4-3-09 Letting, Item 057

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60D76		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAU 2612 /LEMONT ROAD
SECTION: 3104 B–1–I–2
OVER DES PLAINES RIVER, R.R. CANAL
BRIDGE DECK OVERLAY AND BRIDGE JOINT REPAIR
PROJECT: ESP-2612(002)
COOK COUNTY
C–91–095–08

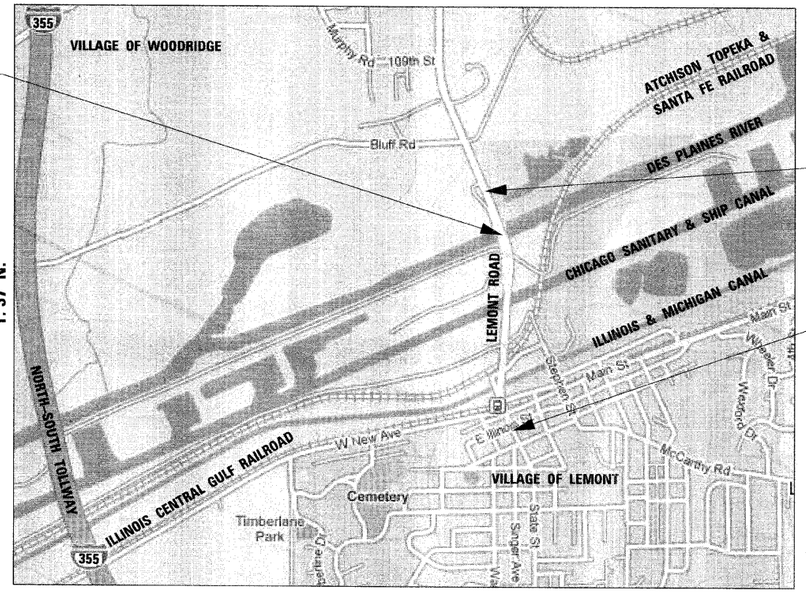
FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION:
LEMONT ROAD : MINOR ARTERIAL (URBAN)
DESIGN SPEED : 45 M.P.H.
2005 ADT = 47,400

MUNICIPALITY INVOLVED:
VILLAGE OF LEMONT

LOCATION:
LEMONT ROAD
OVER DES PLAINES RIVER
S.N. 016–2504

LEMONT TOWNSHIP
R. 11 E.



PROJECT ENDS:
STA. 49 + 18

PROJECT BEGINS:
STA. 13 + 72

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

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

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

GROSS LENGTH OF PROJECT = 3,546 FEET = 0.672 MILES
NET LENGTH OF PROJECT = 3,546 FEET = 0.672 MILES

DISTRICT ONE – DESIGN
PROJECT MANAGER : ISAAC KWARTENG (847) 705–4230
PROJECT ENGINEER : RON ZENAROSA (847) 705–4212

CONTRACT NO. 60D76

D–91–095–08

LOCATION OF SECTION INDICATED THUS: –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 9, 2009
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER
March 13, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT
March 13, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

BIRINDER S. SACHDEVA — 62-37259 — LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Birinder S. Sachdeva — January 12, 2009
BIRINDER S. SACHDEVA, P.E. — DATE
EXPIRES: 11–30–2009

BHADRESH N. SHAH — 081-004476 — PROFESSIONAL ENGINEER

Bhadresh N. Shah — JANUARY 12, 2009
BHADRESH N. SHAH, S.E., P.E. — DATE
EXPIRES: 11–30–2010

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

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LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420001-07	PAVEMENT JOINTS
420401-07	BRIDGE APPROACH PAVEMENT CONNECTOR
701901-01	TRAFFIC CONTROL DEVICES
701601-00	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
886001-01	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
2. THE RESIDENT ENGINEER SHALL CONTACT THE AREA TECHNICIAN TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
3. ALL PAVEMENT MARKINGS AND RAISED REFLECTORS AFFECTED BY THE BRIDGE REPAIRS SHALL BE REPLACED. NOMINAL QUANTITIES HAVE BEEN INCLUDED IN THE CONTRACT FOR THIS WORK.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. DO NOT SCALE THESE PLANS FOR CONSTRUCTION PURPOSES.
6. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR MUST EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND TO THE ADJOINING RESIDENTIAL AREAS.
7. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.

RECOMMENDATIONS FOR LATEX CONCRETE OVERLAY PLACEMENT

1. A 4" SLUMP IS PREFERRED FOR THE LATEX CONCRETE OVERLAY.
2. USE CONVEYORS TO PLACE THE LATEX CONCRETE OVERLAY.
3. IF THE USE OF CONVEYORS ARE NOT POSSIBLE WHEN PLACING THE LATEX CONCRETE OVERLAY THEN USE THE DIRECT TRUCKING METHOD.
4. THE PUMPING METHOD FOR PLACING THE LATEX CONCRETE OVERLAY IS NOT ALLOWED.
5. USE COMPLETE LANE CLOSURE DURING PLACEMENT OF THE LATEX CONCRETE OVERLAY.

ROADWAY NAME	HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
	MIXTURE TYPE	AC TYPE	AIR VOIDS
LEMONT ROAD	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	SBS/SBR PG 70-22	4% @ 90 GYR
	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	SBS/SBR PG 70-22	4% @ 90 GYR

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.
THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

FILE NAME = 60D76 gennote.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - G.F.L.	REVISED -	
DRAWN - A.C.S.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, LIST OF STANDARDS AND GENERAL NOTES
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	2
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

URBAN
100% FED.

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE LEMONT ROAD TOTAL QUANTITIES	SFTY-2A
42001300	PROTECTIVE COAT	SQ YD	22,435	22,435
44213200	SAW CUTS	FOOT	247	247
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	492	492
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	412	412
44000700	APPROACH SLAB REMOVAL	SQ YD	568	568
44000100	PAVEMENT REMOVAL	SQ YD	348	348
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	516	516
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	55	55
50102400	CONCRETE REMOVAL	CU YD	190	190
50157300	PROTECTIVE SHIELD	SQ YD	1,830	1,830
50300225	CONCRETE STRUCTURES	CU YD	44.8	44.8
50200100	STRUCTURE EXCAVATION	CU YD	40	40
50300255	CONCRETE SUPERSTRUCTURE	CU YD	257.1	257.1
50300260	BRIDGE DECK GROOVING	SQ YD	20,877	20,877
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5120	5120
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	20	20
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	53,340	53,340
50800515	BAR SPLICERS	EACH	322	322
51205200	TEMPORARY SHEET PILING	SQ FT	374	374
52000110	PREFORMED JOINT STRIP SEAL	FOOT	72	72
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	2	2
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	8	8
52100030	ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	10	10
52100540	ANCHOR BOLTS,1 1/2"	EACH	40	40
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2
60260100	INLETS TO BE ADJUSTED	EACH	4	4
60622000	CONCRETE MEDIAN, TYPE SM-2.12	SQ FT	3,523	3,523
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	75	75
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1
63200310	GUARDRAIL REMOVAL	FOOT	106	106
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8
67100100	MOBILIZATION	L SUM	1	1
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	40	40

URBAN
100% FED.

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE LEMONT ROAD TOTAL QUANTITIES	SFTY-2A
	70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
	70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,100	1,100
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	550	550
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	14,580	14,580
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	17	17
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,213	1,213
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	750	750
*	78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	245	245
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	19,330	19,330
*	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	1,340	1,340
*	78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	53	53
*	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	130	130
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	113	113
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	33	33
*	78100300	REPLACEMENT REFLECTOR	EACH	33	33
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	2,374	2,374
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	113	113
*	81200120	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	107	107
*	81700125	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 4	FOOT	17,732	17,732
*	81800410	AERIAL CABLE, 4-1/C NO. 4 WITH MESSENGER WIRE	FOOT	4,265	4,265
*	88600100	DETECTOR LOOP, TYPE I	FOOT	605	605
	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1
	X0320887	POLYMER CONCRETE	CU FT	12	12
	X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	22,347	22,347
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	130	130
	X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	48	48
	X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6	6
	X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1,172	1,172
	X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1
	X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	19,654	19,654
	X0712400	TEMPORARY PAVEMENT	SQ YD	348	348
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	1	1

*Specialty Items

Rev.

FILE NAME = 60D76 SOQ.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED -	G.F.L.	REVISED -
DRAWN -	A.C.S.	REVISED -
CHECKED -	E.J.M.	REVISED -
DATE -	JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
LEMONT ROAD

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	3
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

URBAN
100% FED.

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE LEMONT ROAD TOTAL QUANTITIES	CONSTRUCTION TYPE CODE LEMONT ROAD SFTY-2A
	Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	22,693	22,693
	Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	36	36
	Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	53	53
NP	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2
	Z0029999	IMPACT ATTENUATOR REMOVAL	EACH	2	2
	Z0030030	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
	Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	14	14
	Z0030320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	3	3
	Z0034390	MODULAR EXPANSION JOINT 6"	FOOT	435	435
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1
	X0326331	CLEANING AND PAINTING BEARINGS	EACH	16	16
*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	17,732	17,732

NP= Non-participating
* - Specialty Items

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE LEMONT ROAD TOTAL QUANTITIES	CONSTRUCTION TYPE CODE LEMONT ROAD SFTY-2A

FILE NAME = 60D76 SQ0.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
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211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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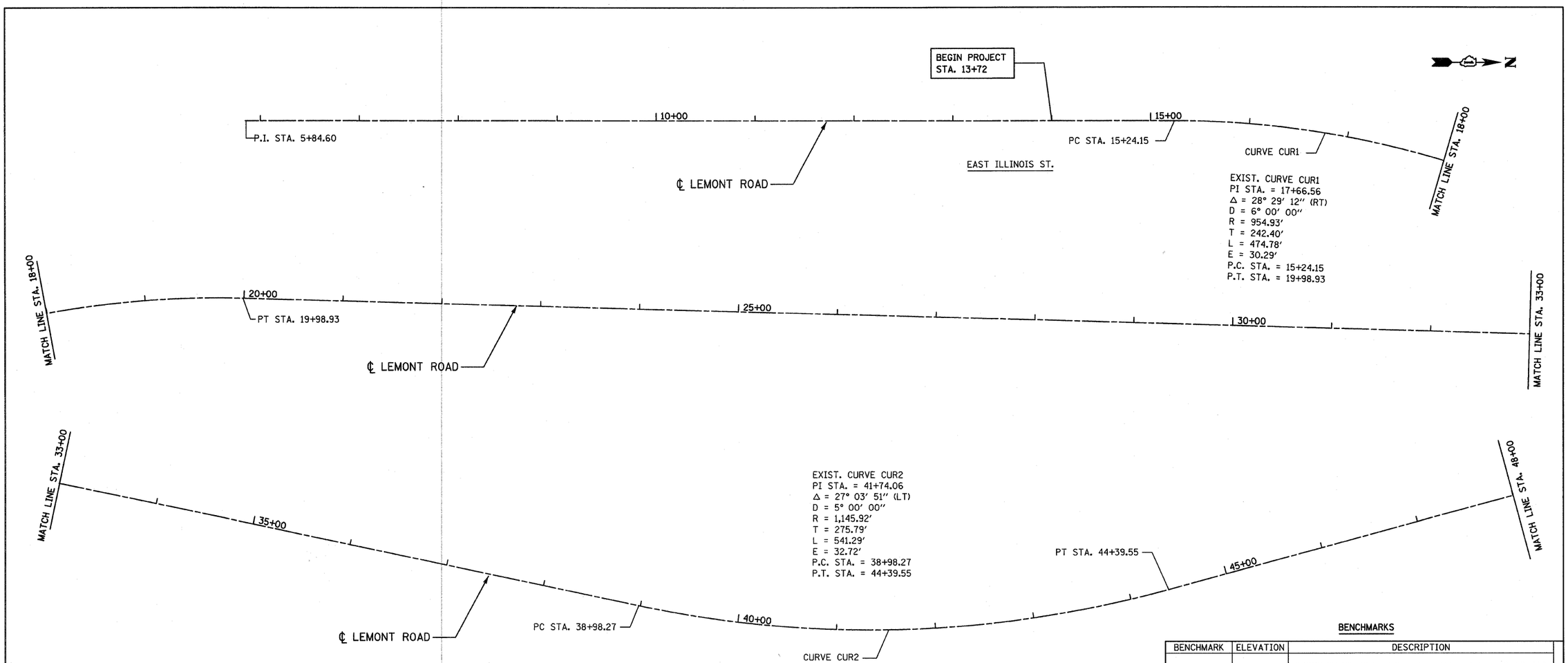
DRAWN - A.C.S.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	4
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONTROL POINTS LEMONT ROAD

POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
A111	5+84.60	0.00	1822917.1454	1075197.8139	BEGIN POINT
104	9+62.83	29.32	1823273.0590	1075066.4980	X-CUT
100	13+09.55	-32.35	1823562.3400	1074865.6600	X-CUT
101	13+23.14	-302.11	1823462.0300	1074614.8800	X-CUT
105	13+75.61	270.87	1823748.9940	1075113.5910	X-CUT
1693	13+96.83	-72.83	1823624.7400	1074792.4300	X-CUT
	15+24.15	0.00	1823770.8415	1074805.4329	PC
	19+98.93	0.00	1824232.9632	1074720.2723	PT
	38+98.27	0.00	1826128.1203	1074846.2122	PC
	44+39.55	0.00	1826656.6732	1074755.5786	PT
106	49+53.56	38.28	1827144.0170	1074587.7440	PK NAIL
102	53+03.96	-46.27	1827432.5380	1074371.6790	PK NAIL
103	60+69.34	-42.55	1828137.1700	1074072.8210	REBAR
	69+19.35	0.00	1828934.8785	1073776.2074	PC

BENCHMARKS

BENCHMARK	ELEVATION	DESCRIPTION
TBM S	597.765	CROSS ON SW CORNER OF TRAFFIC HANDHOLE FOUNDATION NEAR NE CORNER OF STEPHEN ST. BRIDGE
BM 7A	595.555	ON EAST MOST FLANGE BOLT OF HYDRANT AT NE QUADRANT OF RIVER ST. AND BOSSERT DR.
BM 6A	600.835	SOUTHERNMOST FLANGE BOLT ON FIRST HYDRANT EAST OF LEMONT ST. ON NORTH SIDE OF CANAL ST.
BM EW	623.577	BOX CUT ON SE CORNER OF SE WINGWALL OF LEMONT ROAD BRIDGE
BM C	622.904	BOX CUT ON CORNER OF SIGNAL CONTROLLER AT NW QUADRANT OF ILLINOIS ST. AND STATE ST.
BM CB	587.350	BOX CUT ON 3RD BOLLARD EAST OF LEMONT ROAD BRIDGE ON NORTH BANK OF SANITARY AND SHIP CANAL
BM DRS	599.820	BOX CUT IN THE SW WINGWALL OF DES PLAINES RIVER BRIDGE FOR OLD LEMONT ROAD
BM DRN	600.580	BOX CUT IN THE NE WINGWALL OF DES PLAINES RIVER BRIDGE FOR OLD LEMONT ROAD
BM LN	595.160	RR SPIKE IN FIRST POWER POLE NORTH OF LEMONT ROAD BRIDGE ON THE WEST SIDE OF LEMONT ROAD

FILE NAME = 60076 ALIGNMENT.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

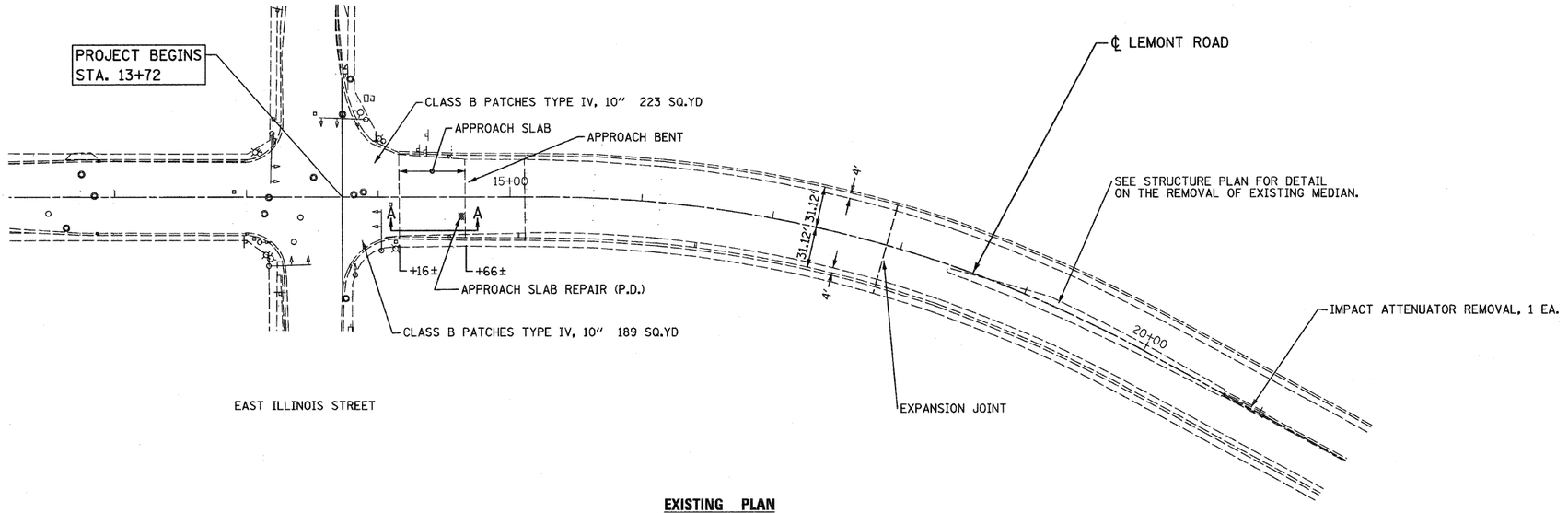
DESIGNED - G.F.L.	REVISED -	
DRAWN - K.R.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

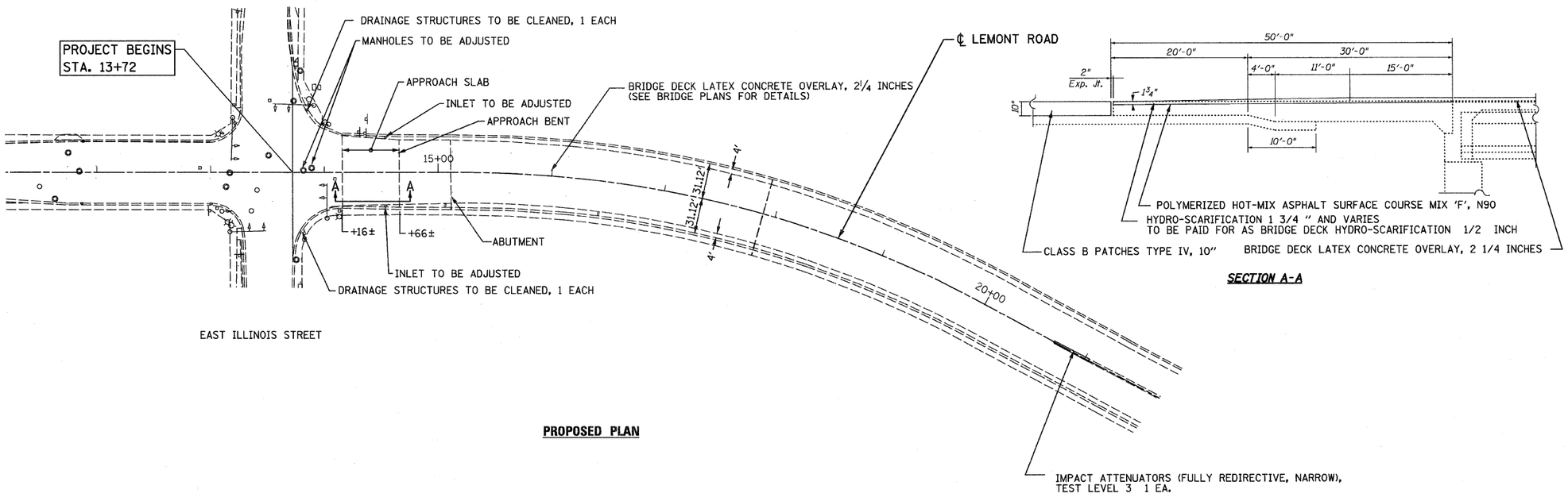
ALIGNMENT PLAN AND BENCHMARKS
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	5
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING PLAN



PROPOSED PLAN

SECTION A-A

FILE NAME = 60D76 removalplan01.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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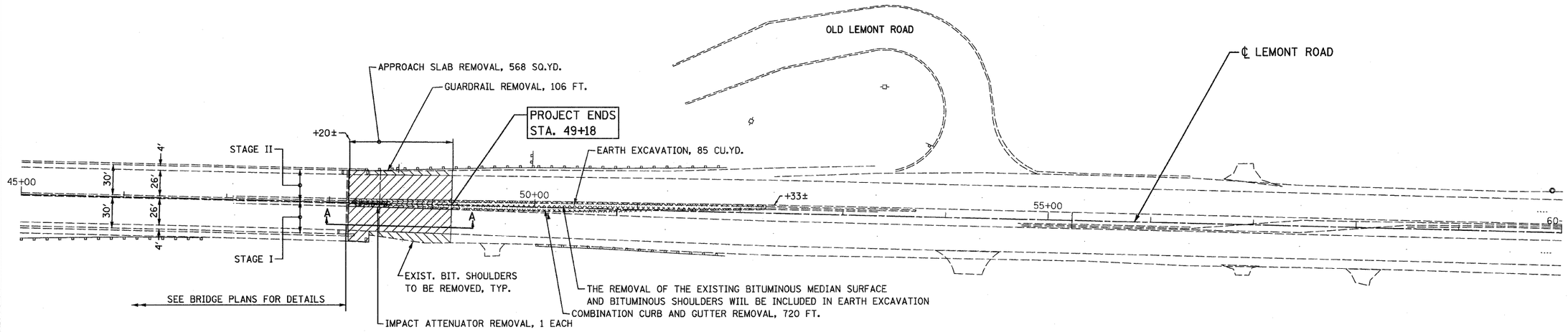
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

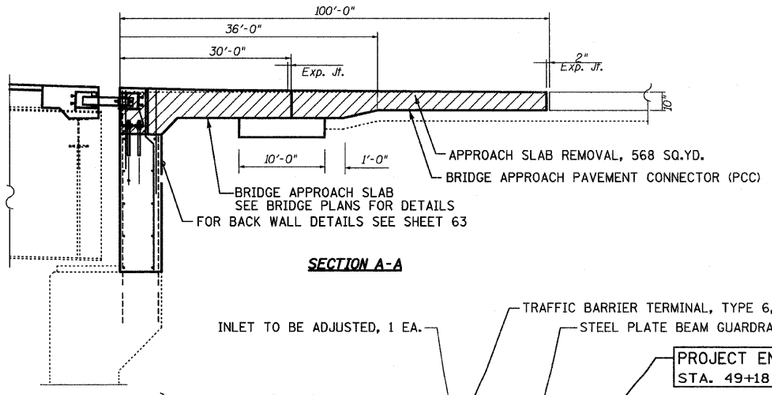
EXISTING AND PROPOSED PLAN
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 13+00 | TO STA. 20+00

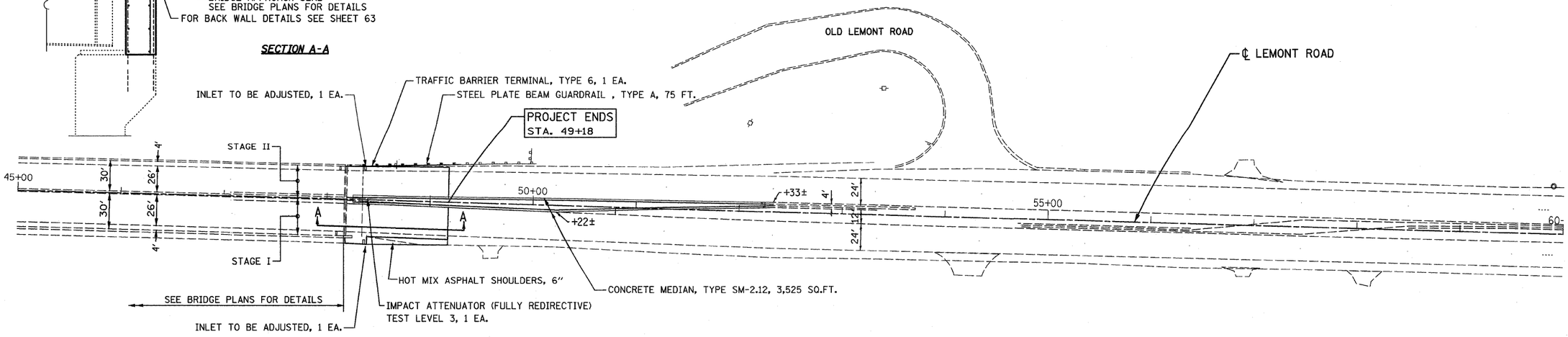
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	6
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING PLAN



SECTION A-A



PROPOSED PLAN

FILE NAME = 60076 removalplan02.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED PLAN
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 48+00 | TO STA. 60+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	7
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC

PRE-STAGE

(NOT SHOWN)

CONSTRUCTION STAGING

1. REMOVE EXISTING PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS IN LANE 2 S.B.

2. REMOVE CONFLICTING PAVEMENT MARKINGS IN LANE 1 S.B. AND PLACE TEMPORARY PAVEMENT MARKINGS FOR STAGE I. REMOVE C-4 MEDIAN ON BRIDGE AND PLACE TEMPORARY CONCRETE BARRIER WHERE REQUIRED FOR STAGE I.

   REMOVE CURB AND GUTTER AND MEDIAN, STA. 48+20± TO STA. 52+30± AND PLACE TEMPORARY PAVEMENT. PLACE TEMPORARY TRAFFIC SIGNALS AT EAST ILLINOIS STREET FOR STAGE I.

MAINTENANCE OF TRAFFIC

1. CLOSE LANE 2 S.B. USING STANDARDS 701601, 701602, AND 707701. MAINTAIN S.B. TRAFFIC IN LANE 1. MAINTAIN 2-LANES OF TRAFFIC N.B. IN EXISTING LANES. LEFT TURNS AT EAST ILLINOIS STREET PERMITTED.

2. SOUTHBOUND TRAFFIC WILL BE MAINTAINED IN LANE 2 S.B. AND NORTHBOUND TRAFFIC WILL BE MAINTAINED IN LANE 2 N.B. USE STANDARDS 701601, 701602, AND 701701 TO PROVIDE ADVANCE LANE CLOSURES.

   NO LEFT TURNS PERMITTED FROM LEMONT ROAD TO EAST ILLINOIS STREET. INITIATE DETOUR ROUTINGS AS SHOWN ON SHEET NO. 16.

STAGE I

CONSTRUCTION STAGING

1. CONSTRUCT DECK REPAIR, JOINT REPLACEMENT, SUB-STRUCTURE REPAIR, DECK SCARIFICATION AND PLACE A LATEX CONCRETE OVERLAY ON THE NORTHBOUND BRIDGE DECK. IN ADDITION, RECONSTRUCT THE NORTHBOUND APPROACH SLABS AND PERFORM PAVEMENT REPAIR FROM THE SOUTHBOUND APPROACH SLAB TO THE NORTH EDGE E. ILLINOIS STREET

2. PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY CONCRETE BARRIER ON THE NORTHBOUND BRIDGE DECK FOR STAGE II. TEMPORARY PAVEMENT MARKINGS WILL BE TAPE TYPE III.

MAINTENANCE OF TRAFFIC

1.& 2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION ON THE SOUTHBOUND BRIDGE DECK AS SHOWN ON SHEET NO'S M3-M5. THE EXISTING SIDEWALK CROSSING THE BRIDGE WILL BE CLOSED AT EACH END USING STANDARD 701801.

MAINTAIN TEMPORARY TRAFFIC SIGNALS AS INDICATED IN THE PLANS AND THE DETOUR ROUTINGS INCLUDED ON SHEET NO. 16 OF THE PLANS.

STAGE II

CONSTRUCTION STAGING

1. CONSTRUCT DECK REPAIR, JOINT REPLACEMENT, SUB-STRUCTURE REPAIR, DECK SCARIFICATION AND PLACE A LATEX CONCRETE OVERLAY ON THE SOUTHBOUND BRIDGE DECK. IN ADDITION, RECONSTRUCT THE SOUTHBOUND APPROACH SLABS AND PERFORM PAVEMENT REPAIR FROM THE SOUTH APPROACH SLAB TO THE NORTH EDGE OF E. ILLINOIS STREET.

MAINTENANCE OF TRAFFIC

1. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION ON THE NORTHBOUND BRIDGE DECK AS SHOWN ON SHEET NO'S M6 - M8. THE EXISTING SIDEWALK OVER THE BRIDGE WILL BE RE-OPENED DURING THIS STAGE.

   ADJUST TEMPORARY TRAFFIC SIGNAL HEADS FOR STAGE II LANE CONFIGURATION AND THE DETOUR ROUTINGS INLCUDED IN SHEET NO. 17 OF THE PLANS.

STAGE III

(NOT SHOWN)

CONSTRUCTION STAGING

1. REMOVE TEMPORARY CONCRETE BARRIER AND TEMPORARY TRAFFIC SIGNALS. RECONSTRUCT MEDIAN, STA. 48+20± TO STA. 52+30±.

2. COMPLETE PAVEMENT REPAIR FROM THE SOUTH APPROACH SLAB TO THE NORTH EDGE OF E. ILLINOIS STREET.

3. PLACE PERMANENT PAVEMENT MARKINGS ON THE NORTHBOUND AND SOUTHBOUND ROADWAYS.

MAINTENANCE OF TRAFFIC

1. PROVIDE ONE LANE OF TRAFFIC IN LANE 2 SOUTHBOUND AND ONE LANE OF TRAFFIC IN LANE 2 NORTHBOUND. UTILIZE STANDARDS 701601, 701602, AND 701701. REMOVE DETOUR ROUTINGS.

2. SAME AS ABOVE.

3. SAME AS ABOVE.

TRAFFIC CONTROL AND STAGING NOTES

1. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.

2. CONTRACTOR SHALL USE PAVEMENT MARKING TAPE, TYPE III FOR ALL TEMPORARY LANE MARKINGS ON ALL PERMANENT PAVEMENT. PAINT PAVEMENT MARKINGS SHALL BE USED ON SURFACES TO BE REMOVED OR OVERLAID.

3. REMOVAL OF TYPE III TAPE TO BE PAID FOR AS "WORK ZONE PAVEMENT MARKING REMOVAL".

4. PEDESTRIAN ACCESS WILL BE CONTROLLED IN ACCORDANCE WITH STANDARD 701801.

5. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE IN CONSTRUCTION STAGING.

6. WHERE STANDARD DRAWINGS ARE SPECIFIED THE LATEST REVISION WILL BE UTILIZED.

7. EXISTING TRAFFIC CONTROL SIGNS AND MESSAGES THAT ARE IN CONFLICT WITH THE PROPOSED MAINTENANCE OF TRAFFIC SHALL BE TEMPORARILY COVERED OR MODIFIED WITH TEMPORARY OVERLAY AS DIRECTED BY THE ENGINEER. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

8. TRAFFIC CONTROL DEVICES WILL BE IN ACCORDANCE WITH STANDARD 701901.

FILE NAME = 60D76 staging notes.dgn
PLOT DATE = 2/2/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

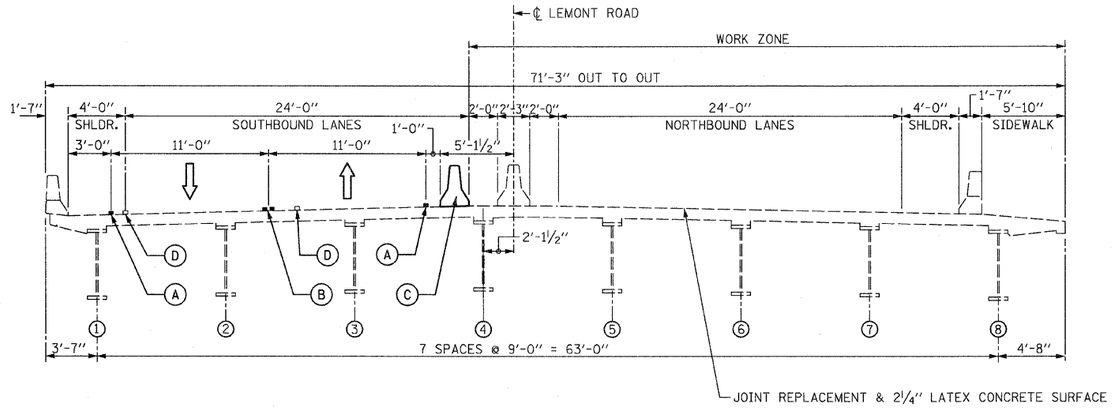
DESIGNED	- G.F.L.	REVISED	-
DRAWN	- B.K.	REVISED	-
CHECKED	- E.J.M.	REVISED	-
DATE	- JANUARY, 2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC STAGING AND GENERAL NOTES
LEMONT ROAD

SCALE: NONE | SHEET NO. M1 OF M8 SHEETS | STA. | TO STA.

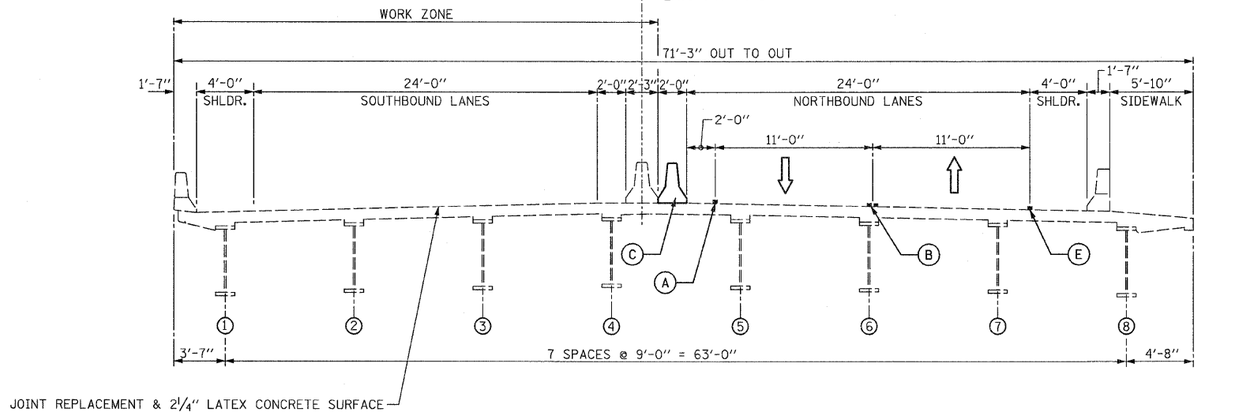
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	8
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



STAGE I

LEGEND

- (A) TEMPORARY 4" SOLID WHITE LINE
- (B) TEMPORARY 2-4" SOLID YELLOW LINES AT 11"c-c.
- (C) TEMPORARY CONCRETE BARRIER- SEE PLANS FOR LOCATIONS
- (D) EXISTING PAVEMENT MARKNGS TO BE REMOVED
- (E) PERMANENT 4" SOLID WHITE EDGE LINE



STAGE II

FILE NAME = 60D76 stg cross-sections
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS – STAGES I & II
LEMONT ROAD

SCALE: NONE | SHEET NO. M2 OF M8 SHEETS | STA. | TO STA.

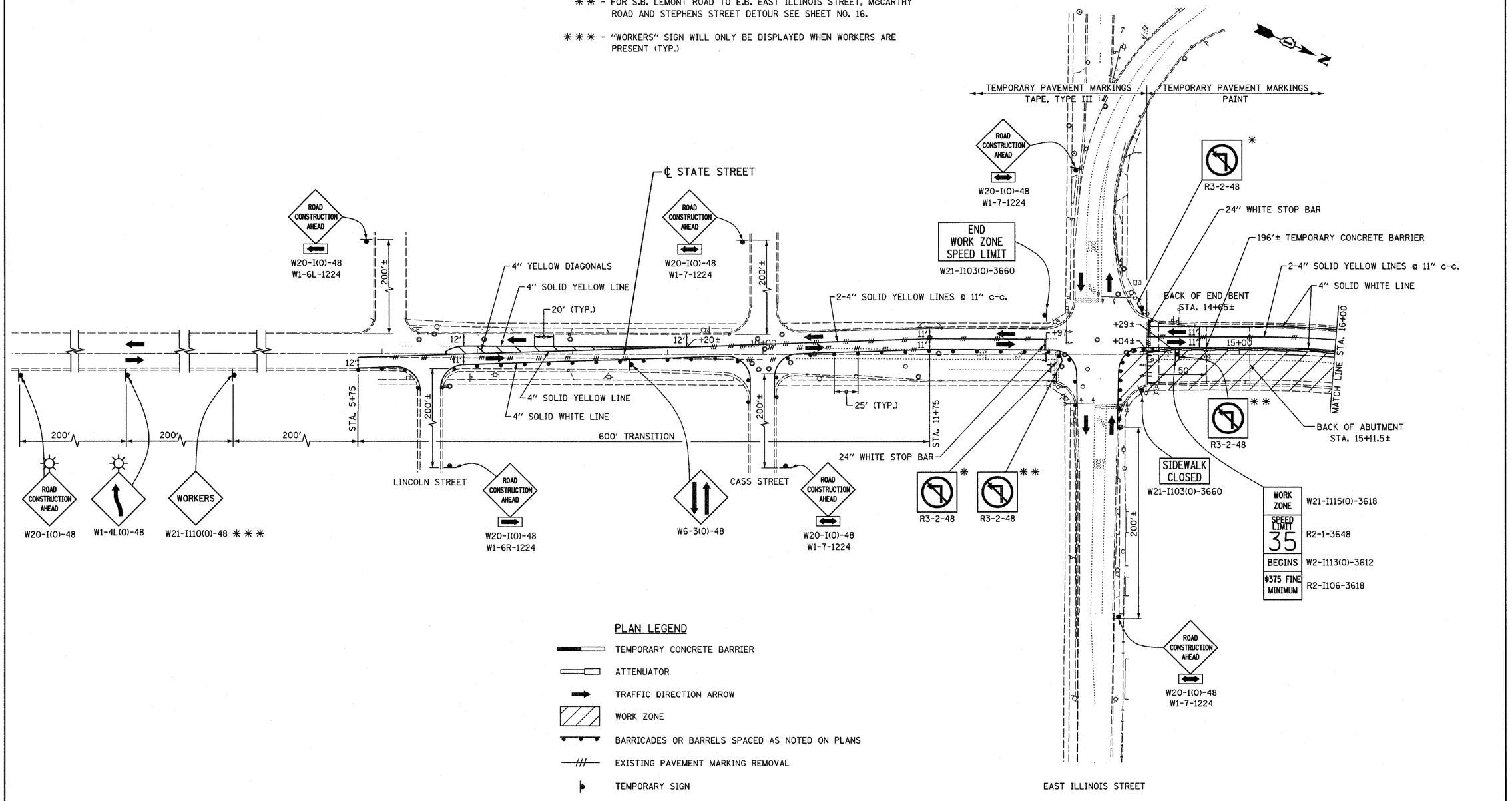
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	9
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

* - FOR N.B. LEMONT ROAD TO MAIN STREET AND WEST NEW AVENUE DETOUR SEE SHEET NO. 16.

** - FOR S.B. LEMONT ROAD TO E.B. EAST ILLINOIS STREET, McCARTHY ROAD AND STEPHENS STREET DETOUR SEE SHEET NO. 16.

*** - "WORKERS" SIGN WILL ONLY BE DISPLAYED WHEN WORKERS ARE PRESENT (TYP.)



PLAN LEGEND

- TEMPORARY CONCRETE BARRIER
- ATTENUATOR
- TRAFFIC DIRECTION ARROW
- WORK ZONE
- BARRICADES OR BARRELS SPACED AS NOTED ON PLANS
- EXISTING PAVEMENT MARKING REMOVAL
- TEMPORARY SIGN

FILE NAME = 60D76 stg1-01.dgn PLOT DATE = 1/31/2009	CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 PHONE: (312)372-2023 FAX: (312)372-5274	DESIGNED - G.F.L. / DRAWN - B.K. / CHECKED - E.J.M. / DATE - JANUARY, 2009	REVISED - / REVISED - / REVISED - / REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

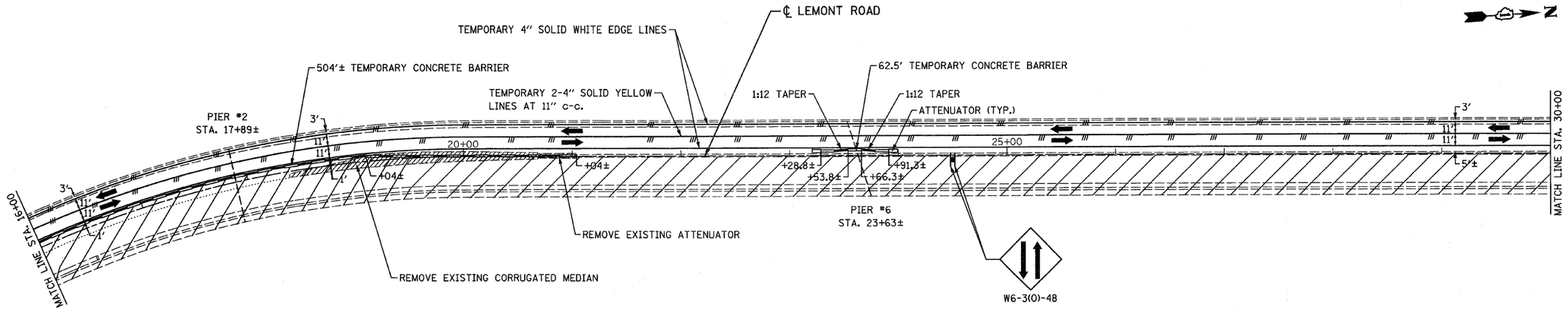
SUGGESTED MAINTENANCE OF TRAFFIC – STAGE I
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M3 OF M8 SHEETS | STA. | TO STA.

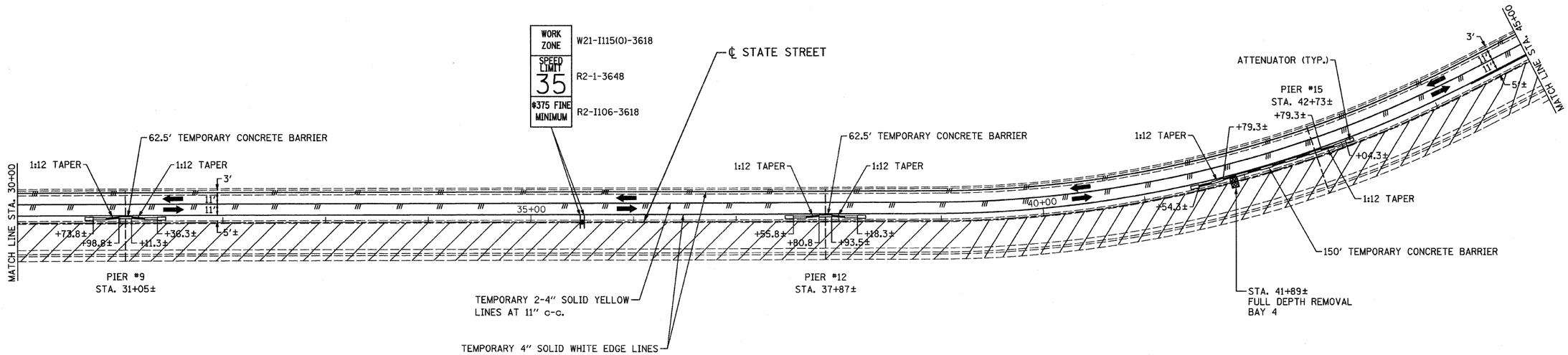
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	10

CONTRACT NO. 60D76

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



NOTE:
1. ALL TEMPORARY PAVEMENT MARKINGS THIS SHEET SHALL BE PAINT.



PLAN LEGEND

- TEMPORARY CONCRETE BARRIER
- ATTENUATOR
- TRAFFIC DIRECTION ARROW
- FULL DEPTH REPAIR
- CORRUGATED MEDIAN REPAIR
- EXISTING PAVEMENT MARKING REMOVAL

FILE NAME = 60D76 stg1-02.dgn	CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 PHONE: (312)372-2023 FAX: (312)372-5274	DESIGNED - G.F.L.	REVISED -
PLOT DATE = 1/31/2009		DRAWN - B.K.	REVISED -
		CHECKED - E.J.M.	REVISED -
		DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC – STAGE I
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M4 OF M8 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	11
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRUCK ROUTE
EAST MAIN ST. TO McCARTHY RD.
WEST NEW AVE.
RIGHT 3/4 MILE

DETOUR ✳
NO LEFT TURN AT E. ILLINOIS ST. USE TRUCK ROUTE

ROAD CONSTRUCTION AHEAD
W20-I(O)-48
W1-7-1224

WORK ZONE W21-I115(O)-3618
SPEED LIMIT 35 R2-1-3648
$375 FINE MINIMUM R2-I106-3618

NOTE:
✳ FOR DETOUR ROUTING AND SIGNING SEE SHT. NO. 16.

N

OLD LEMONT ROAD

TEMPORARY PAVEMENT MARKINGS PAINT
TEMPORARY PAVEMENT MARKINGS TAPE, TYPE III

2-4" SOLID YELLOW LINES @ 11" c-c.
4" SOLID WHITE LINE
W6-3(O)-48
TEMPORARY ATTENUATOR
4" SOLID WHITE LINE
4" SOLID YELLOW LINE
MATCH LINE STA. 45+00
11'
1'
50+00
+75
+50
+25
1:12 TAPER
1,200'R
KEEP RIGHT R4-7b
4" WHITE SKIP-DASH LINE 2' DASH & 6' SPACE
4" SOLID WHITE LINE
TEMPORARY PAVEMENT, 348 SQ.YD
W1-4R(O)-48
TEMPORARY ATTENUATOR

℄ STATE STREET
4" SOLID WHITE LINE
600' TAPER
25' (TYP.)
DETOUR AHEAD
W20-2(O)-4848
ARROW BOARD
4" SOLID YELLOW LINE
55+00
12'
+00
60
MATCH LINE STA. 60+00
4" SOLID WHITE LINE
LEFT TURN LANE
60"
48"

ROAD CONSTRUCTION AHEAD
W20-I(O)-48
W1-6R-1224

200'±

N

℄ STATE STREET

WORK ZONE W21-I115(O)-3618
SPEED LIMIT 35 R2-1-3648
BEGINS W2-I113(O)-3612
$375 FINE MINIMUM R2-I106-3618
STA. 65+75±

4" SOLID YELLOW LINE
600' TAPER
MATCH LINE STA. 60+00
+75, BEGIN LANE CLOSURE
65+00
70+00
W4-2L(O)-48
STA. 68+50±
LEFT LANE CLOSED AHEAD
W20-5(O)-48
STA. 71+00±
ROAD CONSTRUCTION AHEAD
W20-I(O)-48
STA. 74+00±

200'±

END WORK ZONE SPEED LIMIT
W21-I103(O)-3660

ROAD CONSTRUCTION AHEAD
W20-I(O)-48
W1-6L-1224

BLUFF ROAD

PLAN LEGEND
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- TRAFFIC DIRECTION ARROW
- WORK ZONE
- BARRICADES OR BARRELS SPACED AS NOTED ON PLANS
- EXISTING PAVEMENT MARKING REMOVAL
- TEMPORARY SIGN

FILE NAME = 60D76 stg1-03.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
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DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC – STAGE I
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M5 OF M8 SHEETS | STA. | TO STA.

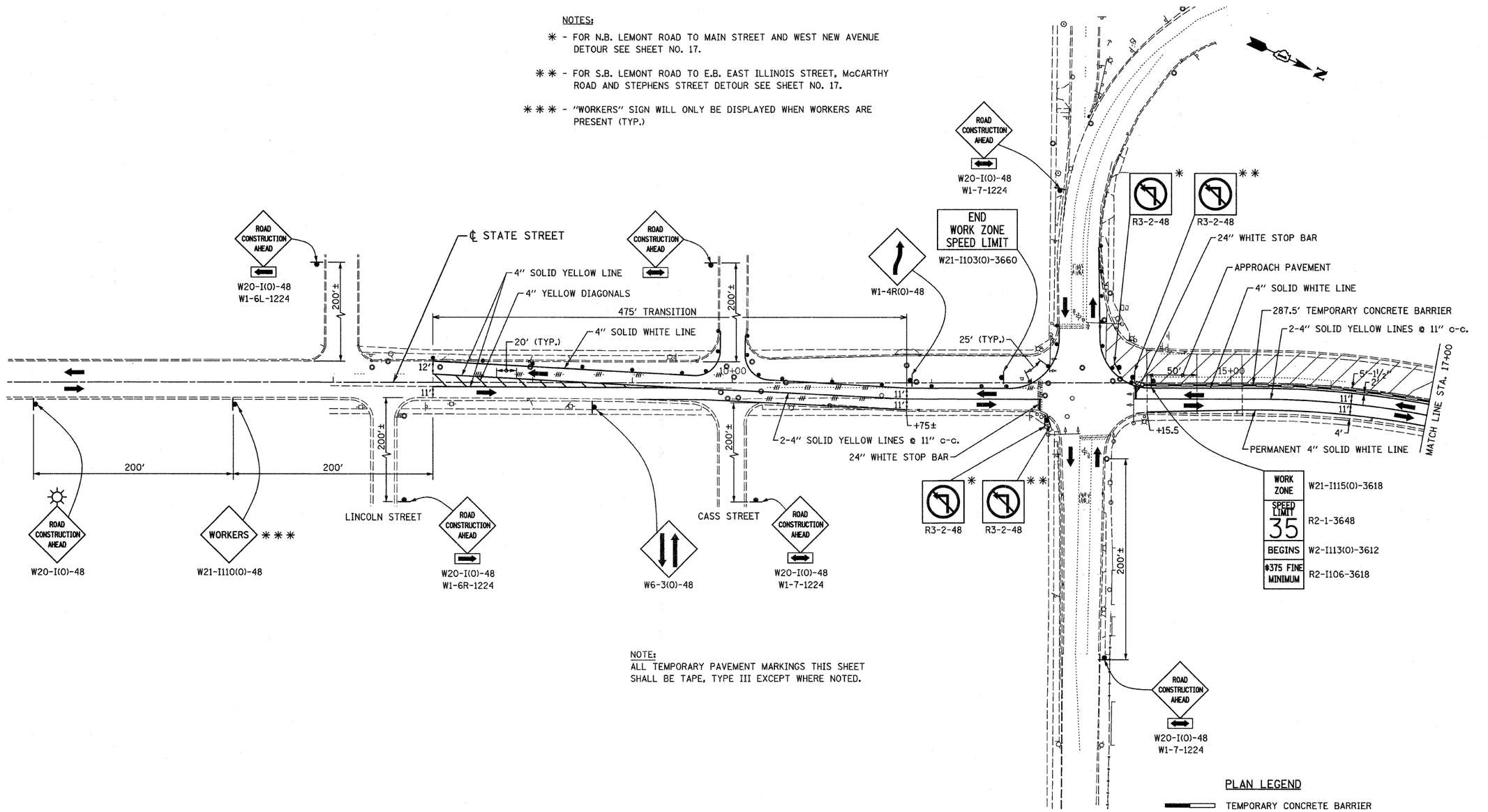
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	12
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

* - FOR N.B. LEMONT ROAD TO MAIN STREET AND WEST NEW AVENUE DETOUR SEE SHEET NO. 17.

** - FOR S.B. LEMONT ROAD TO E.B. EAST ILLINOIS STREET, McCARTHY ROAD AND STEPHENS STREET DETOUR SEE SHEET NO. 17.

*** - "WORKERS" SIGN WILL ONLY BE DISPLAYED WHEN WORKERS ARE PRESENT (TYP.)



NOTE:
ALL TEMPORARY PAVEMENT MARKINGS THIS SHEET SHALL BE TAPE, TYPE III EXCEPT WHERE NOTED.

PLAN LEGEND

- TEMPORARY CONCRETE BARRIER
- ATTENUATOR
- TRAFFIC DIRECTION ARROW
- WORK ZONE
- BARRICADES OR BARRELS SPACED AS NOTED ON PLANS
- EXISTING PAVEMENT MARKING REMOVAL
- TEMPORARY SIGN

FILE NAME = 60D76 stg2-01.dgn
PLOT DATE = 1/31/2009

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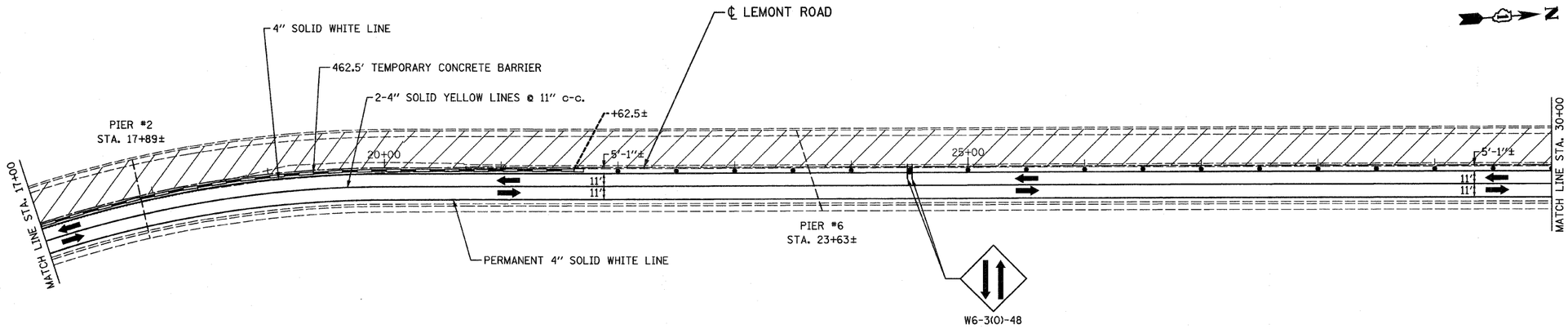
DATE	JANUARY, 2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

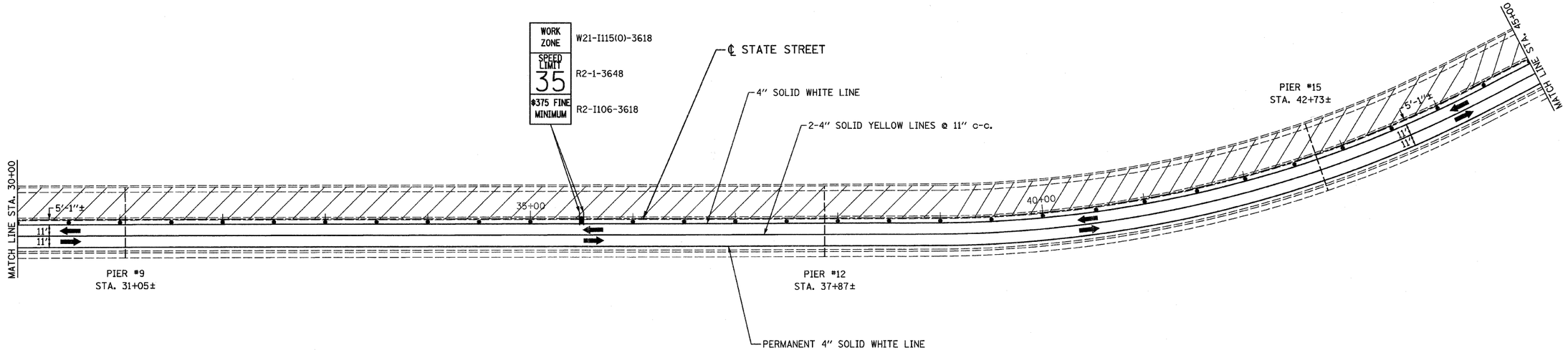
SUGGESTED MAINTENANCE OF TRAFFIC – STAGE II
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M6 OF M8 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	13
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTE:
1. ALL TEMPORARY PAVEMENT MARKINGS THIS SHEET SHALL BE TAPE, TYPE III EXCEPT WHERE NOTED.



