STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAP 335 / IL60 (KENNEDY RD) AT MIDDLE FORK NB CHICAGO RIVER

BRIDGE DECK OVERLAY SECTION 120 R-I-1

SHIELDS TOWNSHIP R12E

PROJECT NO.: <u>NHF-03</u>35(016)

IL 60 (W KENNEDY RD)

WEST DEERFIELD TOWNSHIP R12E

LOCATION MAP

NOT TO SCALE

LAKE COUNTY C-91-244-10 PROJECT LOCATION IL 60 (KENNEDY RD) OVER IMPROVEMENTS ENDS NORTH BRANCH CHICAGO RIVER

PROJECT IS LOCATED IN THE CITY OF LAKE FOREST

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

> GROSS LENGTH OF PROJECT = 98.36 FEET = 0.019 MILES NET LENGTH OF PROJECT = 98.36 FEET = 0.019 MILES

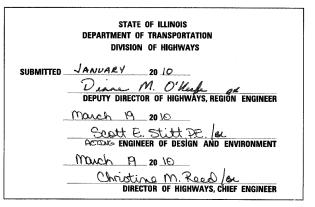
P:312-606-0910 F:312-606-0415

STA 502 + 24.18

TOTAL SHEET NO. SECTION COUNTY 376 120 R-I-1 COOK FED. ROAD DIST, NO. 1 ILLINOIS CONTRACT NO. 60J54

D-91-244-10





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



TED W. LACHUS, P.E. EXPIRES 1/1-30-2011

1-29-2010

CONTRACT NO. 60J54

TRAFFIC DATA:

EXISTING ADT IL 60 23900 (2007) POSTED SPEED = 40 MPH

CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS

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

STRUCTURE NO. 049-0037

IMPROVEMENTS BEGINS

STA 501 + 25.82

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 MOT GENERAL NOTES & CONSTRUCTION SEQUENCING
- 5 SUGGESTED STAGE OF CONSTRUCTION, STAGE 1
- 6 SUGGESTED STAGE OF CONSTRUCTION, STAGE 2
- 7 PAVEMENT MARKINGS
- 8 GENERAL PLAN AND ELEVATION
- 9 STAGE CONSTRUCTION DETAILS
- 10 TEMPORARY CONCRETE BARRIER
- 11 BRIDGE DECK PATCHING & APPROACH PATCHING PLAN AND TRANSVERSE JOINT RECONSTRUCTION DETAILS
- 12 BRIDGE DECK & APPROACH IMPROVEMENT PLAN
- 13 ABUTMENTS REPAIR DETAILS
- 14 TC-10 DISTRICT ONE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
- 15 TC-11 DISTRICT ONE TYPICAL APLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 16 TC-13 DISTRICT ONE TYPICAL PAVEMENT
- 17 TC-22 DISTRICT ONE ARTERIAL ROAD INFORMATION SIGN
- 18 BD-24 DISTRICT ONE CURB AND GUTTER REMOVAL AND
- IBA. 80-400-05 DISTRICT ONE BUTT JOINT AND HMA TAPER DETAILS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS						
MIXTURE TYPE	AIR VOIDS					
SURFACE COURSE						
A HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N70	4% @ 90 Gyr.					
POLYMERIZED						

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

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.

STATE STANDARDS

001001-02

701901-01

001006

000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

DECIMAL OF AN INCH AND OF A FOOT

LANE CLOSURE 2 LANE 2 WAY MOVING OPERATIONS DAY ONLY

701606-06 URBAN LANE CLOSURE, MULTILANE, 2W, WITH MOUNTABLE MEDIAN

AREAS OF REINFORCEMENT BARS

TRAFFIC CONTROL DEVICES

Note: For proposed section see sheet number S4.

GENERAL NOTES:

- 1. THESE PLANS HAVE BEEN PREPARED FROM INFORMATION ACQUIRED FROM EXISTING PLANS AND NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
- 2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO VARIATIONS FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. ANY ADJUSTMENTS PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER. 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 BASED UPON THE UNIT PRICE.
- 3. QUANTITIES FOR DECK SLAB REPAIR ARE APPROXIMATE. LOCATIONS WILL BE DETERMINED BY THE ENGINEER FOLLOWING REMOVAL OF THE HMA SURFACE COURSE AND HYDRO-SCARIFICATION. ACTUAL REPAIR LOCATIONS SHALL BE SHOWN ON THE AS-BUILT PLANS.
- 4. FORTY- EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 FOR LOCATIONS OF THE EXISTING UTILITIES.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
- 10. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
- 11. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS INTO THE CREEK. THE COST OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.
- 12. THE CONTRACTOR 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.
- 13. THE CONTRACTOR SHALL CONTACT DEBBIE HANLON, THE AREA TRAFFIC FIELD ENGINEER, AT (847)438-2300 TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 15. ALL RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) SHALL BE LOW PROFILE.
- 16. ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.

COMMITMENTS

NONE

:::Primera

FILE NAME :

FILEL\$

DESIGNED VFA REVISED DRAWN VEA REVISED CHECKED TWL REVISED 1/29/2010 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION INDEX OF SHEET, STATE STANDARDS. 335 120 R-I-1 **GENERAL NOTES AND COMMITMENTS** TO STA. SHEET NO. OF SHEETS STA. ILLINOIS FED. AID PROJECT

COUNTY

LAKE

SHEET'S NO.

CONTRACT NO. 60J54

	SUMMARY OF QUANTITIES	URBAN 80% FEO. 20% STATE	CONTRUCTION TYPE CODE		
CODE NO.	ITEM DESCRIPTION POLYMERIZED (HOT-MIX ASPHALT	UNIT	TOTAL QUANTITY	SFTY-2A QUANTITY	
40603 595	SURFACE COURSE, MIX D, N-40	TON	60	66	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	358	358	
42001300	PROTECTIVE COAT	SQ YD	227	227	. :
44001700	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	20	20	
50300260	BRIDGE DECK GROOVING	SQ YD	218	218	
59000200	EPOXY CRACK INJECTION	FOOT	29	29	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	
67100100	MOBILIZATION	LSUM	1	1	
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	10	10	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	2530	2530	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3502	3502	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	44	44	

		SUMMARY OF QUANTITIES	SUMMARY OF QUANTITIES				
	CODE NO.	ITEM DESCRIPTION	TOTAL QUANTITY	049-0037 SFTY-2A QUANTITY			
X	78006110	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	10	10		
¥	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	107	107		
H	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6	. 6		
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1215	1215		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	//3	//3		
	X0320887	POLYMER CONCRETE	CU FT	7	7		
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51	51		
	X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	227	227		
	X0326766	CLEAN AND RESEAL RELIEF JOINT	FOOT	92	92		
	X0325305	STRUCTURAL REPAIR CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	76	76		
	X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	7950	7950		
	Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	13	13		
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	4	4		
	Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	227	227		

* Specialty Items

FILE NAME = \$FILEL\$

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CHECKED	TWL	REVISED	-
DATE	1/29/2010	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

										7.3	14.7 ·
					F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
SUMMARY OF QUANTITIES							335	120 R-I-1	LAKE	18	3
A									CONTRACT	NO.	60J54
CALE:	SHEET N	٧٥.	0F	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE MOT PLANS.
- 3. ALL EXISTING PAVEMENT MARKING IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC STRIPING SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "PAVEMENT
- 4. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT MARKING TAPE WHICH CONFLICT WITH THE NEXT STAGE OR FINAL STRIPING. REMOVAL OF TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "WORK ZONE PAVEMENT MARKING REMOVAL".
- 5. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED ON THE PLANS, OR HIGHWAY STANDARD SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
- 6. ALL DRUMS, VERTICAL PANELS AND BARRICADES ADJECENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH STEADY-BURNING LIGHTS.
- 7. ALL EXISTING SIGNS WITHIN THE LIMITS OF MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
- 8. TEMPORARY, OFF-PEAK HOUR LANE CLOSURES MUST BE REQUESTED THROUGH THE ENGINEER AND AS SPECIFIED IN THE SPECIAL PROVISIONS, WHEN OFF-PEAK HOUR OR WEEKEND LANE CLOSURES ARE REQUIRED, A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE WEEK PRIOR TO THE CLOSURE. THE MESSAGE SIGN WORDING AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
- 9. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".
- 10. ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR "TEMPORARY INFORMATION SIGNING".
- 11. FOR ADDITIONAL BRIDGE CONSTRUCTION STAGING INFORMATION, SEE STRUCTURAL PLANS.
- $\Omega_{
 m L}$. The first two warnings signs in each direction must have a mono-directional flashing beacon THAT OPERATES DURING HOURS OF DARKNESS. The states bound hours of the states of the

SUGGESTED CONSTRUCTION SEQUENCING

PRESTAGE

CONSTRUCTION: IMPLEMENT STAGE 1 MOT PAVEMENT MARKING AND TRAFFIC CONTROL

MAINTENANCE OF TRAFFIC: UTILIZE STANDARDS 701606-06 AND 701311-03

STAGE 1

WESTBOUND LANES: HYDROSCARIFY BRIDGE DECK SURFACE, PERFORM DECK REPAIRS, PLACE LATEX CONCRETE OVERLAY AND PERFORM SUBSTRUCTURE REPAIRS.

