

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FUNCTIONAL CLASSIFICATION: STRATEGIC REGIONAL ARTERIAL
 ADT: 36,200 (2005), 46,575 (2021)
 DESIGN SPEED LIMIT: 55 MPH
 POSTED SPEED LIMIT: 55 MPH

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

**PROPOSED
 HIGHWAY PLANS**

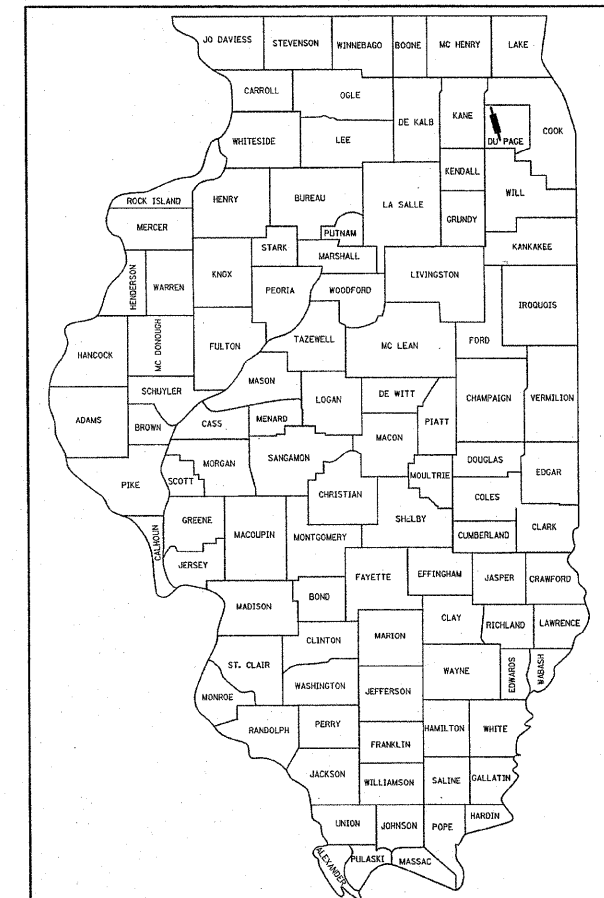
F.A.P. 338 / IL. RTE. 59
 SECTION: 2007-024 I
 OVER B.N.S.F. & U.P. R.R., IL. RTE. 38 & KRESS CREEK
 BRIDGE DECK OVERLAY
 PROJECT: *ESP-0338(036)*
 DuPAGE COUNTY
 C-91-275-07

PROJECT LOCATED IN THE VILLAGE OF WINFIELD
 FOR S.N. 022-0143, S.N. 022-0036 & S.N. 022-0037
 DuPAGE COUNTY

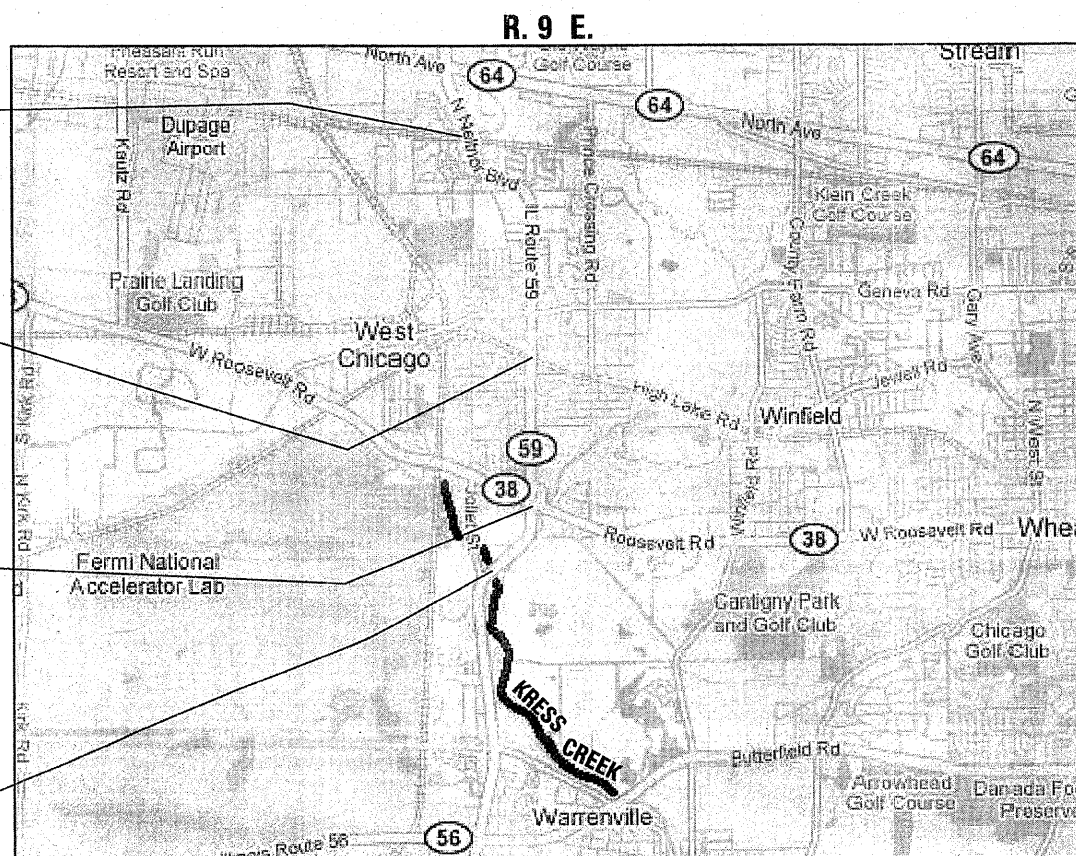
PROJECT LOCATED IN TOWNSHIP OF WAYNE
 FOR S.N. 022-0144
 DuPAGE COUNTY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	1
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90
 D-91-275-07



LOCATION OF SECTION INDICATED THIS: - ■ -

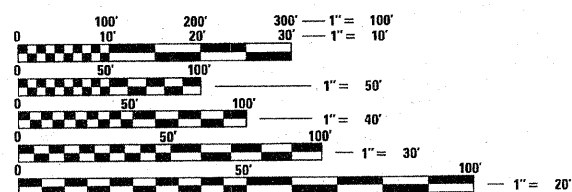


IL. RTE. 59 OVER
 B.N.S.F. R.R.
 S.N. 022-0144

IL. RTE. 59 OVER
 U. P. R.R.
 S.N. 022-0143

IL. RTE. 59 OVER
 IL. RTE. 38
 S.N. 022-0036

IL. RTE. 59 OVER
 KRESS CREEK
 S.N. 022-0037



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 LOCATING INFORMATION FOR EXCAVATORS
 1-800-892-0123

GROSS LENGTH OF PROJECT = 395 FEET = 0.075 MILES
 NET LENGTH OF PROJECT = 395 FEET = 0.075 MILES



CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS - PLANNERS - SURVEYORS
 211 W. WACKER DRIVE CHICAGO, IL. 60606
 TELEPHONE: 312-372-2023



Bhadresh N. Shah JAN. 03, 2003
 BHADRESH N. SHAH
 LICENSED STRUCTURAL ENGINEER
 STATE OF ILLINOIS LIC. No. 081-004476
 EXPIRES: 11-30-10

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

DISTRICT ONE - DESIGN PROJECT MANAGER: ISAAC KWARTENG (847) 705-4230

CONTRACT NO. 60C90

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DuPAGE	26	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90

INDEX OF SHEETS

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1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES

S.N. 022-0036

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5	DECK CROSS SECTION
6	DECK CONCRETE PATCHING

S.N. 022-0037

7	GENERAL PLAN & ELEVATION
8	DECK CROSS SECTION
9	DECK CONCRETE PATCHING
10	ABUTMENT CAPS REPAIRS

S.N. 022-0143

11	GENERAL PLAN & ELEVATION
12	DECK CROSS SECTION
13	DECK CONCRETE PATCHING
14	EXPANSION JOINT DETAILS
15	PREFORMED JOINT STRIP SEAL

S.N. 022-0144

16	GENERAL PLAN & ELEVATION
17	DECK CROSS SECTION
18	DECK CONCRETE PATCHING
19	EXPANSION JOINT DETAILS
20	PREFORMED JOINT STRIP SEAL
21	STANDARD FOR S.N. 022-143 & S.N. 022-0144 BAR SPLICER ASSEMBLY DETAILS

HIGHWAY STANDARDS

22	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
23	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
24	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
25	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
26	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
701421-02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701422-02	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-03	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS ≥ 45 MPH
701602-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES

GENERAL NOTES:

- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
- NO PARTIAL DEPTH PATCHING WILL BE NEEDED ON BRIDGE DECKS WITH HOT-MIX ASPHALT SURFACE REMOVAL AND HYDRO-SCARIFICATION. DECK SLAB PARTIAL DEPTH REPAIR PATCHES ARE SHOWN FOR INFORMATION ONLY.
- ALL PAVEMENT MARKINGS AND RAISED REFLECTORS AFFECTED BY THE BRIDGE REPAIRS SHALL BE REPLACED. QUANTITIES HAVE BEEN INCLUDED IN THE CONTRACT FOR THIS WORK.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 AT LEAST 72 HOURS PRIOR TO INSTALLATION OF THE TEMPORARY TRAFFIC CONTROL DEVICES.
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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 BASED UPON THE UNIT PRICE BID FOR THE WORK.
- THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC TECHNICIAN TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) SHALL BE LOW PROFILE.

CONSTRUCTION STAGING NOTES

STAGE I

STAGE I WORK ACTIVITIES SHALL CONSIST OF PERFORMING ALL PATCHING, CONCRETE REPAIR AND THE PLACEMENT OF THE OVERLAY ON THE INSIDE LANES OF IL. RTE. 59.

THE TRAFFIC CONTROL FOR THIS STAGE SHALL CONSIST OF THE APPLICATION OF I.D.O.T. STANDARDS 701422 AND 701602 FOR THE CLOSURE OF THE INSIDE LANES.

STAGE II

STAGE II WORK ACTIVITIES ARE THE SAME AS STAGE I FOR BOTH THE OUTSIDE LANES AND SHOULDERS. AT THE END OF THE STAGE II, THE FINAL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS WILL BE PLACED.

THE TRAFFIC CONTROL FOR THIS STAGE SHALL CONSIST OF THE APPLICATION OF I.D.O.T. STANDARDS 701422 AND 701602 FOR THE CLOSURE OF THE OUTSIDE LANES AND SHOULDERS.

OTHER TRAFFIC CONTROL NOTES:

- A 10' MINIMUM LANE WIDTH IN EACH DIRECTION SHALL BE PROVIDED FOR TRAFFIC DURING CONSTRUCTION.
- TRAFFIC CONTROL SURVEILLANCE SHALL BE PROVIDED WHENEVER PATCHES ARE LEFT OPEN OVERNIGHT.
- THE CONTRACTOR SHALL UTILIZE STD. 701426 FOR THE PLACEMENT OF THE FINAL PAVEMENT MARKING.
- TRAFFIC CONTROL FOR INTERSECTIONS AND SIDEROADS WITHIN THE TRAFFIC CONTROL LIMITS, SHALL BE PLACED AS SHOWN ON SHEETS 22 & 25.
- ANY SHOULDERS AND RAMPS WITHIN THE LIMITS OF THE TRAFFIC CONTROL SHALL BE TREATED AS SHOWN ON THE DETAIL "TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES".
- QUANTITIES FOR PAVEMENT MARKING TAPE, TYPE III ARE INCLUDED IN THE SCHEDULE OF QUANTITIES. THESE ITEMS SHALL BE PLACED FOR ALL THE LANE CLOSURES.
- THE COST OF THE PLACEMENT OF ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE APPROPRIATE STANDARDS AND DETAILS SHALL BE INCLUDED IN THE PRICE BID FOR "TRAFFIC CONTROL AND PROTECTION (SPECIAL)". THIS PRICE SHALL ALSO INCLUDE THE COST OF THE TRAFFIC CONTROL ON IL. RTE. 38, USING STANDARD 701421, FOR THE PLACEMENT AND REMOVAL OF THE PROTECTIVE SHIELD.
- ALL TEMPORARY PAVEMENT MARKINGS SHALL BE WET REFLECTIVE TAPE, TYPE III.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS,
LIST OF STATE STANDARDS
AND GENERAL NOTES
IL. RTE. 59

SCALE: NONE
DATE: JANUARY 12, 2009

DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./S.J.P.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DuPAGE	26	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90

SUMMARY OF QUANTITIES			URBAN 100% FED. TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT		S.N. 022-0036 FUNDS	S.N. 022-0037 FUNDS	S.N. 022-0143 FUNDS	S.N. 022-0144 FUNDS
				SFTY-2A	SFTY-2A	SFTY-2A	SFTY-2A
4400086	HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ. YD.	3,208	432	402	1,135	1,239
44201737	CLASS D PATCHES, TYPE 1, 8 INCH	SQ. YD.	2	-	2	-	-
50102400	CONCRETE REMOVAL	CU. YD.	50.1	-	-	26.4	23.7
50157300	PROTECTIVE SHIELD	SQ. YD.	1,652	592	-	600	460
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	44.6	-	-	20.9	23.7
50300260	BRIDGE DECK GROOVING	SQ. YD.	2,910	398	378	1,068	1,066
50800205	REINFORCEMENT BARS, EPOXY COATED	FOUND	9,260	-	-	4,400	4,860
50800515	BAR SPLICERS	EACH	96	-	-	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	331	-	-	175	156
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU. YD.	2	-	2	-	-
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL. MO.	8	2	2	2	2
67100100	MOBILIZATION	L. SUM	1	0.25	0.25	0.25	0.25
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L. SUM	1	0.25	0.25	0.25	0.25
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL. DA.	40	10	10	10	10
* 78008210	POLYUREA PAVEMENT MARKING TYPE I-LINE 4"	FOOT	2,300	320	280	900	800
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	48	8	4	20	16
X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	3,230	432	402	1,157	1,239
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ. FT.	192	48	48	48	48
X0323076	SILICONE JOINT SEALER, 1 3/4"	FOOT	261	180	81	-	-
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	162	144	18	-	-
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	1190	68	66	656	400
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	16,000	4,000	4,000	4,000	4,000
Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2 "	SQ. YD.	3,208	432	402	1,135	1,239
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. YD.	1	0.50	0.50	-	-
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	109	33	14	30	32
Z0048665	RAILROAD PROTECTION LIABILITY INSURANCE	L. SUM	1	-	-	1	-

*
*

* SPECIALTY ITEMS

ILLINOIS DEPARTMENT OF TRANSPORTATION	
SUMMARY OF QUANTITIES IL. RTE. 59	
SCALE	DRAWN BY: D.L./F.M.
DATE: JANUARY 12, 2009	CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS	

REVISIONS	
NAME	DATE

Rev.

