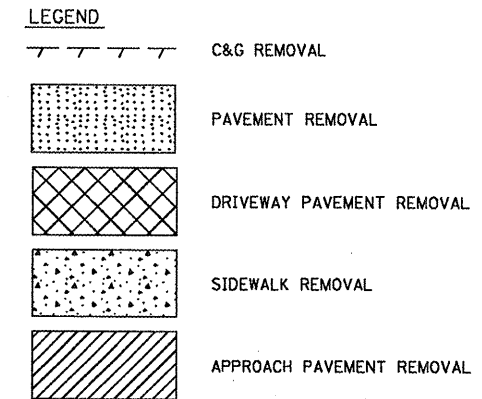
END IMPROVEMENTS  
WEST FRONTAGE ROAD  
STA. 507+00.00

BEGIN IMPROVEMENTS  
WEST FRONTAGE ROAD  
STA. 501+00.00



END IMPROVEMENTS  
EAST FRONTAGE ROAD  
STA. 707+00.00

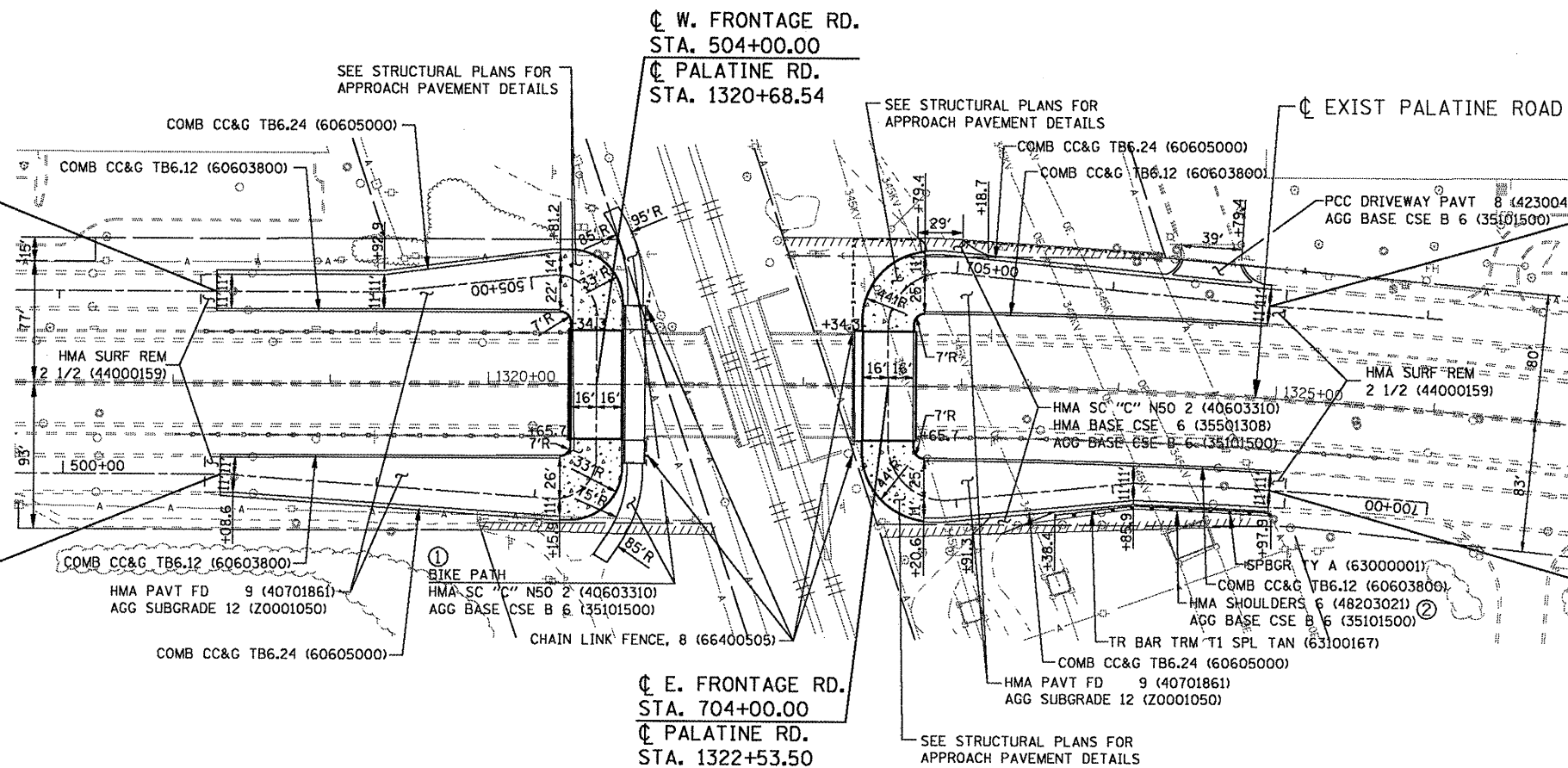
BEGIN IMPROVEMENTS  
EAST FRONTAGE ROAD  
STA. 701+00.00



**REMOVAL PLAN**

END IMPROVEMENTS  
WEST FRONTAGE ROAD  
STA. 507+00.00

BEGIN IMPROVEMENTS  
WEST FRONTAGE ROAD  
STA. 501+00.00



END IMPROVEMENTS  
EAST FRONTAGE ROAD  
STA. 707+00.00

BEGIN IMPROVEMENTS  
EAST FRONTAGE ROAD  
STA. 701+00.00

NOTES:  
① SEE FRONTAGE ROAD DETAILS FOR BIKE PATH PLANS.  
② SEE DISTRICT DETAIL FOR GUARDRAIL STABILIZATION.

**PROPOSED PLAN**

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		CHECKED - TMH	REVISED -
		DATE - 1/09	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

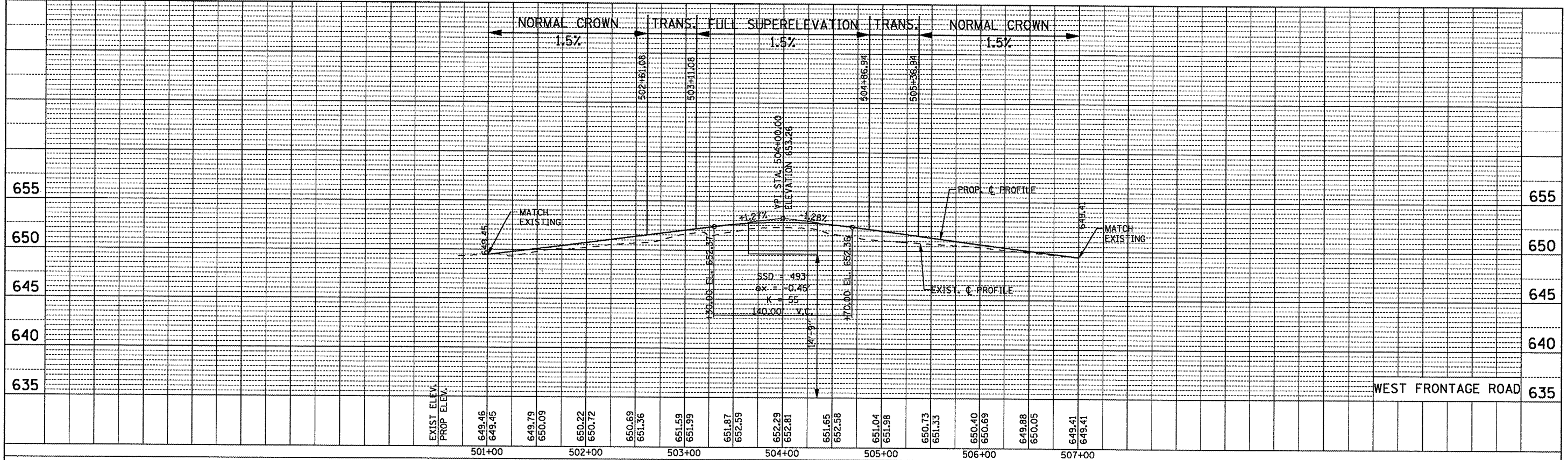
WEST AND EAST FRONTAGE ROADS  
EXISTING AND PROPOSED ROADWAY PLAN

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FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

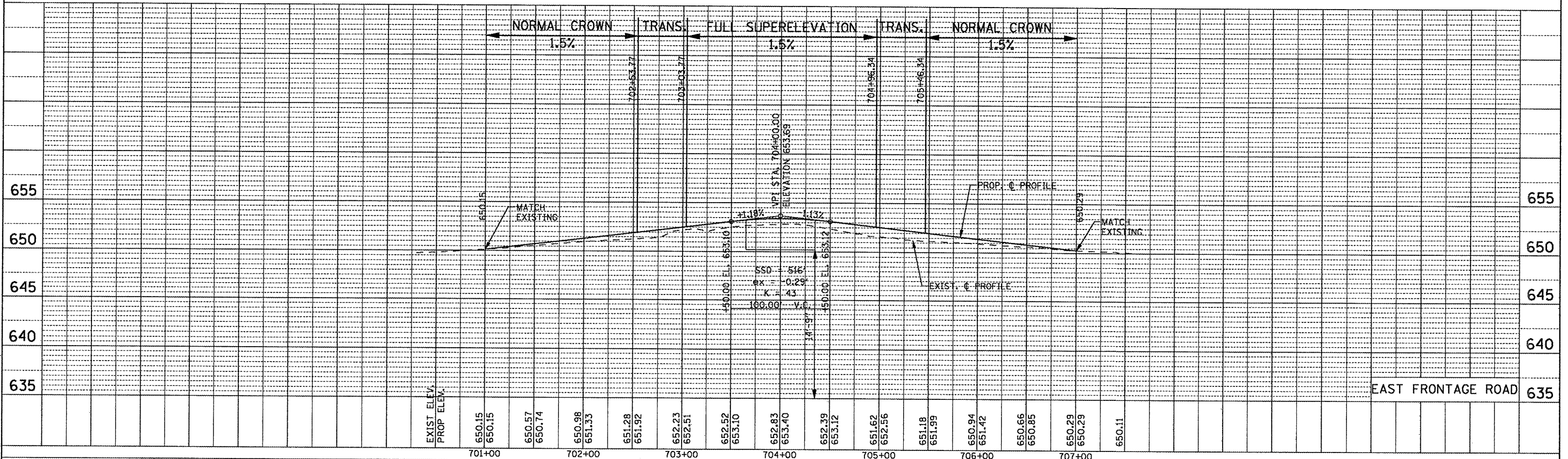
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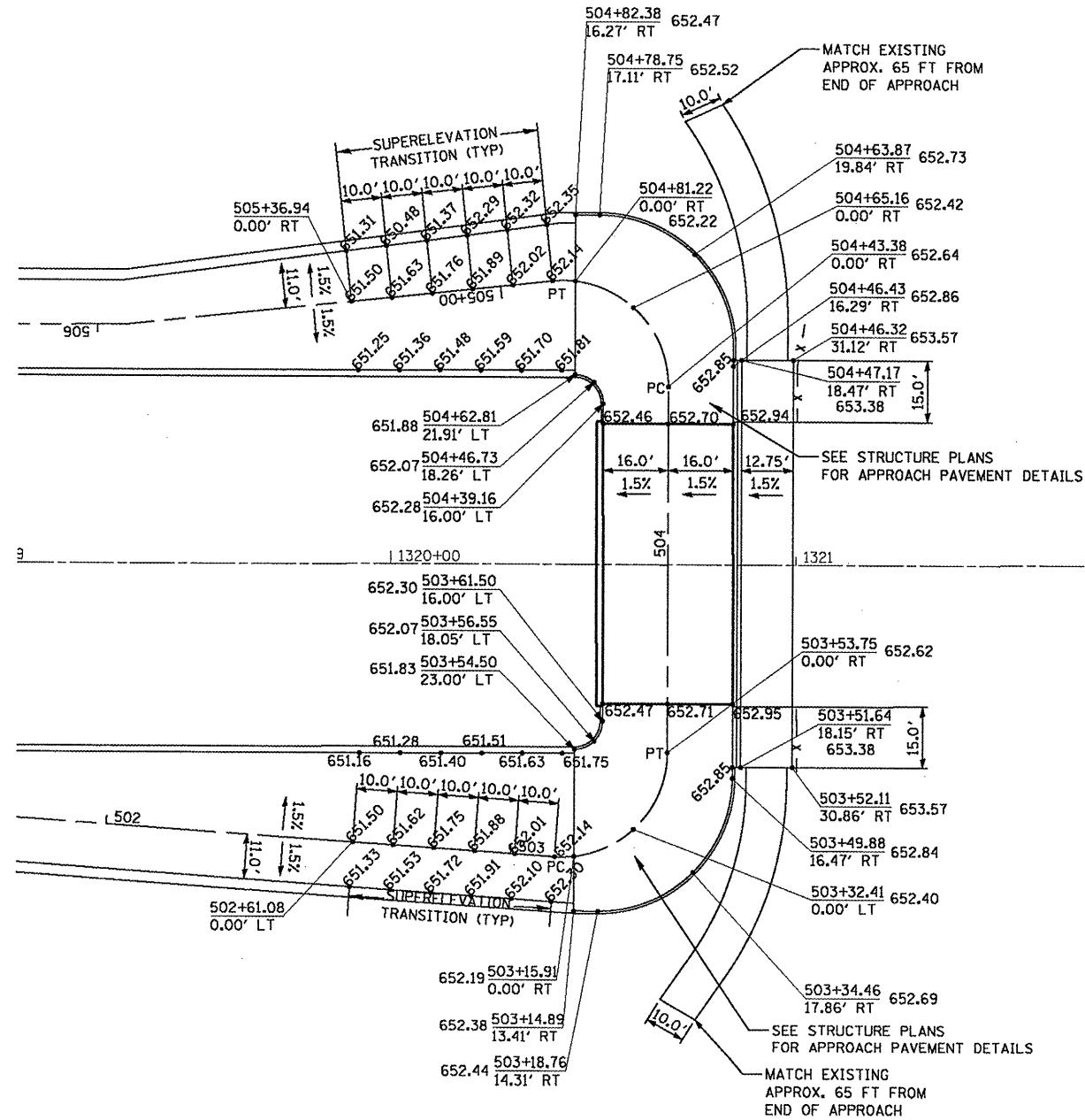
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NO.	BY	
NO.	DATE	
NO.	DATE	
NO.	DATE	
NO.	DATE	
NO.	DATE	



PROFILE	REVISION	DATE
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NO.	DATE	
NO.	DATE	

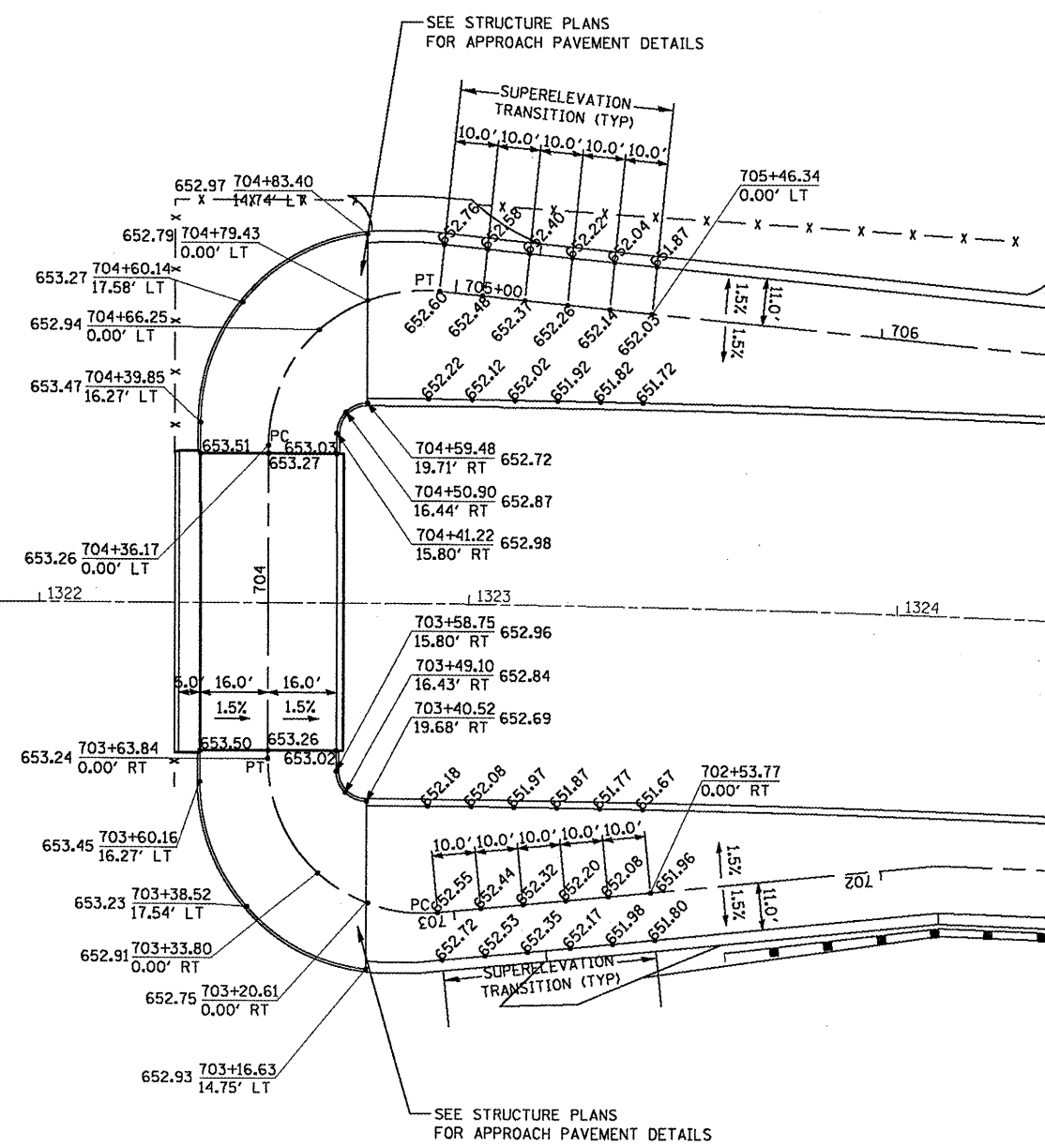


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	PLOT DATE = 2/4/2009	CHECKED - TMH	REVISED -								
		DATE - 1/09	REVISED -								



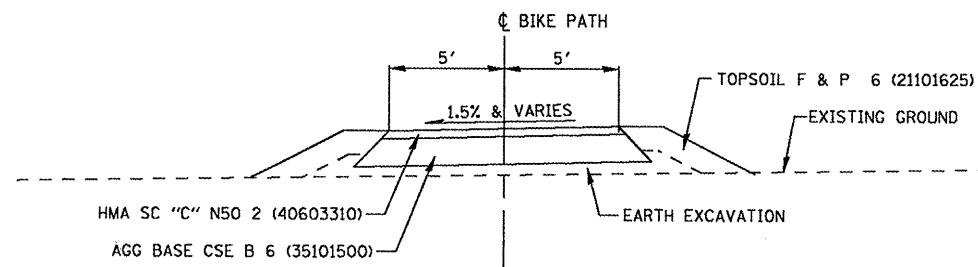
WEST FRONTAGE ROAD DETAILS

SCALE HORIZ.: 1" = 20'



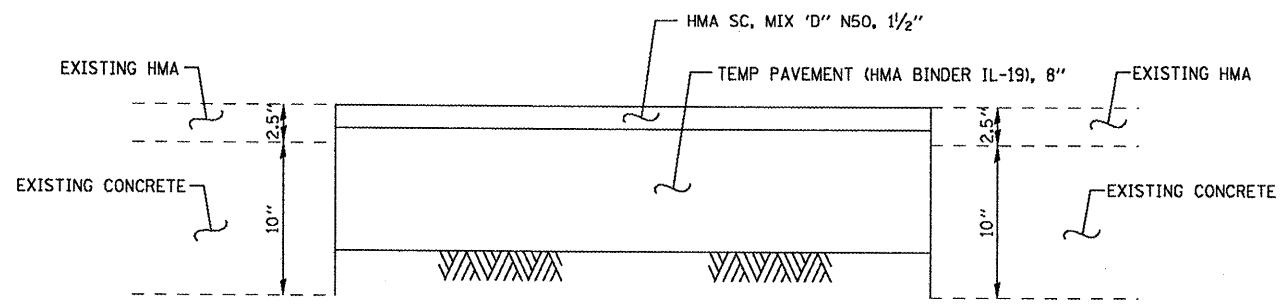
EAST FRONTAGE ROAD DETAILS

SCALE HORIZ.: 1" = 20'



PROPOSED BIKE PATH TYPICAL SECTION

NOT TO SCALE



TEMPORARY PAVEMENT

NOT TO SCALE

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		DATE - 1/09	REVISED -

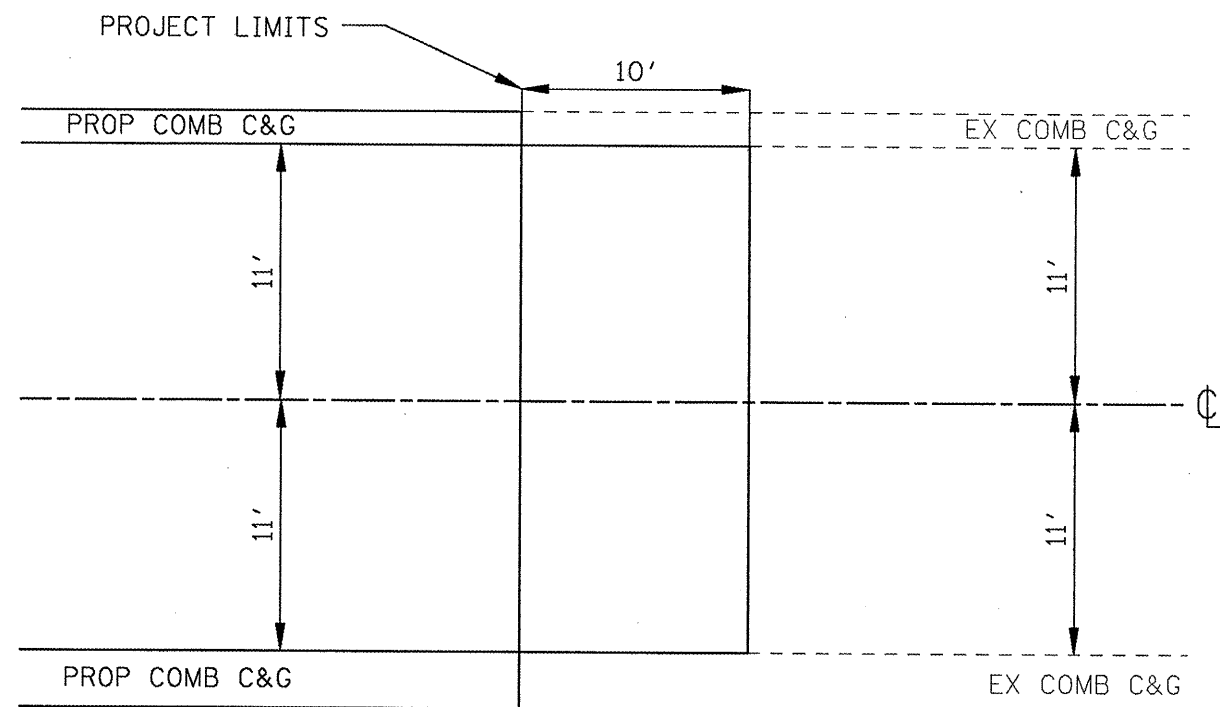
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WEST AND EAST FRONTAGE ROADS  
ROADWAY DETAILS

SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

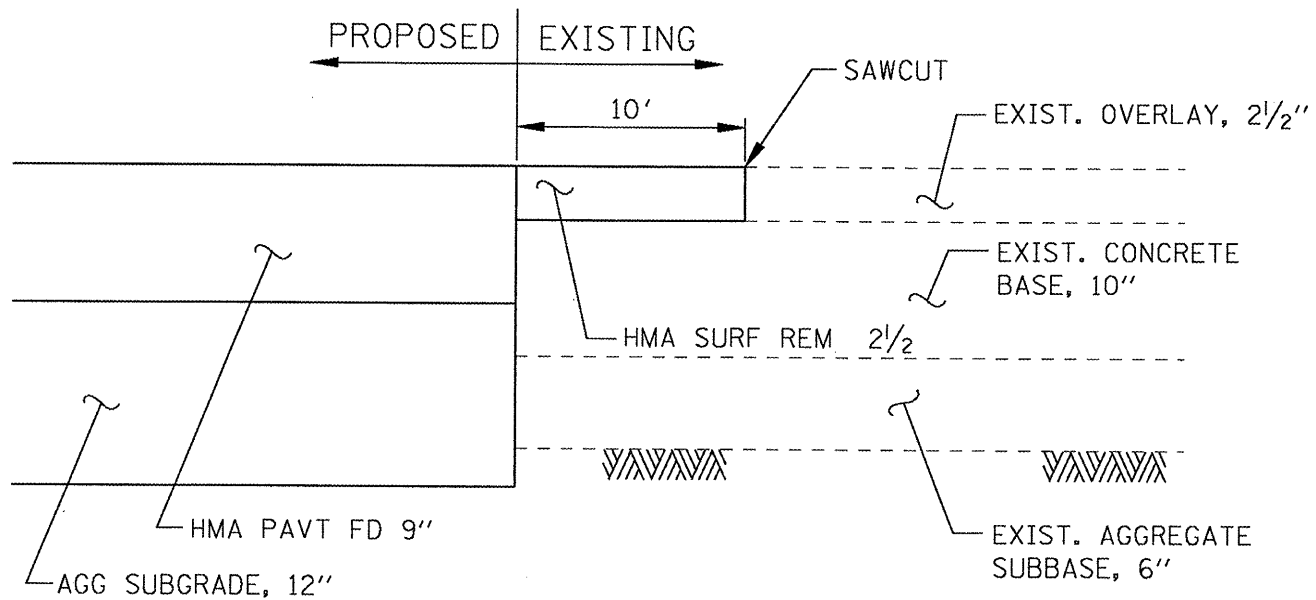
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	14
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F60	





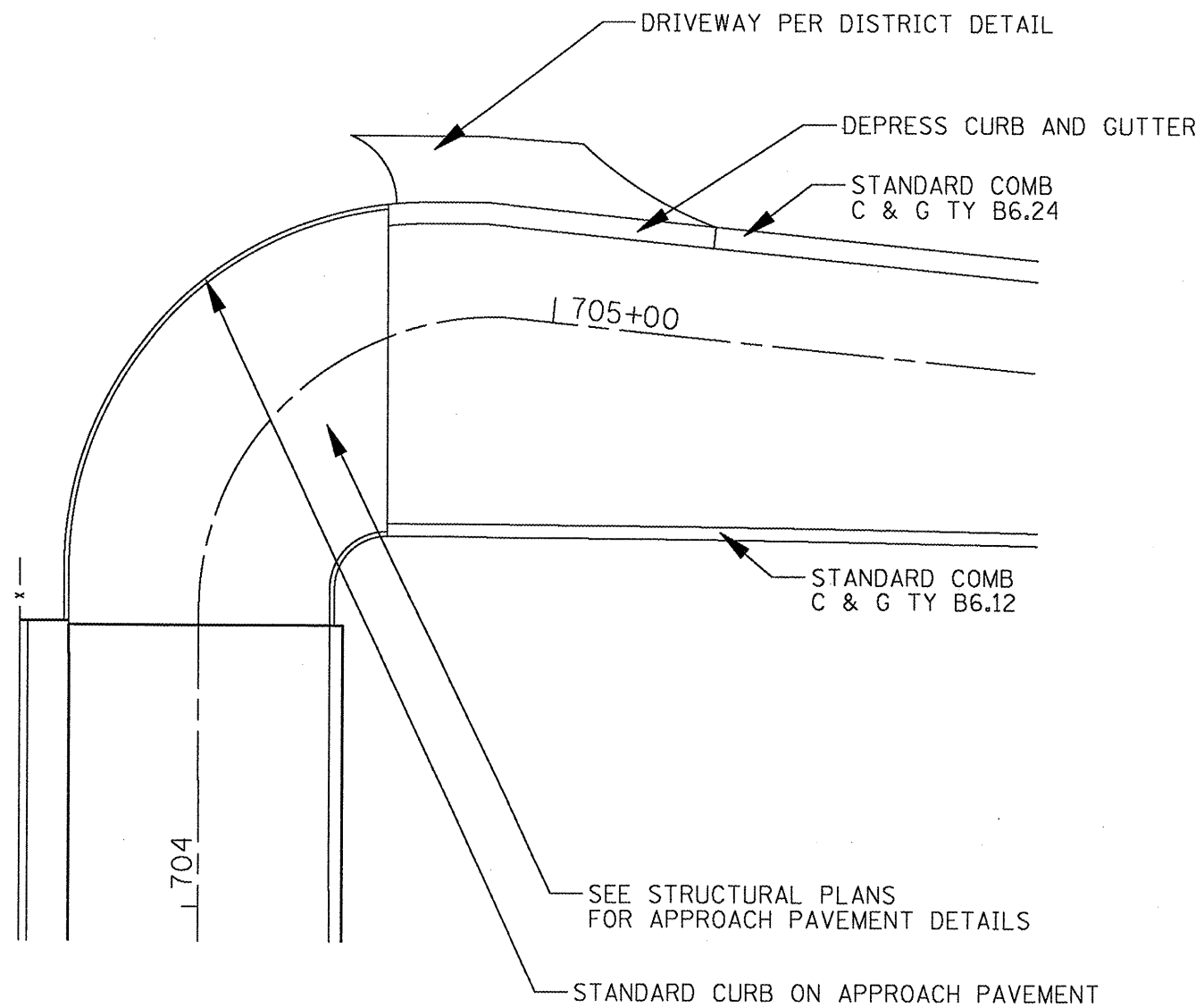
**PLAN VIEW**

WEST FRONTAGE ROAD STA. 500+90 TO 501+00  
 STA. 507+00 TO 507+10  
 EAST FRONTAGE ROAD STA. 700+90 TO 701+00  
 STA. 707+00 TO 707+10



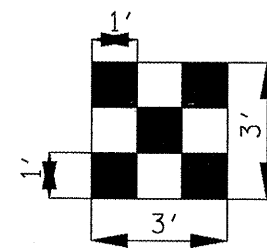
**ELEVATION**

**HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"**



**DRIVEWAY DETAIL**

WEST FRONTAGE ROAD STA. 705+00



**CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG**

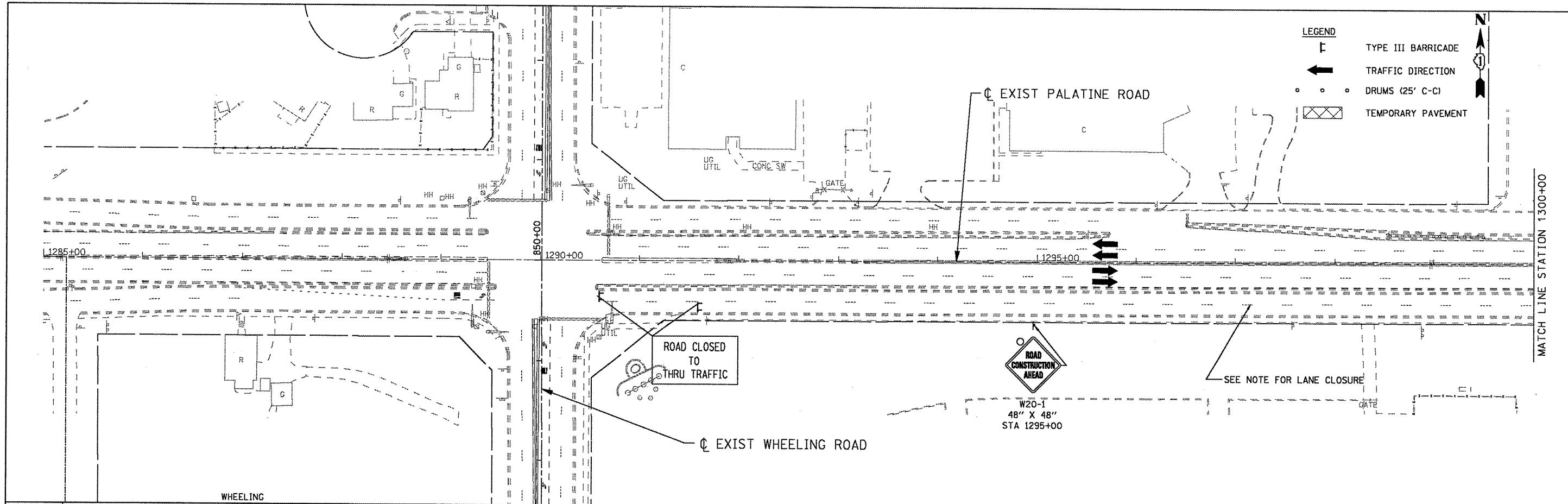
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PLOT DATE = 2/4/2009		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

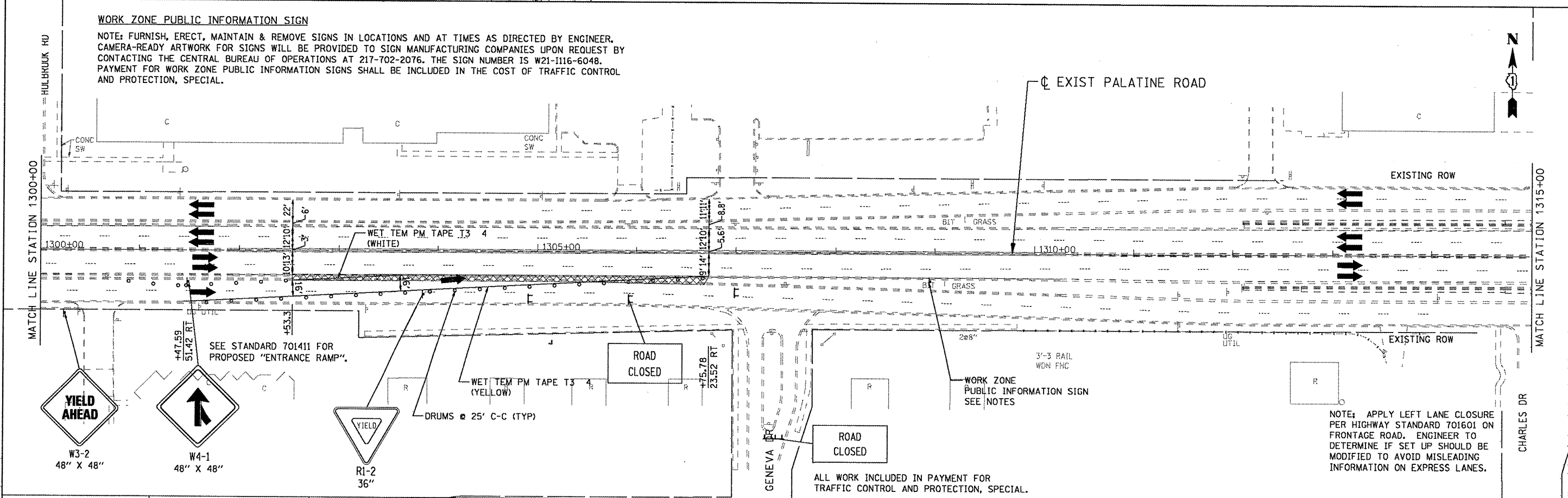
**WEST AND EAST FRONTAGE ROADS  
 ROADWAY DETAILS**

F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 15
SCALE: 1" = 20'		SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60F60
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				





**WORK ZONE PUBLIC INFORMATION SIGN**  
 NOTE: FURNISH, ERECT, MAINTAIN & REMOVE SIGNS IN LOCATIONS AND AT TIMES AS DIRECTED BY ENGINEER. CAMERA-READY ARTWORK FOR SIGNS WILL BE PROVIDED TO SIGN MANUFACTURING COMPANIES UPON REQUEST BY CONTACTING THE CENTRAL BUREAU OF OPERATIONS AT 217-702-2076. THE SIGN NUMBER IS W21-1116-6048. PAYMENT FOR WORK ZONE PUBLIC INFORMATION SIGNS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, SPECIAL.



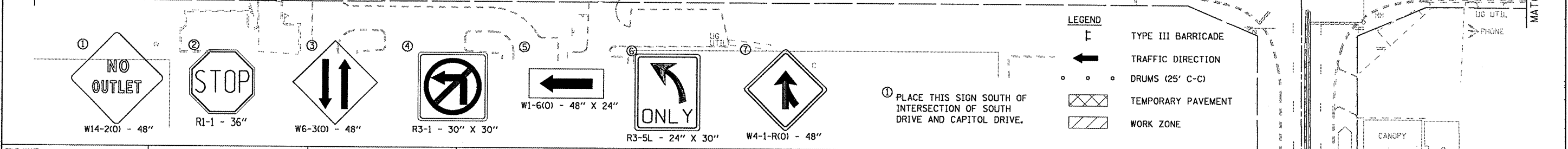
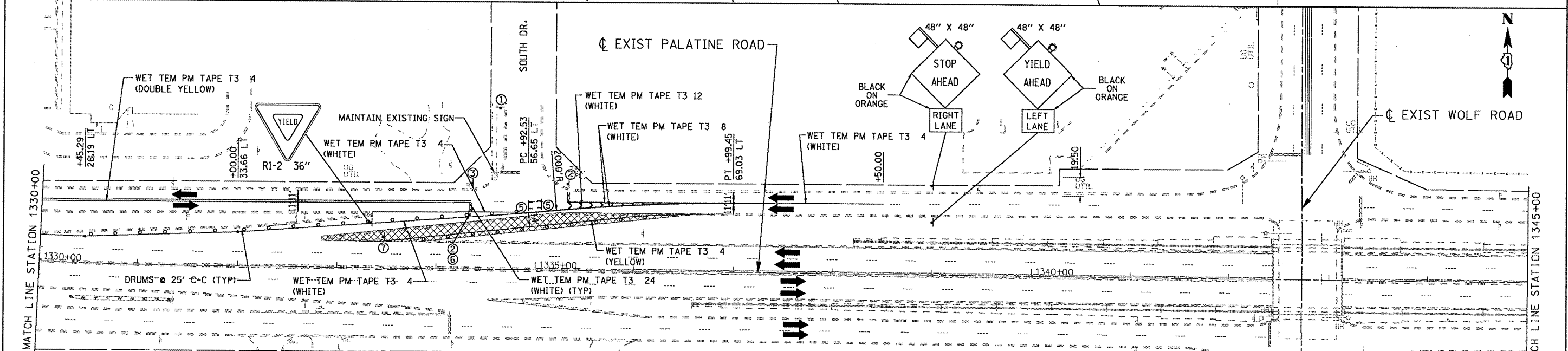
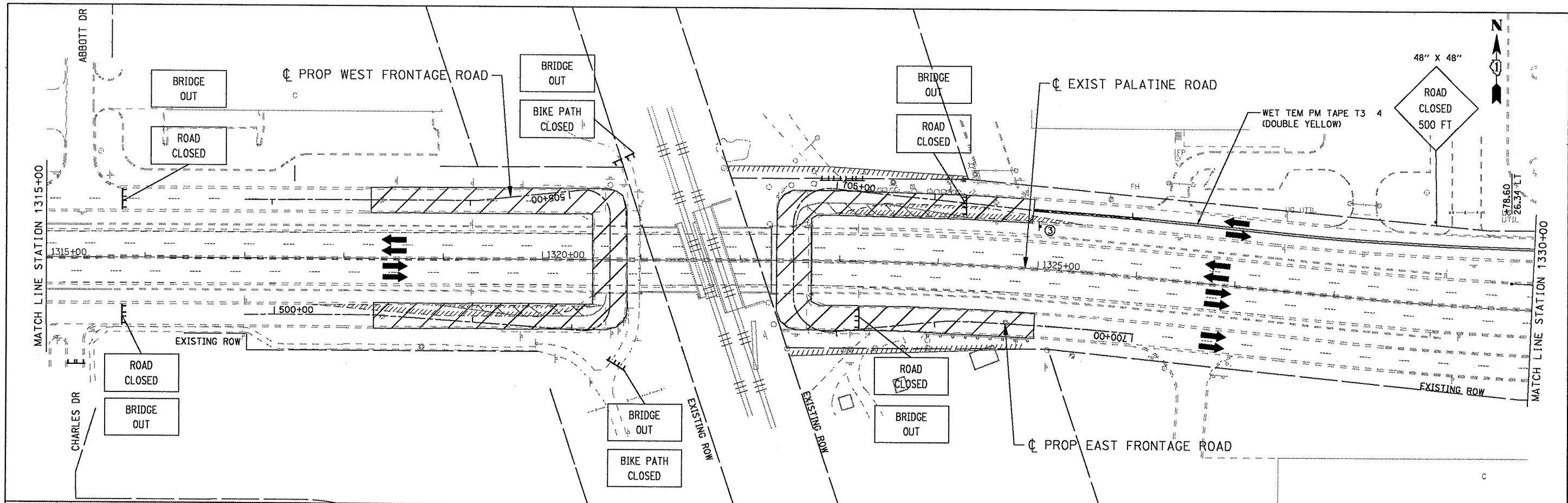
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		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST AND EAST FRONTAGE ROADS  
 MAINTENANCE OF STAGING, NOTES & LEGEND**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	17
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60F60				

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.



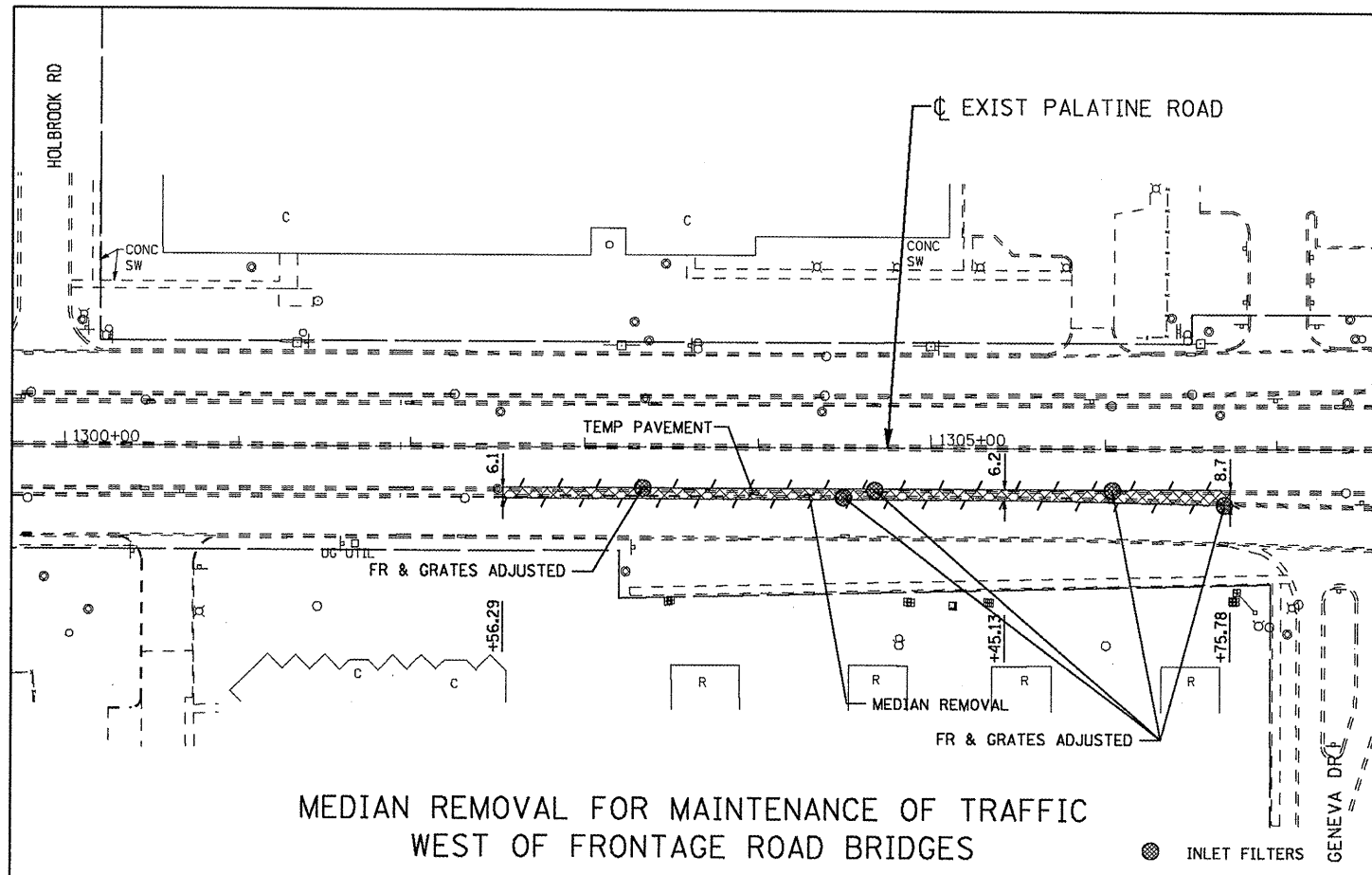
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		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

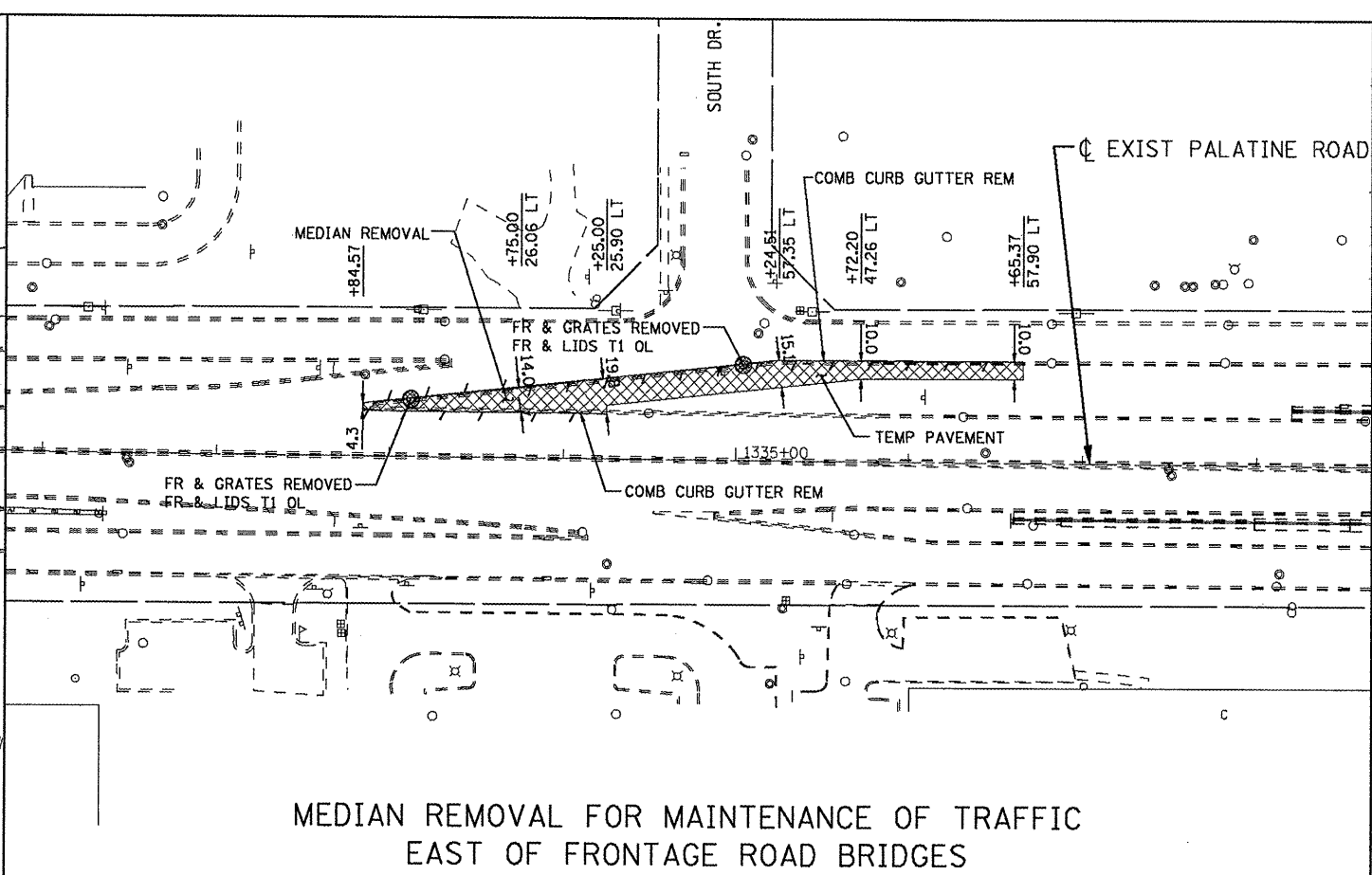
**WEST AND EAST FRONTAGE ROADS  
MAINTENANCE OF STAGING, NOTES & LEGEND**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	18
CONTRACT NO. 60F60				

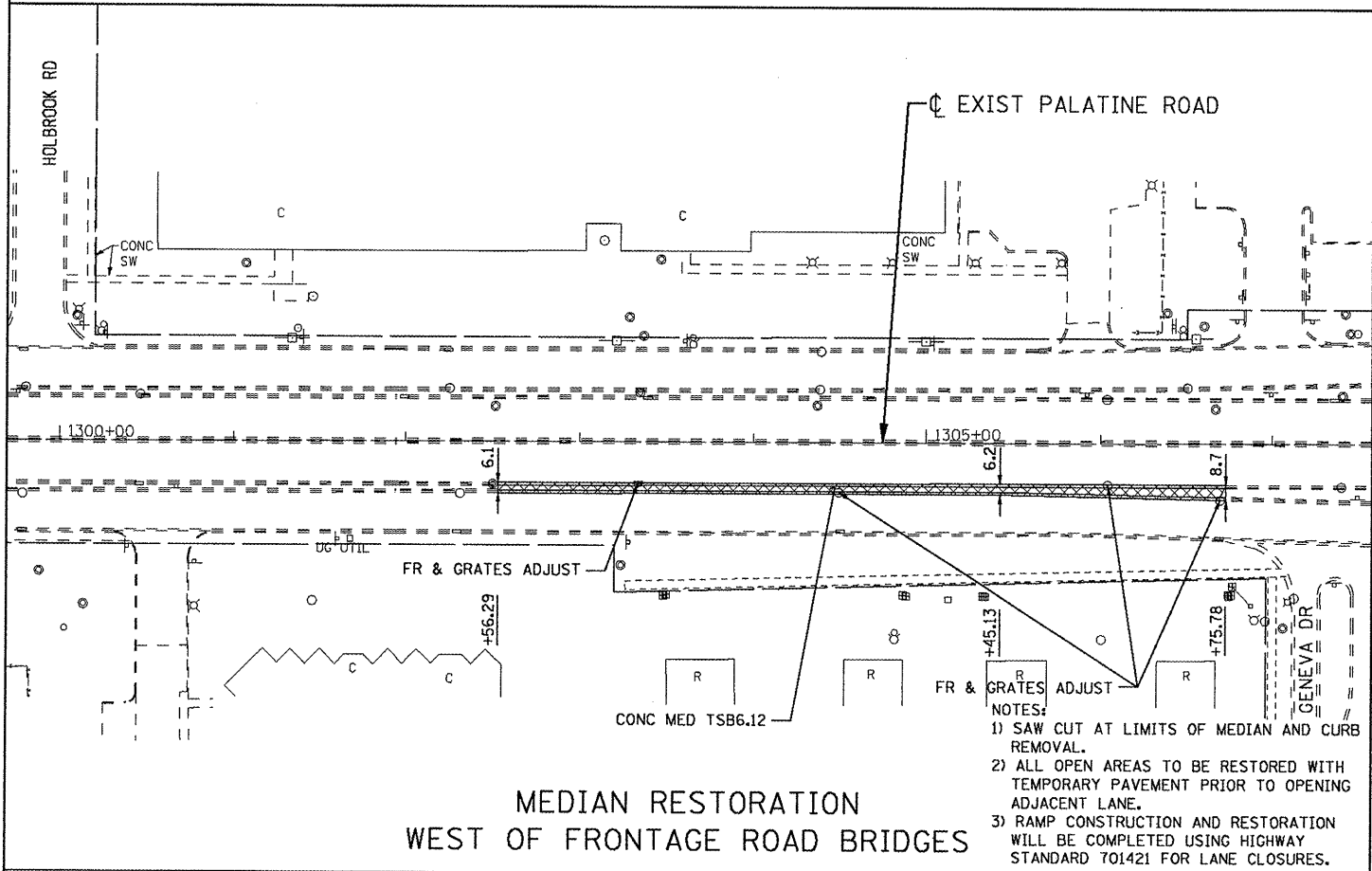
SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



MEDIAN REMOVAL FOR MAINTENANCE OF TRAFFIC  
WEST OF FRONTAGE ROAD BRIDGES

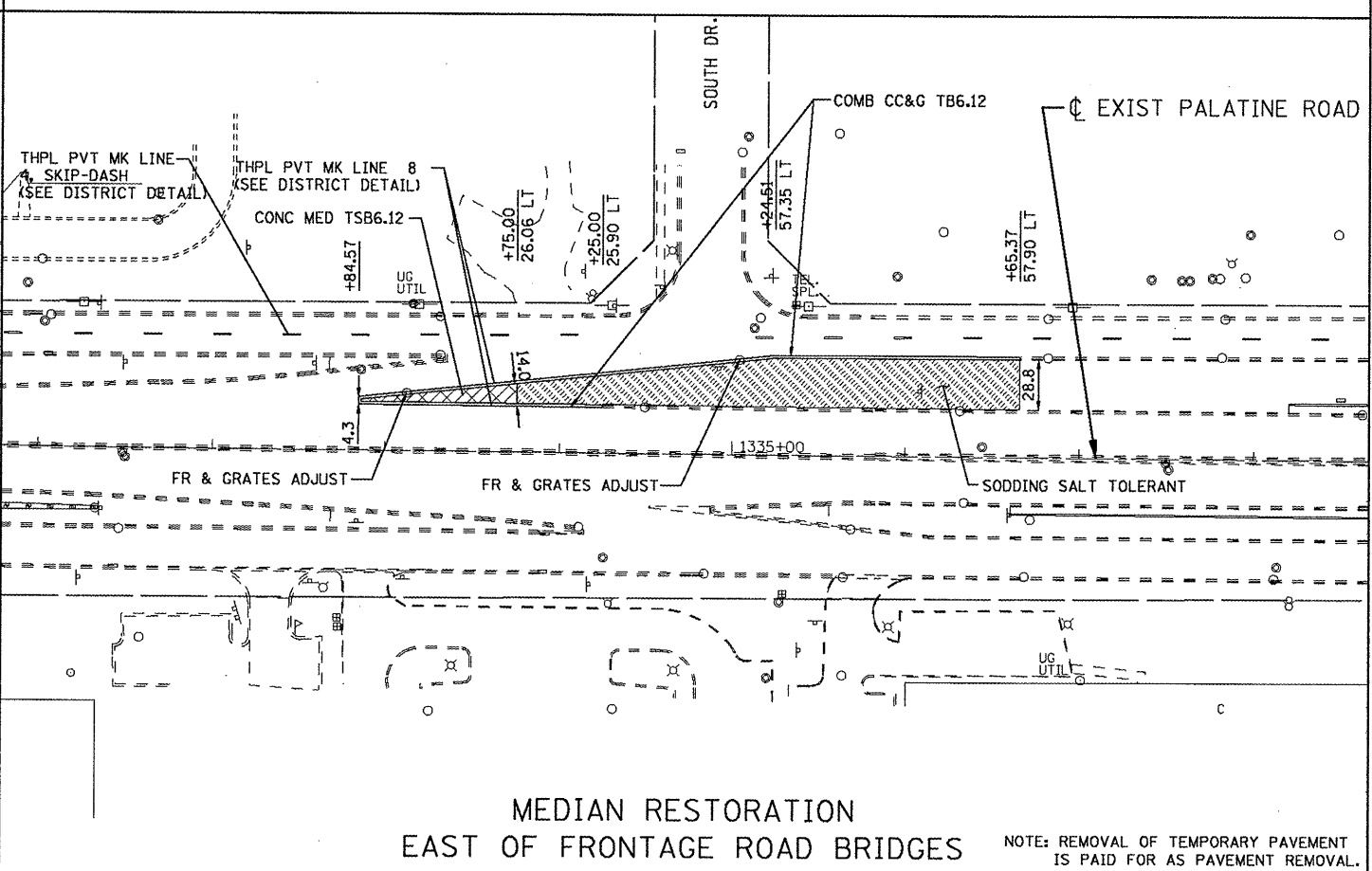


MEDIAN REMOVAL FOR MAINTENANCE OF TRAFFIC  
EAST OF FRONTAGE ROAD BRIDGES



MEDIAN RESTORATION  
WEST OF FRONTAGE ROAD BRIDGES

- NOTES:
- 1) SAW CUT AT LIMITS OF MEDIAN AND CURB REMOVAL.
  - 2) ALL OPEN AREAS TO BE RESTORED WITH TEMPORARY PAVEMENT PRIOR TO OPENING ADJACENT LANE.
  - 3) RAMP CONSTRUCTION AND RESTORATION WILL BE COMPLETED USING HIGHWAY STANDARD 701421 FOR LANE CLOSURES.



MEDIAN RESTORATION  
EAST OF FRONTAGE ROAD BRIDGES

NOTE: REMOVAL OF TEMPORARY PAVEMENT IS PAID FOR AS PAVEMENT REMOVAL.

