04-24-2015 LETTING ITEM 029

CONTRACT NO. 62A24

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

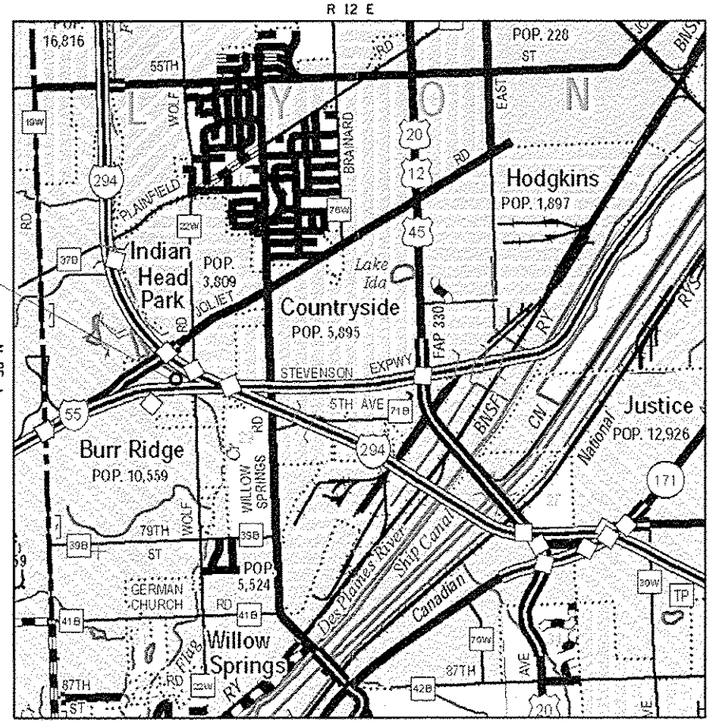
PROPOSED
HIGHWAY PLANS

MS ROUTE 4010: 70TH PLACE
OVER FLAG CREEK
SECTION 0202-602-HB-BR
BRIDGE JOINT AND DECK REPAIRS
COOK COUNTY
C-91-107-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN
INDIAN HEAD PARK

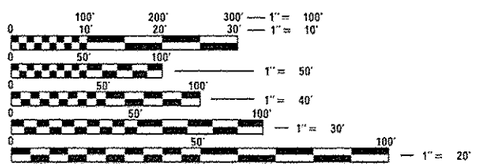
SECTION 0202-602-HB-BR
STRUCTURE NO. 016-1063
REPAIRS TO SINGLE SPAN PRE-STRESSED CONCRETE I-BEAM STRUCTURE CARRYING 70th PLACE OVER FLAG CREEK



D-91-107-15

LOCATION OF SECTION INDICATED THUS: –

N



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

PROJECT MANAGER: ISSAM RAYYAN (847) 705-4178
PROJECT ENGINEER: ROBERT BORO (847) 705-4237

CONTRACT NO. 62A24

TRAFFIC DATA

DESIGN DESIGNATION

70TH PLACE
TWO LANE LOCAL ROAD
ADT = 310 (2032)

TOTAL LENGTH OF PROJECT	= 159 FEET	= 0.030 MILES
NET LENGTH OF PROJECT	= 159 FEET	= 0.030 MILES

Anthony W. Miller 2/18/15

ANTHONY W. MILLER
062-050804
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
Exp 11/30/15
ENGINEERS SEAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 20 2015
John Fortmann Jr.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Mar 20 2015
John D. Baranzelli P.E. for
acting ENGINEER OF DESIGN AND ENVIRONMENT
Mar 20 2015
Omer Osman P.E. for
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

Hutchison Engineering, Inc.
SINCE 1945
JACKSONVILLE • SHOREWOOD • PEORIA

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INDEX OF SHEETS

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635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
643001-02	SAND MODULE IMPACT ATTENUATORS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-14	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
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COMMITMENTS

NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

GENERAL NOTES

1.IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.

2.SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.

3.BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

4.THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF INDIAN HEAD PARK.

5.THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

6.THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR "GUARDRAIL REMOVAL."

7.ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

8.ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

9.BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

10.THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

11.THE ENGINEER SHALL CONTACT JOE ECKERT, AREA TRAFFIC FIELD TECHNICIAN, AT (847) 705-4412 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

12.THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.

13.THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

14.THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

15.DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

HMA MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	LIFT THICKNESS	QMP
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm) -1¾"	4% @ 70 Gyr.	1¾" & VARIABLE (MIN 1½")	QC/QA
CLASS D PATCHES 8 INCH (HMA BINDER IL 19.0)	4% @ 70 Gyr.		QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)			

QUALITY MANAGEMENT PROGRAM (QMP) INDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

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

THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME = V:\Transportation\3238.01\CADD SHTS\62A24-SHT-GENNOTE.dgn	USER NAME = JDoan	DESIGNED - AWM	REVISED -
		DRAWN - JCW	REVISED -
	PLOT SCALE = 2.00 ' / in.	CHECKED - AWM	REVISED -
	PLOT DATE = 2/10/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STANDARDS, GENERAL NOTES AND COMMITMENTS
70th PLACE OVER FLAG CREEK

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	2
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

				100% STATE	
				CONSTRUCTION CODE	
			URBAN		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0014 016-1063	ROADWAY 0004 RURAL
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	7		7
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	104		104
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	161		161
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	23		23
44004000	PAVED DITCH REMOVAL	FOOT	9		9
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	83		83
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	8		8
50102400	CONCRETE REMOVAL	CU YD	22.0	22.0	
50200100	STRUCTURE EXCAVATION	CU YD	54	54	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	28.0	28.0	
50300260	BRIDGE DECK GROOVING	SQ YD	255	255	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2010	2010	
50800515	BAR SPLICERS	EACH	24	24	
~~54002020~~	~~EXPANSION BOLTS 3/4 INCH~~	~~EACH~~	~~144~~	~~144~~	

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Rev.

FILE NAME = Y:\Transportation\3230.81\CADD SHTS\D162A24-SMT-SQQ.dgn	USER NAME = JDean	DESIGNED - AWM	REVISED -
		DRAWN - JCW	REVISED -
	PLOT SCALE = 2.00 ' / in.	CHECKED - AWM	REVISED -
	PLOT DATE = 2/18/2019	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
70th PLACE OVER FLAG CREEK

SCALE: NONE | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-H8-BR	COOK	30	3
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE (100% STATE) BRIDGE 0014 016-1063	CONSTRUCTION CODE (100% STATE) ROADWAY 0004 RURAL
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50		50
*	63100105	TRAFFIC BARRIER TERMINAL, TYPE 10	EACH	4		4
	63200310	GUARDRAIL REMOVAL	FOOT	76		76
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	2	2	
	67100100	MOBILIZATION	L SUM	1	1	
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	22	22	
	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	369	369	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	190	190	
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	190	190	
	70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2	
	70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	115		115
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	4		4

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*Specialty Items

FILE NAME = V:\Transportation\3238.81\CADD SHTS\016A24-SHT-SOO.dgn	USER NAME = JDean	DESIGNED - AWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES 70th PLACE OVER FLAG CREEK			MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JCW	REVISED -					4010	0202-602-HB-BR	COOK	30	4
	PLOT SCALE = 2.00 ' / in.	CHECKED - AWM	REVISED -		SCALE: NONE	SHEET NO. 2 OF 3 SHEETS	STA. TO STA.			CONTRACT NO. 62A24		
	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -							ILLINOIS FED. AID PROJECT		