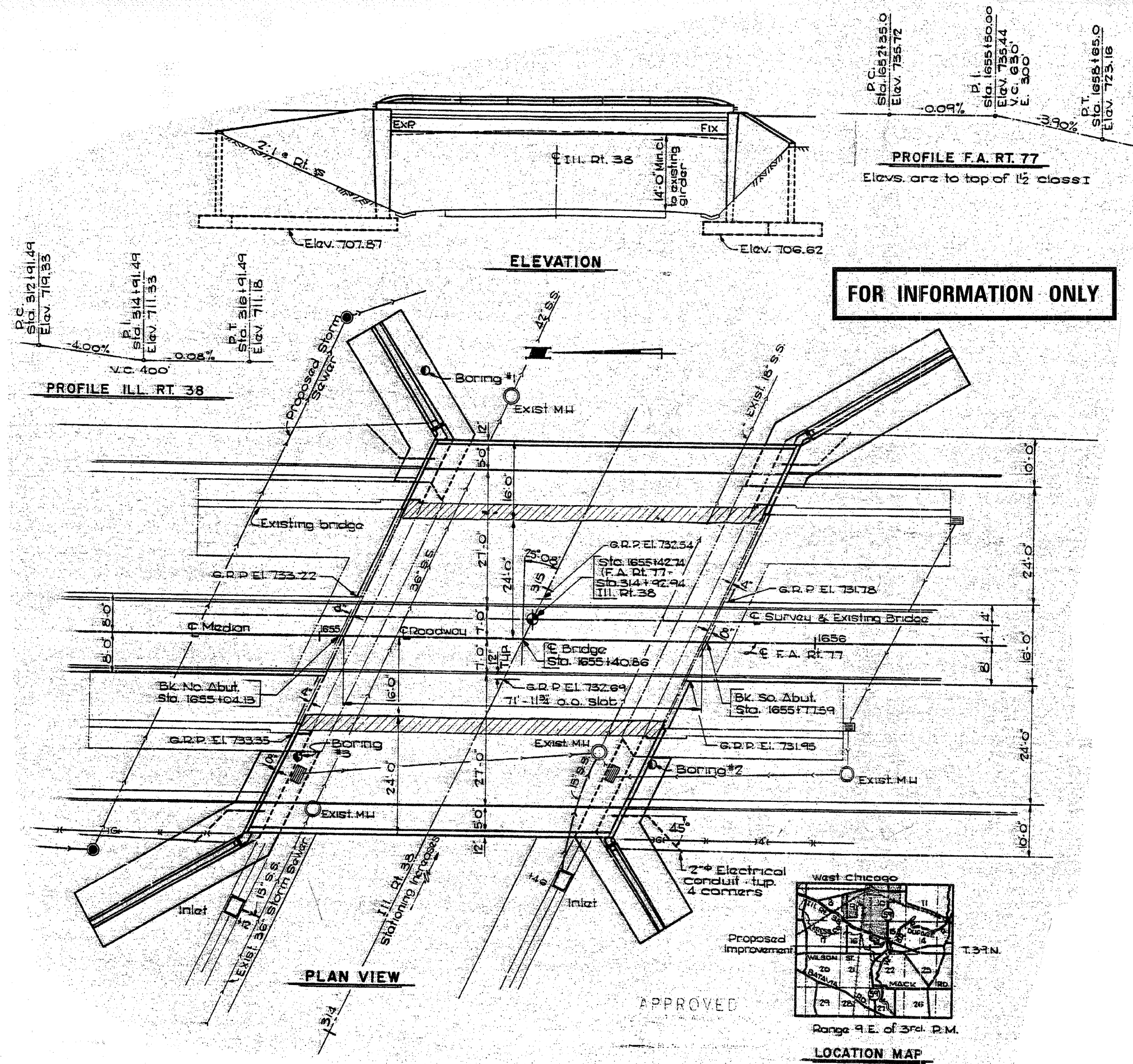
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90

TOTAL BILL OF MATERIAL

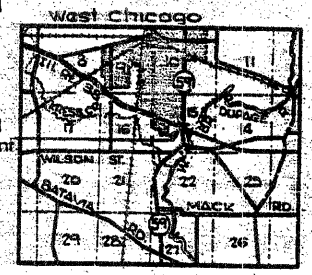
ITEM	UNIT	QUANTITY
HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ. YD.	432
BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ. YD.	432
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	432
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. YD.	0.5
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	33
SILICONE JOINT SEALER 1 3/4"	FOOT	180
BRIDGE DECK GROOVING	SQ. YD.	398
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	144
PROTECTIVE SHIELD	SQ. YD.	592
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	Sq. FT	68

NOTE:
THERE ARE TRAFFIC SIGNAL CONDUITS ATTACHED TO BOTH PARAPETS. THE CONTRACTOR SHALL WATCH AND PROTECT THESE FACILITIES.



FOR INFORMATION ONLY

APPROVED



REVISIONS	
NAME	DATE

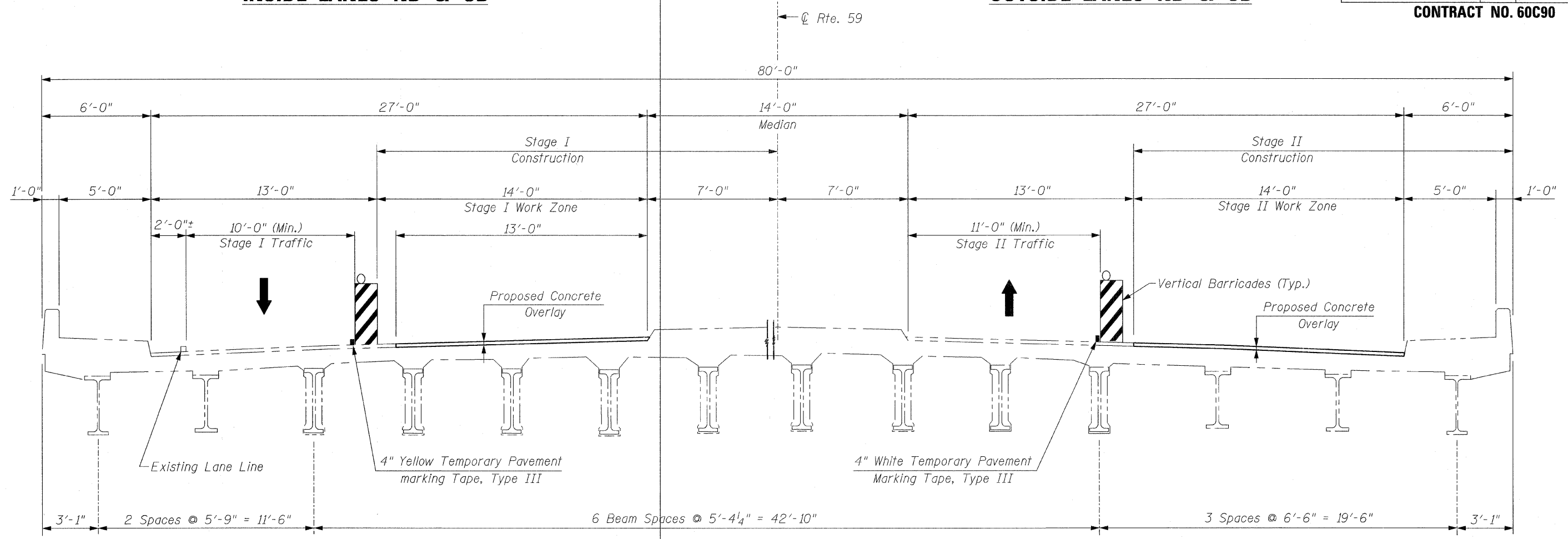
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
IL. RTE. 59
OVER
IL. RTE. 38
F.A.P. RTE. 338 SECTION: 2007-024 I
DUPAGE COUNTY
STRUCTURE NO. 022-0036
SCALE: NONE
DATE: JANUARY 12, 2009
DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90

**STAGE I
INSIDE LANES NB & SB**

**STAGE II
OUTSIDE LANES NB & SB**



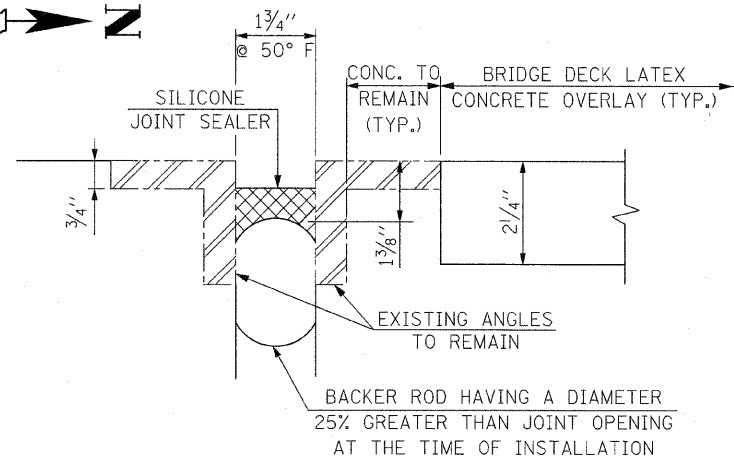
EXISTING DECK CROSS SECTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK CROSS SECTION
 IL. RTE. 59
 OVER
 IL. RTE. 38
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0036
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

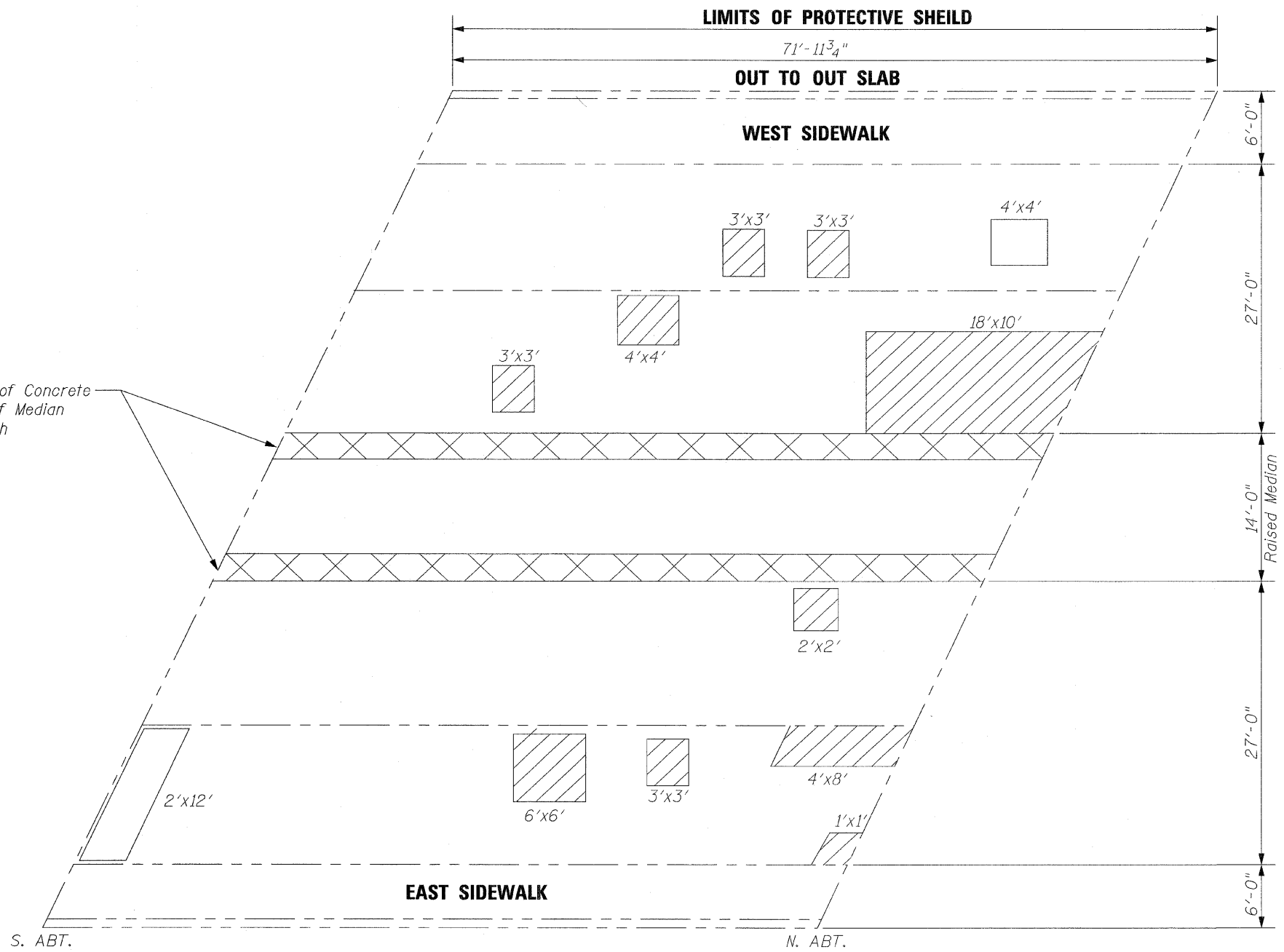
CONTRACT NO. 60C90



AT S. & N. ABUTMENTS
 (EXIST. PREFORMED JT. SEAL-TRANVERSE EXP. JT.)
 (TO BE REMOVED & REPLACED WITH SILICONE JOINT SEALER)

BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
SILICONE JOINT SEALER, 1 3/4"	FT.	180
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN.)	SQ. FT.	144



SIDEWALK REPAIR

LOCATION	UNIT	QUANTITY
EAST SIDEWALK	SQ. FT.	(10x2) + (6x2) = 32.0
WEST SIDEWALK	SQ. FT.	(6x1.5) + (4x1.5) + (14x1.5) = 36.0

STRUCTURAL REPAIR OF CONCRETE
 (DEPTH EQUAL TO OR LESS THAN 5 IN.)
 = 68.0 SQ. FT.

THE ACTUAL LOCATIONS OF SIDEWALK REPAIR WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

* DECK SLAB PARTIAL DEPTH REPAIR PATCHES ARE SHOWN FOR INFORMATION ONLY

LEGEND:
 F.D. = FULL DEPTH = 33.0 S.Y.
 P.D. = PARTIAL DEPTH = 6.0 S.Y.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK CONCRETE PATCHING
 IL. RTE. 59
 OVER
 IL. RTE. 38
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0036
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

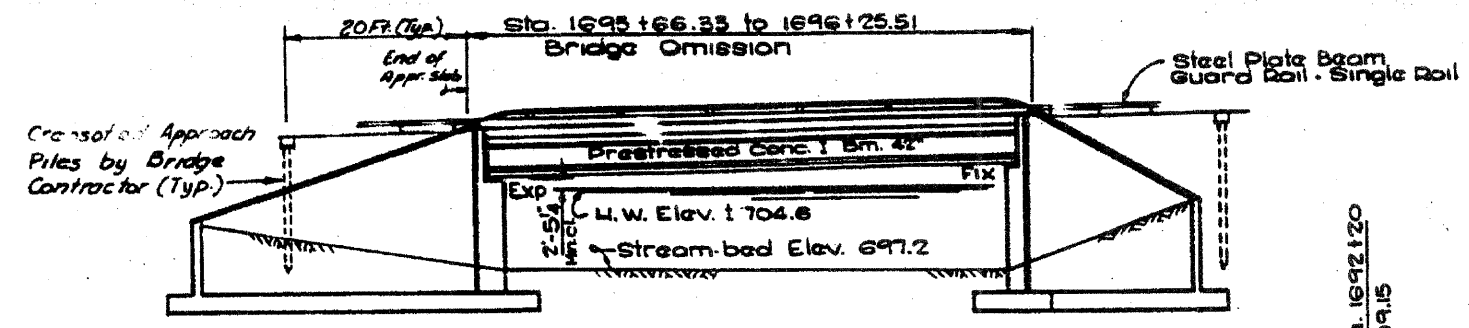
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90

TOTAL BILL OF MATERIAL

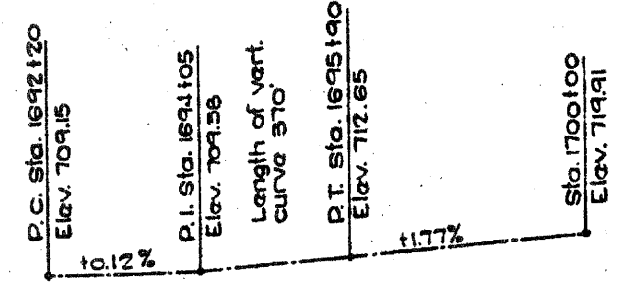
ITEM	UNIT	QUANTITY
HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ. YD.	402
BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ. YD.	402
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	402
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. YD.	0.5
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	14
SILICONE JOINT SEALER 1 3/4"	FOOT	81
BRIDGE DECK GROOVING	SQ. YD.	378
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	18
CLASS D PATCHES, TYPE I, 8 INCH	SQ. YD.	2
CONTROLLED LOW-STRENGTH MATERIAL	CU. YD.	2
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	66

NOTE:
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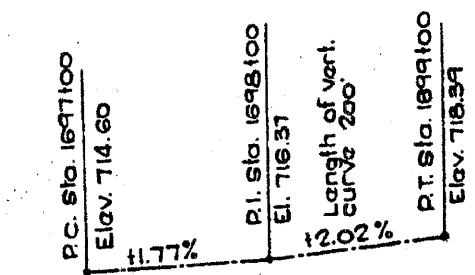