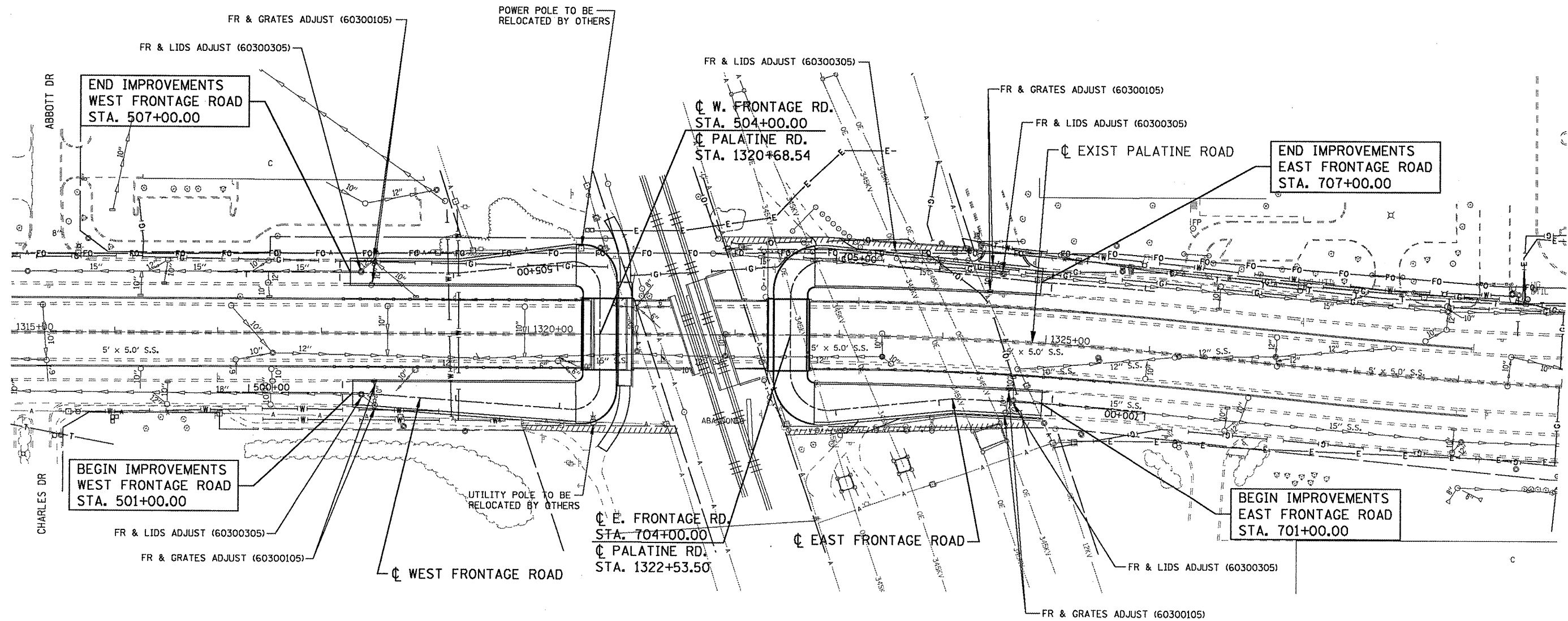
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PLOT DATE = 2/4/2009		CHECKED - TMH	REVISED -
		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST AND EAST FRONTAGE ROADS  
MAINTENANCE OF TRAFFIC - FRONTAGE ROAD CLOSURE**

F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 19
SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60F60
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



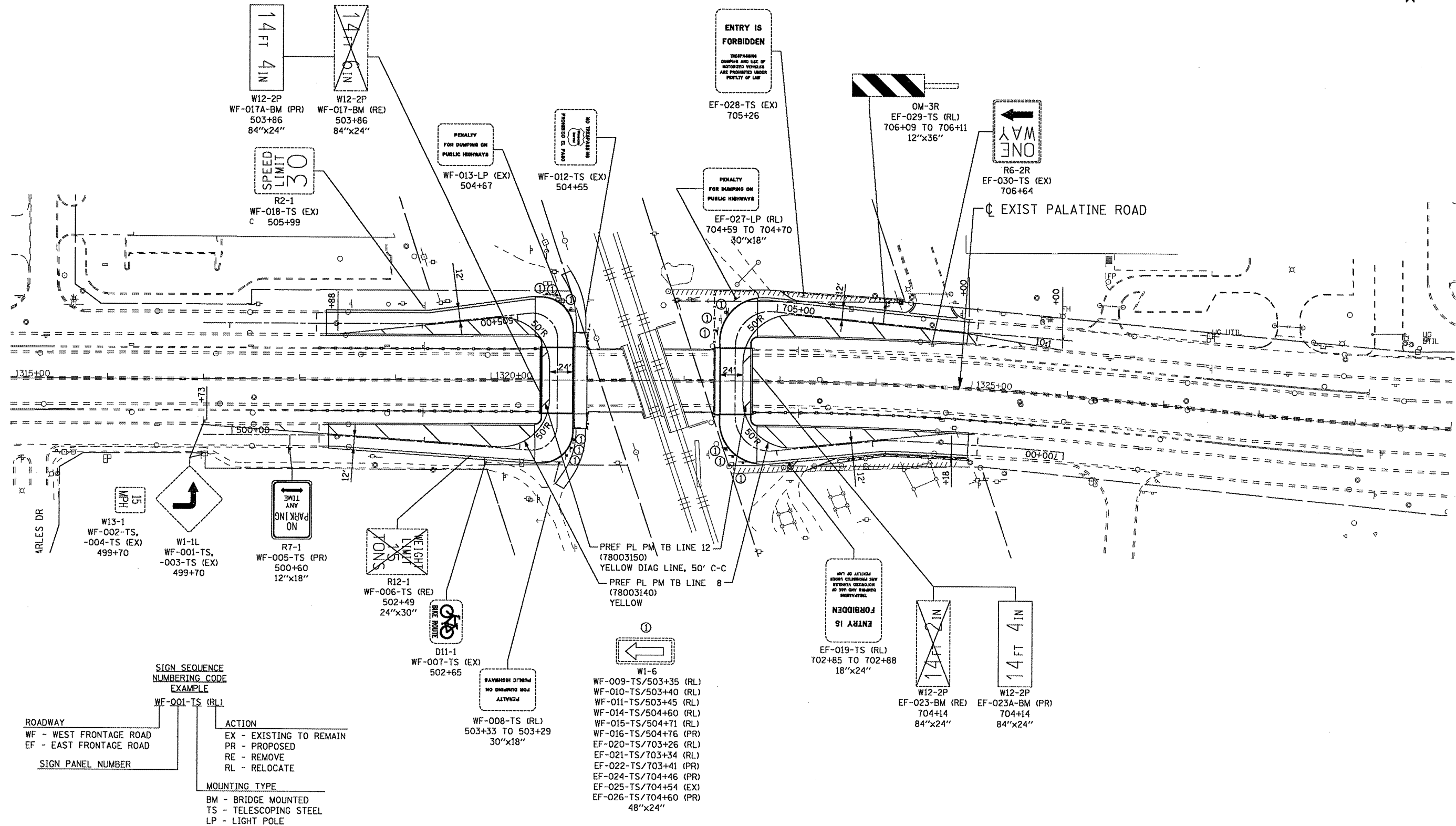


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		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST AND EAST FRONTAGE ROADS  
EXISTING AND PROPOSED DRAINAGE AND UTILITY PLAN**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	20
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
SCALE: 1"=50'		SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60F60



SIGN SEQUENCE NUMBERING CODE EXAMPLE

ROADWAY  
 WF - WEST FRONTAGE ROAD  
 EF - EAST FRONTAGE ROAD

SIGN PANEL NUMBER

ACTION  
 EX - EXISTING TO REMAIN  
 PR - PROPOSED  
 RE - REMOVE  
 RL - RELOCATE

MOUNTING TYPE  
 BM - BRIDGE MOUNTED  
 TS - TELESCOPING STEEL  
 LP - LIGHT POLE

W1-6  
 WF-009-TS/503+35 (RL)  
 WF-010-TS/503+40 (RL)  
 WF-011-TS/503+45 (RL)  
 WF-014-TS/504+60 (RL)  
 WF-015-TS/504+71 (RL)  
 WF-016-TS/504+76 (PR)  
 EF-020-TS/703+26 (RL)  
 EF-021-TS/703+34 (RL)  
 EF-022-TS/703+41 (PR)  
 EF-024-TS/704+46 (PR)  
 EF-025-TS/704+54 (EX)  
 EF-026-TS/704+60 (PR)  
 48"x24"

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

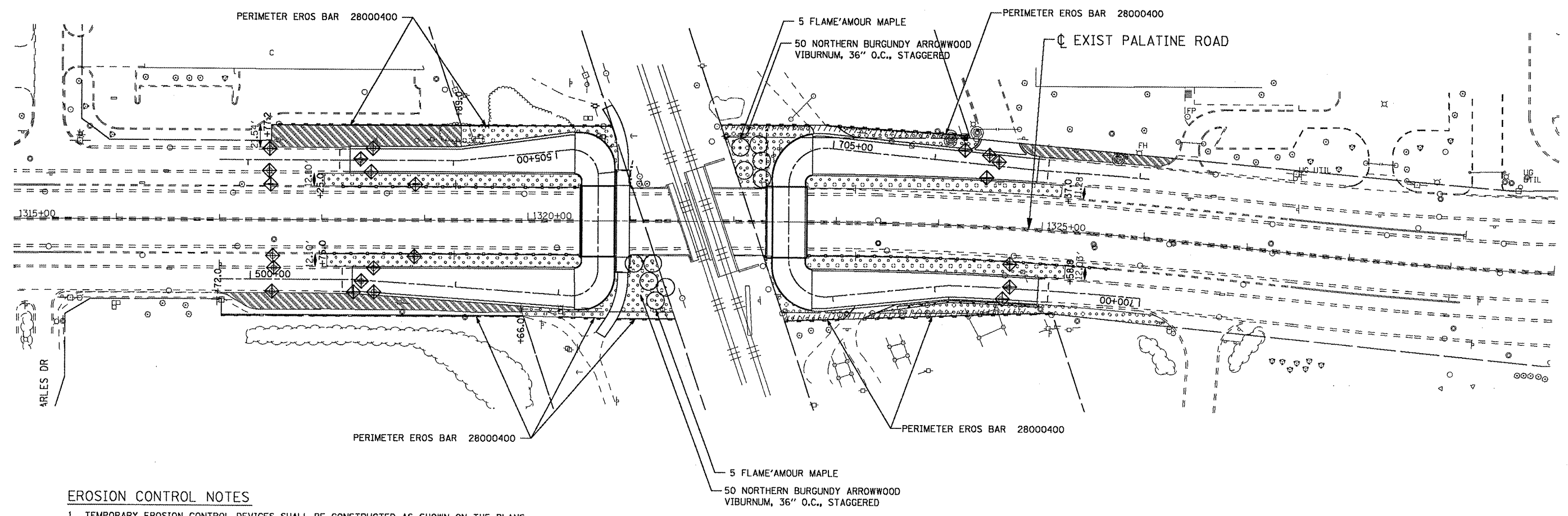
<b>WEST AND EAST FRONTAGE ROADS    PAVEMENT MARKING AND SIGNING PLANS</b>			
SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 21
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F60	





EROSION CONTROL LEGEND	
	INLET AND PIPE PROTECTION (HAY BALES) 28000500
	PERIMETER EROSION BARRIER (SILT FENCE) 28000400



**EROSION CONTROL NOTES**

1. TEMPORARY EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL CONFINE ACTIVITIES TO FALL WITHIN THE PROPOSED RIGHT-OF-WAY AS SHOWN ON THE PLANS.
3. ANY DEVIATION FROM THE TEMPORARY EROSION CONTROL PLAN OR SCHEDULE BY THE CONTRACTOR SHALL BE AT THE DISCRETION OF THE ENGINEER.
4. PERIMETER EROSION BARRIER IS TO BE INSTALLED IN ALL AREAS PRIOR TO START OF CONSTRUCTION.
5. INLET AND PIPE PROTECTION FOR EXISTING STRUCTURES SHALL BE INSTALLED AT THE START OF CONSTRUCTION.

LANDSCAPING LEGEND	
	SODDING SALT TOLERANT 25200110
	SEEDING CLASS 2A WITH EROSION CONTROL BLANKET 25100630

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		DATE - 1/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST AND EAST FRONTAGE ROADS  
EROSION CONTROL AND LANDSCAPING PLANS**

SCALE: 1"=50'    SHEET NO. OF SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	23
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60F60

B.M. - Cut "□" in SE corner of the South Abutment wall of the N-S Railroad Bridge over Palatine Road. Bridge located ±2100' west of the C of Wolf Road. Elev. = 654.66

Existing Structure - Structure No. 016-2529 built as East Frontage Road over F.A.S. Route 116, Palatine Road, Section 110-1415 in 1963. In 2006, the bituminous overlay was replaced with a reinforced concrete overlay, the approach "notch" was removed and replaced and preformed joint seals replaced the existing joint filler. The superstructure consists of 33"x36" PPC Deck Beams supporting a reinforced concrete overlay. The length of the structure is 65'-6" center of bearings. The existing deck width is 41'-0" out to out of deck. The deck is not skewed. The road will be closed during construction.

Salvage - Remove and reinstall existing West Parapet Railing. The East Parapet Railing shall be salvaged and delivered to the IDOT Maintenance Facility in Elk Grove Village.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- Concrete Sealer shall be applied to the surface of the backwalls, abutment seats, and front face of new concrete on abutments.
- The minimum thickness of the Concrete Overlay shall be 5 inches and varies as required to adjust for the new Profile Grade and Beam Camber.
- Slipforming of the parapets is not allowed.
- If the Contractor's procedures for existing deck beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructures, No. 2.

LOADING HL93

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

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinf.)

PRECAST PRESTRESSED UNITS

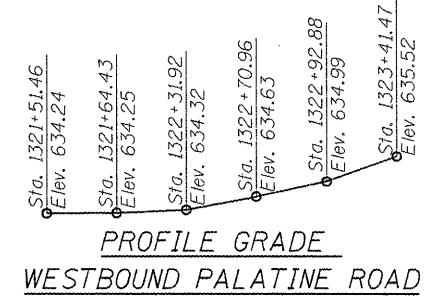
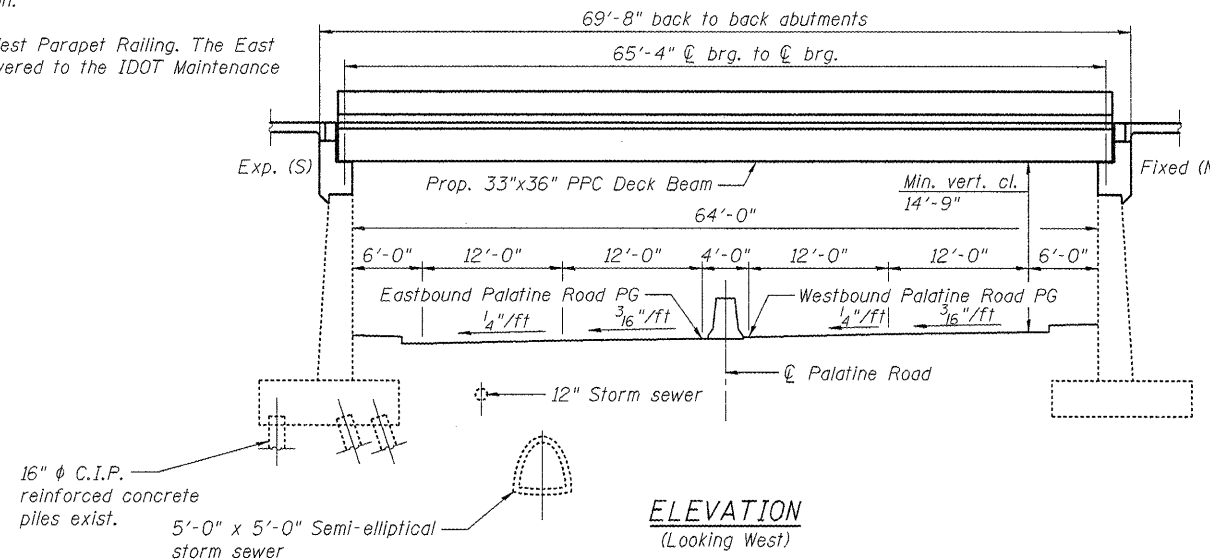
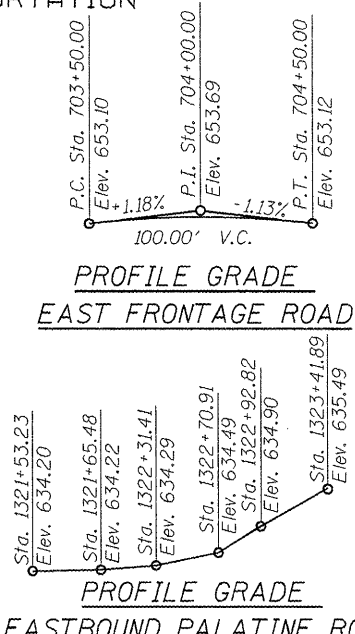
$f'_c = 6,000$  psi  
 $f'_{ci} = 5,000$  psi  
 $f_{pu} = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)  
 $f_{pbt} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site Coefficient (S) = 1.0

INDEX OF SHEETS

- General Plan & Elevation
- Removal Plan
- Deck Plan
- Superstructure Details
- South Bridge Approach Slab
- North Bridge Approach Slab
- Bridge Approach Slab Details
- Preformed Joint Strip Seal
- Parapet Railing
- PPC Deck Beam Framing Plan
- 33"x36" PPC Deck Beam
- 33"x36" PPC Deck Beam Details
- South Abutment
- North Abutment
- Bar Splicer Assembly Details

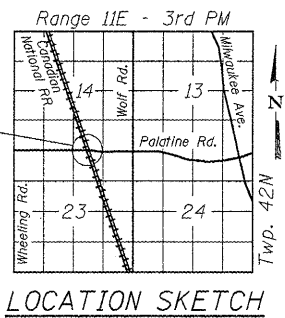
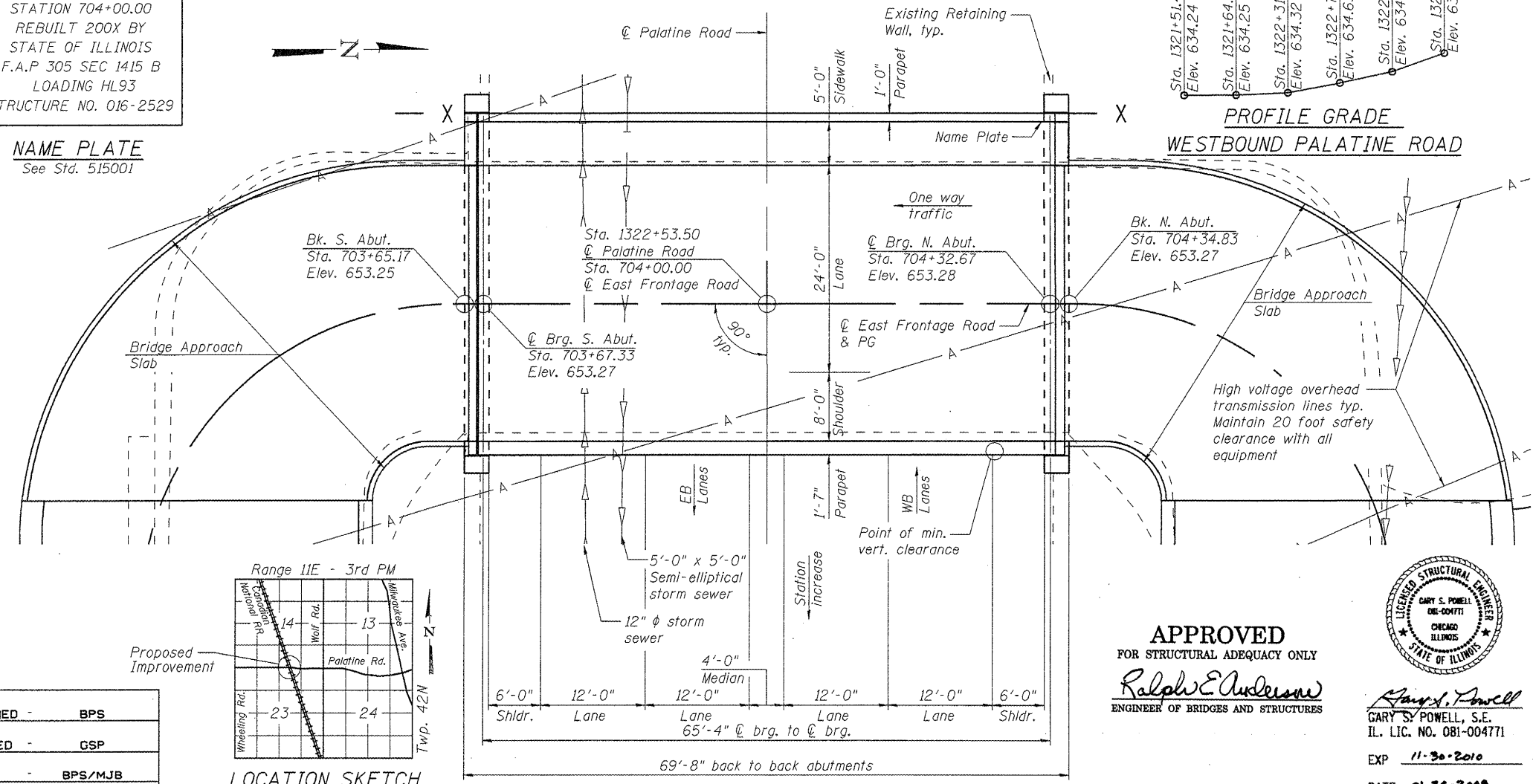


STATION 704+00.00  
REBUILT 200X BY  
STATE OF ILLINOIS  
F.A.P 305 SEC 1415 B  
LOADING HL93  
STRUCTURE NO. 016-2529

NAME PLATE  
See Std. 515001

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures No. 2	Each	1		1
Concrete Removal	Cu. Yd.		35.0	35.0
Structure Excavation	Cu. Yd.		50	50
Concrete Structures	Cu. Yd.		63.8	63.8
Concrete Superstructures	Cu. Yd.	188.5		188.5
Bridge Deck Grooving	Sq. Yd.	582		582
Protective Coat	Sq. Yd.	695		695
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	2,594		2,594
Reinforcement Bars, Epoxy Coated	Pound	39,370	11,370	50,740
Bar Splicers	Each	66		66
Removing and Re-erecting Existing Railing	Foot	66.5		66.5
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	39.5		39.5
Concrete Sealer	Sq. Ft.		641	641
Concrete Wearing Surface, 5"	Sq. Yd.	292.5		292.5
Asbestos Bearing Pad Removal	Each	26		26



DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

*Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



*Gary S. Powell*  
GARY S. POWELL, S.E.  
IL. LIC. NO. 081-004771

EXP 11-30-2010  
DATE 01-28-2009



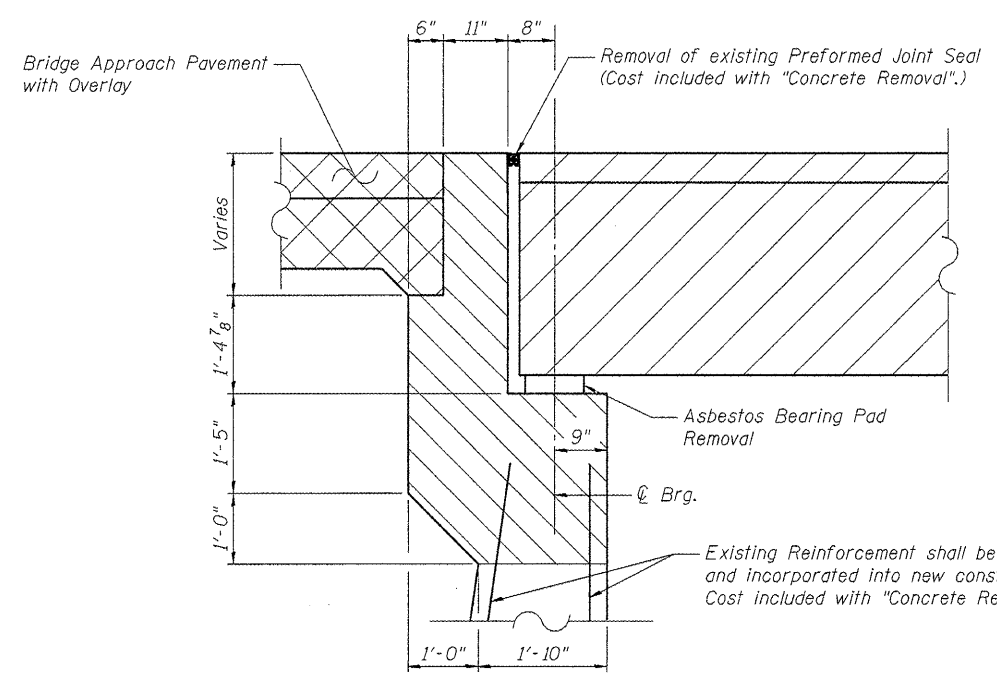
GENERAL PLAN & ELEVATION  
EAST FRONTAGE ROAD OVER PALATINE ROAD  
F.A.P. 305/PALATINE ROAD  
SECTION 1415 B  
COOK COUNTY  
STATION 704+00.00  
STRUCTURE NO. 016-2529

SHEET NO. 1 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	24
CONTRACT NO. 60F60					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

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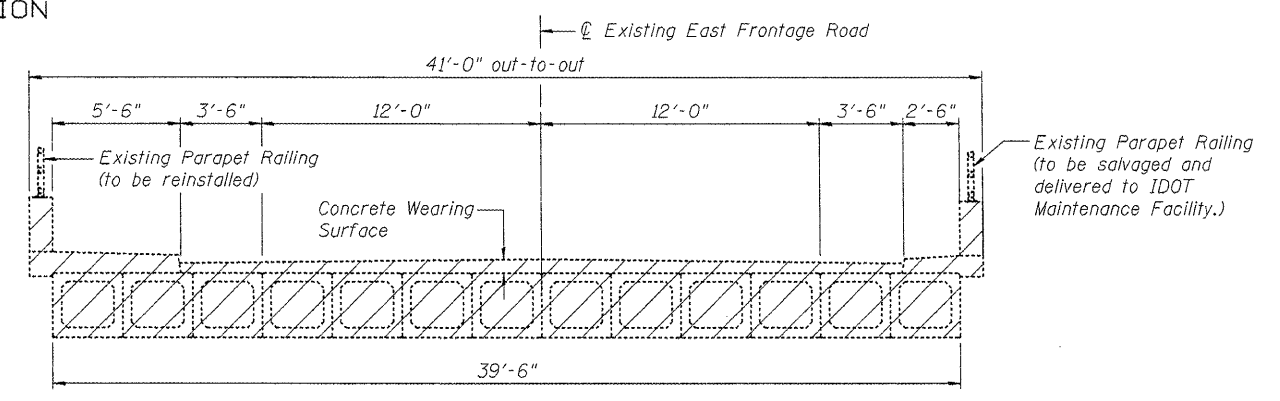
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



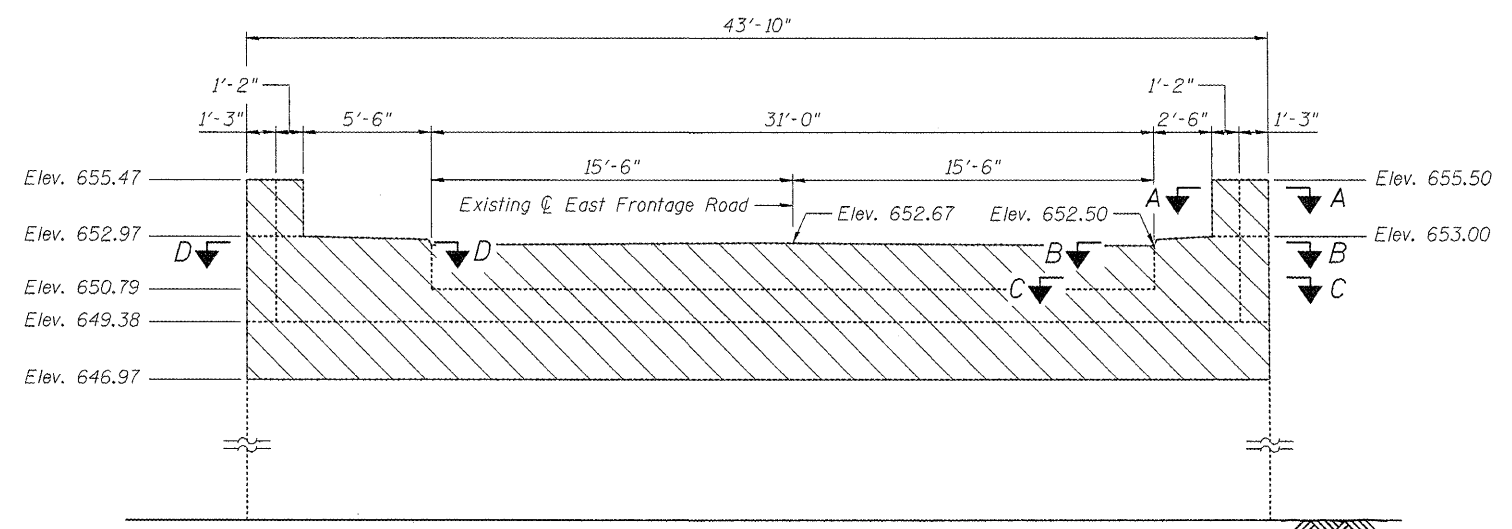
SECTION THRU EXISTING ABUTMENT

**LEGEND**

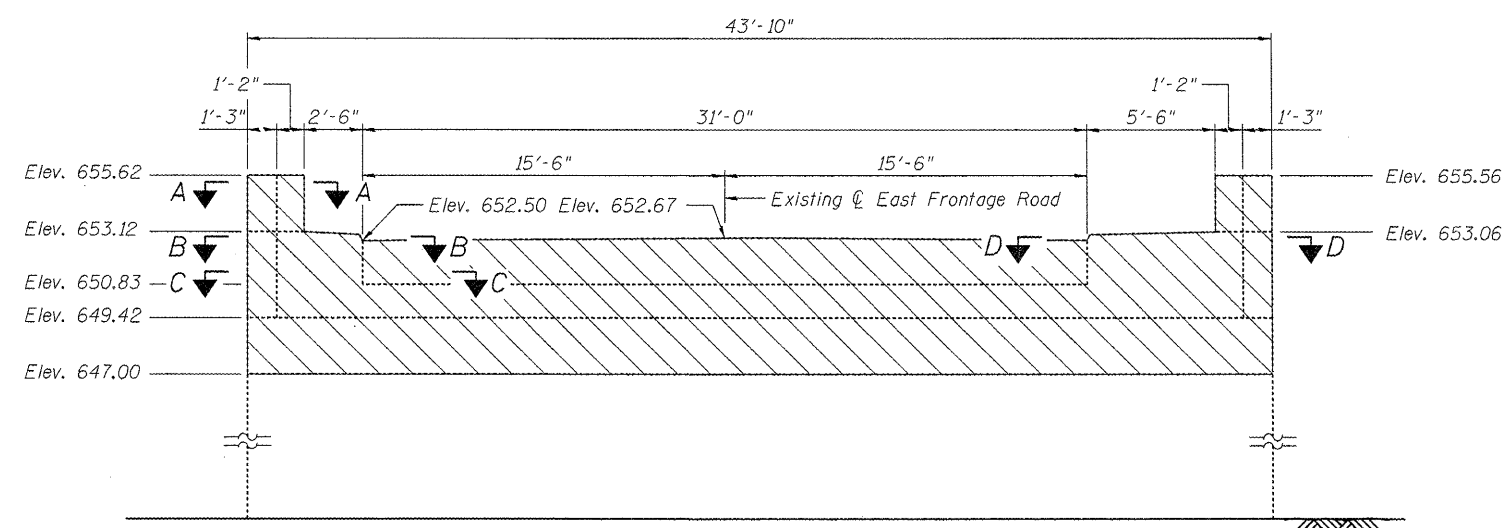
- Removal of Existing Superstructures
- Concrete Removal
- Approach Slab Removal See Roadway Plans



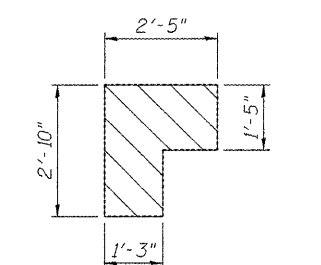
EXISTING SUPERSTRUCTURE  
(Looking North)



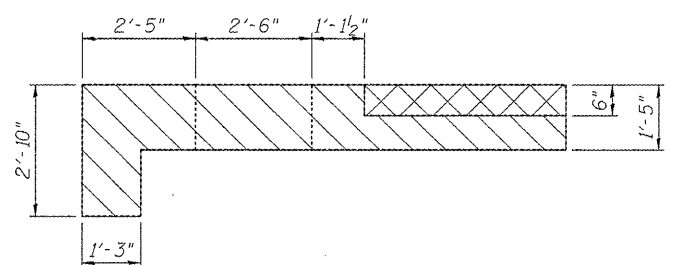
NORTH ABUTMENT ELEVATION  
(Looking North)



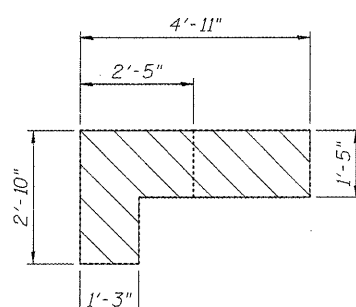
SOUTH ABUTMENT ELEVATION  
(Looking South)



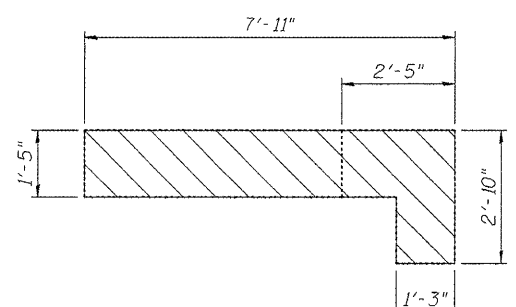
SECTION A-A  
(South Abutment shown, North Abutment opposite hand)



SECTION C-C  
(South Abutment shown, North Abutment opposite hand)



SECTION B-B  
(South Abutment shown, North Abutment opposite hand)



SECTION D-D  
(South Abutment shown, North Abutment opposite hand)

Note:  
Concrete Wearing Surface, Sidewalk, Parapet removal and the East Parapet Railing removal and salvage of shall be included in the cost of "Removal of Existing Superstructures, No. 2."

REMOVAL BILL OF MATERIAL

Item	Unit	Quantity
Asbestos Bearing Pad Removal	Each	26
Removal of Existing Superstructures No. 2	Each	1
Concrete Removal	Cu. Yd.	35.0

REMOVAL PLAN  
STRUCTURE NO. 016-2529

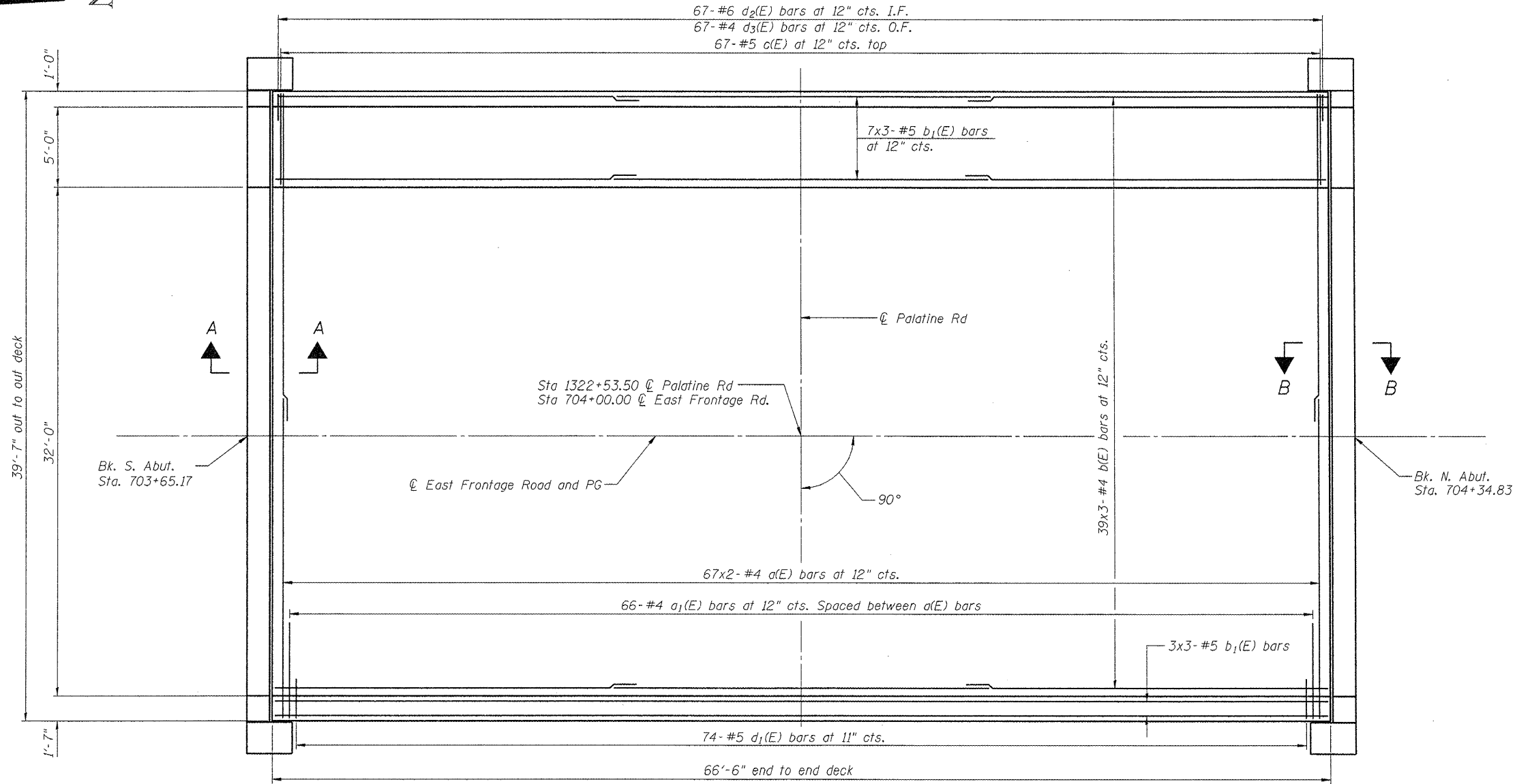
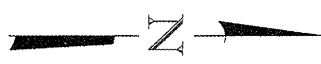
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

SHEET NO. 2 15 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60F60					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

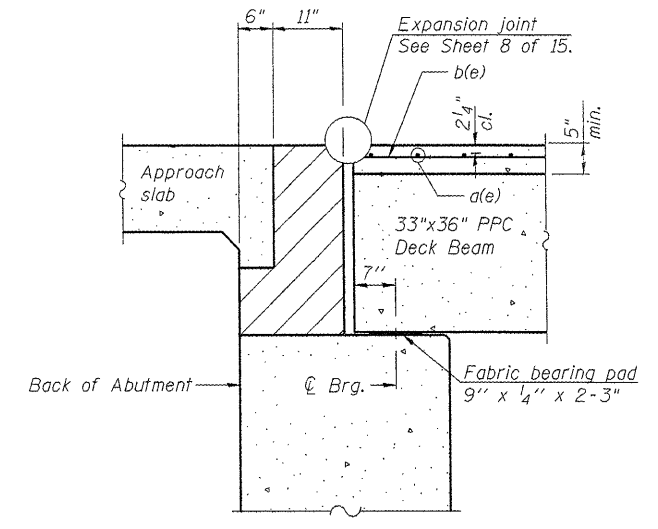


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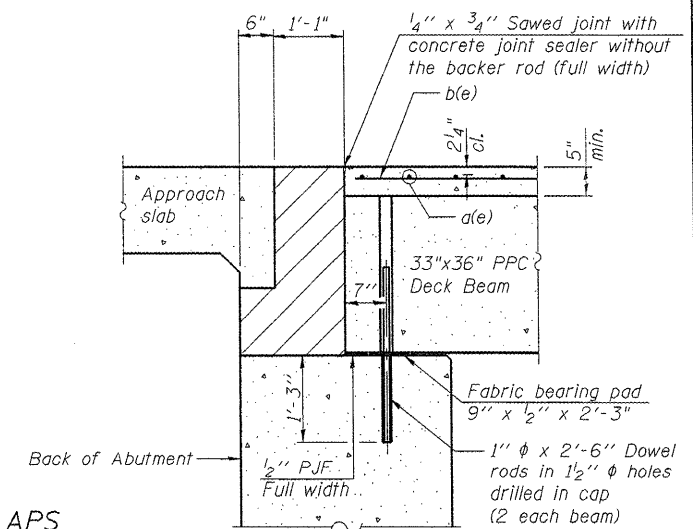
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



DECK PLAN



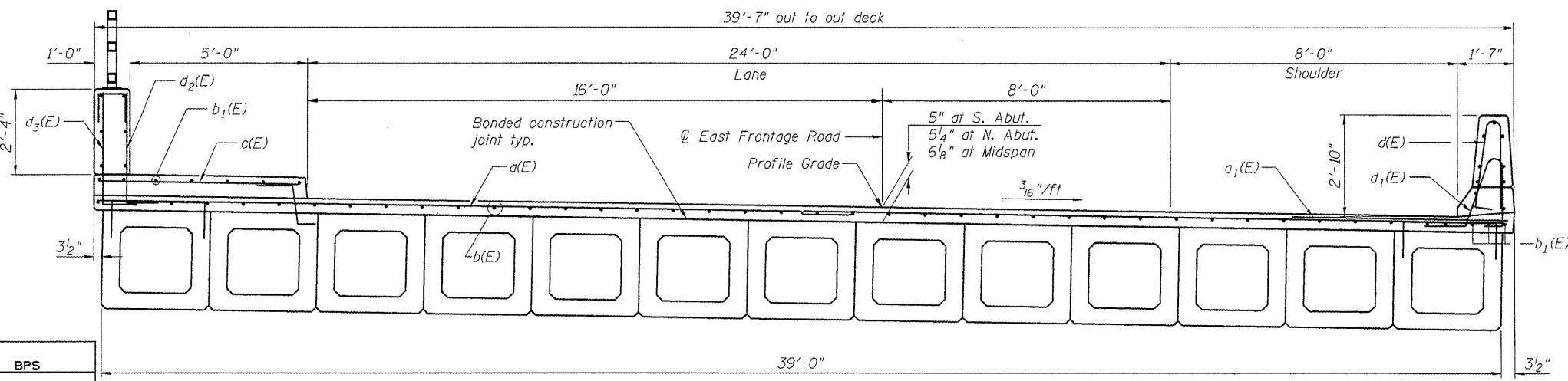
SECTION A-A



SECTION B-B

**MINIMUM BAR LAPS**  
(Deck and Sidewalk)  
#4 bar = 1'-4"  
#5 bar = 1'-8"

**Notes:**  
Hatched area to be poured after concrete wearing surface is in place. Quantity of concrete included with Concrete Superstructure.  
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.  
See sheet 4 of 15 for superstructure details and Bill of Materials.  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
See sheet 4 of 15 for parapet reinforcement.  
See sheet 12 of 15 for bearing pad details.



DECK CROSS SECTION  
(Looking Upstation)

DECK PLAN  
STRUCTURE NO. 016-2529

DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	26
15 SHEETS	CONTRACT NO. 60F60				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

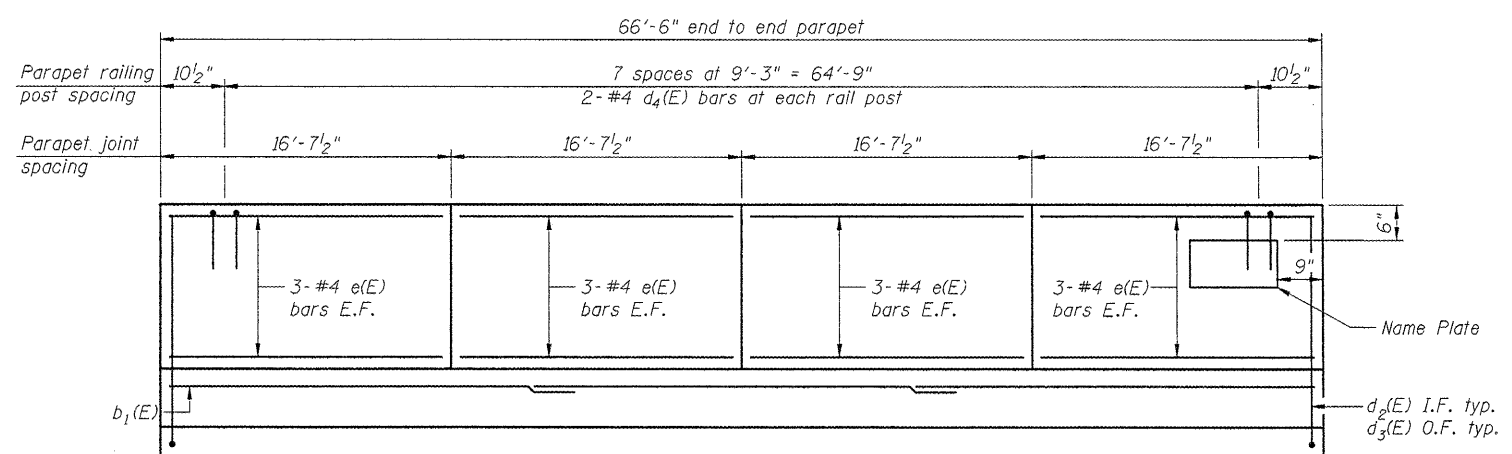


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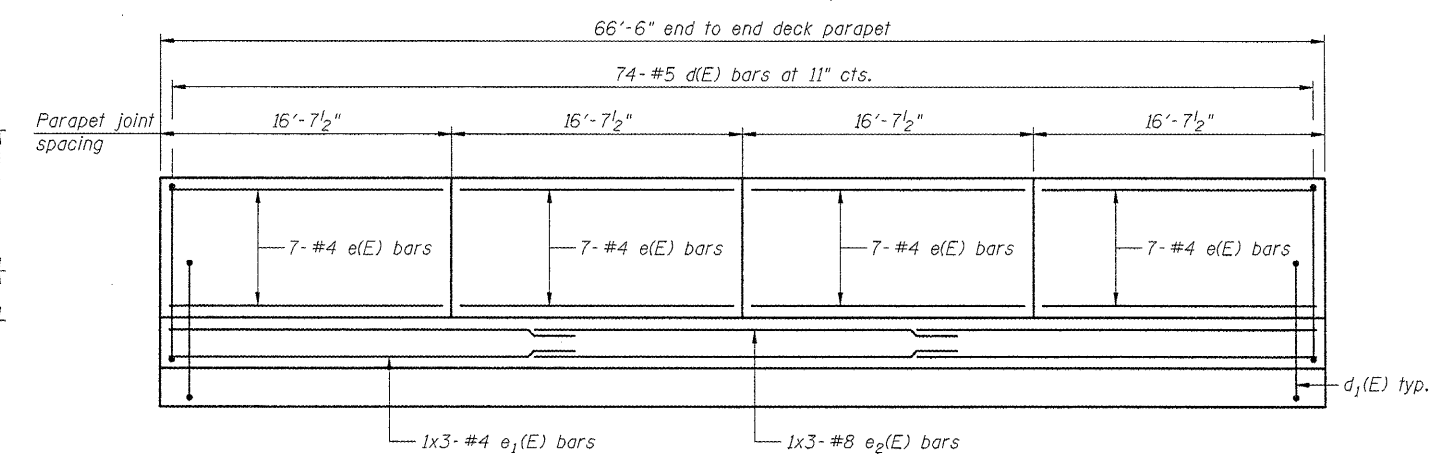
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE  
BILL OF MATERIAL

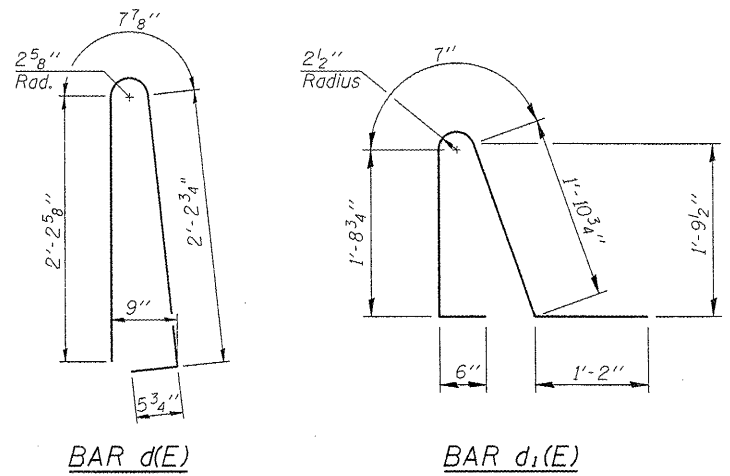
Bar	No.	Size	Length	Shape
a(E)	134	#4	20'-4"	—
a <sub>1</sub> (E)	66	#4	6'-0"	—
b(E)	117	#4	23'-0"	—
b <sub>1</sub> (E)	30	#5	23'-2"	—
c(E)	67	#5	5'-8"	—
d(E)	74	#5	6'-10"	Λ
d <sub>1</sub> (E)	74	#5	5'-10"	Λ
d <sub>2</sub> (E)	67	#6	4'-4"	L
d <sub>3</sub> (E)	67	#4	3'-10"	L
d <sub>4</sub> (E)	16	#4	2'-2"	n
e(E)	52	#4	16'-3"	—
e <sub>1</sub> (E)	3	#4	23'-2"	—
e <sub>2</sub> (E)	3	#8	25'-1"	—
Item		Unit	Quantity	
Concrete Superstructure		Cu. Yd.	37.1	
Bridge Deck Grooving		Sq. Yd.	236	
Protective Coat		Sq. Yd.	347	
Reinforcement Bars, Epoxy Coated		Pound	7,430	
Concrete Wearing Surface, 5"		Sq. Yd.	292.5	



INSIDE ELEVATION OF SIDEWALK PARAPET

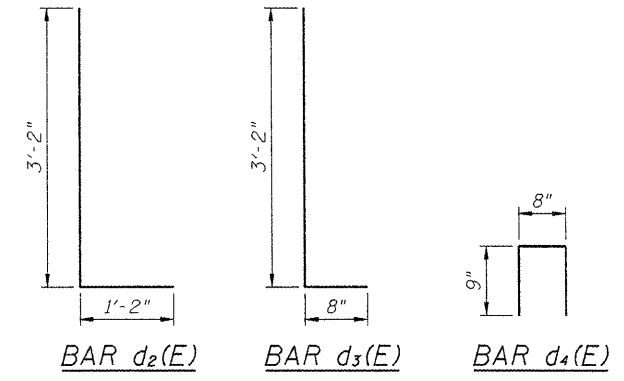


INSIDE ELEVATION OF ROADWAY PARAPET



BAR d(E)

BAR d1(E)



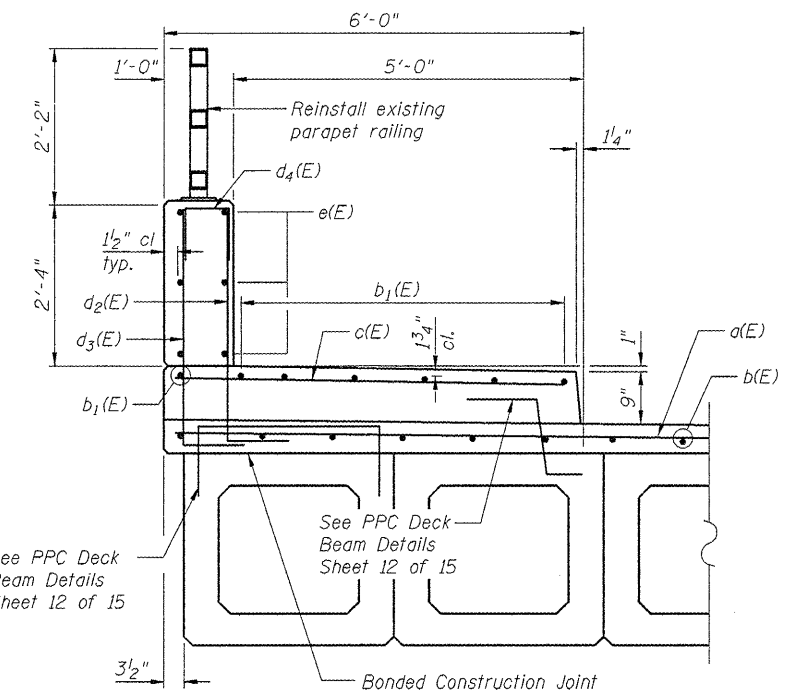
BAR d2(E)

BAR d3(E)

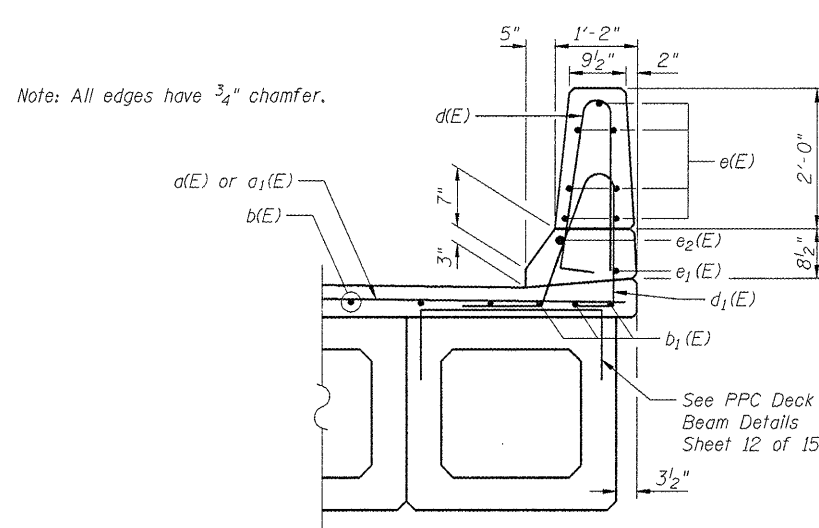
BAR d4(E)

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 016-2529

SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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15 SHEETS	FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT
			CONTRACT NO. 60F60		



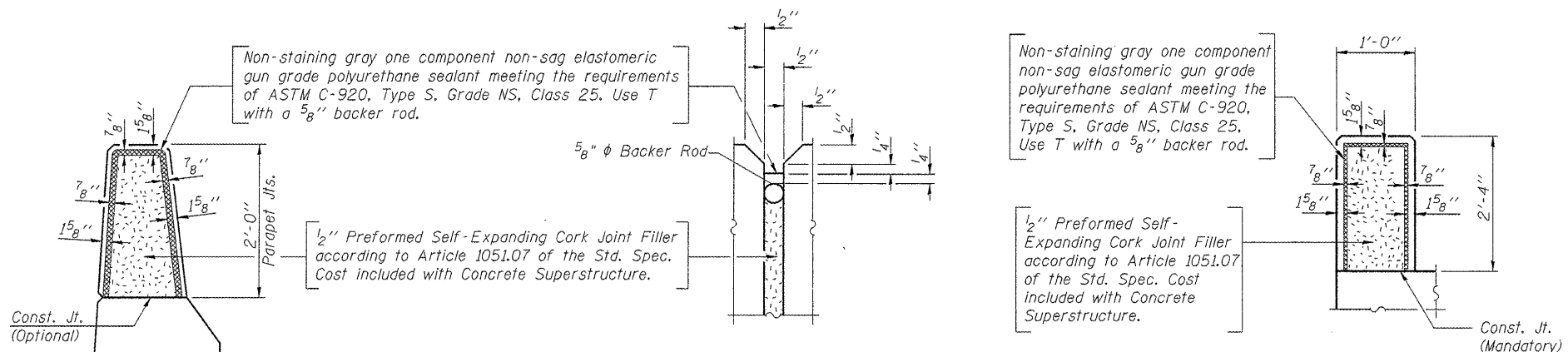
SECTION THRU SIDEWALK PARAPET AND SIDEWALK



SECTION THRU ROADWAY PARAPET

MINIMUM BAR LAPS

- (Parapets)
- #4 bar = 1'-4"
- #8 bar = 3'-5"



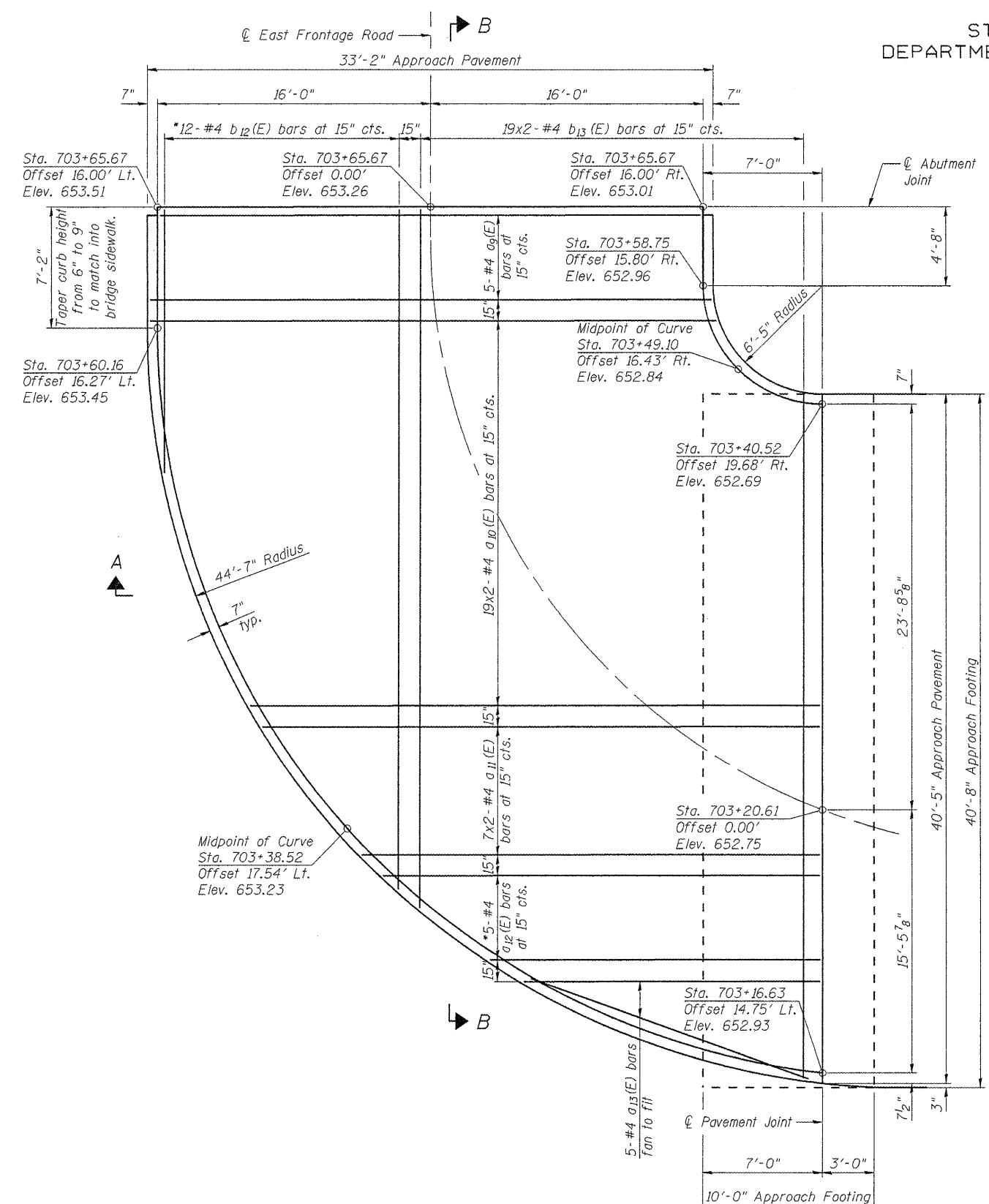
PARAPET JOINT DETAILS



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DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



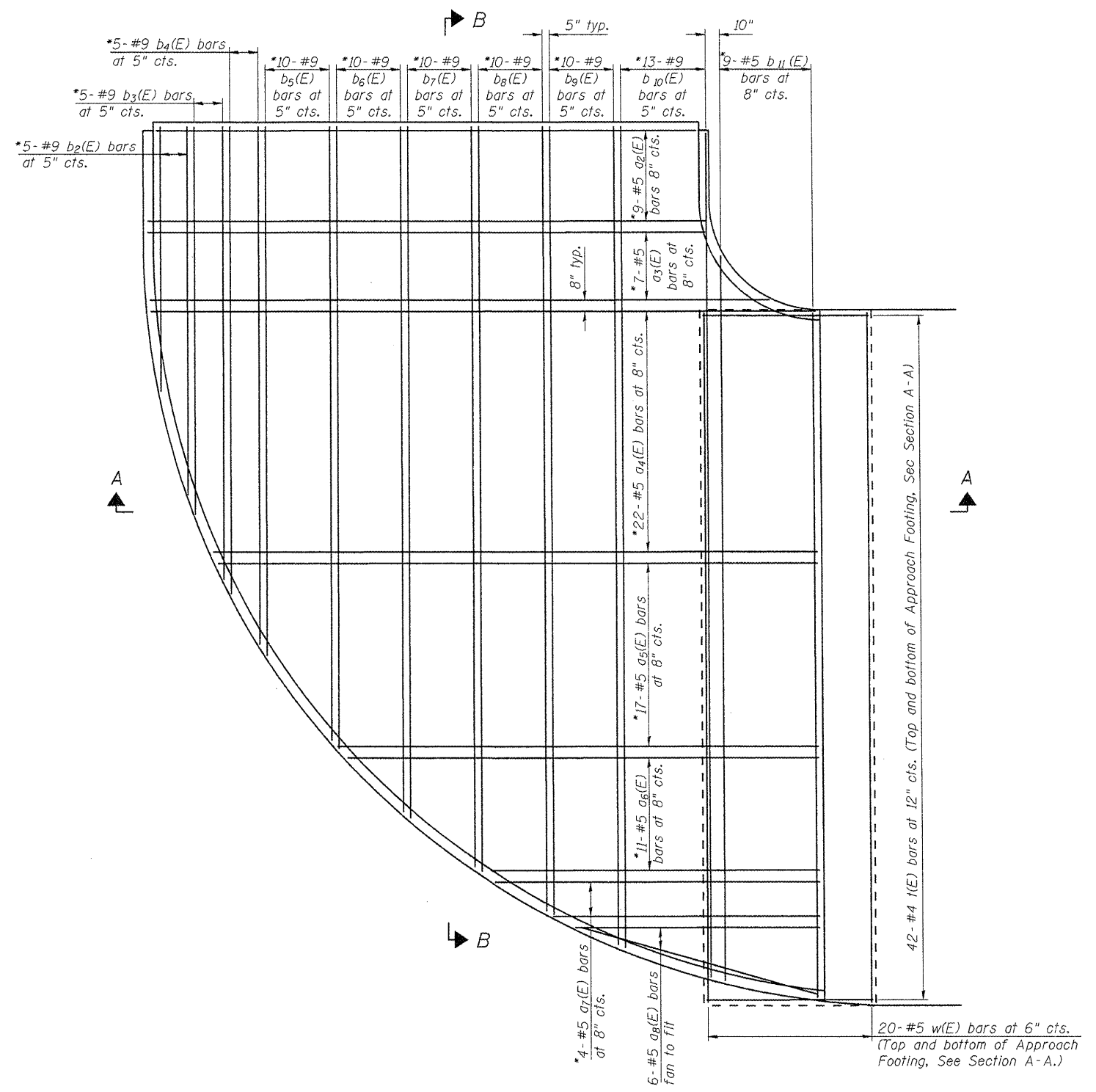
**TOP OF SLAB REINFORCEMENT**  
(Including Approach Slab Layout)

**MINIMUM BAR LAPS**  
(Approach Slab)  
#4 bar = 1'-8"  
#5 bar = 2'-2"

DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

Notes:  
See Sheet 7 of 15 for Section A-A, Section B-B,  
and pavement joint detail.  
See Sheet 3 of 15 for abutment joint detail.