PLAN LEGEND

- TEMPORARY CONCRETE BARRIER
- ATTENUATOR
- TRAFFIC DIRECTION ARROW
- FULL DEPTH REPAIR
- CORRUGATED MEDIAN REPAIR
- EXISTING PAVEMENT MARKING REMOVAL

FILE NAME = 60D76 stg2-02.dgn
PLOT DATE = 1/31/2009

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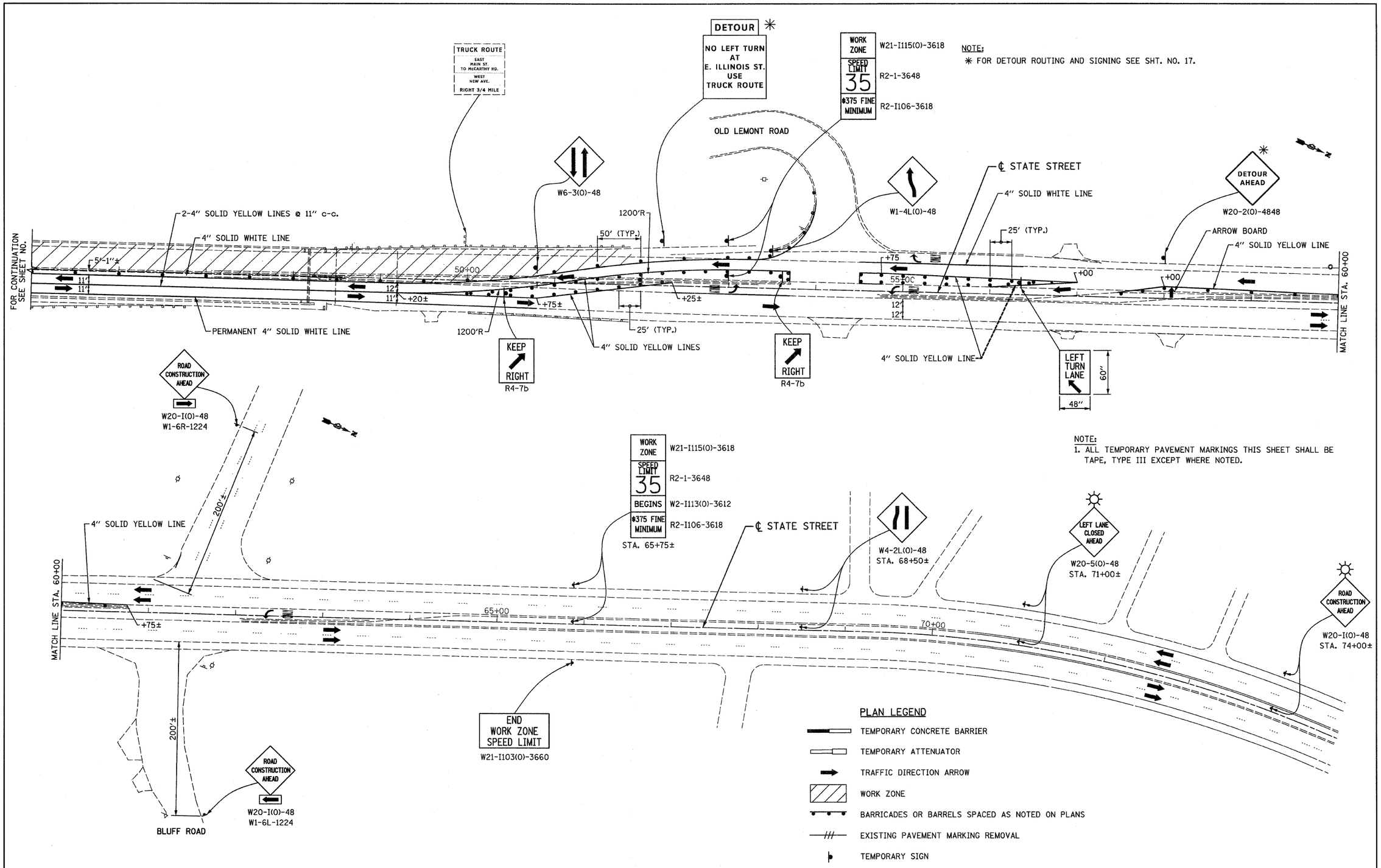
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC – STAGE II
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M7 OF M8 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	14
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FILE NAME = 60D76 stg2-03.dgn
PLOT DATE = 1/31/2009

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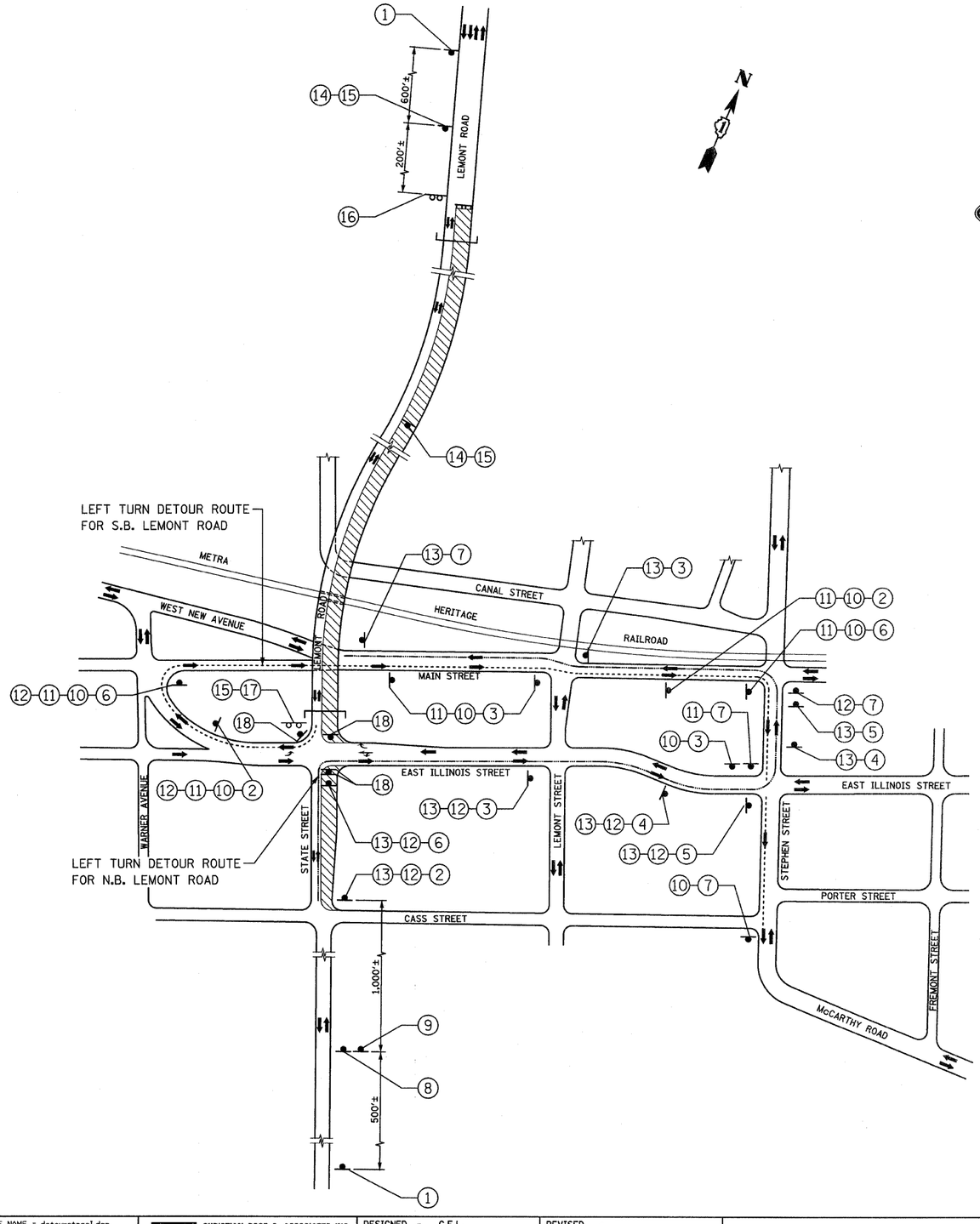
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC – STAGE II
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. M8 OF M8 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	15
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



(1)

DETOUR AHEAD

W20-2(0)
48" x 48"

(2)

DETOUR

M4-9AR
30" x 24"

(3)

DETOUR

M4-9S
30" x 24"

(4)

DETOUR

M4-9AL
30" x 24"

(5)

DETOUR

M4-9L
30" x 24"

(6)

DETOUR

M4-9R
30" x 24"

(7)

END DETOUR

M4-8A
30" x 24"

(8)

NO LEFT TURN AT E. ILLNOIS STREET

36" x 48"

(9)

FOLLOW DETOUR TO WEST NEW AVENUE MAIN ST.

36" x 48"

(10)

McCARTHY ROAD

36" x 12"

(11)

E. ILLINOIS STREET

36" x 12"

(12)

MAIN ST.

36" x 12"

(13)

WEST NEW AVENUE

36" x 12"

(14)

NO LEFT TURN AT E. ILLINOIS ST. USE TRUCK ROUTE

48" x 48"

(15)

DETOUR

36" x 12"
M4-8

(16)

TRUCK ROUTE

EAST MAIN ST. TO McCARTHY RD.

WEST NEW AVE.

RIGHT 3/4 MILE

(EXISTING SIGN)

(17)

TRUCK ROUTE

EAST MAIN ST. → TO McCARTHY RD.

WEST NEW AVE. →

(EXISTING SIGN)

(18)

R3-2L
24" x 24"

FILE NAME = detour-stage1.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

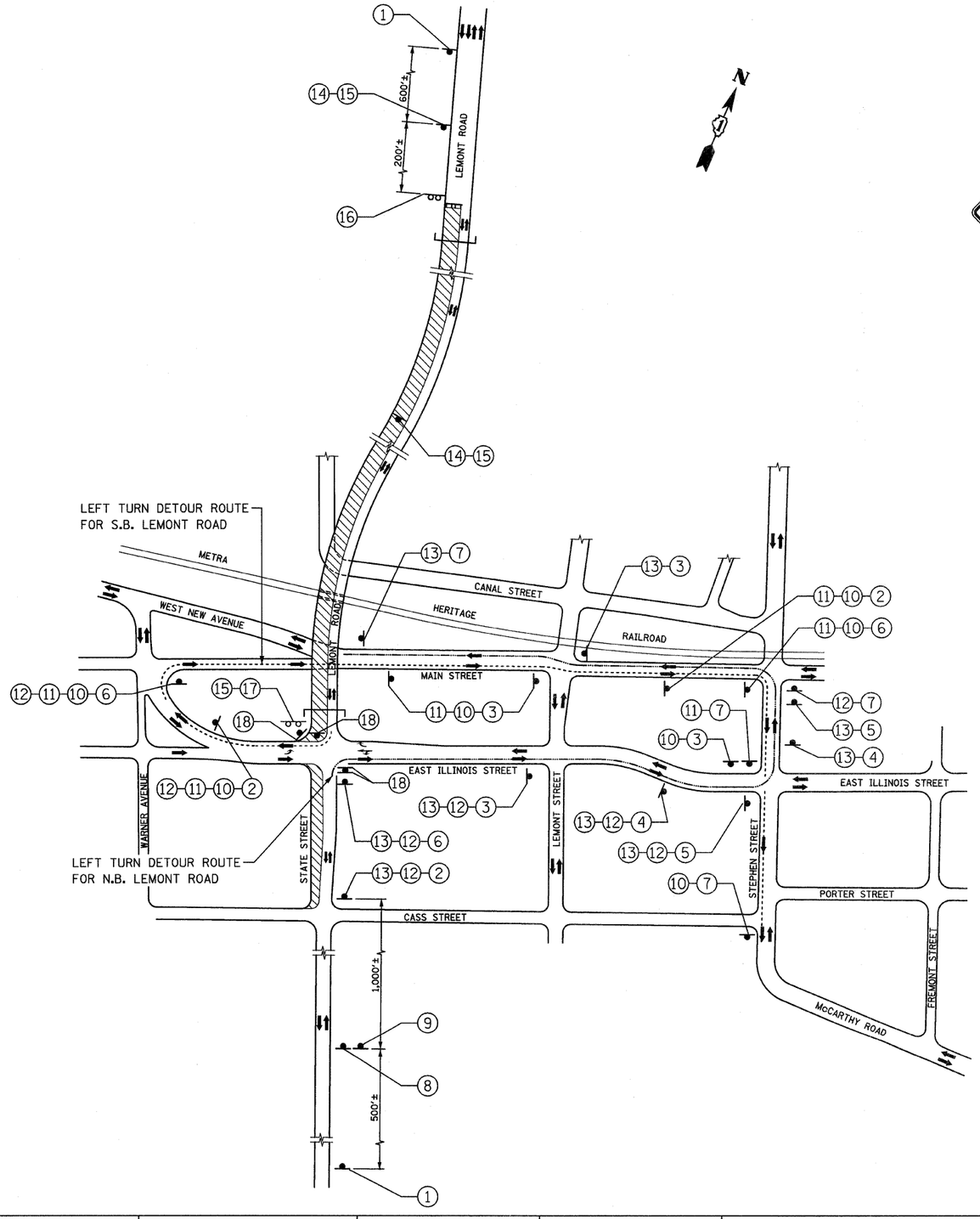
DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR ROUTING AND SIGNING - STAGE I
LEMONT ROAD

SCALE: NONE | SHEET NO. DT1 OF DT2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	16
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



(1)

DETOUR AHEAD

W20-2(0)
48" x 48"

(2)

DETOUR

M4-9AR
30" x 24"

(3)

DETOUR

M4-95
30" x 24"

(4)

DETOUR

M4-9AL
30" x 24"

(5)

DETOUR

M4-9L
30" x 24"

(6)

DETOUR

M4-9R
30" x 24"

(7)

END DETOUR

M4-8A
30" x 24"

(8)

NO LEFT TURN AT E. ILLNOIS STREET

36" x 48"

(9)

FOLLOW DETOUR TO WEST NEW AVENUE MAIN ST.

36" x 48"

(10)

McCARTHY ROAD

36" x 12"

(11)

E. ILLINOIS STREET

36" x 12"

(12)

MAIN ST.

36" x 12"

(13)

WEST NEW AVENUE

36" x 12"

(14)

NO LEFT TURN AT E. ILLINOIS ST. USE TRUCK ROUTE

48" x 48"

(15)

DETOUR

36" x 12"
M4-8

(16)

TRUCK ROUTE

EAST MAIN ST. TO McCARTHY RD.

WEST NEW AVE.

RIGHT 3/4 MILE

(EXISTING SIGN)

(17)

TRUCK ROUTE

EAST MAIN ST. → TO McCARTHY RD.
WEST NEW AVE. →

(EXISTING SIGN)

(18)

R3-2L
24" x 24"

FILE NAME = detourstageII.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED	-	G.F.L.	REVISED -
DRAWN	-	B.K.	REVISED -
CHECKED	-	E.J.M.	REVISED -
DATE	-	JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR ROUTING AND SIGNING - STAGE II
LEMONT ROAD

SCALE: NONE | SHEET NO. DT2 OF DT2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	17
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

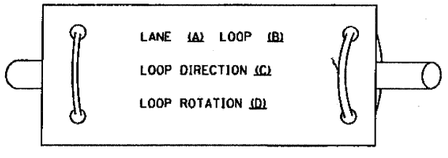
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

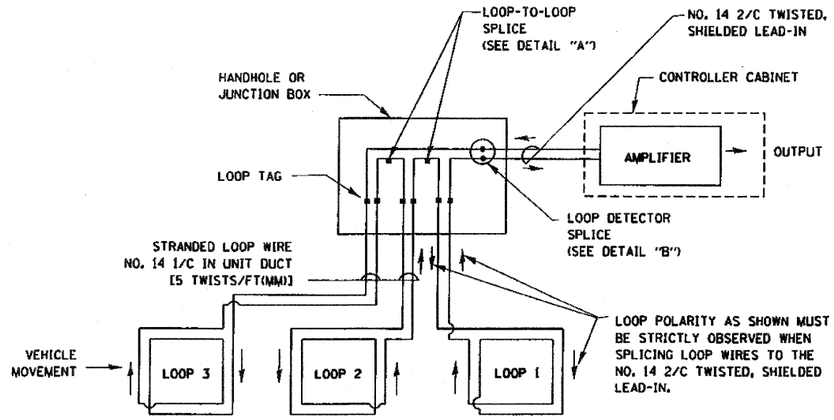


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

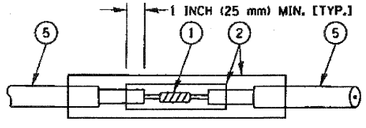
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

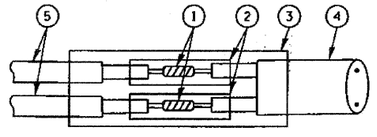


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

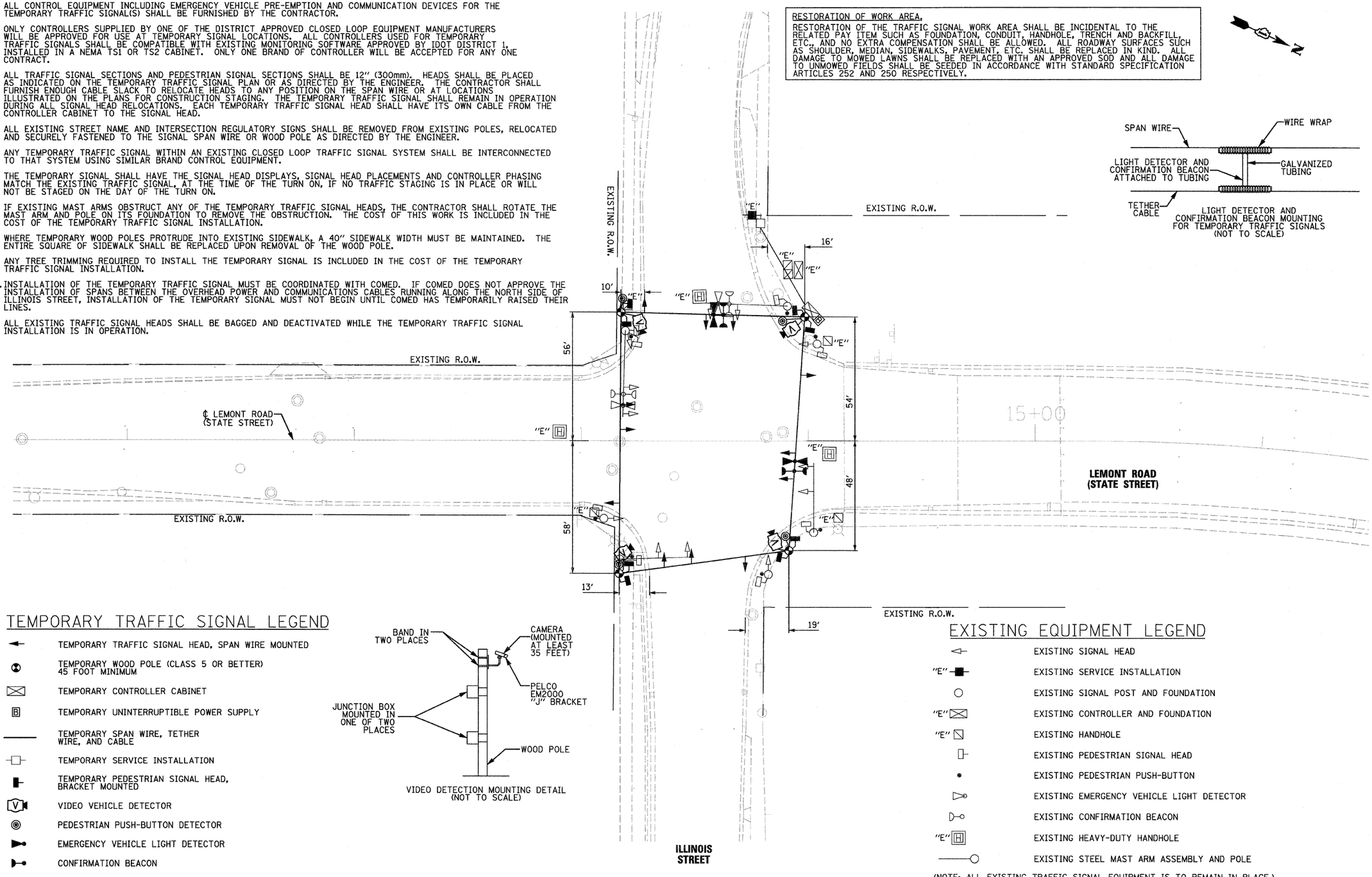
FILE NAME = M:\distatd\22x34\ts05.dgn	USER NAME = geghenobt	DESIGNED - D.A.D.	REVISED - 11-12-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE. 2612	SECTION 3104 B-1-1-2
		DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02				COUNTY COOK
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED -				TOTAL SHEETS 80
	PLOT DATE = 1/4/2008	DATE - 05-30-00	REVISED -		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.		SHEET NO. 18
							TS-05
							CONTRACT NO. 60D76
							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY VEHICLE 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 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 TRAFFIC SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY 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.
7. IF EXISTING MAST ARMS OBSTRUCT ANY OF THE TEMPORARY TRAFFIC SIGNAL HEADS, THE CONTRACTOR SHALL ROTATE THE MAST ARM AND POLE ON ITS FOUNDATION TO REMOVE THE OBSTRUCTION. THE COST OF THIS WORK IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
8. WHERE TEMPORARY WOOD POLES PROTRUDE INTO EXISTING SIDEWALK, A 40" SIDEWALK WIDTH MUST BE MAINTAINED. THE ENTIRE SQUARE OF SIDEWALK SHALL BE REPLACED UPON REMOVAL OF THE WOOD POLE.
9. ANY TREE TRIMMING REQUIRED TO INSTALL THE TEMPORARY SIGNAL IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
10. INSTALLATION OF THE TEMPORARY TRAFFIC SIGNAL MUST BE COORDINATED WITH COMED. IF COMED DOES NOT APPROVE THE INSTALLATION OF SPANS BETWEEN THE OVERHEAD POWER AND COMMUNICATIONS CABLES RUNNING ALONG THE NORTH SIDE OF ILLINOIS STREET, INSTALLATION OF THE TEMPORARY SIGNAL MUST NOT BEGIN UNTIL COMED HAS TEMPORARILY RAISED THEIR LINES.
11. ALL EXISTING TRAFFIC SIGNAL HEADS SHALL BE BAGGED AND DEACTIVATED WHILE THE TEMPORARY TRAFFIC SIGNAL INSTALLATION IS IN OPERATION.

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 SHOULDER, MEDIAN, 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 SPECIFICATION ARTICLES 252 AND 250 RESPECTIVELY.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD, SPAN WIRE MOUNTED
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY UNINTERRUPTIBLE POWER SUPPLY
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO VEHICLE DETECTOR
- PEDESTRIAN PUSH-BUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON

VIDEO DETECTION MOUNTING DETAIL (NOT TO SCALE)

EXISTING EQUIPMENT LEGEND

- EXISTING SIGNAL HEAD
- "E" EXISTING SERVICE INSTALLATION
- EXISTING SIGNAL POST AND FOUNDATION
- "E" EXISTING CONTROLLER AND FOUNDATION
- "E" EXISTING HANDHOLE
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING PEDESTRIAN PUSH-BUTTON
- EXISTING EMERGENCY VEHICLE LIGHT DETECTOR
- EXISTING CONFIRMATION BEACON
- "E" EXISTING HEAVY-DUTY HANDHOLE
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE

(NOTE: ALL EXISTING TRAFFIC SIGNAL EQUIPMENT IS TO REMAIN IN PLACE.)

TS-2 OF 7

FILE NAME = D160D76-SHT-TS2.dgn
PLOT DATE = 1/26/2009

SPAAN TECH, INC.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED	R.A.S.	REVISED	-
DRAWN	R.A.S.	REVISED	-
CHECKED	A.D.O.	REVISED	-
DATE	JANUARY, 2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

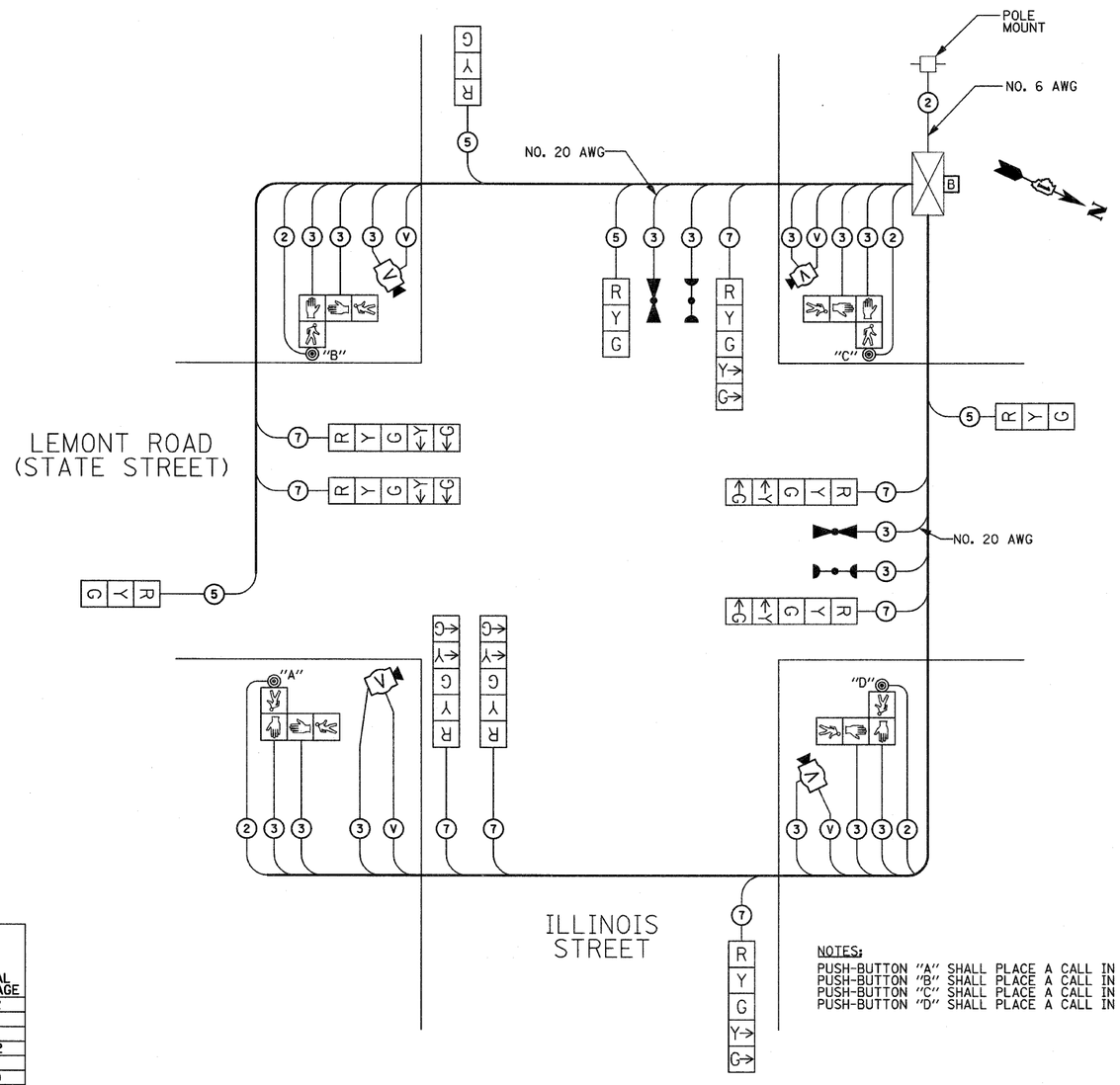
TEMPORARY TRAFFIC SIGNALS – PRE-STAGE I AND POST-STAGE II
LEMONT ROAD (STATE STREET) AT ILLINOIS STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	19
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

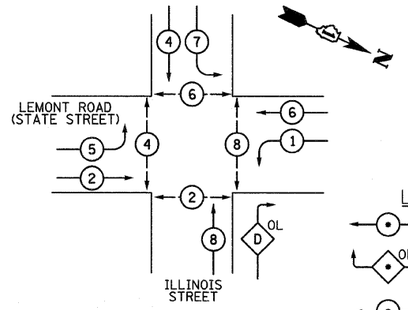
TEMPORARY CABLE PLAN LEGEND

- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- B — TEMPORARY UNINTERRUPTIBLE POWER SUPPLY
- TEMPORARY SERVICE INSTALLATION
- (2) — DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS NOTED
- (V) — VIDEO DETECTOR CABLE PER VIDEO SYSTEM MANUFACTURER'S RECOMMENDATIONS
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSH-BUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- V — VIDEO VEHICLE DETECTOR



TEMPORARY CABLE PLAN

CONTROLLER SEQUENCE



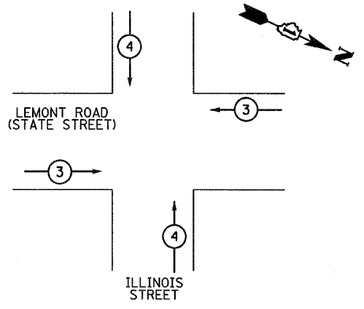
TEMPORARY PHASE DESIGNATION DIAGRAM

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

LEGEND

- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PRIORITY SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	⇅

NOTES:
PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

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

TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	341.2

VILLAGE OF LEMONT
418 MAIN STREET
LEMONT, ILLINOIS 60439

ENERGY SUPPLY: CONTACT: MR. MARK ANDERSON
PHONE: (815) 724-5988
COMPANY: COMED

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

FILE NAME = D160D76-SHT-TS3.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED	R.A.S.	REVISED -
DRAWN	R.A.S.	REVISED -
CHECKED	A.D.O.	REVISED -
DATE	JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN – PRE-STAGE I AND POST-STAGE II
LEMONT ROAD (STATE STREET) AT ILLINOIS STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	20
		CONTRACT NO. 60D76		

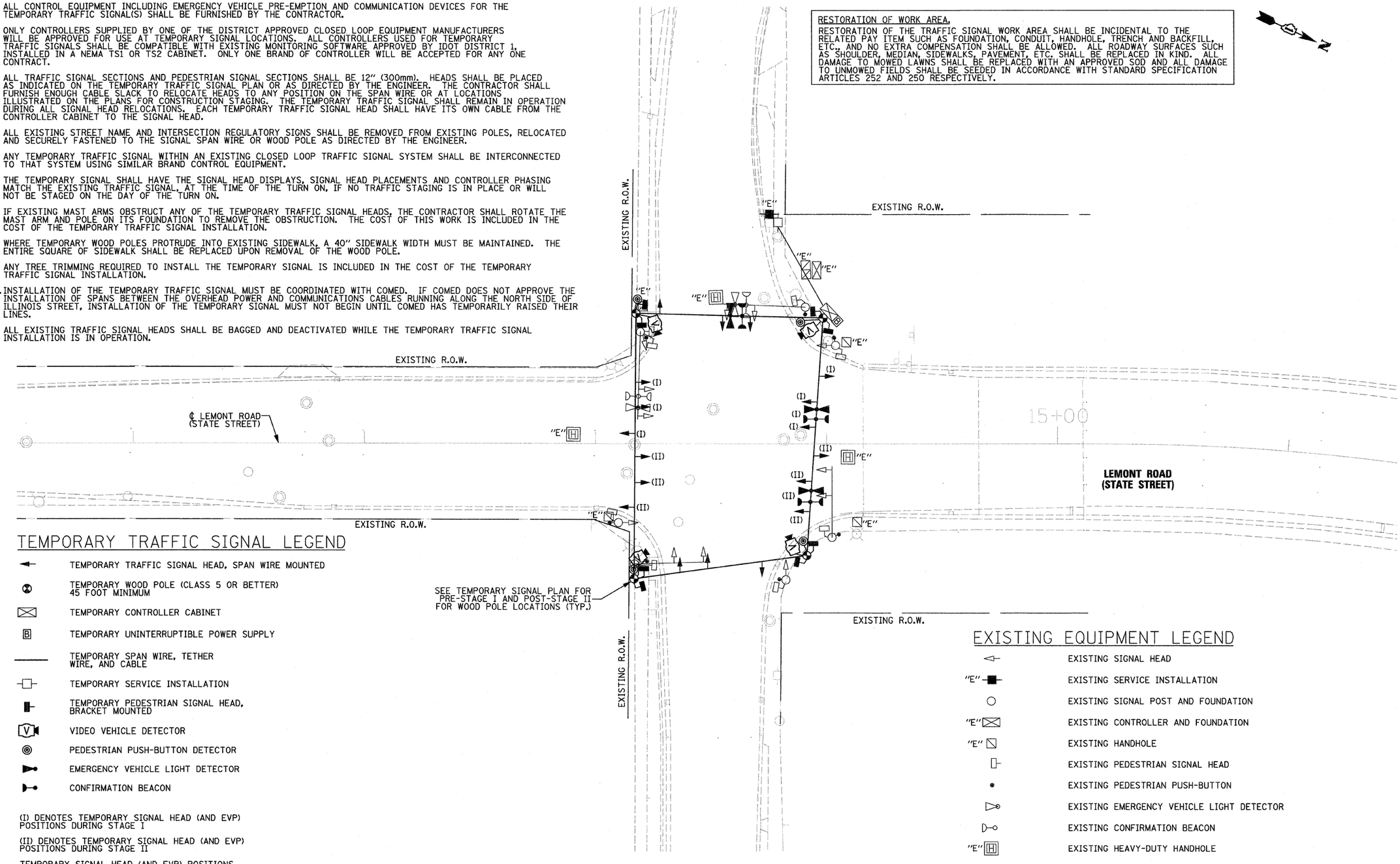
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY VEHICLE 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 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 TRAFFIC SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY 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.
7. IF EXISTING MAST ARMS OBSTRUCT ANY OF THE TEMPORARY TRAFFIC SIGNAL HEADS, THE CONTRACTOR SHALL ROTATE THE MAST ARM AND POLE ON ITS FOUNDATION TO REMOVE THE OBSTRUCTION. THE COST OF THIS WORK IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
8. WHERE TEMPORARY WOOD POLES PROTRUDE INTO EXISTING SIDEWALK, A 40" SIDEWALK WIDTH MUST BE MAINTAINED. THE ENTIRE SQUARE OF SIDEWALK SHALL BE REPLACED UPON REMOVAL OF THE WOOD POLE.
9. ANY TREE TRIMMING REQUIRED TO INSTALL THE TEMPORARY SIGNAL IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
10. INSTALLATION OF THE TEMPORARY TRAFFIC SIGNAL MUST BE COORDINATED WITH COMED. IF COMED DOES NOT APPROVE THE INSTALLATION OF SPANS BETWEEN THE OVERHEAD POWER AND COMMUNICATIONS CABLES RUNNING ALONG THE NORTH SIDE OF ILLINOIS STREET, INSTALLATION OF THE TEMPORARY SIGNAL MUST NOT BEGIN UNTIL COMED HAS TEMPORARILY RAISED THEIR LINES.
11. ALL EXISTING TRAFFIC SIGNAL HEADS SHALL BE BAGGED AND DEACTIVATED WHILE THE TEMPORARY TRAFFIC SIGNAL INSTALLATION IS IN OPERATION.

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 SHOULDER, MEDIAN, 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 SPECIFICATION ARTICLES 252 AND 250 RESPECTIVELY.



TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD, SPAN WIRE MOUNTED
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY UNINTERRUPTIBLE POWER SUPPLY
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO VEHICLE DETECTOR
- PEDESTRIAN PUSH-BUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON

(I) DENOTES TEMPORARY SIGNAL HEAD (AND EVP) POSITIONS DURING STAGE I

(II) DENOTES TEMPORARY SIGNAL HEAD (AND EVP) POSITIONS DURING STAGE II

TEMPORARY SIGNAL HEAD (AND EVP) POSITIONS FOR ILLINOIS STREET ARE TO REMAIN THE SAME FOR BOTH STAGES

EXISTING EQUIPMENT LEGEND

- EXISTING SIGNAL HEAD
- "E" EXISTING SERVICE INSTALLATION
- EXISTING SIGNAL POST AND FOUNDATION
- "E" EXISTING CONTROLLER AND FOUNDATION
- "E" EXISTING HANDHOLE
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING PEDESTRIAN PUSH-BUTTON
- EXISTING EMERGENCY VEHICLE LIGHT DETECTOR
- EXISTING CONFIRMATION BEACON
- "E" EXISTING HEAVY-DUTY HANDHOLE
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE

(NOTE: ALL EXISTING TRAFFIC SIGNAL EQUIPMENT IS TO REMAIN IN PLACE.)

TS-4 OF 7

FILE NAME = D160D76-SHT-TS4.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED - R.A.S.	REVISED -	
DRAWN - R.A.S.	REVISED -	
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DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

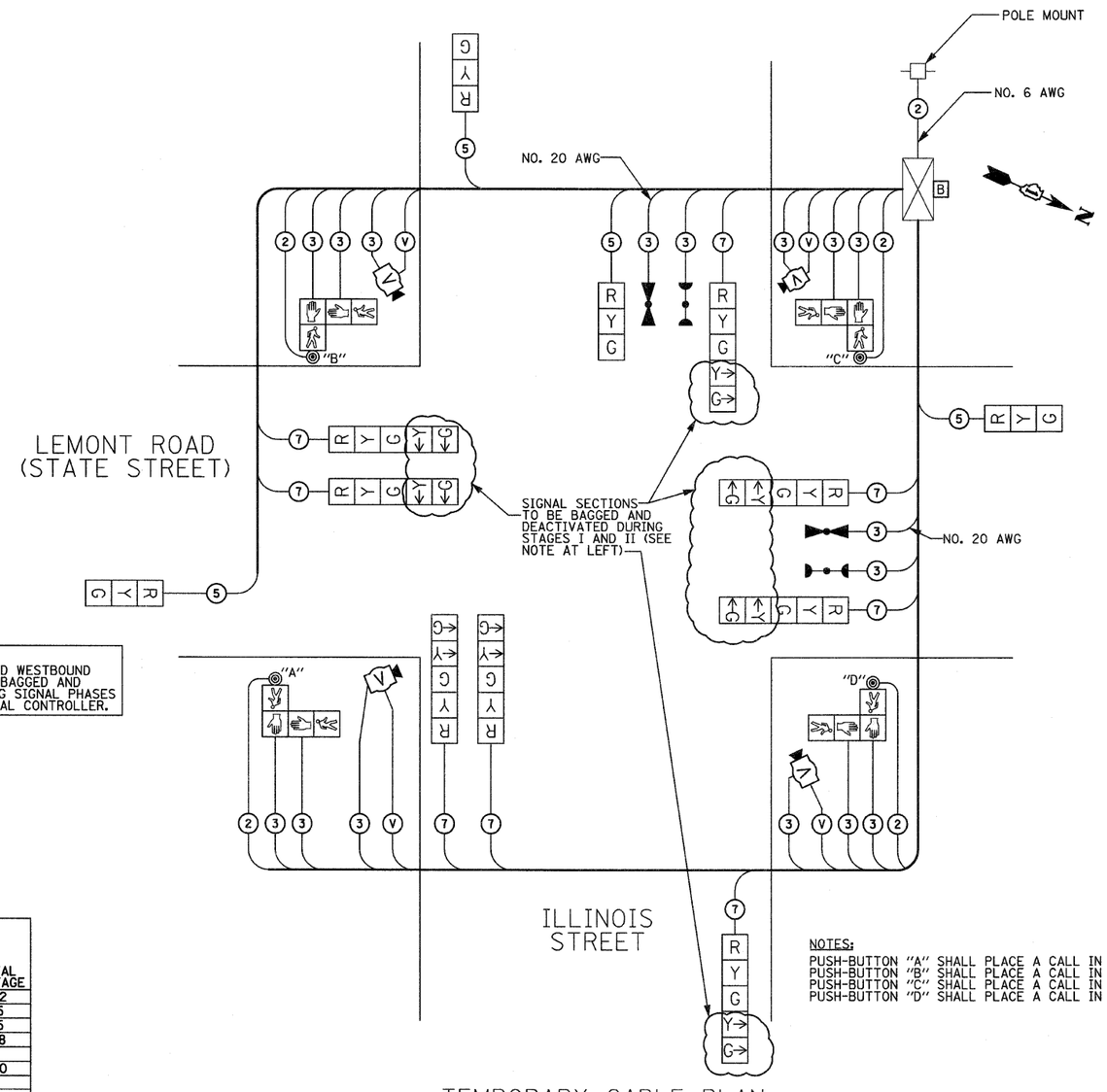
TEMPORARY TRAFFIC SIGNALS – STAGES I AND II
LEMONT ROAD (STATE STREET) AT ILLINOIS STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	21
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TEMPORARY CABLE PLAN LEGEND

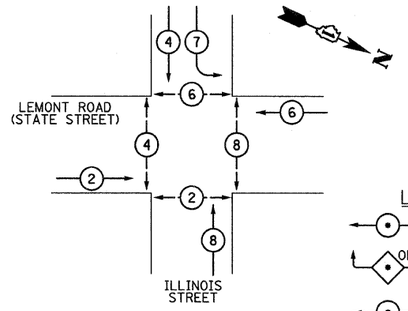
- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- B — TEMPORARY UNINTERRUPTIBLE POWER SUPPLY
- TEMPORARY SERVICE INSTALLATION
- (2) — DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS NOTED
- (V) — VIDEO DETECTOR CABLE PER VIDEO SYSTEM MANUFACTURER'S RECOMMENDATIONS
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSH-BUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- V — VIDEO VEHICLE DETECTOR



TEMPORARY CABLE PLAN

NOTE:
THE NORTHBOUND LEFT TURN, SOUTHBOUND LEFT TURN, AND WESTBOUND RIGHT TURN OVERLAP ARROW SIGNAL SECTIONS SHALL BE BAGGED AND DEACTIVATED DURING STAGES I & II. THE CORRESPONDING SIGNAL PHASES SHALL BE DEACTIVATED AT THE TEMPORARY TRAFFIC SIGNAL CONTROLLER.

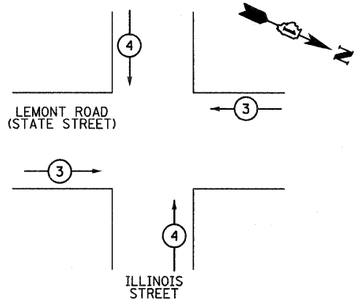
CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

LEGEND
- DUAL ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PRIORITY SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	⇅

NOTES:
PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

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

TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE x LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	8	90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		326.8

FOUNDATION (DEPTH)	FT.	(m)	CABLE SLACK	FT.	(m)	VERTICAL	FT.	(m)
TYPE A - POST	4	(1.2)	HANDHOLE	6.5	(2.0)	ALL FOUNDATIONS	3.5	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'+L-2=	
E - M. ARM POLE			SIGNAL POST	2	(1.0)		(6m+L-0.6m)=	
24" (600 mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750 mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PED PUSHBUTTON	4	(1.2)
			ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.1)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
						POST MOUNTED	6	(1.8)

VILLAGE OF LEMONT
418 MAIN STREET
LEMONT, ILLINOIS 60439

ENERGY SUPPLY: CONTACT: MR. MARK ANDERSON
PHONE: (815) 724-5988
COMPANY: COMED

FILE NAME = D160D76-SHT-TS5.dgn
PLOT DATE = 1/26/2009

SPAAN TECH, INC.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED - R.A.S.		REVISED -
DRAWN - R.A.S.		REVISED -
CHECKED - A.D.O.		REVISED -
DATE - JANUARY, 2009		REVISED -

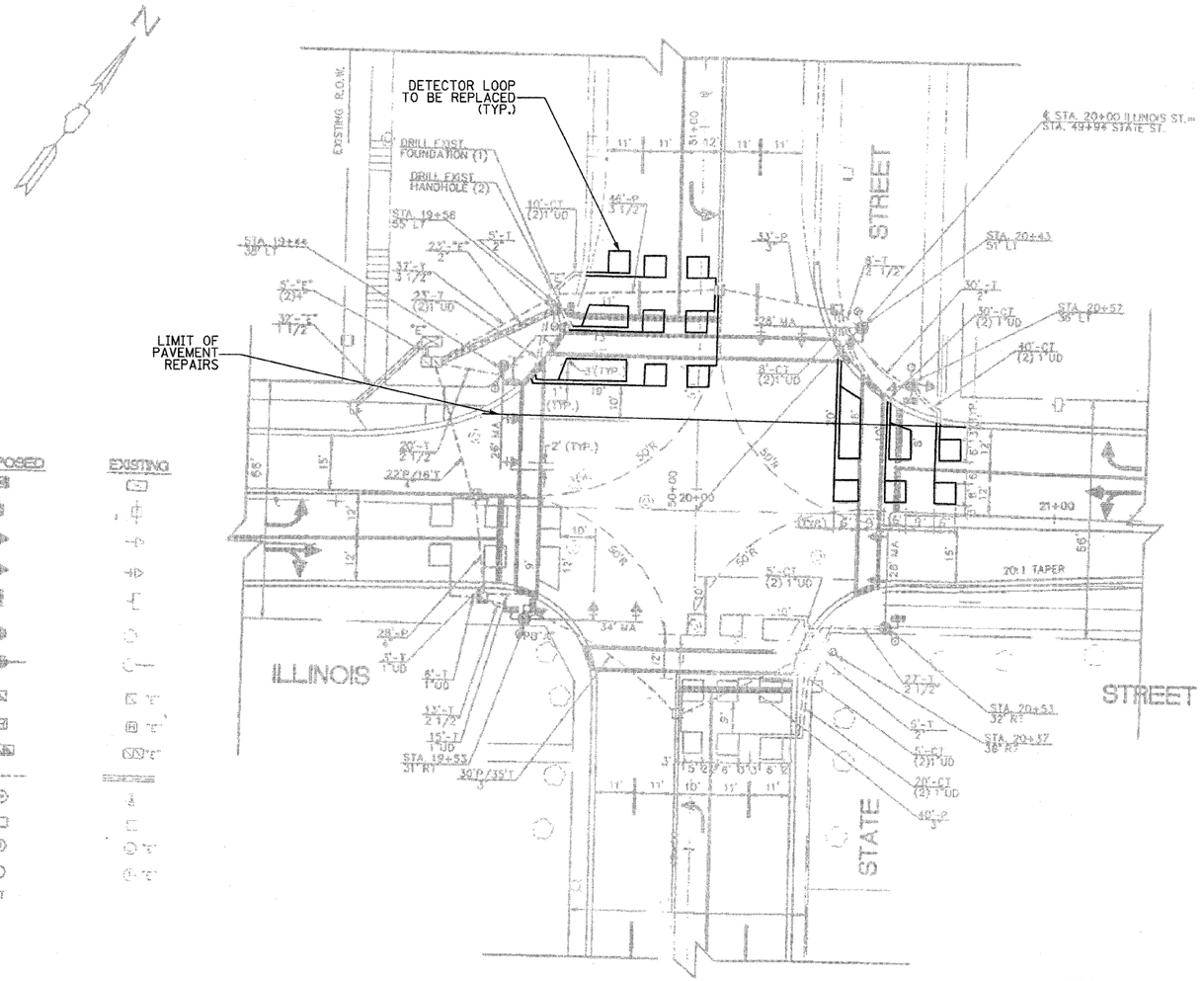
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN – STAGES I AND II
LEMONT ROAD (STATE STREET) AT ILLINOIS STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	22
		CONTRACT NO. 60D76		

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



TRAFFIC SIGNAL LEGEND

N.T.S.

	PROPOSED	EXISTING
CONTROLLER	▭	▭
SERVICE INSTALLATION	●	⊣
SIGNAL HEAD	→	⊣
SIGNAL HEAD WITH BACKPLATE	⇉	⊣⊳
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE		
HANDHOLE	▣	▣ "T"
HEAVY DUTY HANDHOLE	▣	▣ "H"
DOUBLE HANDHOLE	▣▣	▣▣ "S"
G.S. CONDUIT IN TRENCH OR PUSHED		"S"
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	□
CONCRETE JUNCTION BOX	◎	◎ "T"
CAST IRON JUNCTION BOX	ⓘ	ⓘ "T"
COMMON TRENCH	CT	

NOTES:

1. THIS PLAN IS FOR THE PURPOSE OF REPLACING DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND SHALL BE DISREGARDED.
2. THE CONTRACTOR MAY REUSE EXISTING UNIT DUCTS BETWEEN EXISTING HANDHOLES AND THE PAVEMENT IF THEY HAVE NOT BEEN DAMAGED. ALL BURRS SHALL BE REMOVED FROM THE EDGES OF THE EXISTING DUCT WHICH MAY CAUSE DAMAGE TO THE NEW DETECTOR LOOP DURING INSTALLATION. IF THE EXISTING UNIT DUCT IS DAMAGED BEYOND REPAIR, OR IF IT CANNOT BE LOCATED, THE CONTRACTOR SHALL BE REQUIRED TO DRILL THROUGH THE PAVEMENT INTO THE APPROPRIATE HANDHOLE, AND INSTALL 25 MM (1") UNIT DUCT CONDUIT. THIS WORK AND THE REQUIRED MATERIALS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "DETECTOR LOOP, TYPE 1." UPON ESTABLISHMENT OF THE DUCT, THE LOOP MAY BE CUT, INSTALLED, SEALED AND SPLICED TO THE EXISTING TWISTED-SHIELDED CONTROLLER CABLE IN THE HANDHOLE. ALL ABANDONED DETECTOR LOOP WIRE SHALL BE REMOVED.

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SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED - R.A.S.	REVISED -	
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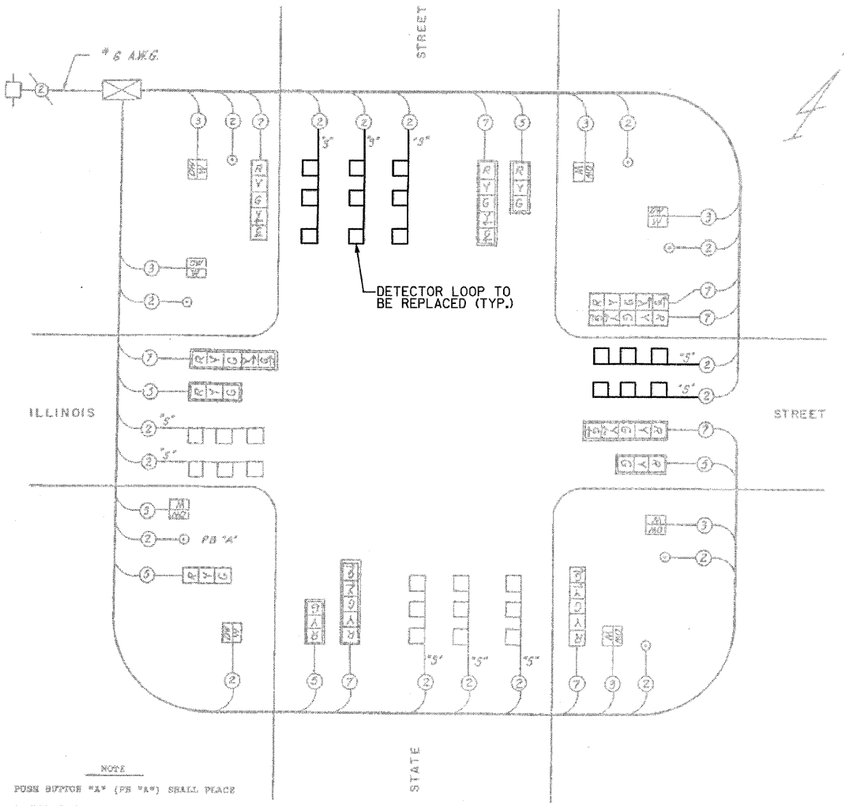
CHECKED - A.D.O.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
LEMONT ROAD (STATE STREET) AT ILLINOIS STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	23
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CABLE PLAN

NOTE

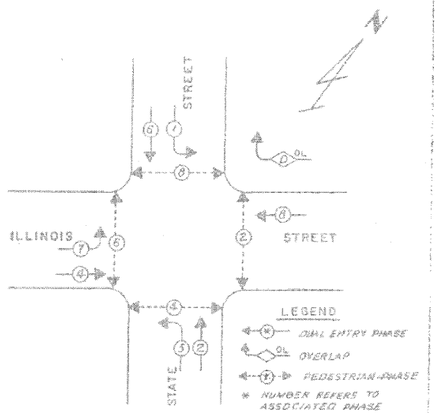
PUSH BUTTON "A" (PB "A") SHALL PLACE A CALL PHASES 4 AND 6

CABLE PLAN LEGEND

- 12" TRAFFIC SIGNAL SECTION
- 12" PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET, EXISTING
- SERVICE INSTALLATION, EXISTING
- VEHICLE DETECTOR, INDUCTION LOOP
- PUSHBUTTON DETECTOR
- (2) DENOTES NUMBER OF CONDUCTORS (#14). ALL LOOP DETECTOR CABLE TO BE SHIELDED. ALL CABLE NO. 14 EXCEPT AS INDICATED.
- (4) INDICATES EXISTING CABLE
- SIGNAL FACE WITH BACKPLATE
- EXISTING SIGNAL SECTION
- "S" TWISTED, SHIELDED

CONTROLLER SEQUENCE IV

REFERRING TO STANDARD 7353, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW



PHASE DESIGNATION DIAGRAM

Dual Entry - All Legs
Protected / Permitted Left Turn Phasing with Eight Turn Overlaps

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
D	=	8	+ 1 - 8

DISPLAY - THE YELLOW RIGHT ARROW OF THE OVERLAP SHALL BE INHIBITED DURING THE PERMISSIVE PHASE'S YELLOW INTERVAL. THE GREEN RIGHT ARROW OF THE OVERLAP SHALL BE INHIBITED DURING THE PERMISSIVE PHASE'S GREEN INTERVAL.

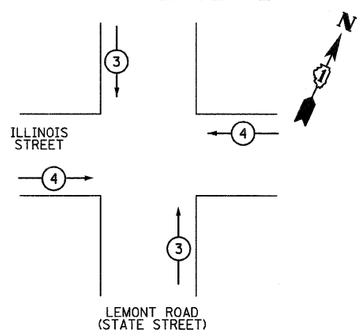
CLEARANCE NOTES FOR RIGHT TURN OVERLAPS WITH 5-SECTION RIGHT TURN SIGNAL HEAD DISPLAYS

1. CONTINUATION OF AN OVERLAP DURING ITS PERMISSIVE PHASE SHALL BE WITH A CIRCULAR YELLOW DISPLAYED TOGETHER WITH A GREEN RIGHT ARROW WHEN FOLLOWED BY THAT OVERLAP'S PROTECTED PHASE.
2. TERMINATION OF AN OVERLAP DURING ITS PERMISSIVE PHASE SHALL BE WITH A CIRCULAR YELLOW WHEN NOT FOLLOWED BY THAT OVERLAP'S PROTECTED PHASE.
3. CONTINUATION OF AN OVERLAP DURING ITS PROTECTED PHASE SHALL BE WITH A CIRCULAR RED DISPLAYED TOGETHER WITH A GREEN RIGHT ARROW WHEN FOLLOWED BY THAT OVERLAP'S PERMISSIVE PHASE.
4. TERMINATION OF AN OVERLAP DURING ITS PROTECTED PHASE SHALL BE WITH A CIRCULAR RED DISPLAYED TOGETHER WITH A YELLOW RIGHT ARROW WHEN NOT FOLLOWED BY THAT OVERLAP'S PERMISSIVE PHASE.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1
DETECTOR LOOP, TYPE 1	FOOT	605
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1

EXISTING EMERGENCY VEHICLE PRIORITY SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇅	⇄

FILE NAME = D160D76-SHT-TS7.dgn PLOT DATE = 1/26/2009	SPAAN Tech, Inc. 311 S. Wacker Drive, Suite 2400 Chicago, Illinois 60606 phone: 312.277.8800 fax: 312.277.8808 web: www.SpaanTech.com	DESIGNED - R.A.S. DRAWN - R.A.S. CHECKED - A.D.O. DATE - JANUARY, 2009	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**DETECTOR LOOP REPLACEMENT CABLE PLAN** **LEMONT ROAD (STATE STREET) AT ILLINOIS STREET** SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	24
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT				

ROADWAY LIGHTING SYMBOLS

DESCRIPTION	PROPOSED	EXISTING	DEMOLITION	TEMPORARY
LIGHT UNIT		⊙—⬭		
LIGHTING CONTROLLER		⊠		
CONDUIT, EMBEDDED		— — —		
RIGID GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE		———		
AERIAL CABLE				———A———
CONDUCTORS TO BE REMOVED FROM EXISTING EMBEDDED CONDUIT AND REPLACED WITH NEW			— XXX ——	
ComEd OVERHEAD LINES			——/——E——/—	

CABLE LEGEND

TAG	DESCRIPTION
⟨1⟩	3-1/C #4 AND 1-1/C #4 GROUND IN CONDUIT, 600V
⟨2⟩	TEMPORARY AERIAL CABLE, 600V, 3/C #2 ALUMINUM WITH STEEL MESSENGER WIRE

ROADWAY LIGHTING INDEX OF SHEETS

LT-01 ROADWAY LIGHTING LEGEND & SHEET INDEX, GENERAL NOTES
LT-02 ROADWAY LIGHTING SCHEDULE OF QUANTITIES
LT-03 TEMPORARY LIGHTING PLAN
LT-04 TEMPORARY LIGHTING PLAN
LT-05 TEMPORARY LIGHTING PLAN
LT-06 EMBEDDED LIGHTING PLAN
LT-07 EMBEDDED LIGHTING PLAN
LT-08 EMBEDDED LIGHTING PLAN
LT-09 DETAILS

GENERAL NOTES - ROADWAY LIGHTING

1. SPLICING OF CONDUCTORS SHALL BE IN POLE BASES OR WEATHER TIGHT JUNCTION BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.