ELEVATION

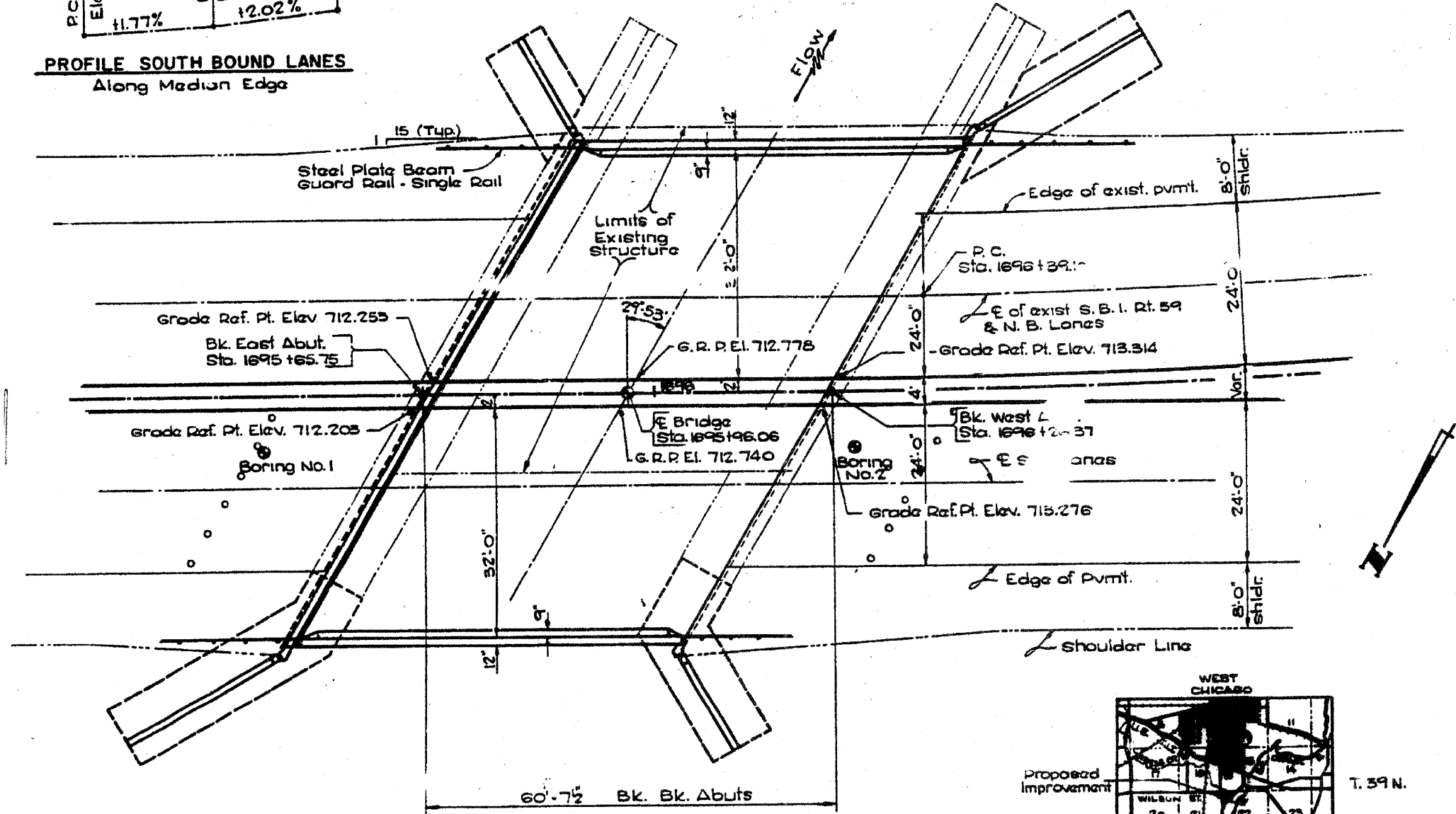
FOR INFORMATION ONLY



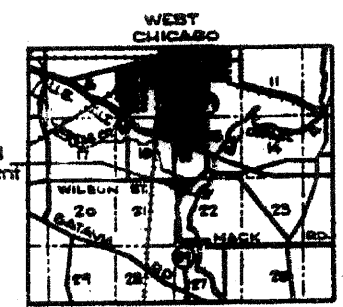
PROFILE NORTH BOUND LANES
Along Median Edge



PROFILE SOUTH BOUND LANES
Along Median Edge



PLAN VIEW



LOCATION MAP

REVISIONS	
NAME	DATE

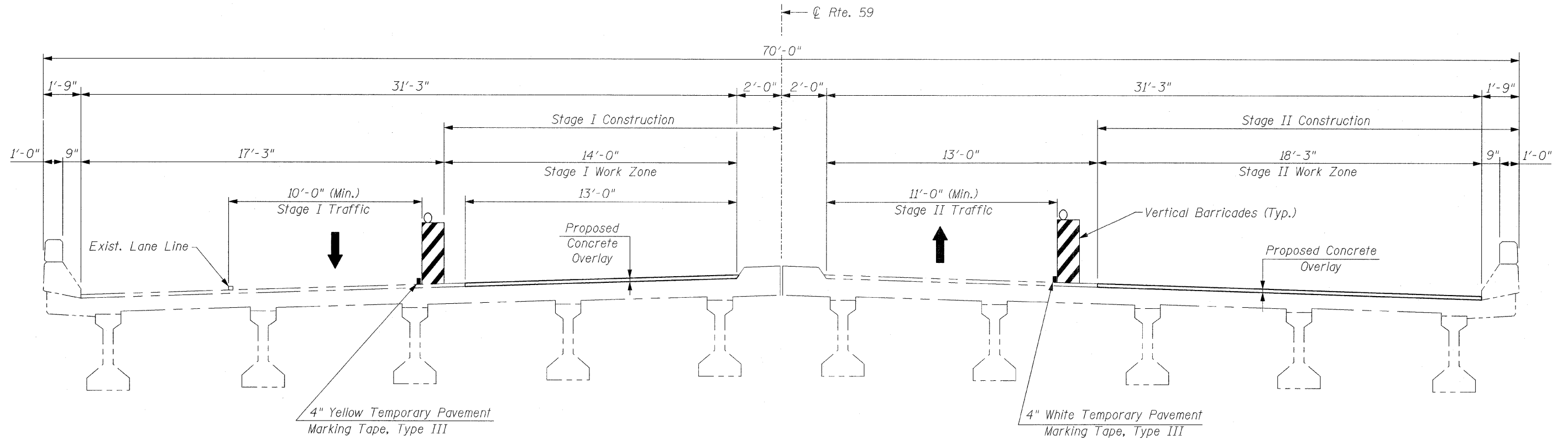
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
IL. RTE. 59
OVER
KRESS CREEK
F.A.P. RTE. 338 SECTION: 2007-024 I
DuPAGE COUNTY
STRUCTURE NO. 022-0037
SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

**STAGE I
INSIDE LANES NB & SB**

**STAGE II
OUTSIDE LANES NB & SB**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90



EXISTING DECK CROSS SECTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

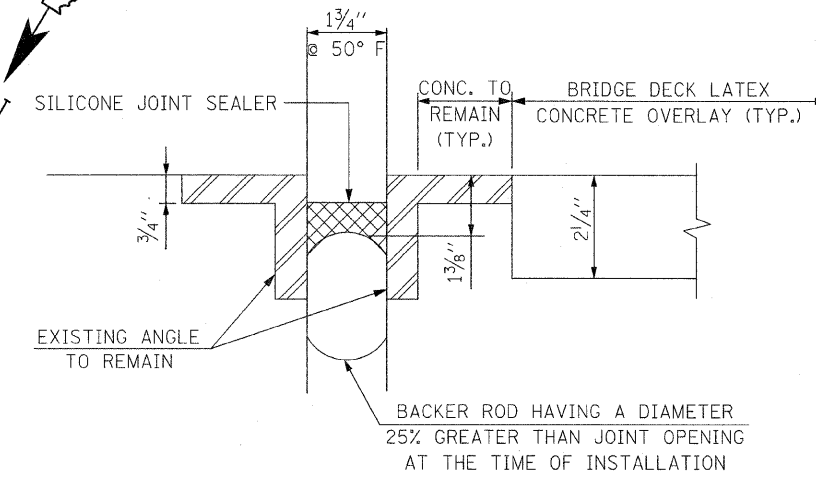
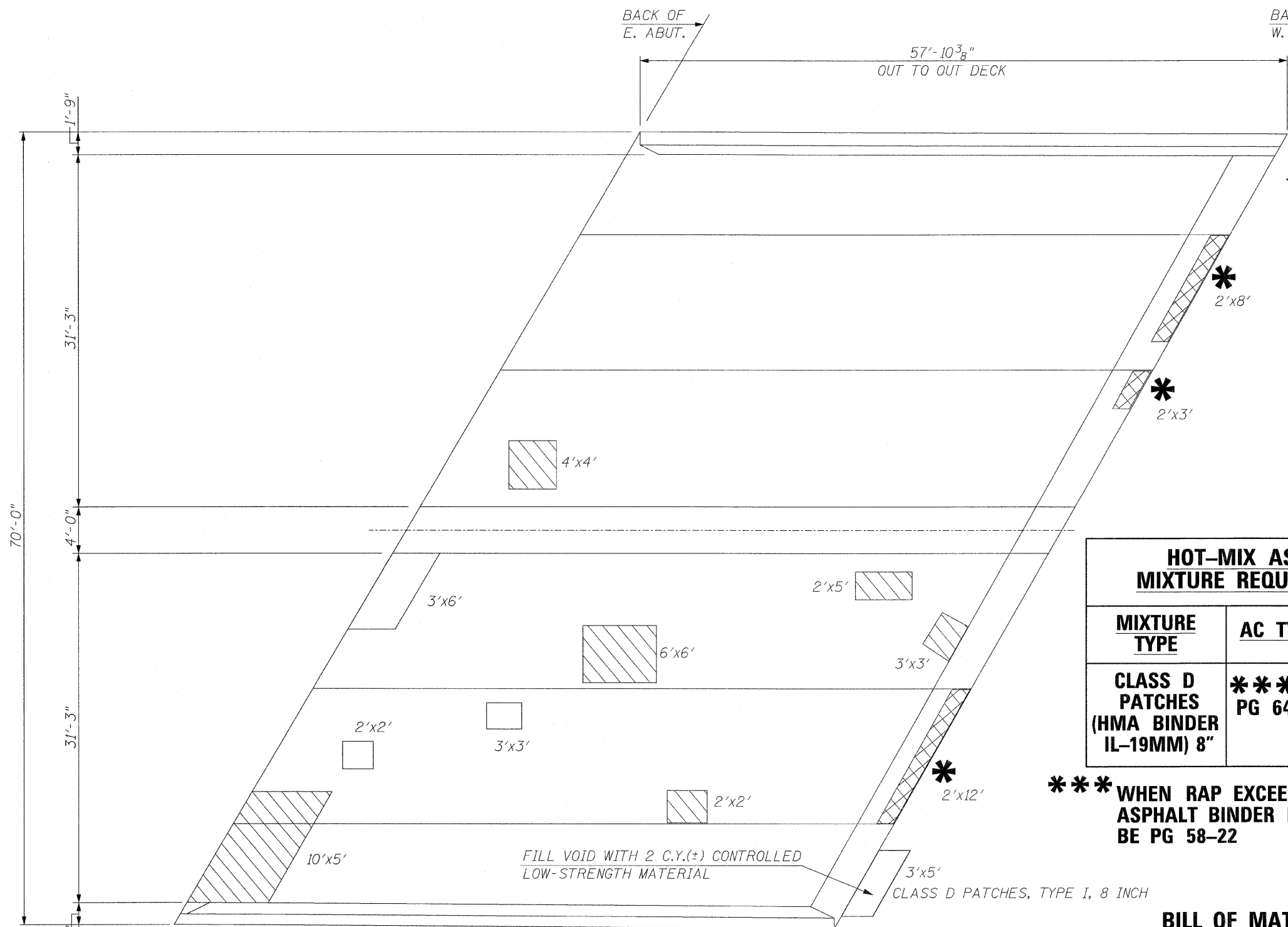
DECK CROSS SECTION
IL. RTE. 59
OVER
KRESS CREEK
F.A.P. RTE. 338 SECTION: 2007-024 I
DuPAGE COUNTY
STRUCTURE NO. 022-0037

SCALE: NONE DATE: JANUARY 12, 2009 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./S.J.P.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DuPAGE	26	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

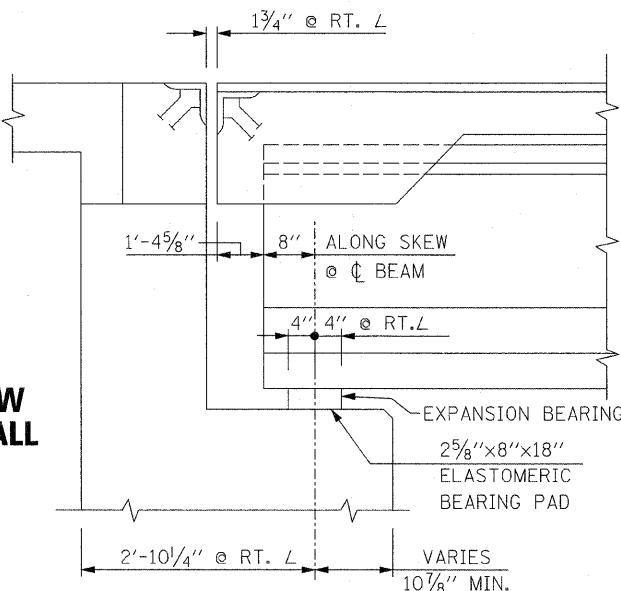
CONTRACT NO. 60C90



AT EAST ABUTMENT (ONLY)
 (EXIST. PREFORMED JT. SEAL-TRANVERSE EXP. JT.)
 (TO BE REMOVED & REPLACED WITH SILICONE JOINT SEALER)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
CLASS D PATCHES (HMA BINDER IL-19MM) 8"	*** PG 64-22	4% @ 70 GYR

*** WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22



BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
SILICONE JOINT SEALER, 1 3/4"	FOOT	81

SECTION AT EAST ABUT.

- ** 4 S.Y. P.D. PATCH
- 14 S.Y. FULL DEPTH PATCH
- * PARTIAL DEPTH REPAIR TO DAMAGED CONCRETE DAM (46 S.F.) (PAID FOR AS "STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN 5 IN)")

TOP DECK

** DECK SLAB PARTIAL DEPTH REPAIR PATCHES ARE SHOWN FOR INFORMATION ONLY

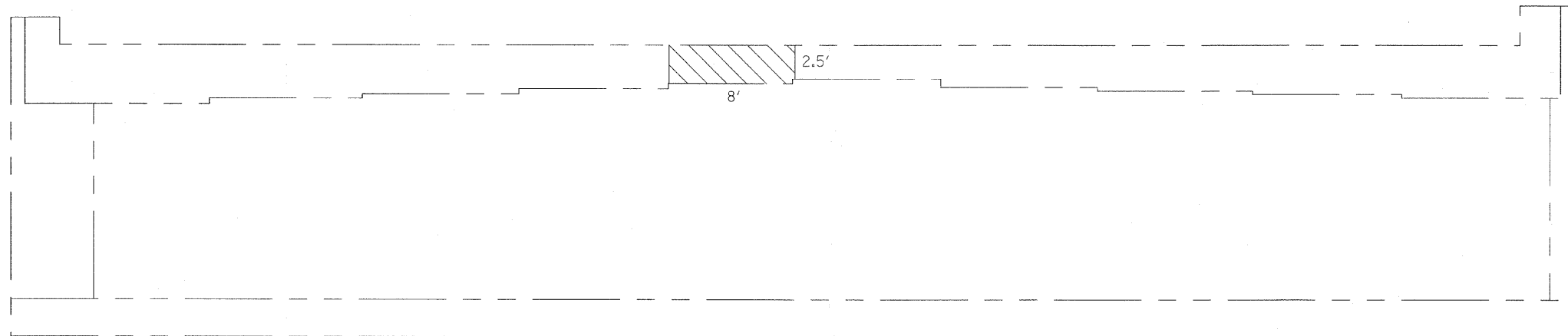
- LEGEND:**
- F.D. = FULL DEPTH
 - P.D. = PARTIAL DEPTH

REVISIONS	
NAME	DATE

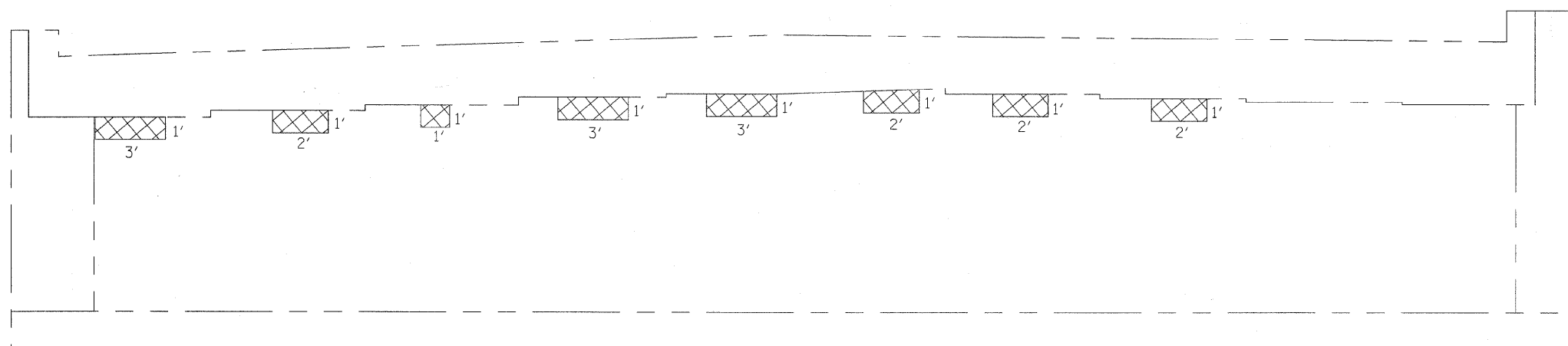
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK CONCRETE PATCHING
 IL. RTE. 59
 OVER
 KRESS CREEK
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DuPAGE COUNTY
 STRUCTURE NO. 022-0037
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	10
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90



EAST ABUTMENT



WEST ABUTMENT

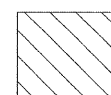
NOTE:

ALL EXPOSED ANCHOR BOLTS AT THE FIXED BEARINGS AT ALL STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN.) LOCATIONS SHOULD BE CLEANED AND INCORPORATED INTO THE REPAIRED AREA. COST IS INCLUDED WITH STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN.).

