F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	1

D-91-443-00
CONTRACT NO. 62037

11-5-10 LETTING ITEM 002

Project located in THE TOWNSHIP OF ANTIOCH

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY

FAP 303 – IL ROUTE 173 OVER BOAT CHANNELS (1.8 MI WEST OF IL 59 & 2.5 MI WEST OF IL 59)
SECTION: 134(B&B–2)R–1
BRIDGE SUPERSTRUCTURE REPLACEMENT AND BRIDGE REPLACEMENT

LOCATION OF SECTION INDICATED THUS: –

Project Description

IL ROUTE 173 OVER WEST BOAT CHANNEL, 2.5 MI WEST OF IL ROUTE 59, BRIDGE SUBSTRUCTURE REPAIR AND SUPERSTRUCTURE REPLACEMENT.
EXISTING S.N. 049-0055
EXISTING BRIDGE LENGTH 9.72 M

Project Description

IL ROUTE 173 OVER EAST BOAT CHANNEL, 1.8 MI WEST OF IL ROUTE 59, BRIDGE SUB-STRUCTURE AND SUPER-STRUCTURE REPLACEMENT.
EXISTING S.N. 049-0056
PROPOSED S.N. 049-0198
EXISTING BRIDGE LENGTH 29.58 M
PROPOSED BRIDGE LENGTH 43.55 M

Project Ends
Sta. 25 + 120

Project Begins
Sta. 25 + 077

Project Ends
Sta. 26 + 400

Project Begins
Sta. 26 + 096

TRAFFIC DATA
2007 ADT: 12,400 VEHICLES
2007 ADTT: 1,875
2027 ADT: 16,700 VEHICLES

POSTED SPEED LIMIT
65 km/h (40 mph)

DESIGN DESIGNATION
17,400(30) PRINCIPAL ARTERIAL
5.07 (FD-20)

METRIC RATIOS

1 m 0 2 m
1 : 50

0 5 m 10 m
1 : 100

10 m 0 20 m
1 : 250

5 m 0 20 m
1 : 500

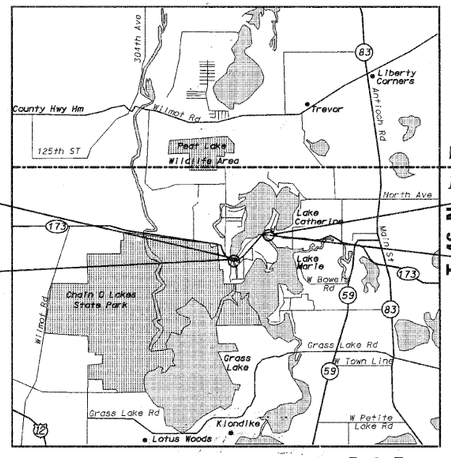
0 50 m 100 m
1 : 1000

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

CONTRACT NO. 62037

LAKE COUNTY
C–91–443–00



ANTIOCH TOWNSHIP
LOCATION MAP
SCALE: 1:60000

WEST BOAT CHANNEL LENGTH OF PROJECT = 43 m = 0.043 km
EAST BOAT CHANNEL LENGTH OF PROJECT = 304 m = 0.304 km
GROSS LENGTH OF PROJECT = 347 m = 0.347 km
NET LENGTH OF PROJECT = 347 m = 0.347 km

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JUNE 10, 20 10
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAY, REGION ONE ENGINEER
October 1 20 10
Scott E. Stitt, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT
October 1 20 10
Christine M. Reed
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Expires: 11/30/11

Robert C. Danke 9/15/10
Expires 11/30/10

SEAL

AppliedTechnologies
CONSULTING ENGINEERS
468 PARK AVENUE
LAKE VILLA, ILLINOIS 60046
PHONE: 847 265–7325, EXT 101
FAX: 847–265–7327

DIST. 1 - DESIGN / CONSULTANT SERVICES PROJECT MANAGER: BRIAN KUTTAB (847) 705-4431

3116&17COV

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

INDEX OF SHEETS

LIST OF HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
609006-05	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701206-02	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS >= 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS - DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L 2W, MOVING OPERATIONS - DAY ONLY
701316-04	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS > 45 MPH
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701336-05	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS >= 45 MPH
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS

SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

3116&17INDEX.DGN

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

GENERAL NOTES

1. 3 METER (10 FEET) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
2. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
3. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
4. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINUMUM OF FOUR SANDBAGS PER BARRICADE.
5. THE REMOVAL OF EXISTING ENTRANCE CULVERTS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
6. BEFORE ORDERING STORM SEWERS, CATCH BASINS, PIPE CULVERTS, PIPE DRAINS, AND MANHOLES, THE CONTRACTOR SHALL CONTACT THE ENGINEER AS TO THE EXACT LENGTH AND QUANTITY REQUIRED.
7. THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 2.0 L/M^2 (0.44 GAL/YD^2).
8. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE TOWNSHIP OF ANTIOCH, USGS, AND FOX WATERWAY AGENCY.
9. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40mm (1½ INCHES) WHERE SPEED LIMIT IS 80km/h (45mph) OR LESS AND 25mm (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80km/h (45mph). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75mm (3 INCHES) MAY BE ALLOWED IF THE EDGE OF MILLING IS SLOPED A MINIMUM 1:3 (V:H).
11. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
12. TWO WEEKS PRIOR TO PERMANENT PAVEMENT MARKING PLACEMENT, CONTACT AREA TRAFFIC FIELD ENGINEER, MS. DEBBIE HANLON AT (847) 438-2300.
13. ELEVATIONS SHOWN ON THE PLANS ARE BASED ON I.D.O.T. DATUM. (USGS MEAN SEA LEVEL DATUM).
14. ALL SAWCUTS SHALL BE INCLUDED IN THE COST OF APPROACH SLAB REMOVAL.
15. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
16. ANY INSTREAM WORK MUST BE APPROVED BY THE ARMY CORPS OF ENGINEERS IN WRITING BEFORE THAT WORK CAN BE STARTED.
17. EAST AND WEST BOAT CHANNELS HAVE HIGH VOLTAGE OVERHEAD WIRES LOCATED ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION AROUND ALL OVERHEAD WIRES TO AVOID DAMAGES. SPECIAL CARE TO BE TAKEN WITH EQUIPMENT SUCH AS CRANES, EXCAVATORS, ETC.
18. THE CONTRACTOR SHALL PREPARE IN-STREAM WORK PLANS (ALL COFFERDAMS, WORK PADS, AND EROSION AND SEDIMENT CONTROL, ETC.) AND SUBMIT TO THE ENGINEER AND THE U.S. ARMY CORP OF ENGINEERS FOR REVIEW AND APPROVAL. THE CONTRACTOR SHOULD EXPECT TO HAVE TO ATTEND MEETINGS AT THE USACOE OFFICE TO DISCUSS THEIR WORK PLAN IN ORDER TO SECURE THEIR PERMIT. THE COST OF ALL IN-STREAM WORK ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

COMMITMENTS

BASED UPON A FIELD CHECK CONDUCTED ON SEPTEMBER 21, 1999 AND JULY 2, 2001, THIS PROJECT QUALIFIES FOR A DISTRICT SIGN-OFF WITH REGARDS TO SPECIAL WASTE. IF THE SCOPE OF THE WORK CHANGES OR IF ADDITIONAL ROW/TEMPORARY EASEMENTS ARE REQUIRED, CONTACT THE ENVIRONMENTAL STUDIES UNIT AT (847) 705-4101 TO DISCUSS ANY POTENTIAL IMPACTS.

PER THE FOX WATERWAY AGENCY, A NAVIGABLE CHANNEL AT BOTH S.N. 049-0055 AND S.N. 049-0056 MUST BE MAINTAINED IN THE CONSTRUCTION AREA AT ALL POSSIBLE TIMES. FOR THE SAFETY AND CONSIDERATION OF BOATERS, SUFFICIENT WARNING BUOYS AND SIGNS MUST BE INSTALLED AND MAINTAINED AT ALL TIMES AS PART OF THE CONSTRUCTION PROJECT. FOX WATERWAY AGENCY WILL RENT THE CONTRACTOR THE WARNING BUOYS AND SIGNS. PLACEMENT OF BUOYS IS DEPENDENT ON THE CONTRACTOR'S CONSTRUCTION STAGING. FOX WATERWAY AGENCY WILL ADVISE THE CONTRACTOR OF APPROPRIATE BUOY NUMBER AND PLACEMENT. CONTRACTOR SHALL PICKUP, PLACE, MAINTAIN AND PRESERVE AND REMOVE AND RETURN THE BUOYS. MAINTENANCE WILL INCLUDE MAINTAINING PROPER BUOY PLACEMENT DUE TO DRIFT TENDENCIES DURING HIGH WATER. FOX WATERWAY AGENCY WILL DETERMINE IF BUOYS NEED TO BE LIGHTED. ANY AND/OR ALL DEBRIS OF ANY SORT RESULTING FROM CONSTRUCTION ACTIVITIES MUST BE REMOVED FROM THE CHANNEL AND CHANNEL BOTTOM, IN NO WAY RESTRICTING NAVIGATION OR IMPACTING ON THE SAFETY OF BOATERS PASSING UNDER THE CONSTRUCTION AREA. CONTACT ROB RINKENBERGER OF THE FOX WATERWAY AGENCY AT (847) 344-4147 FOR BUOY INFORMATION. FOX WATERWAY AGENCY OFFICE IS LOCATED AT 45 SOUTH PISTAKEE LAKE ROAD IN FOX LAKE, IL. THE FOX WATERWAY AGENCY WILL BE INFORMED OF THE LOGISTICS OF THE CONSTRUCTION OF THE PROJECT THROUGHOUT CONSTRUCTION. COST TO COMPLY IS CONSIDERED TO BE INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION (SPECIAL) PAY ITEM.

AT LEAST SIX WEEKS ADVANCE NOTICE SHALL BE GIVEN TO MR. TOM WICKER OF THE USGS AT (815)-756-9207 PRIOR TO CONCRETE PARAPET REMOVAL ON THE SOUTH SIDE OF S.N. 049-0055 (USGS STATION 05547000 CHANNEL LAKE NEAR ANTIOCH, IL). A TEMPORARY WIRE-WEIGHT GAGE WILL BE INSTALLED AND THE EXISTING WIRE-WEIGHT GAGE THAT IS MOUNTED TO THE CONCRETE PARAPET WILL BE REMOVED BY THE USGS. AT LEAST SIX WEEKS ADVANCE NOTICE WILL BE GIVEN TO MR. WICKER PRIOR TO COMPLETION OF THE BRIDGE FOR THE REINSTALLATION OF THE PERMANENT WIRE-WEIGHT GAGE.

IT HAS BEEN VERIFIED WITH THE USGS THAT THE STAFF GAGES ON THE SOUTHEAST AND SOUTHWEST WINGWALLS OF S.N. 049-0056 (USGS STATION 05546900 CHANNEL LAKE EAST OUTLET AT ROUTE 173 NEAR ANTIOCH, IL) ARE NO LONGER USED 3Y USGS. THE STAFF GAGES WILL BE REMOVED AND DISCARDED AS A PART OF THE BRIDGE REMOVAL BY THE CONTRACTOR. COST INCLUDED IN REMOVAL OF EXISTING STRUCTURES PAY ITEM.

REGARDING S.N. 049-0056, THE CONTRACTOR SHALL AVOID WETLANDS THAT ARE IN CLOSE PROXIMITY TO THE PROJECT AREA. THE EXISTING WETLAND BOUNDARY CLOSE TO THE PROJECT SHALL BE FENCED USING TEMPORARY FENCE FOR PROTECTION. TEMPORARY FENCE WILL BE PAID FOR AS TEMPORARY FENCE.

THE CONTRACTOR SHALL AVOID ANY IMPACTS TO THE BLACKCHIN SHINERS THAT MAY BE NEAR THE SHALLOW UNDISTURBED REGIONS OF THE CHANNELS IN THE PROJECT AREA. THE CHANNEL LAKE INAI SITE BOUNDARY IS ADJACENT TO THE PROJECT LOCATION AND THE 1999 OCCURRENCE OF THE STATE ENDANGERED BLACKNOSE SHINER IS APPROXIMATELY 1.25 MILES FROM THE PROJECT AREA. THE CONTRACTOR SHALL FOLLOW THE PROPOSED EROSION AND SEDIMENTATION CONTROL PLAN, WHICH INCLUDES MEASURES TO AVOID IMPACTS TO THE INAI SITE AND THE BLACKNOSE SHINER.

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS
SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

3116&17INDEX.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LOCATION OF WORK: F.A.U. 303 IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS LAKE COUNTY

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
28000510	INLET FILTERS	EACH	2	1			1		
M4402030	GUTTER REMOVAL	METER	10				10		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1					1	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1				
50500305	ERECTING STRUCTURAL STEEL	L SUM	1		0.07			0.93	
50500505	STUD SHEAR CONNECTORS	EACH	3,798		738			3,060	
50800515	BAR SPLICERS	EACH	1,259		382			877	
51500100	NAME PLATES	EACH	2		1			1	
60900315	TYPE D INLET BOX, STANDARD 609006	EACH	3	1			2		
60900515	CONCRETE THRUST BLOCKS	EACH	3	2			1		
*63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	4			4		
*63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	3			2		
63500105	DELINEATORS	EACH	10				10		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	15	7			8		
67100100	MOBILIZATION	L SUM	1	0.25	0.25		0.25	0.25	
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.25	0.25		0.25	0.25	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	270	90	45		90	45	
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	84	20			64		
*78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	14	4			10		
*78200200	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	152	16			136		

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
*78200410	GUARDRAIL MARKERS, TYPE A	EACH	18	4			14		
*78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	5	3			2		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	84	32			52		
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1			1		
*C2001536	SHRUB, CORNUS RACEMOSA (GREY DOGWOOD), 3' HEIGHT, BALLED AND BURLAPPED	EACH	38	38					
*C2009624	SHRUB, SAMBUCUS CANADENSIS (AMERICAN ELDER), 2' HEIGHT, BALLED AND BURLAPPED	EACH	35				35		
*C2011936	SHRUB, VIBURNUM DENTATUM RALPH SENIOR (AUTUMN JAZZ ARROWWOOD VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	37				37		
*X0013030	PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG	UNIT	6.84	1.14			5.70		
M2010110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	400				400		
M2010210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	200				200		
M2010500	TREE REMOVAL, HECTARES	HA	0.3	0.1			0.2		
M2011000	TEMPORARY FENCE	METER	126	31			95		
M2020010	EARTH EXCAVATION	CU M	1,430	125			1,305		
M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	550				550		
M2040800	FURNISHED EXCAVATION	CU M	3,222	14			3,208		

* SPECIALTY ITEM

Applied Technologies

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SUMMARY OF QUANTITIES

SCALE: NTS

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116&17SHT3.DGN

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

LOCATION OF WORK: F.A.U. 303 IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS LAKE COUNTY

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				URBAN- 100% STATE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
MX207.400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU M	305		75			230	
*M2113100	TOPSOIL FURNISH AND PLACE, 100mm	SQ M	5,308	464			4,844		
*M2500210	SEEDING, CLASS 2A	HA	0.3	0.1			0.2		
*M2500310	SEEDING, CLASS 4	HA	0.4	0.1			0.3		
*M2500400	NITROGEN FERTILIZER NUTRIENT	KG	54	6			48		
*M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	54	6			48		
*M2510630	EROSION CONTROL BLANKET	SQ M	5,308	464			4,844		
M2800250	TEMPORARY EROSION CONTROL SEEDING	KG	2,101	183			1,918		
M2800305	TEMPORARY DITCH CHECKS	METER	96	2			94		
M2800400	PERIMETER EROSION BARRIER	METER	705	119			586		
M2810107	STONE RIPRAP, CLASS A4	SQ M	1,005				1,005		
M2820200	FILTER FABRIC	SQ M	1,065				1,065		
M3550500	HOT-MIX ASPHALT BASE COURSE, 200mm	SQ M	595				595		
M4030100	BITUMINOUS MATERIALS (PRIME COAT)	LITER	6,260	440			5,820		
M4060300	AGGREGATE (PRIME COAT)	M TON	44	3			41		
M4060895	CONSTRUCTING TEST STRIP	EACH	2	1			1		
M4060982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ M	60	44			16		
M4061005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	M TON	71	6			65		
M4062135	LEVELING BINDER (MACHINE METHOD), N70	M TON	10	10					
M4063085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	M TON	155				155		
M4063310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	M TON	75				75		

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				URBAN- 100% STATE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
M4063595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	M TON	24	24					
M4075320	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 320mm	SQ M	2,910				2,910		
M4080500	INCIDENTAL HOT-MIX ASPHALT SURFACING	M TON	30	5			25		
M4206200	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ M	766	46			720		
M4400765	HOT-MIX ASPHALT SURFACE REMOVAL, 65mm	SQ M	451	451					
M4401250	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 150mm	SQ M	195	15			180		
M4402000	PAVEMENT REMOVAL	SQ M	1,902	136			1,766		
M4402010	DRIVEWAY PAVEMENT REMOVAL	SQ M	555				555		
M4402040	COMBINATION CURB AND GUTTER REMOVAL	METER	195	27			168		
M4402060	APPROACH SLAB REMOVAL	SQ M	444	228			216		
M4402530	PAVED SHOULDER REMOVAL	SQ M	1,363	198			1,165		
M4428010	CLASS D PATCHES, TYPE I, 150mm	SQ M	60				60		
M4428210	CLASS D PATCHES, TYPE II, 150mm	SQ M	60				60		
M4428310	CLASS D PATCHES, TYPE III, 150mm	SQ M	75	15			60		
M4430080	REFLECTIVE CRACK CONTROL TREATMENT, SPECIAL 900mm	METER	48	48					
M5010240	CONCRETE REMOVAL	CU M	14		14				

* SPECIALTY ITEM

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
SUMMARY OF QUANTITIES
SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

3116&17SHT3.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)IR-1	LAKE	137	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LOCATION OF WORK: F.A.U. 303 IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS LAKE COUNTY

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				URBAN - 100% STATE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
M5010570	PROTECTIVE SHIELD	SQ M	615		155			460	
M5020100	STRUCTURE EXCAVATION	CU M	1,175		75			1,100	
M5030280	CONCRETE ENCASEMENT	CU M	7					7	
M5030350	CONCRETE STRUCTURES	CU M	151		34			117	
M5030360	CONCRETE SUPERSTRUCTURE	CU M	400		130			270	
M5030390	BRIDGE DECK GROOVING	SQ M	1,123		343			780	
M5030450	PROTECTIVE COAT	SQ M	1,319		389			930	
M5080205	REINFORCEMENT BARS, EPOXY COATED	KG	67,280		20,400			46,880	
M5120160	FURNISHING STEEL PILES, HP310x79	METER	380					380	
M5120335	DRIVING PILES	METER	380					380	
M5120460	TEST PILE STEEL, HP310x79	EACH	3					3	
M5120900	TEMPORARY SHEET PILING	SQ M	25		25				
M5210022	ANCHOR BOLTS, M24	EACH	60		24			36	
M542E012	END SECTIONS, 300mm	EACH	3	1			2		
M5900200	EPOXY CRACK INJECTION	METER	42		42				
M5910100	GEOCOMPOSITE WALL DRAIN	SQ M	145		45			100	
M6010125	PIPE DRAINS, 300mm	METER	24	5			19		
MZ011100	PIPE UNDERDRAINS FOR STRUCTURES 100mm	METER	120		60			60	
M6060700	COMBINATION CONCRETE CURB AND GUTTER, TYPE B 15.60	METER	228	18			210		
*M6300103	STEEL PLATE BEAM GUARD RAIL, TYPE A, 2.74m POSTS	METER	384	110			274		

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				URBAN - 100% STATE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
M6320030	GUARDRAIL REMOVAL	METER	402	98			304		
M7030100	SHORT-TERM PAVEMENT MARKING	METER	2,412	692			1,720		
M7031000	WORKZONE PAVEMENT MARKING REMOVAL	SQ M	610	268			342		
M7040100	TEMPORARY CONCRETE BARRIER	METER	290	30			260		
M7040200	RELOCATE TEMPORARY CONCRETE BARRIER	METER	290	30			260		
*M7800105	THERMOPLASTIC PAVEMENT MARKING - LINE 100mm	METER	1,888	415			1473		
*M7802010	POLYUREA PAVEMENT MARKING TYPE I - LINE 100mm	METER	353	106			247		
M7830100	PAVEMENT MARKING REMOVAL	SQ M	821	315			506		
MX030199	TEMPORARY PAVEMENT	SQ M	210	210					
MX033276	TEMPORARY SOIL RETENTION SYSTEM	SQ M	70					70	
MX033460	WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III, 100mm	METER	1,956	692			1,264		
MX033694	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 125mm)	SQ M	23		23				
MX033782	WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III, 600mm	METER	16	8			8		
MZ001050	AGGREGATE SUBGRADE 300mm	SQ M	3,402				3,402		

* SPECIALTY ITEM

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
SUMMARY OF QUANTITIES
SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

31168&17SHT3.DGN

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

LOCATION OF WORK: F.A.U. 303 IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS LAKE COUNTY

SUMMARY OF QUANTITIES

				CONSTRUCTION TYPE CODE					
				URBAN- 100% STATE					
				WEST BOAT CHANNEL			EAST BOAT CHANNEL		
				ROAD	BRIDGE		ROAD	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL	0004	0014		0004	0014	
MZ022800	FENCE REMOVAL	METER	80				80		
X0325290	CORED DRAIN HOLES	EACH	1	1					
X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	0.50			0.50		
X2800510	INLET FILTER CLEANING	EACH	2	1			1		
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION, LOCATION 1	EACH	1					1	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.25	0.25		0.25	0.25	
Z0030275	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 2	EACH	4	2			2		
Z0030355	IMPACT ATTENUATORS, RELOCATE (SEVERE USE), TEST LEVEL 2	EACH	4	2			2		
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	1			1		

* SPECIALTY ITEM

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
SUMMARY OF QUANTITIES

SCALE: NTS

DRAWN BY CLG

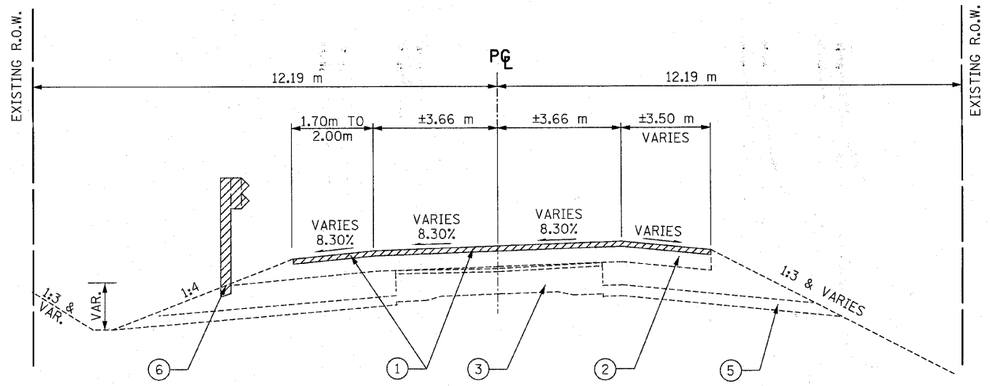
DATE 3-8-10

CHECKED BY JJD

3116&17SHT3.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037



IL ROUTE 173 OVER WEST BOAT CHANNEL

STA. 25+077 TO STA. 25+093.533
STA. 25+103.253 TO STA. 25+120
BRIDGE OMISSION: STA. 25+093.533 TO STA. 25+103.253

TYPICAL SECTION LEGEND

(1) EXISTING HOT-MIX ASPHALT SURFACE, THICKNESS VARIES FROM 25mm to 75mm. PAID AS HOT-MIX ASPHALT SURFACE REMOVAL 65mm

(2) EXISTING HOT-MIX ASPHALT BINDER COURSE, THICKNESS VARIES FROM 100mm TO 200mm

(3) EXISTING PCC BASE COURSE, ±250mm

(4) EXISTING COMBINATION CONCRETE CURB AND GUTTER

(5) EXISTING SUB-BASE GRANULAR MATERIAL TYPE B, 100mm REMOVAL PAID AS EARTH EXCAVATION

(6) EXISTING GUARDRAIL

REMOVAL ITEM

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

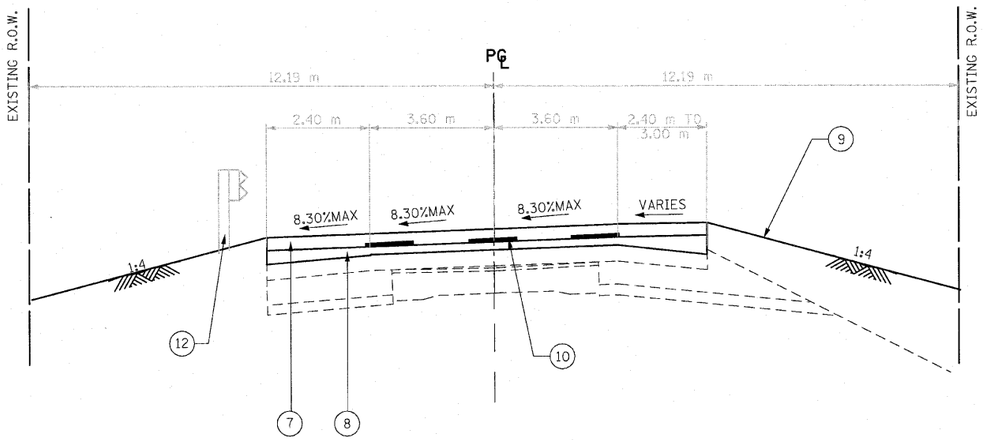
TYPICAL SECTIONS EXISTING

SCALE: NTS
DRAWN BY: CLG
DATE: 3-8-10
CHECKED BY JJD

3117TYP1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



IL ROUTE 173 OVER WEST BOAT CHANNEL

STA. 25+077 TO STA. 25+093.533
STA. 25+103.253 TO STA. 25+120
BRIDGE OMISSION: STA. 25+093.533 TO STA. 25+103.253

TYPICAL SECTION LEGEND

(7) PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX F, N90 45mm

(8) PROPOSED LEVELING BINDER (MACHINE METHOD), N70 19mm

(9) TOPSOIL FURNISH AND PLACE, 100mm

(10) PROPOSED REFLECTIVE CRACK CONTROL TREATMENT, SPECIAL 900mm

(11) PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-15.60

(12) PROPOSED STEEL PLATE BEAM GUARD RAIL, TYPE A WITH TRAFFIC BARRIER TERMINAL, TYPE 6 CONNECTION TO BRIDGE AND TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) WITH TERMINAL MARKERS AT END. SEE PLAN AND PROFILE SHEET FOR LOCATIONS.

RIGHT SHOULDER WIDTH

STA. 25+077 TO 25+084.50: TRANSITION 2.40m TO 3.00m
STA. 25+112.250 TO 25+120: TRANSITION 3.00m TO 2.40m

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING	
MIXTURE TYPE	**AIR VOIDS @ Ndes**
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	4% @ 70 GYR
PAVEMENT RESURFACING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	4% @ 90 GYR
LEVELING BINDER (MACHINE METHOD), N70 (IL-9.5mm)	4% @ 70 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 GYR
TEMPORARY PAVEMENT	
TEMPORARY PAVEMENT (HMA BINDER IL-19mm)	4% @ 50 GYR
INCIDENTAL HMA SURFACING (HMA SURFACE COURSE MIX "C", N50 (IL-9.5mm))	4% @ 50 GYR
HMA PAVEMENT (FULL DEPTH)	
50mm POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	4% @ 90 GYR
270mm HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 GYR
COMMERCIAL ENTRANCES	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL-9.5mm)	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm)	4% @ 50 GYR
BRIDGE APPROACH PAVEMENT (FLEXIBLE)	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	4% @ 90 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19, N70	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 2.4KG/m^2/mm

THE "AC TYPE " FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS

FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS

SUPERELEVATION TRANSITION		
A	NORMAL CROWN 1.50%	STA. 24+655.249
B	0% OUTSIDE LANE 1.50%	STA. 24+665.249
C	REMOVE CROWN 1.50% ACROSS	STA. 24+675.249
D	PC 67% OF e 5.56% ACROSS	STA. 24+702.249
E	BEGIN FULL SUPERELEVATION 8.30%	STA. 24+720.249
	FULL SUPERELEVATION THROUGH PROJECT LIMITS EXCEPT TO TIE TO EXISTING	
E	END FULL SUPERELEVATION 8.30%	STA. 25+317.470
D	PT 67% OF e 5.56% ACROSS	STA. 25+335.470
C	REMOVE CROWN 1.50% ACROSS	STA. 25+362.470
B	0% OUTSIDE LANE 1.50%	STA. 25+372.470
A	NORMAL CROWN 1.50%	STA. 25+382.470

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST BOAT CHANNEL

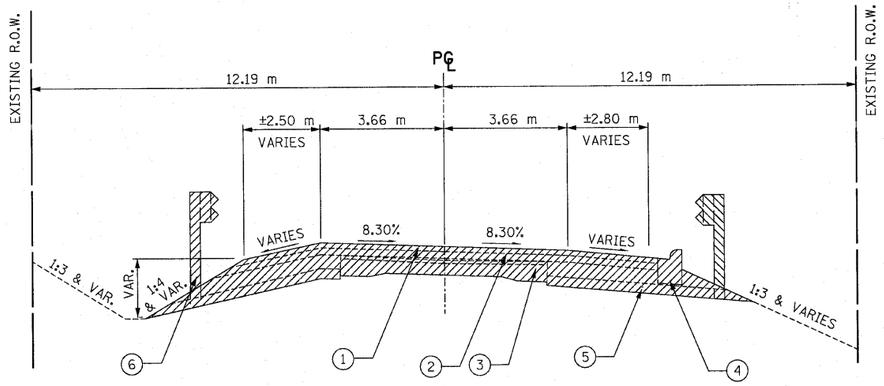
TYPICAL SECTIONS PROPOSED

SCALE: NTS
DRAWN BY: CLG
DATE: 3-8-10
CHECKED BY JJD

3117TYP2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037



IL ROUTE 173 OVER EAST BOAT CHANNEL

STA. 26+096 TO STA. 26+258.5
STA. 26+286.7 TO STA. 26+400
BRIDGE OMISSION: STA. 26+258.5 TO STA. 26+286.7

TYPICAL SECTION LEGEND

1. EXISTING HOT-MIX ASPHALT SURFACE, THICKNESS VARIES FROM 25mm to 75mm.
2. EXISTING HOT-MIX ASPHALT BINDER COURSE, THICKNESS VARIES FROM 100mm TO 200mm
3. EXISTING PCC BASE COURSE, ±250mm
4. EXISTING COMBINATION CONCRETE CURB AND GUTTER
5. EXISTING SUB-BASE GRANULAR MATERIAL TYPE B, 100mm
6. EXISTING GUARDRAIL

REMOVAL ITEM

3116TYP1.DGN

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

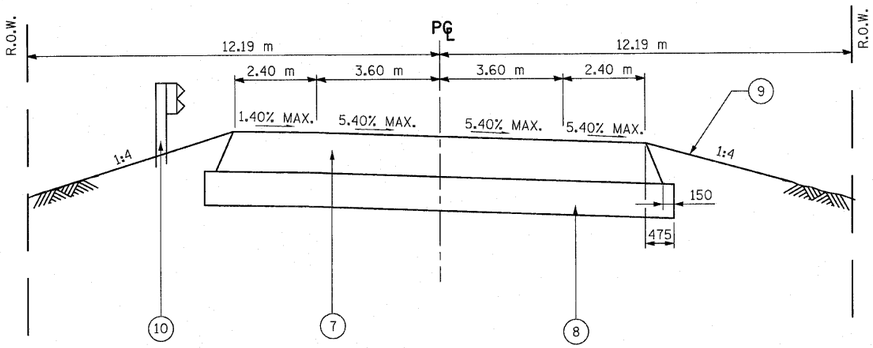
IL ROUTE 173 OVER EAST BOAT CHANNEL

TYPICAL SECTIONS EXISTING

SCALE: NTS
DRAWN BY: CLG
DATE: 3-8-10
CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037



IL ROUTE 173 OVER EAST BOAT CHANNEL

STA. 26+096 TO STA. 26+250.541
STA. 26+294.164 TO STA. 26+400
BRIDGE OMISSION: STA. 26+250.541 TO STA. 26+294.164

TYPICAL SECTION LEGEND

(7) PROPOSED HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 320mm INCLUDES:

PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX F, N90, 50mm
PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 270mm (IN 3 LIFTS)

(8) PROPOSED AGGREGATE SUBGRADE, 300mm

(9) PROPOSED TOPSOIL FURNISH AND PLACE, 100mm

(10) PROPOSED STEEL PLATE BEAM GUARD RAIL, TYPE B WITH TRAFFIC BARRIER TERMINAL, TYPE 6 CONNECTION TO BRIDGE AND TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) WITH TERMINAL MARKERS AT END. SEE PLAN AND PROFILE SHEET FOR LOCATIONS.

SUPERELEVATION TRANSITION		
A	NORMAL CROWN 1.5%	STA 26+141.468
B	0% OUTSIDE LANE 1.5%	STA 26+151.468
C	REMOVE CROWN 1.5% ACROSS	STA 26+161.468
D	PC 67% OF e 3.62% ACROSS	STA 26+178.468
E	BEGIN FULL SUPERELEVATION 5.4%	STA 26+191.468
	FULL SUPER	
E	END FULL SUPERELEVATION 5.4%	STA 26+585.298
D	PT 67% OF e 3.62% ACROSS	STA 26+598.298
C	REMOVE CROWN 1.5% ACROSS	STA 26+615.298
B	0% OUTSIDE LANE 1.5%	STA 26+625.298
A	NORMAL CROWN 1.5%	STA 26+635.298

STRUCTURAL PAVEMENT DESIGN INFORMATION

STRUCTURAL DESIGN TRAFFIC: YEAR 2020
PV = 12,916 SU = 1,368 MU = 912

ROAD/STREE CLASSIFICATION: CLASS II

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 50 S = 50 M = 50

TRAFFIC FACTOR:
ACTUAL TF = 5.07 AC TYPE = 20 MINIMUM TF = 3.81

PG GRADE:
BINDER = 64-22/58-22 SURFACE = 64-22

SUBGRADE SUPPORTING RATING:
SSR = POOR (STA. 25+000 TO 26+530)

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TYPICAL SECTIONS PROPOSED

SCALE: NTS
DRAWN BY: CLG
DATE: 3-8-10
CHECKED BY JJD

3116TYP2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

INLET FILTERS

STA	EACH
WEST	
25+075 LT	1
WEST SUBTOTAL	1
EAST	
26+260 RT	1
EAST SUBTOTAL	1
TOTAL	2

TYPE D INLET BOX, STANDARD 609006

STA	EACH
WEST	
25+105 LT	1
WEST SUBTOTAL	1
EAST	
26+250 RT	1
26+300 RT	1
EAST SUBTOTAL	2
TOTAL	3

CONCRETE THRUST BLOCKS

STA	EACH
WEST	
25+105 LT	1
WEST SUBTOTAL	1
EAST	
26+250 RT	1
26+300 RT	1
EAST SUBTOTAL	2
TOTAL	3

TRAFFIC BARRIER TERMINAL, TYPE 6

STA	EACH
WEST	
25+093 RT	1
25+093 LT	1
25+103 RT	1
25+103 LT	1
WEST SUBTOTAL	4
EAST	
26+254 RT	1
26+246 LT	1
26+298 RT	1
26+289 LT	1
EAST SUBTOTAL	4
TOTAL	8

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

STA	EACH
WEST	
25+086 RT	1
25+113 RT	1
25+120 LT	1
WEST SUBTOTAL	3
EAST	
26+231 RT	1
26+218 LT	1
EAST SUBTOTAL	2
TOTAL	5

DELINEATORS

STA	EACH
EAST	
25+993 LT & RT	2
26+053 LT & RT	2
26+113 LT & RT	2
26+168 LT & RT	2
26+193 LT & RT	2
EAST SUBTOTAL	10
TOTAL	10

RAISED REFLECTIVE PAVEMENT MARKER

STA	EACH
WEST	
25+012 TO 25+079	12
25+112 TO 25+123	2
25+145 TO 25+185	6
WEST SUBTOTAL	20
EAST	
26+096 TO 26+241	26
26+303 TO 26+526	38
EAST SUBTOTAL	64
TOTAL	84

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)

STA	EACH
WEST	
25+087 TO 25+112	4
WEST SUBTOTAL	4
EAST	
26+241 TO 26+303	10
EAST SUBTOTAL	10
TOTAL	14

BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR

	EACH
WEST	
STAGE I	8
STAGE II	8
WEST SUBTOTAL	16
EAST	
STAGE I	68
STAGE II	68
EAST SUBTOTAL	136
TOTAL	152

GUARDRAIL MARKERS, TYPE A

STA	EACH
WEST	
25+105 LT & RT	2
25+081 LT & RT	2
WEST SUBTOTAL	4
EAST	
26+233 LT	1
26+257 LT	1
26+281 LT	1
26+305 LT	1
26+329 LT	1
26+353 LT	1
26+378 LT	1
26+246 RT	1
26+270 RT	1
26+294 RT	1
26+318 RT	1
26+342 RT	1
26+366 RT	1
26+391 RT	1
EAST SUBTOTAL	14
TOTAL	18

TERMINAL MARKER - DIRECT APPLIED

STA	EACH
WEST	
25+086 RT	1
25+113 RT	1
25+120 LT	1
WEST SUBTOTAL	3
EAST	
26+231 RT	1
26+218 LT	1
EAST SUBTOTAL	2
TOTAL	5

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

STA	EACH
WEST	
25+000 TO 25+197	32
WEST SUBTOTAL	32
EAST	
26+210 TO 26+526	52
EAST SUBTOTAL	52
TOTAL	84

TEMPORARY FENCE

STA	METER
EAST	
26+300 TO 26+341	41
26+394 TO 26+400	12
EAST SUBTOTAL	53
TOTAL	53

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

DRAWN BY CLG

DATE 3-8-10

CHECKED BY JJD

3116&17SCHEDULE.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	13
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

TOPSOIL FURNISH AND PLACE, 100mm

STA	SQ M
WEST	
25+038 TO 25+093 LT	268
25+103 TO 25+125 LT	103
25+086 TO 25+093 RT	48
25+103 TO 25+113 RT	45
WEST SUBTOTAL	464
EAST	
26+096 TO 26+127 LT	185
26+130 TO 26+186 LT	380
26+198 TO 26+245 LT	525
26+275 TO 26+400 LT	35
26+096 TO 26+104 RT	417
26+115 TO 26+171 RT	228
26+163 TO 26+200 RT	312
26+202 TO 26+260 RT	1,534
26+291 TO 26+400 RT	1,227
EAST SUBTOTAL	4,844
TOTAL	5,308

NITROGEN FERTILIZER NUTRIENT

STA TO STA	KG
WEST	
25+038 TO 25+093 LT	3
25+103 TO 25+125 LT	1
25+086 TO 25+093 RT	1
25+103 TO 25+113 RT	1
WEST SUBTOTAL	6
EAST	
26+096 TO 26+127 LT	2
26+130 TO 26+186 LT	4
26+198 TO 26+245 LT	5
26+275 TO 26+400 LT	1
26+096 TO 26+104 RT	4
26+115 TO 26+171 RT	2
26+163 TO 26+200 RT	3
26+202 TO 26+260 RT	15
26+291 TO 26+400 RT	12
EAST SUBTOTAL	48
TOTAL	54

POTASSIUM FERTILIZER NUTRIENT

STA TO STA	KG
WEST	
25+038 TO 25+093 LT	3
25+103 TO 25+125 LT	1
25+086 TO 25+093 RT	1
25+103 TO 25+113 RT	1
WEST SUBTOTAL	6
EAST	
26+096 TO 26+127 LT	2
26+130 TO 26+186 LT	4
26+198 TO 26+245 LT	5
26+275 TO 26+400 LT	1
26+096 TO 26+104 RT	4
26+115 TO 26+171 RT	2
26+163 TO 26+200 RT	3
26+202 TO 26+260 RT	15
26+291 TO 26+400 RT	12
EAST SUBTOTAL	48
TOTAL	54

EROSION CONTROL BLANKET

STA TO STA	SQ M
WEST	
25+038 TO 25+093 LT	268
25+103 TO 25+125 LT	103
25+086 TO 25+093 RT	48
25+103 TO 25+113 RT	45
WEST SUBTOTAL	464
EAST	
26+096 TO 26+127 LT	185
26+130 TO 26+186 LT	380
26+198 TO 26+245 LT	525
26+275 TO 26+400 LT	35
26+096 TO 26+104 RT	417
26+115 TO 26+171 RT	228
26+163 TO 26+200 RT	312
26+202 TO 26+260 RT	1,534
26+291 TO 26+400 RT	1,227
EAST SUBTOTAL	4,844
TOTAL	5,308

TEMPORARY EROSION CONTROL SEEDING

STA TO STA	HA
WEST	
25+038 TO 25+093 LT	106
25+103 TO 25+125 LT	40
25+086 TO 25+093 RT	19
25+103 TO 25+113 RT	18
WEST SUBTOTAL	183
EAST	
26+096 TO 26+127 LT	73
26+130 TO 26+186 LT	150
26+198 TO 26+245 LT	208
26+275 TO 26+400 LT	14
26+096 TO 26+104 RT	165
26+115 TO 26+171 RT	90
26+163 TO 26+200 RT	124
26+202 TO 26+260 RT	608
26+291 TO 26+400 RT	486
EAST SUBTOTAL	1,918
TOTAL	2,101

TEMPORARY DITCH CHECKS

STA	METER
WEST	
25+075 LT	2
WEST SUBTOTAL	2
EAST	
26+120 LT	4
26+158 LT	3
26+227 RT	4
26+231 RT	4
26+234 RT	4
26+238 RT	4
26+241 RT	4
26+244 RT	4
26+248 RT	4
26+251 RT	4
26+255 RT	4
26+258 RT	4
26+333 RT	6
26+349 RT	6
36+366 RT	6
26+383 RT	9
26+400 RT	6
26+334 LT	4
26+358 LT	4
26+378 LT	3
26+400 LT	3
EAST SUBTOTAL	94
TOTAL	96

PERIMETER EROSION BARRIER

STA TO STA	METER
WEST SUBTOTAL	119
EAST SUBTOTAL	586
TOTAL	705

HOT-MIX ASPHALT BASE COURSE, 200mm

STA	SQ M
EAST	
26+109 RT	95
26+129 LT	40
26+175 RT	104
26+193 LT	206
26+200 RT	150
EAST SUBTOTAL	595
TOTAL	595

BITUMINOUS MATERIALS (PRIME COAT)

STA TO STA	LITERS
WEST SUBTOTAL	440
EAST SUBTOTAL	5,820
TOTAL	6,260

AGGREGATE (PRIME COAT)

STA TO STA	M TON
WEST SUBTOTAL	3
EAST SUBTOTAL	41
TOTAL	44

CONSTRUCTING TEST STRIP

MIX	EACH
WEST	1
EAST	1
TOTAL	2

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

STA	SQ M
WEST	
25+077	17
25+083	10
25+120	17
WEST SUBTOTAL	44
EAST	
STAGE I	
26+225 RT	8
STAGE 2	
26+225 LT	8
EAST SUBTOTAL	16
TOTAL	60

LEVELING BINDER (MACHINE METHOD), N70

STA TO STA	M TON
WEST	
25+077 TO 25+084	5
25+112 TO 25+120	5
WEST SUBTOTAL	10
TOTAL	10

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70

STA TO STA	M TON
EAST	
STAGE I TEMP RAMP	
26+225 TO 26+243 RT	85
STAGE II TEMP RAMP	
26+225 TO 26+240 LT	70
EAST SUBTOTAL	155
TOTAL	155

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

STA	M TON
EAST	
26+109 RT	12
26+129 LT	5
26+175 RT	15
26+193 LT	25
26+200 RT	18
EAST SUBTOTAL	75
TOTAL	75

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90

STA	M TON
WEST	
25+077 TO STA 25+084	13
25+112 TO 25+120	11
WEST SUBTOTAL	24
TOTAL	24

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

INCIDENTAL HOT-MIX ASPHALT SURFACING

STA	M TON
WEST	
UNDISTRIBUTED	5
WEST SUBTOTAL	5
EAST	
UNDISTRIBUTED	25
EAST SUBTOTAL	25
TOTAL	30

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

STA	SQ M
WEST	46
WEST SUBTOTAL	46
EAST	720
EAST SUBTOTAL	720
TOTAL	766

HOT-MIX ASPHALT SURFACE REMOVAL 65MM

STA TO STA	SQ M
WEST	
25+077 TO 25+084	95
25+112 TO 25+120	98
CIRCLE DR	26
25+084 TO 25+093	116
25+103 TO 25+112	116
WEST SUBTOTAL	232
TOTAL	451

HOT-MIX ASPHALT REMOVAL OVER PATCHES 150MM

STA TO STA	SQ M
WEST SUBTOTAL	15
EAST SUBTOTAL	180
TOTAL	195

PAVEMENT REMOVAL

STA TO STA	SQ M
WEST	
25+077 TO 25+108	54
25+112 TO 25+120	56
CIRCLE DR	26
WEST SUBTOTAL	136
EAST	
26+096 TO 26+241	1,048
26+303 TO 25+400	698
26+320 LT (LAGOON CT)	20
EAST SUBTOTAL	1,766
TOTAL	1,902

DRIVEWAY PAVEMENT REMOVAL

STA TO STA	SQ M
EAST	
26+129 LT	95
26+175 RT	104
26+193 LT	206
26+200 RT	150
EAST SUBTOTAL	555
TOTAL	555

COMBINATION CURB AND GUTTER REMOVAL

STA TO STA	METER
WEST	
25+103 TO 25+130	27
WEST SUBTOTAL	27
EAST	
26+204 TO 26+261 RT	57
26+289 TO 26+400 RT	111
EAST SUBTOTAL	168
TOTAL	195

APPROACH SLAB REMOVAL

STA TO STA	SQ M
WEST	
25+084 TO 25+093	114
25+103 TO 25+112	114
WEST SUBTOTAL	228
EAST	
26+241 TO 26+250	108
26+294 TO 26+303	108
EAST SUBTOTAL	216
TOTAL	444

PAVED SHOULDER REMOVAL

STA	SQ M
WEST	
25+077 TO 25+084	41
25+120 TO 25+130	40
CIRCLE DRIVE	75
25+112 TO 25+130	42
WEST SUBTOTAL	198
EAST	
26+096 TO 26+241	700
26+303 TO 25+400	465
EAST SUBTOTAL	1,165
TOTAL	1,363

CLASS D PATCHS, TYPE 1, 150mm

LOCATION	SQ M
EAST SUBTOTAL	60
TOTAL	60

CLASS D PATCHS, TYPE II, 150mm

LOCATION	SQ M
EAST SUBTOTAL	60
TOTAL	60

CLASS D PATCHS, TYPE III, 150mm

LOCATION	SQ M
WEST SUBTOTAL	15
EAST SUBTOTAL	60
TOTAL	75

REFLECTIVE CRACK CONTROL TREATMENT, SPECIAL 900mm

STA TO STA	METER
WEST	
25+077 TO 25+085 (3 LINES)	24
25+112 TO 25+120 (3 LINES)	24
WEST SUBTOTAL	48
TOTAL	48

END SECTIONS 300mm

STA TO STA	EACH
WEST	
25+105 LT	1
WEST SUBTOTAL	1
EAST	
26+250 RT	1
26+300 RT	1
EAST SUBTOTAL	2
TOTAL	3

PIPE DRAINS 300mm

STA	METER
WEST	
25+105 LT	5
WEST SUBTOTAL	5
EAST	
26+250	8
26+300	11
EAST SUBTOTAL	19
TOTAL	24

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60

STA TO STA	METER
WEST	
25+077 TO 25+085 LT	10
25+112 TO 25+120 RT	8
WEST SUBTOTAL	18
EAST	
26+096 TO 26+124 LT	28
26+141 TO 26+190 LT	49
26+204 TO 26+244 RT	40
26+307 TO 26+400 RT	93
EAST SUBTOTAL	210
TOTAL	228

STEEL PLATE BEAM GUARD RAIL, TYPE A, 2.74M POSTS

STA TO STA	METER
WEST	
25+040 TO 25+094 LT	57
25+086 TO 25+094 RT (CURVE)	15
25+103 TO 25+120 LT	19
25+103 TO 25+112 RT (CURVE)	19
WEST SUBTOTAL	110
EAST	
26+231 TO 26+254 RT	27
26+218 TO 26+247 LT	30
26+298 TO 26+400 RT	103
26+289 TO 26+400 LT	114
EAST SUBTOTAL	274
TOTAL	384

GUARDRAIL REMOVAL

STA TO STA	METER
WEST	
25+040 TO 25+094 LT	54
25+089 TO 25+094 RT (CURVE)	12
25+103 TO 25+094 RT (CURVE)	15
25+103 TO 25+120 LT	17
WEST SUBTOTAL	98
EAST	
26+218 TO 26+253 LT	35
26+237 TO 26+262 RT	25
26+281 TO 26+400 LT	119
26+292 TO 26+417 RT	125
EAST SUBTOTAL	304
TOTAL	402

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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WORK ZONE PAVEMENT MARKING REMOVAL

STA TO STA	SQ M
WEST	
STAGE 1	
25+012 TO 25+084 LT & RT	58
25+112 TO 25+185 LT 7 RT	58
STAGE 2	
25+000	2
25+012 TO 25+197 LT & RT	148
25+197	2
WEST SUBTOTAL	268
EAST	
STAGE 1	
26+400 TO 26+470 RT	28
26+400 TO 26+525 LT	50
STAGE 2	
26+210	2
26+210 TO 26+526 LT & RT	254
26+526	2
EAST SUBTOTAL	342
TOTAL	610

SHORT-TERM PAVEMENT MARKING

STA TO STA	METER
WEST	
25+012 TO 25+185 BINDER	346
25+012 TO 25+185 SURFACE	346
WEST SUBTOTAL	692
EAST	
26+096 TO 26+526 BINDER	860
26+096 TO 26+526 SURFACE	860
EAST SUBTOTAL	1,720
TOTAL	2,412

TEMPORARY CONCRETE BARRIER

STA TO STA	METER
WEST	
STAGE 1	
25+084 TO 25+114	30
WEST SUBTOTAL	30
EAST	
STAGE 1	
26+210 TO 26+470	260
EAST SUBTOTAL	260
TOTAL	290

RELOCATE TEMPORARY CONCRETE BARRIER

STA TO STA	METER
WEST	
25+084 TO 25+114	30
WEST SUBTOTAL	30
EAST	
26+210 TO 26+470	260
EAST SUBTOTAL	260
TOTAL	290

THERMOPLASTIC PAVEMENT MARKING-LINE 100mm

STA TO STA	METER
WEST	
WHITE	
25+012 TO 25+084 LT	72
25+012 TO 25+079 RT	67
25+112 TO 25+121 LT	9
25+112 TO 25+143 RT	31
WHITE SUBTOTAL	179
DOUBLE YELLOW	
25+012 TO 25+079	134
25+112 TO 25+123	22
25+145 TO 25+185	80
DOUBLE YELLOW SUBTOTAL	236
WEST SUBTOTAL	415
EAST	
WHITE	
26+096 TO 26+238 LT	142
26+096 TO 26+244 RT	148
26+298 TO 26+526 LT	228
26+307 TO 26+526 RT	219
WHITE SUBTOTAL	737
DOUBLE YELLOW	
26+096 TO 26+241	290
26+303 TO 26+526	446
DOUBLE YELLOW SUBTOTAL	736
EAST SUBTOTAL	1,473
TOTAL	1,888

POLYUREA PAVEMENT MARKING TYPE I-LINE 100mm

STA TO STA	METER
WEST	
WHITE	
25+084 TO 25+112 LT	28
25+088 TO 25+112 RT	28
WHITE SUBTOTAL	56
DOUBLE YELLOW	
25+087 TO 25+112	50
WEST SUBTOTAL	106
EAST	
WHITE	
26+238 TO 26+298 LT	60
26+244 TO 26+307 RT	63
WHITE SUBTOTAL	123
DOUBLE YELLOW	
26+241 TO 26+303	124
EAST SUBTOTAL	247
TOTAL	353

PAVEMENT MARKING REMOVAL

STA TO STA	SQ M
WEST	
25+000 TO 25+197	315
WEST SUBTOTAL	315
EAST	
26+210 TO 26+526	506
EAST SUBTOTAL	506
TOTAL	821

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IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

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DATE 3-8-10 CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

TEMPORARY PAVEMENT

STA	SQ M
WEST	
CIRCLE DRIVE	75
25+103 TO 25+130 RT	135
WEST SUBTOTAL	210
TOTAL	210

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III, 600mm

STA	METER
WEST	
25+000	4
25+197	4
WEST SUBTOTAL	8
EAST	
26+210	4
26+526	4
EAST SUBTOTAL	8
TOTAL	16

AGGREGATE SUBGRADE, 300mm

STA TO STA	SQ M
EAST	
26+096 TO 26+242	2,044
26+303 TO 26+400	1,358
EAST SUBTOTAL	3,402
TOTAL	3,402

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III 100mm

STA TO STA	METER
WEST	
STAGE I	
25+012 TO 25+185 LT & RT	346
STAGE II	
25+102 TO 25+185 LT & RT	346
WEST SUBTOTAL	692
EAST	
STAGE I	
26+210 TO 25+526 LT & RT	632
STAGE II	
26+210 TO 25+526 LT & RT	632
EAST SUBTOTAL	1,264
TOTAL	1,956

FENCE REMOVAL

STA TO STA	METER
EAST	
26+320 TO 26+337	80
EAST SUBTOTAL	80
TOTAL	80

CORED DRAIN HOLES

STA TO STA	EACH
WEST	
25+105 LT	1
WEST SUBTOTAL	1
TOTAL	1

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IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

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DATE 3-8-10

CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW) TEST LEVEL 2

STA	EACH
WEST	
25+084	1
25+112	1
WEST SUBTOTAL	2
EAST	
26+210	1
26+470	1
EAST SUBTOTAL	2
TOTAL	4

IMPACT ATTENUATORS, RELOCATE (SEVERE USE) TEST LEVEL 2

STA	EACH
WEST	
25+084	1
25+112	1
WEST SUBTOTAL	2
EAST	
26+210	1
26+470	1
EAST SUBTOTAL	2
TOTAL	4

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS

SCHEDULE OF QUANTITIES

SCALE: NTS

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DATE 3-8-10

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	18
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

STAGE I

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USE IN EMBANKMENT ADJUSTED FOR SHRINKAGE	FURNISHED EXCAVATION*	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU METER	CU METER	CUBIC METER	CUBIC METER	CUBIC METER	CUBIC METER
STA. 25+075.000 TO 25+084.530	—	—	—	—	1	-1
STA. 25+084.530 TO 25+093.530	42	—	—	—	1	-1
BRIDGE						
STA. 25+103.250 TO 25+112.250	39	—	—	—	4	-4
STA. 25+112.250 TO 25+125.000	—	—	—	—	4	-4
TOTAL	81	—	—	—	10	-10

STAGE II

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USE IN EMBANKMENT ADJUSTED FOR SHRINKAGE	FURNISHED EXCAVATION*	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU METER	CU METER	CUBIC METER	CUBIC METER	CUBIC METER	CUBIC METER
STA. 25+075.000 TO 25+084.530	—	—	—	—	1	-1
STA. 25+084.530 TO 25+093.530	22	—	—	—	1	-1
BRIDGE						
STA. 25+103.250 TO 25+112.250	22	—	—	—	1	-1
STA. 25+112.250 TO 25+125.000	—	—	—	—	1	-1
TOTAL	44	—	—	—	4	-4

* INCLUDES 15% SHRINK

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ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST BOAT CHANNEL

EARTHWORK SCHEDULE

SCALE: NTS
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DATE 3-8-10 CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

STAGE I

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USE IN EMBANKMENT ADJUSTED FOR SHRINKAGE	FURNISHED EXCAVATION*	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU METER	CU METER	CUBIC METER	CUBIC METER	CUBIC METER	CUBIC METER
BRIDGE						
STA 26+294 TO STA 26+400	546	—	—	—	1150	-1150

STAGE II

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USE IN EMBANKMENT ADJUSTED FOR SHRINKAGE	FURNISHED EXCAVATION*	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU METER	CU METER	CUBIC METER	CUBIC METER	CUBIC METER	CUBIC METER
BRIDGE						
STA 26+294 TO STA 26+400	249	—	—	—	1373	-1373

STAGE III

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USE IN EMBANKMENT ADJUSTED FOR SHRINKAGE	FURNISHED EXCAVATION*	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU METER	CU METER	CUBIC METER	CUBIC METER	CUBIC METER	CUBIC METER
BRIDGE						
STA 26+096 TO STA 26+250	510	—	—	—	685	-685