2. LIGHTING CIRCUITS SHALL BE WIRED IN ACCORDANCE WITH THE PLANS. DEVIATIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

3. THE CONTRACTOR SHALL REQUEST A FORMAL MAINTENANCE TRANSFER BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF LEMONT PUBLIC WORKS AT (630) 257-2532.

4. ALL WORK SHALL CONFORM TO THE LATEST IDOT AND IDOT DISTRICT 1 STANDARDS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE.

5. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES BEFORE STARTING WORK.

6. ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED AND LABELED.

7. ALL CONDUITS SHALL BE SEALED.

8. CIRCUITS SHALL BE TESTED PER SPECIFICATION.

9. THE LOCATIONS OF ALL PROPOSED EQUIPMENT ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.

10. ALL MEASUREMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY MEASUREMENTS IN THE FIELD.

11. THE EXISTING LIGHTING SYSTEM VOLTAGE IS 240/480V, 1-PHASE, 3-WIRE. LUMINAIRE VOLTAGE IS 240V.

12. THE EXISTING LIGHTING CONTROLLER IS IDENTIFIED ON THE PLANS FOR REFERENCE ONLY.

13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING INSTALLATIONS AND DATA PRIOR TO BIDDING.

14. TEMPORARY LIGHTING SHALL REMAIN IN SERVICE UNTIL THE PERMANENT LIGHTING SYSTEM IS RETURNED TO OPERATION.

15. CONTRACTOR MUST MAINTAIN SAFE EQUIPMENT AND WORKING CLEARANCES FROM THE EXISTING COMED LINES. CONTRACTOR SHALL PLAN HIS WORK CONSIDERING ComEd'S LINES TO BE IN SERVICE AND ENERGIZED THROUGHOUT THE CONSTRUCTION PERIOD.

16. ALL EXISTING LIGHTING UNITS SHALL BE OPERATIONAL BETWEEN SUNDOWN AND SUNRISE.

17. MATERIALS AND INSTALLATION COSTS FOR CONDUIT EXPANSION/DEFLECTION JOINTS SHALL BE INCIDENTAL TO THE COST FOR CONDUIT EMBEDDED IN STRUCTURE.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UNDERPASS LIGHTING DURING CONSTRUCTION. IN THE EVENT THAT UNDERPASS LUMINAIRES OR THEIR ASSOCIATED CONDUITS OR JUNCTION BOXES INTERFERE WITH CONCRETE REPAIR AREAS, THE CONTRACTOR SHALL RELOCATE AND/OR PROVIDE TEMPORARY ELECTRICAL EQUIPMENT AS REQUIRED TO MAINTAINING THE UNDERPASS LIGHTING IN SERVICE DURING THE CONSTRUCTION PERIOD. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM FOR MAINTENANCE OF LIGHTING SYSTEM.

19. COST OF SPLICING TEMPORARY CONDUCTORS TO EXISTING CONDUCTORS IN EXISTING POLES SHALL BE INCIDENTAL TO THE PAYITEM FOR AERIAL CABLE. COST OF SPLICING NEW PERMANENT CONDUCTORS TO EXISTING CONDUCTORS AT BASE OF POLES SHALL BE INCIDENTAL TO THE PAY ITEM FOR ELECTRIC CABLE IN CONDUIT.

20. GROUNDING CONDUCTORS SHALL BE CONTINUOUS.

21. THE CONTRACTOR SHALL HAVE A STRUCTURAL ENGINEER EVALUATE THE STRUCTURAL INTEGRITY OF THE EXISTING POLES TO SUPPORT THE TEMPORARY AERIAL CABLES AS SHOWN IN THE PLANS AND SHALL SUBMIT THE EVALUATION TO THE ENGINEER FOR REVIEW AND APPROVAL.

IN THE EVENT THAT THE EXISTING POLES ARE NOT CAPABLE OF SUPPORTING THE LOAD OF THE TEMPORARY AERIAL CABLES, THE CONTRACTOR SHALL, IN LIEU OF MOUNTING THE AERIAL CABLES TO THE POLE, SUPPORT THE AERIAL CABLES ON THE BACK SIDE OF THE WALL BY CLAMPING (NO DRILLING) STAND-OFF SUPPORTS TO THE PARAPET WALL. AT THE BRIDGE JOINT(S) THE AERIAL CABLES SHALL BE APPROPRIATELY DROOPED OR OTHERWISE TRAINED OUT OF THE WAY FOR THE JOINT WORK. THE CONTRACTOR SHALL PERFORM THIS WORK IN A MANNER APPROVED BY THE ENGINEER. ALL TEMPORARY CABLES INSTALLED NEAR THE SIDEWALK ON THE EAST SIDE OF THE BRIDGE SHALL BE REMOVED BEFORE THE SIDEWALK IS OPENED TO PUBLIC ACCESS. PAYMENT FOR THIS ALTERNATIVE SHALL BE AS "AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE"; AND ALL CLAMPS, SPLICES AND OTHER ASSOCIATED APPURTENANCES SHALL BE INCIDENTAL TO THAT PAY ITEM.

FILE NAME = LT-01.dgn
PLOT DATE = 2/2/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.5800
fax: 312.277.5808
web: www.SpaanTech.com

DESIGNED - I.A.B.	REVISED -	
DRAWN - M.K.J.	REVISED -	
CHECKED - A.D.O.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY LIGHTING SYMBOLS & SHEET INDEX, GENERAL NOTES
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	25
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

ROADWAY LIGHTING SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL QUANTITIES
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	107
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 4	FOOT	17,786
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	4,265
REMOVE ELECTRIC CABLE FROM EMBEDDED CONDUIT	FOOT	17,732
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6

LT-02

FILE NAME = LT-02.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED	- I.A.B.	REVISED -
DRAWN	- M.K.J.	REVISED -
CHECKED	- A.D.O.	REVISED -
DATE	- JANUARY, 2009	REVISED -

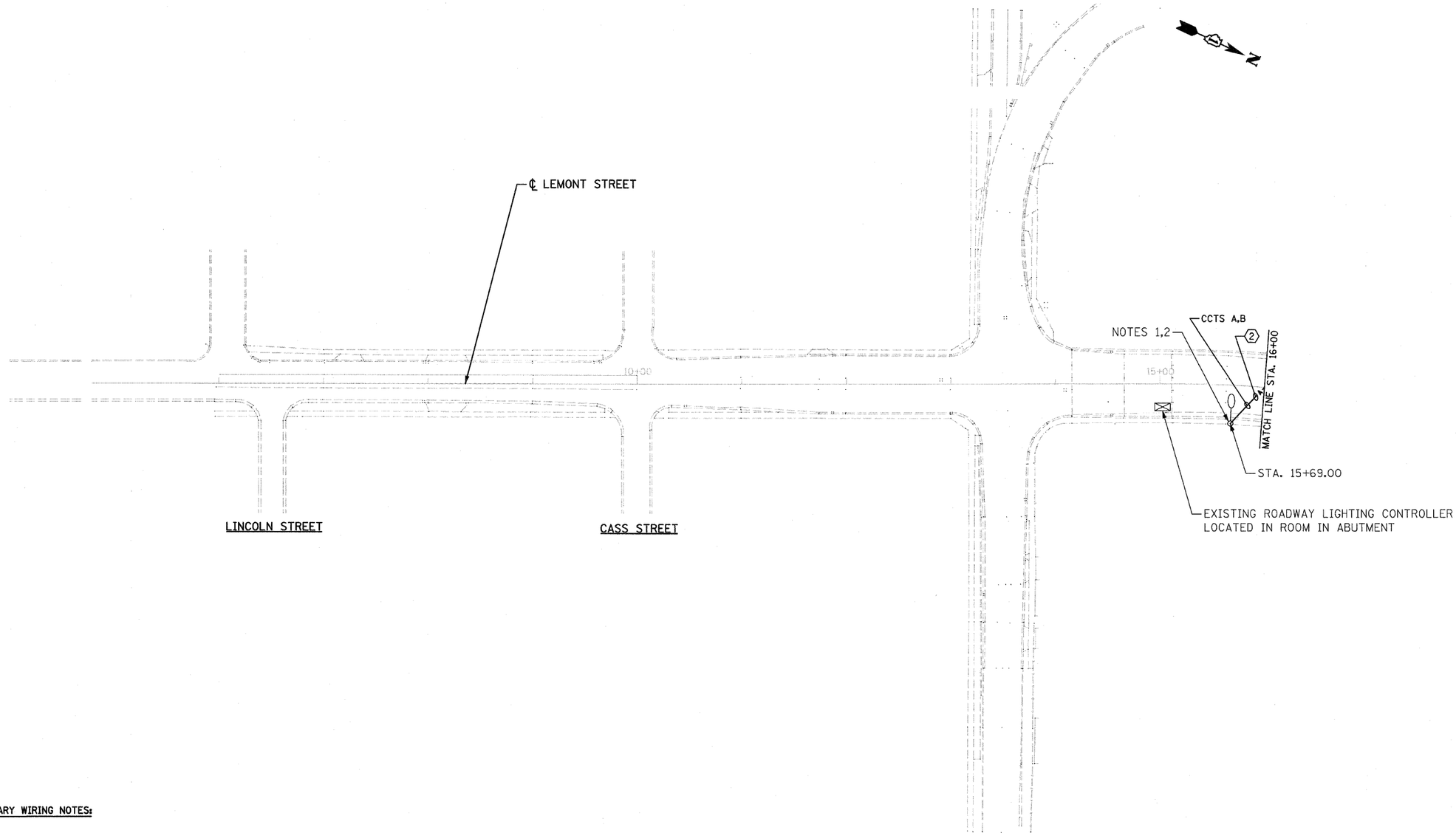
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY LIGHTING SCHEDULE OF QUANTITIES
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	26
		CONTRACT NO. 60D76		

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



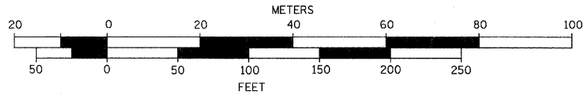
TEMPORARY WIRING NOTES:

1. SECURE AERIAL CABLE ATTACHMENTS TO POLE WITH POLE BANDS AT A HEIGHT THAT WILL PROVIDE THE REQUIRED 18 FOOT NATIONAL ELECTRICAL CODE CONDUCTOR CLEARANCE OVER THE ROADWAY. REFER TO DETAIL 2, SHEET LT-09.

2. INSERT CIRCUIT CONDUCTORS THROUGH POLE CAP. SPLICE CONDUCTORS TO THE LIGHTING CIRCUITS AT THE POLE BASE. REFER TO DETAIL 3, SHEET LT-09. REPLACE POLE CAP AFTER TEMPORARY CONDUCTORS ARE REMOVED.

3. CIRCUIT IDENTIFICATION IS ASSUMED AND IS PROVIDED FOR CLARIFICATION OF CIRCUIT ROUTING ONLY.

GRAPHIC SCALE



LT-03

FILE NAME = LT-03.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

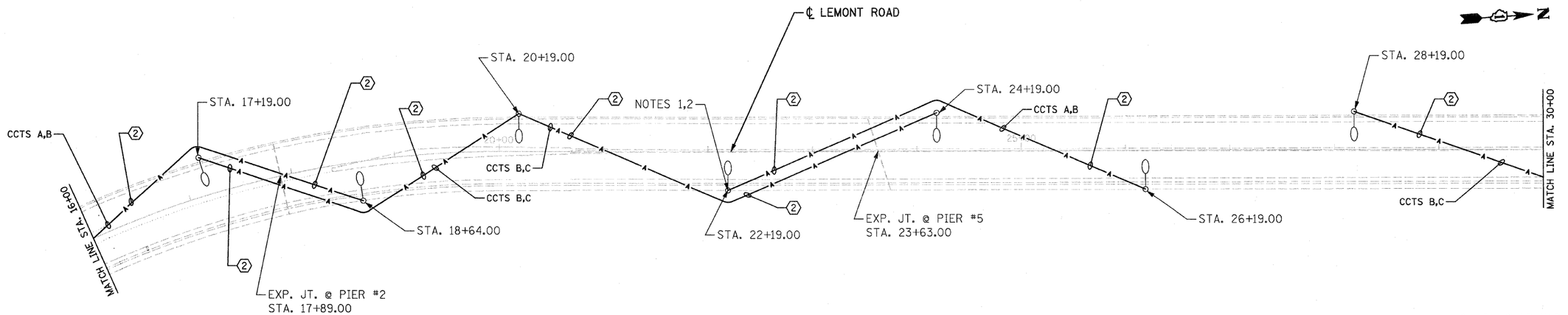
DESIGNED	- I.A.B.	REVISED	-
DRAWN	- M.K.J.	REVISED	-
CHECKED	- A.D.O.	REVISED	-
DATE	- JANUARY, 2009	REVISED	-

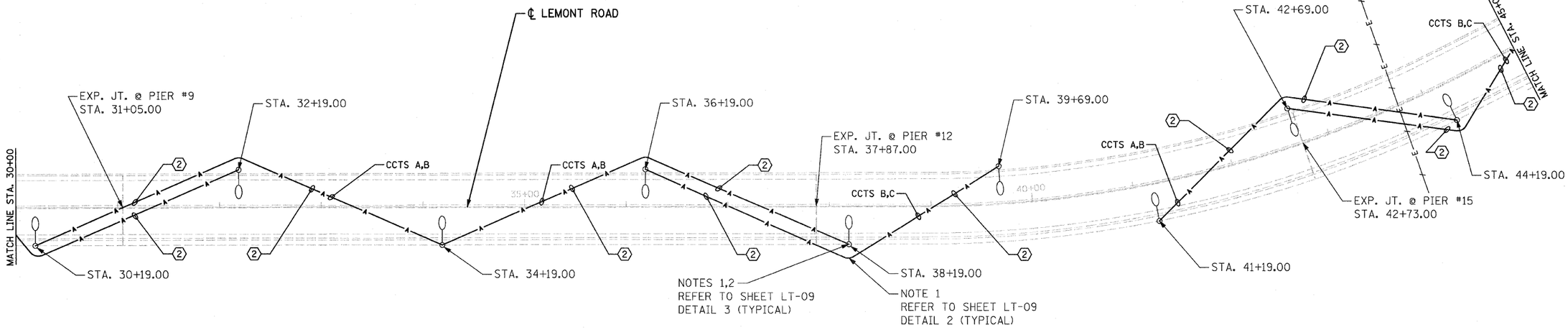
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING PLAN
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	27
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





TEMPORARY WIRING NOTES:

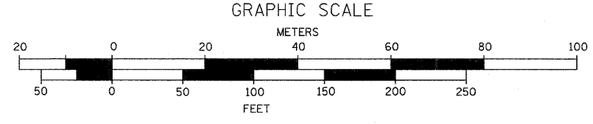
1. SECURE AERIAL CABLE ATTACHMENTS TO POLE WITH POLE BANDS AT A HEIGHT THAT WILL PROVIDE THE REQUIRED 18 FOOT NATIONAL ELECTRICAL CODE CONDUCTOR CLEARANCE OVER THE ROADWAY. REFER TO DETAIL 2, SHEET LT-09.

2. INSERT CIRCUIT CONDUCTORS THROUGH POLE CAP. SPLICE CONDUCTORS TO THE LIGHTING CIRCUITS AT THE POLE BASE. REFER TO DETAIL 3, SHEET LT-09. REPLACE POLE CAP AFTER TEMPORARY CONDUCTORS ARE REMOVED.

3. CIRCUIT IDENTIFICATION IS ASSUMED AND IS PROVIDED FOR CLARIFICATION OF CIRCUIT ROUTING ONLY.

4. LOCATIONS SHOWN FOR ComEd OVERHEAD LINES ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATIONS AND CLEARANCE.

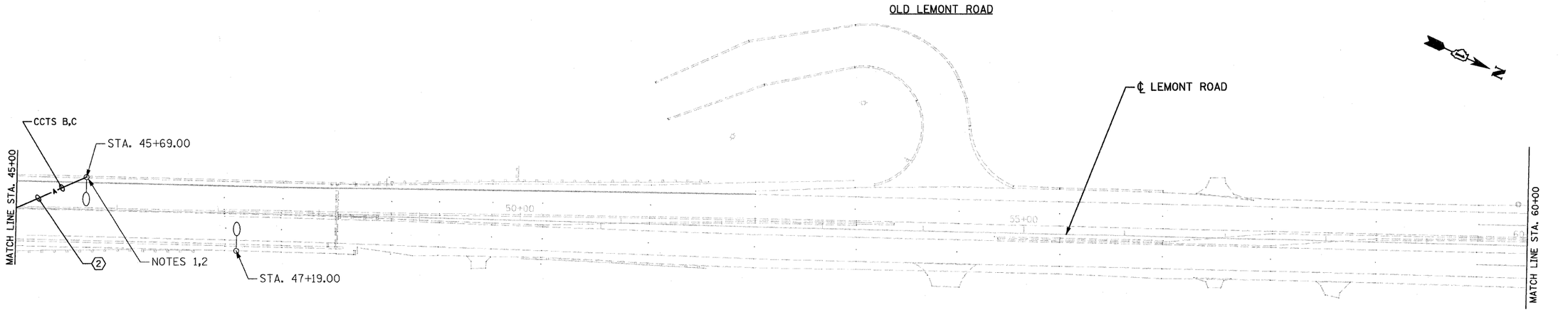
GRAPHIC SCALE



LT-04

FILE NAME = LT-04.dgn PLOT DATE = 1/26/2009	SPAAN Tech, Inc. 311 S. Wacker Drive, Suite 2400 Chicago, Illinois 60606 phone: 312.277.8800 fax: 312.277.8808 web: www.SpaanTech.com	DESIGNED - I.A.B. DRAWN - M.K.J. CHECKED - A.D.O. DATE - JANUARY, 2009	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**TEMPORARY LIGHTING PLAN** **LEMONT ROAD** SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	28
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TEMPORARY WIRING NOTES:

1. SECURE AERIAL CABLE ATTACHMENTS TO POLE WITH POLE BANDS AT A HEIGHT THAT WILL PROVIDE THE REQUIRED 18 FOOT NATIONAL ELECTRICAL CODE CONDUCTOR CLEARANCE OVER THE ROADWAY. REFER TO DETAIL 2, SHEET LT-09.

2. INSERT CIRCUIT CONDUCTORS THROUGH POLE CAP. SPLICE CONDUCTORS TO THE LIGHTING CIRCUITS AT THE POLE BASE. REFER TO DETAIL 3, SHEET LT-09. REPLACE POLE CAP AFTER TEMPORARY CONDUCTORS ARE REMOVED.

3. CIRCUIT IDENTIFICATION IS ASSUMED AND IS PROVIDED FOR CLARIFICATION OF CIRCUIT ROUTING ONLY.

GRAPHIC SCALE

METERS

20 0 20 40 60 80 100

50 0 50 100 150 200 250

FEET

LT-05

FILE NAME = LT-05.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

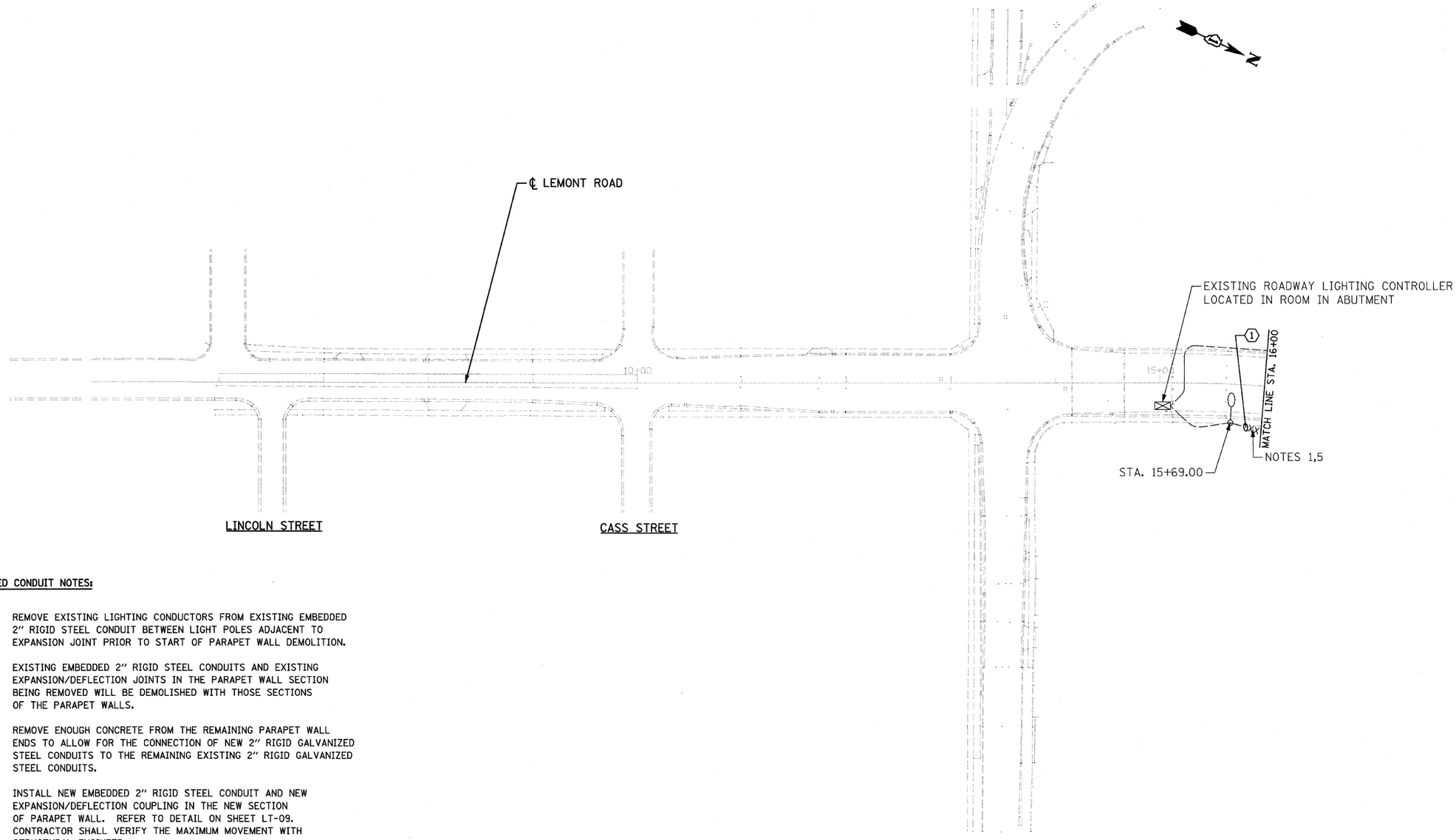
DESIGNED	-	I.A.B.	REVISED -
DRAWN	-	M.K.J.	REVISED -
CHECKED	-	A.D.O.	REVISED -
DATE	-	JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING PLAN
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	29
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EMBEDDED CONDUIT NOTES:

1. REMOVE EXISTING LIGHTING CONDUCTORS FROM EXISTING EMBEDDED 2" RIGID STEEL CONDUIT BETWEEN LIGHT POLES ADJACENT TO EXPANSION JOINT PRIOR TO START OF PARAPET WALL DEMOLITION.

2. EXISTING EMBEDDED 2" RIGID STEEL CONDUITS AND EXISTING EXPANSION/DEFLECTION JOINTS IN THE PARAPET WALL SECTION BEING REMOVED WILL BE DEMOLISHED WITH THOSE SECTIONS OF THE PARAPET WALLS.

3. REMOVE ENOUGH CONCRETE FROM THE REMAINING PARAPET WALL ENDS TO ALLOW FOR THE CONNECTION OF NEW 2" RIGID GALVANIZED STEEL CONDUITS TO THE REMAINING EXISTING 2" RIGID GALVANIZED STEEL CONDUITS.

4. INSTALL NEW EMBEDDED 2" RIGID STEEL CONDUIT AND NEW EXPANSION/DEFLECTION COUPLING IN THE NEW SECTION OF PARAPET WALL. REFER TO DETAIL ON SHEET LT-09. CONTRACTOR SHALL VERIFY THE MAXIMUM MOVEMENT WITH STRUCTURAL ENGINEER.

5. INSTALL NEW 3-1/C #4 AND 1-1/C #4 GROUND LIGHTING CONDUCTORS IN EXISTING AND NEW EMBEDDED CONDUITS AND NEW EXPANSION/DEFLECTION COUPLING BETWEEN POLES ADJACENT TO EXPANSION JOINT. DISCONNECT AND REMOVE TEMPORARY AERIAL CABLE AND SPLICE THE NEW CONDUCTORS AT THE BASE OF THE POLES.

GRAPHIC SCALE

METERS

20 0 20 40 60 80 100

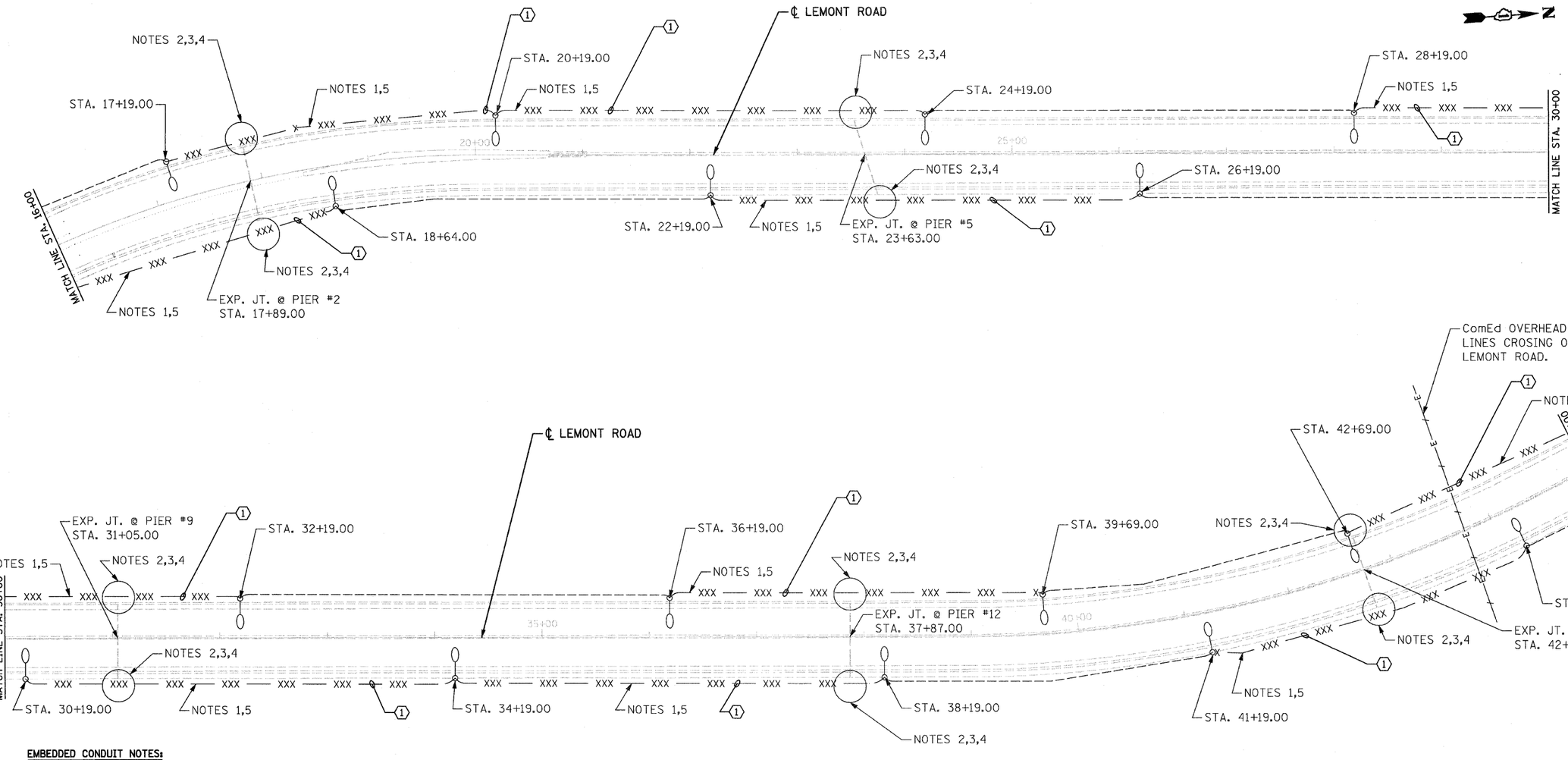
50 0 50 100 150 200 250

FEET

LT-06

FILE NAME = LT-06.dgn PLOT DATE = 1/26/2009	SPAAN Tech, Inc. 311 S. Wacker Drive, Suite 2400 Chicago, Illinois 60606 phone: 312.277.5800 fax: 312.277.5808 web: www.SpaanTech.com	DESIGNED - I.A.B. DRAWN - M.K.J. CHECKED - A.D.O. DATE - JANUARY, 2009	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**EMBEDDED CONDUIT PLAN** **LEMONT ROAD** SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	30
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EMBEDDED CONDUIT NOTES:

1. REMOVE EXISTING LIGHTING CONDUCTORS FROM EXISTING EMBEDDED 2" RIGID STEEL CONDUIT BETWEEN LIGHT POLES ADJACENT TO EXPANSION JOINT PRIOR TO START OF PARAPET WALL DEMOLITION.

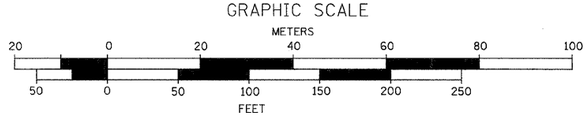
2. EXISTING EMBEDDED 2" RIGID STEEL CONDUITS AND EXISTING EXPANSION/DEFLECTION JOINTS IN THE PARAPET WALL SECTIONS BEING REMOVED WILL BE DEMOLISHED WITH THOSE SECTIONS OF THE PARAPET WALLS.

3. REMOVE ENOUGH CONCRETE FROM THE REMAINING PARAPET WALL ENDS TO ALLOW FOR THE CONNECTION OF NEW 2" RIGID GALVANIZED RIGID STEEL CONDUITS TO THE REMAINING EXISTING 2" RIGID GALVANIZED STEEL CONDUITS.

4. INSTALL NEW EMBEDDED 2" RIGID STEEL CONDUIT AND NEW EXPANSION/DEFLECTION COUPLING IN THE NEW SECTION OF PARAPET WALL. REFER TO DETAIL ON SHEET LT-09. CONTRACTOR SHALL VERIFY THE MAXIMUM MOVEMENT WITH STRUCTURAL ENGINEER.

5. INSTALL NEW 3-1/C #4 AND 1-1/C #4 GROUND LIGHTING CONDUCTORS IN EXISTING AND NEW EMBEDDED CONDUITS AND NEW EXPANSION/DEFLECTION COUPLING BETWEEN POLES ADJACENT TO EXPANSION JOINT. DISCONNECT AND REMOVE TEMPORARY AERIAL CABLE AND SPLICE THE NEW CONDUCTORS AT THE BASE OF THE POLES.

GRAPHIC SCALE



LT-07

FILE NAME = LT-07.dgn
PLOT DATE = 1/26/2009

SPAAN TECH, INC.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

DESIGNED - I.A.B.	REVISED -	
DRAWN - M.K.J.	REVISED -	
CHECKED - A.D.O.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EMBEDDED LIGHTING PLAN
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	31
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EMBEDDED CONDUIT NOTES:

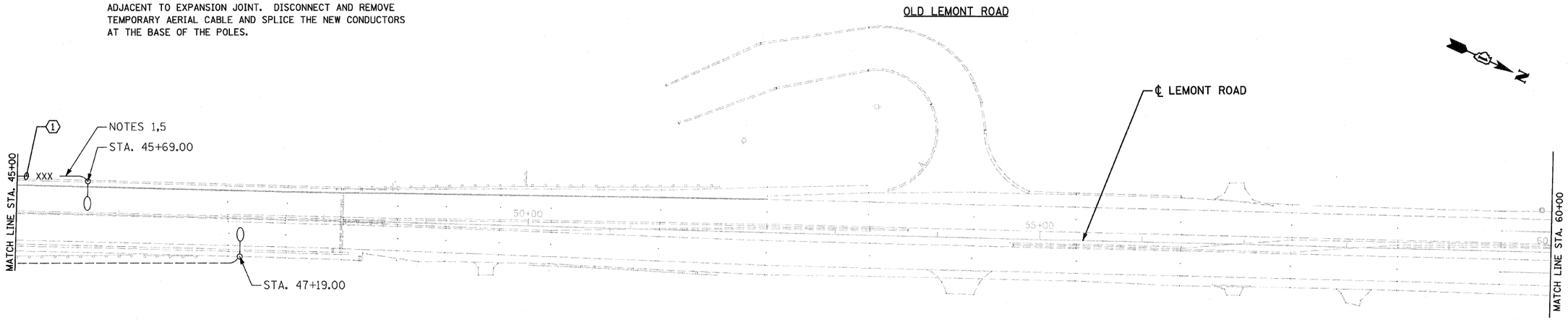
1. REMOVE EXISTING LIGHTING CONDUCTORS FROM EXISTING EMBEDDED 2" RIGID STEEL CONDUIT BETWEEN LIGHT POLES ADJACENT TO EXPANSION JOINT PRIOR TO START OF PARAPET WALL DEMOLITION.

2. EXISTING EMBEDDED 2" RIGID STEEL CONDUITS AND EXISTING EXPANSION/DEFLECTION JOINTS IN THE PARAPET WALL SECTIONS BEING REMOVED WILL BE DEMOLISHED WITH THOSE SECTIONS OF THE PARAPET WALLS.

3. REMOVE ENOUGH CONCRETE FROM THE REMAINING PARAPET WALL ENDS TO ALLOW FOR THE CONNECTION OF NEW 2" RIGID GALVANIZED STEEL CONDUITS TO THE REMAINING EXISTING 2" RIGID GALVANIZED STEEL CONDUITS.

4. INSTALL NEW EMBEDDED 2" RIGID STEEL CONDUIT AND NEW EXPANSION/DEFLECTION COUPLING IN THE NEW SECTION OF PARAPET WALL. REFER TO DETAIL ON SHEET LT-09. CONTRACTOR SHALL VERIFY THE MAXIMUM MOVEMENT WITH STRUCTURAL ENGINEER.

5. INSTALL NEW 3-1/C #4 AND 1-1/C #4 GROUND LIGHTING CONDUCTORS IN EXISTING AND NEW EMBEDDED CONDUITS AND NEW EXPANSION/DEFLECTION COUPLING BETWEEN POLES ADJACENT TO EXPANSION JOINT. DISCONNECT AND REMOVE TEMPORARY AERIAL CABLE AND SPLICE THE NEW CONDUCTORS AT THE BASE OF THE POLES.



GRAPHIC SCALE

METERS

20 0 20 40 60 80 100

50 0 50 100 150 200 250

FEET

LT-08

FILE NAME = LT-08.dgn
PLOT DATE = 1/26/2009

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

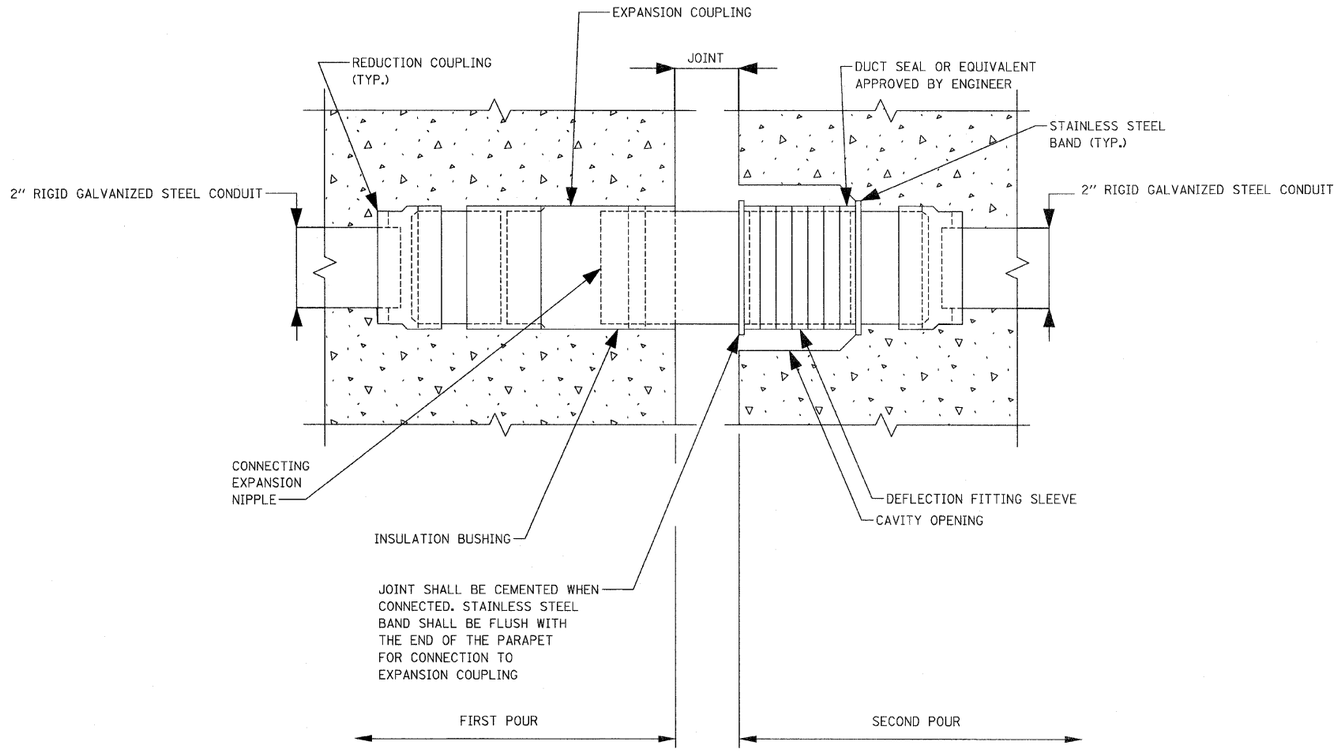
DESIGNED	-	I.A.B.	REVISED -
DRAWN	-	M.K.J.	REVISED -
CHECKED	-	A.D.O.	REVISED -
DATE	-	JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

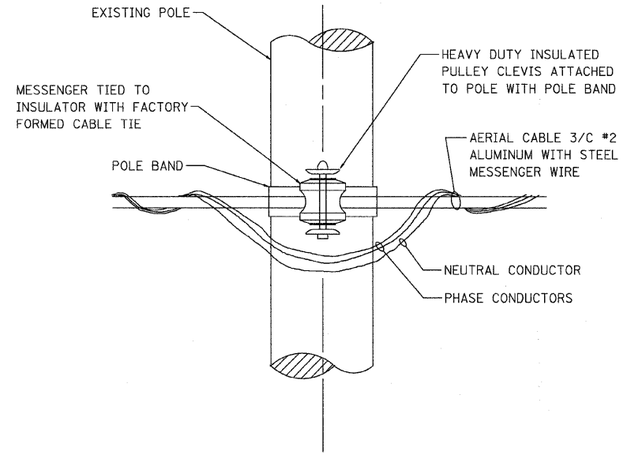
EMBEDDED LIGHTING PLAN
LEMONT ROAD

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

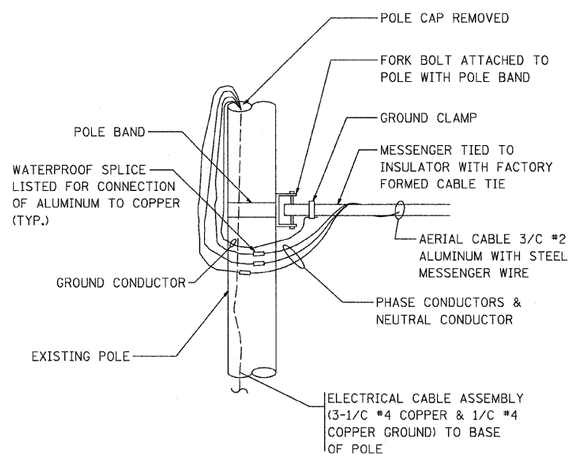
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	32
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



1 CONDUIT EXPANSION/DEFLECTION JOINT
NO SCALE



2 TEMPORARY AERIAL CABLE ATTACHMENT DETAIL
NO SCALE



3 TEMPORARY AERIAL CABLE CONNECTION DETAIL
NO SCALE

NOTES FOR CONDUIT EXPANSION/DEFLECTION JOINTS:

1. ALL MATERIALS (FITTING, COUPLINGS, CONDUIT, ETC.) INCLUDED WITH CONDUIT EMBEDDED IN STRUCTURE.

2. ALL COUPLINGS SHALL BE WATERTIGHT.

3. EXPANSION ASSEMBLY SHALL BE INSTALLED IN ALL EXPANSION JOINTS THAT ARE AT LEAST 1.75" AT 10°C, UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. EXPANSION COUPLINGS SHALL HAVE A TOTAL MINIMUM MOVEMENT OF 6" OR THE MOVEMENT CAPACITY OF THE STRUCTURAL JOINT, WHICHEVER IS GREATER. VERIFY MAXIMUM LONGITUDINAL JOINT MOVEMENT WITH THE STRUCTURAL ENGINEER. EXPANSION/DEFLECTION ASSEMBLY SHALL BE INSTALLED AS REQUIRED.

4. EXPANSION JOINT LOCATIONS WHEN INDICATED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER. EXPANSION/DEFLECTION COUPLINGS SHALL HAVE A TOTAL LONGITUDINAL MOVEMENT OF 4" OR THE MOVEMENT CAPACITY OF THE STRUCTURAL JOINT, WHICHEVER IS GREATER. VERIFY MAXIMUM LONGITUDINAL JOINT MOVEMENT WITH THE STRUCTURAL ENGINEER. THE ROTATIONAL CAPACITY OF THE DEFLECTION FITTING SHALL ALLOW FOR A MINIMUM MOVEMENT OF 1" IN THE TRANSVERSE DIRECTION.

5. EXPANSION/DEFLECTION COUPLING TYPES SHALL BE APPROVED BY THE ENGINEER.

6. REFER TO STRUCTURE PLANS FOR LOCATION & SIZE OF EXPANSION JOINTS.

7. REFER TO STRUCTURAL DRAWINGS FOR EACH EXPANSION JOINT LOCATION AND EACH EXPANSION JOINT WIDTH.

8. THE BARREL OF THE FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE OF ONE SIDE OF THE EXPANSION JOINT.

9. A CAVITY OPENING, IF REQUIRED, SHALL BE 3 IN. LARGER IN DIAMETER AND A MAXIMUM DEPTH OF HALF OF THE DEFLECTION SLEEVE LENGTH. THE DEFLECTION FITTING SHALL BE CENTERED IN THE OPENING AND EMBEDDED IN THE CONCRETE ONLY UP TO THE DEFLECTION FITTING CENTER.

10. BOTH EXPANSION AND DEFLECTION COUPLINGS SHALL HAVE INTEGRAL BONDING JUMPERS.

LT-09

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, Illinois 60606
phone: 312.277.8800
fax: 312.277.8808
web: www.SpaanTech.com

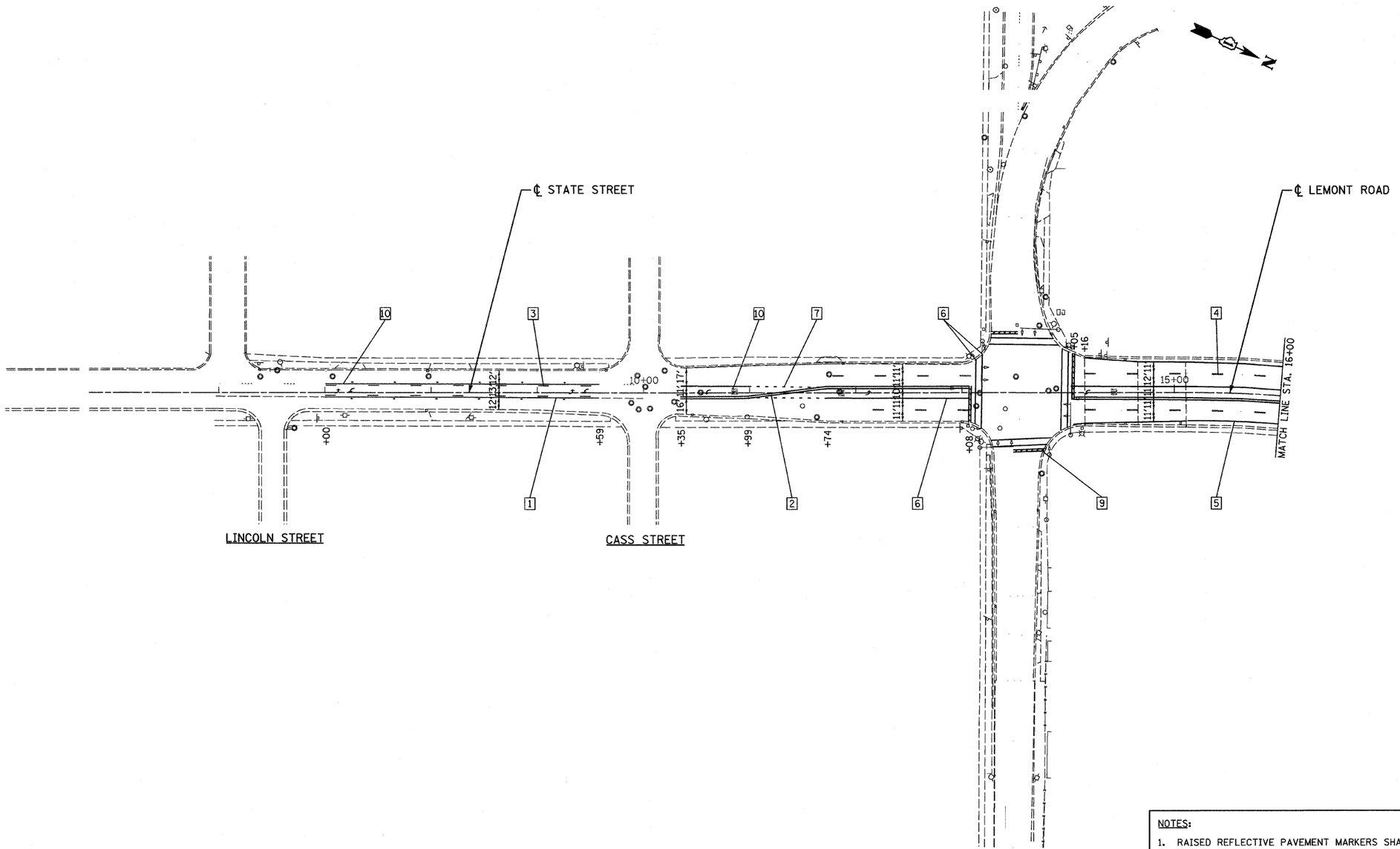
DESIGNED - I.A.B.	REVISED -	
DRAWN - M.K.J.	REVISED -	
CHECKED - A.D.O.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS
LEMONT ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	33
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE IMPROVEMENT LIMITS. SEE DISTRICT DETAIL TC-11 ON SHEET NO. 78.
2. FOR CROSSWALK DETAILS, SEE DISTRICT DETAIL TC-13 ON SHEET NO. 79.

LEGEND

1. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
2. POLYUREA PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINES 11" C-C)
3. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)
4. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPM'S)
5. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE)
6. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
7. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
8. POLYUREA PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE)
9. POLYUREA PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)
10. POLYUREA PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)

FILE NAME = 60D76 PVTMK-01.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

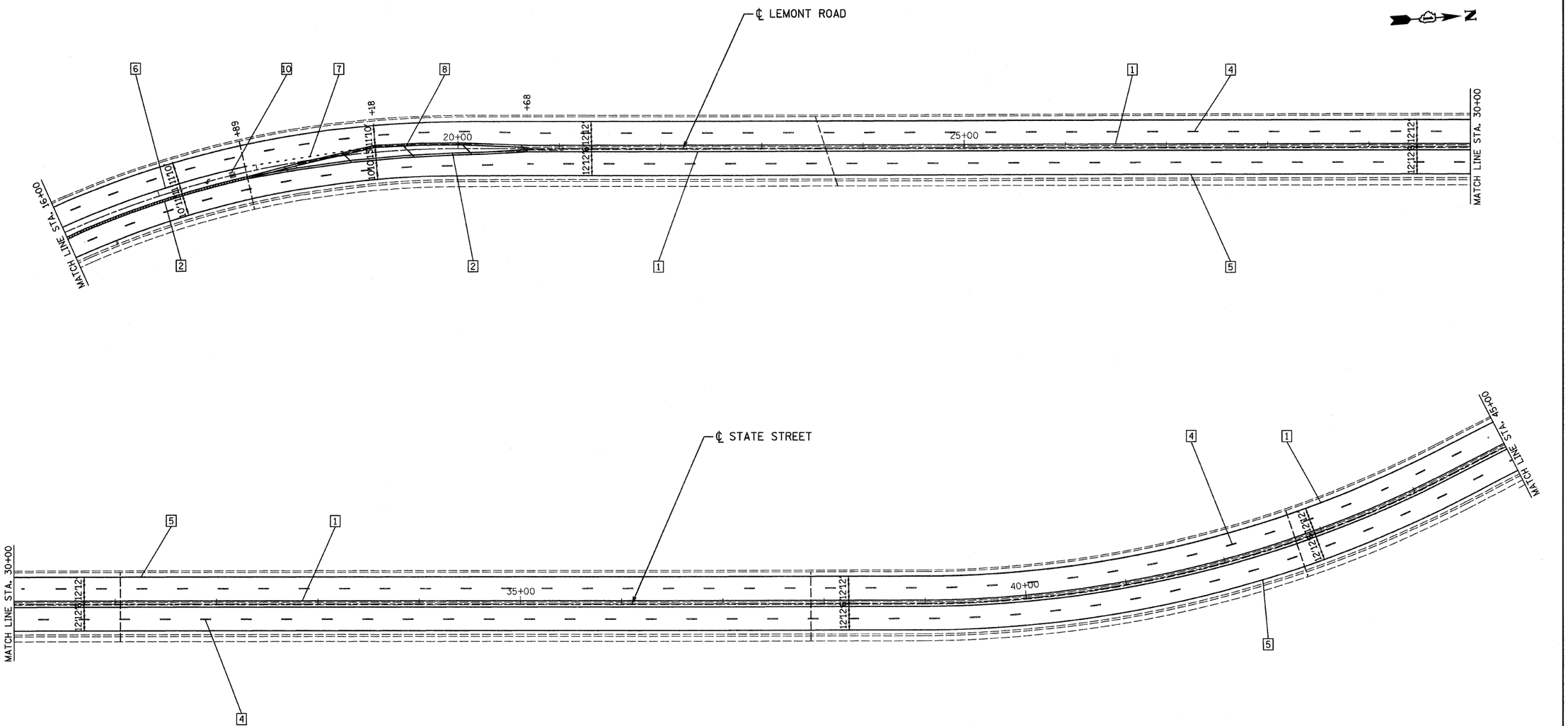
DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING PLAN
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	34
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE IMPROVEMENT LIMITS. SEE DISTRICT DETAIL TC-11 ON SHEET NO. 78.
2. FOR CROSSWALK DETAILS, SEE DISTRICT DETAIL TC-13 ON SHEET NO. 79.

LEGEND

1. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
2. POLYUREA PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINES 11" C-C)
3. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)
4. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPM'S)
5. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE)
6. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
7. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
8. POLYUREA PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE)
9. POLYUREA PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)
10. POLYUREA PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)

FILE NAME = 60D76 PVTMK-02.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

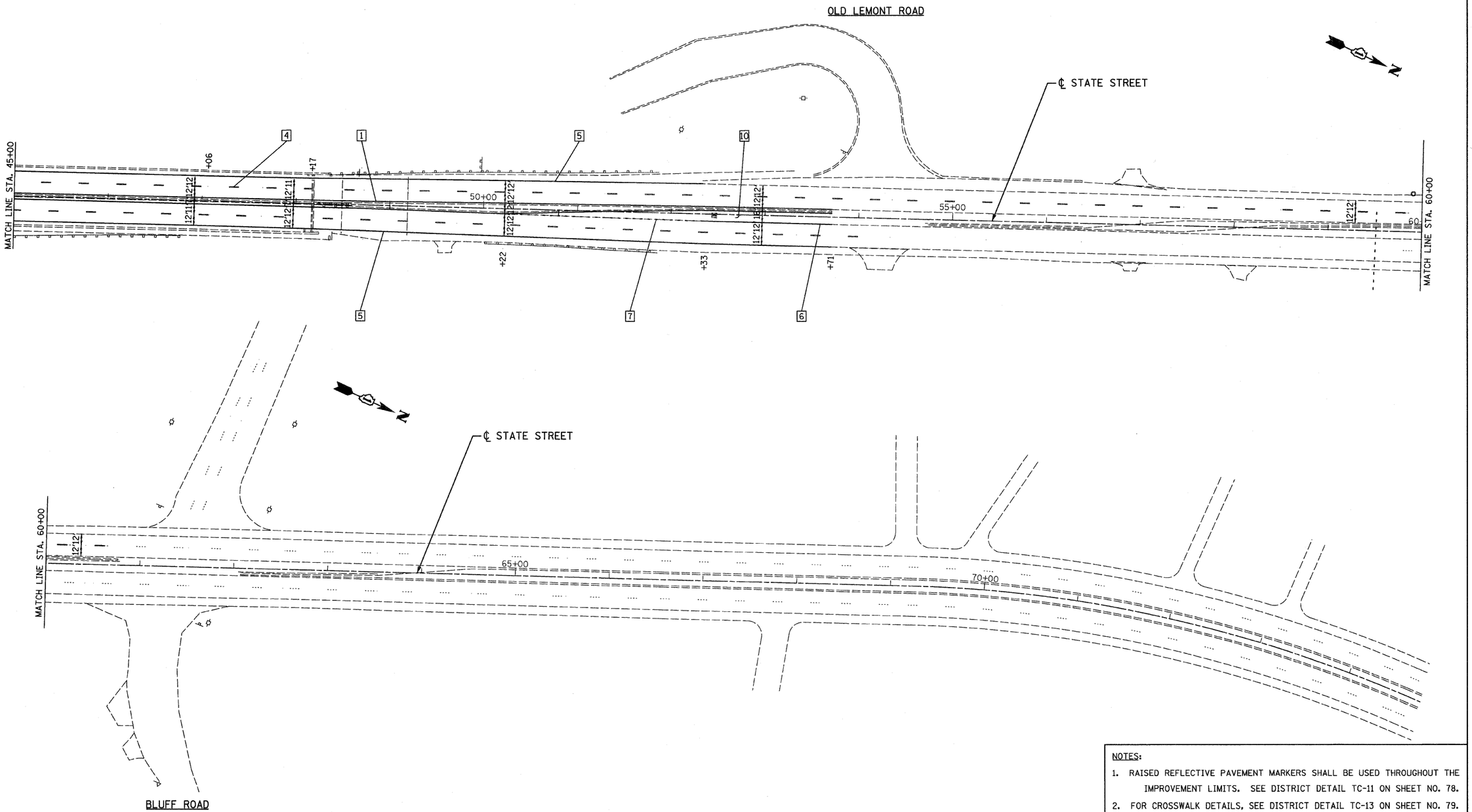
DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING PLAN
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	35
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE IMPROVEMENT LIMITS. SEE DISTRICT DETAIL TC-11 ON SHEET NO. 78.
2. FOR CROSSWALK DETAILS, SEE DISTRICT DETAIL TC-13 ON SHEET NO. 79.

LEGEND

1. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
2. POLYUREA PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINES 11" C-C)
3. POLYUREA PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP)
4. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RRPM'S)
5. POLYUREA PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE)
6. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
7. POLYUREA PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
8. POLYUREA PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE)
9. POLYUREA PAVEMENT MARKING - LINE 24" (WHITE STOP BAR)
10. POLYUREA PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)

FILE NAME = 60D76 PVTMK-03.dgn
PLOT DATE = 1/31/2009

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED - G.F.L.	REVISED -	
DRAWN - B.K.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING PLAN
LEMONT ROAD

SCALE: 1" = 50' | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	36
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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.

Concrete Removal quantity includes Volume of P.P.C. Deck Planks.

All exposed concrete edges shall be chamfered $\frac{3}{4}$" unless otherwise noted.

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

Reinforcement Bars designated (E) shall be Epoxy Coated.

All Structural Steel shall conform to AASHTO Classification M-270 Gr. 36, Unless Otherwise Noted.

Areas of Deck Repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-Built Plans.

If the analysis submitted to the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

Joint Openings shall be adjusted according to Article 520.04 of the Standard Specifications when deck is poured at an ambient temperature other than 50° F.