\*Cut reinforcement bars to fit.



**BOTTOM OF SLAB AND APPROACH FOOTING REINFORCEMENT**

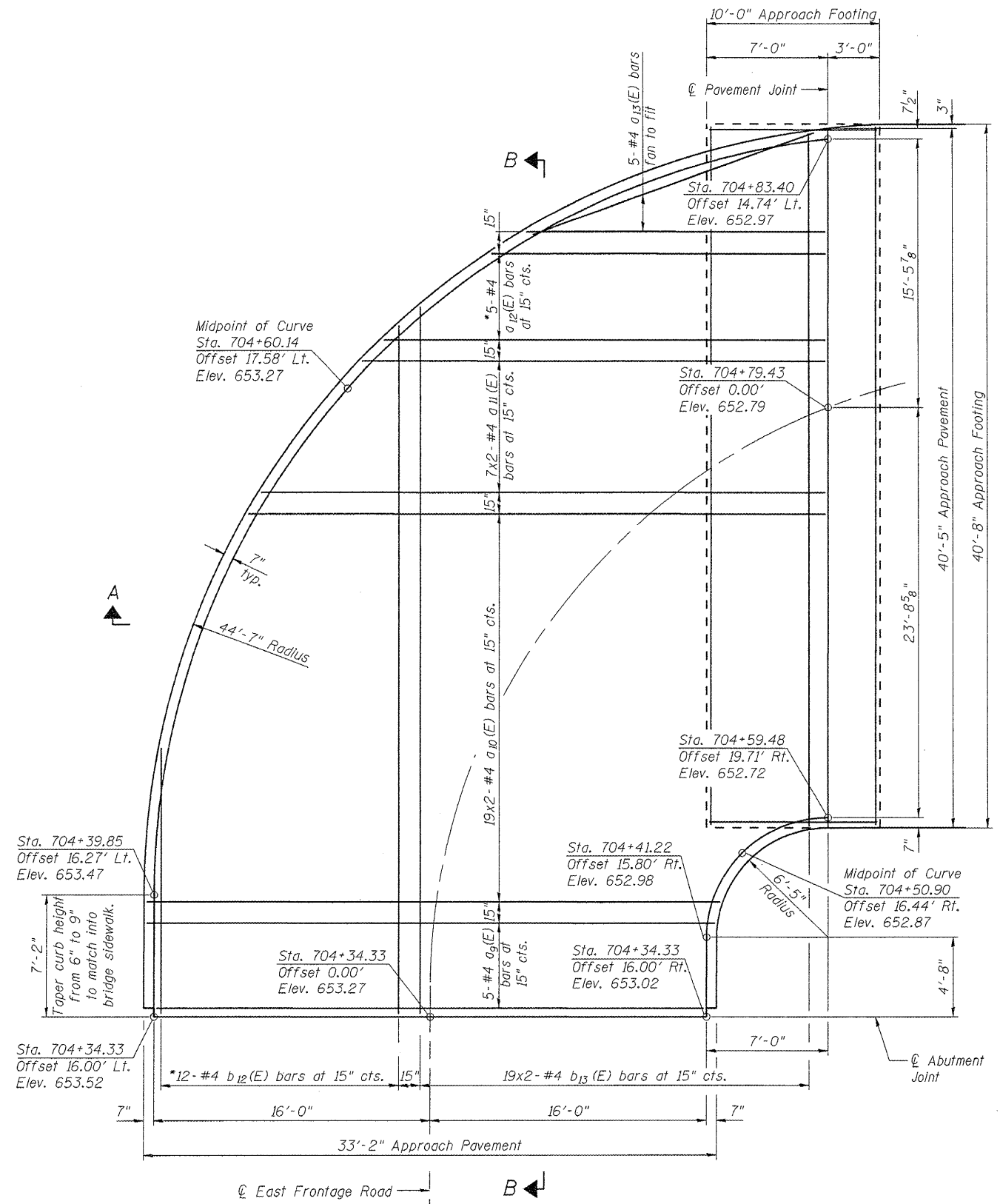
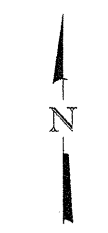
**SOUTH BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 016-2529**

SHEET NO. 5 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
			CONTRACT NO. 60F60		



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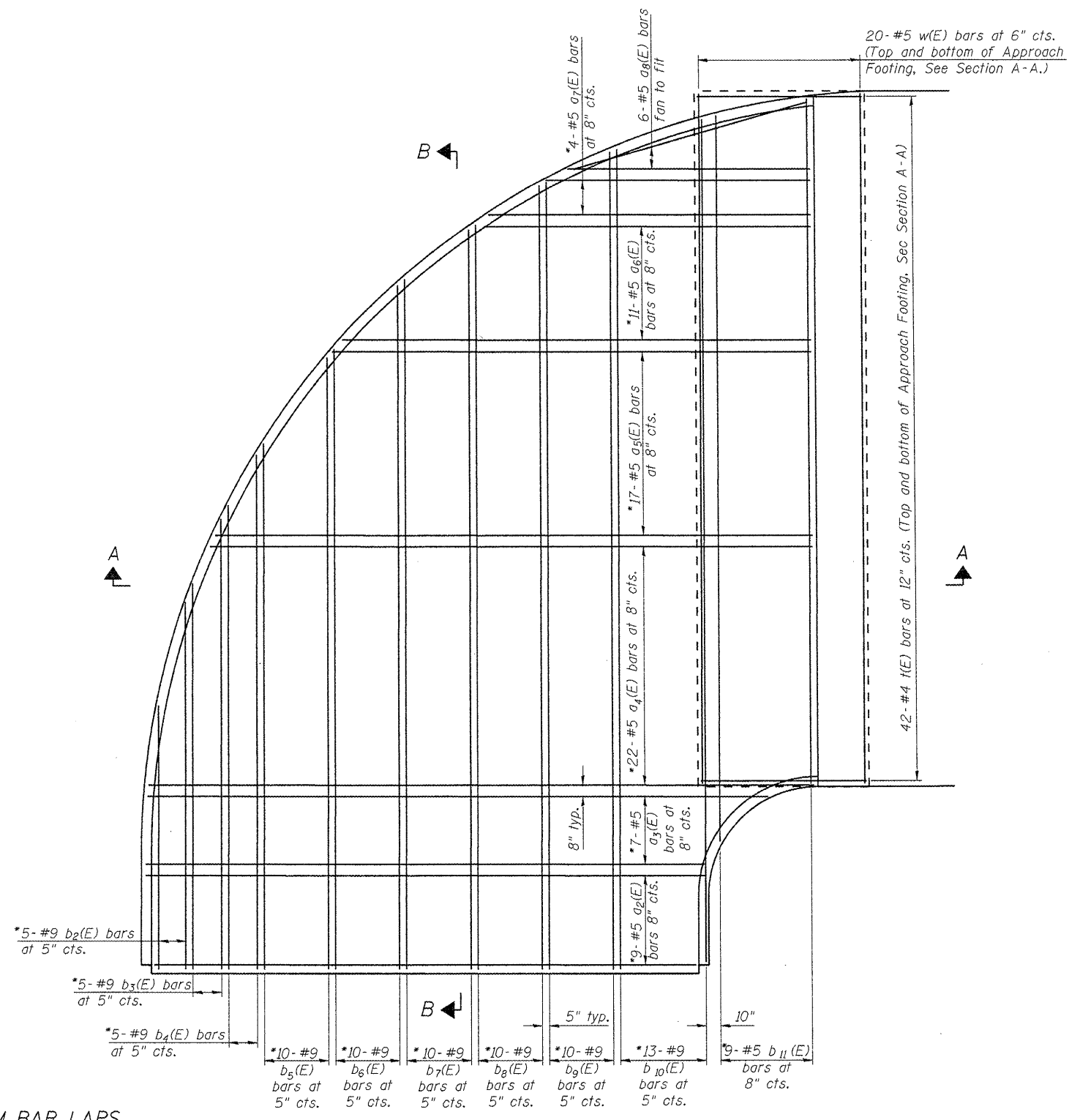
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**TOP OF SLAB REINFORCEMENT**  
(Including Approach Slab Layout)

**MINIMUM BAR LAPS**  
(Approach Slab)  
#4 bar = 1'-8"  
#5 bar = 2'-2"

Notes:  
See Sheet 7 of 15 for Section A-A, Section B-B, and pavement joint detail.  
See Sheet 3 of 15 for abutment joint detail.  
\*Cut reinforcement bars to fit.



**BOTTOM OF SLAB AND APPROACH FOOTING REINFORCEMENT**

**NORTH BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 016-2529**

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

SHEET NO. 6 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7			ILLINOIS FED. AID PROJECT		
				CONTRACT NO. 60F60	



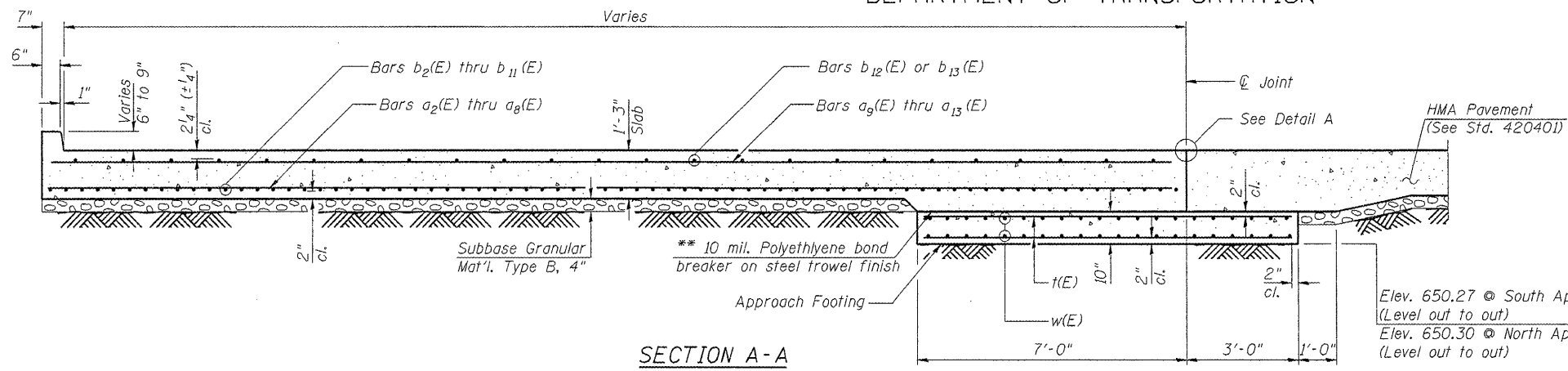
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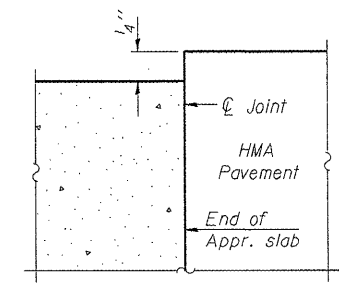
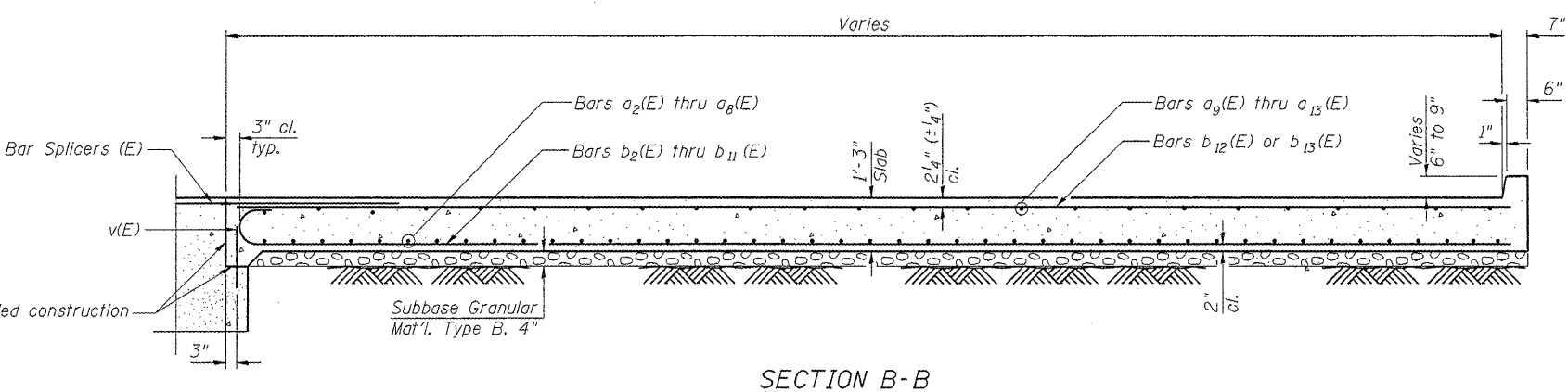
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Notes:  
Approach slab concrete shall be paid for as Concrete Superstructure.  
Approach footing concrete shall be paid for as Concrete Structures.  
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
For v(E) bar details, see sheets 13 or 14 of 15.  
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
For bar splicer details, see sheet 15 of 15.  
Cost of excavation for approach footing included with Concrete Structures.

\*\* Cost included with Concrete Superstructure



Elev. 650.27 @ South Approach Slab  
(Level out to out)  
Elev. 650.30 @ North Approach Slab  
(Level out to out)

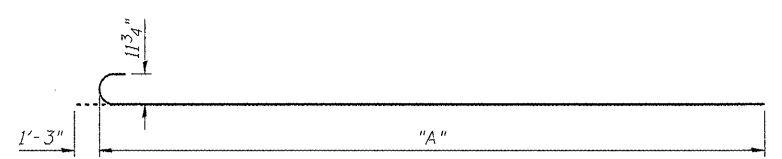


TWO BRIDGE APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	18	#5	32'-8"	—
a3(E)	14	#5	36'-3"	—
a4(E)	44	#5	38'-10"	—
a5(E)	34	#5	34'-11"	—
a6(E)	22	#5	27'-5"	—
a7(E)	8	#5	18'-10"	—
a8(E)	12	#5	14'-2"	—
a9(E)	10	#4	32'-10"	—
a10(E)	76	#4	20'-6"	—
a11(E)	28	#4	17'-2"	—
a12(E)	10	#4	25'-6"	—
a13(E)	10	#4	17'-3"	—
b2(E)	10	#9	22'-11"	C
b3(E)	10	#9	27'-9"	C
b4(E)	10	#9	31'-6"	C
b5(E)	20	#9	37'-2"	C
b6(E)	20	#9	41'-4"	C
b7(E)	20	#9	44'-7"	C
b8(E)	20	#9	47'-2"	C
b9(E)	20	#9	49'-1"	C
b10(E)	26	#9	50'-10"	C
b11(E)	18	#5	42'-5"	—
b12(E)	24	#4	39'-10"	—
b13(E)	76	#4	25'-9"	—
t(E)	168	#4	9'-8"	—
w(E)	80	#5	40'-4"	—
Concrete Structures			Cu. Yd.	25.2
Concrete Superstructure			Cu. Yd.	151.4
Bridge Deck Grooving			Sq. Yd.	346
Protective Coat			Sq. Yd.	348
Reinforcement Bars, Epoxy Coated			Pound	36,390

TABLE OF DIMENSIONS  
BARS b2(E) THRU b10(E)

Bar	Dimension "A"
b2(E)	21'-8"
b3(E)	26'-6"
b4(E)	30'-3"
b5(E)	35'-11"
b6(E)	40'-1"
b7(E)	43'-4"
b8(E)	45'-11"
b9(E)	47'-10"
b10(E)	49'-7"



BARS b2(E) THRU b10(E)

BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 016-2529

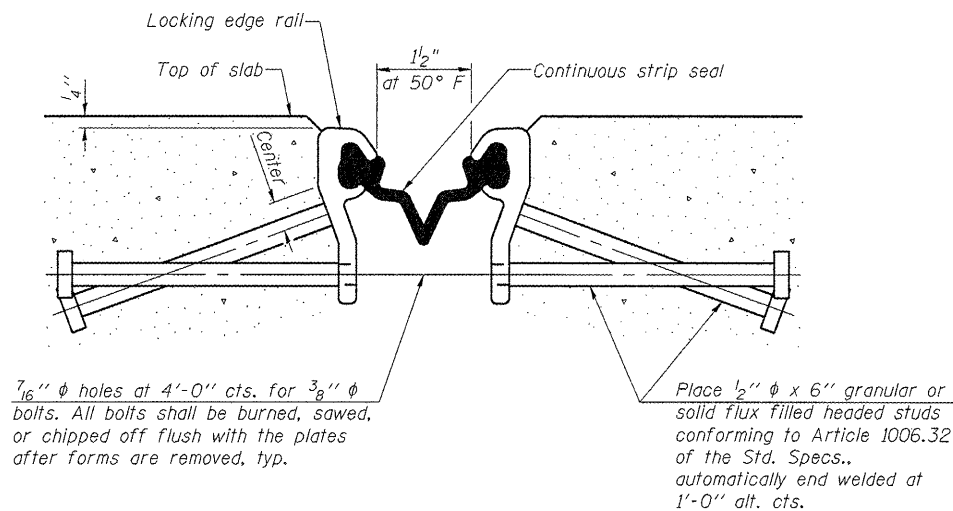
DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

SHEET NO. 7 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	30
FED. ROAD DIST. NO. 7			ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 60F60		

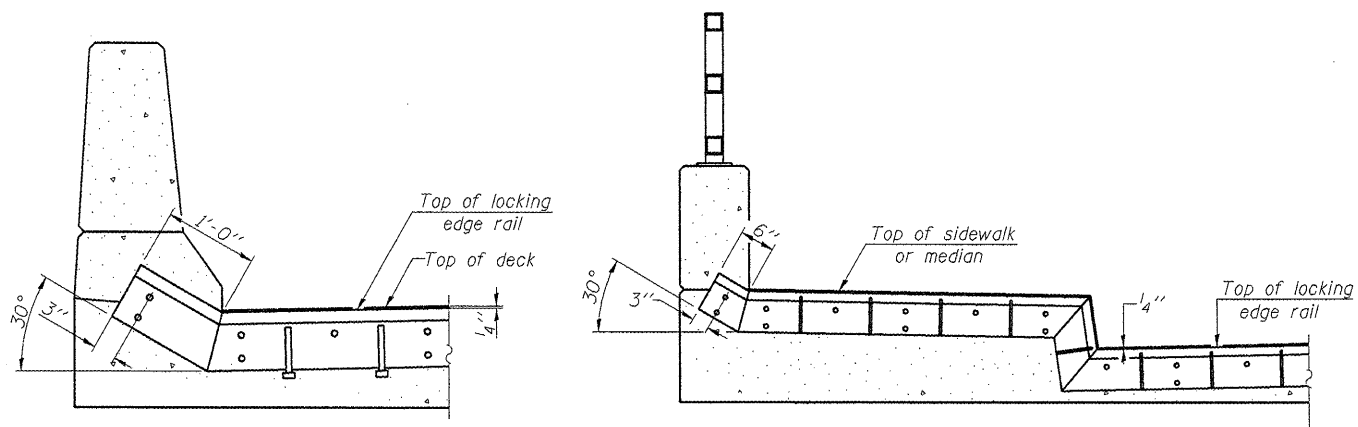


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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



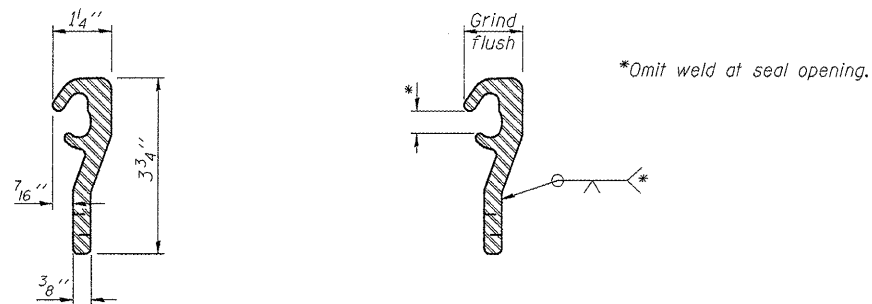
SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS



AT PARAPET

AT SIDEWALK

TYPICAL END TREATMENTS



LOCKING EDGE RAIL

LOCKING EDGE RAIL SPLICE

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.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. 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.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed.

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	39.5

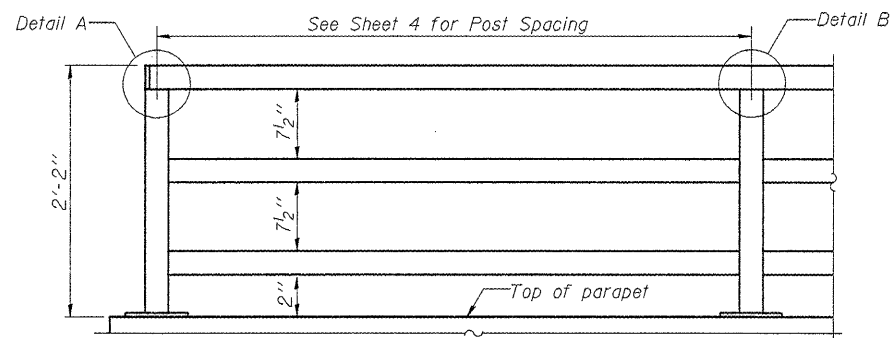
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 016-2529

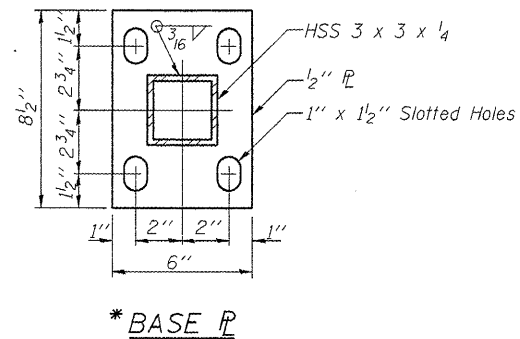
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	305	1415 B	COOK	75	31
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F60		

**ENTRAN**

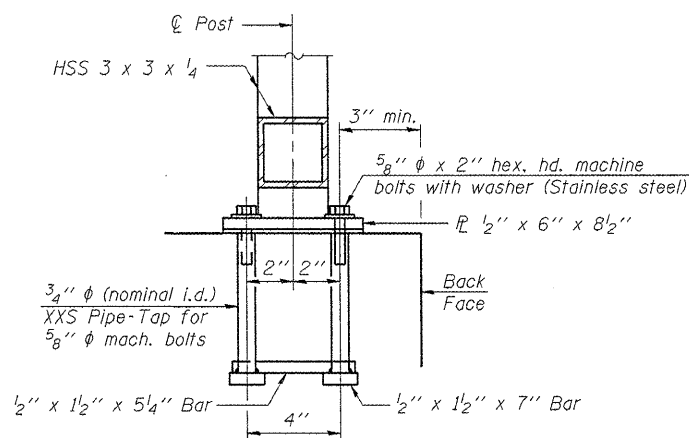
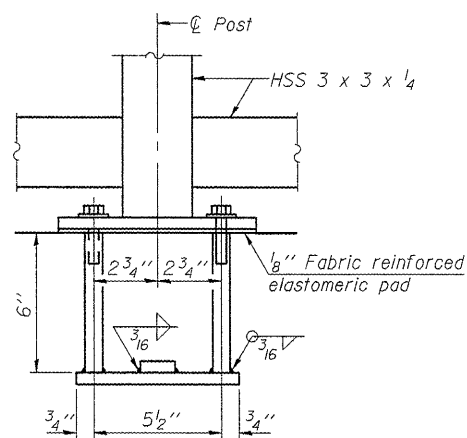
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**\* PARAPET RAILING ELEVATION**  
(Inside Face of Three Element Rail)

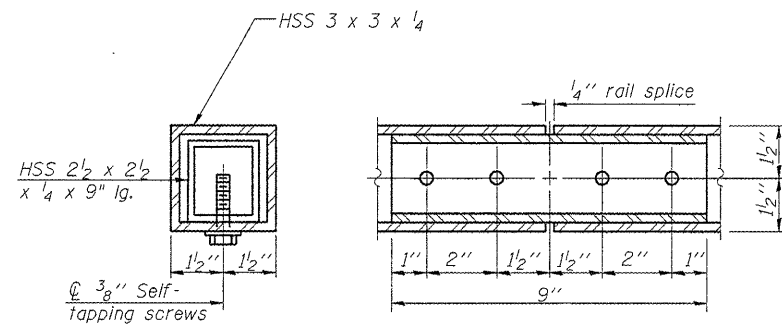


**\* BASE PL**

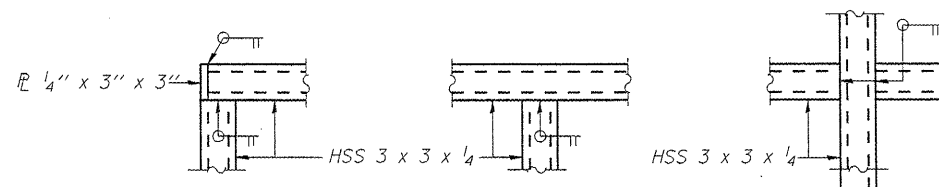


**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8"  $\phi$  anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



**\* RAIL SPLICE**



**\*DETAIL A**

**\*DETAIL B**

**\*DETAIL C**

**BILL OF MATERIAL**

Item	Unit	Quantity
Removing and Re-Erecting Existing Railing	Foot	66.5

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

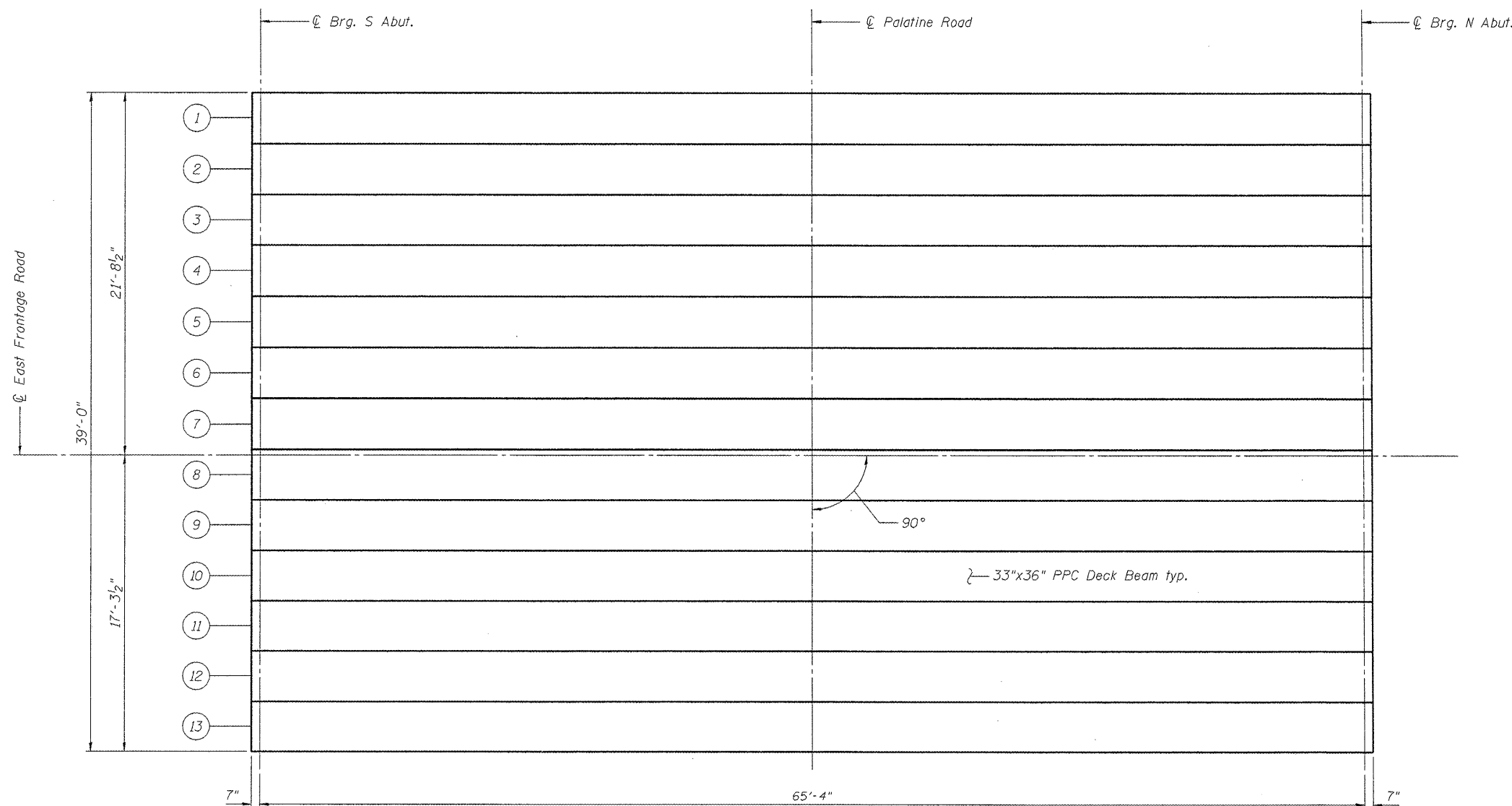
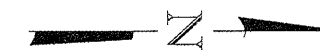
**PARAPET RAILING  
STRUCTURE NO. 016-2529**

SHEET NO.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9	305	1415 B	COOK	75	32
15 SHEETS			CONTRACT NO. 60F60		
FED. ROAD DIST. NO. 7   ILLINOIS   FED. AID PROJECT					

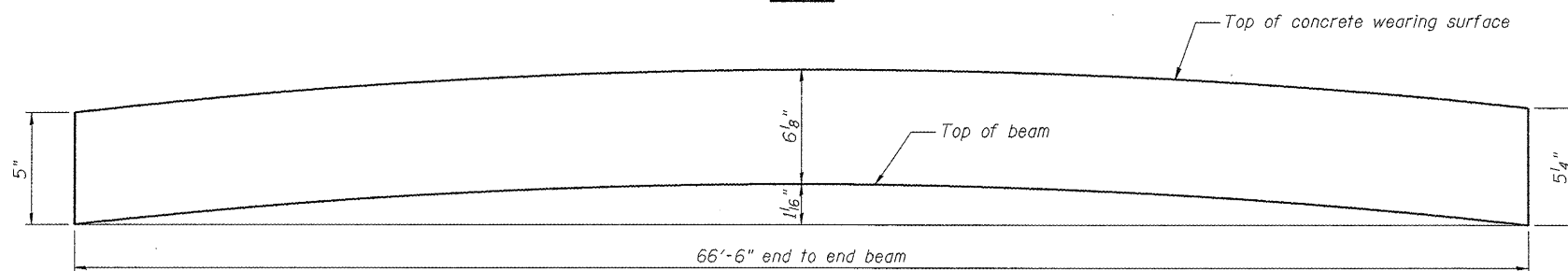
\*FOR INFORMATION ONLY



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



PLAN



INITIAL CAMBER DIAGRAM

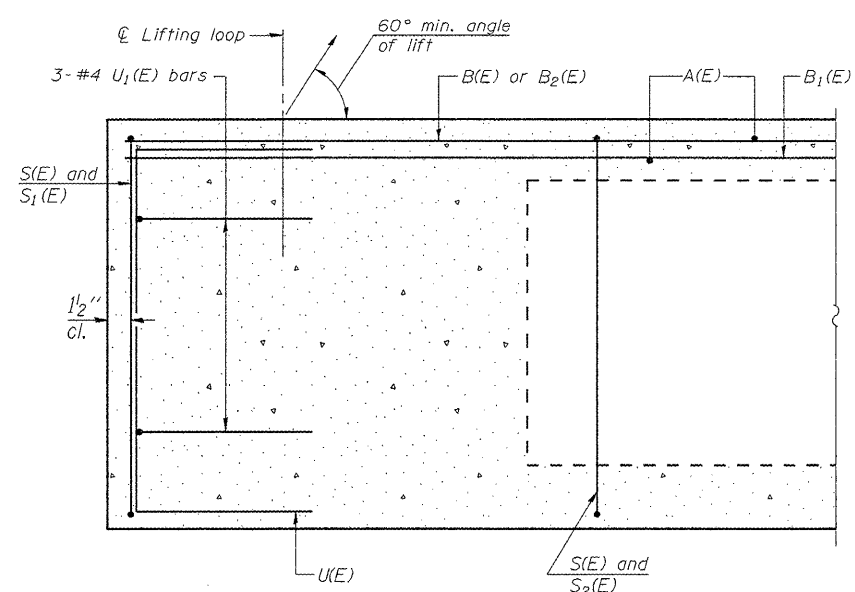
PPC DECK BEAM FRAMING PLAN  
STRUCTURE NO. 016-2529

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

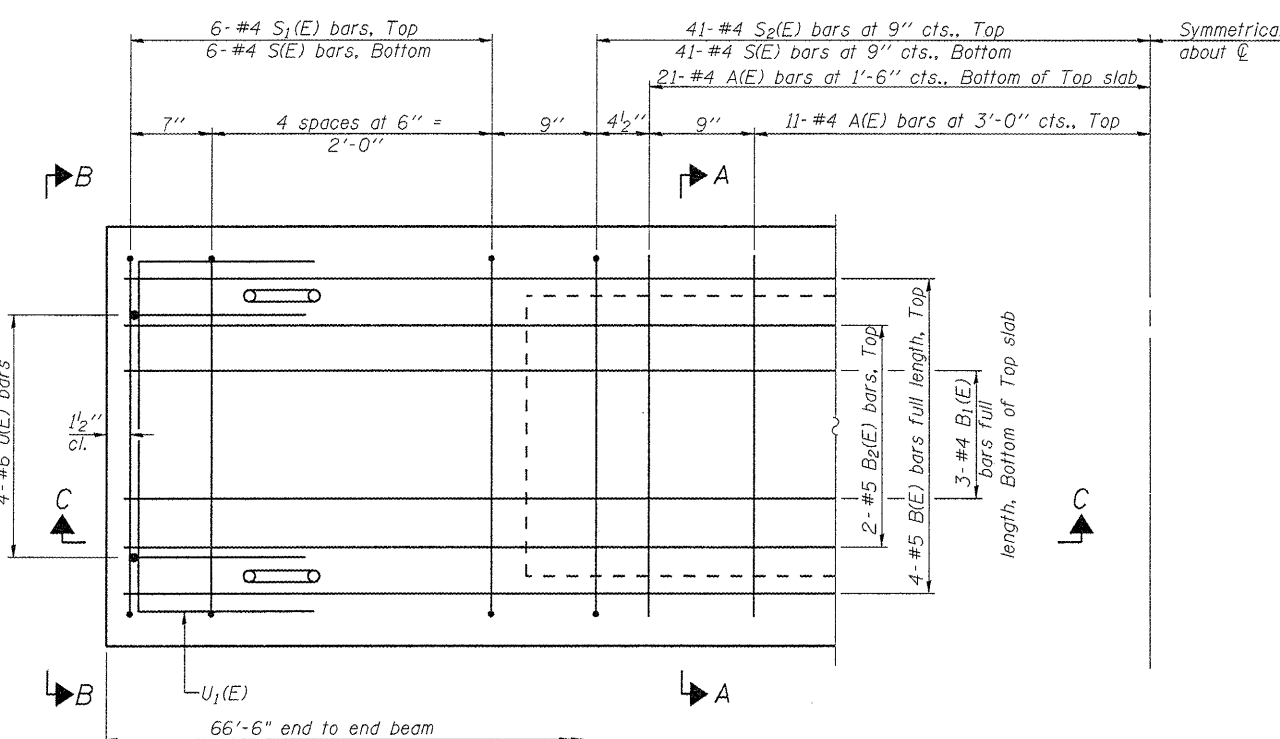
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	305	1415 B	COOK	75	33
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
				CONTRACT NO. 60F60	



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

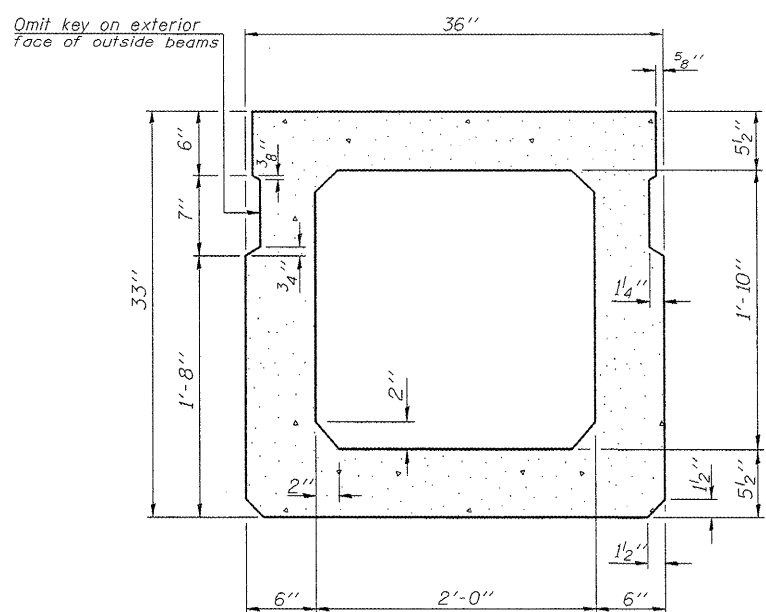


SECTION C-C

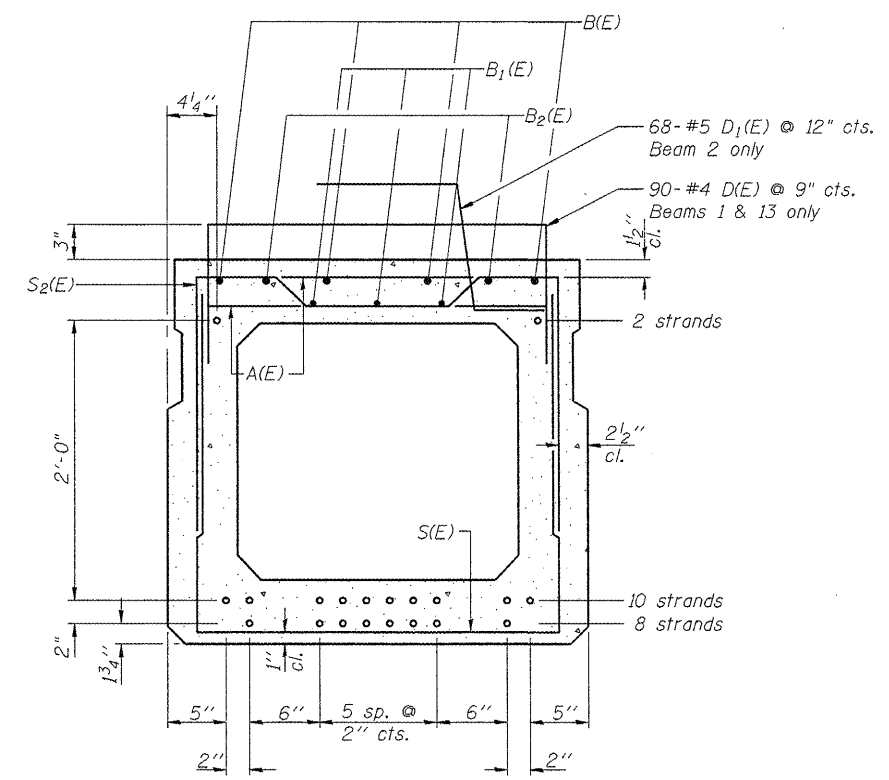


PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

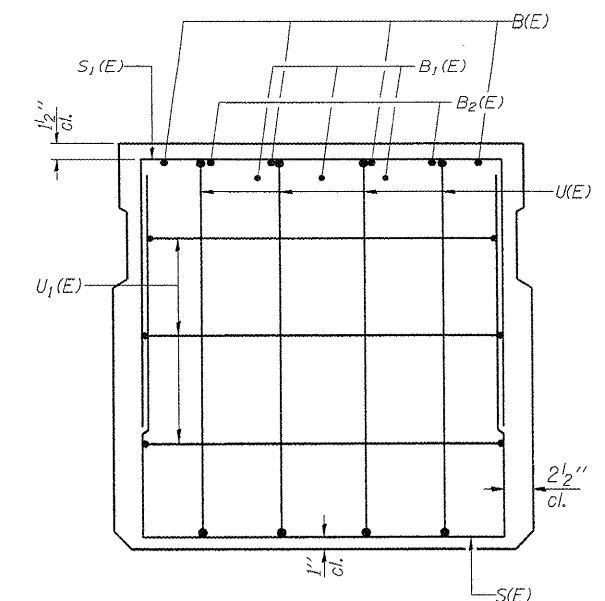


SECTION A-A  
(Showing dimensions)



SECTION A-A  
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.



VIEW B-B

BAR LIST  
ONE BEAM ONLY  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	64	#4	2'-7"	—
B(E)	8	#5	34'-3"	—
B1(E)	6	#4	34'-0"	—
B2(E)	4	#5	34'-3"	—
D(E)	90	#4	4'-7"	⌋
D1(E)	68	#5	2'-10"	⌋
S(E)	94	#4	7'-5"	⌋
S1(E)	12	#4	6'-3"	⌋
S2(E)	82	#4	6'-6"	⌋
U(E)	8	#6	5'-0"	⌋
U1(E)	6	#4	5'-0"	⌋

Note: See Sheet 12 of 15 for additional details and Bill of Material.

33" x 36" PPC DECK BEAM  
STRUCTURE NO. 016-2529

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

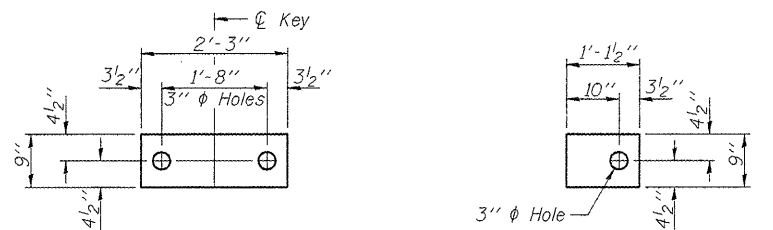
SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	34
15 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 60F60		
FED. AID PROJECT					



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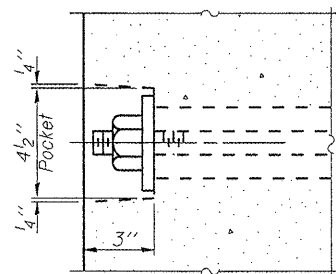
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



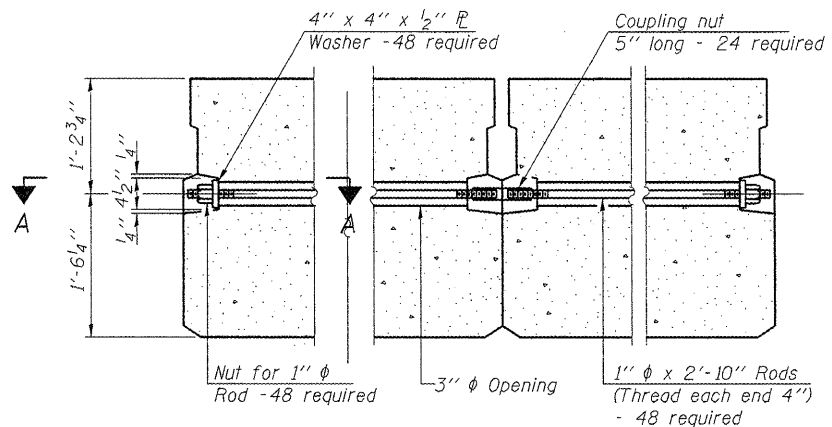
**FABRIC BEARING PAD**  
(Interior - 12 Required) **FIXED**  
**FABRIC BEARING PAD**  
(Exterior - 2 Required)



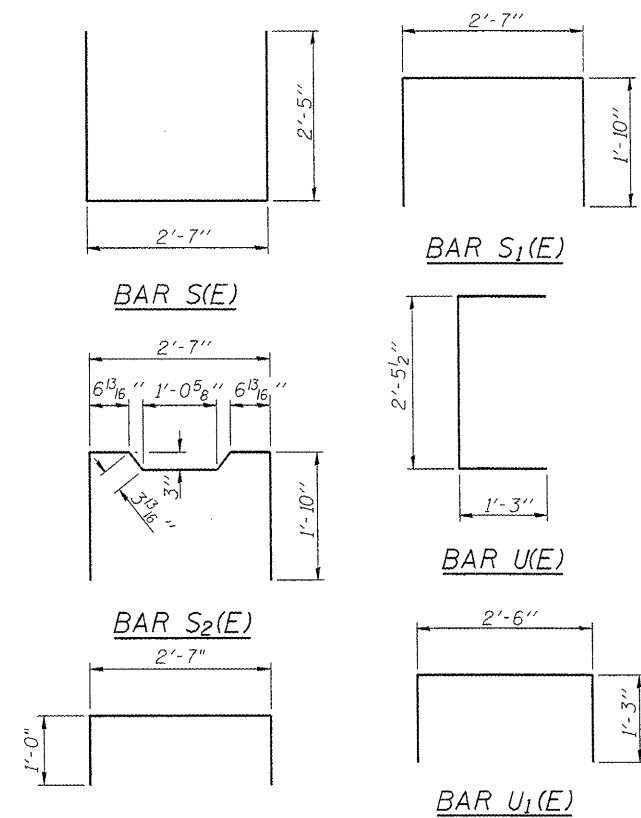
**FABRIC BEARING PAD**  
(Interior - 12 Required) **EXPANSION**  
**FABRIC BEARING PAD**  
(Exterior - 2 Required)



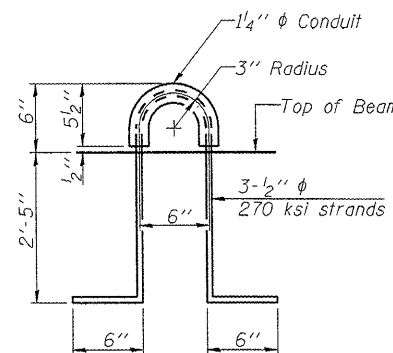
**SECTION A-A**



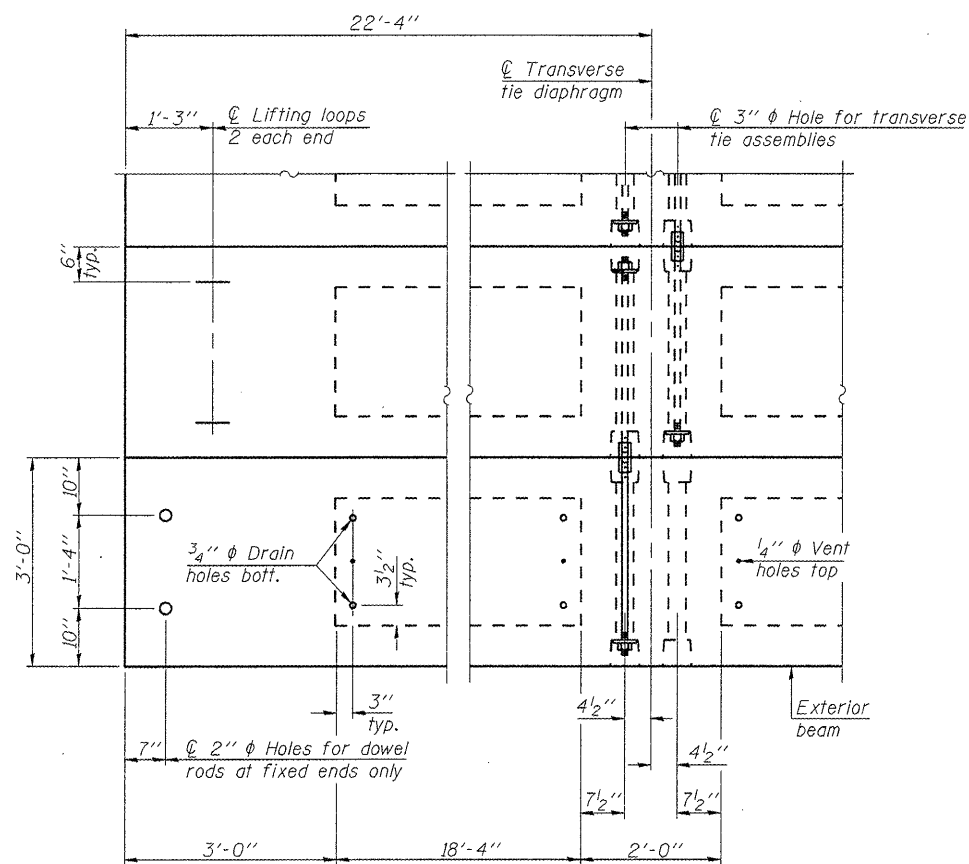
**TYPICAL TRANSVERSE TIE ASSEMBLY**



**BAR D(E)**



**LIFTING LOOP DETAIL**



**PLAN VIEW**

Note: Connect beams in pairs with the transverse tie configuration shown.