* INCLUDES 15% SHRINK

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

EARTHWORK SCHEDULE

SCALE: NTS

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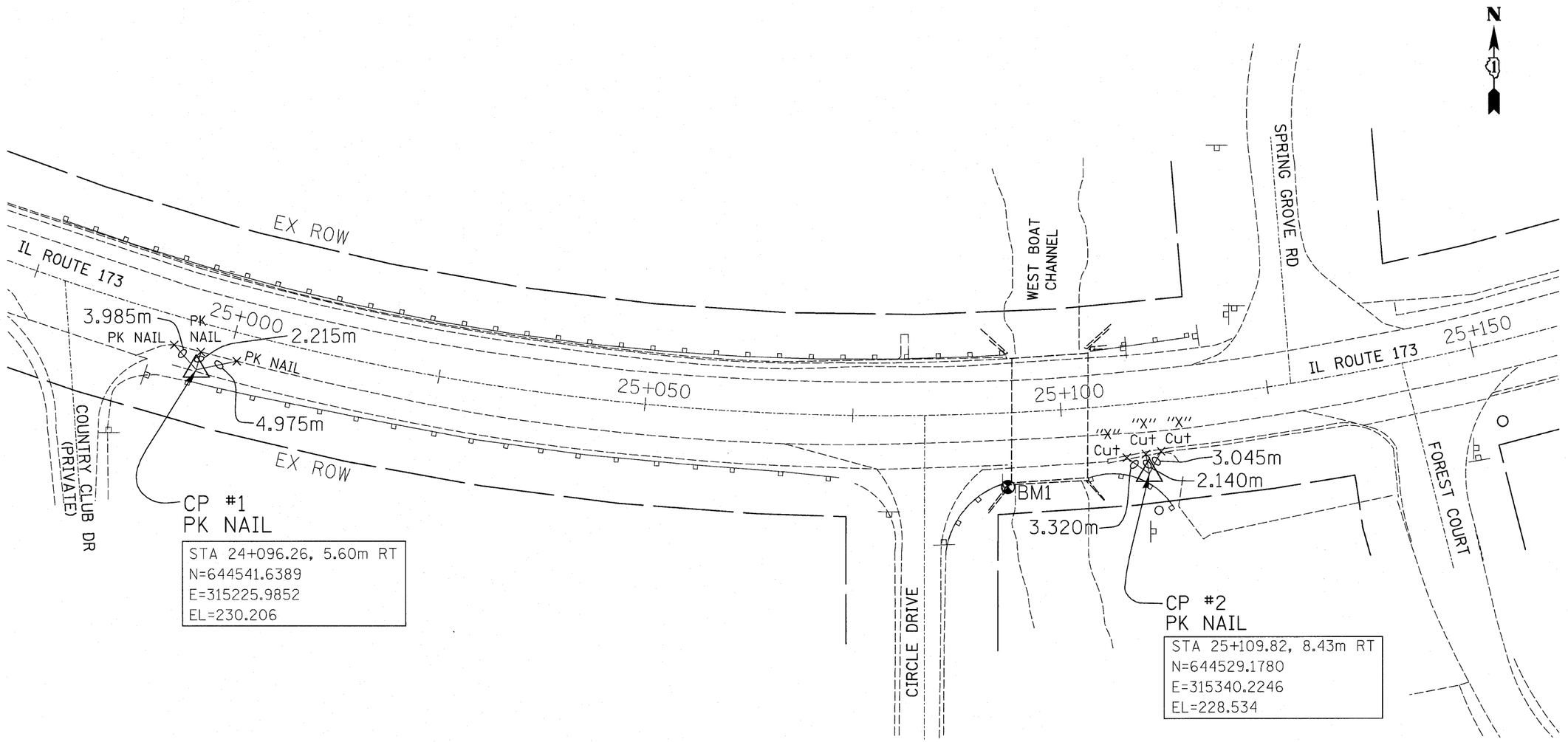
DATE 3-8-10 CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037



BENCHMARK:

BM1 STA. 25+095.13, 8.916m RT, A USGS REFERENCE MARK SET IN SOUTHWEST WINGWALL OF IL ROUTE 173 BRIDGE SN 049-0055 OVER WEST BOAT CHANNEL. EL. 228.867

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

ALIGNMENT, TIES & BENCHMARKS

SCALE: NTS

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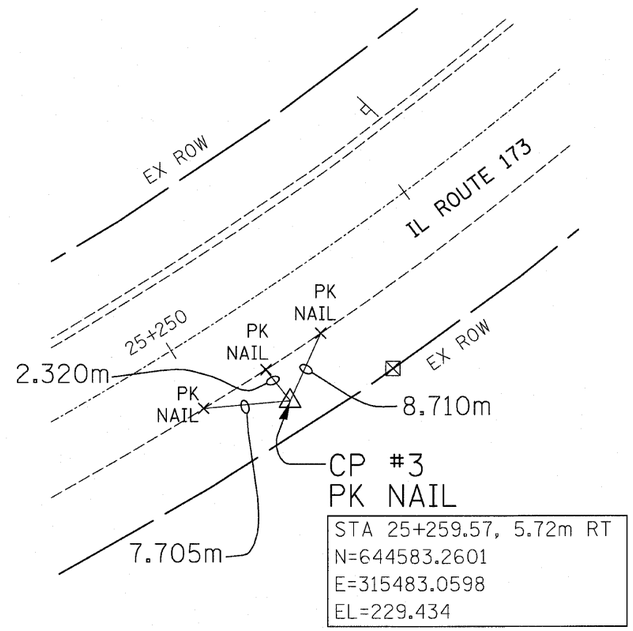
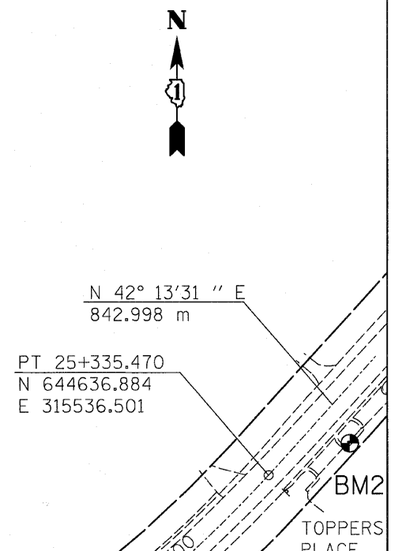
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

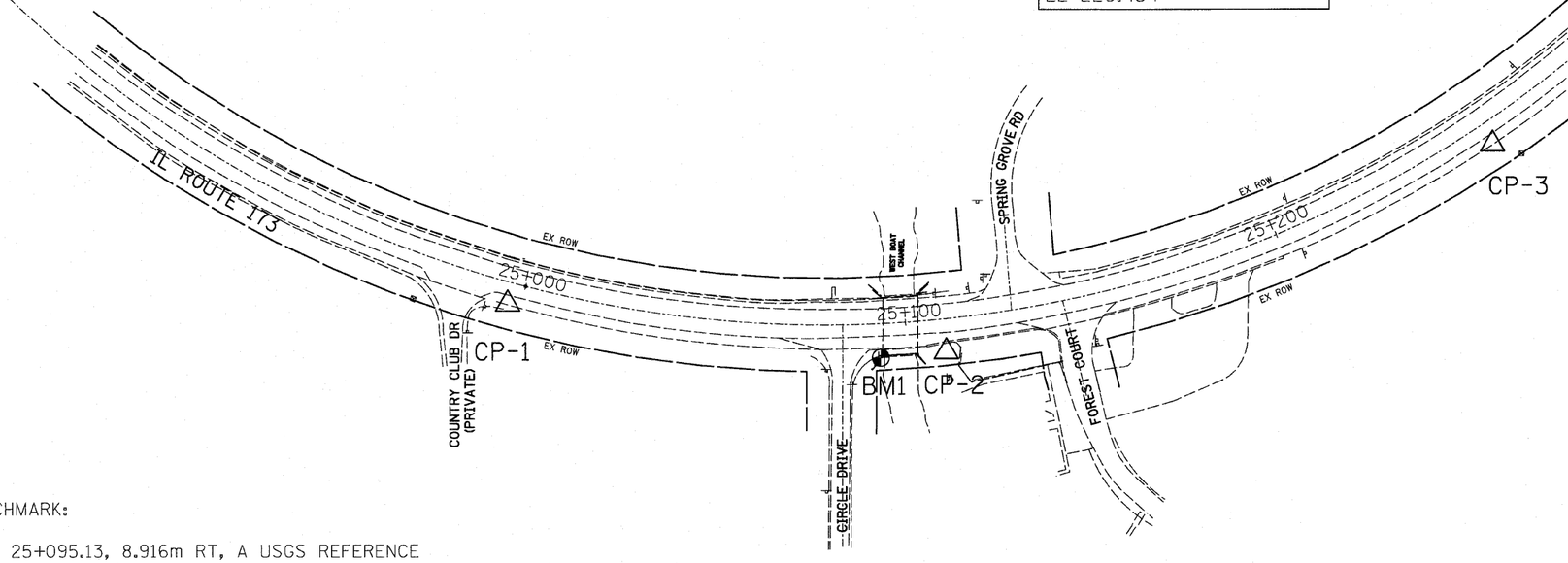
CONTRACT NO. 62037

PC STA. 24+702.249
N 644739.415
E 315019.437

CURVE
PI STA= 25+213.849
N 644258.040
E 315192.681
Δ= 117°58'50.836" (LT)
R= 307.515 m
T= 511.600 m
L= 633.221 m
E= 289.394
e= 8.3%
TR= 10 m
SE RUN= 55 m
PC STA= 24+702.249
PT STA= 25+335.470







BENCHMARK:

BM1 STA. 25+095.13, 8.916m RT, A USGS REFERENCE MARK SET IN SOUTHWEST WINGWALL OF IL ROUTE 173 BRIDGE SN 049-0055 OVER WEST BOAT CHANNEL. EL. 228.867

BM2 STA. 25+355.4, 9.76m RT, CUT SQUARE ON THE CURB SOUTH OF SOUTH LINE OF IL ROUTE 173, FRONT OF TOPPERS PLACE. EL. 231.491

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST BOAT CHANNEL
ALIGNMENT, TIES & BENCHMARKS
SCALE: NTS
DRAWN BY CLG
DATE: 3-8-10
CHECKED BY JJD

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

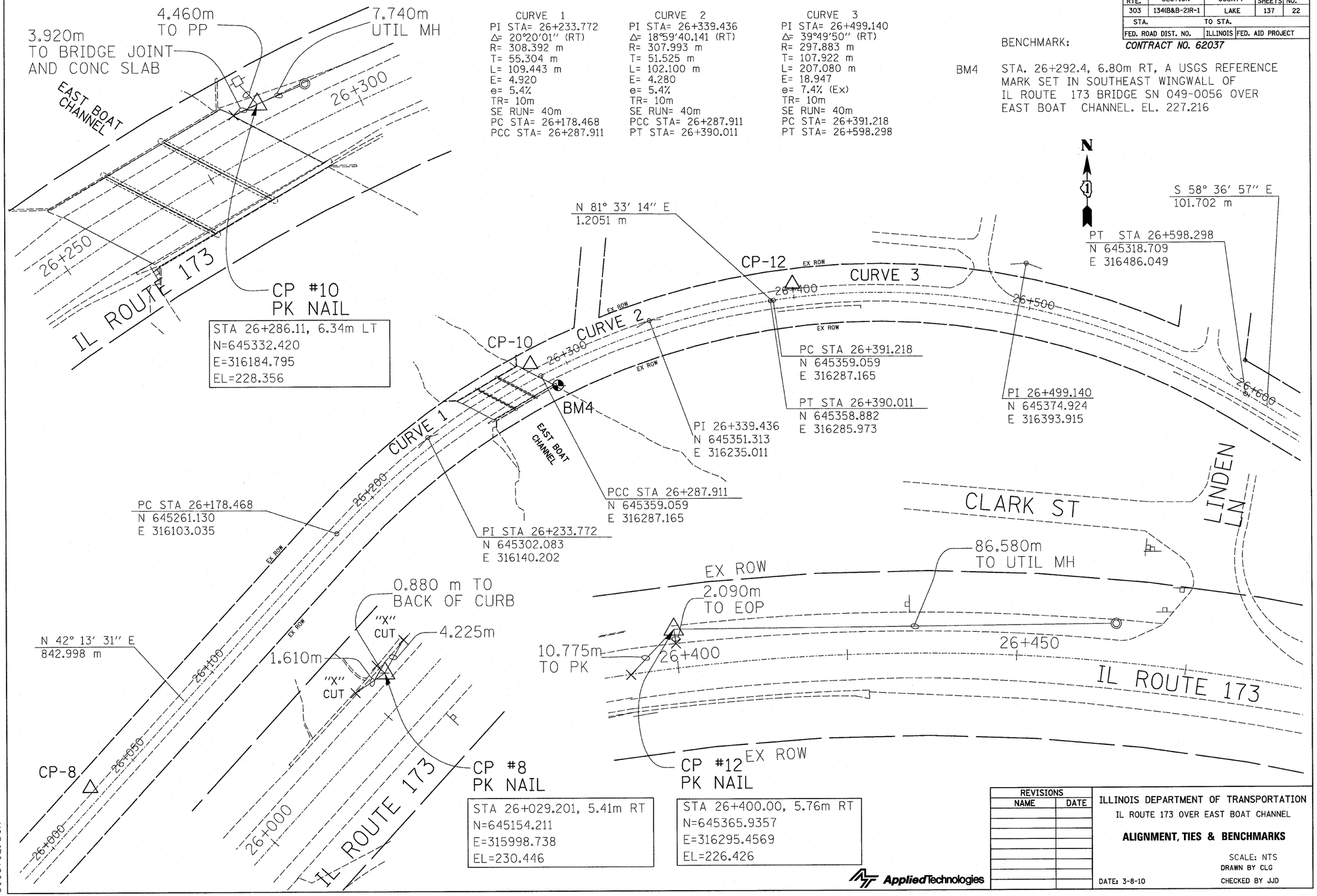
CURVE 1
PI STA= 26+233.772
Δ= 20°20'01" (RT)
R= 308.392 m
T= 55.304 m
L= 109.443 m
E= 4.920
e= 5.4%
TR= 10m
SE RUN= 40m
PC STA= 26+178.468
PCC STA= 26+287.911

CURVE 2
PI STA= 26+339.436
Δ= 18°59'40.141 (RT)
R= 307.993 m
T= 51.525 m
L= 102.100 m
E= 4.280
e= 5.4%
TR= 10m
SE RUN= 40m
PCC STA= 26+287.911
PT STA= 26+390.011

CURVE 3
PI STA= 26+499.140
Δ= 39°49'50" (RT)
R= 297.883 m
T= 107.922 m
L= 207.080 m
E= 18.947
e= 7.4% (Ex)
TR= 10m
SE RUN= 40m
PC STA= 26+391.218
PT STA= 26+598.298

BENCHMARK:

BM4 STA. 26+292.4, 6.80m RT, A USGS REFERENCE MARK SET IN SOUTHEAST WINGWALL OF IL ROUTE 173 BRIDGE SN 049-0056 OVER EAST BOAT CHANNEL. EL. 227.216



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER EAST BOAT CHANNEL

ALIGNMENT, TIES & BENCHMARKS

SCALE: NTS
DRAWN BY CLG
DATE: 3-8-10
CHECKED BY JJD

Applied Technologies

3116TIE.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	23
STA. 25+000 TO STA. 25+098				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

PRE-STAGE I WORK:

1. REMOVE EXISTING SHOULDER AND CURB AND GUTTER STA 25+103 TO STA 25+130.
2. ADD TEMPORARY PAVEMENT, 300mm.

MAJOR WORK STAGE I:

1. TRAFFIC USES SOUTHERN PORTION OF EXISTING BRIDGE.
2. NORTHERN PORTION OF EXISTING BRIDGE SUPER-STRUCTURE IS REMOVED.
3. NORTHERN PORTION OF NEW BRIDGE IS CONSTRUCTED.

NOTES:

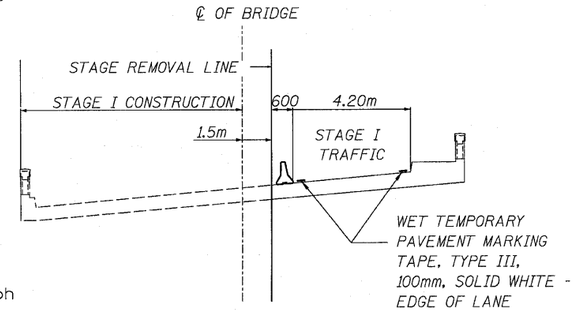
1. LOCATIONS OF ADVANCED WARNING SIGNS AND TEMPORARY CONCRETE BARRIER FOR STAGE I WORK SHALL BE AS SHOWN ON THIS PLAN SHEET. ALL OTHER TRAFFIC CONTROL DEVICES FOR THIS WORK SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.

CONT.:

2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS.
3. ALL ADVANCED WARNING SIGNS ON THIS SHEET ARE TO BE POST MOUNTED.
4. THE STATIONING FOR SIGNS AND SIGNALS ARE APPROXIMATE. ADJUST LOCATIONS AS NEEDED TO AVOID SIDEROADS, DRIVEWAYS, & OTHER OBSTACLES.
5. SEE SIGNAL PLANS
6. NUMBER OF TYPE III BARRICADES USED IS AS REQUIRED FOR CLOSURE.
7. PROVIDE AND INSTALL ALTERNATE SIGNING PER DETAIL. THIS WORK IS INCLUDED WITH TRAFFIC CONTROL AND PROTECTION ITEM.

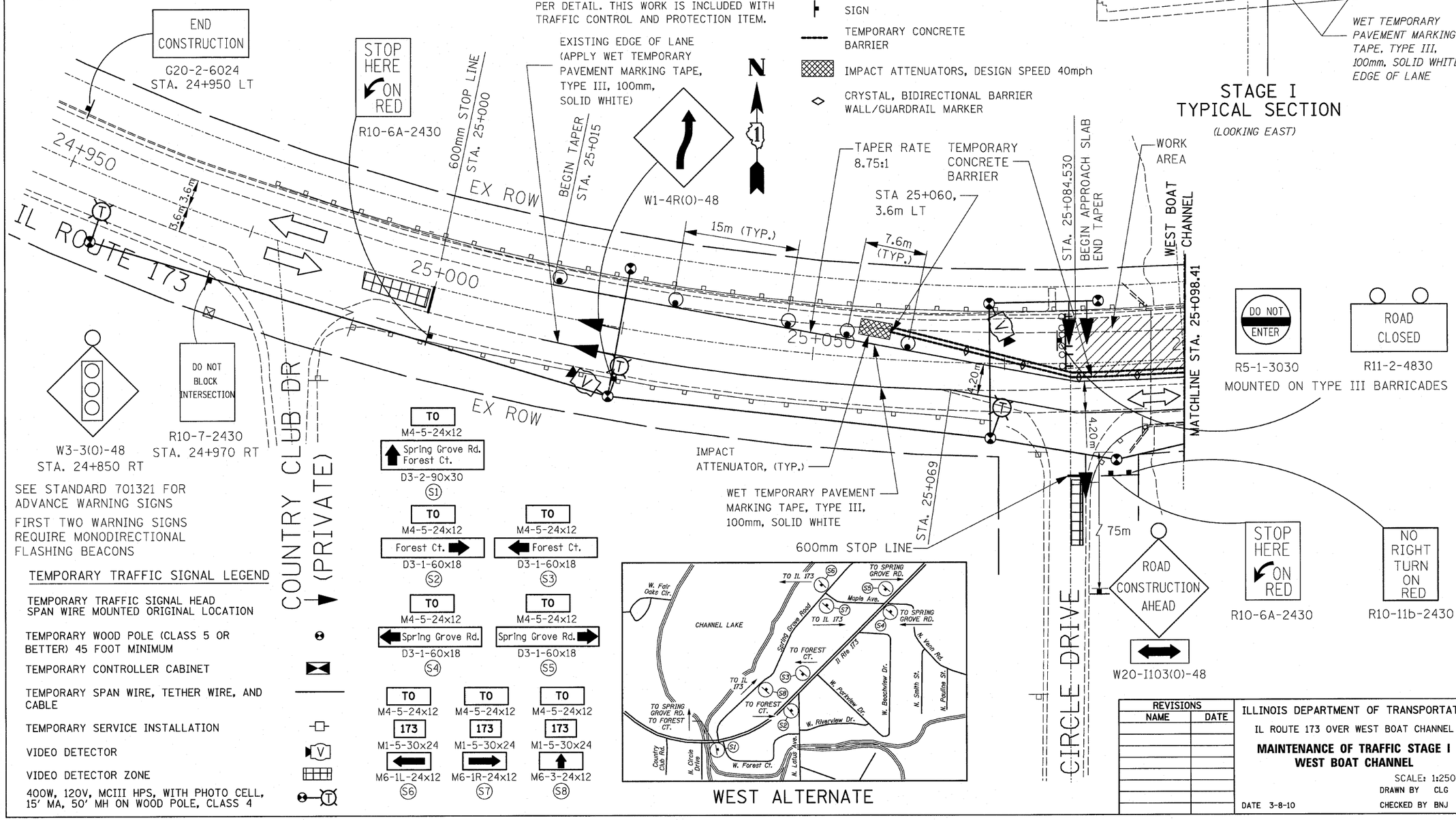
SYMBOLS

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.6m CENTERS.
- WORK AREA
- DOUBLE VERTICAL PANEL
- TYPE III BARRICADE WITH 2 FLASHING MONODIRECTIONAL LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, DESIGN SPEED 40mph
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER



STAGE I TYPICAL SECTION

(LOOKING EAST)



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE I WEST BOAT CHANNEL

SCALE: 1:250

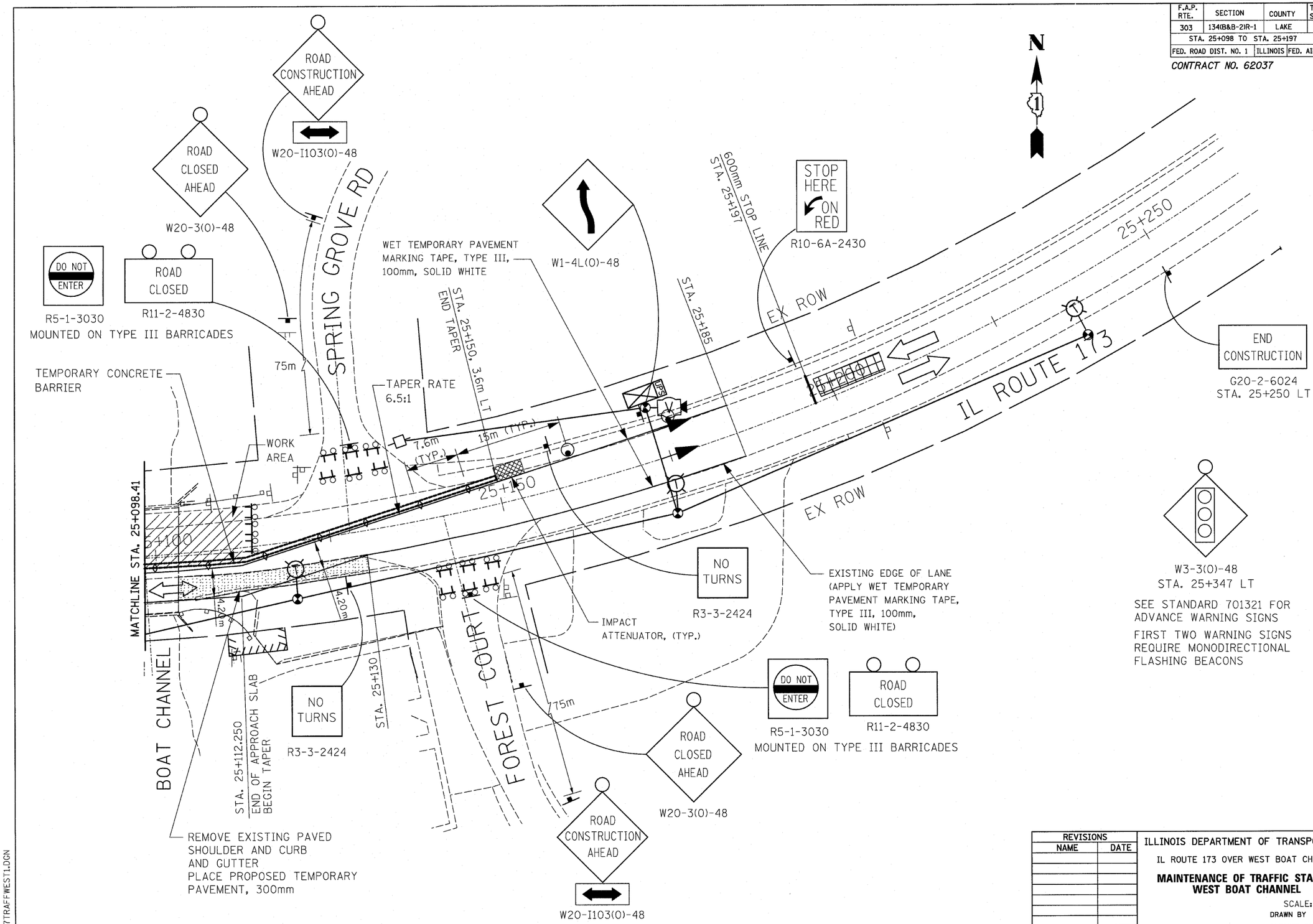
DRAWN BY CLG

DATE 3-8-10 CHECKED BY BNJ

3117TRAFFWEST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	24
STA. 25+098 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE I
WEST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY BNJ

3117TRAFFWEST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	25
STA. 25+000 TO STA. 25+098				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

PRE-STAGE II WORK:

1. ADD TEMPORARY PAVEMENT, 300mm SOUTHWEST CORNER IL 173 AND CIRCLE DRIVE.

MAJOR WORK STAGE II

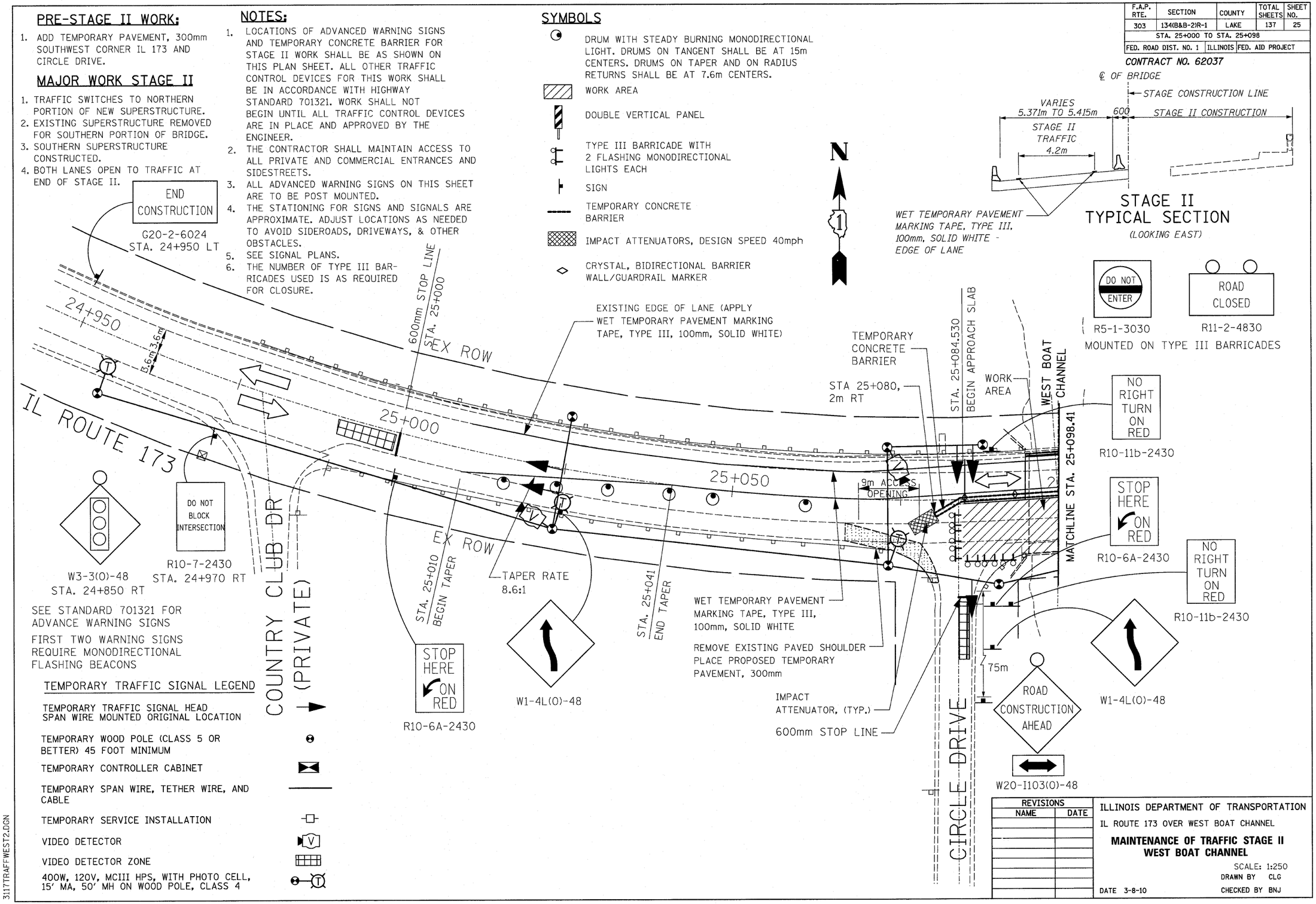
1. TRAFFIC SWITCHES TO NORTHERN PORTION OF NEW SUPERSTRUCTURE.
2. EXISTING SUPERSTRUCTURE REMOVED FOR SOUTHERN PORTION OF BRIDGE.
3. SOUTHERN SUPERSTRUCTURE CONSTRUCTED.
4. BOTH LANES OPEN TO TRAFFIC AT END OF STAGE II.

NOTES:

1. LOCATIONS OF ADVANCED WARNING SIGNS AND TEMPORARY CONCRETE BARRIER FOR STAGE II WORK SHALL BE AS SHOWN ON THIS PLAN SHEET. ALL OTHER TRAFFIC CONTROL DEVICES FOR THIS WORK SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS.
3. ALL ADVANCED WARNING SIGNS ON THIS SHEET ARE TO BE POST MOUNTED.
4. THE STATIONING FOR SIGNS AND SIGNALS ARE APPROXIMATE. ADJUST LOCATIONS AS NEEDED TO AVOID SIDEROADS, DRIVEWAYS, & OTHER OBSTACLES.
5. SEE SIGNAL PLANS.
6. THE NUMBER OF TYPE III BARRICADES USED IS AS REQUIRED FOR CLOSURE.

SYMBOLS

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.6m CENTERS.
- WORK AREA
- DOUBLE VERTICAL PANEL
- TYPE III BARRICADE WITH 2 FLASHING MONODIRECTIONAL LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, DESIGN SPEED 40mph
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER



STAGE II TYPICAL SECTION
(LOOKING EAST)

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- VIDEO DETECTOR
- VIDEO DETECTOR ZONE
- 400W, 120V, MCIII HPS, WITH PHOTO CELL, 15' MA, 50' MH ON WOOD POLE, CLASS 4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

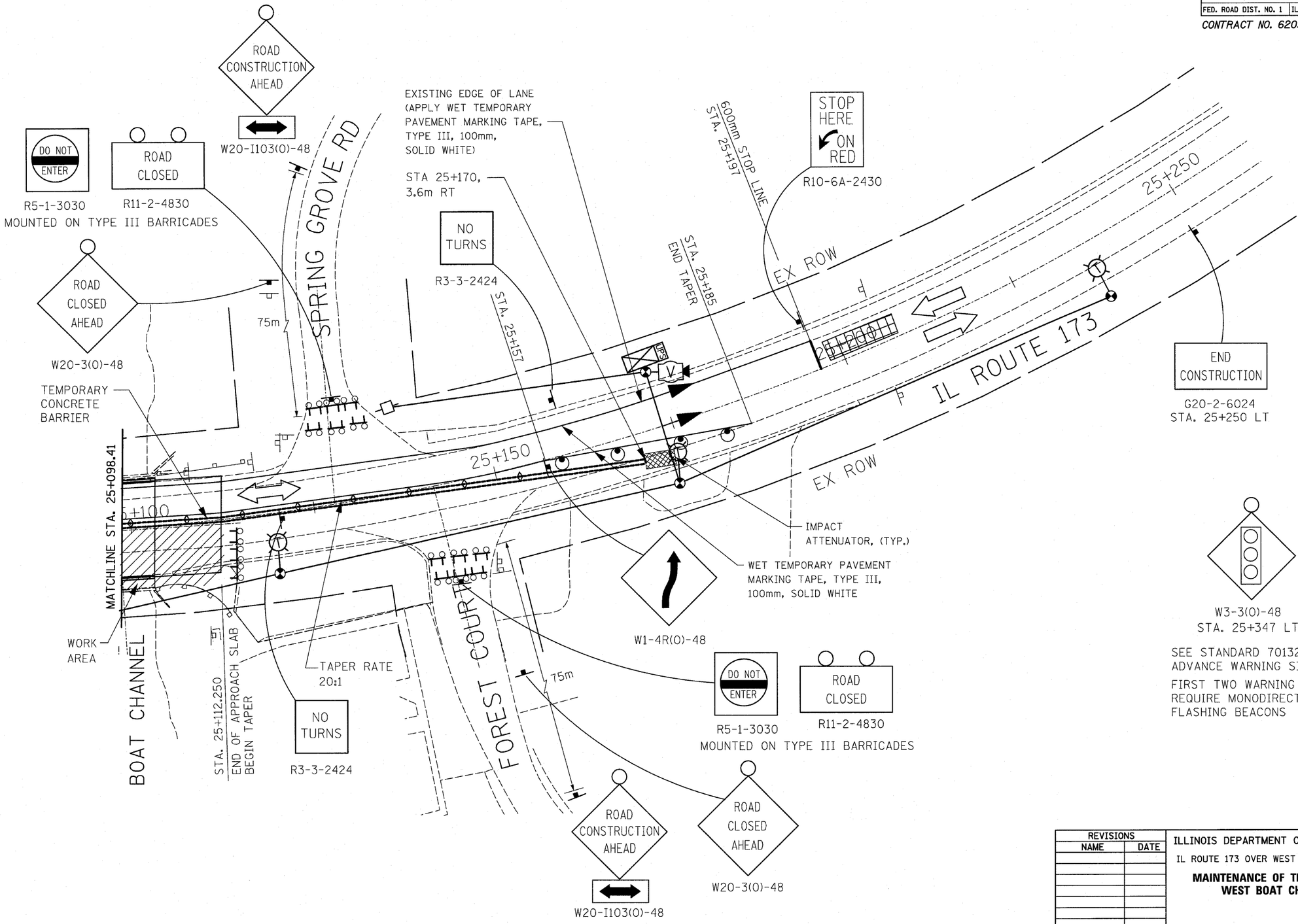
MAINTENANCE OF TRAFFIC STAGE II
WEST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10
CHECKED BY BNJ

3117TRAFFWEST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	26
STA. 25+098 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE II
WEST BOAT CHANNEL

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY BNJ

3117TRAFFWEST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	27
STA. 25+000 TO STA. 25+098				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

MAJOR WORK STAGE III:

1. LEVELING BINDER AND HOT-MIX ASPHALT SURFACE COURSE TO BE COMPLETED BY STAGES. IL ROUTE 173 AND CIRCLE DRIVE SHALL REMAIN OPEN.

NOTES:

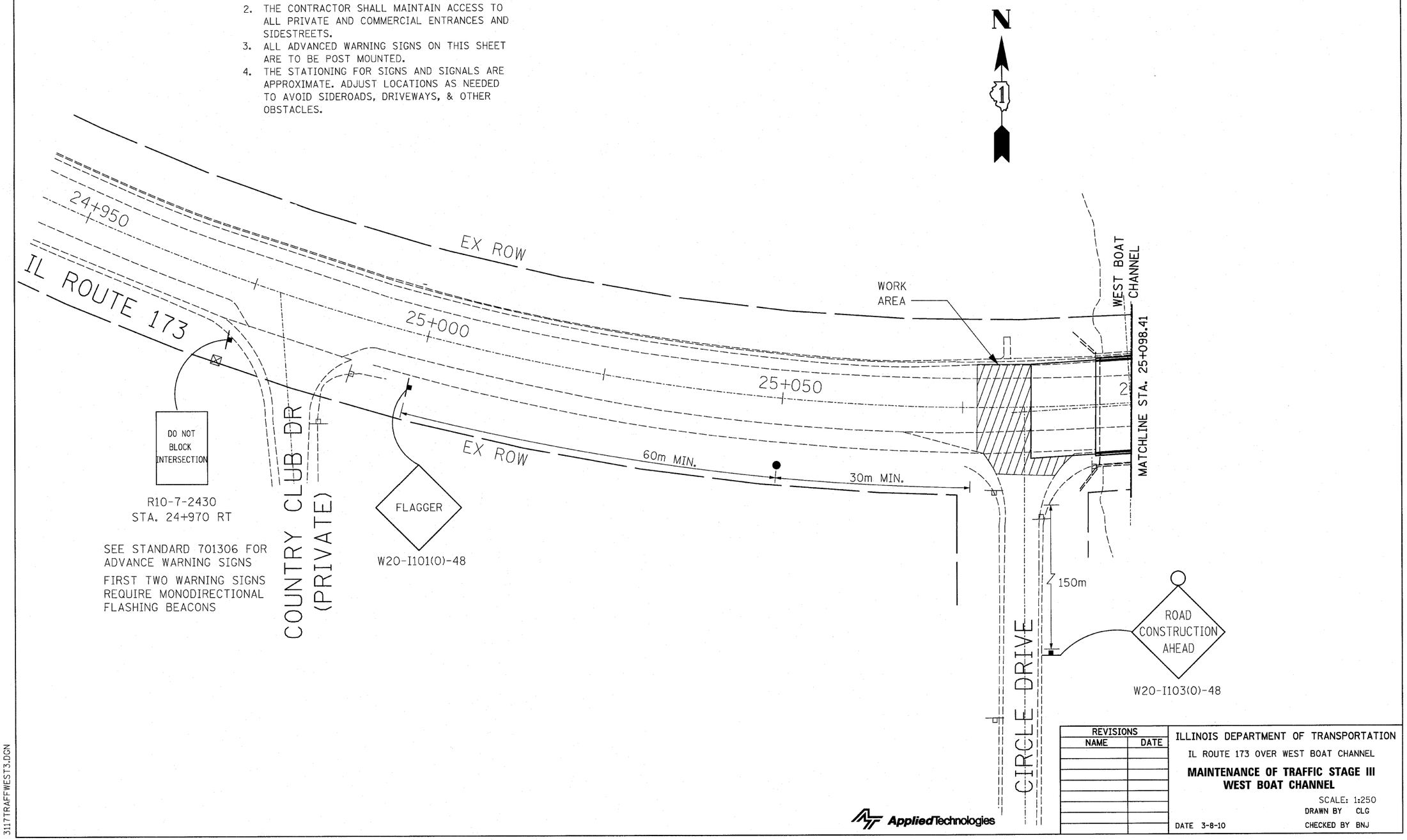
1. LOCATIONS OF ADVANCED WARNING SIGNS FOR STAGE III WORK SHALL BE AS SHOWN ON THIS PLAN SHEET. ALL OTHER TRAFFIC CONTROL DEVICES FOR THIS WORK SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701306. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS.
3. ALL ADVANCED WARNING SIGNS ON THIS SHEET ARE TO BE POST MOUNTED.
4. THE STATIONING FOR SIGNS AND SIGNALS ARE APPROXIMATE. ADJUST LOCATIONS AS NEEDED TO AVOID SIDEROADS, DRIVEWAYS, & OTHER OBSTACLES.

SYMBOLS

WORK AREA

SIGN

FLAGGER WITH TRAFFIC CONTROL SIGN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE III
WEST BOAT CHANNEL

SCALE: 1:250

DRAWN BY CLG

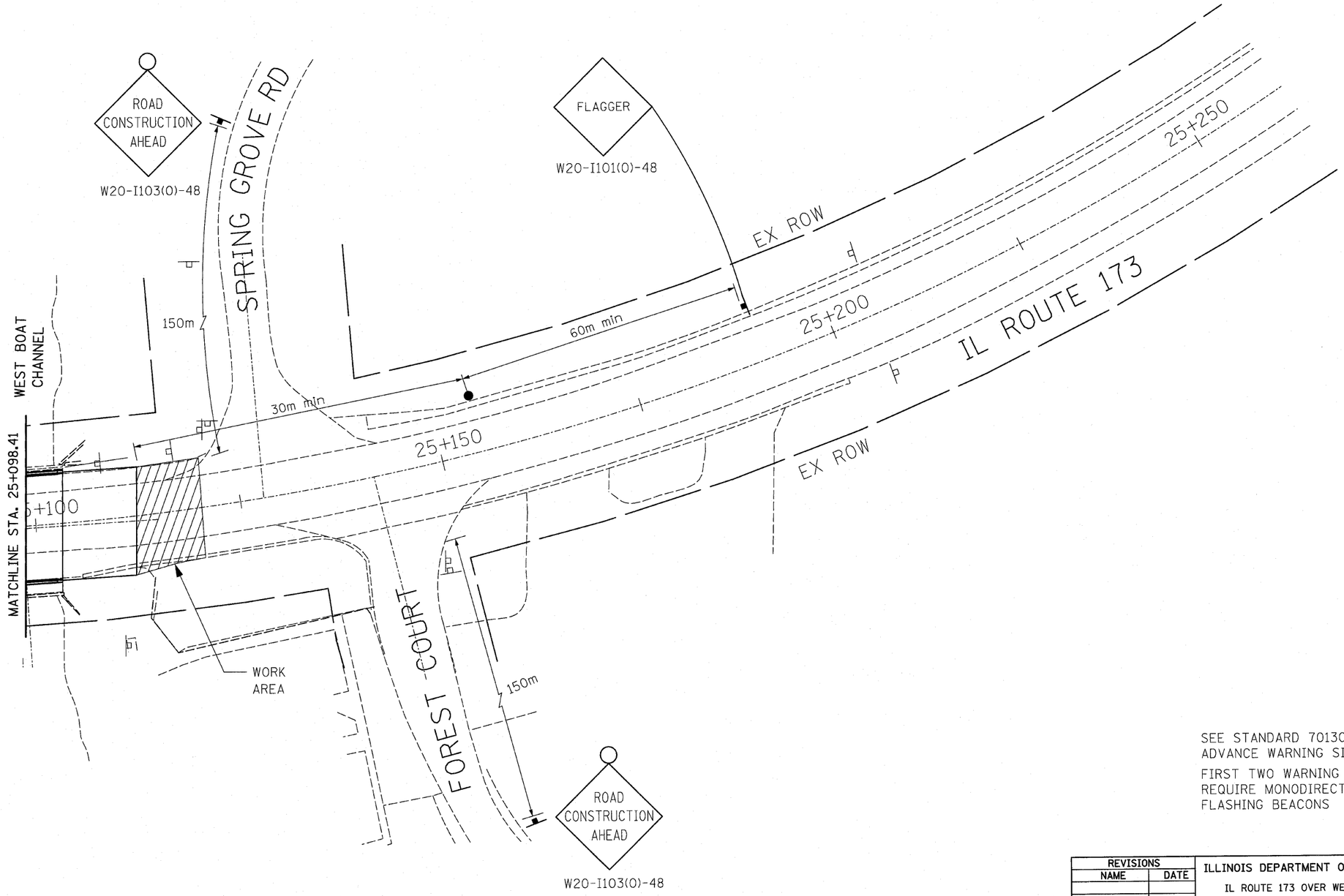
DATE 3-8-10 CHECKED BY BNJ

AppliedTechnologies

3117TRAFFWEST3.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	28
STA. 25+098 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



SEE STANDARD 701306 FOR ADVANCE WARNING SIGNS

FIRST TWO WARNING SIGNS REQUIRE MONODIRECTIONAL FLASHING BEACONS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE III
WEST BOAT CHANNEL

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY BNJ

AppliedTechnologies

3117TRAFFWEST3.DGN

MAJOR WORK STAGE I:

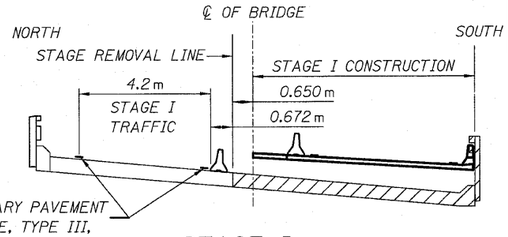
1. TRAFFIC USES NORTHERN PORTION OF EXISTING BRIDGE.
2. SOUTHERN PORTION OF EXISTING BRIDGE IS REMOVED.
3. SOUTHERN PORTION OF NEW BRIDGE IS CONSTRUCTED.
4. REMOVE EXISTING BRIDGE APPROACH SLABS, AND PAVEMENT EAST OF BRIDGE, GRADE, PAVE SOUTH HALF OF IL ROUTE 173.
5. ADD TEMPORARY RAMP BEGINNING STA 26+225 WITH BUTT JOINT.

NOTES:

1. LOCATIONS OF ADVANCED WARNING SIGNS AND TEMPORARY CONCRETE BARRIER FOR STAGE I WORK SHALL BE AS SHOWN ON THIS PLAN SHEET. ALL OTHER TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS, AS SHOWN.
3. ALL ADVANCED WARNING SIGNS ON THIS SHEET ARE TO BE POST MOUNTED.
4. THE STATIONING FOR SIGNS AND SIGNALS ARE APPROXIMATE. ADJUST LOCATIONS AS NEEDED TO AVOID SIDEROADS, DRIVEWAYS, AND OTHER OBSTACLES.
5. SEE SIGNAL PLANS.
6. NUMBER OF TYPE III BARRICADES IS AS REQUIRED FOR CLOSURE.
7. PROVIDE AND INSTALL ALTERNATE SIGNING PER DETAIL. THIS WORK IS INCLUDED WITH TRAFFIC CONTROL AND PROTECTION ITEM.

SYMBOLS

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.6m CENTERS.
- WORK AREA
- DOUBLE VERTICAL PANEL
- TYPE III BARRICADE WITH 2 FLASHING MONODIRECTIONAL LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, DESIGN SPEED 40mph ADVISORY SPEED 30mph
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER



STAGE I
TYPICAL SECTION

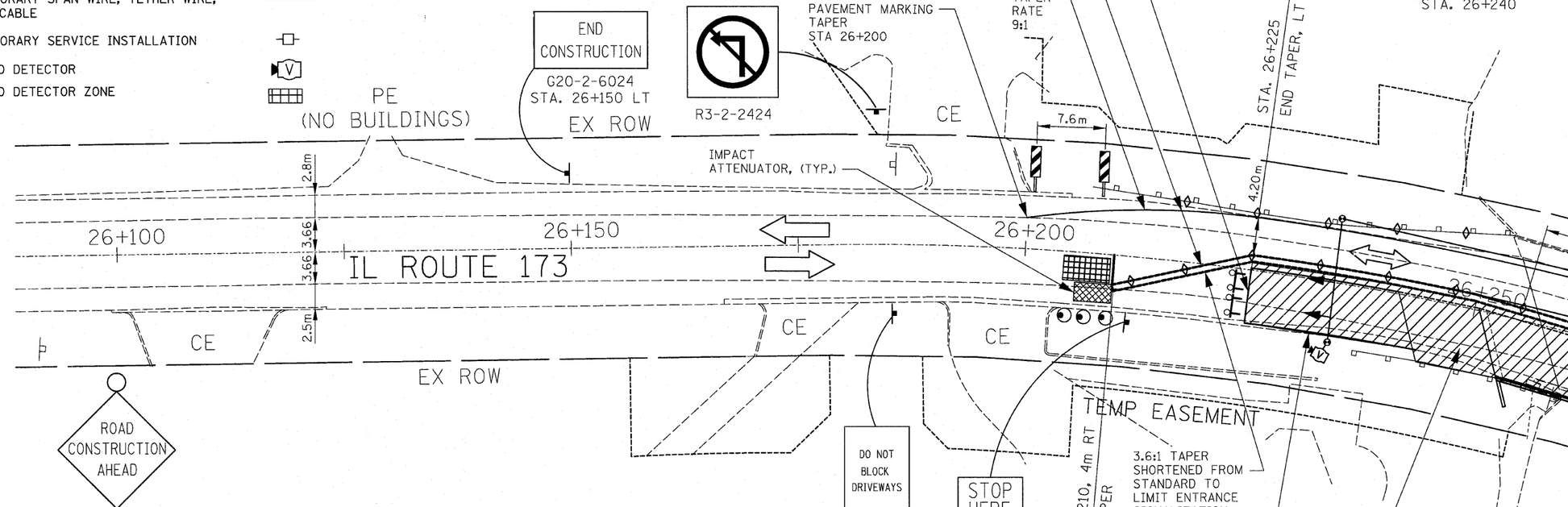
(LOOKING EAST)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	29
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

TEMPORARY TRAFFIC SIGNAL LEGEND

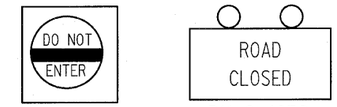
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- VIDEO DETECTOR
- VIDEO DETECTOR ZONE



PAVEMENT MARKING REMOVAL
26+200 - 26+526 LT
26+200 - 26+230 ℄
26+405 - 26+526 ℄

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III,
600mm WHITE
26+210 RT
26+526 LT

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III,
100mm WHITE
26+200 - 26+526 LT
26+210 - 26+470 RT



MOUNTED ON TYPE III BARRICADES
STA. 26+240

SEE STANDARD 701321 FOR ADVANCE WARNING SIGNS

FIRST TWO WARNING SIGNS REQUIRE MONODIRECTIONAL FLASHING BEACONS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE I
EAST BOAT CHANNEL

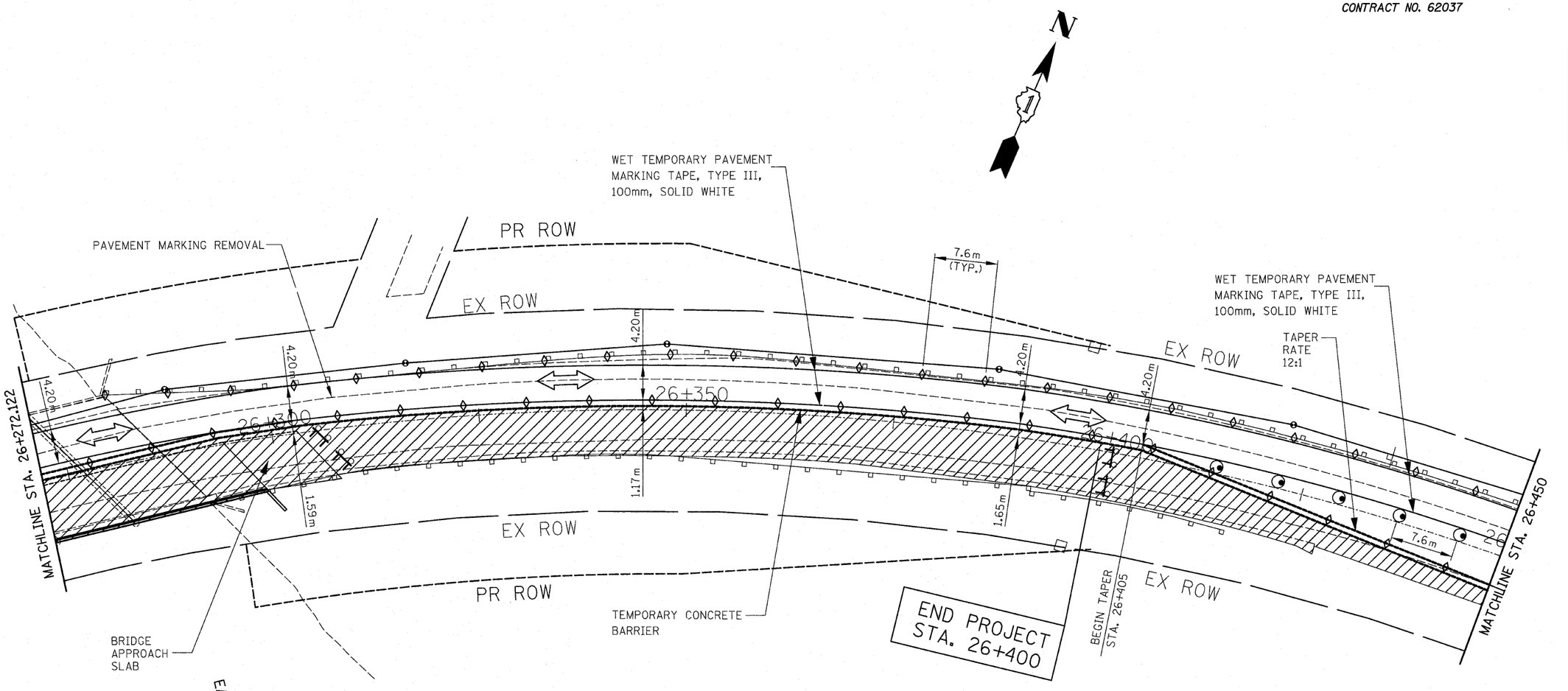
SCALE: 1:250
DRAWN BY CLG
CHECKED BY JJD
DATE 3-8-10

Applied Technologies

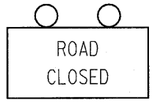
3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	30
STA. 26+272 TO STA. 26+450				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



R5-1-3030



R11-2-4830

MOUNTED ON TYPE III BARRICADES
STA. 26+310
STA. 26+402

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE I
EAST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

AppliedTechnologies

3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	31
STA. 26+450 TO STA. 26+625				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

ROAD CLOSED AHEAD
W20-3-48

75m

LINDEN LN

DO NOT ENTER
R5-1-3030

ROAD CLOSED
R11-2-4830

MOUNTED ON TYPE III BARRICADES

STOP HERE ON RED
R10-6A-2430

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III, 100mm, SOLID WHITE

NO TURNS
R3-3-2424

PAVEMENT MARKING REMOVAL

600mm STOP LINE
STA. 26+526

CLARK ST

MATCHLINE STA. 26+450

4.20m

+450

7.6m

4.0m

26+600

IL ROUTE 173

26+550

NO TURNS
R3-3-2424

END BARRIER TAPER
STA. 26+470
BEGIN TEMPORARY PAVEMENT MARKING TAPER

TAPER RATE 8.3:1

END TAPER
STA. 26+500

SIGNALS
STA. 26+510

PE

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III, 100mm, SOLID WHITE

TEMPORARY CONCRETE BARRIER

N

1

ORCHARD ST.

DO NOT BLOCK INTERSECTION
R10-7-2430
STA. 26+585, RT

ROAD CONSTRUCTION AHEAD
W20-I103(O)-48

30 MPH
W13-1-2424
STA 27+126 LT

SEE STANDARD 701321 FOR ADVANCE WARNING SIGNS

FIRST TWO WARNING SIGNS REQUIRE MONODIRECTIONAL FLASHING BEACONS

26+600

CE

END CONSTRUCTION
G20-2-6024
STA. 26+550 RT

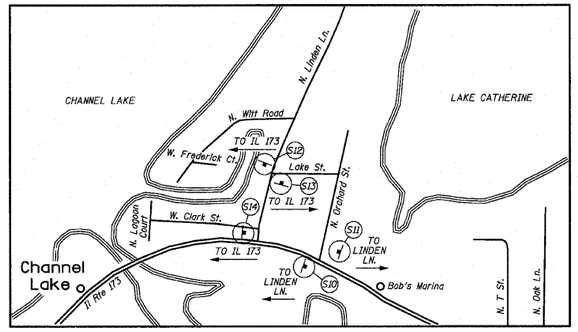
CE

TO
M4-5-24x12
Linden Ln.
D3-1-60x18
S10

TO
M4-5-24x12
Linden Ln.
D3-1-60x18
S11

TO
M4-5-24x12
173
M1-5-30x24
M6-1L-24x12
S12 S14

TO
M4-5-24x12
173
M1-5-30x24
M6-1R-24x12
S13



EAST ALTERNATE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE I
EAST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

Applied Technologies

3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	32
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

MAJOR WORK STAGE II:

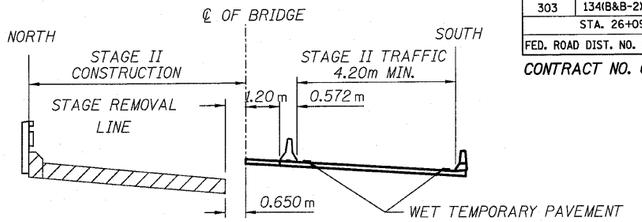
1. TRAFFIC USES SOUTHERN PORTION OF NEW BRIDGE.
2. NORTHERN PORTION OF EXISTING BRIDGE IS REMOVED.
3. NORTHERN PORTION OF NEW BRIDGE IS CONSTRUCTED.
4. REMOVE EXISTING BRIDGE APPROACH SLABS, AND PAVEMENT EAST OF BRIDGE, GRADE, PAVE NORTH PORTION OF IL ROUTE 173.
5. ADD TEMPORARY RAMP WEST OF BRIDGE BEGINNING STA 26+225 WITH BUTT JOINT.

NOTES:

1. LOCATIONS OF ADVANCED WARNING SIGNS AND TEMPORARY CONCRETE BARRIER FOR STAGE II WORK SHALL BE AS SHOWN ON THIS PLAN SHEET. ALL OTHER TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS, AS SHOWN.
3. ALL ADVANCED WARNING SIGNS ON THIS SHEET ARE TO BE POST MOUNTED.
4. THE STATIONING FOR SIGNS AND SIGNALS ARE APPROXIMATE. ADJUST LOCATIONS AS NEEDED TO AVOID SIDEROADS, DRIVEWAYS, & OTHER OBSTACLES.
5. SEE SIGNAL PLANS.
6. NUMBER OF TYPE III BARRICADES IS AS REQUIRED FOR CLOSURE.