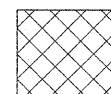
FIELD NOTE QUANTITIES

DESCRIPTION	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \geq 5 IN.	S.F.	18
STRUCTURAL REPAIR OF CONCRETE \leq 5 IN.	S.F.	20

LEGEND



STRUCTURAL REPAIR OF CONCRETE \leq 5 IN.



STRUCTURAL REPAIR OF CONCRETE \geq 5 IN.

REVISIONS	
NAME	DATE

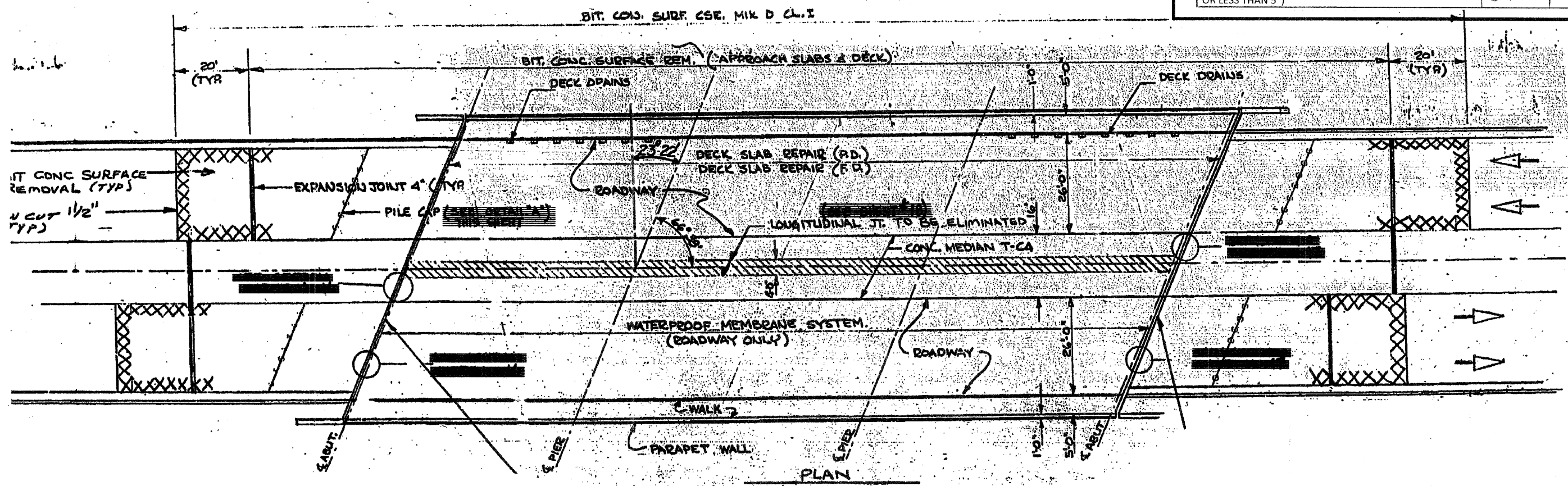
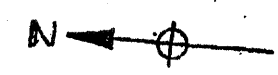
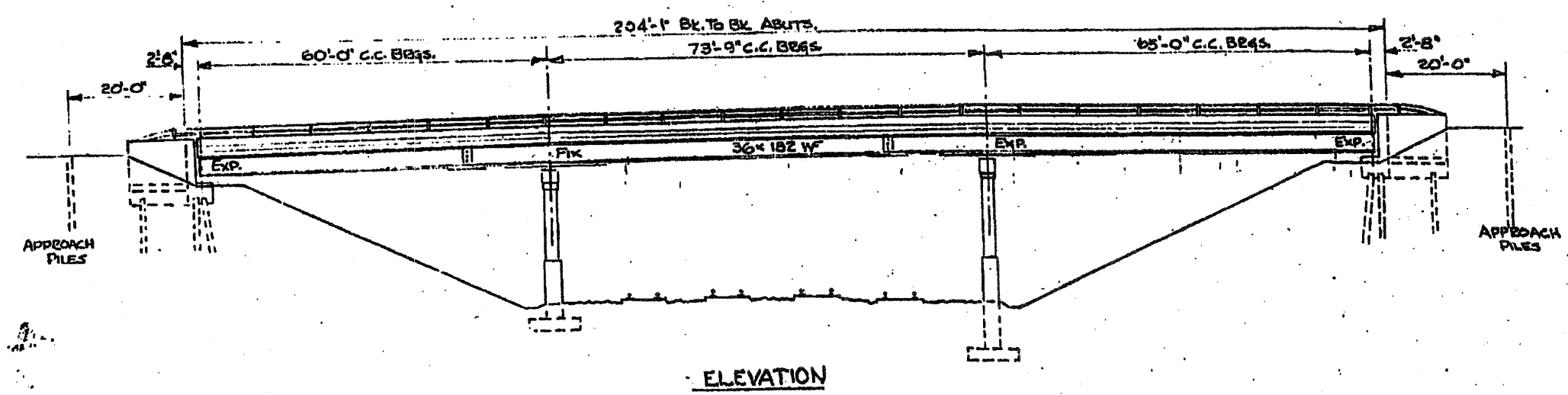
ILLINOIS DEPARTMENT OF TRANSPORTATION
 ABUTMENT CAPS REPAIRS
 IL. RTE. 59
 OVER
 KRESS CREEK
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0037
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ. YD.	1,135
BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ. YD.	1,135
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	1,157
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	30
PREFORMED JOINT STRIP SEAL	FOOT	175
CONCRETE REMOVAL	CU. YD.	26.4
REINFORCEMENT BARS, EPOXY COATED	LB.	4,400
CONCRETE SUPERSTRUCTURE	CU. YD.	20.9
BRIDGE DECK GROOVING	SQ. YD.	1,068
PROTECTIVE SHIELD	SQ. YD.	600
BAR SPLICERS	EACH	48
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ. FT.	656



FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

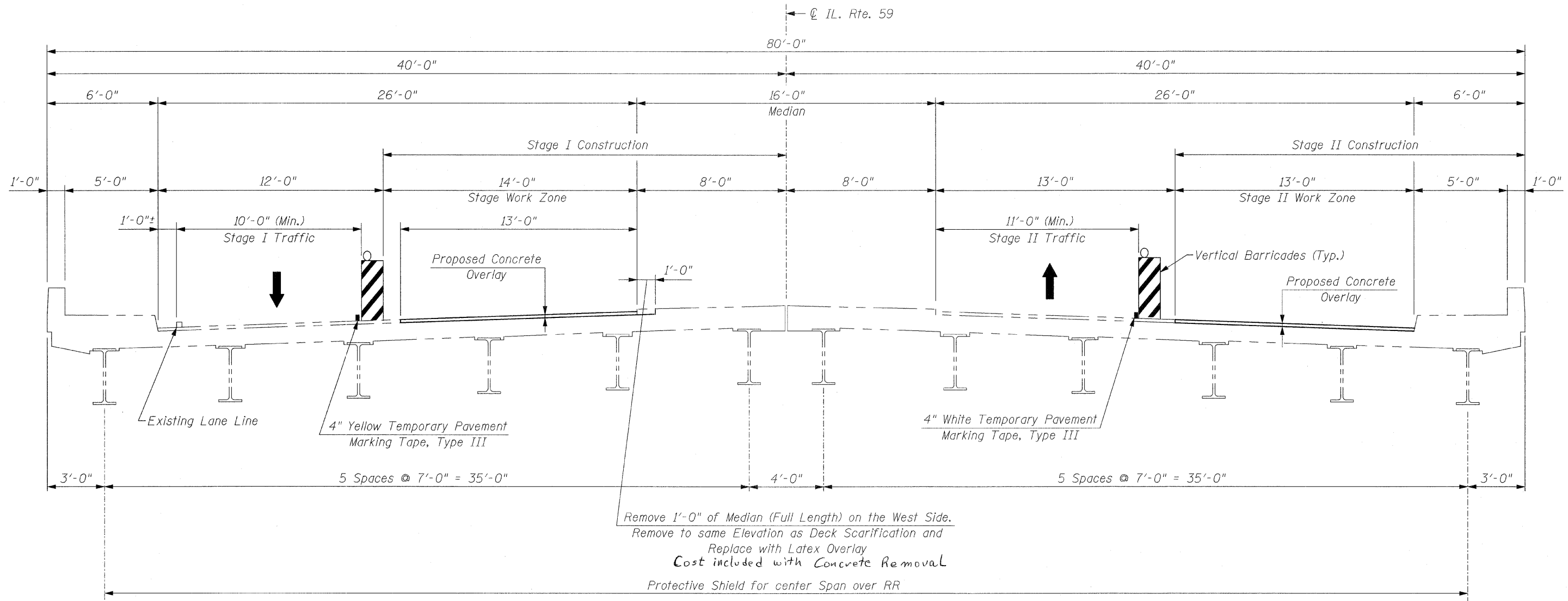
ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL PLAN & ELEVATION
 IL. RTE. 59
 OVER
 UNION PACIFIC R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0143
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2007 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

**STAGE I
INSIDE LANES NB & SB**

**STAGE II
OUTSIDE LANES NB & SB**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DuPAGE	26	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90



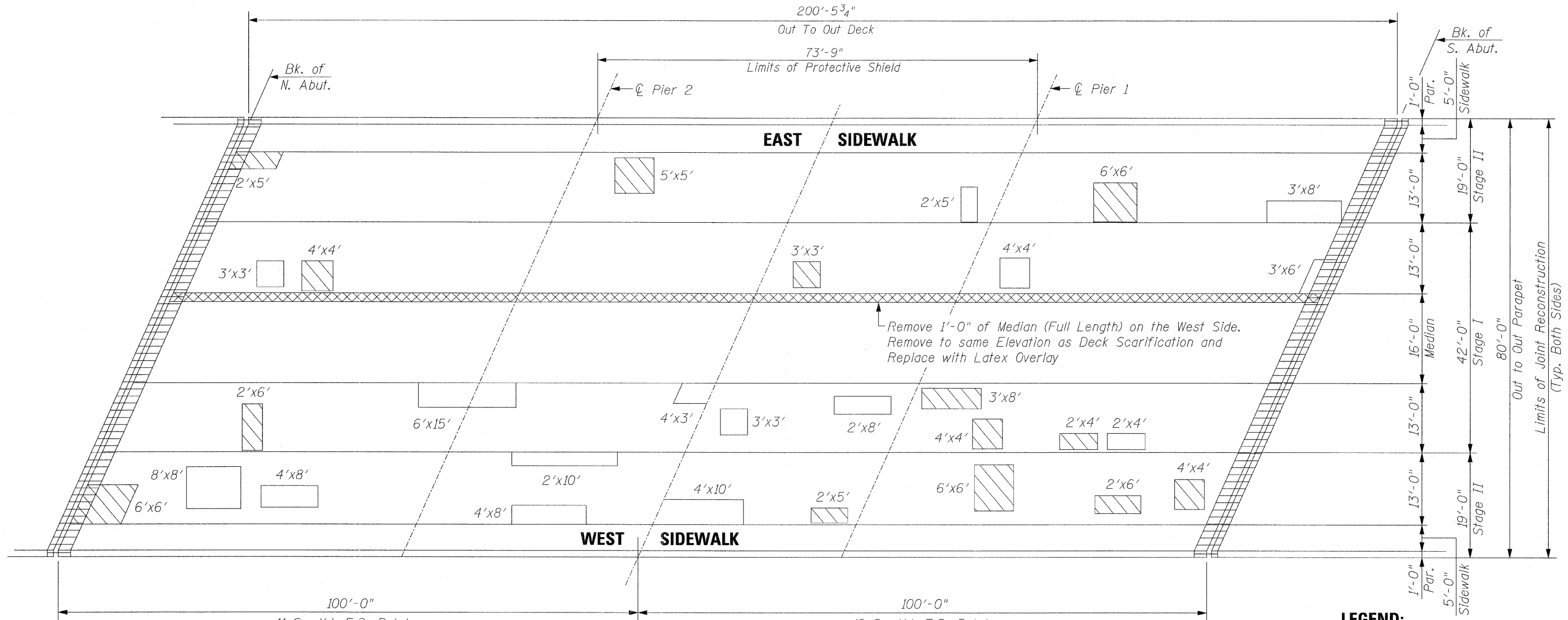
EXISTING DECK CROSS SECTION

Remove 1'-0" of Median (Full Length) on the West Side.
Remove to same Elevation as Deck Scarification and
Replace with Latex Overlay
Cost included with Concrete Removal
Protective Shield for center Span over RR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK CROSS SECTION
IL. RTE. 59
OVER
UNION PACIFIC R.R.
F.A.P. RTE. 338 SECTION: 2007-024 I
DuPAGE COUNTY
STRUCTURE NO. 022-0143
SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 12, 2007 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

CONTRACT NO. 60C90



11 Sq. Yd. F.D. Patch
* 29 Sq. Yd. P.D. Patch

19 Sq. Yd. F.D. Patch
* 16 Sq. Yd. P.D. Patch

SIDEWALK REPAIR

LOCATION	UNIT	QUANTITY
EAST SIDEWALK	SQ. FT.	(164x2) = 328.0
WEST SIDEWALK	SQ. FT.	(164x2) = 328.0

**STRUCTURAL REPAIR OF CONCRETE
(DEPTH EQUAL TO OR LESS THAN 5 IN.)
= 656.0 SQ. FT.**

**THE ACTUAL LOCATIONS OF SIDEWALK REPAIR WILL BE
DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.**

* **DECK SLAB PARTIAL DEPTH
REPAIR PATCHES ARE SHOWN
FOR INFORMATION ONLY**

BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
CONCRETE REMOVAL	CU. YD.	5.5

LEGEND:

- F.D. = FULL DEPTH
- * P.D. = PARTIAL DEPTH
- CONCRETE REMOVAL

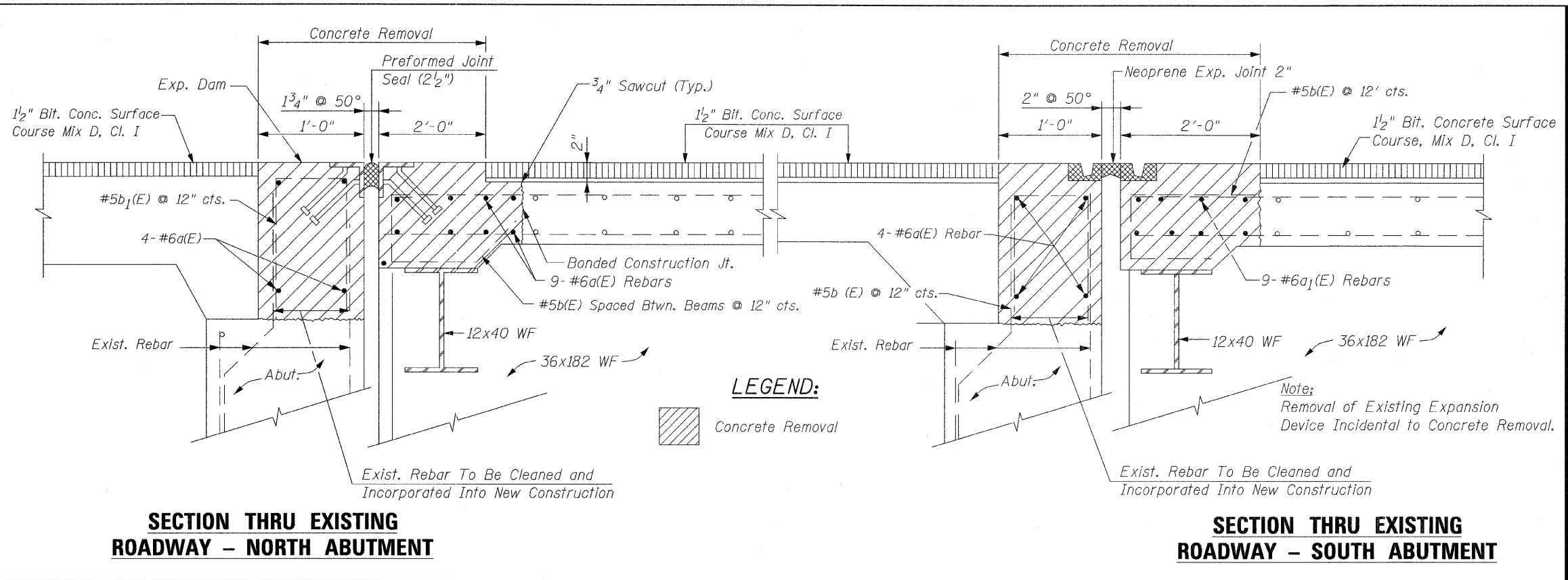
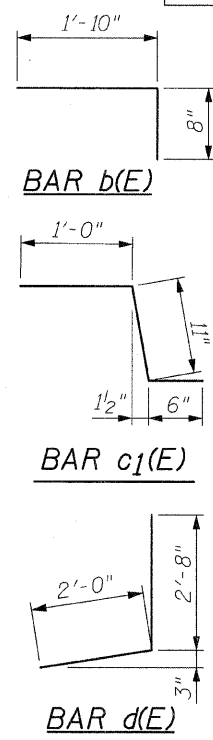
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK CONCRETE PATCHING
IL. RTE. 59
OVER
UNION PACIFIC R.R.
F.A.P. RTE. 338 SECTION: 2007-024 I
DuPAGE COUNTY
STRUCTURE NO. 022-0143
SCALE: NONE DATE: JANUARY 12, 2007 DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

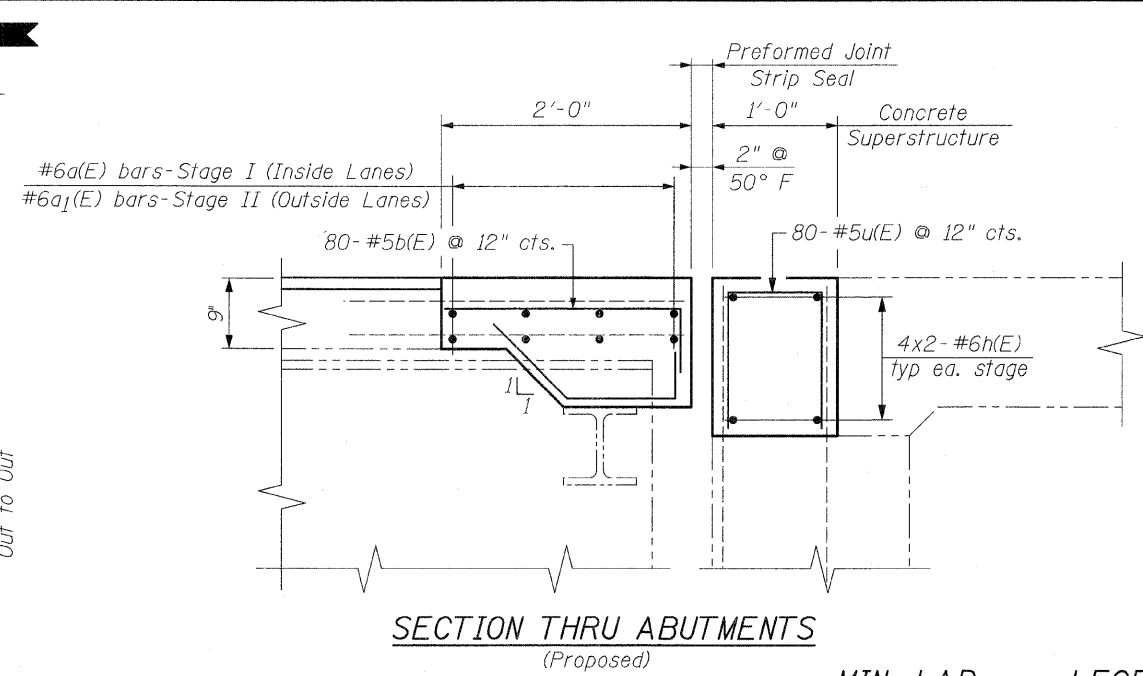
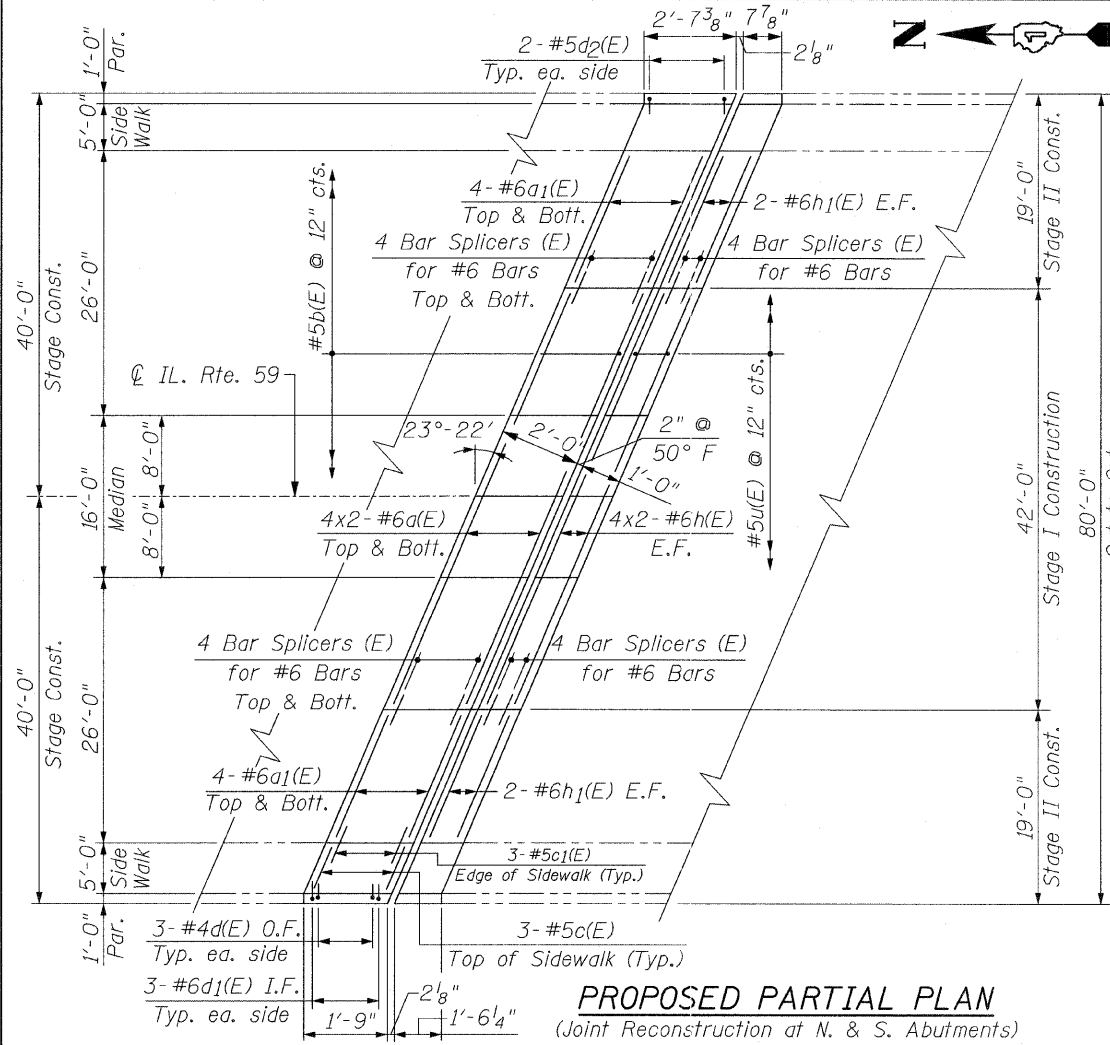
CONTRACT NO. 60C90
BILL OF MATERIAL
(FOR N. & S. ABUTMENTS)

Bar	No.	Size	Length	Shape
a(E)	32	#6	24'-0"	—
a1(E)	32	#6	20'-2"	—
b(E)	160	#5	2'-6"	└
c(E)	12	#5	5'-7"	—
c1(E)	12	#5	2'-5"	└
d(E)	12	#4	4'-8"	└
d1(E)	12	#6	3'-6"	└
d2(E)	8	#5	2'-10"	└
h(E)	16	#6	24'-0"	—
h1(E)	16	#6	20'-2"	—
u(E)	160	#5	3'-8"	└
Reinforcement Bars, Epoxy Coated			Lb.	4,440
Concrete Removal			Cu. Yd.	20.9
Concrete Superstructure			Cu. Yd.	20.9
Bar Splicers			Each	48

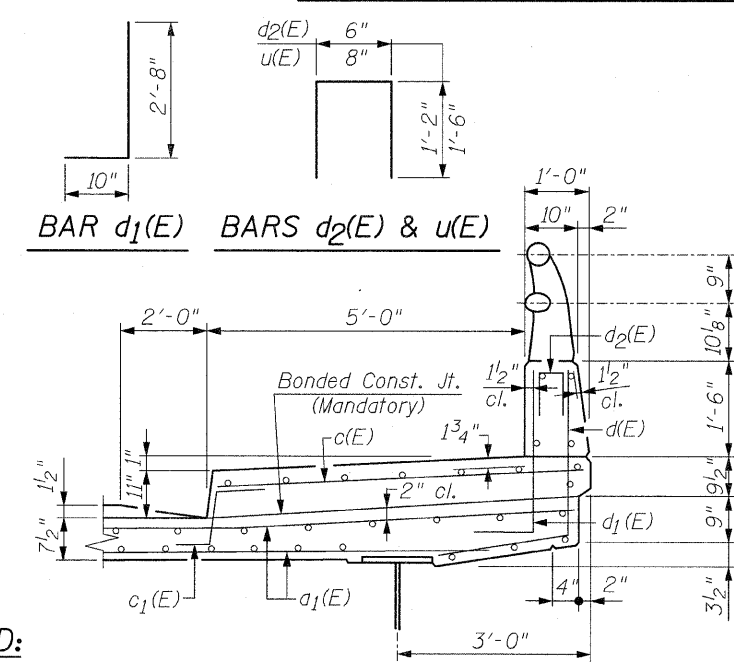


SECTION THRU EXISTING ROADWAY - NORTH ABUTMENT

SECTION THRU EXISTING ROADWAY - SOUTH ABUTMENT



SECTION THRU ABUTMENTS (Proposed)



PARAPET DETAIL

The Contractor must use extreme caution during concrete removal and must not nick, cut or damage in any way, any of the steel beams. The existing Reinforcement Bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any Reinforcement Bars that are damaged during concrete removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost is included with Concrete Removal.

Reinforcement Bars shall conform to the requirements of ASTM A-706, Gr. 60. See Special Provisions.

Reinforcement Bars designated (E) shall be Epoxy Coated.

Cost for removal of existing Neoprene Exp. Joint & Preformed Joint Seal is included in the cost of Concrete Removal.

Bars indicated thus 4x2 etc., indicates 4 lines of bars with 2 lengths per line.

MIN. LAP:
 #6 Bars = 2'-7"

LEGEND:
 I.F. = Inside Face
 O.F. = Outside Face
 E.F. = Each Face

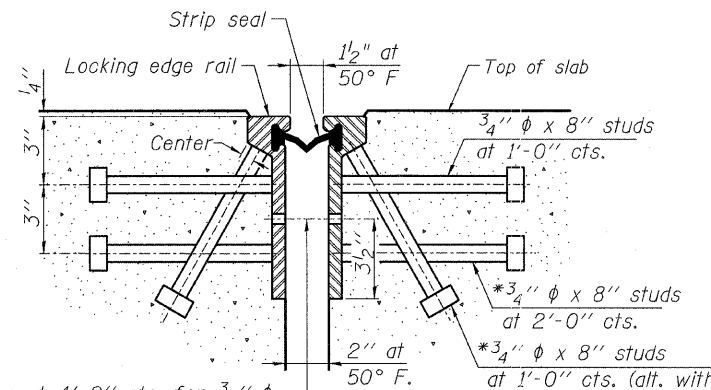
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 EXPANSION JOINT DETAILS
 IL. RTE. 59
 OVER
 UNION PACIFIC R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DuPAGE COUNTY
 STRUCTURE NO. 022-0143
 SCALE: NONE DATE: JANUARY 12, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DuPAGE	26	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

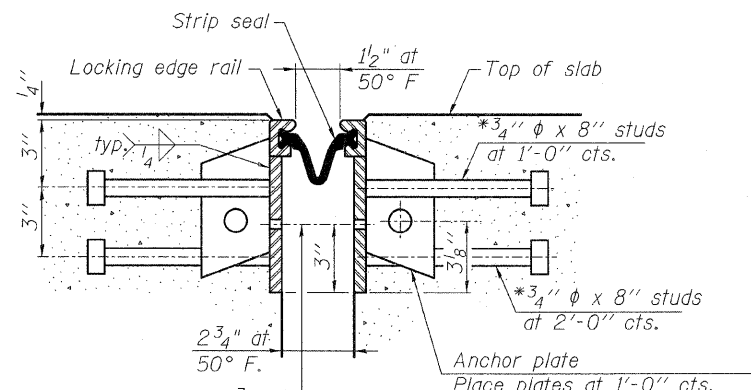
CONTRACT NO. 60C90

*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.
 **When joint is fixed, dimension is set at 1 1/2".



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

SECTION THRU ROLLED RAIL JOINT

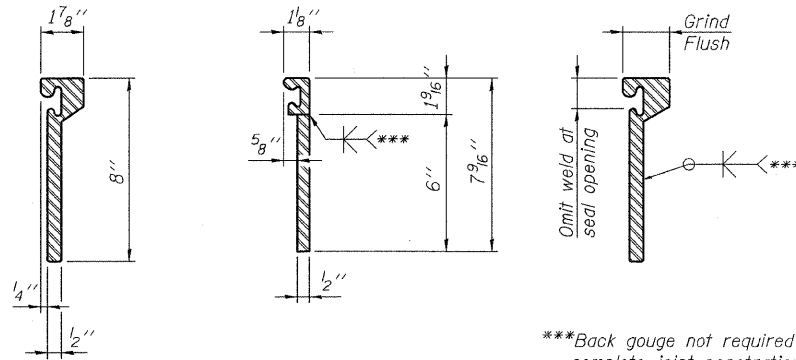


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

NOTES:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The 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. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints. The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.