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

**NOTES**

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	2,594
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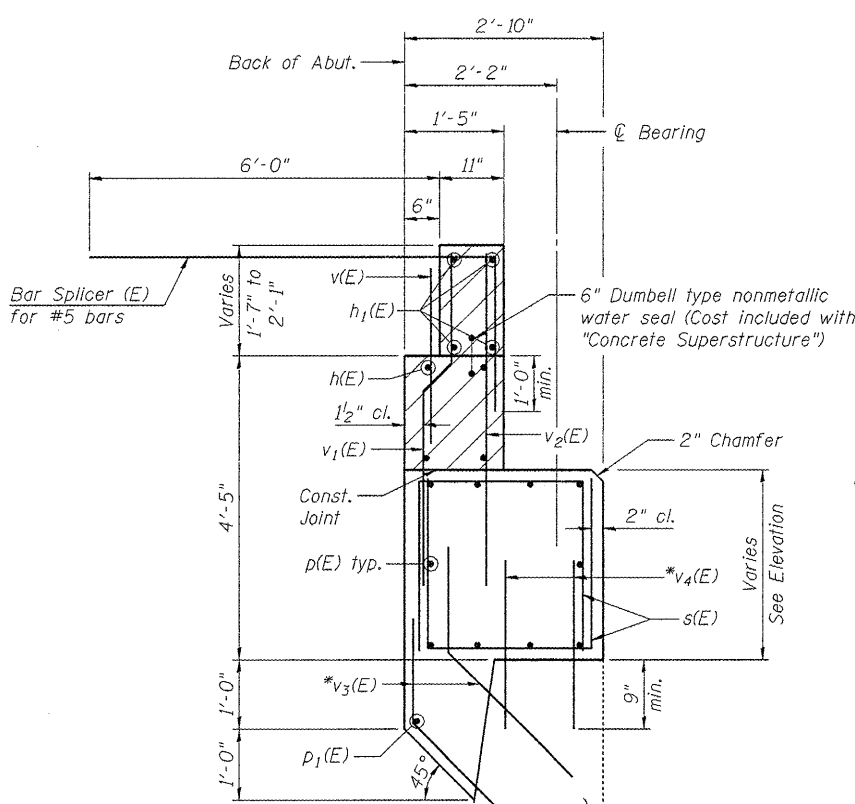
**33" X 36" PPC DECK BEAM DETAILS  
STRUCTURE NO. 016-2529**

SHEET NO. 12 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	35
			CONTRACT NO. 60F60		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



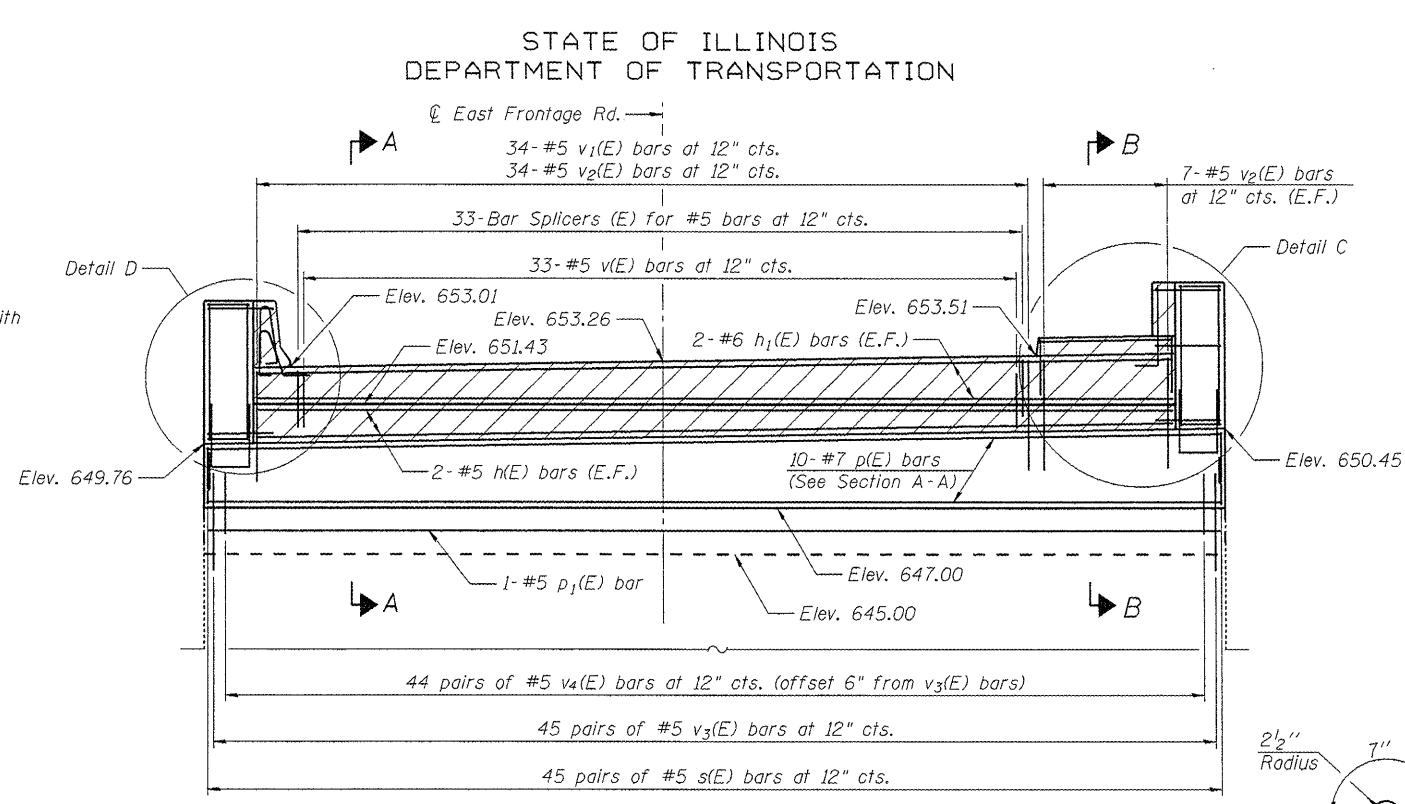
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

East Frontage Rd.

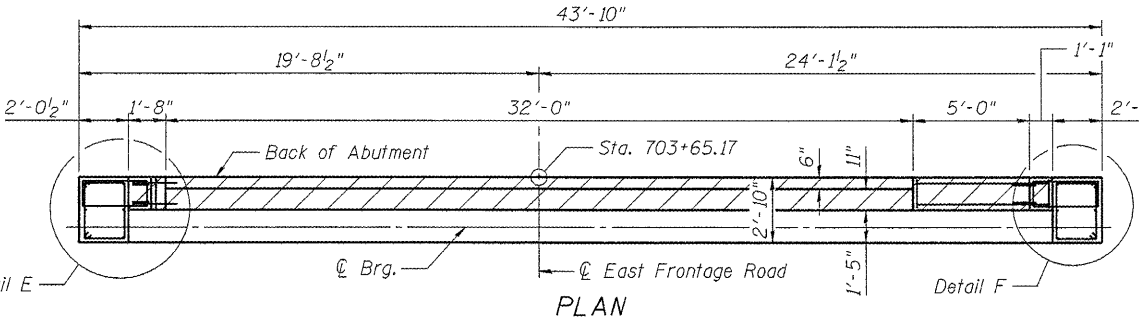


SECTION A-A

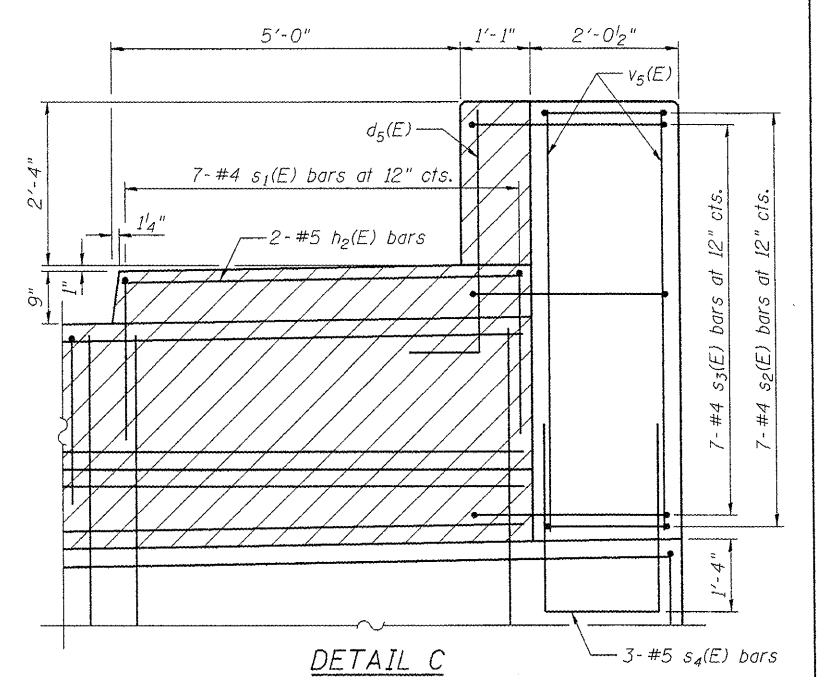
\*Drill and grout #5 v<sub>3</sub>(E) and v<sub>4</sub>(E) bars in 7/8"φ x 9" min. holes according to Section 584 of the Standard Specifications. Cost included with "Reinforcement Bars, Epoxy Coated."



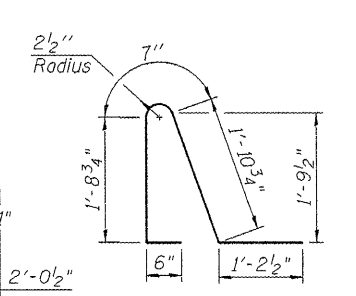
ELEVATION  
(Looking South)



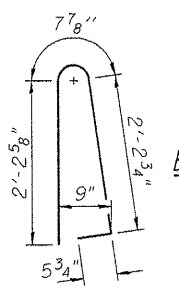
PLAN



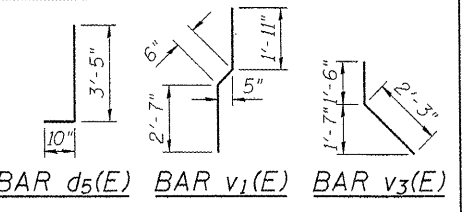
DETAIL C



DETAIL D



DETAIL E



DETAIL F

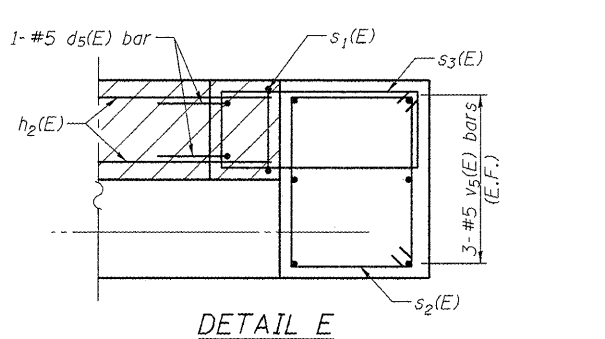
SOUTH ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d <sub>5</sub> (E)	2	#5	4'-3"	J
d <sub>6</sub> (E)	2	#5	5'-11"	J
d <sub>7</sub> (E)	2	#5	5'-7"	J
h(E)	4	#5	39'-3"	—
h <sub>1</sub> (E)	4	#6	39'-3"	—
h <sub>2</sub> (E)	2	#5	5'-8"	—
p(E)	10	#7	43'-6"	—
p <sub>1</sub> (E)	1	#5	43'-6"	—
s(E)	90	#5	7'-0"	—
s <sub>1</sub> (E)	7	#4	4'-11"	—
s <sub>2</sub> (E)	14	#4	9'-1"	—
s <sub>3</sub> (E)	14	#4	8'-5"	—
s <sub>4</sub> (E)	6	#5	8'-0"	—
v(E)	33	#5	2'-10"	—
v <sub>1</sub> (E)	34	#5	5'-0"	—
v <sub>2</sub> (E)	48	#5	4'-9"	—
v <sub>3</sub> (E)	90	#5	3'-9"	—
v <sub>4</sub> (E)	88	#5	2'-8"	—
v <sub>5</sub> (E)	6	#5	5'-10"	—
v <sub>6</sub> (E)	6	#5	5'-9"	—
Structure Excavation		Cu. Yd.		25
Concrete Structures		Cu. Yd.		19.3
Reinforcement Bars, Epoxy Coated		Pound		3,460
Concrete Sealer		Sq. Ft.		320

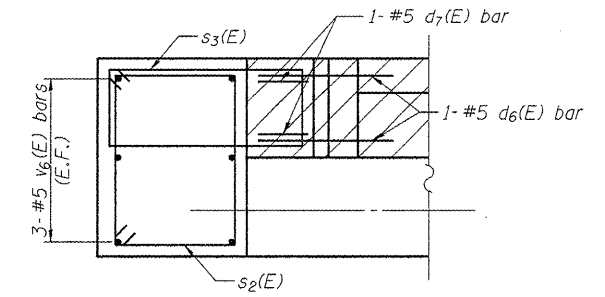
SOUTH ABUTMENT  
STRUCTURE NO. 016-2529

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

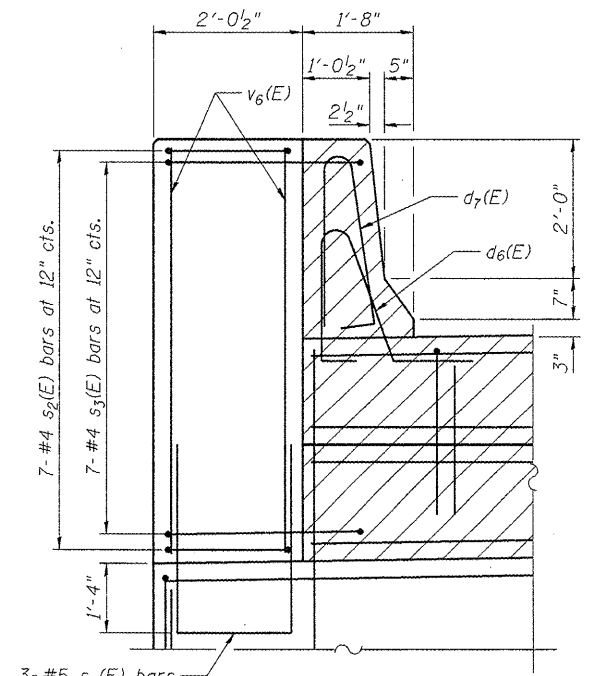
SECTION B-B



DETAIL E



DETAIL F



DETAIL D

Notes:  
Hatched area to be poured after Concrete Wearing Surface is in place. Quantity of concrete included with Concrete Superstructure.  
For details of Bar Splicers, see Sheet 15 of 15.  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal."

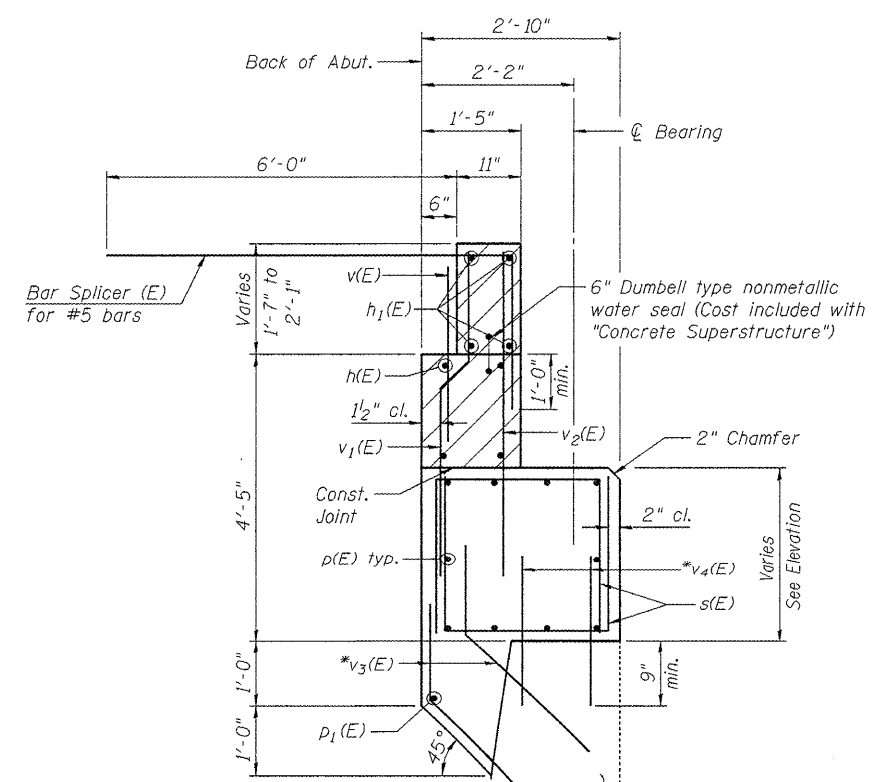
SHEET NO. 13 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	36
			CONTRACT NO. 60F60		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



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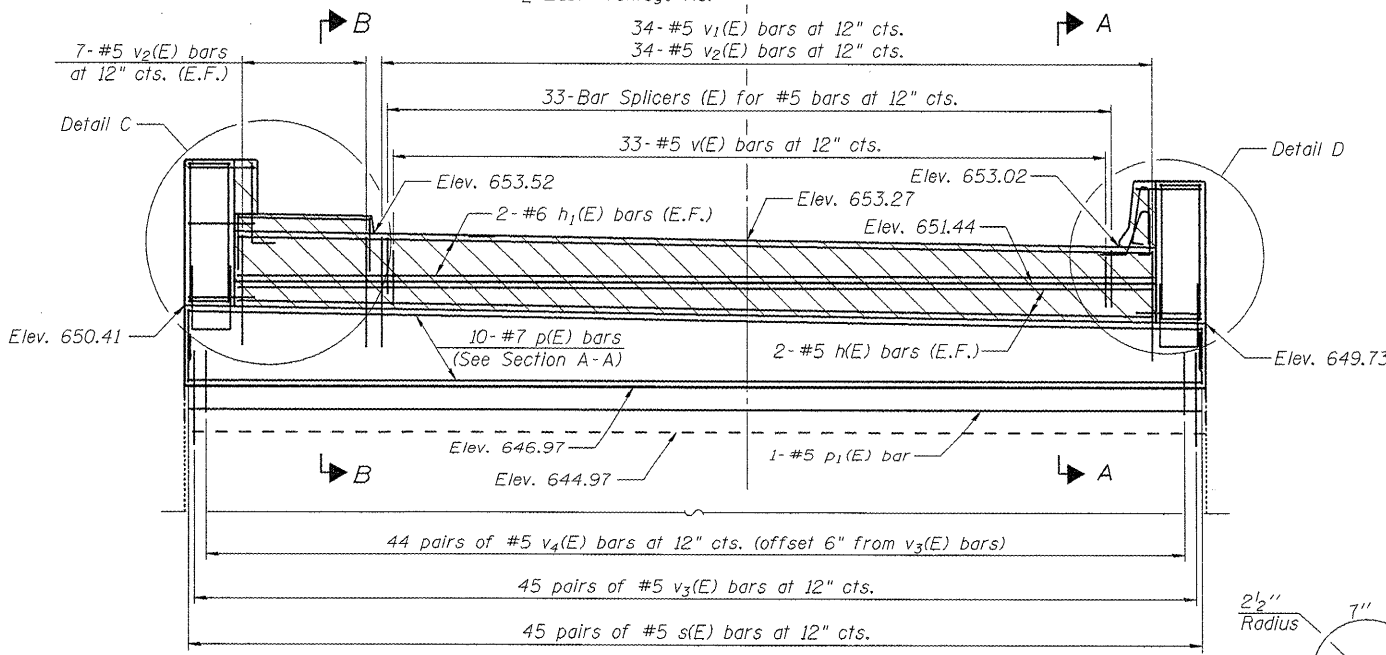
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

East Frontage Rd.

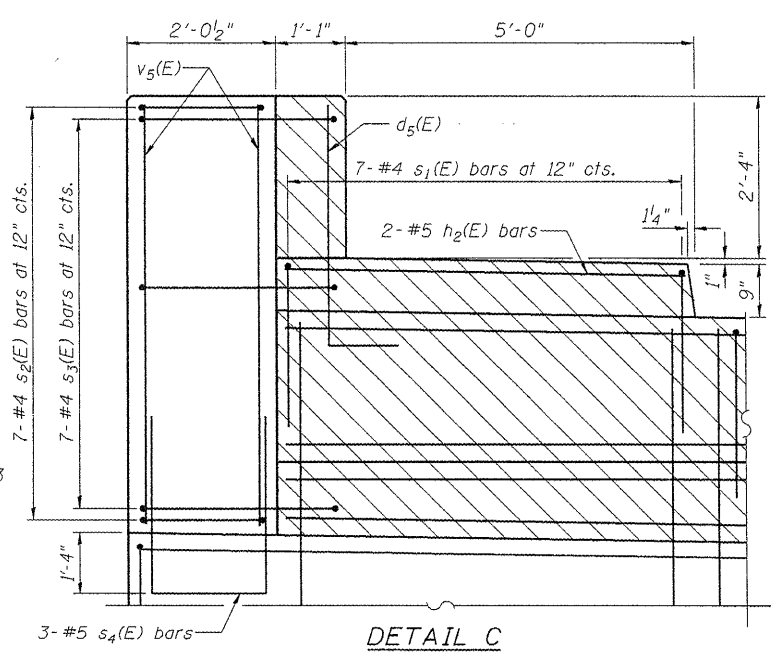


SECTION A-A

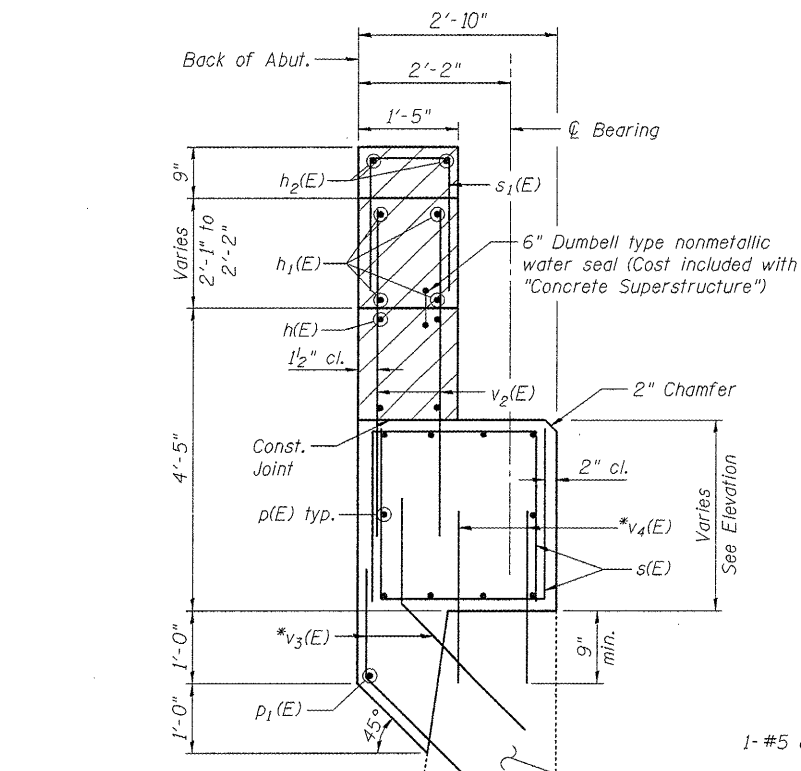
\*Drill and grout #5 v<sub>3</sub>(E) and v<sub>4</sub>(E) bars in 7/8"Ø x 9" min. holes according to Section 584 of the Standard Specifications. Cost included with "Reinforcement Bars, Epoxy Coated."



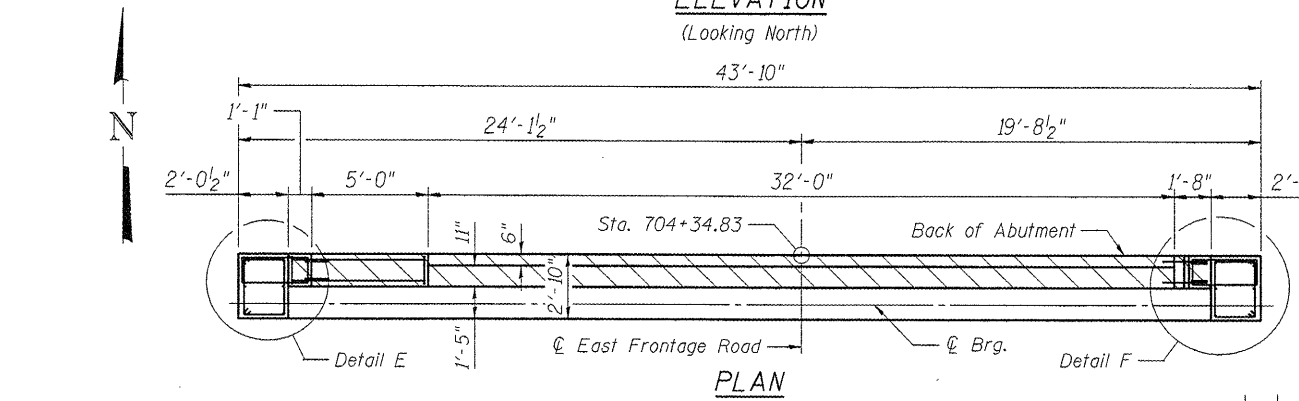
ELEVATION  
(Looking North)



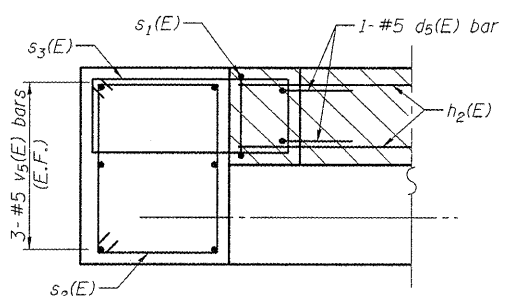
DETAIL C



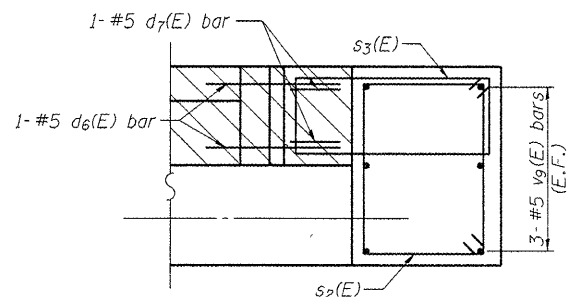
SECTION B-B



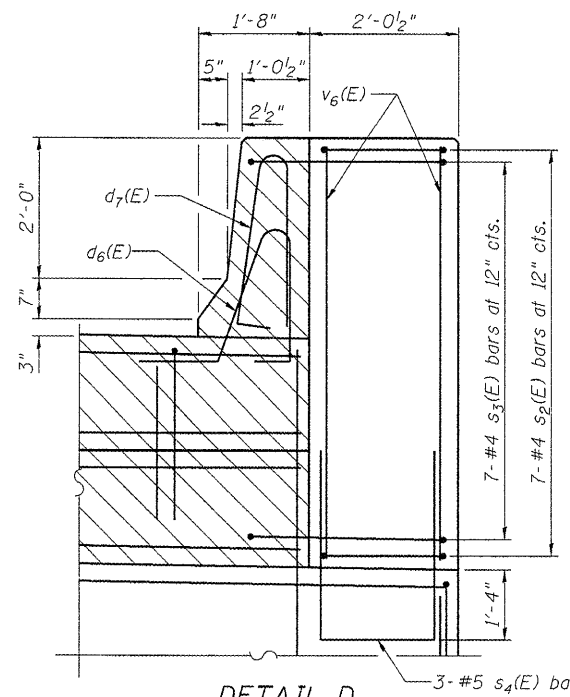
PLAN



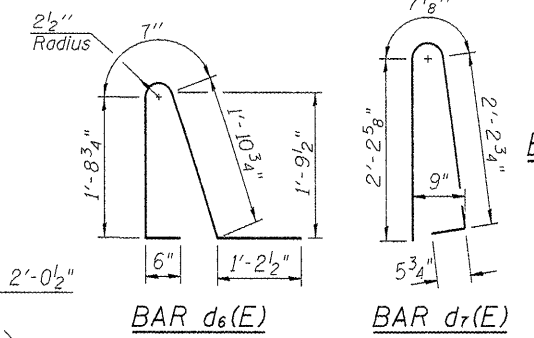
DETAIL E



DETAIL F

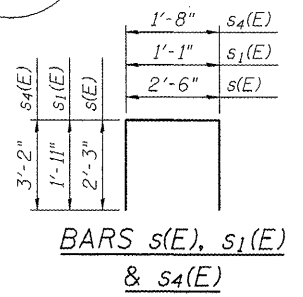


DETAIL D

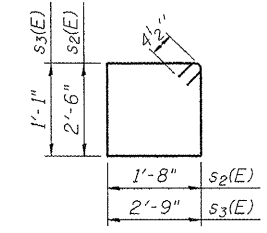


BAR d<sub>6</sub>(E)

BAR d<sub>7</sub>(E)



BARS s(E), s<sub>1</sub>(E) & s<sub>4</sub>(E)



BARS s<sub>2</sub>(E), s<sub>3</sub>(E)

BAR d<sub>5</sub>(E) BAR v<sub>1</sub>(E) BAR v<sub>3</sub>(E)

NORTH ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d <sub>5</sub> (E)	2	#5	4'-3"	J
d <sub>6</sub> (E)	2	#5	5'-11"	J
d <sub>7</sub> (E)	2	#5	5'-7"	J
h(E)	4	#5	39'-3"	
h <sub>1</sub> (E)	4	#6	39'-3"	
h <sub>2</sub> (E)	2	#5	5'-8"	
p(E)	10	#7	43'-6"	
p <sub>1</sub> (E)	1	#5	43'-6"	
s(E)	90	#5	7'-0"	
s <sub>1</sub> (E)	7	#4	4'-11"	
s <sub>2</sub> (E)	14	#4	9'-1"	
s <sub>3</sub> (E)	14	#4	8'-5"	
s <sub>4</sub> (E)	6	#5	8'-0"	
v(E)	33	#5	2'-10"	
v <sub>1</sub> (E)	34	#5	5'-0"	
v <sub>2</sub> (E)	48	#5	4'-9"	
v <sub>3</sub> (E)	90	#5	3'-9"	
v <sub>4</sub> (E)	88	#5	2'-8"	
v <sub>5</sub> (E)	6	#5	5'-10"	
v <sub>6</sub> (E)	6	#5	5'-9"	
Structure Excavation			Cu. Yd.	25
Concrete Structures			Cu. Yd.	19.3
Reinforcement Bars, Epoxy Coated			Pound	3,460
Concrete Sealer			Sq. Ft.	321

NORTH ABUTMENT  
STRUCTURE NO. 016-2529

Notes:  
Hatched area to be poured after Concrete Wearing Surface is in place. Quantity of concrete included with Concrete Superstructure.  
For details of Bar Splicers, see Sheet 15 of 15.  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal."

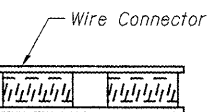
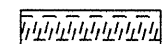
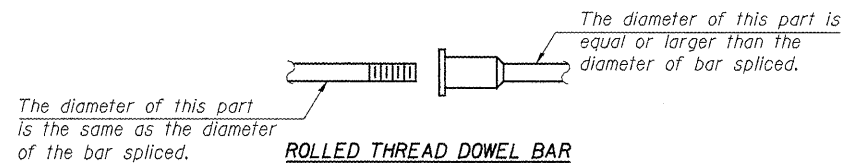
DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

SHEET NO. 14	F.A.P RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 37
15 SHEETS	CONTRACT NO. 60F60		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		



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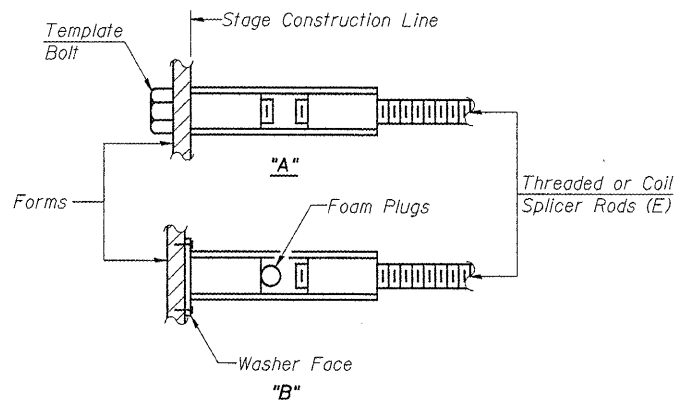
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

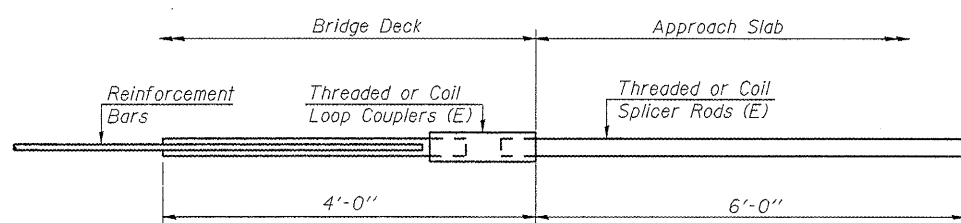
"A" : Set bar splicer assembly by means of a template bolt.  
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
(E) : Indicates epoxy coating.

**NOTES**

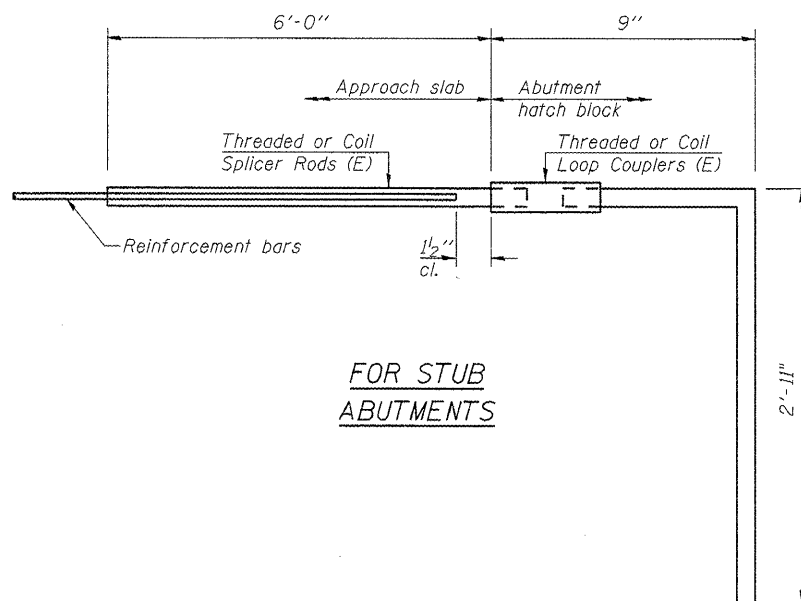
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
(Tension in kips)
  - ② Minimum \*Pull-out Strength =  $0.66 \times f_y \times A_t$   
(Tension in kips)
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

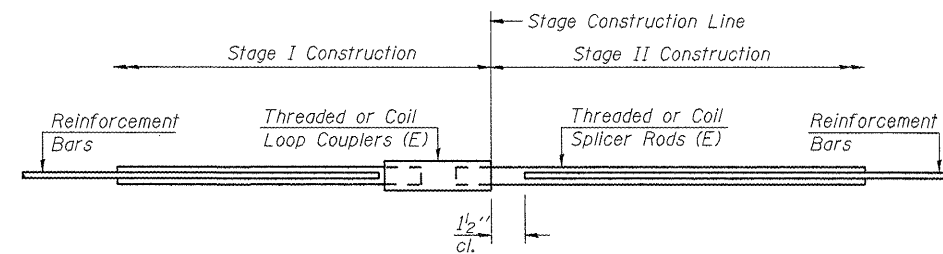
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**



**FOR STUB ABUTMENTS**



**STANDARD**

Bar Size	No. Assemblies Required	Location
	0	

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	0

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	66

**BAR SPLICER ASSEMBLY DETAILS  
STRUCTURE NO. 016-2529**

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

BSD-1

10-1-08



SHEET NO. 15	F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 38
15 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 60F60		
FED. AID PROJECT					

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B.M. - Cut "□" in SE corner of the South Abutment wall of the N-S Railroad Bridge over Palatine Road. Bridge located ±2100' west of the C of Wolf Road. Elev. = 654.66

Existing Structure - Structure No. 016-2530 built as West Frontage Road over F.A.S. Route 116, Palatine Road, Section 110-1415 in 1963. The structure was widened in 2003. In 2006, the bituminous overlay was replaced with a reinforced concrete overlay, the approach "notch" was removed and replaced and preformed joint seals replaced the existing joint filler. The superstructure consists of 33"x36" PPC Deck Beams supporting a reinforced concrete overlay. The length of the structure is 65'-6" center of center of bearings. The existing deck width is 48'-4" out to out of deck. The deck is not skewed. The road will be closed during construction.

Salvage - Remove and reinstall existing parapet and bicycle railing.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

LOADING HL 93

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

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinf.)

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$  psi  
 $f'_ci = 5,000$  psi  
 $f_{pu} = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)  
 $f_{pbt} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site Coefficient (S) = 1.0

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. 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.
4. Concrete Sealer shall be applied to the surface of the backwalls, abutment seats, and front face of new concrete on abutments.
5. The minimum thickness of the Concrete Overlay shall be 5 inches and varies as required to adjust for the new Profile Grade and Beam Camber.
6. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the Beams when developing Construction Procedures for Removal and Replacement of the Superstructure.
7. If the Contractor's procedures for existing deck beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructures No. 1.
8. Slipforming of the parapets is not allowed.

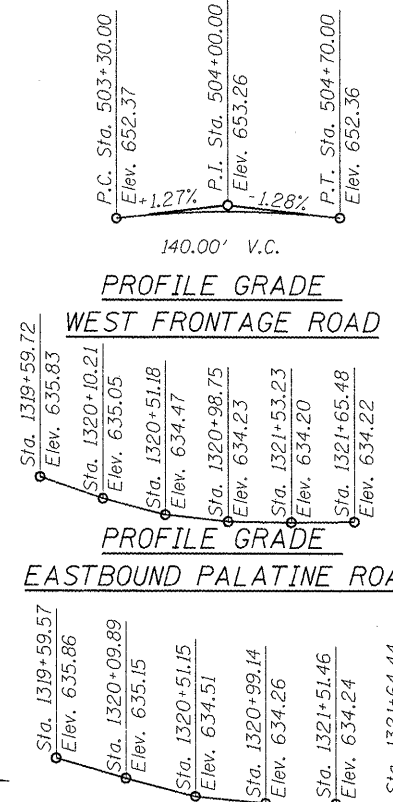
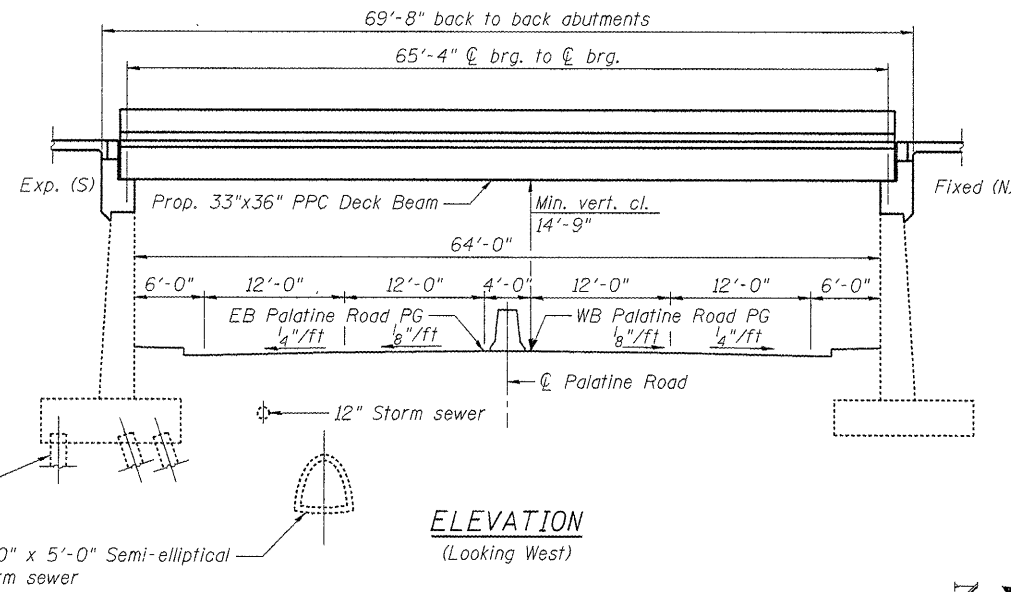
INDEX OF SHEETS

1. General Plan & Elevation
2. Removal Plan
3. Deck Plan
4. Superstructure Details
5. South Bridge Approach Slab
6. North Bridge Approach Slab
7. Bridge Approach Slab Details
8. Preformed Joint Strip Seal
9. Parapet & Bicycle Railing
10. PPC Deck Beam Framing Plan
11. 33"x36" PPC Deck Beam
12. 33"x36" PPC Deck Beam Details
13. South Abutment
14. North Abutment
15. Bar Splicer Assembly Details

STATION 504+00.00  
REBUILT 200X BY  
STATE OF ILLINOIS  
F.A.P. 305 SEC. 1415 B  
LOADING HL93  
STRUCTURE NO. 016-2530

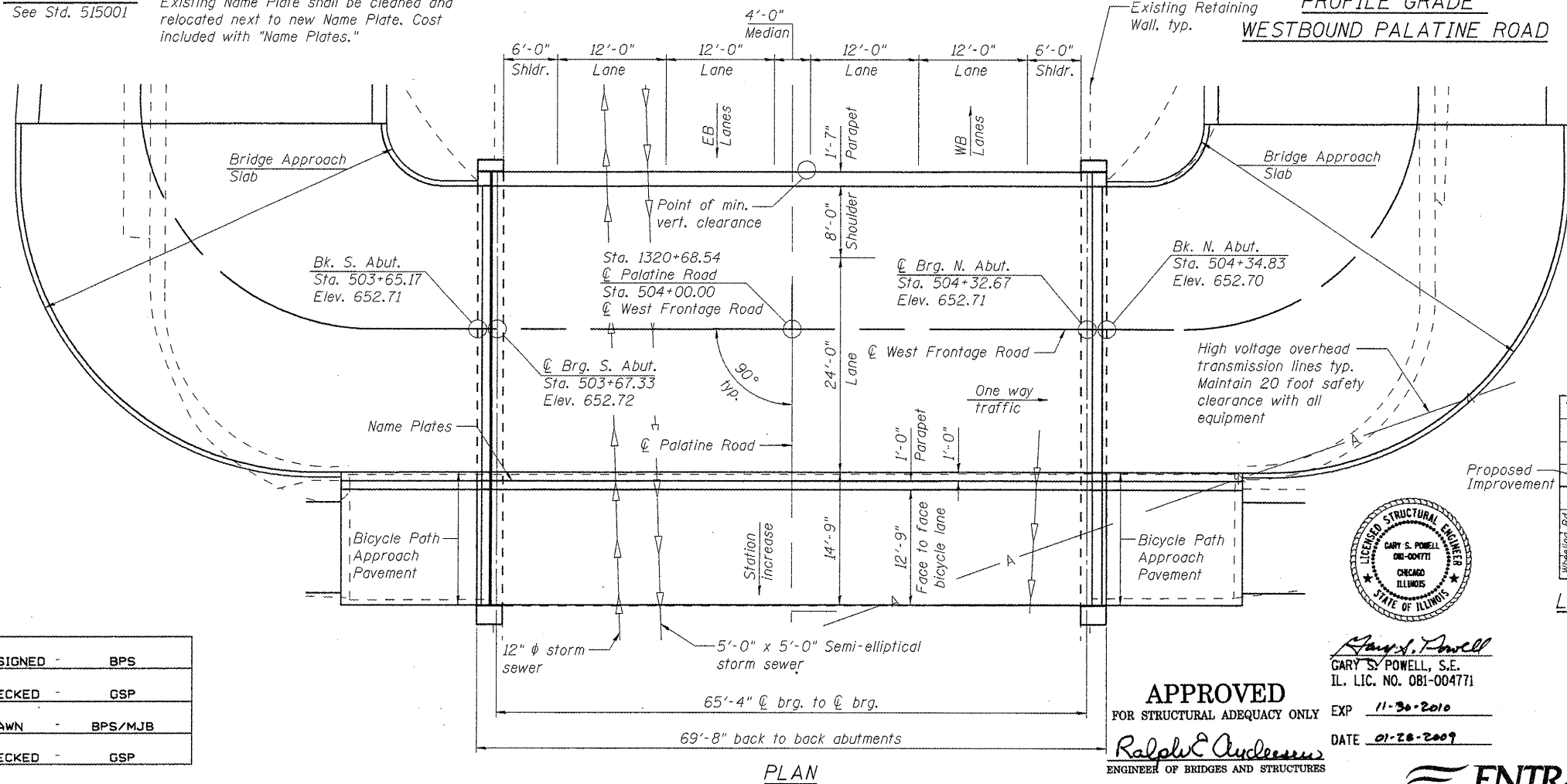
NAME PLATE

See Std. 515001 Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with "Name Plates."



ELEVATION  
(Looking West)

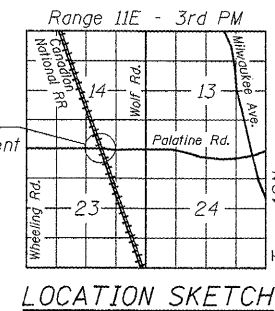
PROFILE GRADE  
WESTBOUND PALATINE ROAD



PLAN

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures No. 1	Each	1		1
Concrete Removal	Cu. Yd.		40.8	40.8
Structure Excavation	Cu. Yd.		60	60
Concrete Structures	Cu. Yd.		69.7	69.7
Concrete Superstructures	Cu. Yd.	248.9		248.9
Bridge Deck Grooving	Sq. Yd.	615		615
Protective Coat	Sq. Yd.	864		864
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	3,192		3,192
Reinforcement Bars, Epoxy Coated	Pound	46,680	12,640	59,320
Bar Splicers	Each	96		96
Removing and Re-erecting Existing Railing	Foot	97.5		97.5
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	48.5		48.5
Concrete Sealer	Sq. Ft.		801	801
Bicycle Railing to be Removed and Reinstalled	Foot	66.5		66.5
Concrete Wearing Surface, 5"	Sq. Yd.	357.1		357.1
Asbestos Bearing Pad Removal	Each	26		26

GENERAL PLAN & ELEVATION  
WEST FRONTAGE ROAD OVER PALATINE ROAD  
F.A.P. 305/PALATINE ROAD  
SECTION 1415 B  
COOK COUNTY  
STATION 504+00.00  
STRUCTURE NO. 016-2530



LOCATION SKETCH



APPROVED  
FOR STRUCTURAL ADEQUACY ONLY  
Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES



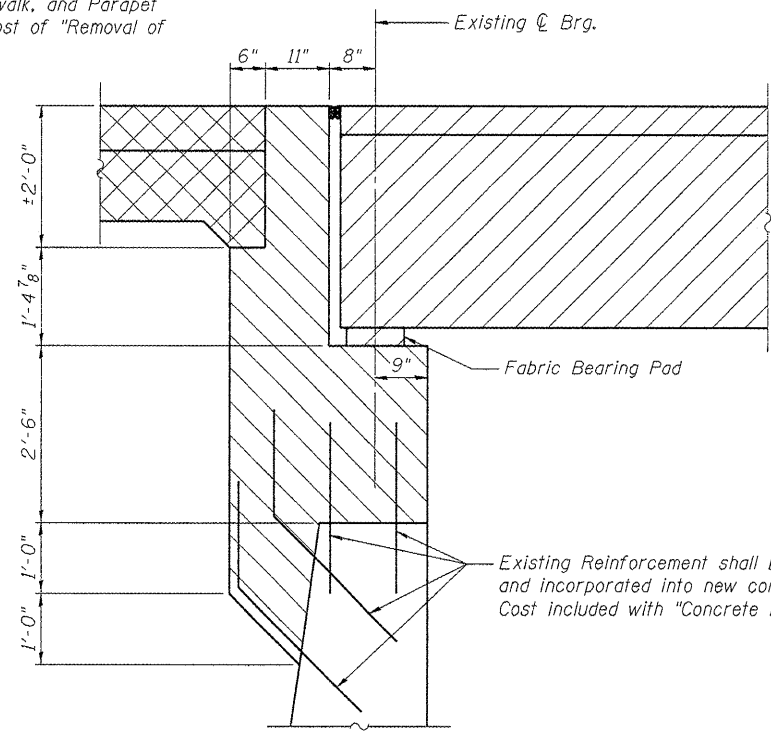
SHEET NO. 1  
15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	39
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F60	

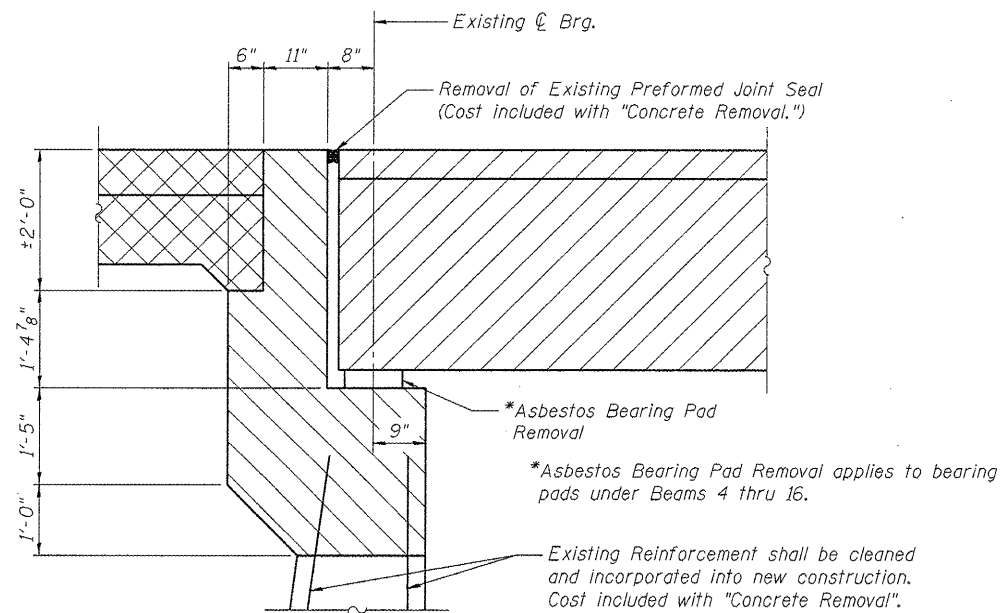


Note:  
Concrete Wearing Surface, Sidewalk, and Parapet removal shall be included in the cost of "Removal of Existing Superstructure No. 1".

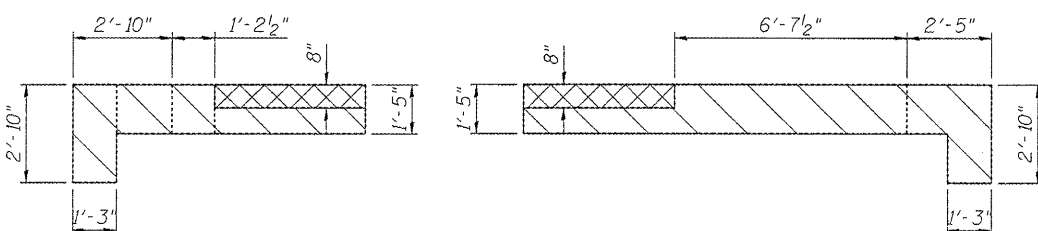
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SECTION A-A



SECTION B-B



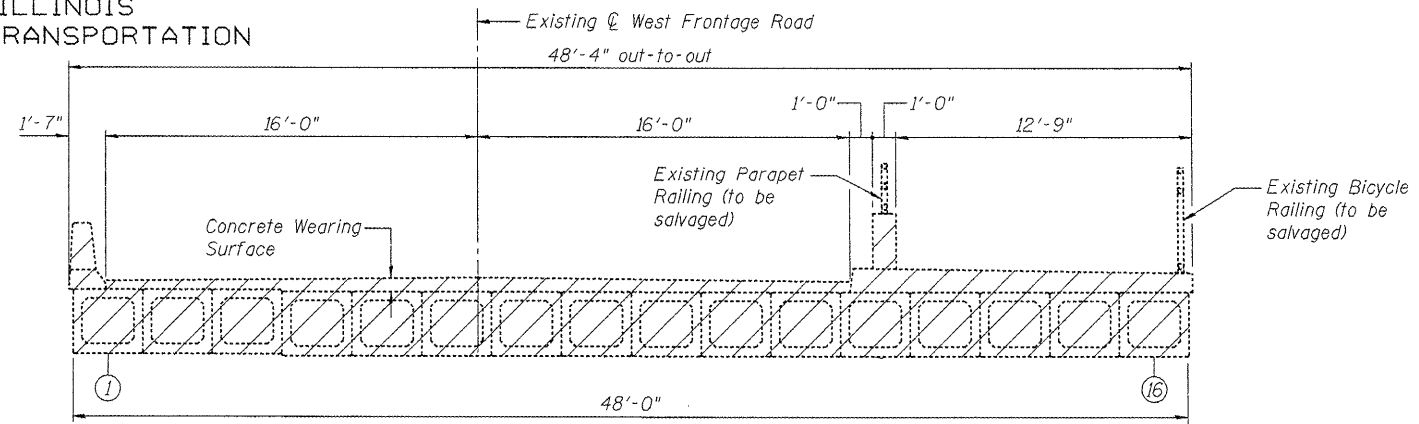
SECTION C-C

(North Abutment shown,  
South Abutment opposite hand)

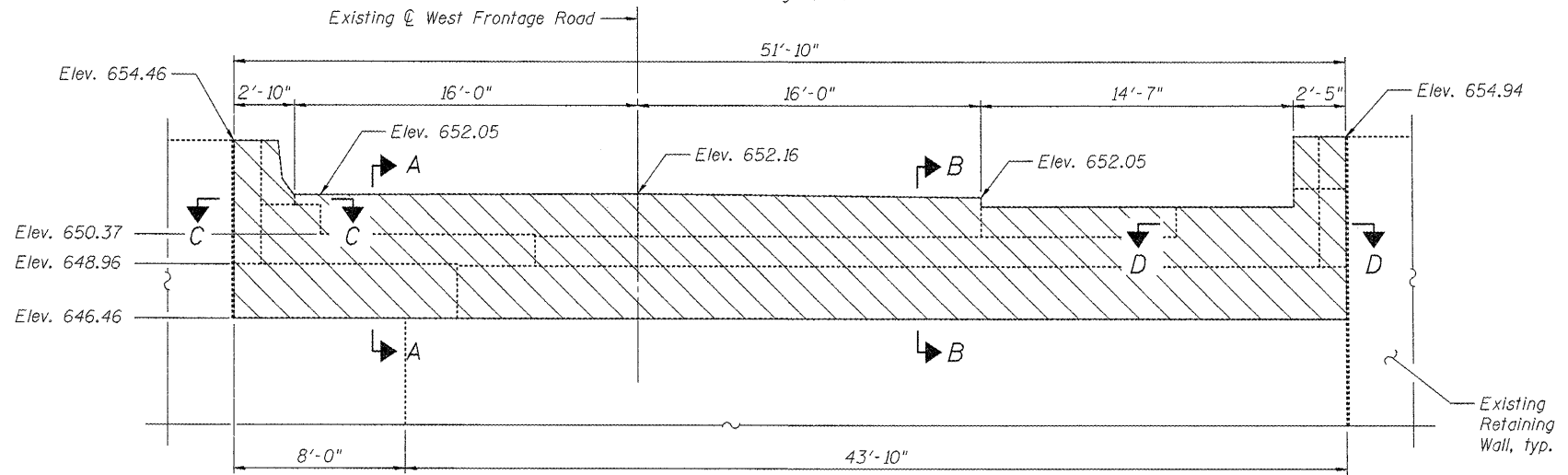
SECTION D-D

(North Abutment shown,  
South Abutment opposite hand)

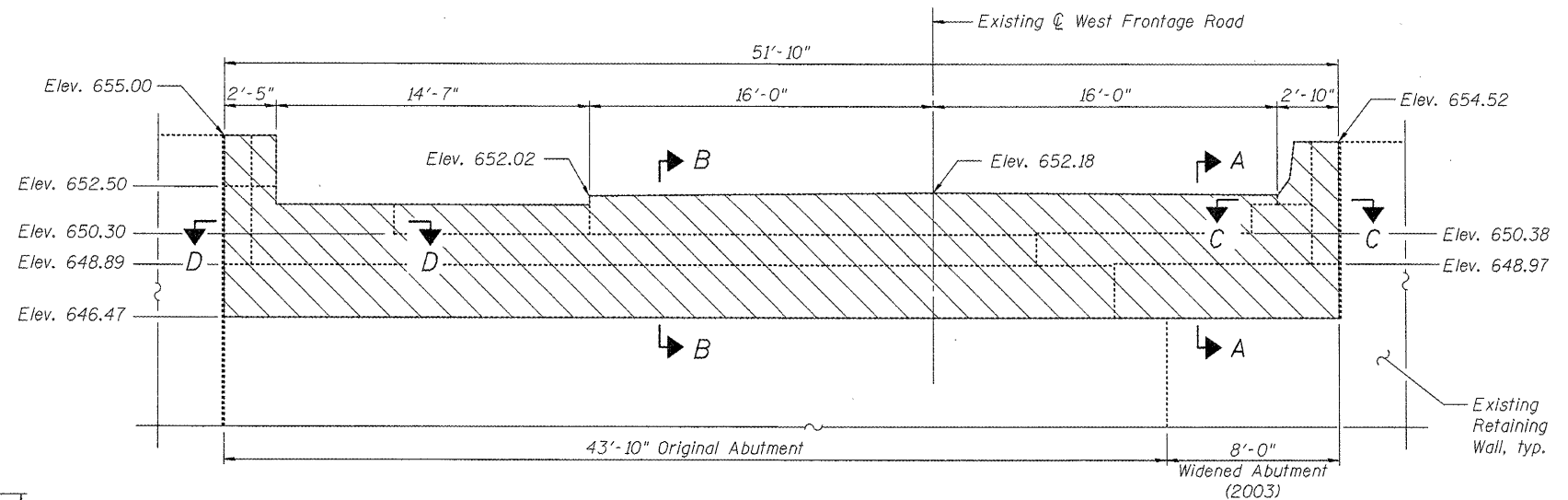
- LEGEND**
- Removal of Existing Superstructures
  - Concrete Removal
  - Approach Slab Removal See Roadway Plans



EXISTING SUPERSTRUCTURE  
(Looking North)



NORTH ABUTMENT ELEVATION  
(Looking North)



SOUTH ABUTMENT ELEVATION  
(Looking South)

REMOVAL BILL OF MATERIAL

Item	Unit	Quantity
Asbestos Bearing Pad Removal	Each	26
Removal of Existing Superstructures No. 1	Each	1
Concrete Removal	Cu. Yd.	40.8

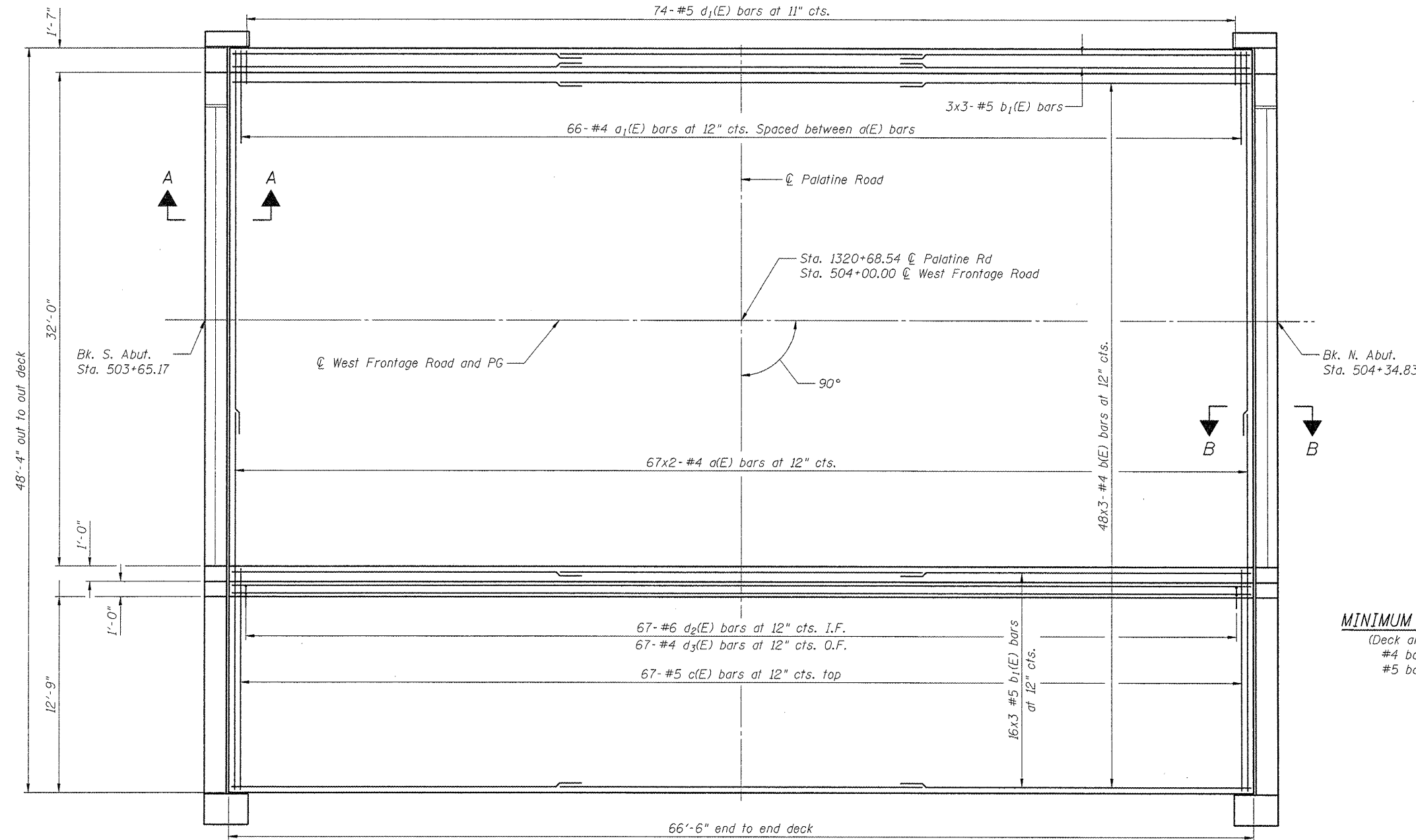
REMOVAL PLAN  
STRUCTURE NO. 016-2530

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

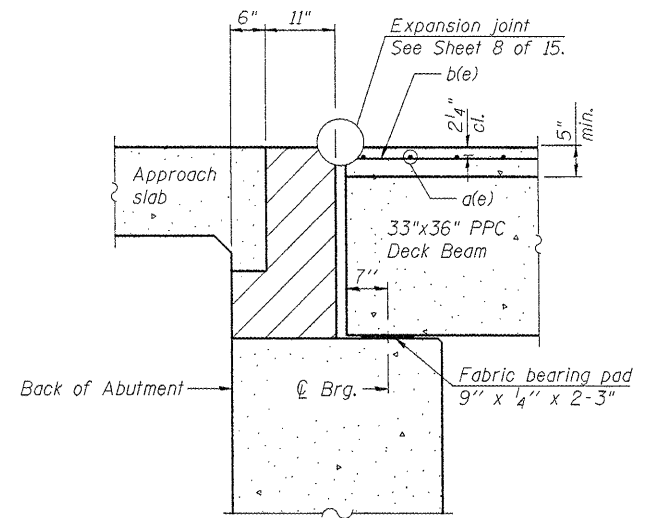
SHEET NO. 2	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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15 SHEETS	CONTRACT NO. 60F60				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



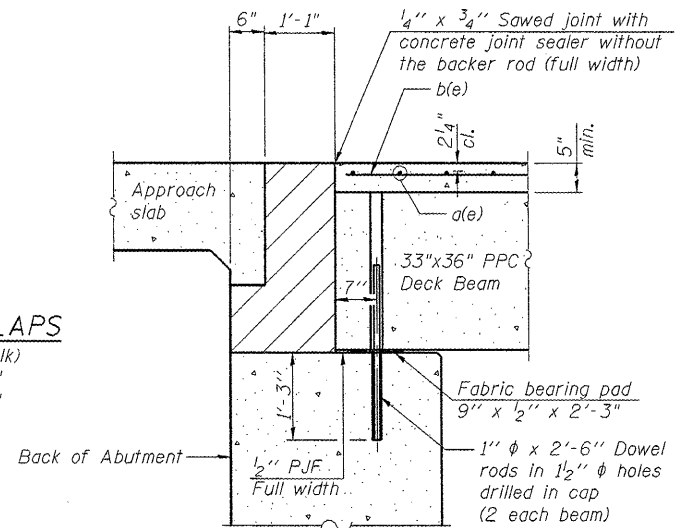
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



DECK PLAN



SECTION A-A

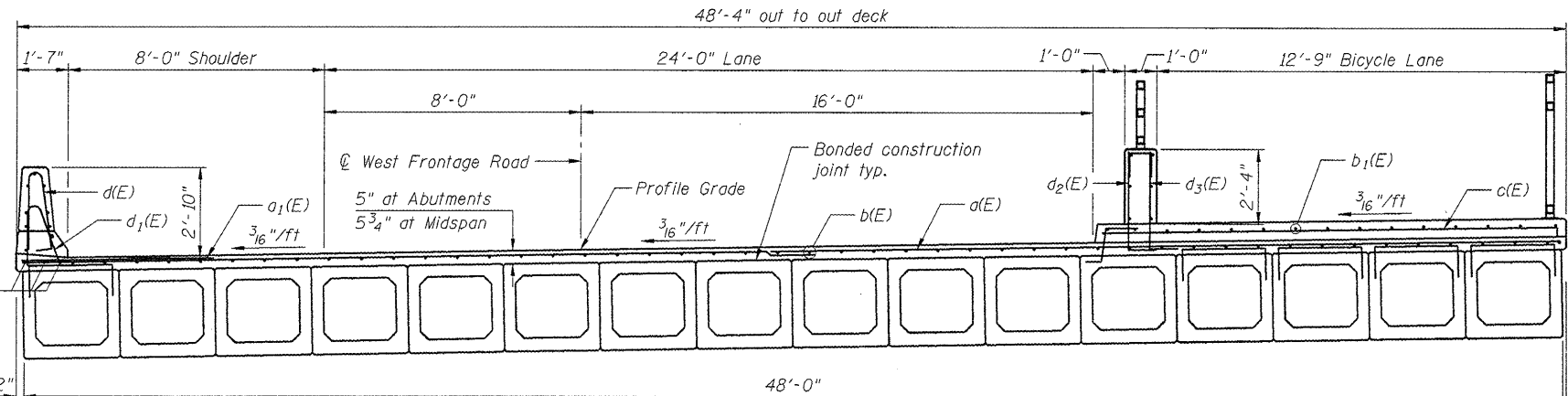


SECTION B-B

MINIMUM BAR LAPS

(Deck and Sidewalk)  
#4 bar = 1'-4"  
#5 bar = 1'-8"

Notes:  
Hatched area to be poured after concrete wearing surface is in place. Quantity of concrete included with Concrete Superstructure.  
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.  
See sheet 4 of 15 for superstructure details and Bill of Materials.  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
See sheet 4 of 15 for parapet reinforcement.  
See sheet 12 of 15 for bearing pad details.