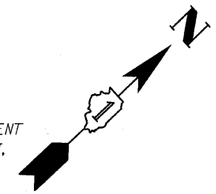
SYMBOLS

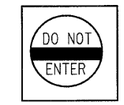
- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.6m CENTERS.
- WORK AREA
- DOUBLE VERTICAL PANEL
- TYPE III BARRICADE WITH 2 FLASHING MONODIRECTIONAL LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, DESIGN SPEED 40mph, ADVISORY SPEED 30mph
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER



STAGE II TYPICAL SECTION

(LOOKING EAST)

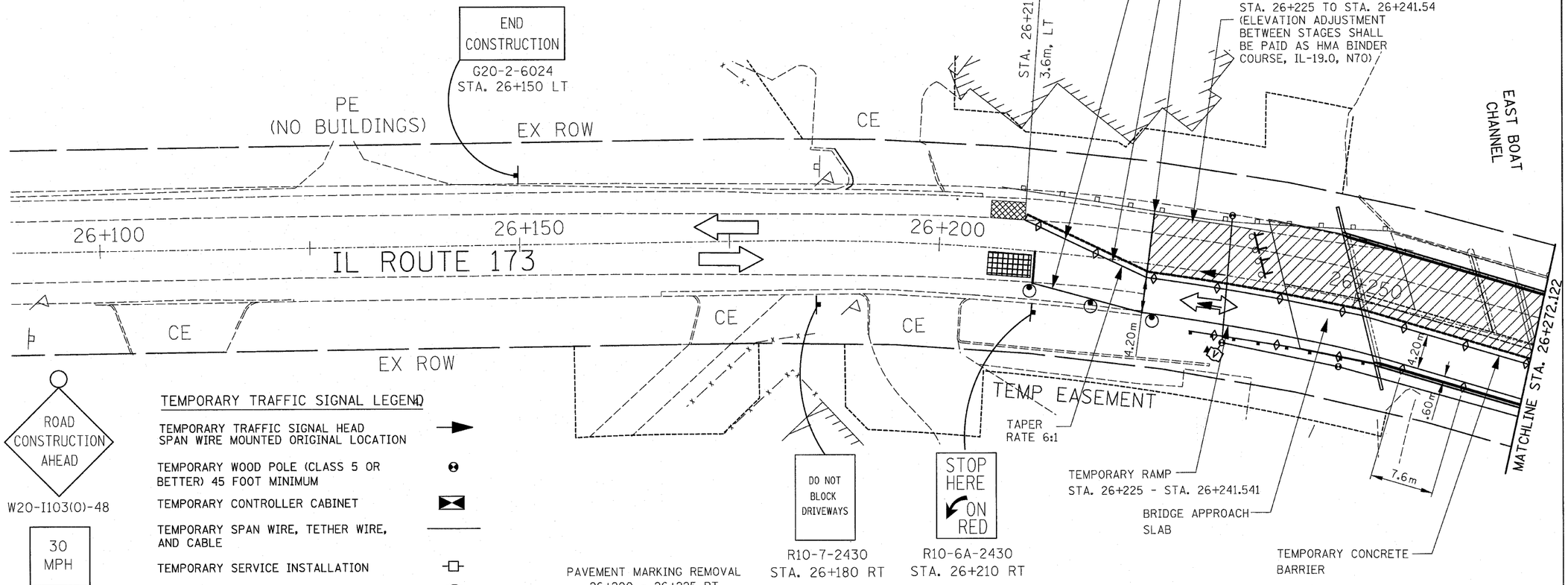




R5-1-3030

R11-2-4830

MOUNTED ON TYPE III BARRICADES STA. 26+240



W20-I103(O)-48

W13-1-2424
STA 25+610 RT

SEE STANDARD 701321 FOR ADVANCE WARNING SIGNS

FIRST TWO WARNING SIGNS REQUIRE MONODIRECTIONAL FLASHING BEACONS

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- VIDEO DETECTOR
- VIDEO DETECTOR ZONE

PAVEMENT MARKING REMOVAL
26+200 - 26+225 RT

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III
600mm WHITE
26+210 RT
26+526 LT

WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III
100mm WHITE
26+200 - 26+526 LT & RT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE II EAST BOAT CHANNEL

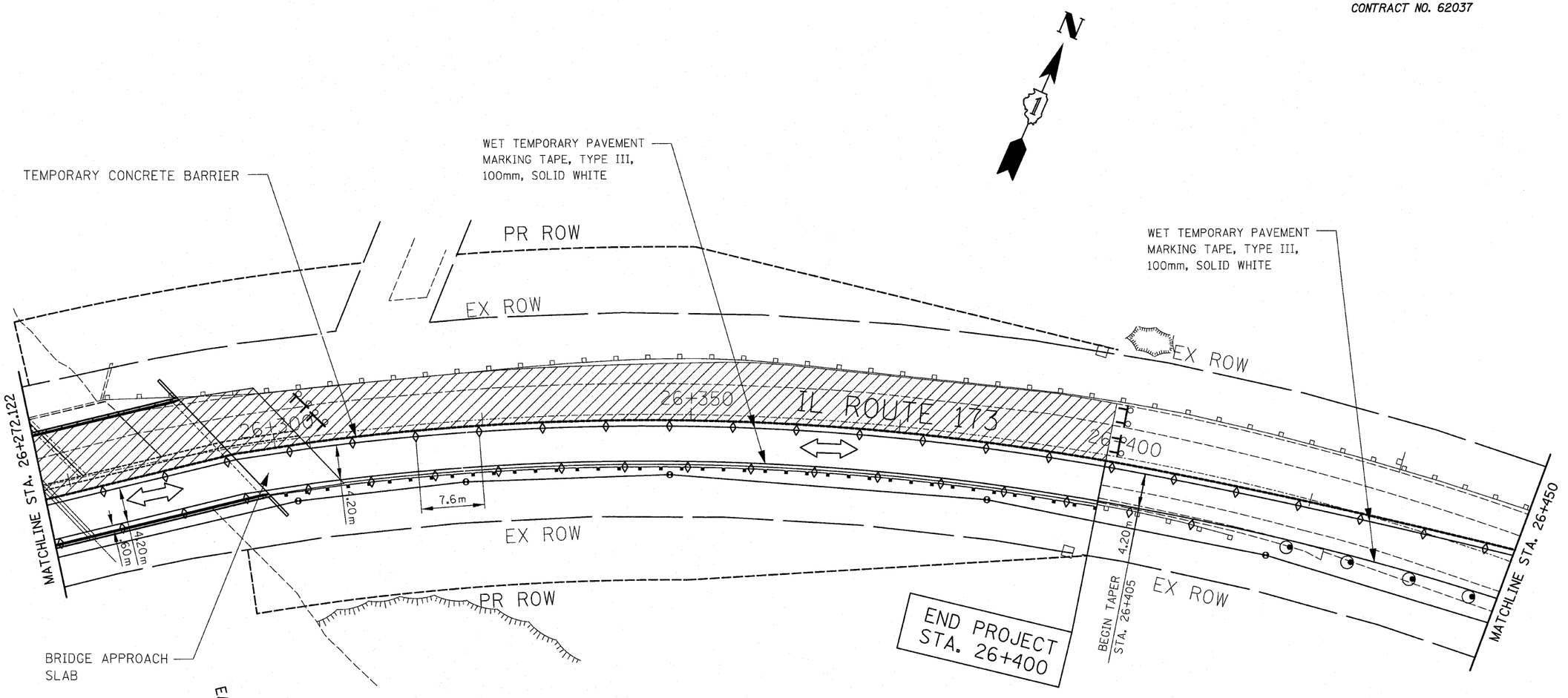
SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

Applied Technologies

3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	33
STA. 26+272 TO STA. 26+450				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



DO NOT ENTER
R5-1-3030

ROAD CLOSED
R11-2-4830

MOUNTED ON TYPE III BARRICADES
STA. 26+310
STA. 26+402
STA. 26+480

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE II
EAST BOAT CHANNEL

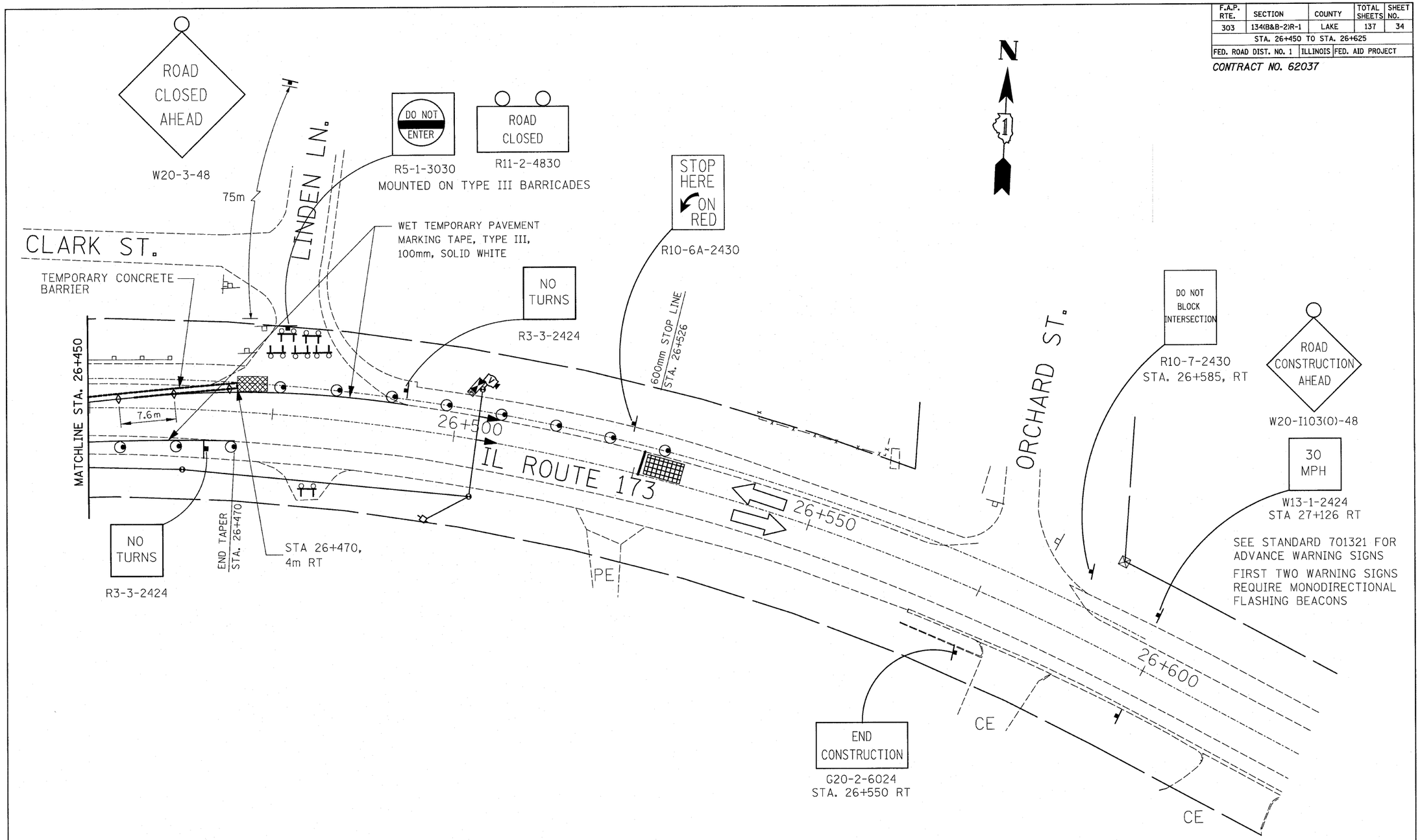
SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

AppliedTechnologies

3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	34
STA. 26+450 TO STA. 26+625				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE II
EAST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

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3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	35
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

MAJOR WORK STAGE III:

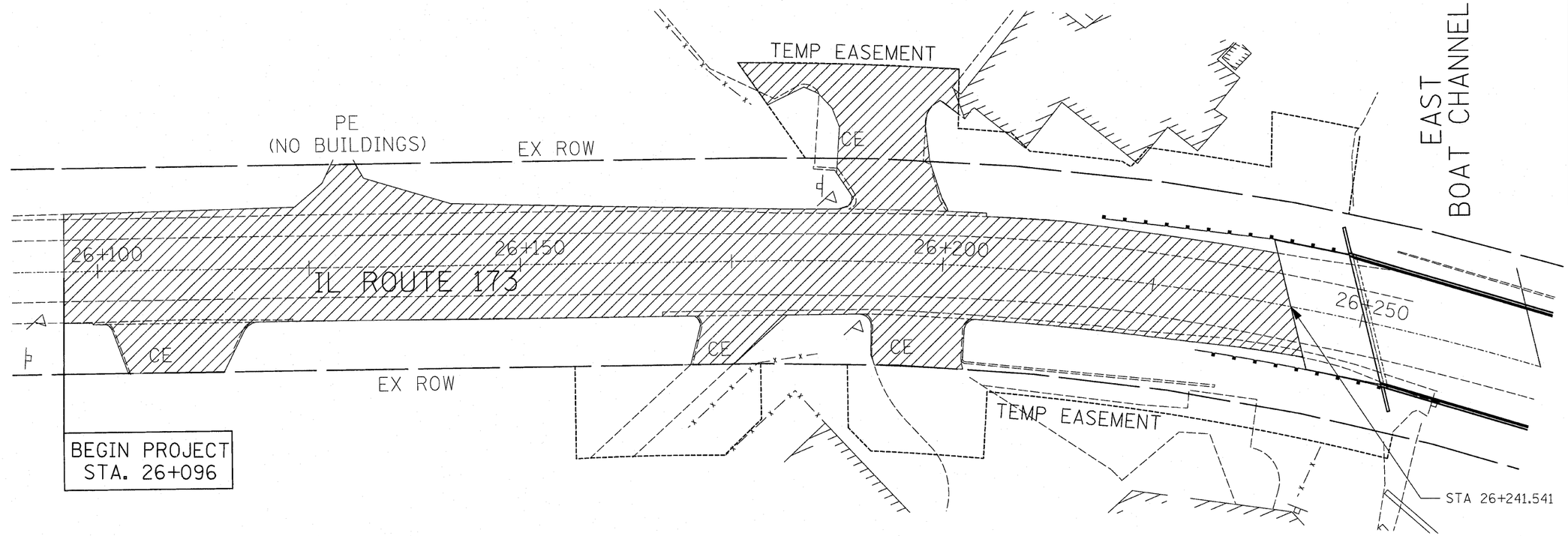
1. PAVE TO PROVIDE DESIGN PROFILE AND SUPERELEVATION ADJUSTMENTS.

NOTES:

1. LOCATIONS OF TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701306. WORK SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE AND COMMERCIAL ENTRANCES AND SIDESTREETS.

SYMBOLS

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.6m CENTERS.
- WORK AREA
- DOUBLE VERTICAL PANEL
- TYPE III BARRICADE WITH 2 FLASHING MONODIRECTIONAL LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

MAINTENANCE OF TRAFFIC STAGE III
EAST BOAT CHANNEL

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

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3116TRAFFEAST3.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	36
STA. 25+000 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

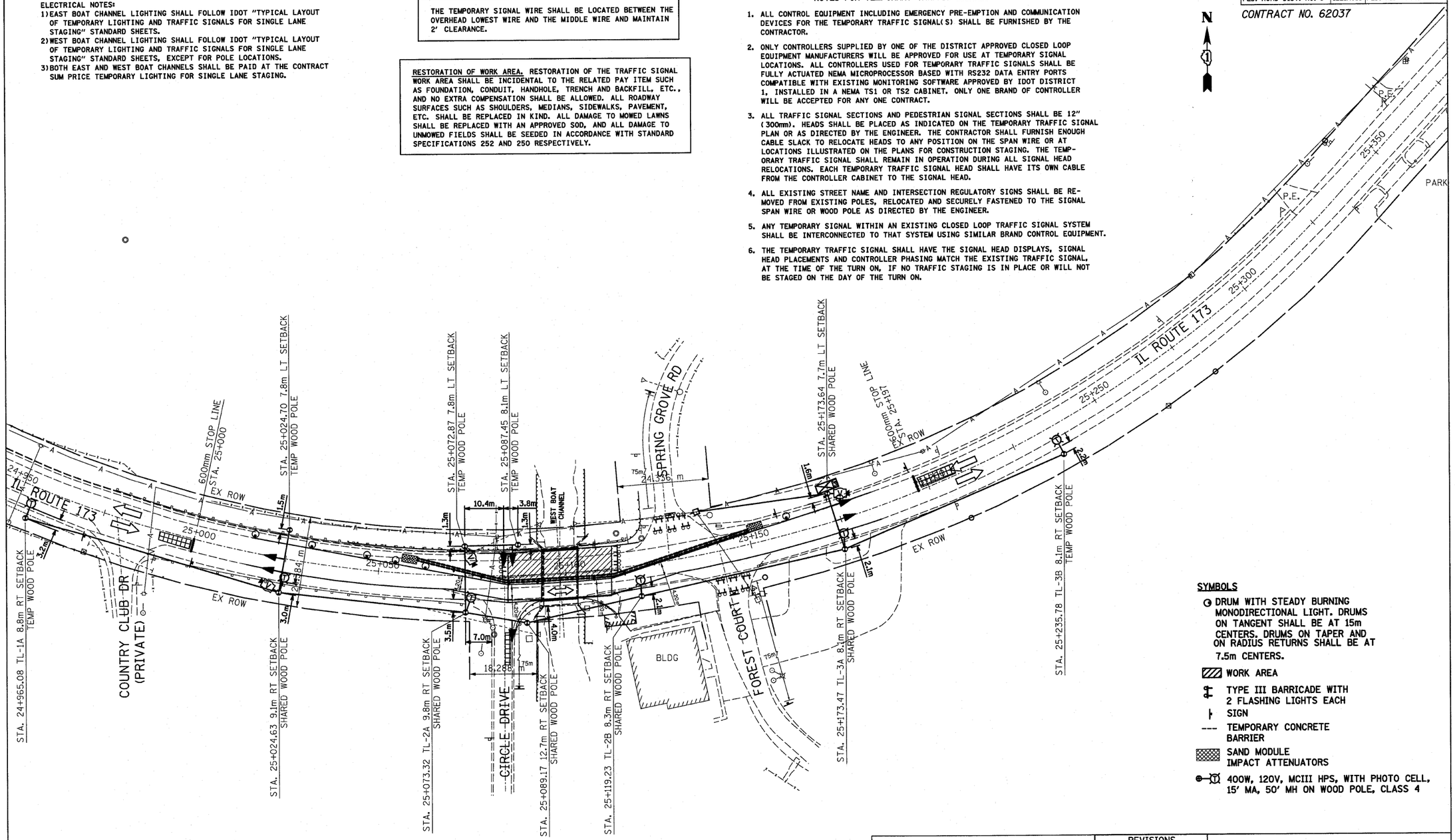
ELECTRICAL NOTES:
1) EAST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS.
2) WEST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS, EXCEPT FOR POLE LOCATIONS.
3) BOTH EAST AND WEST BOAT CHANNELS SHALL BE PAID AT THE CONTRACT SUM PRICE TEMPORARY LIGHTING FOR SINGLE LANE STAGING.

THE TEMPORARY SIGNAL WIRE SHALL BE LOCATED BETWEEN THE OVERHEAD LOWEST WIRE AND THE MIDDLE WIRE AND MAINTAIN 2' CLEARANCE.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.



SYMBOLS

- DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT. DRUMS ON TANGENT SHALL BE AT 15m CENTERS. DRUMS ON TAPER AND ON RADIUS RETURNS SHALL BE AT 7.5m CENTERS.
- WORK AREA
- TYPE III BARRICADE WITH 2 FLASHING LIGHTS EACH
- SIGN
- TEMPORARY CONCRETE BARRIER
- SAND MODULE IMPACT ATTENUATORS
- 400W, 120V, MCIII HPS, WITH PHOTO CELL, 15' MA, 50' MH ON WOOD POLE, CLASS 4

AppliedTechnologies

TERRA ENGINEERING LTD.
505 N. LaSalle Street, Suite 250
Chicago, IL 60610.
(312) 467-0123

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND LIGHTING WEST STAGES I & II

SCALE: 1:500 DRAWN BY: GAO

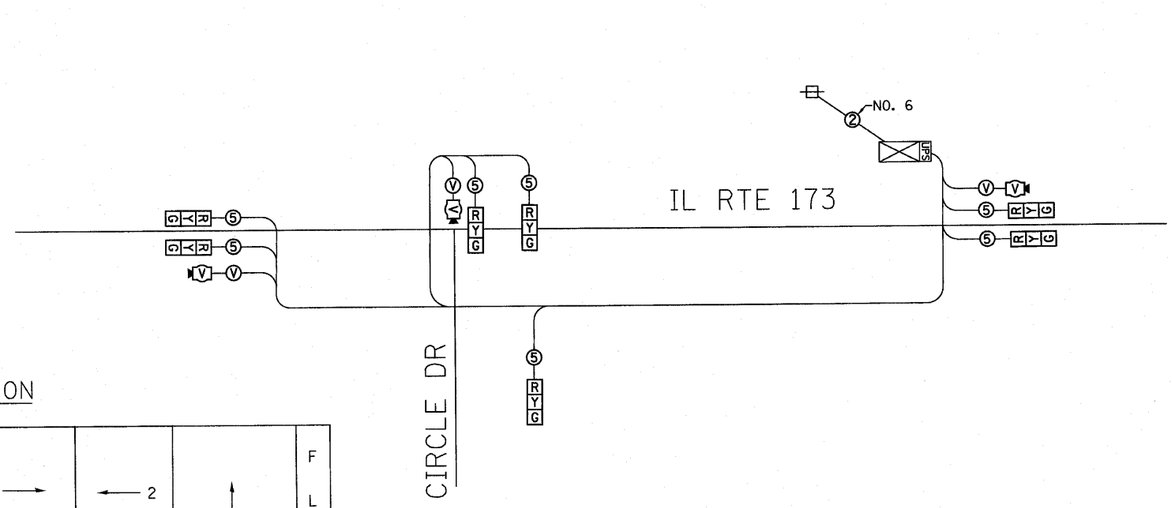
DATE: 3-8-10 CHECKED BY: TCM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B &B-2)R-1	LAKE	137	37
STA. 25+000 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

TEMPORARY CABLE DIAGRAM LEGEND

(V) VENDOR'S CABLE.



TEMPORARY SEQUENCE OF OPERATION

MOVEMENT		1 →			← 2			↑ 3			FLASH
PHASE		1			2			3			
INTERVAL		1	2A	2B	3	4A	4B	5	6A	6B	
CHANGE TO			2 3			1			2		
ILL 173 ALL SIGNALS	EB	G	Y	R	R	R	R	R	R	R	R
ILL 173 ALL SIGNALS	WB	R	R	R	G	Y	R	R	R	R	R
CIRCLE DRIVE ALL SIGNALS	NB	R	R	R	R	R	R	G	Y	R	R

QUANTITIES

89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE LED	x % OPERATION	
SIGNAL (RED)	7	–	17	0.50	59.5
(YELLOW)	7	–	25	0.25	43.8
(GREEN)	7	–	15	0.25	26.3
ARROW	–	–	12	0.10	–
PED. SIGNAL	–	–	25	1.00	–
CONTROLLER	1	–	100	1.00	100.0
ENERGY COSTS TO:			TOTAL =		229.6

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FOUNDATION (DEPTH)	FT.	(m)
TYPE A - POST	4	(1.2)
D - CONTROLLER	4	(1.2)
C - M. ARM POLE		
24" (600mm)	10	(3.0)
30" (750mm)	15	(4.6)

CABLE SLACK	FT.	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT.	(m)
ALL FOUNDATIONS	3.5	(1.0)
MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)=	
BRACKET MOUNTED	13	(4.0)
PED. PUSHBUTTON	4	(1.2)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND	13.5	(4.1)
POST MOUNTED	6	(1.8)

ENERGY SUPPLY: CONTACT: DOROTHY PROSEN
PHONE: (847) 816-5323
COMPANY: COMED

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

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505 N. LaSalle Street, Suite 250
Chicago, IL 60610.
(312) 467-0123

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST BOAT CHANNEL

TEMPORARY CABLE PLAN, SEQUENCE OF OPERATION AND SCHEDULE OF QUANTITIES

SCALE: N.T.S.
DATE: 3-8-10
DRAWN BY: GAO
CHECKED BY: TCM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	38
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
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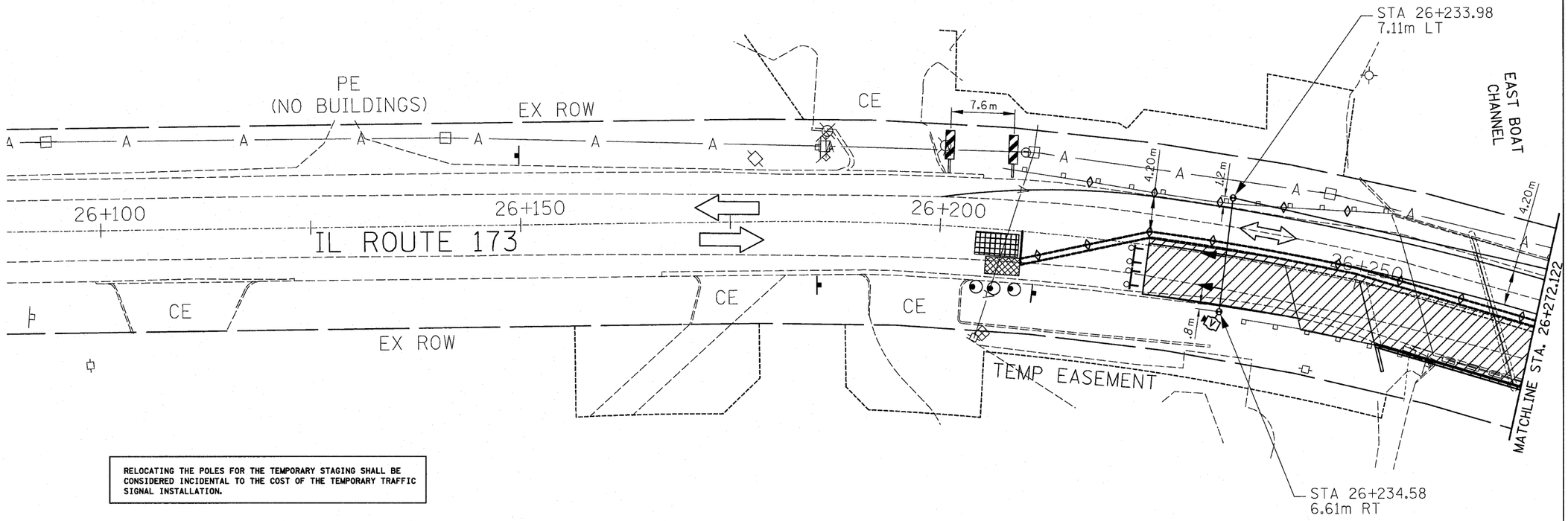

RELOCATING THE POLES FOR THE TEMPORARY STAGING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ELECTRICAL NOTES:
1) EAST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS.
2) WEST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS, EXCEPT FOR POLE LOCATIONS.
3) BOTH EAST AND WEST BOAT CHANNELS SHALL BE PAID AT THE CONTRACT SUM PRICE TEMPORARY LIGHTING FOR SINGLE LANE STAGING.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION
STAGE I – SHEET 1 OF 3

SCALE: 1:250
DRAWN BY CLG
DATE 12-18-09 CHECKED BY JJD

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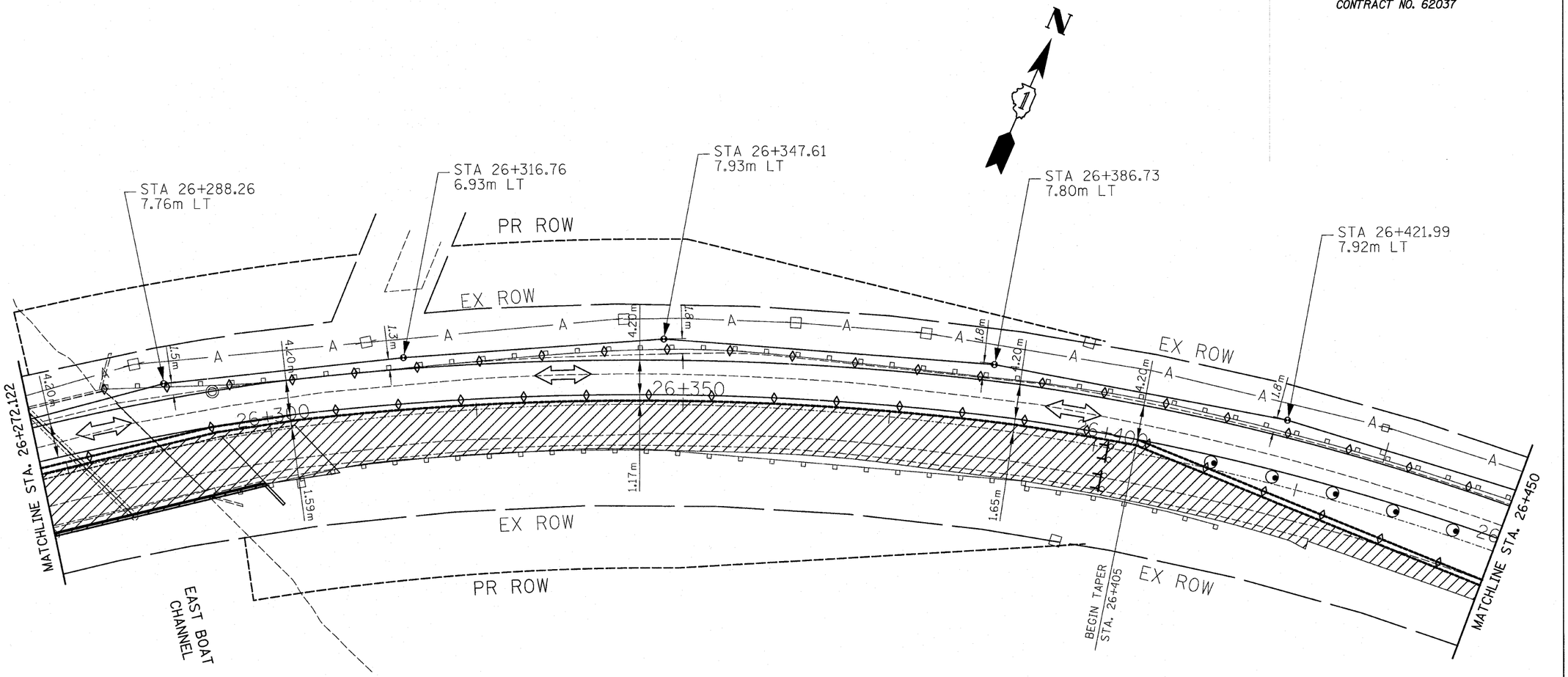
3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	39
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



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ELECTRICAL NOTES:
1) EAST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS.
2) WEST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS, EXCEPT FOR POLE LOCATIONS.
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REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

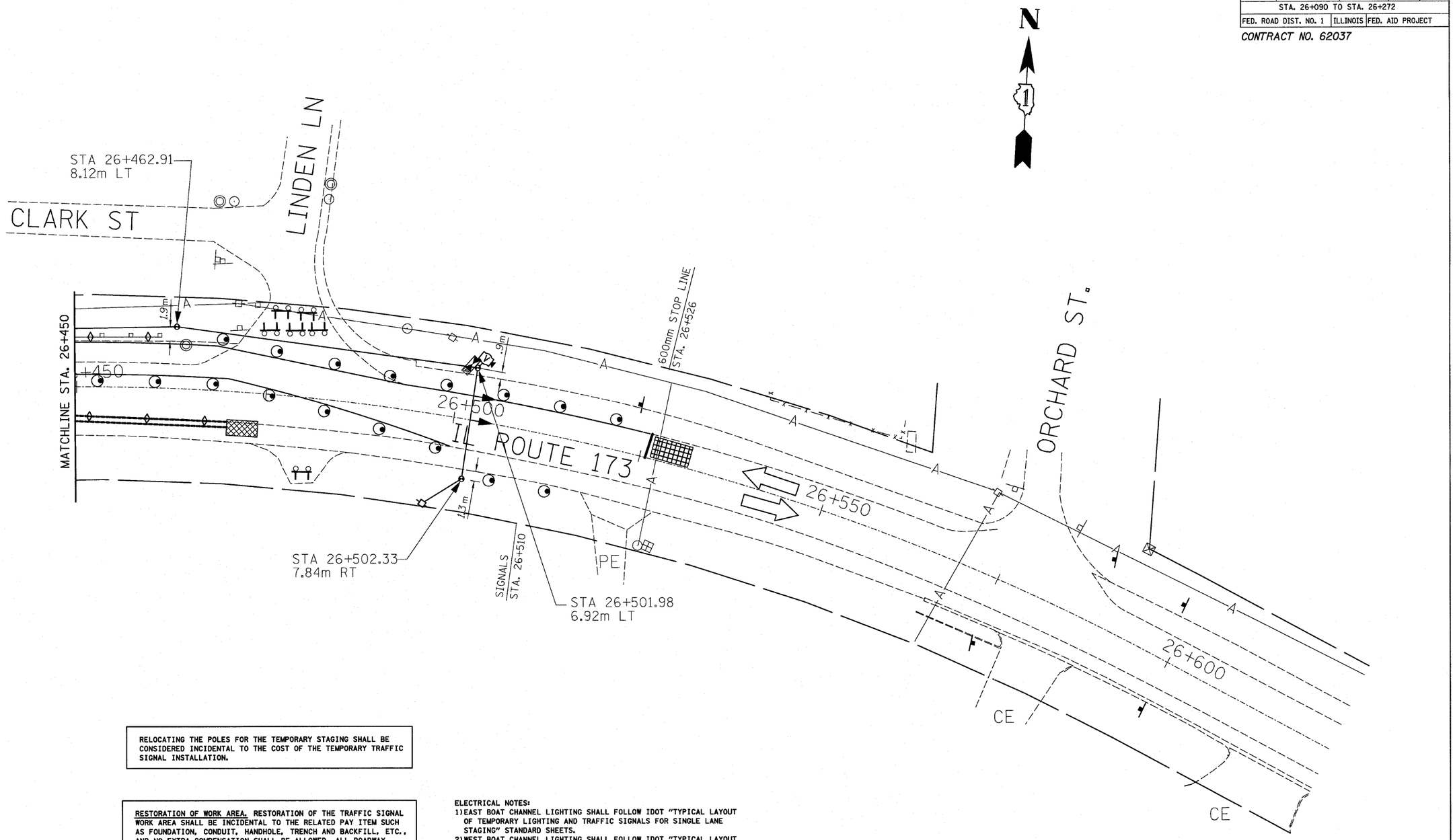
TEMPORARY TRAFFIC SIGNAL INSTALLATION
STAGE I – SHEET 2 OF 3

SCALE: 1:250
DRAWN BY CLG
DATE 12-18-09 CHECKED BY JJD

3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	40
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



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ELECTRICAL NOTES:
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REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION STAGE I – SHEET 3 OF 3

SCALE: 1:250

DRAWN BY CLG

DATE 12-18-09 CHECKED BY JJD

3116TRAFFEAST1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	41
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
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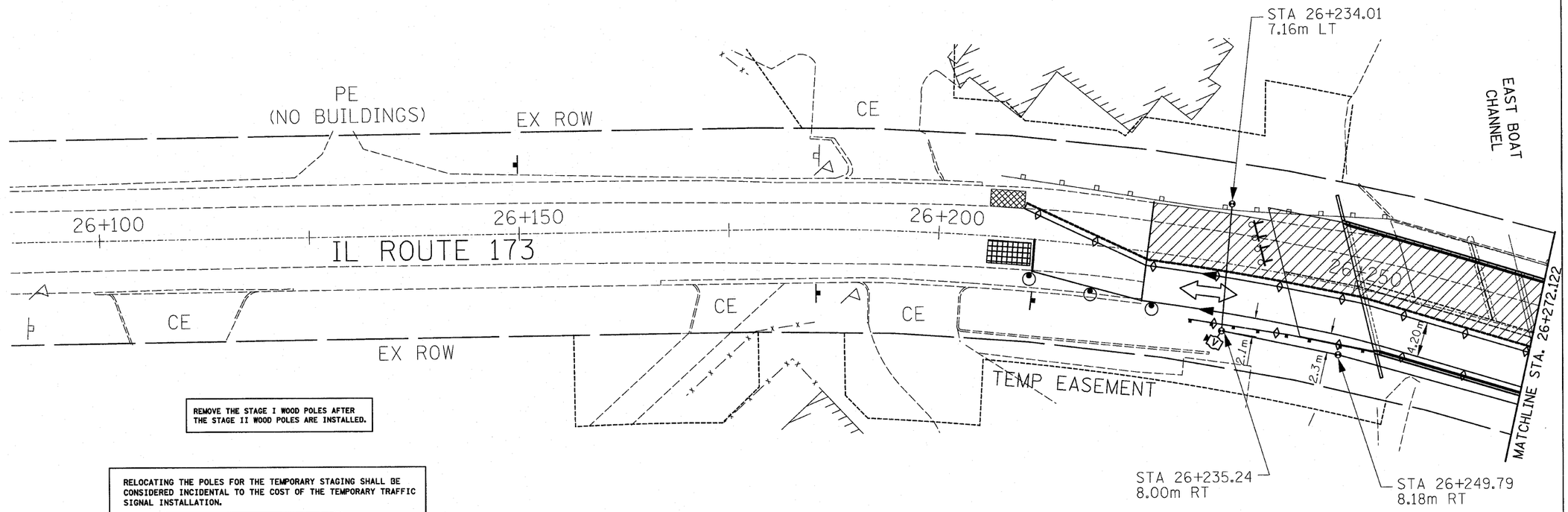
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.



REMOVE THE STAGE I WOOD POLES AFTER THE STAGE II WOOD POLES ARE INSTALLED.

RELOCATING THE POLES FOR THE TEMPORARY STAGING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ELECTRICAL NOTES:
1) EAST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS.
2) WEST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS, EXCEPT FOR POLE LOCATIONS.
3) BOTH EAST AND WEST BOAT CHANNELS SHALL BE PAID AT THE CONTRACT SUM PRICE TEMPORARY LIGHTING FOR SINGLE LANE STAGING.

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION STAGE II – SHEET 1 OF 3

SCALE: 1:250

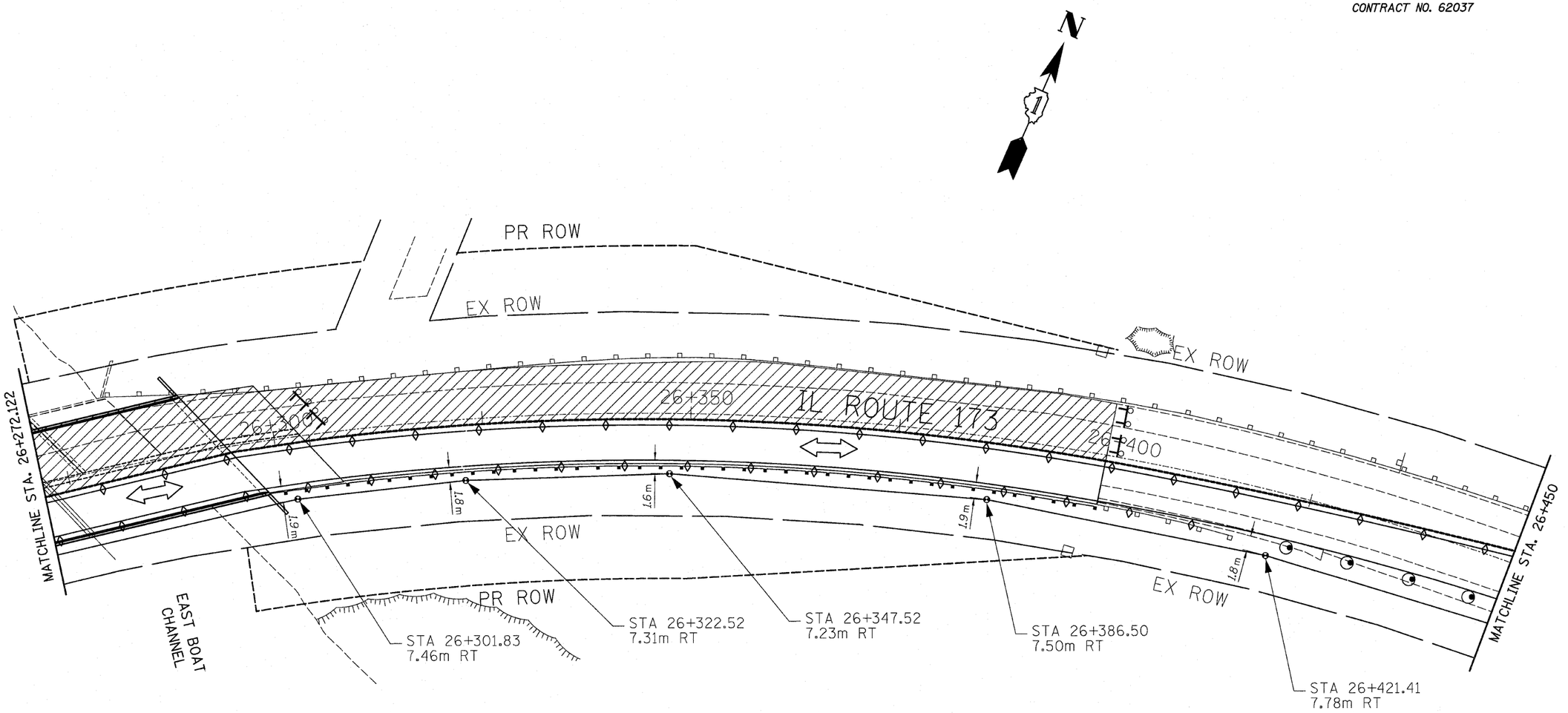
DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	42
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



REMOVE THE STAGE I WOOD POLES AFTER THE STAGE II WOOD POLES ARE INSTALLED.

RELOCATING THE POLES FOR THE TEMPORARY STAGING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ELECTRICAL NOTES:
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3) BOTH EAST AND WEST BOAT CHANNELS SHALL BE PAID AT THE CONTRACT SUM PRICE TEMPORARY LIGHTING FOR SINGLE LANE STAGING.

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION STAGE II – SHEET 2 OF 3

SCALE: 1:250

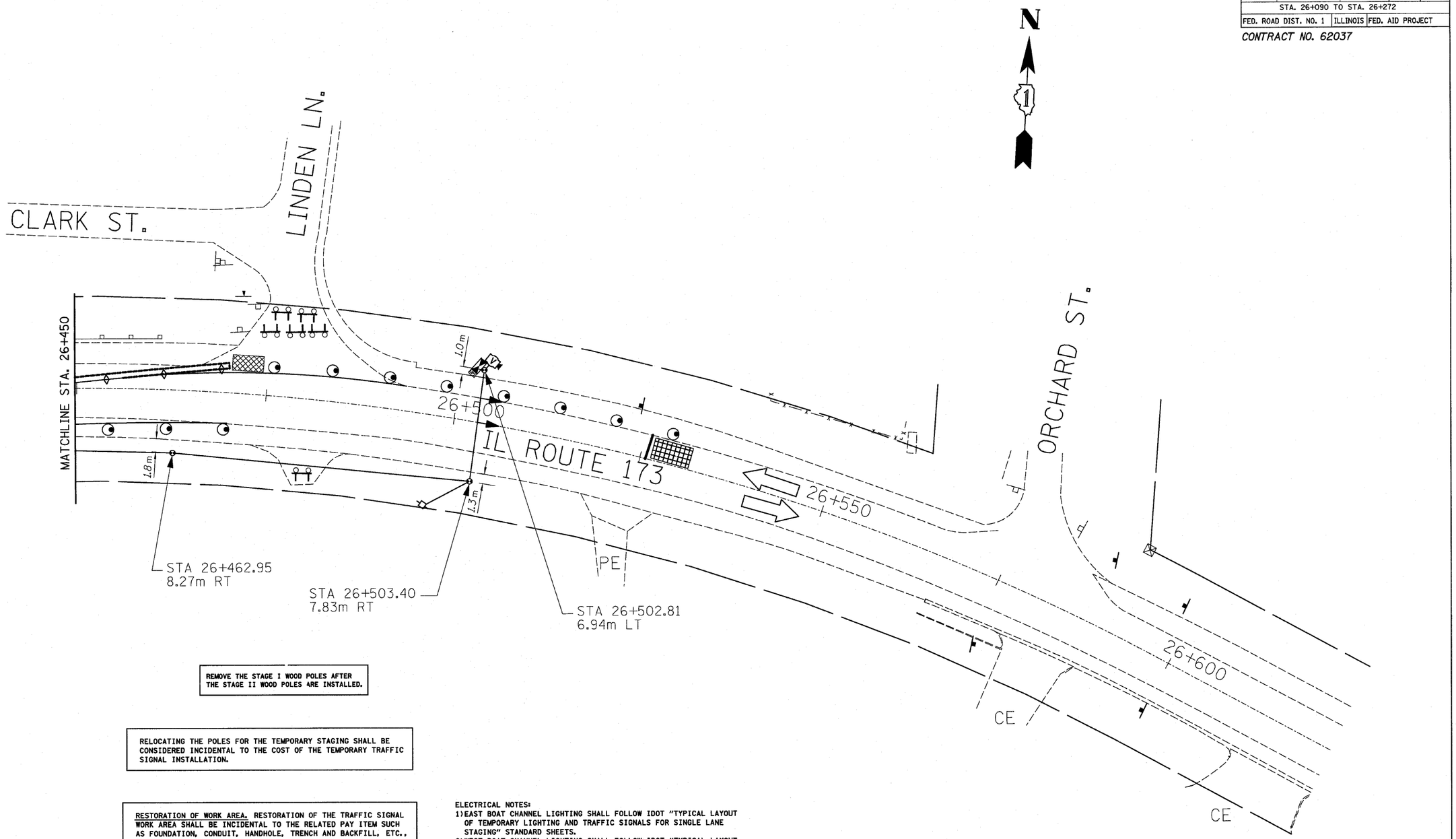
DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	43
STA. 26+090 TO STA. 26+272				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037



REMOVE THE STAGE I WOOD POLES AFTER THE STAGE II WOOD POLES ARE INSTALLED.

RELOCATING THE POLES FOR THE TEMPORARY STAGING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ELECTRICAL NOTES:
1) EAST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS.
2) WEST BOAT CHANNEL LIGHTING SHALL FOLLOW IDOT "TYPICAL LAYOUT OF TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING" STANDARD SHEETS, EXCEPT FOR POLE LOCATIONS.
3) BOTH EAST AND WEST BOAT CHANNELS SHALL BE PAID AT THE CONTRACT SUM PRICE TEMPORARY LIGHTING FOR SINGLE LANE STAGING.

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY TRAFFIC SIGNAL INSTALLATION STAGE II – SHEET 3 OF 3

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

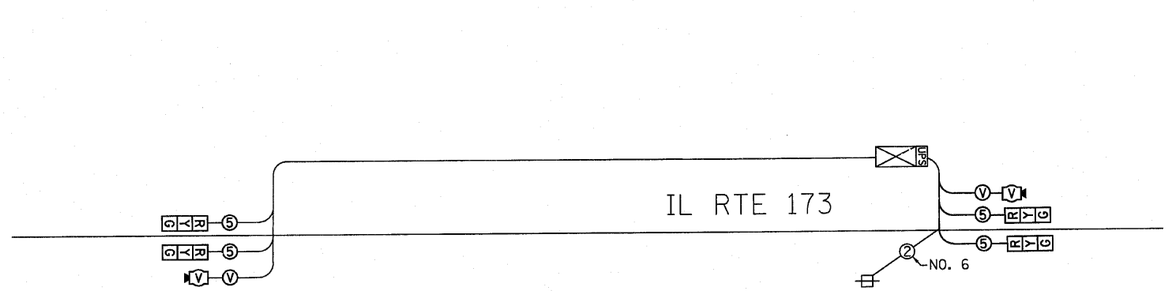
3116TRAFFEAST2.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B &B-2)R-1	LAKE	137	44
STA. 26+090 TO STA. 26+625				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

TEMPORARY CABLE DIAGRAM LEGEND

(V) VENDOR'S CABLE.



TEMPORARY SEQUENCE OF OPERATION

MOVEMENT (N)	1 →	← 2						FLASH
PHASE	1			2				
INTERVAL	1	2A	2B	3	4A	4B		
CHANGE TO		2			1			
ILL 173 ALL SIGNALS EB	G	Y	R	R	R	R	R	
ILL 173 ALL SIGNALS WB	R	R	R	G	Y	R	R	

QUANTITIES

89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	4	–	17	0.50	34.0
(YELLOW)	4	–	25	0.25	25.0
(GREEN)	4	–	15	0.25	15.0
ARROW	–	–	12	0.10	–
PED. SIGNAL	–	–	25	1.00	–
CONTROLLER	1	–	100	1.00	100.0
ENERGY COSTS TO:			TOTAL =		174.0

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: DOROTHY PROSEN
PHONE: (847) 816-5323
COMPANY: COMED

FOUNDATION (DEPTH)	FT.	(m)
TYPE A - POST	4	(1.2)
D - CONTROLLER	4	(1.2)
C - M. ARM POLE		
24" (600mm)	10	(3.0)
30" (750mm)	15	(4.6)

CABLE SLACK	FT.	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT.	(m)
ALL FOUNDATIONS	3.5	(1.0)
MAST ARM (L) POLE	20'+L-2=	(6m+L-0.6m)=
BRACKET MOUNTED	13	(4.0)
PED. PUSHBUTTON	4	(1.2)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND	13.5	(4.1)
POST MOUNTED	6	(1.8)

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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TERRA ENGINEERING LTD.
505 N. LaSalle Street, Suite 250
Chicago, IL 60610.
(312) 467-0123

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER EAST BOAT CHANNEL

TEMPORARY CABLE PLAN, SEQUENCE OF OPERATION AND SCHEDULE OF QUANTITIES

SCALE: N.T.S.
DATE: 3-8-10
DRAWN BY: GAO
CHECKED BY: TCM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	45
STA. 25+000		TO STA. 25+250		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

LEGEND

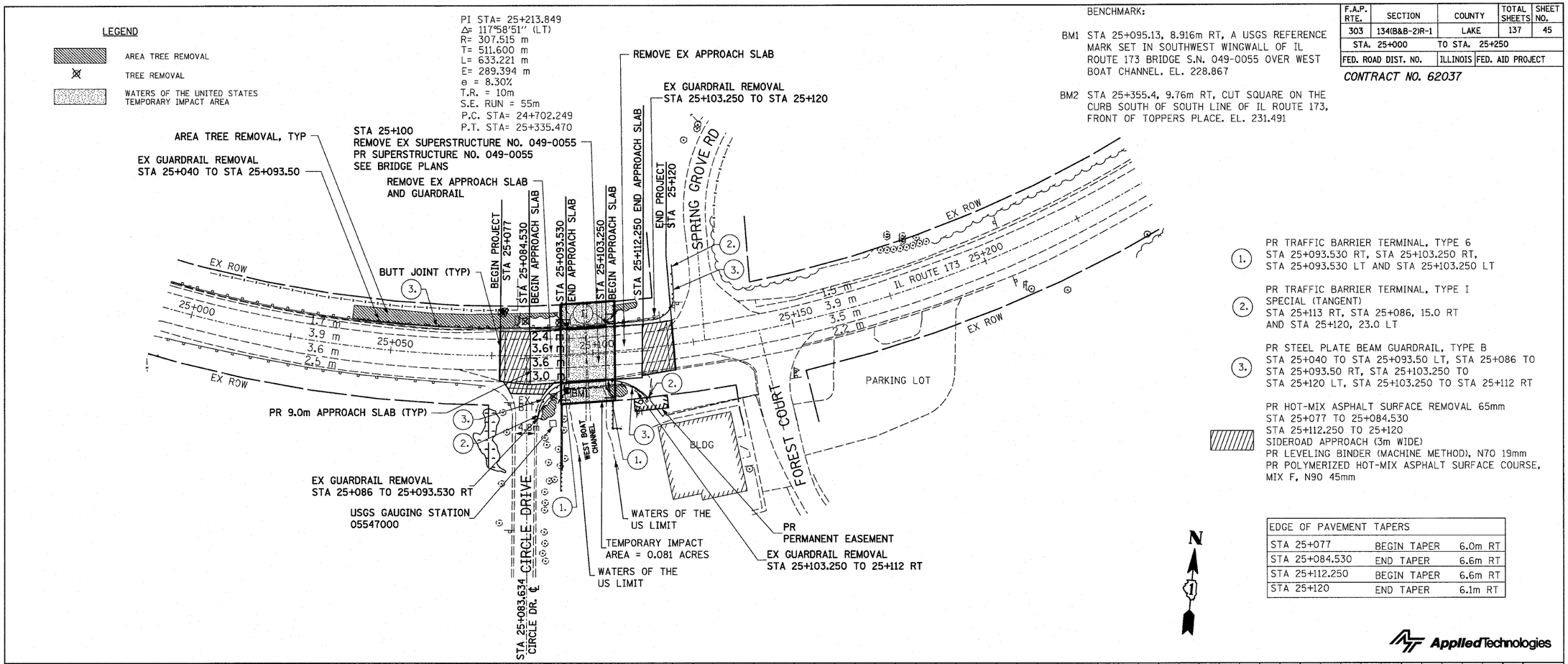
- AREA TREE REMOVAL
- TREE REMOVAL
- WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA

PI STA= 25+213.849
Δ= 117°58'51" (LT)
R= 307.515 m
T= 511.600 m
L= 633.221 m
E= 289.394 m
e = 8.30%
T.R. = 10m
S.E. RUN = 55m
P.C. STA= 24+702.249
P.T. STA= 25+335.470

BENCHMARK:

BM1 STA 25+095.13, 8.916m RT, A USGS REFERENCE MARK SET IN SOUTHWEST WINGWALL OF IL ROUTE 173 BRIDGE S.N. 049-0055 OVER WEST BOAT CHANNEL. EL. 228.867

BM2 STA 25+355.4, 9.76m RT, CUT SQUARE ON THE CURB SOUTH OF SOUTH LINE OF IL ROUTE 173, FRONT OF TOPPERS PLACE. EL. 231.491



1. PR TRAFFIC BARRIER TERMINAL, TYPE 6
STA 25+093.530 RT, STA 25+103.250 RT,
STA 25+093.530 LT AND STA 25+103.250 LT

2. PR TRAFFIC BARRIER TERMINAL, TYPE I SPECIAL (TANGENT)
STA 25+113 RT, STA 25+086, 15.0 RT
AND STA 25+120, 23.0 LT

3. PR STEEL PLATE BEAM GUARDRAIL, TYPE B
STA 25+040 TO STA 25+093.50 LT, STA 25+086 TO STA 25+093.50 RT, STA 25+103.250 TO STA 25+120 LT, STA 25+103.250 TO STA 25+112 RT

PR HOT-MIX ASPHALT SURFACE REMOVAL 65mm
STA 25+077 TO 25+084.530
STA 25+112.250 TO 25+120
SIDEROAD APPROACH (3m WIDE)
PR LEVELING BINDER (MACHINE METHOD), N70 19mm
PR POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX F, N90 45mm

EDGE OF PAVEMENT TAPERS		
STA 25+077	BEGIN TAPER	6.0m RT
STA 25+084.530	END TAPER	6.6m RT
STA 25+112.250	BEGIN TAPER	6.6m RT
STA 25+120	END TAPER	6.1m RT

N

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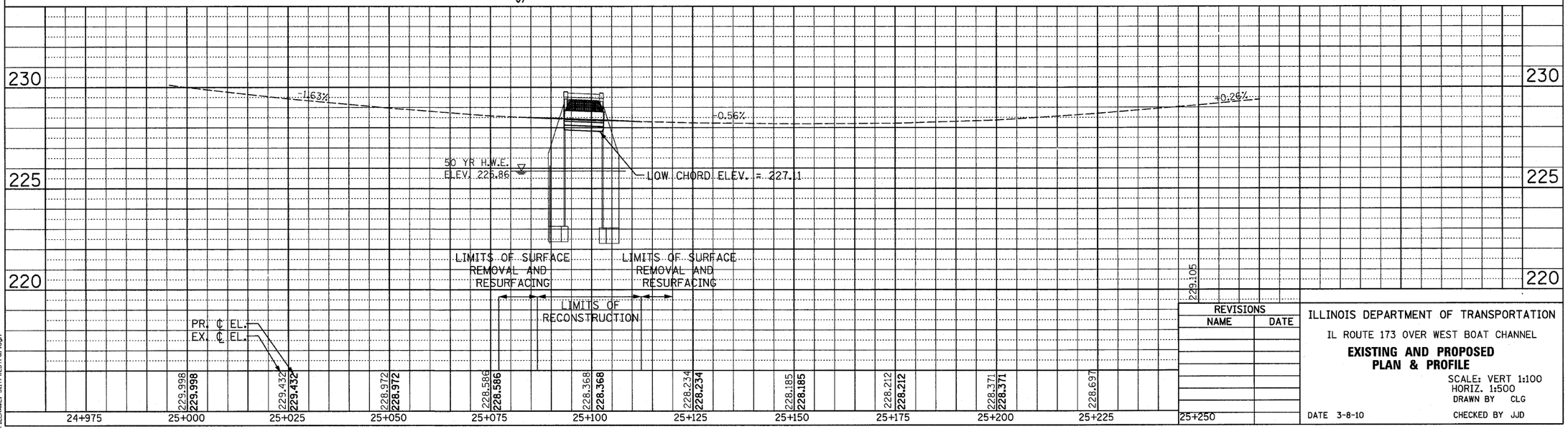


