STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

F. A. P. ROUTE 311
U. S. ROUTE 34 OVER IL. ROUTE 53
SECTION: 10HB-R
BRIDGE DECK REPLACEMENT & RESURFACE APPROACHES
STRUCTURE NO. 022-0033
DUPAGE COUNTY

PROJECT NO: ACBHF - 03/1 (04/) C-91-023-07

PROJECT LOCATED IN THE VILLAGE OF LISLE

TRAFFIC DATA

 \bigcirc

 \circ

2007 ADT (US RTE 34) = 34,400 VEHICLES PER DAY 2007 ADT (IL RTE 53) = 25,600 VEHICLES PER DAY SPEED LIMIT = 40 MPH (US RTE 34) 35 MPH (IL RTE 53)

> PROJECT BEGINS STA. 640 + 20

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

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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: MICHELLE AQUINO (847) 705–4606 PROJECT MANAGER: RAJENDRA SHAH (847) 705–4555

T 38 N

BURLINGTON NORTHERN SANTA FE RAILROAD

LISLE TOWNSHIP

GROSS & NET LENGTH OF PROJECT = 930 FT = 0.18 MILES

LOCATION MAP

NOT TO SCALE

BRANDON L
BUZZELL
6356
NAPERVILLE
8-11-0
Expires 11-30-10

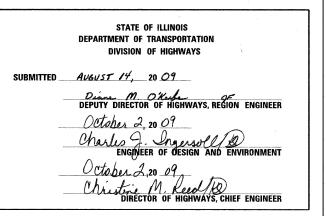
RTE. SECTION COUNTY TOTAL SHEETS NO.

311 10HB-R DUPAGE 53 1

FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60B92

\$53+1=54







PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 60B92

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

STATE STANDARDS

51

52

53

STANDARD NO.	DESCRIPTION
000001 - 05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420401 - 00	BRIDGE APPROACH PAVEMENT CONNECTOR
51 5001 - 03	NAME PLATE FOR BRIDGES
606301 - 04	PCC ISLANDS AND MEDIANS
701 601 - 06	URBAN LANE CLOSURE, MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-04	URBAN LANE CLOSURE, MULTILANE 2W WITH Bidirectional left turn lane
701 701 - 06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701 901 - 01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER

ARTERIAL ROAD INFORMATION SIGN

DRIVEWAY ENTRANCE SIGNING

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL *J.U.L.I.E.* AT (800)892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED.)
- ALL PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE PROJECT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES). ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY
- 6. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD
- DRAINAGE ADJUSTMENT, CLEANING OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- THE RESIDENT ENGINEER SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL
- 10. THE ENGINEER SHALL CONTACT MR. DON CHIARUGI, THE TRAFFIC FIELD ENGINEER, @ 847-741-9857 TWO (2) WEEKS PRIOR TO THE START OF PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED.
- 11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS
- 12. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- 13. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 14. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS
- 15. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 16. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H)
- 17. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 18. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 19. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 20. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE
- 21. SAW CUTTING OF PAVEMENTS, SHOULDERS, ETC., SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN, STRAIGHT EDGE ON THE PORTION REMAINING. THE COST OF SAW CUTTING REMOVAL ITEMS SHALL BE INCLUDED IN THE UNIT PRICES OF THESE ITEMS.

GENERAL NOTES - TRAFFIC CONTROL & PROTECTION

- THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE
- THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO
- ALL EXISTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS IN CONFLICT WITH THE MAINTENANCE OF TRAFIC STRIPING SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "PAVEMENT
- THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT MARKING TAPE WHICH CONFLICTS WITH THE NEXT STAGE OR FINAL STRIPING. REMOVAL OF TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT, "WORK ZONE PAVEMENT MARKING REMOVAL".
- ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED ON THE PLANS, OR HIGHWAY STANDARDS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
- ALL DRUMS, VERTICAL PANELS AND BARRICADES ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH STEADY-BURNING LIGHTS.
- ALL EXISTING SIGNS WITHIN THE LIMITS OF MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
- TEMPORARY, OFF-PEAK HOUR LANE CLOSURÉS MUST BE REQUESTED THROUGH THE ENGINEER AND AS SPECIFIED IN THE SPECIAL PROVISIONS. WHEN OFF-PEAK HOUR OR WEEKEND LANE CLOSURES ARE REQUIRED, A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE WEEK PROR TO THE CLOSURE. THE MESSAGE SIGN WORDING AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
- ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE PER SQUARE FEET FOR "TEMPORARY INFORMATION STGNING".
- TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OF CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF
- ALL TEMPORARY PAVEMENT MARKINGS PROPOSED WITHIN THE WORK AREA SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION PHASE CHANGE.
- FOR ADDITIONAL BRIDGE CONSTRUCTION STAGING INFORMATION, SEE STRUCTURAL PLANS.

SHEET NO. 2 OF 53 SHEETS STA

8/7/2009	K:\11225510\C:v:1\CADD\Sheets\225510_S0G,dqn	*PLT_SCALE*	tracen
11	11	П	D
ш	ш	백	ш

		···	URBAN	801.FED.	20% STATE	
				CONSTR	RUCTION TYPE CO	DDE
	SUMMARY OF QUANTITIES		TOTAL	ROADWAY IOOO-2A	BRIDGE SN 022-0033 X271-2A	VILLAGE OF LISLE X271-2A 100% L.A
CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	QUANTITY	QUANTITY	QUANTITY
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	432		432	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4	4		
40600300	AGGREGATE (PRIME COAT)	TON	19	19		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	524	524		***************************************
40600895	CONSTRUCTING TEST STRIP	EACH	1	1		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	62	62		
40603395	HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	443	443		
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	74	74		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	4,520	4,520		
44000600	SIDEWALK REMOVAL	SQ FT	365	365		
44000700	APPROACH SLAB REMOVAL	SQ YD	440	440		
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	146	146		
44003700	MEDIAN REMOVAL (SPECIAL)	SQ FT	2,874	2,874		
50102400	CONCRETE REMOVAL	CU YD	60.6		60.6	
50104650	SLOPE WALL REMOVAL	SQ YD	5.6		5.6	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1	******
50157300	PROTECTIVE SHIELD	SQ YD	871		871	
50200100	STRUCTURE EXCAVATION	CU YD	489.4		489.4	
50300100	FLOOR DRAINS	EACH	8		8	
50300225	CONCRETE STRUCTURES	CU YD	73.6		73.6	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	713.1		713.1	
50300260	BRIDGE DECK GROOVING	SQ YD	1,200		1, 200	
50300285	FORM LINER TEXTURED SURFACE	SQ FT	1, 284			1, 28
	PROTECTIVE COAT	SQ YD	2, 169	344	1,825	
	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	330		330	
50500505	STUD SHEAR CONNECTORS	EACH	5, 664		5,664	***************************************
	CLEANING AND PAINTING STEEL BRIDGE	L SUM	1			1
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1			1
	REINFORCEMENT BARS, EPOXY COATED		137,440		137,440	
	BAR SPLICERS	EACH	797		797	
	SLOPE WALL 4 INCH	SQ YD	5.6		5.6	
	NAME PLATES	EACH	3.3		1	
	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24	
	ANCHOR BOLTS, 1"	EACH	48		48	
	EPOXY CRACK INJECTION	FOOT	12		12	
	GEOCOMPOSITE WALL DRAIN	SQ YD	177		177	
	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	177		177	
	CONCRETE MEDIAN, TYPE SB-6.06 (SPECIAL)	SQ FT	2,874	2,874	111	
00013300	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2,014	2,014		

	67100100	MOBILIZATION	L SUM	1	1		
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1		
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1		
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10		
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,290	1,290		
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3, 260	3, 260		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	520	520		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	488	488		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2, 758	2, 758		
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	64	64		
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	621	621		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	116	116		
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	19	19		
¥	78200520	BARRIER WALL MARKERS, TYPE B	EACH	42	. 42		
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,003	1,003		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	116	116		
*	81100700	CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVINIZED STEEL	FOOT	30	30		
*	81300835	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"X18"X10"	″[EACH	2	2		
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2		
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	73	73		
*	89502200	MODIFY EXISTING CONTROLLER	EACH	2	2		
*	89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	2,950	2, 950		
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	214	214		
	X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	164		164	
	X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5	SQ FT	20		20	
	X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	8,490	8,490		
*	X0325938	TEMPORARY WIRELESS INTERCONNECT, COMPLETE	L SUM	1	1		
	X0326096	ALUMINUM RAILING, SPECIAL	F00T	300		300	
*	XX003079	REMOVE JUNCTION BOX	EACH	2	2		
	XX007023	STAINING CONCRETE STRUCTURES	SQ YD	186.2			186.2
-	Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
	Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
	Z0030390	IMPACT ATTENUATORS, REPLACEMENT (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
	Z0031200	JACKING AND CRIBBING	EACH	4		4	
Δ	Z0076600	TRAINEES	HOUR	500	500		
					*		10 100

SUMMARY OF QUANTITIES

67000400 ENGINEER'S FIELD OFFICE, TYPE A

ITEM DESCRIPTION

* SPECIALTY ITEM

△ Y080

rjngroup

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

US RTE. 34 OVER IL RTE. 53 STRUCTURE NO. 022-0033 SCALE: SHEET NO. 3 OF 53 SHEETS STA.

SUMMARY OF QUANTITIES

TO STA.

801. FED. / 201. STATE

QUANTITY QUANTITY

ROADWAY

I000-2A

URBAN

TOTAL UNIT QUANTITY

CONSTRUCTION TYPE CODE

BRIDGE SN 022-0033 X271-2A

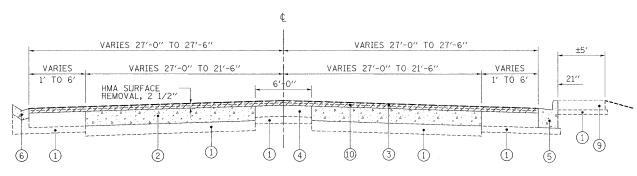
VILLAGE
OF LISLE
X271-2A
100% L.A.
QUANTITY

Pev.

EXISTING TYPICAL SECTION OGDEN AVE.

STA. 640+20 TO STA. 643+83.4 STA. 646+07.1 TO STA. 647+89

- * STA. 646+07.1 TO STA. 646+67 (COMBINATION CONCRETE CURB & GUTTER) STA. 646+67 TO STA. 647+89 (CONCRETE GUTTER)
- ** MEDIAN REMOVAL BEGINS AT STA. 640+70



EXISTING TYPICAL SECTION OGDEN AVE.

STA. 647+89 TO STA. 649+50

LEGEND

- 1 EXISTING AGGREGATE BASE COURSE
- EXISTING PCC PAVEMENT, 9 1/4" (±)
- EXISTING HOT-MIX ASPHALT OVERLAY, 3" (±)
- EXISTING HOT-MIX ASPHALT BASE COURSE, 7 3/4"
- (5) EXISTING COMBINATION CURB AND GUTTER, TYPE B-6.18
- 6 EXISTING GUTTER, TYPE B
- EXISTING CONCRETE MEDIAN REMOVAL (SPECIAL)
- 8 EXISTING HOT-MIX ASPHALT SHOULDER
- 9 EXISTING PCC SIDEWALK
- PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N70, VARIABLE DEPTH (3/4" MIN.)
- PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- PROPOSED CONCRETE MEDIAN, TYPE SB 6.06 (SPECIAL)
- TIE BARS, NO. 6, 24" LONG, EMBEDDED 8" INTO EXISTING PAVEMENT @ 24" O.C.

	•
	cjn group
E	xcellence through Ownership

00 West Vheaton,	Front Stree II 60187	t

DESIGNED	-		REVISED		
DRAWN	-	JT	REVISED	-	Man same same
CHECKED	-	MK	REVISED	~	
DATE	-	8/6/09	REVISED	-	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

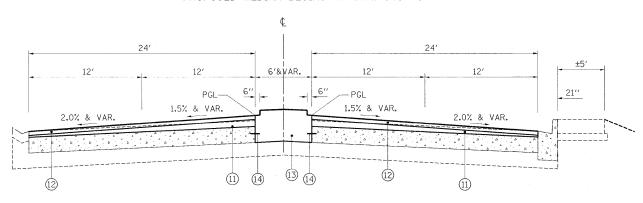
US RTE. 34 STRUCTU						EX	KISTIN
SCALE:	SHEET	NO.	_4_	OF	53	SHEETS	STA.

EXISTING	TYPICAL	SECTIONS	F.A.P. RTE.	
			311	

COUNTY TOTAL SHEE NO. SECTION CONTRACT NO. 60B92

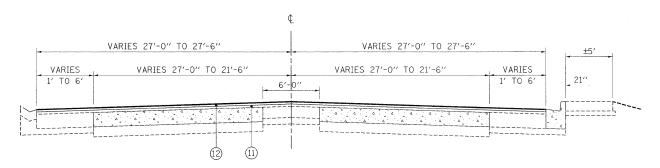
PROPOSED TYPICAL SECTION OGDEN AVE.

STA. 640+20 TO STA. 643+83.4 ** PROPOSED MEDIAN BEGINS AT STA. 640+70



PROPOSED TYPICAL SECTION OGDEN AVE.

STA. 646+07.1 TO STA. 647+89



PROPOSED TYPICAL SECTION OGDEN AVE.

STA. 647+89 TO STA. 649+50

HOT-MIX ASPHALT MIXTURE RE	QUIREMENTS	
MIXTURE USES	AC TYPE	VOIDS
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	SBS / SBR PG 70-22	4% @ 90 GYR.
LEVELING BINDER (MACHINE METHOD), N70, (IL-9.5mm)	PG 64-22 *	4% @ 70 GYR.

* RAP % NOTE UNDER THE CHART.

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

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

LEGEND

- 1 EXISTING AGGREGATE BASE COURSE
- EXISTING PCC PAVEMENT, 9 1/4" (±)
- EXISTING HOT-MIX ASPHALT OVERLAY, 3" (±)
- EXISTING HOT-MIX ASPHALT BASE COURSE, 7 3/4"
- EXISTING COMBINATION CURB AND GUTTER, TYPE B-6.18
- EXISTING GUTTER, TYPE B
- EXISTING CONCRETE MEDIAN REMOVAL (SPECIAL)
- EXISTING HOT-MIX ASPHALT SHOULDER
- EXISTING PCC SIDEWALK
- PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N70, VARIABLE DEPTH (3/4" MIN.)
- PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- PROPOSED CONCRETE MEDIAN, TYPE SB 6.06 (SPECIAL)
- TIE BARS, NO. 6, 24" LONG, EMBEDDED 8" INTO EXISTING PAVEMENT @ 24" O.C.

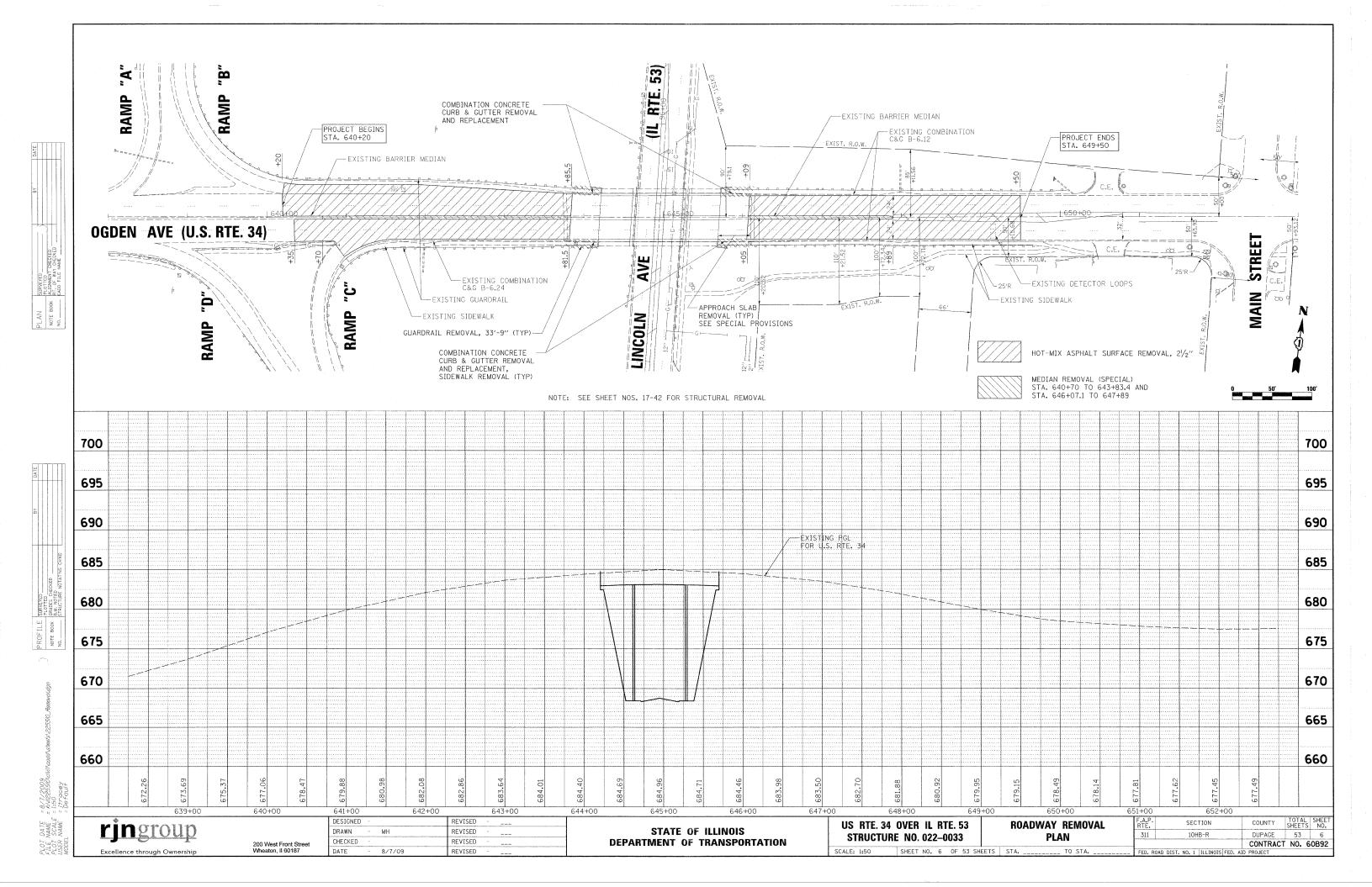
200 West Front Street Wheaton, II 60187

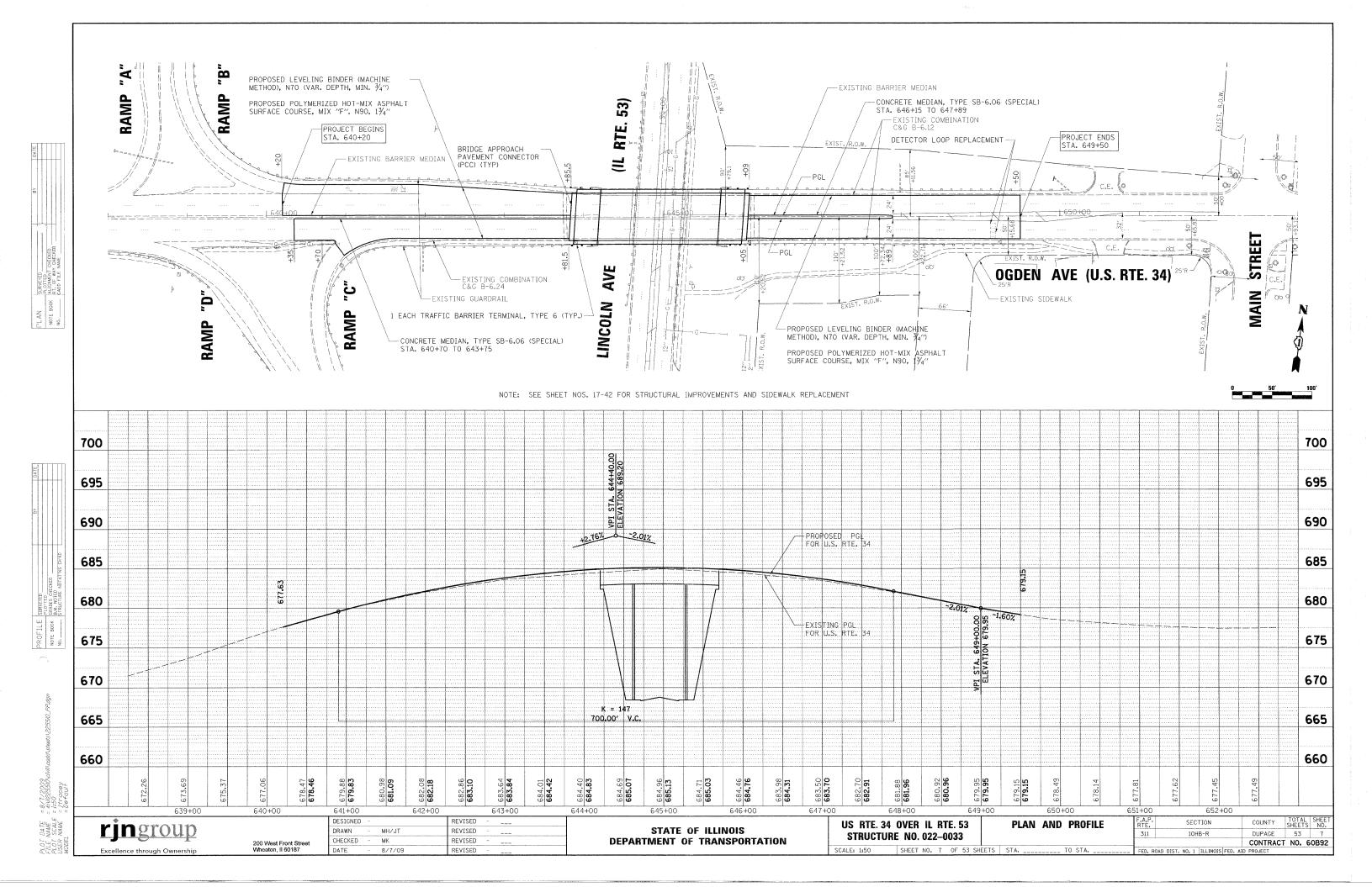
DESIGNED REVISED DRAWN REVISED CHECKED REVISED