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER.	SUB.	TOTAL
Bridge Deck Hydro-Scarification $\frac{1}{2}$ Inch	Sq. Yd.	22,347	-	22,347
Bridge Deck Latex Concrete Overlay, $2\frac{1}{4}$ Inch	Sq. Yd.	22,347	-	22,347
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	36	-	36
Bridge Deck Grooving	Sq. Yd.	20,877	-	20,877
Reinforcement Bars, Epoxy Coated	Pound	51,830	1,660	53,490
Protective Shield	Sq. Yd.	1,830	-	1,830
Concrete Removal	Cu. Yd.	169	24	193
Jack and Remove Existing Bearings	Each	20	-	20
Elastomeric Bearing Assembly, Type I	Each	2	-	2
Elastomeric Bearing Assembly, Type II	Each	8	-	8
Elastomeric Bearing Assembly, Type III	Each	10	-	10
Cleaning and Painting Bearings	Each	16	-	16
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	-	1,172	1,172
Furnishing and Erecting Structural Steel	Pound	5,120	-	5,120
Modular Expansion Joint, 6"	Foot	435	-	435
Temporary Sheet Piling	Sq. Ft.	-	374	374
Preformed Joint Strip Seal	Foot	72	-	72
Concrete Superstructure	Cu. Yd.	257.1	-	257.1
Concrete Structures	Cu. Yd.	-	44.8	44.8
Drainage Structures To Be Adjusted	Each	53	-	53
Protective Coat	Sq. Yd.	22,435	-	22,435
Bar Splicers	Each	236	86	322
Anchor Bolts, $1\frac{1}{2}$"ϕ	Each	40	-	40
Polymer Concrete	Cu. Ft.	12	-	12
Structure Excavation	Cu. Yd.	-	40	40
Porous Granular Embankment, Special	Cu. Yd.	-	40	40

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S3 GENERAL PLAN & ELEVATION-II
S4 GENERAL PLAN & ELEVATION-III
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S7 PARTIAL DEPTH DECK PATCHING SUMMARY
S8 DECK CROSS SECTION
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S17 EXPANSION JOINT DETAILS AT PIER NO'S. 2, 5, 9, 12 & 15
S18 EXPANSION JOINT DETAILS AT PIER NO. 2
S19 EXPANSION JOINT DETAILS AT PIER NO. 5-I
S20 EXPANSION JOINT DETAILS AT PIER NO. 5-II
S21 EXPANSION JOINT DETAILS AT PIER NO. 9
S22 EXPANSION JOINT DETAILS AT PIER NO. 12
S23 EXPANSION JOINT DETAILS AT PIER NO. 15-I
S24 EXPANSION JOINT DETAILS AT PIER NO. 15-II & CONDUIT EXPANSION / DEFLECTION JOINT DETAIL
S25 EXPANSION JOINT DETAILS AT NORTH ABUTMENT-I
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S28 EXISTING EXPANSION BEARING REMOVAL
S29 EXISTING EXPANSION BEARING REMOVAL
S30 ELASTOMERIC BEARING ASSEMBLY, TYPE I
S31 ELASTOMERIC BEARING ASSEMBLY, TYPE II
S32 ELASTOMERIC BEARING ASSEMBLY, TYPE III
S33 ELASTOMERIC BEARING ASSEMBLY, TYPE III
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STATE OF ILLINOIS
BHADRESH N. SHAH
081-004476
CHICAGO
LICENSED STRUCTURAL ENGINEER

Bhadresh N. Shah

BHADRESH N. SHAH MARCH 04, 2009
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-10

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS - PLANNERS - SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = general_notes.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
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	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

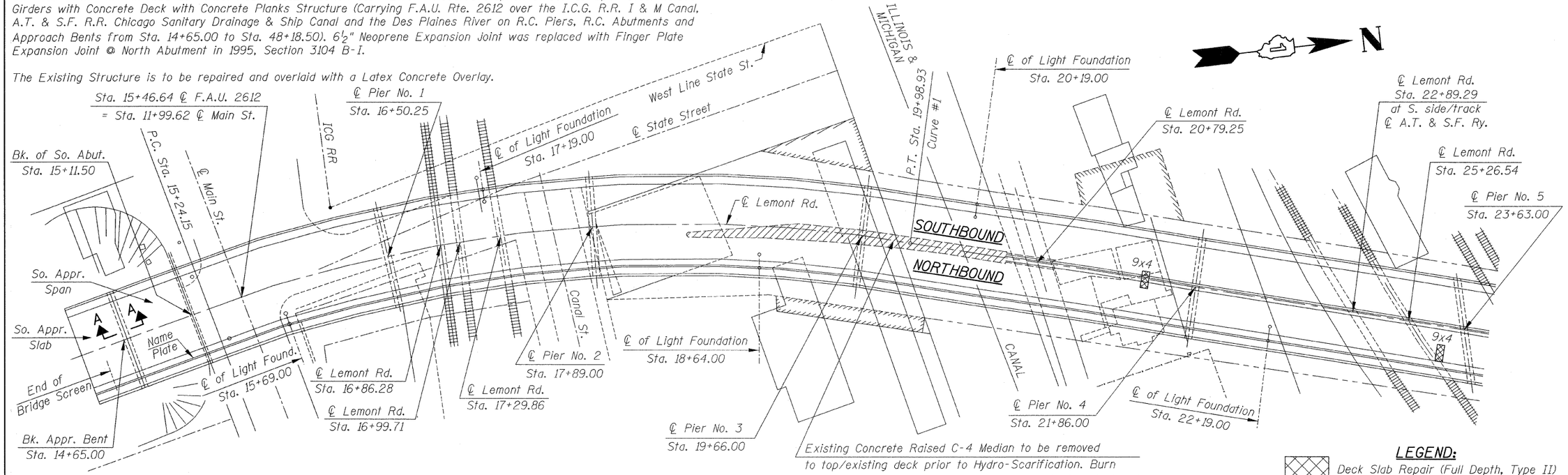
SCALE: | SHEET NO. S1 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	37
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING STRUCTURE:

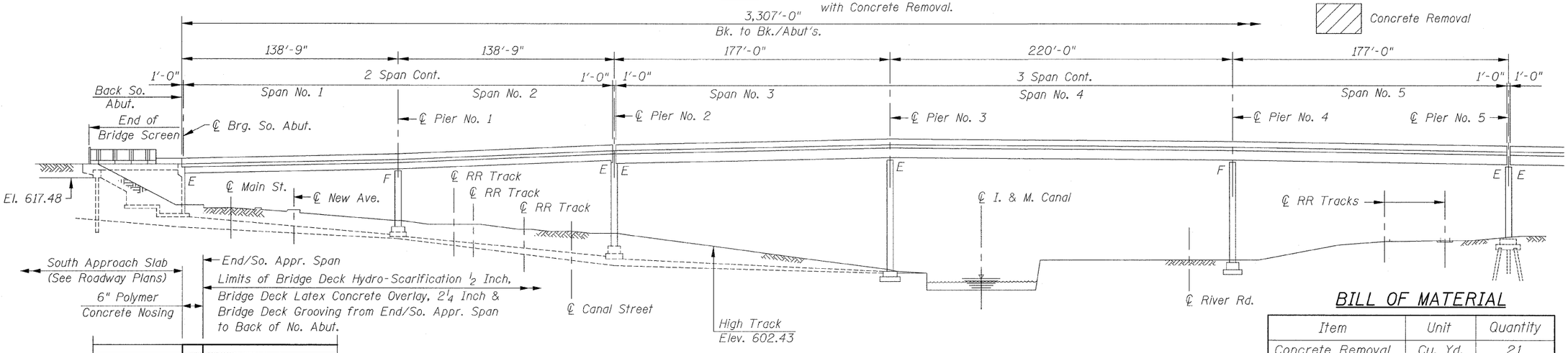
S.N. 016-2504 Built in 1983 as F.A.U. Route 2612, Section 3104-B(79) Relocated Stephen Street, 18-Span Steel Welded Girders with Concrete Deck with Concrete Planks Structure (Carrying F.A.U. Rte. 2612 over the I.C.G. R.R. I & M Canal, A.T. & S.F. R.R. Chicago Sanitary Drainage & Ship Canal and the Des Plaines River on R.C. Piers, R.C. Abutments and Approach Bents from Sta. 14+65.00 to Sta. 48+18.50). 6½" Neoprene Expansion Joint was replaced with Finger Plate Expansion Joint @ North Abutment in 1995, Section 3104 B-I.

The Existing Structure is to be repaired and overlaid with a Latex Concrete Overlay.



PLAN

Existing Concrete Raised C-4 Median to be removed to top/existing deck prior to Hydro-Scarification. Burn and cut vertical Dowels to top/existing deck. Cost included with Concrete Removal.



ELEVATION

LEGEND:

- Deck Slab Repair (Full Depth, Type II) (See Note "A")
- Concrete Removal

NOTE:

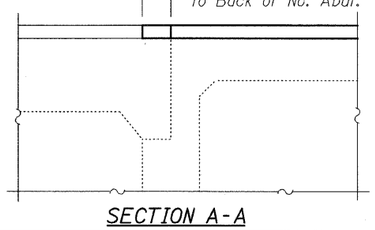
All Dimensions are measured horizontally along the ℄ of Roadway.

NOTE "A"

For Median, Parapet & Deck Reconstruction Details for Deck Slab Repair (Full Depth, Type II), See Sht's. S9, S10 & S11.

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	21
Polymer Concrete	Cu. Ft.	12



SECTION A-A

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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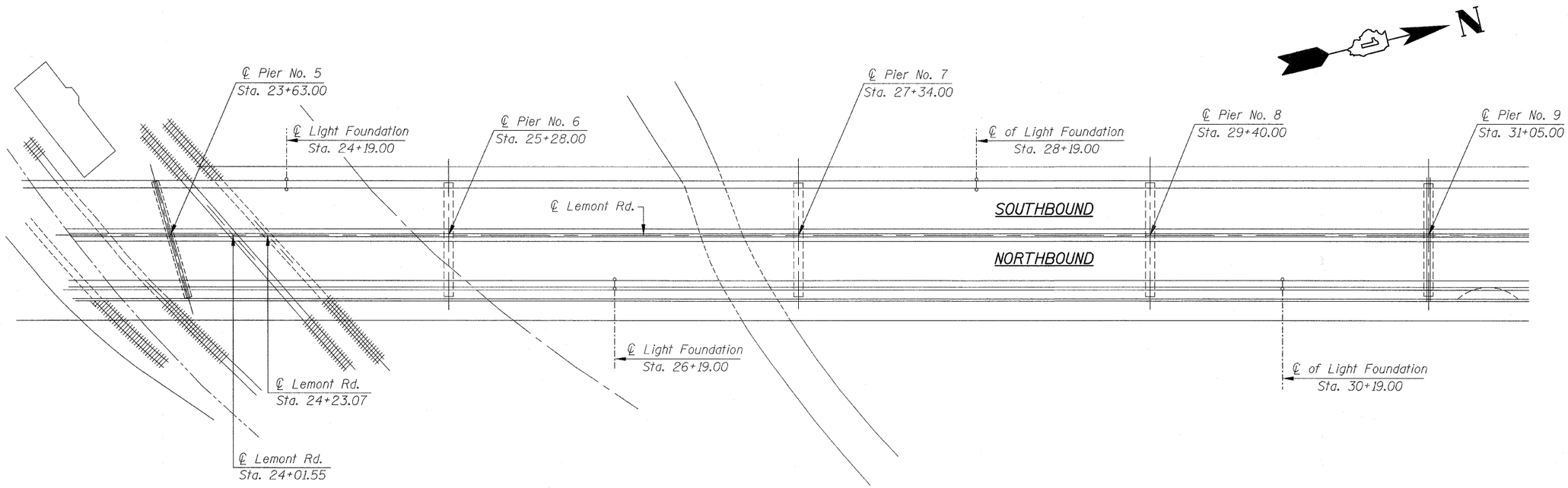
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

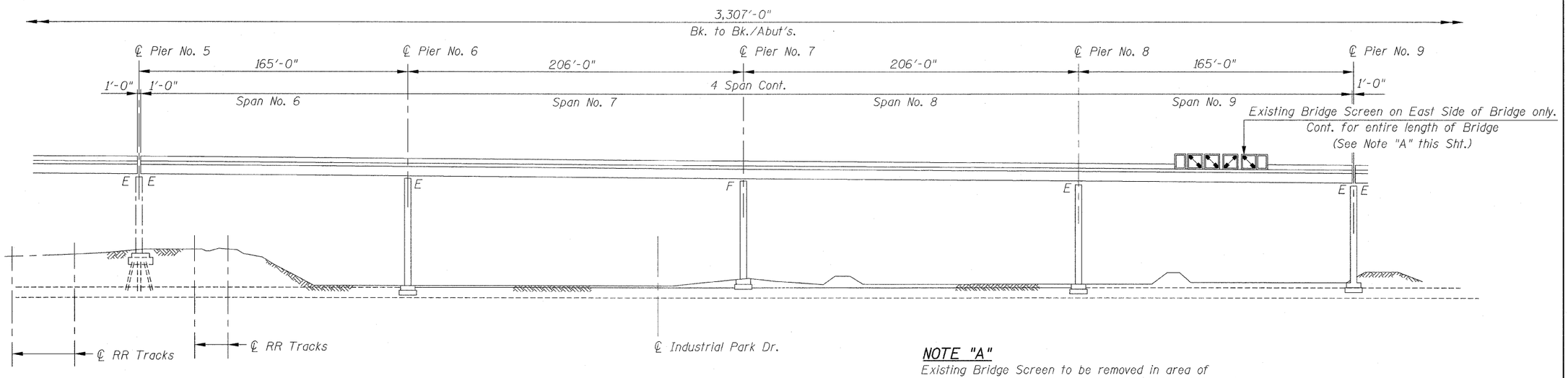
GENERAL PLAN & ELEVATION - 1
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S2 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	38
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



ELEVATION

NOTE "A"

Existing Bridge Screen to be removed in area of retrofit and stored in a safe location for replacement after Construction is completed. Cost included with Concrete Removal.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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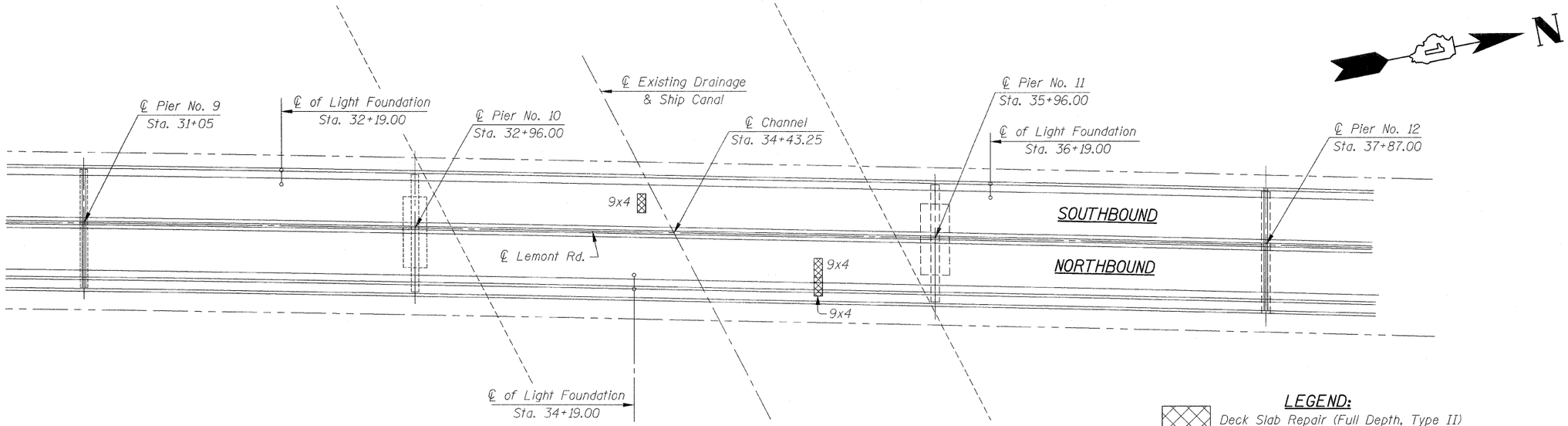
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION – II
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 53 OF 541 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	39
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



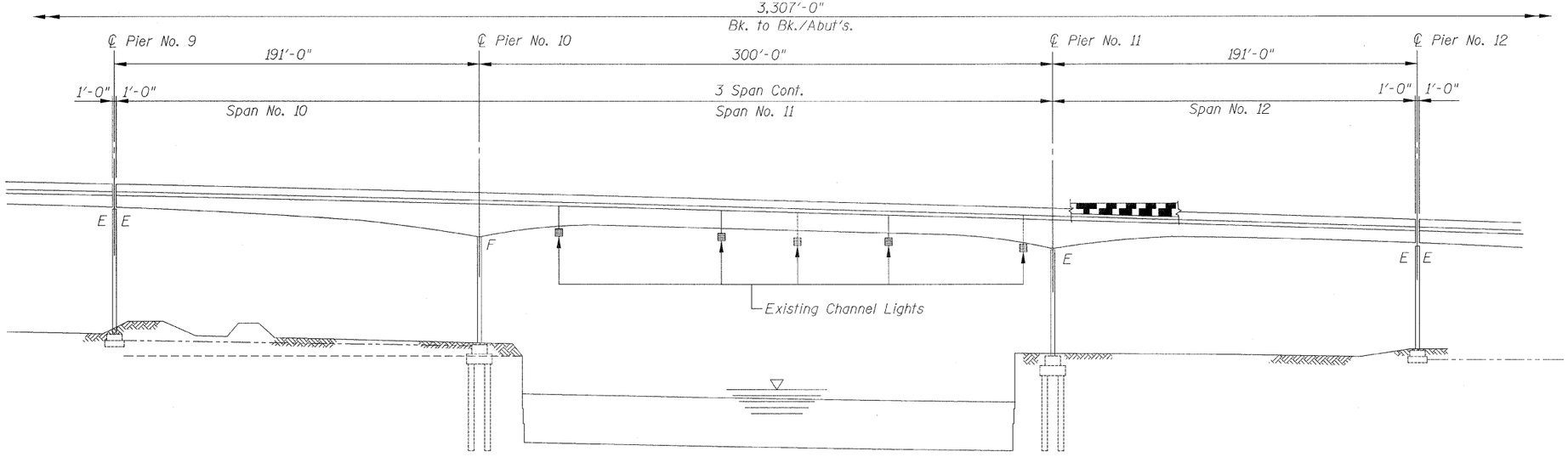
PLAN

LEGEND:

Deck Slab Repair (Full Depth, Type II)
(See Note "A")

NOTE "A"

For Median, Parapet & Deck Reconstruction Details for Deck Slab Repair (Full Depth, Type II), See Sht's. S9, S10 & S11.



ELEVATION

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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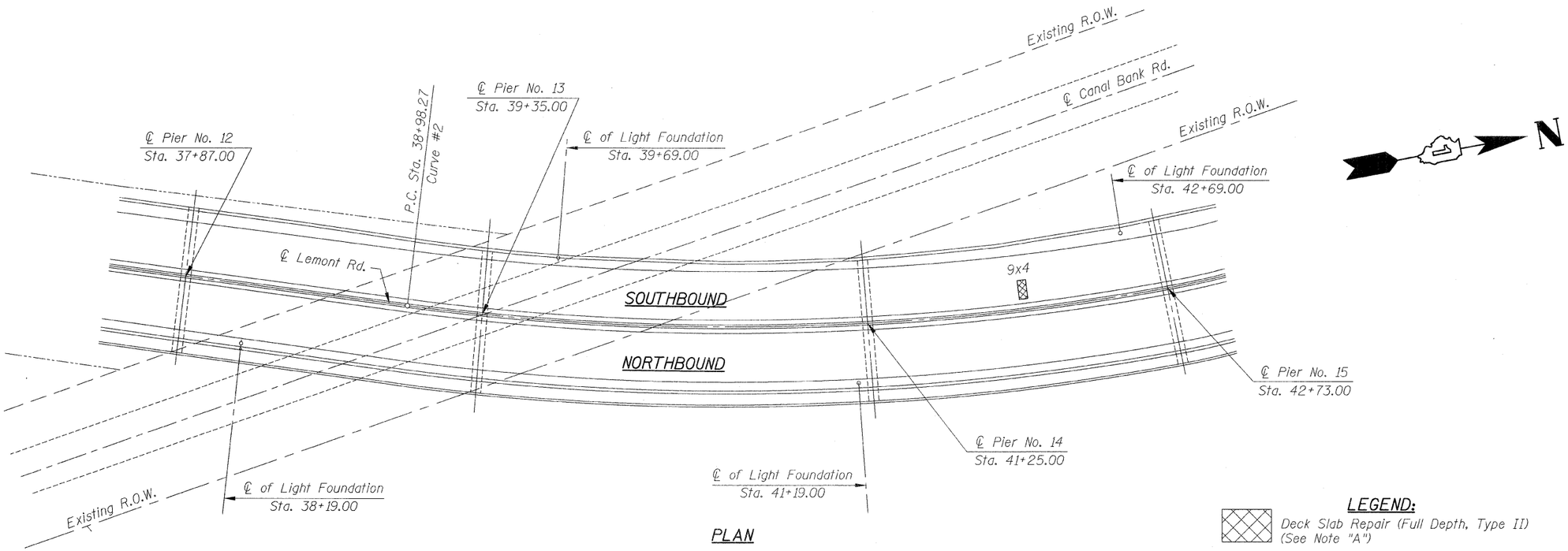
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION – III
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S4 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	40
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



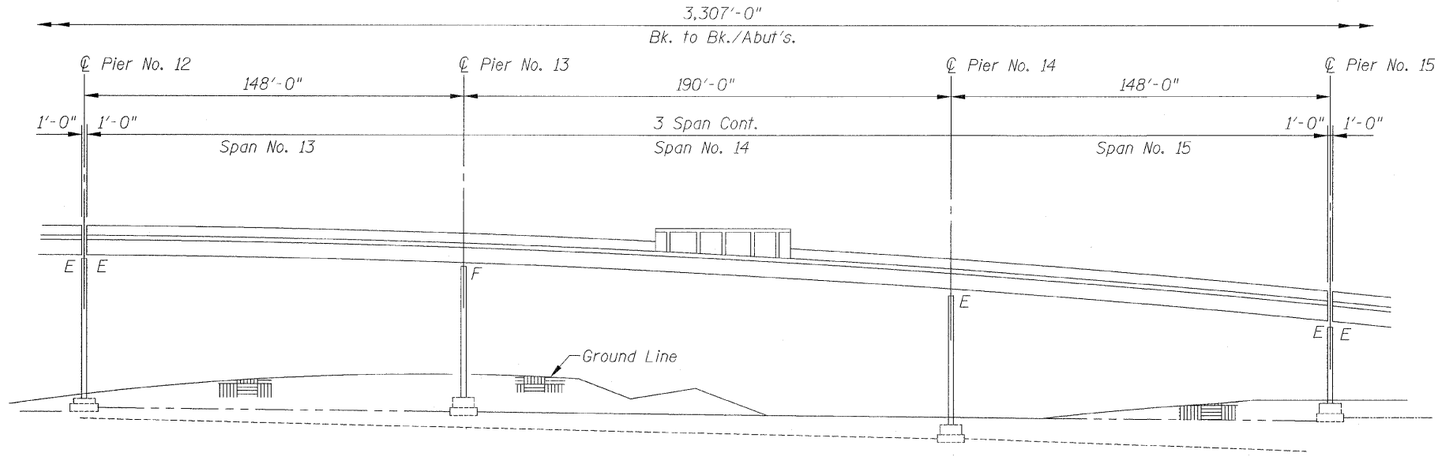
PLAN

LEGEND:

Deck Slab Repair (Full Depth, Type II) (See Note "A")

NOTE "A"

For Median, Parapet & Deck Reconstruction Details for Deck Slab Repair (Full Depth, Type II), See Sht's. S9, S10 & S11.



ELEVATION

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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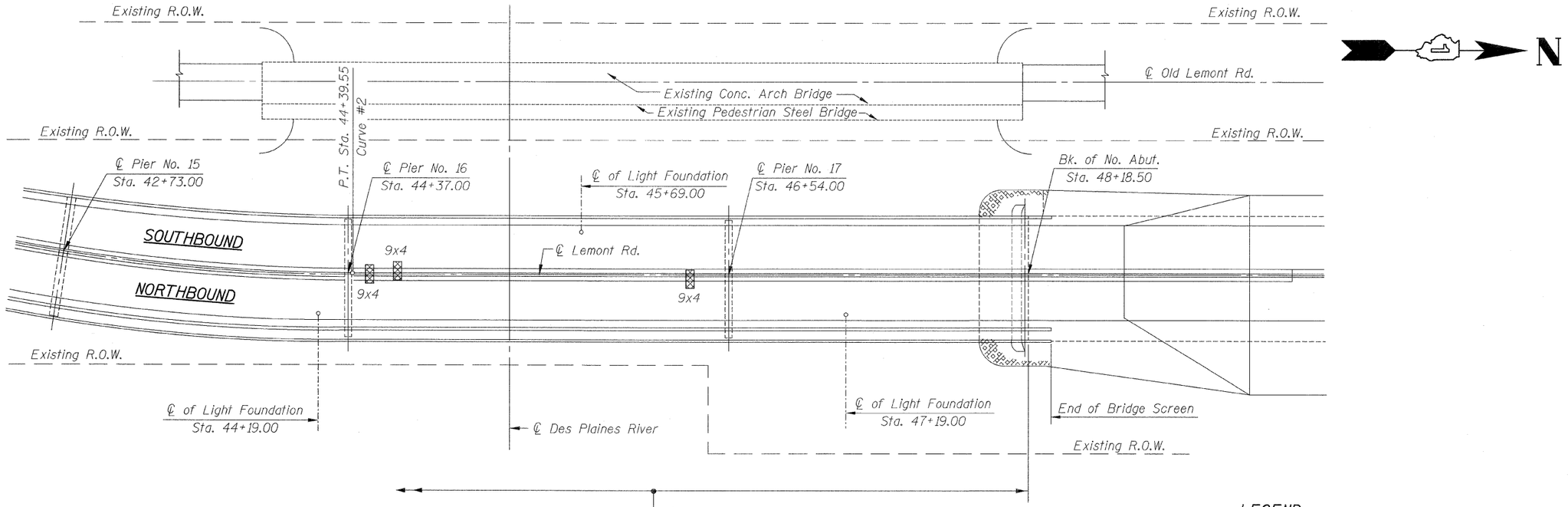
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION – IV
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S5 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	41
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

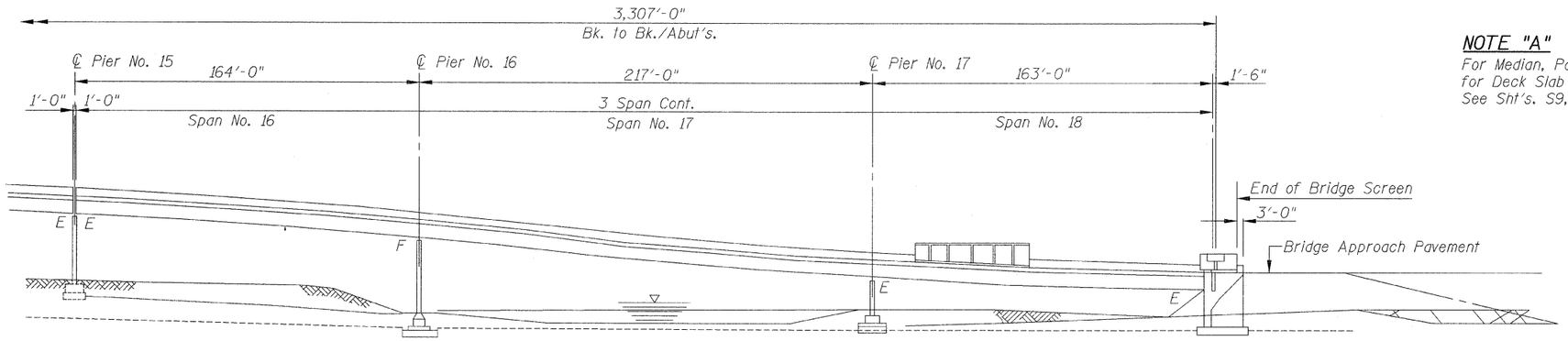


PLAN

Limits of Bridge Deck Hydro-Scarification $\frac{1}{2}$ Inch, Bridge Deck Latex Concrete Overlay, $2\frac{1}{4}$ Inch & Bridge Deck Grooving from Back of No. Abut. to End of So. Appr. Span

LEGEND:

Deck Slab Repair (Full Depth, Type II) (See Note "A")



ELEVATION

NOTE "A"

For Median, Parapet & Deck Reconstruction Details for Deck Slab Repair (Full Depth, Type II), See Sht's. S9, S10 & S11.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION – V
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 56 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	42
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BRIDGE PARTIAL DEPTH DECK PATCHING SUMMARY

NORTHBOUND

Distance from S. Abut. Along E. Bridge Parapet (Ft.)	Offset from E. Bridge Parapet (Ft.)	Size (LxW)	S.F.	S.Y.
696	7	3x3	9	1.00
873	17	3x3	9	1.00
892	18	3x6	18	2.00
900	16	3x3	9	1.00
1,361	7	3x3	9	1.00
1,520	26	3x3	9	1.00
1,524	27	2x5	10	1.11
1,530	26	3x3	9	1.00
1,855	15	3x3	9	1.00
1,872	15	3x3	9	1.00
1,881	16	3x3	9	1.00
1,884	4	2x12	24	2.67
1,916	15	3x3	9	1.00
1,931	15	3x2	6	0.67
2,286	15	3x3	9	1.00
2,310	15	3x3	9	1.00
2,320	28	3x3	9	1.00
2,423	10	2x4	8	0.89
3,101	16	6x3	18	2.00
3,186	15	3x3	9	1.00
3,209	15	3x3	9	1.00
3,230	4	2x12	24	2.67
3,246	4	2x12	24	2.67
		TOTAL =		29.68

SOUTHBOUND

Distance from N. Abut. Along W. Bridge Parapet (Ft.)	Offset from W. Bridge Parapet (Ft.)	Size (LxW)	S.F.	S.Y.
114	8	3x3	9	1.00
123	16	3x3	9	1.00
126	17	3x3	9	1.00
138	4	2x12	24	2.67
150	17	3x3	9	1.00
185	16	3x3	9	1.00
210	27	4x4	16	1.78
214	19	3x3	9	1.00
226	12	2x6	12	1.33
283	7	2x8	16	1.78
347	9	2x5	10	1.11
506	25	2x4	8	0.89
927	27	2x4	8	0.89
1,342	8	3x3	9	1.00
1,466	2	3x3	9	1.00
1,475	8	3x3	9	1.00
1,633	2	3x3	9	1.00
2,197	15	2x3	6	0.67
		TOTAL =		21.12

NOTE:
Total Partial Depth Concrete Deck Patching = 51 S.Y.

BRIDGE DECK PATCHING SUMMARY (FULL DEPTH)

Full Depth Patch locations based on spalled locations of Precast Prestressed Panels. Patching will require replacement of the entire 9'x4' panel

Distance from N. Abut. (Ft.)	Bay No. from West	Approx. Lane Location	Sq. Yd.	For Details See Sht.
204	4	NB 1	4	S9
365	4	NB 1	4	S9
340	4	NB 1	4	S9
611	3	SB 1	4	S11
1,325	7	NB RT. Shld.	4	S10
1,325	6	NB 2	4	S11
1,394	2	SB 1	4	S11
2,485	6	NB 2	4	S11
2,678	4	NB 1	4	S9
		TOTAL	36	

NOTE:
For Median, Parapet & Deck Reconstruction Details for Deck Slab Repair (Full Depth, Type II). See Sht's. S9, S10 & S11.

NOTES:
The Locations of Deck Slab Repairs as Shown in the Tables above are From the most Recent Survey that was Performed by I.D.O.T. Maintenance Engineers in September, 2007

Deck Slab Repairs (Partial Depth) as Shown in the Tables above are For Information Only.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

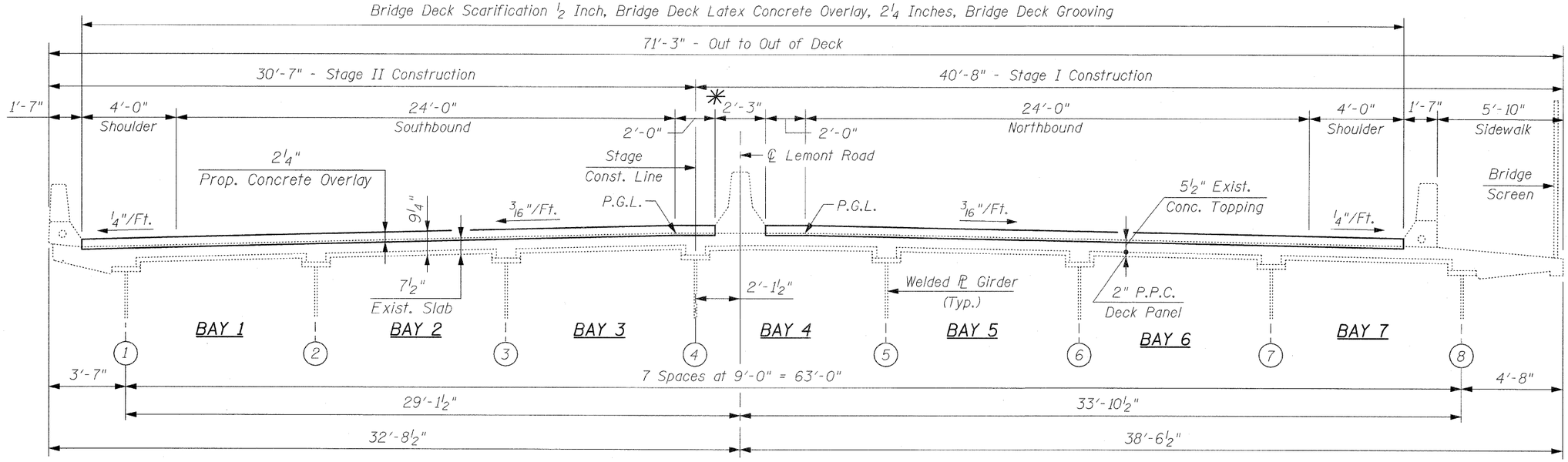
FILE NAME = deck_patching_summary.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARTIAL DEPTH DECK PATCHING SUMMARY
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 57 OF 541 SHEETS | STA. | TO STA.

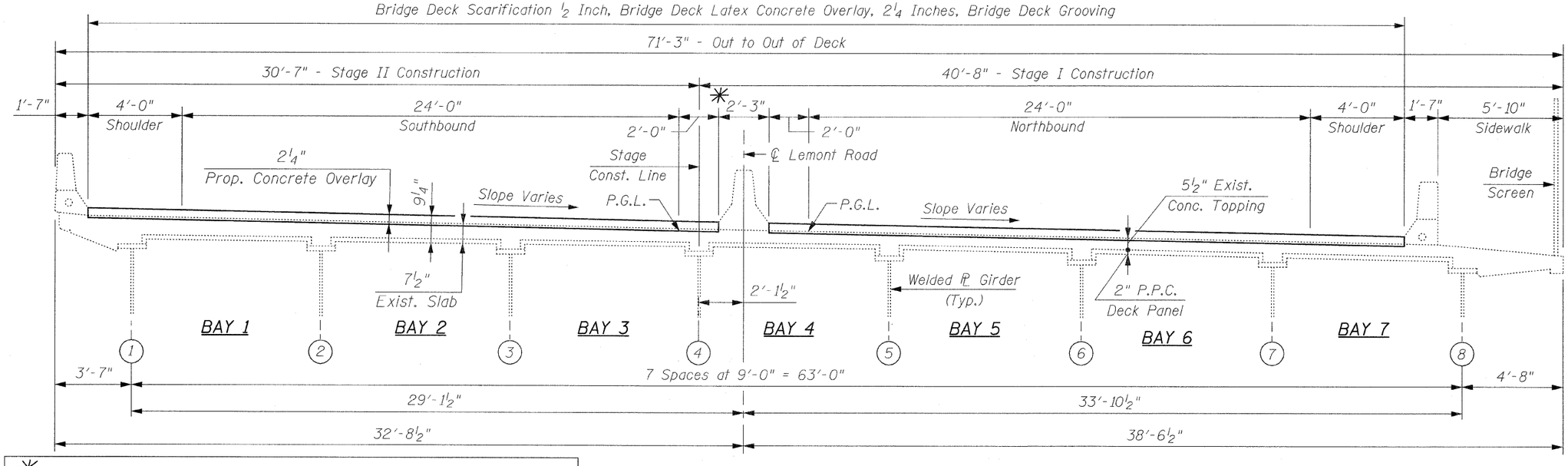
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	43
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING DECK CROSS SECTION

(Looking North)

(With Normal Crown)



EXISTING DECK CROSS SECTION

(Looking North)

(With Superelevation)

✳ Median Barrier ends in Span 4 with an Impact Attenuator continuing South. For portions of Spans 3 & 4 there is a C-4 raised Median. See Sht. 2 for location of Raised Median.

For the remainder in Spans 1, 2 and part of Span 3, there is only a painted Median.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

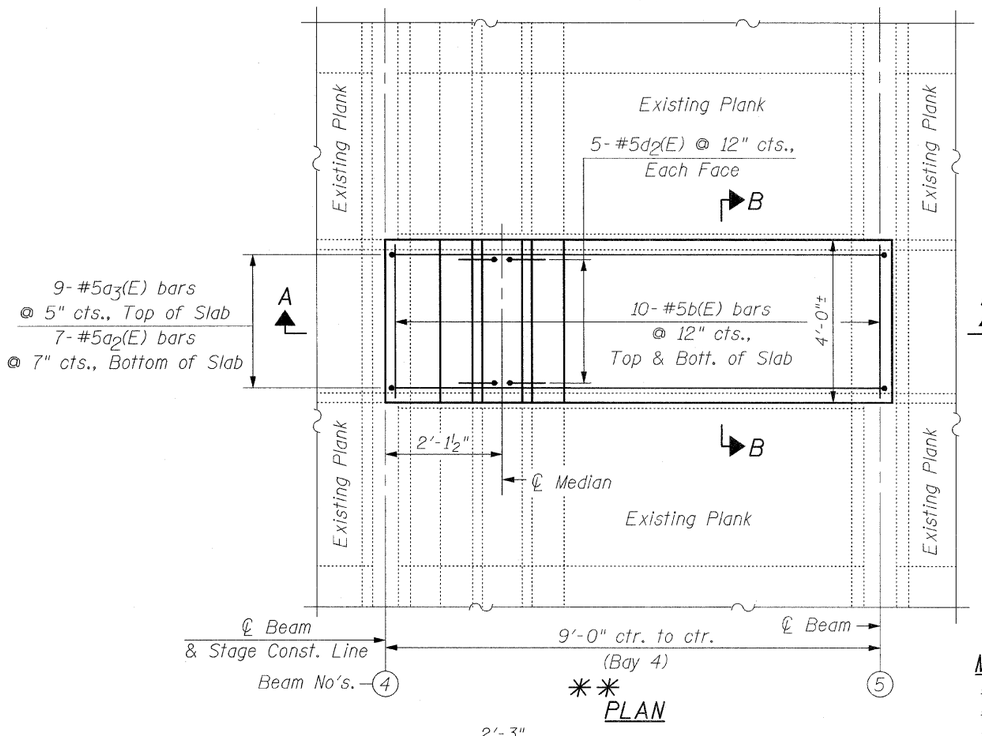
FILE NAME = deck_cross_section.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTION
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 58 OF 541 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	44
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

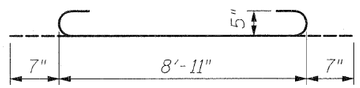


PLAN

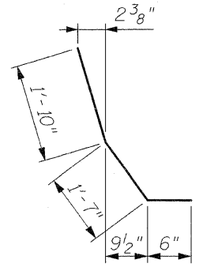
REINFORCEMENT SCHEDULE

(Per Plank)

Bar	No.	Size	Length	Shape
$a_2(E)$	7	#5	10'-1"	
$a_3(E)$	9	#5	8'-11"	
b(E)	20	#5	3'-8"	
$d_2(E)$	10	#5	3'-11"	



BAR $a_2(E)$



BAR $d_2(E)$

NOTES:

The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

Perimeters of Concrete Removal areas shall be saw cut ¾" prior to removal of the Concrete Wearing Surface and Deck Planks.

Existing Reinforcement Bars in the Deck extending into the Removal area shall be cut as required to provide minimum Bar Lap. If the length of removal, as measured parallel to the Centerline of Roadway, is less than the required Bar Lap, the existing Longitudinal Reinforcement Bars shall not be cut.

Existing Reinforcement Bars extending into the Removal area shall be cleaned, straightened and incorporated into the new Construction. Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Deck Slab Repair (Full Depth, Type II).

Top of patch to match top of Proposed Overlay.

MIN. BAR LAP:

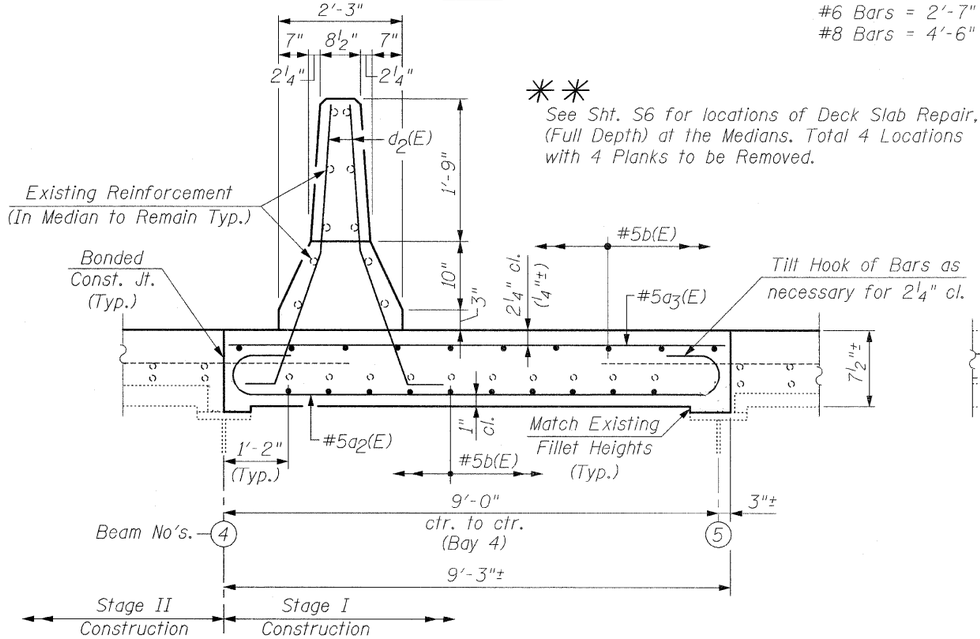
#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#8 Bars = 4'-6"

BILL OF MATERIAL

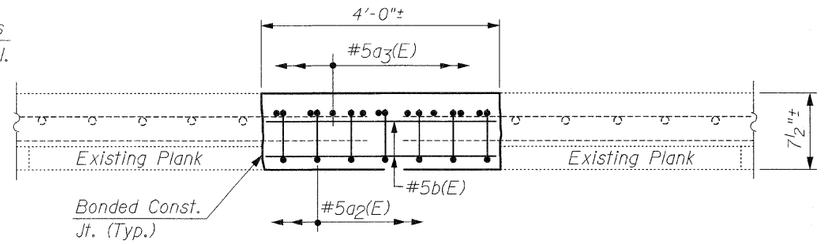
(Four Planks)

Item	Unit	Quantity
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	16
Reinforcement Bars, Epoxy Coated	Pound	1,080
Concrete Removal	Cu. Yd.	2.4
Concrete Superstructure	Cu. Yd.	2.4
Protective Coat	Sq. Yd.	12

✳✳ See Sht. S6 for locations of Deck Slab Repair, (Full Depth) at the Medians. Total 4 Locations with 4 Planks to be Removed.



SECTION A-A



SECTION B-B

DECK & MEDIAN RECONSTRUCTION DETAILS

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

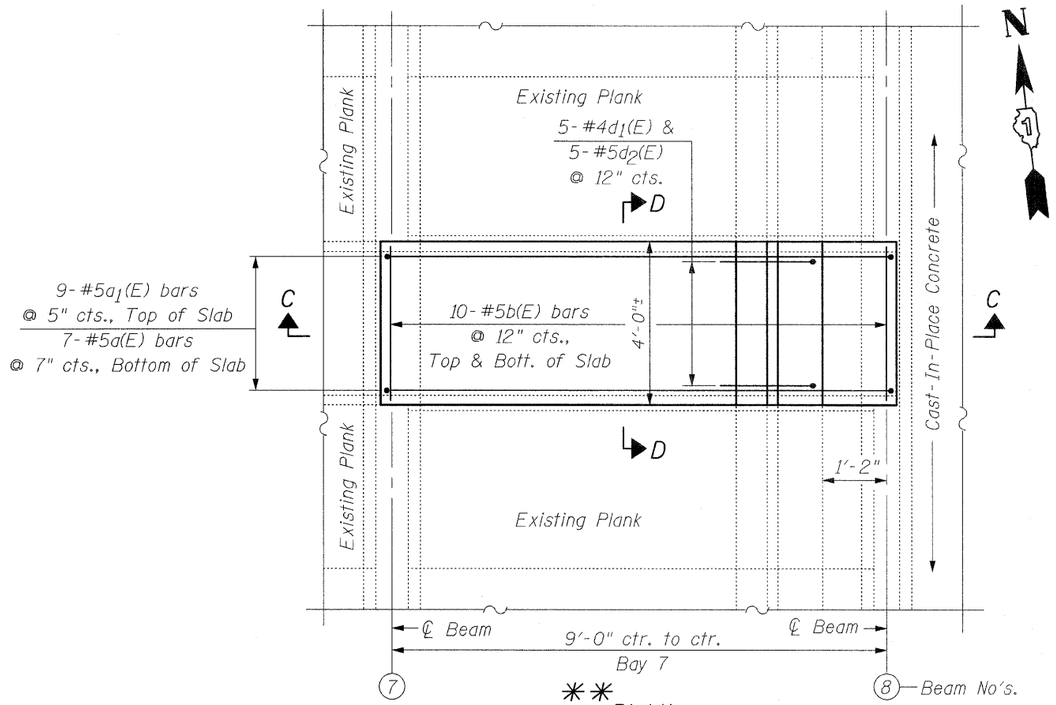
FILE NAME = deck_plank_removal-1.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLANK REMOVAL DETAILS - I
AT MEDIANS
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. 59 OF 541 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	45
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



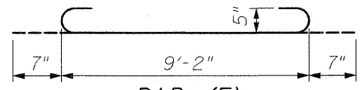
** PLAN

** See Sht. S6 for locations of Deck Slab Repair, (Full Depth) at the Parapets. Total 1 Location with 1 Plank to be Removed.

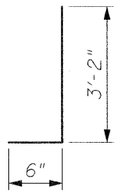
REINFORCEMENT SCHEDULE

(Per Plank)

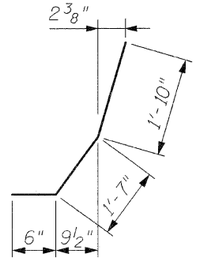
Bar	No.	Size	Length	Shape
a(E)	7	#5	10'-4"	
a_1(E)	9	#5	9'-2"	
b(E)	20	#5	3'-8"	
d_1(E)	5	#4	3'-8"	
d_2(E)	5	#5	3'-11"	



BAR a(E)



BAR d_1(E)



BAR d_2(E)

MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#8 Bars = 4'-6"

BILL OF MATERIAL

Item	Unit	Quantity
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	4
Reinforcement Bars, Epoxy Coated	Pound	270
Concrete Removal	Cu. Yd.	0.5
Concrete Superstructure	Cu. Yd.	0.5
Protective Coat	Sq. Yd.	3

NOTES:

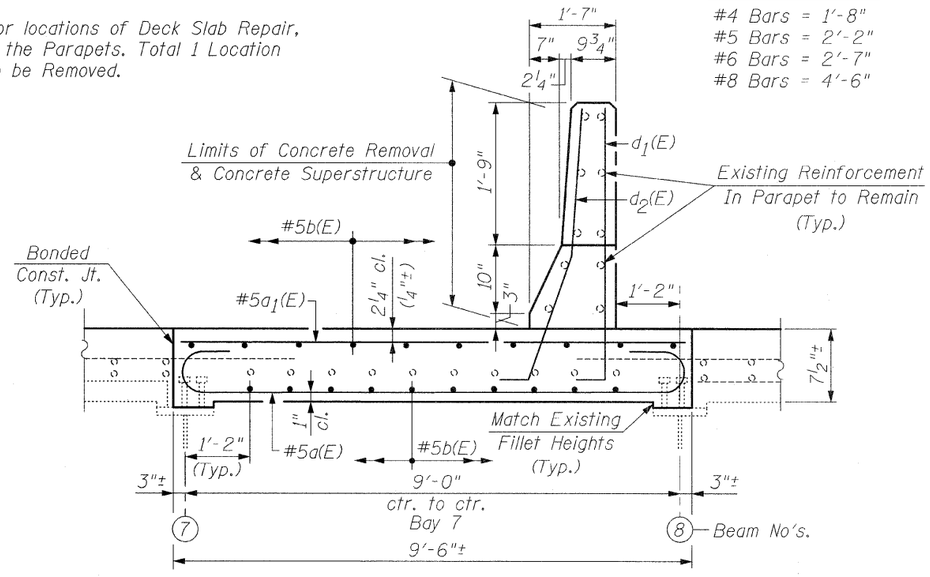
The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

Perimeters of Concrete Removal areas shall be saw cut $\frac{3}{4}$" prior to removal of the Concrete Wearing Surface and Deck Planks.

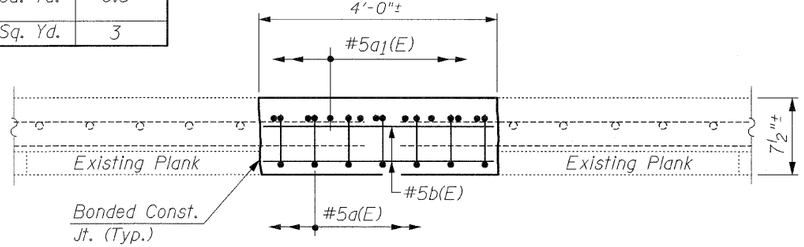
Existing Reinforcement Bars in the Deck extending into the Removal area shall be cut as required to provide minimum Bar Lap. If the length of removal, as measured parallel to the Centerline of Roadway, is less than the required Bar Lap, the existing Longitudinal Reinforcement Bars shall not be cut.

Existing Reinforcement Bars extending into the Removal area shall be cleaned, straightened and incorporated into the new Construction. Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Deck Slab Repair (Full Depth, Type II).

Top of patch to match top of Proposed Overlay.



SECTION C-C



SECTION D-D

DECK & PARAPET RECONSTRUCTION DETAILS

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

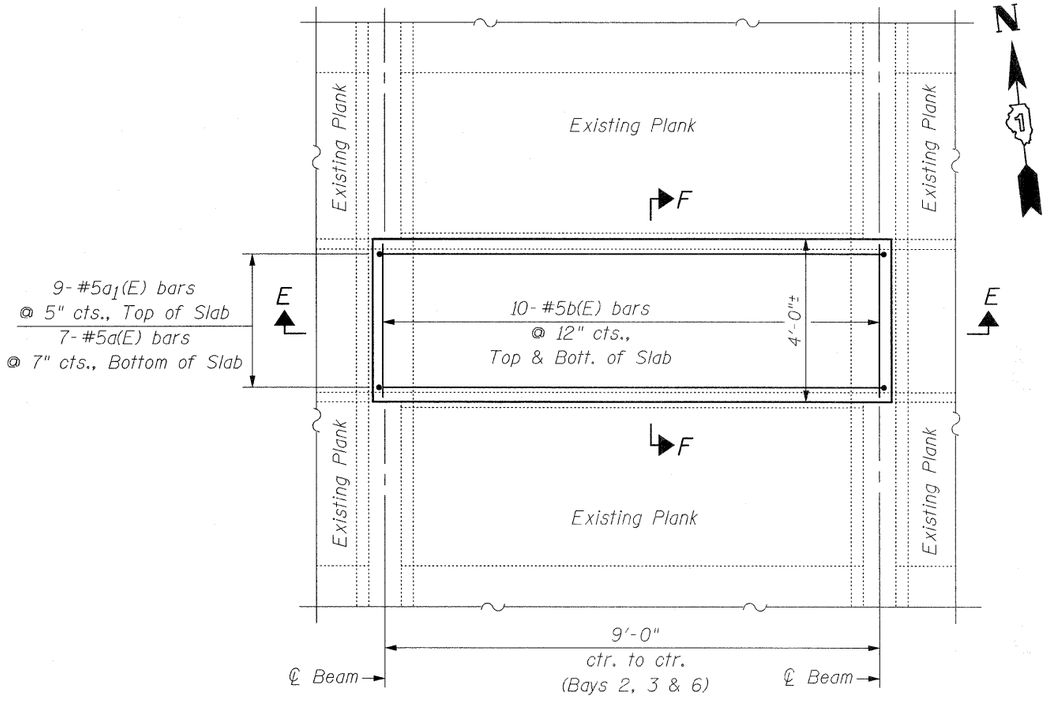
FILE NAME = deck_plank_removal-II.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLANK REMOVAL DETAILS – II
AT PARAPETS
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S10 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	46
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



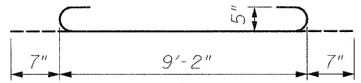
✳✳ PLAN

✳✳ See Sht. S6 for locations of Deck Slab Repair, (Full Depth). Total 4 Locations with 4 Planks to be Removed.

REINFORCEMENT SCHEDULE

(Per Plank)

Bar	No.	Size	Length	Shape
a(E)	7	#5	10'-4"	
a_1(E)	9	#5	9'-2"	
b(E)	20	#5	3'-8"	



BAR a(E)

BILL OF MATERIAL

(Four Planks)

Item	Unit	Quantity
Deck Slab Repair, (Full Depth, Type II)	Sq. Yd.	16
Reinforcement Bars, Epoxy Coated	Pound	960

MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#8 Bars = 4'-6"

NOTES:

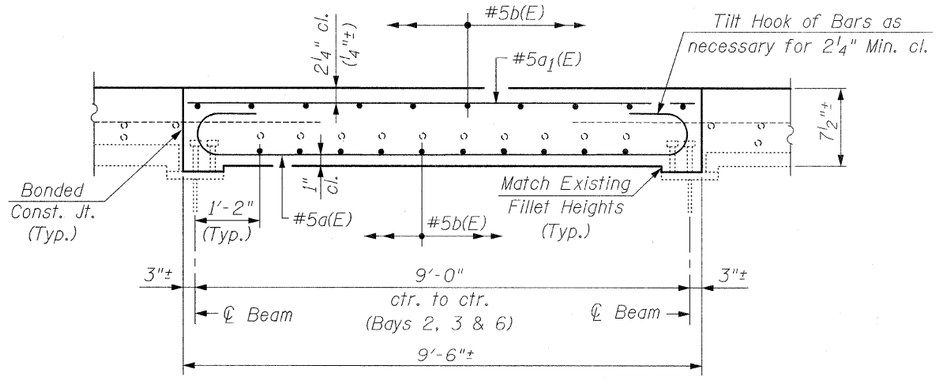
The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

Perimeters of Concrete Removal areas shall be saw cut $\frac{3}{4}$" prior to removal of the Concrete Wearing Surface and Deck Planks.

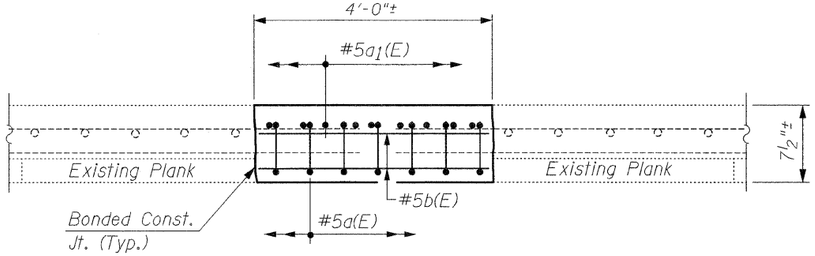
Existing Reinforcement Bars in the Deck extending into the Removal area shall be cut as required to provide minimum Bar Lap. If the length of removal, as measured parallel to the Centerline of Roadway, is less than the required Bar Lap, the existing Longitudinal Reinforcement Bars shall not be cut.

Existing Reinforcement Bars extending into the Removal area shall be cleaned, straightened and incorporated into the new Construction. Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Deck Slab Repair (Full Depth, Type II).

Top of patch to match top of Proposed Overlay.