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

EXISTING AND PROPOSED PLAN & PROFILE

SCALE: VERT 1:100
HORIZ. 1:500
DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

FILENAME= 3117/RESTPRAP.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	46
STA. 26+096		TO STA. 26+400		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

BENCHMARK:

BM2 STA 25+335.4, 9.76m RT, CUT SQUARE ON THE CURB SOUTH OF SOUTH LINE OF IL RTE 173, FRONT OF TOPPERS PLACE. EL 231.491

BM3 STA 25+597.7, 7.8m LT, CUT SQUARE ON THE EAST SIDE OF CONCRETE BASE OF ROY'S AUTO SERVICE PHILLIP'S 76 SIGN. EL 231.915

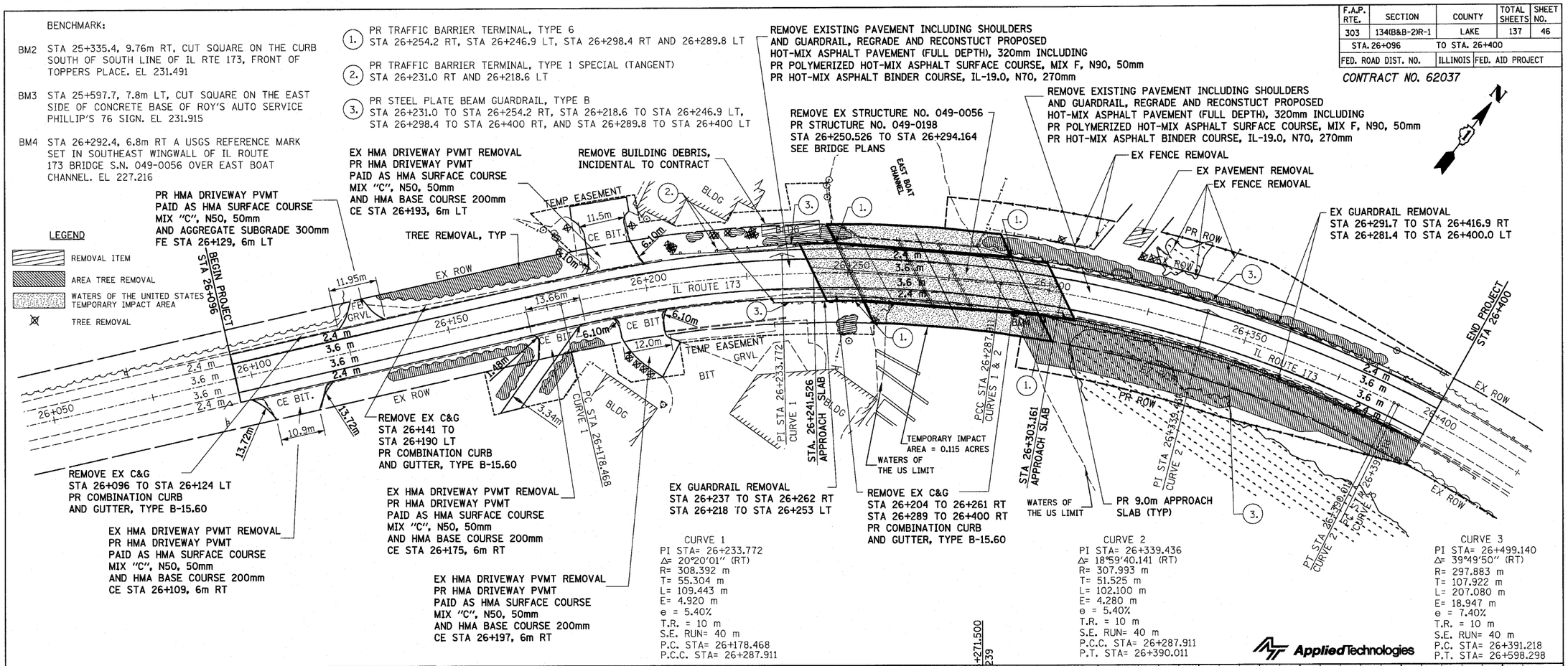
BM4 STA 26+292.4, 6.8m RT A USGS REFERENCE MARK SET IN SOUTHEAST WINGWALL OF IL ROUTE 173 BRIDGE S.N. 049-0056 OVER EAST BOAT CHANNEL. EL 227.216

1. PR TRAFFIC BARRIER TERMINAL, TYPE 6
STA 26+254.2 RT, STA 26+246.9 LT, STA 26+298.4 RT AND 26+289.8 LT

2. PR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)
STA 26+231.0 RT AND 26+218.6 LT

3. PR STEEL PLATE BEAM GUARDRAIL, TYPE B
STA 26+231.0 TO STA 26+254.2 RT, STA 26+218.6 TO STA 26+246.9 LT,
STA 26+298.4 TO STA 26+400 RT, AND STA 26+289.8 TO STA 26+400 LT

LEGEND
- REMOVAL ITEM
- AREA TREE REMOVAL
- WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA
- TREE REMOVAL



CURVE 1
PI STA= 26+233.772
Δ= 20°20'01" (RT)
R= 308.392 m
T= 55.304 m
L= 109.443 m
E= 4.920 m
e = 5.40%
T.R. = 10 m
S.E. RUN= 40 m
P.C. STA= 26+178.468
P.C.C. STA= 26+287.911

CURVE 2
PI STA= 26+339.436
Δ= 18°59'40.141 (RT)
R= 307.993 m
T= 51.525 m
L= 102.100 m
E= 4.280 m
e = 5.40%
T.R. = 10 m
S.E. RUN= 40 m
P.C.C. STA= 26+287.911
P.T. STA= 26+390.011

CURVE 3
PI STA= 26+499.140
Δ= 39°49'50" (RT)
R= 297.883 m
T= 107.922 m
L= 207.080 m
E= 18.947 m
e = 7.40%
T.R. = 10 m
S.E. RUN= 40 m
P.C. STA= 26+391.218
P.T. STA= 26+598.298

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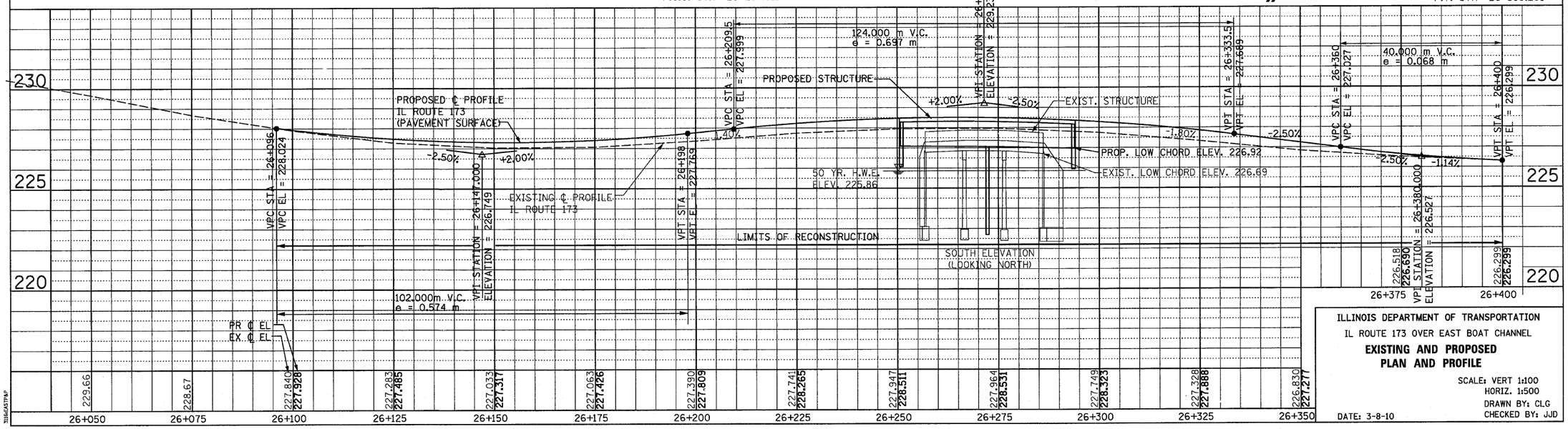


ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER EAST BOAT CHANNEL
EXISTING AND PROPOSED PLAN AND PROFILE
SCALE: VERT 1:100
HORIZ. 1:500
DRAWN BY: CLG
CHECKED BY: JJD
DATE: 3-8-10

3116GS5TPAP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	47
STA. 25+000 TO STA. 25+150				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LEGEND:

- POWER POLE
- LIGHT POLE

PR TYPE D INLET BOX
STANDARD 609006
STA 25+105.000 6.182 LT
CORE THROUGH EX
WING WALL TO OUTLET
OUTLET OFFSET 11 LT
INV EL 227.4
PIPE DRAINS, 300mm 5m

EX CONC CURB & GUTTER TO REMAIN

EX COMED THREE-PHASE
EX COMCAST OVERHEAD
TO REMAIN IN PLACE

EX CONC CURB & GUTTER FLUME TO REMAIN

EX INLET TO REMAIN

EX STORM SEWER TO REMAIN

EX AT&T MANHOLE, TO BE ADJUSTED BY OTHERS
STA 25+121.299 6.933 LT

EX NI-COR GAS MANHOLE
STA 25+114.568 9.159 LT

EX STORM SEWER TO REMAIN

EX UNDERGROUND COMMUNICATIONS CABLE/DUCT

EX NI-COR UNDERGROUND 150mm GAS LINE

EX COMED HIGH VOLTAGE
EX COMCAST OVERHEAD
TO REMAIN IN PLACE
STA 25+142.5

IL ROUTE 173

SPRING GROVE RD

WEST BOAT CHANNEL

EX ROW

25+000

25+050

25+100

25+150

150mm G

50mm G

CTV

EX STORM SEWER TO REMAIN

EX NI-COR UNDERGROUND 50mm GAS LINE
STA 25+075.3

EX COMED SINGLE-PHASE OVERHEAD
TO REMAIN IN PLACE
STA 25+080.0

EX LIGHTING TO REMAIN

CIRCLE DRIVE

EX USGS STATION 05547000
CHANNEL LAKE NEAR
ANTIOCH, IL TO REMAIN
(COORDINATE WITH USGS
FOR PERMANENT GAGE
PLACEMENT)

BLDG

FOREST COURT

CHOPPERS BAR AND GRILL SIGN TO REMAIN AND TO BE PROTECTED. PROTECTION TO BE INCLUDED IN THE COST OF GUARDRAIL REMOVAL.

EX POLE WILL BE REMOVED AND SET ASIDE FOR THE PROPERTY OWNER TO CLAIM. THE REMOVAL INCLUDES THE ENTIRE POLE ASSEMBLY. REMOVAL TO BE INCLUDED IN THE COST OF GUARDRAIL REMOVAL.

NOTE:

EXISTING AT&T FIBER OPTIC FACILITIES ON NORTH SIDE OF BRIDGE IN CONDUITS TO BE RELOCATED VIA DIRECTIONAL DRILLING PRIOR TO CONSTRUCTION BY OTHERS.

ABANDONED AT&T UTILITY CONDUITS ON NORTH SIDE OF BRIDGE TO BE REMOVED AND PAID FOR UNDER "REMOVAL OF EXISTING STRUCTURES" PAY ITEM.

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

EXISTING AND PROPOSED DRAINAGE AND UTILITIES

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

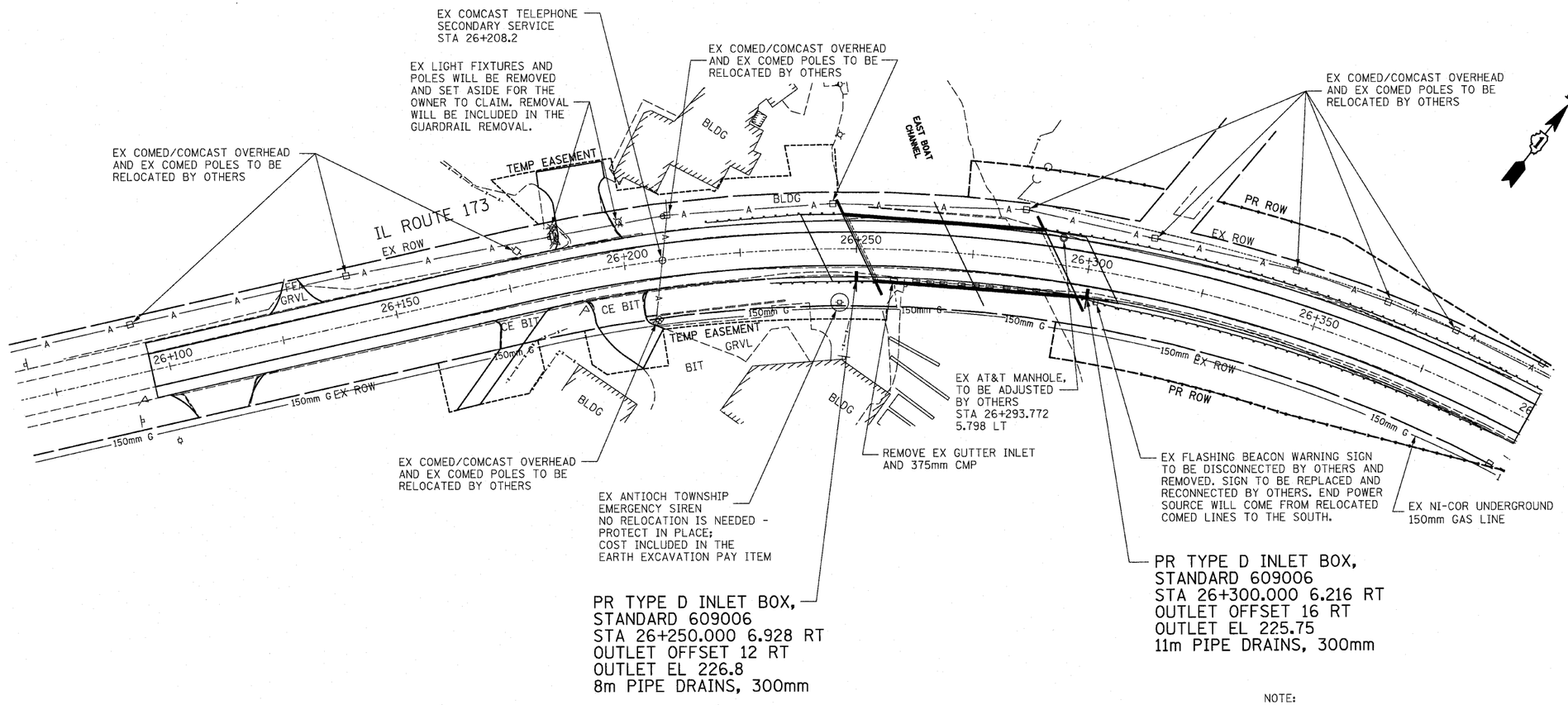
WEST UTILITY.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	48
STA. 26+050		TO STA. 26+400		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

LEGEND:

- POWER POLE
- LIGHT POLE



NOTE:

EXISTING AT&T FIBER OPTIC FACILITIES ON NORTH SIDE OF BRIDGE IN CONDUITS TO BE RELOCATED VIA DIRECTIONAL DRILLING OUTSIDE THE AREA OF THE PROPOSED BRIDGE PRIOR TO CONSTRUCTION BY OTHERS.

ABANDONED AT&T UTILITY CONDUITS ON NORTH SIDE OF BRIDGE TO BE REMOVED AND PAID FOR UNDER "REMOVAL OF EXISTING STRUCTURES" PAY ITEM.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

EXISTING AND PROPOSED DRAINAGE AND UTILITIES

SCALE: 1:500

DRAWN BY: CLG

CHECKED BY: JJD

DATE: 3-8-10

AppliedTechnologies

3136EAST UTILITY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	49
STA. 25+000 TO STA. 25+150				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LEGEND

SEEDING CLASS 2A

SEEDING CLASS 4

WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA

38 BLUE JOINT GRASS
38 BROWN FOX SEDGE
38 PRAIRIE CORD GRASS
PLANTED 12" o.c. STAGGERED, DOUBLE ROW ALONG THE DITCH LINE ON THE FORESLOPE. MIXED PLANTING SHOULD BE SPLIT AMONG TWO LOCATIONS.

16 GRAY DOGWOOD
3' o.c., DOUBLE ROW
STAGGERED

6 GRAY DOGWOOD
3' o.c., DOUBLE ROW
STAGGERED

16 GRAY DOGWOOD
3' o.c., DOUBLE ROW
STAGGERED

EX ROW

IL ROUTE 173

WEST BOAT CHANNEL

SPRING GROVE RD

25+000

25+050

25+100

25+150

EX ROW

CIRCLE DRIVE

FOREST COURT

BLDG

WATERS OF THE US LIMIT

TEMPORARY IMPACT AREA = 0.081 ACRES

WATERS OF THE US LIMIT

N

NOTE:

ALL SHRUB PLANTINGS SHALL BE LOCATED AT LEAST 5' BEHIND THE GUARDRAIL.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

PROPOSED LANDSCAPING

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10

CHECKED BY JJD

Applied Technologies

3117LANDSCAPE.DGN

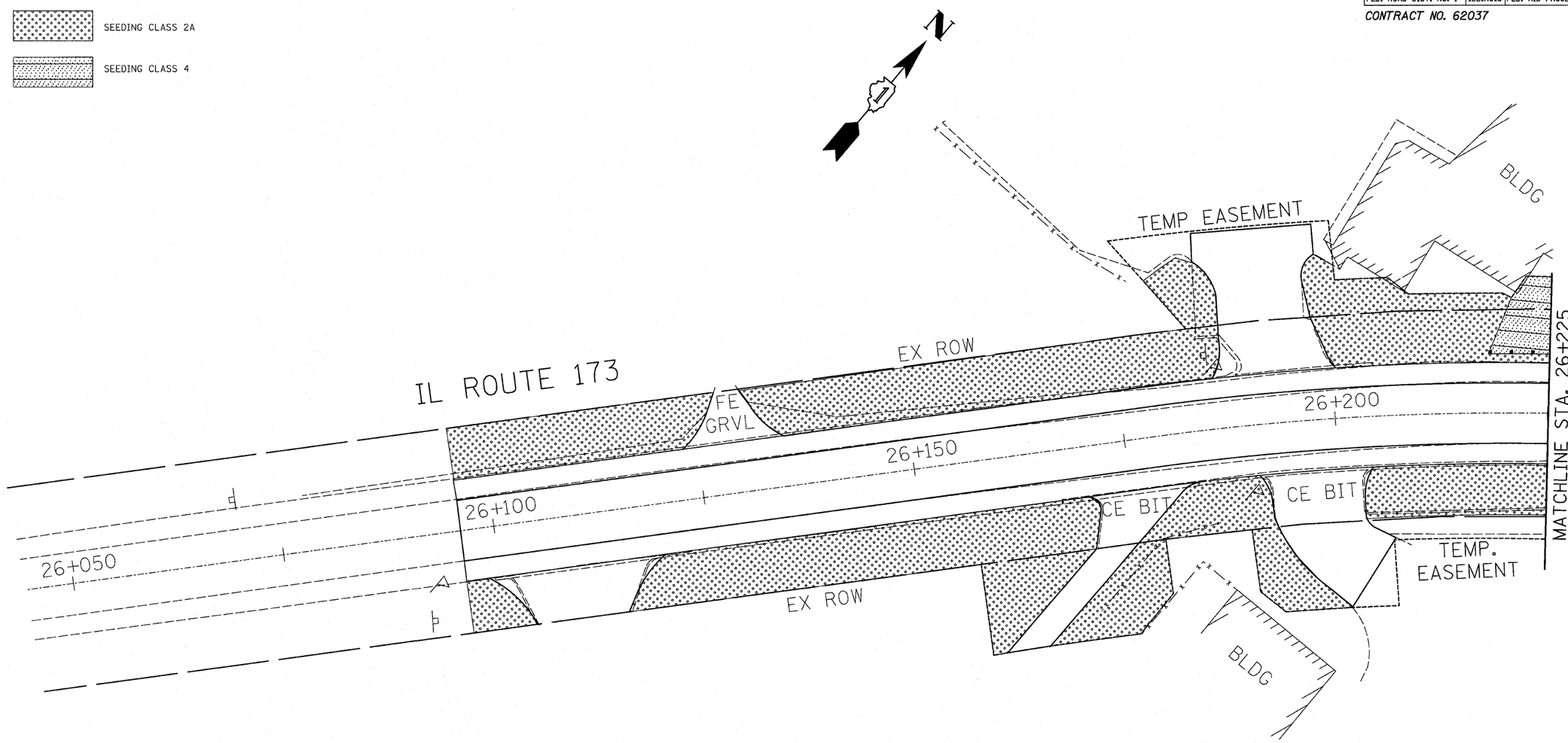
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	50
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LEGEND

SEEDING CLASS 2A

SEEDING CLASS 4



NOTE:

ALL SHRUB PLANTINGS
SHALL BE LOCATED AT LEAST
5' BEHIND THE GUARDRAIL.

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PROPOSED LANDSCAPING

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

3116LANDSCAPE.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	51
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

LEGEND

- SEEDING CLASS 2A
- SEEDING CLASS 4
- WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA

N

76 BLUE FLAG IRIS
38 BROWN FOX SEDGE
76 RICE CUT GRASS
38 PRAIRIE CORD GRASS
MIXED PLANTING SHOULD BE SPLIT AMONG THE TWO LOCATIONS. SPACING IS 12" o.c. STAGGERED, DOUBLE ROW ON THE FORESLOPE.
— ABOVE DITCH LINE
— WITHIN DITCH LINE

17 AMERICAN ELDER
3' o.c., DOUBLE ROW STAGGERED

20 AUTUMN JAZZ VIBURNUM
3' o.c., DOUBLE ROW STAGGERED

IL ROUTE 173

EAST BOAT CHANNEL

PR ROW

26+400

26+350

26+300

26+250

38 JOE PYE WEED
38 BROWN FOX SEDGE
38 RICE CUT GRASS
38 BLUE JOINT GRASS
INTERPLANT THE TWO SPECIES IN THEIR RESPECTIVE AREAS @ 12" o.c. STAGGERED, DOUBLE ROW ON THE FORESLOPE SIDE
— ABOVE DITCH LINE
— WITHIN DITCH LINE

18 AMERICAN ELDER
3' o.c., DOUBLE ROW STAGGERED

38 JOE PYE WEED
38 BROWN FOX SEDGE
38 PRAIRIE CORD GRASS
38 BLUE JOINT GRASS
INTERPLANT THE TWO SPECIES IN THEIR RESPECTIVE AREAS @ 12" o.c. STAGGERED, DOUBLE ROW ON THE FORESLOPE SIDE
— ABOVE DITCH LINE
— WITHIN DITCH LINE

TEMPORARY EASEMENT

MATCHLINE STA. 26+225

TEMPORARY IMPACT AREA = 0.115 ACRES

TEMPORARY EASEMENT

WATERS OF THE US LIMIT

17 AUTUMN JAZZ VIBURNUM
3' o.c., DOUBLE ROW STAGGERED

WATERS OF THE US LIMIT

NOTE:

ALL SHRUB PLANTINGS SHALL BE LOCATED AT LEAST 5' BEHIND THE GUARDRAIL.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PROPOSED LANDSCAPING

SCALE: 1:250
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

Applied Technologies

3117LANDSCAPE.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	52
STA. 25+000 TO STA. 25+150				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

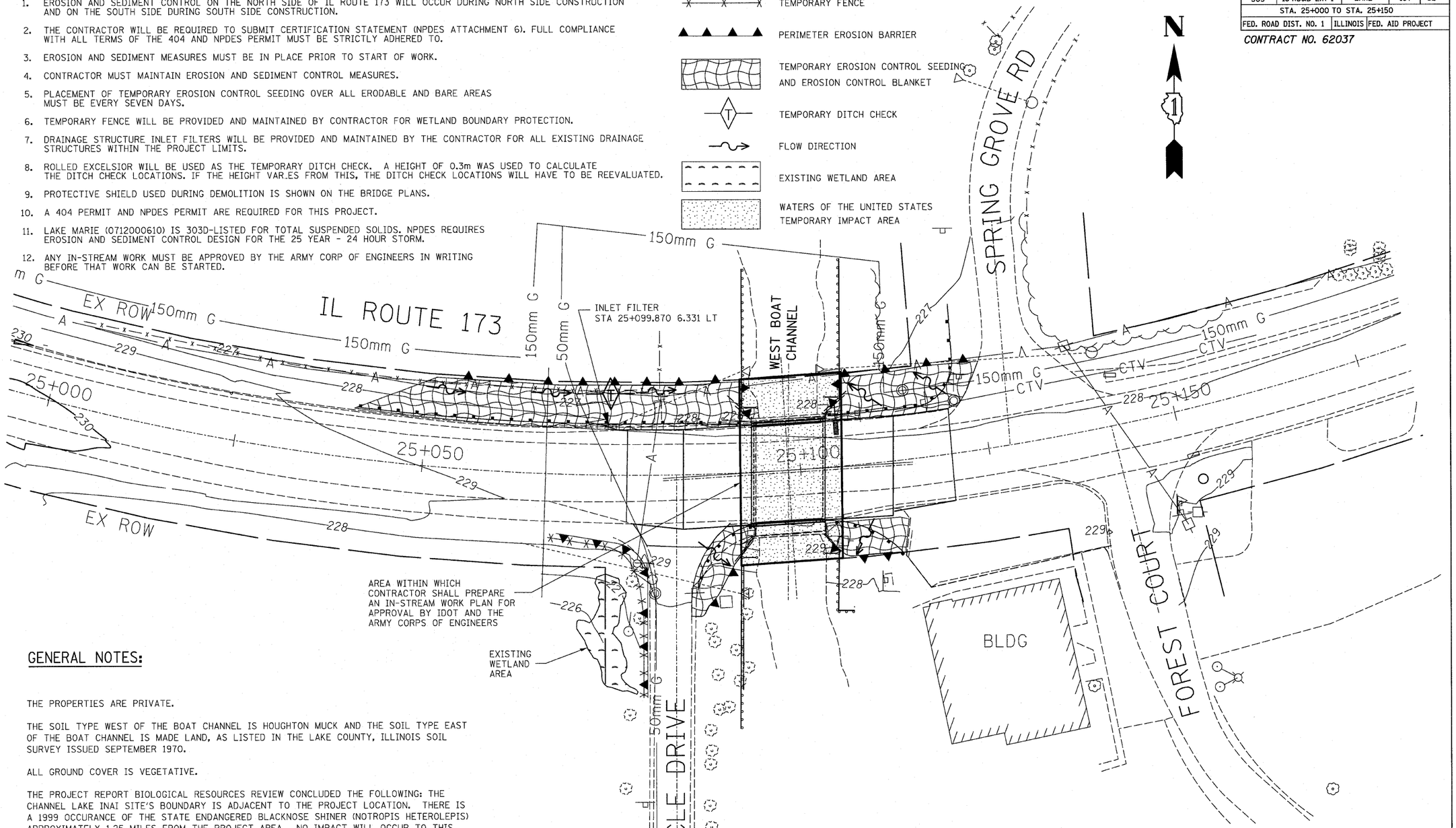
CONTRACT NO. 62037

GENERAL EROSION CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL ON THE NORTH SIDE OF IL ROUTE 173 WILL OCCUR DURING NORTH SIDE CONSTRUCTION AND ON THE SOUTH SIDE DURING SOUTH SIDE CONSTRUCTION.
2. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT CERTIFICATION STATEMENT (NPDES ATTACHMENT 6). FULL COMPLIANCE WITH ALL TERMS OF THE 404 AND NPDES PERMIT MUST BE STRICTLY ADHERED TO.
3. EROSION AND SEDIMENT MEASURES MUST BE IN PLACE PRIOR TO START OF WORK.
4. CONTRACTOR MUST MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES.
5. PLACEMENT OF TEMPORARY EROSION CONTROL SEEDING OVER ALL ERODABLE AND BARE AREAS MUST BE EVERY SEVEN DAYS.
6. TEMPORARY FENCE WILL BE PROVIDED AND MAINTAINED BY CONTRACTOR FOR WETLAND BOUNDARY PROTECTION.
7. DRAINAGE STRUCTURE INLET FILTERS WILL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR ALL EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS.
8. ROLLED EXCELSIOR WILL BE USED AS THE TEMPORARY DITCH CHECK. A HEIGHT OF 0.3m WAS USED TO CALCULATE THE DITCH CHECK LOCATIONS. IF THE HEIGHT VARIES FROM THIS, THE DITCH CHECK LOCATIONS WILL HAVE TO BE REEVALUATED.
9. PROTECTIVE SHIELD USED DURING DEMOLITION IS SHOWN ON THE BRIDGE PLANS.
10. A 404 PERMIT AND NPDES PERMIT ARE REQUIRED FOR THIS PROJECT.
11. LAKE MARIE (0712000610) IS 303D-LISTED FOR TOTAL SUSPENDED SOLIDS. NPDES REQUIRES EROSION AND SEDIMENT CONTROL DESIGN FOR THE 25 YEAR - 24 HOUR STORM.
12. ANY IN-STREAM WORK MUST BE APPROVED BY THE ARMY CORP OF ENGINEERS IN WRITING BEFORE THAT WORK CAN BE STARTED.

EROSION CONTROL LEGEND

- TEMPORARY FENCE
- PERIMETER EROSION BARRIER
- TEMPORARY EROSION CONTROL SEEDING AND EROSION CONTROL BLANKET
- TEMPORARY DITCH CHECK
- FLOW DIRECTION
- EXISTING WETLAND AREA
- WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA



GENERAL NOTES:

THE PROPERTIES ARE PRIVATE.

THE SOIL TYPE WEST OF THE BOAT CHANNEL IS HOUGHTON MUCK AND THE SOIL TYPE EAST OF THE BOAT CHANNEL IS MADE LAND, AS LISTED IN THE LAKE COUNTY, ILLINOIS SOIL SURVEY ISSUED SEPTEMBER 1970.

ALL GROUND COVER IS VEGETATIVE.

THE PROJECT REPORT BIOLOGICAL RESOURCES REVIEW CONCLUDED THE FOLLOWING: THE CHANNEL LAKE INAI SITE'S BOUNDARY IS ADJACENT TO THE PROJECT LOCATION. THERE IS A 1999 OCCURANCE OF THE STATE ENDANGERED BLACKNOSE SHINER (NOTROPIS HETEROLEPIS) APPROXIMATELY 1.25 MILES FROM THE PROJECT AREA. NO IMPACT WILL OCCUR TO THIS SITE OR THE LISTED SPECIES. BIOLOGICAL CLEARANCE WAS RECEIVED ON JUNE 16, 2010.

THE WETLAND SURVEY CONDUCTED MAY 25, 2010 CONCLUDED THAT THE DEPRESSIONAL ISOLATED MARSH WETLAND WAS NOT IDENTIFIED IN THE NATIONAL WETLAND INVENTORY AND HAD LOW FLORISTIC QUALITY. THE SITE WAS IDENTIFIED AS AN ADID WETLAND SITE. THE SITE IS OUTSIDE THE WORK AREA AND NO IMPACT WILL OCCUR TO THIS SITE

THE PROJECT REPORT CULTURAL RESOURCE REVIEW CONCLUDED THAT NO CULTURAL RESOURCE SURVEY IS REQUIRED FOR THIS PROJECT. CULTURAL CLEARANCE WAS RECEIVED ON NOVEMBER 16, 2009.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

PROPOSED EROSION AND SEDIMENT CONTROL

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

Applied Technologies

311TEROSION.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	53
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

EROSION CONTROL LEGEND

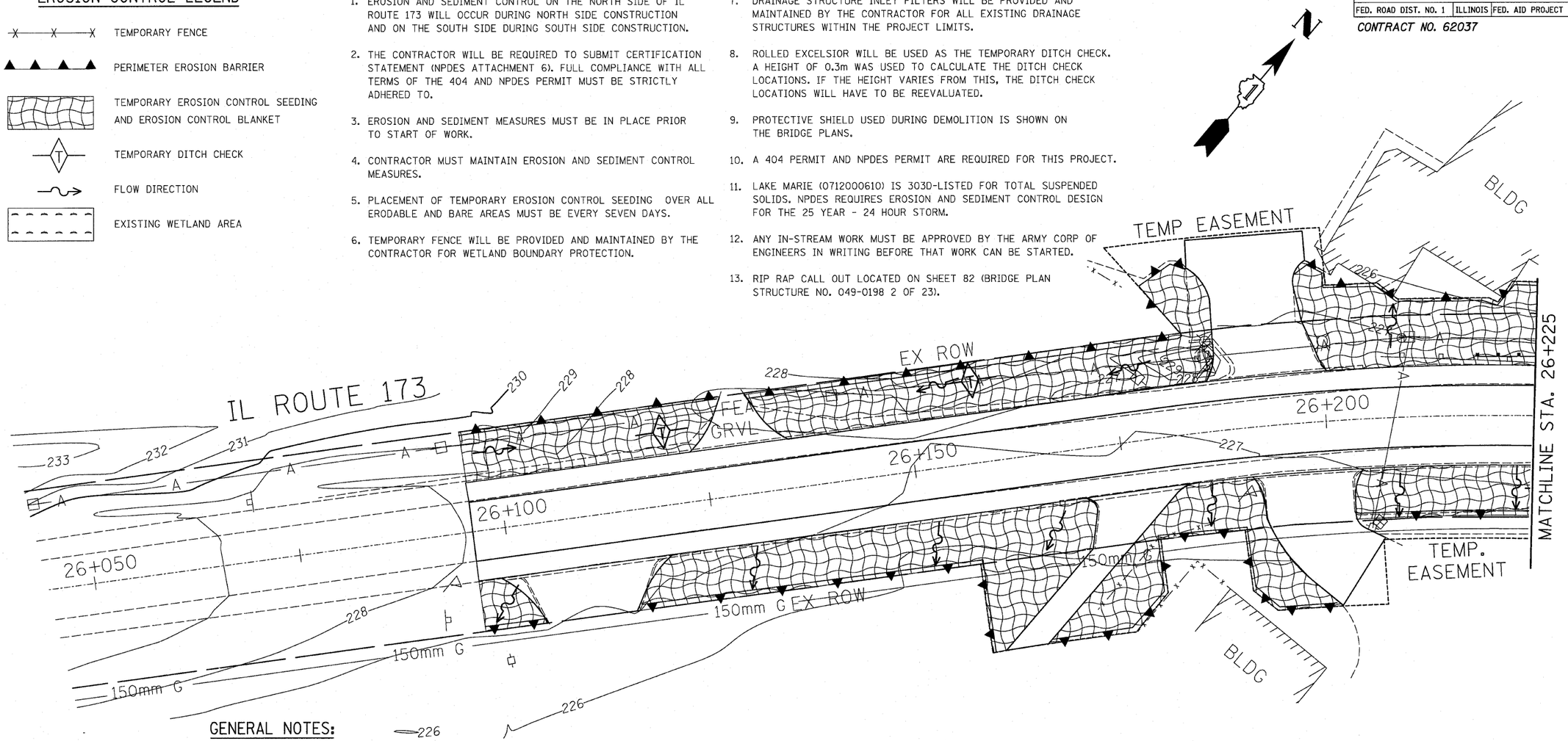
- TEMPORARY FENCE
- PERIMETER EROSION BARRIER
- TEMPORARY EROSION CONTROL SEEDING AND EROSION CONTROL BLANKET
- TEMPORARY DITCH CHECK
- FLOW DIRECTION
- EXISTING WETLAND AREA

GENERAL EROSION CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL ON THE NORTH SIDE OF IL ROUTE 173 WILL OCCUR DURING NORTH SIDE CONSTRUCTION AND ON THE SOUTH SIDE DURING SOUTH SIDE CONSTRUCTION.
2. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT CERTIFICATION STATEMENT (NPDES ATTACHMENT 6). FULL COMPLIANCE WITH ALL TERMS OF THE 404 AND NPDES PERMIT MUST BE STRICTLY ADHERED TO.
3. EROSION AND SEDIMENT MEASURES MUST BE IN PLACE PRIOR TO START OF WORK.
4. CONTRACTOR MUST MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES.
5. PLACEMENT OF TEMPORARY EROSION CONTROL SEEDING OVER ALL ERODABLE AND BARE AREAS MUST BE EVERY SEVEN DAYS.
6. TEMPORARY FENCE WILL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR WETLAND BOUNDARY PROTECTION.

GENERAL EROSION CONTROL NOTES CONT.:

7. DRAINAGE STRUCTURE INLET FILTERS WILL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR ALL EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS.
8. ROLLED EXCELSIOR WILL BE USED AS THE TEMPORARY DITCH CHECK. A HEIGHT OF 0.3m WAS USED TO CALCULATE THE DITCH CHECK LOCATIONS. IF THE HEIGHT VARIES FROM THIS, THE DITCH CHECK LOCATIONS WILL HAVE TO BE REEVALUATED.
9. PROTECTIVE SHIELD USED DURING DEMOLITION IS SHOWN ON THE BRIDGE PLANS.
10. A 404 PERMIT AND NPDES PERMIT ARE REQUIRED FOR THIS PROJECT.
11. LAKE MARIE (0712000610) IS 303D-LISTED FOR TOTAL SUSPENDED SOLIDS. NPDES REQUIRES EROSION AND SEDIMENT CONTROL DESIGN FOR THE 25 YEAR - 24 HOUR STORM.
12. ANY IN-STREAM WORK MUST BE APPROVED BY THE ARMY CORP OF ENGINEERS IN WRITING BEFORE THAT WORK CAN BE STARTED.
13. RIP RAP CALL OUT LOCATED ON SHEET 82 (BRIDGE PLAN STRUCTURE NO. 049-0198 2 OF 23).



GENERAL NOTES:

THE PROPERTIES ARE PRIVATE.

THE SOIL TYPE WEST OF THE BOAT CHANNEL IS HOUGHTON MUCK AND THE SOIL TYPE EAST OF THE BOAT CHANNEL IS MADE LAND, AS LISTED IN THE LAKE COUNTY, ILLINOIS SOIL SURVEY ISSUED SEPTEMBER 1970.

ALL GROUND COVER IS VEGETATIVE.

THE PROJECT REPORT BIOLOGICAL RESOURCES REVIEW CONCLUDED THAT THE IDNR NATURAL HERITAGE DATABASE HAS NO RECORDS OF LISTED SPECIES, NATURAL AREAS, OR NATURAL PRESERVES WITHIN THE PROJECT CORRIDOR (IDNR AGENCY ACTION REPORT DATED APRIL 6, 2000). BIOLOGICAL CLEARANCE RECEIVED ON JUNE 16, 2010.

THE WETLAND SURVEY CONDUCTED MAY 25, 2010 CONCLUDED THAT TWO WETLAND AREAS WERE PRESENT WITHIN THE PROJECT LIMITS. SITE 1 IS SHRUBLAND WETLAND, LOCATED NORTH OF IL ROUTE 173 AND EAST OS THE BRIDGE. SITE 1 WAS NOT IDENTIFIED AS AN ADID WETLAND SITE. SITE 1 SURVEY INDICATED LOW FLORISTIC QUALITY. SITE 1 WAS NOT IDENTIFIED IN THE NATIONAL WETLAND INVENTORY. SITE 1 WETLAND COVERS 0.010 HA (0.025 ACRES), ALL WITHIN THE PROJECT CORRIDOR. SITE 1 ENTIRE AREA WILL BE IMPACTED BY THE PROJECT.

SITE 2 MARSH WETLAND IS LOCATED SOUTH OF IL ROUTE 173 AND EAST OF THE BRIDGE. SITE 2 WAS NOT IDENTIFIED AS AN ADID WETLAND SITE. SITE 2 HAS A LOW FLORISTIC QUALITY. SITE 2 IS NOT IDENTIFIED IN THE NATIONAL WETLAND INVENTORY. THE WETLAND COVERS 0.052 HA (0.128 ACRES) WITHIN THE PROJECT CORRIDOR AND CONTINUES BEYOND THE ROW TO THE SOUTH. SITE 2 AREA WITHIN THE PROJECT CORRIDOR WILL BE IMPACTED BY THE PROJECT.

THE PROJECT REPORT CULTURAL RESOURCE REVIEW CONCLUDED THAT NO CULTURAL RESOURCE SURVEY IS REQUIRED FOR THIS PROJECT. CULTURAL CLEARANCE RECEIVED ON NOVEMBER 12, 2009.

Applied Technologies

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PROPOSED EROSION AND SEDIMENT CONTROL

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116EROSION.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	54
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

EROSION CONTROL LEGEND

- TEMPORARY FENCE
- PERIMETER EROSION BARRIER
- TEMPORARY EROSION CONTROL SEEDING AND EROSION CONTROL BLANKET
- TEMPORARY DITCH CHECK
- FLOW DIRECTION
- EXISTING WETLAND AREA
- WATERS OF THE UNITED STATES TEMPORARY IMPACT AREA

N

IL ROUTE 173

EAST BOAT CHANNEL

EX ROW

PR ROW

EXISTING WETLAND AREA - SITE 1

STA 26+334 TO 26+400
4 TEMPORARY DITCH CHECKS
21.93m SPACING

26+400

26+350

26+300

26+250

26+225

150mm G

TEMP EASEMENT

MATCHLINE STA. 26+225

STA 26+333.24 TO 26+400.00
5 TEMPORARY DITCH CHECKS
16.69m SPACING

TEMPORARY FENCE

EXISTING WETLAND AREA - SITE 2

AREA WITHIN WHICH CONTRACTOR SHALL PREPARE AN IN-STREAM WORK PLAN FOR APPROVAL BY IDOT AND THE ARMY CORPS OF ENGINEERS

INLET FILTER
STA 26+258.220, 6.484 RT

STA 26+227.49 TO STA 26+258
10 TEMPORARY DITCH CHECKS
3.39m SPACING

3116EROSION.DGN

Applied Technologies

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PROPOSED EROSION AND SEDIMENT CONTROL

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	55
STA. 25+000 TO STA. 25+050				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS ON BRIDGE SHOULD BE RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO-WAY AMBER, 12m O.C.
2. ALL PAVEMENT MARKINGS ON THE PC CONCRETE BRIDGE SHALL BE POLYUREA PAVEMENT MARKING TYPE I.

PAVEMENT MARKING LEGEND

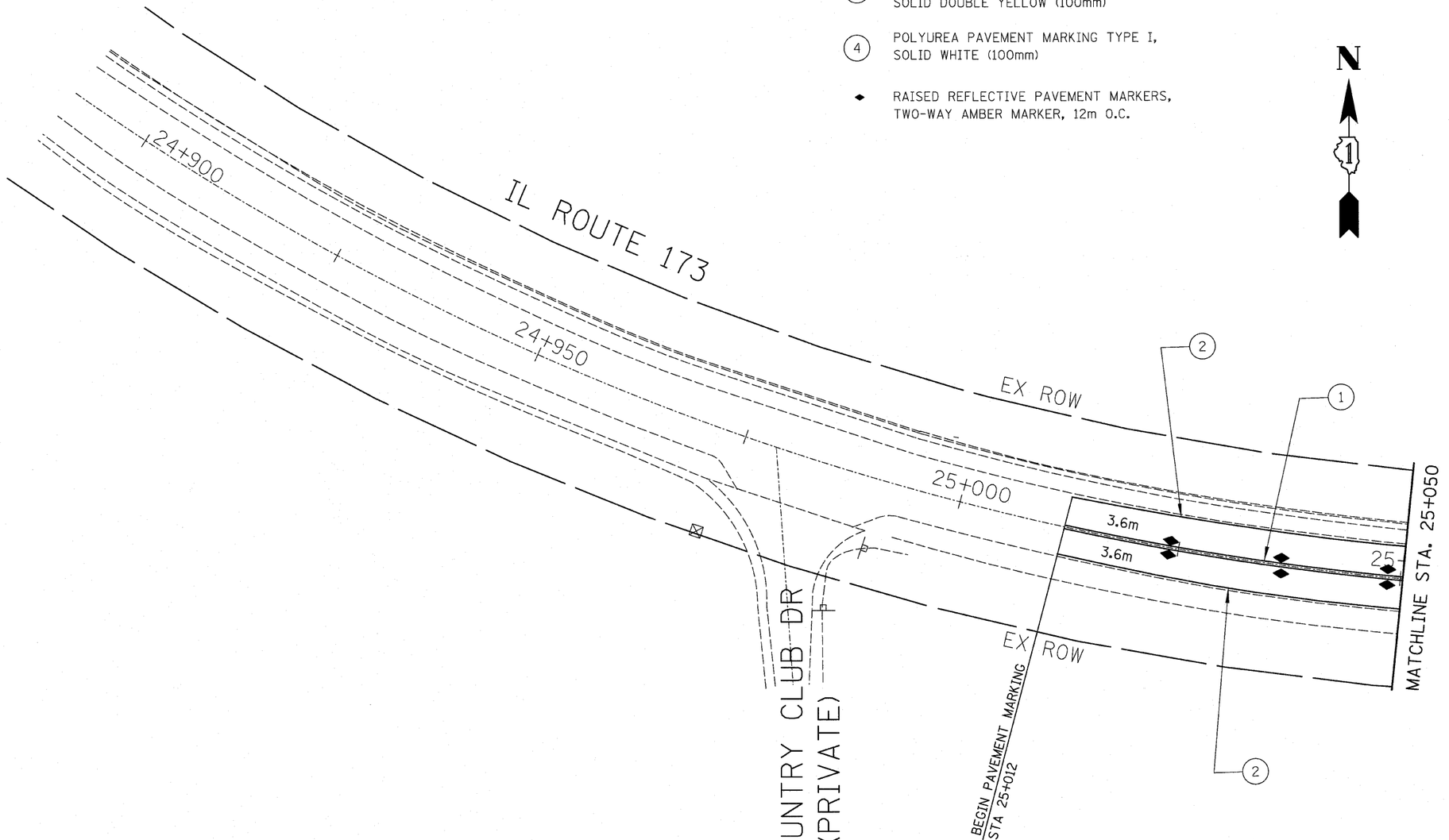
(1) THERMOPLASTIC PAVEMENT MARKING, SOLID DOUBLE YELLOW (100mm)

(2) THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE (100mm)

(3) POLYUREA PAVEMENT MARKING TYPE I, SOLID DOUBLE YELLOW (100mm)

(4) POLYUREA PAVEMENT MARKING TYPE I, SOLID WHITE (100mm)

◆ RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER MARKER, 12m O.C.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

PROPOSED PAVEMENT MARKINGS

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

AppliedTechnologies

3117PAVMRKWEST.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	56
STA. 25+050 TO STA. 25+197				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS ON BRIDGE SHOULD BE RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO-WAY AMBER, 12m O.C.
2. ALL PAVEMENT MARKINGS ON THE PC CONCRETE BRIDGE SHALL BE POLYUREA PAVEMENT MARKING TYPE I.

PAVEMENT MARKING LEGEND

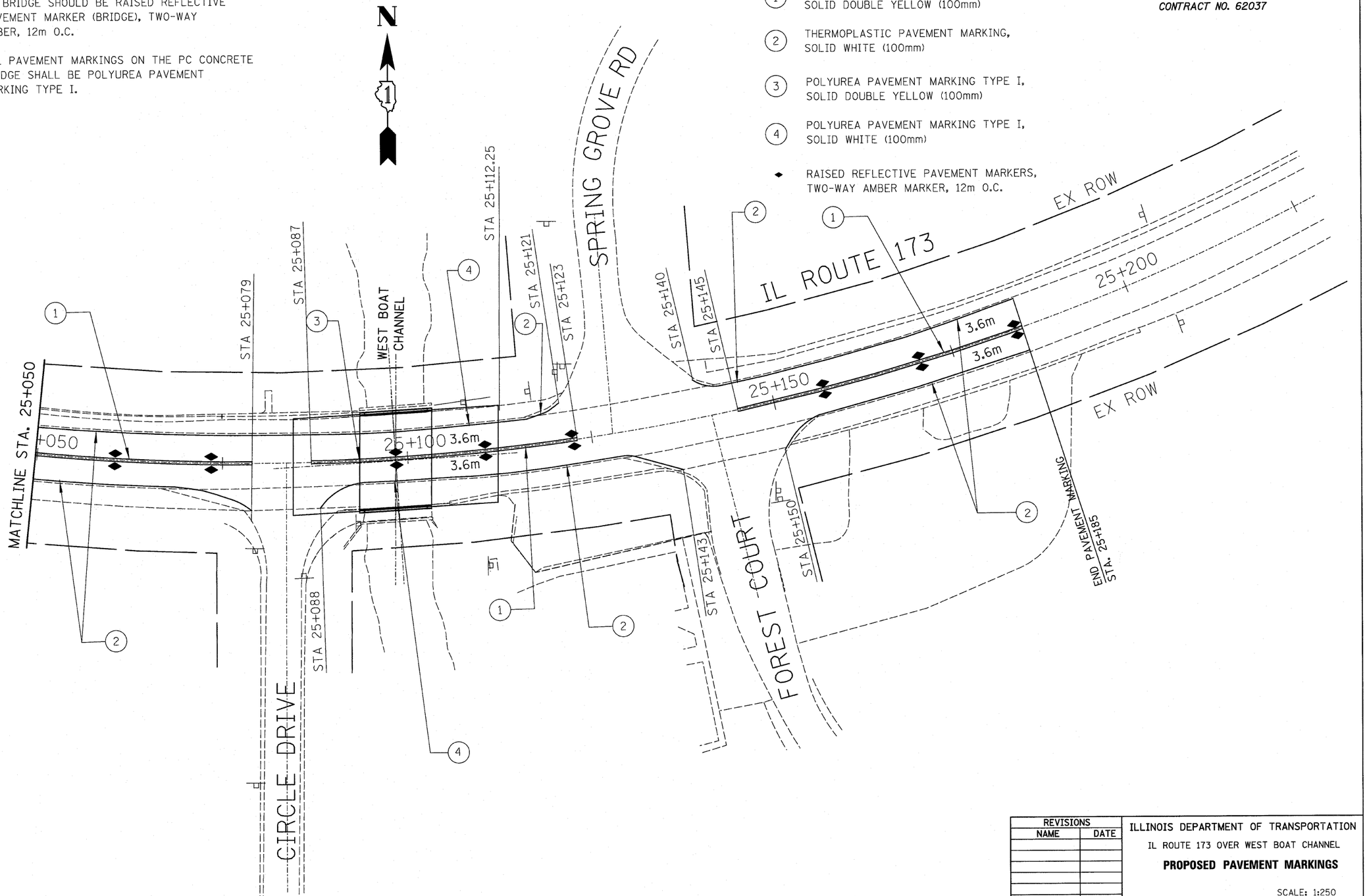
(1) THERMOPLASTIC PAVEMENT MARKING, SOLID DOUBLE YELLOW (100mm)

(2) THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE (100mm)

(3) POLYUREA PAVEMENT MARKING TYPE I, SOLID DOUBLE YELLOW (100mm)

(4) POLYUREA PAVEMENT MARKING TYPE I, SOLID WHITE (100mm)

◆ RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER MARKER, 12m O.C.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER WEST BOAT CHANNEL

PROPOSED PAVEMENT MARKINGS

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

AppliedTechnologies

3117PAVMRKWEST.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	57
STA. 26+100 TO STA. 26+400				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS ON BRIDGE SHOULD BE RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO-WAY AMBER, 12m O.C.
2. ALL PAVEMENT MARKINGS ON THE PC CONCRETE BRIDGE SHALL BE POLYUREA PAVEMENT MARKING TYPE I.

PAVEMENT MARKING LEGEND

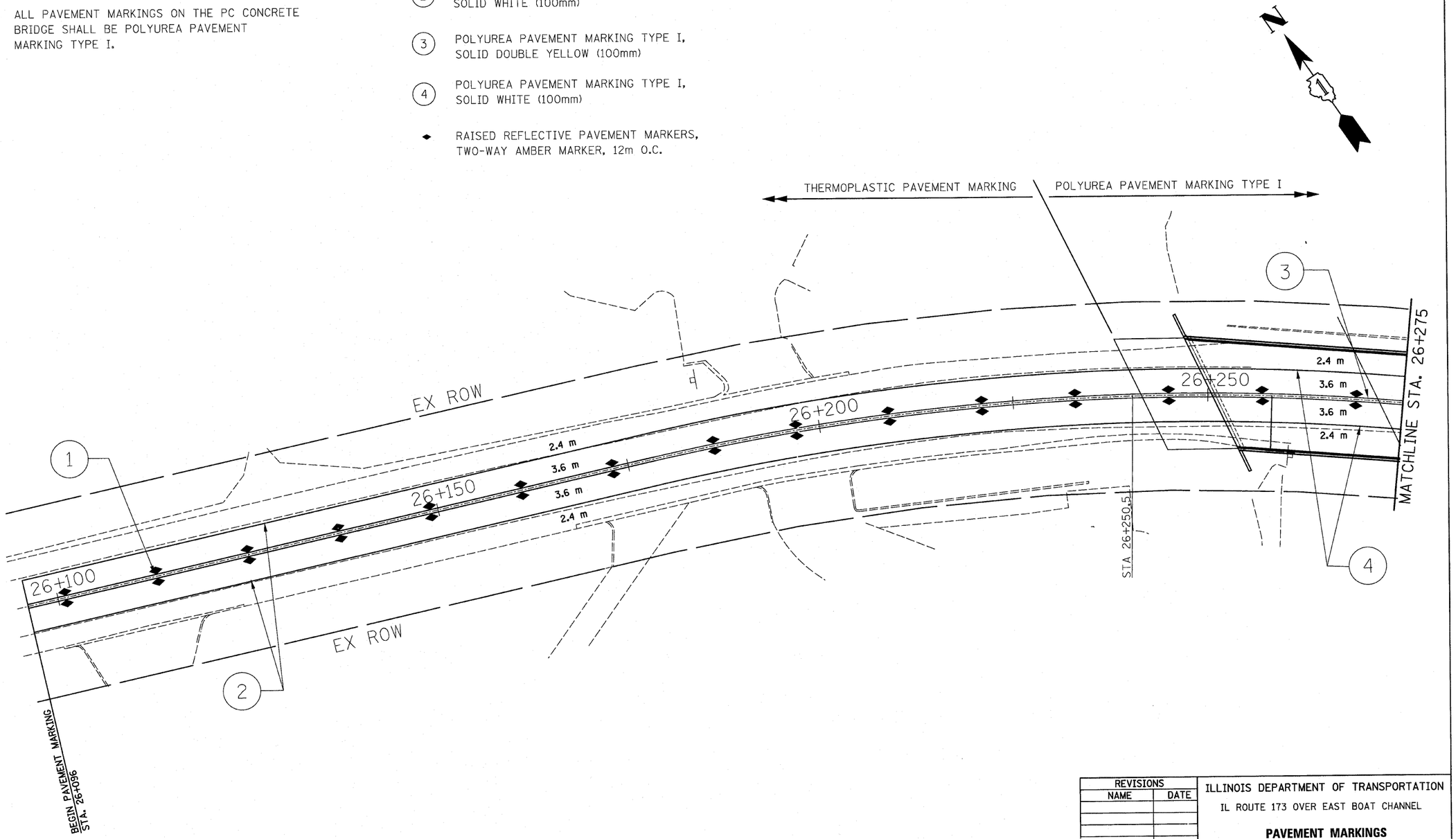
(1) THERMOPLASTIC PAVEMENT MARKING, SOLID DOUBLE YELLOW (100mm)

(2) THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE (100mm)

(3) POLYUREA PAVEMENT MARKING TYPE I, SOLID DOUBLE YELLOW (100mm)

(4) POLYUREA PAVEMENT MARKING TYPE I, SOLID WHITE (100mm)

◆ RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER MARKER, 12m O.C.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PAVEMENT MARKINGS

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116PAVMRKEAST.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	58
STA. 26+400 TO STA. 26+650				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS ON BRIDGE SHOULD BE RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO-WAY AMBER, 12m O.C.
2. ALL PAVEMENT MARKINGS ON THE PC CONCRETE BRIDGE SHALL BE POLYUREA PAVEMENT MARKING TYPE I.