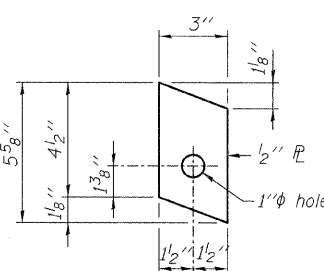
ROLLED (EXTRUDED) RAIL WELDED RAIL

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

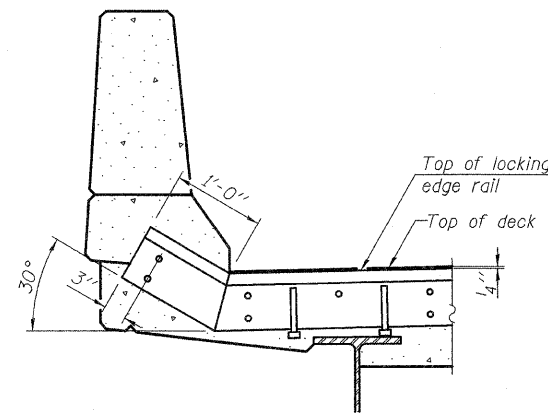
LOCKING EDGE RAIL SPLICE

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

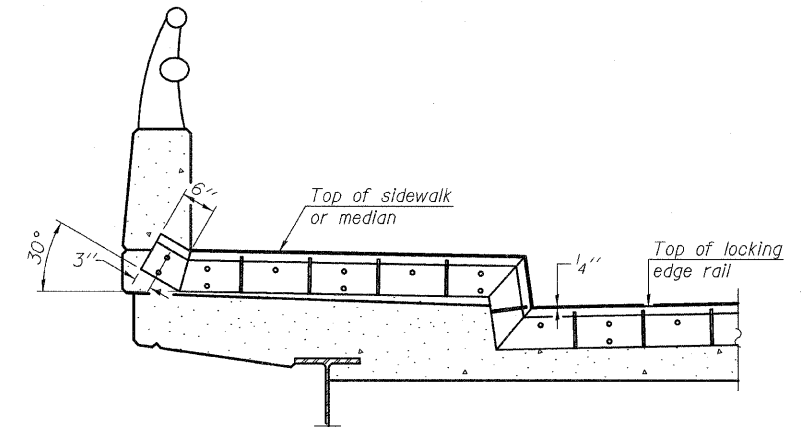
LOCKING EDGE RAILS



ANCHOR PLATE (for welded rail)



AT PARAPET



AT SIDEWALK OR MEDIAN

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	175

REVISIONS	
NAME	DATE

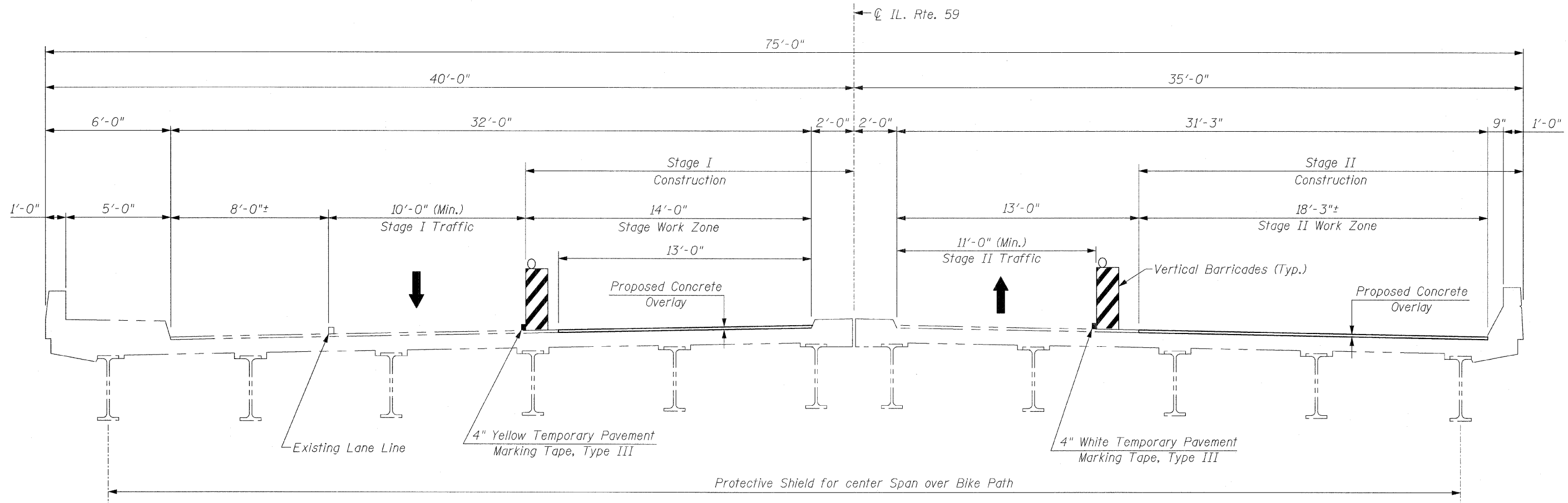
ILLINOIS DEPARTMENT OF TRANSPORTATION
 PREFORMED JOINT STRIP SEAL
 IL. RTE. 59
 OVER
 UNION PACIFIC R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DuPAGE COUNTY
 STRUCTURE NO. 022-0143
 SCALE: NONE
 DATE: JANUARY 12, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

**STAGE I
INSIDE LANES NB & SB**

**STAGE II
OUTSIDE LANES NB & SB**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60C90



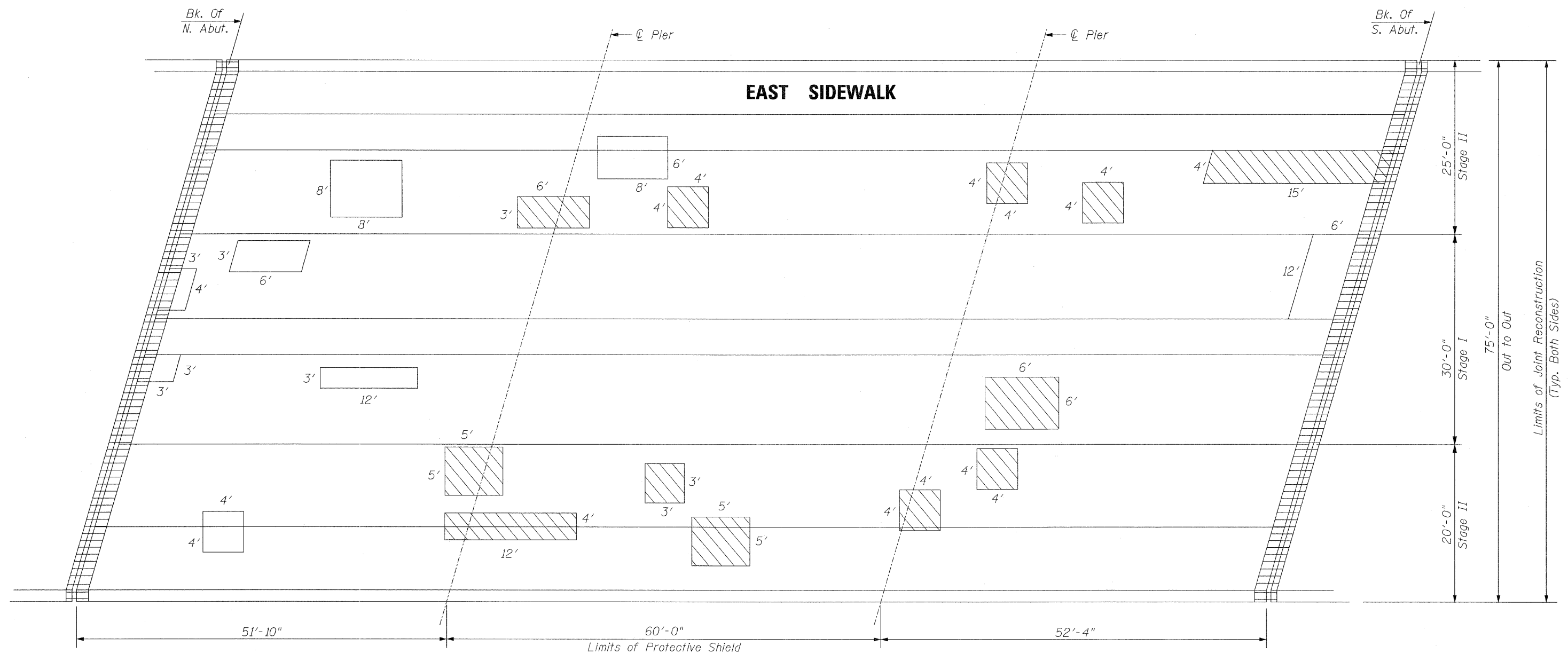
EXISTING DECK CROSS SECTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK CROSS SECTION
 IL. RTE. 59
 OVER
 B.N.S.F. R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0144
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	18
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C90



SIDEWALK REPAIR

LOCATION	UNIT	QUANTITY
EAST SIDEWALK	SQ. FT.	(200x2) = 400.0

**STRUCTURAL REPAIR OF CONCRETE
(DEPTH EQUAL TO OR LESS THAN 5 IN.)
= 400.0 SQ. FT.**

**THE ACTUAL LOCATIONS OF SIDEWALK REPAIR WILL BE
DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.**

PLAN

*** DECK SLAB PARTIAL DEPTH
REPAIR PATCHES ARE SHOWN
FOR INFORMATION ONLY**

QUANTITIES
* 33 S.Y. P.D. PATCH
32 S.Y. F.D. PATCH

LEGEND:

- F.D. = FULL DEPTH**
- ***
- P.D. = PARTIAL DEPTH**
- CONCRETE REMOVAL**

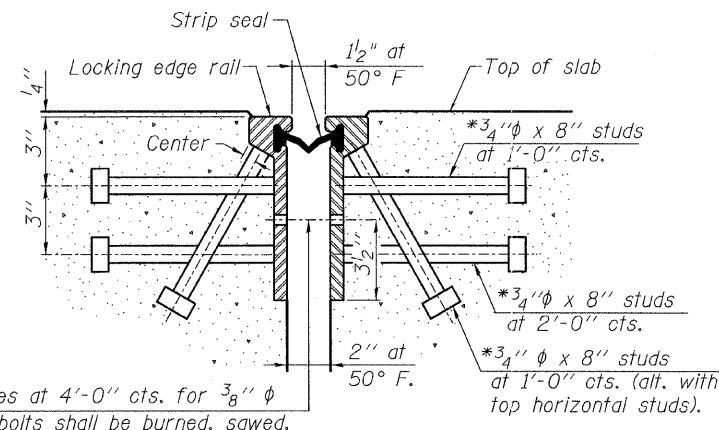
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK CONCRETE PATCHING
 IL. RTE. 59
 OVER
 B.N.S.F. R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0144
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-024 I	DUPAGE	26	20
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

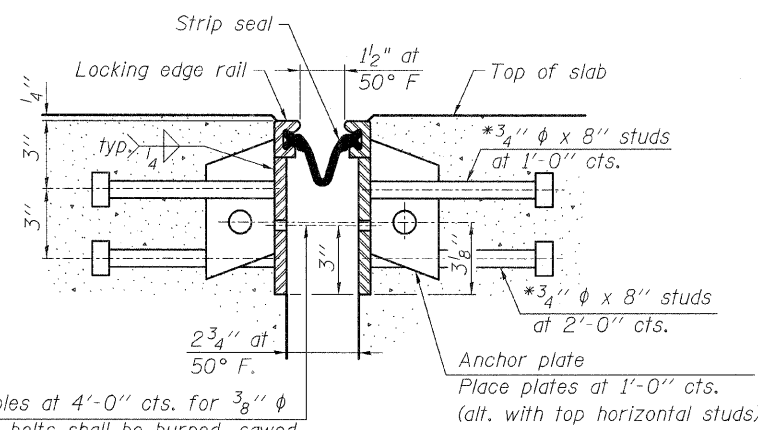
CONTRACT NO. 60C90

*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.
 **When joint is fixed, dimension is set at 1 1/2".



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

SECTION THRU ROLLED RAIL JOINT

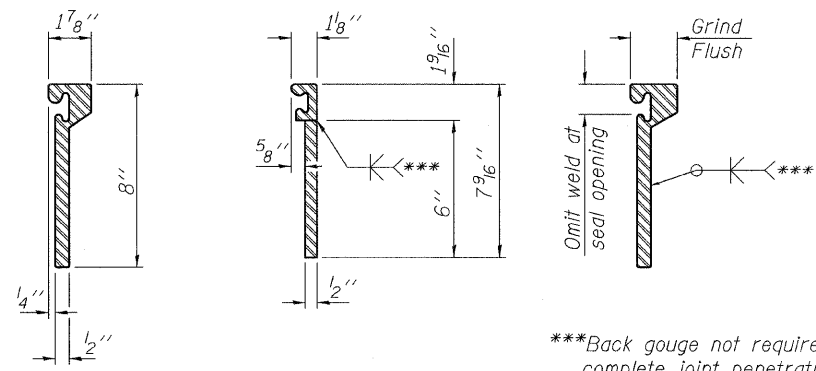


7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

NOTES:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The 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. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
 The manufacturer's recommended installation methods shall be followed.
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

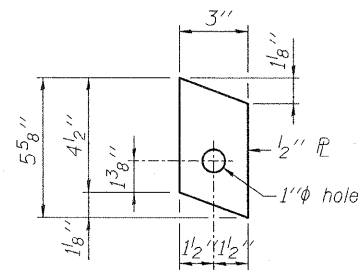


ROLLED (EXTRUDED) RAIL WELDED RAIL

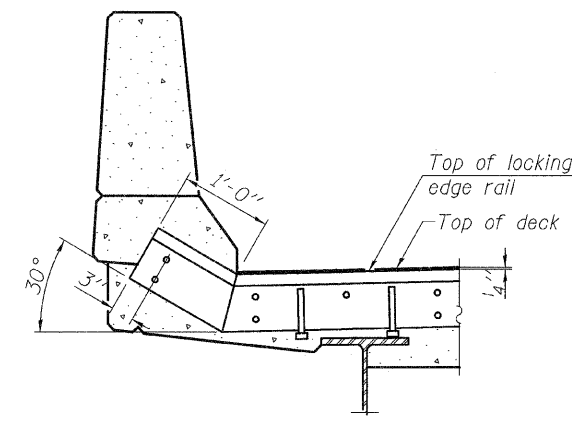
LOCKING EDGE RAIL SPLICE

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

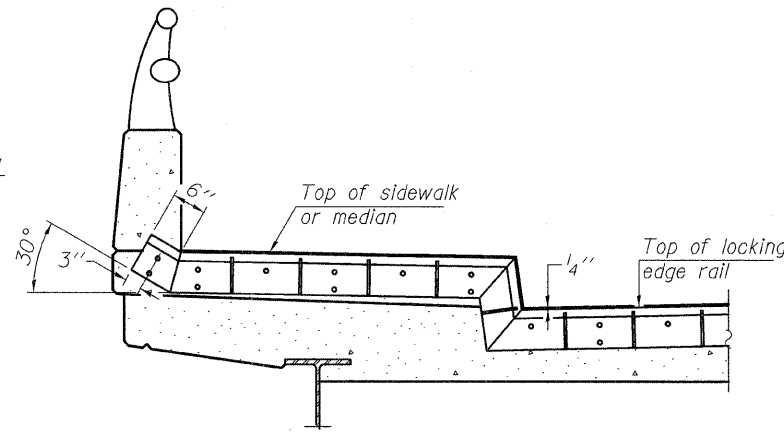
LOCKING EDGE RAILS



ANCHOR PLATE (for welded rail)



AT PARAPET



AT SIDEWALK OR MEDIAN

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

TYPICAL END TREATMENTS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	156

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PREFORMED JOINT STRIP SEAL
 IL. RTE. 59
 OVER
 B.N.S.F. R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 STRUCTURE NO. 022-0144
 SCALE: NONE DATE: JANUARY 12, 2009 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

CONTRACT NO. 60C90

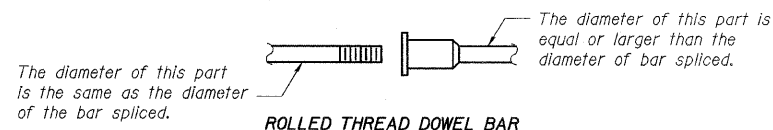
NOTES:

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 (Tension in kips) = $1.25 \times f_y \times A_l$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_l$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

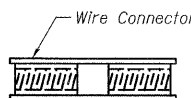
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0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