SECTION E-E



SECTION F-F

DECK RECONSTRUCTION DETAILS

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = deck_plank_removal-III.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
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	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLANK REMOVAL DETAILS – III
NO MEDIAN AND NO PARAPET
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S11 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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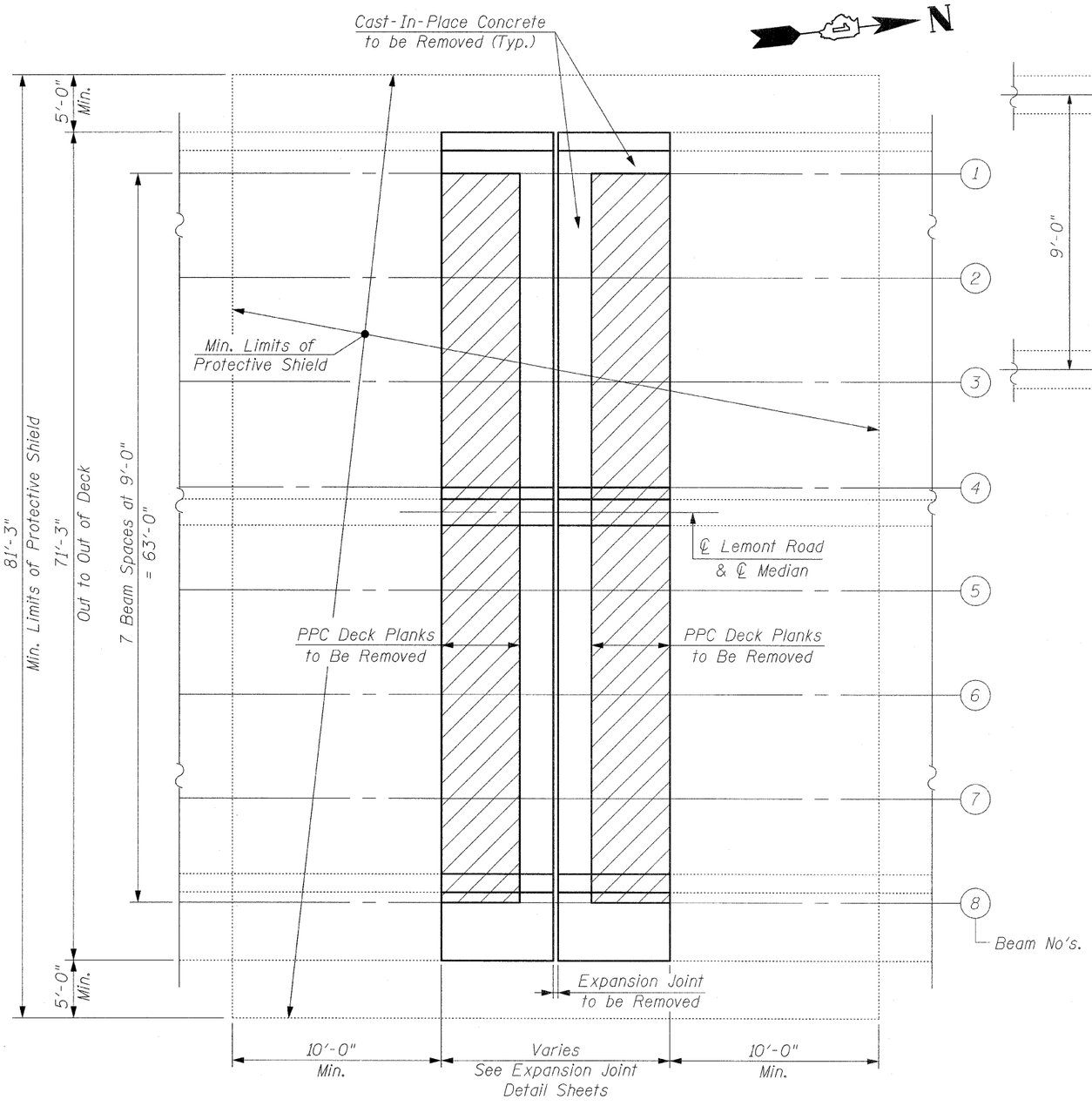
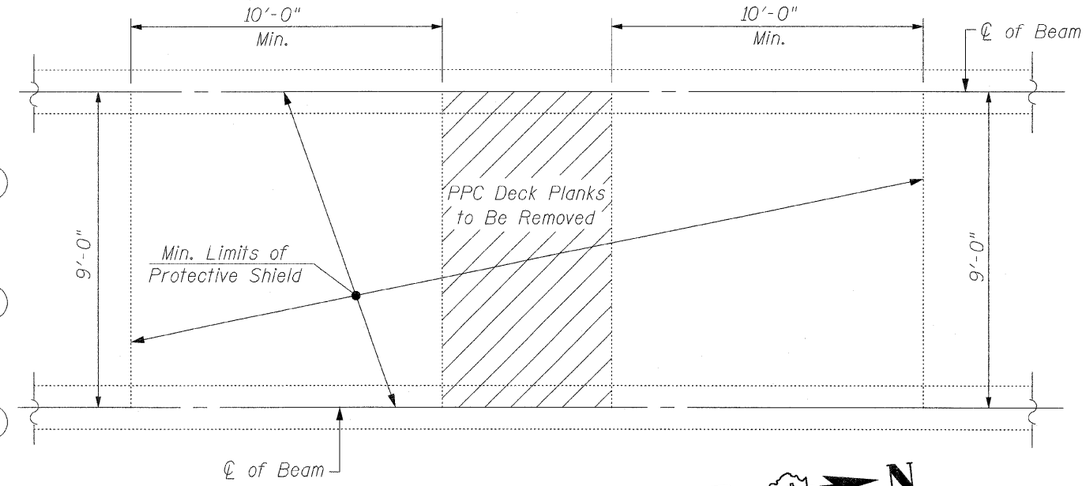
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROTECTIVE SHIELD AT EXPANSION JOINT RECONSTRUCTION LOCATIONS

See Sht's. S14 Thru S26 for Locations of Expansion Joint Reconstruction and See Sht. S19 for Protective Shield Limits of Skewed Joint at Pier No. 5) (7 Locations)



INTERIOR BAYS

PROTECTIVE SHIELD AT FULL DEPTH PATCH LOCATIONS

See Sht's. S9 Thru S11 for Locations of Deck Slab Repair (Full Depth, Type II) (9 Locations)

NOTES:

The Contractor shall submit detailed Shop Drawings to the Engineer for approval prior to constructing the Protective Shield.

For multiple Plank removal, the Protective Shield shall be adjusted length wise (as measured parallel to Centerline of the Roadway) to maintain a minimum distance of 10'-0" from the outer most edge of the removal area.

The Existing Deck consists of either 2½" or 3" PPC Panels with 4½" or 5" Reinforced Concrete Overlay.

The last 42'-0"± of the Deck at the North End of the Structure is Reinforced Concrete Full Depth.

There are no "As-Built" Plans for the Existing Deck.

BILL OF MATERIAL

Item	Unit	Quantity
Protective Shield	Sq. Yd.	1,830

LEGEND:

Precast Prestressed Concrete Deck Planks to Be Removed

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

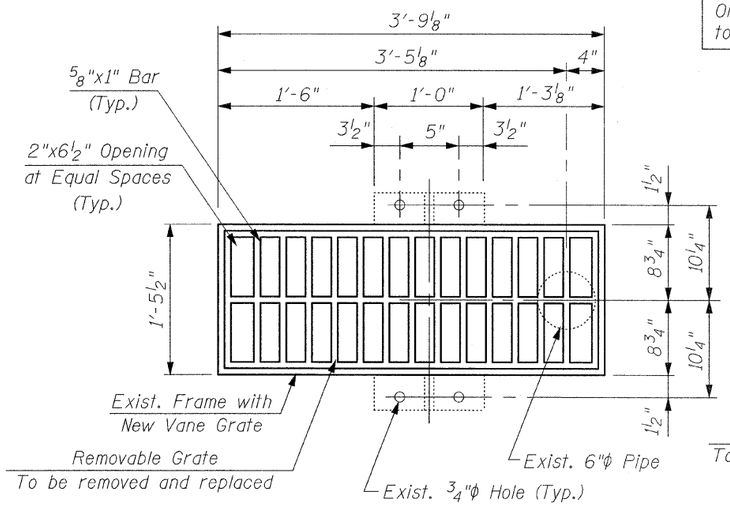
FILE NAME = protect_shield.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROTECTIVE SHIELD DETAIL
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

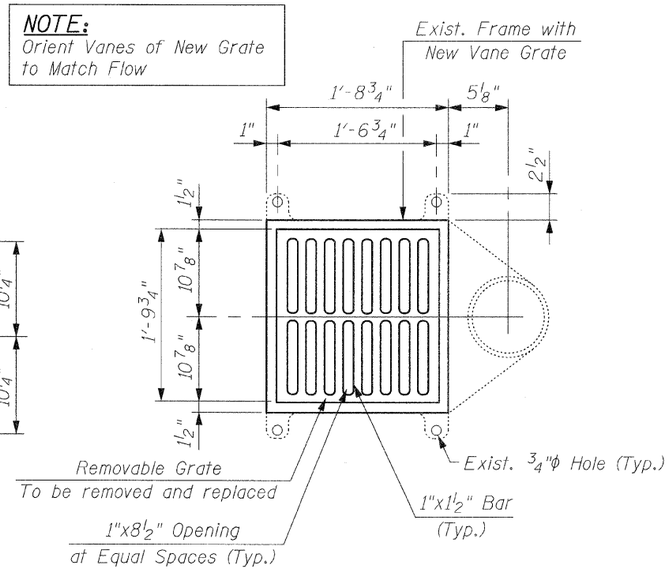
SCALE: | SHEET NO. S12 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	48
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL PLAN AT SIDE CURBS
(44 Locations)

NOTE:
Orient Vanes of New Grate to Match Flow



TYPICAL PLAN AT MEDIAN
(9 Locations)

NOTES:

All Cast Iron parts shall be Gray Iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, Anchor Studs, Washers and Nuts shall conform to the requirements of ASTM A 307 and shall be Galvanized according to AASHTO M 232.

Cast Iron parts shall be unfinished.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the Scuppers.

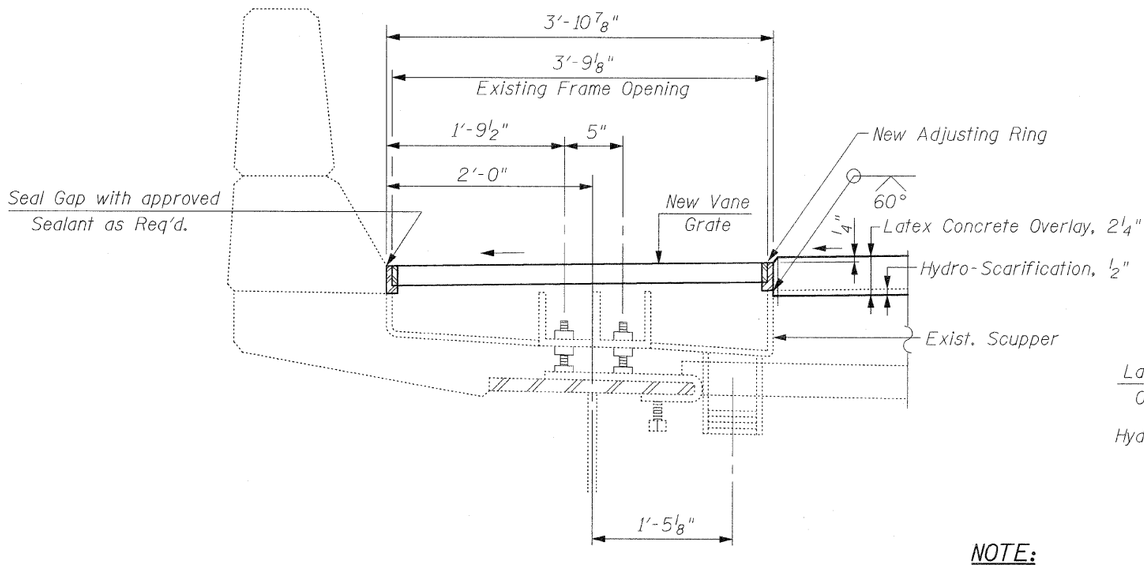
Adjusting Ring and Grates shall be from Neenah or approved equal. Structural Steel weldments or equal sections and of the same configuration may be substituted for Cast Iron. Fillet or full Penetration Welds may be used for weldments. Details shall be submitted to the Engineer for approval.

Provide a 1/8" Fillet Weld around perimeter of new Adjusting Ring to secure to existing Scupper. Electrode shall be compatable with cast Iron.

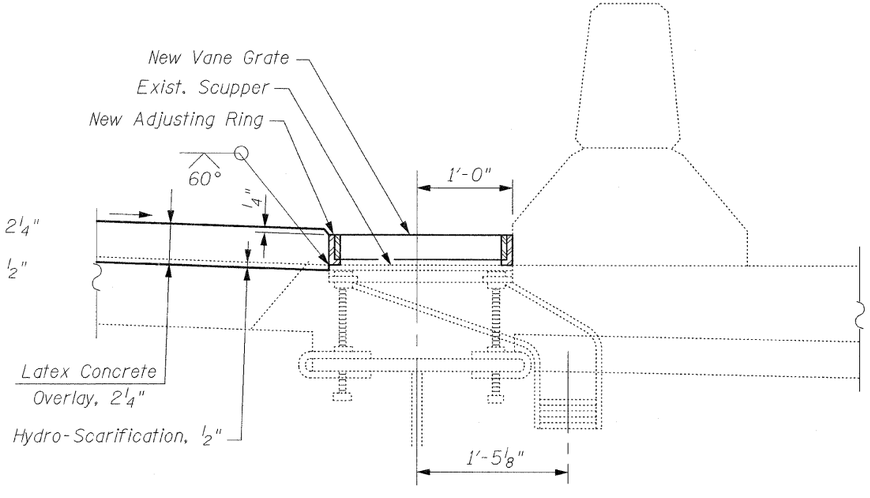
Cost of all labor and materials necessary to remove and dispose of existing grates, clean existing scuppers, install adjusting scupper rings, fabricate and install new grates is included in the cost per unit each for Drainage Structures to be Adjusted.

BILL OF MATERIAL

Item	Unit	Quantity
Drainage Structures To Be Adjusted	Each	53



TYPICAL SCUPPER DETAIL AT WEST CURB (SHOWN)
TYPICAL SCUPPER DETAIL AT EAST CURB (OPP. HAND)



TYPICAL SCUPPER DETAIL AT MEDIAN

NOTE:
The Contractor shall field verify Existing Dimensions and Details of the Existing Scuppers and make necessary adjustments prior to construction of New Adjusting Ring or ordering of material for Adjusting Drainage Scuppers

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = scupper_details.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ADJUSTING DRAINAGE SCUPPER DETAILS LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504
		DRAWN - R.E.S./D.L./F.M.	REVISED -		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -		
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -		SCALE: SHEET NO. S13 OF S41 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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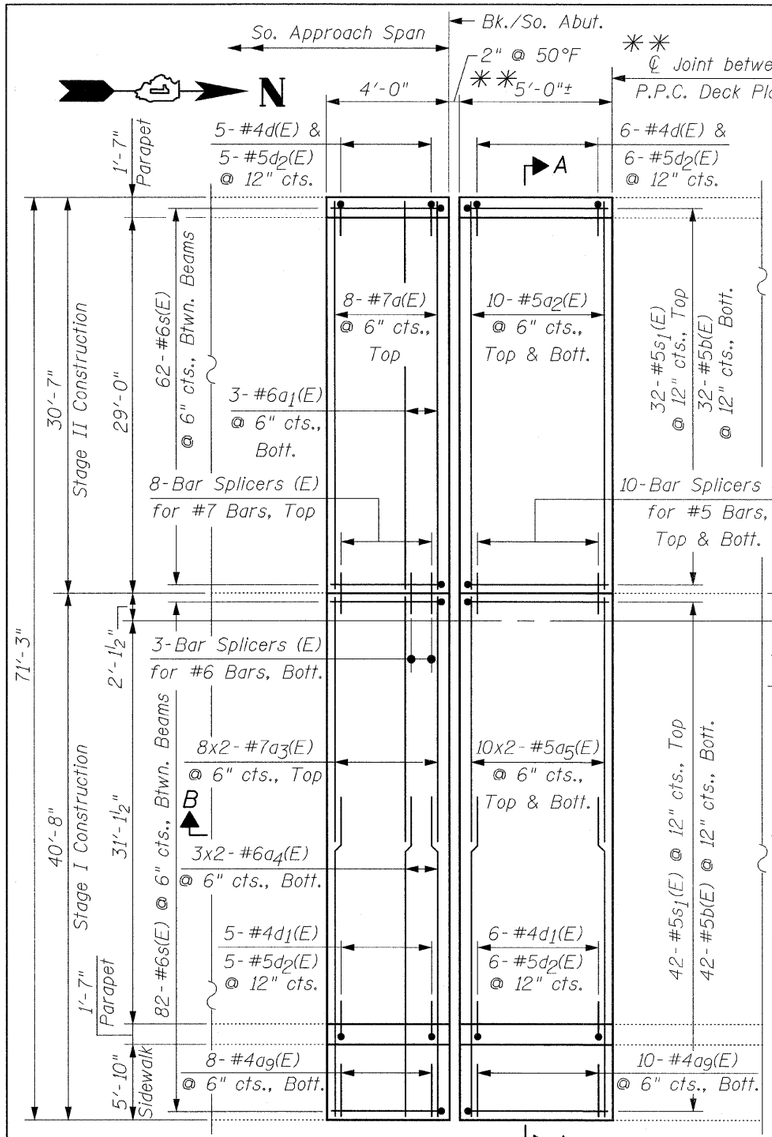
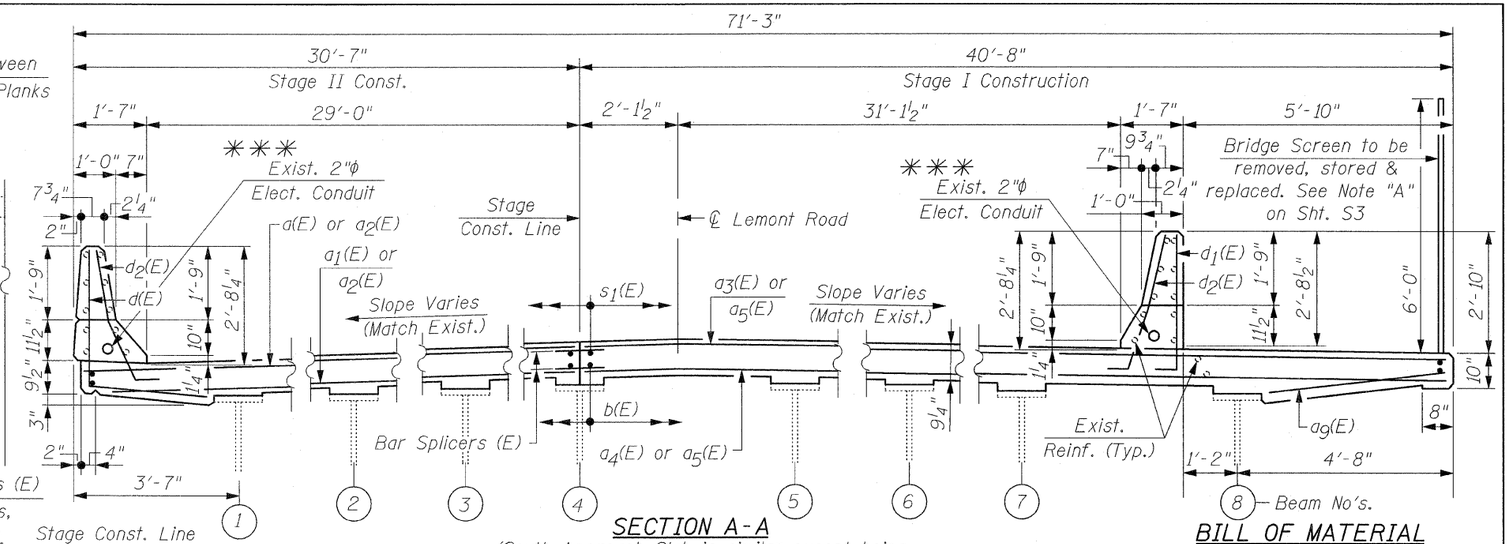
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

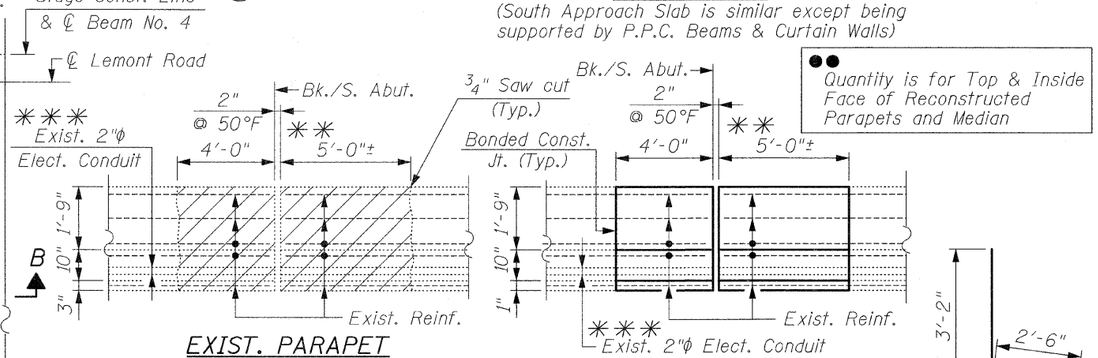


PLAN AT SOUTH ABUTMENT



SECTION A-A

(South Approach Slab is similar except being supported by P.P.C. Beams & Curtain Walls)



EXIST. PARAPET CONCRETE REMOVAL

PROPOSED PARAPET CONCRETE REPLACEMENT

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	8	#7	30'-1"	——
a1(E)	3	#6	29'-5"	——
a2(E)	20	#5	30'-1"	——
a3(E)	16	#7	21'-11"	——
a4(E)	6	#6	21'-6"	——
a5(E)	40	#5	21'-3"	——
a9(E)	18	#4	3'-10"	——
b(E)	74	#5	4'-8"	——
d(E)	11	#4	5'-8"	L
d1(E)	11	#4	3'-8"	⌋
d2(E)	22	#5	3'-11"	L
s(E)	144	#6	5'-4"	⌐
s1(E)	74	#5	5'-3"	⌐
Reinforcement Bars, Epoxy Coated			Pound	5,170
Protective Coat			Sq. Yd.	8
Concrete Removal			Cu. Yd.	21
Concrete Superstructure			Cu. Yd.	25
Bar Splicers			Each	31
Preformed Joint Strip Seal			Foot	72

Bars indicated thus 8x2-#7 etc., indicates 8 Lines of Bars with 2 Lengths per Line

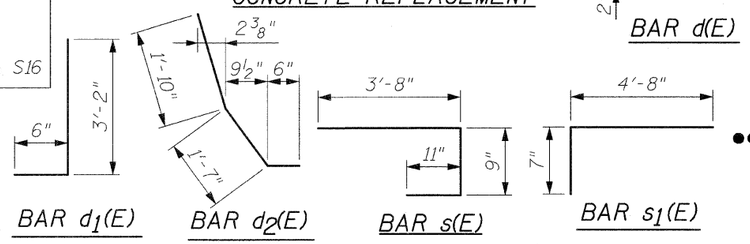
NOTES:

See Sht. S15 for Section B-B

Work This Sheet With Sht's. S15 & S16

MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"



BAR d1(E) BAR d2(E) BAR s(E) BAR s1(E) BAR d(E)

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳ The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduit in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

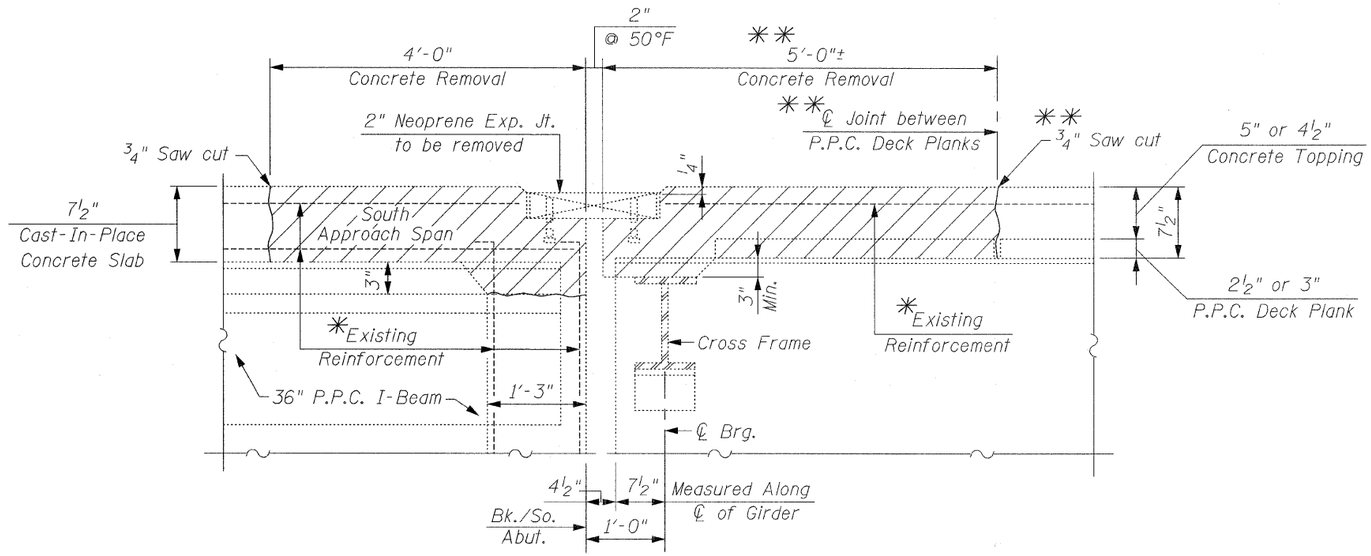
FILE NAME = exp_Jt-So_Abut_I.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT SOUTH ABUTMENT - I
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S14 OF S41 SHEETS | STA. | TO STA.

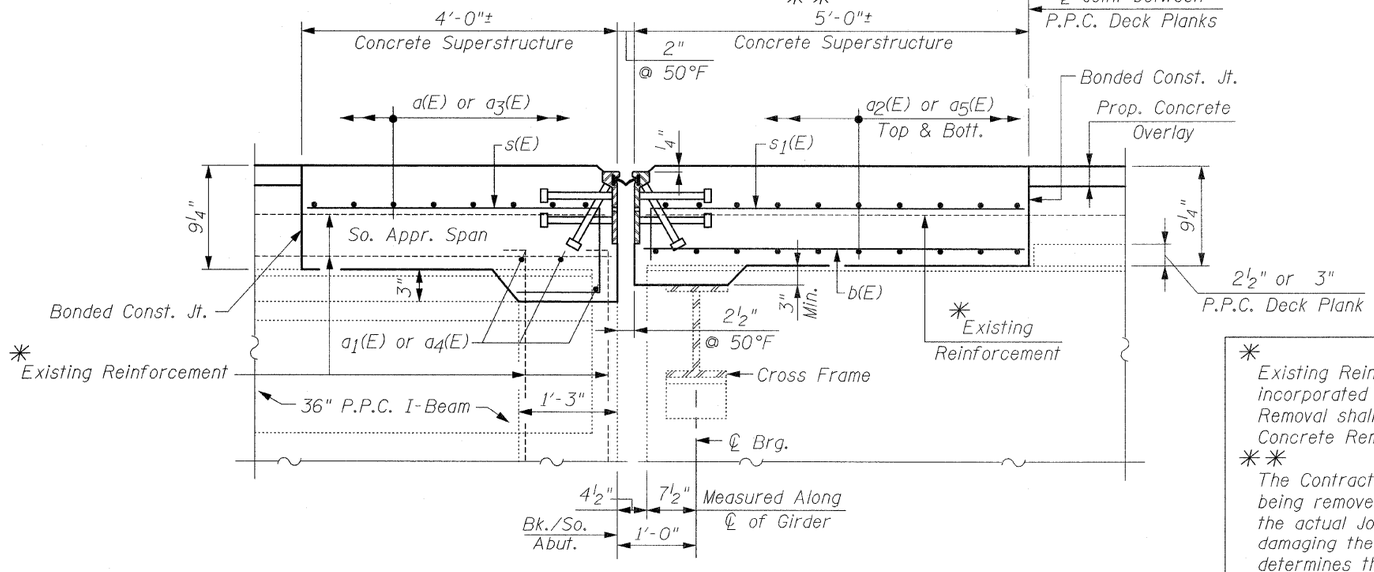
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	50
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SECTION B-B

EXPANSION JOINT AT SOUTH ABUT.

EXISTING



SECTION B-B

EXPANSION JOINT AT SOUTH ABUT.

PROPOSED

NOTE:
Work This Sheet With Sht's. S14 & S16

NOTE:
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sht. S16.

* Existing Reinforcement Bars extending into the removal area shall be cleaned, straightened and incorporated into the new Construction. Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

** The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removed. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operation, the damaged Planks shall be repaired or replaced at the Contractor's expense.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

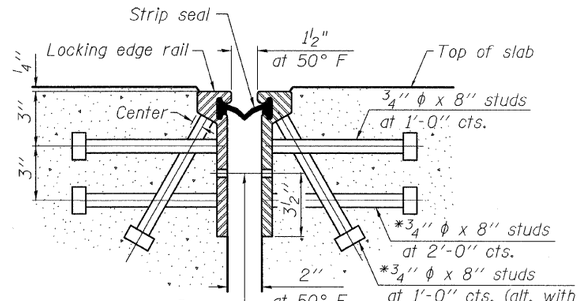
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT SOUTH ABUTMENT – II
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

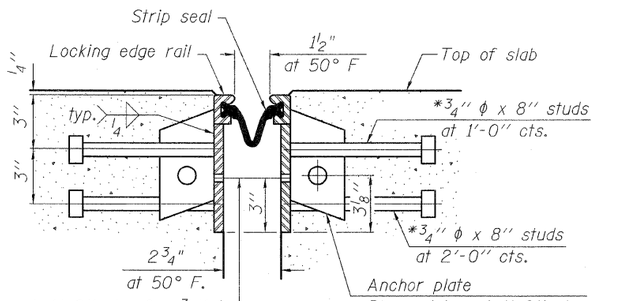
SCALE: | SHEET NO. S15 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	51
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



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



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

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

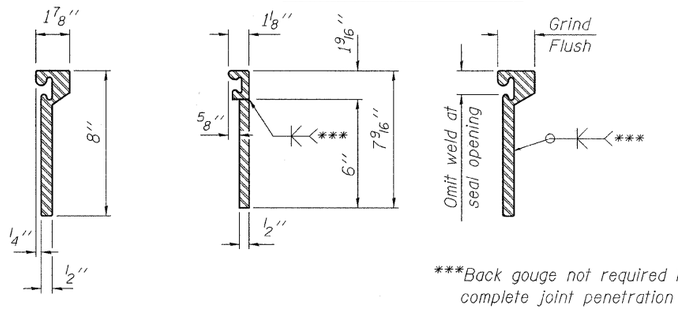
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed.

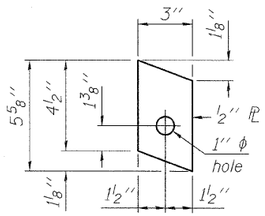
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

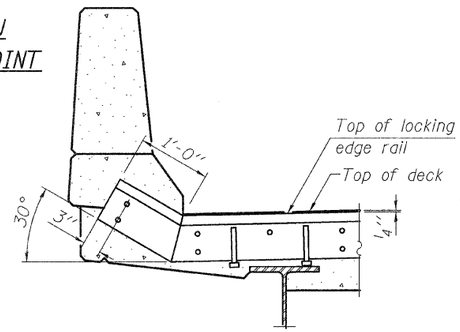
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

SECTION THRU ROLLED RAIL JOINT

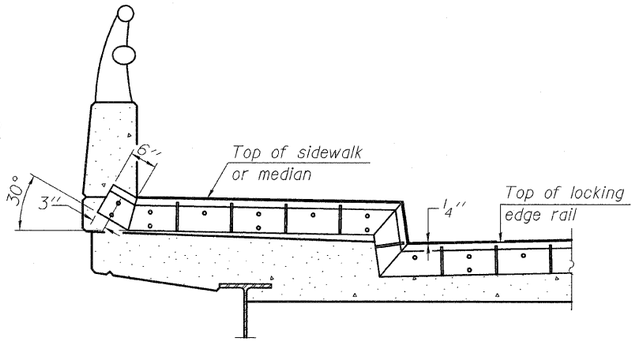


SECTION THRU WELDED RAIL JOINT





AT PARAPET



AT SIDEWALK OR MEDIAN

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

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

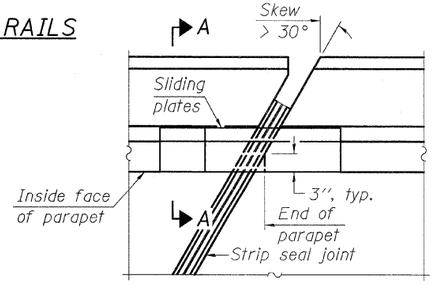
ANCHOR ℄ (for welded rail)

ROLLED (EXTRUDED) RAIL WELDED RAIL

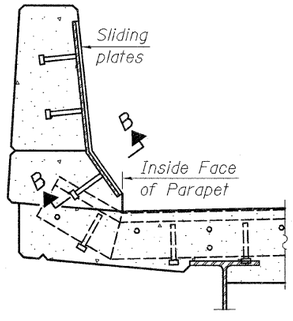
LOCKING EDGE RAIL SPLICE

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

LOCKING EDGE RAILS



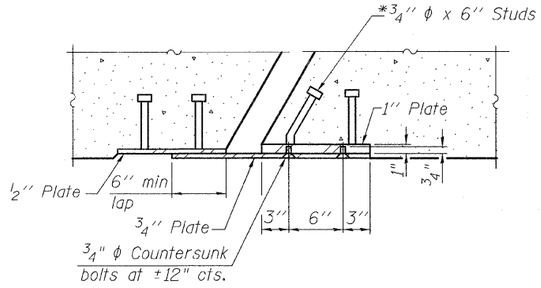
PLAN



SECTION A-A

POINT BLOCK DETAILS (for skews > 30°)

TYPICAL END TREATMENTS



SECTION B-B

PREFORMED JOINT STRIP SEAL AT SOUTH ABUTMENT

NOTE:
Work This Sheet With Sht's. S14 & S15

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EJ-SSJ 9-3-07

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	PLOT SCALE = 50.0000 '/ IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT SOUTH ABUTMENT – III
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S16 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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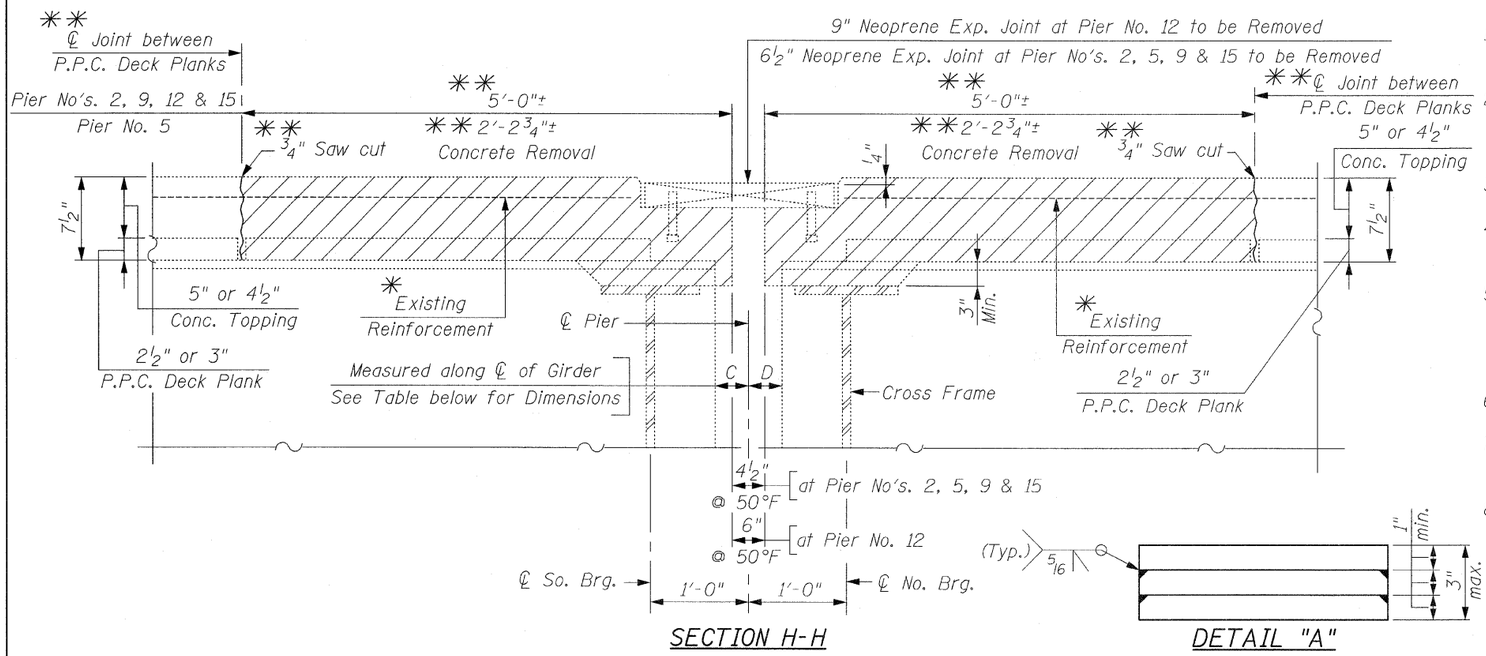
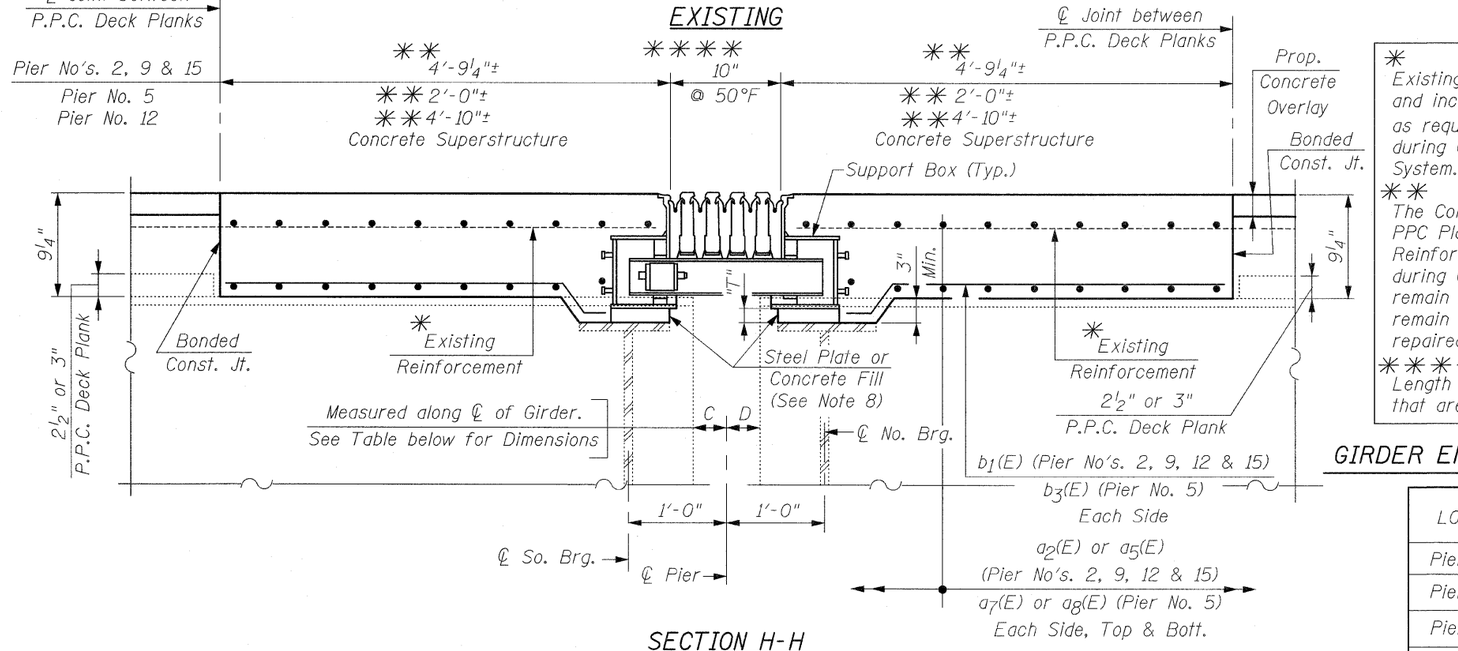
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SECTION H-H

TYPICAL FOR ALL EXPANSION JOINTS AT PIERS

EXISTING



SECTION H-H

TYPICAL FOR ALL EXPANSION JOINTS AT PIERS

PROPOSED

MODULAR EXPANSION JOINT NOTES:

1. Modular Expansion Joint shall be designed according to the latest ASTM Specifications for HS20 Loading with 30% impact and for minimum movement of 3"± (Total of 6"). See Special Provision for Modular Expansion Joint.
2. Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer. Support Brackets may be added as required by Modular Expansion Joint fabricator. Cost included with Modular Expansion Joint.
3. Joint shall be fabricated to conform to the existing Cross Slopes. Match existing conditions.
4. Cost of all hardware and installation of Steel Bearing Shim Plates and additional reinforcement required to anchor the Joint to the Slab shall be included with Modular Expansion Joint.
5. The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except no top coat required in non-exposed areas. The color of the acrylic finish coat shall be Gray, Munsell No. 5B 7/1. See Special Provision for Cleaning and Painting New Metal Structures.
6. Modular Expansion Joints Shall be Assembled in Their Final Relative Positions With the Ends in Place for Shop Inspection and Acceptance.
7. Support Box Shall be Rigidly Attached to Diaphragms and Beams by Adjustable Brackets, Stools or Shims. Support Box Spacing Shall be Designed by the Joint Manufacturer.
8. If distance "T" from bottom of Support Box to top of diaphragm is 3" or less, use steel plates. If distance "T" is more than 3", extend $b_1(E)$ or $b_3(E)$ bars and fill with concrete. If steel plates are used, the minimum plate size shall be 1" except for the fractional portion of the dimension. For example: If distance "T" is $2\frac{3}{4}$", only the $\frac{3}{4}$" portion of the thickness can use plates that fall below the 1" minimum. See Detail "A" for Stacked Plate Steel Extension. Cost included with Modular Expansion Joint, 6".

DETAIL "A"

✳ Existing Reinforcement Bars extending into removal area shall be cleaned, straightened and incorporated into the new Construction. Cut or bend the Existing Reinforcement Bars as required to miss Support Boxes by $1\frac{1}{2}$". Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer.

GIRDER END DISTANCES FROM ℄ OF PIER

LOCATION	DIMENSIONS	
	C	D
Pier No. 2	$4\frac{1}{2}$"	3"
Pier No. 5	$3\frac{13}{16}$"	$2\frac{9}{16}$"
Pier No. 9	3"	6"
Pier No. 12	6"	6"
Pier No. 15	3"	$4\frac{1}{4}$"

NOTE: Work This Sheet With Sht's. S18 thru S24

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ENGINEERS – PLANNERS – SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
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	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
AT PIER NO'S. 2, 5, 9, 12 & 15
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S17 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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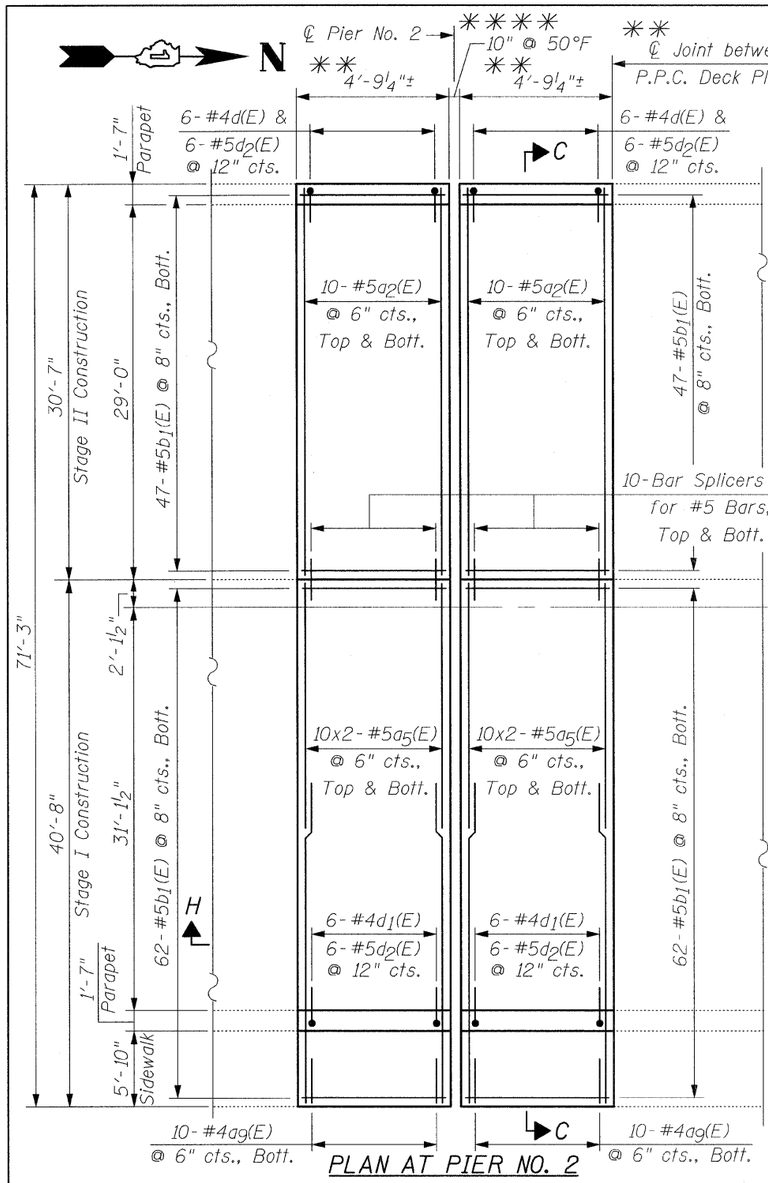
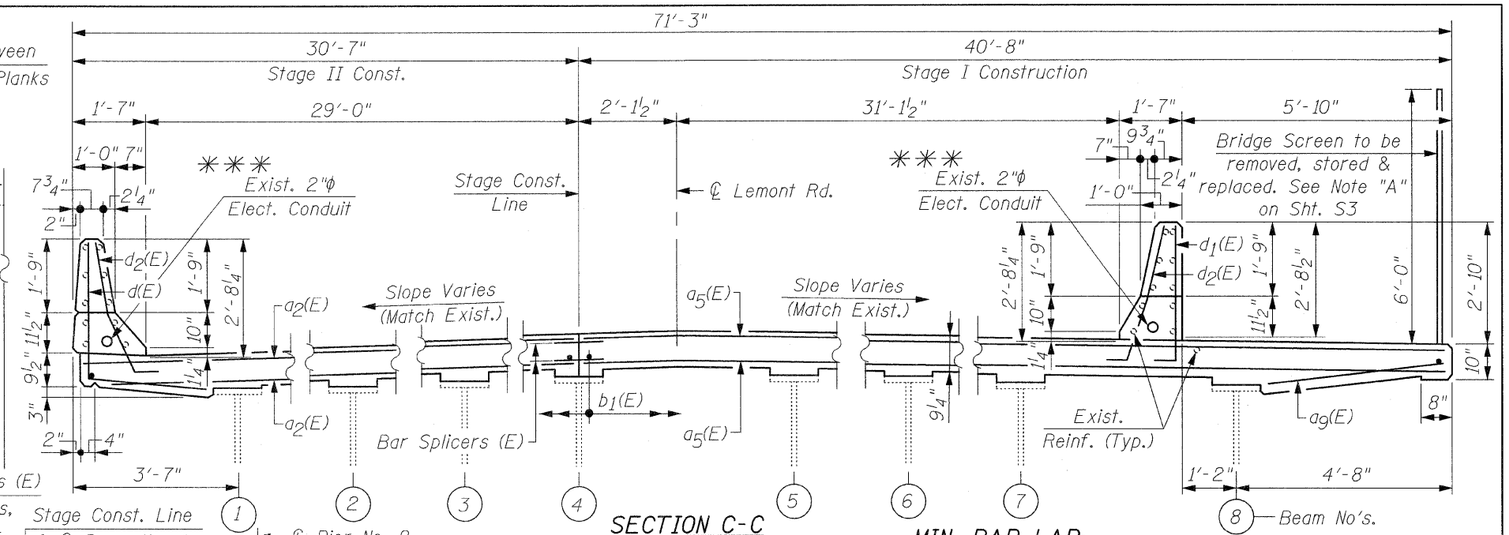
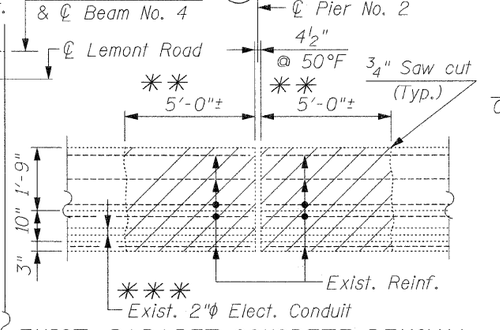
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

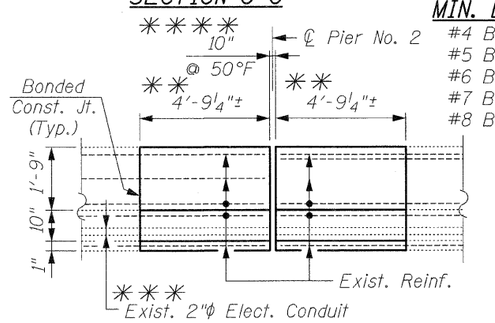


PLAN AT PIER NO. 2





EXIST. PARAPET CONCRETE REMOVAL



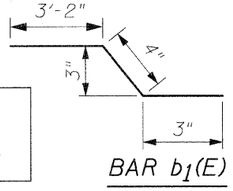
PROPOSED PARAPET CONCRETE REPLACEMENT

NOTES:

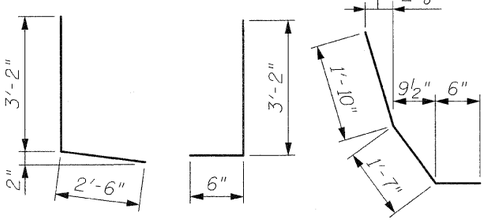
See Sht. S17 for Section H-H

Work This Sheet With Sht. S17

✳✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer



BAR $b_1(E)$



BAR d(E) BAR $d_1(E)$ BAR $d_2(E)$

MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_2(E)$	40	#5	30'-1"	—
$a_5(E)$	80	#5	21'-3"	—
$a_9(E)$	20	#4	3'-10"	—
$b_1(E)$	218	#5	3'-9"	⌐
d(E)	12	#4	5'-8"	L
$d_1(E)$	12	#4	3'-8"	⌐
$d_2(E)$	24	#5	3'-11"	L
Reinforcement Bars, Epoxy Coated		Pound	4,100	
Bar Splicers		Each	40	
Concrete Removal		Cu. Yd.	23	
Concrete Superstructure		Cu. Yd.	26	
Protective Coat		Sq. Yd.	8	
Modular Expansion Joint, 6"		Foot	72	

Bars indicated thus 10x2-#5 etc., indicates 10 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳ The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduit in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

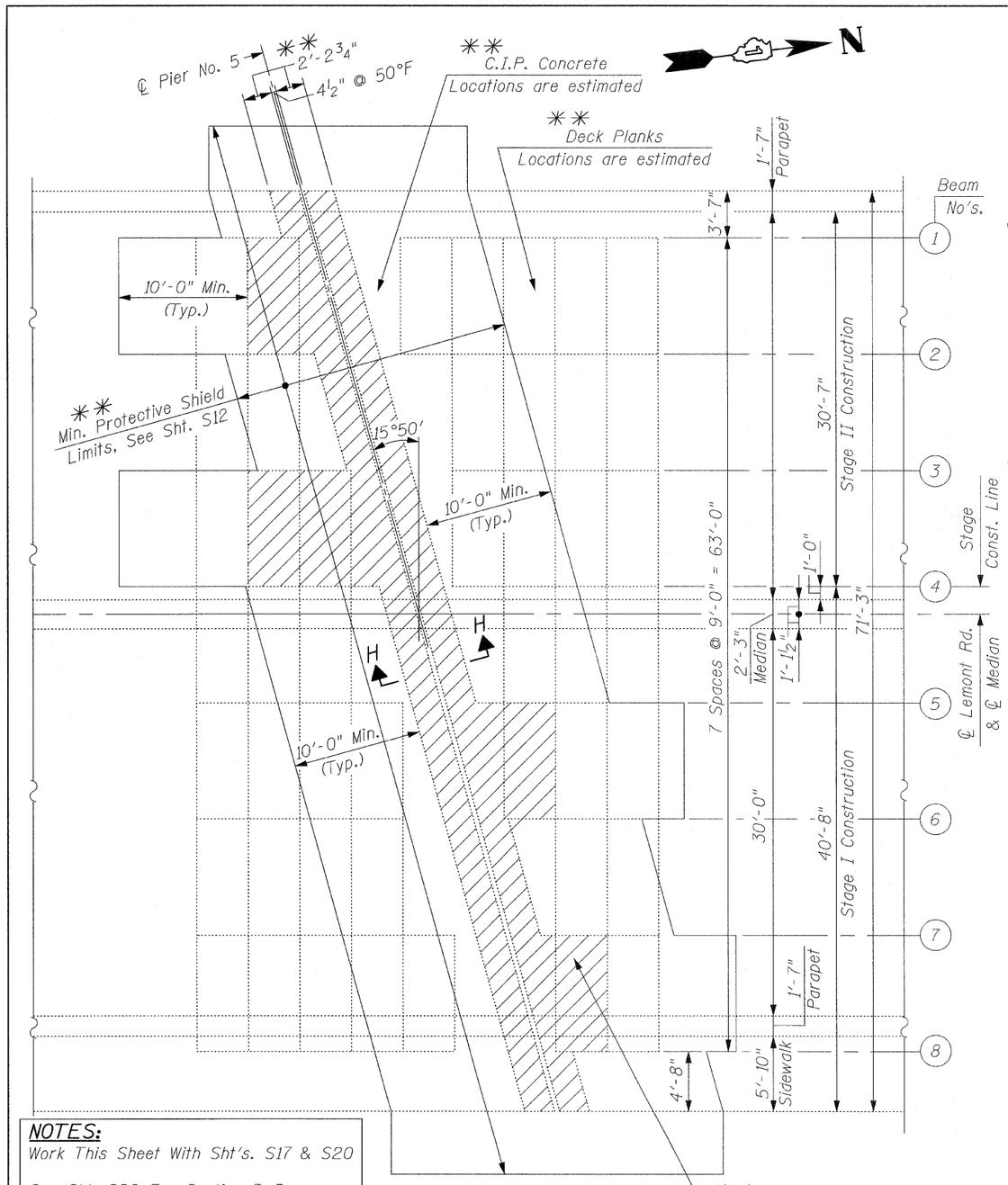
FILE NAME = exp_Jt-Pier-2.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

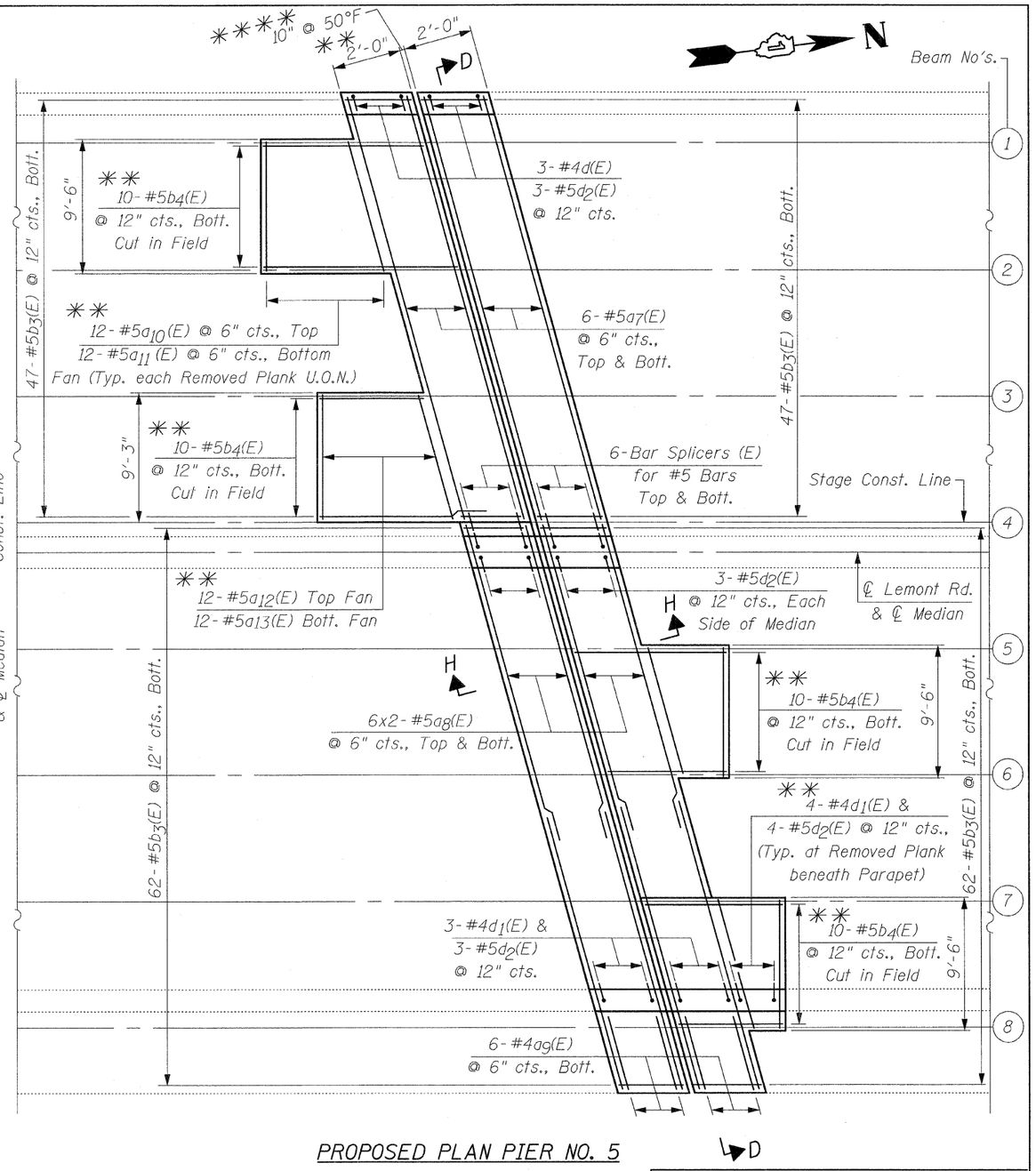
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT PIER NO. 2
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S18 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	54
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





NOTES:

Work This Sheet With Sht's. S17 & S20

See Sht. S20 For Section D-D

See Sht. S17 For Section H-H

See Sht's. S9 thru S11 For Sections Through Deck Plank Reconstruction

REMOVAL PLAN PIER NO. 5

** Deck Plank removal locations are estimated
Planks are to be entirely removed if 2'-2 3/4" removal line crosses over any portion. (Typ.)