PAVEMENT MARKING LEGEND

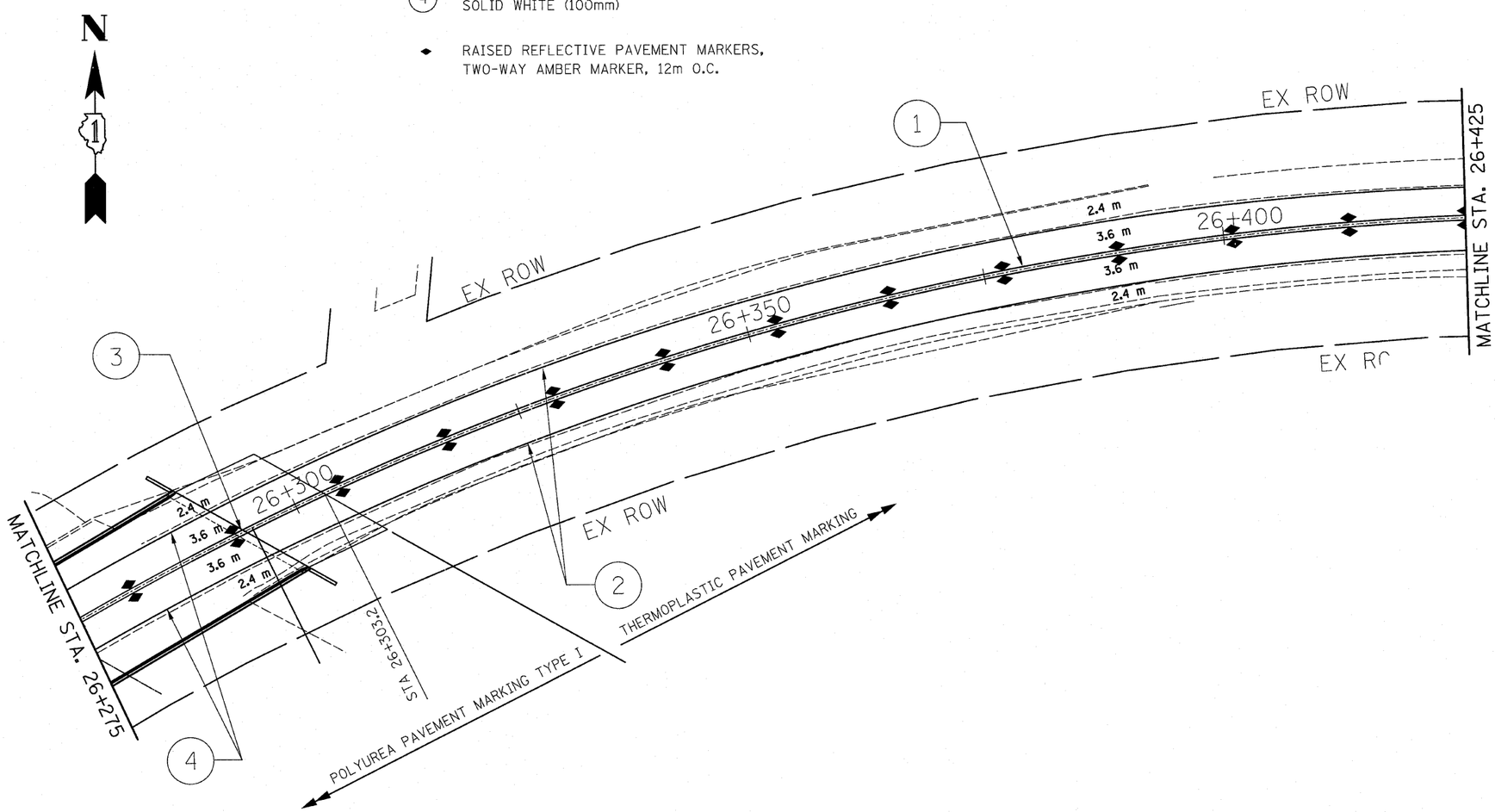
(1) THERMOPLASTIC PAVEMENT MARKING, SOLID DOUBLE YELLOW (100mm)

(2) THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE (100mm)

(3) POLYUREA PAVEMENT MARKING TYPE I, SOLID DOUBLE YELLOW (100mm)

(4) POLYUREA PAVEMENT MARKING TYPE I, SOLID WHITE (100mm)

◆ RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER MARKER, 12m O.C.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PAVEMENT MARKINGS

SCALE: 1:250

DRAWN BY CLG

DATE 3-8-10 CHECKED BY JJD

3116PAVMRKEAST.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	59
STA. 26+400 TO STA. 26+650				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS ON BRIDGE SHOULD BE RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO-WAY AMBER, 12m O.C.
2. ALL PAVEMENT MARKINGS ON THE PC CONCRETE BRIDGE SHALL BE POLYUREA PAVEMENT MARKING TYPE I.

PAVEMENT MARKING LEGEND

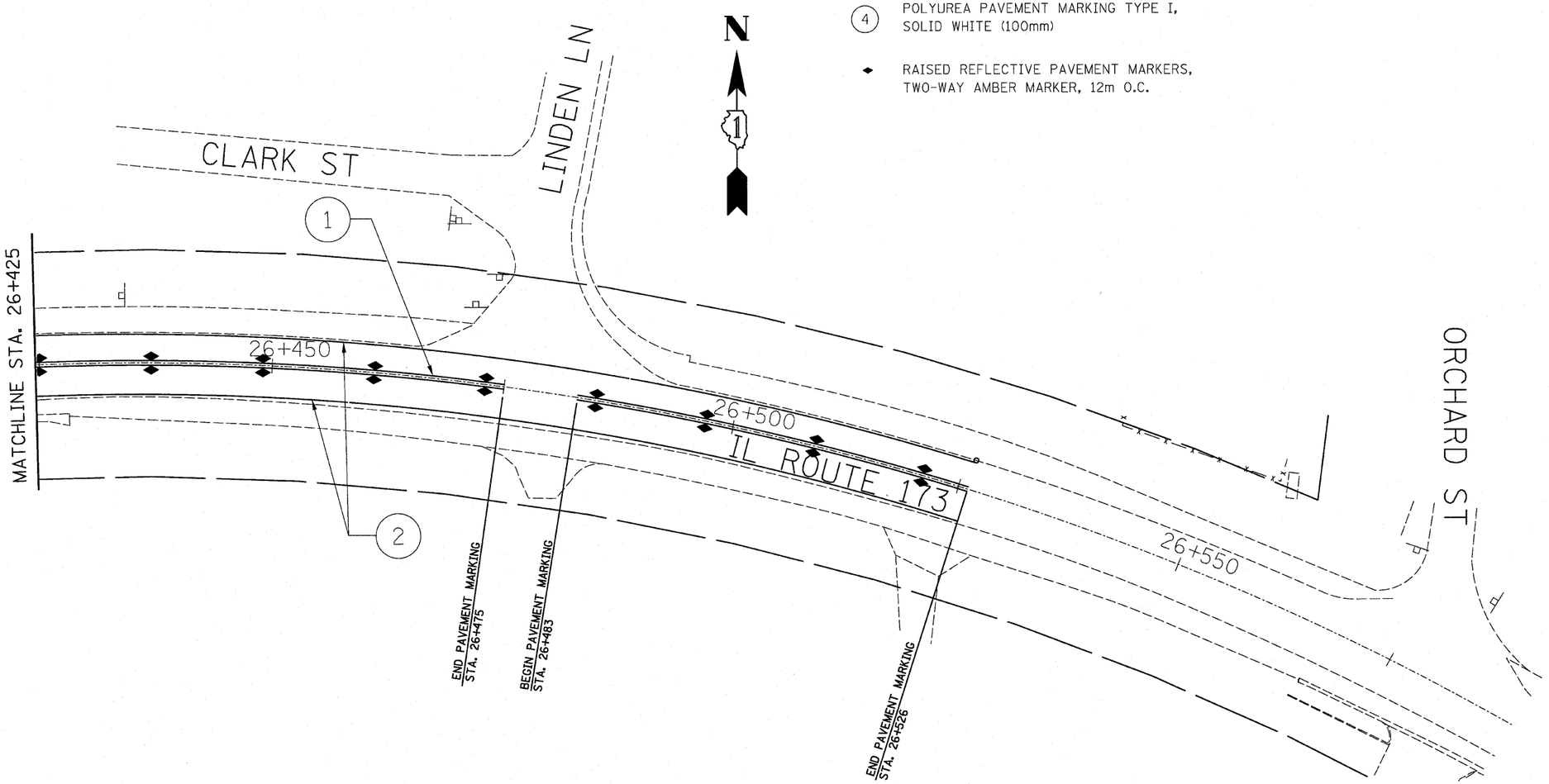
(1) THERMOPLASTIC PAVEMENT MARKING, SOLID DOUBLE YELLOW (100mm)

(2) THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE (100mm)

(3) POLYUREA PAVEMENT MARKING TYPE I, SOLID DOUBLE YELLOW (100mm)

(4) POLYUREA PAVEMENT MARKING TYPE I, SOLID WHITE (100mm)

◆ RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER MARKER, 12m O.C.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 173 OVER EAST BOAT CHANNEL

PAVEMENT MARKINGS

SCALE: 1:250

DRAWN BY CLG

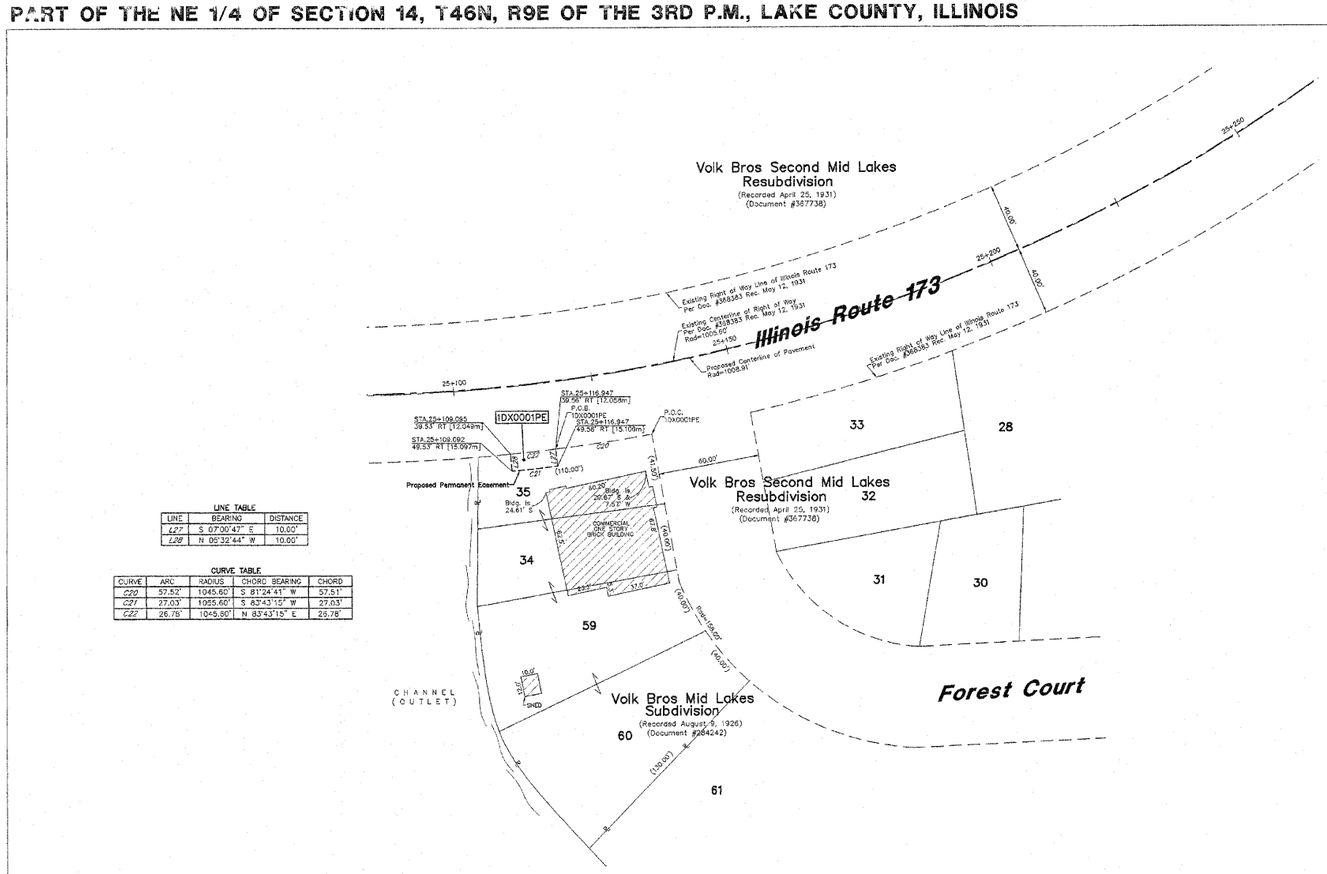
DATE 3-8-10 CHECKED BY JJD

3116PAVMRKEAST.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	60
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

PART OF THE NE 1/4 OF SECTION 14, T46N, R9E OF THE 3RD P.M., LAKE COUNTY, ILLINOIS



LINE TABLE

LINE	BEARING	DISTANCE
L27	S 07°00'47" E	10.00'
L28	N 05°32'44" W	10.00'

CURVE TABLE

CURVE	ARC	RADIUS	CHORD BEARING	CHORD
C26	57.52'	1045.60'	S 81°24'41" W	57.51'
C27	27.03'	1055.60'	S 83°43'15" W	27.03'
C22	26.78'	1045.80'	N 83°43'15" E	26.78'

LEGEND

SECTION CORNER (9 10 16 15) — QUARTER SECTION CORNER (16 — 15)

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' MEASURED DIMENSION
- 129.32'(COMP.) COMPUTED DIMENSION
- ( ) RECORD DATA
- EXISTING BUILDING
- ○ IRON PIPE OR ROD FOUND
- + CUT CROSS FOUND OR SET
- PK NAIL SET
- ● REPLACED AFTER CONSTRUCTION
- ● T1 T2 T3 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSHED WITH GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 **THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.** BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ **STAKING OF PROPOSED RIGHT OF WAY.** SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M **STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.** BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLOR PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER. I D O T STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

GRAPHIC SCALE (IN FEET)

40 0 40 80 120 160

NOTES:

1. COORDINATES SHOWN ON THIS PLAT ARE GROUND COORDINATES IN FEET.
2. SURVEYED IN ENGLISH. DATA SHOWN IN BRACKETS IS THE METRIC EQUIVALENT. ALL STATIONING IS SHOWN IN METERS. DATA SHOWN IN PARENTHESIS IS RECORD DATA.
3. SHEET B1 IS THE COVER SHEET AND IS NOT RECORDED.
4. SHEET B5 IS FOR MONUMENT TIES.

STATE OF ILLINOIS } SS
COUNTY OF COOK }

THIS IS TO CERTIFY THAT I, GLORIA JEAN KOTER, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN THE SOUTHWEST QUARTER OF SECTION 12 & THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 46 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS. THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

GIVEN UNDER OUR HAND AND SEAL THIS_____ DAY OF_____ A.D. 2002, AT SCHAUMBURG, ILLINOIS.

W-T LAND SURVEYING, INC.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 3323

PARCEL No.	OWNER	TOTAL HOLDING	PART TAKEN	REMAINDER	PREVIOUSLY DEDICATED	EASEMENT	EASEMENT PURPOSE	PERMANENT INDEX NUMBER
		ACRES	ACRES	ACRES	ACRES	ACRES		
1DX0001PE	William Neurauter	0.579	N/A	0.579	N/A	0.006 269.06' sq. ft		01-14-208-001

REVISION DATE	4/4/02	REVISION	Changed Parcel 1DX0001TE to 1DX0001PE	MADE BY	MWO
REVISION DATE	1/18/02	REVISION	Added Temporary Easement for Parcel 1DX0005	MADE BY	MWO
REVISION DATE	11/30/01	REVISION	Revised per IDOT comments	MADE BY	MWO
REVISION DATE	11/20/01	REVISION	Revised per IDOT Comments	MADE BY	MWO

RECEIVED
JUL 11 2002
PLATS & LEGALS

N

W-T LAND SURVEYING, INC.
LAND AND CONSTRUCTION SURVEYORS
39 EAST SCULLY DRIVE
SCHAUMBURG, ILLINOIS 60193
ph. (847)895-3640
fax (847)895-9685

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.P. 303 (ILLINOIS ROUTE 173)

SECTION 134 (B and B2) R-1 *LAKE COUNTY*
PROJECT *JOB NO. R91-077-01*
STATION 25+109.092 *TO STATION 25+116.947*
SCALE: 1"=30' *SHEET B2 OF 5*

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ROUTE FAP 303 (ILLINOIS ROUTE 173) SECTION 134 (B and B2) R-1 COUNTY LAKE JOB NO. R-91-077-01 RECORDING: RECORDED ON AS DOCUMENT NO.

PLAT OF HIGHWAYS.DGN

Applied Technologies

REVISIONS NAME	DATE

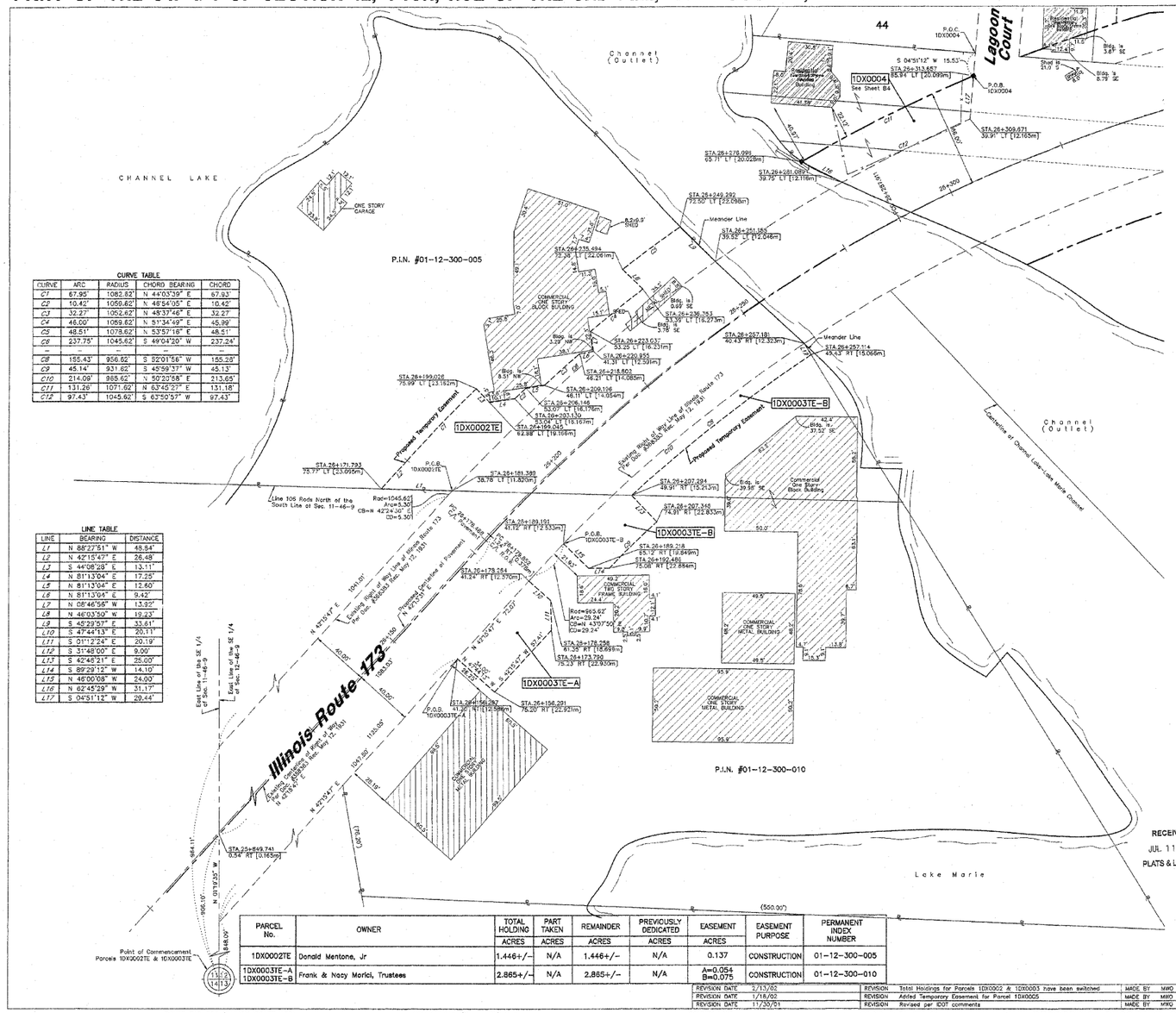
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
PLAT OF HIGHWAYS

SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	61
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62037

PART OF THE SW 1/4 OF SECTION 12, T46N, R9E OF THE 3RD P.M., LAKE COUNTY, ILLINOIS



CURVE TABLE

CURVE	ARC	RADIUS	CHORD BEARING	CHORD
C1	67.95'	1082.82'	N 44°03'39" E	67.83'
C2	10.42'	1059.62'	N 48°54'05" E	10.42'
C3	32.27'	1052.62'	N 48°37'46" E	32.27'
C4	46.00'	1059.62'	N 51°34'49" E	45.99'
C5	48.51'	1073.62'	N 53°57'16" E	48.51'
C6	237.75'	1045.62'	S 49°04'20" W	237.24'
--	--	--	--	--
C8	155.43'	956.62'	S 52°01'56" W	155.28'
C9	45.14'	931.62'	S 45°59'37" W	45.13'
C10	214.09'	955.62'	N 50°20'58" E	213.65'
C11	131.26'	1071.62'	N 63°45'27" E	131.18'
C12	97.43'	1045.62'	S 63°50'57" W	97.43'

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 88°27'51" W	48.84'
L2	N 42°15'47" E	26.48'
L3	S 44°08'28" E	13.11'
L4	N 81°13'04" E	17.25'
L5	N 81°13'04" E	12.60'
L6	N 81°13'04" E	9.42'
L7	N 08°46'56" W	13.92'
L8	N 46°03'50" W	19.23'
L9	S 45°29'57" E	33.61'
L10	S 47°44'13" E	20.11'
L11	S 01°12'24" E	20.19'
L12	S 31°48'00" E	9.00'
L13	S 42°48'21" E	25.00'
L14	S 89°29'12" W	14.10'
L15	N 46°00'08" W	24.00'
L16	N 62°45'29" W	31.17'
L17	S 04°51'12" W	29.44'

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 125.32' MEASURED DIMENSION
- 129.32'(COMP.) COMPUTED DIMENSION
- ( ) RECORD DATA
- EXISTING BUILDING
- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- PK NAIL SET
- REPLACED AFTER CONSTRUCTION
- T1 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSHED WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2
- T3
- BT1 **THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.** BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- **STAKING OF PROPOSED RIGHT OF WAY.** SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M **STAKING OR PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.** BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLOR PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I D O T STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

GRAPHIC SCALE
(IN FEET)
40 0 40 80 120 160

NOTES:

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2. SURVEYED IN ENGLISH. DATA SHOWN IN BRACKETS IS THE METRIC EQUIVALENT. ALL STATIONING IS SHOWN IN METERS. DATA SHOWN IN PARENTHESIS IS RECORD DATA.
3. SHEET B1 IS THE COVER SHEET AND IS NOT RECORDED.
4. SHEET B5 IS FOR MONUMENT TIES.

STATE OF ILLINOIS } SS
COUNTY OF COOK }

THIS IS TO CERTIFY THAT I, GLORIA JEAN KOSER, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN THE SOUTHWEST QUARTER OF SECTION 12 & THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 46 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THIS PLAT CORRECTLY REPRESENTS SAID SURVEY; THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

GIVEN UNDER OUR HAND AND SEAL THIS _____ DAY OF _____, A.D. 2002. AT SCHAUMBURG, ILLINOIS.

W-T LAND SURVEYING, INC.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 3322

PARCEL No.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DEDICATED ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT INDEX NUMBER
1DX0002TE	Donald Mentone, Jr	1.446+/-	N/A	1.446+/-	N/A	0.137	CONSTRUCTION	01-12-300-005
1DX0003TE-A 1DX0003TE-B	Frank & Nacy Morici, Trustees	2.865+/-	N/A	2.865+/-	N/A	A=0.054 B=0.075	CONSTRUCTION	01-12-300-010

REVISION DATE	2/13/02	REVISION	Total Holdings for Parcels 1DX0002 & 1DX0003 have been switched	MADE BY	MWO
REVISION DATE	1/18/02	REVISION	Added Temporary Easement for Parcel 1DX0005	MADE BY	MWO
REVISION DATE	11/30/01	REVISION	Revised per IDOT comments	MADE BY	MWO

RECEIVED
JUL 11 2002
PLATS & LEGALS

N

W-T LAND SURVEYING, INC.
LAND AND CONSTRUCTION SURVEYORS
39 EAST SCULLY DRIVE
SCHAUMBURG, ILLINOIS 60193
ph. (847)895-3640
fax. (847)895-9985

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.P. 303 (ILLINOIS ROUTE 173)

SECTION 134 (B and B2) R-1 LAKE COUNTY
PROJECT JOB NO. R91-077-01
STATION 26+156.291 TO STATION 26+257.181
SCALE: 1"=30' SHEET B3 OF 5

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ROUTE FAP 303 (ILLINOIS ROUTE 173) SECTION 134 (B and B2) R-1 COUNTY LAKE JOB NO. R-91-077-01 RECORDING: RECORDED ON AS DOCUMENT NO.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
PLAT OF HIGHWAYS

SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

Applied Technologies

PLAT OF HIGHWAYS.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	62
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

PART OF THE SW 1/4 OF SECTION 12, T46N, R9E OF THE 3RD P.M., LAKE COUNTY, ILLINOIS

STATE OF ILLINOIS }
COUNTY OF COOK } SS

THIS IS TO CERTIFY THAT I, GLORIA JEAN KOTER, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN THE SOUTHWEST QUARTER OF SECTION 12 & THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 46 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

GIVEN UNDER OUR HAND AND SEAL THIS_____DAY OF_____A.D. 2002.
AT SCHAUMBURG, ILLINOIS.

W-T LAND SURVEYING, INC.

ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 3323

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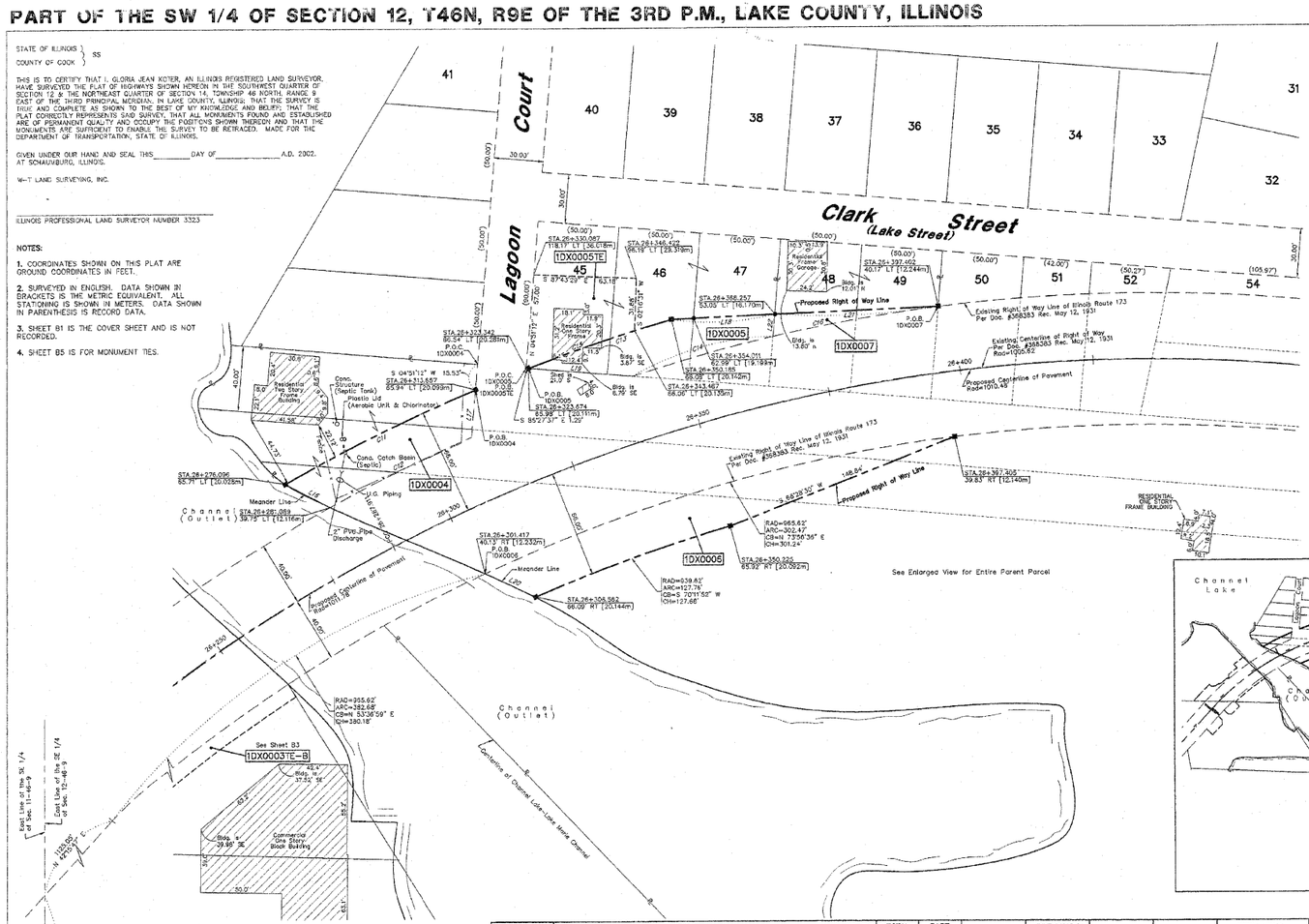

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' MEASURED DIMENSION
- 129.32'(COMP.) COMPUTED DIMENSION
- ( ) RECORD DATA
- EXISTING BUILDING
- IRON PIPE OR ROD FOUND
- PK NAIL SET
- CUT CROSS FOUND OR SET
- REPLACED AFTER CONSTRUCTION
- T1, T2, T3 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSHED WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1, BT2, BT3 **THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.** BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- **STAKING OF PROPOSED RIGHT OF WAY.** SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M **STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.** BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLOR PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER. I D O T STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

GRAPHIC SCALE
(IN FEET)
40 0 40 80 120 160

RECEIVED
JUL 11 2002
PLATS & LEGALS

Scale: 1" = 200'

LINE TABLE

LINE	BEARING	DISTANCE
L16	N 62°45'29" W	31.17'
L17	S 04°51'12" W	29.44'
L18	N 87°32'53" E	64.11'
L19	N 85°27'37" W	64.39'
L20	N 64°48'38" W	34.16'
L21	N 87°32'53" E	100.62'
L22	S 04°51'12" W	13.55'

CURVE TABLE

CURVE	ARC	RADIUS	CHORD BEARING	CHORD
C11	131.26'	1071.62'	N 63°45'27" E	131.18'
C12	97.43'	1045.62'	S 63°50'57" W	97.43'
C13	92.66'	1071.62'	N 71°36'57" E	92.63'
C14	89.80'	1045.62'	S 74°47'15" W	89.77'
C15	69.18'	1071.62'	S 70°39'17" W	69.17'
C16	103.48'	1045.62'	S 80°04'57" W	103.42'

PARCEL No.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DEDICATED ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT INDEX NUMBER
1DX0004	Nancy G. Cannan	0.264	0.068	0.196	N/A	N/A	N/A	01-12-300-006
1DX0005 & 1DX0005TE	Howard L. Bishop and Joan M. Bishop, in Joint Tenancy	0.279	0.064	0.215	N/A	0.065	DEMOLITION	01-12-308-001, 002 & 003
1DX0006	First National Bank of Joliet as Trustee under Trust Agreement dated January 22, 1999 known as Trust No. 5182	9.600	0.135	9.465	N/A	N/A	N/A	01-12-300-007
1DX0007	Howard L. Bishop and Joan M. Bishop, husband and wife as joint tenants as to an undivided 1/2 interest and Thomas E. Fremgen and Maureen E. Fremgen husband and wife as joint tenants as to an undivided 1/2 interest	0.105	0.014	0.091	N/A	N/A	N/A	01-12-308-004

REVISION	DATE 7/9/02	REVISION	Added Septic Location for Parcel 0004	MADE BY MWO
REVISION	DATE 2/13/02	REVISION	Split Parcel 0005 to create Parcel 0007 (Two different owners)	MADE BY MWO
REVISION	DATE 2/7/02	REVISION	Changed Scale of drawing from 1"=40' to 1"=30'	MADE BY MWO
REVISION	DATE 1/29/02	REVISION	Changed Owner name for Parcel 0006 & showed Parent Parcel	MADE BY MWO
REVISION	DATE 1/18/02	REVISION	Added Temporary Easement for Parcel 1DX0005	MADE BY MWO
REVISION	DATE 11/30/01	REVISION	Revised per IDOT comments	MADE BY MWO
REVISION	DATE 11/20/01	REVISION	Revised per IDOT comments	MADE BY MWO

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W-T LAND SURVEYING, INC.
LAND AND CONSTRUCTION SURVEYORS
39 EAST SCULLY DRIVE
SCHAUMBURG, ILLINOIS 60193
ph. (847)895-3640
fax. (847)895-9985

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.P. 303 (ILLINOIS ROUTE 173)

SECTION 134 (B and B2) R-1 LAKE COUNTY
PROJECT JOB NO. R91-077-01
STATION 26+276.096 TO STATION 26+397.405
SCALE: 1"=30' SHEET B4 OF 5

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ROUTE FAP 303 (ILLINOIS ROUTE 173) SECTION 134 (B and B2) R-1 COUNTY LAKE JOB NO. R-91-077-01

RECORDING: RECORDED ON AS DOCUMENT NO.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
PLAT OF HIGHWAYS

SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

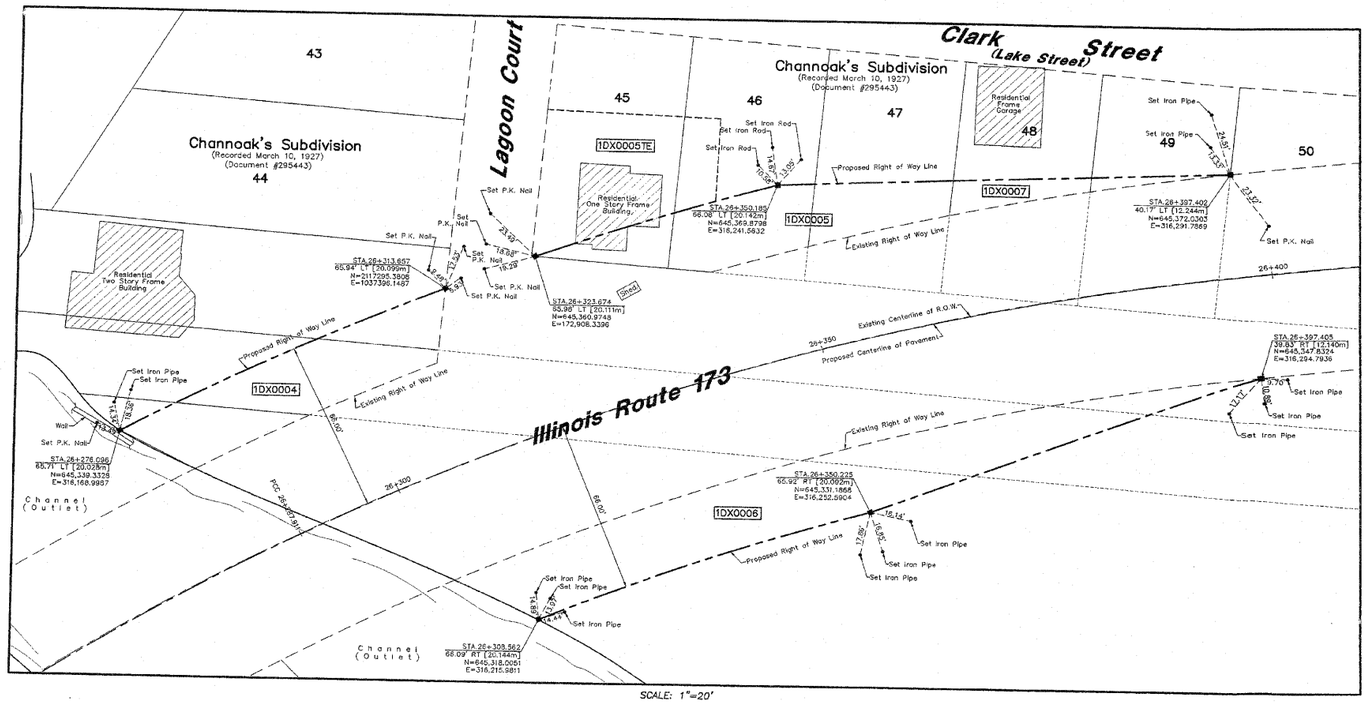
Applied Technologies

PLAT OF HIGHWAYS.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134(B&B-2)R-1	LAKE	137	63
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62037

PART OF THE SW 1/4 OF SECTION 12 & THE NE 1/4 OF SECTION 14, T46N, R9E OF THE 3RD P.M., LAKE COUNTY, ILLINOIS



LEGEND

SECTION CORNER (9 | 10 | 16 | 15)

QUARTER SECTION CORNER (16 — 15)

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' MEASURED DIMENSION
- 129.32'(COMP.) COMPUTED DIMENSION
- ( ) RECORD DATA
- EXISTING BUILDING

- O IRON PIPE OR ROD FOUND
- + CUT CROSS FOUND OR SET
- ϕ PK NAIL SET
- • REPLACED AFTER CONSTRUCTION
- ● T1, T2, T3 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSHED WITH GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
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- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

GRAPHIC SCALE

(IN FEET)

40 0 40 80 120 160

NOTES:

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STATE OF ILLINOIS } SS
COUNTY OF COOK }

THIS IS TO CERTIFY THAT I, GLORIA JEAN KOTER, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN THE SOUTHWEST QUARTER OF SECTION 12 & THE NORTHEAST QUARTER OF SECTION 14, TOWNSHIP 46 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY; THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

GIVEN UNDER OUR HAND AND SEAL THIS _____ DAY OF _____ A.D. 2001. AT SCHAUMBURG, ILLINOIS.

W-T LAND SURVEYING, INC.

ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 3323

W-T LAND SURVEYING, INC.
LAND AND CONSTRUCTION SURVEYORS
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N

RECEIVED
JUL 11 2002
PLATS & LEGALS

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.P. 303 (ILLINOIS ROUTE 173)

SECTION 134 (B and B2) R-1 LAKE COUNTY
PROJECT JOB NO. R91-077-01
STATION TO STATION
SCALE: N/A SHEET B5 OF 5

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ROUTE FAP 303 (ILLINOIS ROUTE 173) | SECTION 134 (B and B2) R-1 | COUNTY LAKE | JOB NO. R-91-077-01

REVISION DATE	REVISION	MADE BY

RECORDING: RECORDED ON AS DOCUMENT NO.

REVISIONS	
NAME	DATE

Applied Technologies

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 173 OVER WEST AND EAST BOAT CHANNELS
PLAT OF HIGHWAYS

SCALE: NTS
DRAWN BY CLG
DATE 3-8-10 CHECKED BY JJD

PLAT OF HIGHWAYS.DGN

CONTRACT NO. 62037

Bench Mark: USGS Reference Mark on S.W. wingwall of structure 049-0055 Elev. 228.867

Existing Structure: S.N. 049-0055, single span 9.720m Back to Back abutments, 15.748m Out to Out, R.C. slab bridge on closed abutments. Built as IL Route 173, Section 134B at Sta. 830+21 (English) in 1931. The contractor shall remove the existing superstructure and replace it with a single span Composite Steel Wide Flange Superstructure. The road shall be kept open to traffic at all times utilizing stage construction.

Note: All dimensions in millimeters (mm) except as noted.

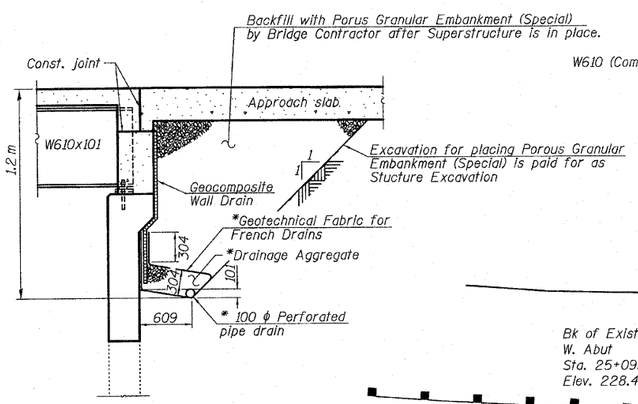
No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	64
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
17 SHEETS

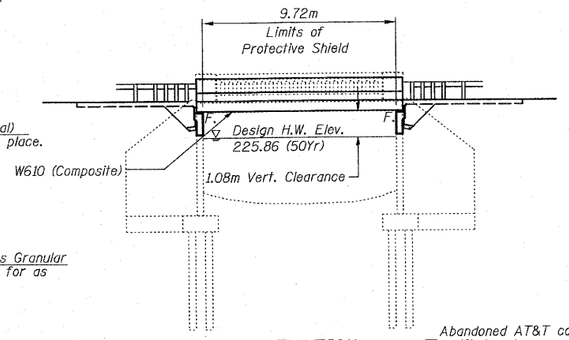
STATION 25+098.390
BUILT 200_ BY
STATE OF ILLINOIS
FAP 303 SEC 134B
LOADING MS18
STRUCTURE NO. 049-0055



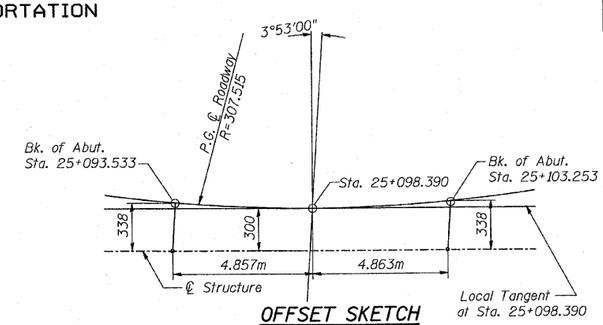
SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures

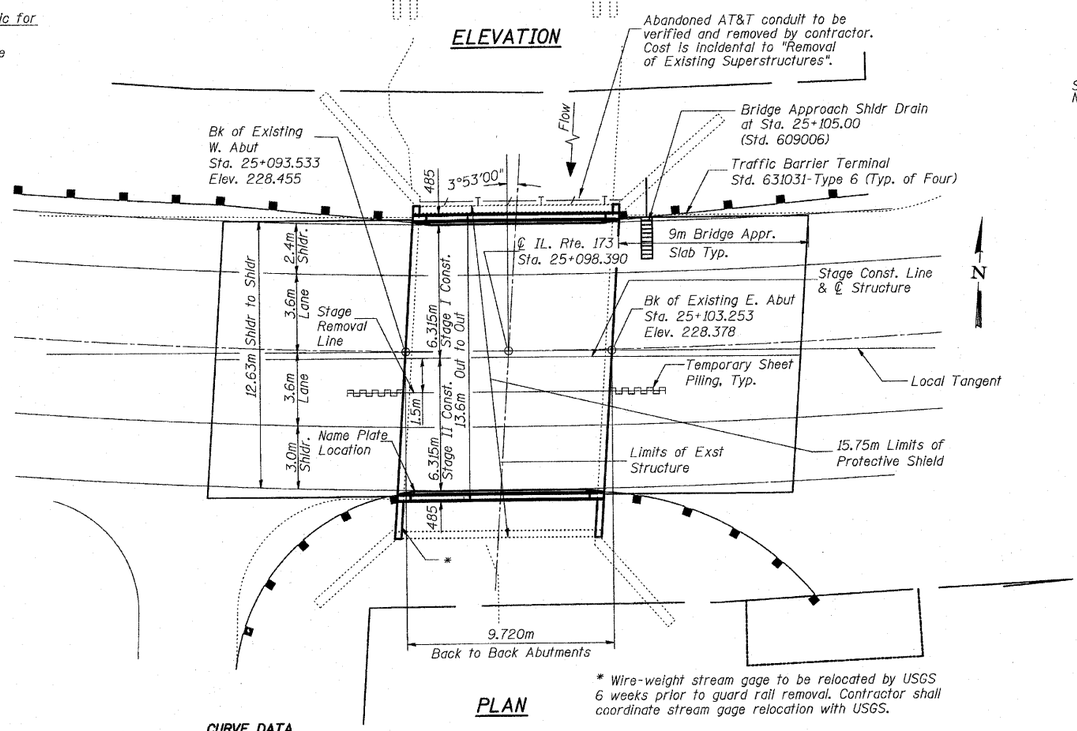
All drainage systems components shall extend to 308mm from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into the concrete headwalls. (See Article 601.04 of the Standard Specifications and Highway Standard 601101) Drain may be connected to existing drain holes in existing abutment.



ELEVATION



OFFSET SKETCH



PLAN

* Wire-weight stream gage to be relocated by USGS 6 weeks prior to guard rail removal. Contractor shall coordinate stream gage relocation with USGS.

INDEX OF SHEETS

NAME PLATE
See Std. 515001
Existing Name Plate Shall be Cleaned and Relocated Next to New Name Plate. Cost Included with "Name Plates".

LOADING MS18
Allow 2.4 kN/m² for future wearing surface.

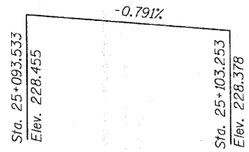
DESIGN SPECIFICATIONS
AASHTO 1996 thru 2000 & 2002 Interims

DESIGN STRESSES

FIELD UNITS
f'_c = 24 MPa
f_y = 420 MPa (Reinforcement)
f_y = 250 MPa (M270M Grade 250)
f_y = 345 MPa (M270M Grade 345)

EXISTING UNITS
f'_c = 24 MPa
f_y = 228 MPa (reinforcement)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0



PROFILE GRADE
Along ℄ Roadway

CURVE DATA

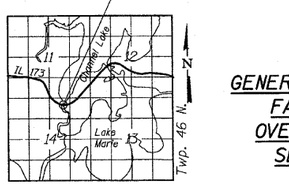
Δ= 117°58'50.836"
T= 511.600
R= 307.515
L= 633.221
E= 289.394
S.E.= 0.083
P.C. STA= 24+702.249
P.T. STA= 25+335.470
P.I. STA= 25+213.849

WATERWAY INFORMATION

Drainage Area = 2256 km2 Low Grade Elev. 226.94 @ Sta. 25+103

Flood	Freq. Yr.	Q C.M.S.	Opening Sq. M Exist.	Opening Sq. M Prop.	Natural H.W.E. Exist.	Natural H.W.E. Prop.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	0	12.5	12.5	225.46	225.46	0.00	0.00	225.46	225.46
NPDES	25	0	14.7	14.7	225.69	225.69	0.00	0.00	225.69	225.69
Design	50	0	16.3	16.3	225.86	225.86	0.00	0.00	225.86	225.86
Base	100	0	17.8	17.8	226.04	226.04	0.00	0.00	226.04	226.04
Overtopping		0					0.00	0.00		
Max. Calc.	500	0	21.8	21.8	226.44	226.44	0.00	0.00	226.44	226.44

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Rafal E Andrzejewski (TTD)
ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

3117-049-2055.DGN

CONTRACT NO. 62037

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	65
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
17 SHEETS

GENERAL NOTES

No field welding is permitted except as specified in the contract documents.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams.

Reinforcement bars shall conform to the requirements of ASTM A 706m Gr. 420. See special provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Calculated mass of Structural Steel = 1005 kg (Grade 250)*
= 5825 kg (Grade 345)
* includes mass of bearings

All dimensions are in millimeters (mm) except as noted.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Slipforming of the parapet is not allowed.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts M22 open hole 24mm ϕ unless otherwise noted.

TOTAL BILL OF MATERIAL

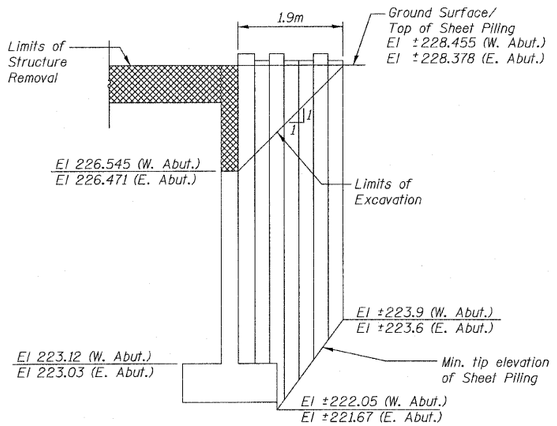
	ITEM	UNIT	SUPER	SUB	TOTAL
	Structural Repair of Concrete Depth equal to or less than 125mm	Sq M	0	23	23
	Porous Granular Embankment, Special	Cu M	0	75	75
	Concrete Removal	Cu M	0	14	14
	Removal of Existing Superstructures	Each	1	0	1
	Protective Shield	Sq M	155	0	155
	Structure Excavation	Cu M	0	75	75
**	Concrete Structures	Cu M	0	34	34
**	Concrete Superstructure	Cu M	130	0	130
**	Bridge Deck Grooving	Sq M	343	0	343
	Protective Coat	Sq M	389	0	389
***	Erecting Structural Steel	L Sum	0.07	0	0.07
	Stud Shear Connectors	Each	738	0	738
**	Reinforcement Bars, Epoxy Coated	KG	18,670	1,730	20,400
**	Bar Splicers	Each	282	100	382
	Temporary Sheet Piling	Sq M	0	25	25
	Name Plates	Each	1	0	1
	Anchor Bolts, M24	Each	0	24	24
	Epoxy Crack Injection	Meter	0	42	42
	Geocomposite Wall Drain	Sq M	0	45	45
	Pipe Underdrains for Structures, 100mm	Meter	0	60	60

Note:

The top of existing abutment shall be braced prior to removal of existing superstructure. The bracing shall remain in place until the anchor bolts are set and the concrete in the new deck slab attains the specified 28-day strength (f'c). The Contractor shall submit details and calculations of the proposed bracing system for approval by the Engineer, before commencing work. The submittal shall be designed and sealed by a licensed Structural Engineer in Illinois. All costs of the bracing shall be included with "Removal of Existing Superstructures."

** Includes Approach Slabs

*** Furnishing Structural Steel is paid for under a separate contract

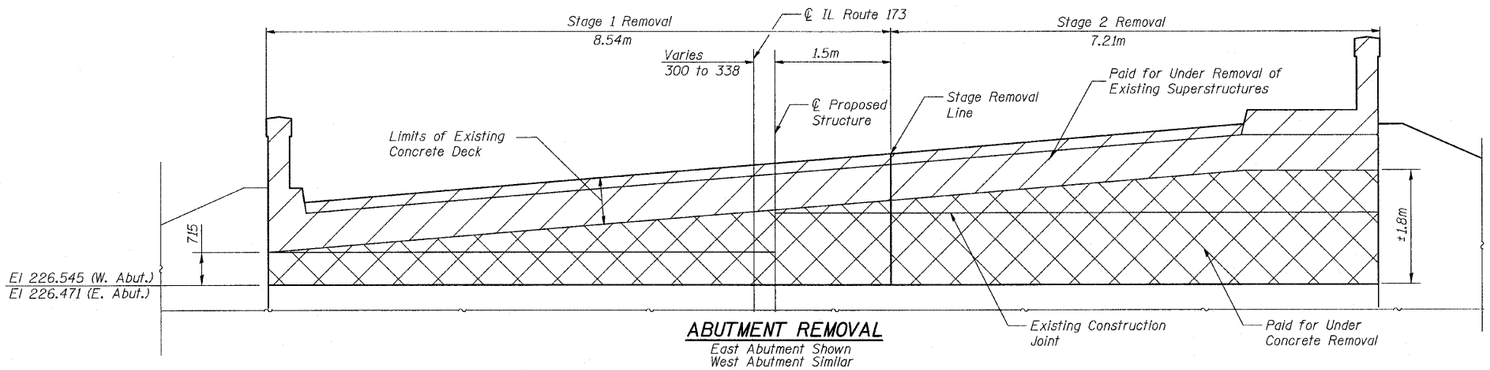


TEMPORARY SHEET PILING (STAGED CONST.)

1. Minimum section modulus of the temporary sheet piling shall be 415 x $10^3 mm^3/m$.

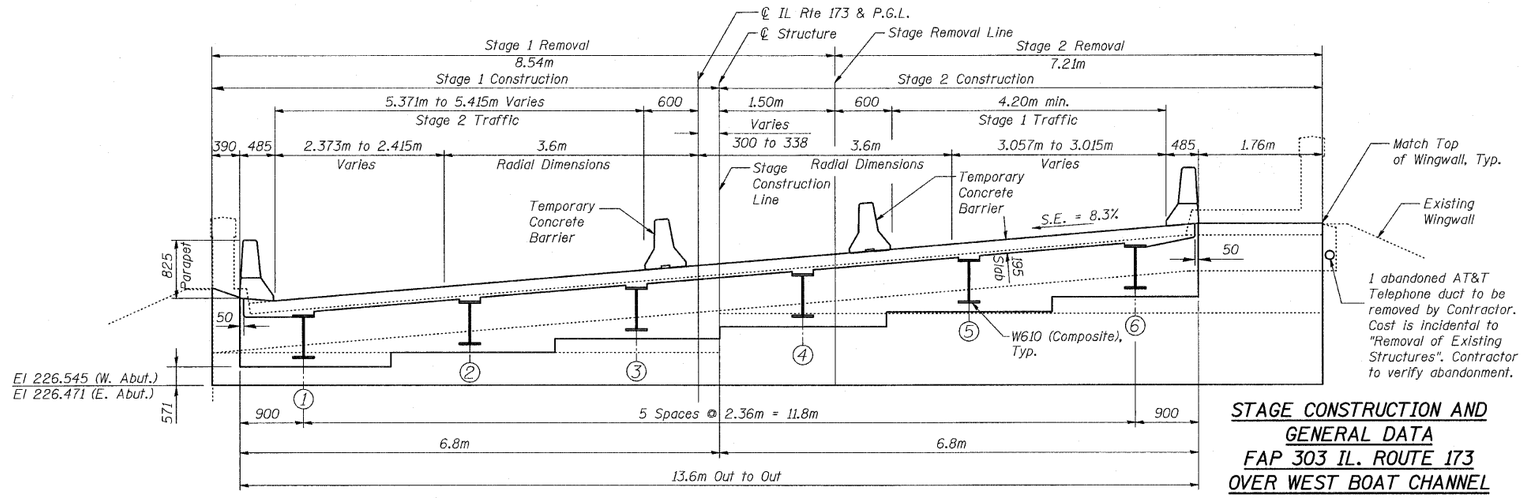
2. The Contractor shall connect the first sheet to the existingabutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

3. If the Contractor chooses to alter the temporary sheet piling design requirements shown on the plans for lesser design requirements, then a full design submittal including plan, details, and calculations will be required for review and acceptance by the Engineer.



ABUTMENT REMOVAL

East Abutment Shown
West Abutment Similar



NOTE:

See Sheet 15 for details of Temporary Concrete Barrier.
See roadway plans for quantity of Temporary Concrete Barrier.

CROSS SECTION

Looking East

STAGE CONSTRUCTION AND GENERAL DATA
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

AppliedTechnologies

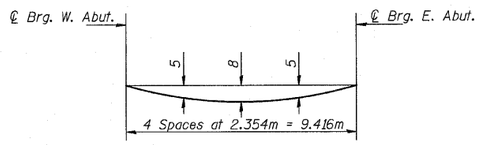
3117-049-0055.DGN

CONTRACT NO. 62037

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	06
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

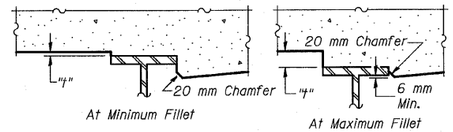
SHEET NO. 3
17 SHEETS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only).

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on Sheet 4 of 17.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet 4 of 17. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on Sheet 4 of 17, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

GIRDER 1

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.827	-5.567	227.991	227.991
℄ West Abut.	25+093.982	-5.569	227.989	227.989
C	25+097.038	-5.597	227.963	227.969
D	25+100.093	-5.595	227.939	227.946
℄ East Abut.	25+103.572	-5.557	227.914	227.914
Back East Abut.	25+103.727	-5.555	227.913	227.913

GIRDER 2

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.701	-3.205	228.188	228.188
℄ West Abut.	25+093.854	-3.207	228.186	228.186
C	25+096.886	-3.236	228.160	228.166
D	25+099.918	-3.236	228.136	228.143
℄ East Abut.	25+103.370	-3.200	228.112	228.112
Back East Abut.	25+103.527	-3.198	228.111	228.111

GIRDER 3

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.576	-0.842	228.385	228.385
℄ West Abut.	25+093.729	-0.845	228.383	228.383
C	25+096.737	-0.876	228.357	228.363
D	25+099.746	-0.877	228.333	228.340
℄ East Abut.	25+103.171	-0.843	228.309	228.309
Back East Abut.	25+103.323	-0.841	228.308	228.308

℄ IL. Rte. 173 and P.G.L.

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.532	0.000	228.455	228.455
℄ West Abut.	25+093.684	0.000	228.454	228.454
C	25+096.682	0.000	228.430	228.436
D	25+099.682	0.000	228.406	228.413
℄ East Abut.	25+103.101	0.000	228.379	228.379
Back East Abut.	25+103.253	0.000	228.378	228.378

NOTES

For Plan View, ℄ Structure, Stage Construction Line and Girders 4 thru 6, See Sheet 4.

All dimensions are in millimeters (mm) except as noted.