MAINTENANCE OF TRAFFIC: UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701606-06

STAGE 2

EASTBOUND LANES: HYDROSCARIFY BRIDGE DECK SURFACE, PERFORM DECK REPAIRS. PLACE LATEX CONCRETE OVERLAY, AND PERFORM SUBSTRUCTURE REPAIRS.

MAINTENANCE OF TRAFFIC: UTILIZING MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701606-06

STAGE 3

CONSTRUCTION: PLACE FINAL PAVEMENT MARKINGS AND RAISED REFLECTIVE MARKERS.

MAINTENANCE OF TRAFFIC: UTILIZE STANDARD 701606-06 AND 701311-03.

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CHECKED	SF	REVISED -
DATE	1/29/2010	REVISED -

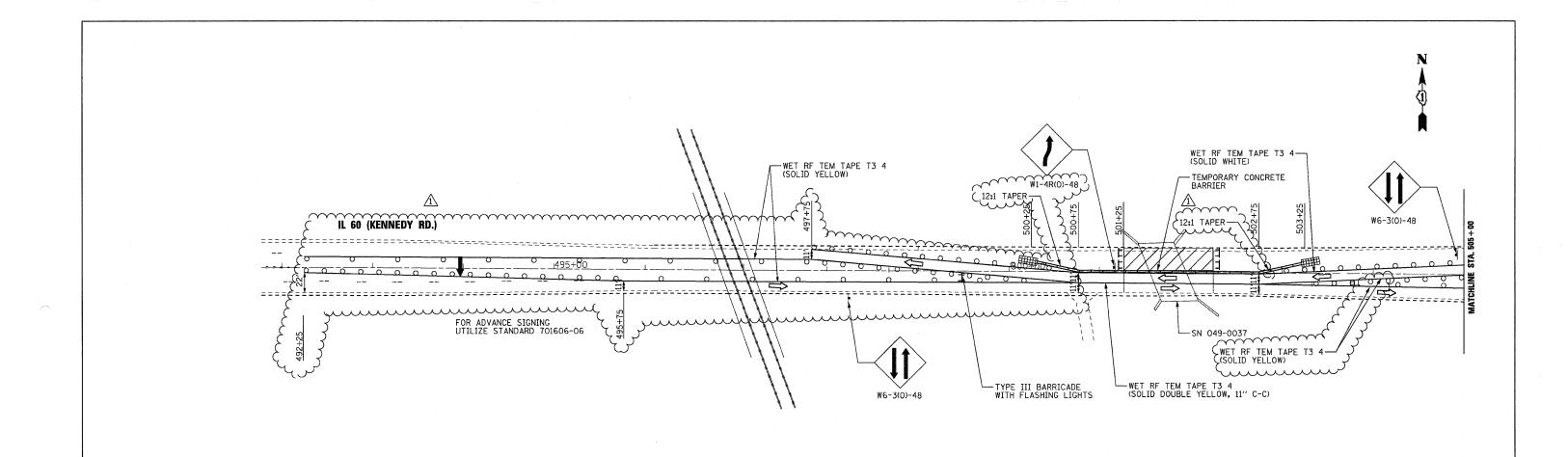


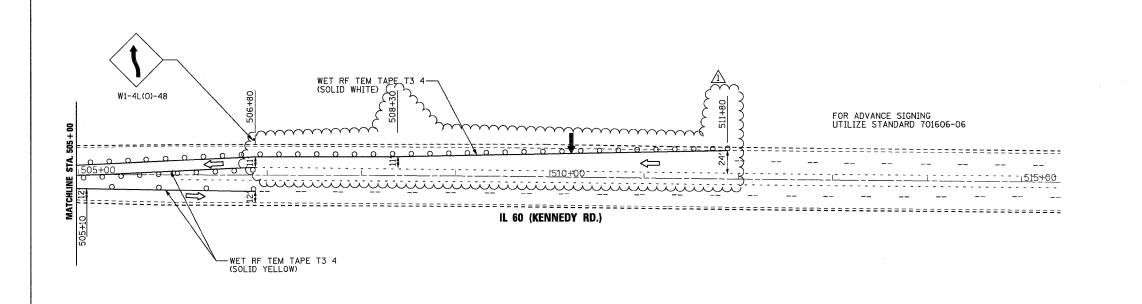
TOTAL SHEET

18 4

CONTRACT NO. 60J54

LAKE





LEGEND:

WORK AREA

TEMPORARY CONCRETE BARRIER

ARROW BOARD

SIGN

O TYPE II BARRICADE OR DRUM
WITH STEADY BURNING LIGHTS
@ 50 FT CENTERS ALONG
ROADWAY (TANGENT) AND 20 FT
CENTERS ALONG TAPERS

TYPE III BARRICADE

IMPACT ATTENUATOR,
TEMPORARY NON-REDIRECTIVE

□⇒ DIRECTION OF TRAFFIC

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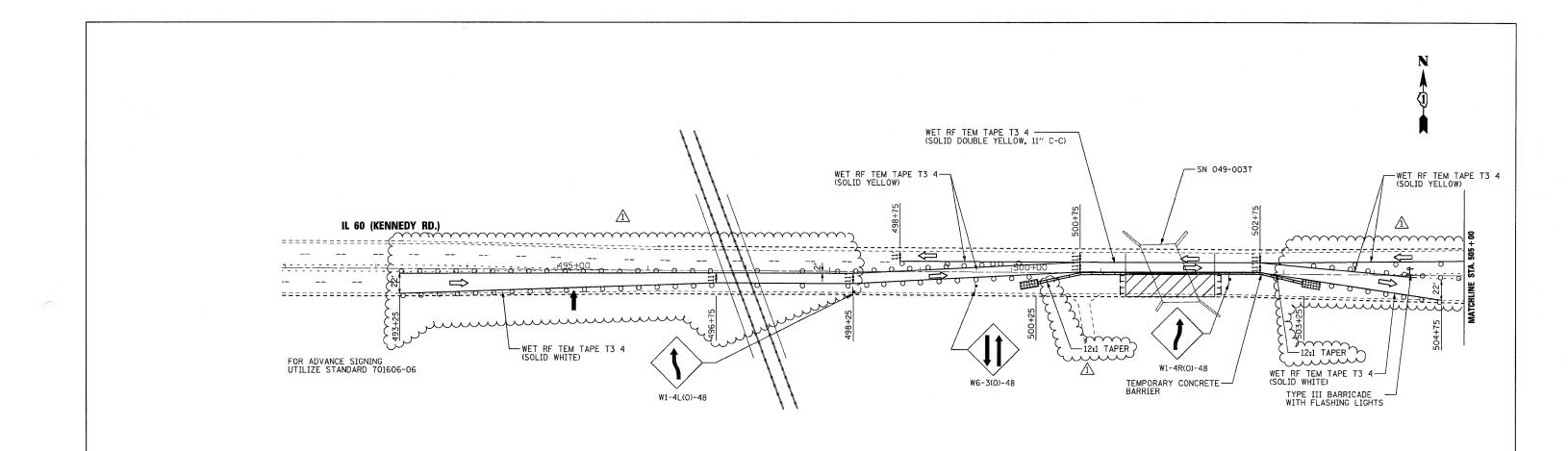
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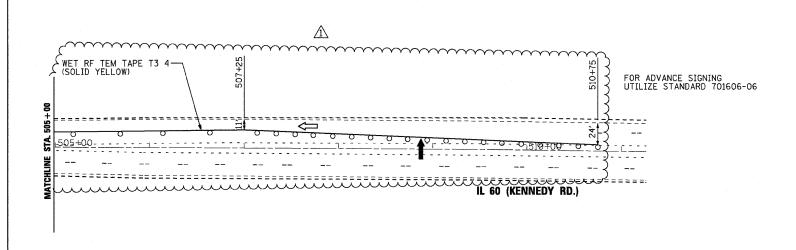
 DATE
 1/29/2010
 REVISED
 3/9/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 1
IL 60 (KENNEDY RD.)