PROPOSED PLAN PIER NO. 5

LEGEND:

Concrete Removal

U.O.N. Unless Otherwise Noted

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
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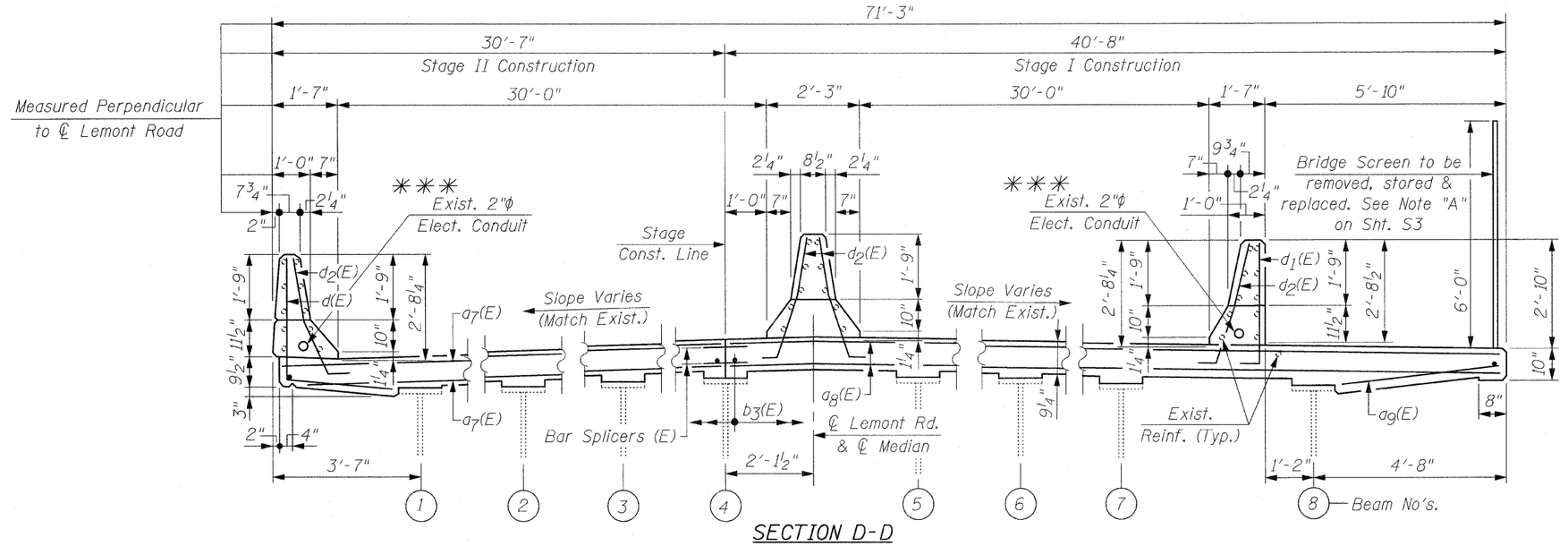
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

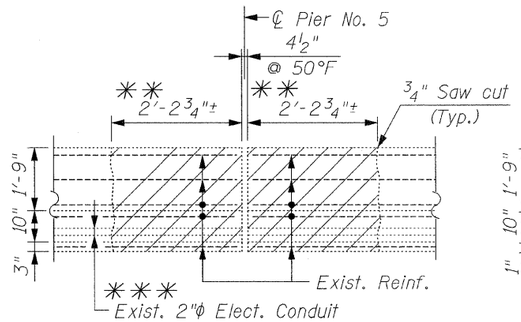
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT PIER NO. 5 – I
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

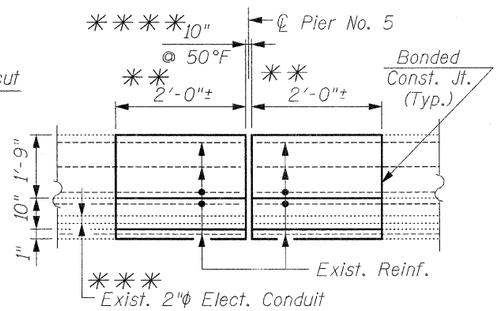
SCALE: | SHEET NO. S19 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	55
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





EXIST. MEDIAN & PARAPET CONCRETE REMOVAL



PROPOSED MEDIAN & PARAPET CONCRETE REPLACEMENT

BILL OF MATERIAL

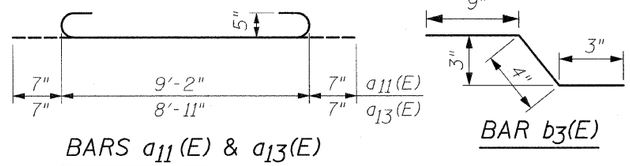
Bar	No.	Size	Length	Shape
a_7(E)	24	#5	31'-4"	——
a_8(E)	48	#5	22'-2"	——
a_9(E)	12	#4	3'-10"	——
a_{10}(E)	36	#5	9'-2"	——
a_{11}(E)	36	#5	10'-4"	⊂⊃
a_{12}(E)	12	#5	8'-11"	——
a_{13}(E)	12	#5	10'-1"	⊂⊃
b_3(E)	218	#5	1'-4"	⌐
b_4(E)	40	#5	7'-0"	——
d(E)	6	#4	5'-8"	L
d_1(E)	10	#4	3'-8"	⌋
d_2(E)	28	#5	3'-11"	L
Reinforcement Bars, Epoxy Coated			Pound	3,650
Bar Splicers			Each	24
Concrete Removal			Cu. Yd.	18
Concrete Superstructure			Cu. Yd.	20
Protective Coat			Sq. Yd.	8
Modular Expansion Joint, 6"			Foot	75

Bars indicated thus 6x2-#5 etc., indicates 6 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median

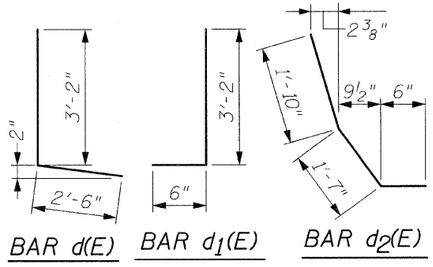
NOTE:
Work This Sheet With Sht's. S17 & S19

MIN. BAR LAP:
#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"



BARS a_{11}(E) & a_{13}(E)

BAR b_3(E)



BAR d(E) BAR d_1(E) BAR d_2(E)

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳ The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduit in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal.

✳✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
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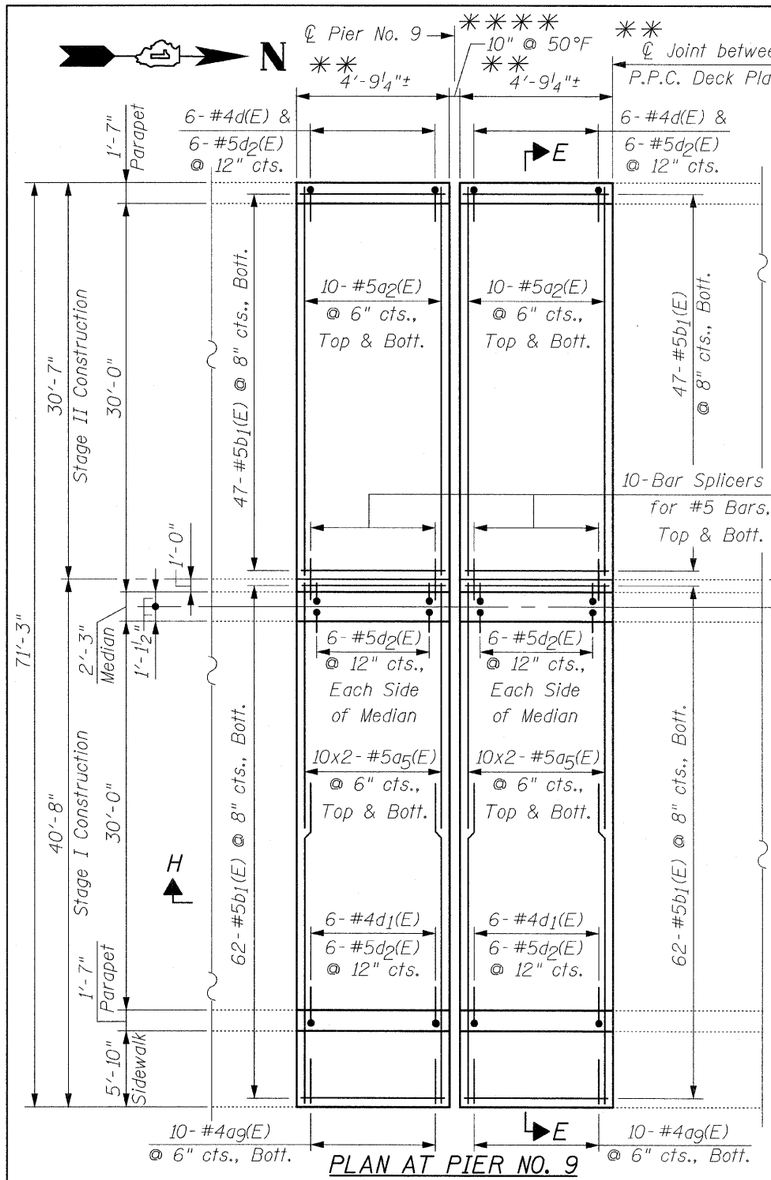
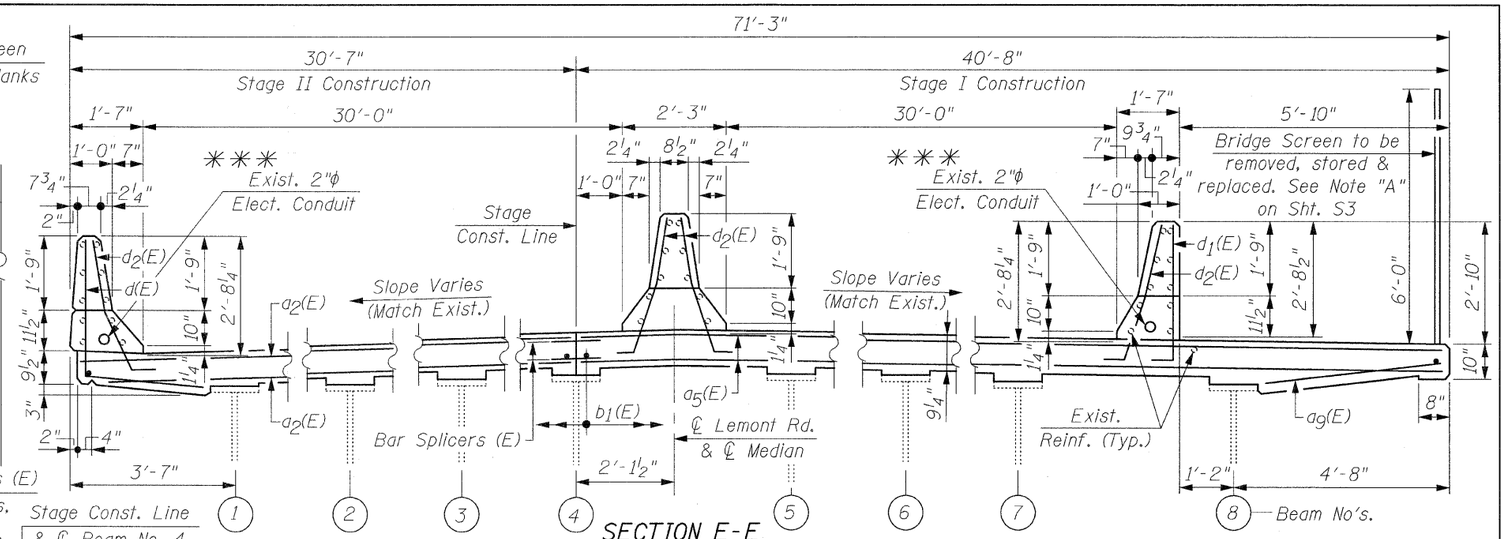
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -	
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -	

EXPANSION JOINT DETAILS AT PIER NO. 5 – II
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

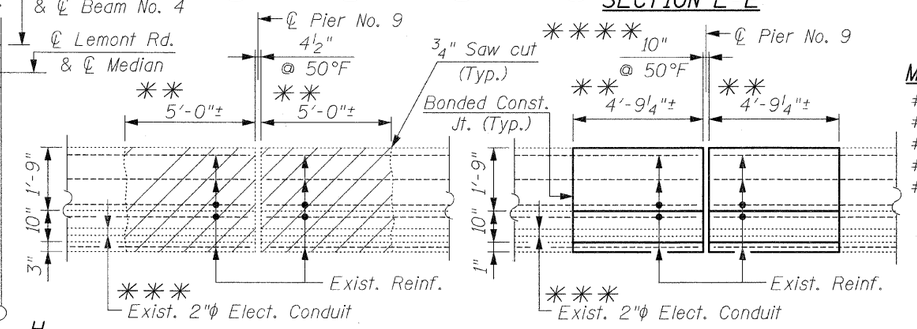
SCALE: | SHEET NO. S20 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	56
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





SECTION E-E



EXIST. MEDIAN & PARAPET CONCRETE REMOVAL

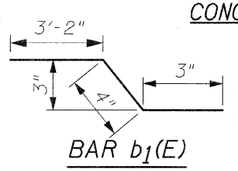
PROPOSED MEDIAN & PARAPET CONCRETE REPLACEMENT

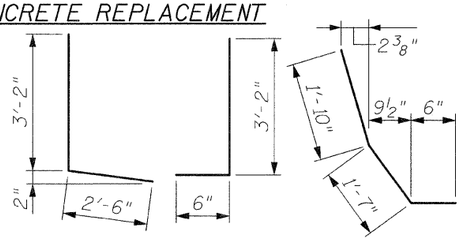
NOTES:

See Sht. S17 for Section H-H

Work This Sheet With Sht. S17

✳✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer





MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	40	#5	30'-1"	—
a5(E)	80	#5	21'-3"	—
ag(E)	20	#4	3'-10"	—
b1(E)	218	#5	3'-9"	⌝
d(E)	12	#4	5'-8"	L
d1(E)	12	#4	3'-8"	⌟
d2(E)	48	#5	3'-11"	L
Reinforcement Bars, Epoxy Coated			Pound	4,200
Bar Splicers			Each	40
Protective Coat			Sq. Yd.	15
Concrete Superstructure			Cu. Yd.	27
Concrete Removal			Cu. Yd.	24
Modular Expansion Joint, 6"			Foot	72

Bars indicated thus 10x2-#5 etc., indicates 10 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median.

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳ The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduit in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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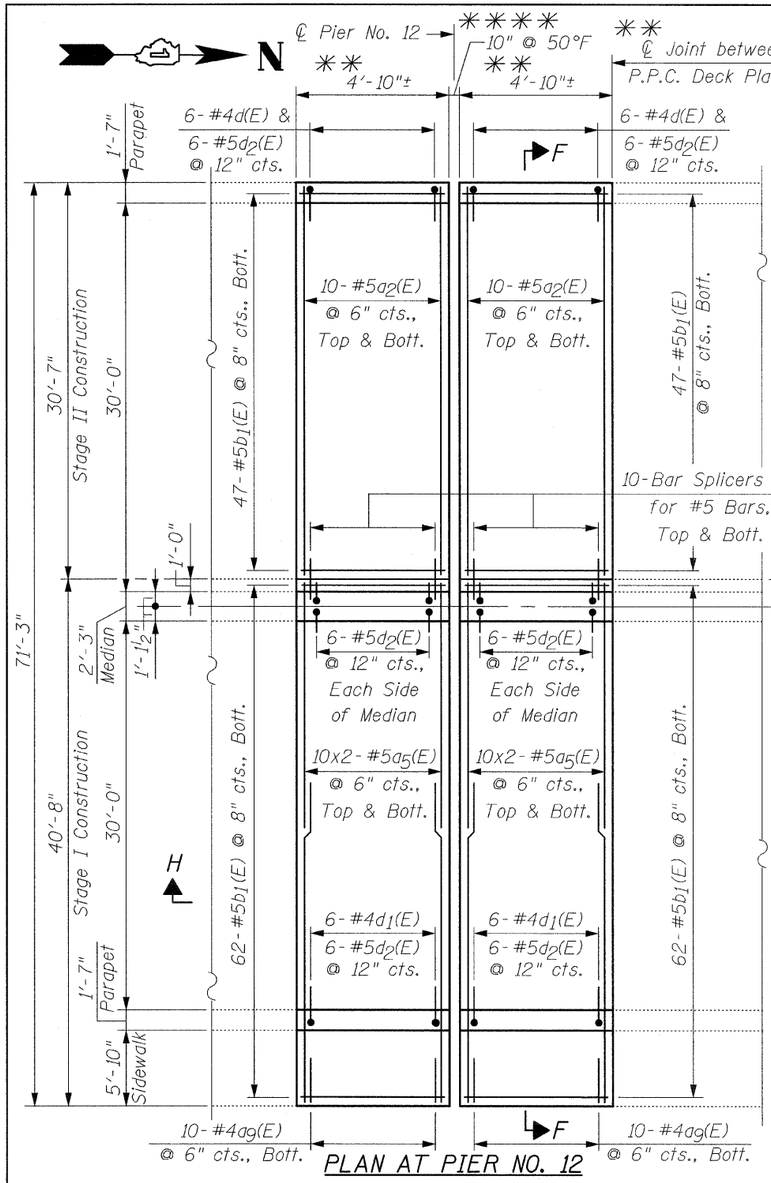
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

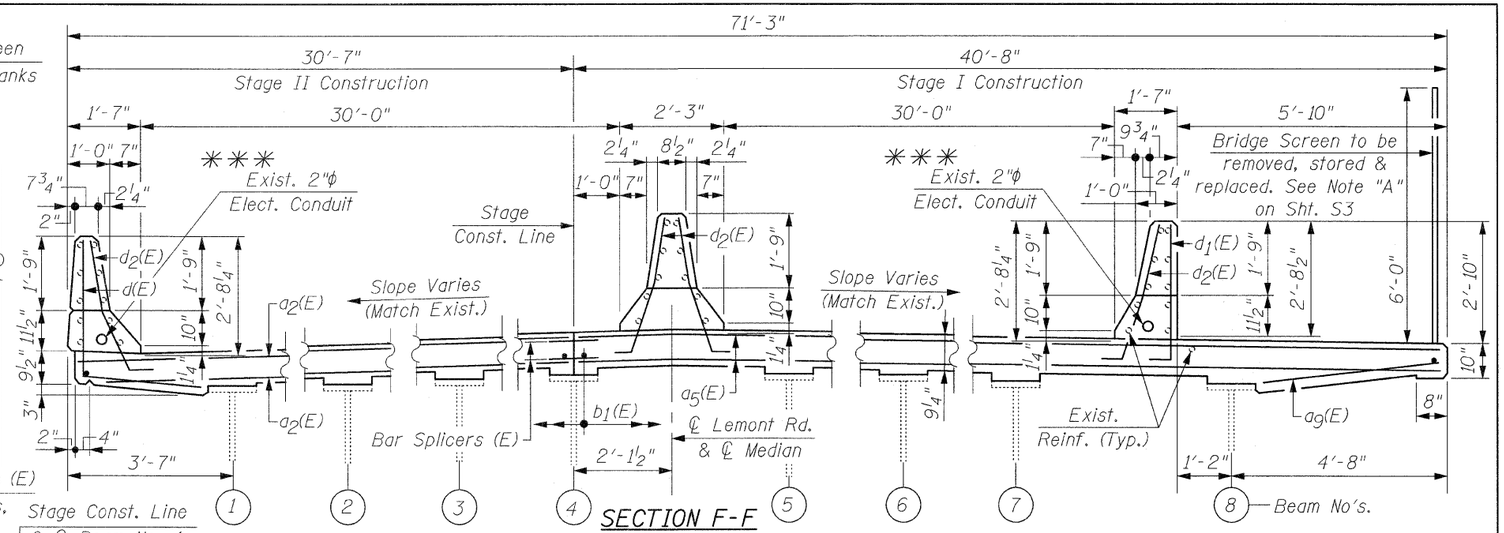
EXPANSION JOINT DETAILS AT PIER NO. 9
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S21 OF S41 SHEETS | STA. | TO STA.

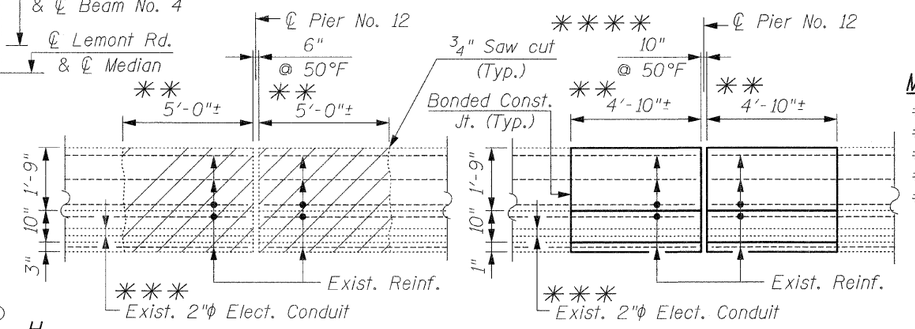
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	57
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN AT PIER NO. 12



SECTION F-F



EXIST. MEDIAN & PARAPET CONCRETE REMOVAL

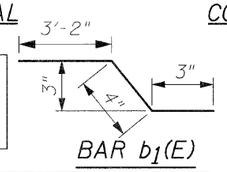
PROPOSED MEDIAN & PARAPET CONCRETE REPLACEMENT

NOTES:

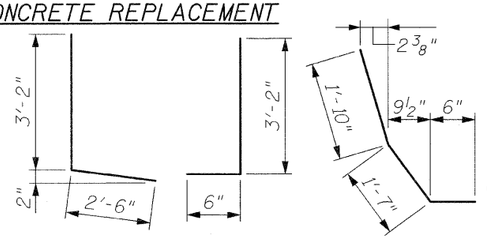
See Sht. S17 for Section H-H

Work This Sheet With Sht. S17

✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer



BAR $b_1(E)$



BAR d(E) BAR $d_1(E)$ BAR $d_2(E)$

MIN. BAR LAP:

#4 Bars	1'-8"
#5 Bars	2'-2"
#6 Bars	2'-7"
#7 Bars	3'-5"
#8 Bars	4'-6"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_2(E)$	40	#5	30'-1"	——
$a_5(E)$	80	#5	21'-3"	——
$a_g(E)$	20	#4	3'-10"	——
$b_1(E)$	218	#5	3'-9"	⌝
d(E)	12	#4	5'-8"	L
$d_1(E)$	12	#4	3'-8"	⌟
$d_2(E)$	48	#5	3'-11"	L
Reinforcement Bars, Epoxy Coated		Pound	4,200	
Bar Splicers		Each	40	
Concrete Removal		Cu. Yd.	24	
Concrete Superstructure		Cu. Yd.	28	
Protective Coat		Sq. Yd.	16	
Modular Expansion Joint, 6"		Foot	72	

Bars indicated thus 10x2-#5 etc., indicates 10 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median.

✳✳ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

✳✳✳ The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduit in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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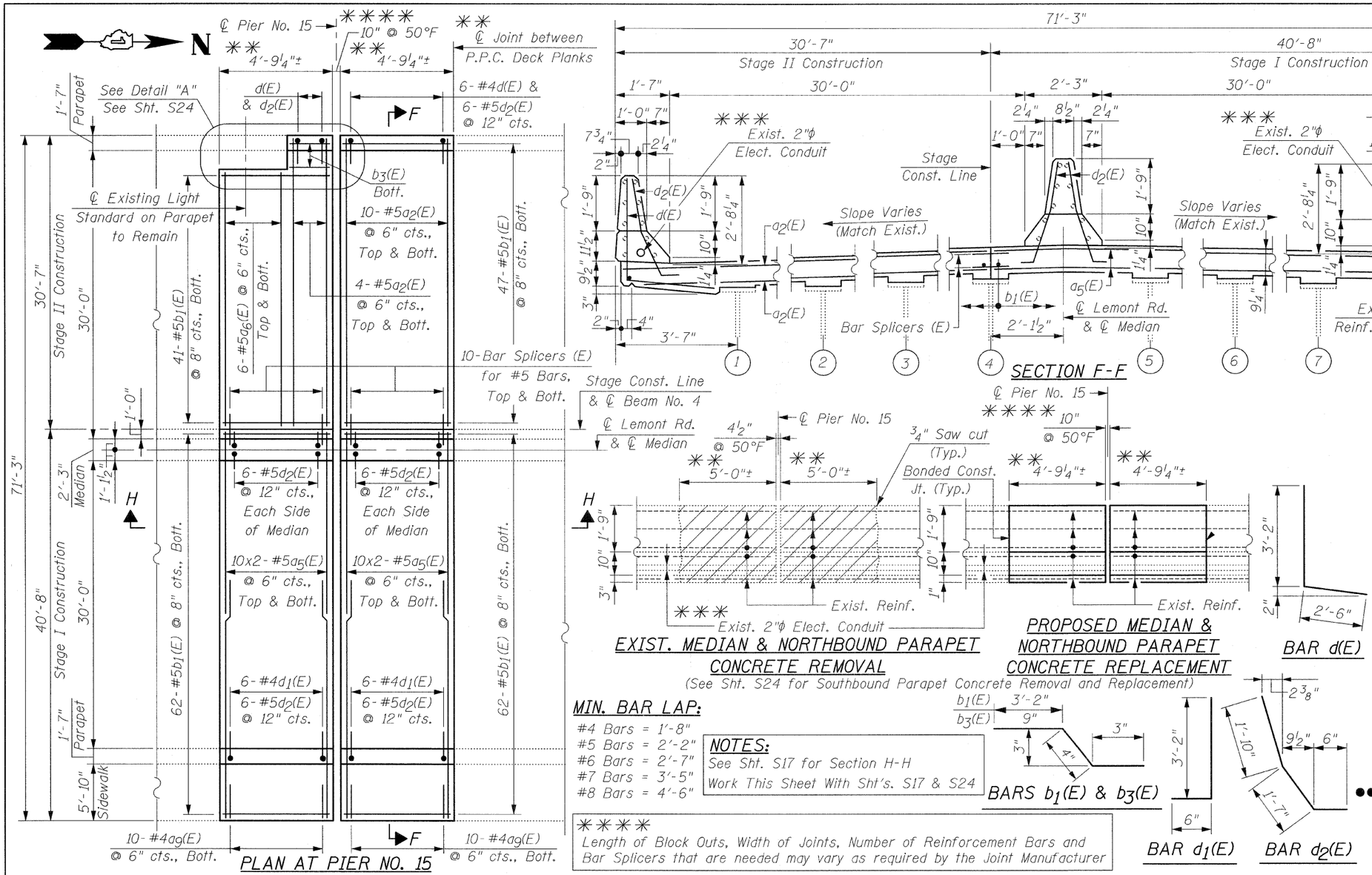
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT PIER NO. 12
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S22 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	58
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MIN. BAR LAP:

#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"

NOTES:

See Sht. S17 for Section H-H
Work This Sheet With Sht's. S17 & S24

✱✱✱✱ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	28	#5	30'-1"	—
a5(E)	80	#5	21'-3"	—
a6(E)	12	#5	26'-8"	—
a9(E)	20	#4	3'-10"	—
b1(E)	212	#5	3'-9"	⌐
b3(E)	6	#5	1'-9"	⌐
d(E)	9	#4	5'-8"	L
d1(E)	12	#4	3'-8"	⌐
d2(E)	45	#5	3'-11"	L
Reinforcement Bars, Epoxy Coated		Pound	4,120	
Bar Splicers		Each	40	
Concrete Removal		Cu. Yd.	23	
Concrete Superstructure		Cu. Yd.	26	
●● Protective Coat		Sq. Yd.	14	
Modular Expansion Joint, 6"		Foot	72	

Bars indicated thus 10x2-#5 etc., indicates 10 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median.

✱✱ The Contractor shall locate and verify the exact location of the boundaries of the existing PPC Plank being removed prior to Saw cutting and removal. The Contractor must adjust Reinforcement based on the actual Joint location. The Contractor shall use extreme care during Concrete Removal to avoid damaging the Adjacent existing PPC Planks that are to remain in place. If the Resident Engineer determines that the existing Planks that are to remain are damaged due to the Contractor's operations, the damaged Planks shall be repaired or replaced at the Contractor's expense.

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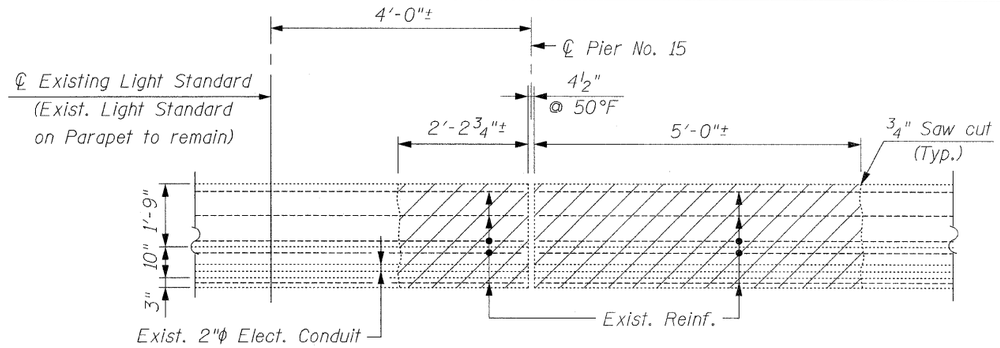
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

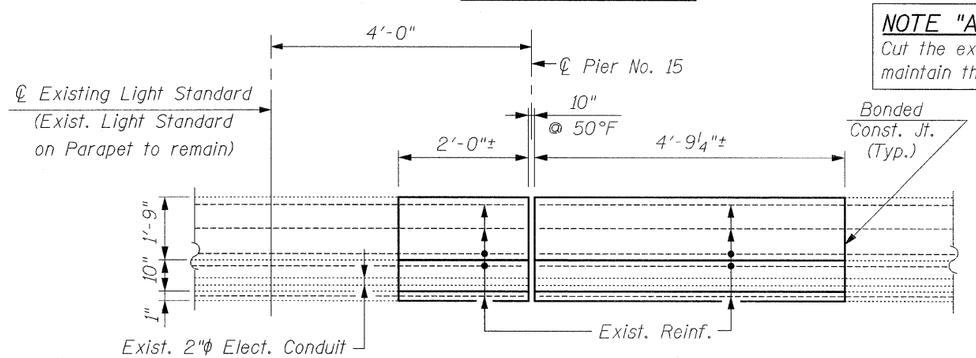
EXPANSION JOINT DETAILS AT PIER NO. 15 – I
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S23 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	59
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



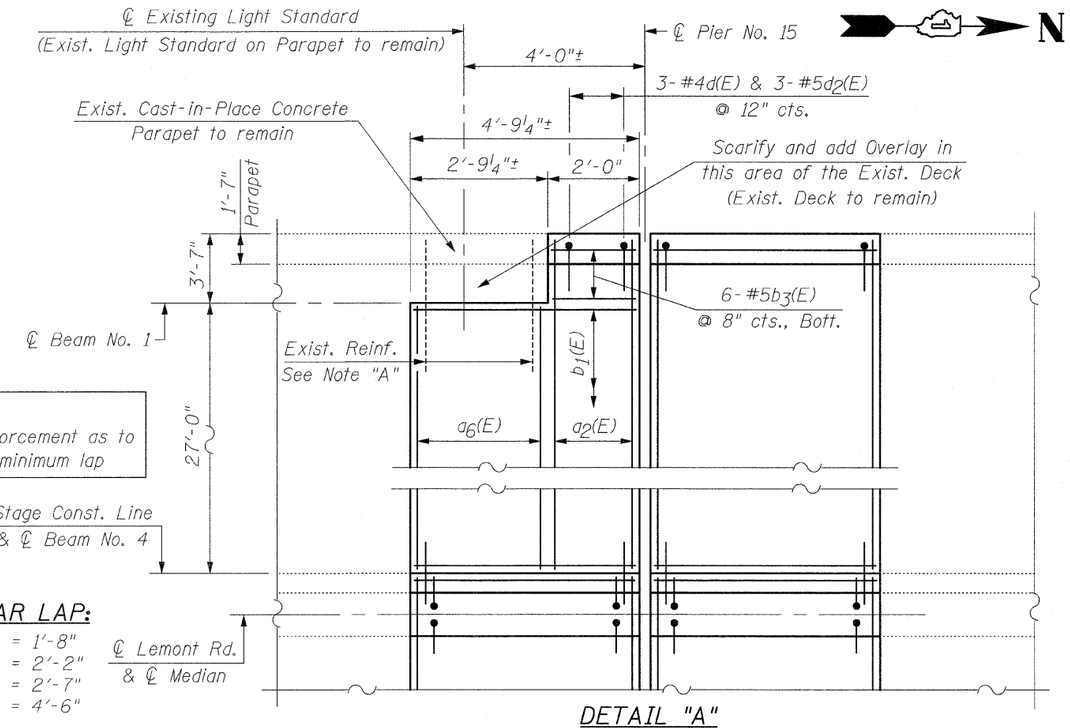
EXIST. SOUTHBOUND PARAPET
CONCRETE REMOVAL



PROPOSED SOUTHBOUND PARAPET
CONCRETE REPLACEMENT

NOTE "A"
Cut the existing Reinforcement as to maintain the required minimum lap

MIN. BAR LAP:
#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#8 Bars = 4'-6"

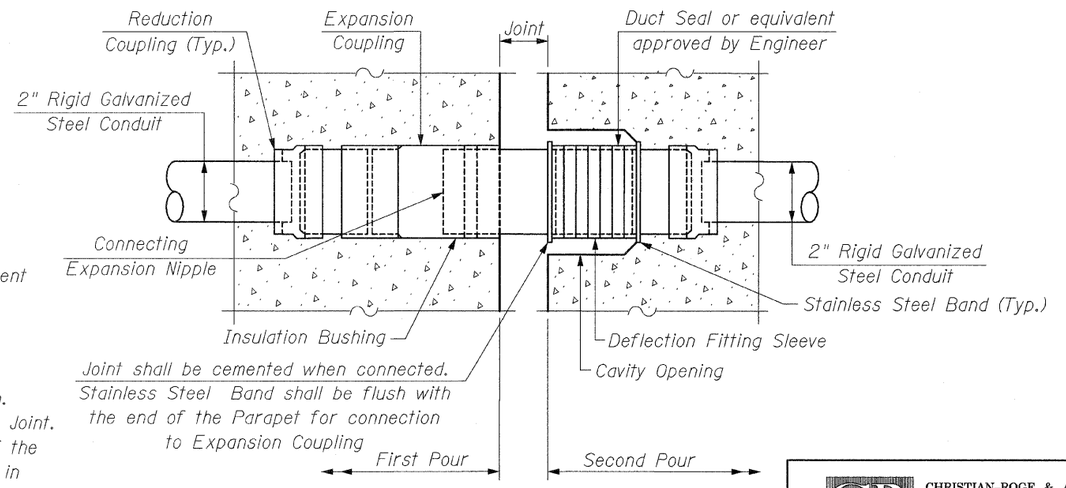


DETAIL "A"
(For remainder of Detail, See Sht. S23)

NOTE:
Work This Sheet With Sht's. S17 & S23

NOTES FOR CONDUIT EXPANSION/DEFLECTION JOINTS:

1. All materials (Fitting, Couplings, Conduit, etc.) included with Conduit embedded in Structure.
2. All Couplings shall be watertight.
3. Expansion assembly shall be installed in all Expansion Joints that are at least 1'-9" at 10°C, unless otherwise shown or as directed by the Engineer. Expansion Couplings shall have a total minimum movement of 6" or the movement capacity of the Structural Joint, whichever is greater. Verify maximum Longitudinal Joint movement with the Structural Engineer. Expansion/Deflection Assembly shall be installed as required.
4. Expansion Joint locations when indicated in the plans or as directed by the Engineer. Expansion/Deflection Couplings shall have a total Longitudinal Movement of 4" or the movement capacity of the Structural Joint, whichever is greater. Verify maximum Longitudinal Joint movement with the Structural Engineer. The rotational capacity of the Deflection Fitting shall allow for a minimum movement of 1" in the transverse direction.
5. Expansion/Deflection Coupling types shall be approved by the Engineer.
6. Refer to Structural Plans for location & size of Expansion Joints.
7. Refer to Structural Drawings for each Expansion Joint location and each Expansion Joint width.
8. The barrel of the Fitting shall be fully embedded in the concrete of one side of the Expansion Joint.
9. A cavity opening, if required, shall be 3 in. larger in diameter and a maximum depth of half of the Deflection Sleeve length. The Deflection Fitting shall be centered in the opening and embedded in the Concrete only up to the Deflection Fitting center.
10. Both Expansion and Deflection Couplings shall have Integral Bonding Jumpers.



CONDUIT EXPANSION/DEFLECTION JOINT

CONDUIT EXPANSION/DEFLECTION JOINT DETAIL

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211 W. WACKER DRIVE CHICAGO, IL. 60606
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	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -	
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT PIER NO. 15 – II &
CONDUIT EXPANSION / DEFLECTION JOINT DETAIL
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S24 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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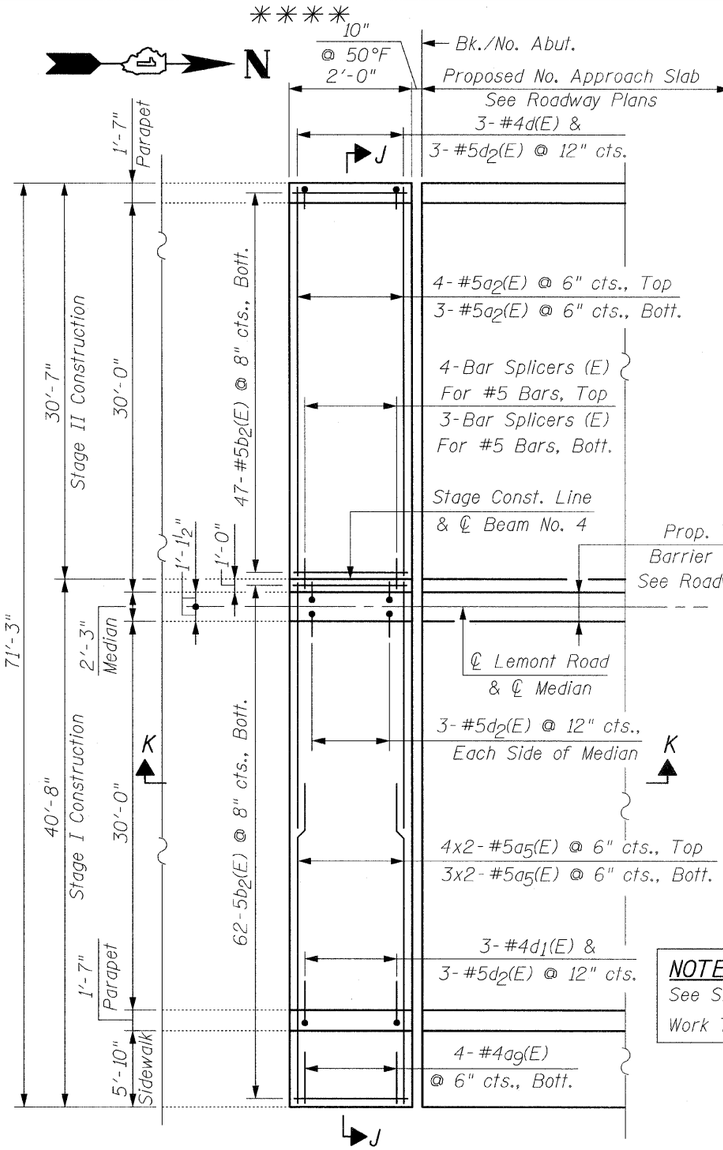
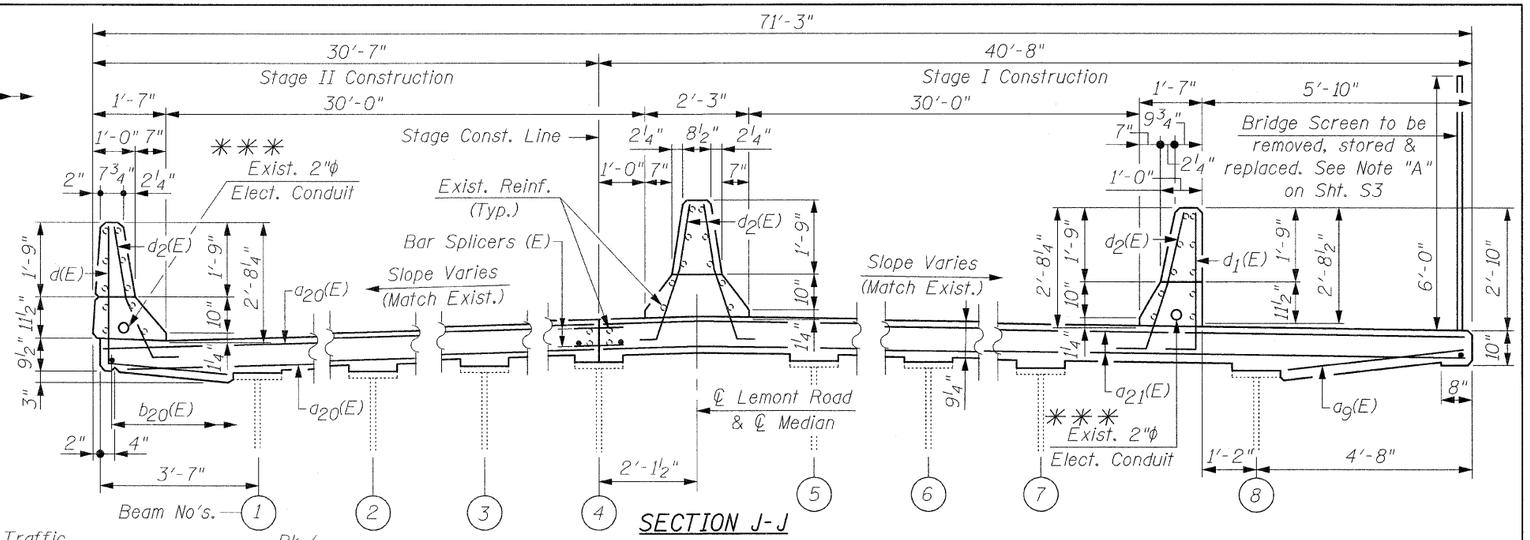
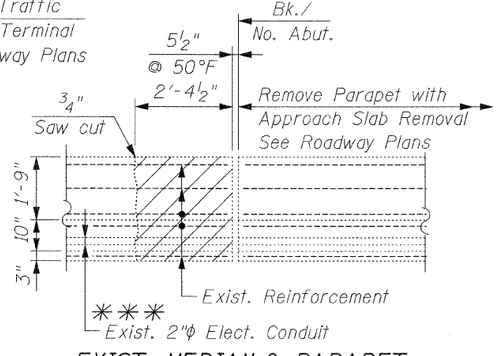
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



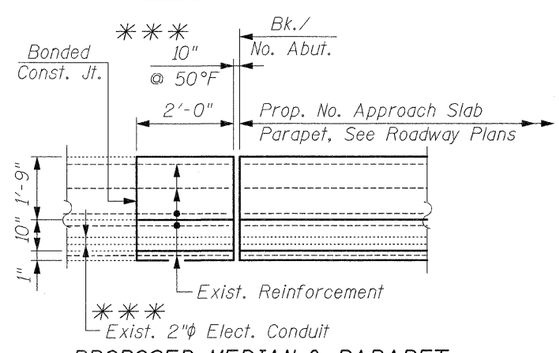
PLAN AT NORTH ABUTMENT



SECTION J-J



EXIST. MEDIAN & PARAPET CONCRETE REMOVAL



PROPOSED MEDIAN & PARAPET CONCRETE REPLACEMENT

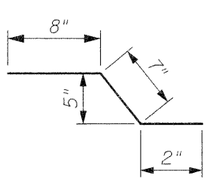
NOTES:

See Sht. S26 for Section K-K

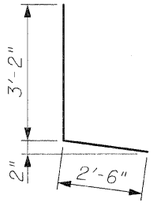
Work This Sheet With Sht. S26

MIN. BAR LAP:

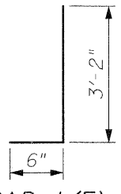
#4 Bars = 1'-8"
#5 Bars = 2'-2"
#6 Bars = 2'-7"
#7 Bars = 3'-5"
#8 Bars = 4'-6"



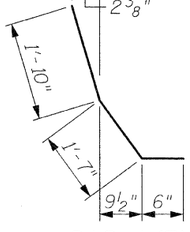
BAR $b_2(E)$



BAR d(E)



BAR $d_1(E)$



BAR $d_2(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_2(E)$	7	#5	30'-1"	—
$a_5(E)$	14	#5	21'-3"	—
$a_9(E)$	4	#4	3'-10"	—
$b_2(E)$	109	#5	1'-5"	⌐
d(E)	3	#4	5'-8"	⌐
$d_1(E)$	3	#4	3'-8"	⌐
$d_2(E)$	12	#5	3'-11"	⌐
Reinforcement Bars, Epoxy Coated	Pound		770	
Bar Splicers	Each		7	
Concrete Removal	Cu. Yd.		9	
Concrete Superstructure	Cu. Yd.		9	
Protective Coat	Sq. Yd.		4	
Modular Expansion Joint, 6"	Foot		72	

Bars indicated thus 4x2-#5 etc., indicates 4 Lines of Bars with 2 Lengths per Line

●● Quantity is for Top & Inside Face of Reconstructed Parapets and Median.

*** The Existing Conduit will remain. Concrete in the area of the Conduit must be hand removed. The Contractor must take all necessary precautions as not to damage the Existing Conduits in any way, if the Conduit is damaged a new Coupler, Conduit and Utilities must be provided by the Contractor at no additional cost to I.D.O.T. All power to any Utilities going into the Conduit, in the Construction area, must be turned off and such utilities must be temporarily re-routed during Construction. Cost included with Concrete Removal..

**** Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

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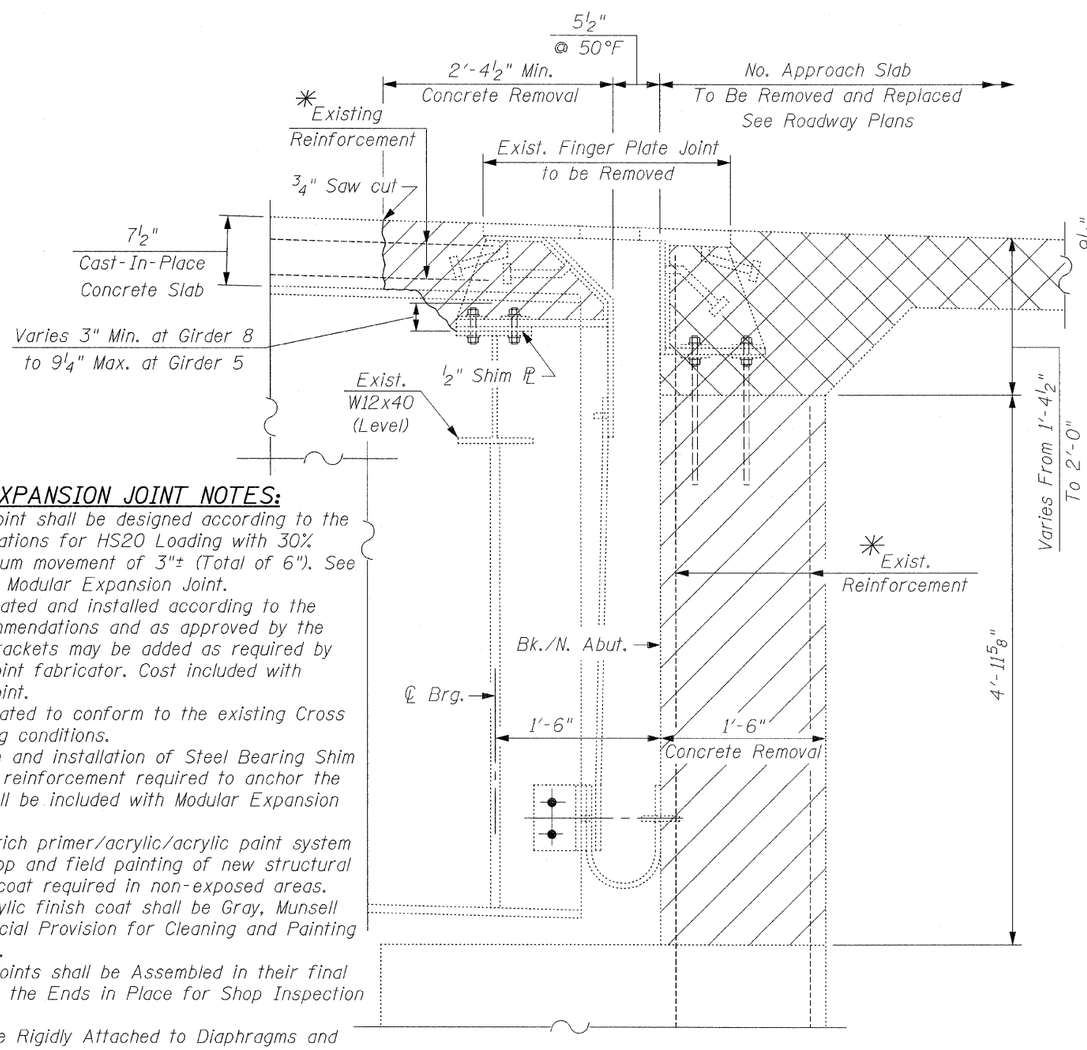
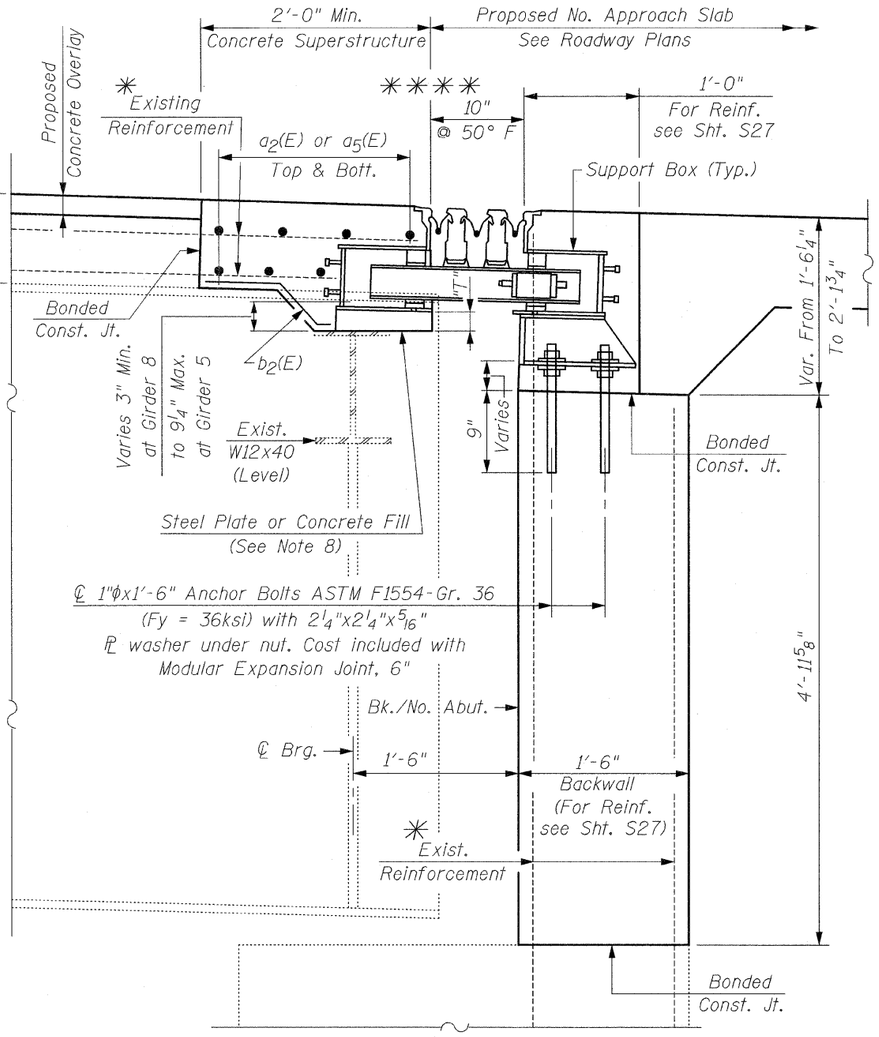
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT NORTH ABUTMENT – I
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S25 OF S41 SHEETS | STA. | TO STA.

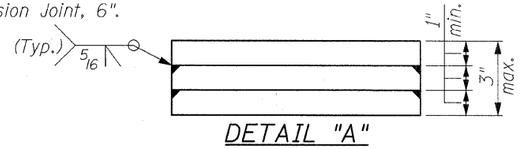
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	61
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





MODULAR EXPANSION JOINT NOTES:

1. Modular Expansion Joint shall be designed according to the latest ASTM Specifications for HS20 Loading with 30% impact and for minimum movement of 3"± (Total of 6"). See Special Provision for Modular Expansion Joint.
2. Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer. Support Brackets may be added as required by Modular Expansion Joint fabricator. Cost included with Modular Expansion Joint.
3. Joint shall be fabricated to conform to the existing Cross Slopes. Match existing conditions.
4. Cost of all hardware and installation of Steel Bearing Shim Plates and additional reinforcement required to anchor the Joint to the Slab shall be included with Modular Expansion Joint.
5. The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except no top coat required in non-exposed areas. The color of the acrylic finish coat shall be Gray, Munsell No. 5B 7/1. See Special Provision for Cleaning and Painting New Metal Structures.
6. Modular Expansion Joints shall be Assembled in their final Relative Position with the Ends in Place for Shop Inspection and Acceptance.
7. Support Box shall be Rigidly Attached to Diaphragms and Beams by Adjustable Brackets, Stools or Shims. Support Box spacing shall be Designed by the Joint Manufacturer.
8. If distance "T" from bottom of Support Box to top of diaphragm is 3" or less, use steel plates. If distance "T" is more than 3", extend $b_2(E)$ bars and fill with concrete. If steel plates are used, the minimum plate size shall be 1" except for the fractional portion of the dimension. For example: If distance "T" is $2\frac{3}{4}$", only the $\frac{3}{4}$" portion of the thickness can use plates that fall below the 1" minimum. See Detail "A" for Stacked Plate Steel Extension. Cost included with Modular Expansion Joint, 6".