					100% STATE CONSTRUCTION CODE	
				URBAN		
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0014 016-1063	ROADWAY 0004 RURAL
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	18	18	
	89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	38	38	
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1	1	
	X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	890	890	
	X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	36	36	
	Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	266	266	
	Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	266	266	
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	15	15	
	Z0015550	DEBRIS REMOVAL	CU YD	65	65	
	Z0026407	TEMPORARY SHEET PILING	SQ FT	159	159	
	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	

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* Specialty Items

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		DRAWN - JCW	REVISED -	
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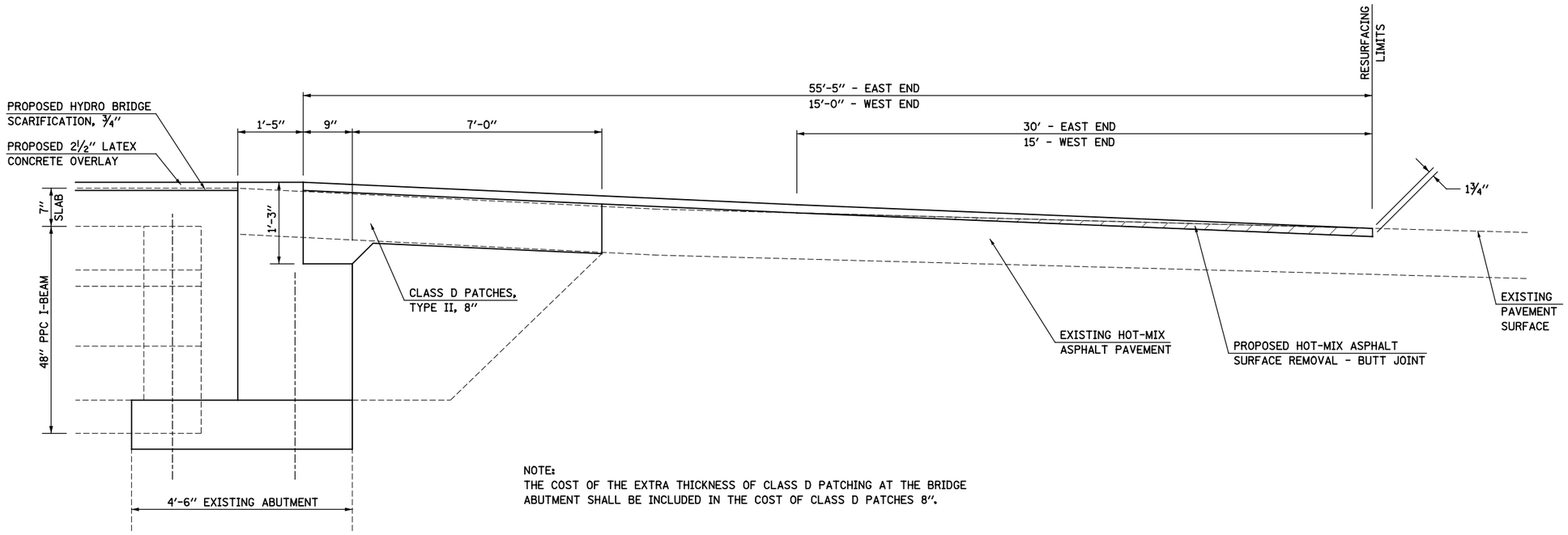
	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
70th PLACE OVER FLAG CREEK

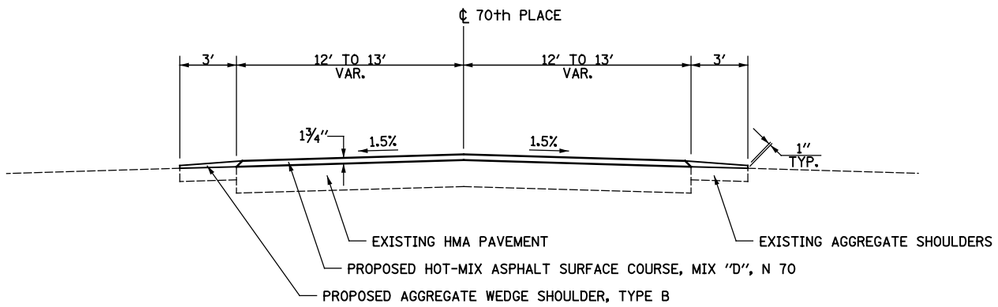
SCALE: NONE | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-8R	COOK	30	5
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			



NOTE:
THE COST OF THE EXTRA THICKNESS OF CLASS D PATCHING AT THE BRIDGE ABUTMENT SHALL BE INCLUDED IN THE COST OF CLASS D PATCHES 8".

PROPOSED SECTION THRU ABUTMENTS



PROPOSED TYPICAL SECTION

EXCEPT IN BRIDGE OMISSION

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-DETAILS-1.dgn	USER NAME = JDeen	DESIGNED - AWM	REVISED -
		DRAWN - JCW	REVISED -
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	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION & DETAILS
70th PLACE OVER FLAG CREEK

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	6
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

AGGREGATE WEDGE SHOULDERS, TYPE B			
LOCATION	LENGTH	WIDTH	TONS
	FOOT		
NW CORNER OF BRIDGE	15.0	3.0	0.8
SW CORNER OF BRIDGE	15.0	3.0	0.8
NE CORNER OF BRIDGE	56.0	3.0	3.0
SE CORNER OF BRIDGE	56.0	3.0	3.2
TOTAL			7.8
USE			8

TEMPORARY RUMBLE STRIPS	
LOCATION	TEMPORARY RUMBLE STRIPS
	EACH
NORTH LEG OF WOLF RD	3
SOUTH LEG OF WOLF RD	3
TOTAL	6
USE	6

WORK ZONE PAVEMENT MARKING REMOVAL	
CONSTRUCTION STAGE	WORK ZONE PAVEMENT MARKING REMOVAL
	SQ FT
STAGE 1 TAPE REMOVAL, NORTH EDGE OF PAVEMENT	101.7
STAGE 1 TAPE REMOVAL, SOUTH EDGE OF PAVEMENT	46.7
STAGE 2 TAPE REMOVAL, NORTH EDGE OF PAVEMENT	46.7
STAGE 2 TAPE REMOVAL, SOUTH EDGE OF PAVEMENT	101.6
STOP BARS	72.0
TOTAL	368.7
USE	369

GUARDRAIL REMOVAL	
LOCATION	TYPE A 6 FOOT POSTS
	FOOT
NW CORNER OF BRIDGE	18.8
SW CORNER OF BRIDGE	18.8
NE CORNER OF BRIDGE	18.8
SE CORNER OF BRIDGE	18.8
TOTAL	75.2
USE	76

TEMPORARY CONCRETE BARRIER			
CONSTRUCTION STAGE	TEMPORARY CONCRETE BARRIER	BARRIER WALL MARKERS, TYPE C	RELOCATE TEMPORARY CONCRETE BARRIER
	FOOT	EACH	FOOT
STAGE 1	190.0	18.0	
STAGE 2			190.0
TOTAL	190.0	18.0	190.0
USE	190	18	190