ROLLED THREAD DOWEL BAR



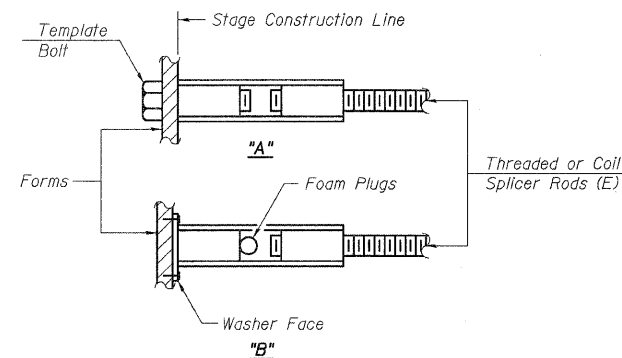
**** ONE PIECE**



WELDED SECTIONS

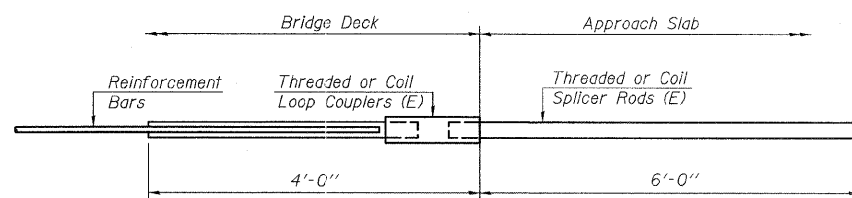
BAR SPLICER ASSEMBLY ALTERNATIVES

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



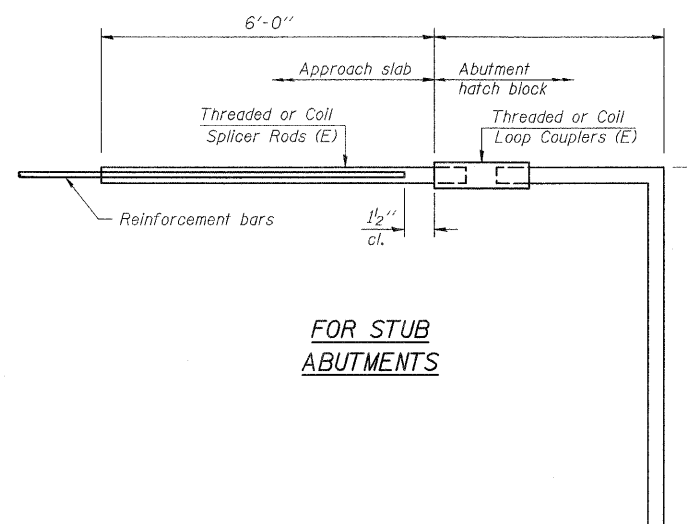
INSTALLATION AND SETTING METHODS

"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.



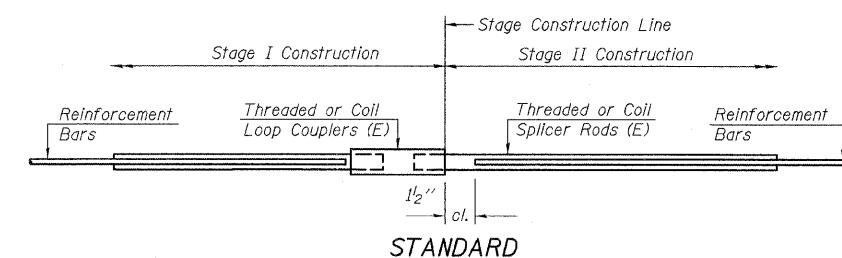
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar		
Min. Capacity =	23.0 kips - tension	
Min. Pull-out Strength =	12.3 kips - tension	
No. Required =	82	



FOR STUB ABUTMENTS

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



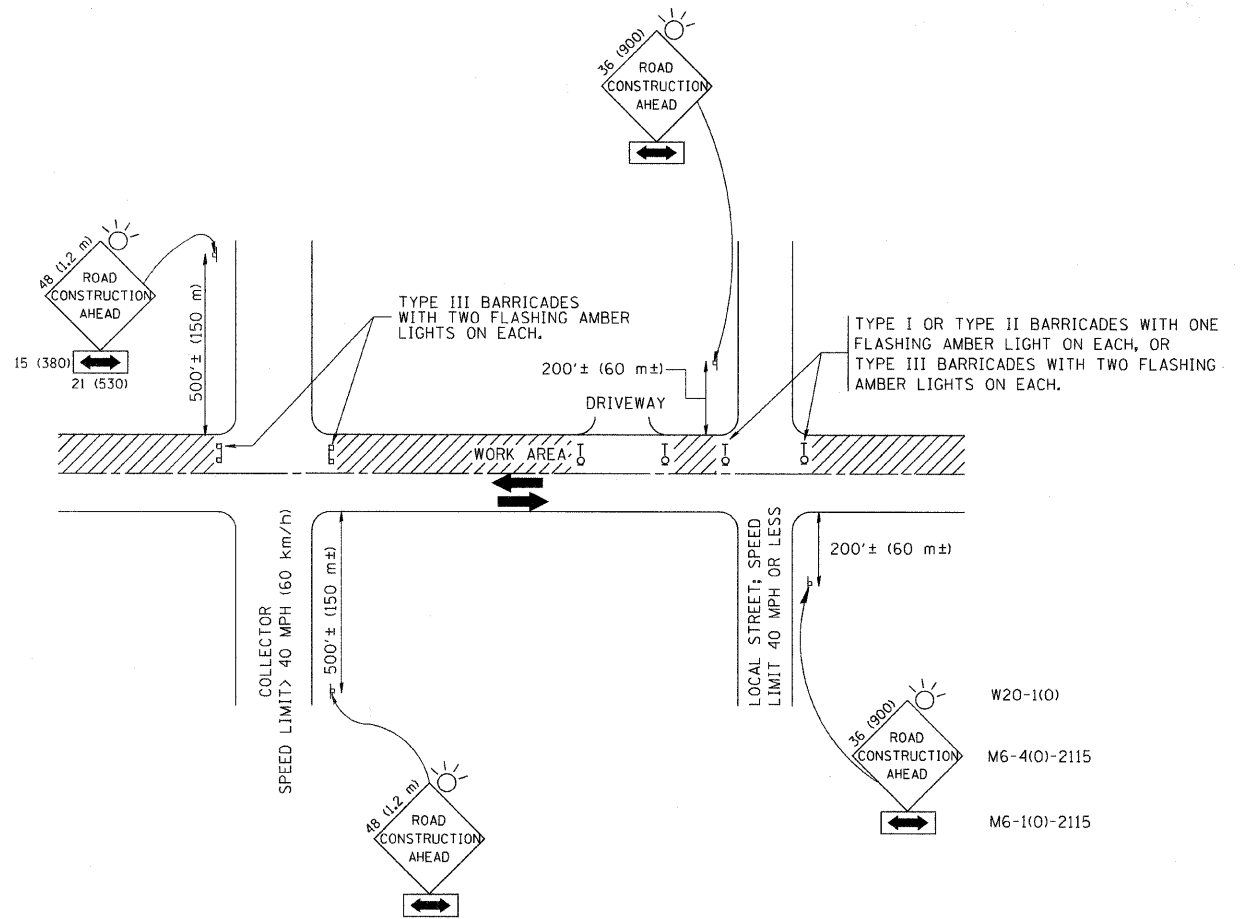
STANDARD

S.N. 022-0143 & 022-0144 FOR EACH STRUCTURE

Bar Size	No. Assemblies Required	Location
#6	32	Slab
#6	16	Abutments
Total	48	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BAR SPLICER ASSEMBLY DETAILS
 IL. RTE. 59
 OVER
 B.N.S.F. R.R.
 F.A.P. RTE. 338 SECTION: 2007-024 I
 DUPAGE COUNTY
 S.N. 022-0143 & S.N. 022-0144
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 12, 2009 CHECKED BY: B.N.S./S.J.P.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.

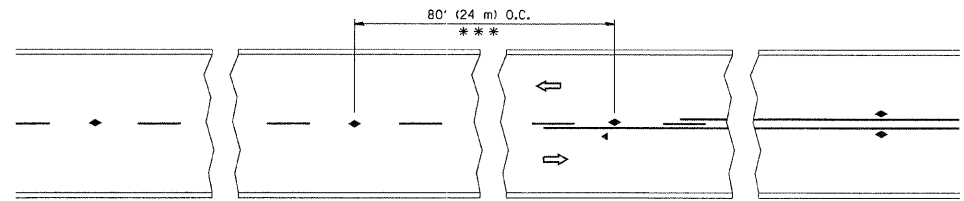
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

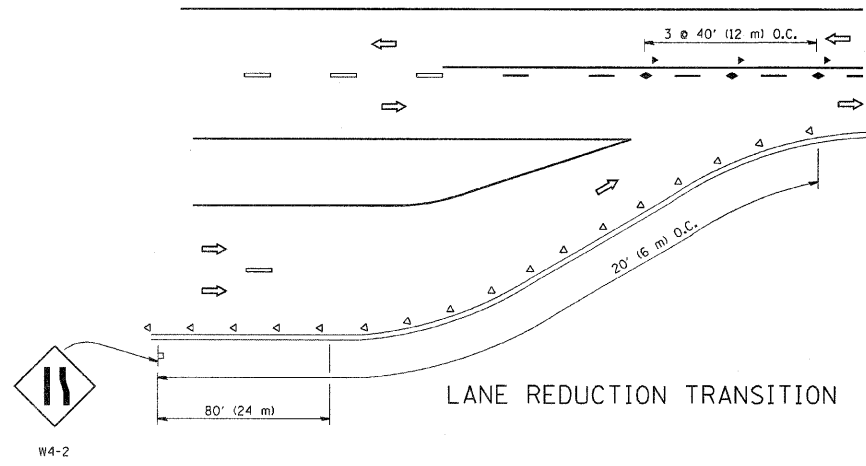
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2007-0241	DuPAGE	26	22
TC-10			CONTRACT NO. 60C90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

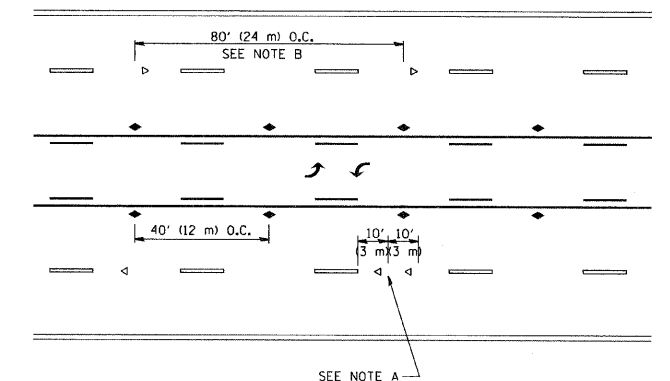


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

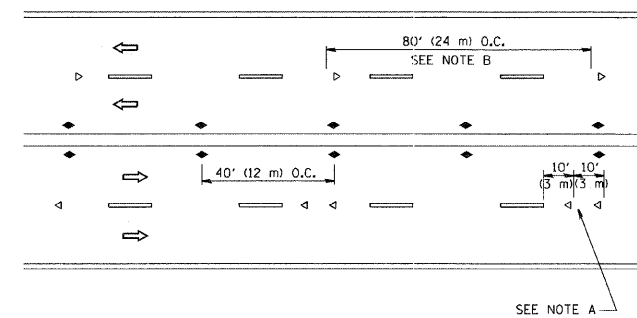
TWO-LANE/TWO-WAY



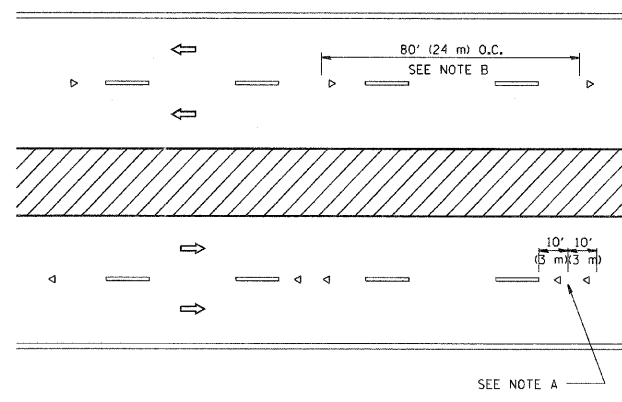
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

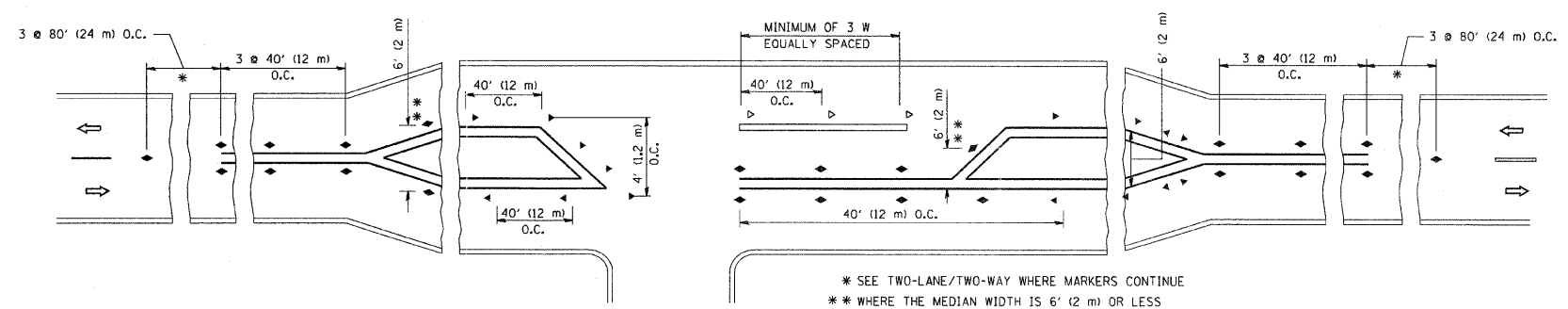
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

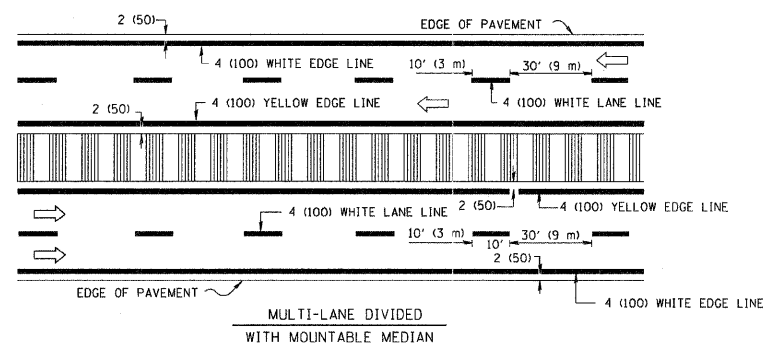
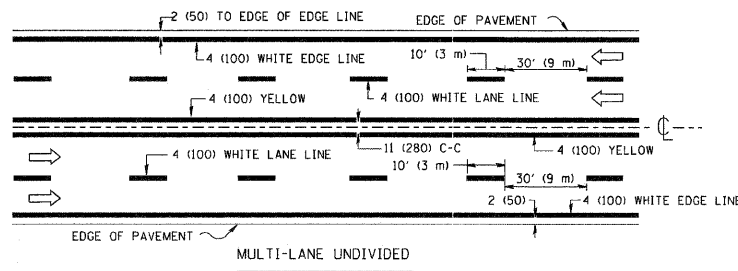
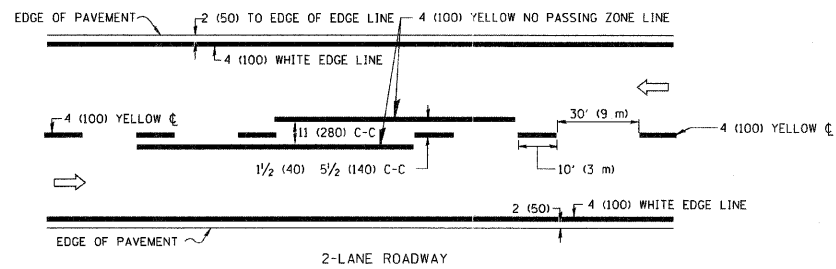