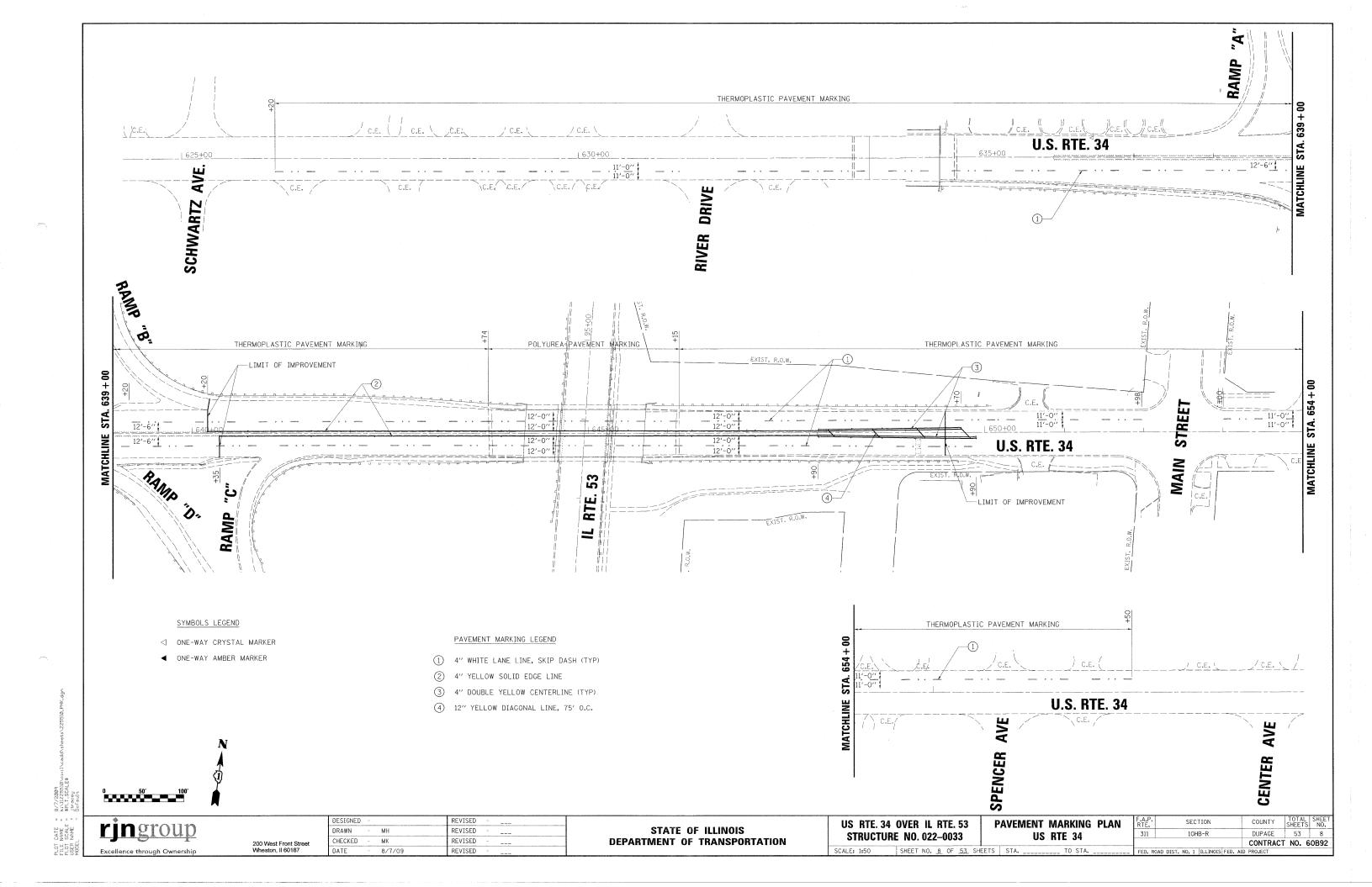
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** US RTE. 34 OVER IL RTE. 53 **STRUCTURE NO. 022-0033**

PROPOSED TYPICAL SECTIONS

SECTION COUNTY TOTAL SHEE DUPAGE CONTRACT NO. 60B92

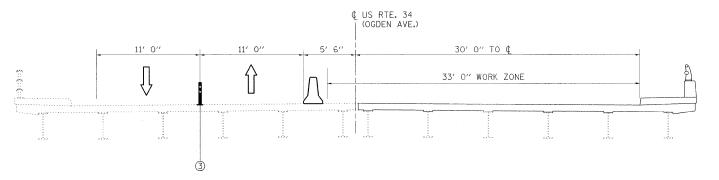






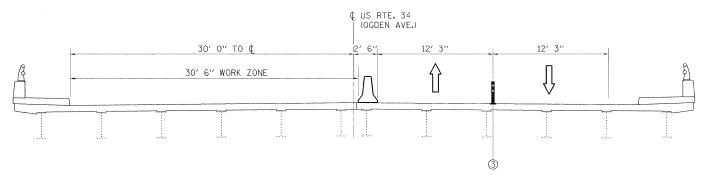
U.S. RTE. 34 - PRE-STAGE

(LOOKING EAST)



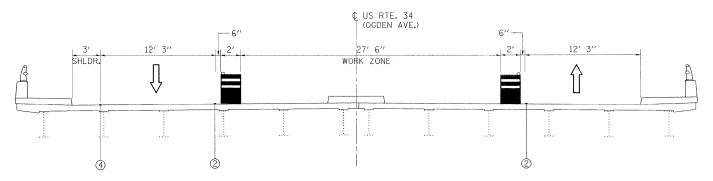
U.S. RTE. 34 - STAGE I

(LOOKING EAST)



U.S. RTE. 34 - STAGE II

(LOOKING EAST)



U.S. RTE. 34 - STAGE III

(LOOKING EAST)

PRE-STAGE

- REMOVE CONCRETE MEDIAN STA. 640+70 TO 643+75 AND STA. 646+15 TO 647+89
- TO BE FLUSH WITH ADJACENT PAVEMENT WITHIN THE LIMITS SHOWN.

 * PLACE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATOR, TEMPORARY.
- * REMOVE CONFLICTING MARKINGS AND IMPLEMENT STAGE I MOT PAVEMENT MARKINGS WITHIN THE WORK ZONE.
- MAINTENANCE OF TRAFFIC:
 * CLOSE INSIDE LANE IN BOTH DIRECTIONS PER THE MOT PLANS.

STAGE I

- CONSTRUCTION:
 PERFORM STRUCTURAL WORK ON SOUTH HALF OF DECK AND ABUTMENTS.
- * PARTIAL REMOVAL AND RESURFACING OF ROADWAY (TO PERMIT TRAFFIC FOR STAGE II WORK).
- * MISCELLANEOUS WORK ALONG THE SOUTH EDGE OF PAVEMENT.

 * RELOCATE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATOR, TEMPORARY.
- * REMOVE CONFLICTING MARKINGS AND IMPLEMENT STAGE II MOT PAVEMENT MARKINGS WITHIN THE WORK ZONE.

- MAINTENANCE OF TRAFFIC:

 * U.S. 34 TRAFFIC REDUCED TO ONE LANE IN EACH DIRECTION, AND SHIFTED TO THE NORTH SIDE OF THE EXISTING BRIDGE DECK.

 * IL 53 EITHER THE INSIDE OR OUTSIDE LANE(S) WILL BE CLOSED, PER THE MAINTENANCE OF TRAFFIC PLANS (PLANS SHOW WORK IN BOTH DIRECTIONS). CLOSURES ARE ANTICIPATED TO BE LIMITED TO OFF-PEAK HOURS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

STAGE II

CONSTRUCTION:

- * PERFORM STRUCTURAL WORK ON NORTH HALF OF DECK AND ABUTMENTS.

 * PARTIAL REMOVAL AND RESURFACING OF ROADWAY (TO PERMIT TRAFFIC FOR STAGE III WORK).
- * MISCELLANEOUS WORK ALONG THE NORTH EDGE OF PAVEMENT.
- * REMOVE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATOR, TEMPORARY.
 * REMOVE CONFLICTING MARKINGS AND IMPLEMENT SHORT-TERM PAVEMENT

- MAINTENANCE OF TRAFFIC:
 * U.S. 34 TRAFFIC REDUCED TO ONE LANE IN EACH DIRECTION, AND SHIFTED TO THE SOUTH SIDE OF THE EXISTING BRIDGE DECK.

 * IL 53 - EITHER THE INSIDE OR OUTSIDE LANE(S) WILL BE CLOSED, PER THE
- MAINTENANCE OF TRAFFIC PLANS (PLANS SHOW WORK IN BOTH DIRECTIONS). CLOSURES ARE ANTICIPATED TO BE LIMITED TO OFF-PEAK HOURS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

STAGE III

CONSTRUCTION:

- * COMPLETE MEDIAN REMOVAL AND RECONSTRUCT CONCRETE MEDIAN. ON DECK AND PAVEMENT.
- * RESURFACE APPROACH AND DEPARTURE PAVEMENT IN BOTH DIRECTIONS.
- * APPLY BOTH SHORT-TERM AND PERMANENT PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS.
- * OTHER MISCELLANEOUS WORK.

- MAINTENANCE OF TRAFFIC:
 * U.S. 34 CLOSE INSIDE LANE IN BOTH DIRECTIONS PER THE MOT PLANS. * U.S. 34 - CLOSE INSIDE LANE IN BOTH DIRECTIONS PER THE MOT PLANS.
 ONCE MEDIAN HAS BEEN RECONSTRUCTED AND THERE ARE NO DROP-OFFS TO THE
 PAVEMENT, DAILY LANE CLOSURES PER STD. 701601 MAY BE USED.
 IL 53 - EITHER THE INSIDE OR OUTSIDE LANE(S) WILL BE CLOSED, PER THE
 * MAINTENANCE OF TRAFFIC PLANS (PLANS SHOW WORK IN BOTH DIRECTIONS).
- CLOSURES ARE ANTICIPATED TO BE LIMITED TO OFF-PEAK HOURS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SEE SHEET 2 FOR TRAFFIC CONTROL AND PROTECTION NOTES.

LEGEND

- (1) EXISTING PAVEMENT MARKING
- 2) TYPE III TEMPORARY PAVEMENT MARKING TAPE, FOR WET CONDITIONS, 4" SOLID YELLOW LINE (TYP)
- 3) TYPE III TEMPORARY PAVEMENT MARKING TAPE, FOR WET CONDITIONS, 4" DOUBLE YELLOW LINE @ 11" O.C. (TYP) STA. 43+25 TO STA. 46+65 FLEXIBLE DELINEATORS
- (4) TYPE III TEMPORARY PAVEMENT MARKING TAPE, FOR WET CONDITIONS, 4" SOLID WHITE LINE (TYP)

ringroup

200 West Front Street Wheaton II 60187

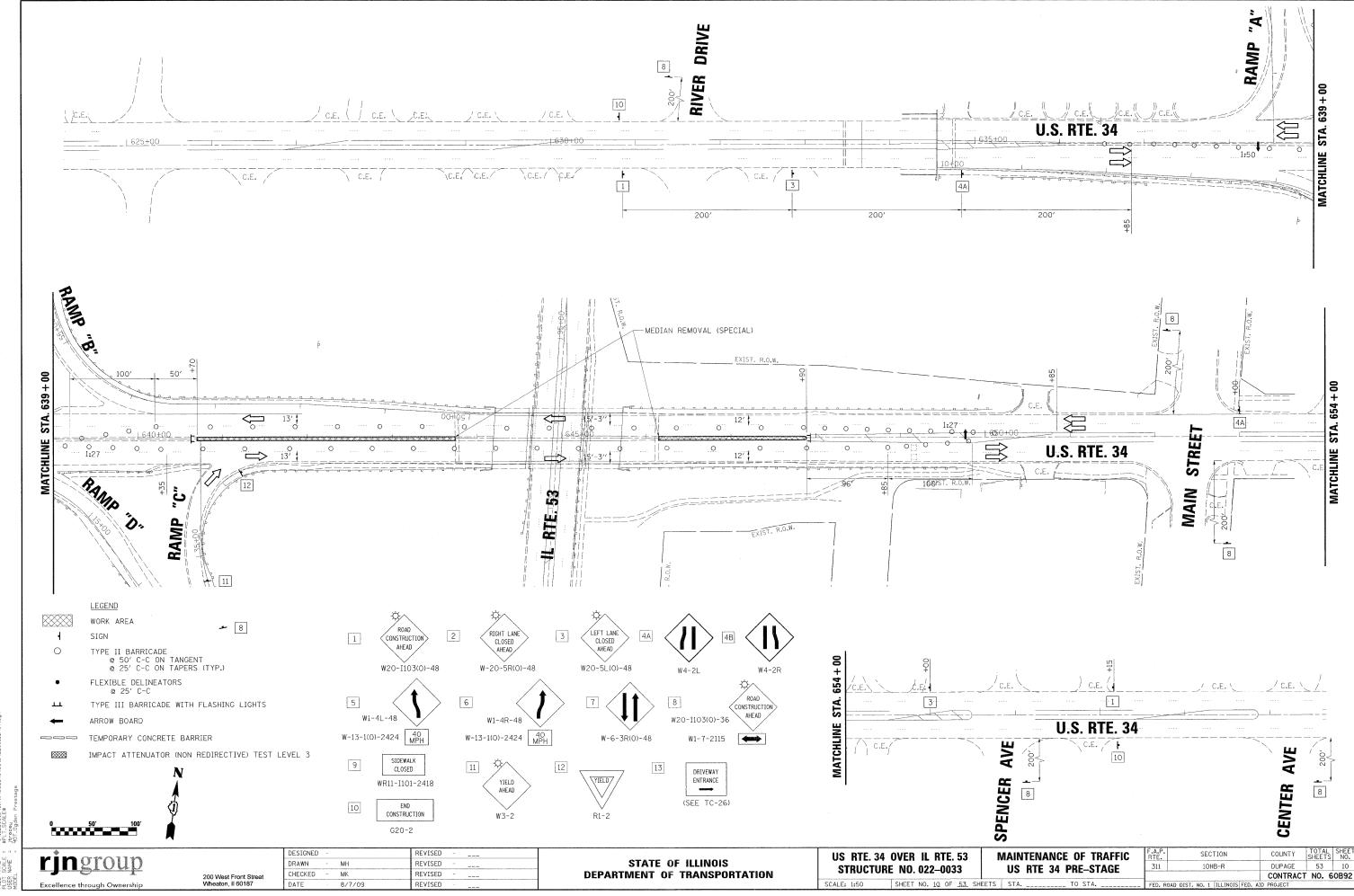
DESIGNED REVISED DRAWN REVISED CHECKED MK REVISED DATE 8/7/09 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** US RTE. 34 OVER IL RTE. 53 **STRUCTURE NO. 022-0033**

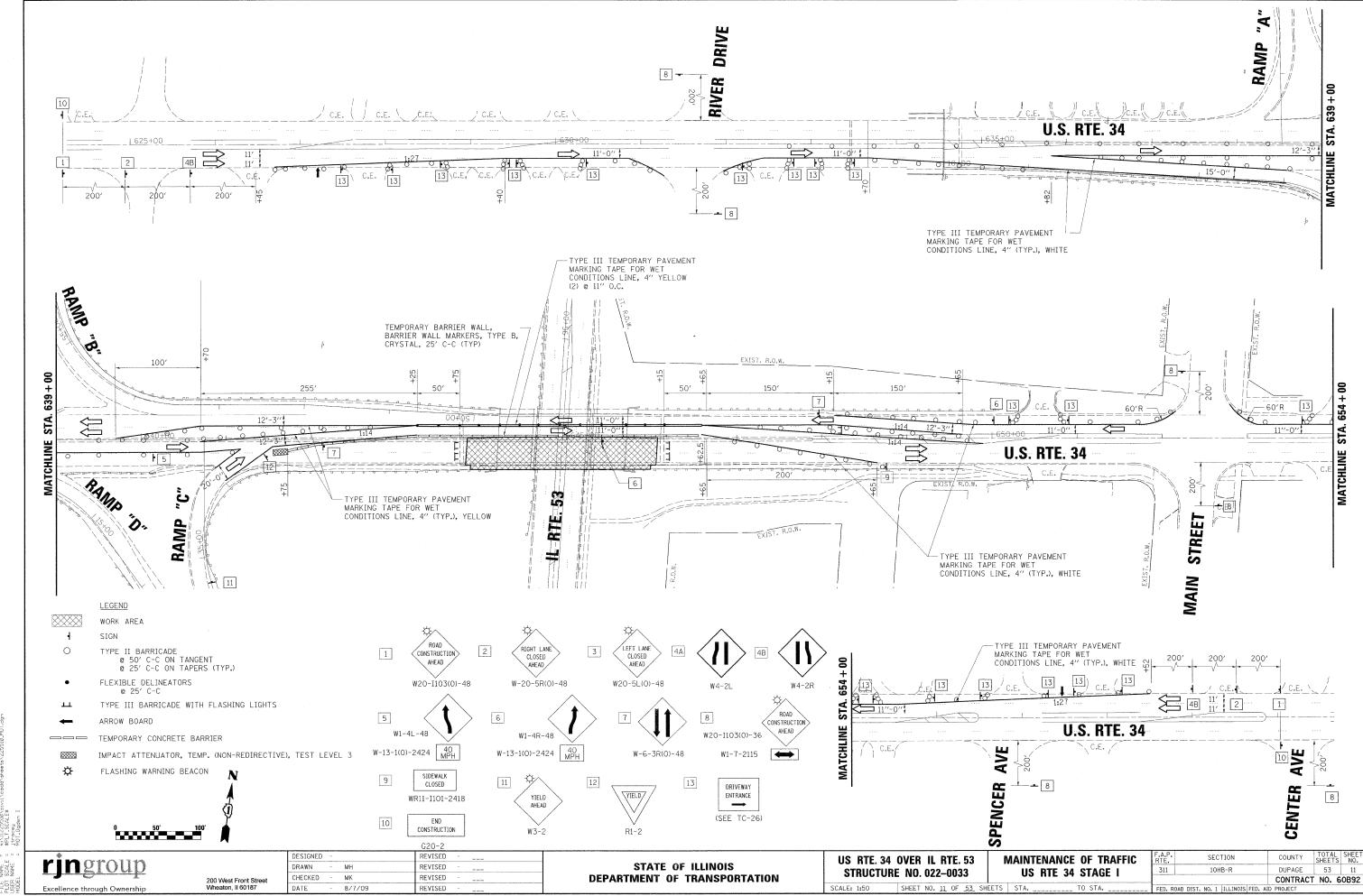
SHEET NO. 9 OF 53 SHEETS STA.

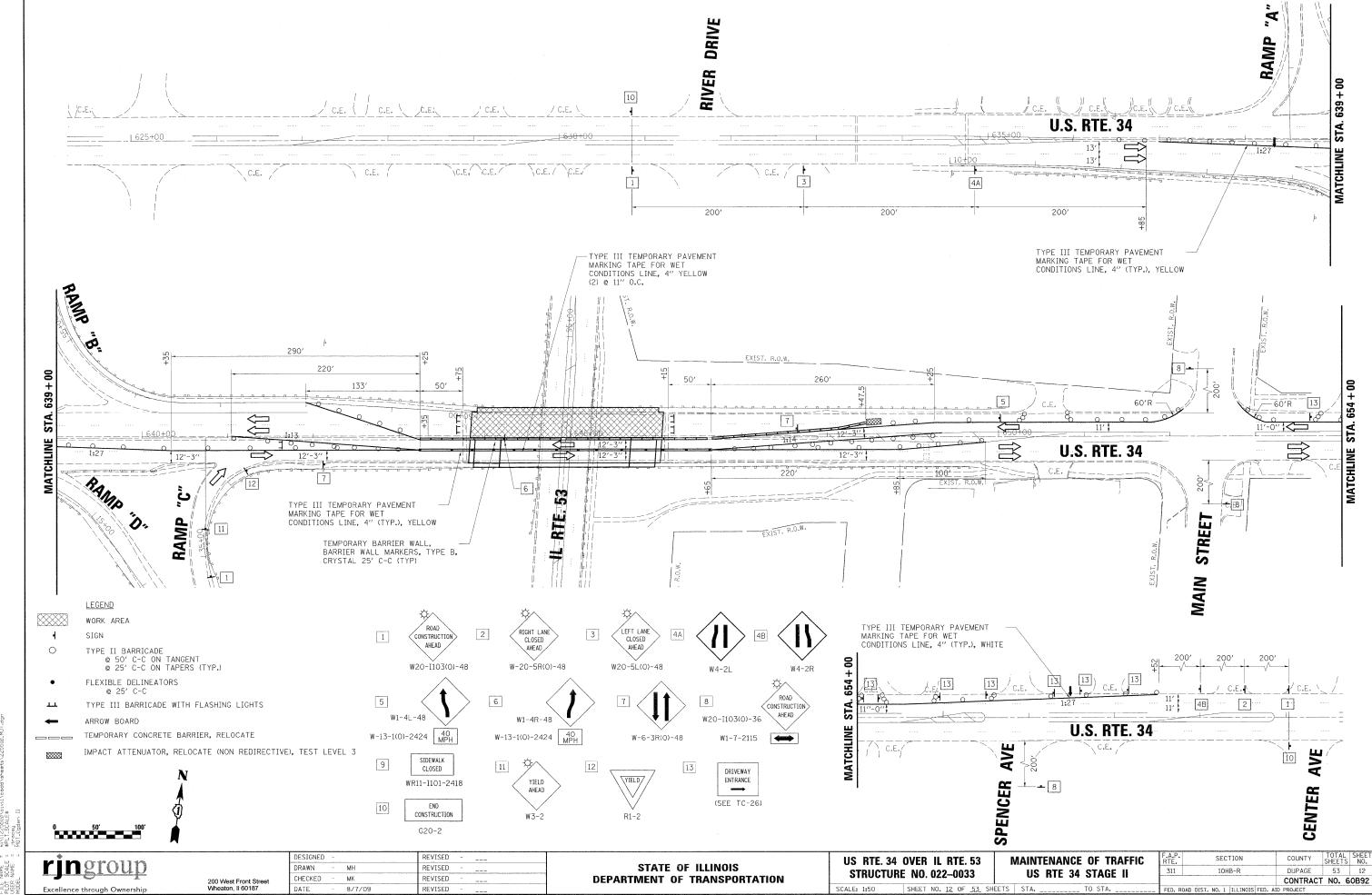
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

RTE. SECTION COUNTY TOTAL SHEE DUPAGE 10HB-6 CONTRACT NO. 60B92

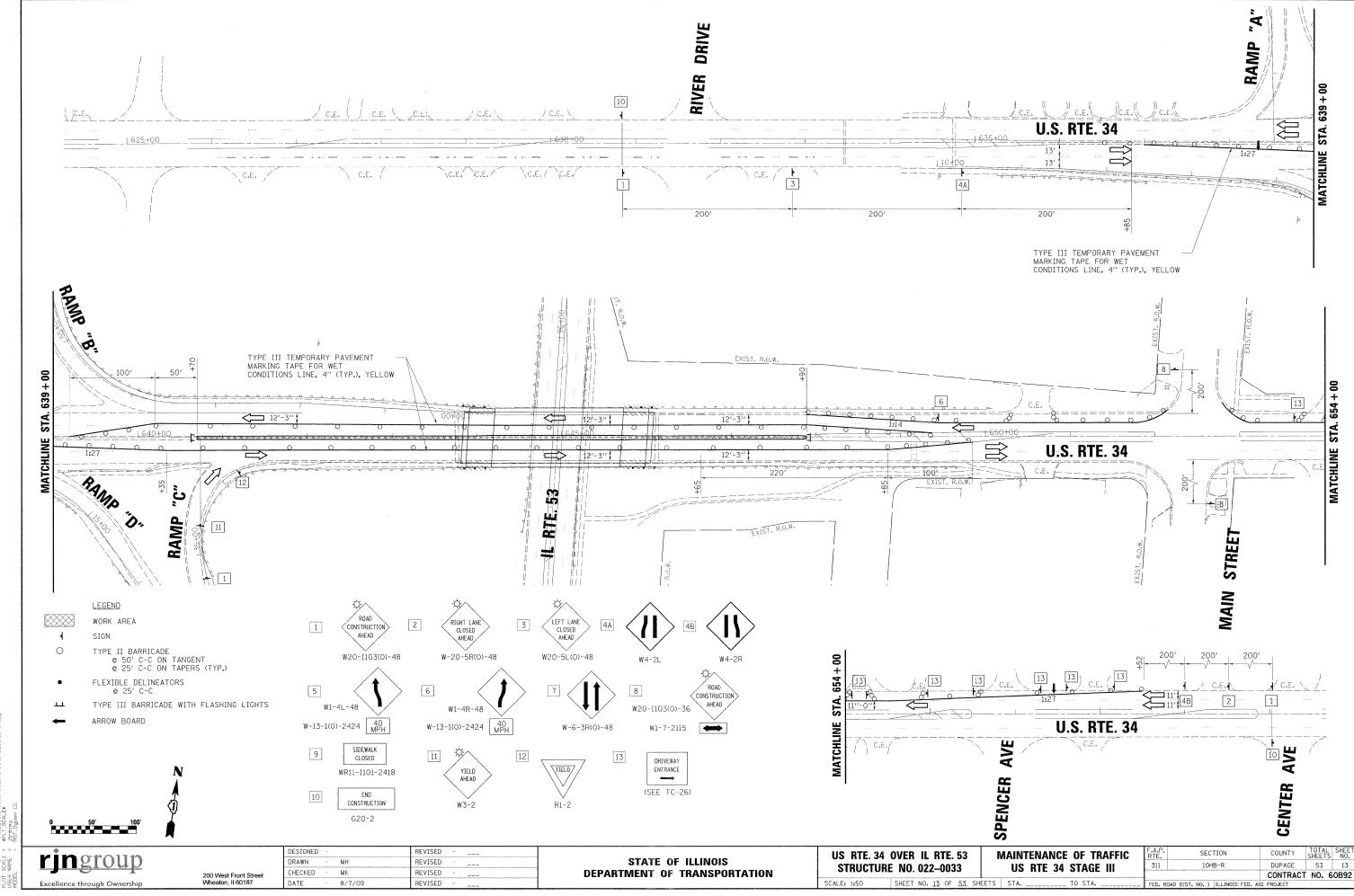


DATE = 8/7/2009 NAME = <t/1125510\curl\cadd\sheets\225510.MOT SCALE = sPLT.SCALES NAME = trecel