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





LEGEND:

WORK AREA

TEMPORARY CONCRETE BARRIER

ARROW BOARD

SIGN

TYPE II BARRICADE OR DRUM WITH STEADY BURNING LIGHTS © 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 20 FT CENTERS ALONG TAPERS

TYPE III BARRICADE

IMPACT ATTENUATOR, TEMPORARY NON-REDIRECTIVE

□⇒ DIRECTION OF TRAFFIC

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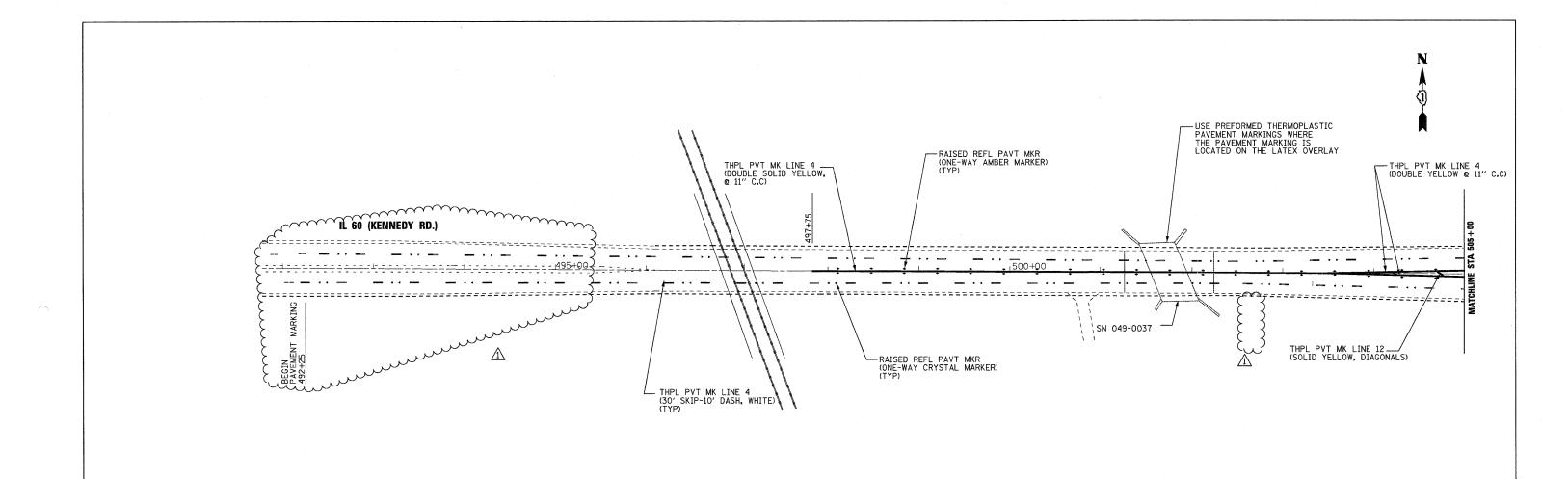
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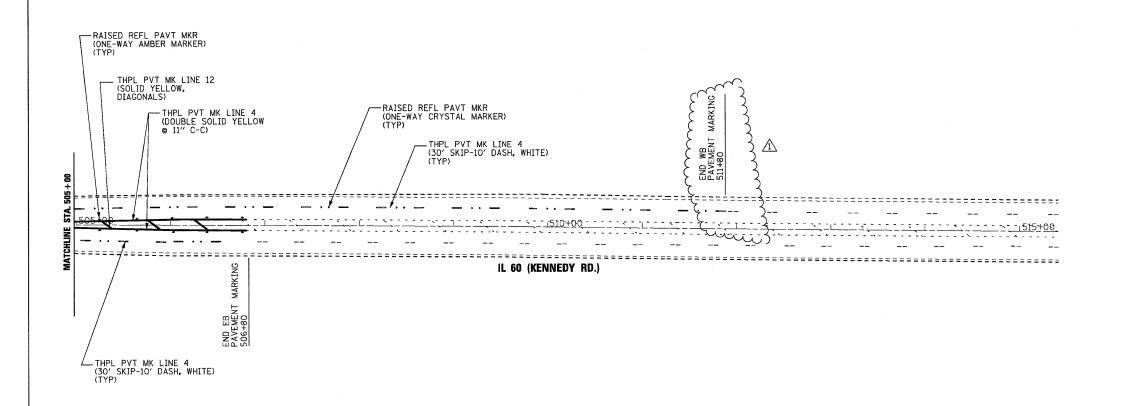
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DESIGNED	TWL	REVISED	-	2/3/2010
DRAWN	JLS	REVISED	-	2/10/2010
CHECKED	SF	REVISED	-	2/22/2010
DATE	1/29/2010	REVISED	-	3/9/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTI	ED STA	AGE OF			TRAFFIC CONTROL				
STAGE 2 IL 60 (KENNEDY RD.)									
SCALE:	SHEET	NO. 0	F SHEETS	STA.	TO STA.				





NOTES:

- 1. REFER TO DISTRICT 1 DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" AND "TYPICAL PAVEMENT MARKING" FOR ADDITIONAL INFORMATION.
- 2. THE PROPOSED PAVEMENT MARKINGS SHALL BE PLACED IN THE SAME LOCATIONS AS THE EXISTING PAVEMENT MARKINGS OR AS DIRECTED BY THE ENGINEER

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DESIGNED	TWL	REVISED	-	
DRAWN	JLS	REVISED		2/10/2010
CHECKED	SF	REVISED	-	2/22/2010
DATE	1/29/2010	REVISED	_	3/9/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	PA		IT MARKI (KENNED)	NG PLAN (RD.)	
SHEET	NO.	ΩF	SHEETS	STA.	

SCALE:

F.A.P. SECTION COUNTY TOTAL SHEET NO.

335 120 R-I-1 LAKE 18 7

CONTRACT NO. 60J54

Existing Structure: S.N. 049-0037, original bridge built as four lane single span structure in 1941. Reconstructed in 1987 with the superstructure completely replaced with Reinforced Concrete deck slab on Steel Beams as F.A.U. Rte. 1246 (IL Rte. 60), Sec. 119&120)R-(85) at Sta. 501+75. The structure measures 40'- 8^3_8 "± Bk. to Bk. Abutments and 57'-7" Out to Out Deck. The substructures consists of Reinforced Concrete closed abutments.

Traffic is to be maintained utilizing stage construction. One lane for each direction will be provided.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

- 1. Partial Depth Slab repairs.
- 2. Hydroscarify $\frac{1}{2}$ inch bridge deck slab surface.
- 3. Reconstruction of transverse joints.
- 4. Place 214 inch latex concrete overlay.
- 5. Patch & Overlay approaches.
- 6. Structural Repairs of Concrete to substructures.