DECK CROSS SECTION  
(Looking Upstation)

DECK PLAN  
STRUCTURE NO. 016-2530

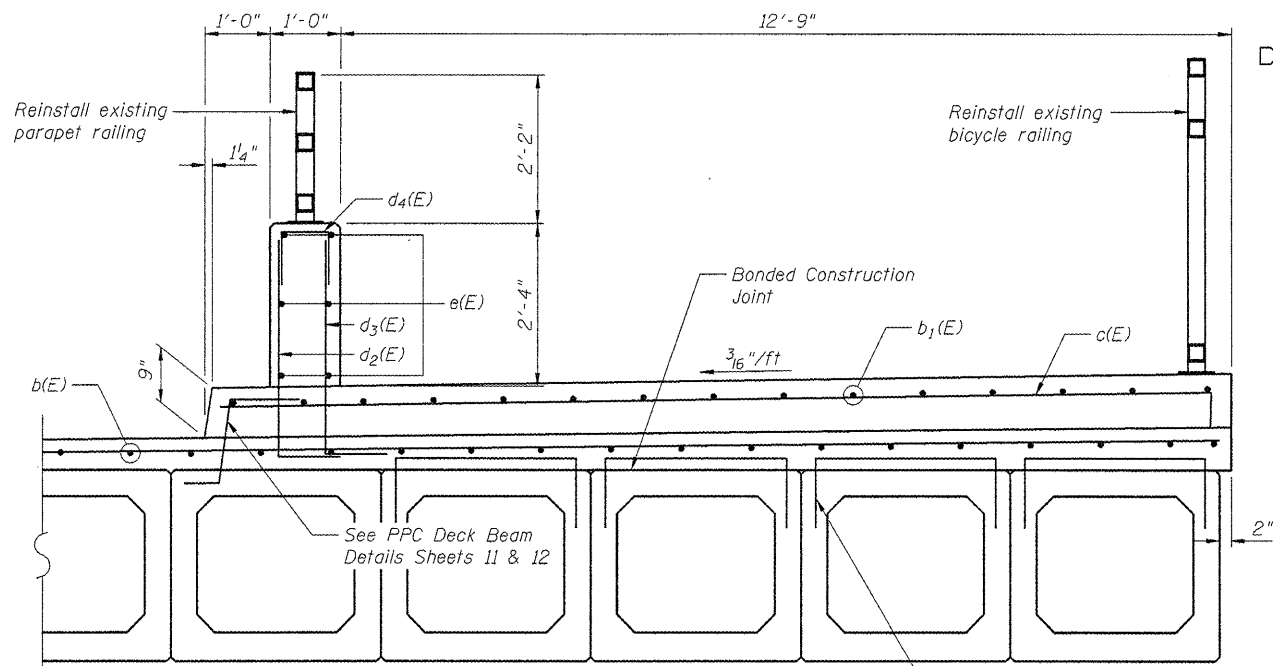
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

SHEET NO. 3 15 SHEETS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
			CONTRACT NO. 60F60		



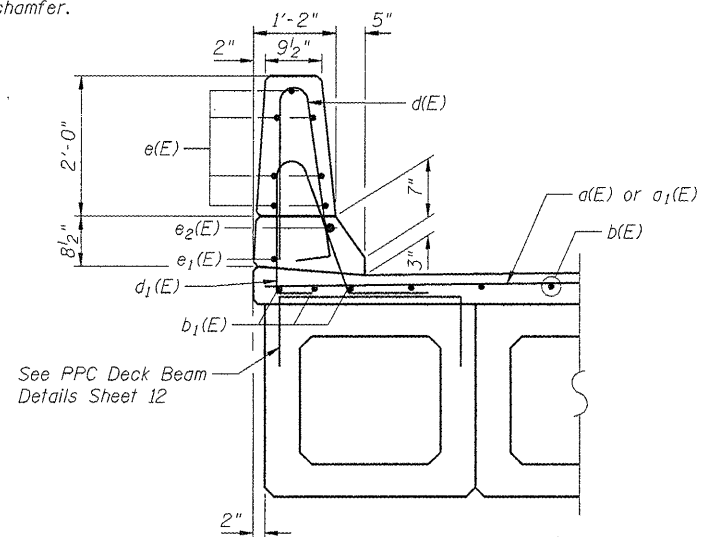
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SECTION THRU BICYCLE PATH

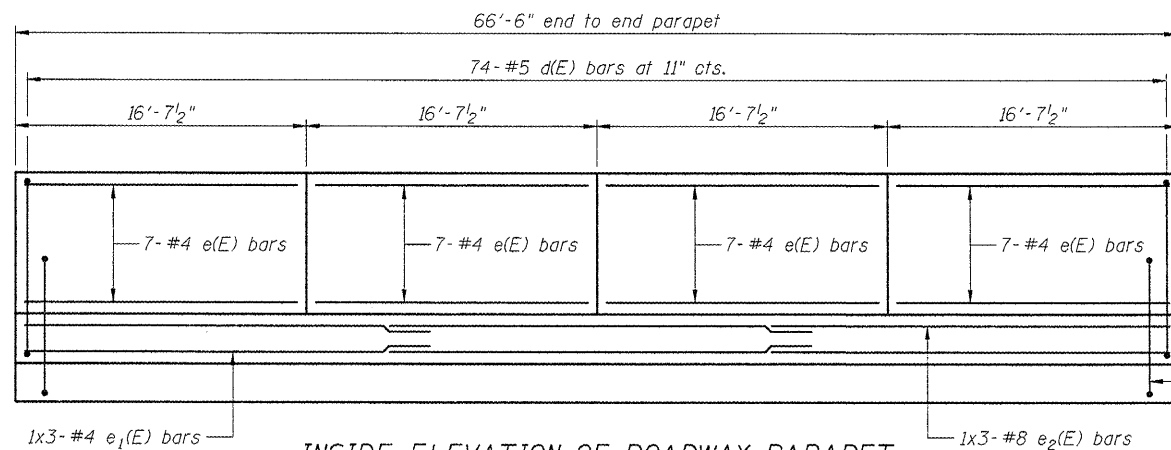
All edges should have 3/4" chamfer.



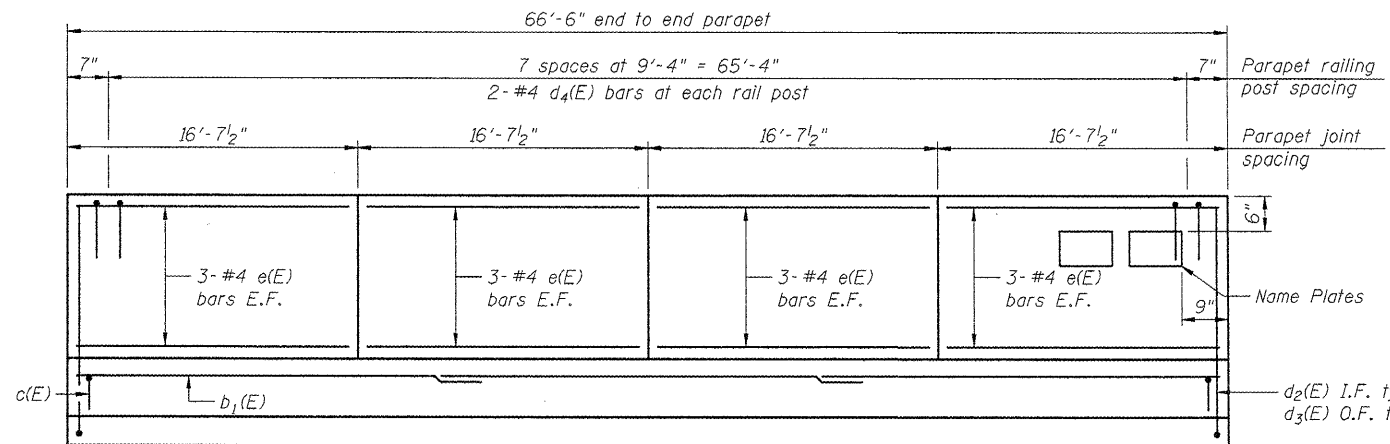
SECTION THRU ROADWAY PARAPET

**MINIMUM BAR LAPS**  
(Parapets)  
#4 bar = 1'-4"  
#8 bar = 3'-5"

INSIDE ELEVATION OF ROADWAY PARAPET



INSIDE ELEVATION OF BICYCLE PATH PARAPET



BAR d(E)

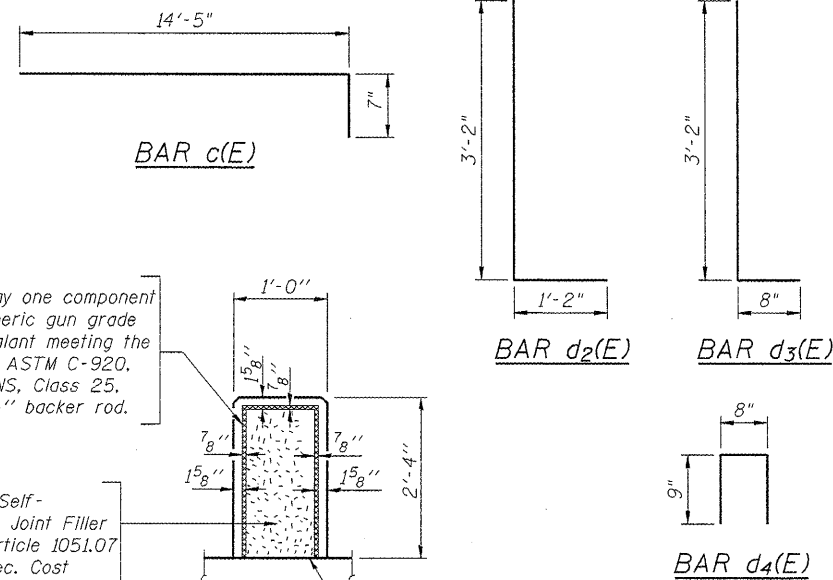
BAR d1(E)

SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	134	#4	24'-8"	—
a1(E)	66	#4	6'-0"	—
b(E)	144	#4	23'-0"	—
b1(E)	57	#5	23'-2"	—
c(E)	67	#5	15'-0"	—
d(E)	74	#5	6'-10"	Λ
d1(E)	74	#5	5'-10"	Λ
d2(E)	67	#6	4'-4"	L
d3(E)	67	#4	3'-10"	L
d4(E)	16	#4	2'-2"	□
e(E)	52	#4	16'-3"	—
e1(E)	3	#4	23'-0"	—
e2(E)	3	#8	24'-4"	—

Item	Unit	Quantity
Protective Coat	Sq. Yd.	410
Concrete Superstructure	Cu. Yd.	55.3
Bridge Deck Grooving	Sq. Yd.	237
Concrete Wearing Surface	Sq. Yd.	357.1
Reinforcement Bars, Epoxy Coated	Pound	9,520

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 016-2530



PARAPET JOINT DETAILS

DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

Const. Jt.  
(Optional)

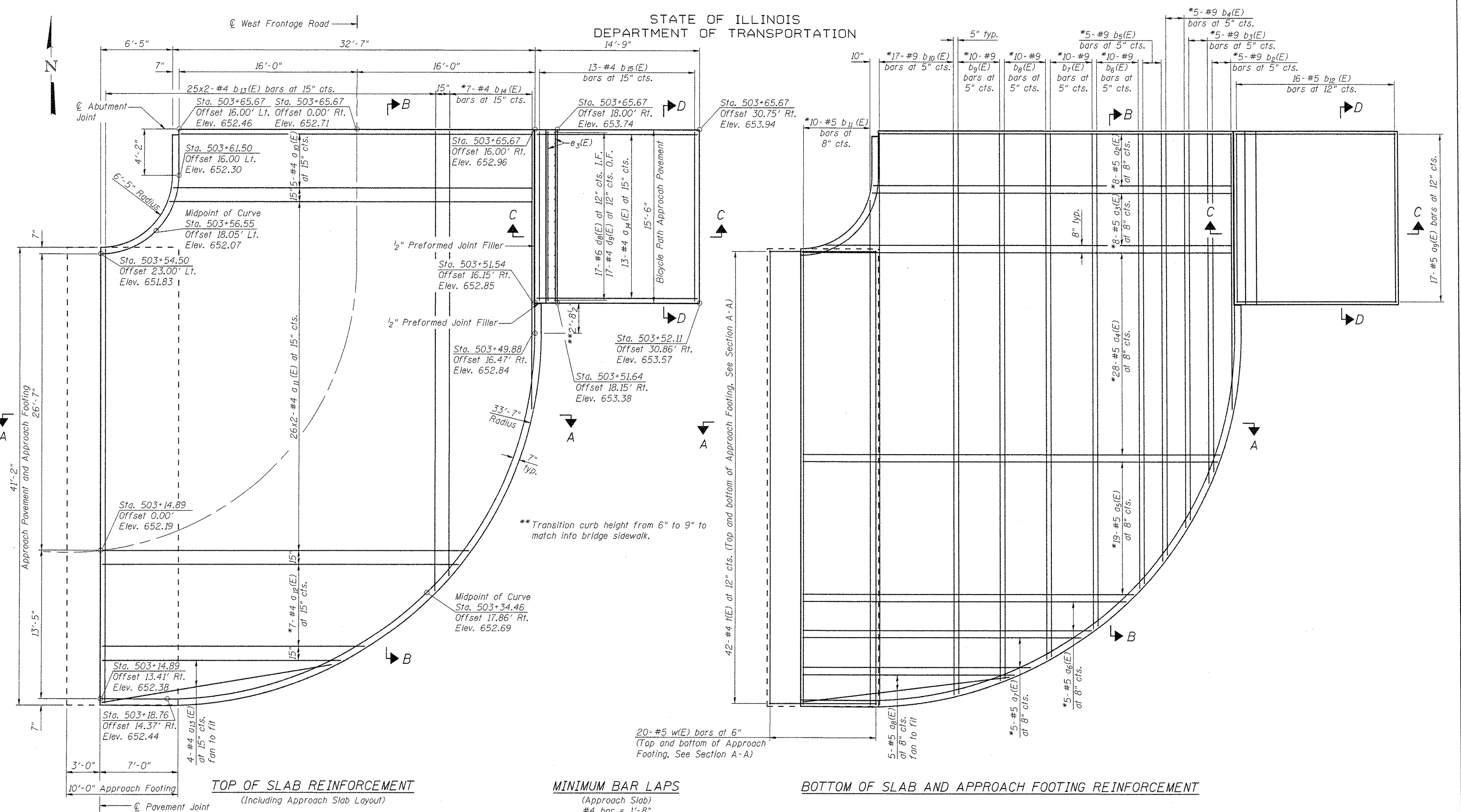
Const. Jt.  
(Mandatory)

Const. Jt.  
(Mandatory)



SHEET NO. 4	F.A.P. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 42
15 SHEETS	CONTRACT NO. 60F60		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**TOP OF SLAB REINFORCEMENT**  
(Including Approach Slab Layout)

**MINIMUM BAR LAPS**  
(Approach Slab)  
#4 bar = 1'-8"  
#5 bar = 2'-2"

**BOTTOM OF SLAB AND APPROACH FOOTING REINFORCEMENT**

DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

Notes:  
See Sheet 7 of 15 for Section A-A, Section B-B, and pavement joint detail.  
See Sheet 3 of 15 for abutment joint detail.  
Cost of Preformed Joint Filler included with Concrete Superstructure.

\*Cut reinforcement bars to fit.

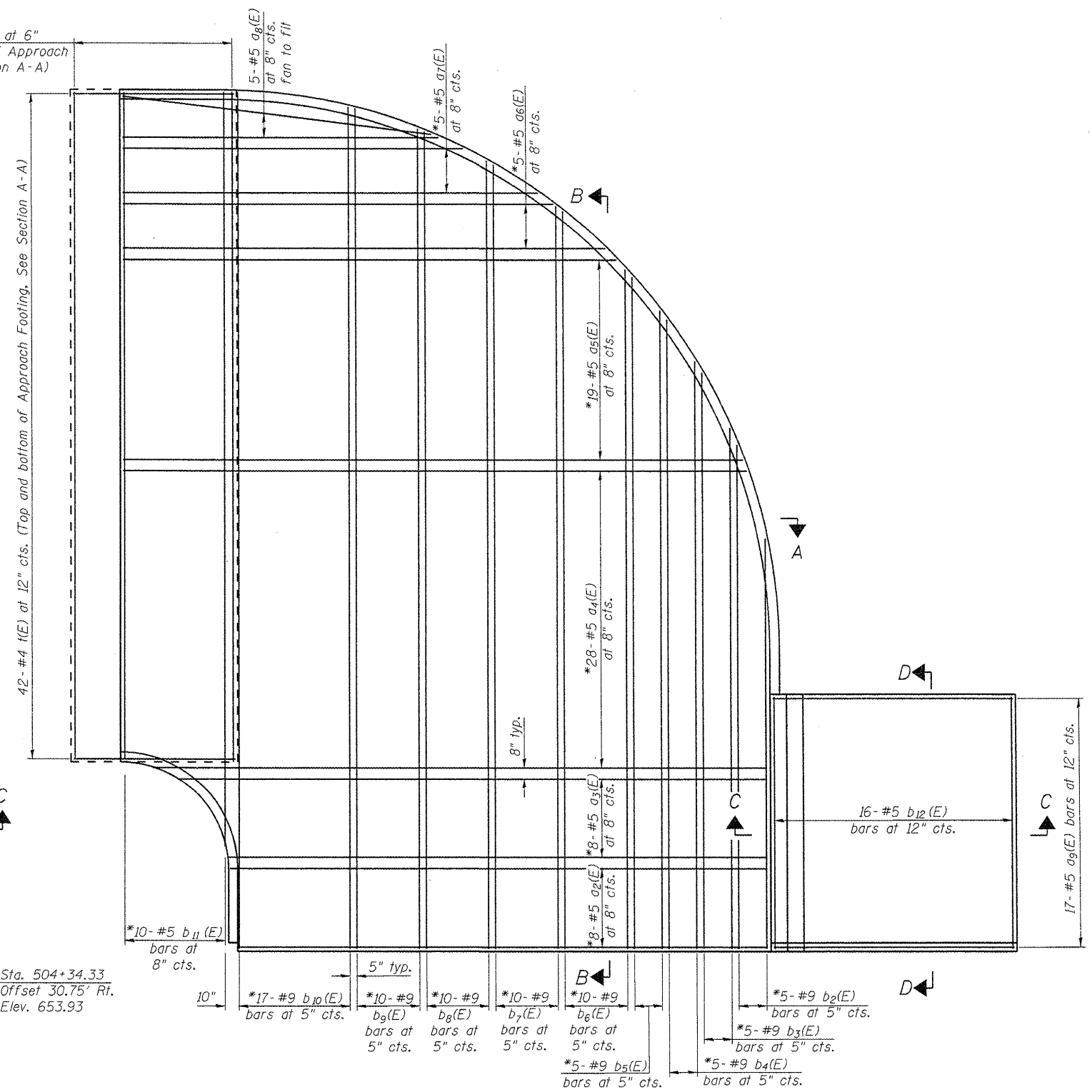
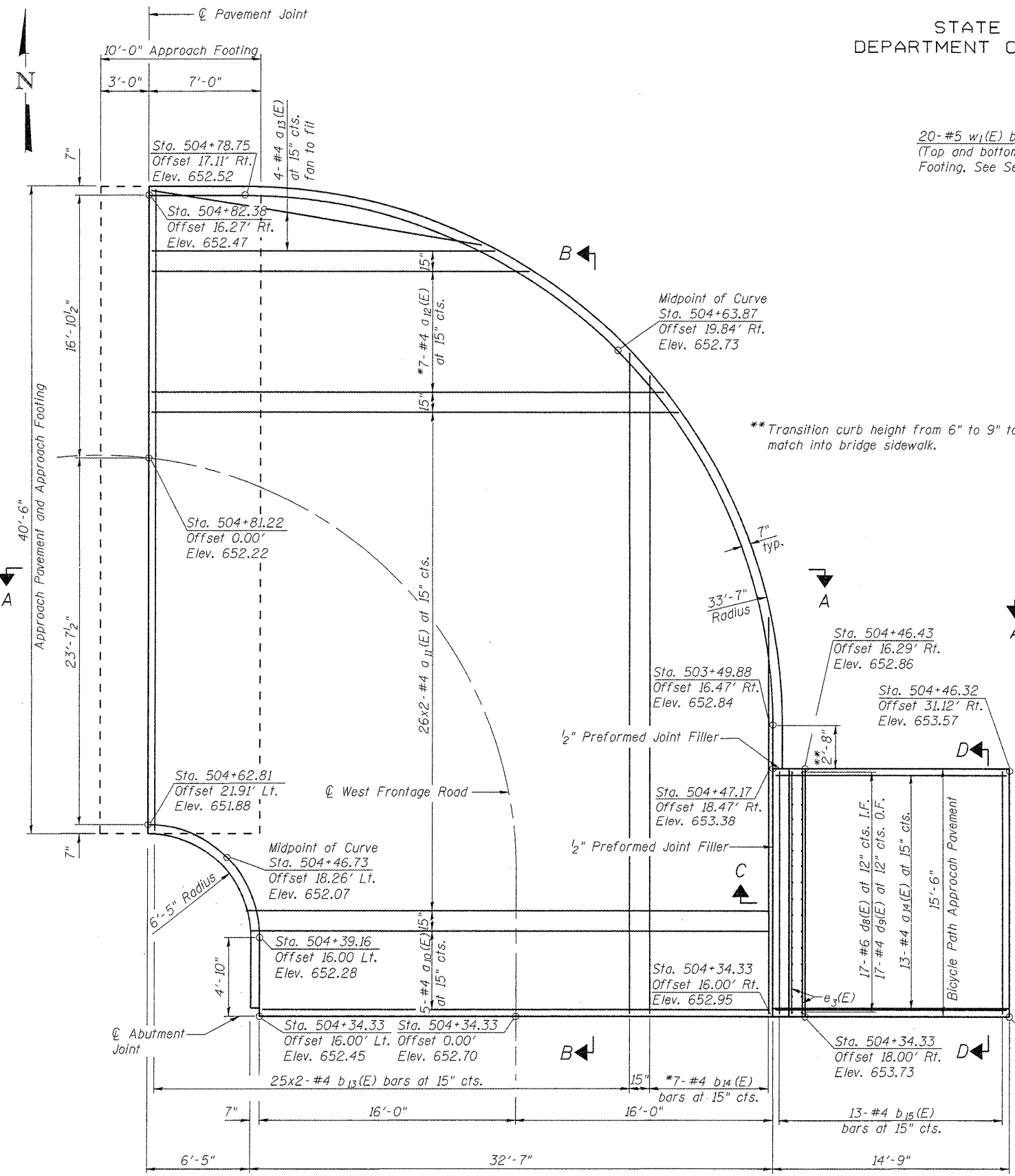


**SOUTH BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 016-2530**

SHEET NO. 5 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	43
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 60F60		
FED. AID PROJECT					

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



TOP OF SLAB REINFORCEMENT  
(Including Approach Slab Layout)

BOTTOM OF SLAB AND APPROACH FOOTING REINFORCEMENT

NORTH BRIDGE APPROACH SLAB  
STRUCTURE NO. 016-2530

DESIGNED	BPS
CHECKED	GSP
DRAWN	BPS/MJB
CHECKED	GSP

MINIMUM BAR LAPS  
(Approach Slab)  
#4 bar = 1'-8"  
#5 bar = 2'-2"

Notes:  
See Sheet 7 of 15 for Section A-A, Section B-B, and pavement joint detail.  
See Sheet 3 of 15 for abutment joint detail.  
Cost of Preformed Joint Filler Included with Concrete Superstructure.  
\*Cut reinforcement bars to fit.



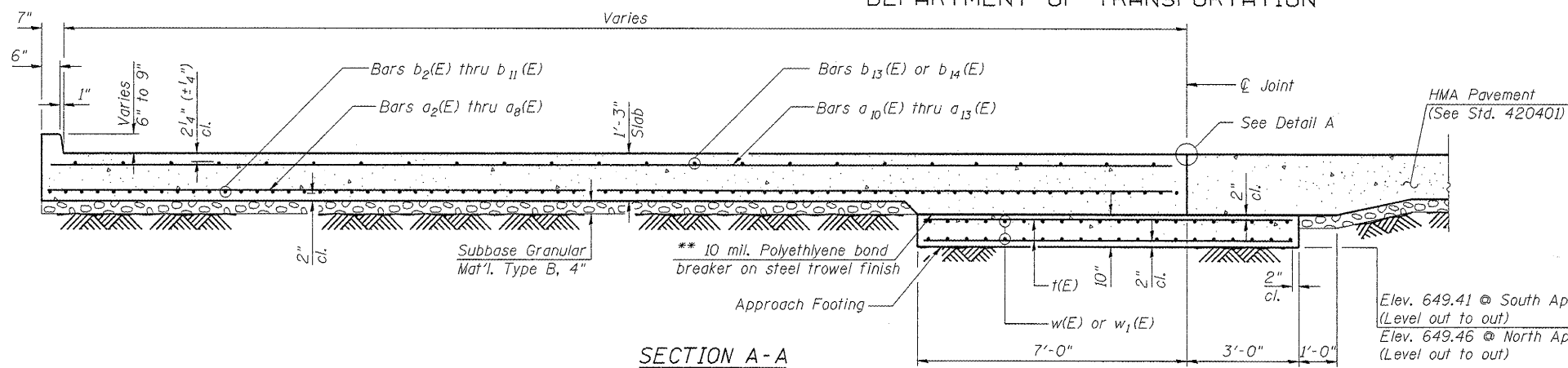
SHEET NO. 6 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	44
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 60F60		
FED. AID PROJECT					

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

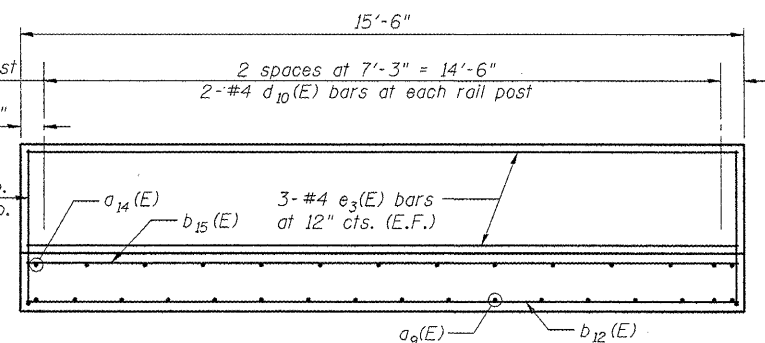
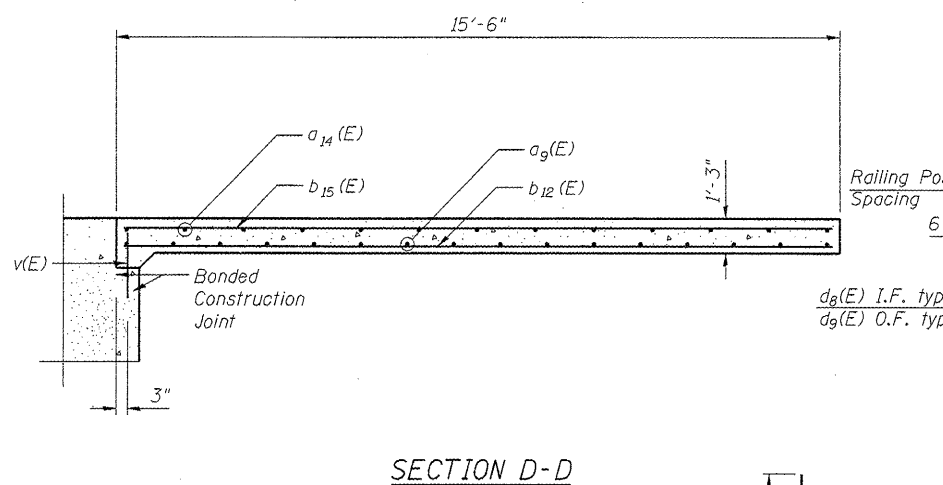
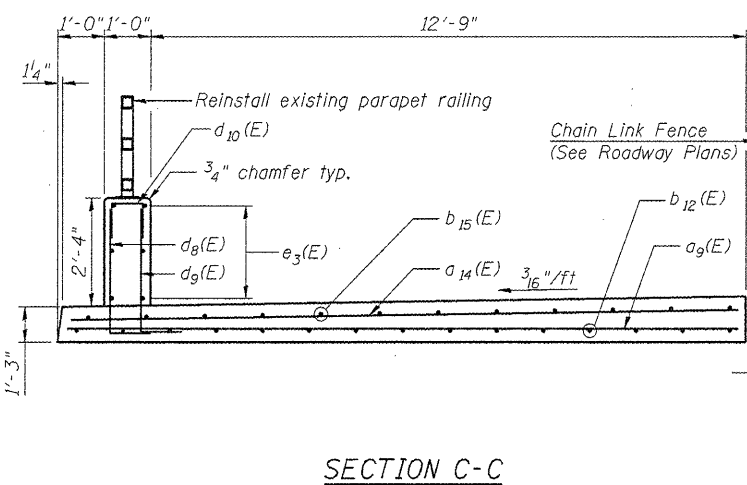
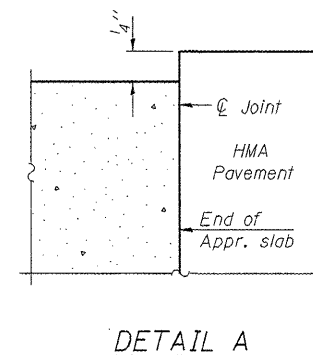
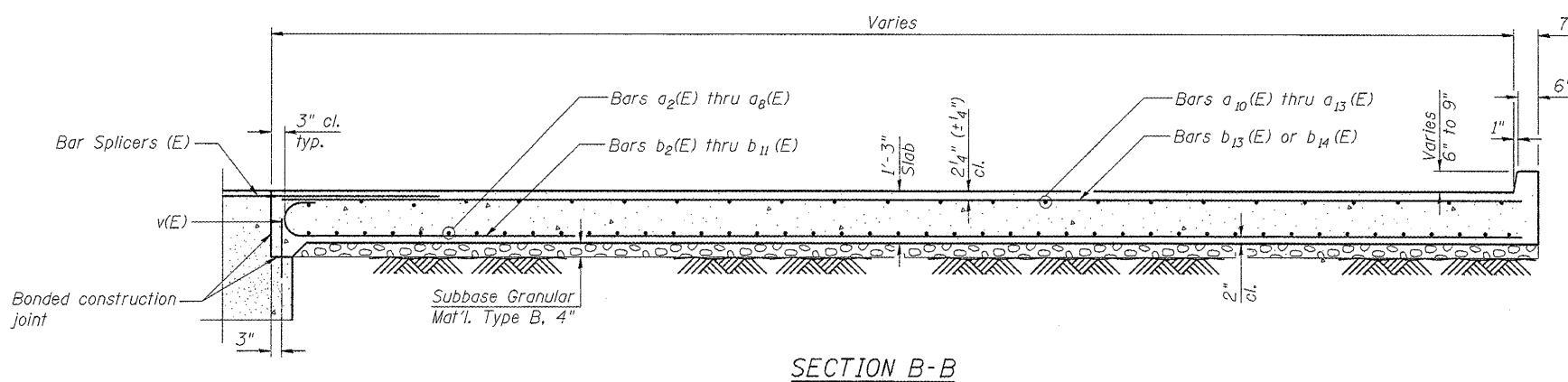
Notes:  
 Approach slab concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see sheets 13 or 14 of 15.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet 15 of 15.  
 Cost of excavation for approach footing included with Concrete Structures.  
 Verify railing post spacing in field prior to placing d<sub>10</sub>(E) bars.  
 \*\* Cost included with Concrete Superstructure



Elev. 649.41 @ South Approach Slab  
(Level out to out)  
 Elev. 649.46 @ North Approach Slab  
(Level out to out)

TWO BRIDGE APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>2</sub> (E)	16	#5	32'-3"	—
a <sub>3</sub> (E)	16	#5	36'-6"	—
a <sub>4</sub> (E)	56	#5	38'-8"	—
a <sub>5</sub> (E)	38	#5	37'-3"	—
a <sub>6</sub> (E)	10	#5	29'-1"	—
a <sub>7</sub> (E)	10	#5	25'-1"	—
a <sub>8</sub> (E)	10	#5	19'-0"	—
a <sub>9</sub> (E)	34	#5	14'-5"	—
a <sub>10</sub> (E)	10	#4	32'-3"	—
a <sub>11</sub> (E)	104	#4	20'-6"	—
a <sub>12</sub> (E)	14	#4	32'-0"	—
a <sub>13</sub> (E)	8	#4	21'-7"	—
a <sub>14</sub> (E)	26	#4	14'-5"	—
b <sub>2</sub> (E)	10	#9	31'-6"	—
b <sub>3</sub> (E)	10	#9	35'-11"	—
b <sub>4</sub> (E)	10	#9	39'-1"	—
b <sub>5</sub> (E)	10	#9	41'-7"	—
b <sub>6</sub> (E)	20	#9	45'-6"	—
b <sub>7</sub> (E)	20	#9	48'-3"	—
b <sub>8</sub> (E)	20	#9	50'-3"	—
b <sub>9</sub> (E)	20	#9	51'-7"	—
b <sub>10</sub> (E)	34	#9	52'-8"	—
b <sub>11</sub> (E)	20	#5	45'-5"	—
b <sub>12</sub> (E)	32	#5	15'-2"	—
b <sub>13</sub> (E)	100	#4	26'-7"	—
b <sub>14</sub> (E)	14	#4	39'-11"	—
b <sub>15</sub> (E)	26	#4	15'-2"	—
d <sub>8</sub> (E)	34	#6	3'-9"	L
d <sub>9</sub> (E)	34	#4	3'-5"	L
d <sub>10</sub> (E)	12	#4	2'-2"	□
e <sub>3</sub> (E)	12	#4	15'-2"	—
t(E)	168	#4	9'-8"	—
w(E)	40	#5	40'-10"	—
w <sub>1</sub> (E)	40	#5	40'-2"	—
Concrete Structures			Cu. Yd.	25.2
Concrete Superstructure			Cu. Yd.	193.6
Bridge Deck Grooving			Sq. Yd.	378
Protective Coaf			Sq. Yd.	454
Reinforcement Bars, Epoxy Coated			Pound	41,620



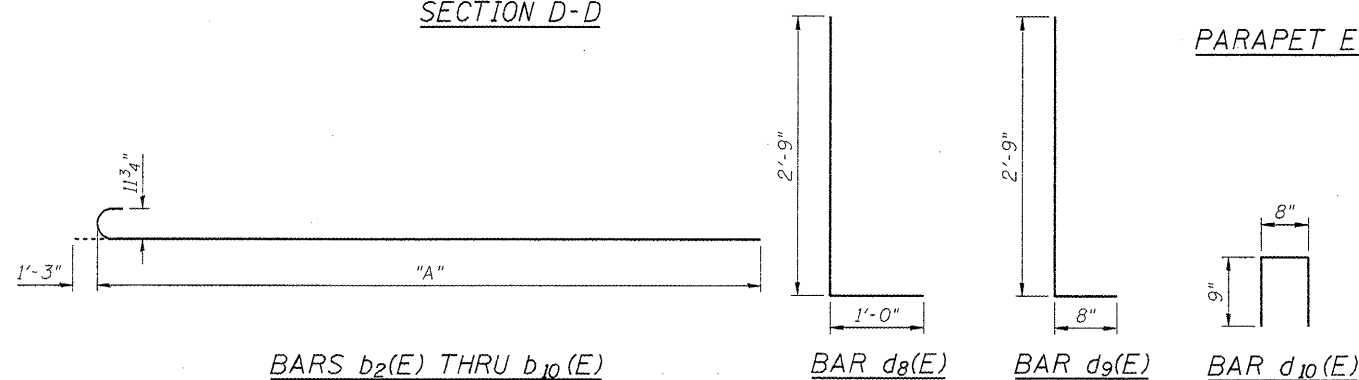
SECTION C-C

SECTION D-D

PARAPET ELEVATION

TABLE OF DIMENSIONS  
BARS b<sub>2</sub>(E) THRU b<sub>10</sub>(E)

Bar	Dimension "A"
b <sub>2</sub> (E)	30'-3"
b <sub>3</sub> (E)	34'-8"
b <sub>4</sub> (E)	37'-10"
b <sub>5</sub> (E)	40'-4"
b <sub>6</sub> (E)	44'-3"
b <sub>7</sub> (E)	47'-0"
b <sub>8</sub> (E)	49'-0"
b <sub>9</sub> (E)	50'-4"
b <sub>10</sub> (E)	51'-5"



BARS b<sub>2</sub>(E) THRU b<sub>10</sub>(E)

BAR d<sub>8</sub>(E)

BAR d<sub>9</sub>(E)

BAR d<sub>10</sub>(E)

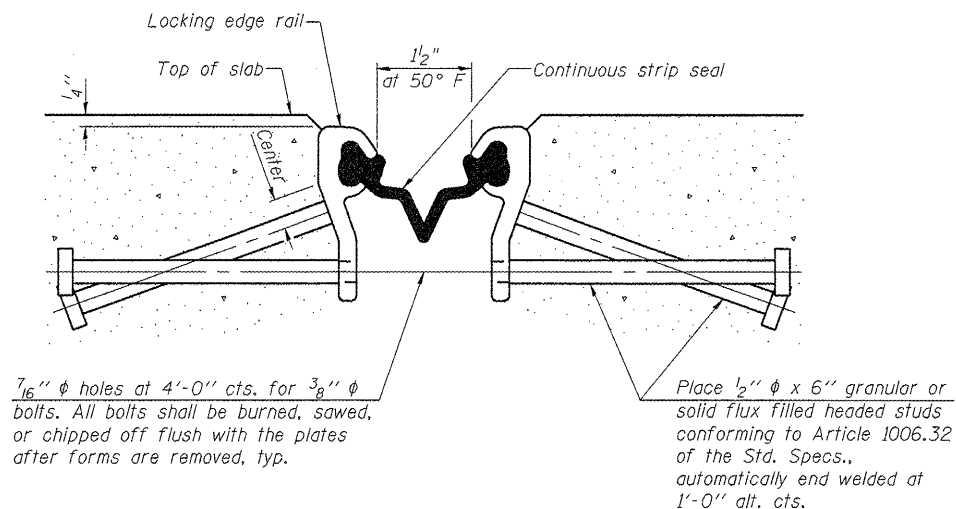
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 016-2530

SHEET NO. 7 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	45
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT		
			CONTRACT NO. 60F60		



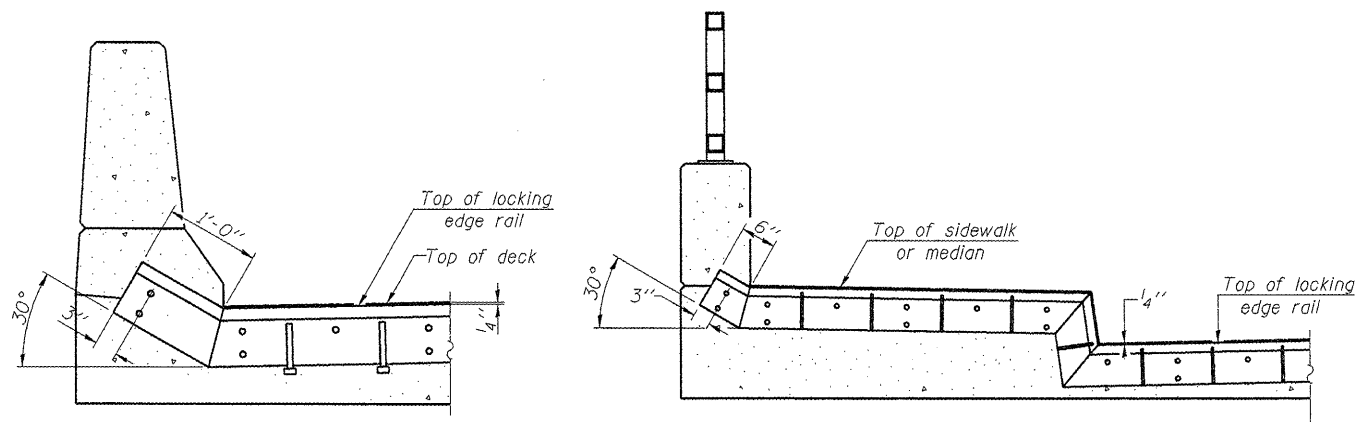
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



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

Place 1/2"  $\phi$  x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

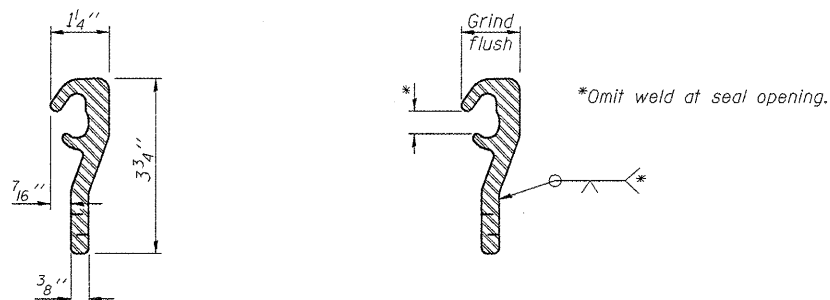
SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS



AT PARAPET

AT SIDEWALK

TYPICAL END TREATMENTS



LOCKING EDGE RAIL

LOCKING EDGE RAIL SPLICE

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.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. 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.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	48.5

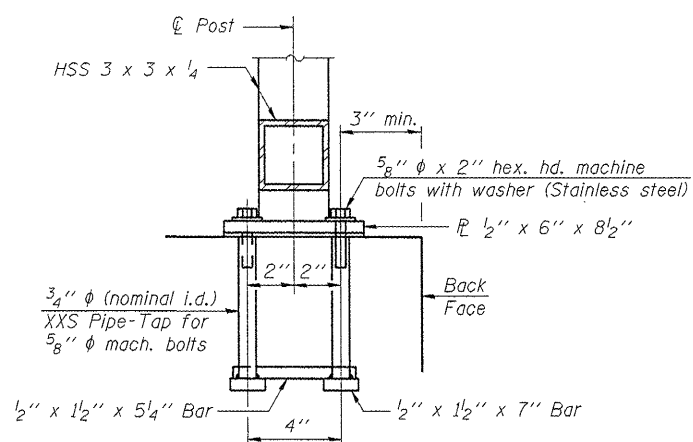
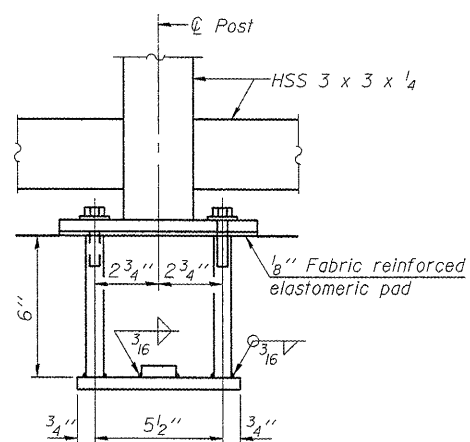
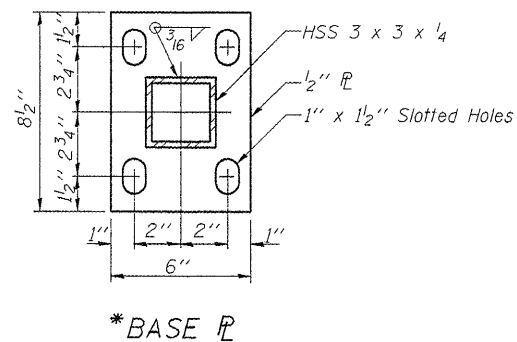
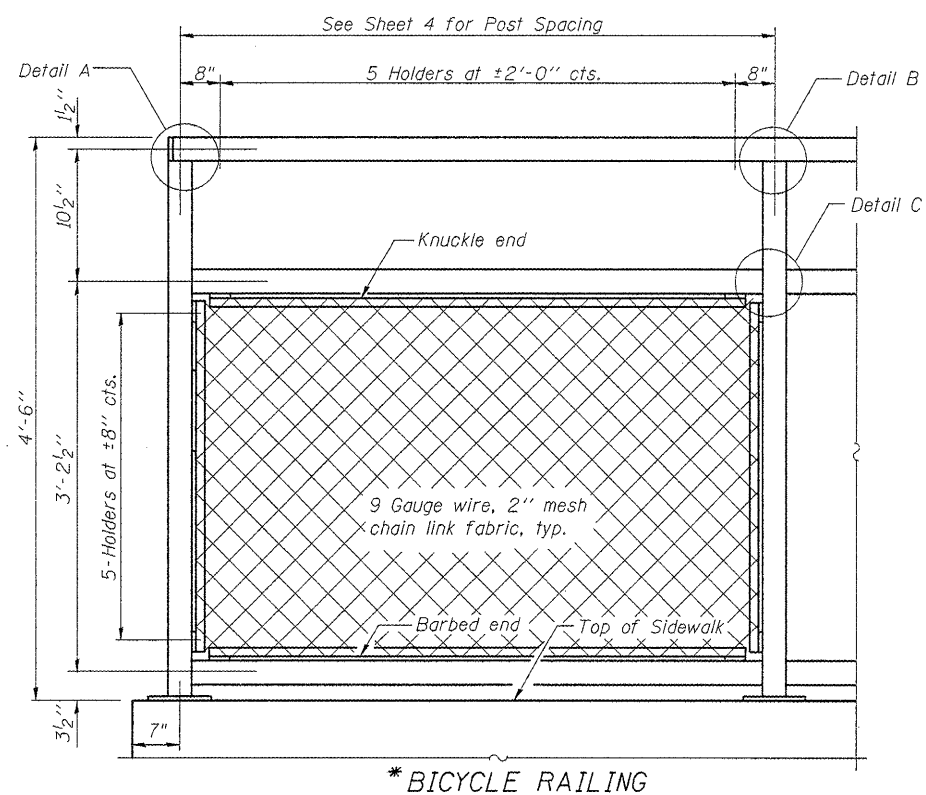
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 016-2530

SHEET NO. 8 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	46
FED. ROAD DIST. NO. 7			ILLINOIS FED. AID PROJECT		
				CONTRACT NO. 60F60	

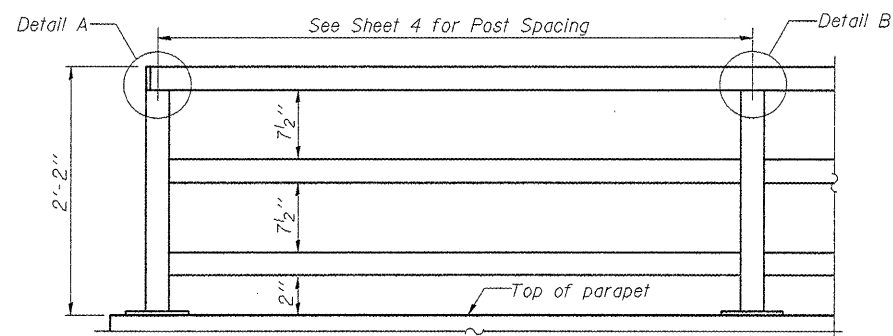


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

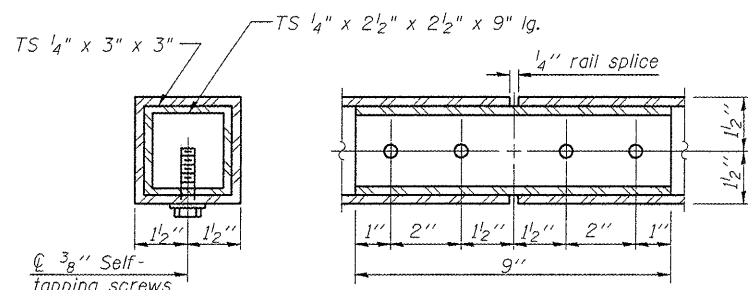
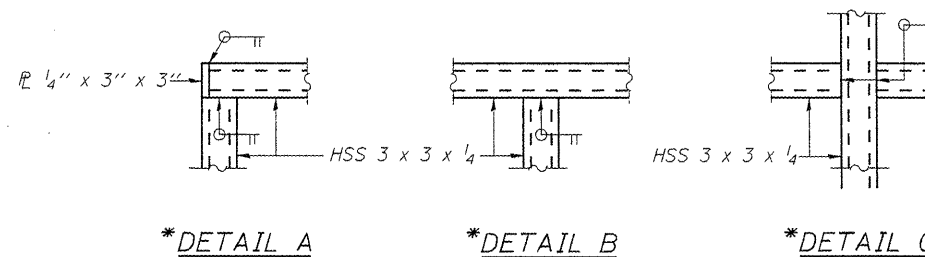


**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



**\*PARAPET RAILING ELEVATION**  
(Inside Face of Three Element Rail)



**\*RAIL SPLICE**

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

Item	Unit	Quantity
Removing and Re-Erecting Existing Railing	Foot	97.5
Bicycle Railing to be Removed and Reinstalled	Foot	66.5