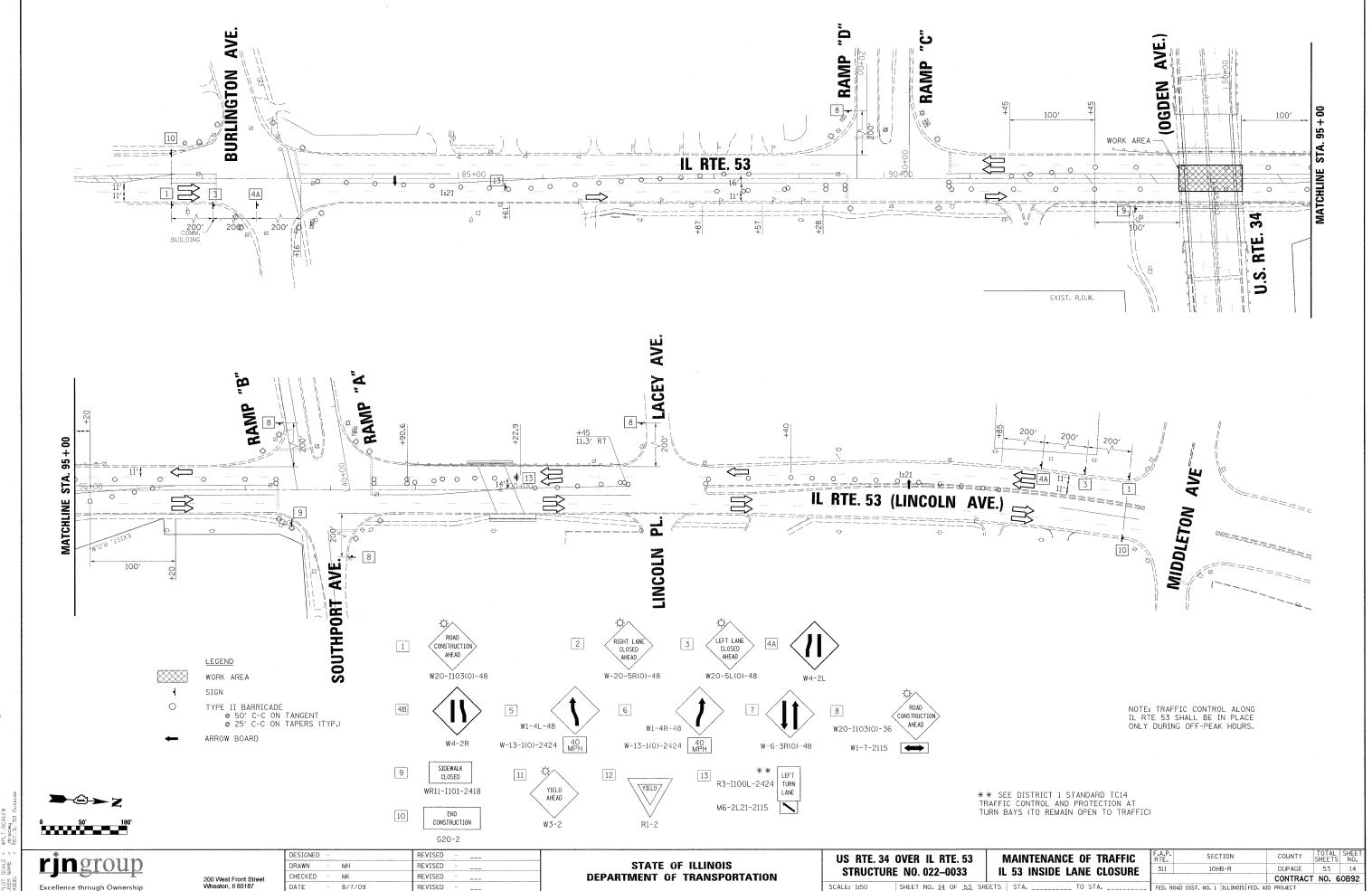




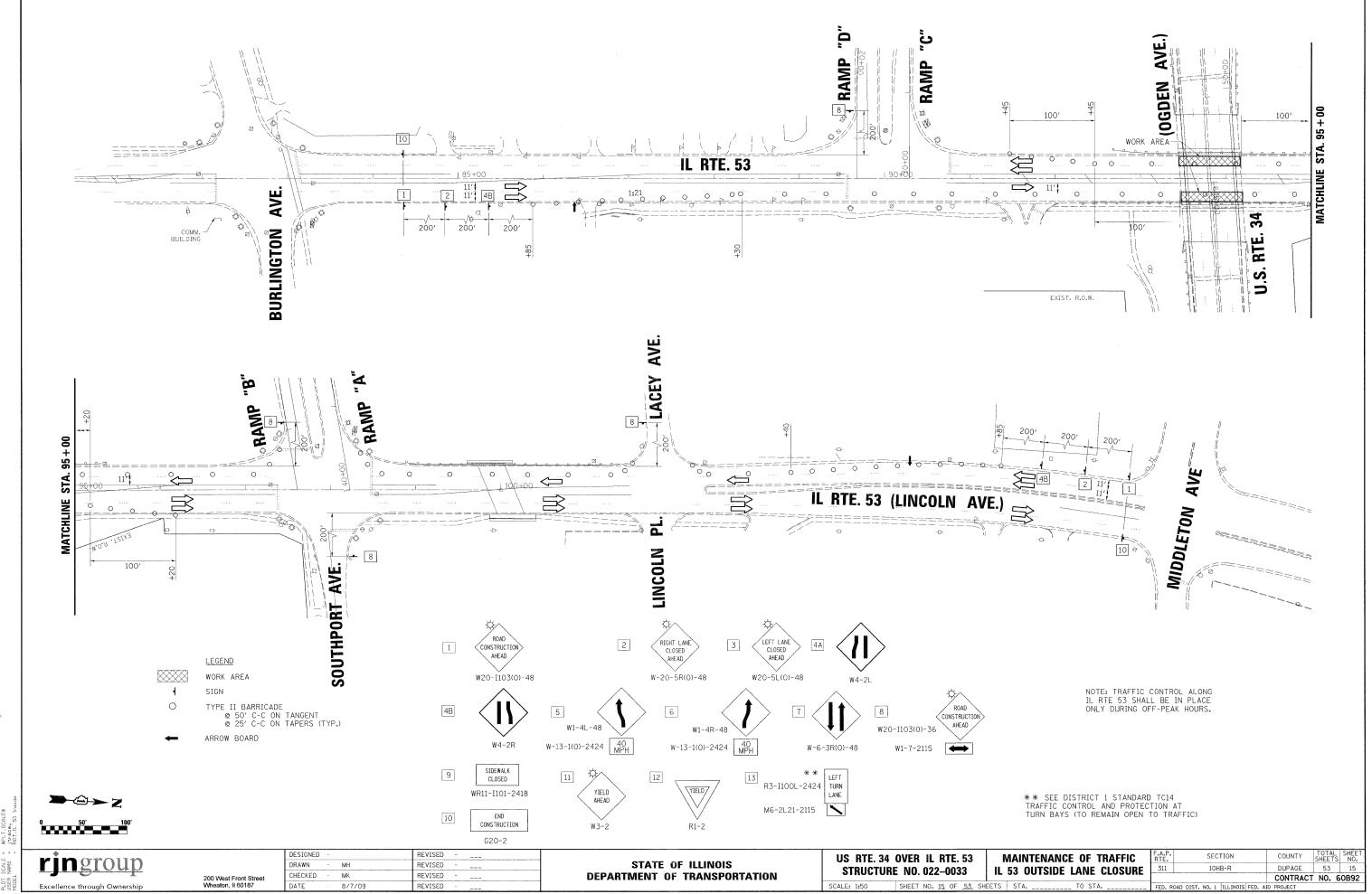
DATE NAME SCALE NAME



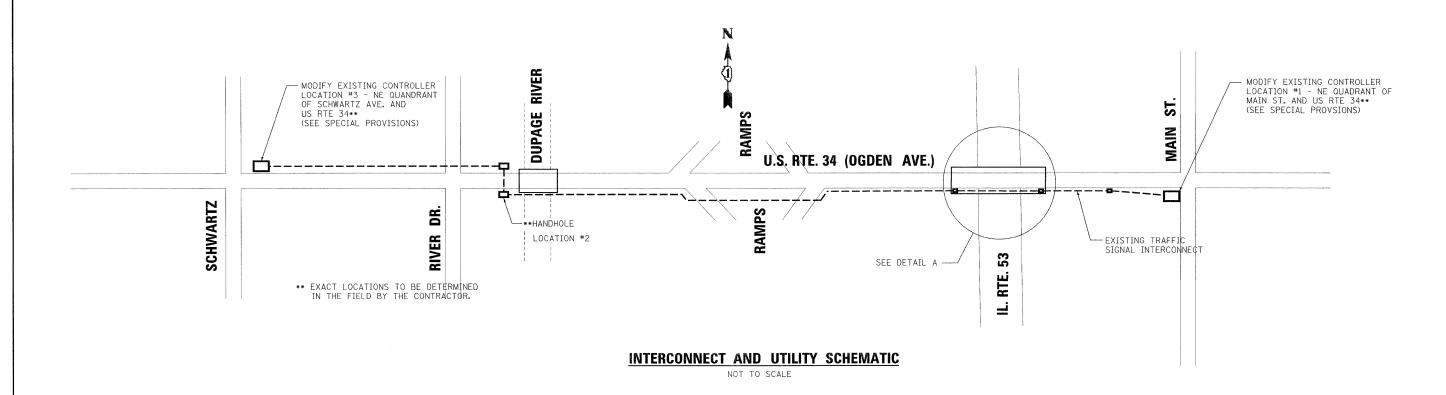
)ATE = 8/7/2009 AME = k:\11225510\cr\11\cedd\sheets\225510.MC SCALE = \$PLT_SCALE\$ AMF = troper



DATE NAME SCALE NAME



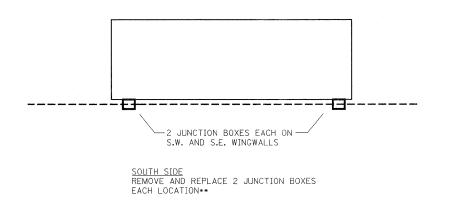
E = 8///2009 E = k:\1225510\codd\sheets\225510_MOT.dgn LE = #PLT.SCALE\$



BILL OF MATERIAL

	81100700	CONDUIT ATTACHED TO STRUCTURE.	FOOT	30
	01100700	2 1/2" DIA., GALVANIZED STEEL	F001	30
	81300835	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"×18"×10"	EACH	2
8	35000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
8	89502200	MODIFY EXISTING CONTROLLER	EACH	2
{	89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	2950
7	X0325938	TEMPORARY WIRELESS INTERCONNECT, COMPLETE	L SUM	1
	XX003079	REMOVE JUNCTION BOX	EACH	2

* LARGE BOXES ARE FOR FIBER OPTIC INTERCONNECT CABLE: SMALL BOXES ARE FOR ROADWAY LIGHTING CABLE



DETAIL A

- 1. EXISTING FIBER OPTIC CABLE SHALL BE PULLED OUT OF THE EXISTING CONDUIT, STARTING AT THE EXISTING CONTROLLER BOX AT U.S. 34 AND MAIN STREET (LOCATION *1), ALL THE WAY TO THE FIRST HANDHOLE WEST OF THE BRIDGE (LOCATION *2). THIS CABLE SHALL BE SPOOLED UP NEAR LOCATION *2 AND PROTECTED ON-SITE FOR THE DURATION OF THE BRIDGE CONSTRUCTION. AFTER BRIDGE CONSTRUCTION IS COMPLETED AND NEW JUNCTION BOXES
 AND CONDUIT ARE IN PLACE, THE EXISTING CABLE SHALL BE REINSTALLED IN THE CONDUIT,
 ALL THE WAY BACK TO THE CONTROLLER BOX AT LOCATION #1. COST INCLUDED WITH
- 2. REMOVAL OF FIBER OPTIC CABLE SHALL NOT BEGIN UNTIL ALL COMPONENTS OF THE TEMPORARY WIRELESS INTERCONNECT SYSTEM ARE IN PLACE AND OPERATIONAL.
- 3. ESTIMATED LENGTH OF INTERCONNECT CABLE TO BE REMOVED AND REINSTALLED = 2,950 FEET.
- 4. A NOMINAL QUANTITY OF 15 FEET OF NEW CONDUIT HAS BEEN PROVIDED AT EACH OF THE TWO JUNCTION BOX LOCATIONS, IN THE EVENT THAT CONDUIT IN THESE LOCATIONS NEEDS TO BE REMOVED AND REPLACED. REMOVAL OF THE EXISTING ROADWAY LIGHTING CONDUIT, IF NEEDED, SHALL BE PAID FOR AS "ROADWAY LIGHTING CONDUIT REMOVAL". REMOVAL OF THE EXISTING TRAFFIC SIGNAL INTERCONNECT CONDUIT, IF NEEDED, IS INCLUDED WITH THE CONTRACT UNIT PRICE BID FOR "JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"X10"X10" "
- 5. ANY HARDWARE OR ACCESSORIES REQUIRED TO ATTACH THE NEW CONDUIT TO THE NEW JUNCTION BOXES OR TO THE EXISTING CONDUIT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE CONTRACT UNIT PRICE BID FOR "CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVANIZED STEEL".
- 6. SEE TRAFFIC SIGNAL SPECIFICATIONS AND SPECIAL PROVISIONS FOR MORE INFORMATION.

rjngroup

DESIGNED DRAWN CHECKED MK

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** US RTE. 34 OVER IL RTE. 53 **STRUCTURE NO. 022-0033**

INTERCONNECT SCHEMATICS

F.A.P. RTE. SECTION COUNTY TOTAL SHEE DUPAGE 10HB-R CONTRACT NO. 60B92

SHEET NO. 16 OF 53 SHEETS STA.

FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

Excellence through Ownership

200 West Front Street Wheaton, II 60187

REVISED

REVISED

REVISED

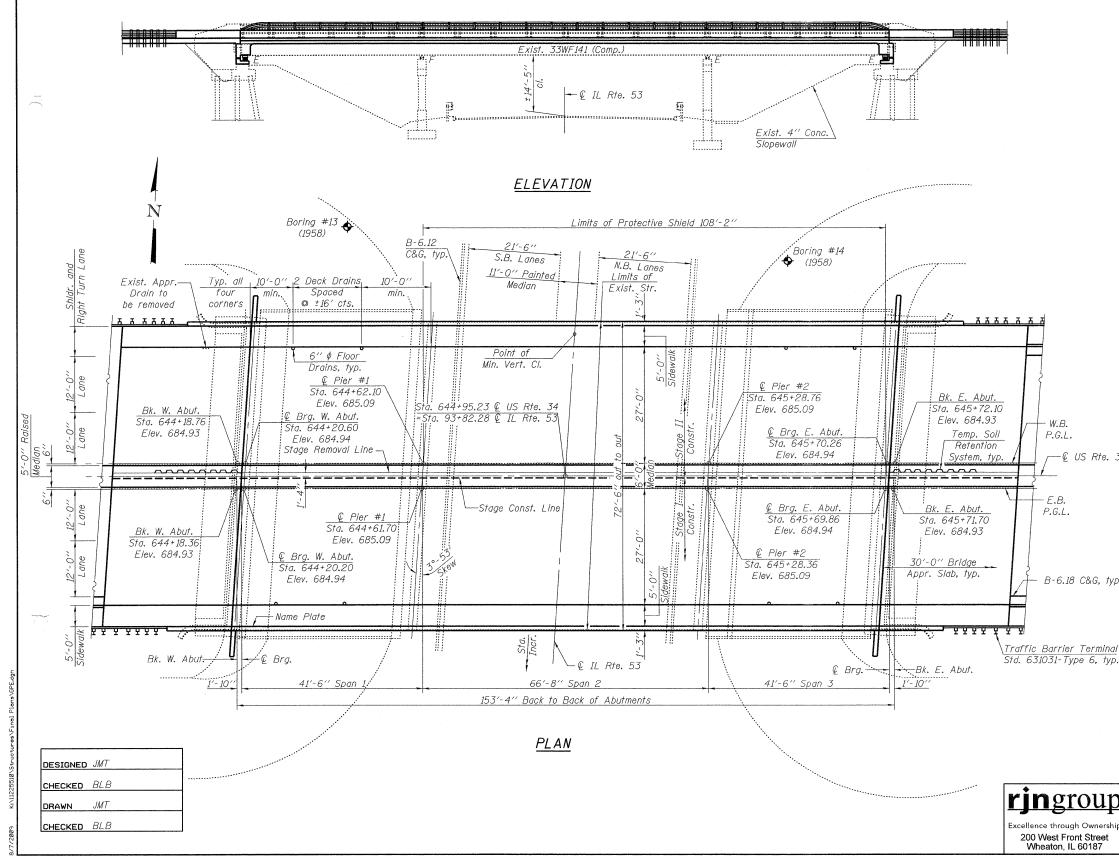
REVISED

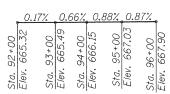
Benchmark: Square cut in W. end of Concrete Wingwall, N.W. corner of Rt. 34 bridge over Rt. 53. Elev. 685.16.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

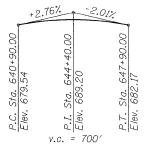
Existing Structure: S.N. 022-0033 built in 1960 as F.A.P. Route 311, Section 10-HB at Station 644+95.23. The superstructure consists of a R.C. deck 153'-4" back to back abutments by 71'-8" wide supported on three-span continuous steel wide flange beams, on stub abutments and multi-column piers. Traffic shall be maintained utilizing stage construction.

Existing Protective Shield and Bridge Railing to be Salvaged. See General Notes.





EXIST. PROFILE GRADE IL RTE. 53



PROFILE GRADE US RTE. 34

DESIGN SPECIFICATIONS

2002 AASHTO (17th Ed.)

LOADING HS20-44

Allow 50 #/Sq.Ft. for future wearing surface.

SEISMIC DATA

Seismic performance category (S.P.C.) = A Bedrock acceleration coefficient (A) = .04g Site coefficient (s) = 1.0

3rd P.M.

LOCATION SKETCH

DESIGN STRESSES

NEW FIELD UNITS

fc = 3,500 psi

fy = 60,000 psi (Reinf.)

fy = 36,000 psi (M270 Grade 36)

EXISTING CONSTRUCTION fc = 1,400 psi

fs = 20,000 psi (Reinf.)

fs = 18,000 psi

STATION 644+95.23 REBUILT 20 BY STATE OF ILLINOIS F.A.P. RT. 311 SEC 10HB-R LOADING HS-20 STRUCTURE NO. 022-0033

NAME PLATE

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



18-7-09 Expires 11-30-10

17

APPROVED FOR STRUCTURAL ADEQUACY ONLY

Ralph E andresse (TID) ENGINEER OF BRIDGES AND STRUCTURES GENERAL PLAN AND ELEVATION US RTE. 34 OVER IL RTE. 53 FAP 311, SECTION 10HB-R DUPAGE COUNTY STATION 644+95.23 STRUCTURE NO. 022-0033

rjngroup

W.R.

P.G.L.

P.G.I

-€ US Rte. 34

B-6.18 C&G, typ.

27 SHEETS 200 West Front Street Wheaton, IL 60187

SHEET NO. 1

TOTAL SHEET SHEETS NO. SECTION COUNTY 10HB-R Du Page 53 CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ | ILLINOIS | FED. AID PROJECT

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts ${}^{7}_{8}$ " ϕ , holes ${}^{15}_{16}$ " ϕ , unless otherwise noted.

No field welding is permitted except as specified in the contract documents. Reinforcement bars shall conform to the requirements of ASTM A 706

Gr 60. See Special Provisions. Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete, including existing diaphragms at abutments. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

If the Contractor elects to use cantilever forming brackets on the exterior beams or airders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

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.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of \(\frac{1}{8} \) inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Protective shield may exist in some locations. The Contractor with the approval of the Engineer may re-use the existing protective shield. If protective shield is to be re-utilized, the Contractor shall evaluate the existing protective shield, and demonstrate through calculations sealed by an Illinois Licensed Structural Engineer that the existing system meets or exceeds the design requirements specified in Artical 501.03 of the Standard Specifications. Supplementing and/or replacement of the existing shield may be required to satisfy the Standard Specifications. The Cost of maintaining and adjusting the protective shield shall be included in the cost of protective shield.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Cleaning and painting of the existing fascia beams shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures." The exterior and bottom flange of the fascia beams shall be cleaned per Near White Blast Cleaning-SSPC-SP10. These surfaces shall be painted according to the requirements of Paint System 1-0Z/E/U, The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Black, Munsell No. N-1.

The existing protective shield shall be salvaged when no longer required. The salvaged protective shield shall be delivered to IDOT District One Bridge Office, 1101 Biesterfield Road, Elk Grove Village, Illinois, 60007, telephone 847-956-1501. The cost of salvaging and delivering the existing protective shield shall be included in the cost of Protective Shield.

The existing handrail and posts shall be salvaged when no longer required. The salvaged handrail and posts shall be delivered to IDOT District One Bridge Office, 1101 Biesterfield Road, Elk Grove Village, Illinois, 60007, telephone 847-956-1501. The cost of salvaging and delivering the existing handrail and posts shall be included in the cost of Removal of Existina Concrete Deck.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will be required for

The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction. See Special Provisions.