INDEX OF SHEETS

- S1 General Plan & Elevation
- S2 Stage Construction Details
- S3 Temporary Concrete Barrier
- S4 Bridge Deck & Approach Patching Plan and Transverse Joint Reconstruction Details
- S5 Bridge Deck & Approach Improvement Plan
- S6 Abutments Repairs

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

Reinforcement bars designated (E) shall be epoxy coated.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi fy = 60,000 psi

LAST DELAMINATION SURVEY

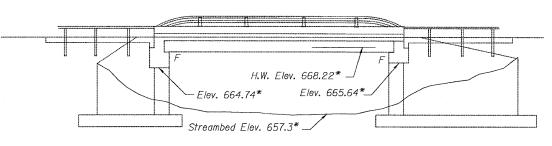
October 2009

TOTAL BILL OF MATERIAL

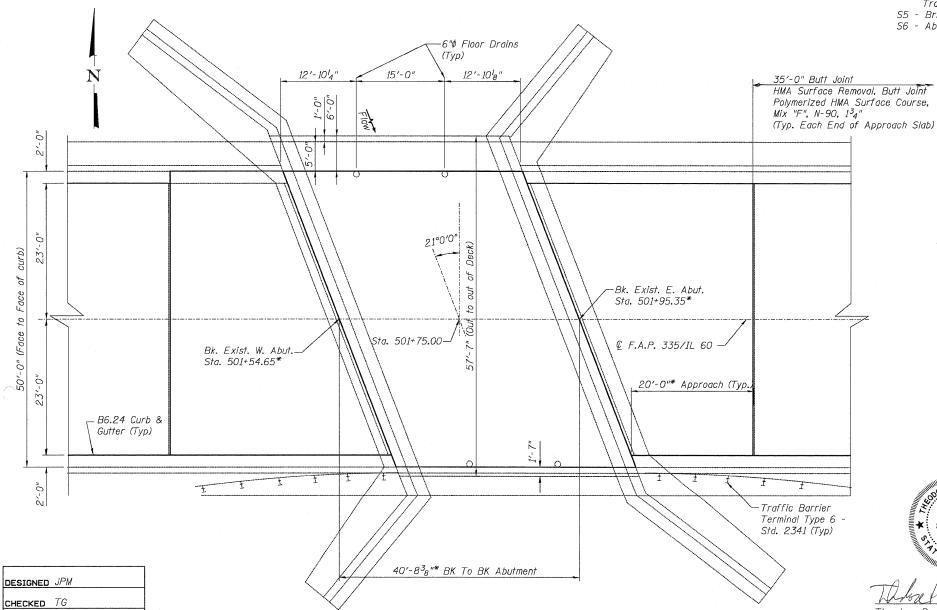
ITEM	UNIT	SUPER	SUB	TOTAL
Approach Slab Repair (Full Depth)	Sq. Yd.	13	-	13
Approach Slab Repair (Partial Depth)	Sq. Yd.	4	-	4
Bridge Deck Grooving	Sq. Yd.	218	-	218
Bridge Deck Hydro-scarification ¹ 2"	Sq. Yd.	227	-	227
Bridge Deck Latex Concrete Overlay, 21/4"	Sq. Yd.	227	-	227
Polymer Concrete	Cu. Ft.	7		7
Comb. Curb & Gutter Removal & Replacement	Foot	20	-	20
Epoxy Crack Injection	Foot	-	29	29
Polymerized Hot-Mix Asphalt Surface Course, Mix "F", N-90, 1 ³ ₄ "	Tons	66	-	66
Protective Coat	Sq. Yd.	227	-	227
Structural Repair of Concrete (Depth equal to or less 5 inches)	Sq. Ft.	_	76	76
Clean and Reseal Relief Joint	Foot	92	-	92
Hot-Mix Asphalt Surface Removal, Butt Joint	Sq. Yd.	358	-	358

GENERAL PLAN AND ELEVATION FAP 335/ILL 60 (KENNEDY RD.) OVER MIDDLE FORK OF N. BRANCH CHICAGO RIVER LAKE COUNTY STATION 501+75.00 STRUCTURE NO. 049-0037

SECTION COUNTY SHEET NO. SI 335 120 R-I-1 LAKE 18 8 S6 SHEETS CONTRACT NO. 60J54 ILLINOIS FED. AID PROJECT



ELEVATION



PLAN

081-004609 REGISTERED STRUCTURAL ENGINEER

Theodore P. Georgas Licensed Structural Engineer

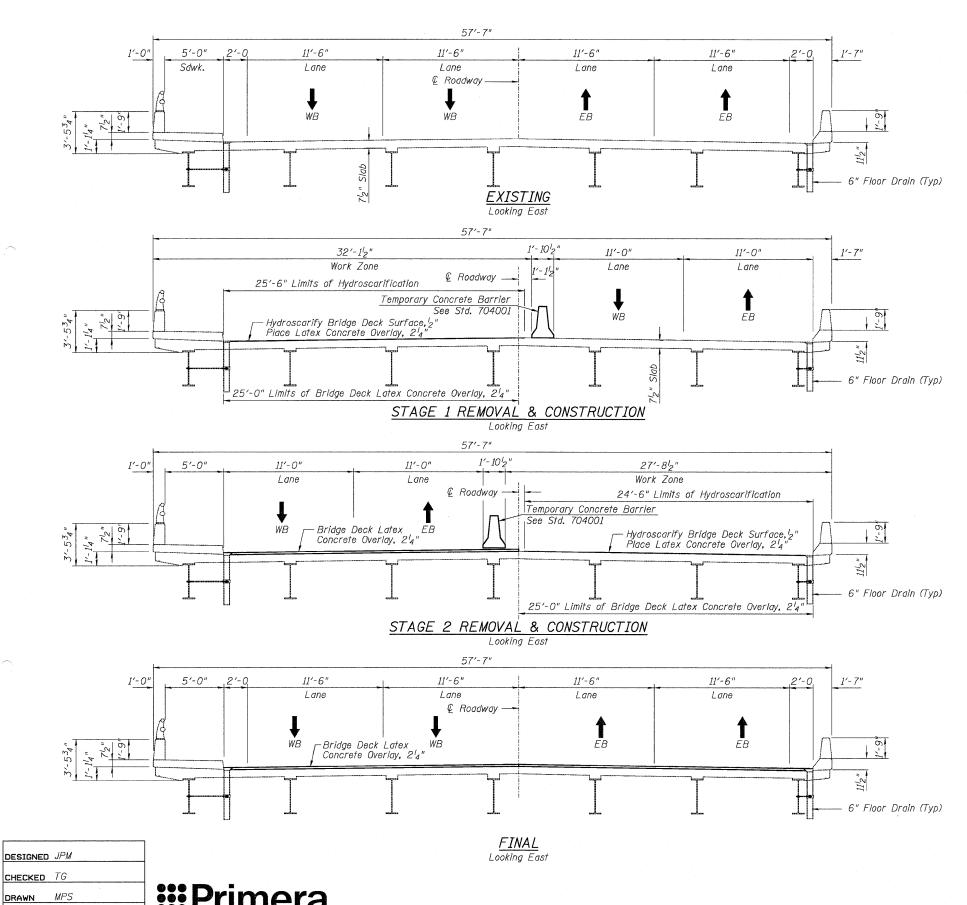
State of Illinois 081-4609

Expires 11/30/2010

DRAWN MPS CHECKED JPM, TG

* Information taken from 1987 existing plans.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CHECKED JPM, TG

<u>LEGEND:</u>



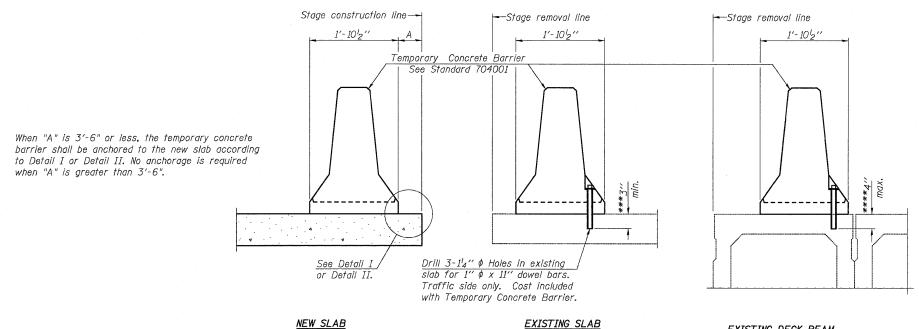
Bridge Deck Hydro-scarification $^{l}_{2}$ "

STAGE CONSTRUCTION DETAILS STRUCTURE NO. 049-0037

-						
SHEET NO.52	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	1	335	120 R-I-1	LAKE	18	9
	S6 SHEETS			CONTRACT	NO. 6	0J54
			ILLINOIS FED. A	ID PROJECT		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING DECK BEAM



NOTES

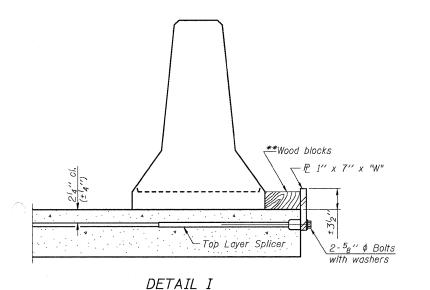
Detail I - With Bar Splicer or Couplers: Connect one (1) 1"x7"x10" steel P to the top layer of couplers with $2^{-5}8'' \phi$ bolts screwed to coupler at approximate ℓ of each barrier panel.