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

3117-049-0055.DGN

TOP OF SLAB ELEVATIONS-1
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	67
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

℄ STRUCTURE and STAGE CONSTRUCTION LINE

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.515	0.339	228.483	228.483
℄ West Abut.	25+093.667	0.336	228.482	228.482
C	25+096.663	0.305	228.456	228.462
D	25+099.660	0.303	228.432	228.438
℄ East Abut.	25+103.073	0.336	228.407	228.438
Back East Abut.	25+103.225	0.338	228.406	228.407

GIRDER 4

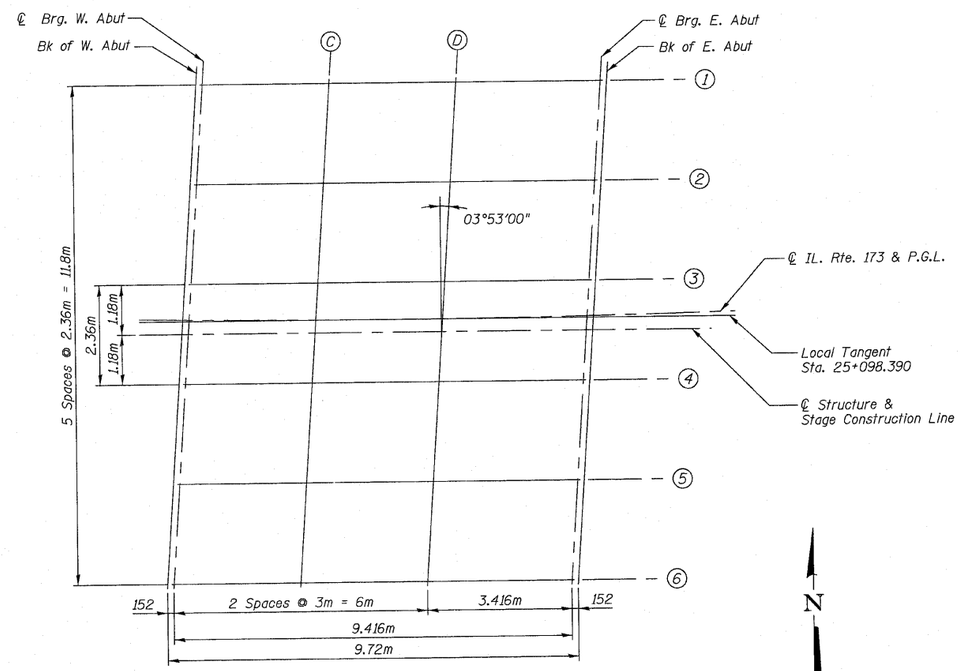
Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.454	1.520	228.582	228.582
℄ West Abut.	25+093.605	1.517	228.580	228.580
C	25+096.590	1.485	228.554	228.560
D	25+099.576	1.482	228.530	228.537
℄ East Abut.	25+102.975	1.514	228.506	228.506
Back East Abut.	25+103.126	1.517	228.505	228.505

GIRDER 5

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.333	3.882	228.779	228.779
℄ West Abut.	25+093.483	3.880	228.777	228.777
C	25+096.446	3.846	228.751	228.758
D	25+099.409	3.842	228.727	228.734
℄ East Abut.	25+102.782	3.872	228.703	228.703
Back East Abut.	25+102.932	3.874	228.702	228.702

GIRDER 6

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back West Abut.	25+093.214	6.244	228.976	228.976
℄ West Abut.	25+093.363	6.242	228.974	228.974
C	25+096.303	6.207	228.948	228.955
D	25+099.244	6.201	228.925	228.931
℄ East Abut.	25+102.592	6.229	228.900	228.900
Back East Abut.	25+102.741	6.231	228.899	228.899



PLAN

NOTES

For Dead Load Deflection Diagram and Fillet Heights, See Sheet 3.

For Girders 1 thru 3 and ℄ of Roadway, See Sheet 3.

All dimensions are in millimeters (mm) except as noted.

TOP OF SLAB ELEVATIONS-2
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

3117-049-0055.DGN

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	68
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.682	-5.845	228.040
A	25+087.738	-5.964	228.006
B	25+090.797	-6.053	227.974
E. End West Appr. Slab.	25+093.857	-6.112	227.945

NORTH EDGE OF NORTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.629	-3.600	228.227
A	25+087.659	-3.600	228.203
B	25+090.690	-3.600	228.179
E. End West Appr. Slab.	25+093.722	-3.600	228.155

℄ ROADWAY AND P.G.L.

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.546	0.000	228.526
A	25+087.541	0.000	228.502
B	25+090.536	0.000	228.479
E. End West Appr. Slab.	25+093.532	0.000	228.455

℄ STRUCTURE and STAGE CONSTRUCTION LINE

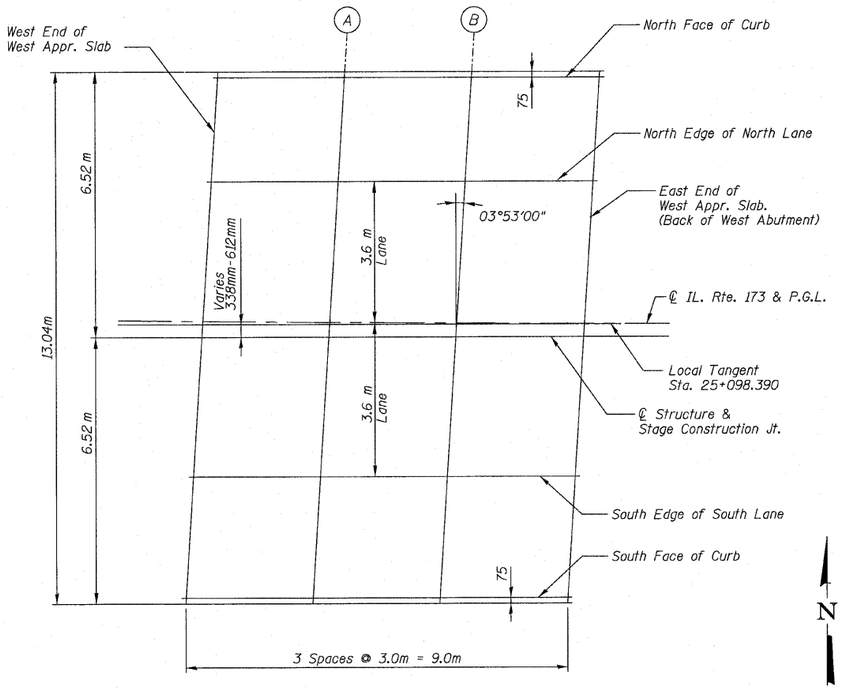
Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.533	0.613	228.526
A	25+087.525	0.492	228.502
B	25+090.519	0.401	228.479
E. End West Appr. Slab.	25+093.515	0.339	228.455

SOUTH EDGE OF SOUTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.465	3.600	228.825
A	25+087.425	3.600	228.802
B	25+090.386	3.600	228.779
E. End West Appr. Slab.	25+093.347	3.600	228.755

SOUTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab.	25+084.389	7.071	229.114
A	25+087.320	6.949	229.081
B	25+090.253	6.855	229.050
E. End West Appr. Slab.	25+093.187	6.790	229.021



PLAN
West Approach Slab

NOTE

All dimensions are in millimeters (mm) except as noted.

TOP OF WEST APPROACH SLAB ELEVATIONS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

3117-049-0055.DGN

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	6%
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

SHEET NO. 6
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+103.774	-6.099	227.868
E	25+106.834	-6.031	227.849
F	25+109.892	-5.934	227.833
E. End East Appr. Slab	25+112.947	-5.807	227.819

NORTH EDGE OF NORTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+103.558	-3.600	228.077
E	25+106.599	-3.600	228.053
F	25+109.642	-3.600	228.029
E. End East Appr. Slab	25+112.689	-3.600	228.005

℄ IL. RTE. 173 AND P.G.L.

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+103.253	0.000	228.378
E	25+106.258	0.000	228.354
F	25+109.265	0.000	228.331
E. End East Appr. Slab	25+112.276	0.000	228.307

℄ STRUCTURE and STAGE CONSTRUCTION LINE

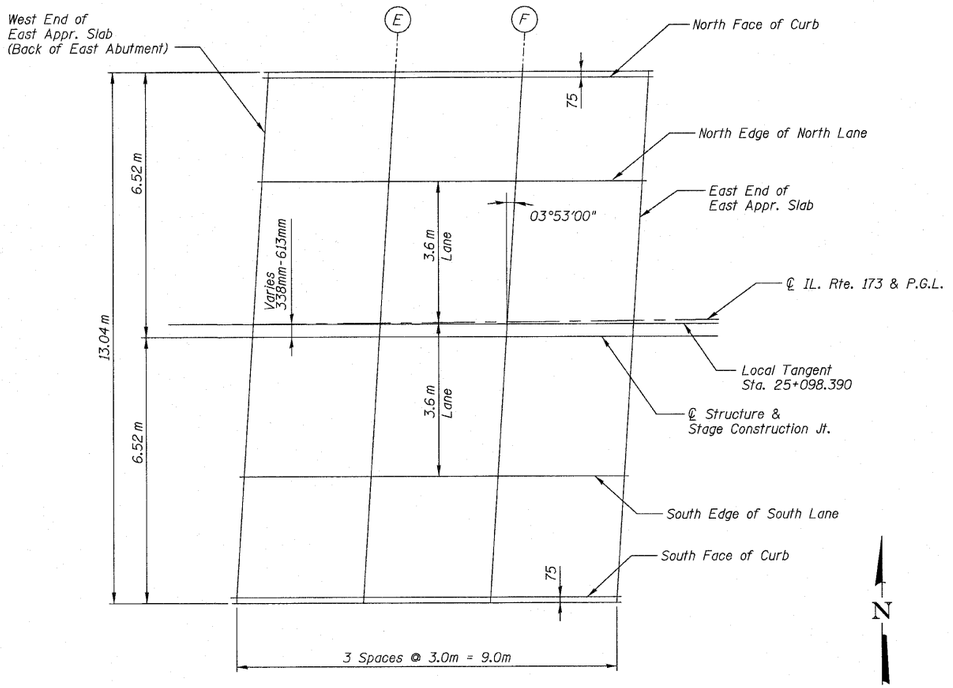
Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+103.225	0.338	228.378
E	25+106.220	0.400	228.354
F	25+109.215	0.491	228.331
E. End East Appr. Slab	25+112.207	0.611	228.307

SOUTH EDGE OF SOUTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+102.955	3.600	228.679
E	25+105.925	3.600	228.656
F	25+108.897	3.600	228.632
E. End East Appr. Slab	25+111.872	3.600	228.609

SOUTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	25+102.697	6.776	228.945
E	25+105.632	6.832	228.926
F	25+108.565	6.917	228.910
E. End East Appr. Slab	25+111.497	7.031	228.896



PLAN
East Approach Slab

NOTE

All dimensions are in millimeters (mm) except as noted.

TOP OF EAST APPROACH SLAB ELEVATIONS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

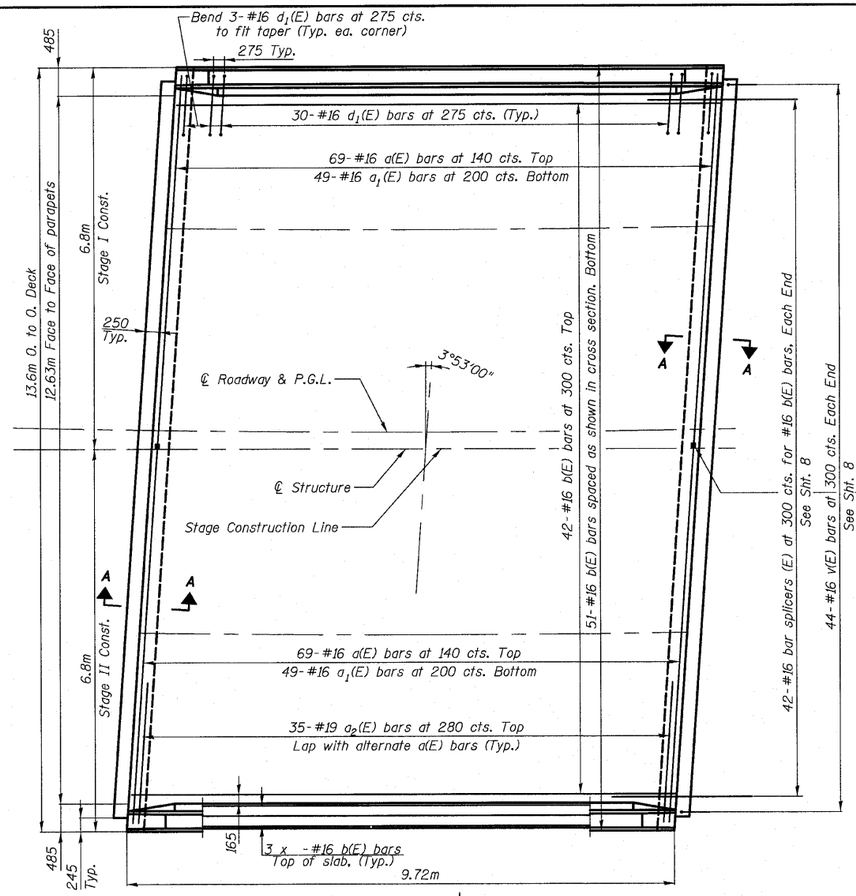
3117-049-0055.DGN

CONTRACT NO. 62037

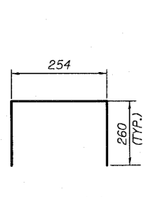
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	78
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
17 SHEETS

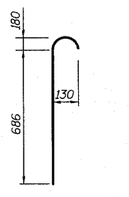
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



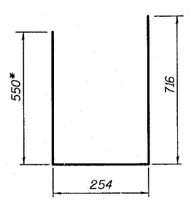
69 Bar Splicers (E) at 140 cts. for #16 d(E) bars, Top.
49 Bar Splicers (E) at 200 cts. for #16 a_1(E) bars, Bottom.



BAR s_3(E)

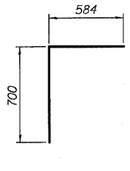


BAR s_2(E)

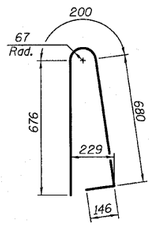


BAR s_1(E)

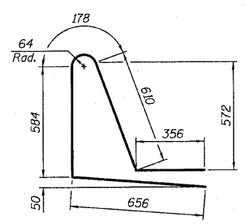
*field trim bar to maintain clr at approach seat



BAR v(E)



BAR d(E)



BAR d_1(E)

SUPERSTRUCTURE BILL OF MATERIAL

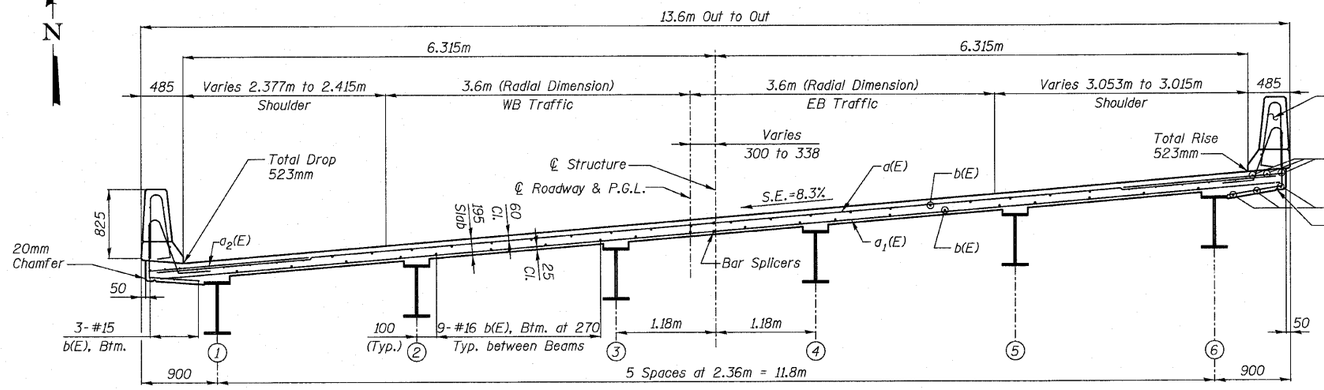
Bar	No.	Size	Length(m)	Shape
d(E)	138	#16	6.685	
d_1(E)	98	#16	6.421	
d_2(E)	70	#19	2.000	
b(E)	99	#16	9.640	
d(E)	72	#16	1.702	
d_1(E)	72	#16	2.384	
e(E)	28	#16	4.770	
e_1(E)	2	#25	9.640	
e_2(E)	2	#16	9.640	
m(E)	24	#16	3.270	
m_1(E)	4	#16	6.732	
m_2(E)	2	#16	1.970	
m_3(E)	2	#16	4.330	
m_4(E)	4	#16	4.670	
m_5(E)	4	#16	2.260	
m_6(E)	2	#16	4.390	
m_7(E)	2	#16	2.030	
s_1(E)	92	#16	1.520	
s_2(E)	92	#16	0.866	
s_3(E)	92	#16	0.774	
v(E)	88	#16	1.284	
Reinforcement Bars Epoxy Coated		kg	5850	
Concrete Superstructure		m^3	39	

NOTES

Bars designated (E) shall be epoxy coated.
See Sheet No. 8 for Superstructure Details.
See Sheet No. 8 for parapet reinforcement.
For Section A-A, See Sheet No. 8.
◯ Indicates Girder Number.
All dimensions are in millimeters (mm) except as noted.
See Sheet No. 16 for Bar Splicer Details.

PLAN

N



CROSS SECTION
(Looking East)

NOTES

See Sheet No. 16 for Bar Splicer Details.
Place Transverse Bars Parallel to Skew.

MINIMUM BAR LAP

#16 bar = 470
#19 bar = 610
#25 bar = 1.010m

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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DECK PLAN AND CROSS SECTION
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

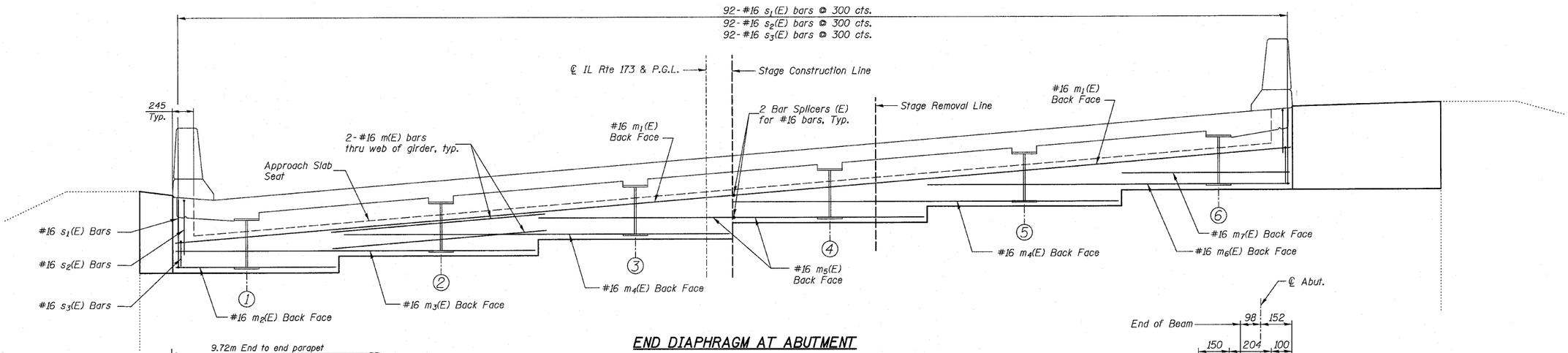
3117-049-0055.DGN

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	71
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

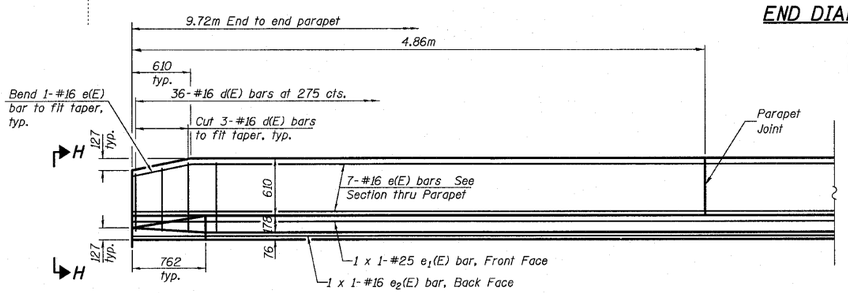
SHEET NO. 8
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

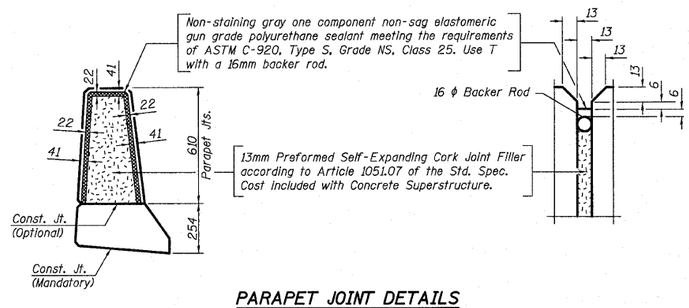


END DIAPHRAGM AT ABUTMENT

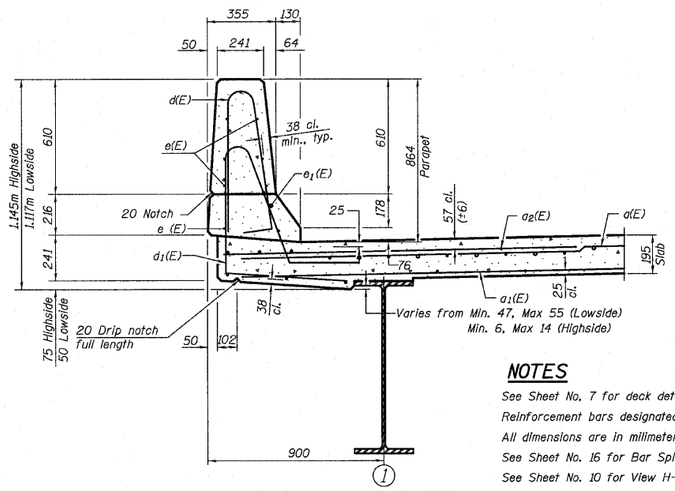
Looking East
East Abutment Shown
West Abutment Similar



INSIDE ELEVATION OF PARAPET



PARAPET JOINT DETAILS

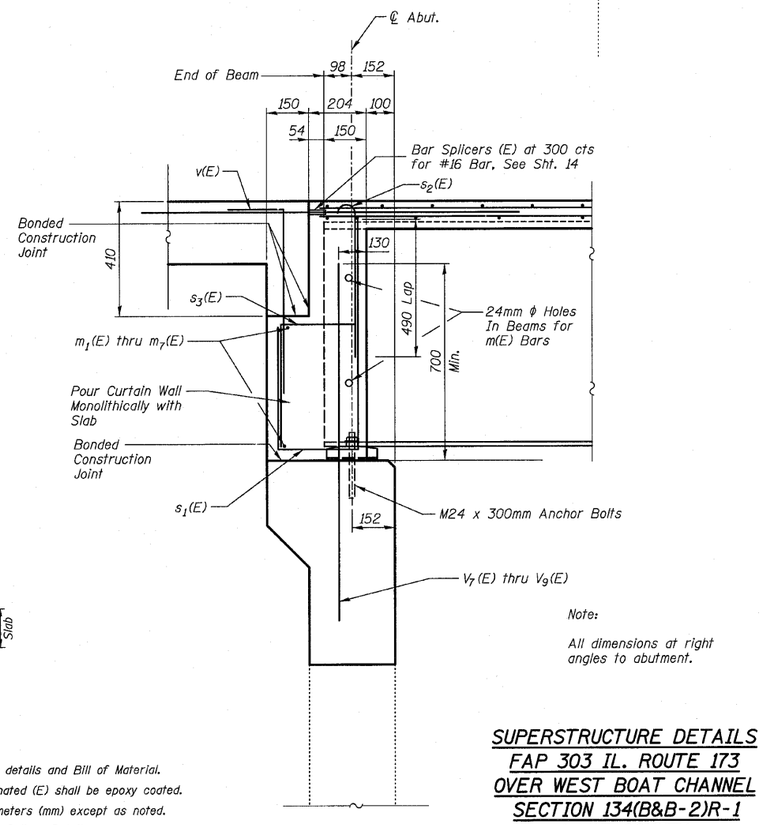


SECTION THRU PARAPET

Lowside Shown
Highside Similar

NOTES

See Sheet No. 7 for deck details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Sheet No. 16 for Bar Splicer Details.
See Sheet No. 10 for View H-H



SECTION A-A

SUPERSTRUCTURE DETAILS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

Applied Technologies

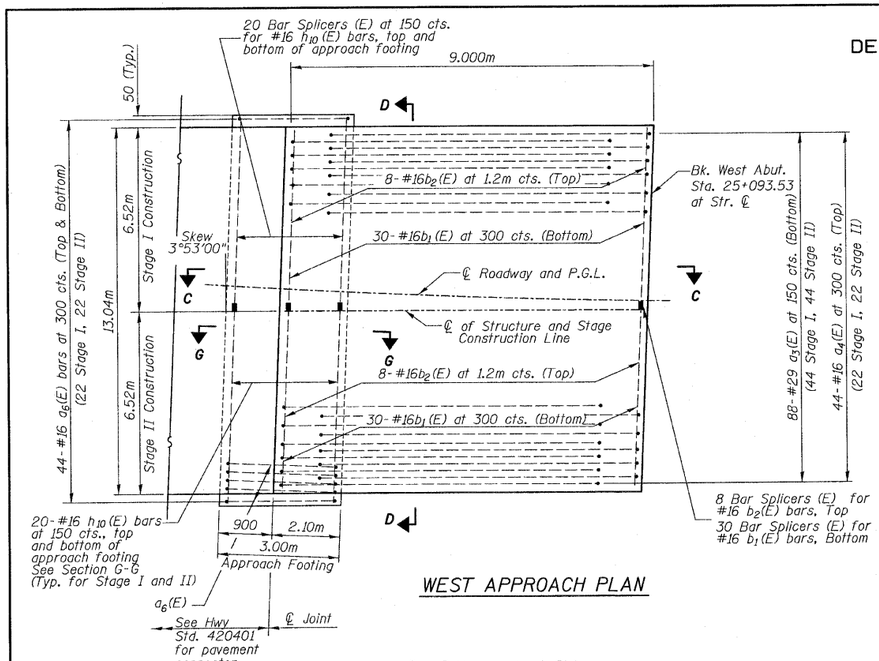
3117-049-0055.DGN

CONTRACT NO. 62037

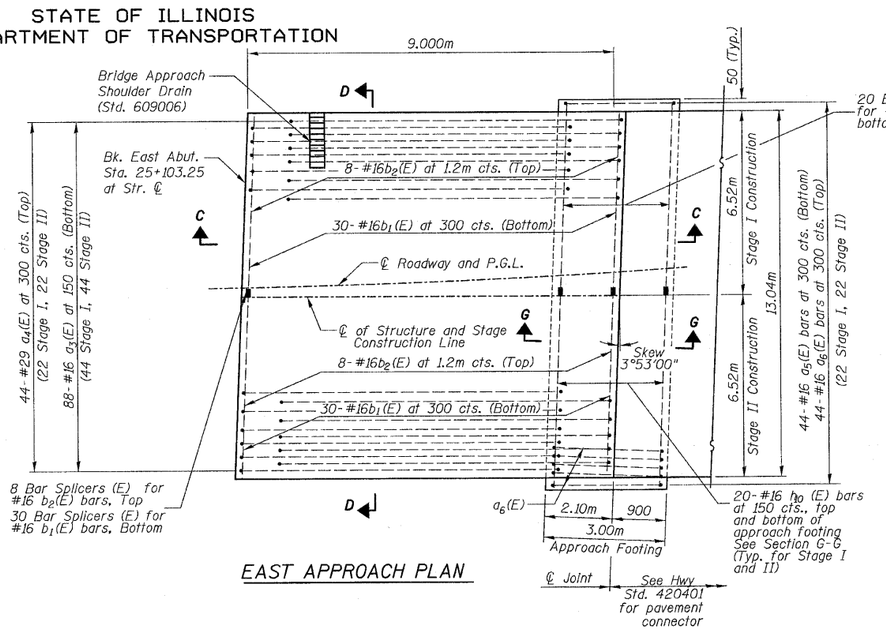
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2R-1	LAKE	137	72
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 9
17 SHEETS



WEST APPROACH PLAN



EAST APPROACH PLAN

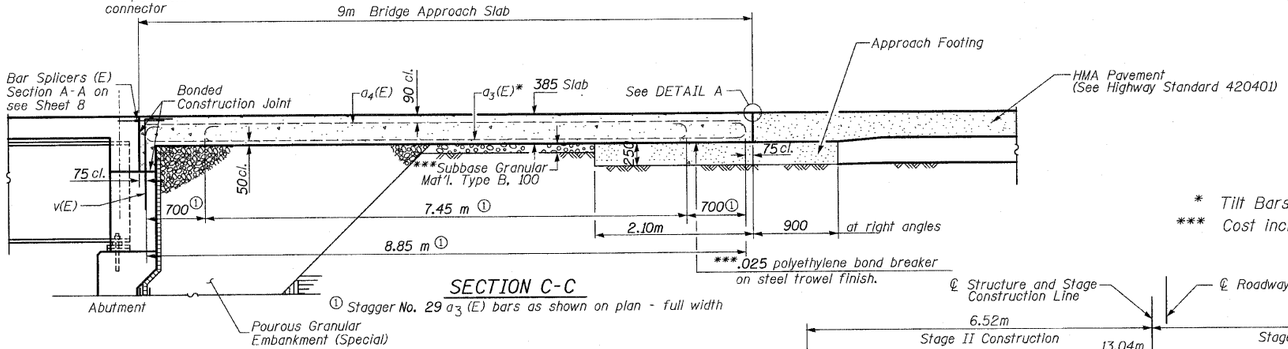
BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a_3(E)	176	#29	8.987	
a_4(E)	88	#16	8.850	
a_6(E)	176	#16	2.900	
b_1(E)	120	#16	6.455	
b_2(E)	32	#16	6.455	
h_{10} (E)	160	#16	6.505	

*** Concrete Structures	m^3	20
*** Concrete Superstructure	m^3	91
Reinforcement Bars, Epoxy Coated	kg	12,820

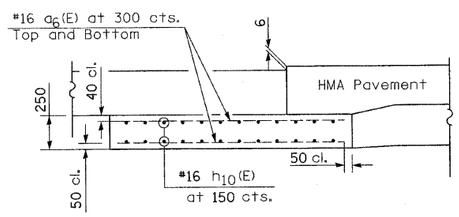
The above table contains information and quantities for two Bridge Approach Slabs.

See Sheet 10 for Bar Diagrams.

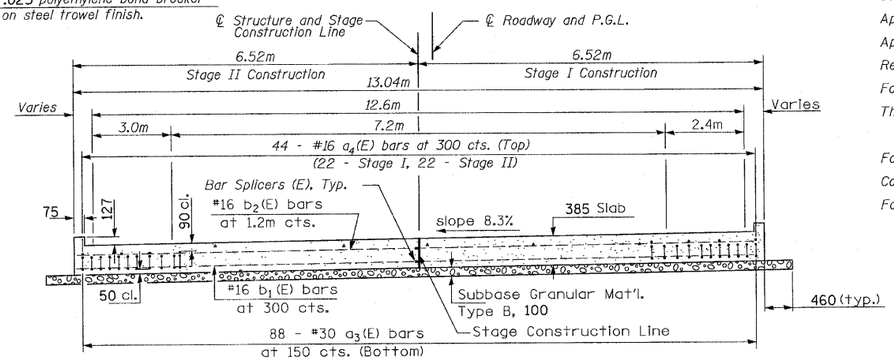


SECTION C-C

* Tilt Bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.



SECTION G-G - FLEXIBLE PAVEMENT
(Showing reinforcement)



SECTION D-D
(See Plan for Dimensions not shown)

DESIGN STRESSES
fy = 400 MPa
f'c = 24 MPa
n = 8.5

NOTES:

All dimensions are in millimeters unless otherwise noted.
See sheet 10 for Bar Bending Details.
See sheet 10 of 17 for Detail A and View H-H.
Approach slab concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 7 of 17.
The approach footing maximum applied service bearing pressure (Qmax) = 100 kPa.
For bar splicer details, see sheet 16 of 17.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 1 of 17.

DESIGNED	RGT
CHECKED	RJC/JRF
DRAWN	RDS
CHECKED	PAT2

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BRIDGE APPROACH SLAB -1
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

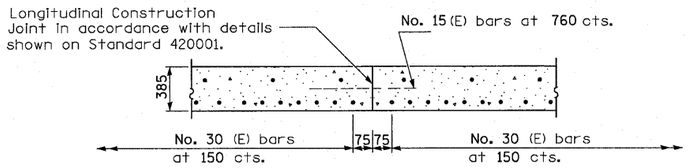
3117APPROACHPVT.DGN

CONTRACT NO. 62037

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

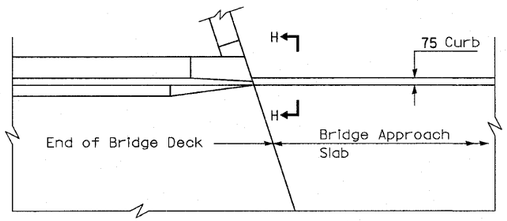
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	73
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
17 SHEETS

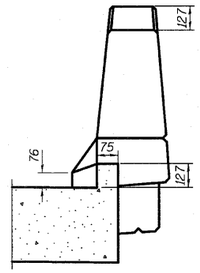


LONGITUDINAL CONSTRUCTION JOINT

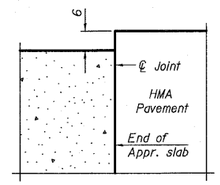
As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.



PARAPET TO CURB TRANSITION

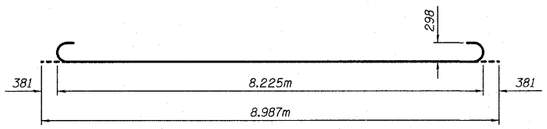


VIEW H-H

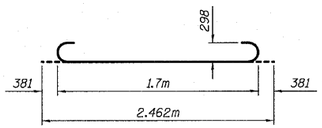


FLEXIBLE PAVEMENT

DETAIL A



BAR a(E)



BAR a_2(E)

NOTES:

All dimensions are in millimeters unless otherwise shown.

BRIDGE APPROACH SLAB -2
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

DESIGNED	RGT
CHECKED	RJC/JRF
DRAWN	RDS
CHECKED	PAT2

AppliedTechnologies

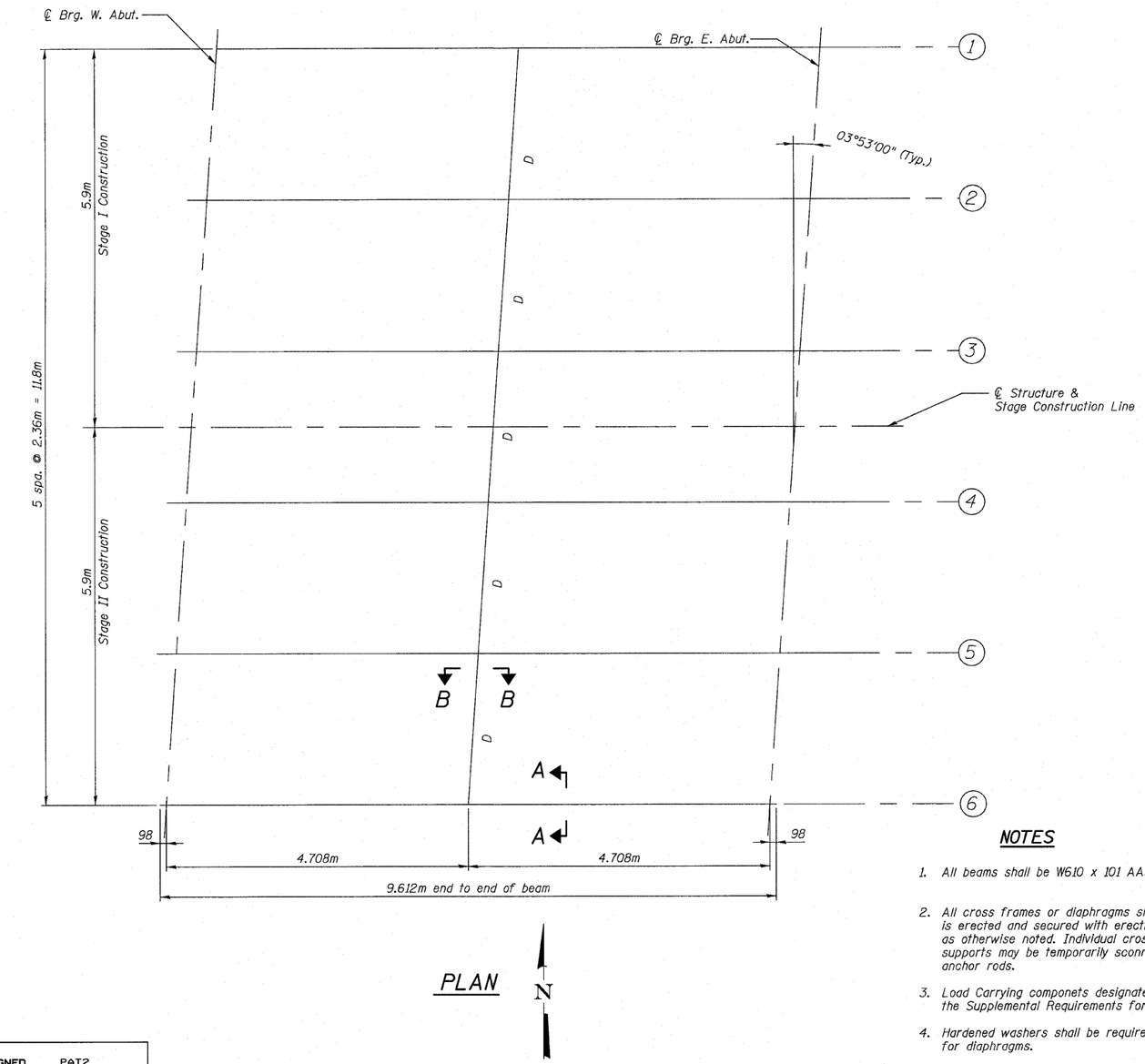
3117APPROACHPVT.DGN

CONTRACT NO. 62037

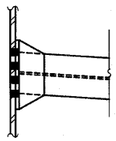
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	74
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 11
17 SHEETS

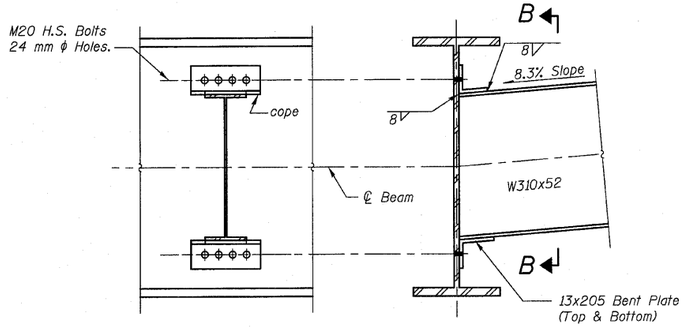
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



TOP VIEW



SECTION B-B

SECTION A-A

NOTES

1. All beams shall be W610 x 101 AASHTO M270 grade 345 (NTR)
2. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily sconnected to install bearing anchor rods.
3. Load Carrying componets designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness Zone 2.
4. Hardened washers shall be required over all oversize holes for diaphragms.
5. For Steel Beam Details See Sheet No. 12.
6. All dimensions are in millimeters (mm) except as noted.
7. Bearings and Structural Steel are Furnished in a separate contract. Cost for erecting these items is included in this contract as "Erecting Structural Steel"

DIAPHRAGM D

5 Required

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

AppliedTechnologies

3117-049-2055.DGN

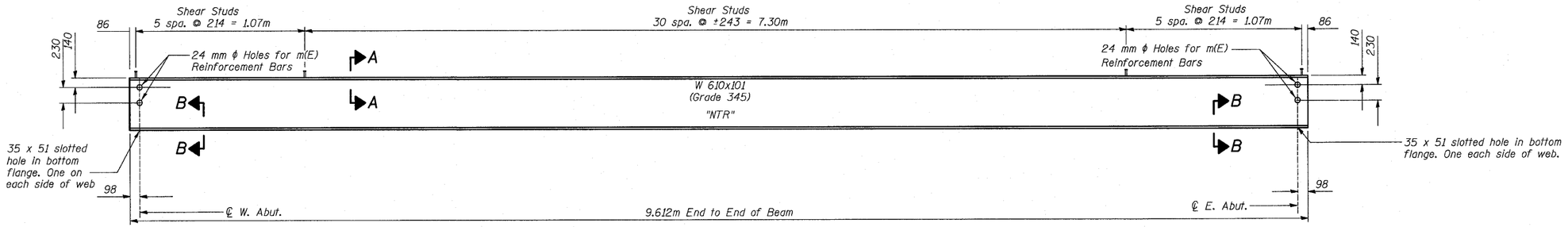
FRAMING PLAN
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	76
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 12
17 SHEETS

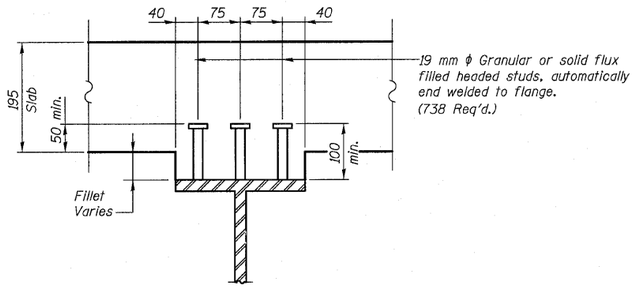
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



GIRDER ELEVATION

(Looking North)

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



SECTION A-A

INTERIOR GIRDER MOMENT TABLE		0.5 Sp. 1		
Is	(10^6 mm⁴)	764		
Ic (n)	(10^6 mm⁴)	2876		
Ic (3n)	(10^6 mm⁴)	2205		
Ss	(10^3 mm³)	2534		
Sc (n)	(10^3 mm³)	4487		
Sc (3n)	(10^3 mm³)	4029		
℘	(kN/m)	12.4		
M℘	(kN·m)	134		
s℘	(kN/m)	7.23		
Ms℘	(kN·m)	86		
M℄	(kN·m)	365		
M (Imp)	(kN·m)	110		
$5/3$[M℄+M(Imp)]	(kN·m)	837		
Ma	(kN·m)	1374		
Mu	(kN·m)	1821		
fs℘ (non-comp)	(MPa)	57.6		
fs℘ (comp)	(MPa)	21.3		
fs $5/3$ (℄+Imp)	(MPa)	188		
fs (Overload)	(MPa)	263		
VR	(kN)	235		

INTERIOR GIRDER REACTION TABLE		Abuts.	
R℘	(kN)	95.6	
R℄	(kN)	180.8	
Imp.	(kN)	54.2	
R (Total)	(kN)	330.6	

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

VR is the maximum Live Load + Impact shear range in span.

Ma (Applied Moment)=1.3[M℘ + Ms℘ + $5/3$(M℄ + M(Imp))].

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to M℘ + Ms℘ + $5/3$(M℄ + M(Imp)).

TOP OF GIRDER ELEVATIONS

(FOR FABRICATION ONLY)

Location	℄ W. Abut.	℄ E. Abut.
Girder 1	227.772	227.697
Girder 2	227.969	227.895
Girder 3	228.166	228.092
Girder 4	228.363	228.289
Girder 5	228.560	228.486
Girder 6	228.757	228.683

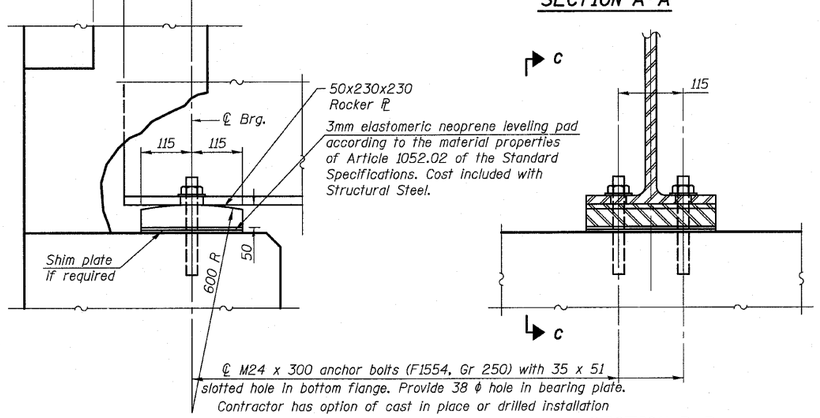
NOTES

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 250 (Fy=250MPa). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

Bearings and Structural Steel are Furnished in a separate contract. Cost for erecting these items is included in this contract as "Erecting Structural Steel"



SECTION C-C

SECTION B-B

FIXED BEARING

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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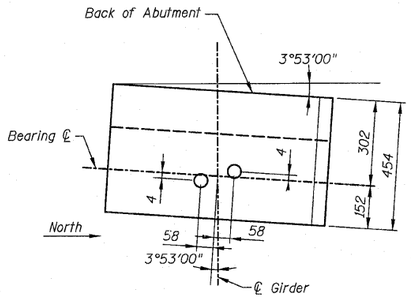
3117-043-02S5.DGN

FRAMING DETAILS AND DESIGN DATA TABLES
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL. 173	134(B&B-2)R-1	LAKE	137	76
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

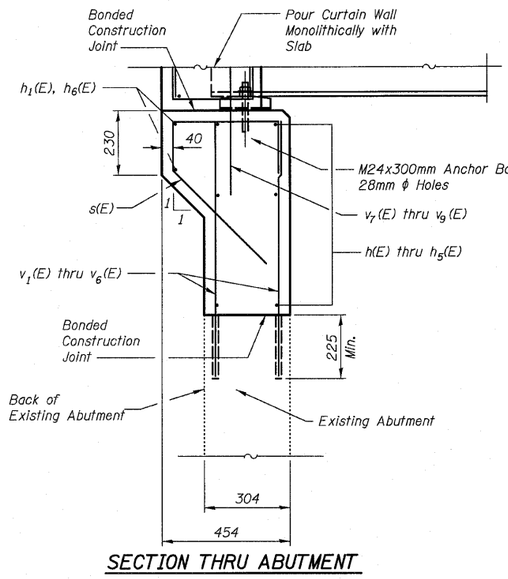
SHEET NO. 13
17 SHEETS



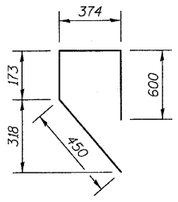
ANCHOR BOLT LAYOUT DETAIL

West Abutment shown
East Abutment similar

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU ABUTMENT



Bar s(E)

NOTES

See Sheet No. 16 for Bar Splicer Details.

Reinforcement bars designated (E) shall be epoxy coated.

See Sheet No. 8 for $v_7(E)$ thru $v_9(E)$ details.

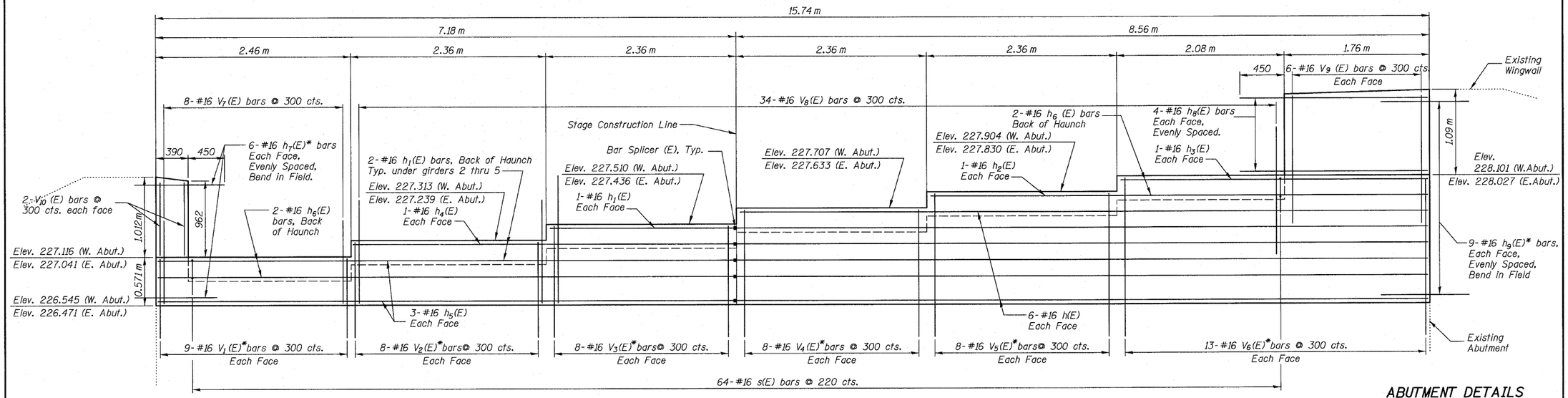
See Sheet No. 12 for Girder Bearing Details.

Pour steps monolithically with cap.

Place reinforcement in cap to miss anchor bolts.

ABUTMENT BILL OF MATERIALS

Bar	No.	Size	Length(m)	Shape
h(E)	24	#16	8.480	——
h_1(E)	20	#16	2.280	——
h_2(E)	4	#16	6.120	——
h_3(E)	4	#16	3.760	——
h_4(E)	4	#16	4.640	——
h_5(E)	12	#16	7.100	——
h_6(E)	4	#16	1.990	——
h_7(E)	24	#16	1.070	——
h_8(E)	16	#16	2.170	——
h_9(E)	36	#16	0.680	——
s(E)	128	#16	1.597	⌐
v_1(E)	36	#16	0.746	——
v_2(E)	32	#16	0.943	——
v_3(E)	32	#16	1.140	——
v_4(E)	32	#16	1.337	——
v_5(E)	32	#16	1.534	——
v_6(E)	52	#16	1.731	——
v_7(E)	8	#16	1.231	——
v_8(E)	68	#16	1.400	——
v_9(E)	24	#16	1.550	——
v_{10}(E)	8	#16	0.882	——
Reinforcement Bars Epoxy Coated			kg	1730
Concrete Structures			m^3	14



ABUTMENT DETAILS

Looking East
East Abutment Shown
West Abutment Similar

* Epoxy grout bars in 225mm min drilled holes according to section 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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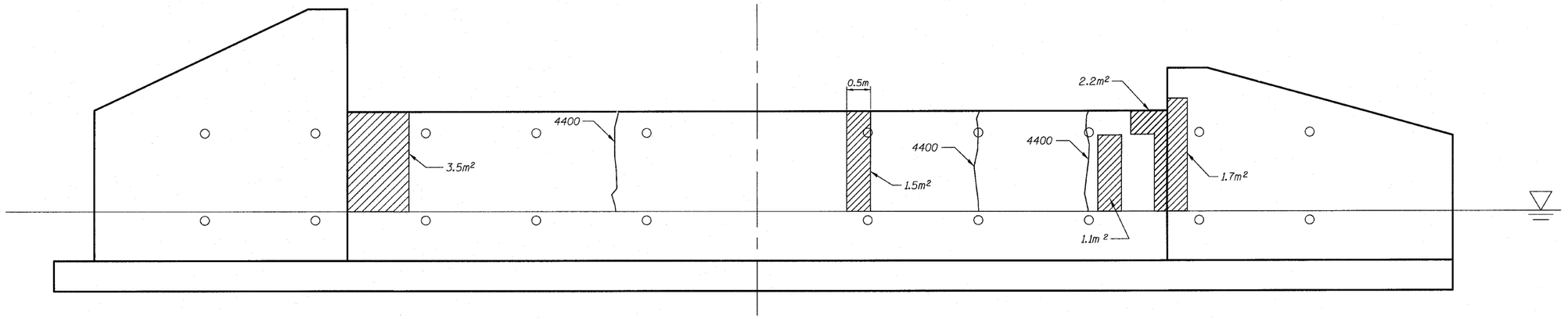
ABUTMENT DETAILS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	77
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 14
17 SHEETS

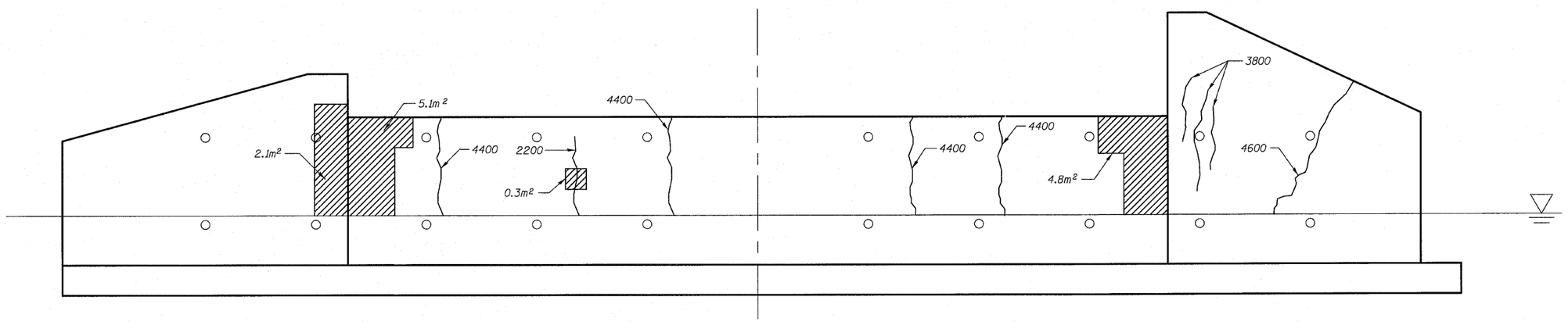
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NOTE:
Contractor to prevent debris from falling into waterway.

EXISTING WEST ABUTMENT
(Looking West)

LEGEND
- Formed Concrete Repair (<=125mm)
- 1800 → Epoxy Crack Injection
- All Crack Lengths are in mm
- All Areas are in m²



EXISTING EAST ABUTMENT
(Looking East)

BILL OF MATERIALS

ITEM	UNIT	TOTAL
Structural Repair of Concrete (<=125mm)	m²	23
Epoxy Crack Injection	m	42

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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3117-049-0055.DGN

SUBSTRUCTURE REPAIR
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

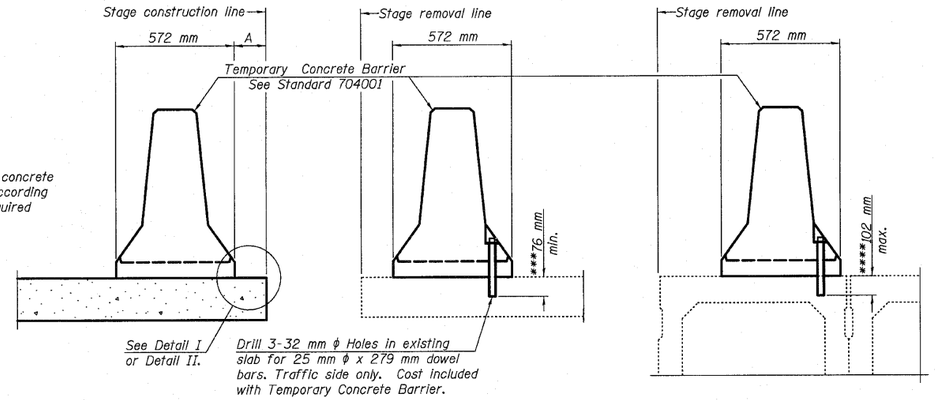
CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2)R-1	LAKE	137	78
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 1.067 m or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 1.067 m.



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 25 mm x 178 mm x 254 mm steel ℙ to the top layer of couplers with 2- 16 mm ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 25 mm x 178 mm x 254 mm steel ℙ to the concrete slab or concrete wearing surface with 2- 16 mm ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

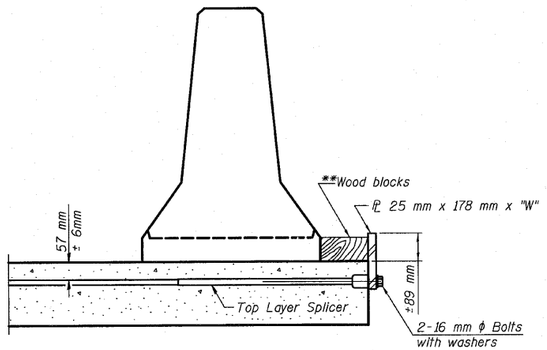
Cost of anchorage is included with Temporary Concrete Barrier.

The 25 mm x 178 mm x 254 mm 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.

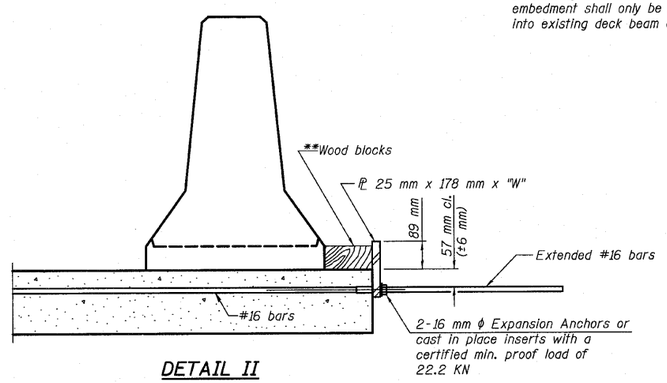
SECTIONS THRU SLAB OR DECK BEAM

*** 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.

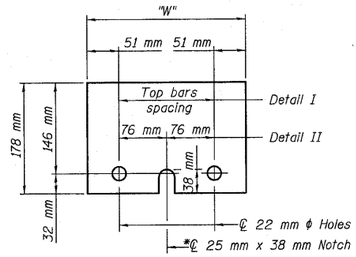
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 25 mm x 178 mm x 254 mm

* 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.