Current Ratings on File for Existing Structure:

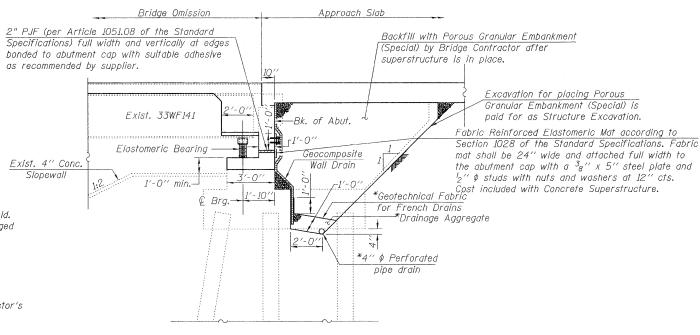
Inventory: HS 24.4 Operating: HS 36.7 Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd	432		432
Protective Coat	Sq Yd	1825		1825
Concrete Removal	Cu Yd		60.6	60.6
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq Yd	871		871
Structure Excavation	Cu Yd		489.4	489.4
Floor Drains	Each	8		8
Concrete Structures	Cu Yd		73.6	73.6
Concrete Superstructure	Cu Yd	713.1		713.1
Cleaning and Painting Steel Bridge	L Sum	1		1
Bridge Deck Grooving	Sq Yd	1200		1200
Stud Shear Connectors	Each .	5,664		5,664
Jacking and Cribbing	Each	24		24
Reinforcement Bars, Epoxy Coated	Pound	134,240	3,200	137,440
Bar Splicers	Each	785	12	797
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each	24		24
Geocomposite Wall Drain	Sq Yd		177	177
Pipe Underdrains for Structures 4''	Foot		177	177
Slope Wall Removal	Sq Yd		5.6	5.6
Slope Wall, 4 Inch	Sq Yd		5.6	5.6
Aluminum Railing, Special	Foot	300		300
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq Ft		20	20
Temporary Soil Retention System	Sq Ft		164	164
Containment and disposal of non-lead paint cleaning residues	L Sum	1		1
Form Liner Textured Surface	Sq Ft	1284		1284
Staining Concrete Structures	Sq Yd	186.2		186.2
Furnishing and Erecting Structural Steel	Pound	330		330
Anchor Bolts, 1 Inch	Each	48		48
Epoxy Crack Injection	Foot		12	12



SECTION THRU SEMI-INTEGRAL ABUTMENT

(Horiz, dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

GENERAL DATA STRUCTURE NO. 022-0033

ringroup SHEET NO. 2 Excellence through Ownershi

> 200 West Front Street Wheaton II 60187

27 SHEETS

F.A.P. RTE.		SEC1	ΓΙΟΝ			COUNTY	TOTAL SHEETS	SHEET NO.
311	10HB-R			Du Page	53	18		
						CONTRACT	NO. 60	B92
FED. RO	DAD DIST.	NO	ILLINOIS	FED.	ΑI	D PROJECT		

INDEX OF SHEETS

General Data

Deck Plan

Diaphragm Details

Bridge Rail Details

Parapet Details

Framing Plan

Bearing Details

22. Abutment Details -

25. Slope Wall Repairs

26. Bar Splicer Details

27A. Soil Boring Logs

24. Pier Repairs

23. Abutment Details - II

11.

12. 13.

14.

16. 17.

18.

20.

21.

General Plan and Elevation

Stage Construction Details

Top of Slab Elevations - I

Top of Slab Elevations - II

Top of Slab Elevations - III

Top of Slab Elevations - IV

Top of Slab Elevations - VI

West Approach Slab Elevations

East Approach Slab Elevations

Beam Moment & Reaction Tables

27. Temporary Concrete Barrier Details

Approach Slab Details -

Deck Sections and Details

Approach Slab Details - II

Top of Slab Flevations - V

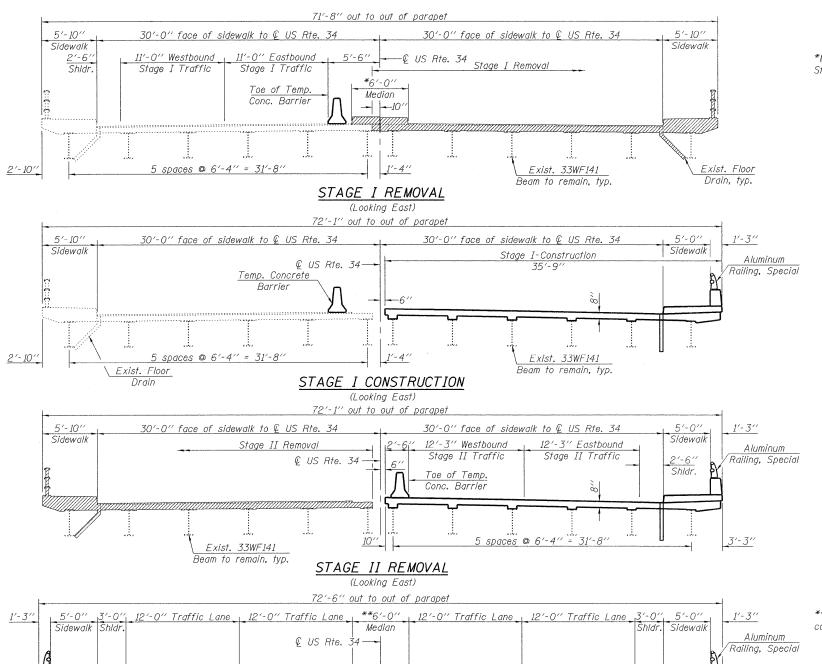
DESIGNED JMT

CHECKED BLB

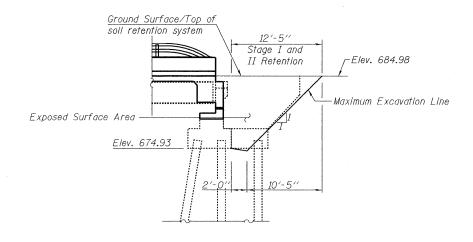
CHECKED BLB

DRAWN

JMT



*Median to be removed during Stage I Removal.



TEMPORARY SOIL RETENTION SYSTEM

Slopes and distances shown parallel to roadway centerline.

NOTES:

Removal of existing bridge rail and median is included with Removal of Existing Concrete Deck.

See Sheet 27 of 27 for Temporary Concrete Barrier Details. Pay Item for "Temporary Concrete Barrier" is included with Roadway Plans.

Stage Removal Line and Stage Construction Line at Abutments vary from what is shown on this sheet. See Sheets 22 and 23 of 27 for details.

A cantilevered sheet piling design does not appear feasible and additional

members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

**Raised median to be constructed after completion of Stage II Construction.

STAGE CONSTRUCTION DETAILS STRUCTURE NO. 022-0033



200 West Front Street Wheaton, IL 60187

SHEET NO. 3

F.A.P. RTE. 311 27 SHEETS

TOTAL SHEET SHEETS NO. SECTION COUNTY 10HB-R 53 19 Du Page CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

DESIGNED JMT CHECKED BLB DRAWN JMT

CHECKED BLB

3'-3"

Prop. 6" ∅

Drain, typ.

Exist. 33WF141 Beam to remain, typ.

5 spaces @ 6'-4" = 31'-8"

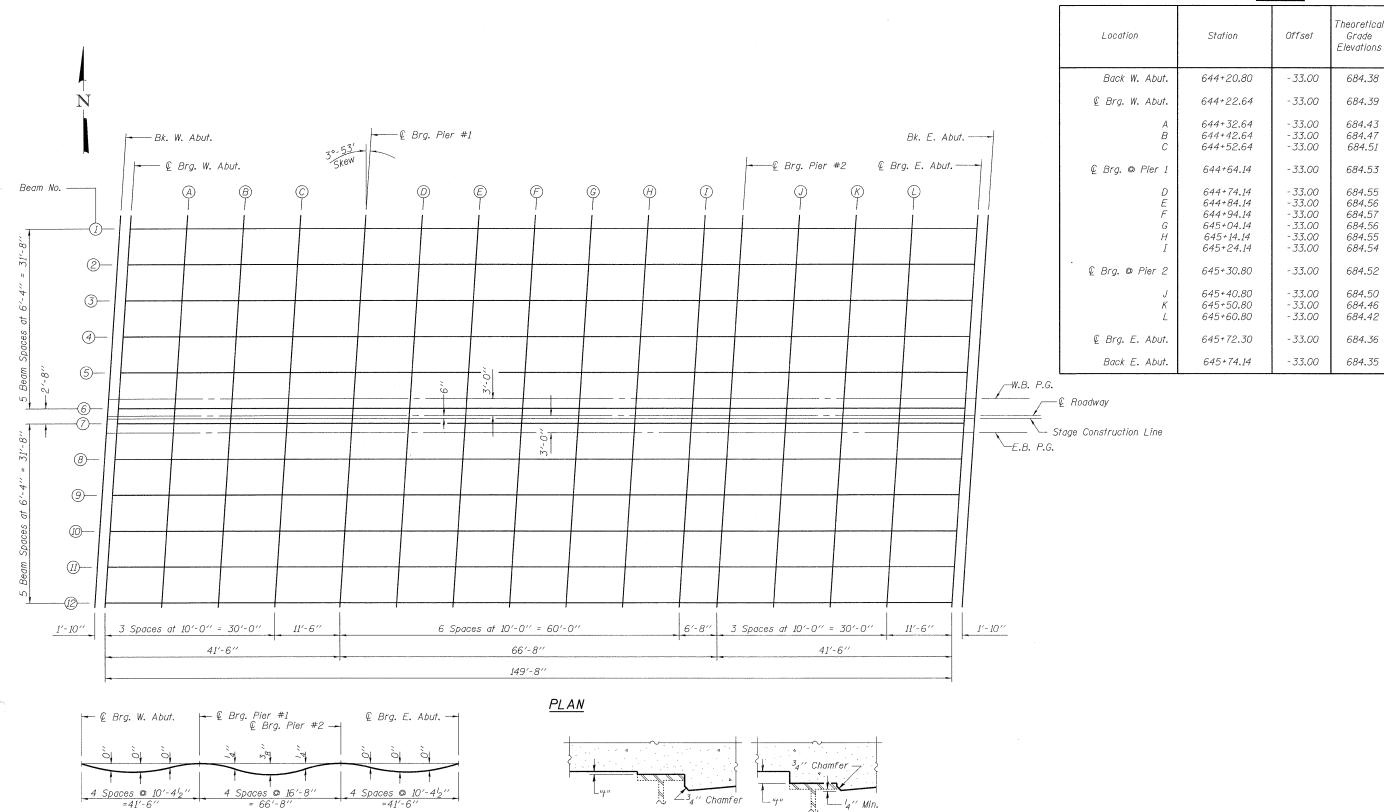
STAGE II CONSTRUCTION (Looking East)

5 spaces @ 6'-4" = 31'-8"

LEGEND:

3'-3"

Removal of Existing Concrete Deck



TOP OF SLAB ELEVATIONS - I STRUCTURE NO. 022-0033

20

rjngroup 200 West Front Street Wheaton, IL 60187

SHEET NO. 4 27 SHEETS

TOTAL SHEET NO. F.A.P. RTE. SECTION COUNTY 10HB-R Du Page 53 CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

BEAM 1

Theoretical Grade

Ndjusted For Dead

Load Deflection

684.38

684.39

684.44

684.48

684.50

684.53

684.57

684,60

684.61

684.61

684.58

684.55

684.52

684.49

684,46

684.42

684.36

684.35

Elevations

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

DESIGNED JMT CHECKED BLB DRAWN CHECKED BLB

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

At Minimum Fillet At Maximum Fillet

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

FILLET HEIGHTS

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection					
Back W. Abut.	644+20.37	-26.67	684.51	684.51					
© Brg. W. Abut.	644+22.21	-26.67	684.52	684.52					
А В С	644+32.21 644+42.21 644+52.21	-26.67 -26.67 -26.67	684.56 684.60 684.64	684.57 684.61 684.64					
© Brg. © Pier 1	644+63.71	-26.67	684.67	684.67					
D E F G H I	644+73.71 644+83.71 644+93.71 645+03.71 645+13.71 645+23.71	- 26.67 - 26.67 - 26.67 - 26.67 - 26.67 - 26.67	684.68 684.69 684.70 684.70 684.69 684.67	684.70 684.73 684.74 684.74 684.72 684.68					
© Brg. © Pier 2	645+30.37	-26.67	684.66	684.66					
J K L	645+40.37 645+50.37 645+60.37	-26.67 -26.67 -26.67	684.63 684.59 684.55	684.63 684.60 684.56					
₡ Brg. E. Abut.	645+71.87	-26.67	684.50	684,50					
Back E. Abut.	645+73.71	-26.67	684.49	684.49					

<u>BEAM 3</u>

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+19.94	-20.33	684.64	684.64				
© Brg. W. Abut.	644+21.78	-20.33	684.65	684.65				
A B C	644+31.78 644+41.78 644+51.78	-20.33 -20.33 -20.33	684.69 684.73 684.77	684.70 684.74 684.77				
€ Brg. © Pier 1	644+63.28	-20.33	684.80	684.80				
D E F G H I	644+73.28 644+83.28 644+93.28 645+03.28 645+13.28 645+23.28	-20.33 -20.33 -20.33 -20.33 -20.33 -20.33	684.81 684.83 684.83 684.83 684.82 684.80	684.83 684.86 684.88 684.87 684.85 684.82				
₡ Brg. © Pier 2	645+29.94	- 20.33	684.79	684.79				
J K L	645+39.94 645+49.94 645+59.94	-20.33 -20.33 -20.33	684.76 684.73 684.69	684.76 684.73 684.69				
© Brg. E. Abut.	645+71.44	- 20.33	684.63	684.63				
Back E. Abut.	645+73,28	-20.33	684.62	684.62				

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+19.51	- 14.00	684.76	684.76				
© Brg. W. Abut.	<i>644+21.3</i> 5	- 14.00	684.77	684.77				
A B C	644+31.35 644+41.35 644+51.35	- 14.00 - 14.00 - 14.00	684.82 684.86 684.89	684.82 684.86 684.89				
⊈ Brg. @ Pier 1	644+62.85	- 14.00	684.92	684.92				
D E F G H I	644+72.85 644+82.85 644+92.85 645+02.85 645+12.85 645+22.85	- 14.00 - 14.00 - 14.00 - 14.00 - 14.00	684.94 684.95 684.96 684.96 684.95 684.93	684.96 684.99 685.00 685.00 684.98 684.94				
€ Brg. © Pier 2	645+29.51	-14.00	684.92	684.92				
J K L	645+39.51 645+49.51 645+59.51	- 14.00 - 14.00 - 14.00	684.89 684.86 684.82	684.89 684.86 684.82				
© Brg. E. Abut.	645+71.01	- 14.00	684.76	684.76				
Back E. Abut.	645+72.85	- 14.00	684.75	684.75				

DESIGNED JMT CHECKED BLB DRAWN JMT CHECKED BLB TOP OF SLAB ELEVATIONS - II STRUCTURE NO. 022-0033

rjngroup sheet NO. 5 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

27 SHEETS

TOTAL SHEET NO. F.A.P. RTE. SECTION COUNTY Du Page 53 21 10HB-R CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

BEAM 5

<u> </u>								
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+19.08	-7.67	684.86	684.86				
₡ Brg. W. Abut.	644+20.92	- 7.67	684.87	684.87				
A B C	644+30.92 644+40.92 644+50.92	- 7.67 - 7.67 - 7.67	684.92 684.96 684.99	684.92 684.96 684.99				
© Brg. © Pier 1	644+62.42	- 7.67	685.02	685.02				
D E F G H I	644+72.42 644+82.42 644+92.42 645+02.42 645+12.42 645+22.42	- 7.67 - 7.67 - 7.67 - 7.67 - 7.67 - 7.67	685.04 685.05 685.06 685.05 685.05 685.03	685.06 685.08 685.10 685.10 685.08 685.04				
© Brg. © Pier 2	645+29.08	- 7.67	685.02	685.02				
J K L	645+39.08 645+49.08 645+59.08	- 7.67 - 7.67 - 7.67	684.99 684.96 684.92	684.99 684.96 684.92				
₡ Brg. E. Abut.	645+70,58	-7.67	684.86	684.86				
Back E. Abut.	645+72.42	- 7.67	684.85	684.85				

W.B. P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection					
Back W. Abut.	644+18.76	- 3.00	684.93	684.93					
€ Brg. W. Abut.	644+20.60	- 3.00	684.94	684.94					
A B C C © Bra. © Pier 1	644+30.60 644+40.60 644+50.60	-3.00 -3.00 -3.00	684.99 685.03 685.06	684.99 685.03 685.06					
D E F G H I	644+72.10 644+82.10 644+92.10 645+02.10 645+12.10 645+22.10	-3.00 -3.00 -3.00 -3.00 -3.00 -3.00	685.11 685.12 685.13 685.13 685.12 685.10	685.13 685.16 685.17 685.17 685.15 685.12					
© Brg. © Pier 2 J K L	645+28.76 645+38.76 645+48.76 645+58.76	- 3.00 - 3.00 - 3.00 - 3.00	685.09 685.06 685.03 684.99	685.09 685.06 685.03 684.99					
₡ Brg. E. Abut.	645+70.26	- 3.00	684.94	684.94					
Back E. Abut.	645+72.10	- 3,00	684.93	684.93					

BEAM 6

Location	on Station		Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	644+18.65	- 1.33	684.96	684.96
© Brg. W. Abut.	644+20.49	-1.33	684.97	684.97
A B C	644+30.49 644+40.49 644+50.49	-1.33 -1.33 -1.33	685.01 685.05 685.09	685.02 685.06 685.09
© Brg. @ Pier 1	644+61.99	- 1.33	685.12	685.12
D E F G H I	644+71.99 644+81.99 644+91.99 645+01.99 645+11.99	- 1.33 - 1.33 - 1.33 - 1.33 - 1.33	685.14 685.15 685.16 685.15 685.15 685.13	685.16 685.18 685.20 685.19 685.18 685.14
© Brg. ◎ Pier 2	645+28.65	-1.33	685.12	685.12
J K L	645+38.65 645+48.65 645+58.65	- 1.33 - 1.33 - 1.33	685.09 685.06 685.02	685.09 685.06 685.02
© Brg. E. Abut.	645+70.15	-1.33	684.96	684.96
Back E. Abut.	645+71.99	-1.33	684.95	684.95

DESIGNED JMT CHECKED BLB DRAWN JMT CHECKED BLB TOP OF SLAB ELEVATIONS - III STRUCTURE NO. 022-0033

ringroup | SHEET NO. 6 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

3	F.A.P. SECTION				COUNTY	TOTAL SHEETS		SHEE NO.		
	311		10HB-R			Du Page	53	3	22	
							CONTRACT	NO.	60	B92
	FED. RO	AD DIST.	NO	ILLINOIS	FED.	ΑI	D PROJECT			

@ ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+18.56	0.00	684.98	684.98				
₡ Brg. W. Abut.	644+20.40	0.00	684.99	684.99				
A B C	644+30.40 644+40.40 644+50.40	0.00 0.00 0.00	685.03 685.07 685.11	685.04 685.08 685.11				
	644+61.90	0.00	685.14	685.14				
D E F G H I	644+71.90 644+81.90 644+91.90 645+01.90 645+11.90 645+21.90	0.00 0.00 0.00 0.00 0.00 0.00	685.16 685.17 685.18 685.17 685.17 685.15	685.18 685.20 685.22 685.22 685.20 685.16				
© Brg. © Pier 2	645+28.56	0.00	685.14	685 . 14				
J K L	645+38.56 645+48.56 645+58.56	0.00 0.00 0.00	685.11 685.08 685.04	685.11 685.08 685.04				
₡ Brg. E. Abut.	645+70.06	0.00	684.98	684.98				
Back E. Abut.	645+71.90	0.00	684.97	684.97				

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+18.56	0.50	684.97	684.97				
© Brg. W. Abut.	644+20.40	0.50	684.98	684.98				
A B C C € Brg. © Pier 1	644+30.40 644+40.40 644+50.40 644+61.90	0.50 0.50 0.50 0.50	685.03 685.07 685.10 685.13	685.03 685.07 685.10 685.13				
D E F G H I	644+71.90 644+81.90 644+91.90 645+01.90 645+11.90 645+21.90	0.50 0.50 0.50 0.50 0.50	685.15 685.16 685.17 685.17 685.16	685.17 685.20 685.21 685.21 685.19				
© Brg. © Pier 2 J K L	645+28.56 645+38.56 645+48.56 645+58.56	0.50 0.50 0.50 0.50	685.13 685.10 685.07 685.03	685.13 685.10 685.07 685.03				
© Brg. E. Abut.	645+70.06	0.50	684.98	684.98				
Back E. Abut.	645+71.90	0.50	684.97	684.97				

<u>BEAM 7</u>

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	644+18.53	1.33	684.96	684.96
© Brg. W. Abut.	644+20,37	1.33	684.97	684.97
A B C	644+30.37 644+40.37 644+50.37	1.33 1.33 1.33	685.01 685.05 685.09	685.02 685.06 685.09
© Brg. ◎ Pier 1	644+61.87	1.33	685.12	685.12
D E F G H I	644+71.87 644+81.87 644+91.87 645+01.87 645+11.87 645+21.87	1.33 1.33 1.33 1.33 1.33 1.33	685.14 685.15 685.16 685.15 685.15 685.13	685.16 685.18 685.20 685.19 685.18 685.14
⊊ Brg. © Pier 2	645+28.53	1.33	685.12	<i>685.12</i>
J K L	645+38.53 645+48.53 645+58.53	1.33 1.33 1.33	685.09 685.06 685.02	685.09 685.06 685.02
© Brg. E. Abut.	645+70.03	1.33	684.96	684.96
Back E. Abut.	645+71.87	1.33	684.95	684.95

DESIGNED JMT CHECKED BLB DRAWN JMT CHECKED BLB TOP OF SLAB ELEVATIONS - IV STRUCTURE NO. 022-0033

ringroup SHEET NO. 7 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

7	F.A.P. RTE.	SECT	TION			COUNTY	TOT SHEE	AL TS	SHEET NO.
,	311	10HE	3-R			Du Page	53	3	23
						CONTRACT	NO.	60	B92
	FED. RC	DAD DIST. NO	ILLINOIS	FED.	ΑI	D PROJECT			

E.B. P.G.