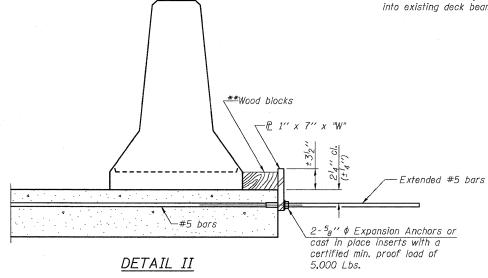
Detail II - With Extended Reinforcement Bars: Connect one (1) 1"x7"x 10" steel 12 to the concrete slab or concrete wearing surface with 2- $^58''$ ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate © of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready

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.





Top bars spacing Detail II ---- € ⁷8" ¢ Holes *£ 1" x 1'2" Notch

STEEL RETAINER P 1" x 7" x 10"

* Required only with Detail II

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

"W" = Top bars spacing + 4"

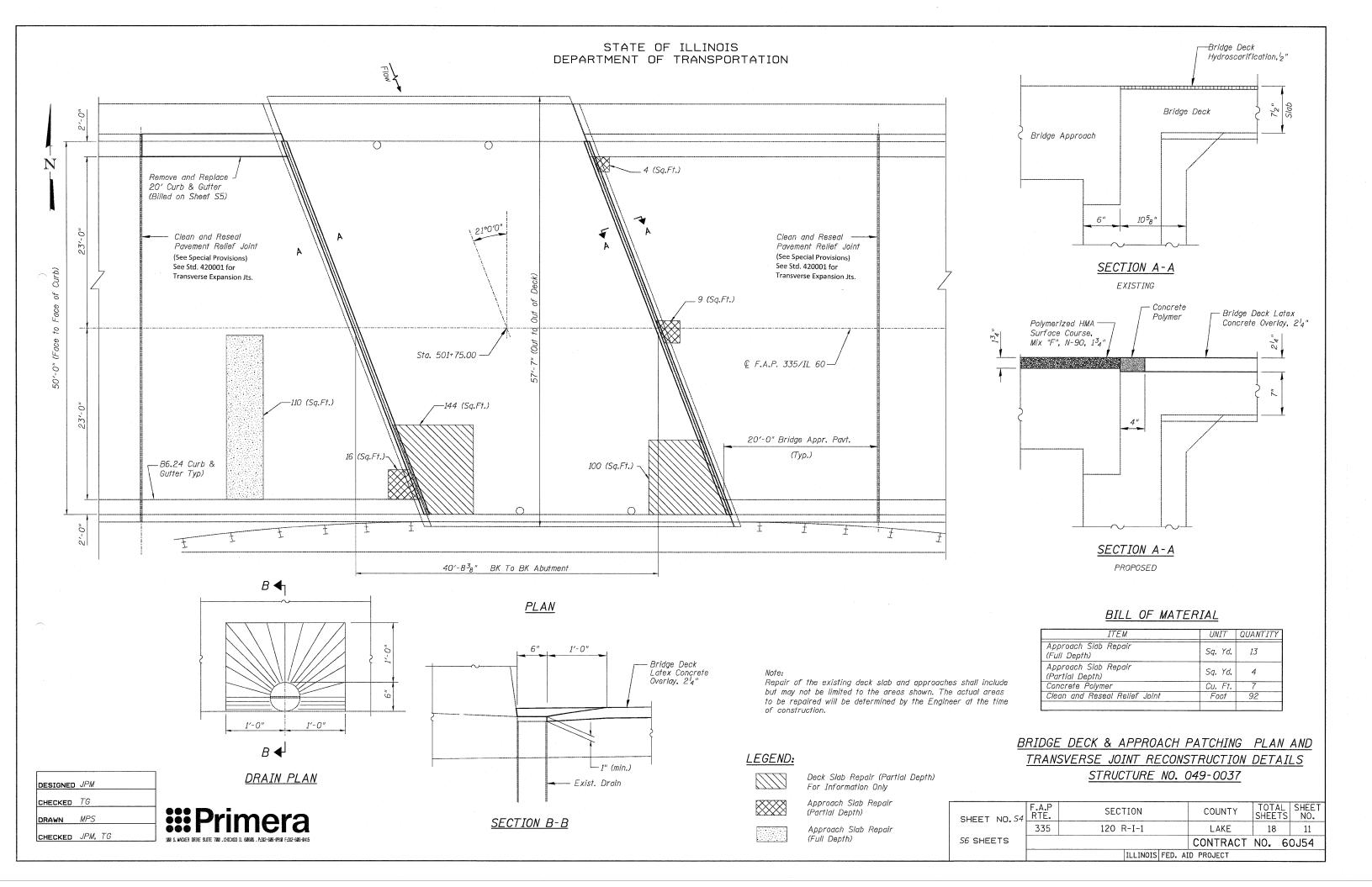
TEMPORARY CONCRETE BARRIER STRUCTURE NO. 049-0037

TOTAL SHEET SHEETS NO. F.A.P RTE. SECTION COUNTY SHEET NO.53 335 LAKE 18 120 R-I-1 10 S6 SHEETS CONTRACT NO. 60J54 ILLINOIS FED. AID PROJECT

DESIGNED	JPM	
CHECKED	TG	
DRAWN	MPS	000
CHECKED	JPM, TG	188 S. WACKER DR

R-27

11-1-09



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION € FAP 335/IL60 BILL OF MATERIAL UNIT QUANTITY Bridge Deck Hydroscarification, 2" Bridge Deck Latex Concrete Sq. Yd. 227 227 Overlay, 21/4" Polymerized HMA Surface Course, Mix "F", N-90, 1³₄" 66 Tons I I I 20'-0" Bridge Appr. (Typ.) Comb. Curb & Gutter Removal & Replacement Foot 20 40'-838" BK To BK Abutment

DESIGNED JPM

CHECKED TG

DRAWN MPS

CHECKED JPM, TG

***Primera
188 S. WHOCHE DRIVE SUITE 788 . CHICAGO IL GAGGG . P.532-686-6915

PLAN

LEGEND:

Polymerized HMA Surface Course, Mix "F", N-90, 1³4"

Bridge Deck Hydroscarification, $^{l}_{2}$ " Bridge Deck Latex Concrete Overlay, 2^{l}_{4} "