THERMOPLASTIC PAVEMENT MARKING - LINE 4"	
LOCATION	THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
	FOOT
NE END OF BRIDGE	55.8
SE END OF BRIDGE	59.1
TOTAL	114.9
USE	115

WET REFLECTIVE TEMPORARY TAPE TYPE III		
CONSTRUCTION STAGE	WET REFLECTIVE TEMPORARY TAPE (WHITE)	
	4"	24"
	FOOT	
STAGE 1, NORTH EDGE OF PAVEMENT	305.1	
STAGE 1, SOUTH EDGE OF PAVEMENT	140.1	
STAGE 2, NORTH EDGE OF PAVEMENT	140.0	
STAGE 2, SOUTH EDGE OF PAVEMENT	304.7	
STAGES 1 & 2 STOP BARS		36.0
TOTAL	889.9	36.0
USE	890	36

PAVED DITCH REMOVAL	
LOCATION	PAVED DITCH REMOVAL
	FOOT
SW CORNER OF BRIDGE	9
TOTAL	9
USE	9

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT			
LOCATION	LENGTH	WIDTH	HMA SURFACE REMOVAL - BUTT JOINT
	FOOT	FEET	SQ YD
WEST END OF BRIDGE	15.0	26.5	44.2
EAST END OF BRIDGE	30.0	25.5 TO 52.4	116.5
TOTAL			160.7
USE			161

STEEL PLATE BEAM GUARDRAIL			
LOCATION	TYPE A 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 10	GUARDRAIL MARKERS, TYPE A
	FOOT	EACH	EACH
NW CORNER OF BRIDGE	12.5	1	1
SW CORNER OF BRIDGE	12.5	1	1
NE CORNER OF BRIDGE	12.5	1	1
SE CORNER OF BRIDGE	12.5	1	1
TOTAL	50.0	4	4
USE	50	4	4

PAVEMENT SCHEDULE				
LOCATION	LENGTH	WIDTH	HMA SURFACE COURSE, MIX "D", N70	BITUMINOUS MATERIALS (PRIME COAT)
	FOOT	FEET	TONS	POUNDS
WEST END OF BRIDGE	15.0	26.5	4.3	19.9
EAST END OF BRIDGE	55.4	25.0 TO 52.4	18.3	84.0
TOTAL			22.6	103.9
USE			23	104

CLASS D PATCHES 8 INCH			
LOCATION	LENGTH	WIDTH	CLASS D PATCHES 8 INCH
	FOOT	FOOT	SQ YD
WEST END OF BRIDGE	26.5	7.8	23.0
EAST END OF BRIDGE	25.0	7.8	21.7
NW QUAD OF WOLF RD INTERSECTION	20.0	5.1 TO 14.2	19.7
SW QUAD OF WOLF RD INTERSECTION	15.0	7.2 TO 17.4	18.4
TOTAL			82.8
USE			83

STONE DUMPED RIPRAP, CLASS A4	
LOCATION	SQ YD
SW CORNER OF BRIDGE	7
TOTAL	7
USE	7

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		DRAWN - JCW	REVISED -
	PLOT SCALE = 2.00 ' / in.	CHECKED - AWM	REVISED -
	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
70th PLACE OVER FLAG CREEK

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	7
		CONTRACT NO. 62A24		
	ILLINOIS	FED. AID PROJECT		

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC

CONSTRUCTION STAGING

PRE-STAGE

- INSTALL TEMPORARY BRIDGE TRAFFIC SIGNALS AND TRAFFIC CONTROL DEVICES FOR STAGE I.

STAGE I - WORK ITEMS COMPLETED NORTH OF 70th PLACE CENTERLINE

- COMPLETE NECESSARY REMOVAL OF BRIDGE DECK AND ABUTMENT BACKWALLS.
- CONSTRUCT NEW INTEGRAL ABUTMENTS.
- REPAIR PPC I-BEAMS.
- SCARIFY WESTBOUND LANE ON BRIDGE, COMPLETE DECK PATCHING, AND PLACE LATEX CONCRETE OVERLAY.
- CONSTRUCT 8'' CLASS D PATCHES AT EACH END OF BRIDGE.

STAGE II - WORK ITEMS COMPLETED SOUTH OF 70th PLACE CENTERLINE

- COMPLETE NECESSARY REMOVAL OF BRIDGE DECK AND ABUTMENT BACKWALLS.
- CONSTRUCT NEW INTEGRAL ABUTMENTS.
- REPAIR PPC I-BEAMS.
- SCARIFY EASTBOUND LANE ON BRIDGE, COMPLETE DECK PATCHING, AND PLACE LATEX CONCRETE OVERLAY.
- CONSTRUCT 8'' CLASS D PATCHES AT EACH END OF BRIDGE.

STAGE III

- MILL AND RESURFACE APPROACHES.
- REMOVE AND REPLACE GUARDRAIL TERMINALS.
- PLACE PROPOSED PAVEMENT MARKING.

MAINTENANCE OF TRAFFIC

PRE-STAGE

- USE LANE CLOSURES TO INSTALL TEMPORARY SIGNALS AND PLACE TRAFFIC CONTROL DEVICES FOR STAGE I UTILIZING STD 701501.

STAGE I

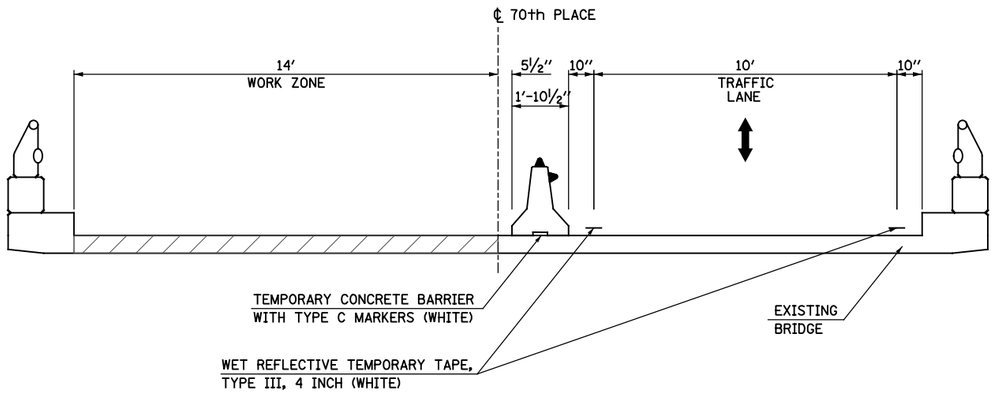
- CLOSE WESTBOUND LANE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN AND UTILIZING STD 701321.
- MAINTAIN ONE-LANE TWO-WAY TRAFFIC ON EASTBOUND LANE ACROSS BRIDGE.

STAGE II

- CLOSE EASTBOUND LANE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN AND UTILIZING STD 701321.
- MAINTAIN ONE-LANE TWO-WAY TRAFFIC ON WESTBOUND LANE ACROSS BRIDGE.