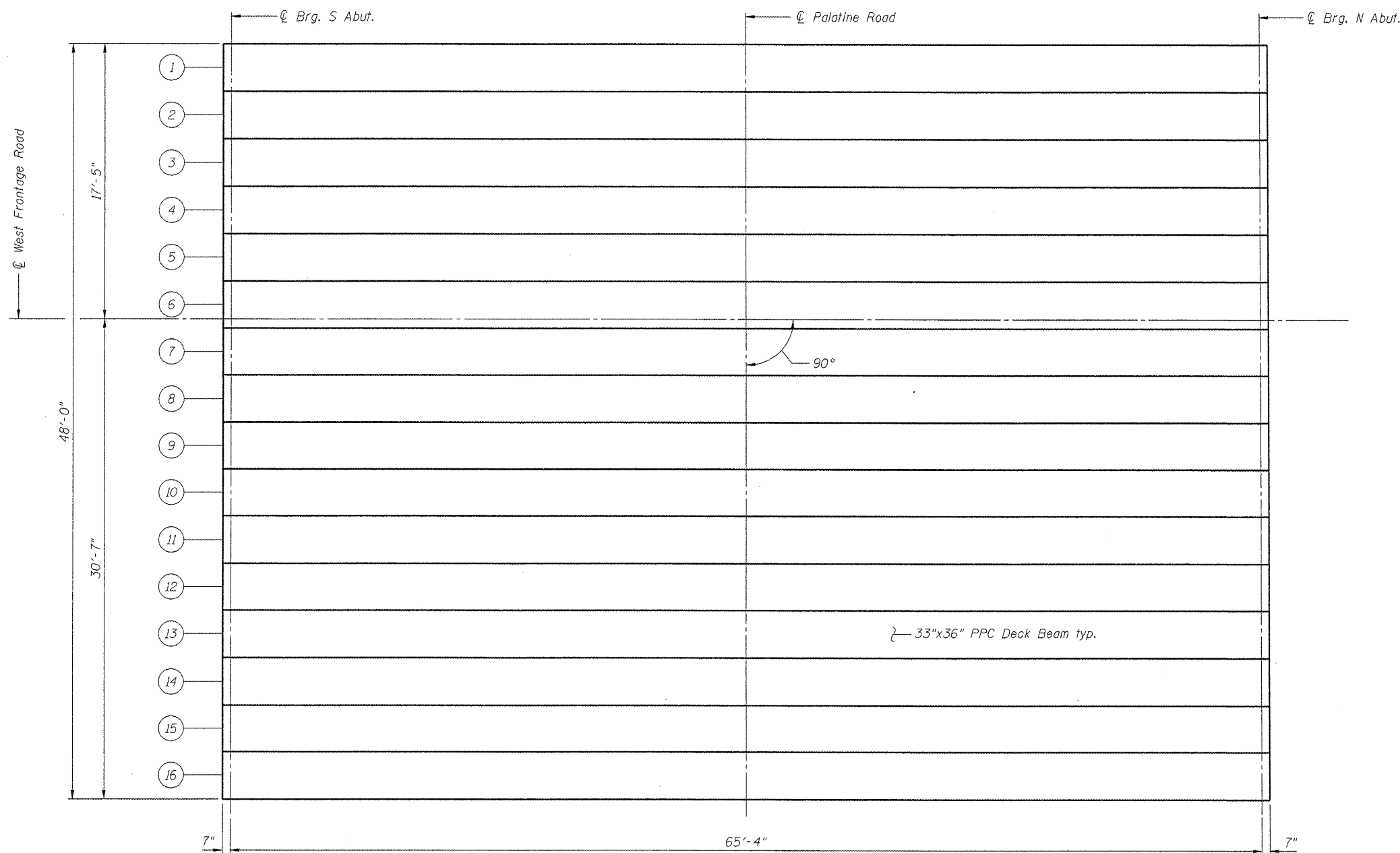
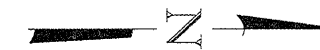
**PARAPET & BICYCLE RAILING**  
**STRUCTURE NO. 016-2530**

SHEET NO. 9	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	47
15 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 60F60		
FED. AID PROJECT					

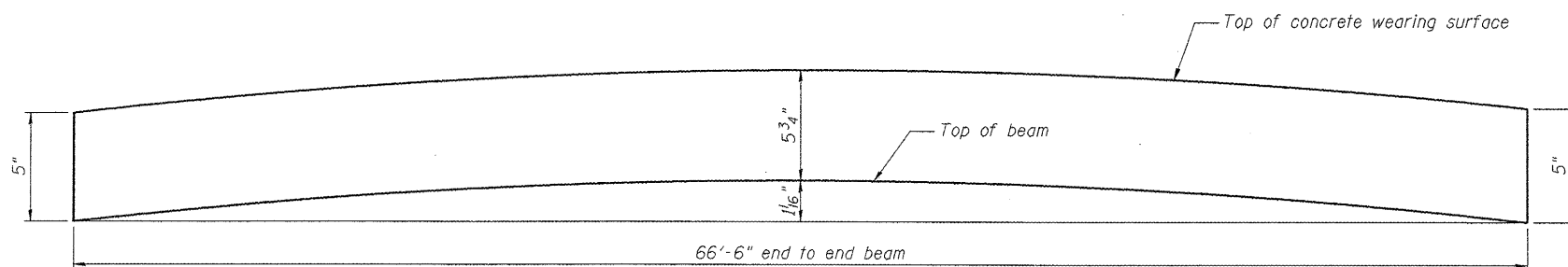
\*FOR INFORMATION ONLY



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



PLAN



INITIAL CAMBER DIAGRAM

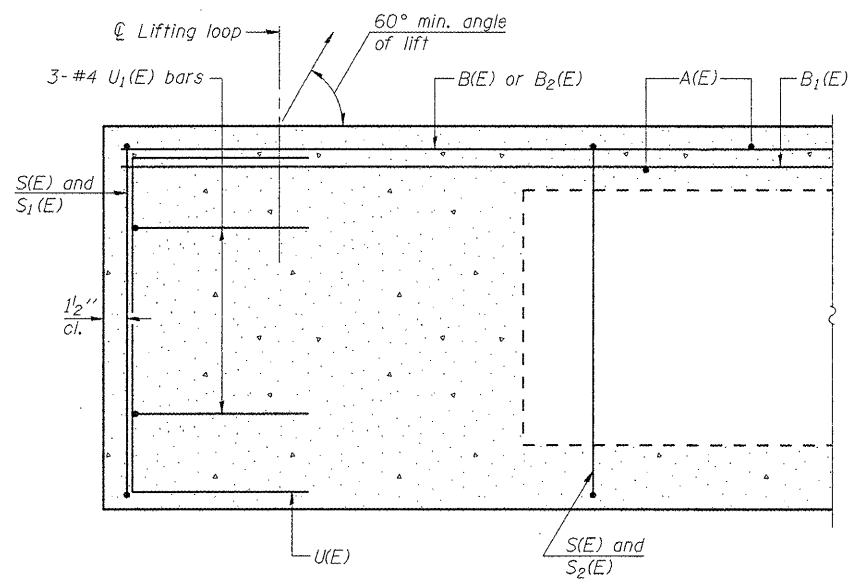
PPC DECK BEAM FRAMING PLAN  
STRUCTURE NO. 016-2530

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

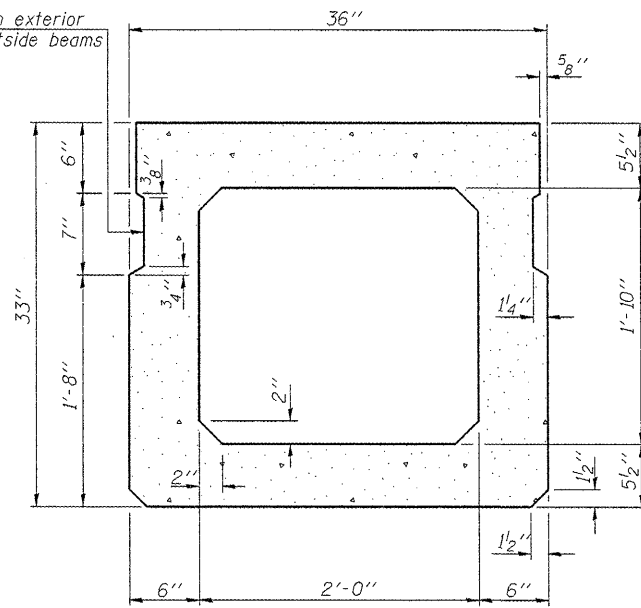
SHEET NO. 10 15 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	48
			CONTRACT NO. 60F60		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



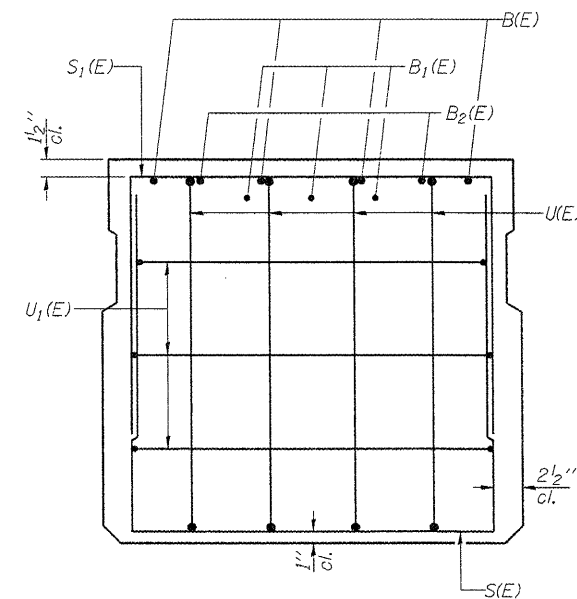
STATE OF ILLINOIS  
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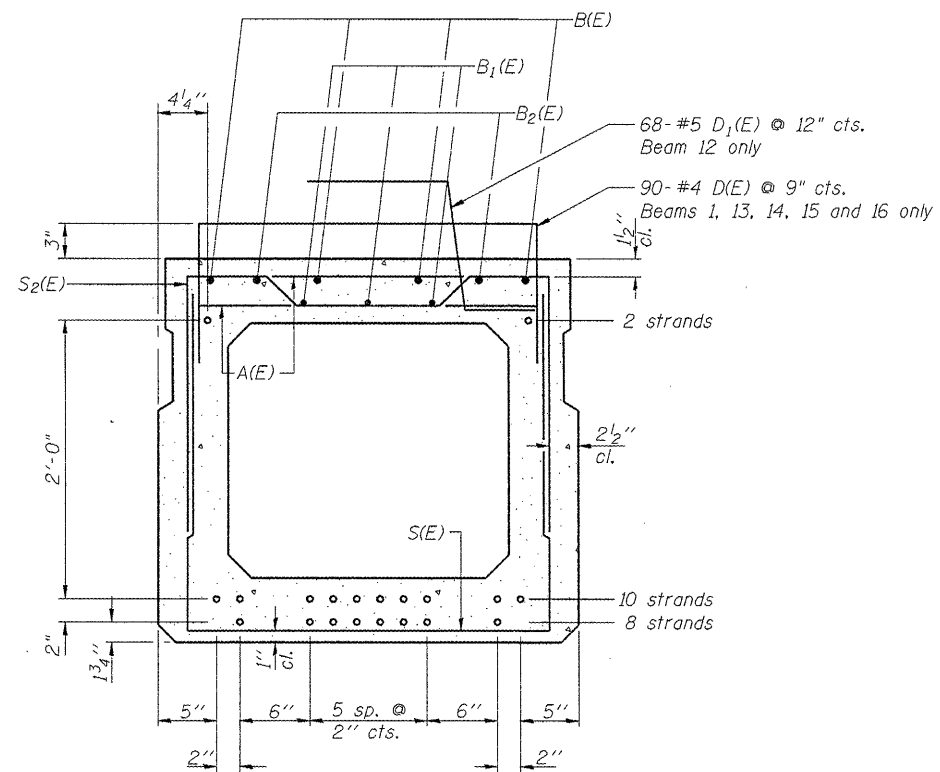
SECTION C-C



SECTION A-A  
(Showing dimensions)



VIEW B-B



SECTION A-A

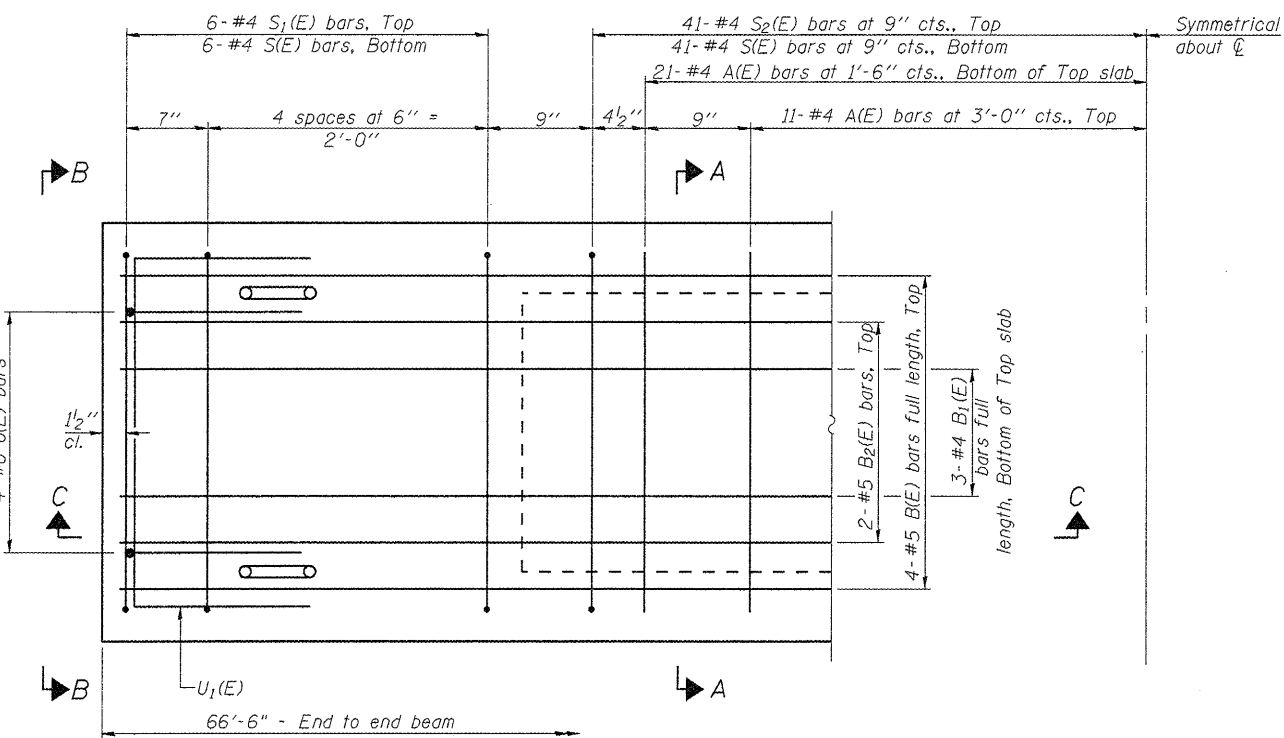
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST  
ONE BEAM ONLY  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	64	#4	2'-7"	—
B(E)	8	#5	34'-3"	—
B1(E)	6	#4	34'-0"	—
B2(E)	4	#5	34'-3"	—
D(E)	90	#4	4'-7"	┌
D1(E)	68	#5	2'-10"	┌
S(E)	94	#4	7'-5"	┌
S1(E)	12	#4	6'-3"	┌
S2(E)	82	#4	6'-6"	┌
U(E)	8	#6	5'-0"	┌
U1(E)	6	#4	5'-0"	┌

Note: See sheet 12 of 15 for additional details and Bill of Material.



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

33" x 36" PPC DECK BEAM  
STRUCTURE NO. 016-2530

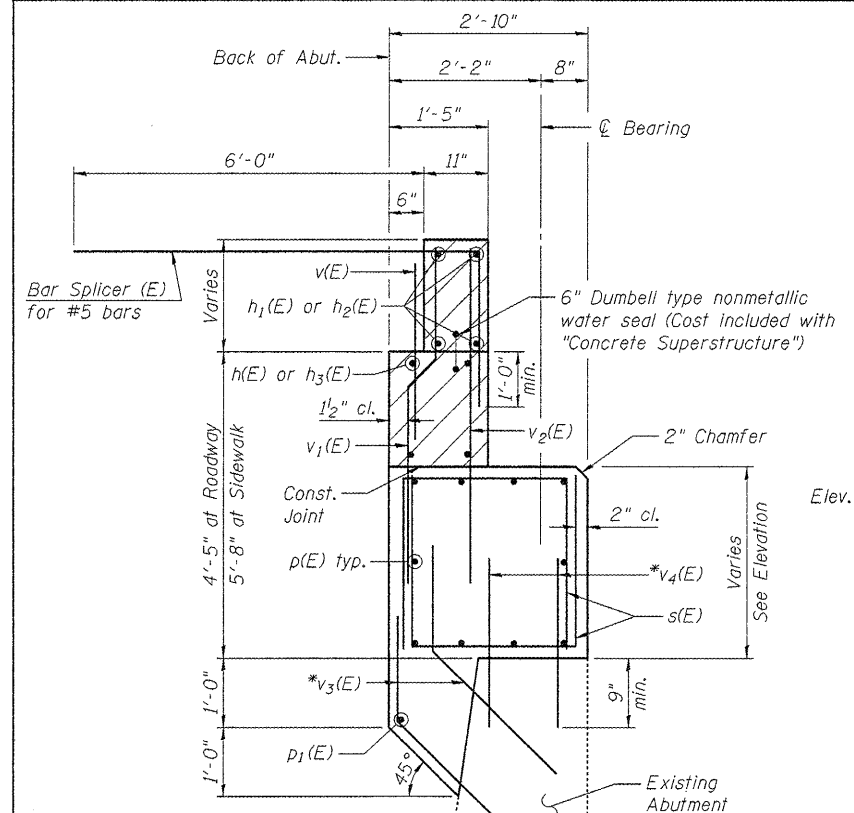
SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	49
15 SHEETS	CONTRACT NO. 60F60		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		



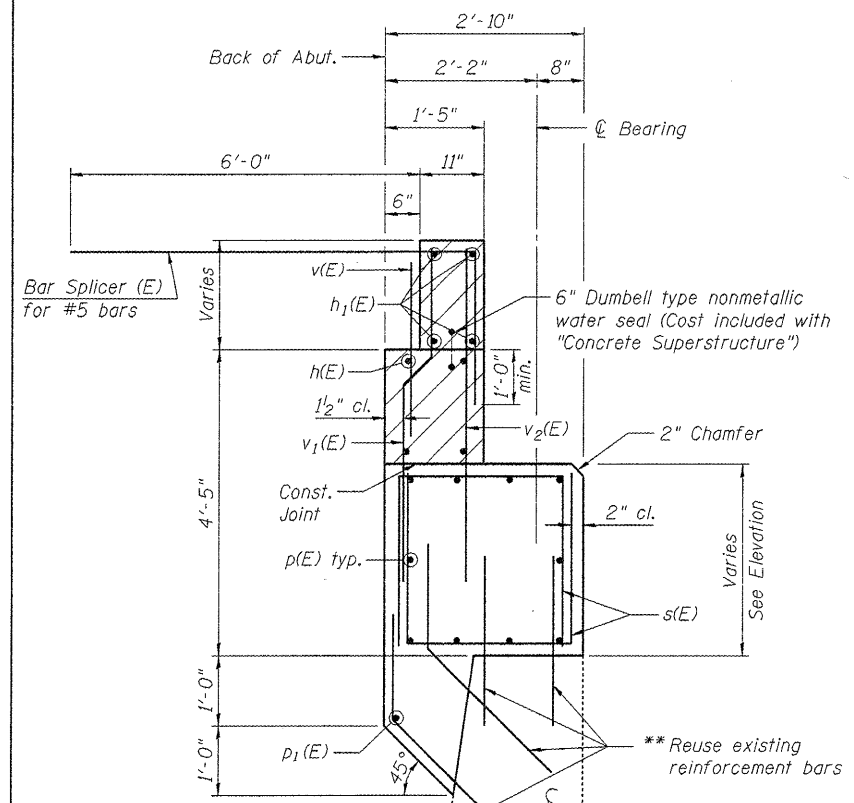




STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



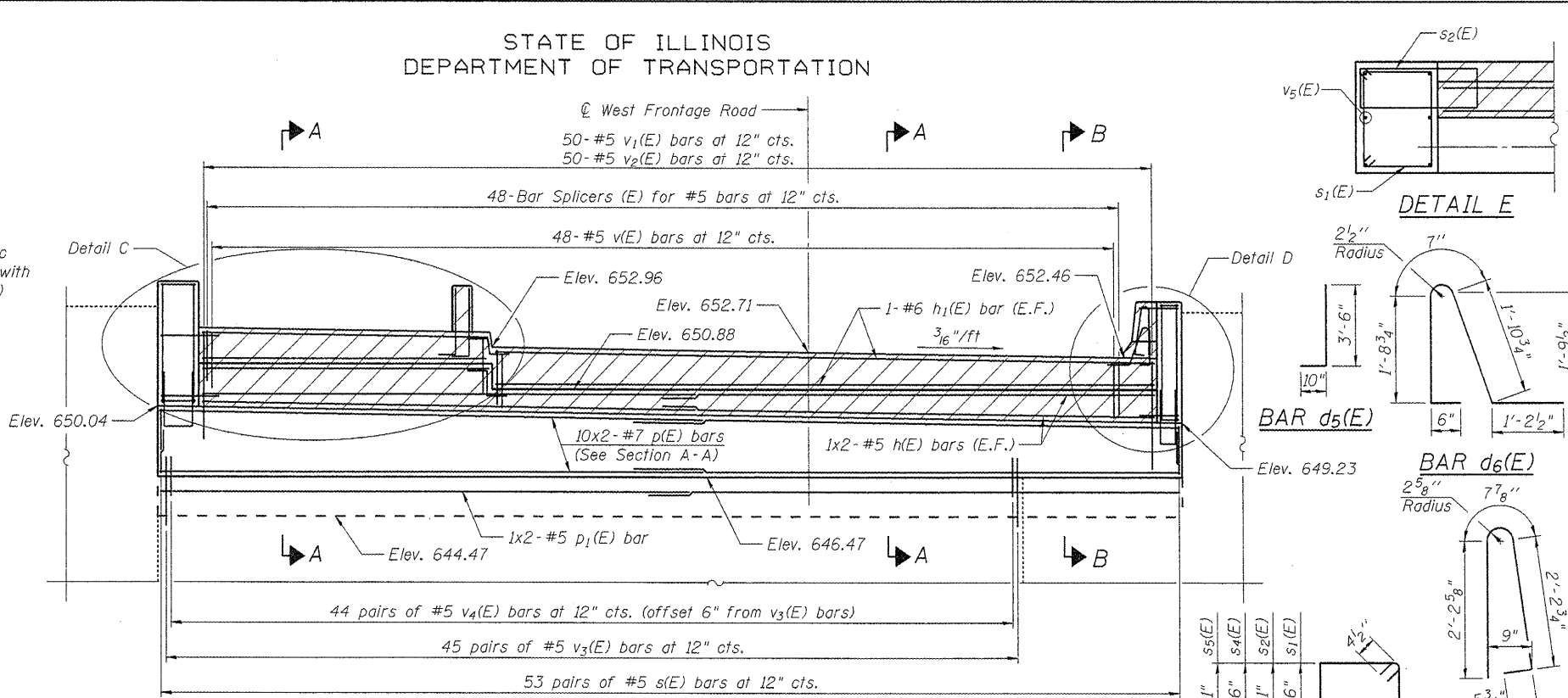
\*Drill and grout #5 v<sub>3</sub>(E) and v<sub>4</sub>(E) bars in 7/8"Ø x 9" min. holes according to Section 584 of the Standard Specifications. Cost included with "Reinforcement Bars, Epoxy Coated."



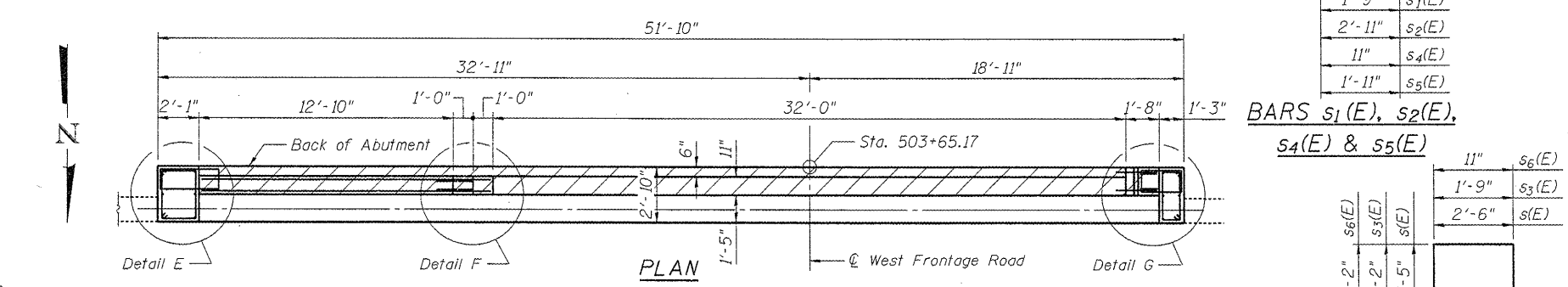
DESIGNED - BPS  
CHECKED - GSP  
DRAWN - BPS/MJB  
CHECKED - GSP

Existing Abutment (converted from retaining wall in 2003 widening)

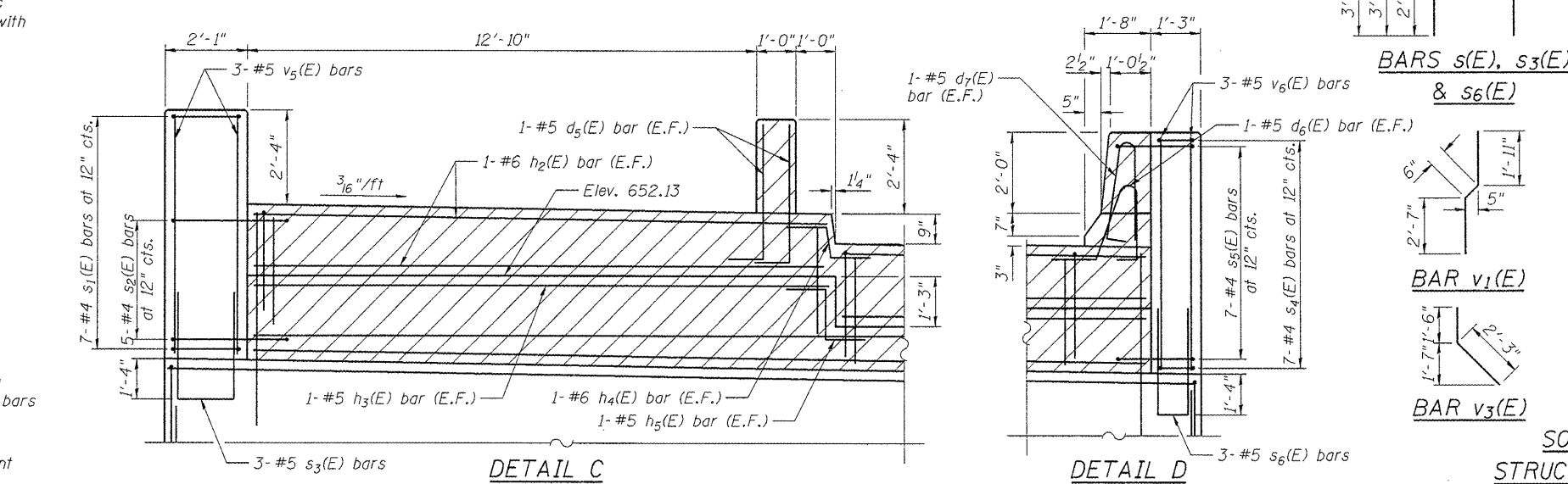
\*\* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.



ELEVATION  
(Looking South)

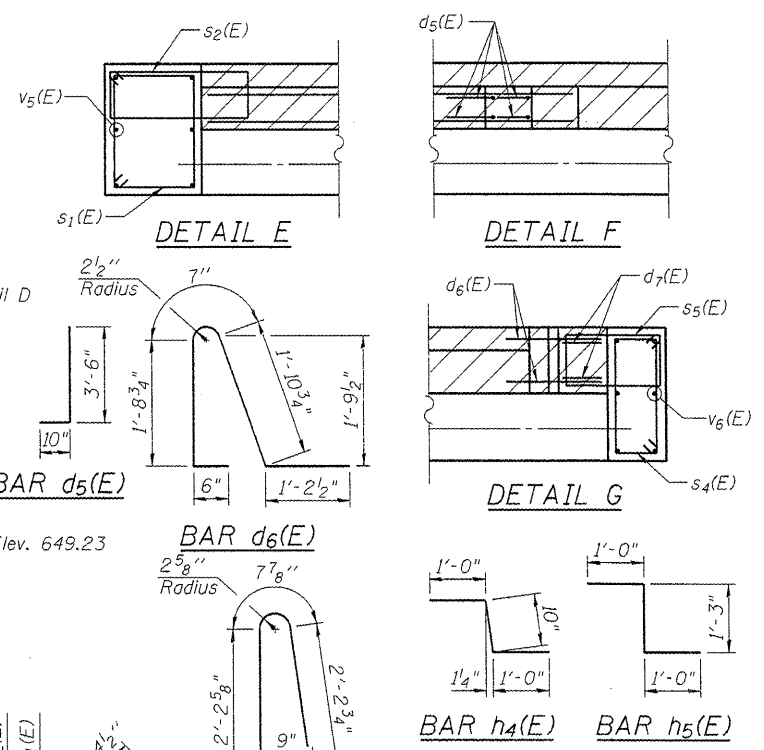


PLAN



MINIMUM BAR LAPS  
(Abutment)  
#5 bar = 2'-3"  
#7 bar = 3'-8"

Notes:  
Hatched area to be poured after Concrete Wearing Surface is in place. Quantity of concrete included with Concrete Superstructure.  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
For details of Bar Splicers, see Sheet 15 of 15.



SOUTH ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d <sub>5</sub> (E)	4	#5	4'-4"	J
d <sub>6</sub> (E)	2	#5	5'-11"	J
d <sub>7</sub> (E)	2	#5	5'-7"	J
h(E)	8	#5	25'-3"	—
h <sub>1</sub> (E)	4	#6	33'-4"	—
h <sub>2</sub> (E)	4	#6	14'-6"	—
h <sub>3</sub> (E)	2	#5	14'-6"	—
h <sub>4</sub> (E)	2	#6	2'-10"	—
h <sub>5</sub> (E)	2	#5	3'-3"	—
p(E)	20	#7	27'-7"	—
p <sub>1</sub> (E)	2	#5	26'-11"	—
s(E)	106	#5	7'-4"	—
s <sub>1</sub> (E)	7	#4	9'-3"	—
s <sub>2</sub> (E)	5	#4	8'-9"	—
s <sub>3</sub> (E)	3	#5	8'-1"	—
s <sub>4</sub> (E)	7	#4	7'-7"	—
s <sub>5</sub> (E)	7	#4	6'-9"	—
s <sub>6</sub> (E)	3	#5	7'-3"	—
v(E)	48	#5	2'-10"	—
v <sub>1</sub> (E)	50	#5	5'-0"	—
v <sub>2</sub> (E)	50	#5	4'-9"	—
v <sub>3</sub> (E)	90	#5	3'-9"	—
v <sub>4</sub> (E)	88	#5	2'-8"	—
v <sub>5</sub> (E)	6	#5	5'-10"	—
v <sub>6</sub> (E)	6	#5	5'-8"	—
Structure Excavation			Cu. Yd.	30
Concrete Structures			Cu. Yd.	22.3
Reinforcement Bars, Epoxy Coated			Pound	4,090
Concrete Sealer			Sq. Ft.	401

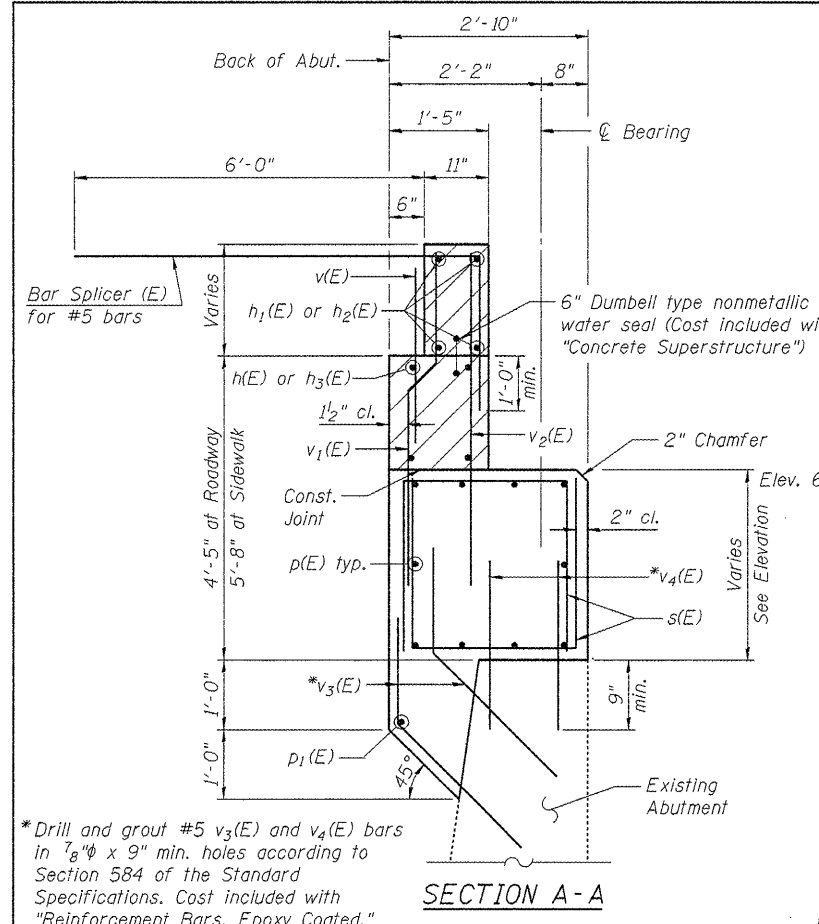
SOUTH ABUTMENT  
STRUCTURE NO. 016-2530

SHEET NO. 13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	51
15 SHEETS	FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 60F60		
FED. AID PROJECT					

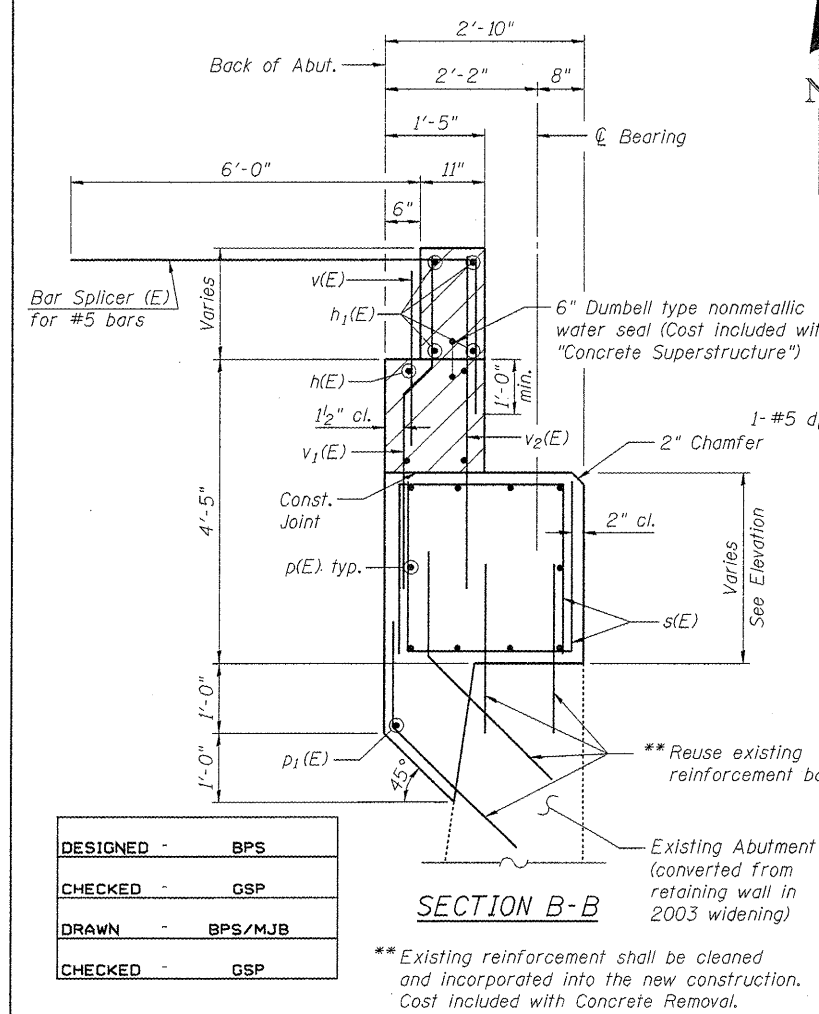
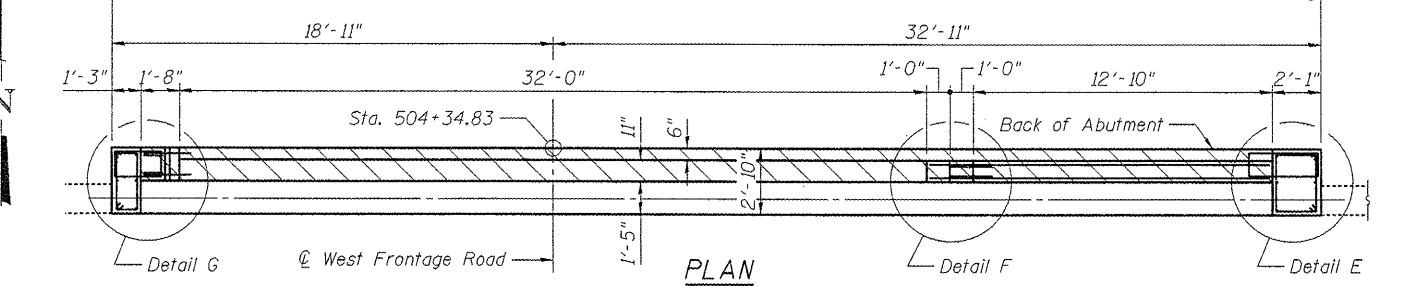
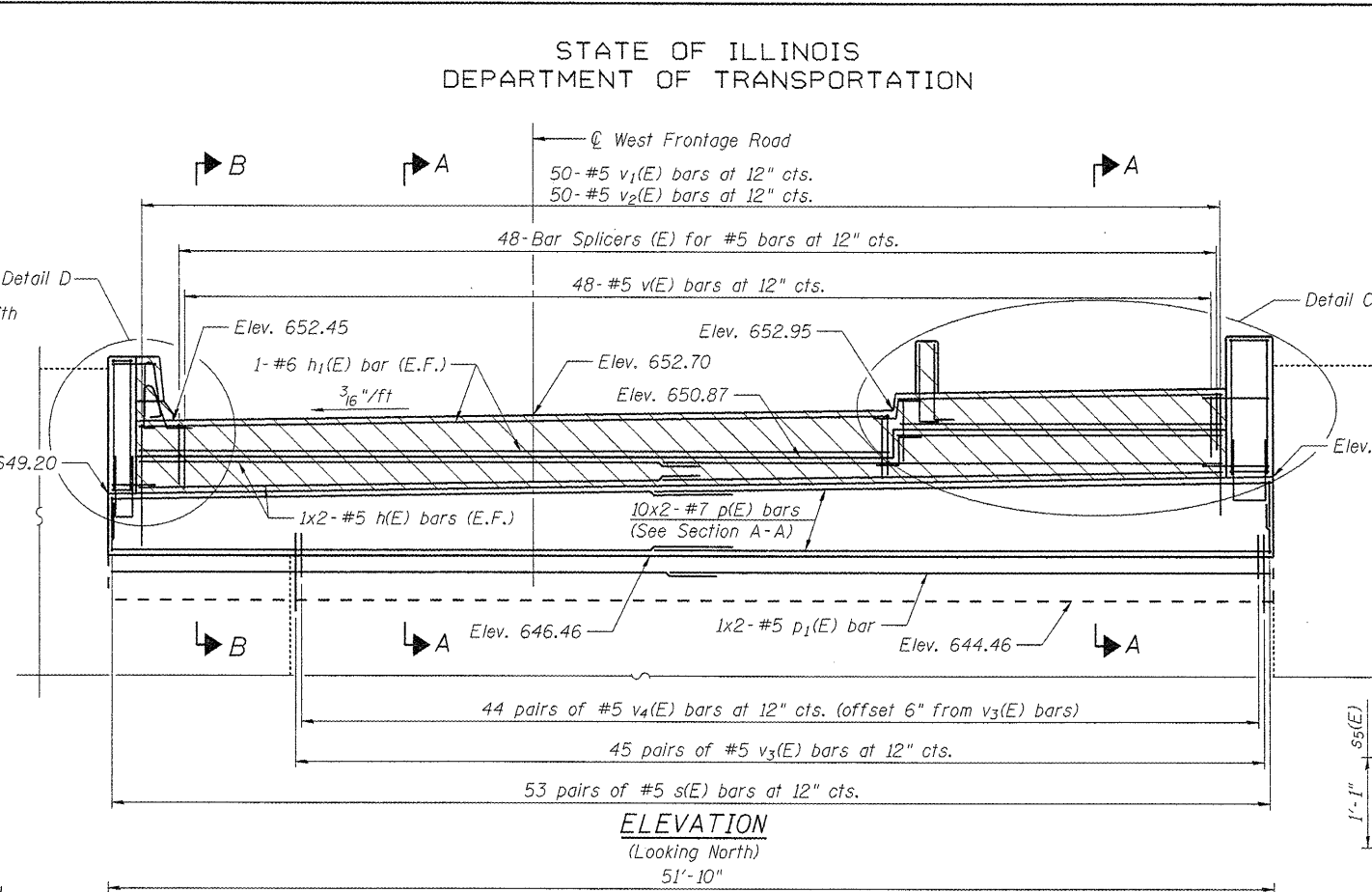


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\* Drill and grout #5 v3(E) and v4(E) bars in 7/8" φ x 9" min. holes according to Section 584 of the Standard Specifications. Cost included with "Reinforcement Bars, Epoxy Coated."

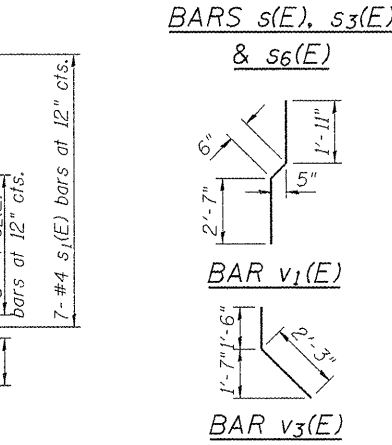
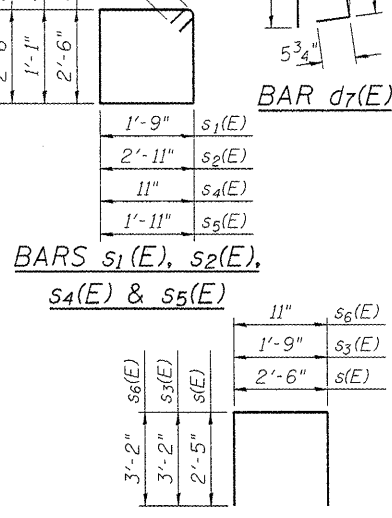
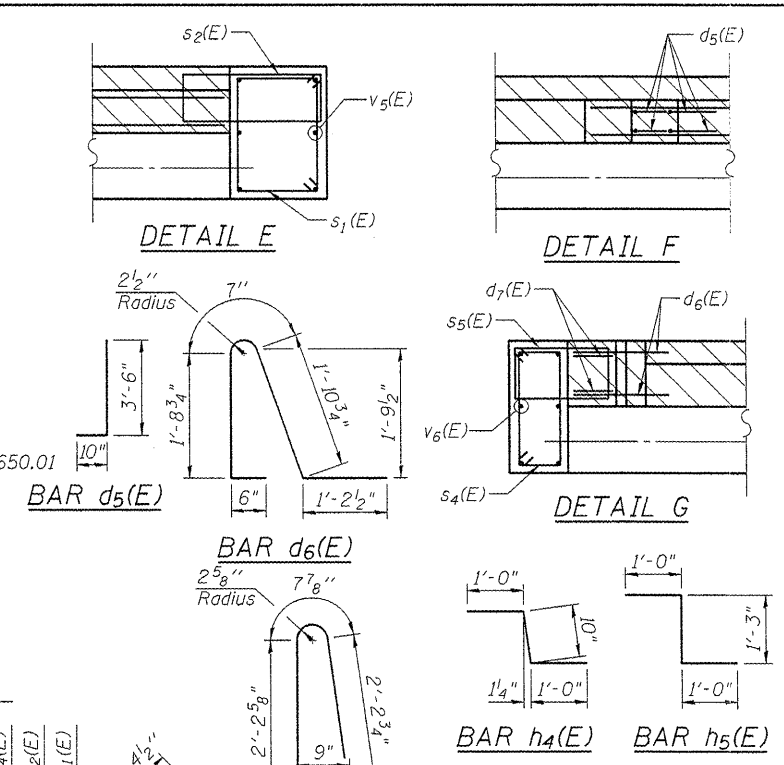


DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

\*\* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

**MINIMUM BAR LAPS**  
(Abutment)  
#5 bar = 2'-3"  
#7 bar = 3'-8"

Notes:  
Hatched area to be poured after Concrete Wearing Surface is in place. Quantity of concrete included with Concrete Superstructure.  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
For details of Bar Splicers, see Sheet 15 of 15.



**NORTH ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d5(E)	4	#5	4'-4"	J
d6(E)	2	#5	5'-11"	J
d7(E)	2	#5	5'-7"	J
h(E)	8	#5	25'-3"	—
h1(E)	4	#6	33'-4"	—
h2(E)	4	#6	14'-6"	—
h3(E)	2	#5	14'-6"	—
h4(E)	2	#6	2'-10"	—
h5(E)	2	#5	3'-3"	—
p(E)	20	#7	27'-7"	—
p1(E)	2	#5	26'-11"	—
s(E)	106	#5	7'-4"	—
s1(E)	7	#4	9'-3"	—
s2(E)	5	#4	8'-9"	—
s3(E)	3	#5	8'-1"	—
s4(E)	7	#4	7'-7"	—
s5(E)	7	#4	6'-9"	—
s6(E)	3	#5	7'-3"	—
v(E)	48	#5	2'-10"	—
v1(E)	50	#5	5'-0"	—
v2(E)	50	#5	4'-9"	—
v3(E)	90	#5	3'-9"	—
v4(E)	88	#5	2'-8"	—
v5(E)	6	#5	5'-10"	—
v6(E)	6	#5	5'-8"	—
Structure Excavation		Cu. Yd.	30	
Concrete Structures		Cu. Yd.	22.2	
Reinforcement Bars, Epoxy Coated		Pound	4,090	
Concrete Sealer		Sq. Ft.	400	

**NORTH ABUTMENT  
STRUCTURE NO. 016-2530**

SHEET NO. 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	52
15 SHEETS	CONTRACT NO. 60F60			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	



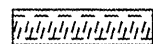
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DEPARTMENT OF TRANSPORTATION

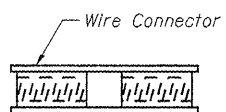
The diameter of this part is equal or larger than the diameter of bar spliced.

The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



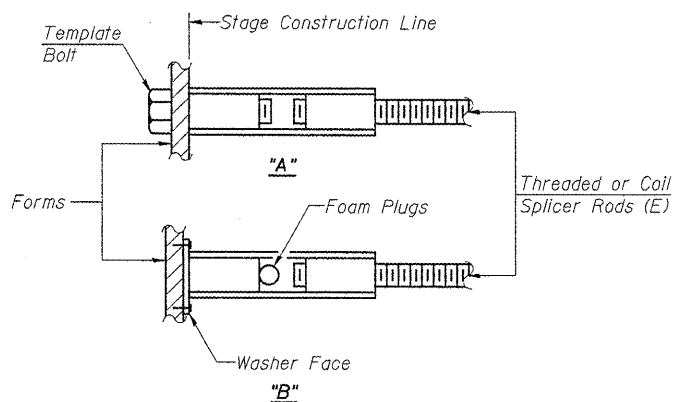
\*\* ONE PIECE



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

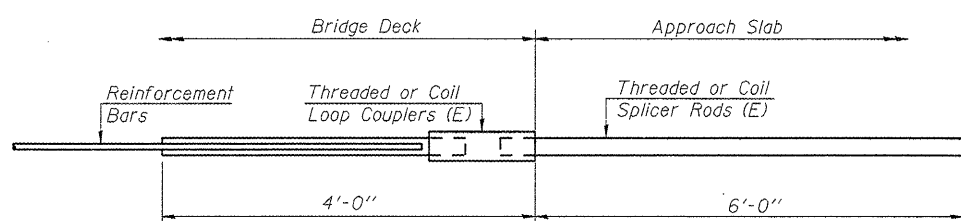
"A" : Set bar splicer assembly by means of a template bolt.  
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
(E) : Indicates epoxy coating.

NOTES

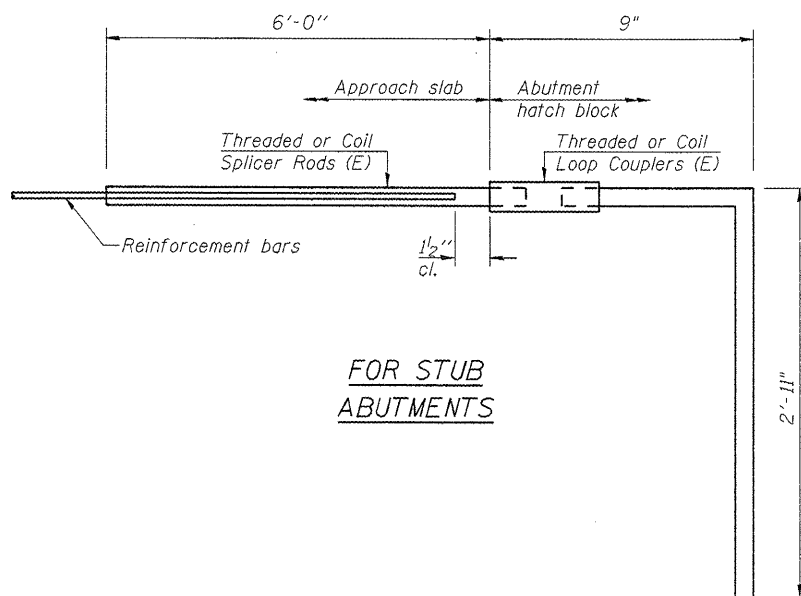
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
(Tension in kips)
  - ② Minimum \*Pull-out Strength =  $0.66 \times f_y \times A_t$   
(Tension in kips)
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

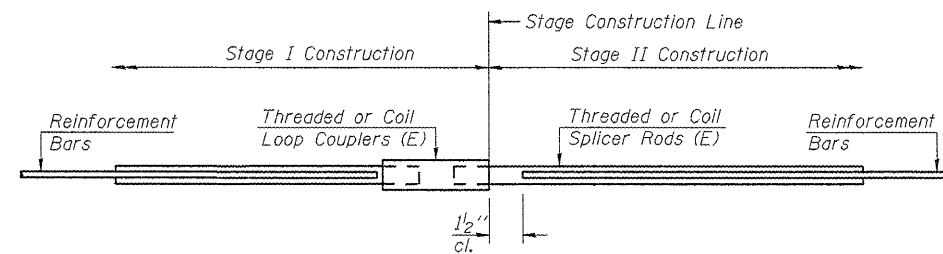
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
	0	

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	0

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	96

BAR SPLICER ASSEMBLY DETAILS  
STRUCTURE NO. 016-2530

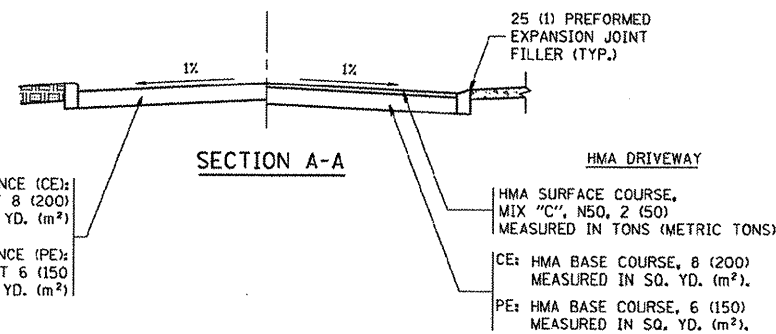
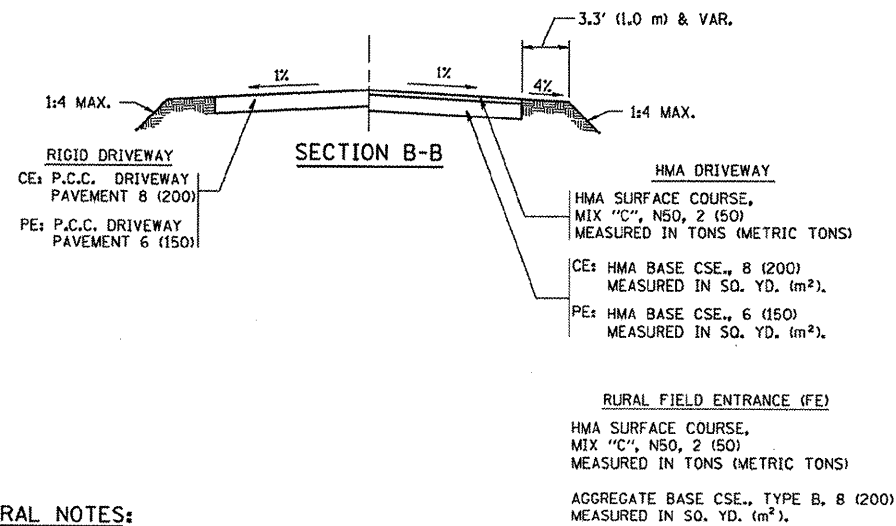
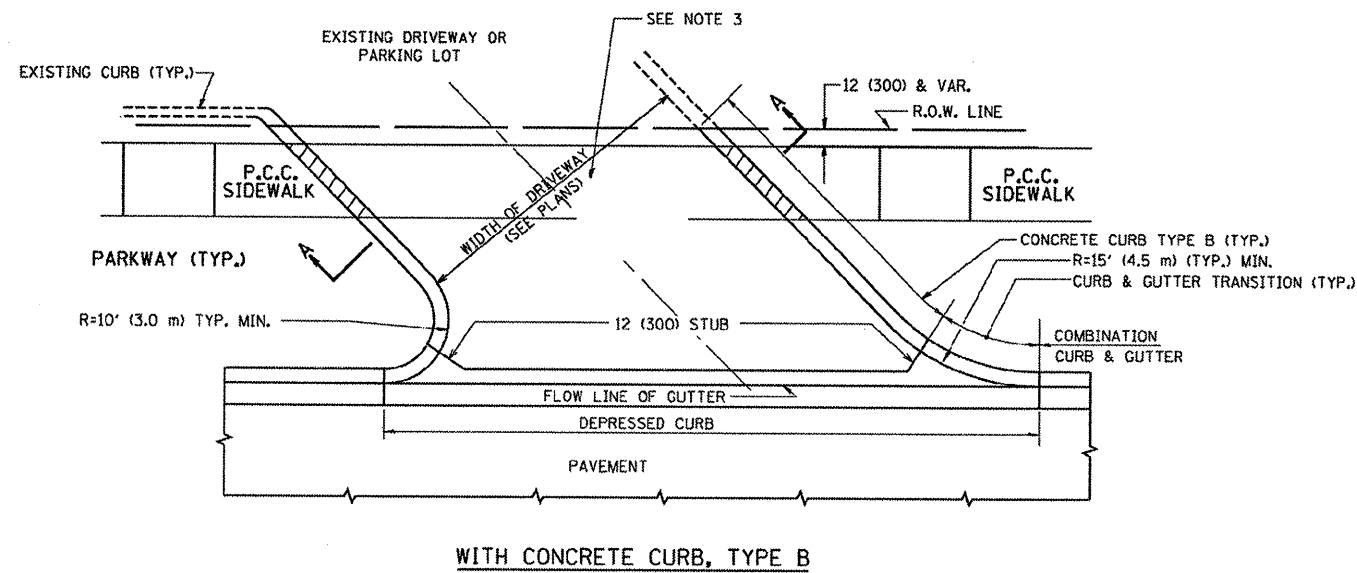
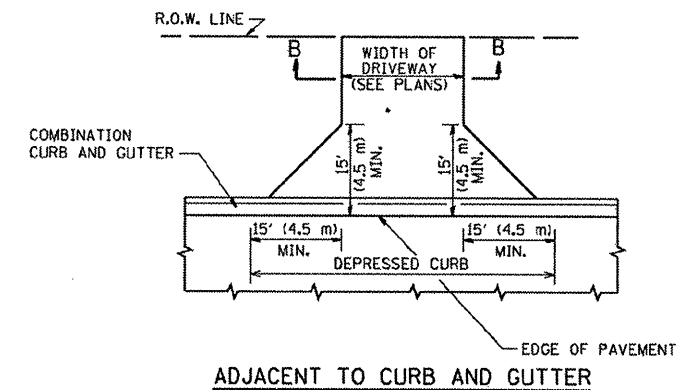
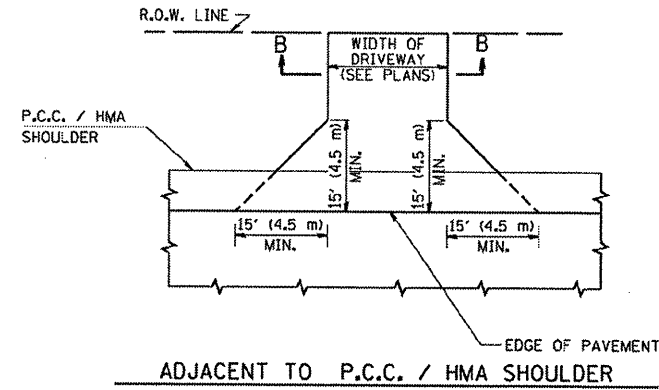
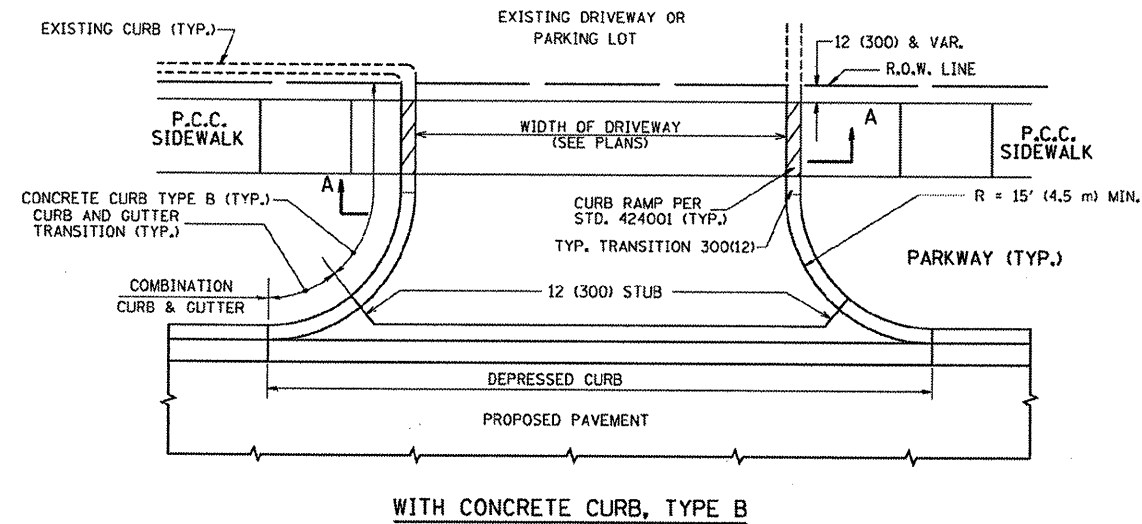
DESIGNED -	BPS
CHECKED -	GSP
DRAWN -	BPS/MJB
CHECKED -	GSP