Curb & Gutter Removal & Replacement

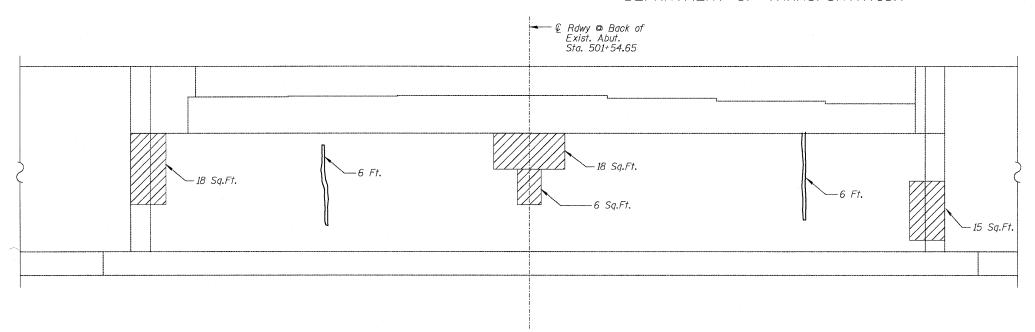
BRIDGE DECK & APPROACH

IMPROVEMENT PLAN

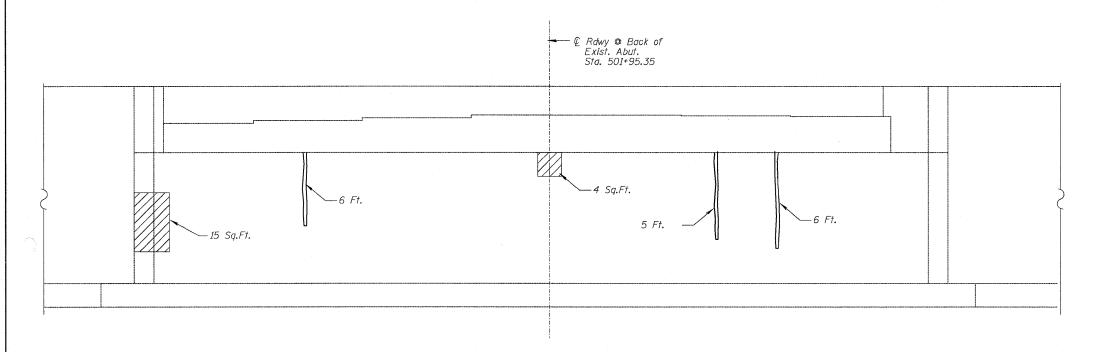
STRUCTURE NO. 049-0037

SHEET NO.S5	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0.1221 ,10100	335	120 R-I-1	LAKE	18	12
S6 SHEETS			CONTRACT	NO. 6	0J54
		ILLINOIS FED. A	ID PROJECT		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



WEST ABUTMENT



EAST ABUTMENT

DESIGNED JPM CHECKED TG DRAWN MPS CHECKED JPM, TG

LEGEND:



Structural Repair of Concrete (Depth equal to or less than 5 inches)

Epoxy Crack Injection

ABUTMENT REPAIRS STRUCTURE NO. 049-0037

BILL OF MATERIAL

(Depth equal to or less than 5 inches) Sq. Ft.

UNIT QUANTITY

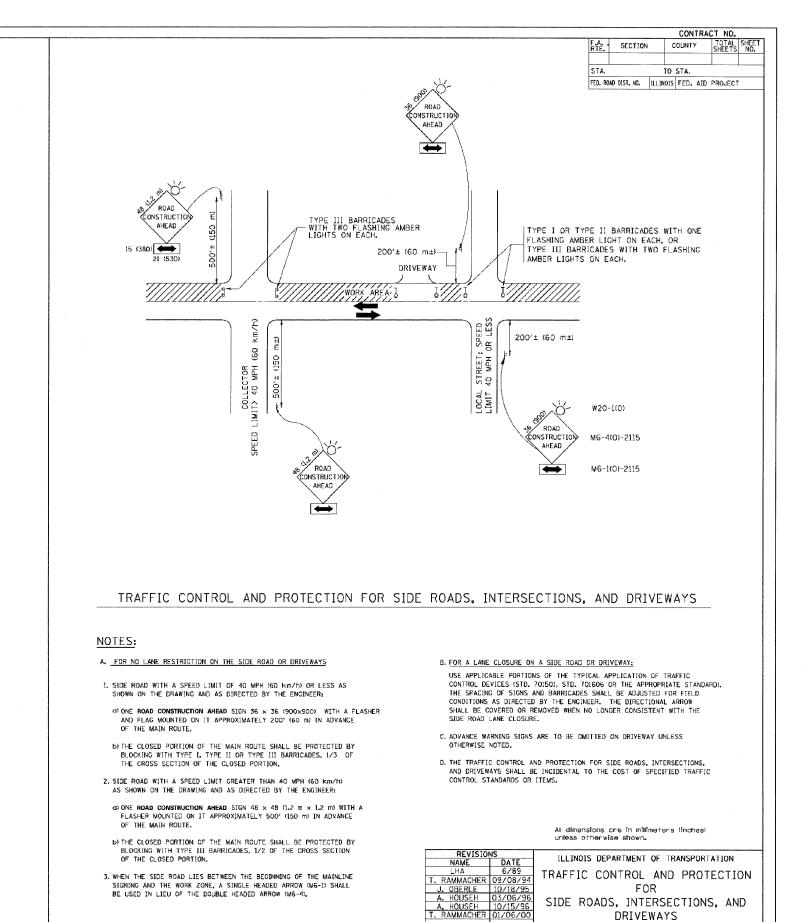
Foot

76

SHEET NO. S6	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	335	120 R-I-1	LAKE	18	13
^{S6} SHEETS			CONTRACT	NO. 6	0J54
		ILLINOIS FED. AI	D PROJECT		

Structural Repair of Concrete

Epoxy Crack Injection



:::Primera \$FILEL\$

DESIGNED VEA REVISED DRAWN REVISED CHECKED TWL REVISED REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DISTRICT ONE STANDARD DETAILS SHEET NO. OF SHEETS STA. TO STA.

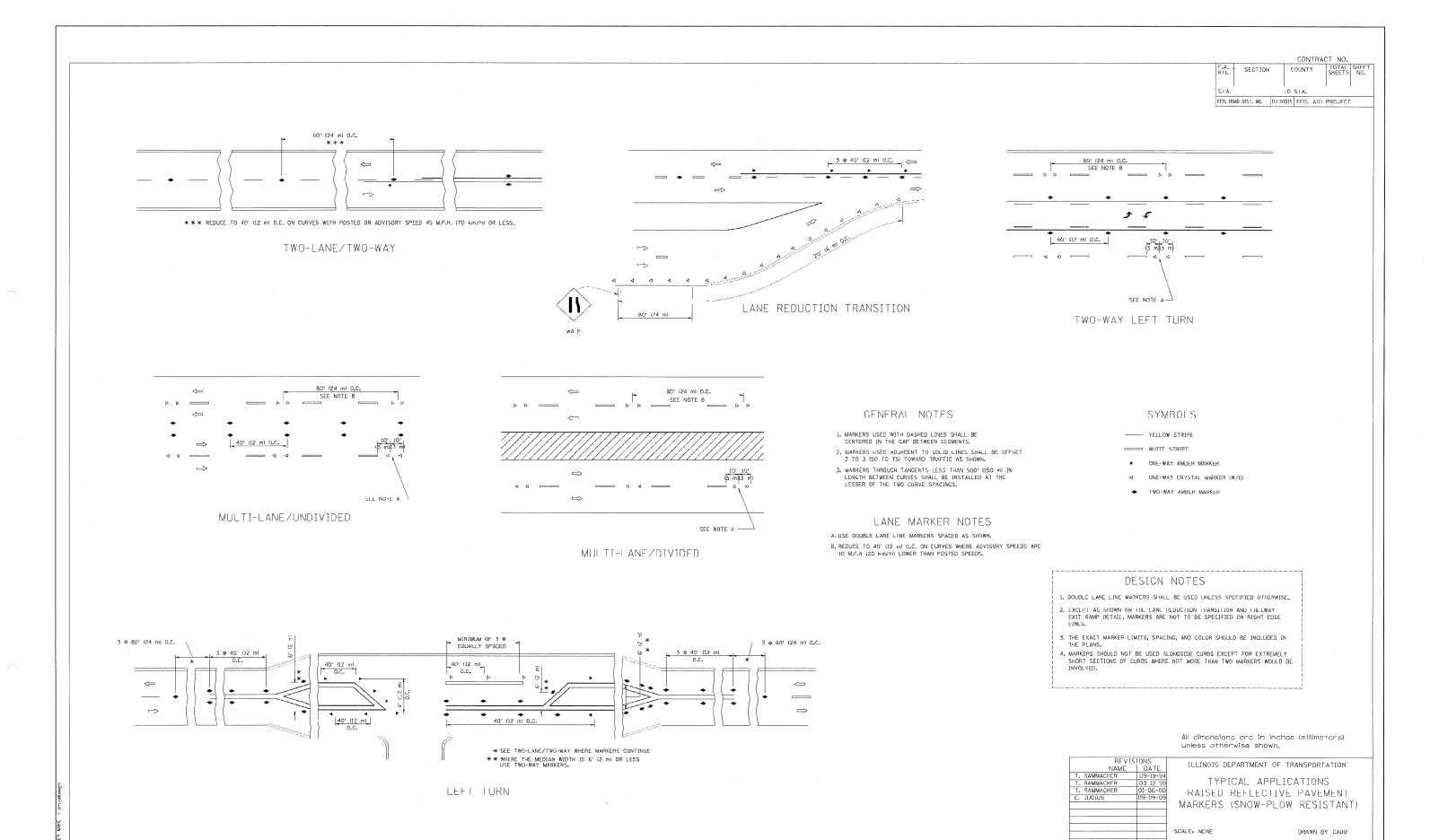
TC-10 COUNTY TOTAL SHEE SECTION 120 R-I-1 LAKE CONTRACT NO. 60J54