<u> </u>							
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection			
Back W. Abut.	644+18.47	3.00	684.93	684.93			
© Brg. W. Abut.	644+20.31	3.00	684.94	684.94			
A B C © Brg. © Pier 1 D E F G	644+30.31 644+40.31 644+50.31 644+61.81 644+71.81 644+81.81 644+91.81 645+01.81	3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	684.99 685.03 685.06 685.09 685.11 685.12 685.13 685.13	684.99 685.03 685.06 685.09 685.13 685.16 685.17 685.17			
H I © Bra. © Pier 2	645+11.81 645+21.81 645+28.47	3.00 3.00 3.00	685.12 685.11 685.09	685.15 685.12 685.09			
y Big. Willow Z	645+38.47 645+48.47 645+58.47	3.00 3.00 3.00	685.07 685.03 684.99	685.06 685.03 685.00			
₡ Brg. E. Abut.	645+69.97	3.00	684.94	684.94			
Back E. Abut.	645+71.81	3.00	684.93	684.93			

BEAM 8

		7177		
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	644+18.36	7.67	684.86	684.86
₡ Brg. W. Abut.	644+20.20	7.67	684.87	684.87
A B C	644+30.20 644+40.20 644+50.20	7.67 7.67 7.67	684.91 684.95 684.99	684.92 684.96 684.99
© Brg. © Pier 1	644+61.70	7.67	685.02	685.02
D E F G H I	644+71.70 644+81.70 644+91.70 645+01.70 645+11.70 645+21.70	7.67 7.67 7.67 7.67 7.67 7.67	685.04 685.05 685.06 685.05 685.05 685.03	685.06 685.08 685.10 685.10 685.08 685.04
& Brg. ◎ Pier 2	645+28.36	7.67	685.02	685,02
J K L	645+38.36 645+48.36 645+58.36	7.67 7.67 7.67	684.99 684.96 684.92	684.99 684.96 684.92
⊈ Brg. E. Abut.	645+69.86	7.67	684.87	684.87
Back E. Abut.	645+71.70	7.67	684.86	684.86

BEAM 9

BE71W 5								
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection				
Back W. Abut.	644+18.04	14.00	684.76	684.76				
€ Brg. W. Abut.	644+19.88	14.00	684.77	684.77				
A B C	644+29.88 644+39.88 644+49.88	14.00 14.00 14.00	684.81 684.85 684.89	684.82 684.86 684.89				
⊈ Brg. @ Pier 1	644+61.38	14.00	684.92	684.92				
D E F G H I	644+71.38 644+81.38 644+91.38 645+01.38 645+11.38 645+21.38	14.00 14.00 14.00 14.00 14.00 14.00	684.94 684.95 684.96 684.96 684.95 684.93	684.96 684.98 685.00 685.00 684.98 684.95				
© Brg. © Pier 2 J K L	645+28.04 645+38.04 645+48.04 645+58.04	14.00 14.00 14.00 14.00	684.92 684.89 684.86 684.82	684.92 684.89 684.86 684.83				
€ Brg. E. Abut.	645+69.54	14.00	684.77	684.77				
Back E. Abut.	645+71.38	14.00	684.76	684.76				

DESIGNED JMT CHECKED BLB DRAWN JMT CHECKED BLB TOP OF SLAB ELEVATIONS - V STRUCTURE NO. 022-0033

ringroup | SHEET NO. 8 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

3	F.A.P. RTE.		SEC	TION			COUNTY	TOT. SHEE	AL TS	SHEET NO.
	311		10H	B-R			Du Page	53		24
							CONTRACT	NO.	60	B92
	FED. RO	AD DIST.	NO	ILLINOIS	FED.	AID	PROJECT			

BEAM 10

<u> </u>							
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection			
Back W. Abut.	644+17.61	20.33	684.63	684.63			
₡ Brg. W. Abut.	644+19.45	20.33	684.64	684.64			
А В С	644+29.45 644+39.45 644+49.45	20.33 20.33 20.33	684.68 684.73 684.76	684.69 684.73 684.76			
© Brg. © Pier 1	644+60.95	20.33	684.79	684.79			
D E F G H I	644+70.95 644+80.95 644+90.95 645+00.95 645+10.95 645+20.95	20.33 20.33 20.33 20.33 20.33 20.33	684.81 684.82 684.83 684.83 684.82 684.81	684.83 684.86 684.87 684.87 684.85 684.82			
© Brg. © Pier 2	645+27.61	20.33	684.79	684.79			
J K L	645+37.61 645+47.61 645+57.61	20.33 20.33 20.33	684.77 684.74 684.70	684.77 684.74 684.70			
ℚ Brg. E. Abut.	645+69.11	20.33	684.64	684.64			
Back E. Abut.	645+70.95	20.33	684.63	684.63			

BEAM 11

DEAM 11							
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection			
Back W. Abut.	644+17.18	26.67	684.49	684.49			
€ Brg. W. Abut.	644+19.02	26.67	684.50	684.50			
A B C © Brg. © Pier 1 D E	644+29.02 644+39.02 644+49.02 644+60.52 644+70.52 644+80.52	26.67 26.67 26.67 26.67 26.67 26.67	684.55 684.59 684.63 684.66 684.68 684.69	684.55 684.59 684.63 684.66 684.70 684.73			
F G H I	644+90.52 645+00.52 645+10.52 645+20.52	26.67 26.67 26.67 26.67	684.70 684.70 684.69 684.68	684.74 684.74 684.72 684.69			
© Brg. © Pier 2 J K L	645+27.18 645+37.18 645+47.18 645+57.18	26.67 26.67 26.67 26.67	684.66 684.61 684.57	684.64 684.64 684.61 684.57			
€ Brg. E. Abut.	645+68.68	26.67	684.51	684.51			
Back E. Abut.	645+70.52	26.67	684.50	684.50			

<u>BEAM 12</u>

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection			
Back W. Abut.	644+16.75	33.00	684.36	684.36			
© Brg. W. Abut.	644+18.59	33.00	684.37	684.37			
A B C	644+28.59 644+38.59 644+48.59	33.00 33.00 33.00	684.42 684.46 684.49	684.42 684.46 684.49			
© Brg. ◎ Pier 1	644+60.09	33.00	684.53	684.53			
D E F G H I	644+70.09 644+80.09 644+90.09 645+00.09 645+10.09 645+20.09	33.00 33.00 33.00 33.00 33.00 33.00	684.55 684.56 684.57 684.57 684.56 684.55	684.56 684.59 684.61 684.61 684.59 684.56			
© Brg. © Pier 2 J K	645+26.75 645+36.75 645+46.75	33.00 33.00 33.00	684.53 684.51 684.48	684.53 684.51 684.48			
Ĺ	645+56.75	33.00	684.44	684.44			
© Brg. E. Abut.	645+68.25	33.00	684.38	684.38			
Back E. Abut.	645+70.09	33.00	684.37	684.37			

DESIGNED JMT CHECKED BLB CHECKED BLB

TOP OF SLAB ELEVATIONS - VI STRUCTURE NO. 022-0033

ringroup | SHEET NO. 9 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

F.A.P. RTE.			S	EC-	ΓΙΟΝ			COUNTY	TOT SHEE	AL ETS	SHEE NO.
311			1	ОН	B-R			Du Page	5	3	25
								CONTRACT	NO.	60	B92
FED. RO	DAD	DIST.	NO.	_	ILLINOIS	FED.	ΑI	D PROJECT			

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+91.44	- 30.00	684.26
A1 A2	644+01.44 644+11.44	-30.00 -30.00	684.33 684.39
E. End of W. Appr	644+21.44	- 30.00	684.44

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+91.23	-27.00	684.32
A1 A2	644+01 . 23 644+11.23	-27.00 -27.00	684.39 684.45
E. End of W. Appr	644+21.23	-27.00	684.51

W.B. P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+89,60	- 3.00	684.75
A1 A2	643+99.60 644+09.60	- 3.00 - 3.00	684.82 684.88
E. End of W. Appr	644+19.60	- 3.00	684.94

ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+89.40	0.00	684.80
A1 A2	643+99 . 40 644+09 . 40	0.00 0.00	684.86 684.93
E. End of W. Appr	644+19.40	0.00	684.98

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+89.37	0.50	684.79
A1 A2	643+99 . 37 644+09.37	0.50 0.50	684.86 684.92
E. End of W. Appr	644+19.37	0.50	684.97

E.B. P.G.

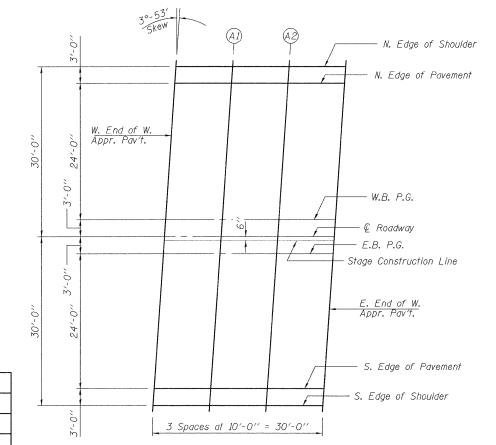
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+89.20	3.00	684.75
A1 A2	643+99,20 644+09.20	3.00 3.00	684.82 684.88
E. End of W. Appr	644+19,20	3.00	684.93

DESIGNED JMT

CHECKED BLB

DRAWN JMT

CHECKED BLB



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+87.57	27.00	684.30
A1 A2	643+97.57 644+07.57	27.00 27.00	684.37 684.43
E. End of W. Appr	644+17.57	27.00	684.49

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr	643+87.36	30.00	684.23
A1 A2	643+97.36 644+07.36	30.00 30.00	684.30 684.37
E. End of W. Appr	644+17.36	30.00	684.42

WEST APPROACH SLAB ELEVATIONS STRUCTURE NO. 022-0033



SHEET NO. 10

NO. 10	F.A.P. RTE.		SECT	ΓΙΟΝ
1101 12	311		10H	B-R
HEETS				
	FFD, RO	DAD DIST.	NO.	THE TNOTS F

F.A.P. SECTION				COUNTY	TOT SHEE		SHEET NO.		
311		lOH	B-R			Du Page	53	3	26
						CONTRACT	NO.	60	B92
FED. RO	DAD DIST. NO.	_	ILLINOIS	FED.	AII	PROJECT			

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+73.11	- 30.00	684.42
A3 A4	645+83.11 645+93.11	- 30.00 - 30.00	684.37 684.30
E. End of E. Appr	646+03.11	- 30 . 00	684.23

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+72.90	-27.00	684.49
A3 A4	645+82.90 645+92.90	-27.00 -27.00	684.43 684.37
E. End of E. Appr	646+02.90	-27.00	684.30

W.B. P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+71.27	- 3,00	684.93
A3 A4	645+81.27 645+91.27	-3.00 -3.00	684.88 684.81
E. End of E. Appr	646+01.27	- 3.00	684.74

€ ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+7 1. 07	0.00	684.98
A3 A4	645+81.07 645+91.07	0.00 0.00	684.92 684.86
E. End of E. Appr	646+01.07	0.00	684.79

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+71.04	0.50	684.97
A3 A4	645+81 . 04 645+91.04	0.50 0.50	684.92 684.85
E. End of E. Appr	646+01,04	0.50	684.79

- N. Edge of Shoulder

E.B. P.G.

Location	Station	Offset	Theoretical Grade Elevations		
W. End of E. Appr	645+70.87	3.00	684.93		
A3 A4	645+80.87 645+90.87	3.00 3.00	684.88 684.82		
E. End of E. Appr	646+00.87	3.00	684.75		

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr	645+69.24	27.00	684.50
A3 A4	645+79.24 645+89.24	27.00 27.00	684.45 684.39
E. End of E. Appr	645+99.24	27.00	684.32

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretico Grade Elevations
W. End of E. Appr	645+69.03	30.00	684.44
A 3 A 4	645+79.03 645+89.03	30.00 30.00	684.39 684.33
E. End of E. Appr	645+99.03	30.00	684.26

N. Edge of Pavement — W.B. P.G. — © Roadway — E.B. P.G. - Stage Construction Line E. End of E. Appr. Pav1. DESIGNED JMT — S. Edge of Pavement CHECKED BLB — S. Edge of Shoulder DRAWN JMT

3 Spaces at 10'-0'' = 30'-0''

PLAN

CHECKED BLB

EAST APPROACH SLAB ELEVATIONS STRUCTURE NO. 022-0033

ringroup | SHEET NO. 11 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	311	10HB-R	Du Page	53	27
27 SHEETS	27 SHEETS				B92
	FED. RO	DAD DIST. NO. ILLINOIS FED. A	ID PROJECT		

See Hwy. Std. 420401

for pavement connector

7-011

Joint Sta. 643+89.40 (W. Appr.)

Joint Sta. 646+01.07 (E. Appr.)

/ Stage Const. 1 ine

20-#5 Bar Splicers (E) for

20-#5 w₁(E) bars at 6" cts.

Top and bottom of Approach

Footing. See Sec. C-C

 $w_1(E)$ bars. Top and Bottom

 \rightarrow P.G. E.B.

1

€ Joint—

See sheet 13 of 27 for Sections C-C & D-D and View E-E. $a_4(E)$ thru $a_8(E)$, w(E), and $w_1(E)$ bar spacings measured perpendicular to Q Rdwy.

**** 4" <u>Preformed</u> 23₄ " at Joint Seal, 4" recess 50° F. Pavement

**** Cost included with Concrete Superstructure.

JOINT SEAL

- € Joint HMAPavement 1³4'' at End of End of Appr. slab Appr. slab 50° F. - Ç Joint FLEXIBLE PAVEMENT RIGID PAVEMENT

DETAIL A

PLAN

East Approach Shown. West Approach similiar but opposite hand.

₽ D

 $\rightarrow D$

** 12-#6 a4(E) bars

at 15" cts, Top of Slab

5-#5 b₆(E) bars @ ±12" cts.

25-#4 a₅(E) bars at 15" cts. Top of slab

46-#5 a₆(E) bars at 8" cts. Bottom of slab

Sta. 644+19.40 (W. Appr.) ***30-#5 c₂(E) bars © 12" cts.

25-#4 Bar Splicers (E) for a5(E) bars. Top

46-#5 Bar Splicers (E) for a₆(E) bars. Bottom

r ⊈ Roadway

Skew

8-#5 b₆(E) bars

15'-0" typ.

Spaced as shown in

Section Thru Sidewalk

25'-0'

30'-0" | 15-#5 c(E) bars @ 12" cts | 15-#5 c4(E) bars @ 12" cts. | Top (in Sidewalk)

17-#5 dʒ(E) bars at 11'' cts., typ. B.F.

17-#5 d4(E) bars at 11" cts., typ. F.F.

25-#4 a₇(E) bars at 15" cts. Top of slab

Top and bottom of Approach

Footing. See Sec. C-C

As Shown in Cross Section. Top of Median

30-#5 c₃(E) bars © 12" cts. Top (in Raised Median)

46-#5 a₈(E) bars at 8" cts. Bottom of slab 20-#5 w(E) bars at 6" cts.

30-#5 c1(E) bars_

typ., Each Sidewalk

@ 12" cts.

- * Tilt #9 $b_5(E)$ bars as required to maintain clearance.
- ** Alternate with $a_5(E)$ or $a_7(E)$ bars, typ. each parapet. *** 3 4'' 4 Galvanized expansion anchor or Ferrule Loop Slab Insert (Proof Load 6600 lb) for each $c_2(E)$ bar. Cost of anchor/inserts is included in the cost of Reinforcement Bars, Epoxy Coated. (120 total)

DESIGNED JMT CHECKED BLB DRAWN JMT CHECKED BLB

1-#4 b3(E) bar) bottom of slab.

Typ. each end.

b4(E) bars at 12" cts. Top of slab. bars Stage I, 37 bars Stage II)

#4

5", bars

171-#9 bs(E) bars at (84 bars Stage I, 87 t

4

Ε

C

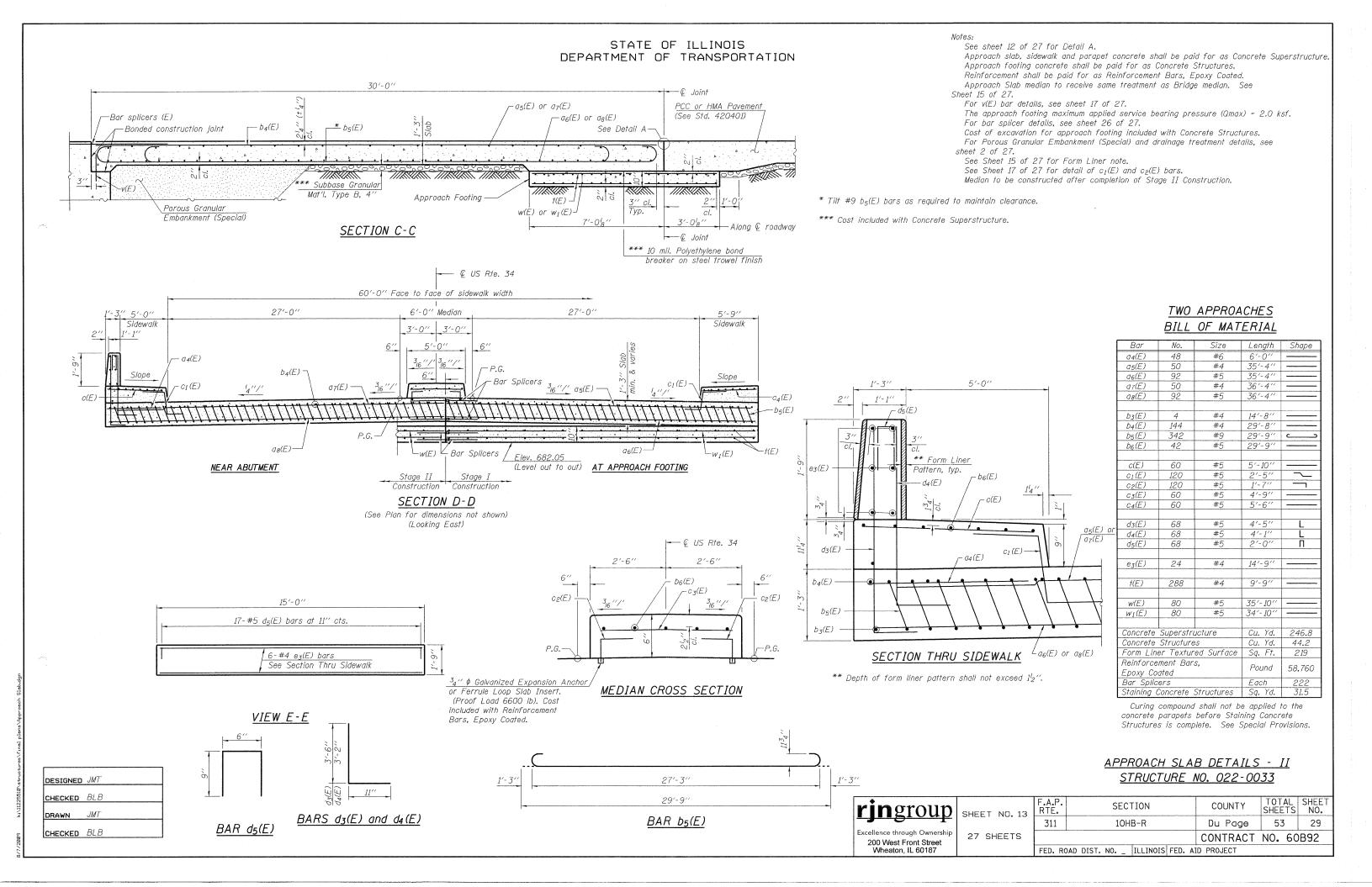
1

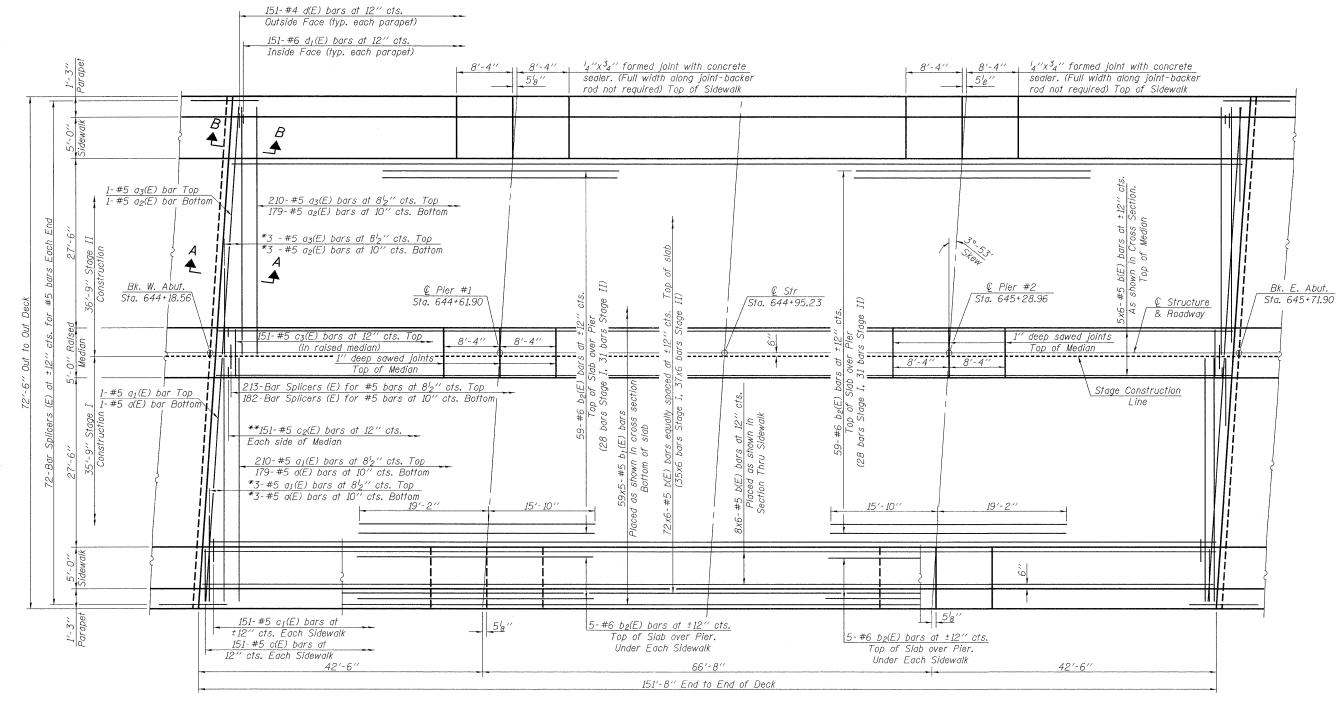
APPROACH SLAB DETAILS - I STRUCTURE NO. 022-0033



200 West Front Street Wheaton, IL 60187

2	F.A.P. RTE.	SECTION				COUNTY	TOT SHEE	AL TS	SHEET NO.	
_	311 10HB-R						Du Page	53		28
							CONTRACT	NO.	60	B92
	EED BO	TZIO OM	NO	THETNOTS	FED	ΛT	D PROJECT			





PLAN

*Order a(E) thru $a_3(E)$ bars full length. Cut to fit skew and use remainder of bars in opposite end.

** $^34^{\prime\prime}$ ϕ Galvanized Expansion Anchor or Ferrule Loop Slab Insert. (Proof Load 6600 lb) for each $c_2(E)$ bar. Cost of anchor/inserts is included with Reinforcement Bars, Epoxy Coated.

<u>NOTES</u>

Minimum lap length for #5 bars = 2'-2".

See Sheets 15 and 17 of 27 for Superstructure Details, Parapet Details, Median Details, Section A-A, Section B-B and Bill of Material.

See Sheet 26 of 27 for Bar Splicer Details. Bars indicated thus 6x5-#5 etc. indicates 6 lines of bars

with 5 lengths per line. See Sheet 1 of 27 for location of Deck Drains. See Sheet 16 of 27 for Diaphragm Details.

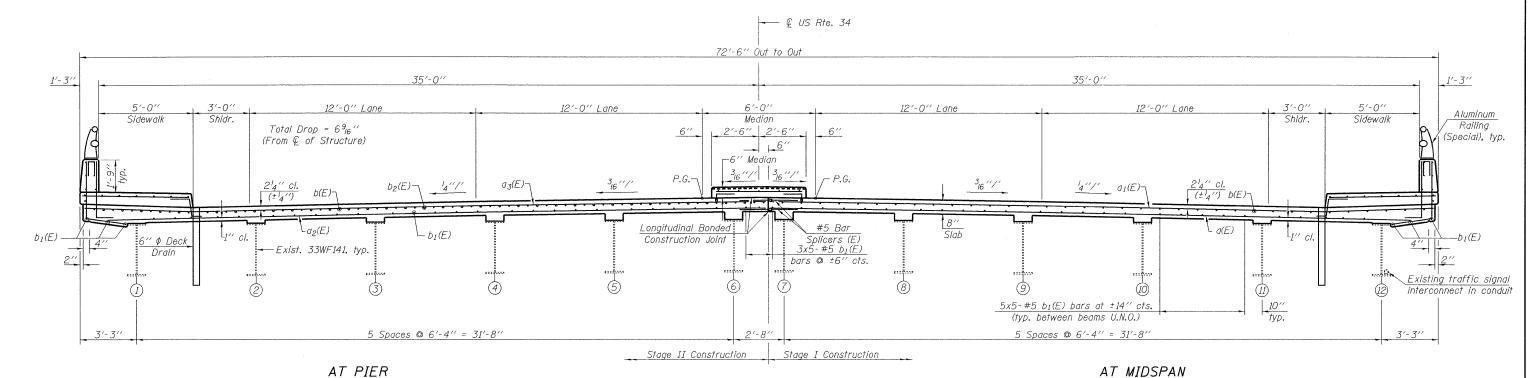
DECK PLAN STRUCTURE NO. 022-0033

ringroup | SHEET NO. 14

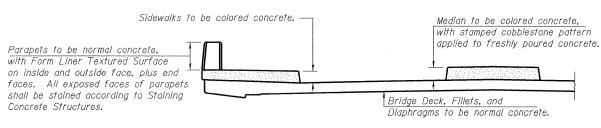
200 West Front Street Wheaton, IL 60187

4	F.A.P. RTE.	.P. SECTION					COUNTY	DUNTY TOTAL SHEETS		SHEE NO.
	311	311 10HB-R				Du Page	e 53		30	
							CONTRACT	NO.	60	B92
	FED. RO	DAD DIST.	NO	ILLINOIS	FED.	ΑI	D PROJECT			

DESIGNED JMT CHECKED BLB JMT DRAWN CHECKED BLB



DECK CROSS SECTION (Looking East)



CONCRETE TREATMENTS

CONCRETE TREATMENT NOTES

Coloring admixture shall be "Santa Fe Buff", color number L1447 by Butterfield Color, or approved equal. Contractor shall submit a sample for approval prior to construction according to the Special Provision for Concrete Median (Special). See Special Provision for more information.