BSD-1

10-1-08

SHEET NO. 15	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	305	1415 B	COOK	75	53
15 SHEETS	CONTRACT NO. 60F60			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	

g:\proj\2082305\cadd\structure\11\Sheet\0162530-8501.dgn



**GENERAL NOTES:**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

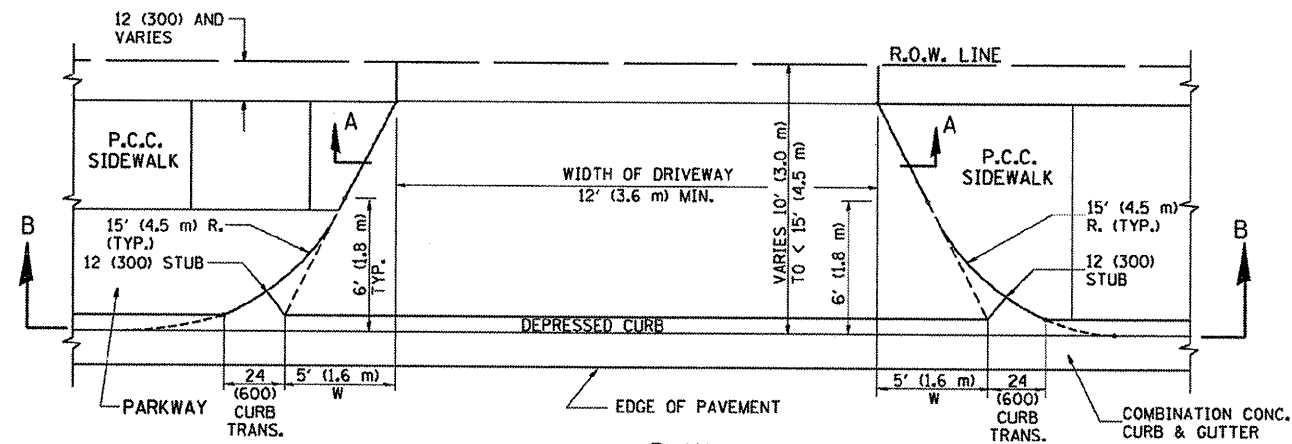
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		DRAWN -	REVISED - P. LOFLUER 04-15-03
		PLOT SCALE = 4/9999' / IN.	REVISED - R. BORO 01-01-07
		PLOT DATE = 6/12/2008	REVISED - R. BORO 06-11-08
		CHECKED -	
		DATE - 11-04-95	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

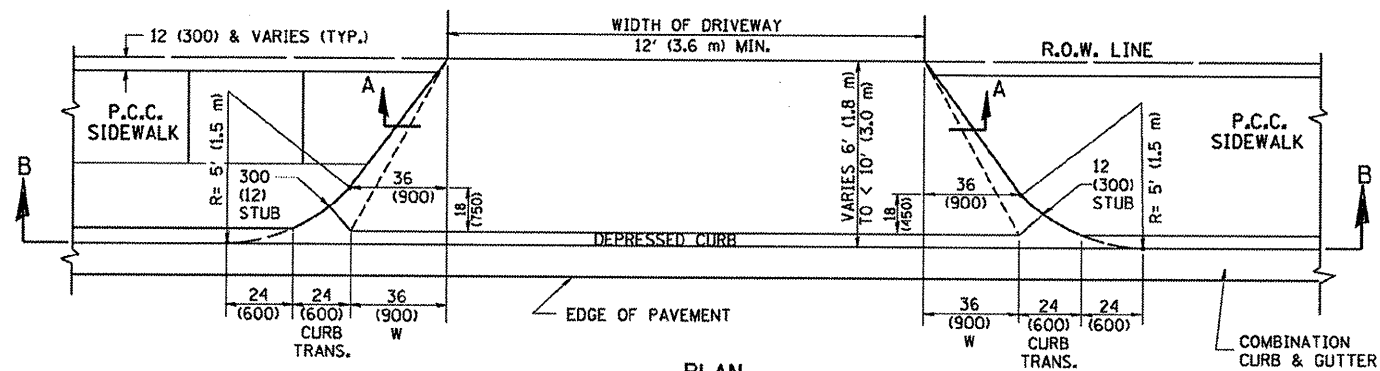
DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 54
BD0156-07 (BD-01)		CONTRACT NO. 60F60	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

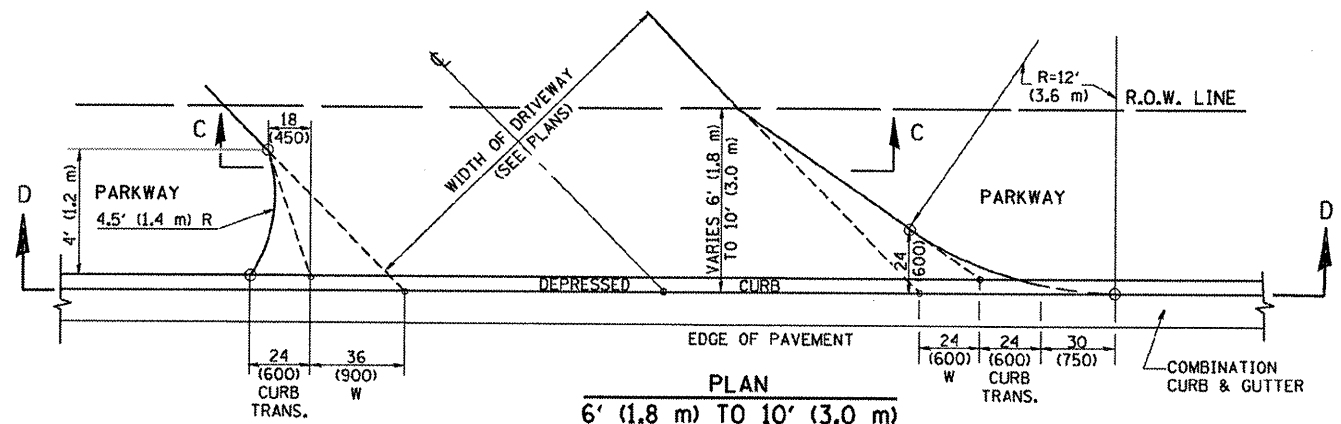




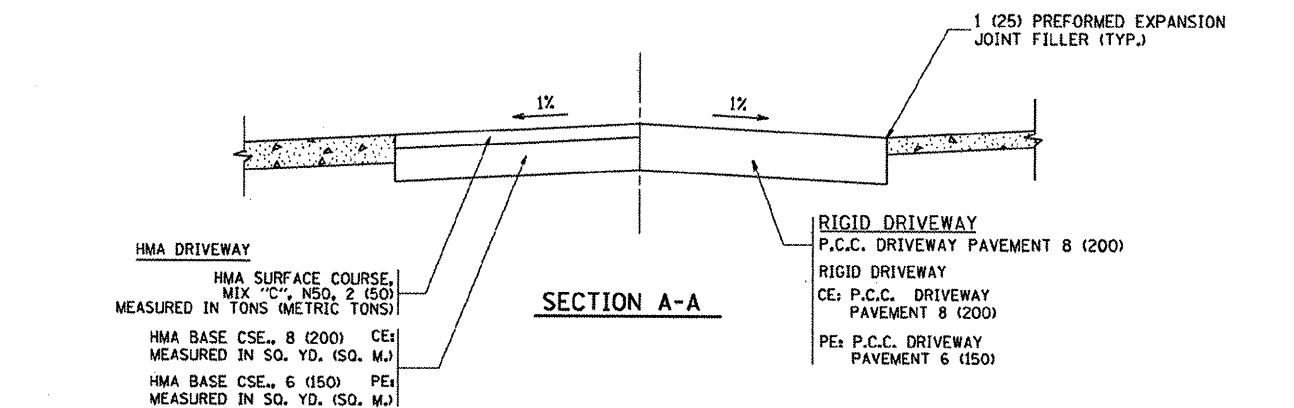
PLAN  
10' (3.0 m) TO < 15' (4.5 m)



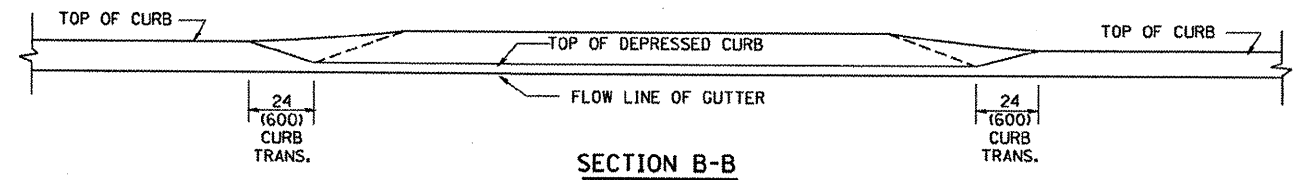
PLAN  
6' (1.8 m) TO < 10' (3.0 m)



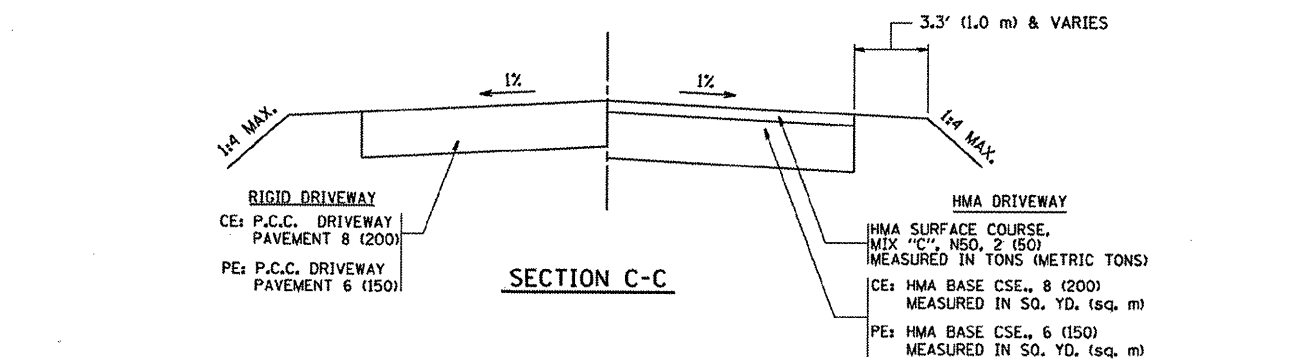
PLAN  
6' (1.8 m) TO 10' (3.0 m)



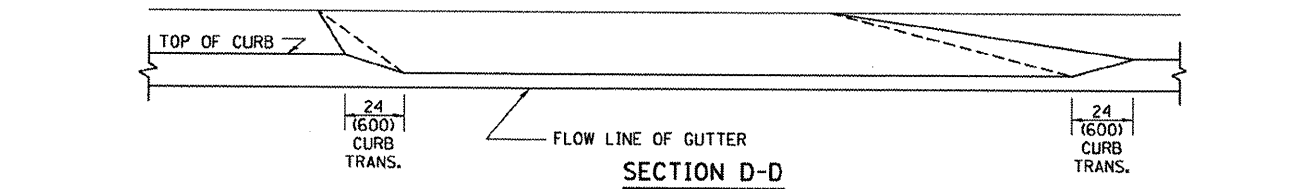
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

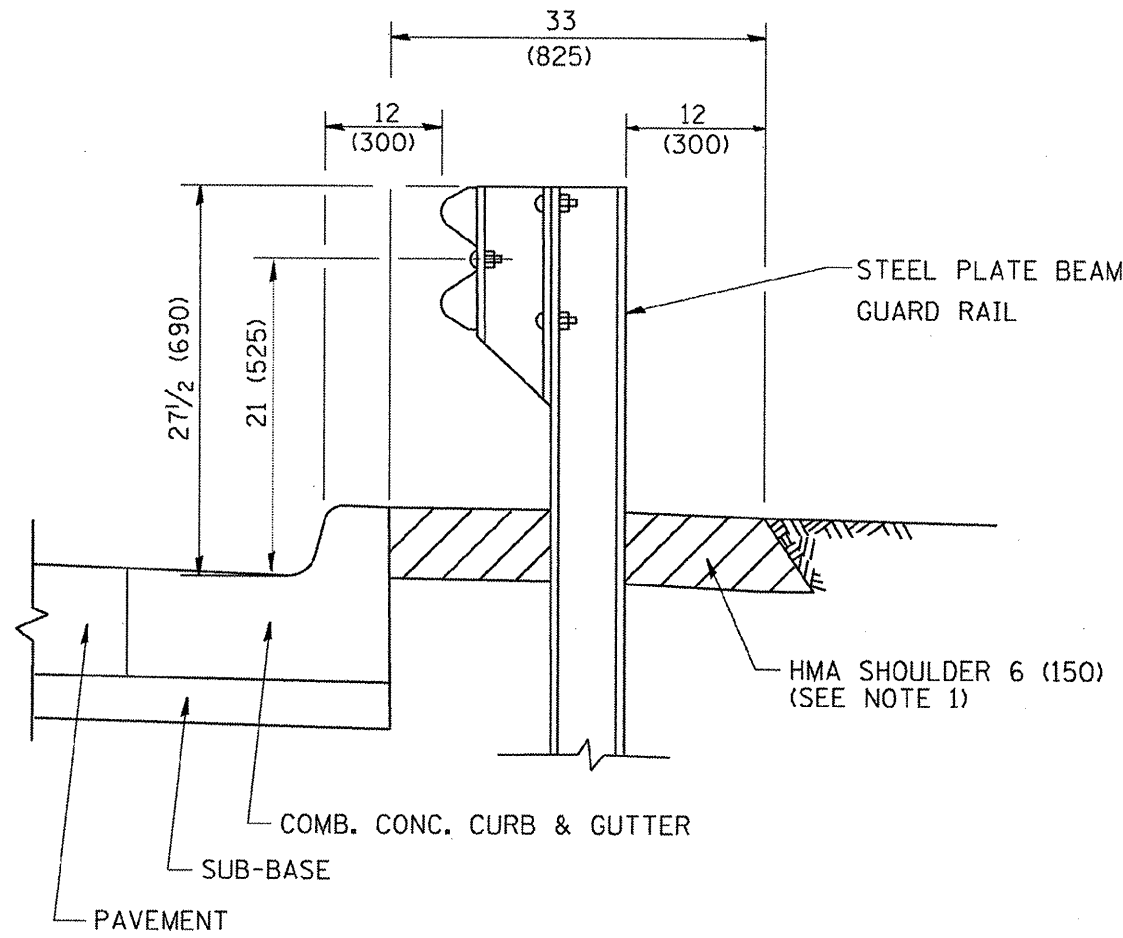
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = goglianob	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97
M:\dstata\22x34\bd02.dgn		DRAWN -	REVISED - M. GOMEZ 04-06-01
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - P. LAFLEUR 04-15-03
	PLOT DATE = 1/4/2008	DATE - 11-06-95	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS	
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	55
BD400-02 (BD-02)			CONTRACT NO. 60F60	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

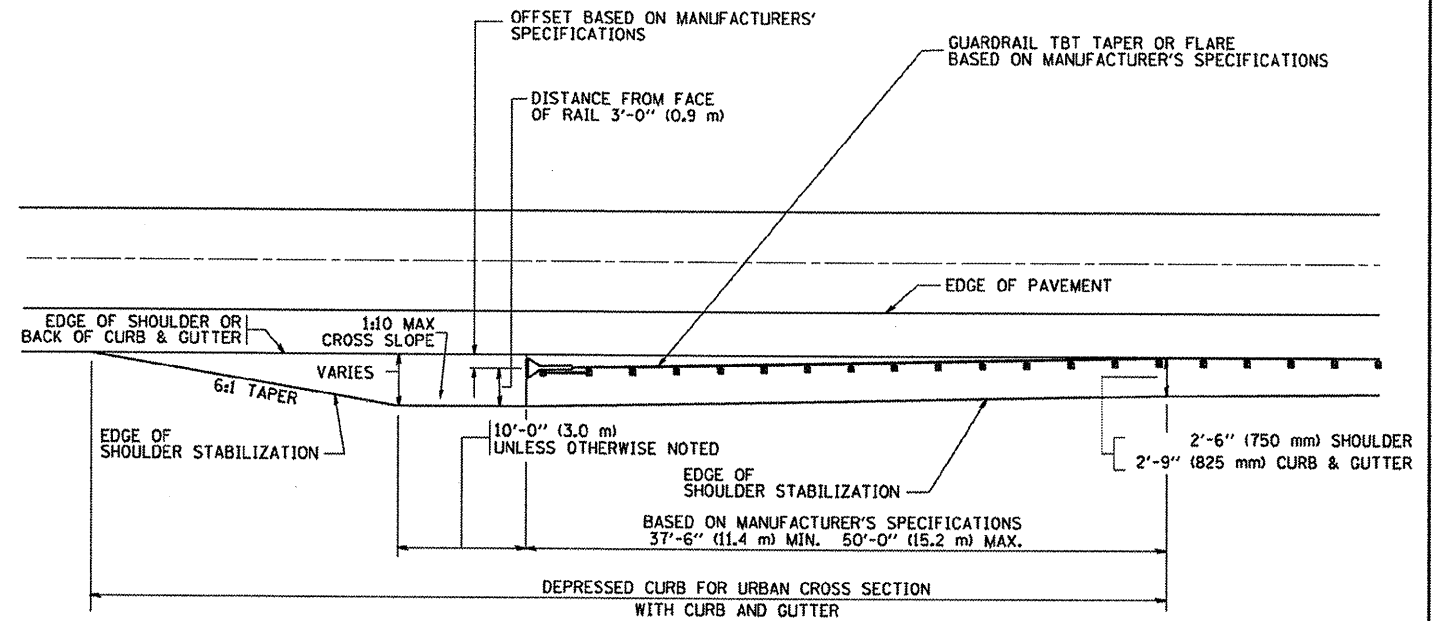


- NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

**DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER  
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



**STABILIZATION AT TBT TY. 1 SPL.**

TBT = TRAFFIC BARRIER TERMINAL

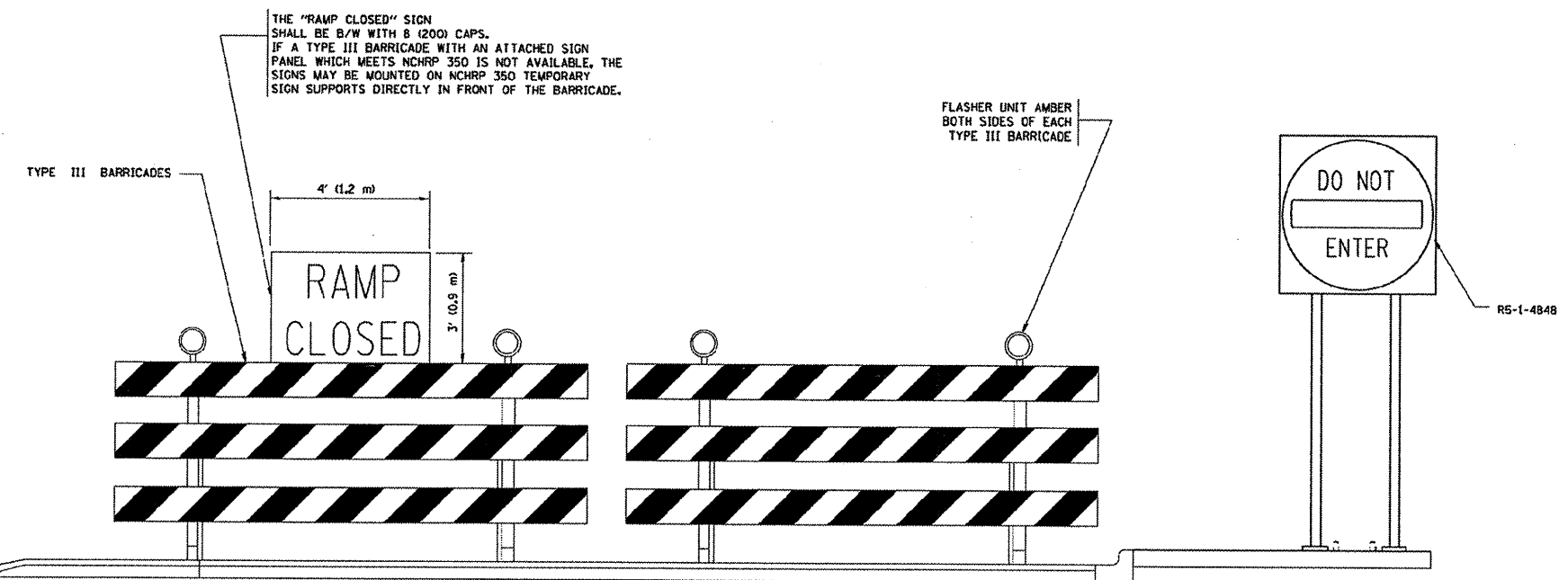
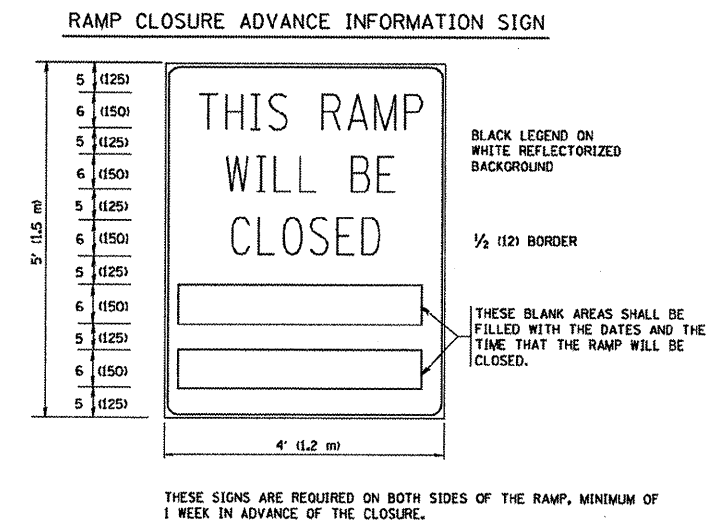
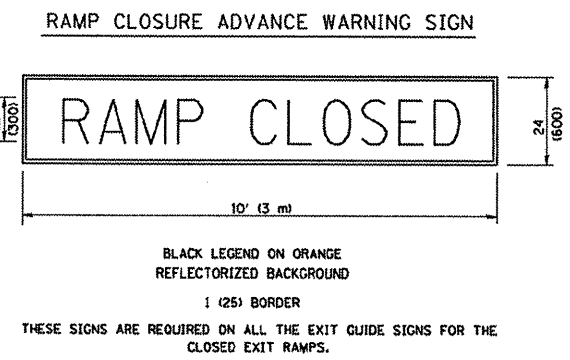
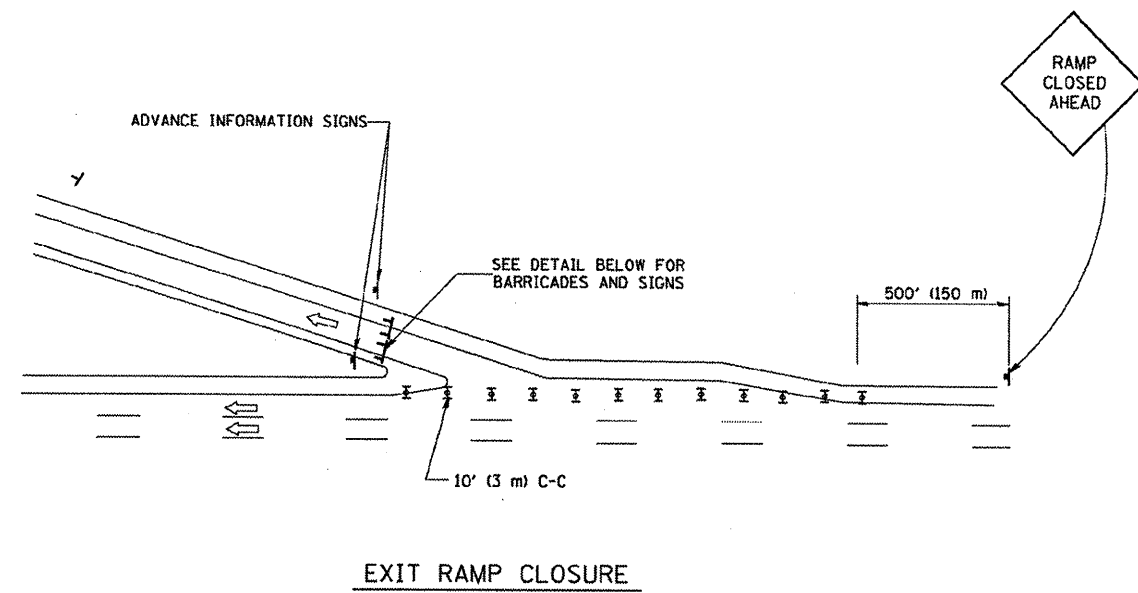
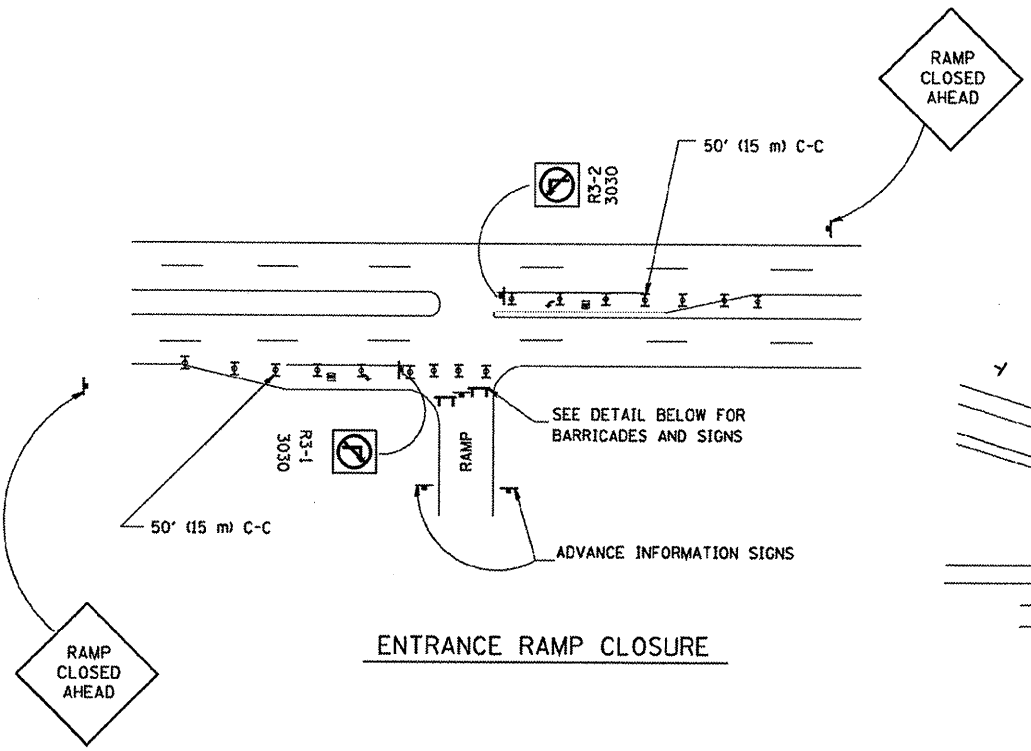
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - E. GOMEZ 08-28-00
	PLOT DATE = 1/4/2008	DATE - 09-22-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE. = 305	SECTION = 1415 B	COUNTY = COOK	TOTAL SHEETS = 75	SHEET NO. = 56
BD600-10 (BD 34)		CONTRACT NO. 60F60		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



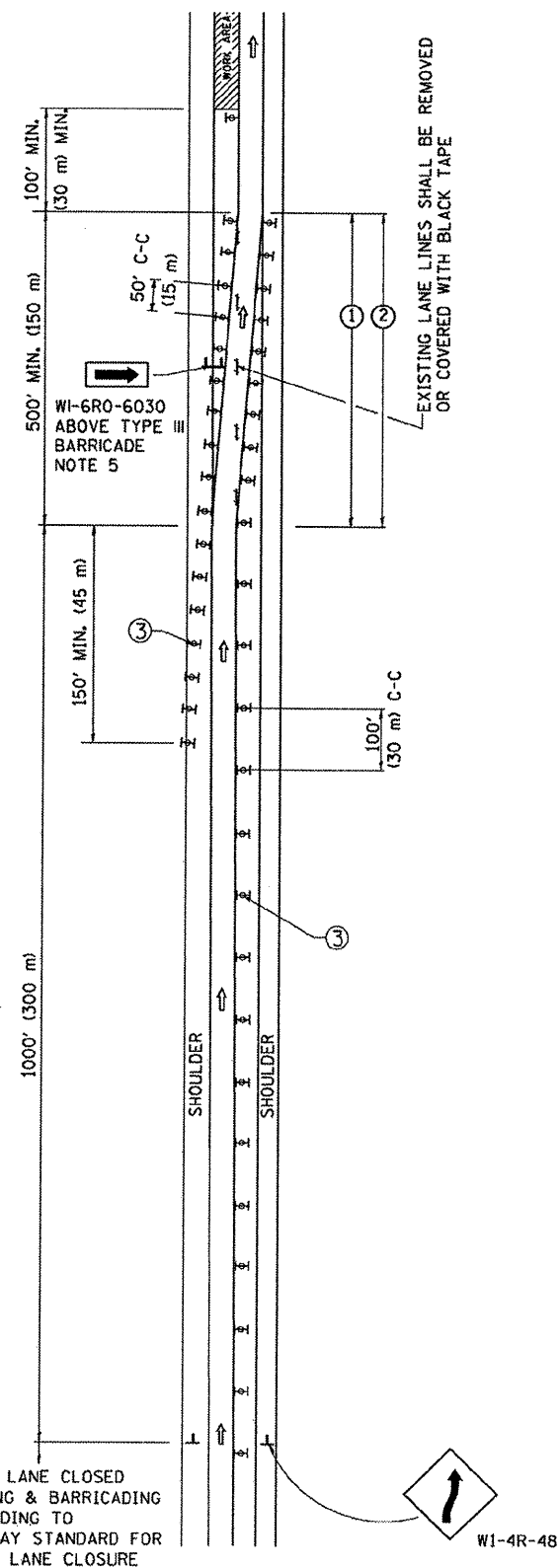
- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
  - ⌈ TYPE III BARRICADE WITH FLASHING LIGHT

- GENERAL NOTES:**
1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
  2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
  3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
  4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
  5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
  6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
  7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

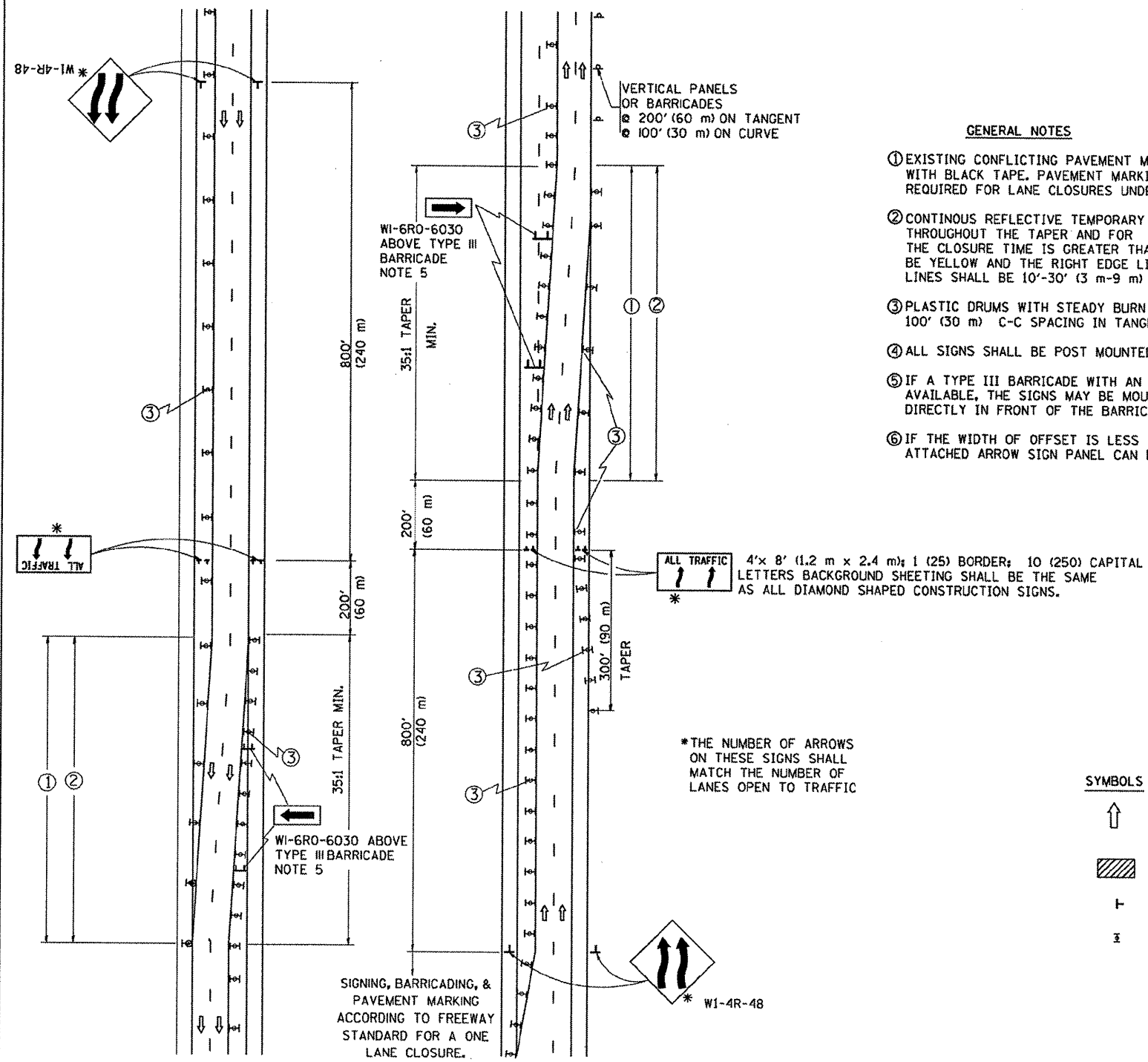
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME - M:\distata\22x34\ca88.dgn	USER NAME = goglianob	DESIGNED - DWS	REVISED - DWS 12-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FREEWAY ENTRANCE AND EXIST RAMP CLOSURE DETAILS</b>		F.A. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 57
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - DWS/JAF 12-02		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TC-08		CONTRACT NO. 60F60	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - JAF 02-06					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
		DATE - 02-83	REVISED - SPB 01-07								

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



### GENERAL NOTES

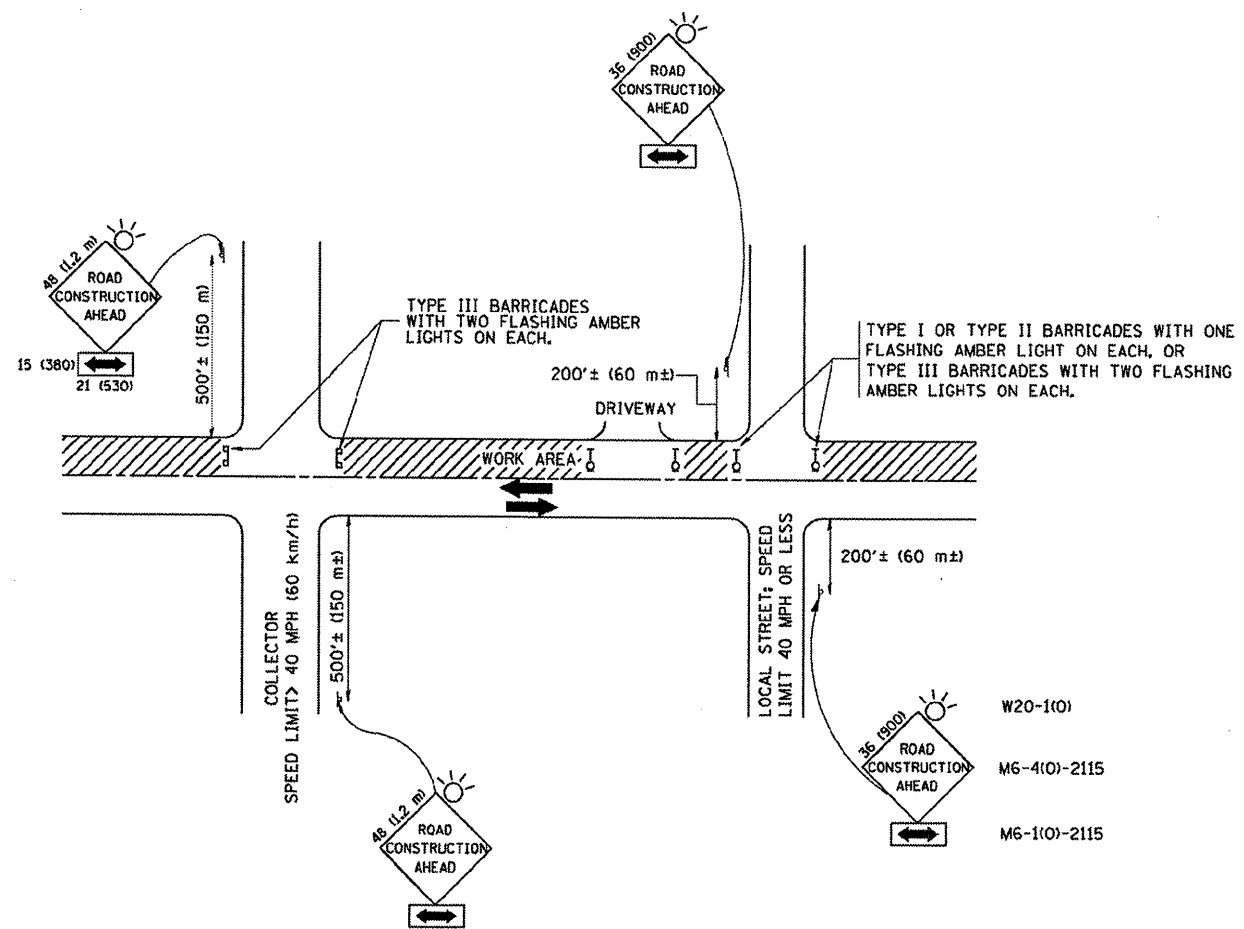
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.
- IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

### SYMBOLS

- ↑ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- ⊞ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\data\22x34\col9.dgn	USER NAME = goglenobt	DESIGNED - DWS	REVISED - DWS 11-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b>		F.A. - RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 58
	PLOT SCALE = 50,000 / IN	CHECKED -	REVISED - JAF 01-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>TC-09</b>		<b>CONTRACT NO. 60F60</b>	
	PLOT DATE = 1/4/2008	DATE - 02-87	REVISED - JAF 02-06					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
			REVISED - SPB 01-07								



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
  - 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  - 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
  - USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
W:\distatc\22x34\1c18.dgn	ngltenoot	LHA	J. OBERLE 10-18-95
		DRAWN -	REVISED -
			A. HOUSEH 03-06-96
		CHECKED -	REVISED -
			A. HOUSEH 10-15-96
		DATE -	REVISED -
		06-89	T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

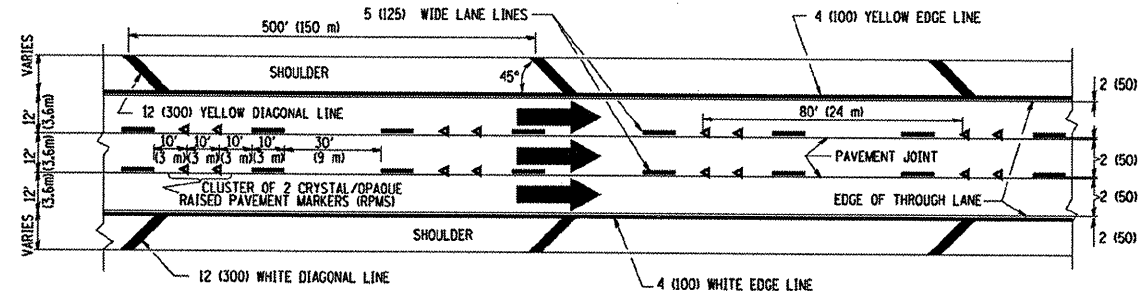
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	59
TC-10			CONTRACT NO. 60F60	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

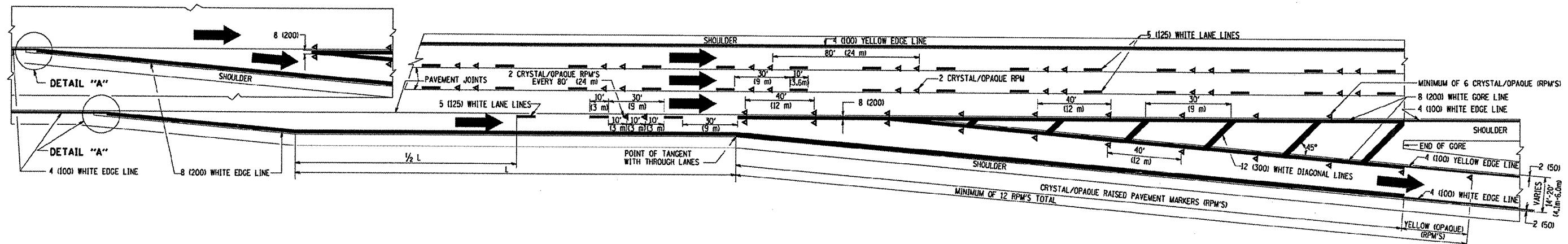
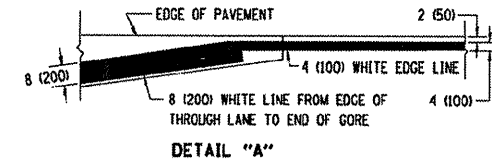


THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH  
THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

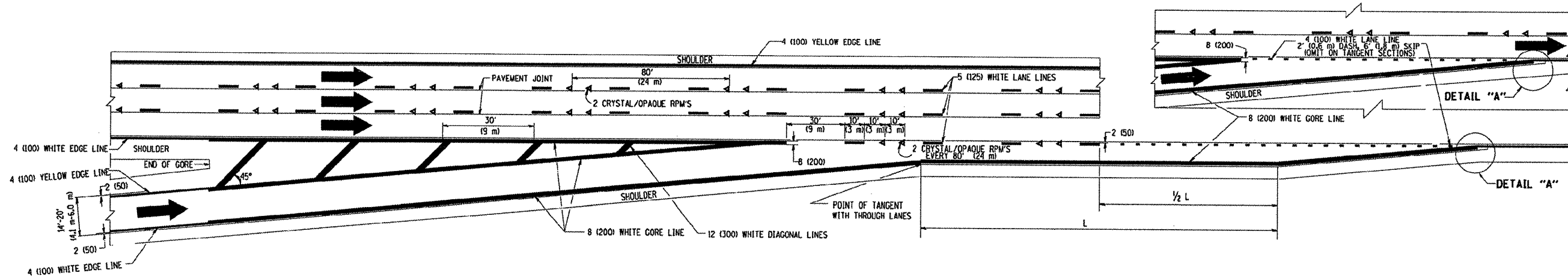


TYPICAL EDGE LINES & LANE LINES

- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
  2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
  3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC

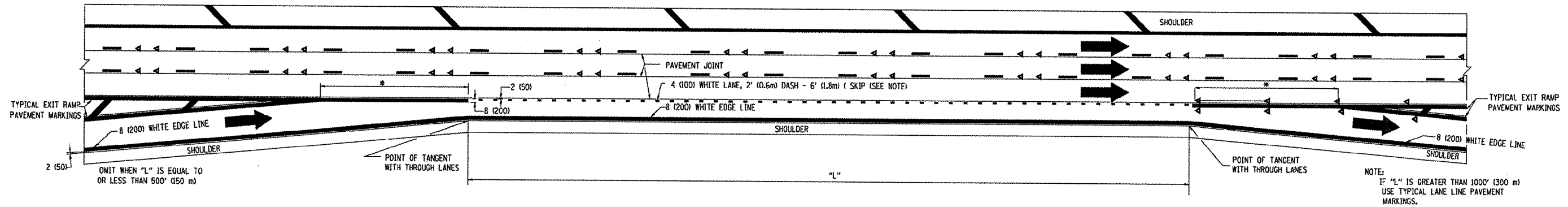


TYPICAL EXIT RAMP PAVEMENT MARKINGS

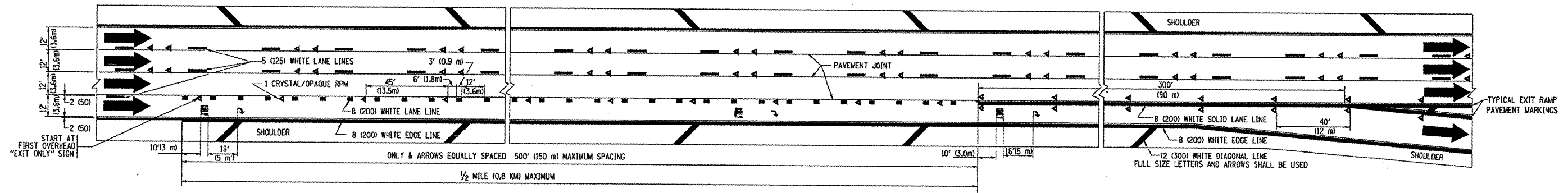


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

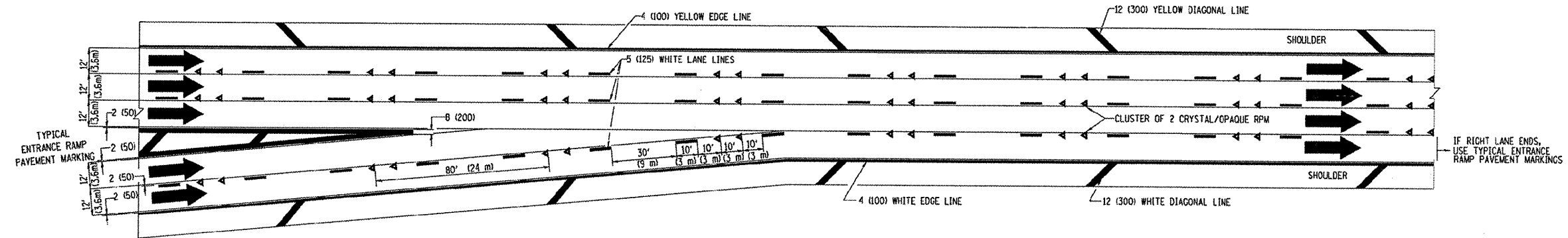
FILE NAME = W:\distato\22x34\1012.dgn	USER NAME = gogliano	DESIGNED - D.W.S.	REVISED - A.H. 03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>			F.A. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 60
	PLOT SCALE = 58,000 / IN.	DRAWN -	REVISED - D.W.S. 07-96		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA. TO STA.	<b>TC-12</b>		CONTRACT NO. 60F60		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - J.A.F. 02-06					<b>FED. ROAD DIST. NO. 1 ILLINOIS</b>		FED. AID PROJECT		
		DATE - 01-90	REVISED - S.P.B. 01-07									



**TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS**



**TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS**



**TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS**

FILE NAME = c:\projects\tds\td22x34\td12.dgn

USER NAME = boueral  
 PLOT SCALE = 50,000 / IN.  
 PLOT DATE = 10/3/2008

DESIGNED - D.W.S.  
 DRAWN -  
 CHECKED -  
 DATE - 01-90

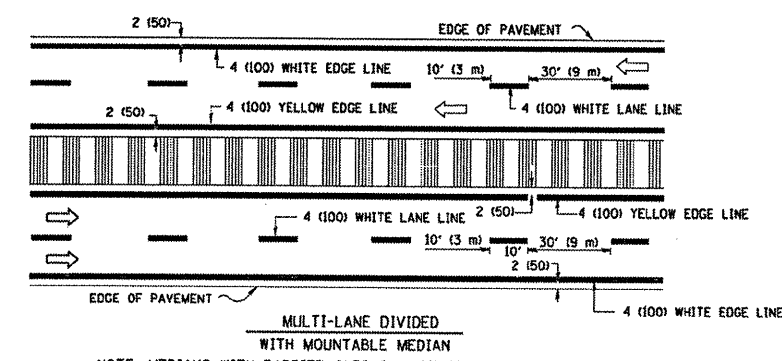
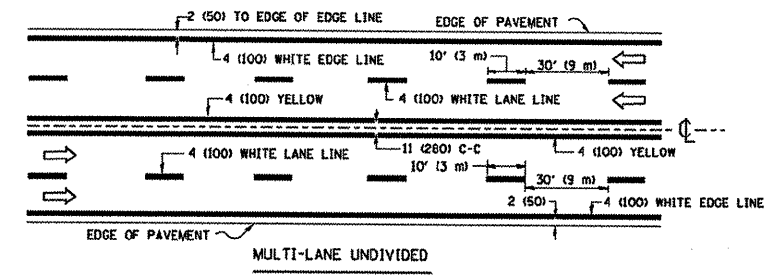
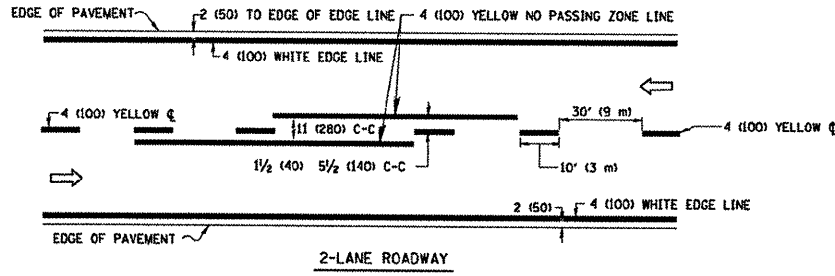
REVISED - A.H. 03-96  
 REVISED - D.W.S. 07-96  
 REVISED - J.A.F. 02-06  
 REVISED - S.P.B. 01-07

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

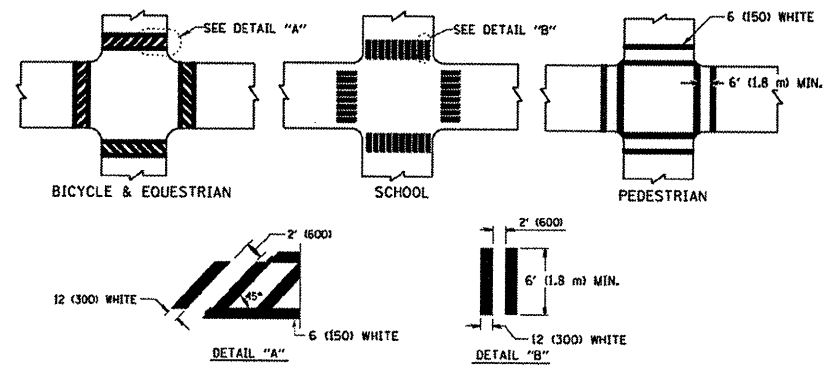
**MULTI-LANE FREEWAY  
 PAVEMENT MARKING DETAILS**

SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

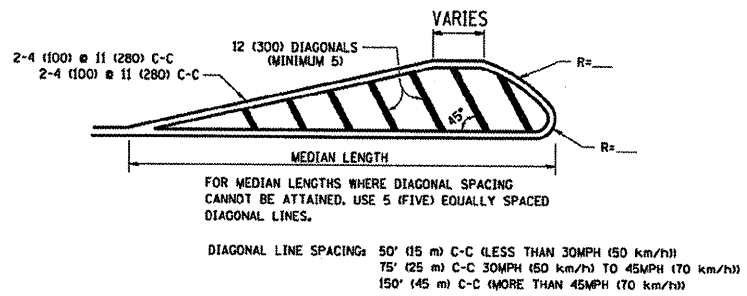
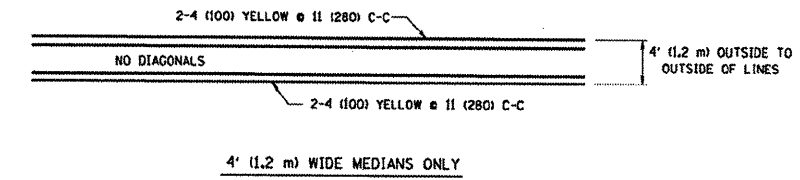
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	61
<b>TC-12</b>				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60F60				



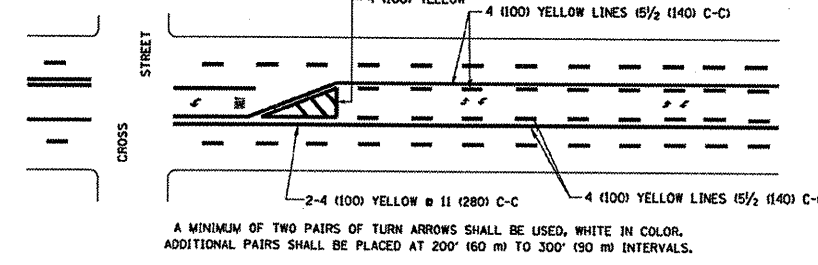
TYPICAL LANE AND EDGE LINE MARKING



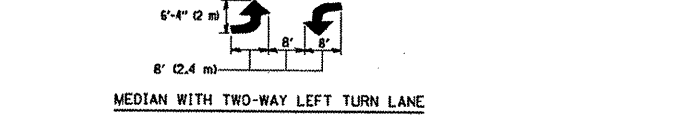
TYPICAL CROSSWALK MARKING



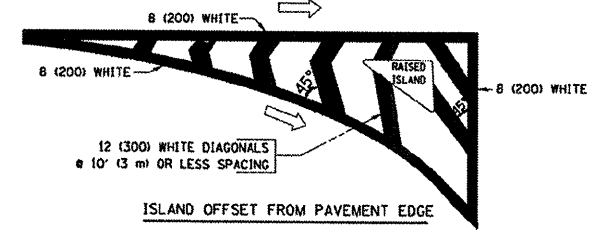
MEDIANS OVER 4' (1.2 m) WIDE



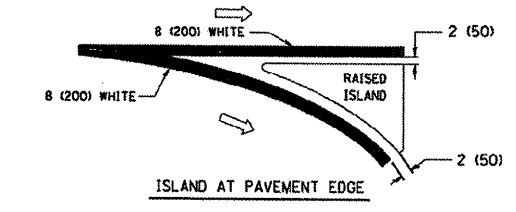
TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 2 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (22.5 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

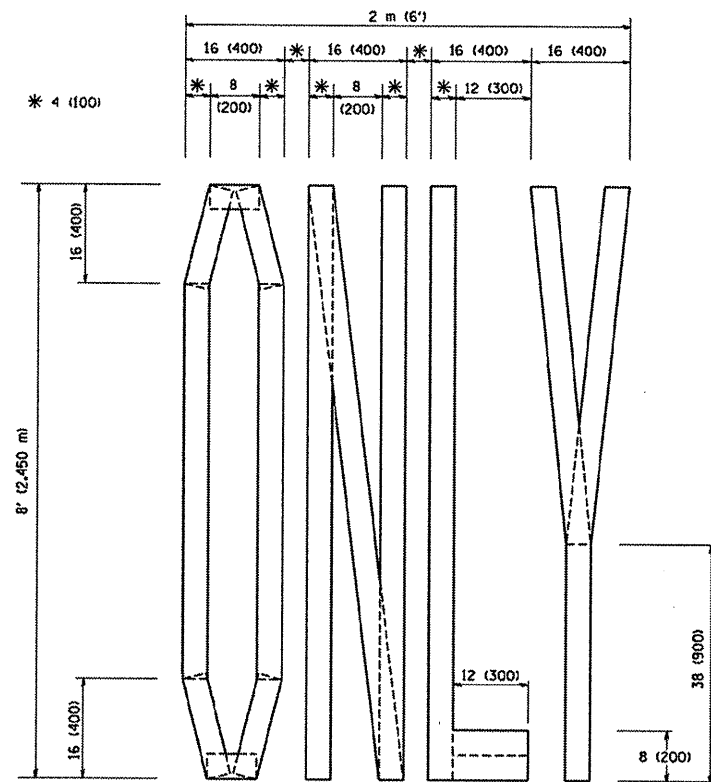
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\dts\22x34\1313.dgn	USER NAME = gqglianob	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
		DRAWN -	REVISED - A. HOUSEH 10-09-96
		PLOT SCALE = 5/8" = 1' IN.	REVISED - A. HOUSEH 10-17-96
		PLOT DATE = 1/4/2008	REVISED - T. RAMMACHER 01-06-00
		CHECKED -	DATE - 03-19-90

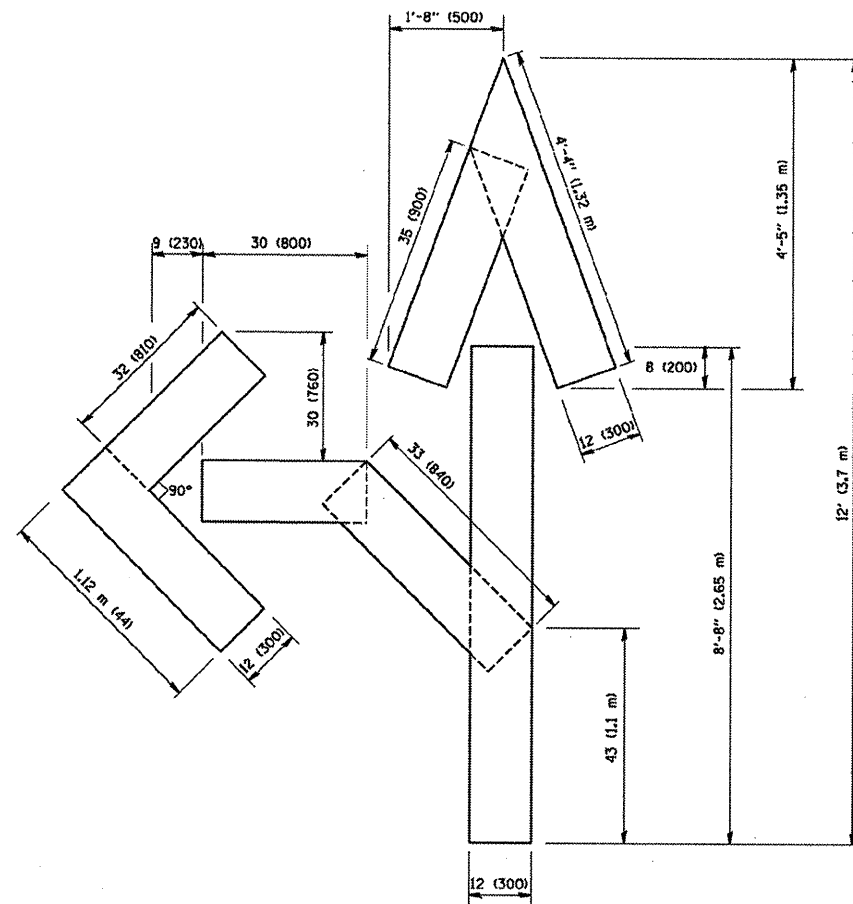
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		305	1415 B	COOK	75	62
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	

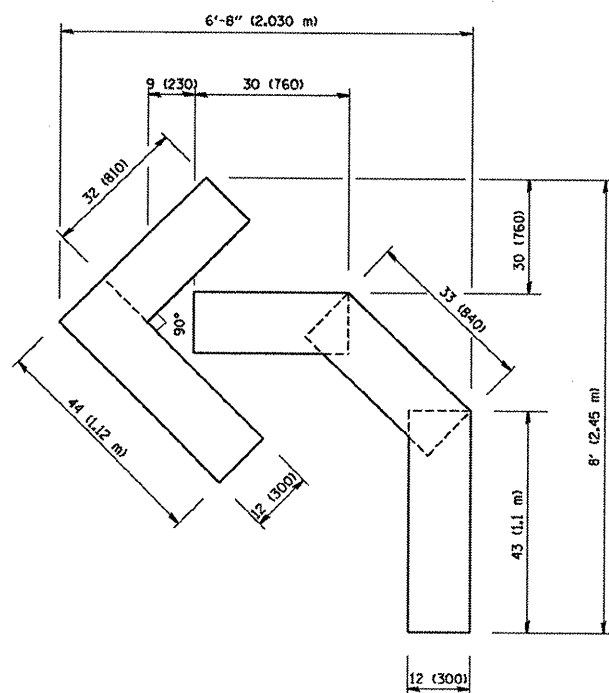
TC-13		CONTRACT NO. 60F60	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



QUANTITY  
4 (100) LINE = 64.1 ft. (19.7 m)  
21.1 sq. ft. (1.97 sq. m)



QUANTITY  
4 (100) LINE = 82.5 ft. (25.3 m)  
27.5 sq. ft. (2.53 sq. m)



QUANTITY  
4 (100) LINE = 45.5 ft. (13.9 m)  
15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters)  
unless otherwise shown.