DRAWN BY CHECKED BY

SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

ILLINOIS FED. AID PROJECT

SCALE: NONE



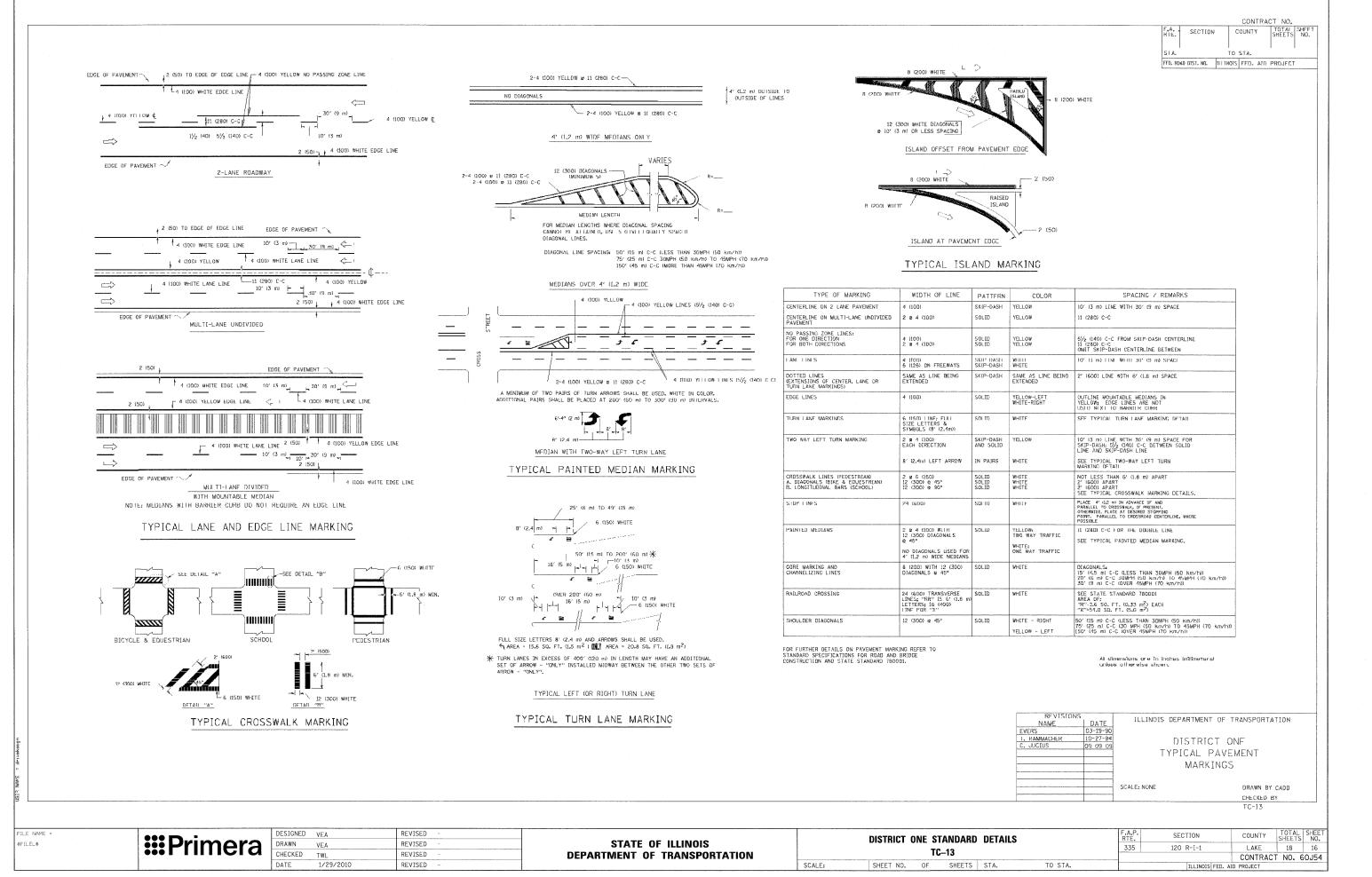
sfilels SPIRES #Primera

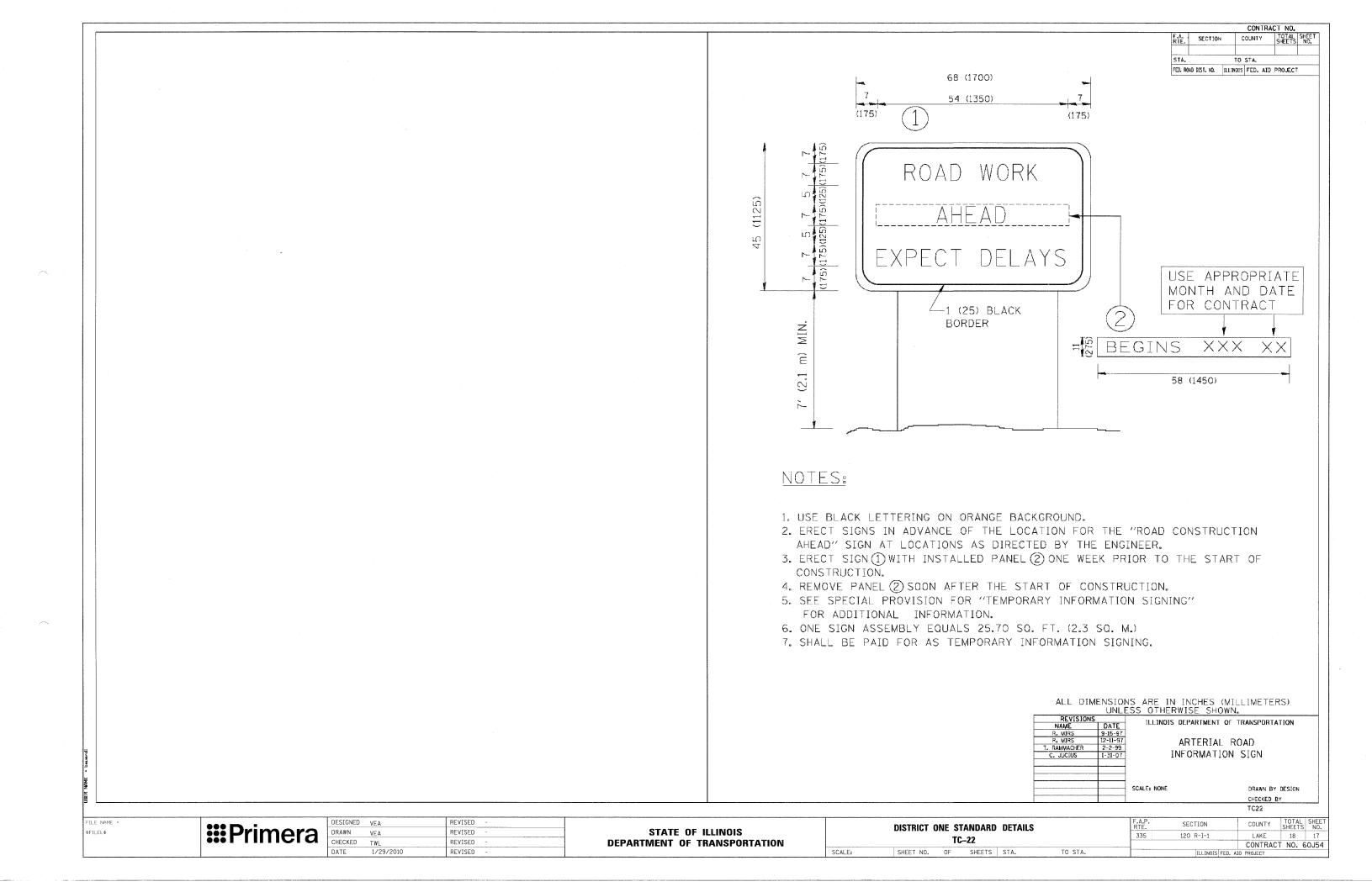
DESIGNED	VEA	REVISED	-
DRAWN	VEA	REVISED	-
CHECKED	TWL	REVISED	-
DATE	1/29/2010	REVISED	-