Stamped pattern applied to top surface of Median shall be "Cobblestone - Random Interlocking" by Scofield Systems, or approved equal. Installation shall be according to manufacturer's recommendations. Contractor shall submit a sample for approval by the Village of Lisle, at least 30 days prior to pouring the median.

Color additive in bridge and approach slab (Median and Sidewalks), and stamped Cobblestone pattern on bridge and approach slab (Median), plus any required samples to be submitted for approval, will not be paid for separately, but shall be included with the unit price bid for Concrete Superstructure.

Form Liner on bridge and approach slab (Parapets) shall be Customrock pattern #12021 "Ashlar", or approved equal. Contractor shall submit a sample for approval by the Village of Lisle according to the requirements of Article 503.06(a) of the Standard Specifications. This sample shall also display an example of the proposed staining method for Staining Concrete Structures. Cost included with Form Liner Textured Surface.

Staining of concrete parapets shall be done in accordance with the Special Provision for Staining Concrete Structures. Contractor shall exercise care when staining to avoid coloring the Aluminum Railing.

DECK SECTIONS & DETAILS STRUCTURE NO. 022-0033

COUNTY

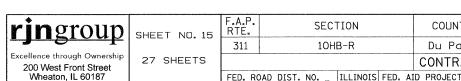
Du Page

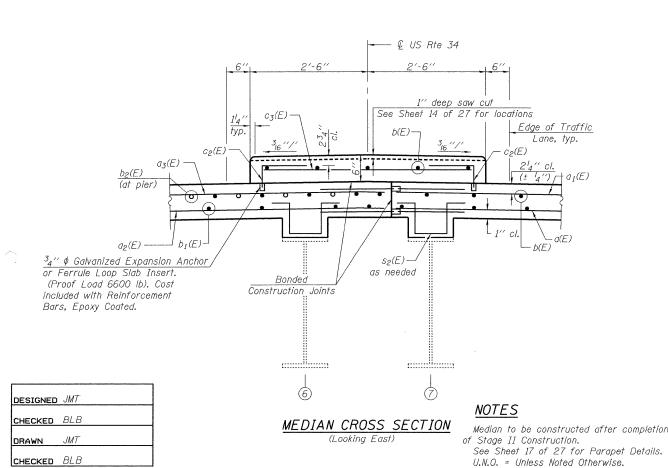
TOTAL SHEET SHEETS NO.

31

53

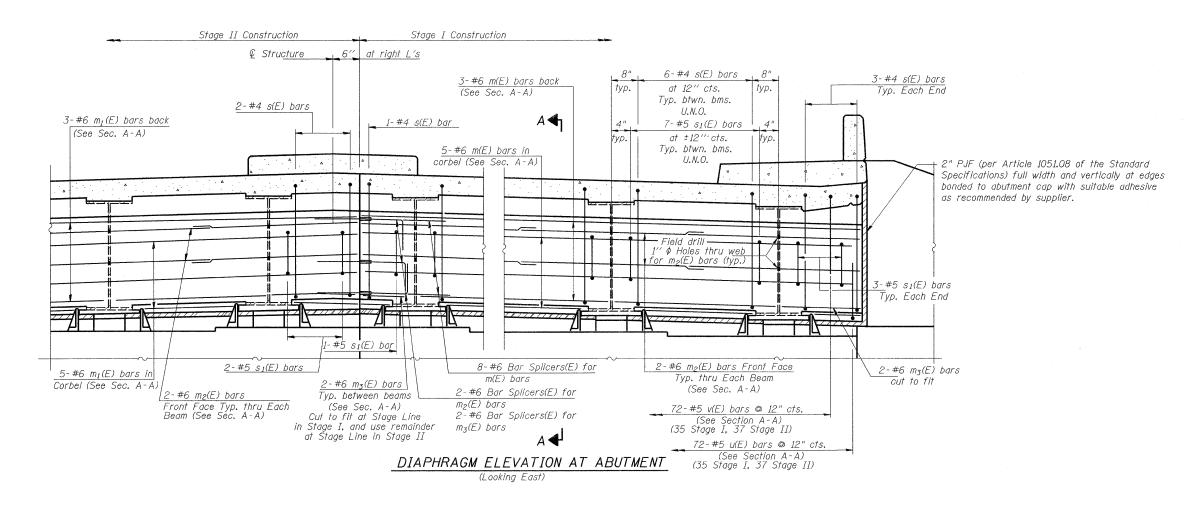
CONTRACT NO. 60B92

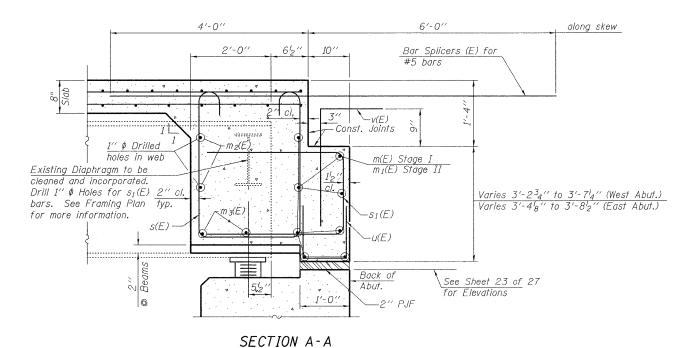




46-#5 s2(E) bars spaced with stud shear connectors. Beams 5 thru 8, Span 2 only. See Sheet 19 of 27 for spacing. 1½" cl. 33WF141

FILLET REINFORCEMENT DETAIL





DIAPHRAGM DETAILS STRUCTURE NO. 022-0033

rjngroup 200 West Front Street

NOTES:

SHEET NO. 16

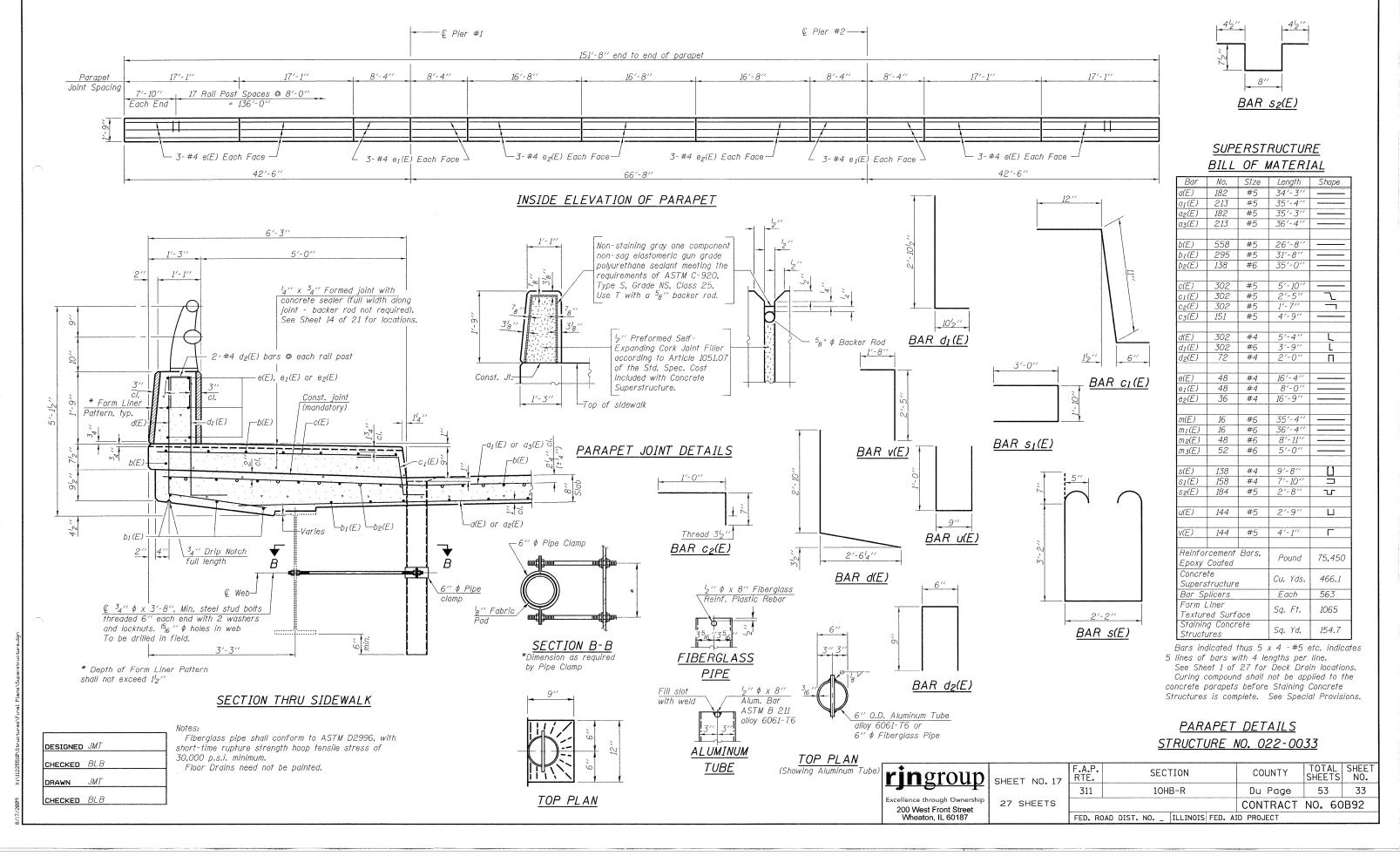
U.N.O. = Unless Noted Otherwise.

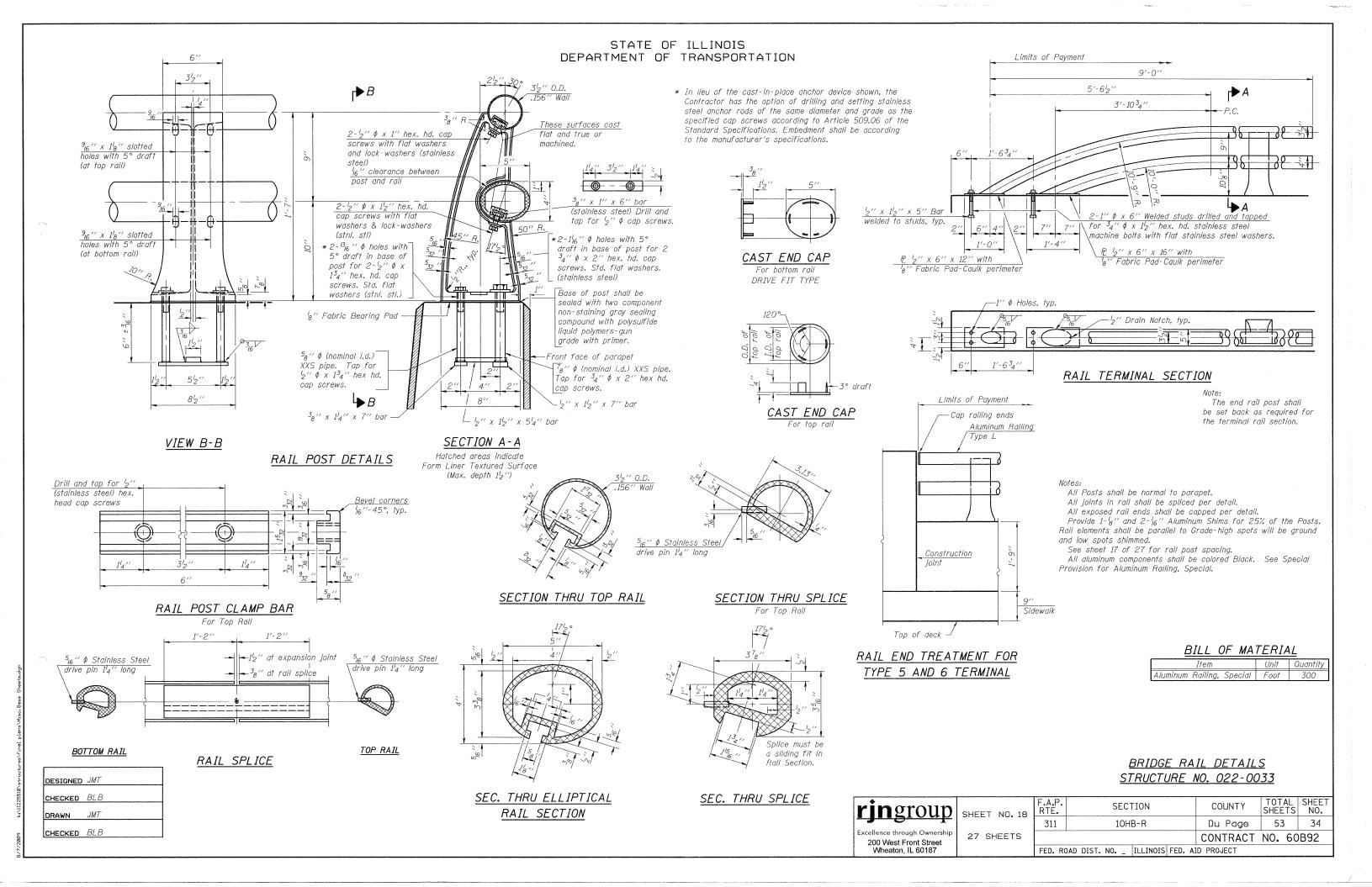
TOTAL SHEET NO. SECTION COUNTY RTE. 10HB-R 32 311 Du Page 53 27 SHEETS CONTRACT NO. 60B92 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

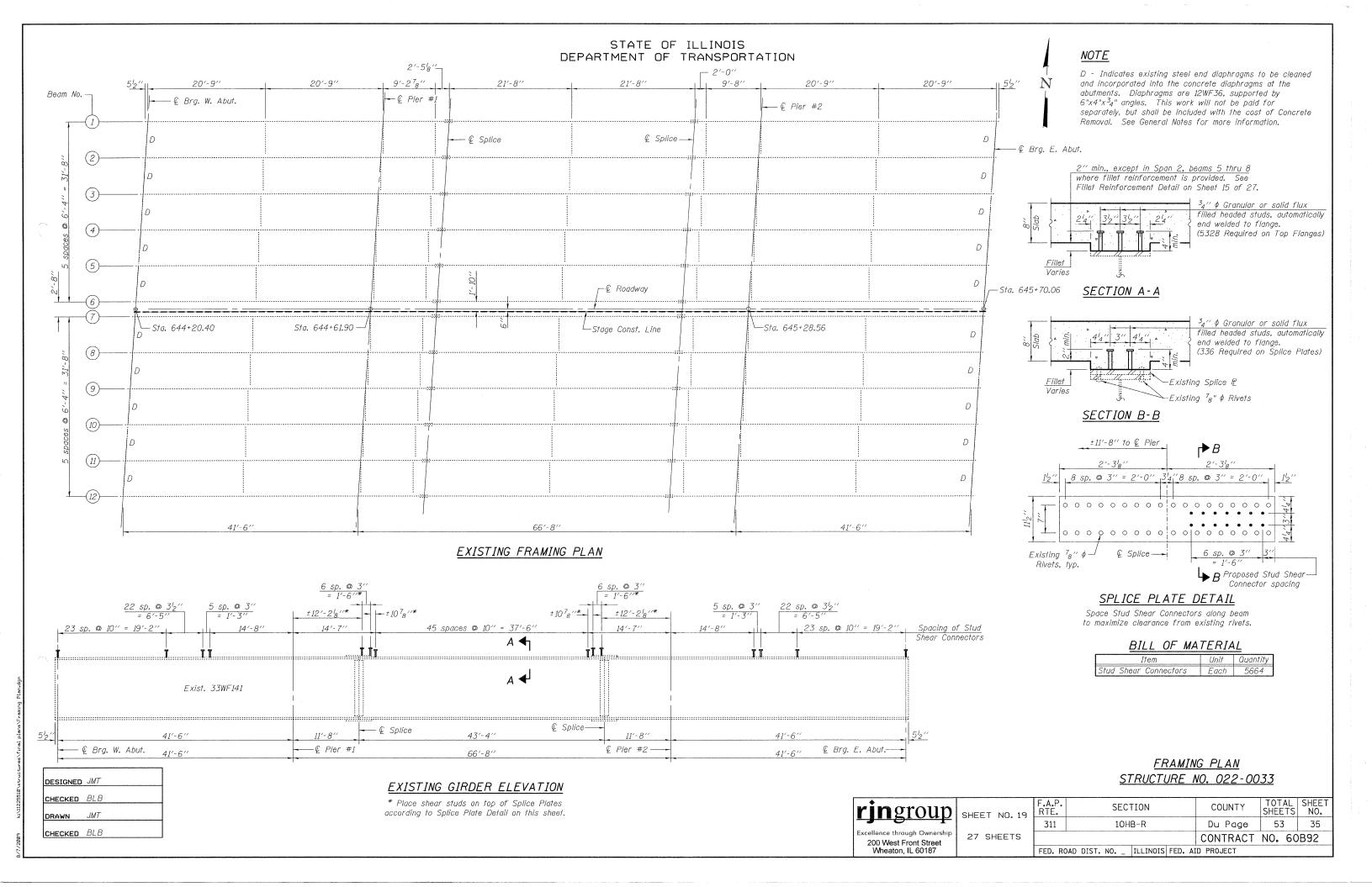
DESIGNED JMT CHECKED BLB DRAWN JMT

CHECKED BLB

(Dimensions at right angles to abutment, except as shown.)







INTERIOR GIRDER REACTION TABLE							
		*** W. Abut.	Pier #1	Pier #2	*** E. Abut.		
R Q	(k)	17.2	76.8	76.8	17.2		
R4	(k)	35.4	42.7	42.7	35.4		
R_I	(k)	10.6	12.8	12.8	10.6		
R Total	(k)	63.3	132.4	132.4	63.3		

- * Compact section
- ** Braced non-compact and partially braced section
- *** These reactions include 3 kips per foot dead load from the Approach Pavement.

Is, Ss:	Non-composite	moment	of in	nertia	and	sect	ion	modulus	of	· the
	steel section u	sed for	comp	outing	fs(T	otal	and	Overload	1)	due
	to non-compos	ite dead	load	s (in.4	and	in. 3).				

- $I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing $f_{\mathcal{S}}$ (Total and Overload) due to short-term composite live loads (in.4 and in.3).
- $I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.4 and in.3).
 - Q: Un-factored non-composite dead load (kips/ft.).
 - $M_{\overline{\ell}}^{\overline{p}}$: Un-factored moment due to non-composite dead load (kip-ft.).
 - s Q: Un-factored long-term composite (superimposed) dead load (kips/ft.)
 - $M_s \mathbb{Q}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 - Mt: Un-factored live load moment (kip-ft.).
 - Mi: Un-factored moment due to impact (kip-ft.).
 - Ma: Factored design moment (kip-ft.).

 - 1.3 [$MP + M_SP + \frac{1}{3}$ ($ML + M_I$)]

 Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- fs (Overload): Sum of stresses as computed from the moments below (ksi).
- $MQ + MsQ + \frac{5}{3} (ML + MI)$ fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).

 - 1.3 [M2 + $Ms2 + \frac{5}{3}$ (M½ + M_I)] VR: Maximum½ + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

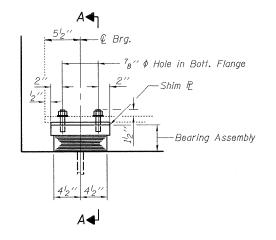
BEAM MOMENT & REACTION TABLES STRUCTURE NO. 022-0033



27 SHEETS

20	F.A.P. RTE.	SECT	COUNTY	TOTAL SHEETS	SHEET NO.		
	311	10H	B-R	Du Page	53	36	
;					CONTRACT	NO. 60)B92
	FED. RC	DAD DIST. NO	ILLINOIS FED.	ΑI	D PROJECT		

DESIGNED JMT CHECKED BLB DRAWN___JMT CHECKED BLB



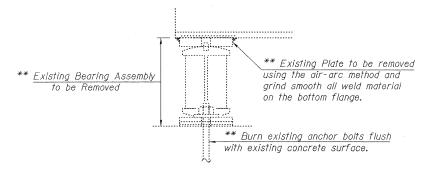
ELEVATION AT ABUT.

Side Retainer, typ. € 1" ∮ x 12" Anchor bolts (F 1554 Grade 36) with 2¹4" x 2¹4" x ⁵16" P washer SECTION A-A

Shim Height (in) Beam No. West Abut East Abut 10

SHIM TABLE

Match Plan dimensions of top bearing plate. Cost included with Furnishing and Erecting Structural Steel.



**Cost is included with Jacking and Cribbing.

REMOVE EXISTING BEARINGS AT ABUTMENTS

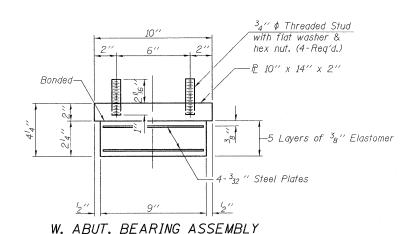
JACKING AND CRIBBING PROCEDURES

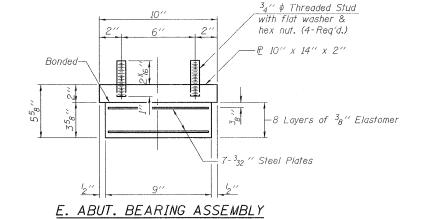
1. Prior to commencing any work at the bearings, the contractor shall submit plans for Jacking and Cribbing for approval by the Engineer.

In each removal stage, Jacking and Cribbing shall be done after the existing deck is removed and before the new deck is poured.

- 2. Jacking shall be limited so that the maximum lift transversely between adjacent beams is \(\frac{1}{8} \)". See Special Provision for Jacking and Cribbing.
- 3. Minimum Jack capacity is 12 Tons per bearing.

TYPE I ELASTOMERIC EXP. BRG.





Shim plates shall not be placed under Bearing Assembly.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Prior to ordering any material, the contractor shall verify in the field all bearing height and shim thickness dimensions.