"W" = Top bars spacing + 102 mm

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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3117-049-00155.DGN

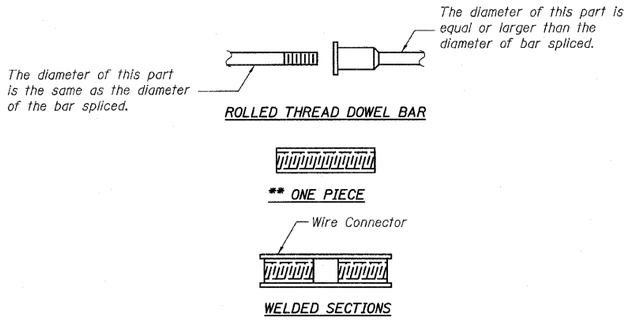
TEMPORARY CONCRETE BARRIER
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	79
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

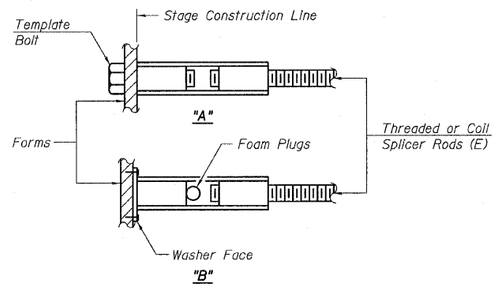
SHEET NO. 16
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 400 MPa yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

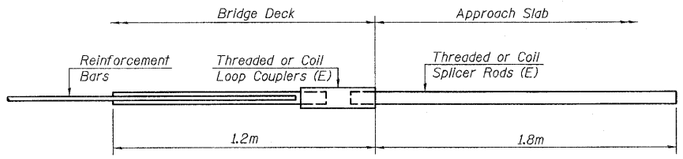
① Minimum Capacity (Tension in KN) = $1.25 \times 10^{-3} \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in KN) = $1.25 \times 10^{-3} \times fs_{allow} \times A_t$

Where fy = Yield strength of lapped reinforcement bars in MPa.
fs_{allow} = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

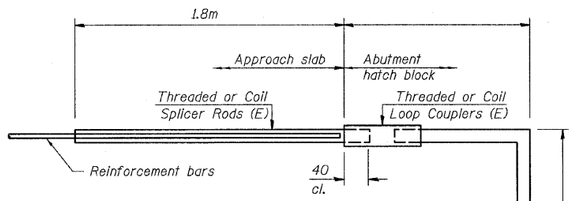
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity KN - tension	Min. Pull-Out Strength KN - tension
#16	610	100	40
#19	790	150	60
#25	1.04m	250	100
#29	1.37m	350	140

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



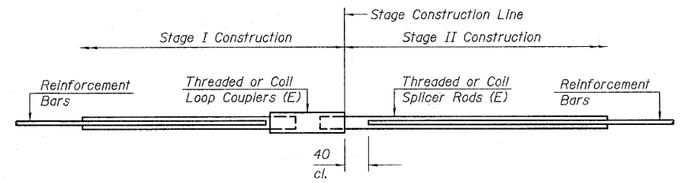
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #16 bar
Min. Capacity = 100 KN - tension
Min. Pull-out Strength = 40 KN - tension
No. Required = 84



FOR PILE BENT ABUTMENTS

Bar Splicer for #16 bar
Min. Capacity = 100 KN - tension
Min. Pull-out Strength = 40 KN - tension
No. Required = 0



STANDARD

Bar Size	No. Assemblies Required	Location
#16	118	Deck
#16	4	Diaphragm
#16	20	Abutment
#16	80	Approach Footing
#16	76	Approach Pavement

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

BSD-1 10-31-02

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3117-049-0055.DGN

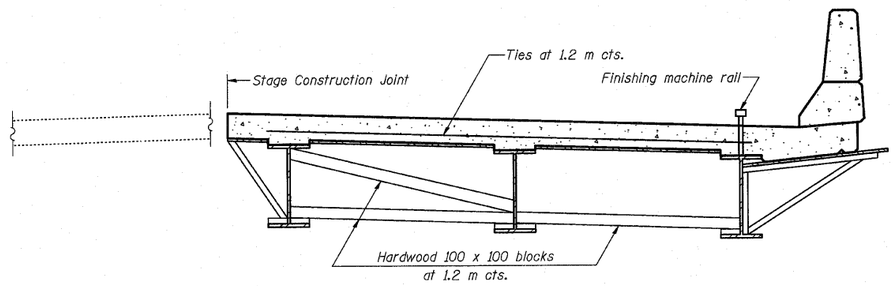
BAR SPLICER DETAILS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

CONTRACT NO. 62037

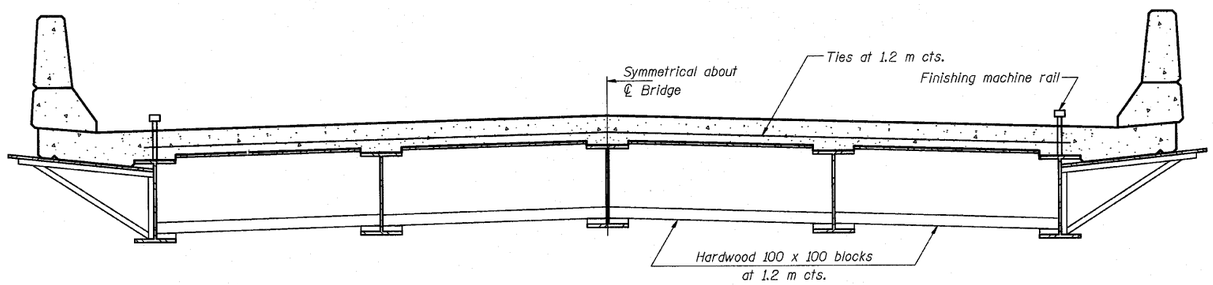
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2R-1	LAKE	137	88
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 17
17 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

When cantilever forming brackets are used, the work shall be done according to Article 503.06, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders supporting cantilever forming brackets shall be tied together at 1.2 m intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2

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CANTILEVER FORMING BRACKETS
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055

3117-249-2055.DGN

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	81
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
23 SHEETS

Bench Mark: USGS reference mark on S.W. wingwall of structure 049-0055 (Elev. 228.867)

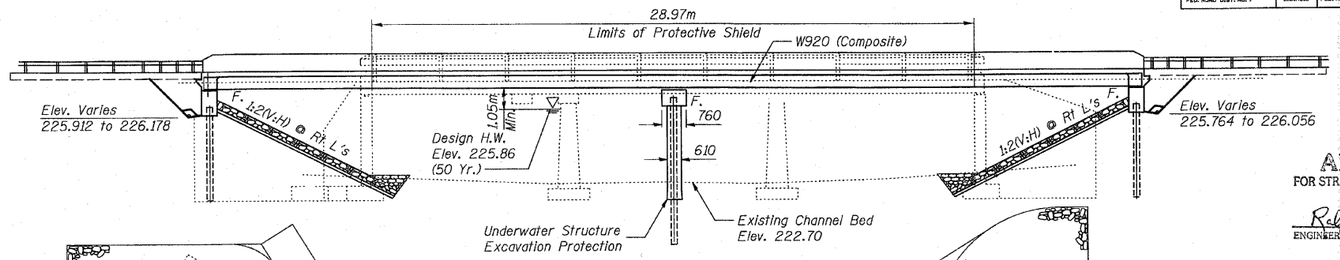
Existing Structure:
S.N. 049-0056, three span 29.58m Back to Back abutments, 15.748m Out to Out, R.C. slab bridge on closed abutments. Built as IL Route 173, Section 134B-BR at Sta. 860+77 (English) in 1931. The contractor shall remove the existing structure and replace it with a two span steel girder composite superstructure on integral abutments. The road shall be kept open to traffic at all times utilizing stage construction.

Note: All dimensions in millimeters (mm) except as noted.

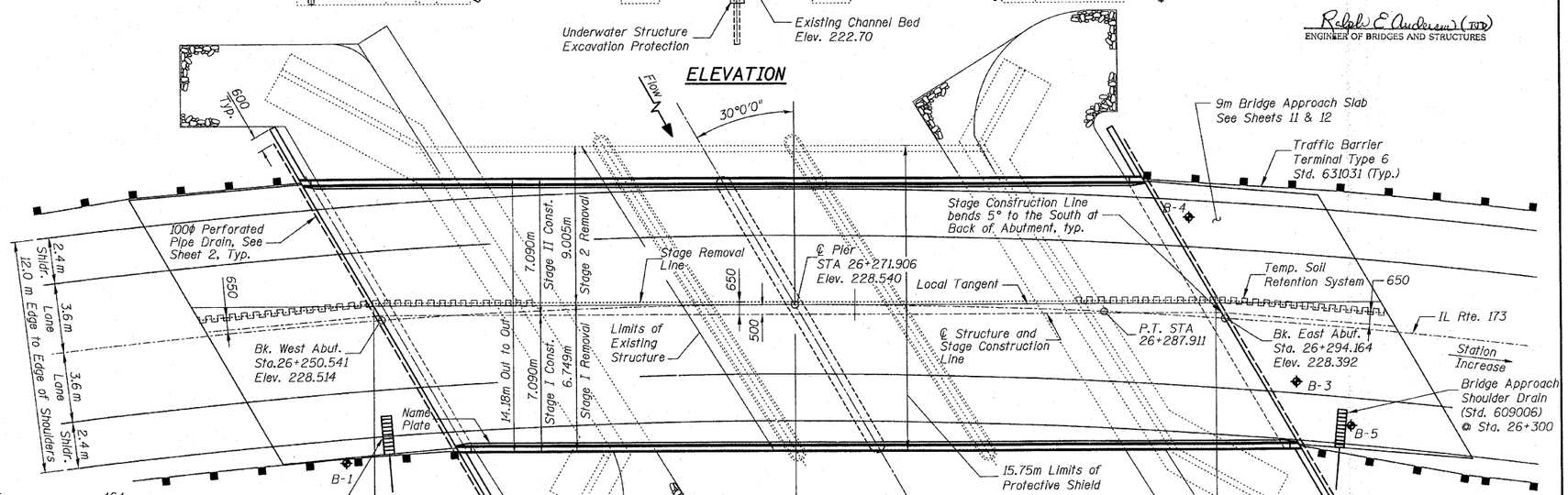
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

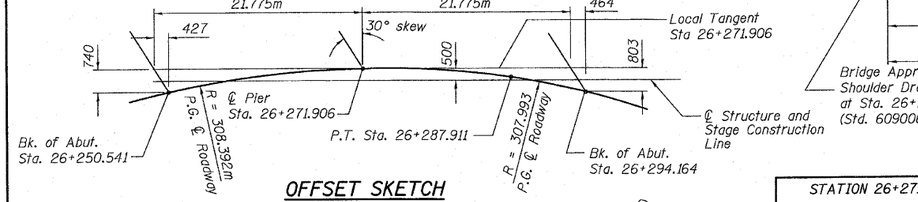
INDEX OF SHEETS



ELEVATION



PLAN



OFFSET SKETCH

HORIZONTAL CURVE DATA-1

Δ= 20° 20' 01"
T= 55.304m
R= 308.392m
L= 109.443m
E= 4.920m
S.E.= 0.054
P.C. STA= 26+178.468
P.T. STA= 26+287.911
P.I. STA= 26+233.772

HORIZONTAL CURVE DATA-2

Δ= 18° 59' 40"
T= 51.525m
R= 307.993m
L= 102.100m
E= 4.280
S.E.= 0.054
P.C. STA= 26+287.911
P.T. STA= 26+390.011
P.I. STA= 26+339.436

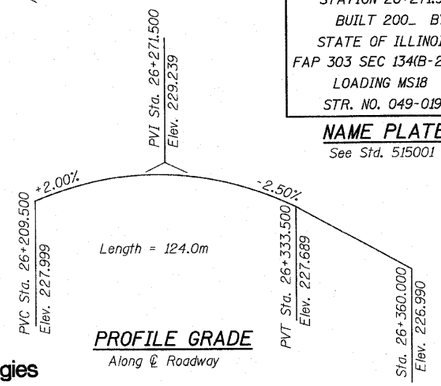
DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

3116-049-0198.dgn

Applied Technologies

STATION 26+271.906
BUILT 200_ BY
STATE OF ILLINOIS
FAP 303 SEC 134(B-2) R-1
LOADING MS18
STR. NO. 049-0198

NAME PLATE
See Std. 515001



PROFILE GRADE
Along ℄ Roadway

LOADING MS18
Allow 2.4 kN/m² for future wearing surface.

DESIGN SPECIFICATIONS
AASHTO 1996, 1997 Through 2000 and 2002 Interims

DESIGN STRESSES
FIELD UNITS
f'_c = 24 MPa
f_y = 420 MPa (reinforcement)
f_y = 250 MPa (M270M Grade 250)
f_y = 345 MPa (M270M Grade 345)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.2

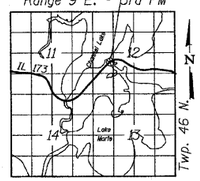
WATERWAY INFORMATION

Drainage Area = 2256 km2 Low Grade Elev. 226.7m ℄ Sta. 26+287

Flood	Freq. Yr.	Q C.M.S.	Opening Sq. M Exist.	Opening Sq. M Prop.	Natural H.W.E. Exist.	Natural H.W.E. Prop.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	0	62.10	61.00	225.46	225.46	0.00	0.00	225.46	225.46
NPDES	25	0	67.40	70.90	225.69	225.69	0.00	0.00	225.69	225.69
Design	50	0	71.40	73.00	225.86	225.86	0.00	0.00	225.86	225.86
Base	100	0	75.60	78.50	226.04	226.04	0.00	0.00	226.04	226.04
Overtopping		0					0.00	0.00		
Max. Calc.	500	0	84.90	91.20	226.44	226.44	0.00	0.00	226.44	226.44

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E Anderson (JVR)
ENGINEER OF BRIDGES AND STRUCTURES

ROBERT C. JANKE
081-004698
REGISTERED STRUCTURAL ENGINEER
OF ILLINOIS
EXPIRES 11/30/2010
8/1/10



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2R-1	LAKE	137	82
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164, Type 1, mechanically galvanized bolts. Bolts 22mm ϕ, holes 24mm ϕ, unless otherwise noted.

Calculated mass of Structural Steel = 6765 Kg (Grade 250)
79,485 Kg (Grade 345)

No field welding is permitted except as specified in the Contract Documents.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of ASTM A 706m Gr. 420. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

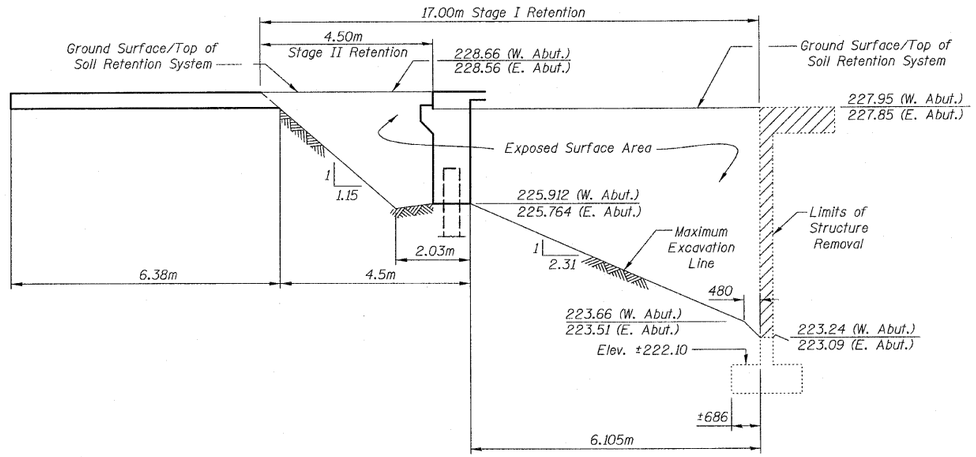
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Two 3 mm adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

All dimensions are in millimeters (mm) except as noted.

Slipforming of the parapets is not allowed.



TEMPORARY SOIL RETENTION SYSTEM

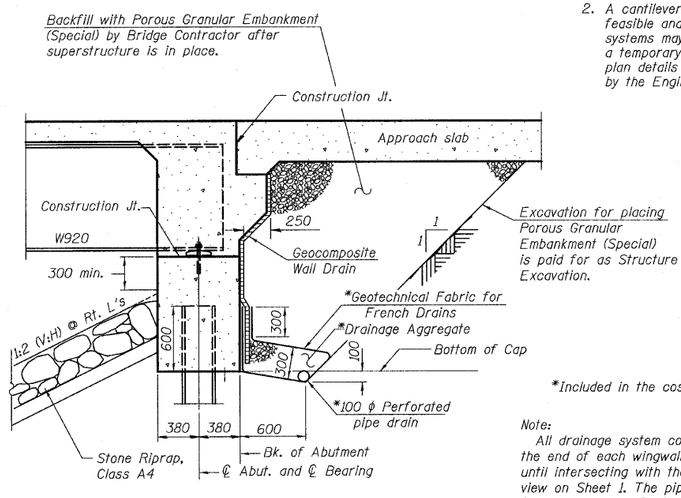
1. Slopes and distances shown along alignment of sheeting. (for structure with 30 degree skew).
2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	m^3	0	230	230
Stone Riprap Class A4	m^2	0	1,005	1,005
Filter Fabric	m^2	0	1,065	1,065
Removal of Existing Structures	Each	1	0	1
Protective Shield	m^2	460	0	460
Structure Excavation	m^3	0	1,100	1,100
Underwater Structure Excavation Protection - Location 1*	Each	0	1	1
Temporary Soil Retention System	m^2	0	70	70
Concrete Encasement	m^3	0	7	7
Concrete Structures	m^3	0	117	117
Concrete Superstructure	m^3	270	0	270
Bridge Deck Grooving	m^2	780	0	780
Protective Coat	m^2	930	0	930
Erecting Structural Steel**	L. Sum	0.93	0	0.93
Stud Shear Connectors	Each	3,060	0	3,060
Bar Splicers	Each	751	126	877
Reinforcement Bars, Epoxy Coated	KG	38,790	8,090	46,880
Furnishing Steel Piles, HP310x79	Meter	0	380	380
Driving Piles	Meter	0	380	380
Test Pile Steel, HP310x79	Each	0	3	3
Name Plates	Each	1	0	1
Anchor Bolts, M24	Each	0	36	36
Geocomposite Wall Drain	m^2	0	100	100
Pipe Underdrains for Structures 100mm	m	0	60	60

*Location 1: Pier

**Furnishing Structural Steel is paid for under a separate contract

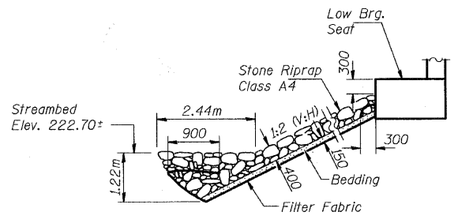


SECTION THRU INTEGRAL ABUTMENT

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

*Included in the cost of Pipe Underdrains for Structures.

Note:
All drainage system components shall extend to 600mm from the end of each wingwall except an outlet pipe shall extend until intersecting with the riprap slope as shown on the Plan view on Sheet 1. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101). Drainage components shall step at the change in elevation of the bottom of the abutment. Use a section of 100ϕ perforated pipe at a 45 degree slope while maintaining the typical French Drain dimensions.



STONE RIPRAP ANCHOR DETAIL

BILL OF MATERIAL, GENERAL DATA
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

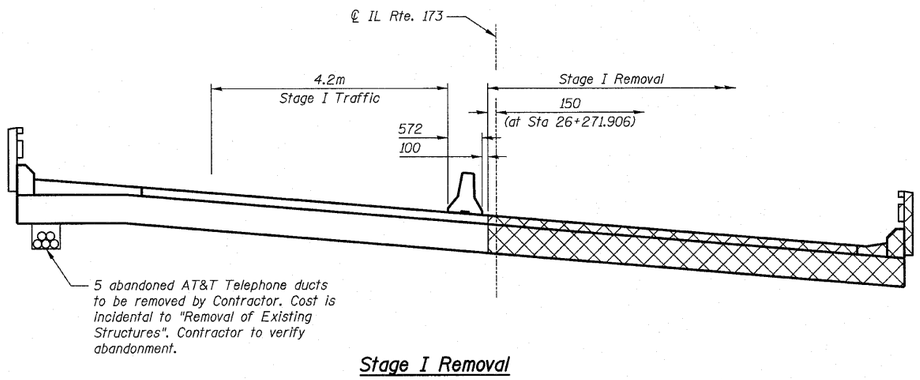
3116-049-0198.dgn

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	83
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

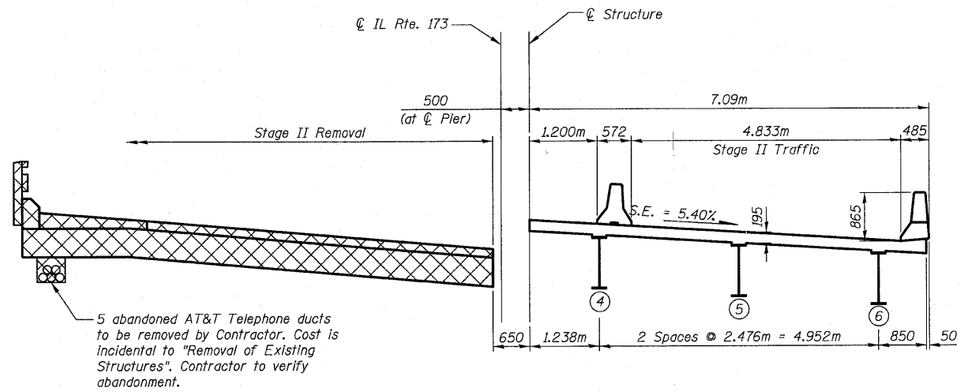
SHEET NO. 3
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



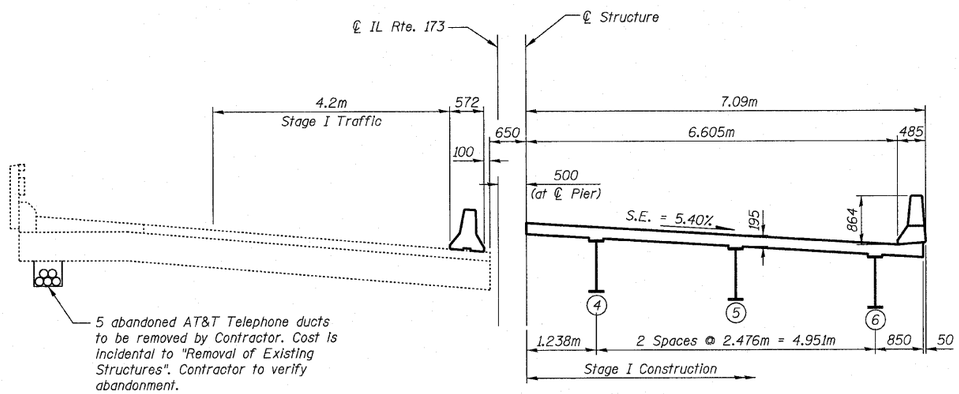
Stage I Removal
(Looking East)

All Dimensions at right angles unless otherwise noted



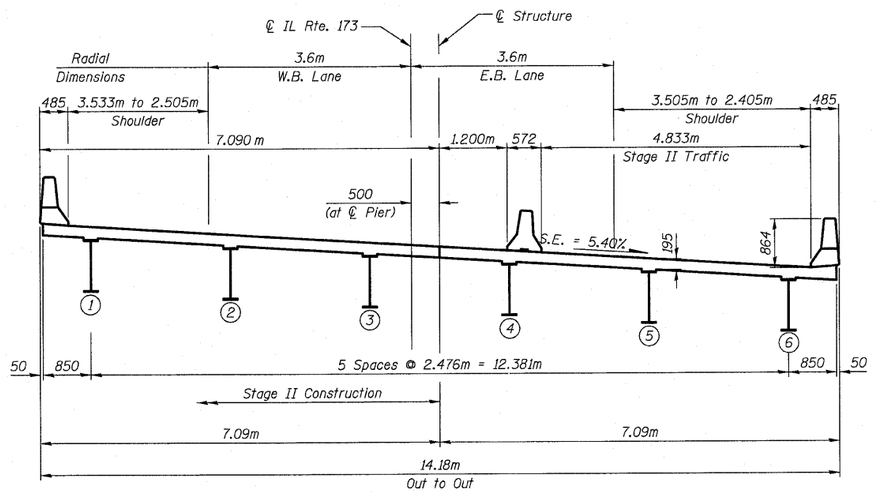
Stage II Removal
(Looking East)

All Dimensions at right angles unless otherwise noted



Stage I Construction
(Looking East)

All Dimensions at right angles unless otherwise noted



Stage II Construction
(Looking East)

All Dimensions at right angles unless otherwise noted

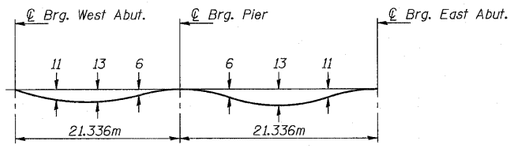
DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

STAGE CONSTRUCTION
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

3116-849-0198.dgn

CONTRACT NO. 62037



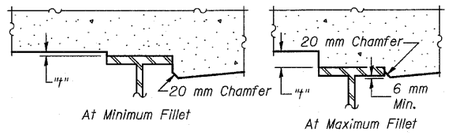
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on Sheet 5 of 23.

All offsets are in meters.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	84
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
23 SHEETS

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below and on Sheet 5 of 23. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on Sheet 5 of 23, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

GIRDER NO. 1

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+247.352	-6.688	228.857	228.857
℄ W. Abut.	26+247.780	-6.654	228.858	228.858
C	26+250.710	-6.433	228.862	228.870
D	26+253.643	-6.242	228.865	228.877
E	26+256.580	-6.078	228.867	228.880
F	26+259.520	-5.943	228.866	228.878
G	26+262.462	-5.837	228.864	228.872
H	26+265.406	-5.760	228.861	228.864
℄ Pier	26+268.680	-5.707	228.855	228.855
I	26+271.626	-5.690	228.848	228.851
J	26+274.572	-5.702	228.840	228.847
K	26+277.517	-5.742	228.830	228.841
L	26+280.461	-5.811	228.818	228.832
M	26+283.403	-5.908	228.805	228.817
N	26+286.344	-6.035	228.790	228.798
℄ E. Abut.	26+289.611	-6.208	228.772	228.772
Bk. E. Abut.	26+290.040	-6.234	228.769	228.769

GIRDER NO. 2

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+248.564	-4.109	228.725	228.725
℄ W. Abut.	26+248.996	-4.076	228.726	228.726
C	26+251.950	-3.868	228.730	228.737
D	26+254.909	-3.688	228.732	228.744
E	26+257.870	-3.537	228.733	228.746
F	26+260.834	-3.415	228.732	228.744
G	26+263.801	-3.322	228.729	228.737
H	26+266.768	-3.257	228.725	228.728
℄ Pier	26+270.070	-3.220	228.719	228.719
I	26+273.039	-3.216	228.711	228.713
J	26+276.007	-3.242	228.702	228.708
K	26+278.975	-3.296	228.691	228.702
L	26+281.942	-3.379	228.678	228.692
M	26+284.907	-3.491	228.664	228.676
N	26+287.870	-3.632	228.648	228.656
℄ E. Abut.	26+291.161	-3.822	228.629	228.629
Bk. E. Abut.	26+291.593	-3.850	228.626	228.626

GIRDER NO. 3

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+249.796	-1.534	228.593	228.593
℄ W. Abut.	26+250.231	-1.503	228.594	228.594
C	26+253.211	-1.307	228.597	228.604
D	26+256.195	-1.140	228.599	228.611
E	26+259.181	-1.001	228.599	228.612
F	26+262.170	-0.892	228.597	228.609
G	26+265.161	-0.812	228.594	228.601
H	26+268.153	-0.761	228.589	228.592
℄ Pier	26+271.481	-0.738	228.581	228.581
I	26+274.474	-0.749	228.573	228.575
J	26+277.466	-0.788	228.563	228.570
K	26+280.457	-0.857	228.551	228.562
L	26+283.447	-0.955	228.537	228.551
M	26+286.434	-1.081	228.522	228.534
N	26+289.419	-1.237	228.505	228.513
℄ E. Abut.	26+292.732	-1.444	228.485	228.485
Bk. E. Abut.	26+293.168	-1.474	228.482	228.482

STAGE CONSTRUCTION JOINT and ℄ STRUCTURE

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+250.420	-0.249	228.527	228.527
℄ W. Abut.	26+250.857	-0.219	228.528	228.528
C	26+253.850	-0.028	228.531	228.538
D	26+256.846	0.133	228.532	228.544
E	26+259.845	0.264	228.532	228.545
F	26+262.847	0.367	228.530	228.541
G	26+265.850	0.441	228.526	228.533
H	26+268.854	0.485	228.521	228.523
℄ Pier	26+272.195	0.500	228.513	228.513
I	26+275.200	0.482	228.504	228.506
J	26+278.204	0.436	228.493	228.500
K	26+281.207	0.360	228.481	228.492
L	26+284.208	0.255	228.467	228.480
M	26+287.207	0.121	228.451	228.463
N	26+290.203	-0.043	228.434	228.441
℄ E. Abut.	26+293.530	-0.259	228.412	228.412
Bk. E. Abut.	26+293.968	-0.290	228.409	228.409

NOTES

For information about ℄ of roadway and girders 4 thru 6, See Sheet 5 of 23.

All dimensions are in millimeters (mm) except as noted.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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TOP OF SLAB ELEVATIONS-1
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	85
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

℄ IL ROUTE 173 (PGL)

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+250.541	0.000	228.514	228.514
℄ W. Abut.	26+250.964	0.000	228.516	228.516
C	26+253.864	0.000	228.529	228.536
D	26+256.778	0.000	228.539	228.551
E	26+259.706	0.000	228.546	228.559
F	26+262.649	0.000	228.549	228.561
G	26+265.606	0.000	228.550	228.557
H	26+268.580	0.000	228.547	228.550
℄ Pier	26+271.906	0.000	228.540	228.540
I	26+274.915	0.000	228.531	228.533
J	26+277.940	0.000	228.518	228.525
K	26+280.984	0.000	228.501	228.513
L	26+284.047	0.000	228.482	228.495
M	26+287.129	0.000	228.458	228.470
N	26+290.231	0.000	228.431	228.439
℄ E. Abut.	26+293.705	0.000	228.397	228.397
Bk. E. Abut.	26+294.164	0.000	228.392	228.392

GIRDER NO. 4

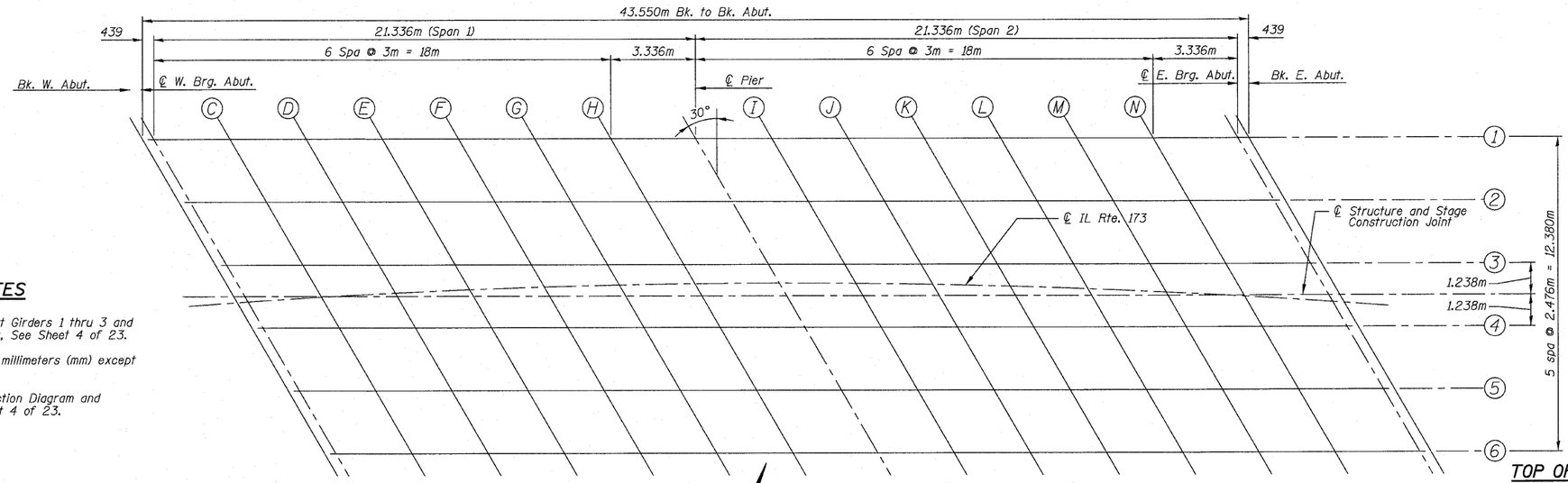
Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+251.049	1.035	228.461	228.461
℄ W. Abut.	26+251.488	1.065	228.461	228.461
C	26+254.493	1.249	228.464	228.471
D	26+257.502	1.403	228.465	228.477
E	26+260.514	1.529	228.464	228.478
F	26+263.528	1.625	228.462	228.474
G	26+266.543	1.692	228.458	228.465
H	26+269.560	1.729	228.452	228.455
℄ Pier	26+272.915	1.736	228.444	228.444
I	26+275.932	1.712	228.434	228.437
J	26+278.948	1.658	228.423	228.430
K	26+281.963	1.575	228.410	228.422
L	26+284.975	1.462	228.396	228.409
M	26+287.985	1.321	228.380	228.392
N	26+290.993	1.150	228.362	228.370
℄ E. Abut.	26+294.333	0.925	228.340	228.340
Bk. E. Abut.	26+294.771	0.893	228.337	228.337

GIRDER NO. 5

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+252.322	3.600	228.328	228.328
℄ W. Abut.	26+252.765	3.627	228.329	228.329
C	26+255.797	3.799	228.331	228.338
D	26+258.832	3.940	228.331	228.343
E	26+261.869	4.053	228.330	228.343
F	26+264.908	4.136	228.327	228.338
G	26+267.949	4.189	228.322	228.329
H	26+270.990	4.213	228.315	228.318
℄ Pier	26+274.373	4.204	228.306	228.306
I	26+277.414	4.165	228.295	228.298
J	26+280.454	4.097	228.283	228.290
K	26+283.492	3.999	228.269	228.281
L	26+286.528	3.872	228.254	228.267
M	26+289.561	3.715	228.237	228.249
N	26+292.591	3.528	228.218	228.225
℄ E. Abut.	26+295.956	3.287	228.194	228.194
Bk. E. Abut.	26+296.398	3.252	228.191	228.191

GIRDER NO. 6

Location	Station	Offset (m)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+253.618	6.159	228.196	228.196
℄ W. Abut.	26+254.065	6.184	228.196	228.196
C	26+257.123	6.343	228.197	228.205
D	26+260.183	6.472	228.197	228.209
E	26+263.247	6.571	228.196	228.209
F	26+266.311	6.640	228.191	228.203
G	26+269.377	6.680	228.185	228.193
H	26+272.444	6.690	228.178	228.180
℄ Pier	26+275.854	6.665	228.167	228.167
I	26+278.919	6.612	228.156	228.158
J	26+281.984	6.529	228.143	228.150
K	26+285.046	6.416	228.128	228.139
L	26+288.105	6.273	228.111	228.125
M	26+291.162	6.101	228.093	228.105
N	26+294.214	5.899	228.073	228.080
℄ E. Abut.	26+297.604	5.639	228.048	228.048
Bk. E. Abut.	26+298.049	5.602	228.045	228.045



FRAMING PLAN

N

NOTES

For information about Girders 1 thru 3 and Stage Construction Joint, See Sheet 4 of 23.

All dimensions are in millimeters (mm) except as noted.

For Dead Load Deflection Diagram and Fillet Heights, See Sheet 4 of 23.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

AppliedTechnologies

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TOP OF SLAB ELEVATIONS-2
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	86
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

SHEET NO. 6
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+238.294	-7.329	228.820
A	26+241.224	-7.278	228.844
B	26+244.155	-7.255	228.866
E. End West Appr. Slab	26+247.086	-7.261	228.886

NORTH EDGE OF NORTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+239.917	-3.600	228.634
A	26+242.867	-3.600	228.659
B	26+245.830	-3.600	228.681
E. End West Appr. Slab	26+248.805	-3.600	228.699

STAGE CONSTRUCTION LINE and ℄ SLAB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+241.426	-0.222	228.465
A	26+244.424	-0.202	228.487
B	26+247.422	-0.211	228.508
E. End West Appr. Slab	26+250.420	-0.249	228.527

℄ IL ROUTE 173 and P.G.L.

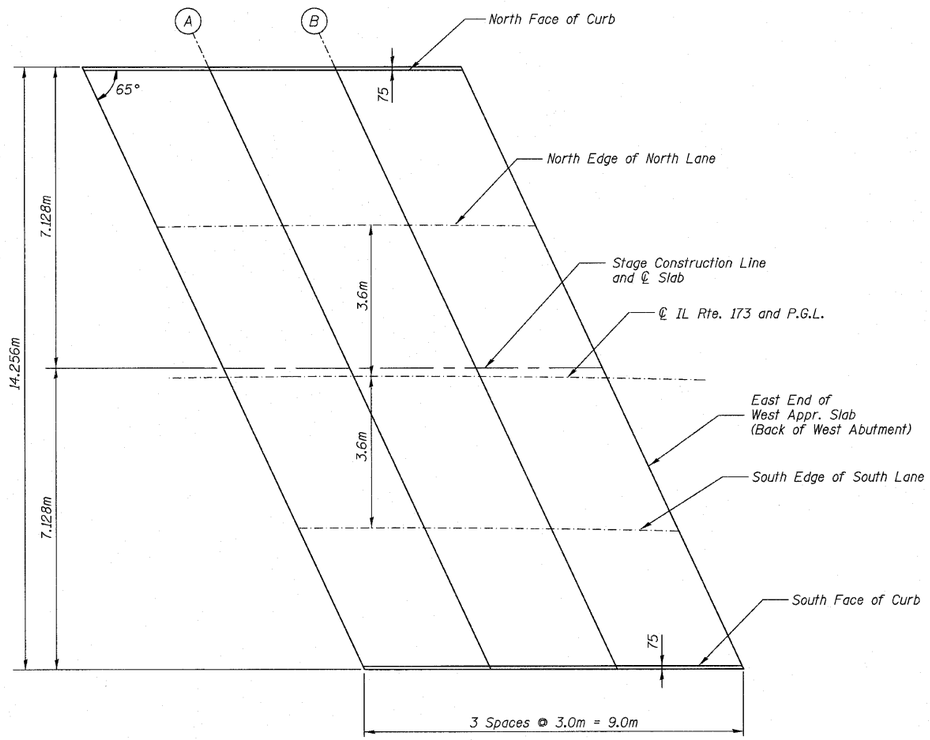
Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+241.526	0.000	228.453
A	26+244.518	0.000	228.477
B	26+247.522	0.000	228.497
E. End West Appr. Slab	26+250.541	0.000	228.514

SOUTH EDGE OF SOUTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+243.177	3.600	228.272
A	26+246.211	3.600	228.294
B	26+249.260	3.600	228.313
E. End West Appr. Slab	26+252.323	3.600	228.328

SOUTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End West Appr. Slab	26+244.706	6.852	228.108
A	26+247.774	6.840	228.129
B	26+250.842	6.798	228.149
E. End West Appr. Slab	26+253.908	6.726	228.166



PLAN
West Approach

N

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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TOP OF WEST APPROACH
SLAB ELEVATIONS
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	87
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT=		

SHEET NO. 7
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+289.705	-6.753	228.801
O	26+292.641	-6.679	228.768
P	26+295.577	-6.633	228.734
E. End East Appr. Slab	26+298.514	-6.616	228.699

NORTH EDGE OF NORTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+291.758	-3.600	228.611
O	26+294.686	-3.600	228.580
P	26+297.634	-3.600	228.547
E. End East Appr. Slab	26+300.602	-3.600	228.509

STAGE CONSTRUCTION LINE and ℄ SLAB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+293.968	-0.290	228.409
O	26+296.965	-0.257	228.374
P	26+299.962	-0.254	228.337
E. End East Appr. Slab	26+302.960	-0.280	228.298

℄ IL ROUTE 173 and P.G.L.

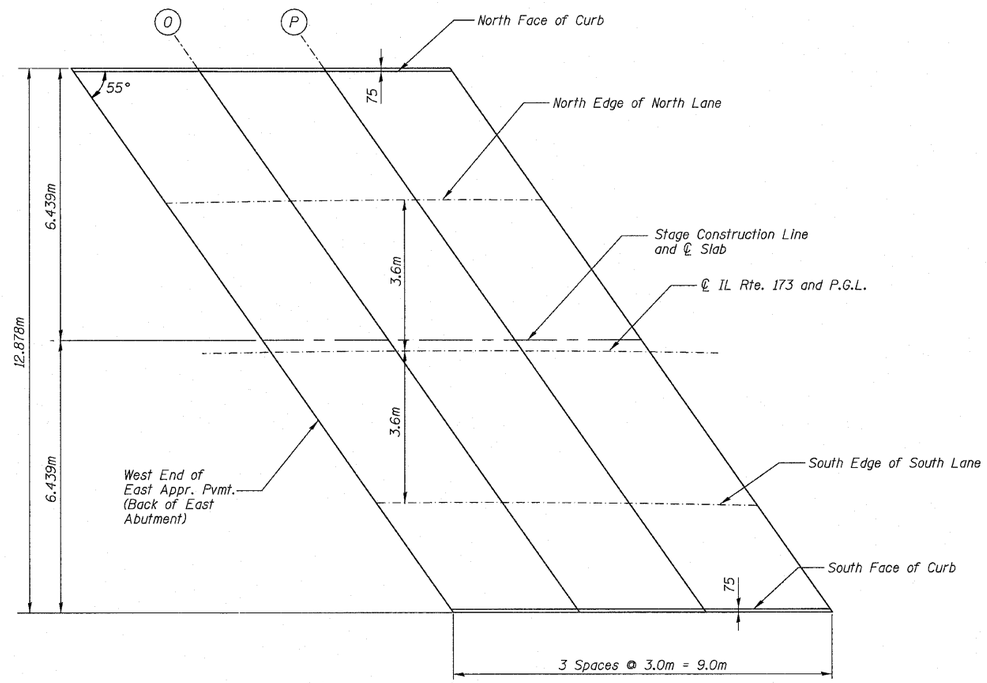
Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+294.164	0.000	228.392
O	26+297.143	0.000	228.358
P	26+300.142	0.000	228.321
E. End East Appr. Slab	26+303.161	0.000	228.280

SOUTH EDGE OF SOUTH LANE

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+296.640	3.600	228.170
O	26+299.671	3.600	228.133
P	26+302.724	3.600	228.092
E. End East Appr. Slab	26+305.798	3.600	228.048

SOUTH FACE OF CURB

Location	Station	Offset (m)	Theoretical Grade Elevations
W. End East Appr. Slab	26+298.412	6.112	228.013
O	26+301.472	6.101	227.974
P	26+304.533	6.060	227.934
E. End East Appr. Slab	26+307.592	5.989	227.891



PLAN
East Approach

N

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

3117-049-0055.DGN

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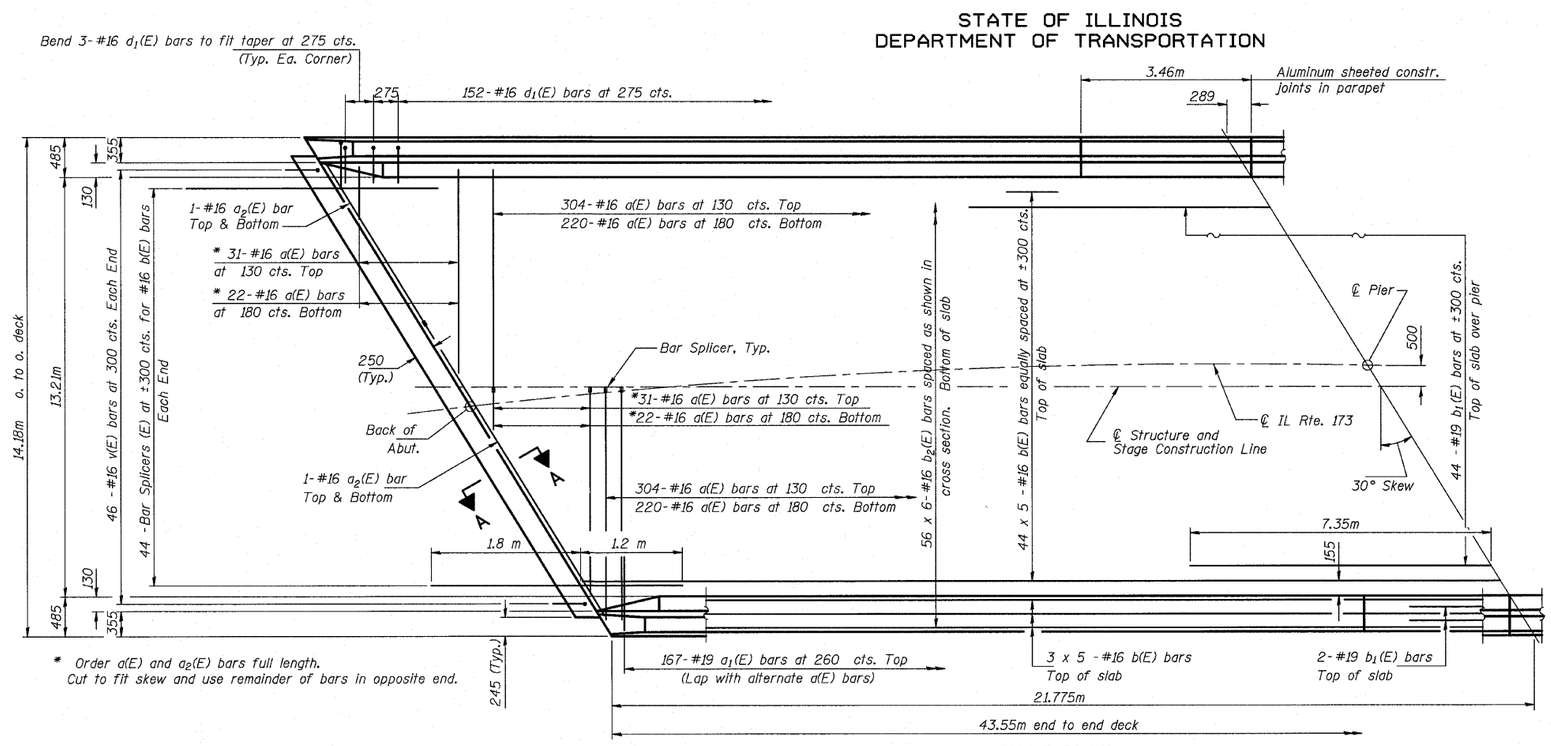
TOP OF EAST APPROACH
SLAB ELEVATIONS
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2R-1	LAKE	137	88
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

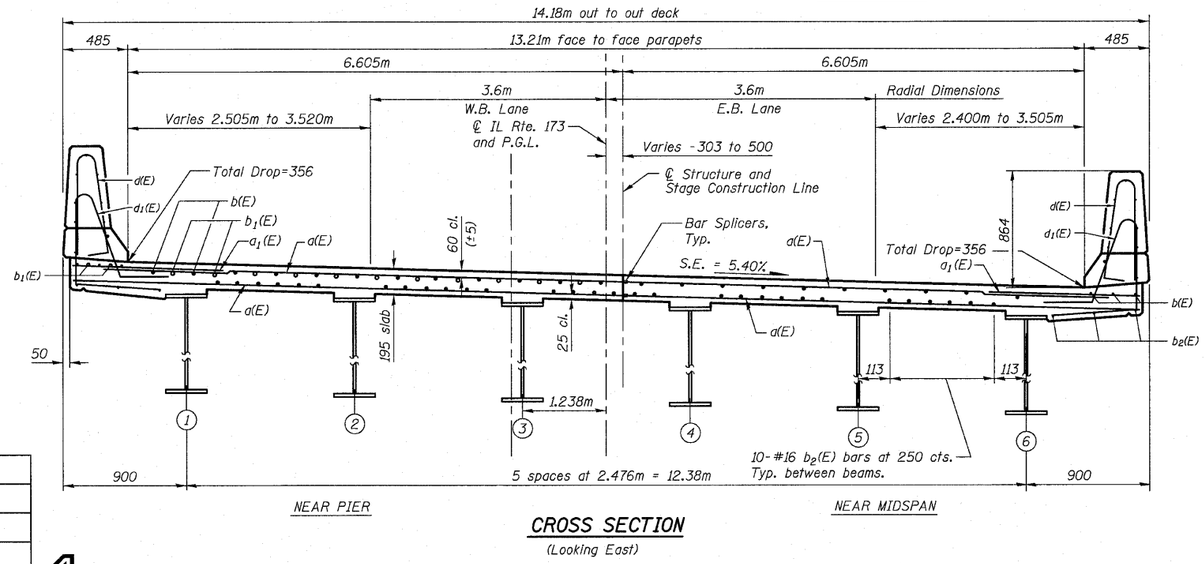
SHEET NO. 8
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* Order a(E) and a_2(E) bars full length.
Cut to fit skew and use remainder of bars in opposite end.

HALF PLAN



CROSS SECTION
(Looking East)

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

3116-049-0198.dgn

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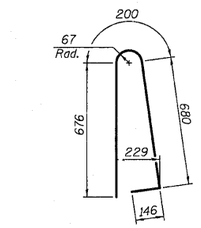
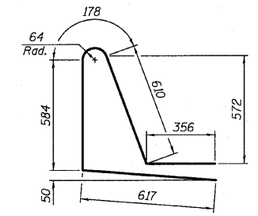
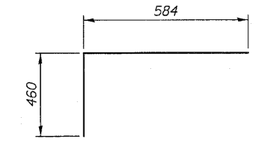


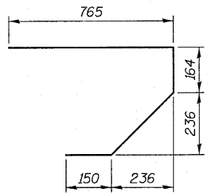
BAR d(E)



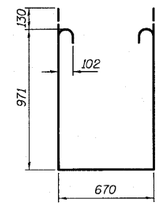
BAR d_1(E)



BAR v(E)



BAR s(E)



BAR s_1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length(m)	Shape
a(E)	1154	#16	6.800	
a_1(E)	334	#19	2.000	
a_2(E)	8	#16	8.000	
b(E)	250	#16	9.180	
b_1(E)	48	#19	14.700	
b_2(E)	336	#16	7.750	
d(E)	316	#16	1.702	
d_1(E)	316	#16	2.345	
e(E)	84	#16	5.970	
e_1(E)	8	#25	9.700	
e_2(E)	32	#16	3.460	
e_3(E)	4	#25	3.460	
e_4(E)	8	#16	9.370	
m(E)	8	#19	8.107	
m_1(E)	12	#19	8.107	
m_2(E)	24	#19	3.709	
m_3(E)	10	#19	2.739	
m_4(E)	4	#19	0.939	
s(E)	92	#16	1.413	
s_1(E)	92	#16	2.872	
v(E)	92	#16	1.044	
Reinforcement Bars Epoxy Coated			kg	27,760
Concrete Superstructure			m^3	175

MINIMUM BAR LAP
#16 bar = 610
#25 bar = 1.270m

NOTES
See Sheets #9 and 10 for additional Superstructure details.

Bars indicated thus 20x3-#15 etc. indicates 20 lines of bar with 3 lengths per line.

See Sheet #10 for parapet reinforcement.

See Sheet #9 for Section A-A.

Reinforcing Bars designated (E) shall be Epoxy Coated.

All dimensions are in millimeters (mm) except as noted.

(x) Girder designation

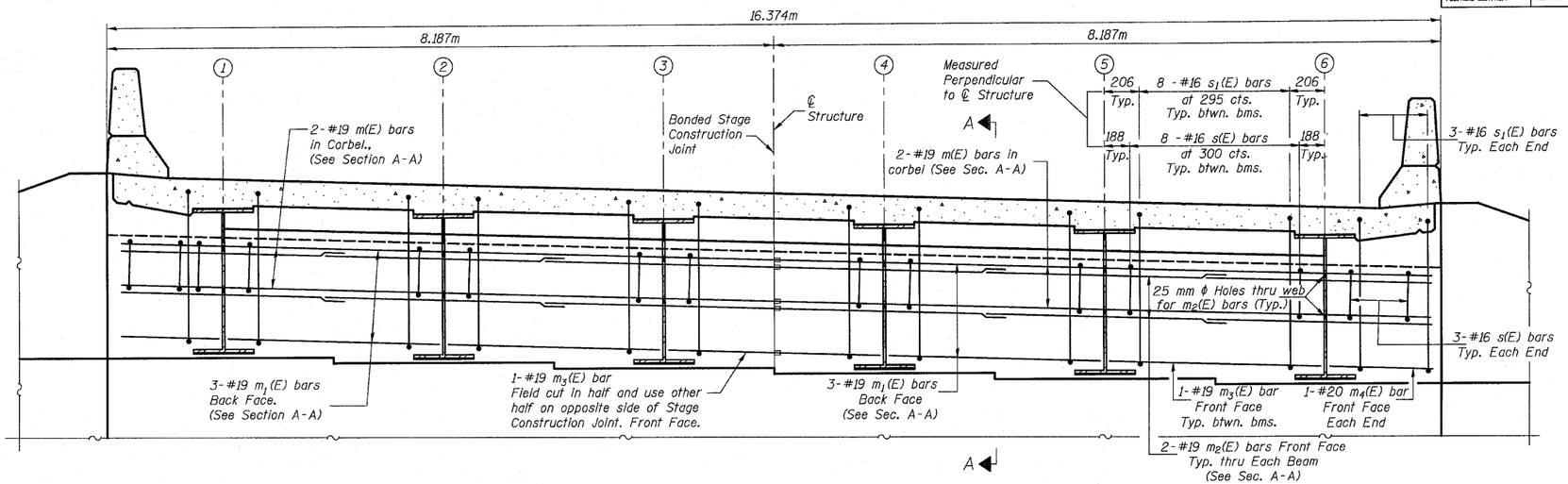
DECK PLAN AND CROSS SECTION
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

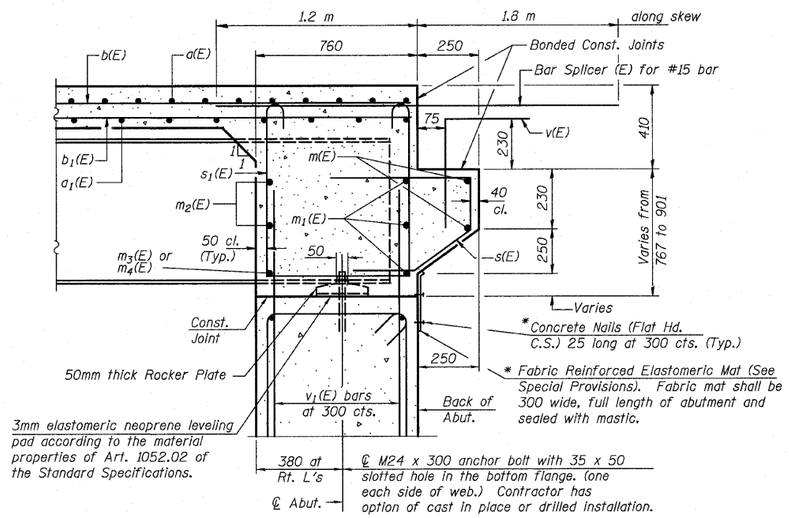
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	89
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 9
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



END DIAPHRAGM AT ABUTMENT



SECTION A-A

Dimensions in Section A-A at right angles to abutment.
* Cost included with Concrete Structures.

NOTES

Reinforcement bars in diaphragm are billed with superstructure on Sheet #8.

Concrete in diaphragm is included with Concrete Superstructure on Sheet #8.

For details of bars s(E) and s_1(E) see Sheet #8.

The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

Reinforcement Bars designated (E) shall be Epoxy Coated.

All dimensions are in millimeters (mm) except as noted.