LEFT TURN

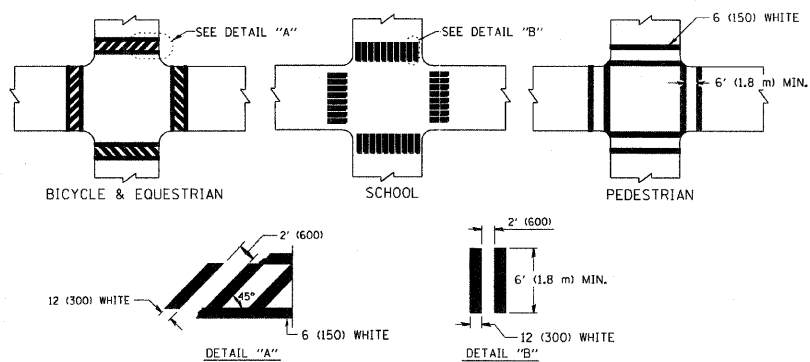
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

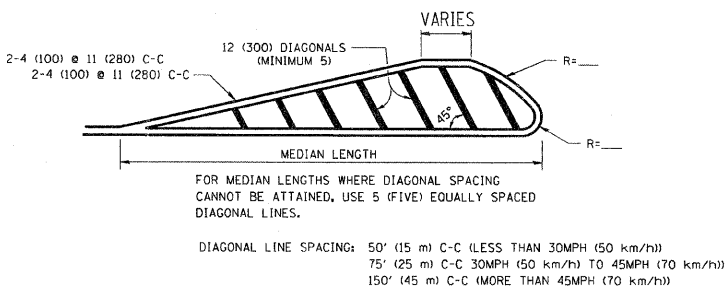
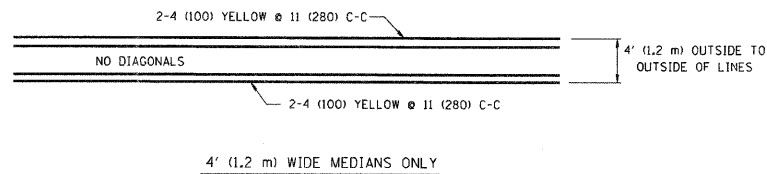
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	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - T. RAMMACHER 03-12-99		RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			TC-11			CONTRACT NO. 60C90	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. VARIOUS TO STA. VARIOUS			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. VARIOUS TO STA. VARIOUS			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



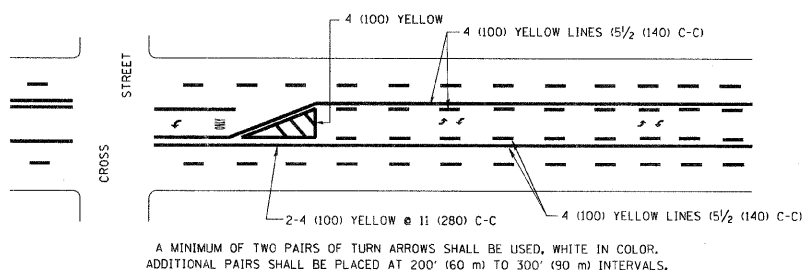
TYPICAL LANE AND EDGE LINE MARKING



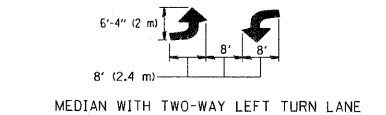
TYPICAL CROSSWALK MARKING



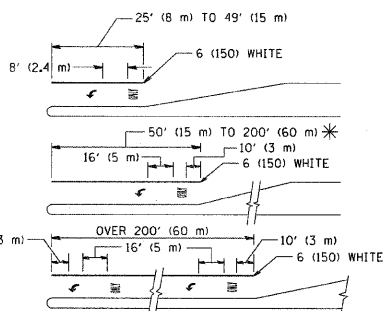
MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING

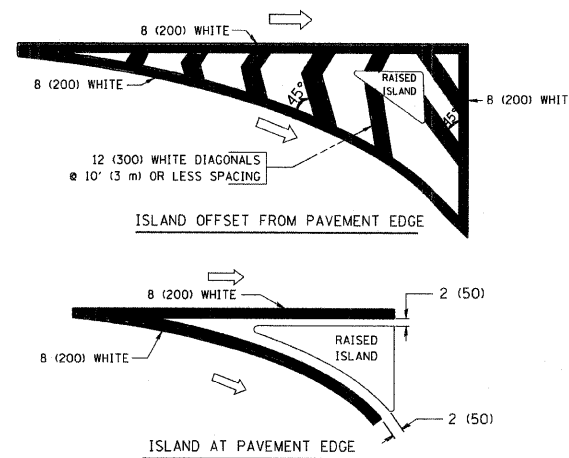


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

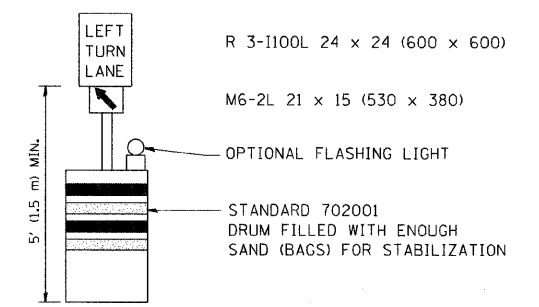
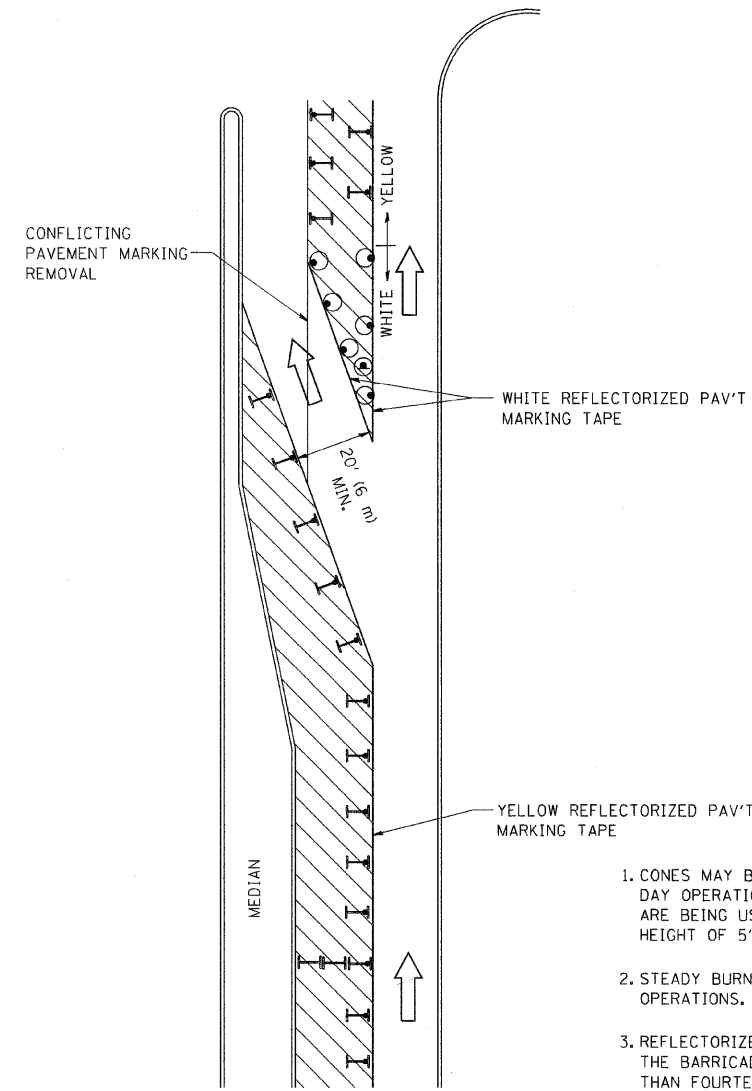


TYPICAL ISLAND MARKING

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 1/2 (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 1/2 (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) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) 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" 15' (4.5 m) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 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.

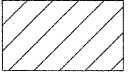





All dimensions are in inches (millimeters) unless otherwise shown.



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

FILE NAME =	USER NAME = gogliano	DESIGNED -	REVISED -T. RAMMACHER 09-08-94
W:\diststd\22x34\to14.dgn		DRAWN -	REVISED - A. HOUSEH 11-07-95
		PLOT SCALE = 50.0000 / IN.	REVISED - A. HOUSEH 10-12-96
		PLOT DATE = 1/4/2008	REVISED -T. RAMMACHER 01-06-00

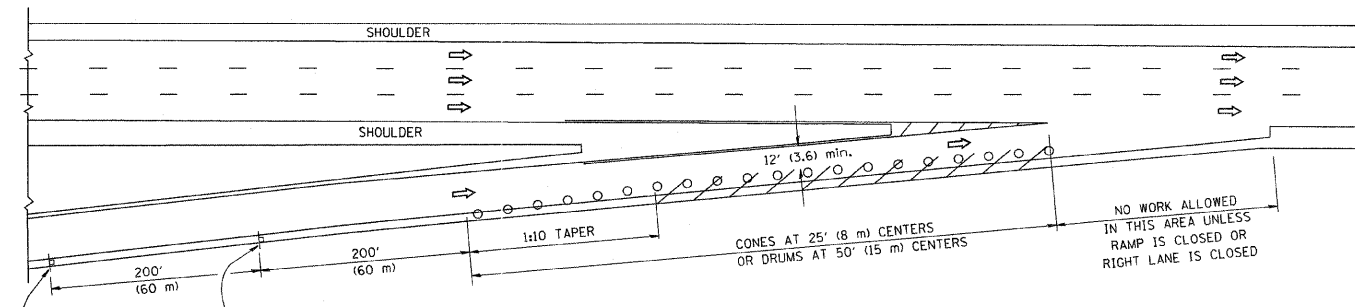
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

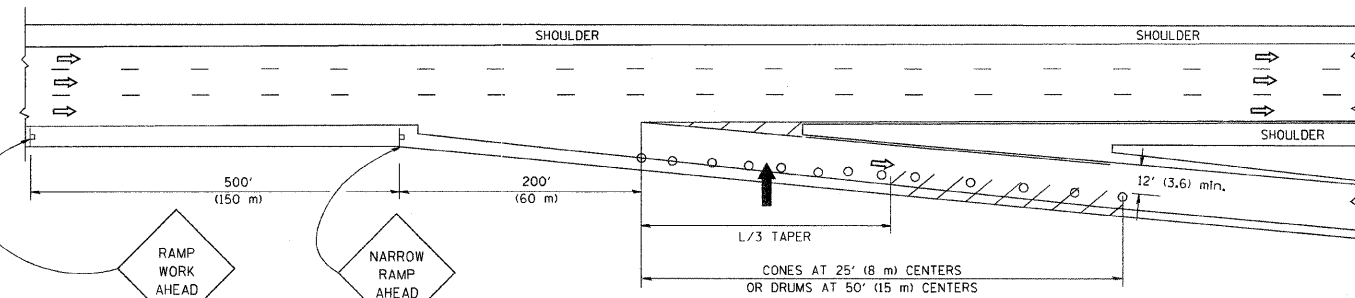
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. VARIOUS TO STA. VARIOUS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-14		CONTRACT NO. 60C90		
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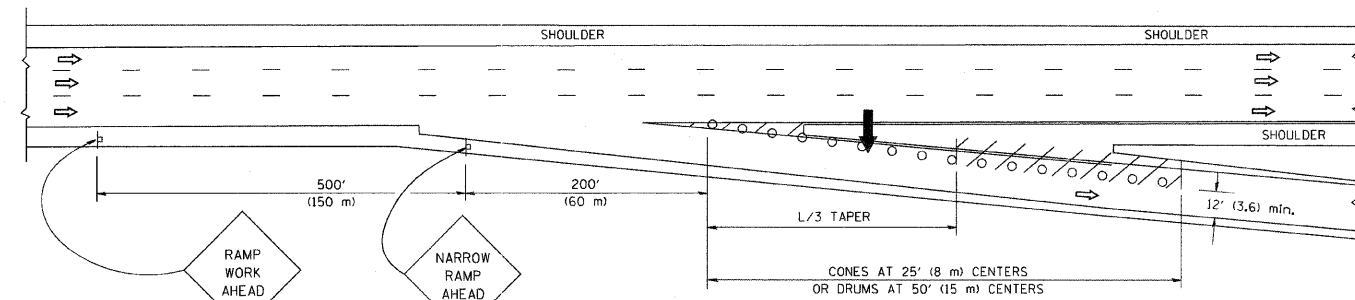
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

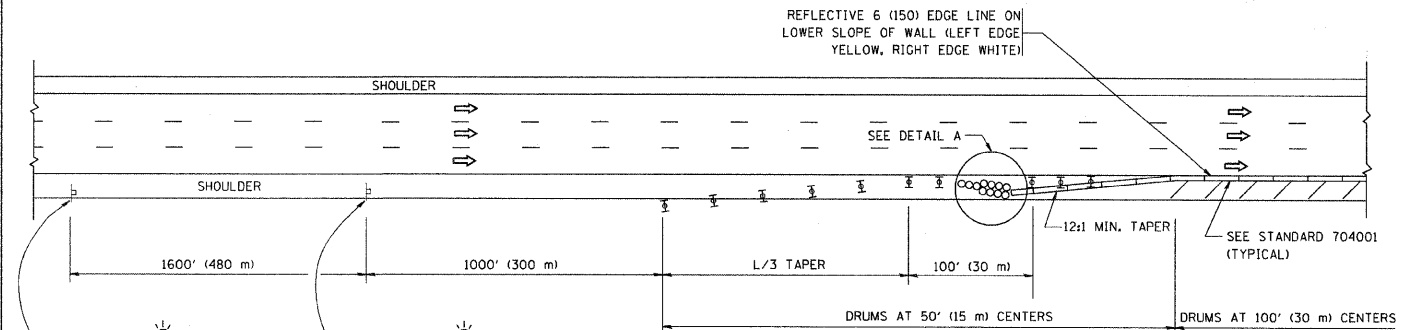
- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

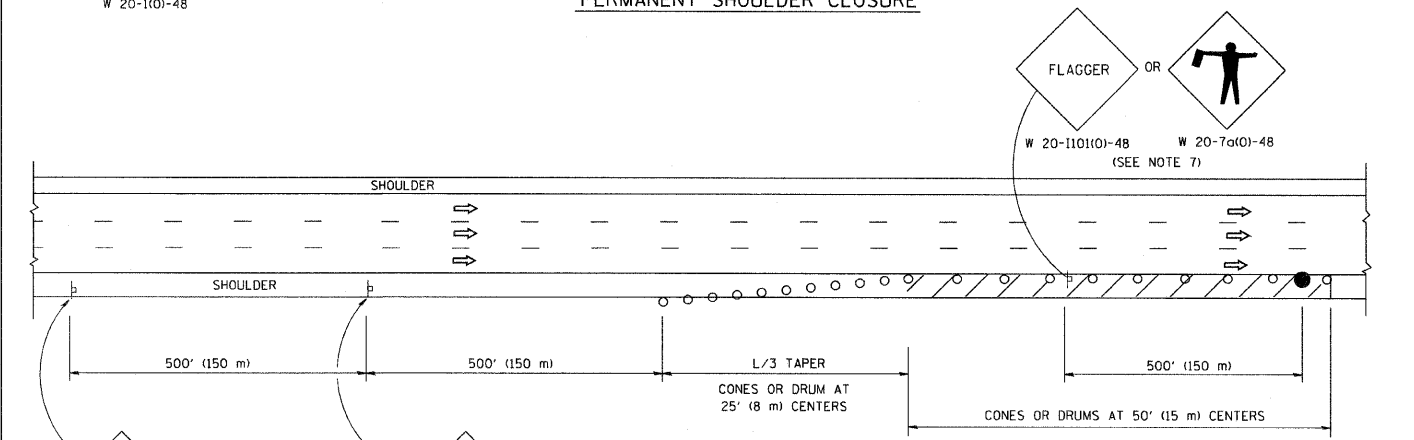
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH L=0.65(WXS) L=(WXS)
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.

FILE NAME = W:\diststd\22x34\td17.dgn	USER NAME = gajlionobt	DESIGNED -	REVISED - J.A.F. 12-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	F.A.P. RTE. 338	SECTION 2007-0241	COUNTY DuPAGE	TOTAL SHEETS 26	SHEET NO. 26	
		DRAWN - D.W.S.	REVISED - 04-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS					
		PLOT SCALE = 50,0000 "/ IN.	REVISED - J.A.F. 12-06			STA. VARIOUS TO STA. VARIOUS					
		PLOT DATE = 1/4/2008	REVISI O - S.P.B. 01-07								
		DATE - 11-96									