Two $\frac{1}{8}$ in, adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

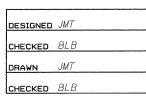
BILL OF MATERIAL

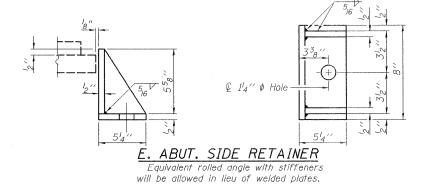
	Item	Unit	Total
	Elastomeric Bearing Assembly, Type I	Each	24
	Anchor Bolts, 1 inch	Each	48
***	Jacking and Cribbing	Each	24
	Furnishing and Erecting Structural Steel	Pound	330

***Locations for Jacking and Cribbing include 12 beam ends at each Abutment.

€ 1'4" ¢ Hole W. ABUT. SIDE RETAINER

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





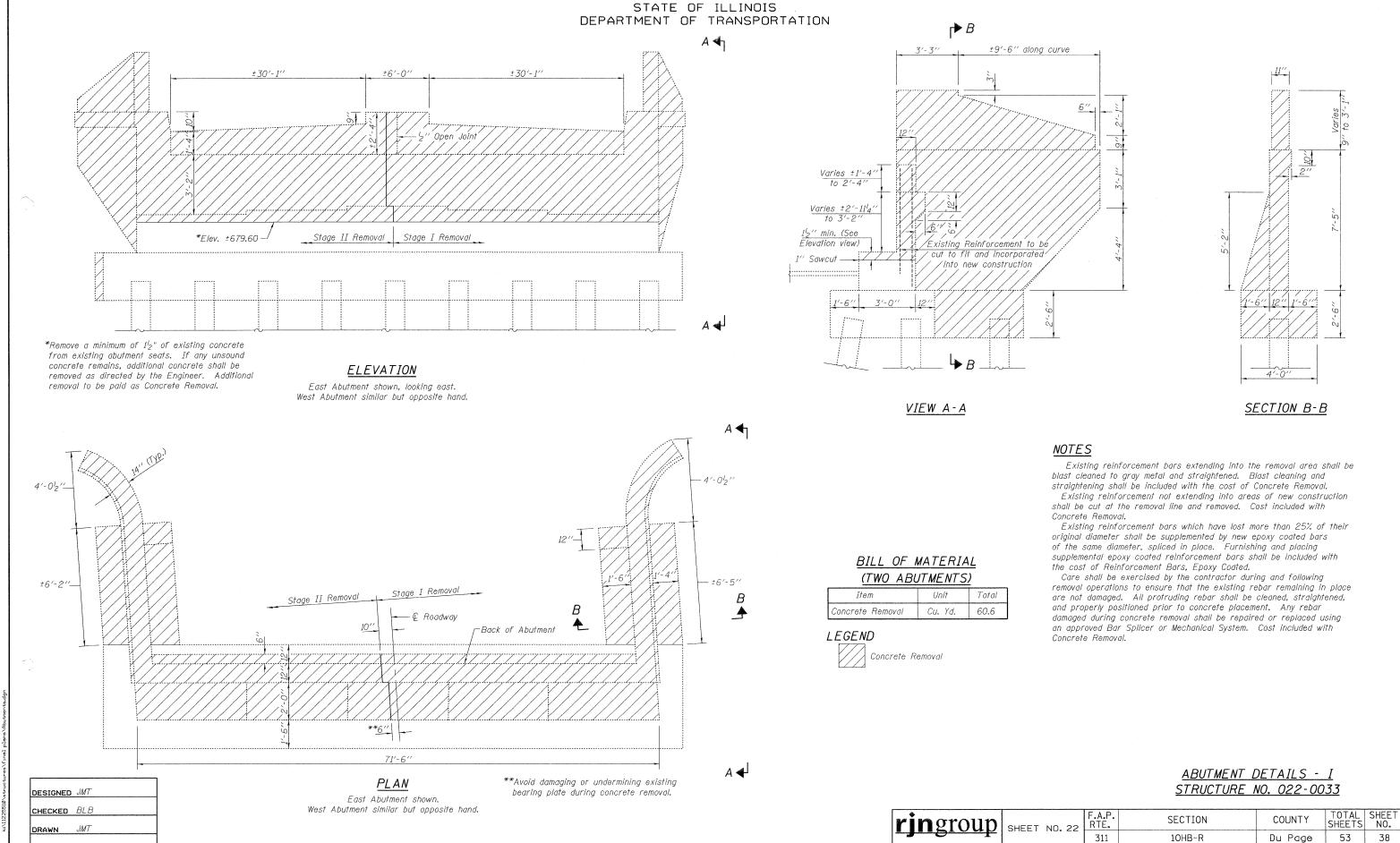
BEARING DETAILS STRUCTURE NO. 022-0033

rjngroup 200 West Front Street Wheaton, IL 60187

SHEET NO. 21

27 SHEETS

TOTAL SHEET SHEETS NO. F.A.P. RTE. **SECTION** COUNTY Du Page 311 10HB-R 53 37 CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

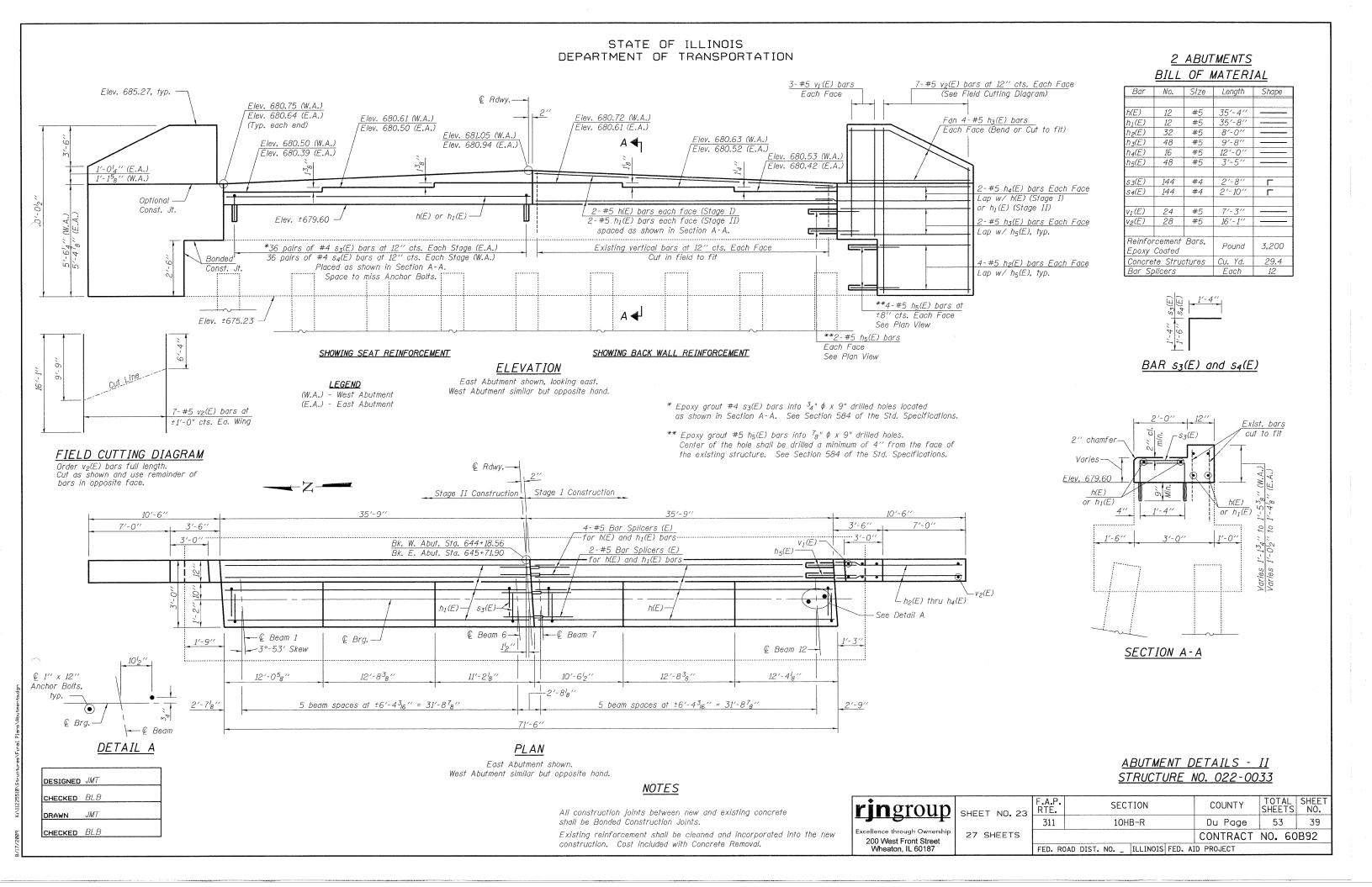


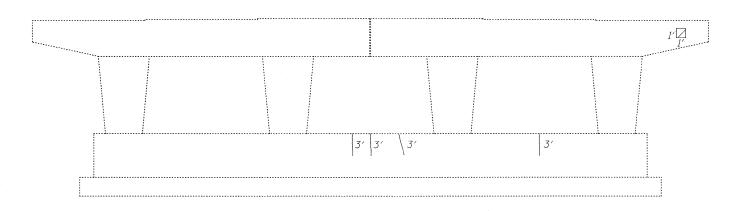
27 SHEETS

200 West Front Street Wheaton, IL 60187 CONTRACT NO. 60B92

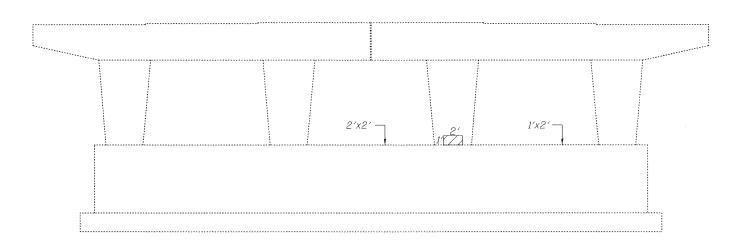
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

CHECKED BLB





<u>PIER #1</u> (East Face has no deterioration)



LEGEND



--- Epoxy Crack Sealing

BILL OF MATERIAL

DILL OF WATENIA	<u>L</u>	
Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5″)	Sq. Ft.	20*
Epoxy Crack Injection	Foot	12

DESIGNED JMT

CHECKED BLB

DRAWN JMT

CHECKED BLB

* Quantity has been increased to allow for additional repairs as directed by the Engineer.

<u>PIER #2</u> (East Face has no deterioration)

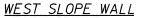
STRUCTURE NO. 022-0033

rjn group	•
Excellence through Ownership	
200 West Front Street Wheaton, IL 60187	

SHEET	NO. 24
27 SH	IEETS

4	F.A.P. RTE.	SECTION								UNTY	TOTAL SHEETS		SHEET NO.	
•	311		10HB-R						Du	Page	53	53		
									CON	TRACT	NO.	60	B92	
	FED. RO	OAD	DIST.	NO.	_	ILLINOIS	FED.	AID	PRO	IECT				

<u>PIER REPAIRS</u>



NOTE:

Slopewall shall be reinforced with welded wire fabric, $6^{\prime\prime}$ x $6^{\prime\prime}$ - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

<u>LEGEND</u>

Slope Wall Repair

BILL OF MATERIAL

DILL OF WATER	<u> 17 L</u>	
Item	Unit	Quantity
Slope Wall Removal	Sq. Yd.	5.6
Slope Wall 4 Inch	Sa Yd	5.6

SLOPE WALL REPAIRS STRUCTURE NO. 022-0033

rjngroup | SHEET NO. 25 Excellence through Ownership 200 West Front Street Wheaton, IL 60187

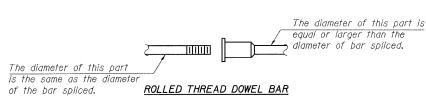
27 SHEETS

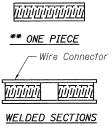
5	F.A.P. RTE.		SEC	ΓΙΟΝ		COUNTY	TOTA SHEE	SHE NO		
	311		10H	B-R			Du Page	53		41
							CONTRACT	NO.	60	B92
	FED. RO	DAD DIST.	NO	ILLINOIS	FED.	AID	PROJECT			

CHECKED BLB DRAWN JMT CHECKED BLB

DESIGNED JMT

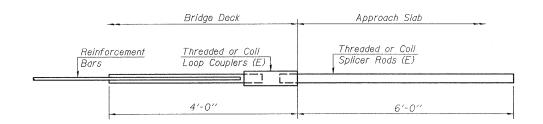
EAST SLOPE WALL





BAR SPLICER ASSEMBLY ALTERNATIVES

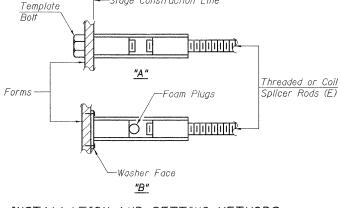
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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 = 144

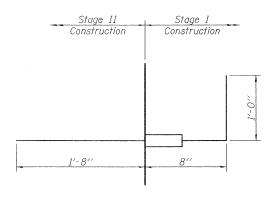
DESIGNED	JMT
CHECKED	BLB
DRAWN	JMT
CHECKED	BLB



Stage Construction Line

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.



#6 BAR SPLICER (E) BETWEEN BEAMS 6 AND 7

SPECIAL SPLICER DETAIL (Diaphragms)

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:

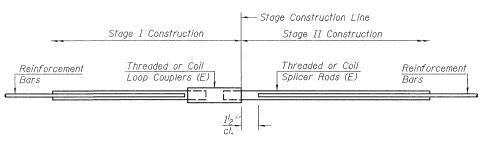
Minimum Capacity (Tension in kips) = 1.25 x fy x A_t

Minimum *Pull-out Strength = 0.66 x fy x A_t (Tension in kips)

Where fy = Yield strength of lapped reinforcement bars in ksi.

 A_t = Tensile stress area of lapped reinforcement bars. * = 28 day concrete

BAR SPLICER ASSEMBLIES									
		Strength Requirements							
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length		Min. Pull-Out Strengt 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						



STANDARD

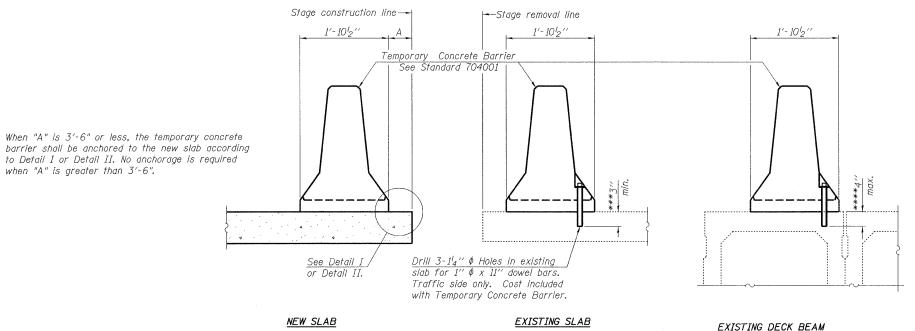
Bar Size	No. Assemblies Required	Location
#5	395	Deck
#5	172	Approach
#6	24	Diaphragms
#5	12	A <i>butments</i>
#4	50	Approach

BAR SPLICER DETAILS STRUCTURE NO. 022-0033



SHEET NO. 26 27 SHEETS

TOTAL SHEET SHEETS NO. F.A.P. RTE. SECTION COUNTY 311 10HB-R Du Page 53 42 CONTRACT NO. 60B92 FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT



NOTES

Detail I - With Bar Splicer or Couplers: Connect one (1) 1''x7''x10'' steel $\frac{n}{2}$ to the top layer of couplers with $2^{-5}g''$ ϕ bolts screwed to coupler at approximate @ of each barrier panel.

Detail II - With Extended Reinforcement Bars:

Connect one (1) 1''x7''x 10'' steel £ to the concrete slab or concrete wearing surface with $2^{-5}8''$ ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate Q of each barrier panel.

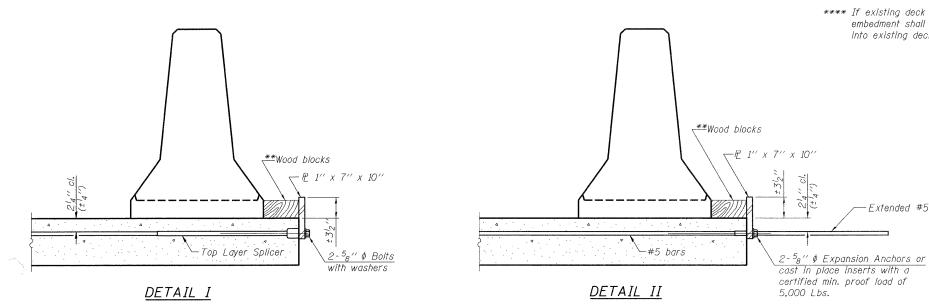
Cost of anchorage is included with Temporary Concrete Barrier. The $I'' \times I'' \times I0''$ plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

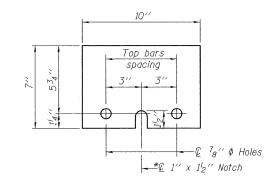
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

Extended #5 bars





STEEL RETAINER P 1" x 7" x 10"

* Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

TEMPORARY CONCRETE BARRIER DETAILS STRUCTURE NO. 022-0033



27 SHEETS

7	F.A.P. RTE.			SI	EC ⁻	ΓΙΟΝ		COUNTY		TOTAL SHEETS		SHEET NO.	
. /	311 10HB-R								Du	Page	53	53	
									CON	TRACT	NO.	60	B92
	FED. RO	DAD D	IST.	NO.	_	ILLINOIS	FED.	AII	PRO	JECT			

CHECKED BLB R-27

DESIGNED JMT CHECKED BLB

DRAWN JMT

when "A" is greater than 3'-6".

10-1-08

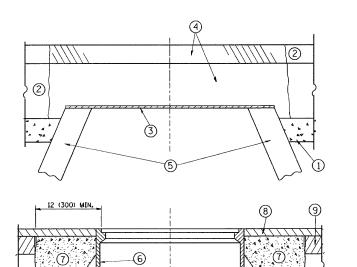
ROUTE F.A.P. 311	DESCRI	PTION		US	-34 (OGDEN AVE.) OVER IL-53	LOGGI	D BY		
					J, SEC. 3, TWP. 38N, RNG. 10E, 3rd PM				
COUNTY <u>DUPAGE</u> D	RILLING	METHO	DD		HAMMER T	TYPE			
STRUCT. NO. 022-0033		WEA	THER	COND	·		_ TE	MP	
Station 644 + 95.23 BORING NO. 13 Station Offset 54 ft W of CL Longitude/Northing Latitude/Easting	D E P T H	B L O W S	U C S Qu (tsf)	M O I S T	Surface Water Elev. ff Stream Bed Elev. ff Groundwater Elev.: First Encounter ff Upon Completion ff After Hrs. ff	t EP		U C S Qu (tsf)	
Glound Surface Liev.	_11 1 (14)	(,	(407)	(/*/	Atter Firs.		, ,	14-17	t
Boring begins at ground surface from 1958. No information availab in embankment cone. 1958 Ground Surface 66		-							
Medium Black Clayey Silt						-20			
	665.8								
Stiff Brown Silty Sandy Clay						***************************************			
	663.8								
6									
	661.8	44				-25			Ī
	001.0					-25			1
Very Dense Brown Angular	660.3								
Well Graded Gravel	659.3	64							
									1
6	557.8 <u>-10</u>		ļ						-
	656.8	58				-30			
	655.8								+
Dense Gray Uniform	655. <u>3</u>								1
Fine Sand	654. <u>3</u> 653.8	23							
Very Dense Gray Angular									
Poorly Graded Gravel	652.8 <u>–15</u>	105							
	651.8	<u> </u>	<u> </u>	<u> </u>		-35	L		1

ROUTE F.A.P. 311 DE	SCRI	PTION		US	-34 (OGDEN AVE.) OVER IL-53	LOGGI	ED BY		
SECTION 10HB-R	l	OCAT	ION _	SE 1/4	, SEC. 3, TWP. 38N, RNG. 10E, 3rd PM	1	***************************************		
COUNTY DUPAGE DRILLIN	IG N	иетно	DD		HAMMER	TYPE			
STRUCT. NO. 022–0033 Station 644+95.23		WEA	THER	COND	•		TE	MP.	
BORING NO. 14 Station 645 + 45 Offset 48 ft W of CL Longitude/Northing Latitude/Easting Ground Surface Elev. ft	D E P T H (ft)	B L O W S	U C S Qu (tsf)	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.	ft P T H ft	. o & s	U C S Qu (tsf)	(9
diodna odnace Liev.	,,		(4-17	(///	Attel 1115.		, ,	(,	
Boring begins at ground surface from 1958. No information available in embankment cone.					Very Dense Gray Poorly Graded Gravel	646.8 645.3 644.3	92		
1958 Ground Surface 662.5	0								
Medium Black Silty Gravelly Clay					(642.8 <u>–20</u> 641.8 –	Refu	sal	
Stiff Brown Sandy Clay 658.									
Very Dense Angular Gravel 657.8 and Cobbles 65	6.8	50							
68 Ruptured Sample	55.3	16							
Very Stiff Gray Clay Till	74.5					***************************************			
652.8 Too Stoney to Test	-10 51.8	16							
Free Water Level 650.8						-30 			
64 Very Dense Gray Poorly	19.3	66							
Graded Gravel 647.8	15	55							
64	16.8		<u> </u>						<u> </u>

<u>SOIL BORING LOGS</u> <u>STRUCTURE NO. 022-0033</u>

SHEET NO. 27A	F.A.P. RTE.	SEC ⁻	TION	COUNTY	TOTAL SHEETS	SHEE NO.	
OHEET HOLETH	311	10HI	B-R	DUPAGE	53	43A	
27 SHEETS					CONTRACT	NO. 60)B92
	FED. RO	DAD DIST. NO	ILLINOIS FEE	D. AI	D PROJECT		

CONTRACT NO. 60B92
COUNTY TOTAL SHEET NO. SECTION 10HB-R DUPAGE STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



PROPOSED

PROPOSED

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE REGINEER, REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM $1\!\!1\!\!1_2$ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HWA SURFACE COURSE OR HWA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

SUB-BASE GRANULAR MATERIAL

- PROPOSED SAND FILL

- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

3 36 (900) DIAMETER METAL PLATE

- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- (5) EXISTING STRUCTURE

LOCATION OF STRUCTURES:

8 PROPOSED HMA SURFACE COURSE

9 PROPOSED HMA BINDER COURSE

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

DEVICTORS

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT

WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

	VEAT210M2		ILLINOIS DE	DADTM
	NAME	DATE	ILLINOIS DE	CARIN
R.	SHAH	10/25/94		
R.	SHAH	01/30/95		DET
R.	SHAH	03/10/95	FRAMES	AND
Α.	ABBAS	03/21/97	FRAMES	
R.	WIEDEMAN	05/14/04		WIT
R,	BORO	01/01/07		

MENT OF TRANSPORTATION TAILS FOR

LIDS ADJUSTMENT TH MILLING

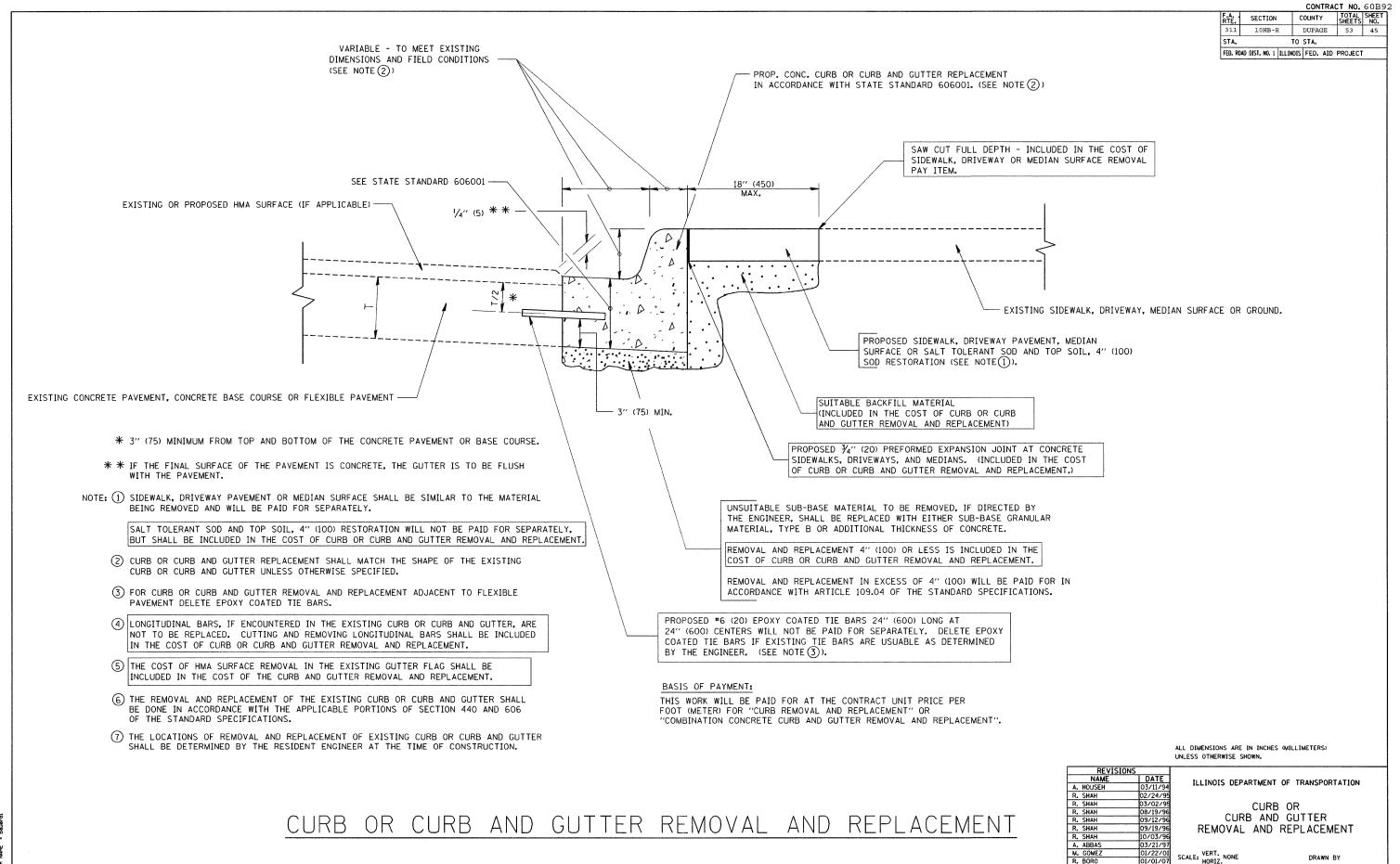
SCALE: VERT. NONE

DRAWN BY CHECKED BY

BD600-03 (BD-8)