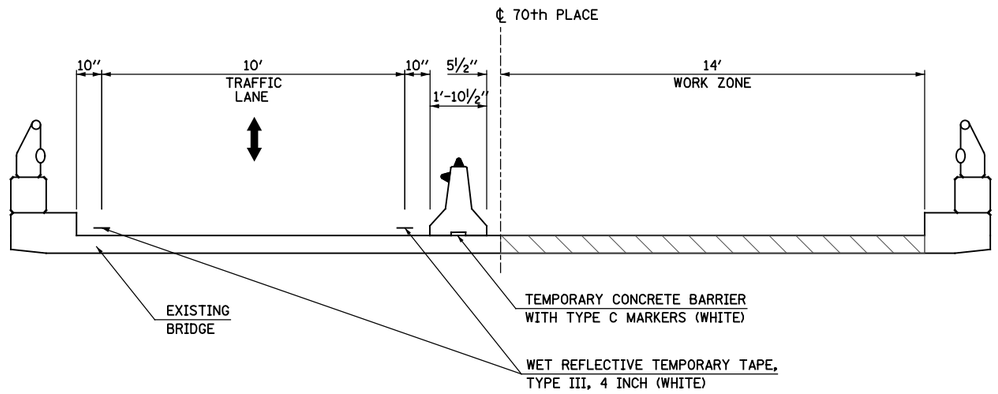
STAGE III

- USE LANE CLOSURES IN ACCORDANCE WITH STD 701501.



STAGE 1

(LOOKING EAST)



STAGE 2

(LOOKING EAST)

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		DRAWN - JCW	REVISED -
	PLOT SCALE = 20.00 ' / in.	CHECKED - AWM	REVISED -
	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC – NOTES AND TYPICAL SECTIONS
70th PLACE OVER FLAG CREEK

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	8
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

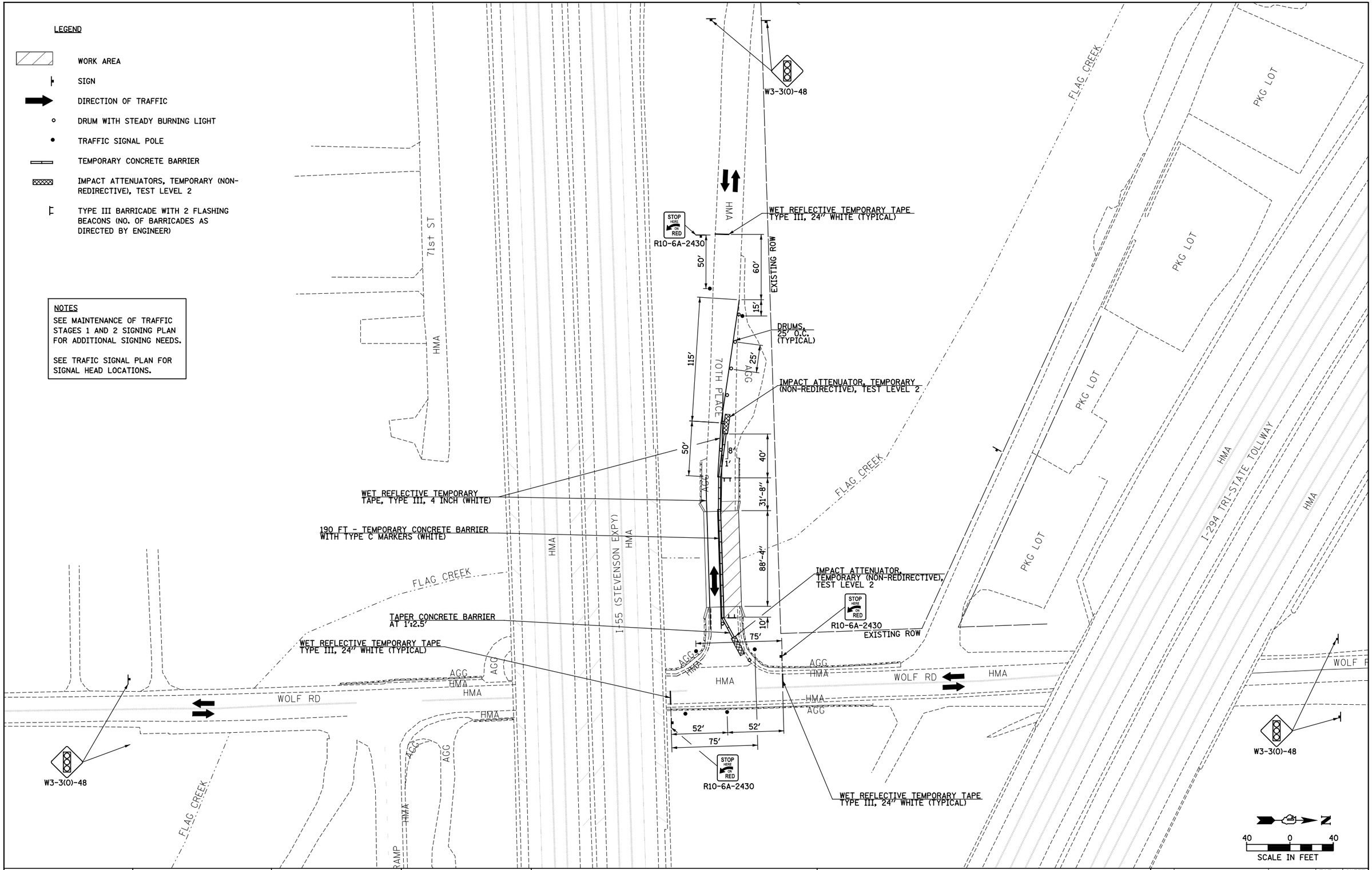
LEGEND

- WORK AREA
- SIGN
- DIRECTION OF TRAFFIC
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL POLE
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
- TYPE III BARRICADE WITH 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY ENGINEER)

NOTES

SEE MAINTENANCE OF TRAFFIC STAGES 1 AND 2 SIGNING PLAN FOR ADDITIONAL SIGNING NEEDS.

SEE TRAFIC SIGNAL PLAN FOR SIGNAL HEAD LOCATIONS.



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Default	PLOT DATE = 2/18/2015	CHECKED - AWM	REVISED -
		DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC - STAGE 1
70th PLACE OVER FLAG CREEK

SCALE: 1"=20'-0" | SHEET 1 OF 3 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	9
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