FILE NAME = W:\state\22\34\sc16.dgn	USER NAME = qeglianob	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 58.0802' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE = 09-18-94	REVISED -E. GOMEZ 08-28-00

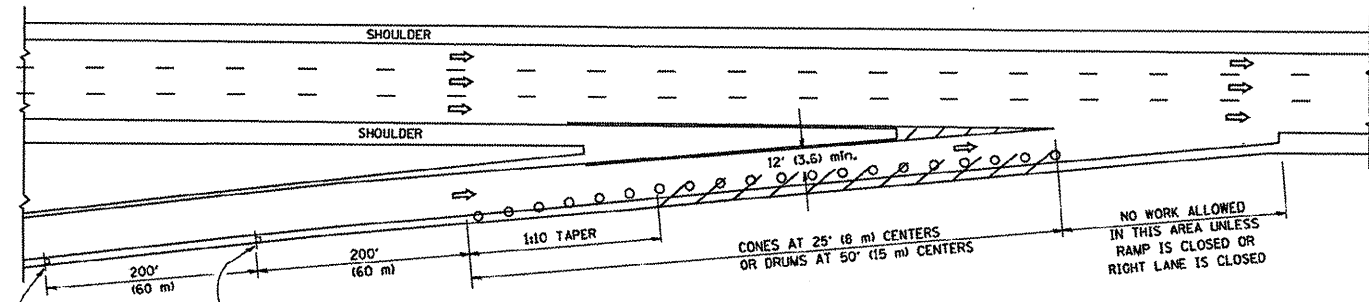
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
FOR TRAFFIC STAGING

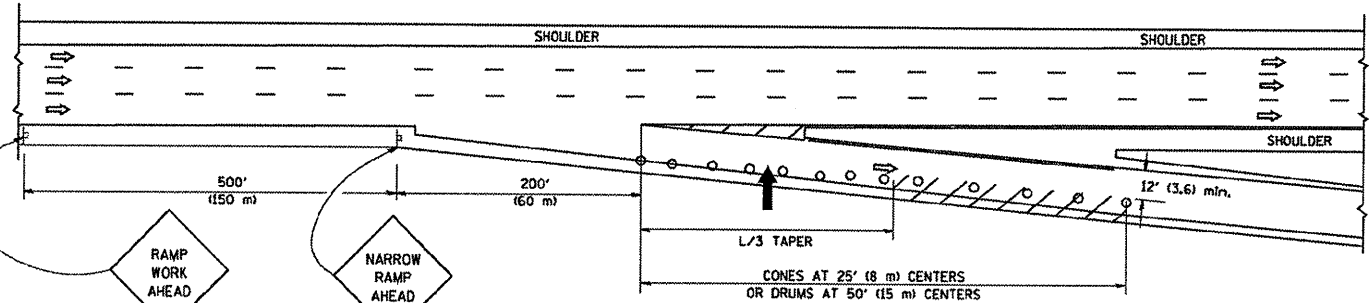
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-16			CONTRACT NO. 60F60	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

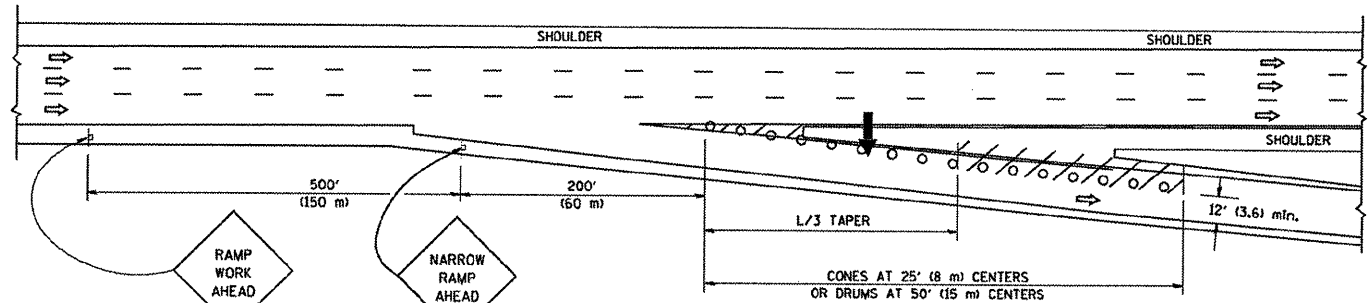
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

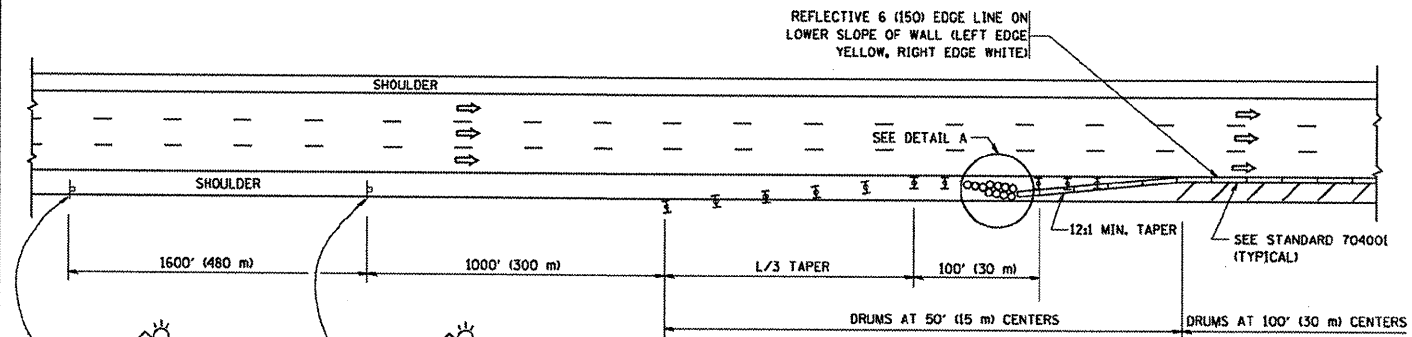
- ➔ ARROWBOARD
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊕ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

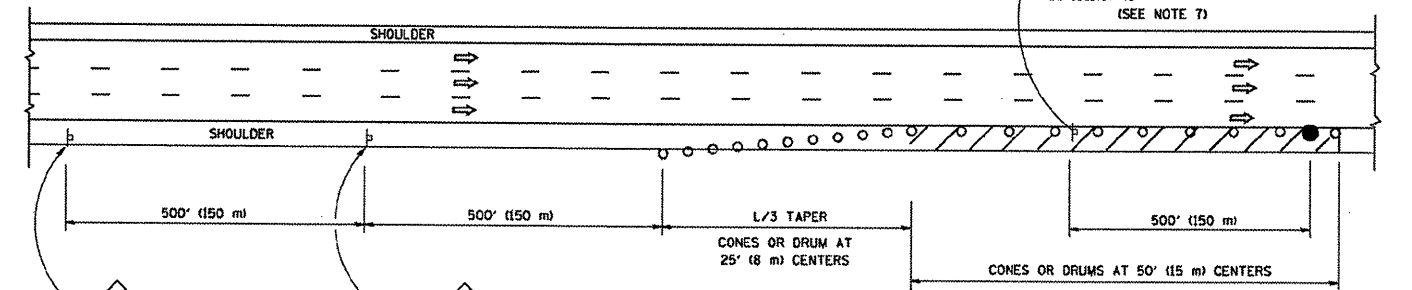
1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC    ENGLISH
	$L=0.65(W)(S)$ $L=(W)(S)$
	$W$ = WIDTH OF OFFSET IN FEET (METERS)
	$S$ = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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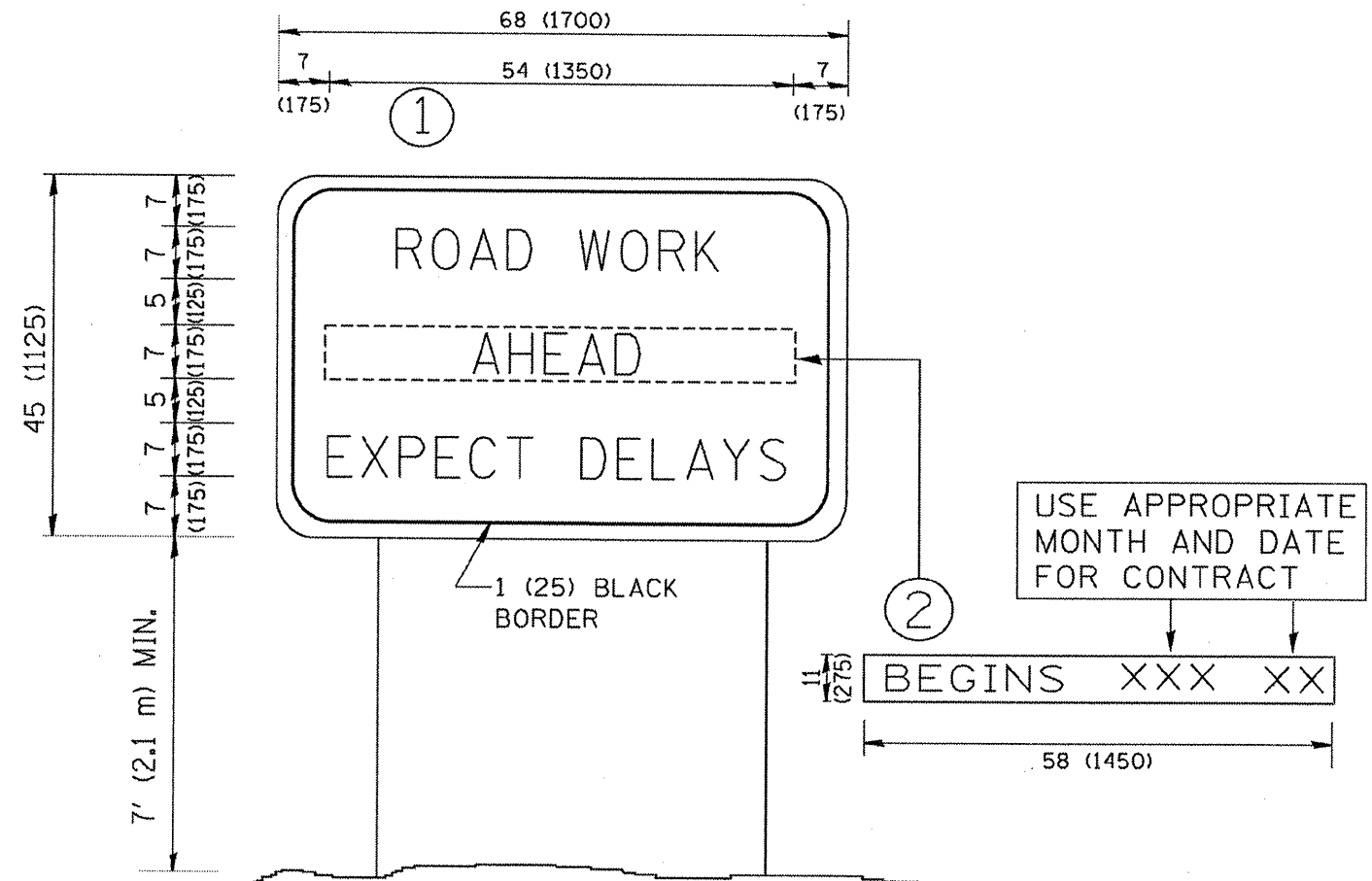
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	DRAWN - D.W.S.	REVISED - 04-03
PLOT SCALE = 50/8000' / IN.	CHECKED -	REVISED - J.A.F. 12-06
PLOT DATE = 1/4/2008	DATE - 11-96	REVISED - S.P.B. 01-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY	
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 305	SECTION 1415 B	COUNTY COOK	TOTAL SHEETS 75	SHEET NO. 64
CONTRACT NO. 60F60			ILLINOIS FED. AID PROJECT	





NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\disto\22x34\1c22.dgn	USER NAME = qag1enobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 / / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

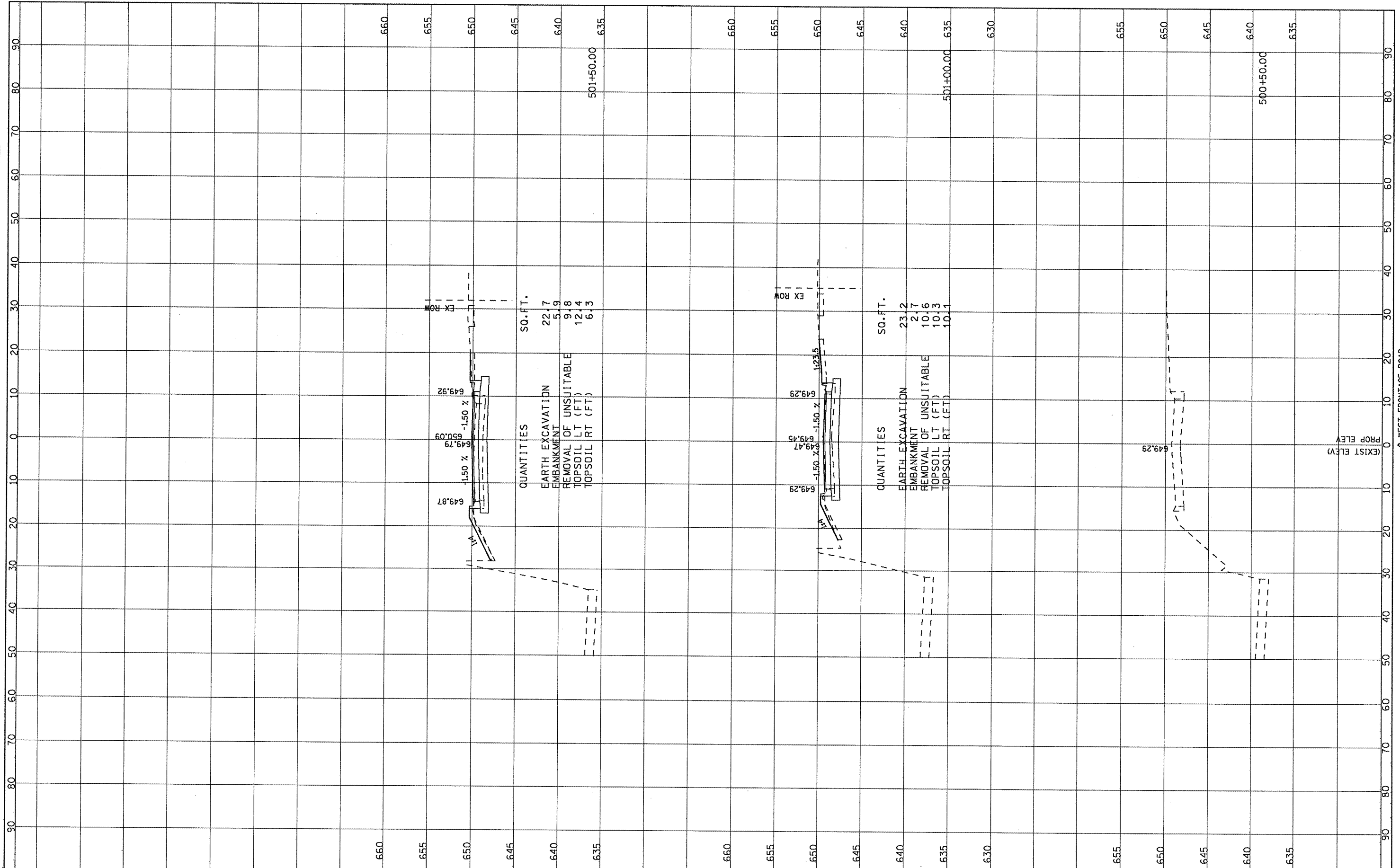
ARTERIAL ROAD  
INFORMATION SIGN

F.A. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1415 B	COOK	75	65
TC-22			CONTRACT NO. 60F60	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

FINISH	DATE
SURVEYED	BY
NOTE BOOK	NO.
AREAS CHECKED	

ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	NO.
AREAS CHECKED	



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 PLOT SCALE = 10.0000' / IN.  
 PLOT DATE = 2/4/2009

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

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

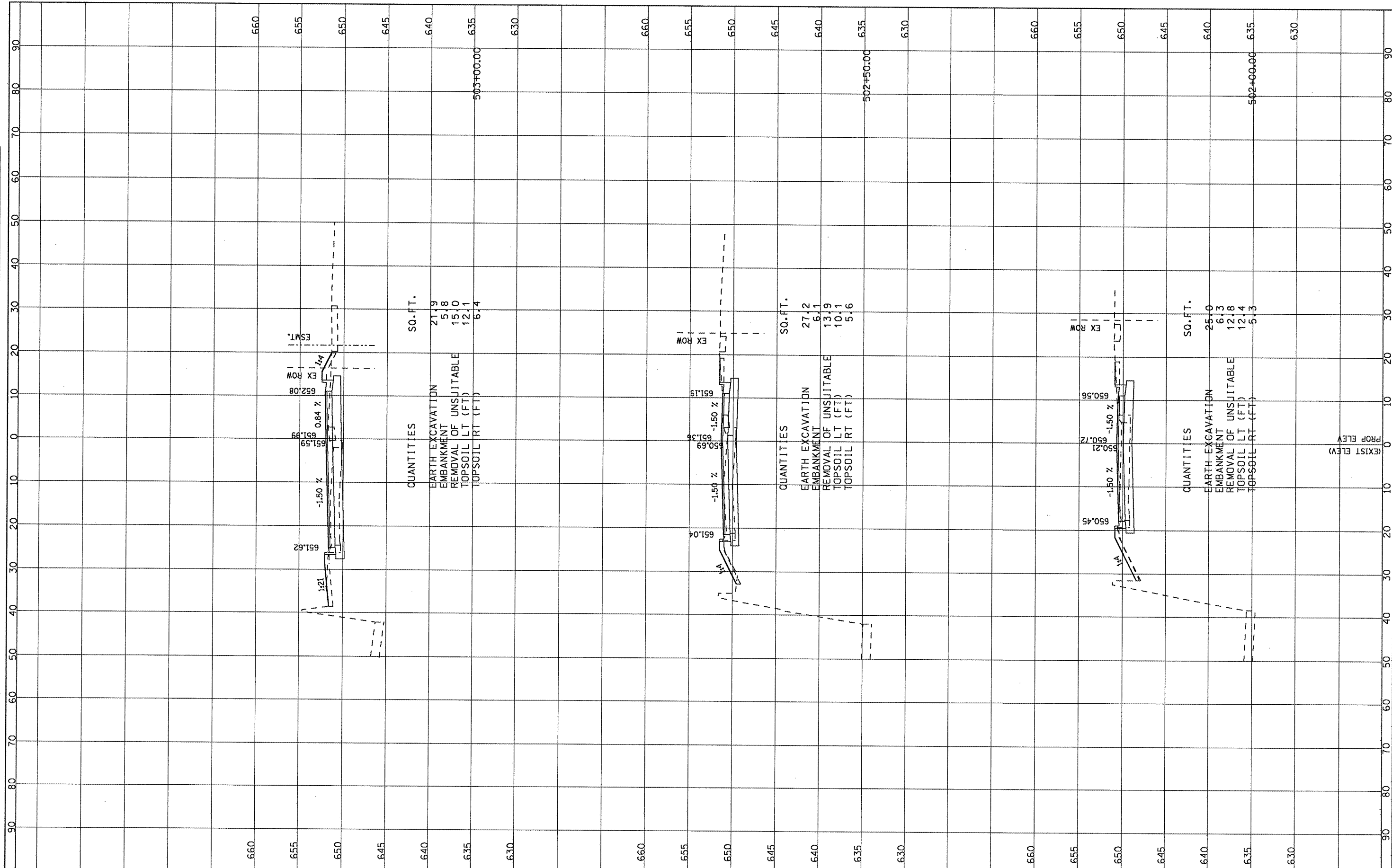
**WEST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 500+50.00 TO STA. 501+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	66
CONTRACT NO.			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
SURVEYED	BY
NOTED	
TEMPLATE	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTED	
TEMPLATE	
AREAS CHECKED	
NO.	



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		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

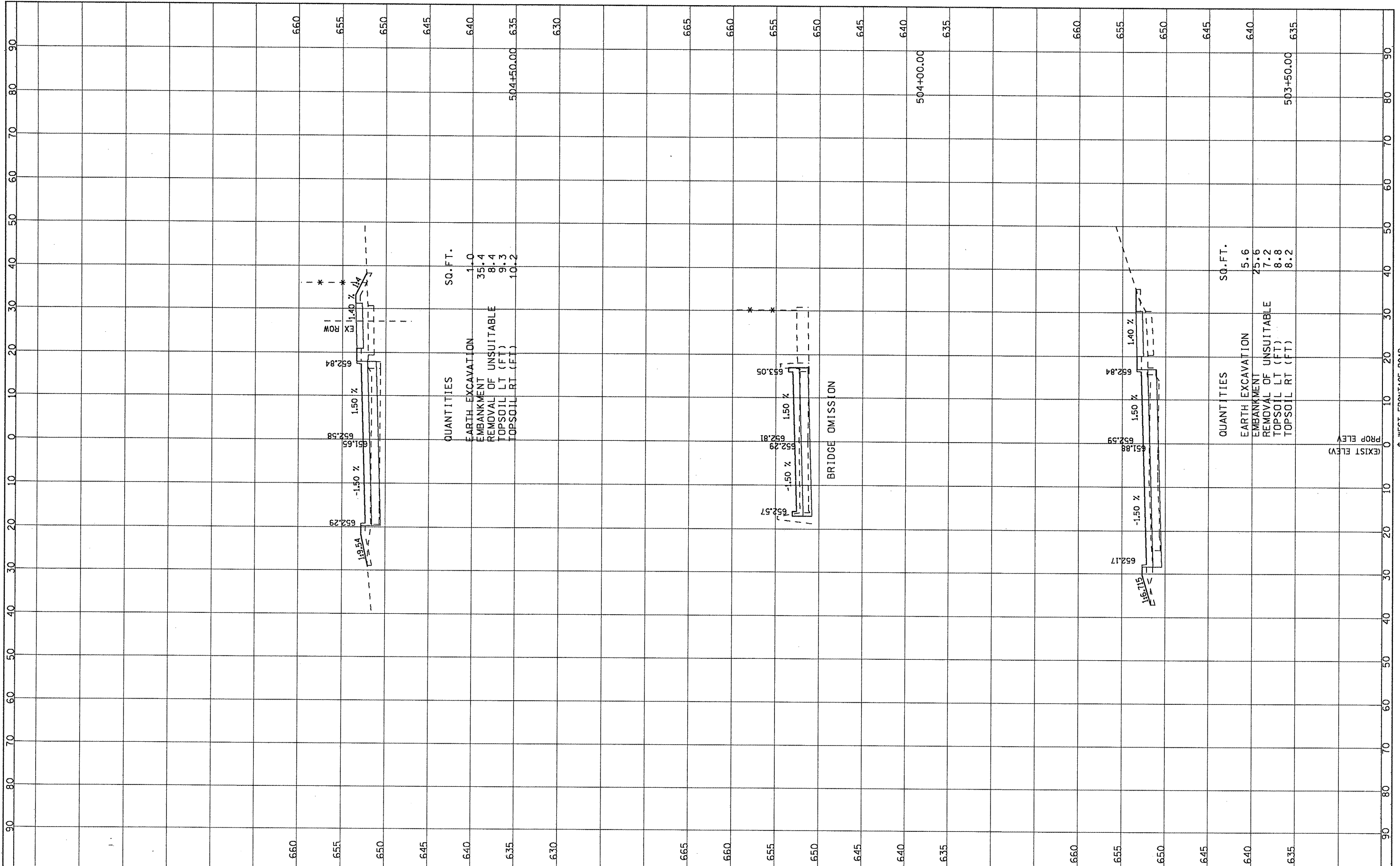
**WEST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 502+00.00 TO STA. 503+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	67
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		
NO.		



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 PLOT DATE = 2/4/2009

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

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

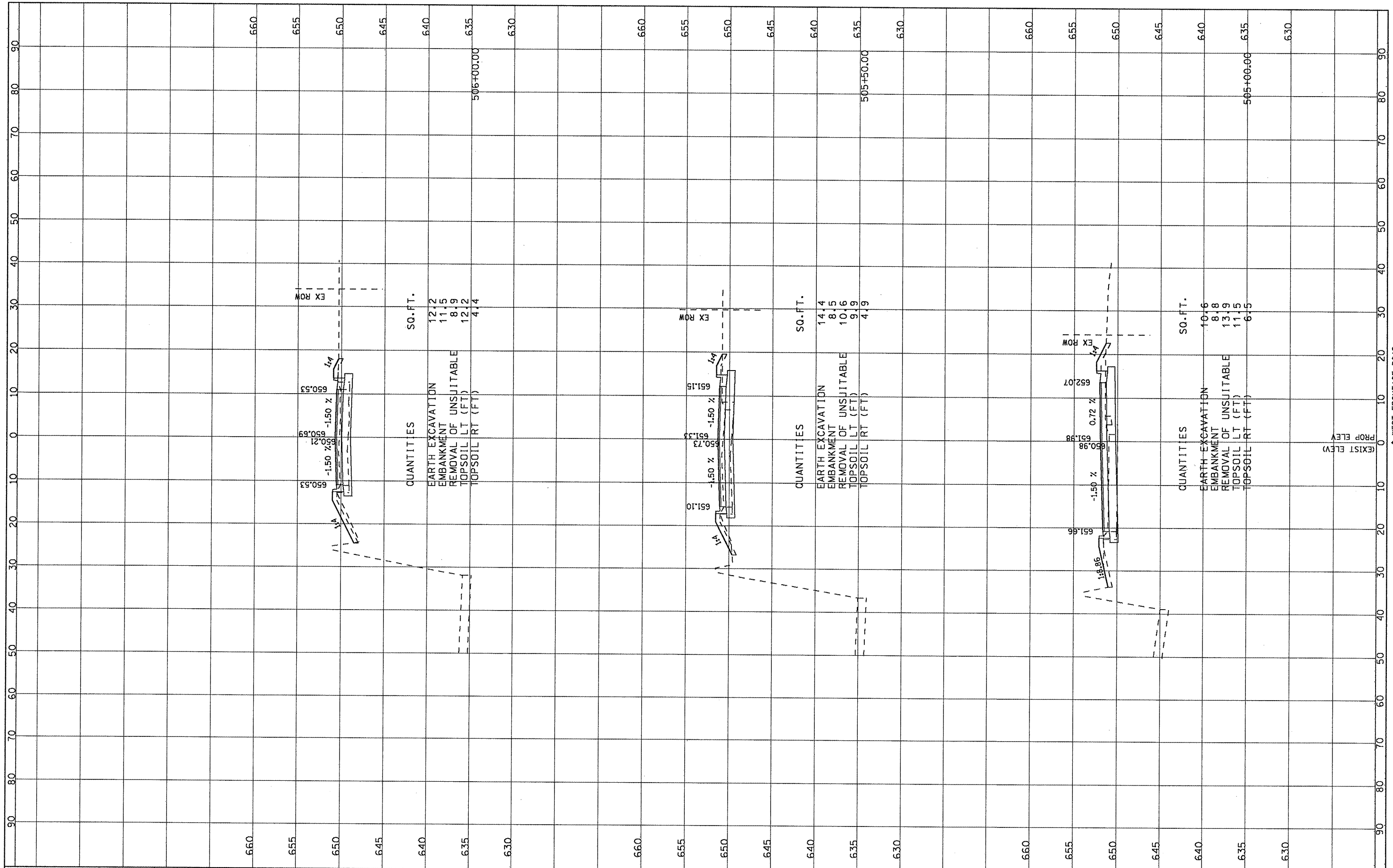
**WEST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 503+50.00 TO STA. 504+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	68
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO.				

ENR SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



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	PLOT DATE = 2/4/2009	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

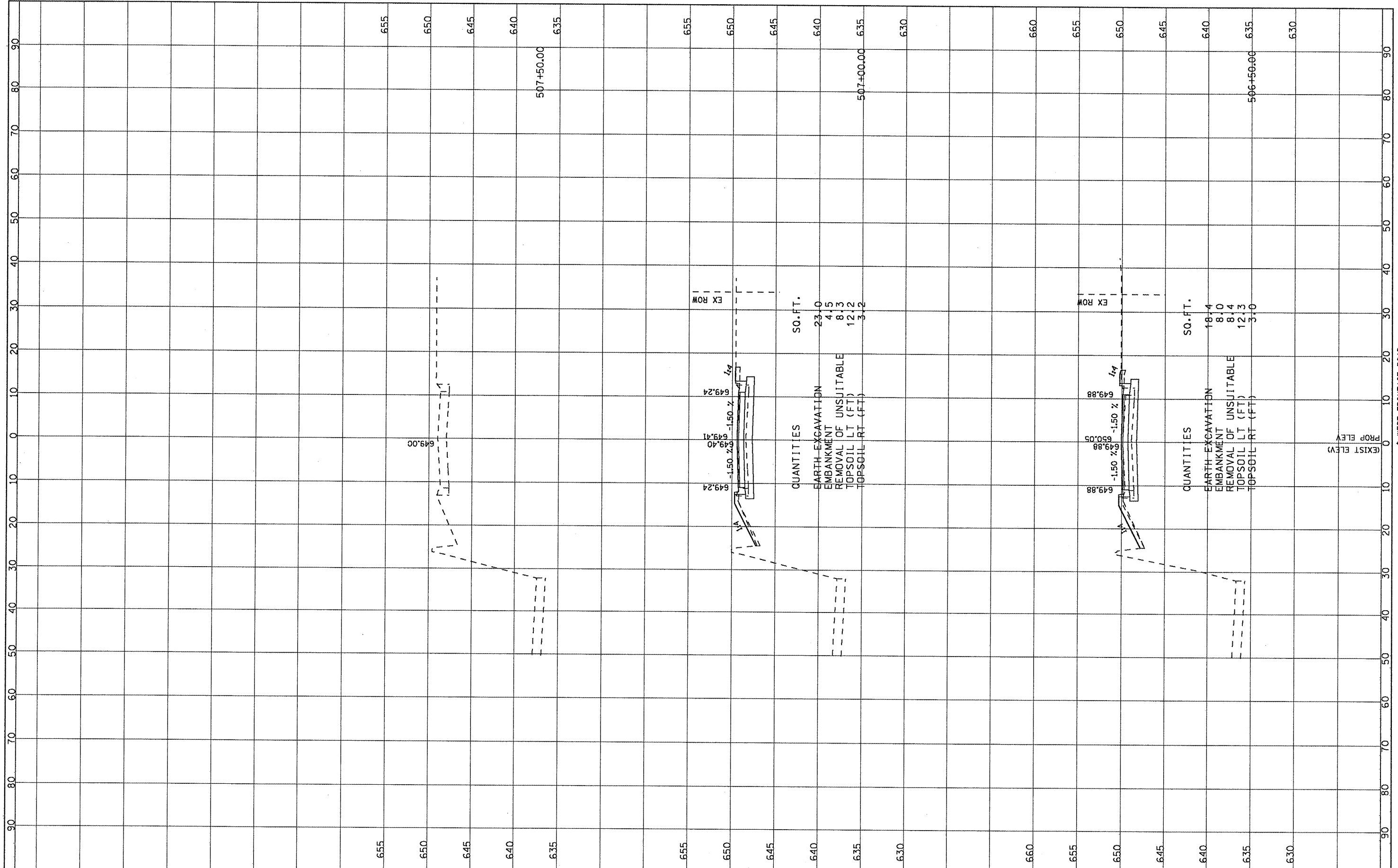
**WEST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 505+00.00 TO STA. 506+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	69
CONTRACT NO.			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
NO. _____	BY _____
PLANNED	DATE
NO. _____	BY _____
AREAS CHECKED	DATE
NO. _____	BY _____

ORIGINAL SURVEY	DATE
NO. _____	BY _____
PLANNED	DATE
NO. _____	BY _____
AREAS CHECKED	DATE
NO. _____	BY _____

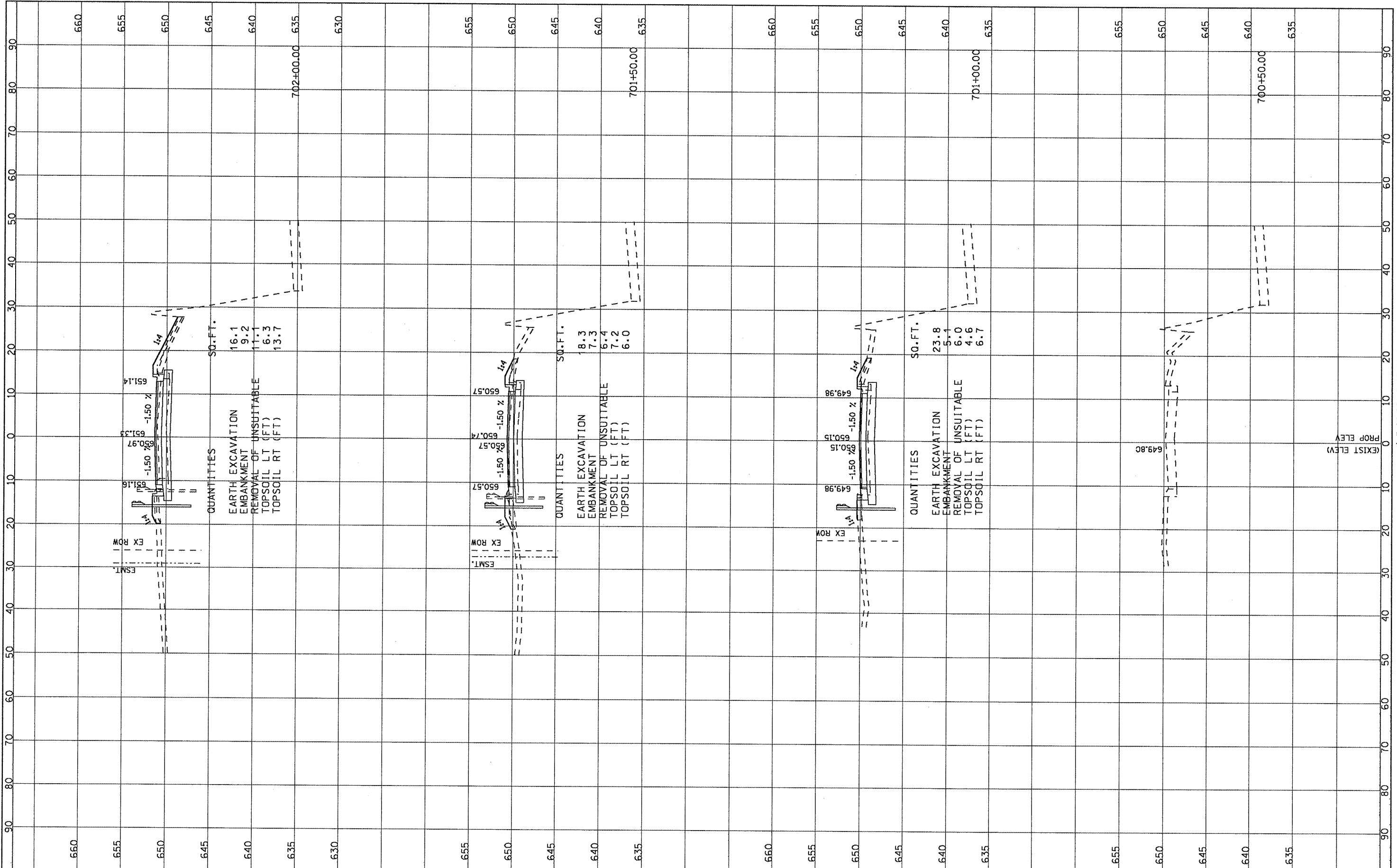


FILE NAME =	USER NAME = 2piand	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST FRONTAGE ROAD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D:\project\2002305\CADD\Civil\Sh1\003\003WFRX...01.dgn	PLLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -			1415 B	COOK	75	70		
	PLLOT DATE = 2/4/2009	CHECKED -	REVISED -			CONTRACT NO.					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



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

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



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PLOT SCALE = 10,000' / IN.	PLOT DATE = 2/4/2009	DRAWN -	REVISED -
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		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

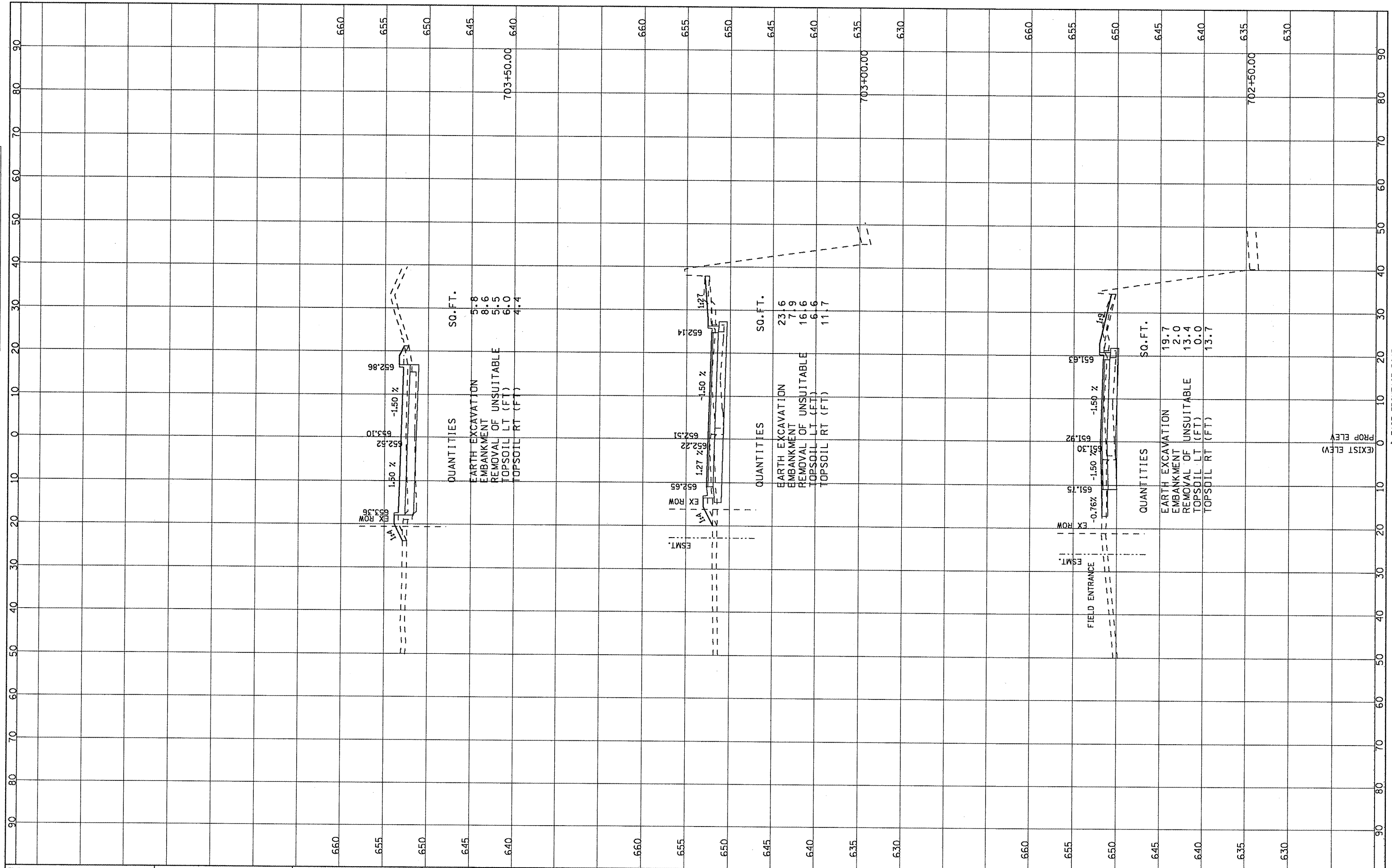
**EAST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 700+50.00 TO STA. 702+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	71
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO.	

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		



QUANTITIES  
SO. FT.

EARTH EXCAVATION 5.8  
EMBANKMENT 8.6  
REMOVAL OF UNSUITABLE 5.5  
TOPSOIL LT (FT) 6.0  
TOPSOIL RT (FT) 4.4

QUANTITIES  
SO. FT.

EARTH EXCAVATION 23.6  
EMBANKMENT 7.9  
REMOVAL OF UNSUITABLE 16.6  
TOPSOIL LT (FT) 6.6  
TOPSOIL RT (FT) 11.7

QUANTITIES  
SO. FT.

EARTH EXCAVATION 19.7  
EMBANKMENT 2.0  
REMOVAL OF UNSUITABLE 13.4  
TOPSOIL LT (FT) 0.0  
TOPSOIL RT (FT) 13.7

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	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE: SHEET NO. OF SHEETS STA. 702+50.00 TO STA. 703+50.00

EAST FRONTAGE ROAD

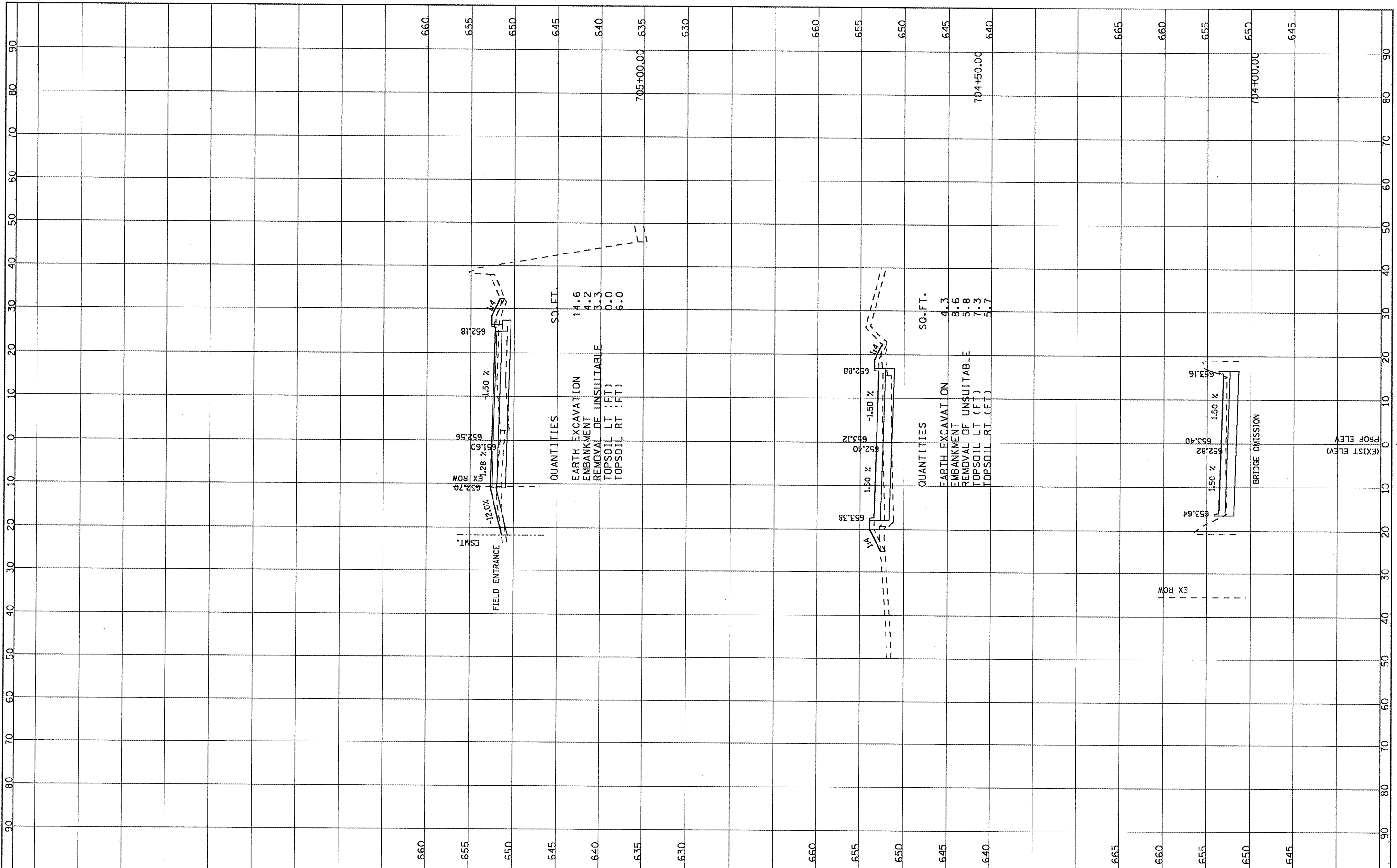
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CONTRACT NO.				
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

PROP ELEV  
(EXIST ELEV)

← EAST FRONTAGE ROAD

FINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS CHECKED		



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DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

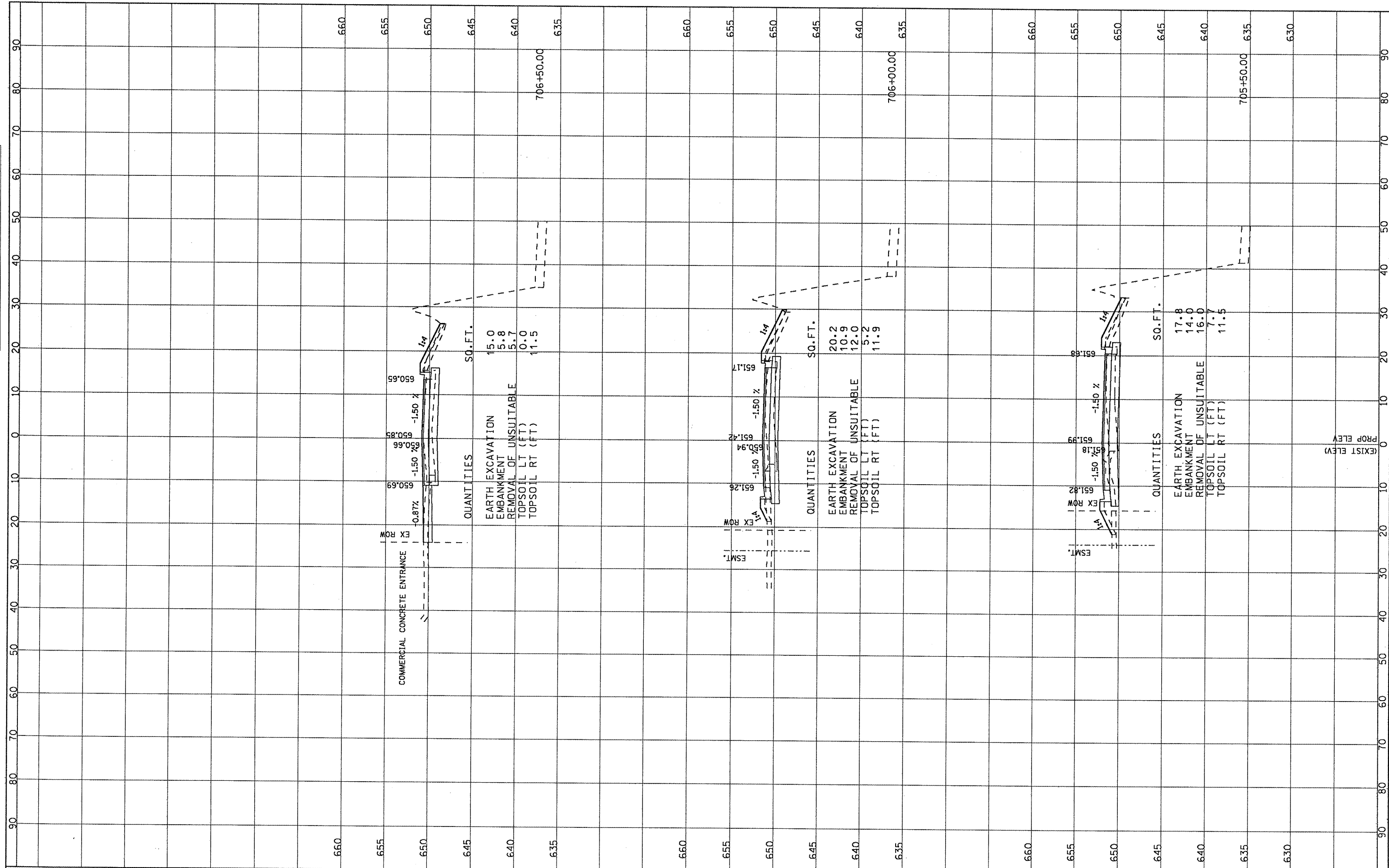
**EAST FRONTAGE ROAD**

SCALE: SHEET NO. OF SHEETS STA. 704+00.00 TO STA. 705+00.00

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	1415 B	COOK	75	73
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	



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

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

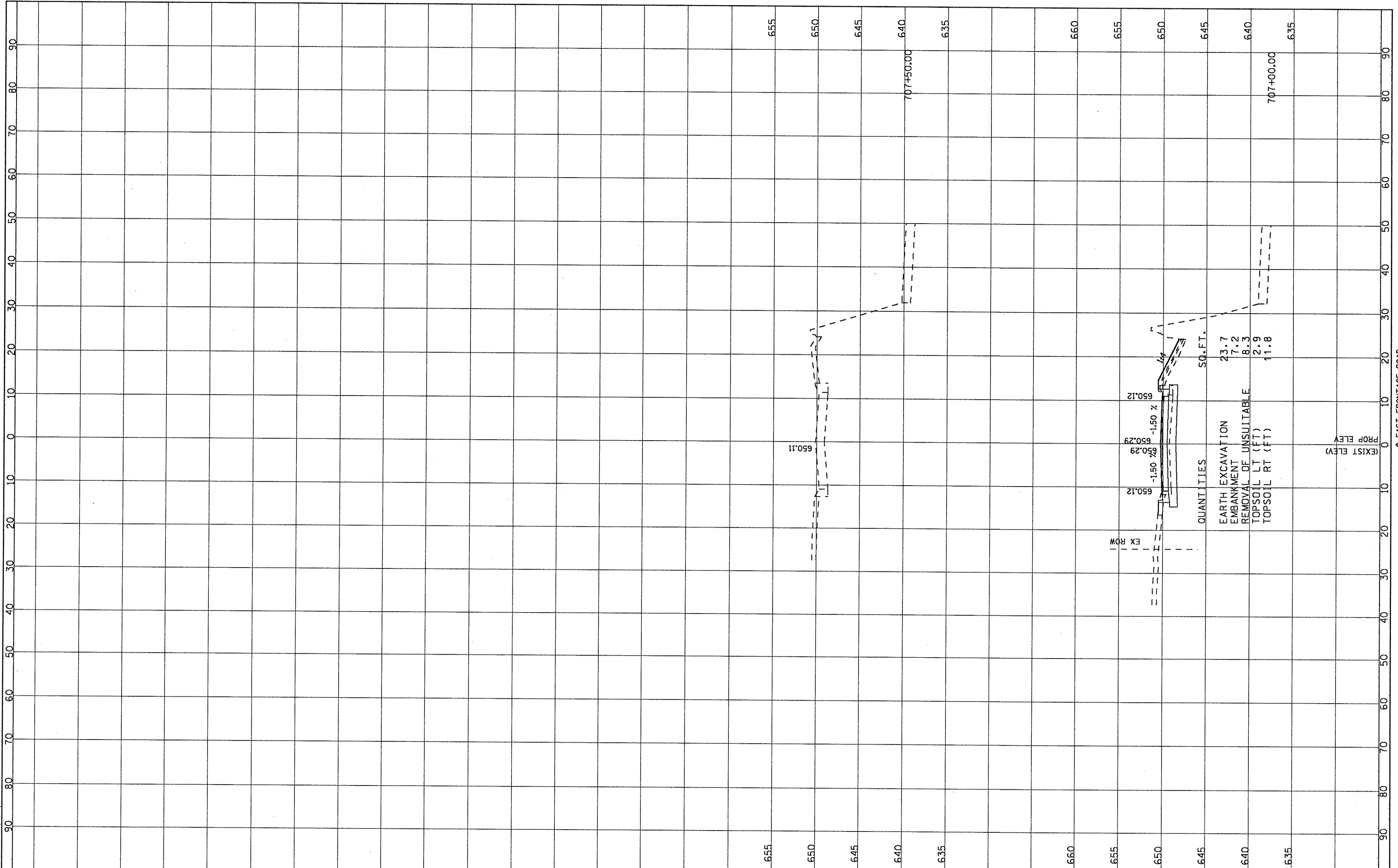
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SCALE: SHEET NO. OF SHEETS STA. 705+50.00 TO STA. 706+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	74
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
NOTE BOOK		
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ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		



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		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET NO. OF SHEETS	STA. 707+00.00 TO STA. 708+00.00
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1415 B	COOK	75	75
CONTRACT NO.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		