= 3/5/2007 = Ki\diststd\bd08.c = 50.0000 '/ IN, = bouerdl

DATE NAME SCALE NAME



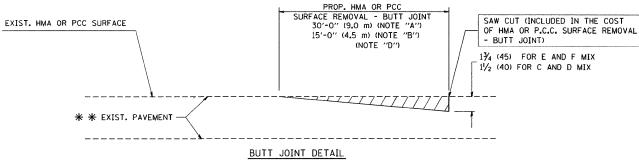
DATE NAME SCALE NAME

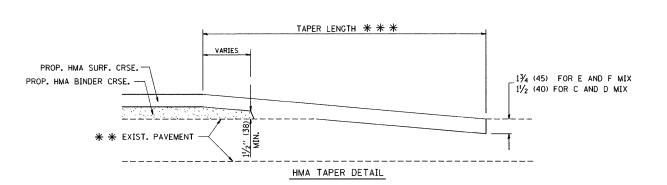
CHECKED BY

BD600-06 (BD-24)

PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING TEMP. RAMP (NOTE "E") PROP. HMA SURFACE REMOVAL -EXIST. PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST TEMP. RAMP OF HMA SURFACE (NOTE "C") PROP. HMA SURFACE REMOVAL REMOVAL - BUTT JOINT) 13/4 (45) FOR E AND F MIX 4'-6" (1.35 m) PAY LIMI FOR BUTT JOINT 11/2 (40) FOR C AND D MIX EXIST. HMA SURF. EXIST. PAVEMENT ______ HMA CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 2 TYPICAL TEMPORARY RAMP HMA TAPER LENGTH SAW CUT (INCLUDED IN THE COST OF HMA SURFACE PROP. HMA SURF. CRSE. REMOVAL - BUTT JOINT) PROP. HMA BINDER CRSE. 4'-6" (1.35 m) VARIES_ 13/4 (45) FOR F AND F MIX PAY LIMIT FOR BUTT JOINT 11/2 (40) FOR C AND D MIX EXIST. HMA SURF. EXIST. PAVEMENT MA SURF. REMOVAL - BUTT JOINT 5/5 BUTT JOINT AND HMA TAPER TYPICAL BUTT JOINT AND HMA TAPER

CONTRACT NO. 60B92 SECTION COUNTY TOTAL SHEET NO. DUPAGE STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

BASIS OF PAYMENT:

- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-O" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

R. SHAH A. ABBAS M. GOMEZ

- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

* * * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

REVISIONS NAME ILLINOIS DEPARTMENT OF TRANSPORTATION M. DE YONG M. DE YONG
M. DE YONG

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE

CHECKED BY

BD400-05 (VI=BD32)

DATE NAME SCALE NAME

FOR MILLING AND RESURFACING

ROAD
CONSTRUCTION
AHEAD

TYPE III BARRICADES
WITH TWO FLASHING AMBER
LIGHTS ON EACH,

200'± (600 m±)

DRIVEWAY

RECTION
COUNTY STOTAL
FED. ROAD
CONSTRUCTION
AHEAD

TYPE III BARRICADES WITH ONE
FLASHING AMBER LIGHT ON EACH, OR
TYPE III BARRICADES WITH TWO FLASHING
AMBER LIGHTS ON EACH.

SPEED LIMIT 4 0 MPH 60 MPH 60

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:
- Q) 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:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON 1T 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.
- 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.

		REVISIO
	DATE	NAME
т	6/89	LHA
'	09/08/94	T. RAMMACHER
	10/18/95	J. OBERLE
	03/06/96	A. HOUSEH
	10/15/96	A. HOUSEH
	01/06/00	T. RAMMACHER
۰		
۱ ۵۱		

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

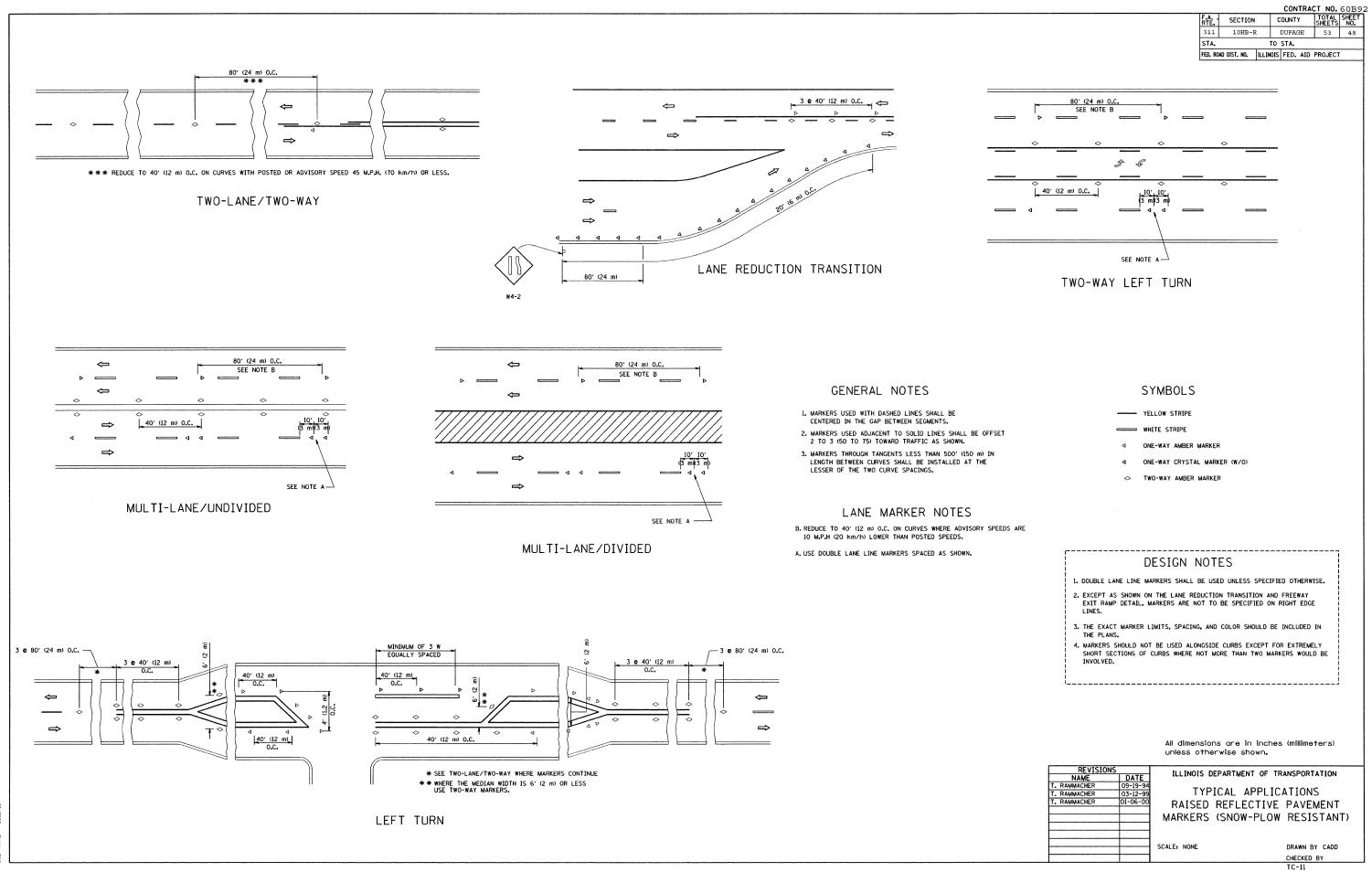
SCALE: NONE

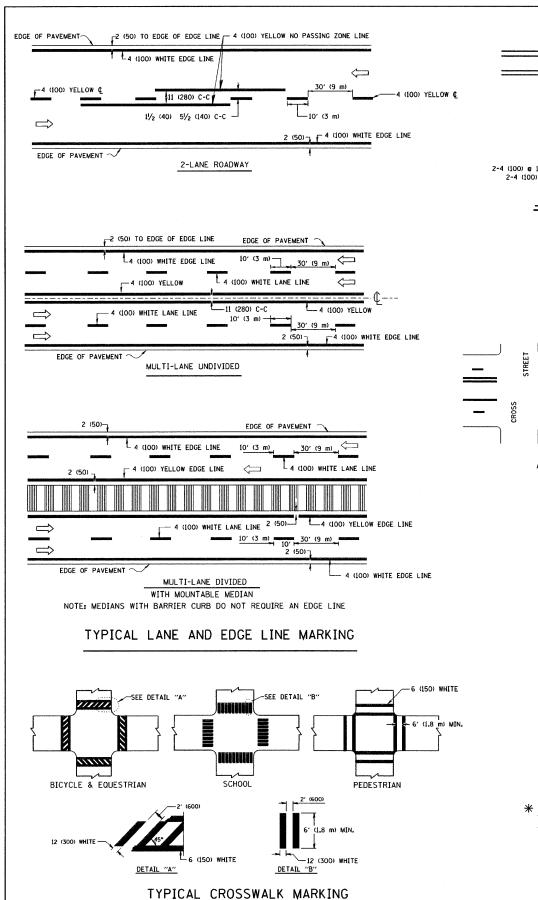
DRAWN BY CHECKED BY

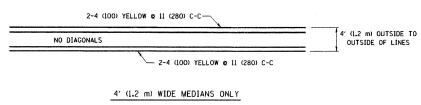
CONTRACT NO. 60B92

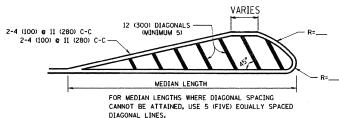
TC-10

DATE = 3/6/2007
NAME = Ki\diststd\tcl0.dgn
SCALE = 50.000 '/ IN.



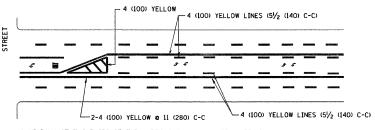




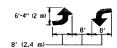


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

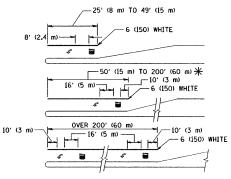


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

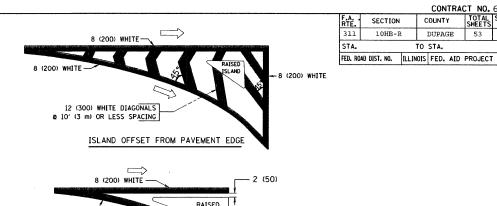


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SO. FT. (1.5 m²) \uparrow AREA = 20.8 SO. FT. (1.9 m²)

* 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 TURN LANE MARKING



TYPICAL ISLAND MARKING

ISLAND AT PAVEMENT EDGE

ISLAND

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 UNDIVEDED PAVEMENT	2 e 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 6 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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" IS 6' (1.8 m: LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO, FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
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 (0VER 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.

REVISIO		II LINOI	S DEPARTMENT OF TRANSPORTATION
NAME	DATE	ILLINOI	3 DEFARTMENT OF TRANSPORTATION
EVERS	03-19-90		
T. RAMMACHER	10-27-94		DISTRICT ONE
ALEX HOUSEH	10-09-96		
ALEX HOUSEH	10-17-96		TYPICAL PAVEMENT
T. RAMMACHER	01-06-00		MADICINICS
			MARKINGS
		SCALE: NONE	DRAWN BY CADD

SCALE: NONE

DRAWN BY CADD CHECKED BY

CONTRACT NO. 60B92 COUNTY TOTAL SHEET NO.

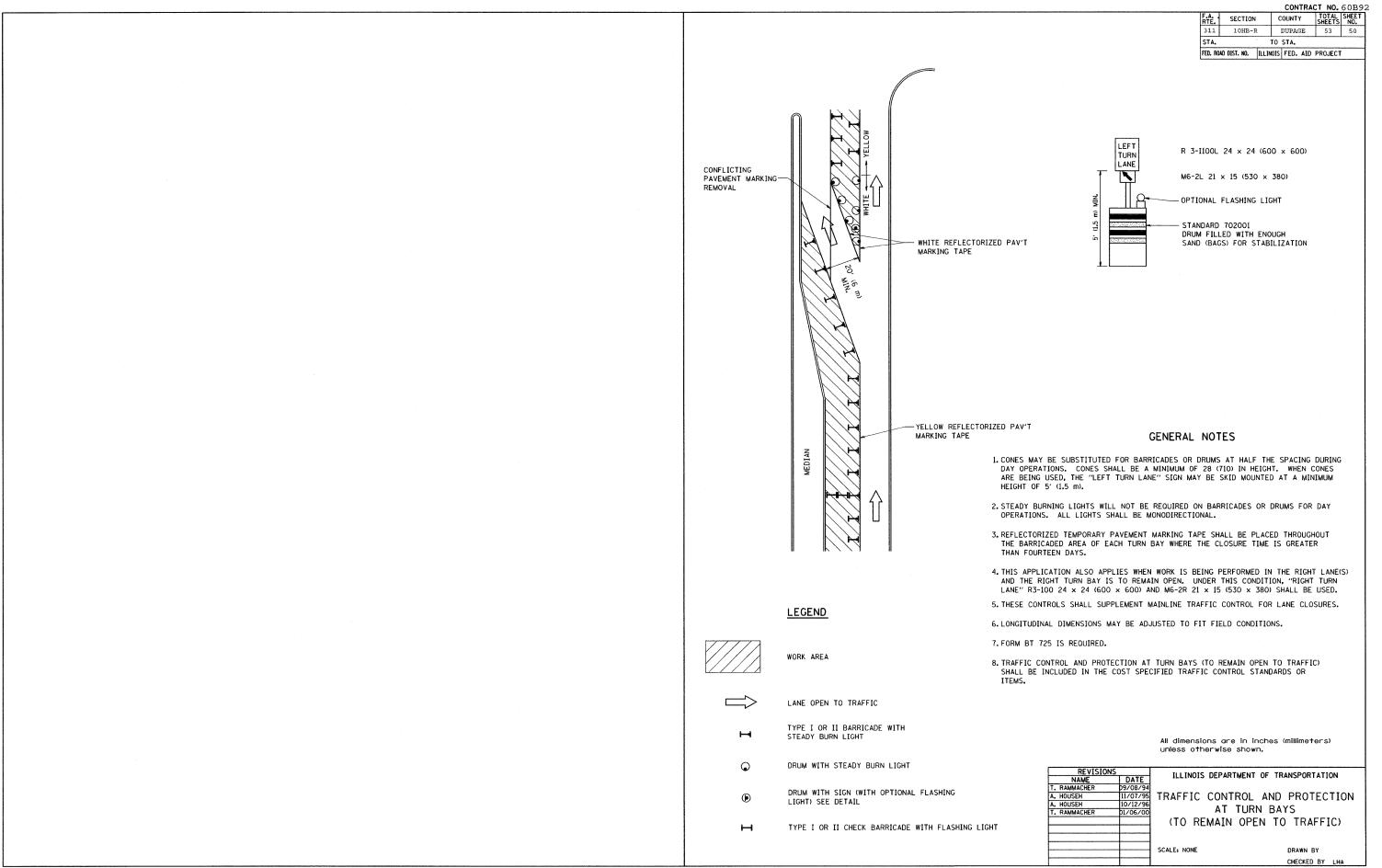
DUPAGE

TO STA.

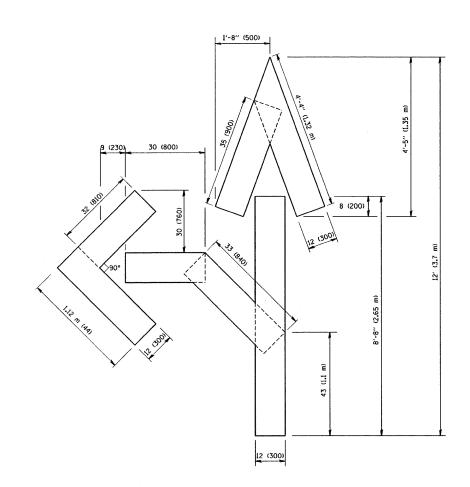
SECTION 10HB-R

TC-13

DATE NAME SCALE NAME



TC-14



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

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

J. OBERLE 06/01/9 T. RAMMACHER 06/05/9 T. RAMMACHER 11/04/9 T. RAMMACHER 03/02/9	NAME	DATE
T. RAMMACHER 06/05/9 T. RAMMACHER 11/04/9 T. RAMMACHER 03/02/9	T. RAMMACHER	09/18/94
T. RAMMACHER 11/04/9° T. RAMMACHER 03/02/9	J. OBERLE	06/01/96
T. RAMMACHER 03/02/9	T. RAMMACHER	06/05/96
	T. RAMMACHER	11/04/97
E. GOMEZ 08/28/0	T. RAMMACHER	03/02/98
	E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD CHECKED BY

CHECKED BY

2 m (6')

16 (400) * 16 (400) * 16 (400)

* 8 * 8 * * 12 (300)

* 12 (300)

* 12 (300)

* 12 (300)

* 14 (100)

* 15 (400) * 16 (400)

* 16 (400)

* 17 (100)

* 18 (200)

* 19 (100)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

* 10 (400)

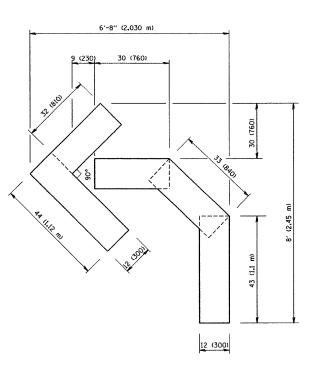
* 10 (400)

* 10 (400)

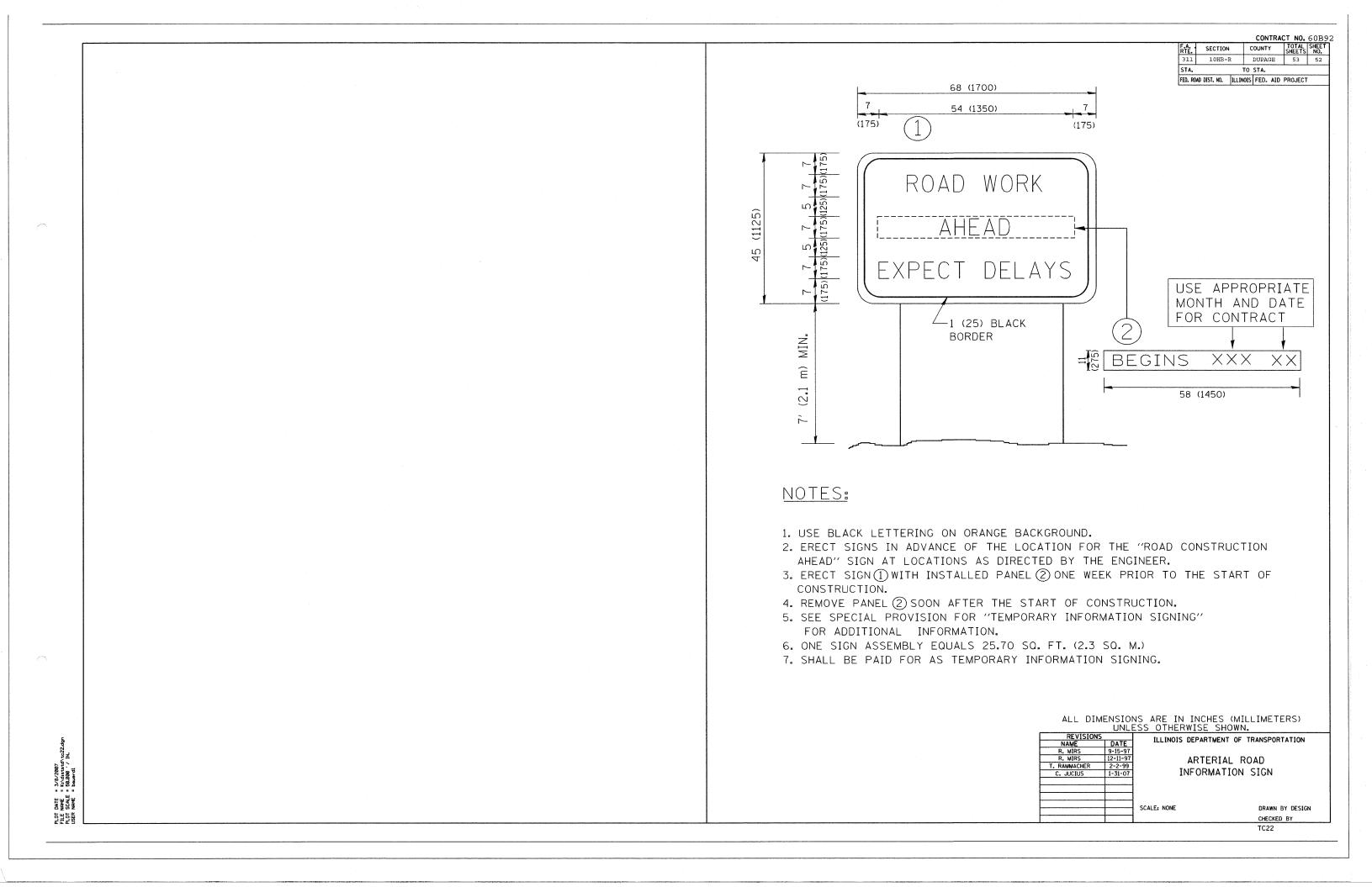
* 10 (400)

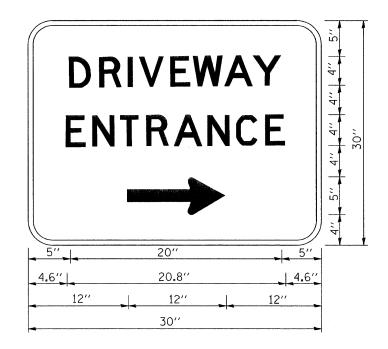
* 10 (400)

* 1



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





3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

REVISIO		THE INOIS DEPARTM	ENT OF TRANSPORTATION
NAME	DATE	ILLINOIS DEI ANTIQ	LINI OF THANSFORTATION
c. Jucius	02/15/07		
			AY ENTRANCE IGNING
		SCALE: NONE	DRAWN BY R.H.
		DATE	CHECKED BY
			TC-26

DATE = 3/9/2007 NAME = Ki\diststd\tc26.dgn SCALE = 50.000 ' IN.