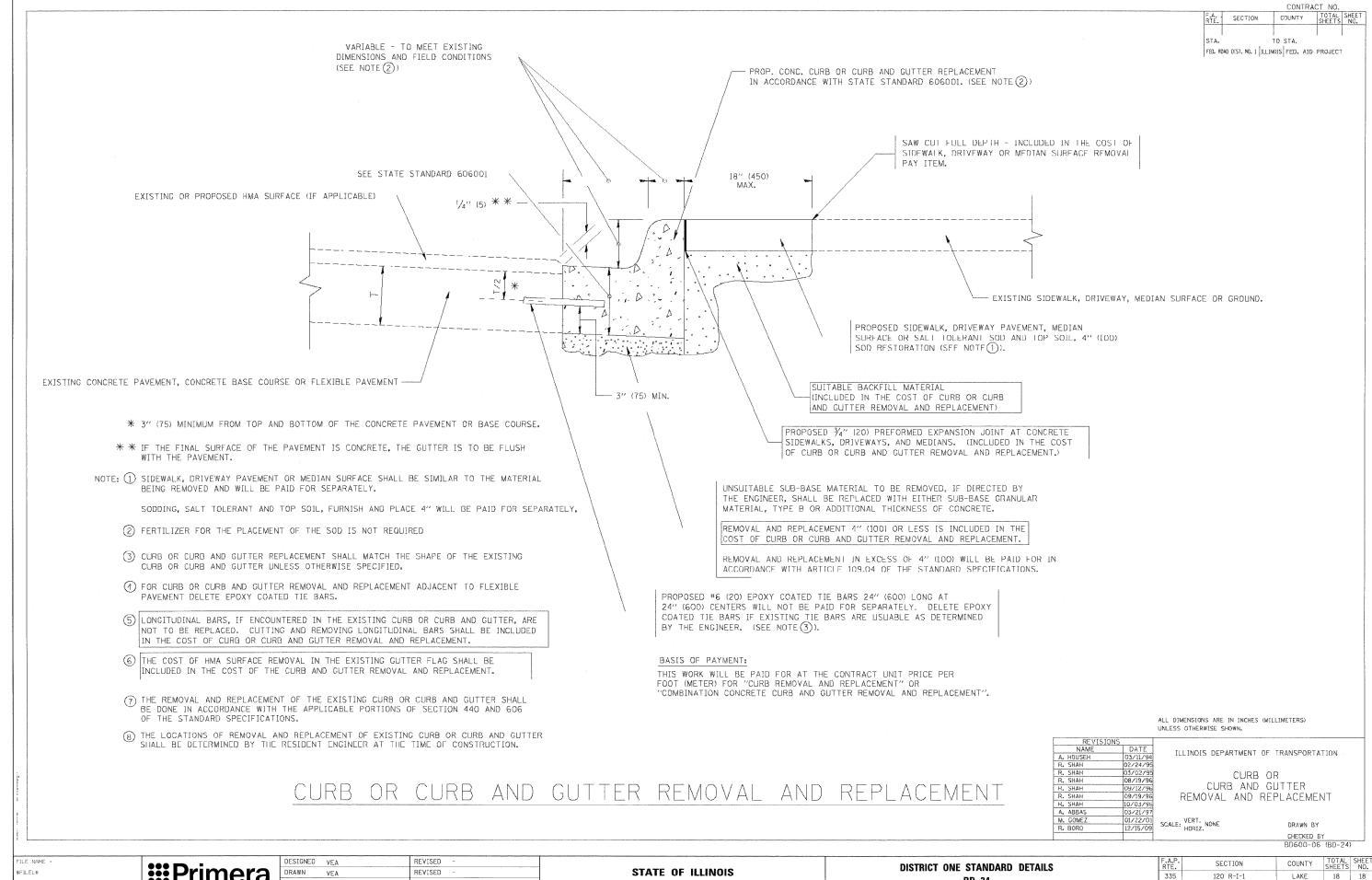
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD DETAILS						F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
TC-11						335	120 R-I-1	LAKE	18	15	
	****			U-11					CONTRACT	NO.	50J54
	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

TC-11







:::Primera

CHECKED TWL REVISED DATE REVISED

DEPARTMENT OF TRANSPORTATION

BD-24 OF SHEETS STA.

TO STA.

SHEET NO.

SCALE:

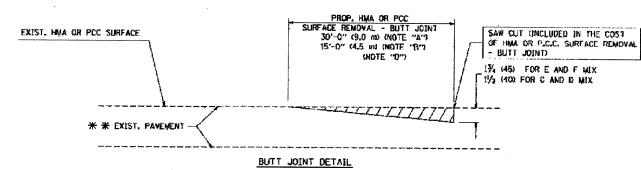
CONTRACT NO. 60J54

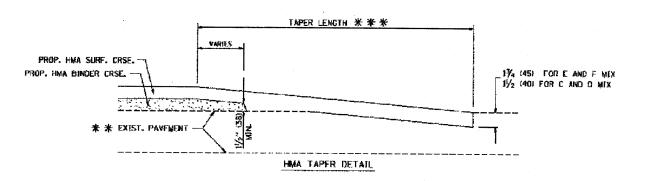
PROP. PAY LIMIT OF HWA SURF. REMOVAL FULL THICKNESS OF MILLING TEMP. RAMP PROP. HMA SURFACE REMOVAL EXIST, PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST OF HMA SURFACE (NOTE "C") PHOP. HMA SURFACE REMOVAL REMOVAL - BUTT JOINT) 1% (45) FOR E AND F MIX 4'-6" (1.35 m) PAY LIMIT FOR BUTT JOINT 1/2 (40) FOR C AND D WIX EXIST. HMA "SURF. EXIST. PAVEMENT HMA CONSTRUCTED TEMPORARY RAMP FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW OPTION 2 TYPICAL TEMPORARY RAMP HMA TAPER LENGTH *** SAW CUT (INCLUDED IN THE COST OF HMA SURFACE PROP. HMA SURF. CRSE. PROP. HMA BINDER CRSE. 4'-6" (t.35 m) VARIES_ 1% (45) FOR E AND F MIX 1/2 (40) FOR C AND D MIX EXIST, HMA SURF. EXIST, PAVEMENT BUTT JOINT AND HMA TAPER TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

RTE. SECTION COUNTY TOTAL SHEET NO.

STA. TO SIA.

FED. ROMO BIST. 00. I BLIRGIS HED. AND PROJECT





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- 8: MINOR SIDE ROADS.
- C: THE TEMP, RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- Ex TAPER THE TEMP, RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MOULING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP, RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- GA SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HIMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR WILLING THICKNESS.

ALL OBMENSIONS ARE IN INCHES (WILLDWETERS) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENTS

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD ISQUARE WETER).
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CENENT CONCRETE SURFACE REMOVAL BUTF JOINT".

SCALE:

WEATOM.	M2
NAME	DATE
M, DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-97
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. COMEZ	04/06/01
R. BORG	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE

ORAWN BY CHECKED BY

FILE NAME = \$FILEL\$

:::Primera

 DESIGNED
 VEA
 REVISED

 DRAWN
 VEA
 REVISED

 CHECKED
 TWL
 REVISED

 DATE
 1/29/2010
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD DETAILS

BD400-05

SHEET NO. OF SHEETS STA.

F.A.P. SECTION COUNTY TOTAL SHEETS NO. 335 120 R-I-1 LAKE 18 18A CONTRACT NO. 60J54