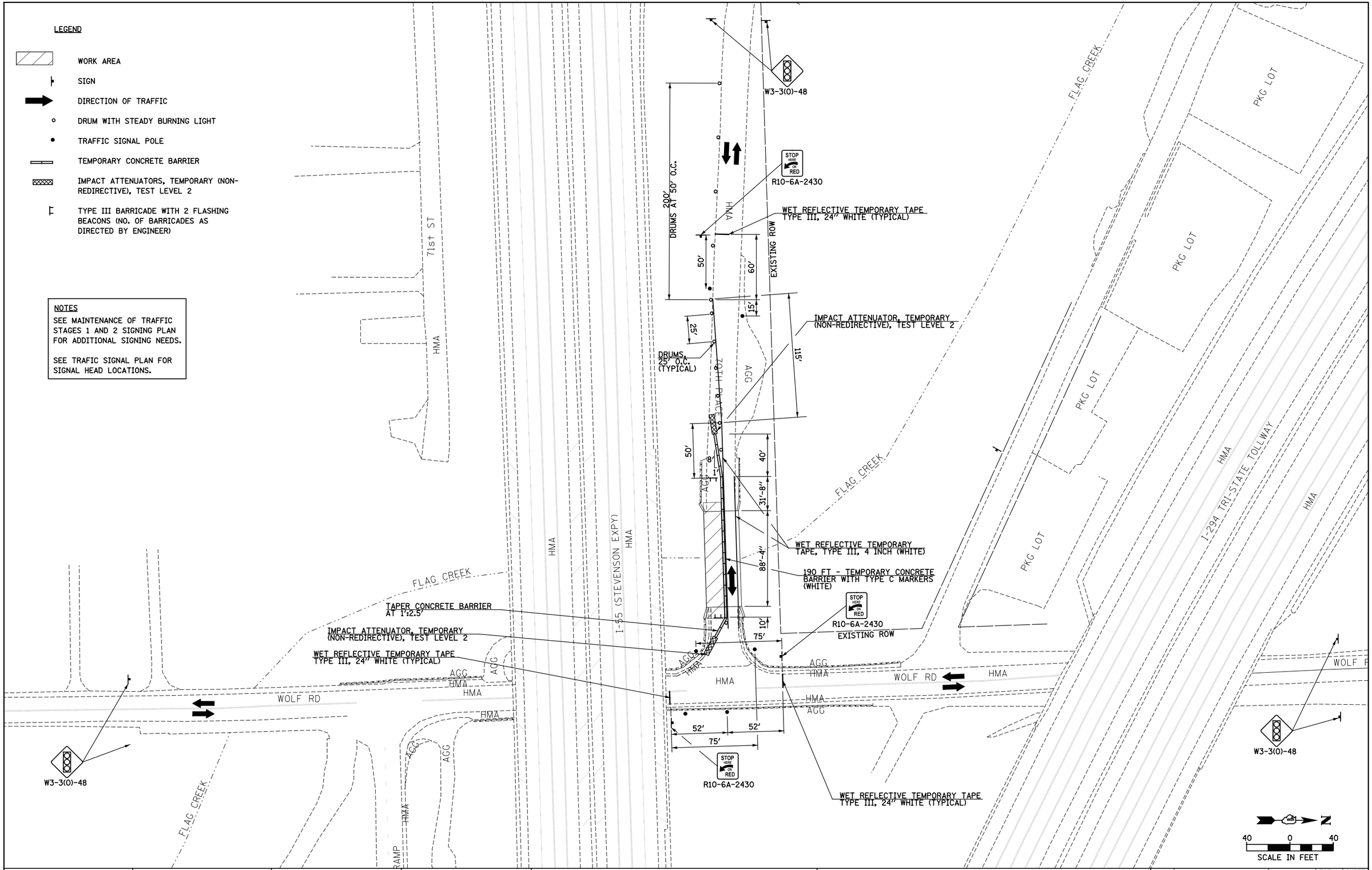
LEGEND

- WORK AREA
- SIGN
- DIRECTION OF TRAFFIC
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL POLE
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
- TYPE III BARRICADE WITH 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY ENGINEER)

NOTES

SEE MAINTENANCE OF TRAFFIC STAGES 1 AND 2 SIGNING PLAN FOR ADDITIONAL SIGNING NEEDS.

SEE TRAFIC SIGNAL PLAN FOR SIGNAL HEAD LOCATIONS.



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		DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC - STAGE 2
70th PLACE OVER FLAG CREEK

SCALE: 1"=20'-0" | SHEET 2 OF 3 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	10
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

LEGEND

SIGN

TRAFFIC SIGNAL WITH POLE

RUMBLE STRIPS

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48

8'-6"
W12-I102(0)-48

ONE LANE ROAD AHEAD
W20-4(0)-48

W3-3(0)-48

STOP BAR

STOP HERE ON RED
R10-6A-2430

M6-1R
21"x15"

M6-1L

TEMPORARY RUMBLE STRIPS

500'

200'

70TH PLACE

WOLF RD

FLAG CREEK

I-55 STEVENSON EXPY

I-294 TRI-STATE TOLLWAY

I-294 ON RAMP

I-294 OFF RAMP

HMA

AGG

PKG LOT

100 0 100
SCALE IN FEET

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-STAGING-5.dgn	USER NAME = JDeen	DESIGNED - AWM	REVISED -
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Default	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC – STAGES 1 & 2 SIGNING PLAN
70th PLACE OVER FLAG CREEK

SCALE: 1"=20'-0" | SHEET 3 OF 3 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	11
		CONTRACT NO. 62A24		
		ILLINOIS FED. AID PROJECT		

LEGEND

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

CLASS D PATCHING, 8"

PAVED DITCH REMOVAL & STONE DUMPED RIPRAP, CLASS A4

EXISTING ROW

FLAG CREEK

PROPOSED TRAFFIC BARRIER TERMINAL, TYPE 10, & PROPOSED STEEL PLATE BEAM GUARDRAIL AS NECESSARY TO CONNECT TO EXISTING.

WOLF RD

AGG

HMA

±24′

EXISTING ROW

PROPOSED LIMITS OF CONSTRUCTION

15′

AGG

HMA

70TH PLACE

26′-6″

25′

EXISTING JOINT

HMA

AGG

PAVED DITCH REMOVAL & STONE DUMPED RIPRAP, CLASS A-4

7′

9′

15′

25′-5″

30′

55′-5″

±26′

PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

LIMITS OF HMA SURFACE COURSE, MIX D, N70. SEE DETAILS ON SHEET 6.

STRUCTURE NO. 016-1063
REPAIR SINGLE SPAN PRE-STRESSED CONCRETE I-BEAM STRUCTURE AND PROVIDE LATEX CONCRETE OVERLAY.
SEE STRUCTURE REPAIR PLANS.

HMA

I-55 (STEVENSON EXPY)