DETAIL "A"

SECTION K-K

EXPANSION JOINT AT N. ABUT.

EXISTING

NOTE:
Work This Sheet With Sht's. S25 & S27

SECTION K-K

EXPANSION JOINT AT N. ABUT.

PROPOSED

✳ Existing Reinforcement Bars extending into the removal area shall be cleaned, straightened and incorporated into the new Construction. Cut or bend Existing Reinforcement Bars as required to miss Support Box by $1\frac{1}{2}$". Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an Approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

✳✳✳✳ Length of Block Outs, Width of Joints, Number of Reinforcement Bars and Bar Splicers that are needed may vary as required by the Joint Manufacturer.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS - PLANNERS - SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS AT NORTH ABUTMENT - II
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S26 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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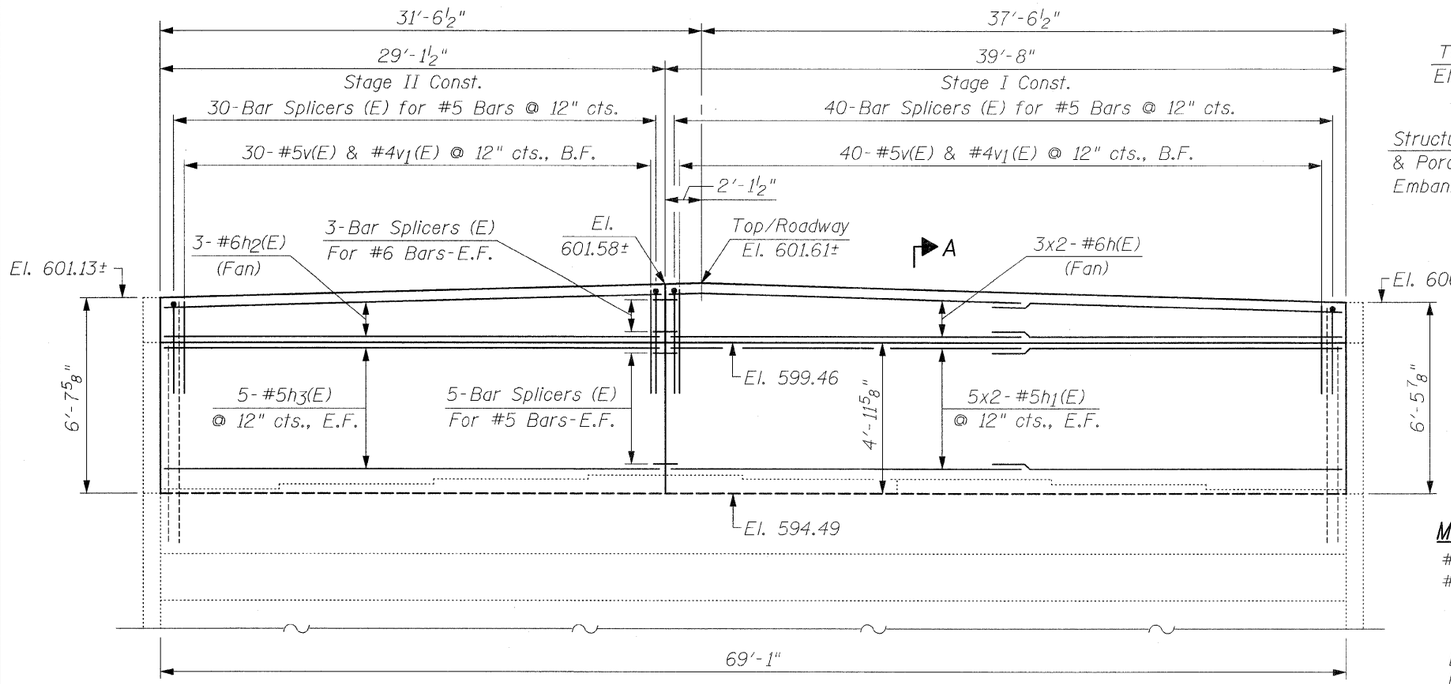
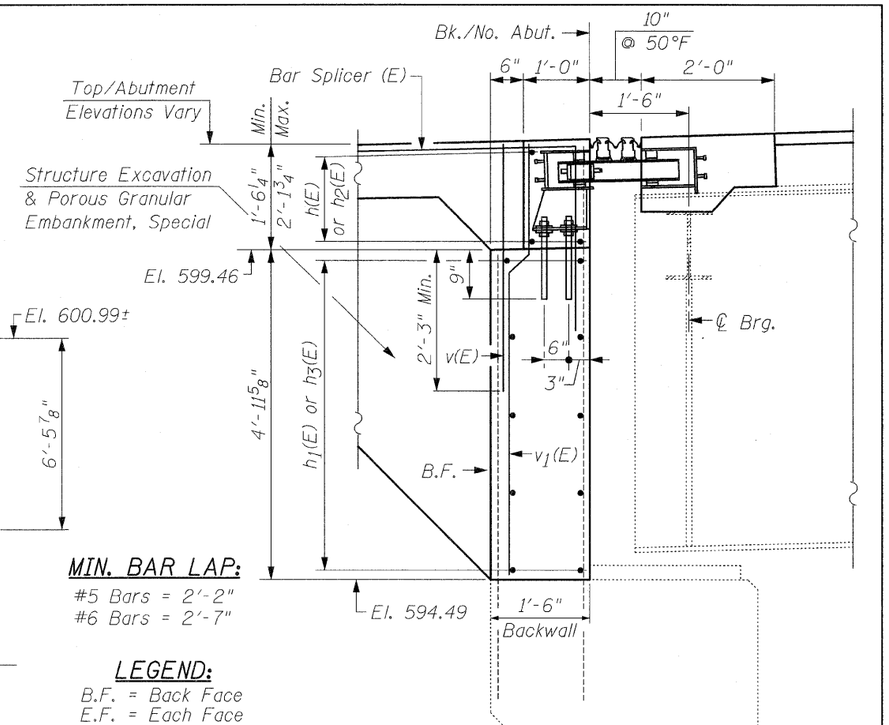
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ELEVATION



MIN. BAR LAP:

#5 Bars = 2'-2"
#6 Bars = 2'-7"

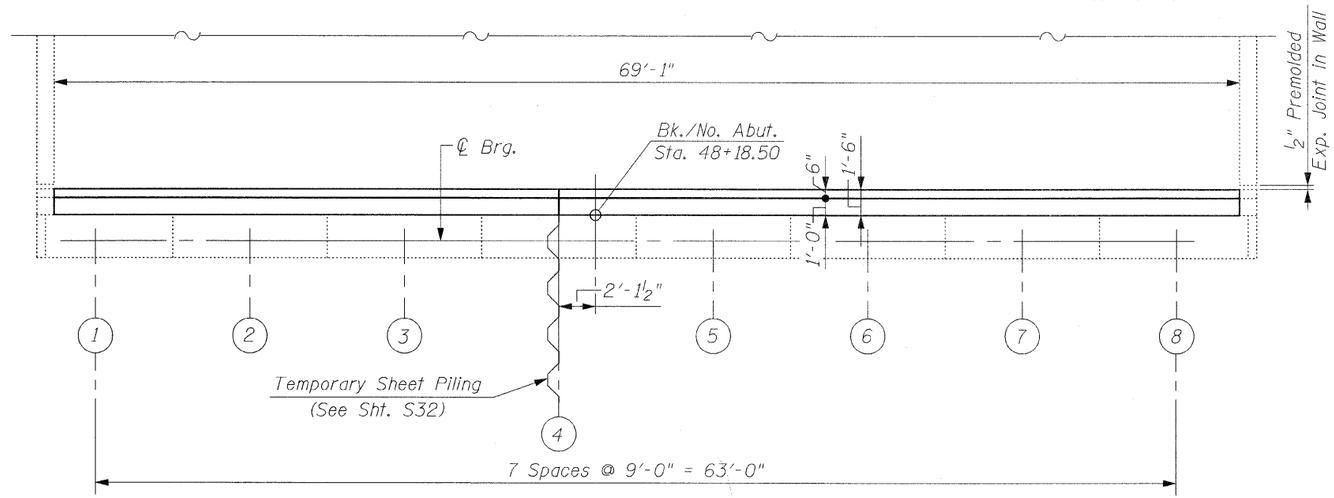
LEGEND:

B.F. = Back Face
E.F. = Each Face

NOTE:

Bars Indicated Thus 5x2-#5 etc., Indicates 5 Lines of Bars with 2 Lengths Per Line

See sheet S35 for Temporary Sheet Piling Details



TOP PLAN
(Looking North)

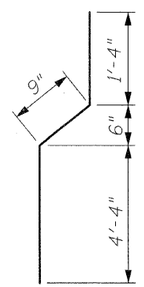
NOTE:

Work this Sheet With Sht. S26

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	6	#6	21'-0"	——
h1(E)	20	#5	20'-9"	——
h2(E)	3	#6	28'-9"	——
h3(E)	10	#5	28'-9"	——
V(E)	70	#5	4'-2"	——
V1(E)	70	#4	6'-5"	⌇
Concrete Removal			Cu. Yd.	24
Concrete Structures			Cu. Yd.	25
Bar Splicers			Each	86
Reinforcement Bars, Epoxy Coated			Pound	1,660
Porous Granular Embankment, Special			Cu. Yd.	40
Structure Excavation			Cu. Yd.	40

SECTION A-A
THRU NORTH ABUT.
(Showing Proposed Backwall)



BAR v1(E)

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FILE NAME = backwall_no_abut.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BACKWALL DETAILS AT NORTH ABUTMENT
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S27 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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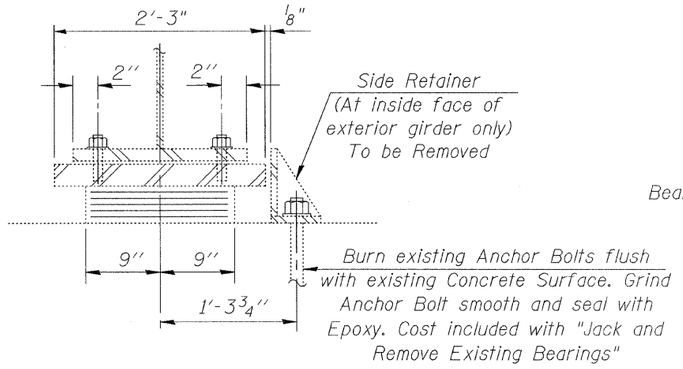
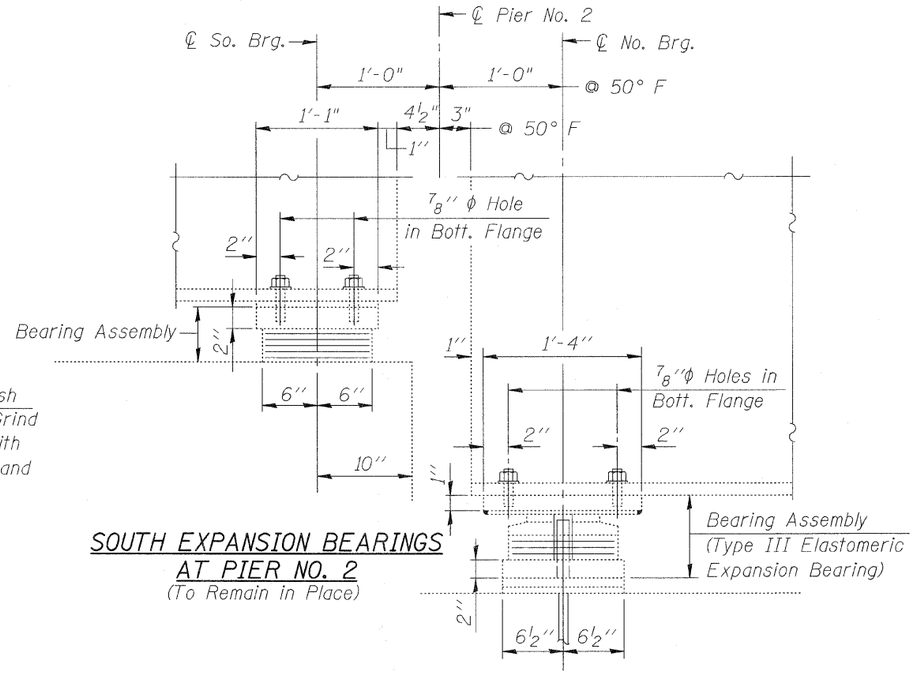
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SECTION AT SOUTH ABUT.

(Existing Type I Elastomeric Expansion Bearings at Beam No's. 1 & 8 are to be Removed)

EXISTING TYPE I ELASTOMERIC EXP. BEARING AT SOUTH ABUT.



SOUTH EXPANSION BEARINGS AT PIER NO. 2

(To Remain in Place)

SECTION AT PIER NO. 2

(Existing Type III Elastomeric Expansion Bearings at Beam No. 3 is to be Removed)

ELEVATION AT PIER NO. 2

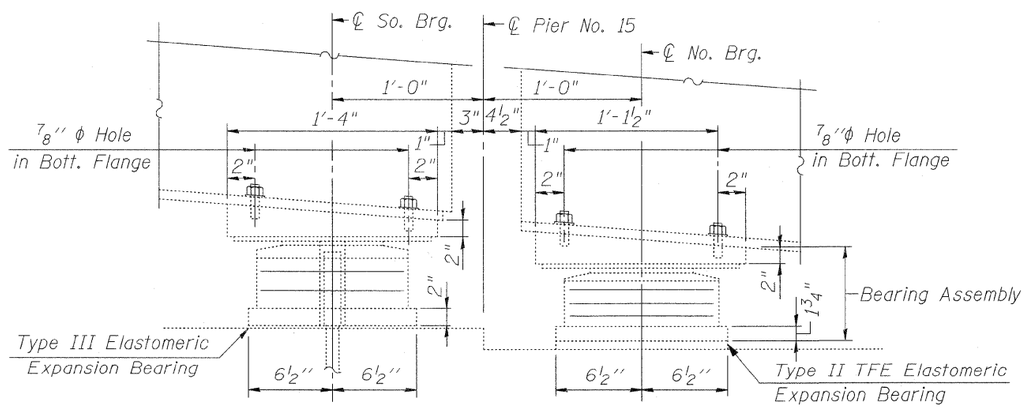
EXISTING TYPE III ELASTOMERIC EXPANSION BEARING AT PIER NO. 2 AT BEAM NO. 3 (NO. BRG.)

BEARING REPLACEMENT NOTES:

1. The Contractor shall submit for approval by the Engineer plans for jacking Existing Superstructure prior to commencing any work at the Bearings. This submittal shall be prepared and sealed by a Licensed Structural Engineer in Illinois.
2. Jacking and Removing Existing Bearings shall be done after the existing Deck Overlay removal is completed and before the New Deck Overlay is poured.
3. Remove Nuts from Anchor Bolts of Bearings at the Beams.
4. Remove the Existing Type III Elastomeric Expansion Bearings:
   at No. Brg.-Pier No. 2, Beam 3
   & at So. Brg.-Pier No. 15, Beam 7
5. Remove existing Expansion Bearings at South Abutment at Beam No's. 1 & 8.
6. Install Type III Elastomeric Expansion Bearings on the existing Pedestals:
   at No. Brg.-Pier No. 2, Beam 3
   & at So. Brg.-Pier No. 15, Beam 7
7. Install Type I Elastomeric Expansion Bearings on the existing Pedestals:
   at South Abutment-Beam No's. 1 & 8
8. The New Bearings shall be in place and the Jacks shall be lowered before the New Deck Overlay is poured.

LEGEND:

So. Brg. = South Bearing
No. Brg. = North Bearing



SECTION AT PIER NO. 15

(Existing Type III Elastomeric Expansion Bearing at S. Abut. at Beam No. 7 is to be Removed)

NORTH EXPANSION BEARINGS AT PIER NO. 15

(To Remain in Place)

ELEVATION AT PIER NO. 15

EXISTING EXPANSION BEARINGS AT PIER NO. 15

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	4

EXISTING EXPANSION BEARINGS REMOVAL AND REPLACEMENT

At So. Abut., At Beam No's. 1 & 8
At Pier No. 2 At Beam No. 3 (No. Brg.)
At Pier No. 15 At Beam No. 7 (So. Brg.)

See Sht. S30 For Type I Elastomeric Exp. Brg. and Sht. S32 For Type III Elastomeric Brg.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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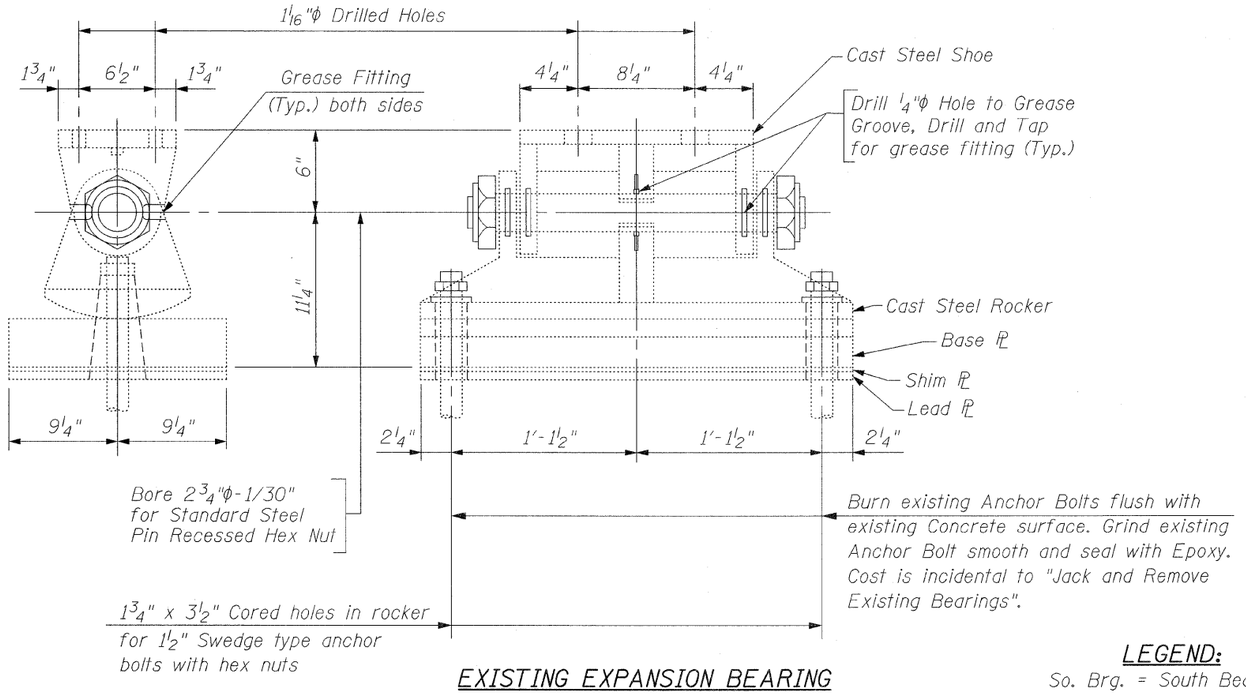
EXISTING EXPANSION BEARING REMOVAL
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S28 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	64
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING EXPANSION BEARING

At Pier No. 9 (No. Brg.) & Pier No. 12 (So. Brg.)

BEARING REPLACEMENT NOTES:

1. The Contractor shall submit for approval by the Engineer plans for jacking Existing Superstructure prior to commencing any work at the Bearings. This submittal shall be prepared and sealed by a Licensed Structural Engineer in Illinois.
2. Jacking and Removing Existing Bearings shall be done after the existing Deck Overlay removal is completed and before the New Deck Overlay is poured.
3. Remove Nuts from Anchor Bolts of Bearings at the Beams.
4. Remove the Existing Bearings:
   at Pier No. 9 (8 No. Brg.)
   at Pier No. 12 (8 So. Brg.)
5. Install Type II Elastomeric Expansion Bearings on the existing Pedestals with fabricated Steel Extensions:
   at Pier No. 9 (No. Brg.)
6. Install Type III Elastomeric Expansion Bearings on the existing Pedestals with fabricated Steel Extensions:
   at Pier No. 12 (So. Brg)
7. The New Bearings shall be in place and the Jacks shall be lowered before the New Deck Overlay is poured.

LEGEND:

So. Brg. = South Bearing
No. Brg. = North Bearing

NOTE:

Existing Expansion Bearings are to be removed:
at Pier No. 9 (No. Brg.)
at Pier No. 12 (So. Brg.)

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	16

EXISTING EXPANSION BEARINGS REMOVAL AND REPLACEMENT

at Pier No. 9 (8 No. Brg.)
at Pier No. 12 (8 So. Brg.)

See Sht. S31 For Type II Elastomeric Exp. Brg.
See Sht. S33 For Type III Elastomeric Exp. Brg.

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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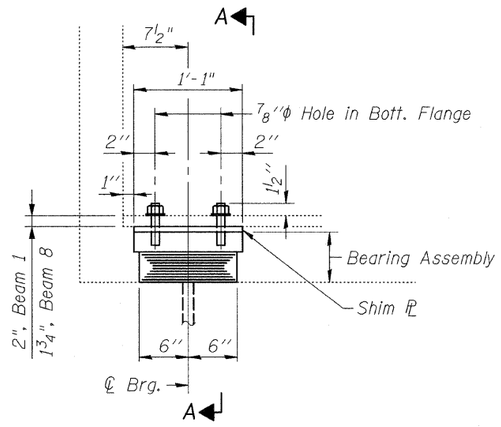
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

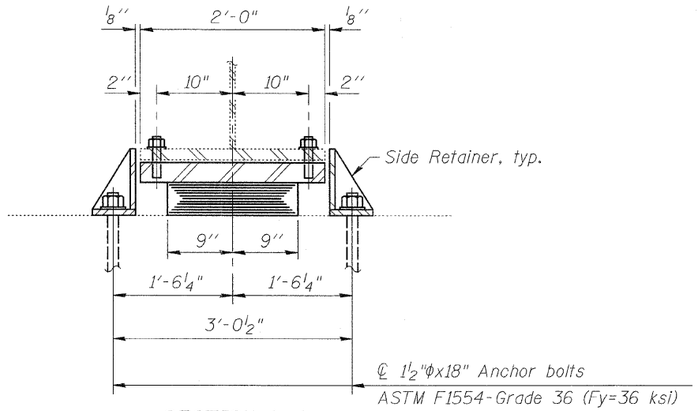
EXISTING EXPANSION BEARING REMOVAL
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S29 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	65
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ELEVATION AT SOUTH ABUT.

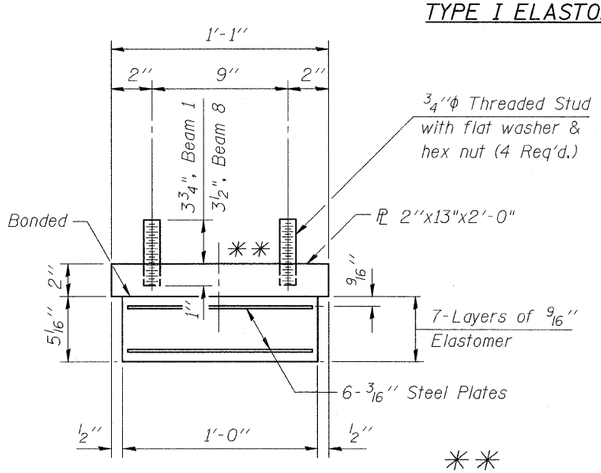


SECTION A-A

BEAM REACTIONS
(From Existing Plans)

BEAM 1	BEAM 8
$R_{℄}$ = 90.8k	$R_{℄}$ = 79.2k
$R_{℄}$ = 51.7k	$R_{℄}$ = 53.9k
R_{Imp} = 10.0k	R_{Imp} = 10.6k
R_{Total} 152.5k	R_{Total} 143.7k

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

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 36 (Fy=36ksi). The corresponding specified Grade of AASHTO M314 Anchor Bolts may be used in lieu of ASTM F1554.

Drilled and set Anchor Bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side Retainers and other Steel members required for the Bearing Assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

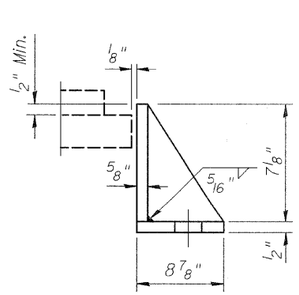
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Elastomeric Bearing Assembly, Type I.

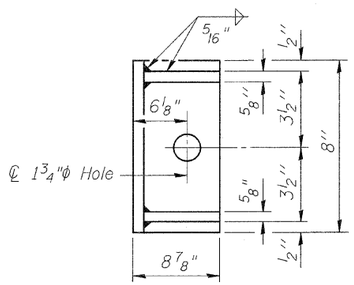
Prior to ordering any material, the Contractor shall verify in the field all Bearing height and Shim thickness dimensions.

Min. jack capacity = 95 tons for Beam 1 & 85 tons for Beam 8.

BILL OF MATERIAL
AT SOUTH ABUTMENT BEAM NO'S. 1 & 8

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	2
Anchor Bolts, 1 1/2" ϕ	Each	4





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

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

I-2E-1 10-1-08

FILE NAME = brg_assem_type-I.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

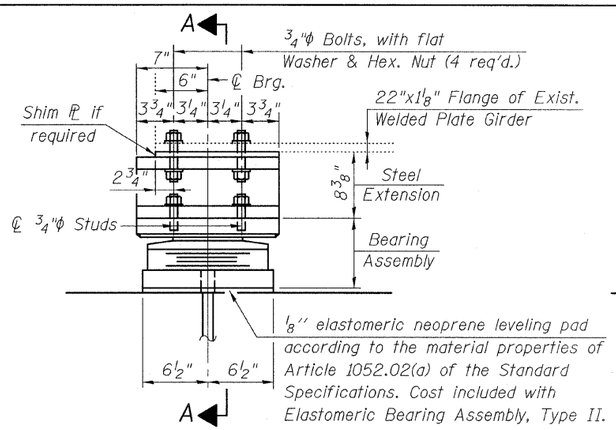
ELASTOMERIC BEARING ASSEMBLY, TYPE I
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S30 OF S41 SHEETS | STA. | TO STA.

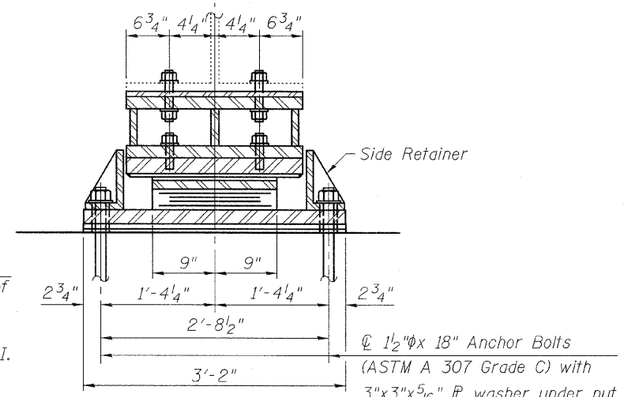
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	66
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPE II ELASTOMERIC EXP. BRG. WITH FABRICATED STEEL EXTENSION

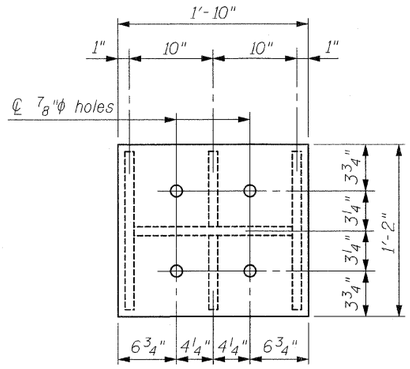
(8 North Bearings required)



ELEVATION AT PIER 9



SECTION A-A



TOP & BOTTOM PLATE PLAN

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 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 Anchor Bolts may be used in lieu of ASTM F1554.

Anchor Bolts for Type II Bearings shall be placed in holes drilled in the Concrete through holes in the bottom Bearing Plate after members are in place. Side Retainers shall be placed after bolts are installed.

Drilled and set Anchor Bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side Retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE Sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity Epoxy Resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

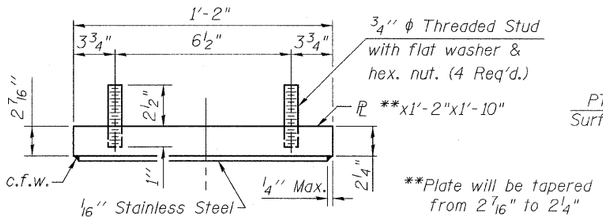
Bonding of 1/8" PTFE Sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Elastomeric Bearing Assembly, Type II.

Prior to ordering any material, the Contractor shall verify in the field all Bearing height and Shim thickness dimensions.

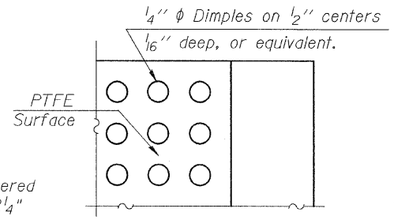
Min. jack capacity = 100 tons for Pier 9 at each Bearing location.

Steel extensions, shim plates and connection bolts are included with Furnishing Structural Steel.

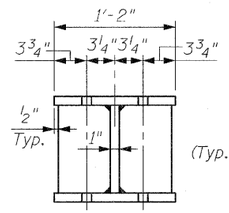


TOP BEARING ASSEMBLY

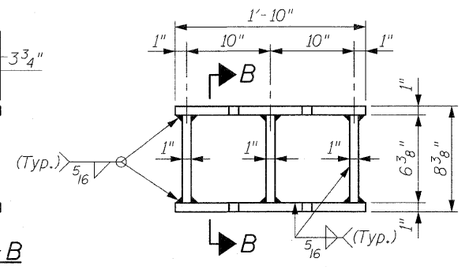
**Plate will be tapered from 2 7/16" to 2 1/4"



PLAN-PTFE SURFACE



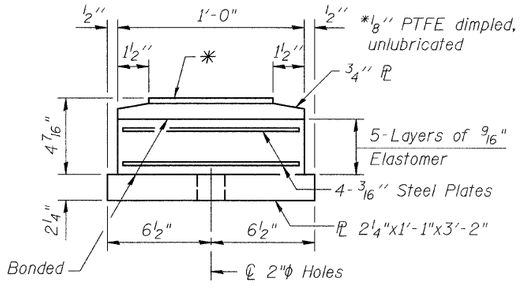
SECTION B-B



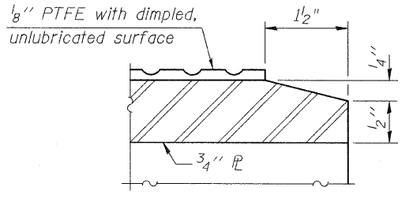
STEEL EXTENSION ELEVATION

STEEL EXTENSION DETAIL

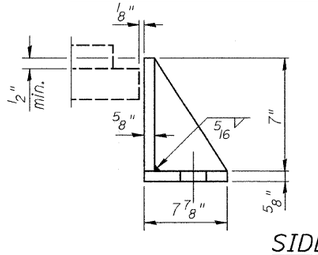
(8 required)



BOTTOM BEARING ASSEMBLY

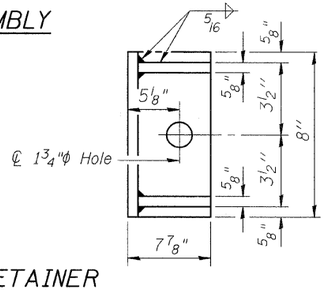


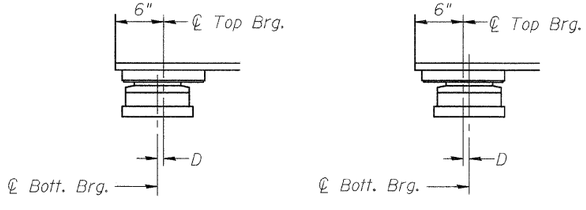
SECTION THRU PTFE



SIDE RETAINER

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





BELOW 50°F. (Move bott. brg. away from fixed brg.)

ABOVE 50°F. (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BEARING REACTIONS FROM EXISTING PLANS

PIER 9 (NORTH BEARING)		
R℄	(K)	83.1
R℄	(K)	65.9
RImp.	(K)	10.5
R (Total)	(K)	159.5

BILL OF MATERIAL AT PIER 9 (NORTH BEARINGS)

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	8
Anchor Bolts, 1 1/2"ϕ	Each	16
Furnishing and Erecting Structural Steel	Pound	2,150

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS – PLANNERS – SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

I-2E-2 10-1-08

FILE NAME = brg_assem_type-II.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELASTOMERIC BEARING ASSEMBLY, TYPE II
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 531 OF 541 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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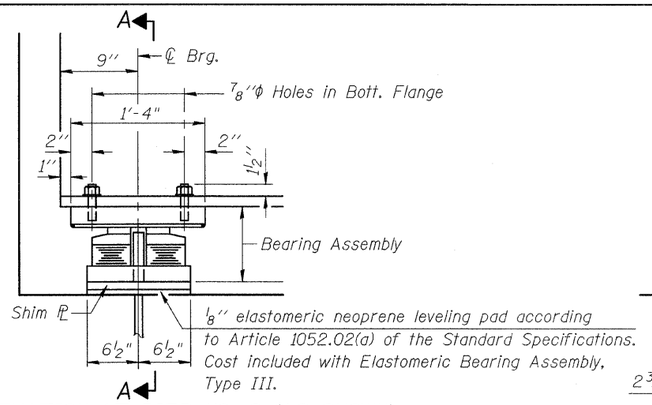
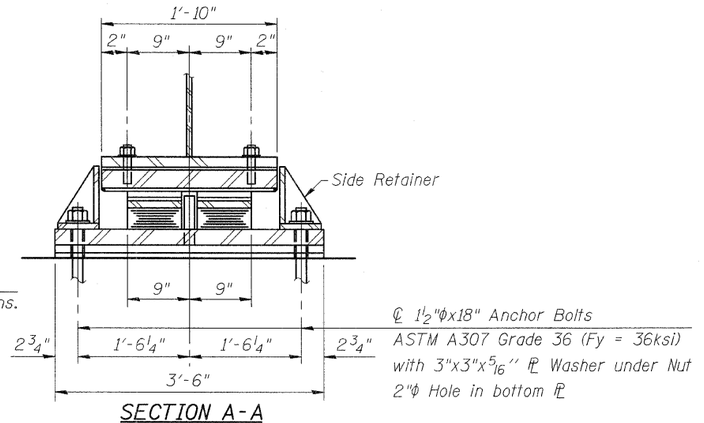
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

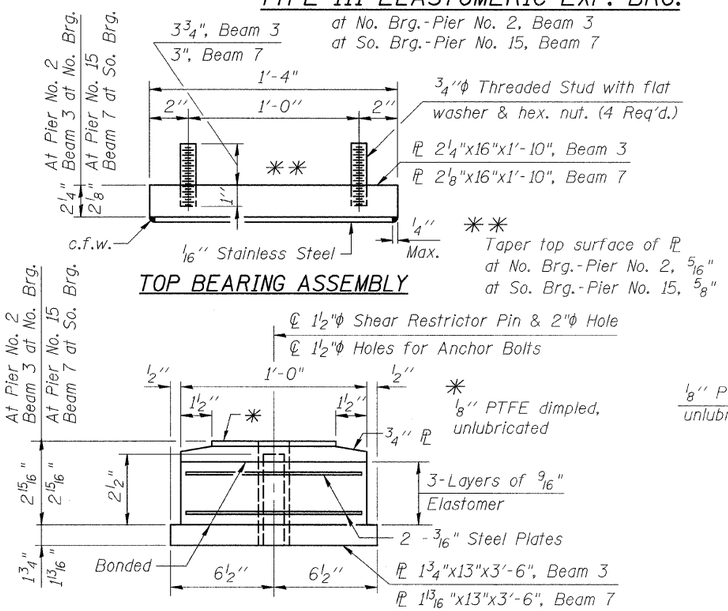


ELEVATION AT PIER NO. 2 (AS SHOWN)
ELEVATION AT PIER NO. 15 (OPP. HAND)



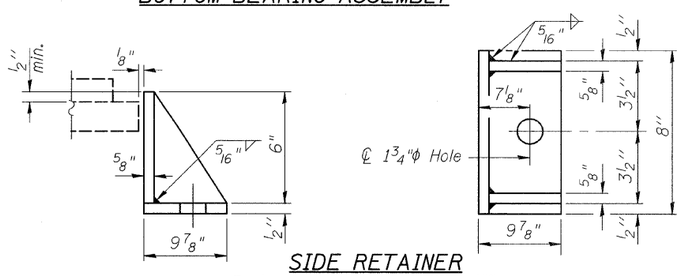
SECTION A-A

TYPE III ELASTOMERIC EXP. BRG.

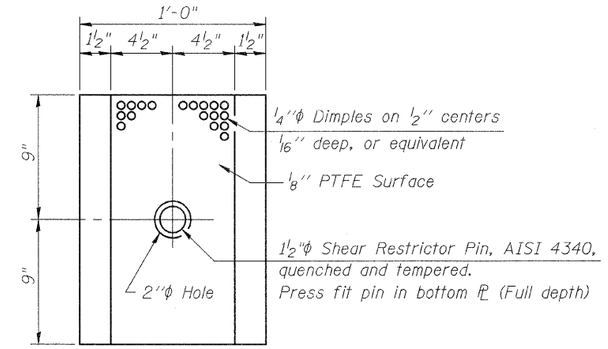


TOP BEARING ASSEMBLY

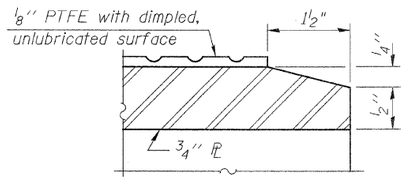
BOTTOM BEARING ASSEMBLY



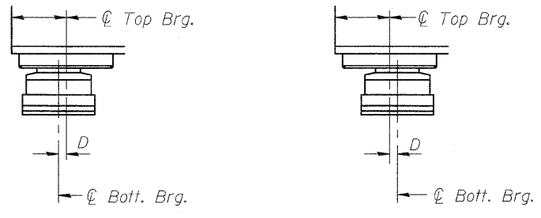
SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN-PTFE ELASTOMERIC BRG.



SECTION THRU PTFE



SETTING ANCHOR BOLTS AT EXP. BRG.
D=1/8" per each 100° of expansion for every 15° temp. change from the normal temp. of 50° F.

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 36 (Fy = 36ksi). The corresponding specified Grade of AASHTO M314 Anchor Bolts may be used in lieu of ASTM F1554.

Anchor Bolts for Type III Bearings shall be placed in holes drilled through the bottom Bearing Plate after members are in place. Side Retainers shall be placed after Bolts are installed.

Drilled and set Anchor Bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side Retainers and other Steel members required for the Bearing Assembly shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The 1/8" PTFE Sheet shall be bonded directly to the Top Steel Plate with a two-component, medium viscosity Epoxy Resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The Bond Agent shall be applied on the full area of the Contact Surfaces.

Bonding of 1/8" PTFE Sheet during vulcanizing process will be permitted provided the process and method of adjusting Assembly height is approved by the Engineer.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Elastomeric Bearing Assembly, Type III.

Prior to ordering any material, the Contractor shall verify in the field, all Bearing height and Shim thickness dimensions.

Min. jack capacity = 115 tons for Pier No. 2 at Beam 3 & 100 tons for Pier No. 15 at Beam 7.

BEAM REACTIONS
(From Existing Plans)

PIER 2 BEAM 3 NO. BRG.	PIER 15 BEAM 7 SO. BRG.
R_{DL} = 112.6	R_{DL} = 93.1k
R_{LL} = 63.6k	R_{LL} = 58.8k
R_{Imp} = 10.8k	R_{Imp} = 10.6k
R_{Total} 187.0k	R_{Total} 162.5k

BILL OF MATERIAL
AT PIER NO. 2, BEAM NO. 3
AT PIER NO. 15, BEAM NO. 7

Item	Unit	Total
Elastomeric Bearing Assembly, Type III	Each	2
Anchor Bolts, 1 1/2" ϕ	Each	4

LEGEND:
So. Brg. = South Bearing
No. Brg. = North Bearing

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

I-2E-3 10-1-08

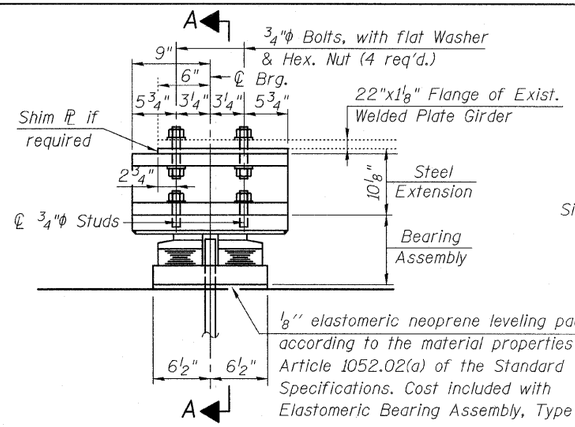
FILE NAME = brg_assem_type-III.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

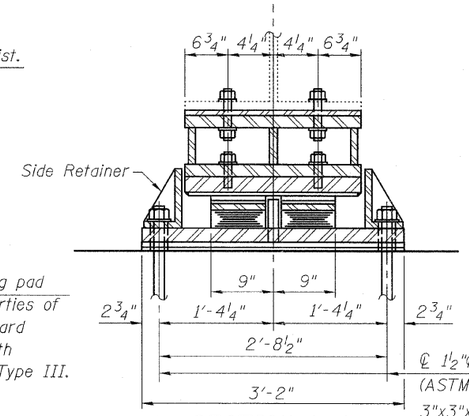
ELASTOMERIC BEARING ASSEMBLY, TYPE III
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S32 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	68
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

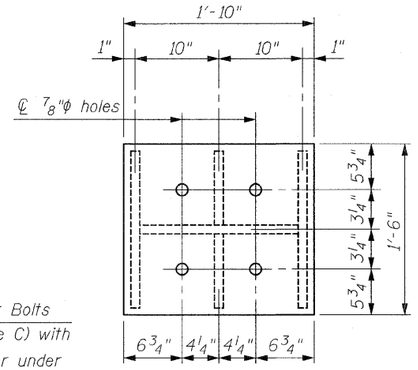


ELEVATION AT PIER 12



SECTION A-A

℄ 1 1/2"ϕx 18" Anchor Bolts (ASTM A 307 Grade C) with 3"x3"x 5/16" ℙ washer under nut 2"ϕ Holes in bottom ℙ



TOP & BOTTOM PLATE PLAN

TYPE III ELASTOMERIC EXP. BRG. WITH FABRICATED STEEL EXTENSION

(8 South Bearings required)

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 36 (Fy = 36ksi). The corresponding specified Grade of AASHTO M314 Anchor Bolts may be used in lieu of ASTM F1554.

Anchor Bolts for Type III Bearings shall be placed in holes drilled through the bottom Bearing Plate after members are in place. Side Retainers shall be placed after Bolts are installed.

Drilled and set Anchor Bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side Retainers shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The 1/8'' PTFE Sheet shall be bonded directly to the Top Steel Plate with a two-component, medium viscosity Epoxy Resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I.

The Bond Agent shall be applied on the full area of the Contact Surfaces.

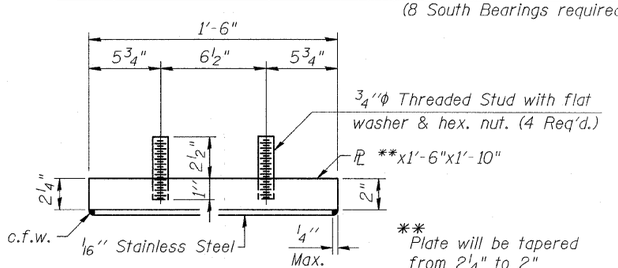
Bonding of 1/8'' PTFE Sheet during vulcanizing process will be permitted provided the process and method of adjusting Assembly height is approved by the Engineer.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Elastomeric Bearing Assembly, Type III.

Prior to ordering any material, the Contractor shall verify in the field, all Bearing height and Shim thickness dimensions.

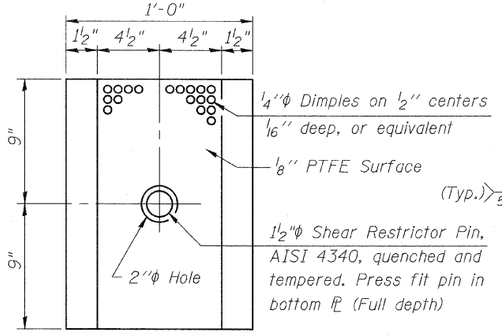
Min. jack capacity = 100 tons for Pier No. 12 at each Bearing location.

Steel extensions, shim plates and connection bolts are included with Furnishing Structural Steel.

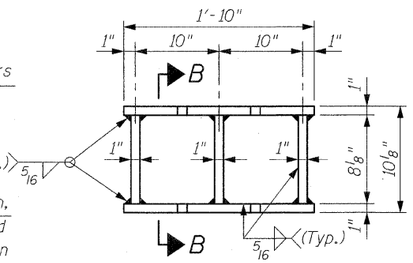


** Plate will be tapered from 2 1/4" to 2"

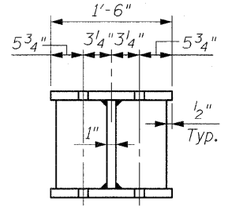
TOP BEARING ASSEMBLY



PLAN-PTFE ELASTOMERIC BRG.



STEEL EXTENSION ELEVATION



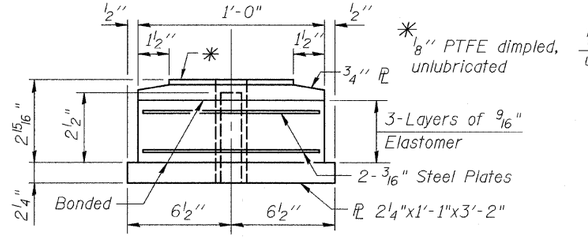
SECTION B-B

STEEL EXTENSION DETAIL

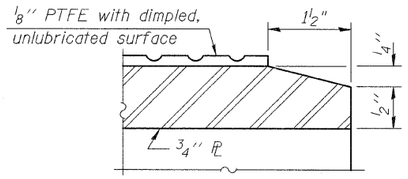
(8 required)

BEARING REACTIONS FROM EXISTING PLANS

PIER 12 (SOUTH BEARING)		
RP	(K)	83.1
RL	(K)	65.9
RImp.	(K)	10.5
R (Total)	(K)	159.5



1/8'' PTFE dimpled, unlubricated

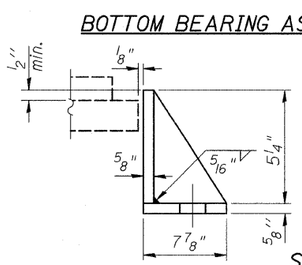


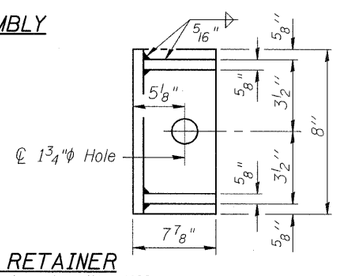
SECTION THRU PTFE

BILL OF MATERIAL AT PIER 12 (SOUTH BEARINGS)

Item	Unit	Total
Elastomeric Bearing Assembly, Type III	Each	8
Anchor Bolts, 1 1/2"ϕ	Each	16
Furnishing and Erecting Structural Steel	Pound	2,970

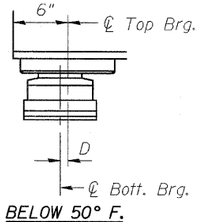
BOTTOM BEARING ASSEMBLY





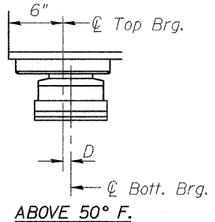
SIDE RETAINER

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



BELOW 50° F.

(Move bott. brg. away from fixed brg.)



ABOVE 50° F.

(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8'' per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

I-2E-3 10-1-08

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ENGINEERS – PLANNERS – SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

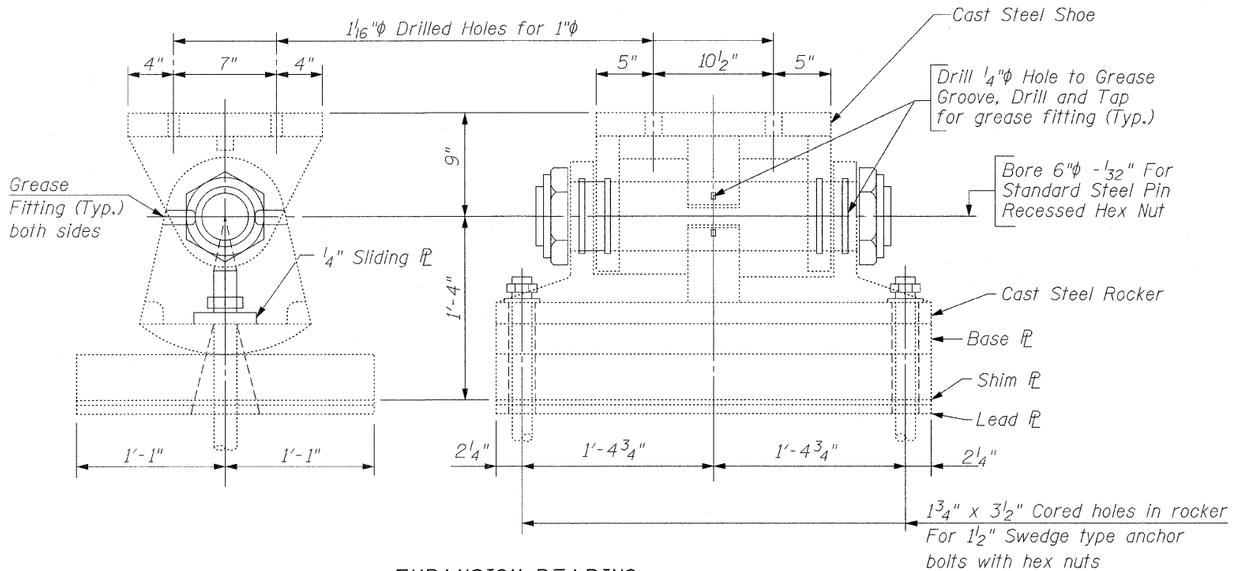
FILE NAME = brg_assem_type-III-2.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

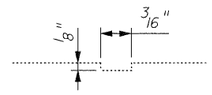
ELASTOMERIC BEARING ASSEMBLY, TYPE III
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S33 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	69
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

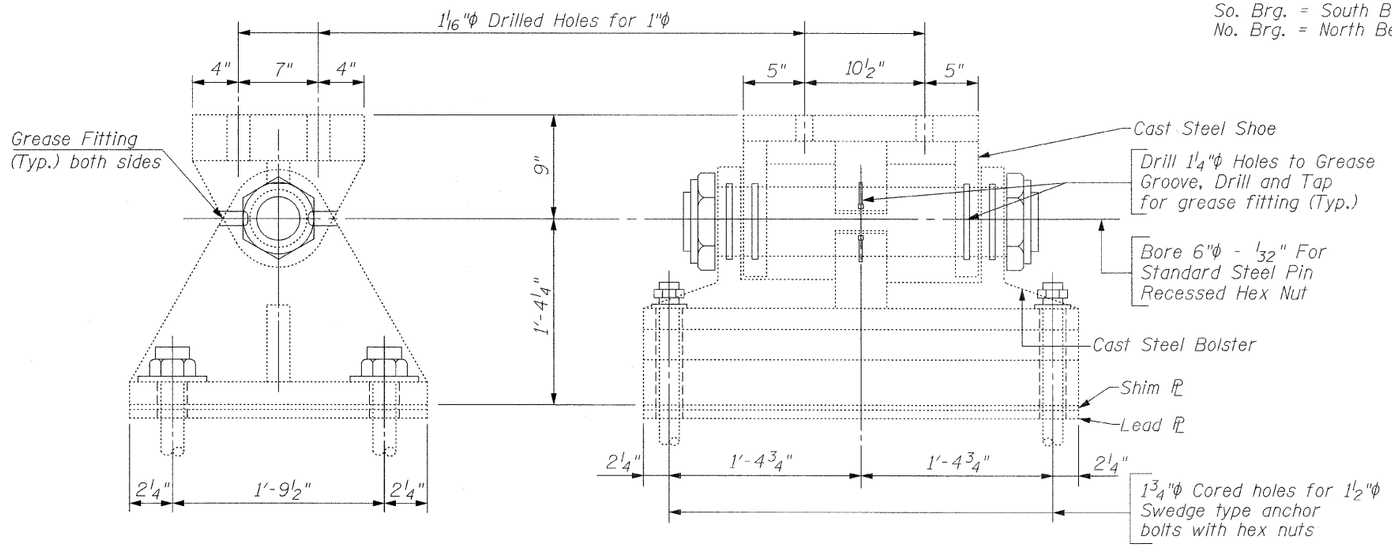


EXPANSION BEARING
(At Pier No. 11)



DETAIL OF GREASE GROOVE ON SADDLE

LEGEND:
So. Brg. = South Bearing
No. Brg. = North Bearing



FIXED BEARING
(At Pier No. 10)

TOTAL BILL OF MATERIAL

ITEM	LOCATION	UNIT	QUANTITY
Cleaning And Painting Bearings			
	Pier No. 10	Each	8
	Pier No. 11	Each	8
		Total	16

NOTES:
Details shown on this Sheet are for Information Only.

For details of Cleaning And Painting Bearings, see Special Provisions.

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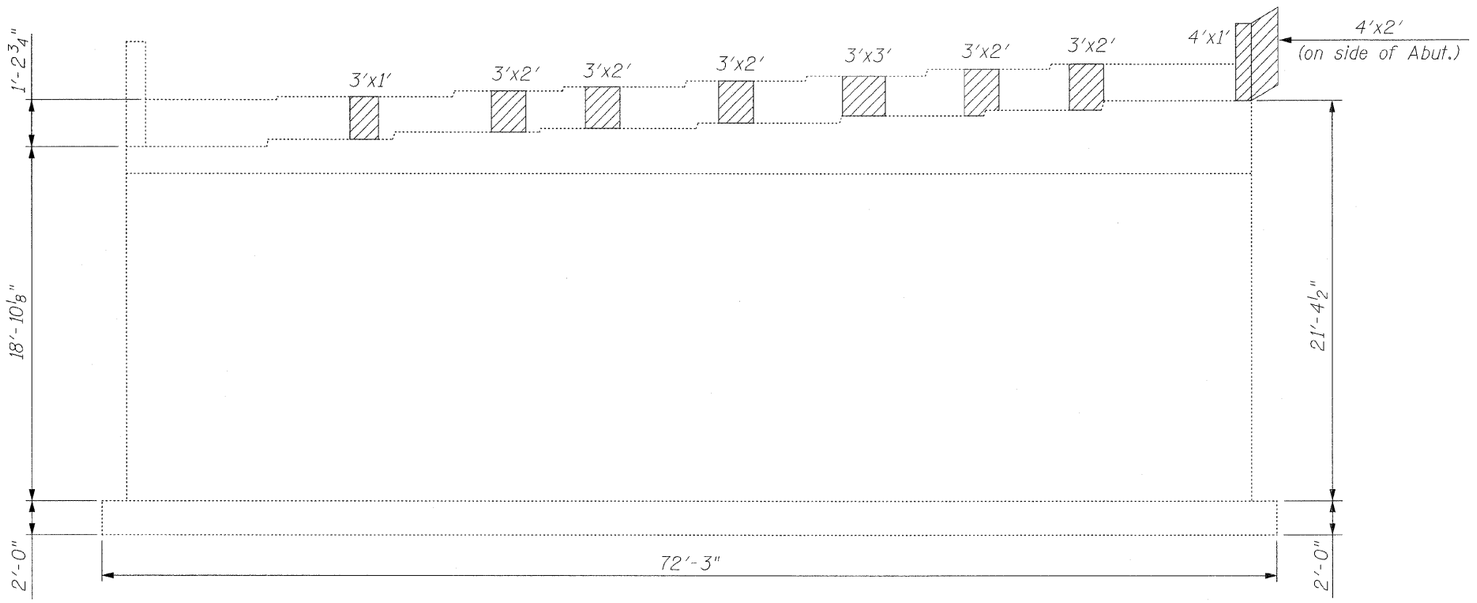
FILE NAME = brg_clean-paint.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLEANING AND PAINTING BEARINGS
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. 534 OF 541 SHEETS | STA. | TO STA.