MINIMUM BAR LAP

#19 bar = 850

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

SI-DS1 (M) 4-30-99

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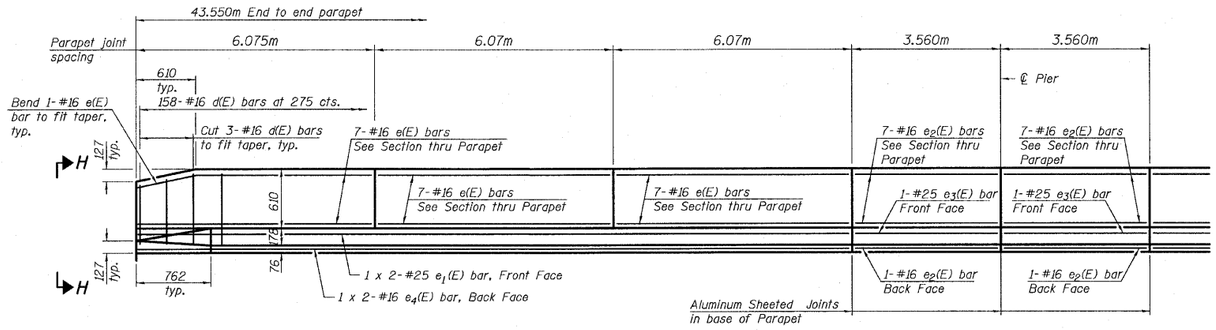
SUPERSTRUCTURE DETAILS-1
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	98
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
23 SHEETS

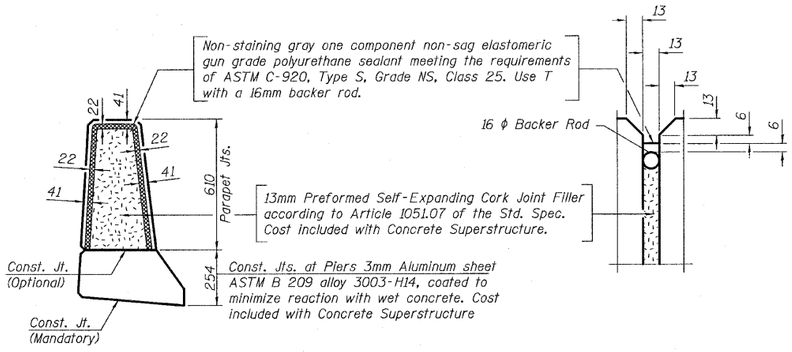
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



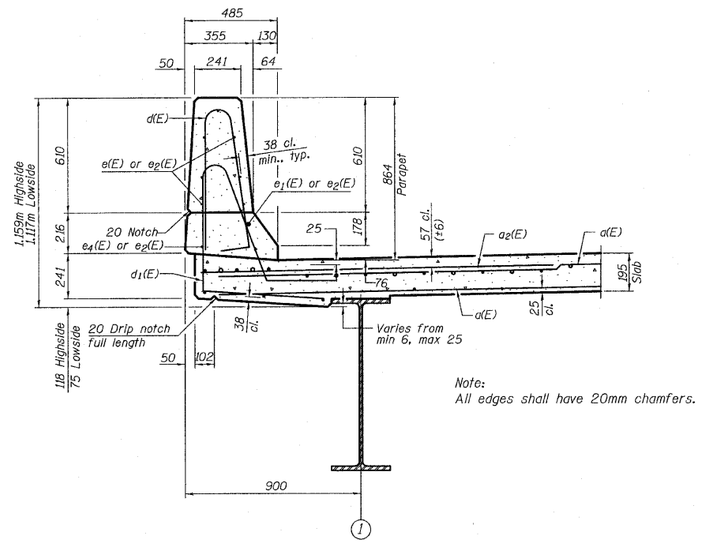
MINIMUM BAR LAP
(Parapet)

#10 bar = 350
#16 bar = 470
#19 bar = 610
#25 bar = 1.010m

INSIDE ELEVATION OF PARAPET



PARAPET JOINT DETAILS



Note:
All edges shall have 20mm chamfers.

SECTION THRU PARAPET
Highside Shown
Lowside Similar

NOTES

See Sheet #8 for deck details and Bill of Material.

Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in milimeters (mm) except as noted.

Reinforcement bars in Parapet are billed with Superstructure on Sheet #8.

Concrete in Parapet is included with concrete Superstructure on Sheet #8.

See Sheet #12 for Section H-H.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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SUPERSTRUCTURE DETAILS-2
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

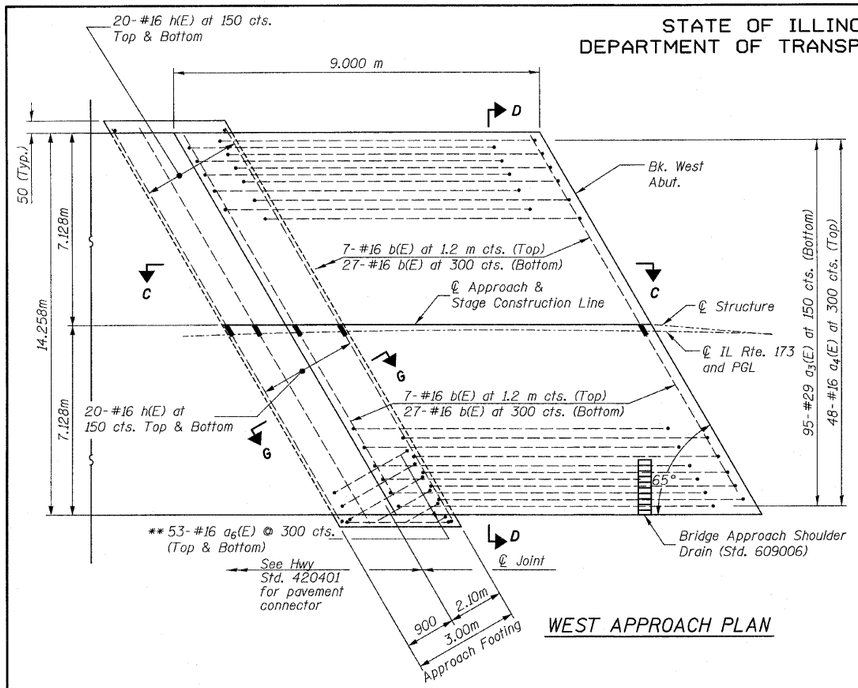
usp_9198-049-9316

CONTRACT NO. 62037

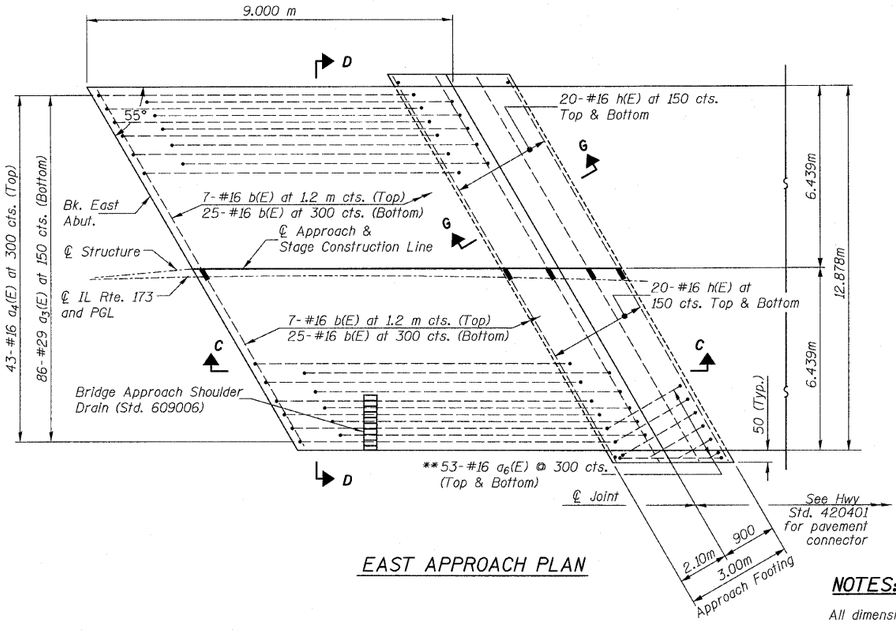
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	98
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
23 SHEETS



WEST APPROACH PLAN



EAST APPROACH PLAN

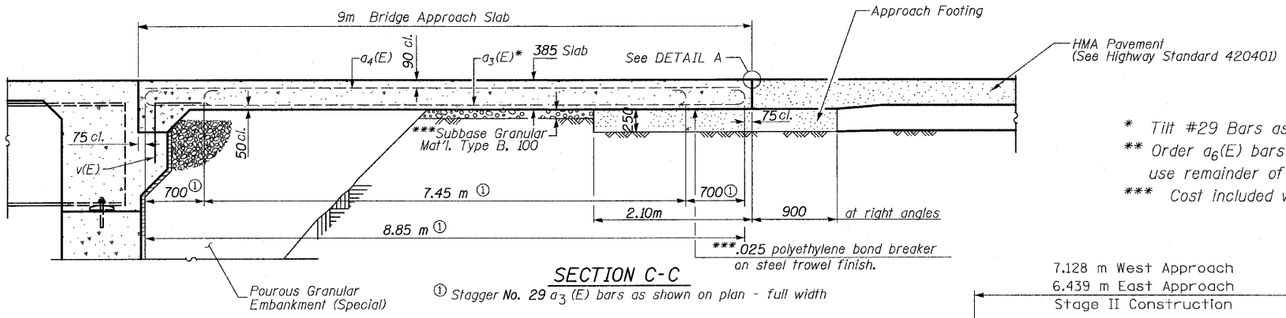
BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
$a_3(E)$	181	#29	8.912	
$a_4(E)$	91	#16	8.85	
$a_6(E)$	212	#16	2.900	
b(E)	132	#16	7.81	
h(E)	160	#16	7.87	

Concrete Structures	m^3	24
Concrete Superstructure	m^3	95
Reinforcement Bars, Epoxy Coated	kg	13,930
Bar Splicers (#16 bar)	Each	146

The above table contains information and quantities for two Bridge Approach Pavements.

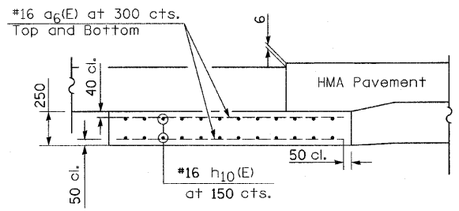
See Sheet 12 for Bar Diagrams.



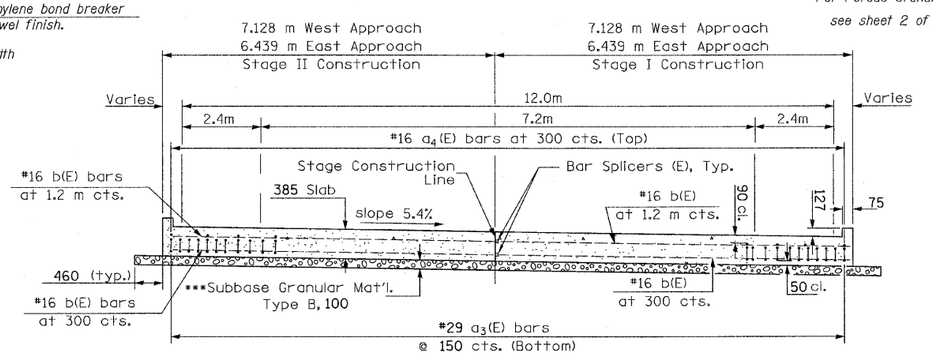
SECTION C-C

① Stagger No. 29 a_3 (E) bars as shown on plan - full width

* Tilt #29 Bars as required to maintain clearance.
** Order a_6(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.
*** Cost included with Concrete Superstructures.



SECTION G-G - FLEXIBLE PAVEMENT
(Showing reinforcement)



SECTION D-D
(See Plan for Dimensions not shown)

NOTES:

All dimensions are in millimeters unless otherwise noted.
See sheet 12 for Bar Bending Details.
See sheet 12 of 23 for Detail A and View H-H.
Approach slab concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 8 of 23.
The approach footing maximum applied service bearing pressure (Qmax) = 100 kPa.
For bar splicer details, see sheet 20 of 23.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 23.

DESIGN STRESSES

fy = 400 MPa
f'c = 24 MPa
n = 8.5

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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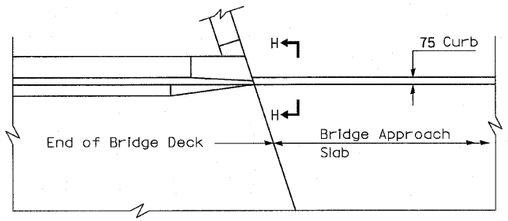
BRIDGE APPROACH SLAB -1
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

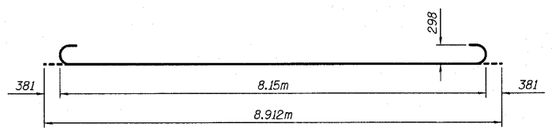
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	127	92
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 12
23 SHEETS

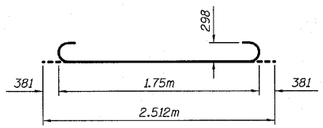
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



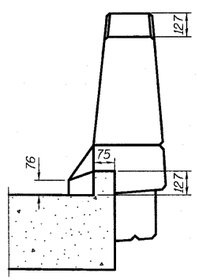
PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT



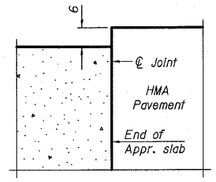
BAR a(E)



BAR a_2(E)



VIEW H-H



FLEXIBLE PAVEMENT

DETAIL A

NOTES:

All dimensions are in millimeters unless otherwise shown.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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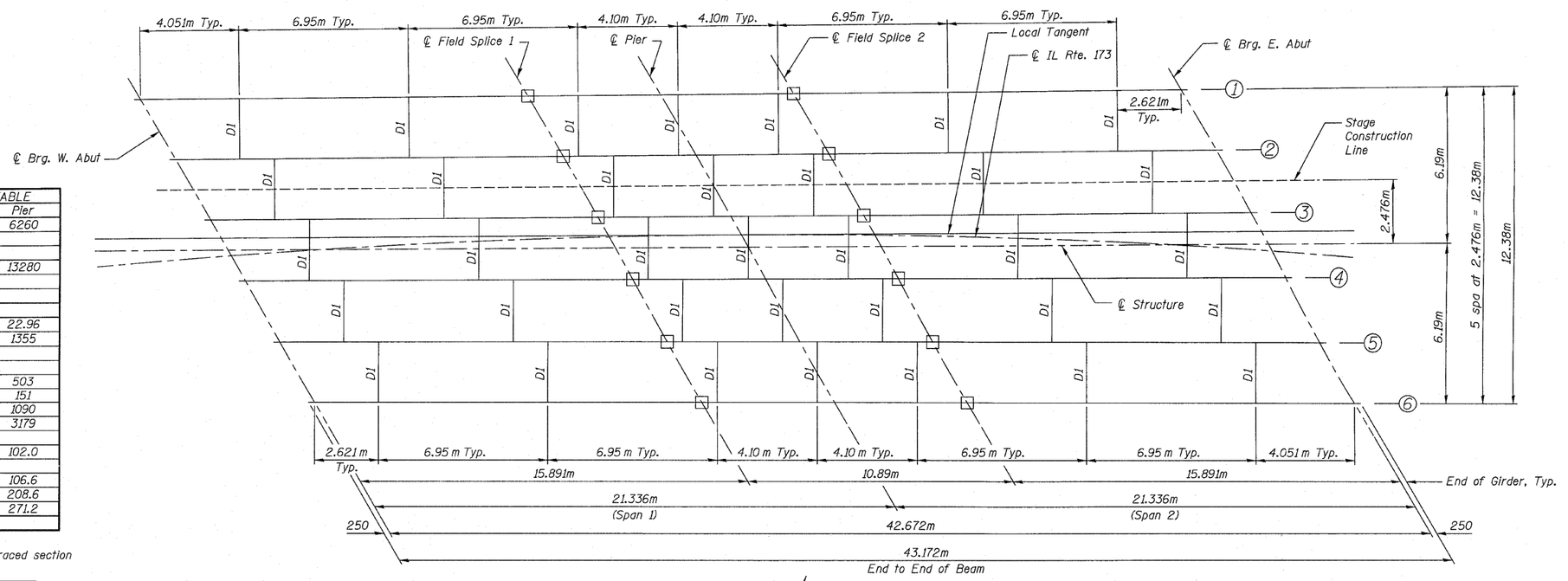
BRIDGE APPROACH SLAB -2
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134B&B-2R-1	LAKE	137	93
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 13
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN

INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 1	Pier
Is	(10^6 mm⁴)	4720	6260
Ic (n)	(10^6 mm⁴)	11790	
Ic (3n)	(10^6 mm⁴)	8610	
Ss	(10^3 mm³)	10230	13280
Sc (n)	(10^3 mm³)	14610	
Sc (3n)	(10^3 mm³)	13170	
Z	(10^3 mm³)		
MD	(kN·m)	14.84	22.96
ML	(kN·m)	442	1355
sD	(kN/m)	8.12	
MsD	(kN·m)	276	
ML	(kN·m)	802	503
M (Imp)	(kN·m)	241	151
5/3[ML+M(Imp)]	(kN·m)	1735	1090
Ma	(kN·m)	3189	3179
* Mu	(kN·m)	5898	
fsD (non-comp)	(MPa)	43.2	102.0
fsD (comp)	(MPa)	21.0	
fs5/3 (L+Imp)	(MPa)	118.8	106.6
fs (Overload)	(MPa)	177.7	208.6
** fs (Total)	(MPa)		271.2
VR	(kN)	298	

* Compact Section
** Braced non-compact and partially braced section

INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
RD	(kN)	181	617
RL	(kN)	213	254
Imp.	(kN)	64	76
R (Total)	(kN)	458	947

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)

VR is the maximum Live Load + Impact shear range in span.

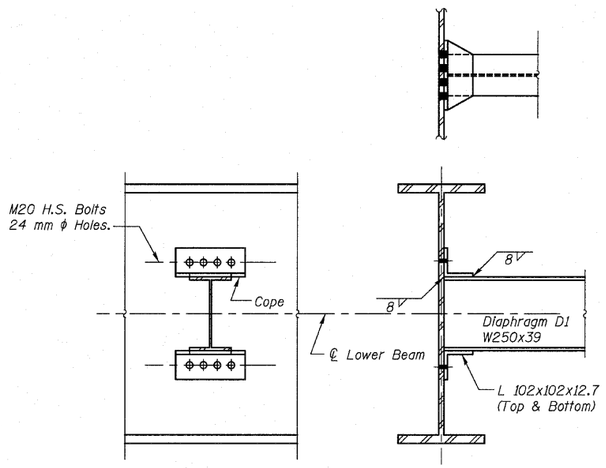
Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.

Ma (Applied Moment)=1.3[MD + MsD +5/3(ML + M(Imp))].

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to MD + MsD +5/3(ML + M(Imp)).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[MD + MsD +5/3(ML + M(Imp))].



DIAPHRAGM D1

(35 Required)

Note: Two hardened washers shall be required over all oversized holes.

NOTES

Bearings and Structural Steel are Furnished in a separate contract. Cost for erecting these items is included in this contract as "Erecting Structural Steel"

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

For Beam Elevations see Sheet #14.

For Bearing Details see Sheet #15.

All dimensions are in millimeters (mm) except as noted.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

3116-049-0198.dgn

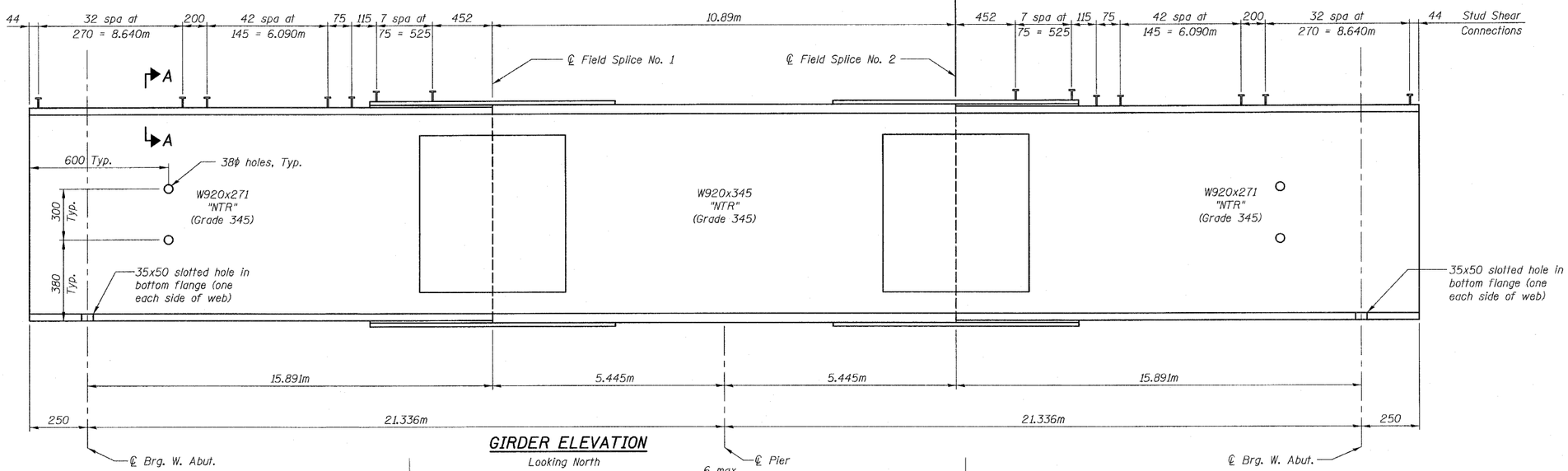
FRAMING PLAN AND DESIGN DATA TABLES FAP 303 IL. ROUTE 173 OVER EAST BOAT CHANNEL SECTION 134(B&B-2)R-1 LAKE COUNTY STATION 26+271.906 STRUCTURE NO. 049-0198

CONTRACT NO. 62037

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

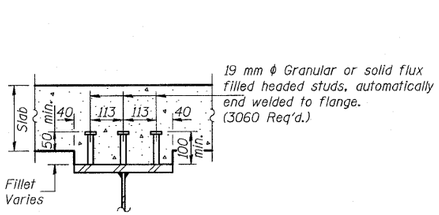
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	(3&B&B-2)R-1	LAKE	137	94
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 14
23 SHEETS

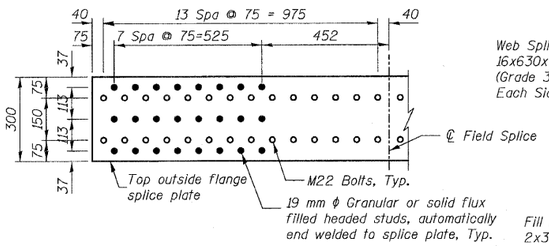


GIRDER ELEVATION

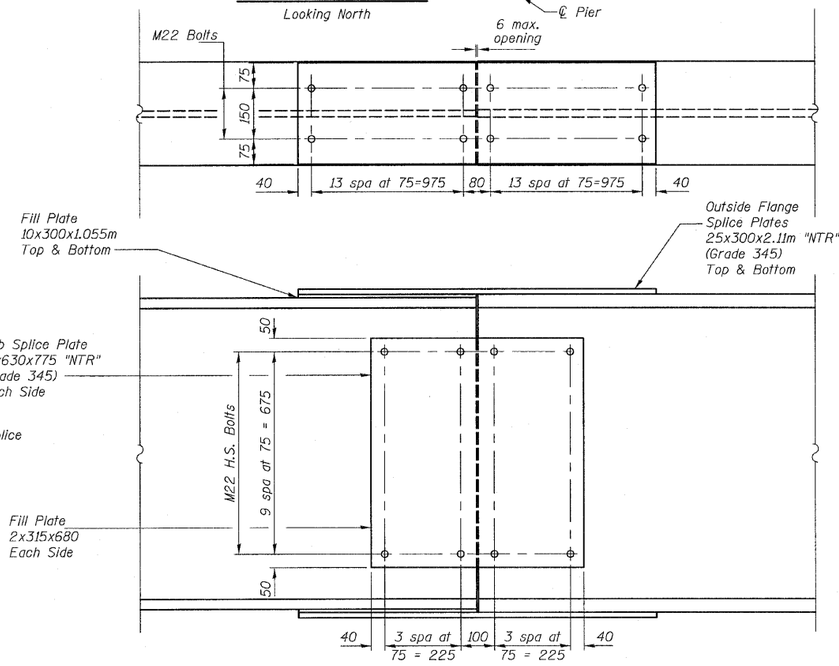
Looking North



SECTION A-A



SHEAR STUDS ON SPLICE PLATE LAYOUT



DETAIL OF SPLICES NO. 1 AND 2

(Splice ℄'s shall be M270 M Grade 345)

TOP OF GIRDER ELEVATIONS

(For Fabrication Only)

LOCATION	℄ BEARING W. ABUT.	*℄ FIELD SPLICE NO. 1	℄ PIER	*℄ FIELD SPLICE NO. 2	℄ BEARING E. ABUT.
Girder 1	228.641	228.622	228.611	228.600	228.555
Girder 2	228.509	228.486	228.474	228.461	228.412
Girder 3	228.377	228.351	228.337	228.323	228.268
Girder 4	228.244	228.215	228.199	228.183	228.123
Girder 5	228.112	228.078	228.061	228.044	227.977
Girder 6	227.979	227.941	227.922	227.903	227.831

*Elevation at Field Splice Location is measured at top of W920X345

NOTES

Bearings and Structural Steel are Furnished in a separate contract. Cost for erecting these items is included in this contract as "Erecting Structural Steel"

For Anchor Bolt Installation Details, see Sheet #21.

For Bearing Details see Sheet #15.

For Diaphragm Details see Sheet #13.

All dimensions are in millimeters (mm) except as noted.

Load Carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness Zone 2.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

3116-049-0198.dgn

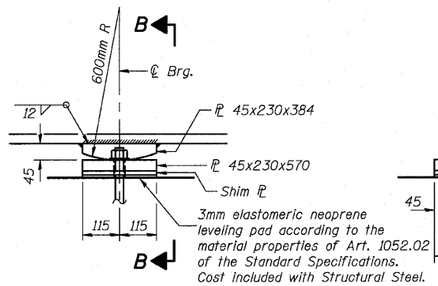
STEEL GIRDER DETAILS
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

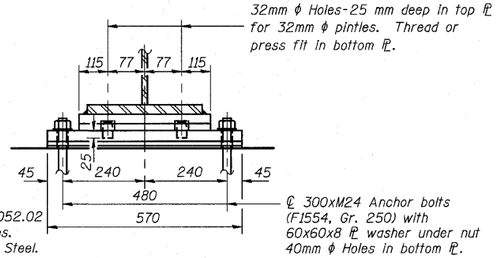
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	115
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

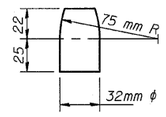


ELEVATION AT PIER



SECTION B-B

FIXED BEARING
(6 Required)



PINTLE

NOTES

Bearings and Structural Steel are Furnished in a separate contract. Cost for erecting these items is included in this contract as "Erecting Structural Steel"

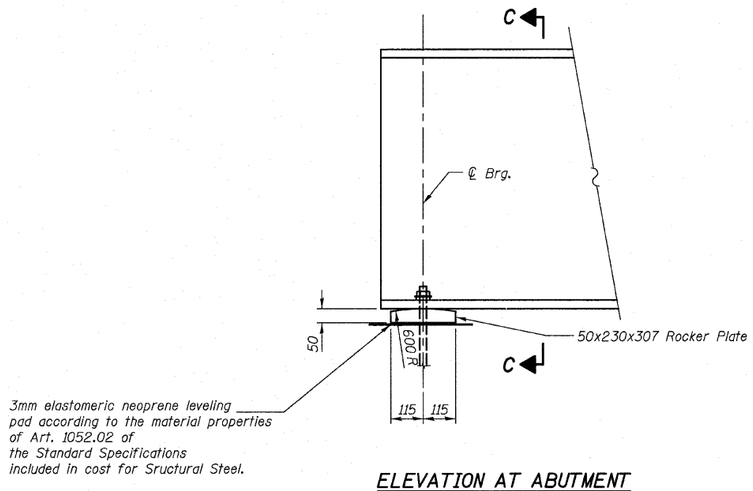
Two 3 mm adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All dimensions are in millimeters (mm) except as noted.

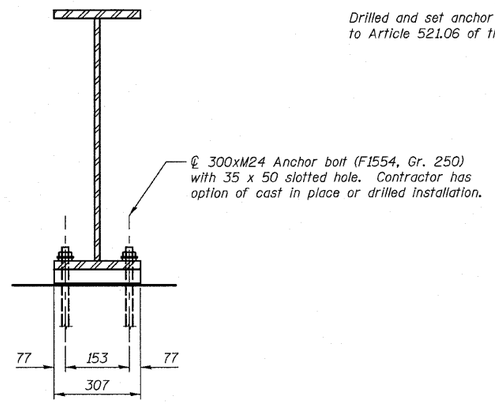
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 250 (Fy=250mpa). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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



ELEVATION AT ABUTMENT



SECTION C-C

ROCKER BEARING
(12 Required)

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

AppliedTechnologies

3116-249-0198.dgn

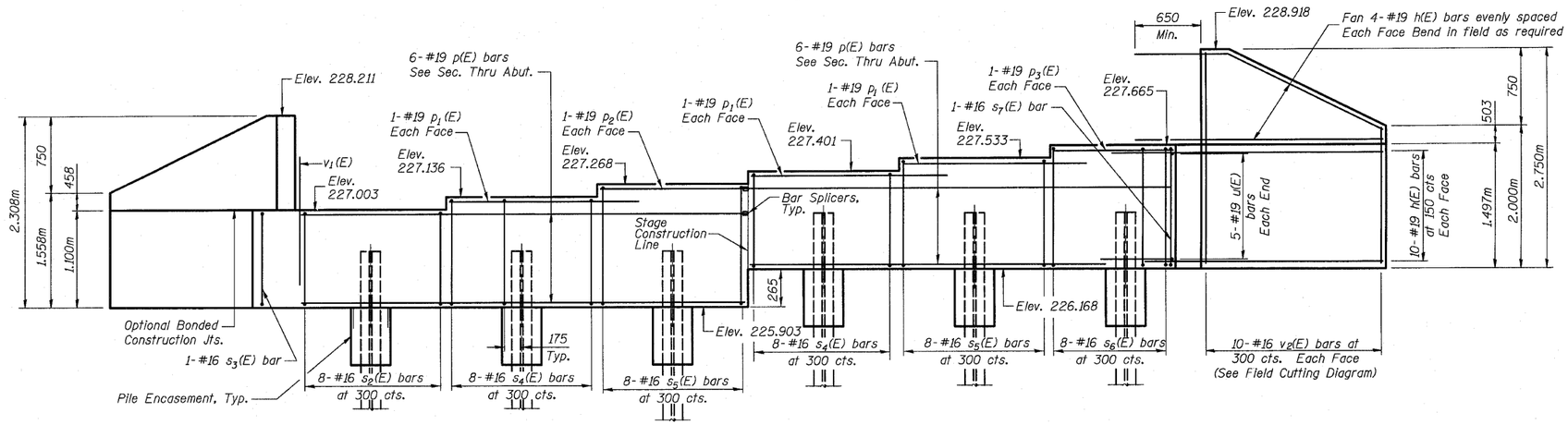
LOW-PROFILE FIXED BEARINGS
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

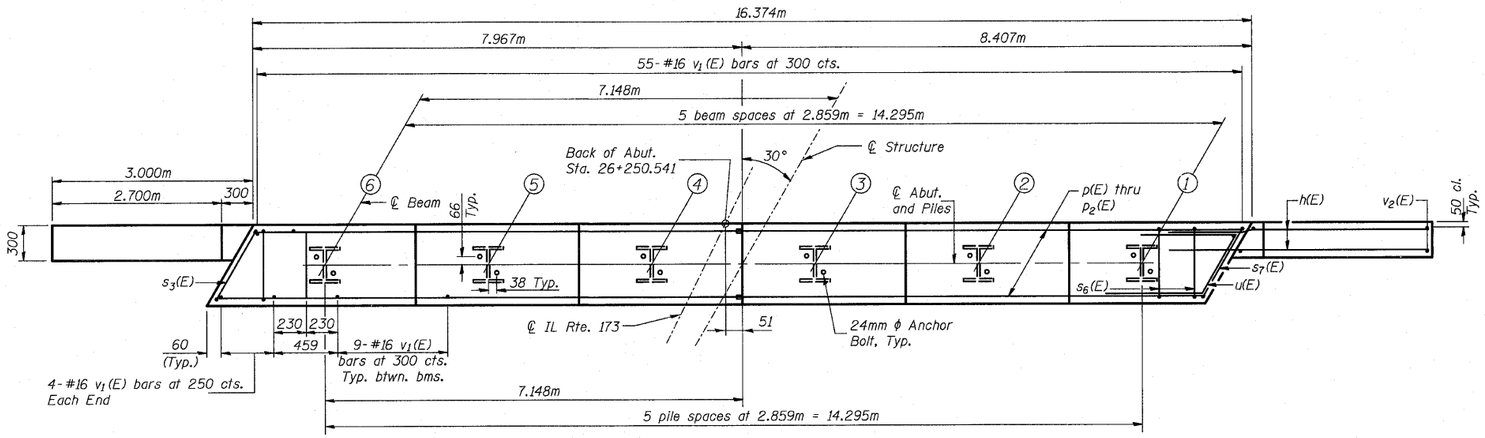
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	98
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 16
23 SHEETS

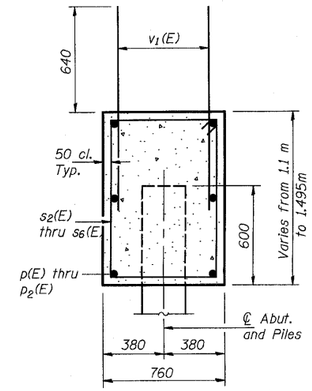
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WEST ABUTMENT ELEVATION
(Looking West)



PLAN



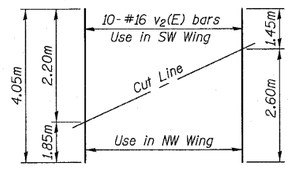
SEC. THRU ABUT.
Dimensions at right angle to abutment

WEST ABUTMENT BILL OF MATERIAL

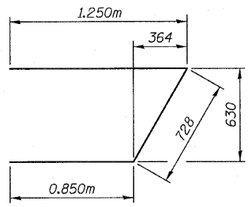
Bar	No.	Size	Length	Shape
h(E)	56	#19	3.750	
p(E)	12	#19	7.887	
p1(E)	6	#19	3.540	
p2(E)	2	#19	2.779	
p3(E)	2	#19	2.170	
s2(E)	8	#16	3.600	
s3(E)	1	#16	3.804	
s4(E)	16	#16	3.860	
s5(E)	16	#16	4.128	
s6(E)	8	#16	4.390	
s7(E)	1	#16	4.594	
u(E)	10	#19	2.828	
v1(E)	108	#16	1.280	
v2(E)	20	#16	4.050	
Concrete Structures		m³	20	
Concrete Encasement		m³	2.0	
Reinforcement Bars Epoxy Coated		kg	1,470	
Furnishing Steel Piles HP310x79		m	105	
Driving Steel Piles		m	105	
Test Pile, HP310x79		each	1	
Structure Excavation		m³	550	

PILE DATA

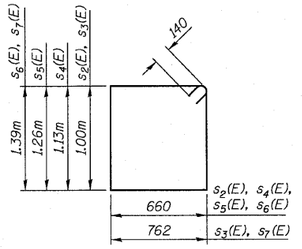
Type: HP 310x79
Nominal Required Bearing: 580kN
Allowable Resistance Available: 580kN
Est. Length: 20.5m
No. Production Piles Required: 5
No. Test Piles: 1



FIELD CUTTING DIAGRAM
Order v2(E) full length. Cut as shown and use remainder of bars in opposite wingwall.



BAR u(E)



BARS $s_2(E)$, $s_3(E)$, $s_4(E)$, $s_5(E)$, $s_6(E)$

MINIMUM BAR LAP
#19 bar = 850

NOTES

Pour steps monolithically with cap.

Place reinforcement in cap to miss anchor bolts.

Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.

Stage Construction Line differs from Stage Construction Line in the deck above due to the skew of the bridge.

See Sheet 21 for Pile Encasement details.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

3116-049-0198.dgn

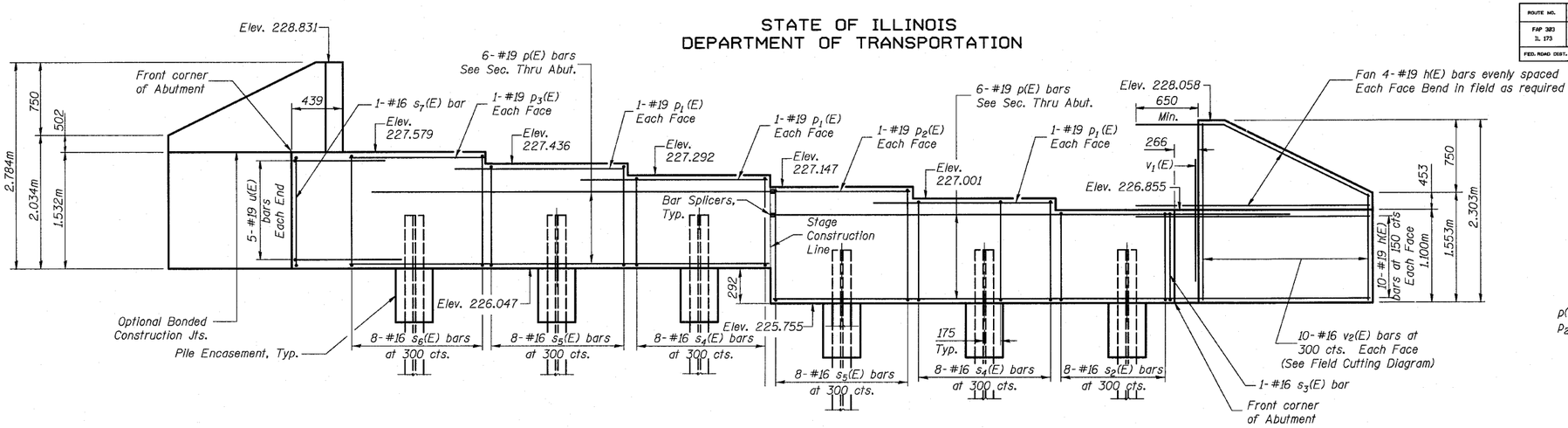
WEST ABUTMENT
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

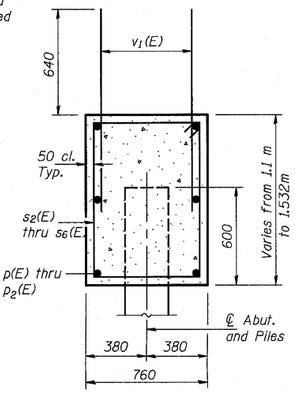
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	97
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 17
23 SHEETS



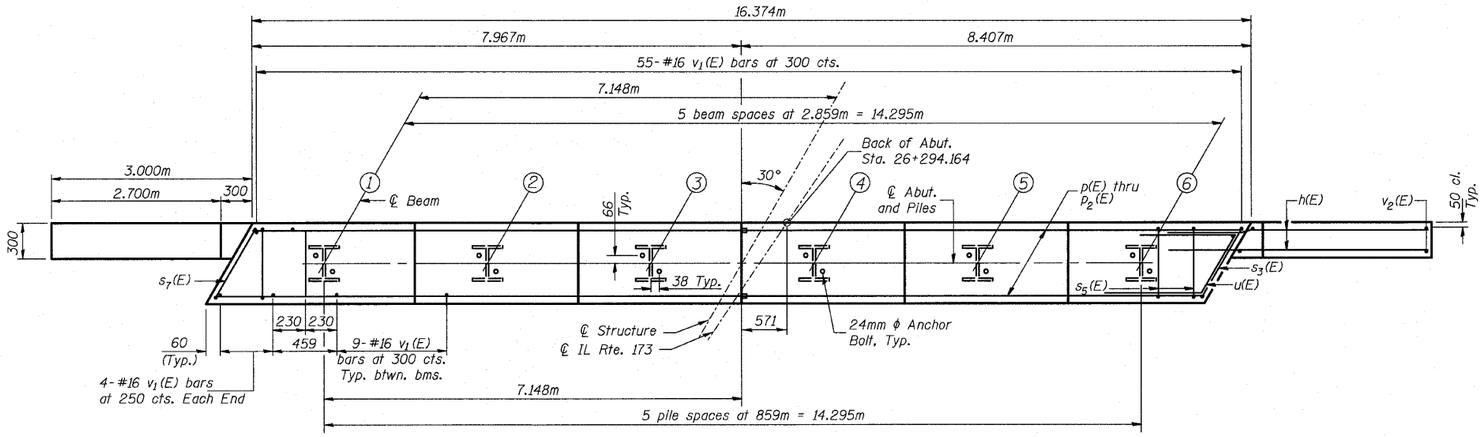
EAST ABUTMENT ELEVATION

(Looking East)



SEC. THRU ABUT.

Dimensions at right angle to abutment



PLAN

EAST ABUTMENT BILL OF MATERIAL

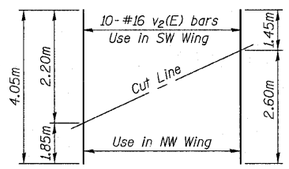
Bar	No.	Size	Length	Shape
h(E)	56	#19	3.750	
p(E)	12	#19	7.887	
p_1(E)	6	#19	3.540	
p_2(E)	2	#19	2.779	
p_3(E)	2	#19	2.170	
s_2(E)	8	#16	3.600	
s_3(E)	1	#16	3.804	
s_4(E)	16	#16	3.860	
s_5(E)	16	#16	4.128	
s_6(E)	8	#16	4.390	
s_7(E)	1	#16	4.594	
u(E)	10	#19	2.828	
v_1(E)	108	#16	1.280	
v_2(E)	20	#16	4.050	
Concrete Structures		m^3	20	
Concrete Encasement		m^3	2.0	
Reinforcement Bars Epoxy Coated		kg	1,470	
Furnishing Steel Piles HP310x79		m	105	
Driving Steel Piles		m	105	
Test Pile, HP310x79		each	1	
Structure Excavation		m^3	550	

MINIMUM BAR LAP

#19 bar = 850

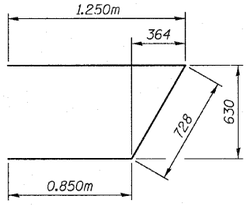
PILE DATA

Type: HP 310x79
Nominal Required Bearing: 580kN
Allowable Resistance Available: 580kN
Est. Length: 20.5m
No. Production Piles Required: 5
No. Test Piles: 1

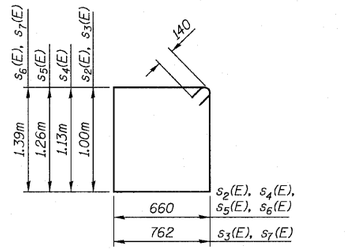


FIELD CUTTING DIAGRAM

Order v_2(E) full length. Cut as shown and use remainder of bars in opposite wingwall.



BAR u(E)



BARS s_2(E), s_3(E), s_4(E), s_5(E), s_6(E)

NOTES

Pour steps monolithically with cap.

Place reinforcement in cap to miss anchor bolts.

Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.

Stage Construction Line differs from Stage Construction Line in the deck above due to the skew of the bridge.

See Sheet 21 for Pile Encasement details.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

3116-049-0198.dgn

EAST ABUTMENT
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL. 173	134B&B-2(R-1	LAKE	137	98
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 18
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTES

Pour steps monolithically with cap.

Place reinforcement in cap to miss anchor bolts.

Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.

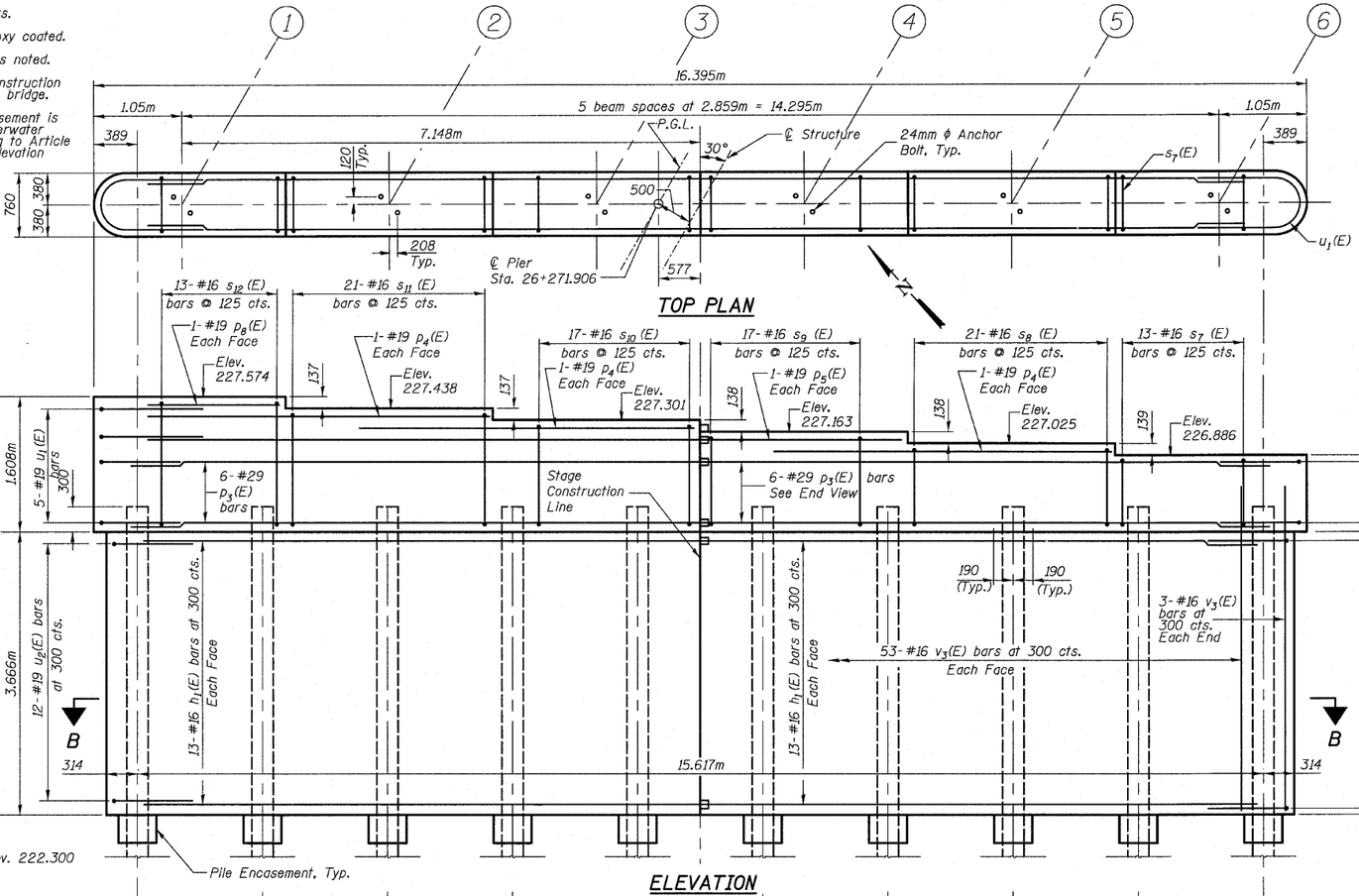
Stage Construction Line differs from Stage Construction Line in the deck above due to the skew of the bridge.

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 300 above the water line at the time of construction.

See Sheet 21 for Pile Encasement details.

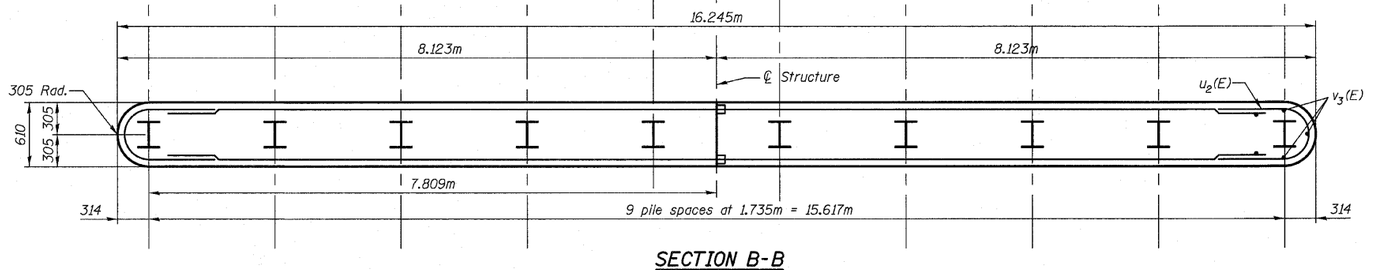
PILE DATA

Type: HP 310x79
Nominal Required Bearing: 500kN
Allowable Resistance Available: 530kN
Est. Length: 18.6m
No. Production Piles Required: 9
No. Test Piles: 1

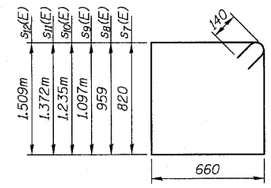


END VIEW

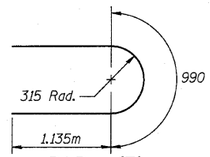
ELEVATION
(Looking East)



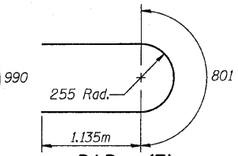
SECTION B-B



BARS s_7(E), s_8(E), s_9(E), s_{10}(E), s_{11}(E), s_{12}(E)



BAR u_1(E)



BAR u_2(E)

PIER BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h_1(E)	52	#16	7.603	——
p_3(E)	12	#29	7.603	——
p_4(E)	6	#19	3.620	——
p_5(E)	2	#19	2.779	——
p_8(E)	2	#19	2.060	——
s_7(E)	13	#16	3.240	□
s_8(E)	21	#16	3.518	□
s_9(E)	17	#16	3.794	□
s_{10}(E)	17	#16	4.070	□
s_{11}(E)	21	#16	4.344	□
s_{12}(E)	13	#16	4.618	□
u_1(E)	8	#19	3.260	⌓
u_2(E)	24	#19	3.071	⌓
v_3(E)	108	#16	4.018	——
Underwater Structure Excavation Protection, Location 1		Each	1	
Concrete Structures		m^3	53	
Concrete Encasement		m^3	3.0	
Furnishing Steel Piles, HP310x79		Meter	170	
Driving Steel Piles		Meter	170	
Test Pile, HP310x79		Each	1	
Reinforcement Bars, Epoxy Coated		kg	2,250	

Reinforcement Bars designated (E) shall be epoxy coated.

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

AppliedTechnologies

3116-049-8198.dgn

PIER
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

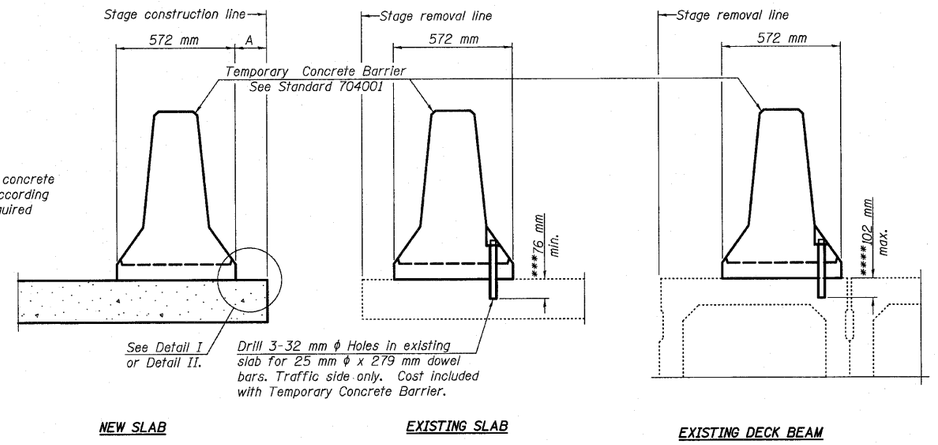
CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL. 173	134(B&B-2)R-1	LAKE	137	99
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 19
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 1.067 m or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 1.067 m.



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 25 mm x 178 mm x 254 mm steel ℙ to the top layer of couplers with 2- 16 mm ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 25 mm x 178 mm x 254 mm steel ℙ to the concrete slab or concrete wearing surface with 2- 16 mm ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

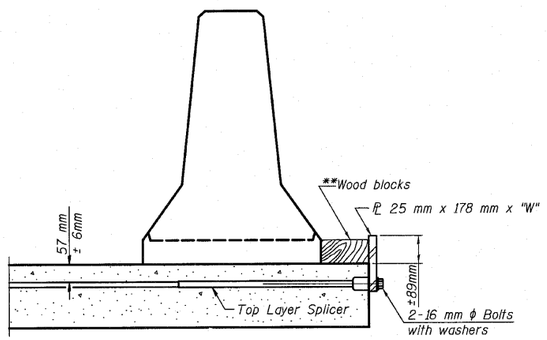
Cost of anchorage is included with Temporary Concrete Barrier.

The 25 mm x 178 mm x 254 mm 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.

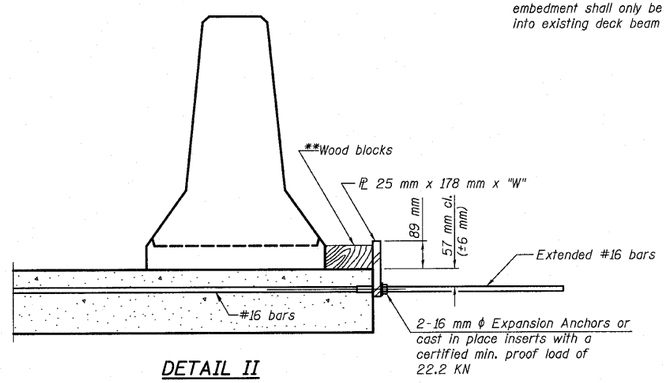
SECTIONS THRU SLAB OR DECK BEAM

*** 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.



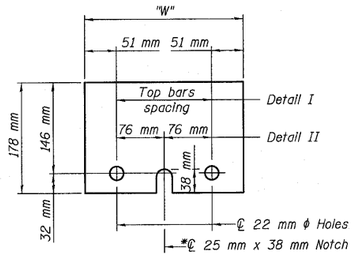
DETAIL I



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.

"W" = Top bars spacing + 102 mm



STEEL RETAINER ℙ 25 mm x 178 mm x 254 mm

* Required only with Detail II

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

Applied Technologies

3116-049-2198.dgn

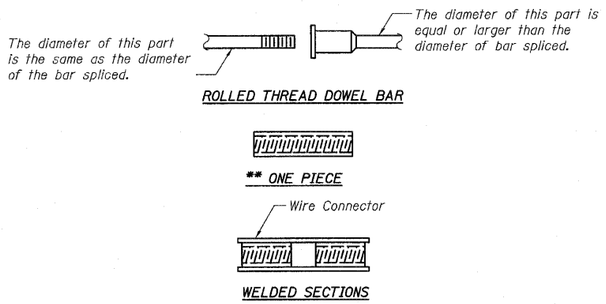
TEMPORARY CONCRETE BARRIER
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

CONTRACT NO. 62037

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137	100
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

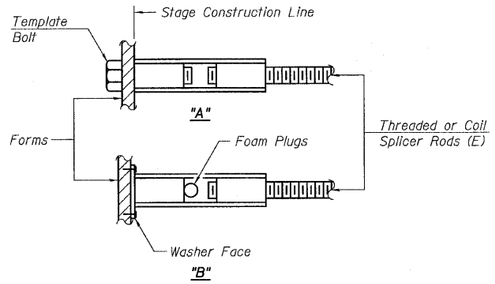
SHEET NO. 20
23 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 400 MPa yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

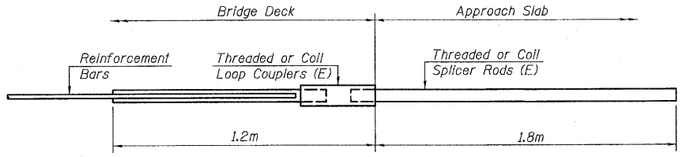
① Minimum Capacity (Tension in KN) = $1.25 \times 10^{-3} \times f_y \times A_t$

② Minimum *Pull-out Strength (Tension in KN) = $1.25 \times 10^{-3} \times fs_{allow} \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in MPa.
fs_{allow} = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

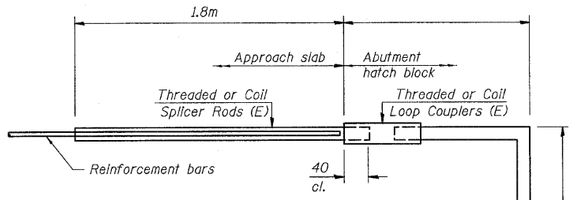
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity KN - tension	Min. Pull-Out Strength KN - tension
#16	610	100	40
#19	790	150	60
#25	1.04m	250	100
#29	1.37m	350	140

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



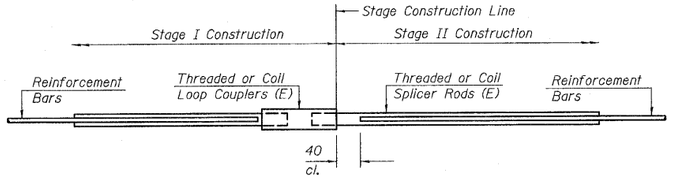
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #16 bar
Min. Capacity = 100 KN - tension
Min. Pull-out Strength = 40 KN - tension
No. Required = 88



FOR PILE BENT ABUTMENTS

Bar Splicer for #16 bar
Min. Capacity = 100 KN - tension
Min. Pull-out Strength = 40 KN - tension



STANDARD

Bar Size	No. Assemblies Required	Location
#16	581	Deck
#19	16	Diaphragms
#19	12	Abutments
#16	26	Pier
#19	2	Pier
#29	6	Pier
#16	146	Approaches

DESIGNED	JRF
CHECKED	RCJ
DRAWN	RDS
CHECKED	JRF

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3116-049-0198.dgn

BAR SPLICER DETAILS
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