HMA

N

20 0 20

SCALE IN FEET

FLAG CREEK

AGG

HMA

AGG

HMA

HMA

AGG

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-STAGING-2.dgn	USER NAME = JDeen	DESIGNED - AWM	REVISED -
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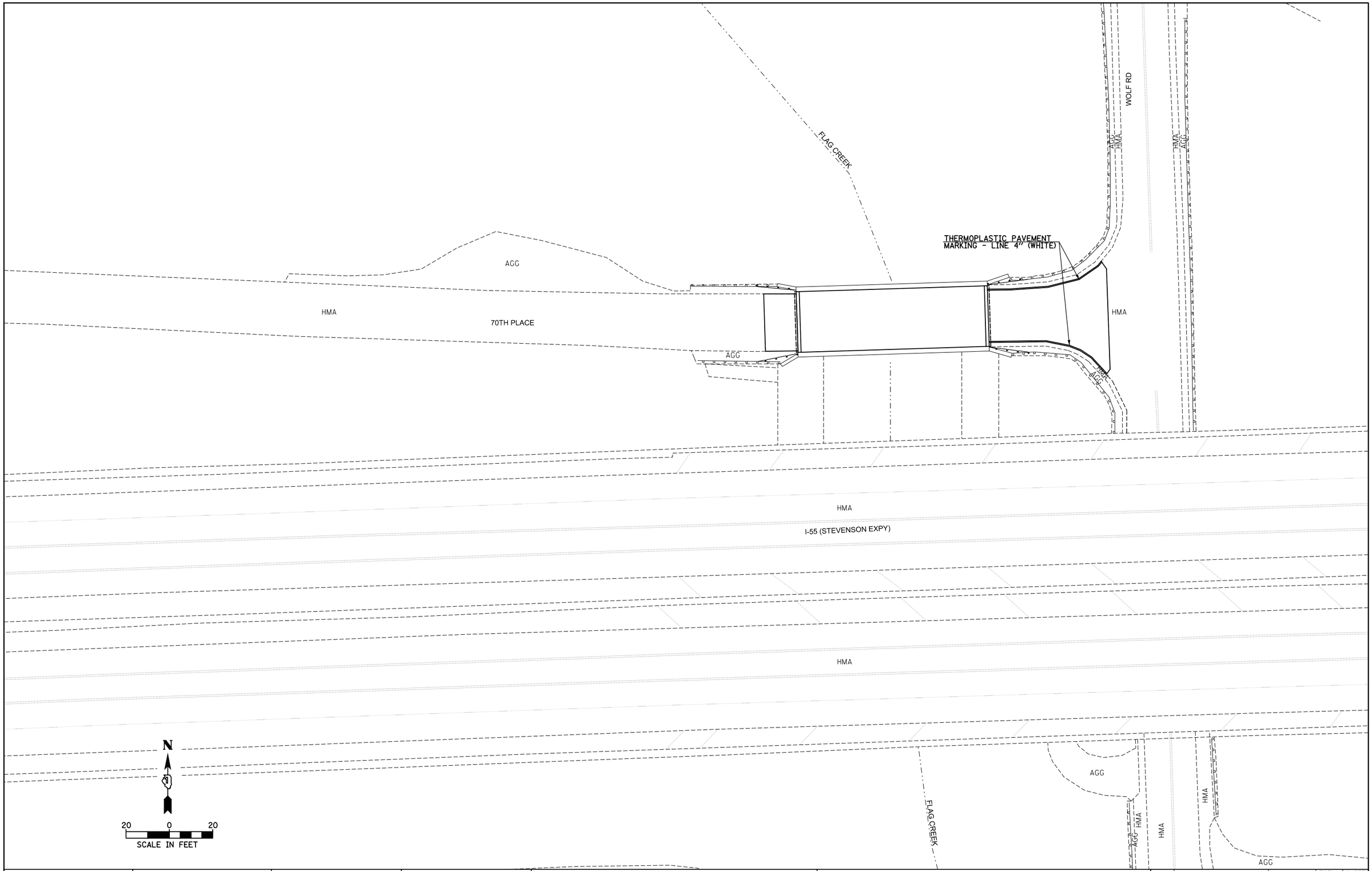
Default	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
70th PLACE OVER FLAG CREEK

SCALE: 1″=20′-0″ | SHEET 1 OF 1 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	12
		CONTRACT NO. 62A24		
		ILLINOIS FED. AID PROJECT		



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Default	PLOT DATE = 2/18/2015	DATE - 12-05-14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

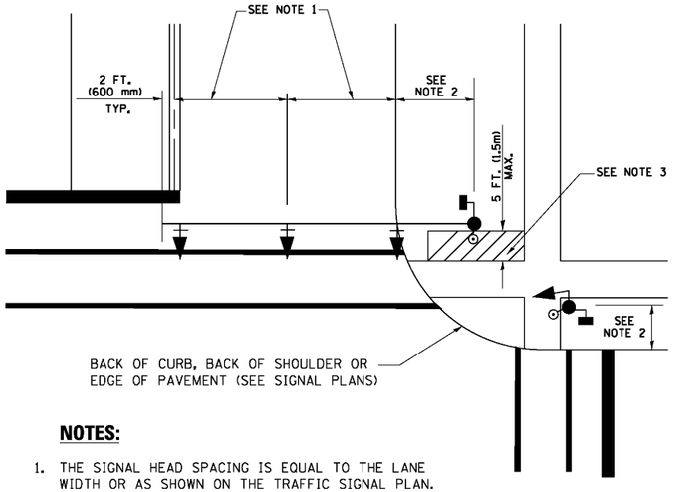
PAVEMENT MARKING PLAN
70th PLACE OVER FLAG CREEK

SCALE: 1"=20'-0" | SHEET 1 OF 1 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	13
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

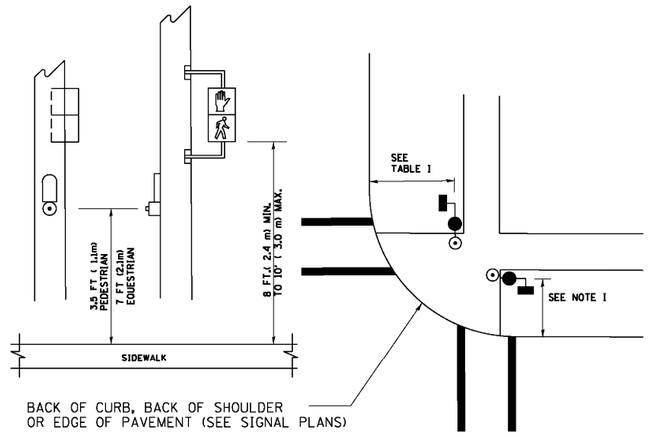
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

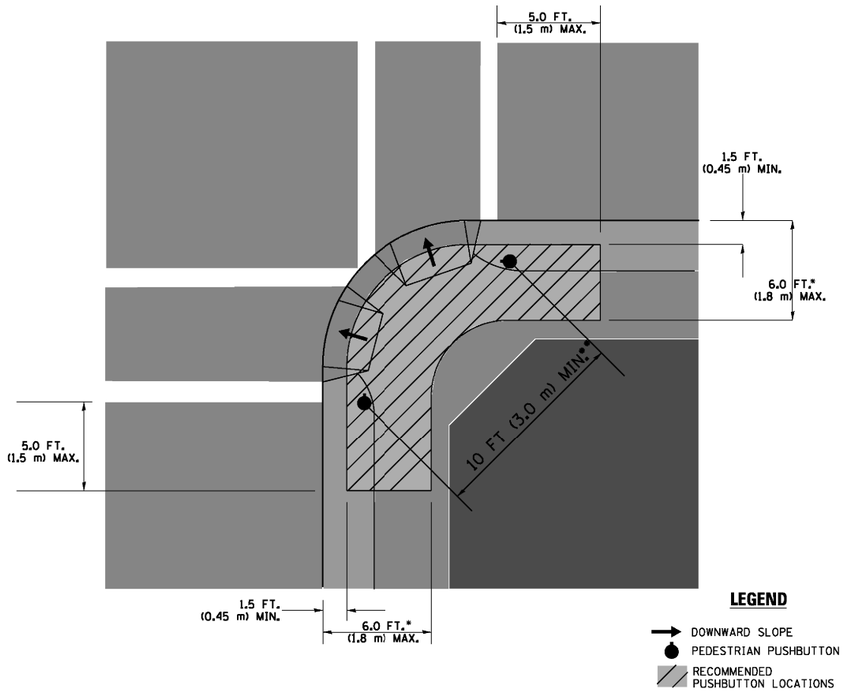
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-TS-1.dgn	USER NAME = JDeen	DESIGNED - DAD	REVISED - DAG 1-1-14
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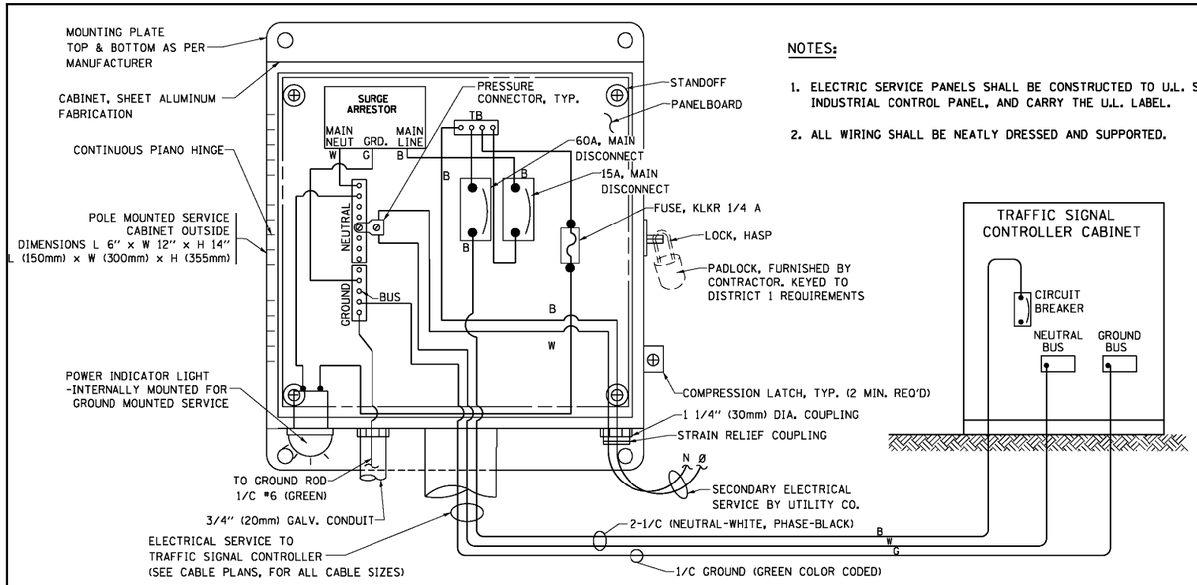
	PLOT DATE = 2/18/2015	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	14
	TS-05	CONTRACT NO. 62A24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