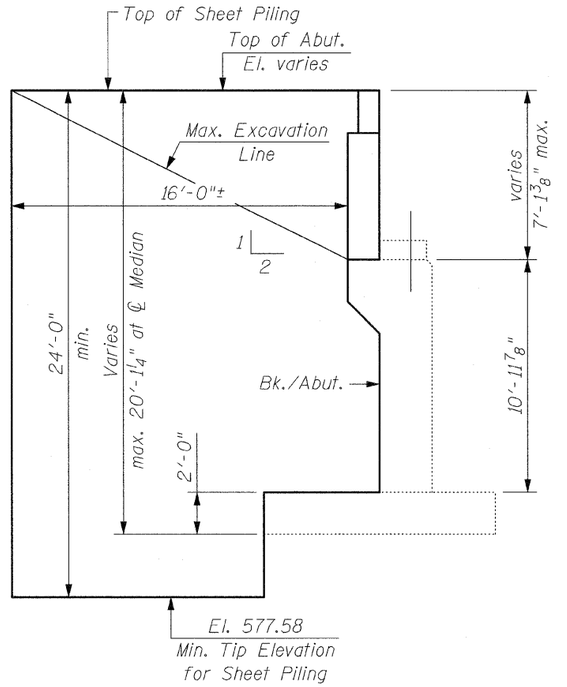
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	70
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



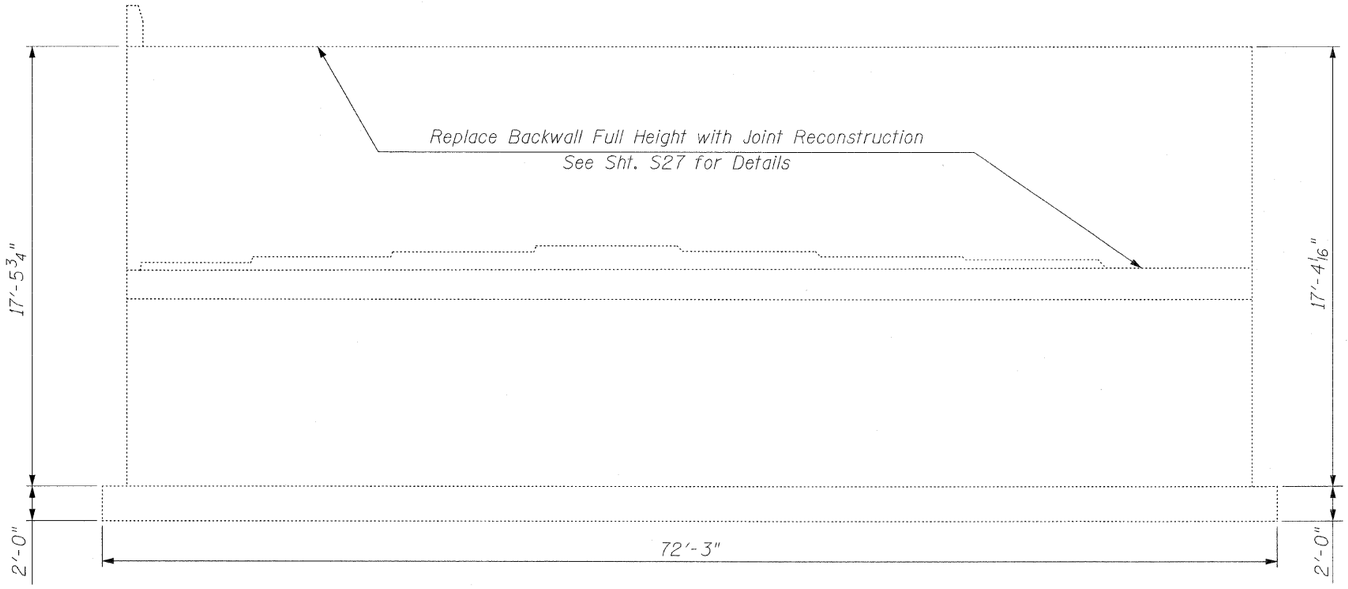
SOUTH ABUTMENT
(Looking South)

LEGEND:

Structural Repair of Concrete
(Depth Equal to or Less Than 5 In.)



TEMPORARY SHEET PILING
AT NORTH ABUTMENT



NORTH ABUTMENT
(Looking North)

NOTES:

If the Contractor chooses to alter the Temporary Cantilevered Sheet Piling System design requirements shown on plans, a design submittal including plan details and Calculations will be required for review and acceptance by the Engineer.

Minimum Section Modulus of Sheet Piling = 14.3 $in^3/Ft.$

Work this Sheet with Sht. S27.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	54
Temporary Sheet Piling	Sq. Ft.	374

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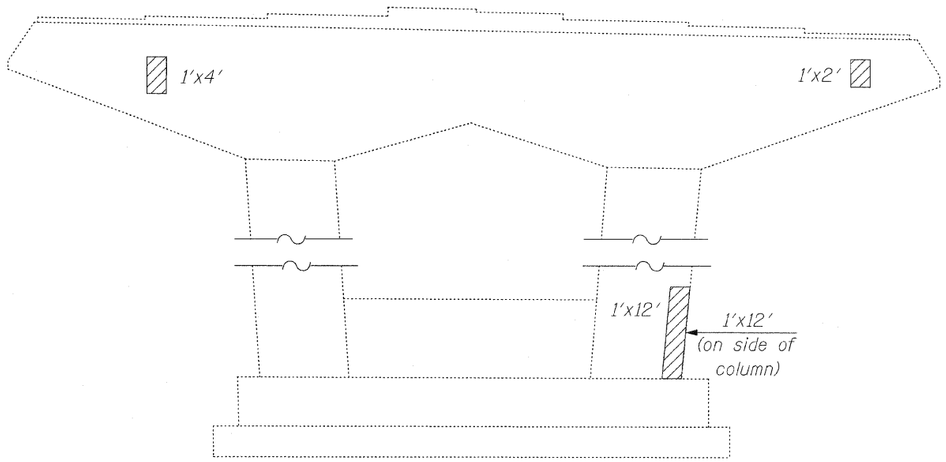
FILE NAME = abut_repair.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

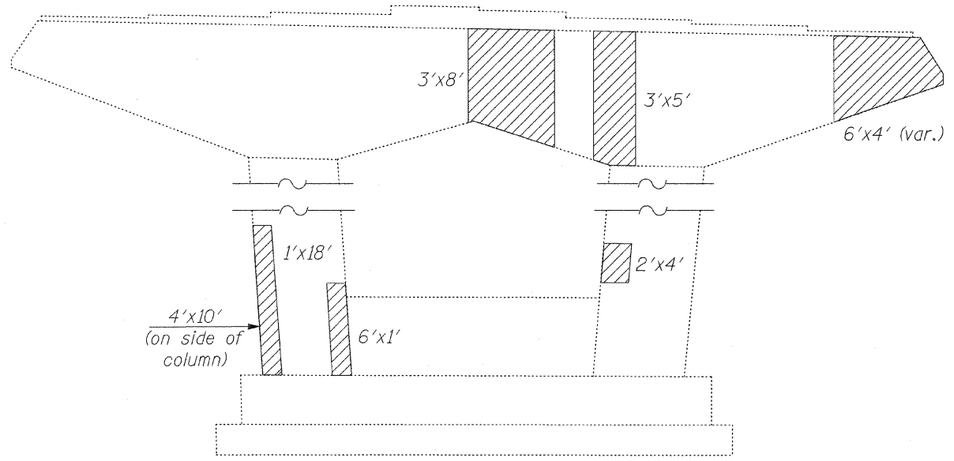
ABUTMENT REPAIRS
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. S35 OF S41 SHEETS | STA. | TO STA.

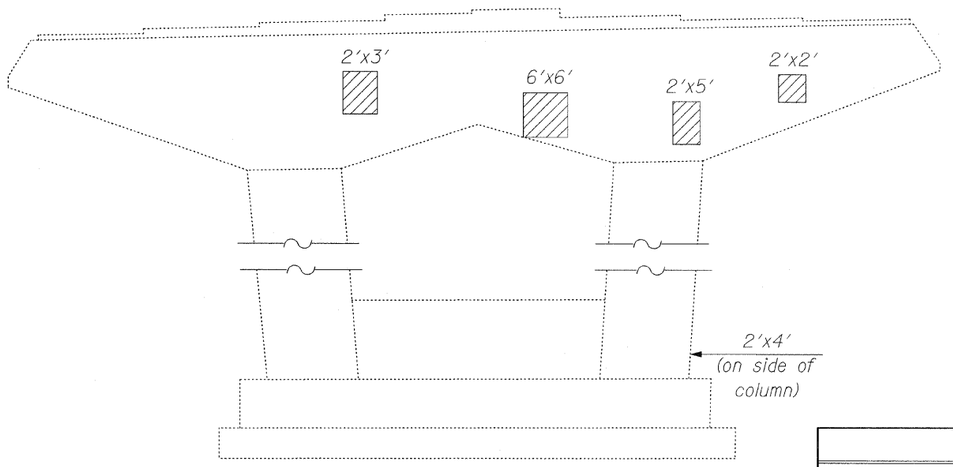
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	71
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SOUTH FACE
(Looking North)



SOUTH FACE
(Looking North)



NORTH FACE
(Looking South)

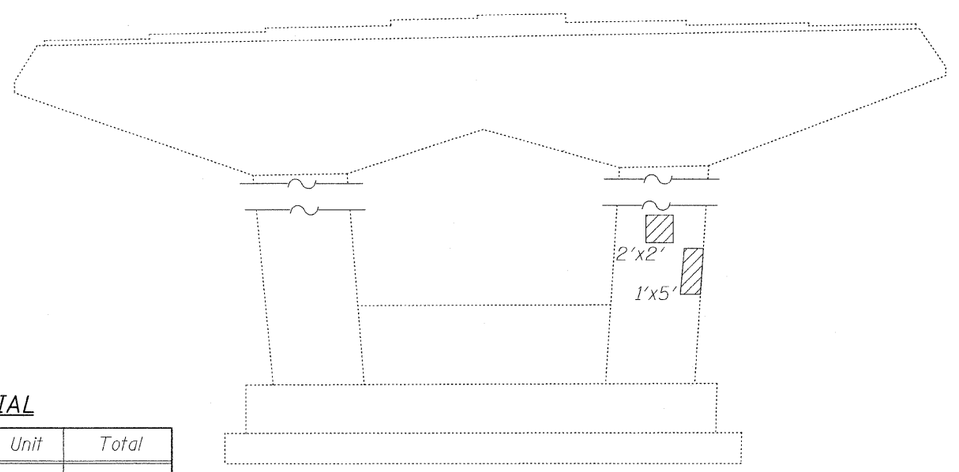
PIER NO. 2

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	238

LEGEND:

Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)



NORTH FACE
(Looking South)

PIER NO. 5

CHRISTIAN–ROGE & ASSOCIATES, INC.
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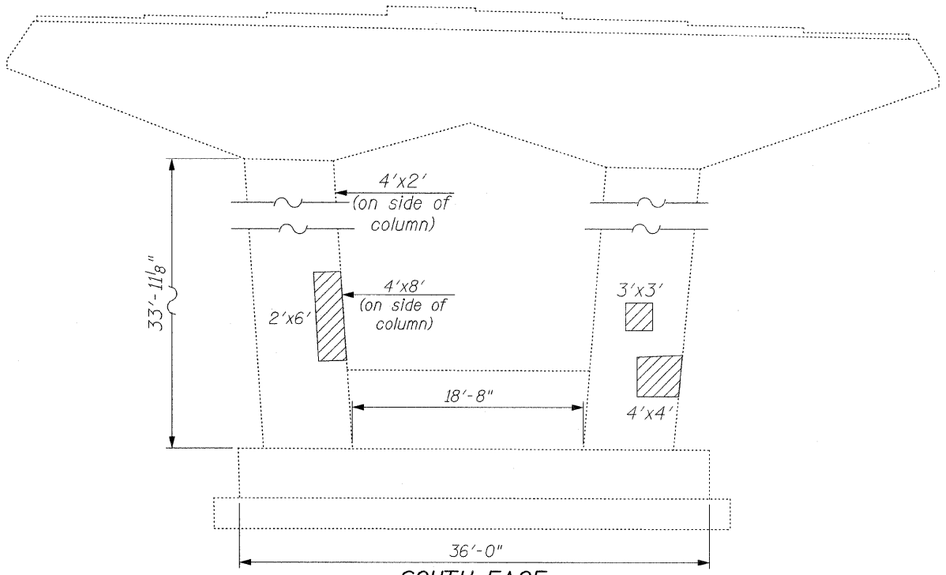
FILE NAME = pier_2-5-elev.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

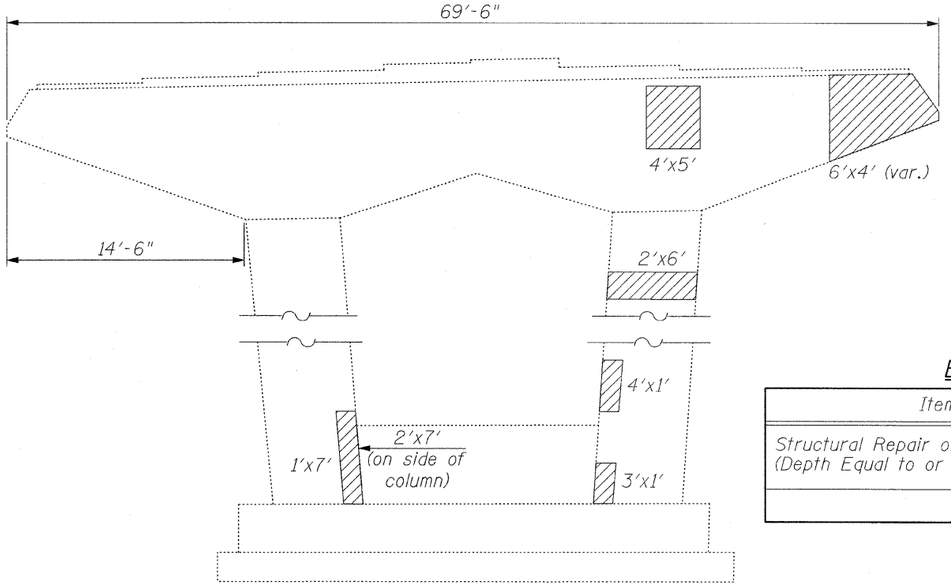
PIER NO. 2 & PIER NO. 5 REPAIRS
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016–2504**

SCALE: | SHEET NO. S36 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	72
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

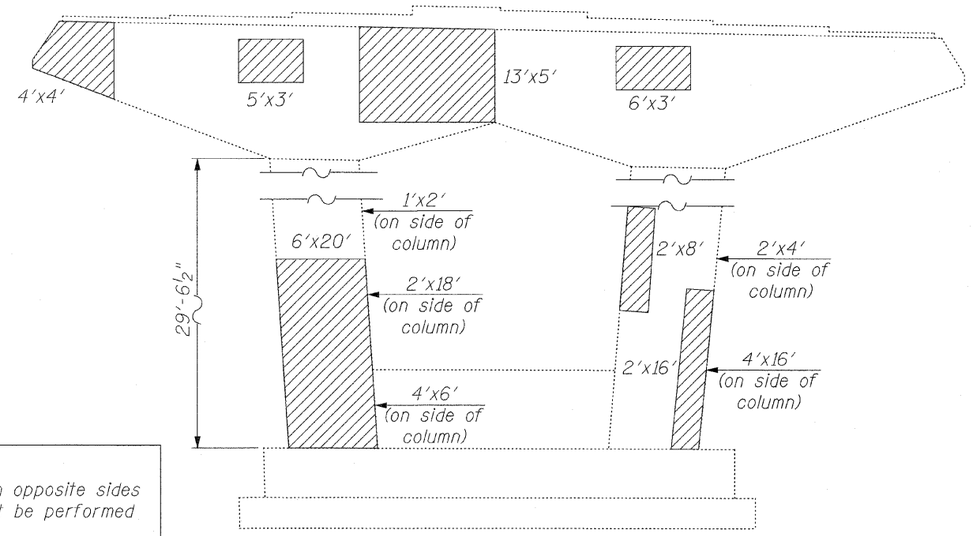


SOUTH FACE
(Looking North)



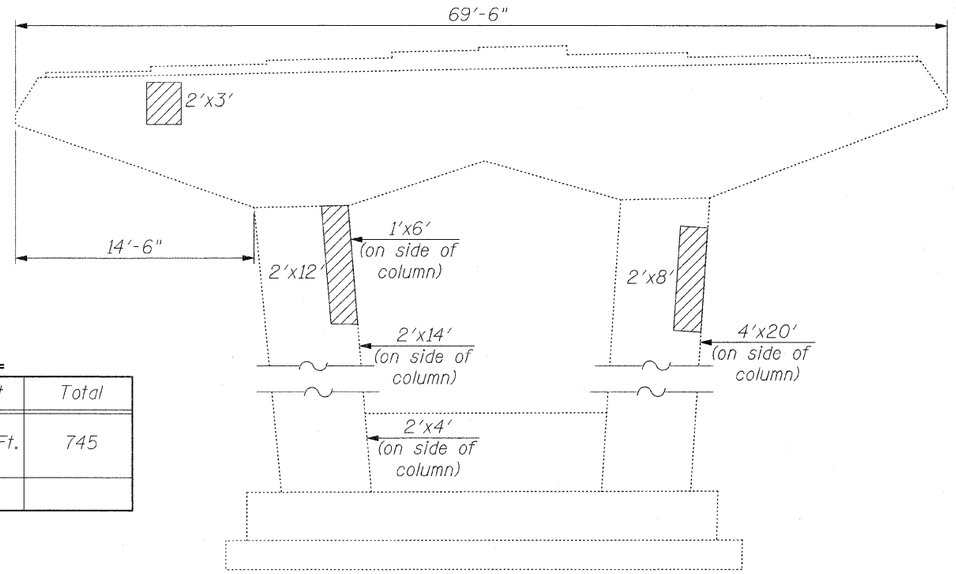
NORTH FACE
(Looking South)

PIER NO. 9



NOTE:
Any work needed on opposite sides of Columns shall not be performed at the same time

SOUTH FACE
(Looking North)



NORTH FACE
(Looking South)

PIER NO. 12

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	745

LEGEND:

Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)

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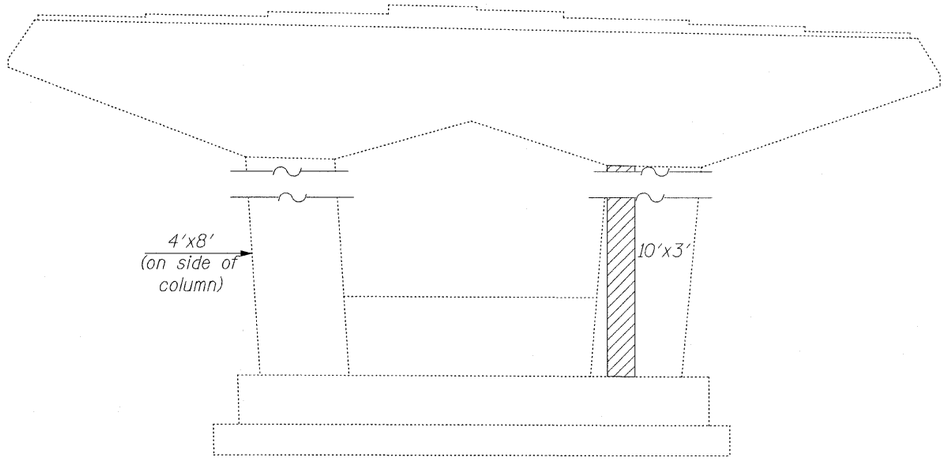
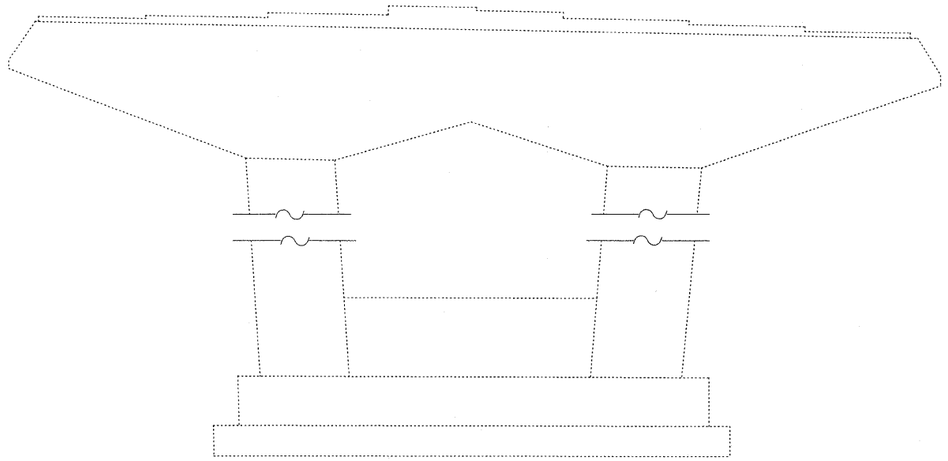
FILE NAME = pier_9-12-elev.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER NO. 9 & PIER NO. 12 REPAIRS LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504
		DRAWN - R.E.S./D.L./F.M.	REVISED -		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -		
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -		SCALE: SHEET NO. S37 OF S41 SHEETS STA. TO STA.

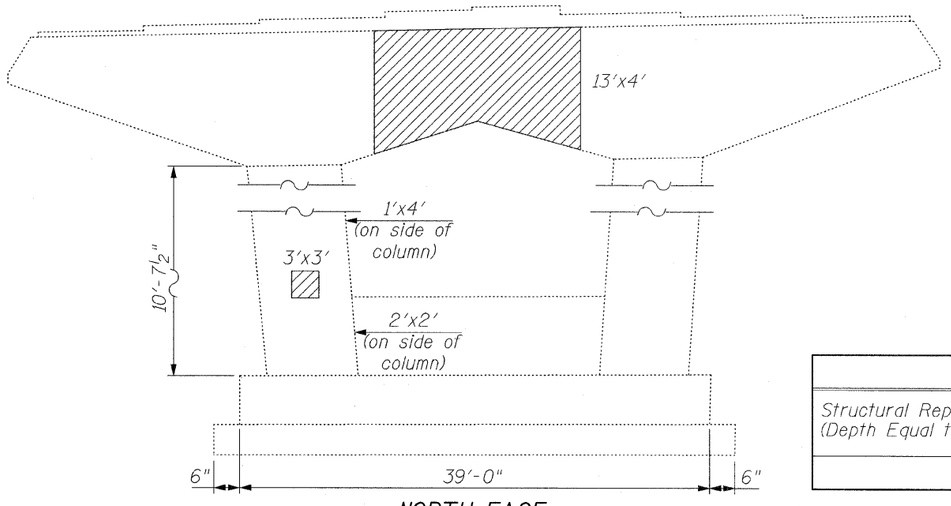
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	73
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SOUTH FACE
(Looking North)



SOUTH FACE
(Looking North)



NORTH FACE
(Looking South)

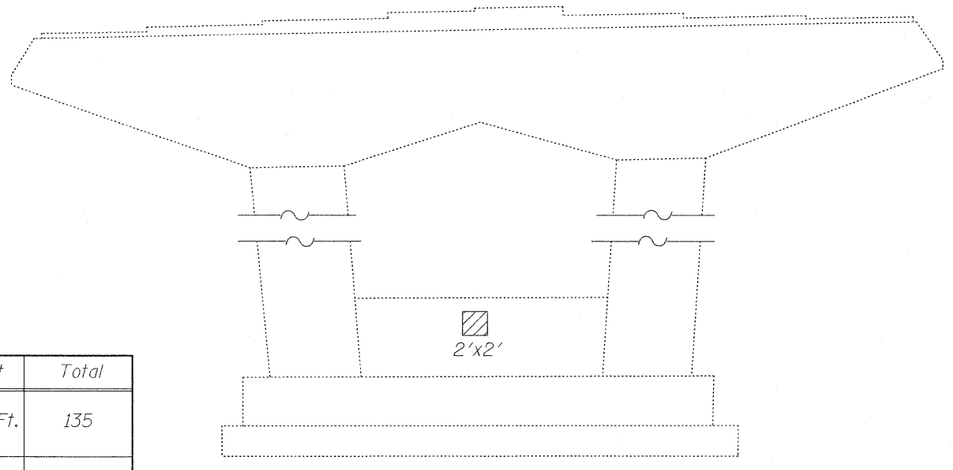
PIER NO. 15

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	135

LEGEND:

Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)



NORTH FACE
(Looking South)

PIER NO. 16

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

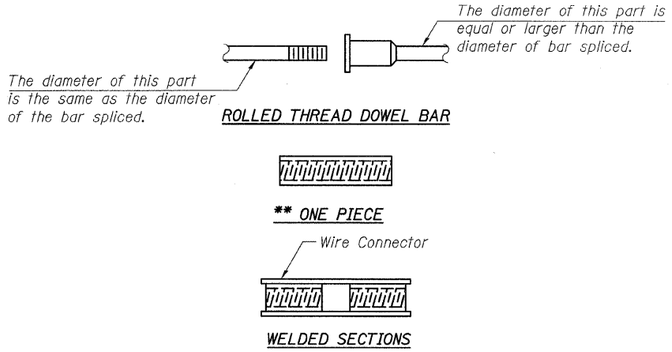
FILE NAME = pier_15-16-elev.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER NO. 15 & PIER NO. 16 REPAIRS
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

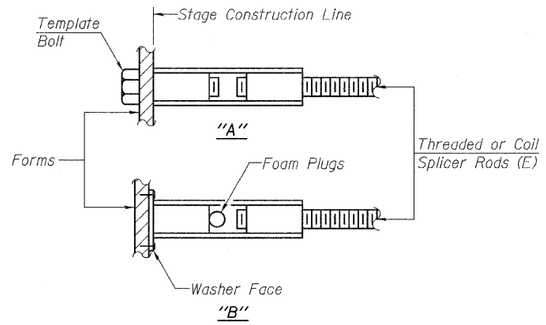
SCALE: | SHEET NO. S38 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	74
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

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

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

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

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

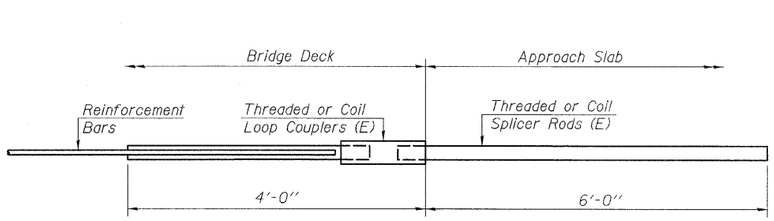
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

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

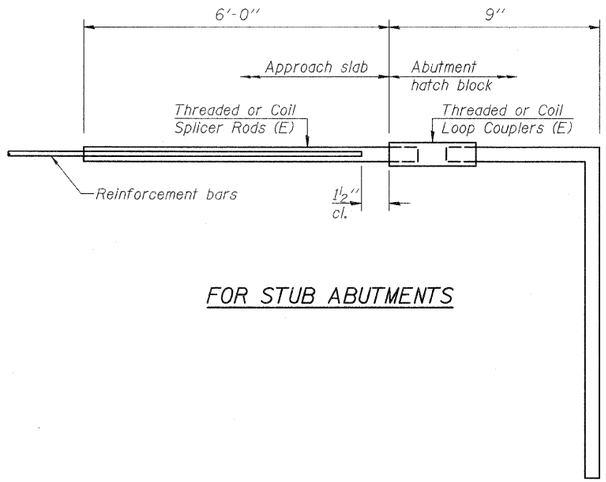
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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



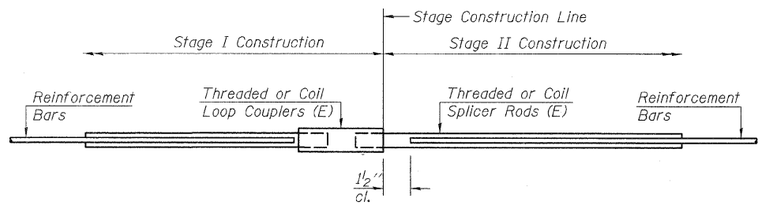
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 70



STANDARD

Bar Size	No. Assemblies Required	Location
#5	211	Expansion Joint Reconstructions
#6	3	
#7	8	
#5	10	North Abutment Backwall
#6	6	
TOTAL	238	

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

BSD-1 10-1-08

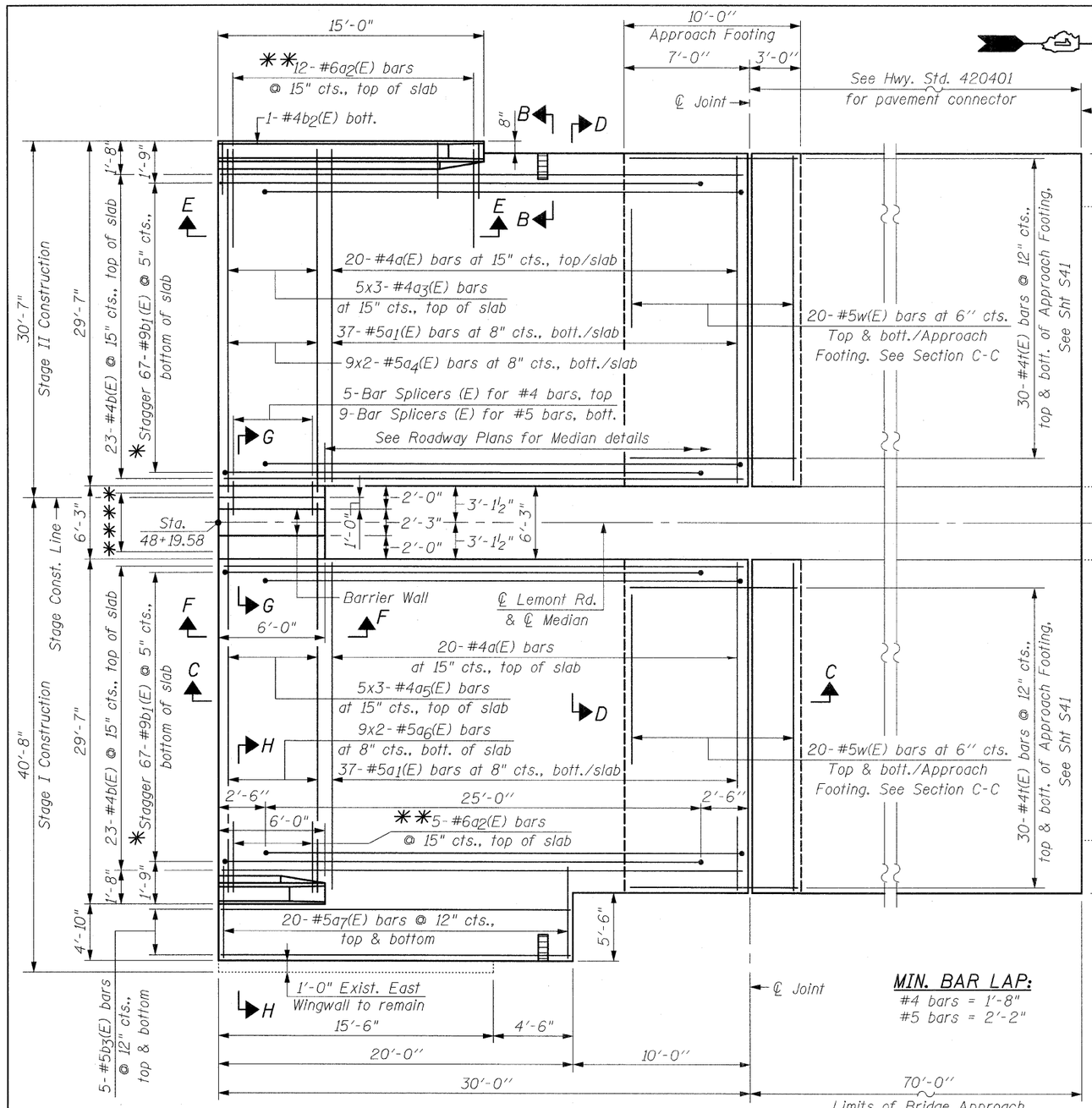
FILE NAME = bar_splicer.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 1/30/2009	DATE - JANUARY, 2009	REVISED -

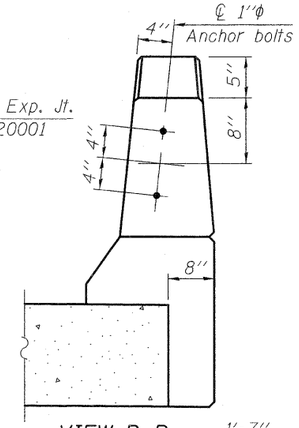
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

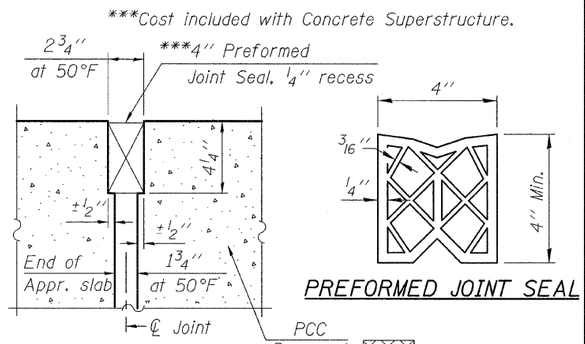
BAR SPLICER ASSEMBLY DETAILS
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

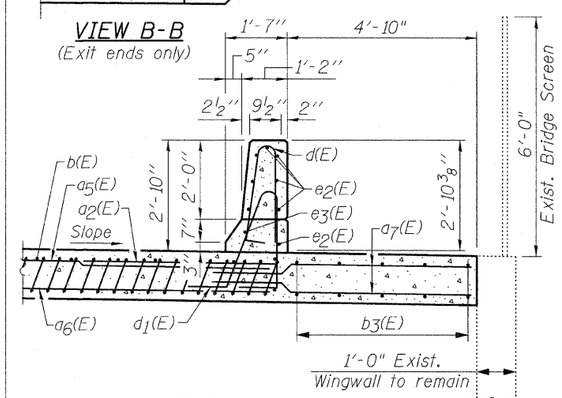
SCALE: | SHEET NO. 539 OF 541 SHEETS | STA. | TO STA.

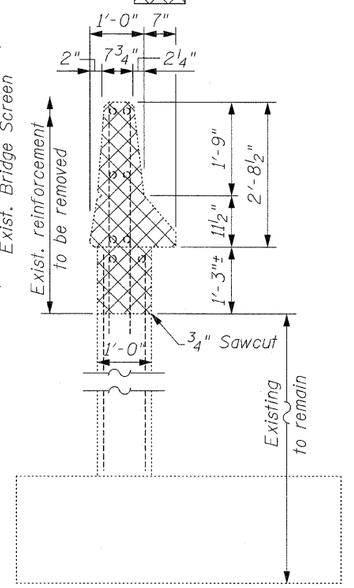
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	75
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

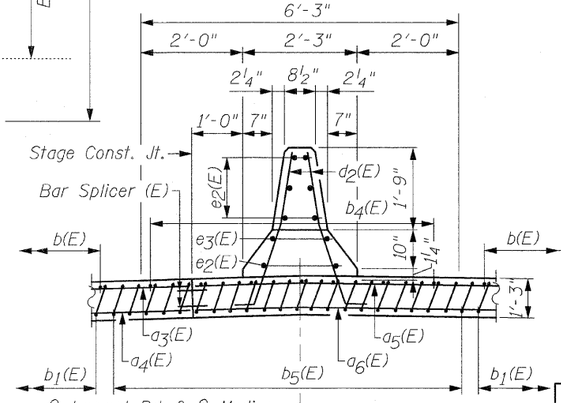


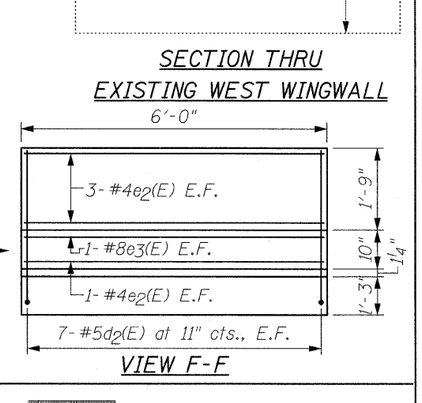












(Sheet 1 of 2)

BRIDGE APPROACH SLAB DETAILS

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS - PLANNERS - SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

BA-0 10-31-08

FILE NAME = approach_slab-1.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS - I
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S40 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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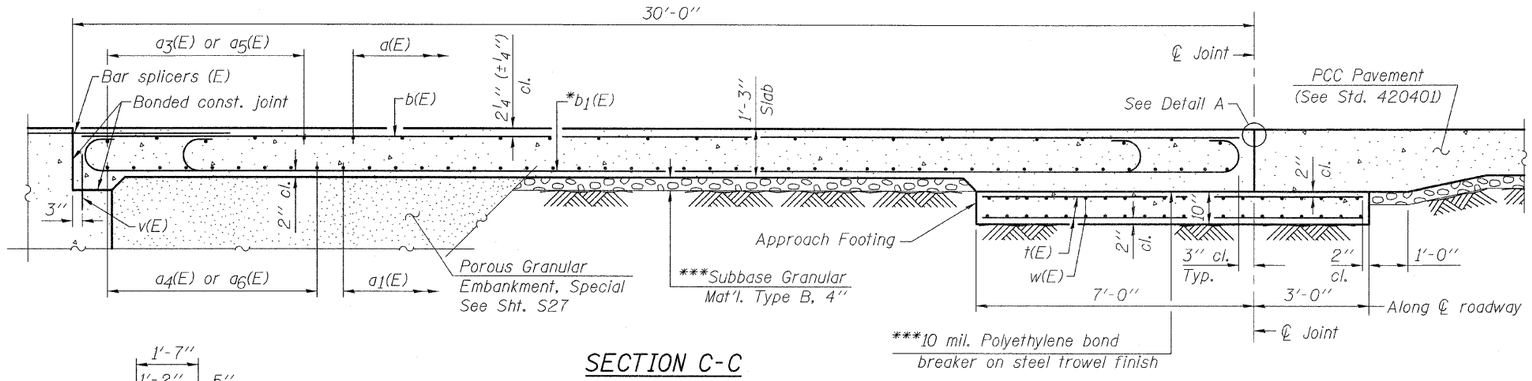
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

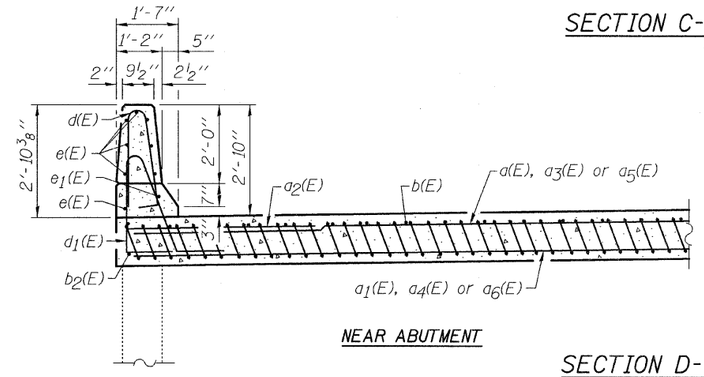


SECTION C-C

*Tilt #9b_1(E) bars as required to maintain clearance.

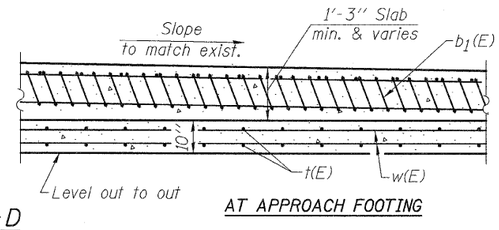
***Cost included with Concrete Superstructure.

Notes:
See Sht. S40 for Detail A & View B-B.
Approach Slab and Parapet 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 Sht. S27.
The Approach Footing maximum applied service bearing pressure (Qmax) = 2.0ksf.
For Bar Splicer Details, see Sht. S39.
Cost of excavation for Approach Footing included with Concrete Structures.
For Porous Granular Embankment, Special and drainage treatment details, see Sht. S27.
Bars indicated thus 5x3-#4 etc., indicates 5 lines of bars with 3 lengths per line.



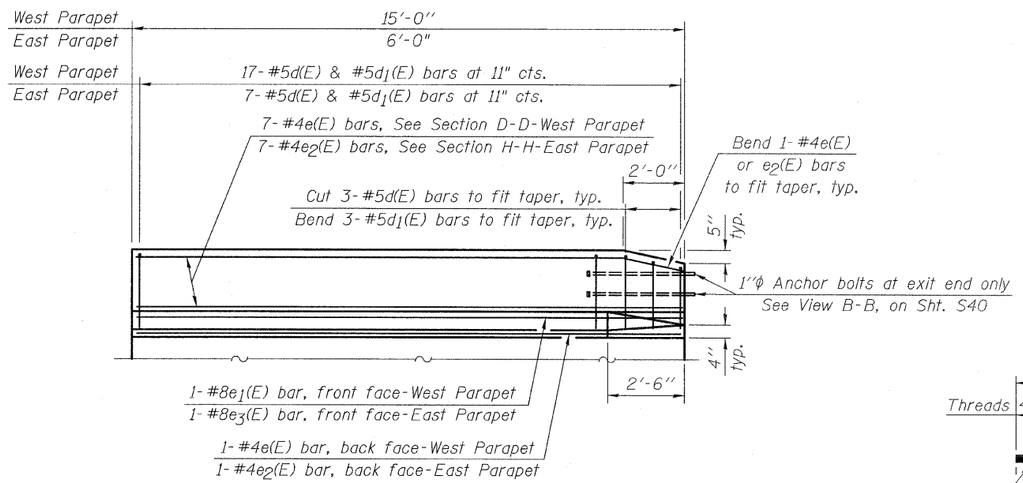
NEAR ABUTMENT

WEST ABUTMENT



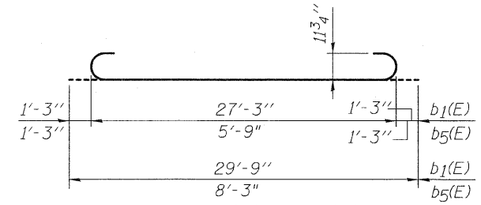
SECTION D-D
(Looking North)
(See Plan for dimensions not shown)

AT APPROACH FOOTING

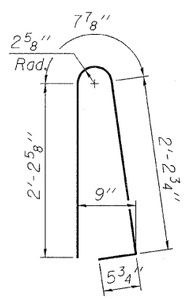


VIEW E-E

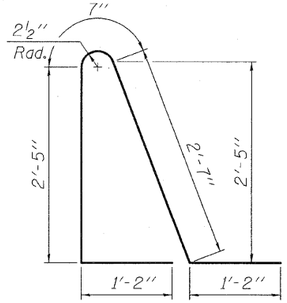
WEST PARAPET
(East Parapet opposite hand)



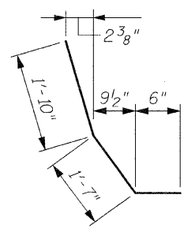
BARS b_1(E) & b_5(E)



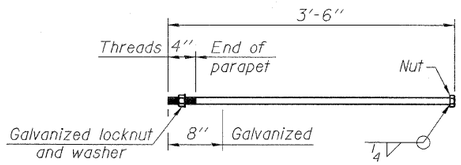
BAR d(E)



BAR d_1(E)



BAR d_2(E)



1"ϕ ANCHOR BOLT
(Cost included with Concrete Superstructure)

BA-0 10-31-08

BILL OF MATERIAL (NORTH APPROACH)

Bar	No.	Size	Length	Shape
d(E)	40	#4	28'-9"	—
a1(E)	74	#5	28'-9"	—
a2(E)	17	#6	6'-0"	—
a3(E)	15	#4	11'-3"	—
a4(E)	18	#5	16'-3"	—
a5(E)	15	#4	14'-7"	—
a6(E)	18	#5	21'-3"	—
a7(E)	40	#5	7'-0"	—
b(E)	46	#4	29'-8"	—
b1(E)	134	#9	29'-9"	⌒
b2(E)	1	#4	14'-8"	—
b3(E)	10	#5	19'-8"	—
b4(E)	6	#4	5'-9"	—
b5(E)	15	#9	8'-3"	⌒
d(E)	24	#5	5'-7"	⌐
d1(E)	24	#5	7'-11"	⌐
d2(E)	14	#5	3'-11"	⌐
e(E)	8	#4	14'-8"	—
e1(E)	1	#8	14'-8"	—
e2(E)	16	#4	5'-8"	—
e3(E)	3	#8	5'-8"	—
t(E)	120	#4	9'-8"	—
w(E)	80	#5	28'-9"	—
Concrete Removal			Cu. Yd.	3.0
Concrete Superstructure			Cu. Yd.	93.2
Concrete Structures			Cu. Yd.	19.8
Reinforcement Bars, Epoxy Coated			Pound	23,310
Bar Splicers			Each	14

(Sheet 2 of 2)

BRIDGE APPROACH SLAB DETAILS

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS – PLANNERS – SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

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		DRAWN - R.E.S./D.L./F.M.	REVISED -	
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	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS – II
LEMONT ROAD OVER DES PLAINES RIVER S.N. 016-2504

SCALE: | SHEET NO. S41 OF S41 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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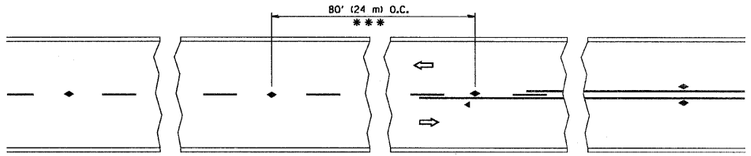
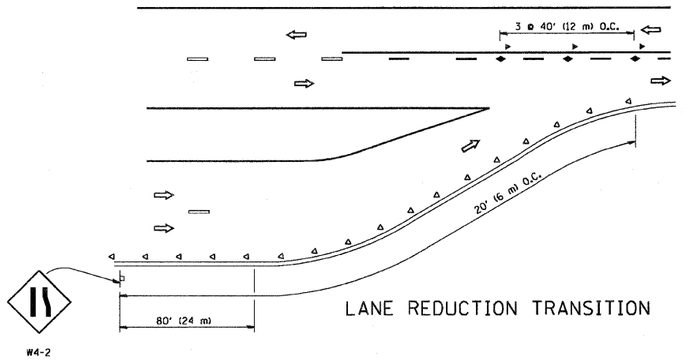
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

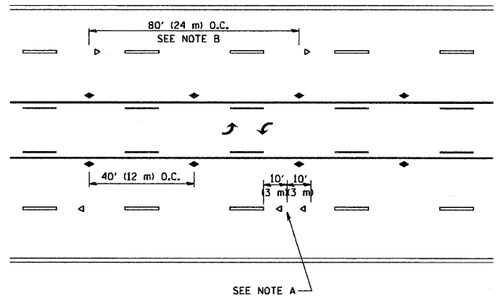


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

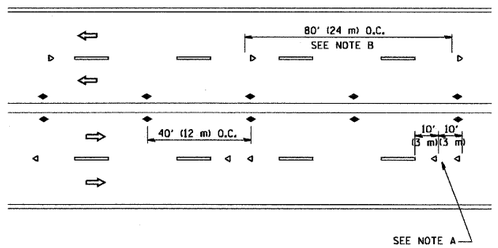
TWO-LANE/TWO-WAY



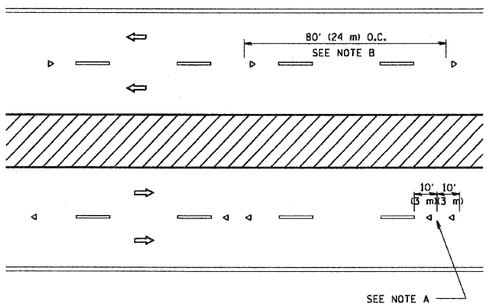
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

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

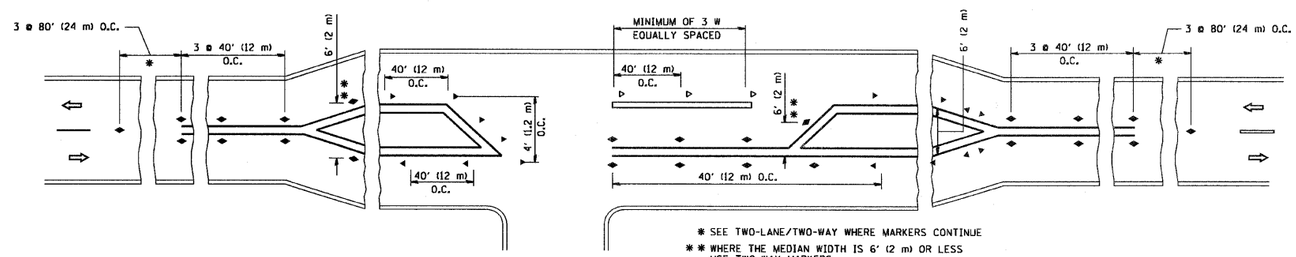
LANE MARKER NOTES

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

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



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

LEFT TURN

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

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		DRAWN -	REVISED - T. RAMMACHER 03-12-99
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	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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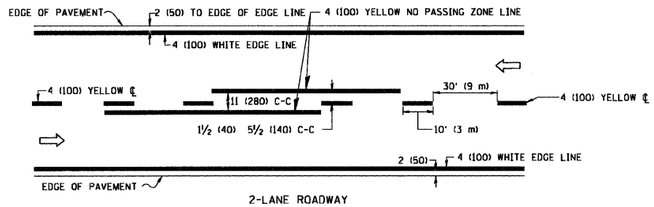
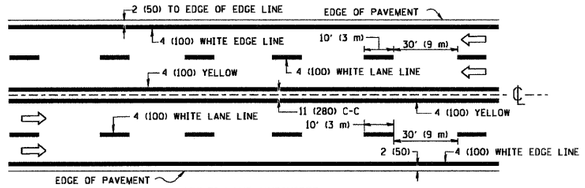
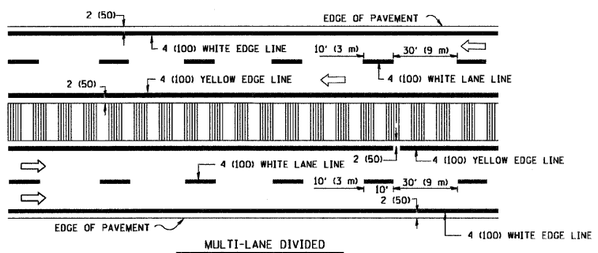
	TC-11	CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



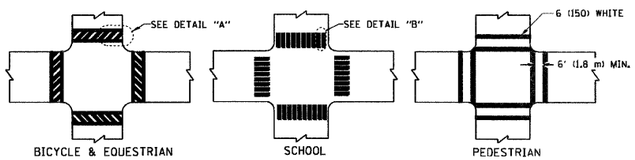
MULTI-LANE UNDIVIDED

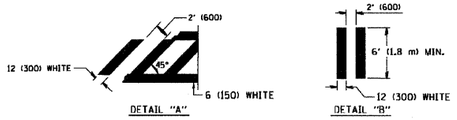


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

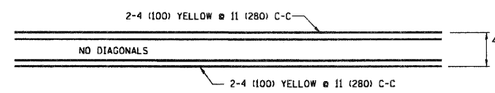
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

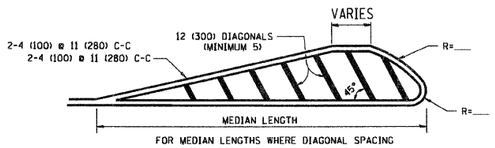




TYPICAL CROSSWALK MARKING



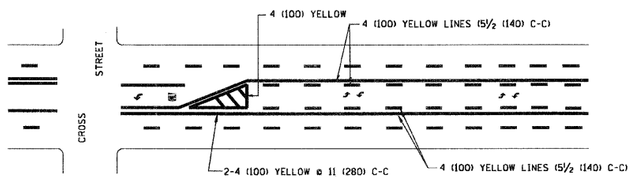
4' (1.2 m) WIDE MEDIANS ONLY



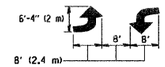
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

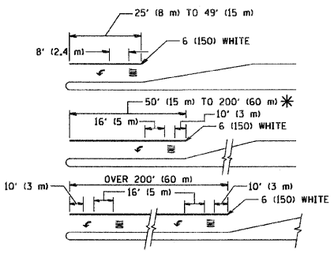


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

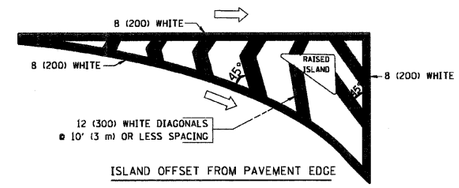


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

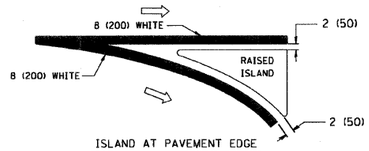
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 ⌀ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⌀ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⌀ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⌀ 6 (150) 12 (300) ⌀ 45° 12 (300) ⌀ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⌀ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 5' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) ⌀ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

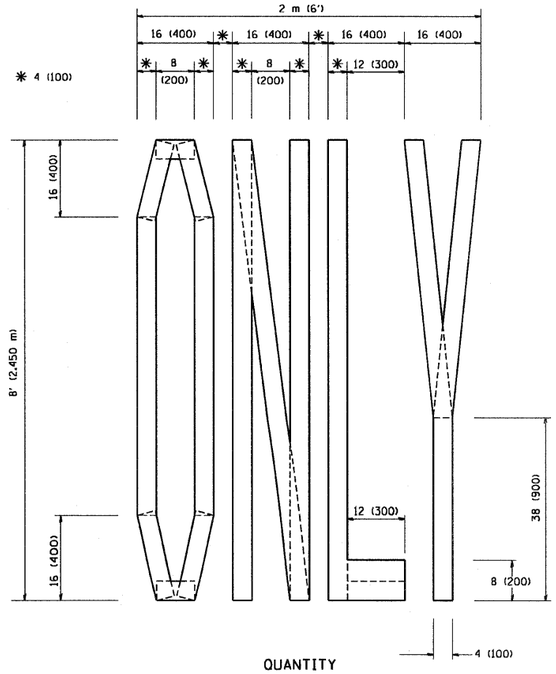
FILE NAME = W:\diststd\22x34\tc13.dgn	USER NAME = gaglenobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

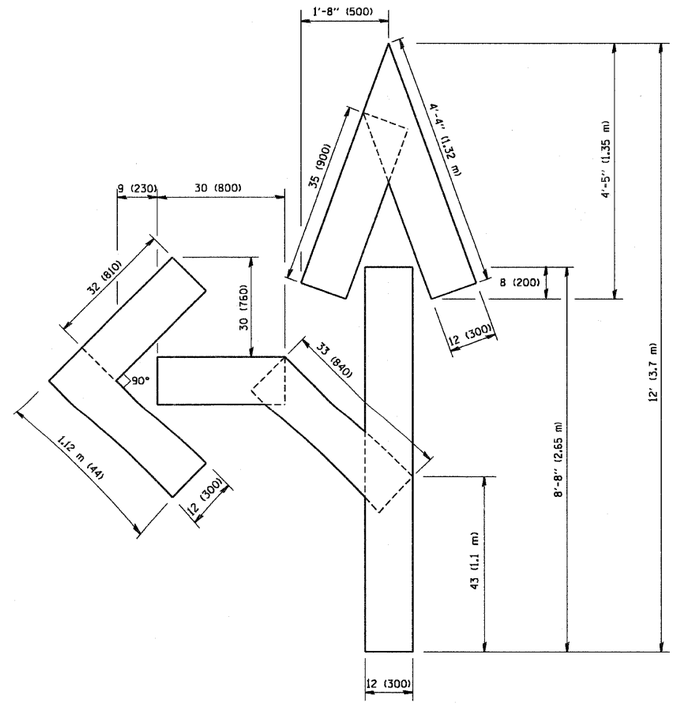
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

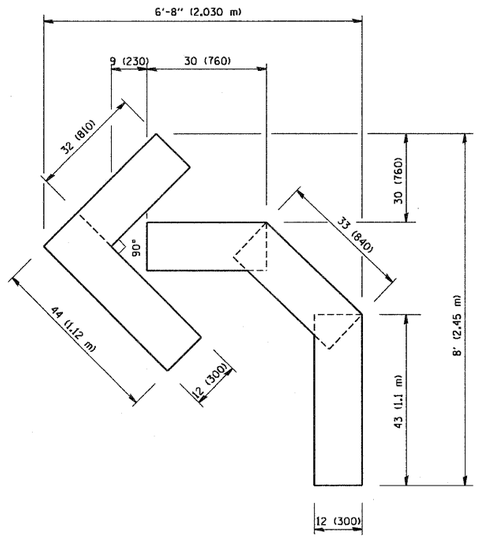
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	79
	TC-13	CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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



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



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

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-I-2	COOK	80	80
	TC-16	CONTRACT NO. 60D76		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		