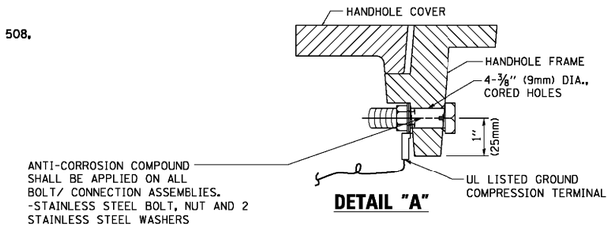
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

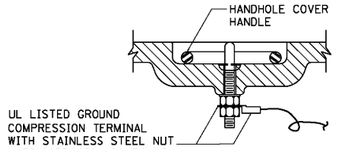
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



DETAIL "A"

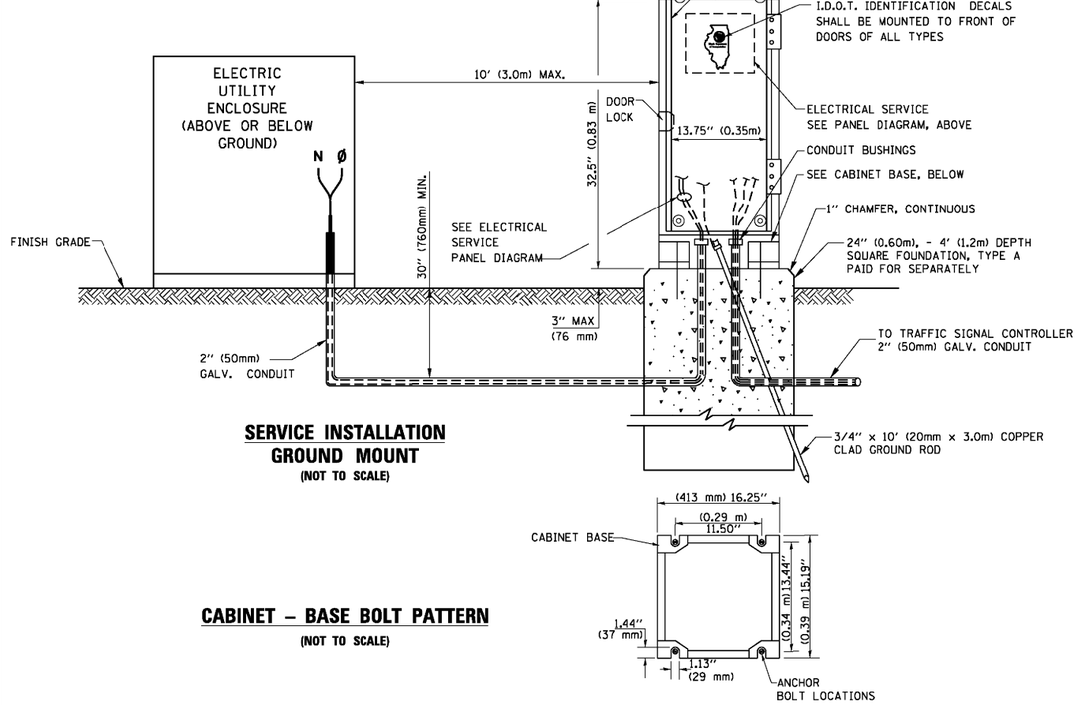


DETAIL "B"

NOTES:

GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS, THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

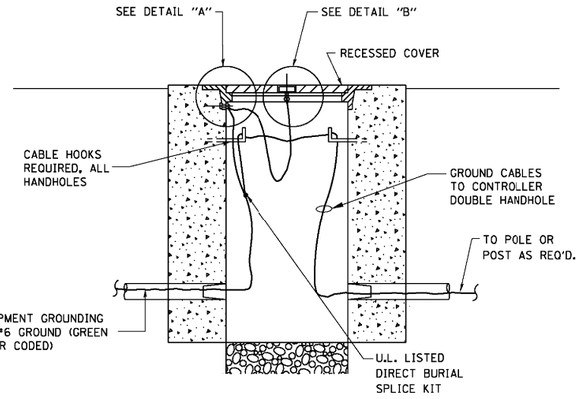


SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)

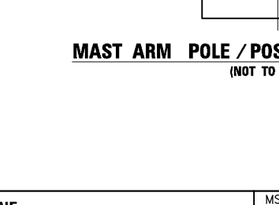
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)

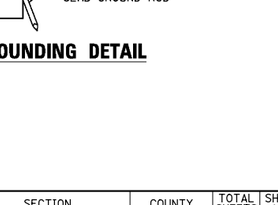


HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



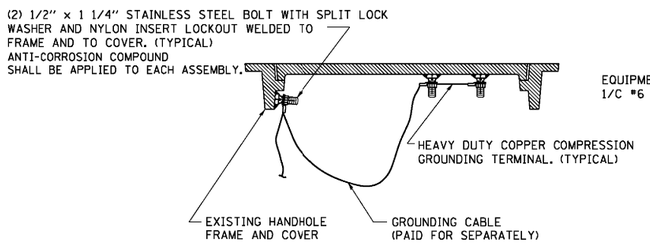
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

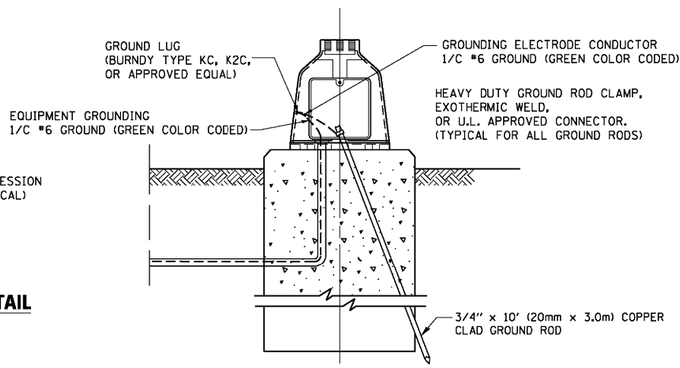
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

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	PLOT SCALE = 20.00 ' / in.	DRAWN - BCK	REVISED -
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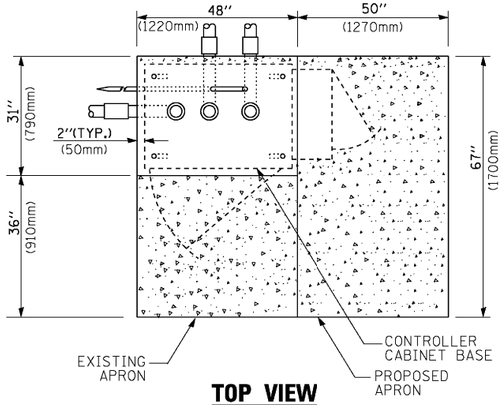
		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

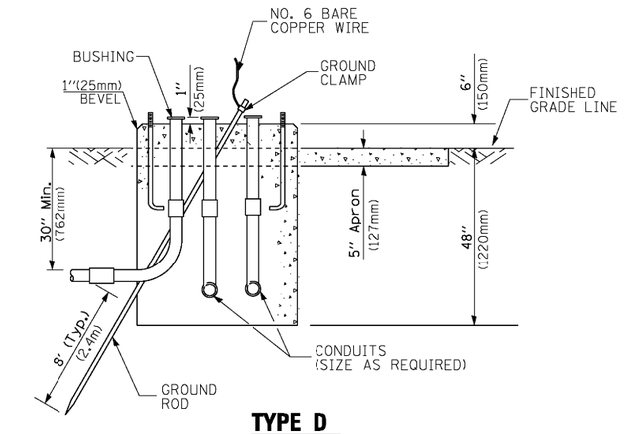
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

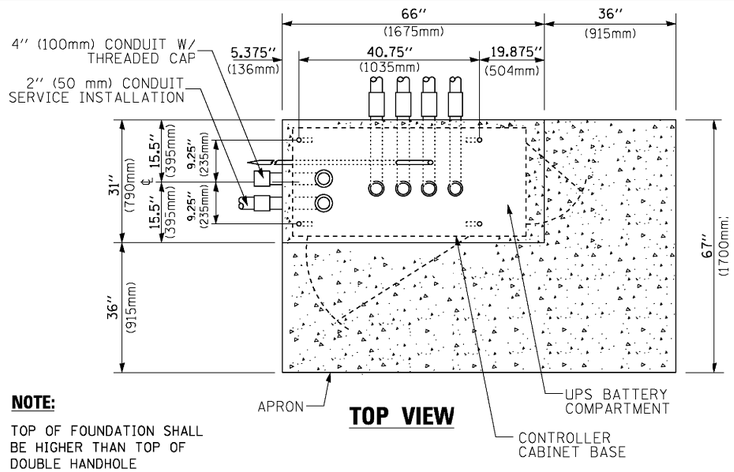
MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	15
	TS-05	CONTRACT NO. 62A24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TOP VIEW



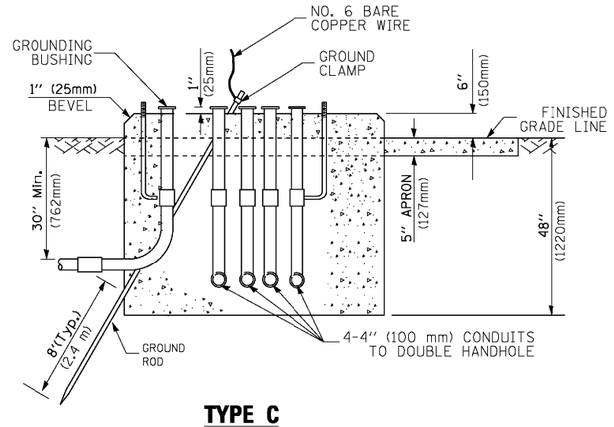
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



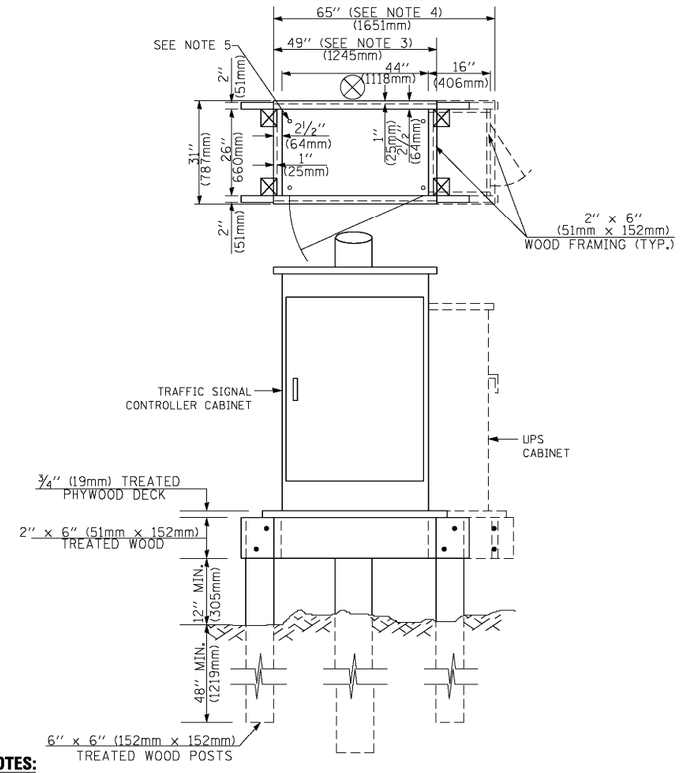
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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		DRAWN - BCK	REVISED -
	PLOT SCALE = 20.00 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 2/18/2015	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	16
	TS-05	CONTRACT NO. 62A24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET		RR	RR
COMMUNICATIONS CABINET	R CC	ECC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTABLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G ◄Y ◄G	R Y G ◄Y ◄G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD. "RB" INDICATES REFLECTIVE BACKPLATE		R Y G ◄Y ◄G "P"	R Y G ◄Y ◄G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F		36F	36F
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RPF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
QUEUE DETECTOR		Q	Q
PREFORMED QUEUE DETECTOR		PQ	PQ
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-TS-4.dgn	USER NAME = JDeen	DESIGNED - DAG/BCK	REVISED - DAG 1-1-14
	PLOT SCALE = 20.00 ' / in.	DRAWN - BCK	REVISED -
	PLOT DATE = 2/18/2015	CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

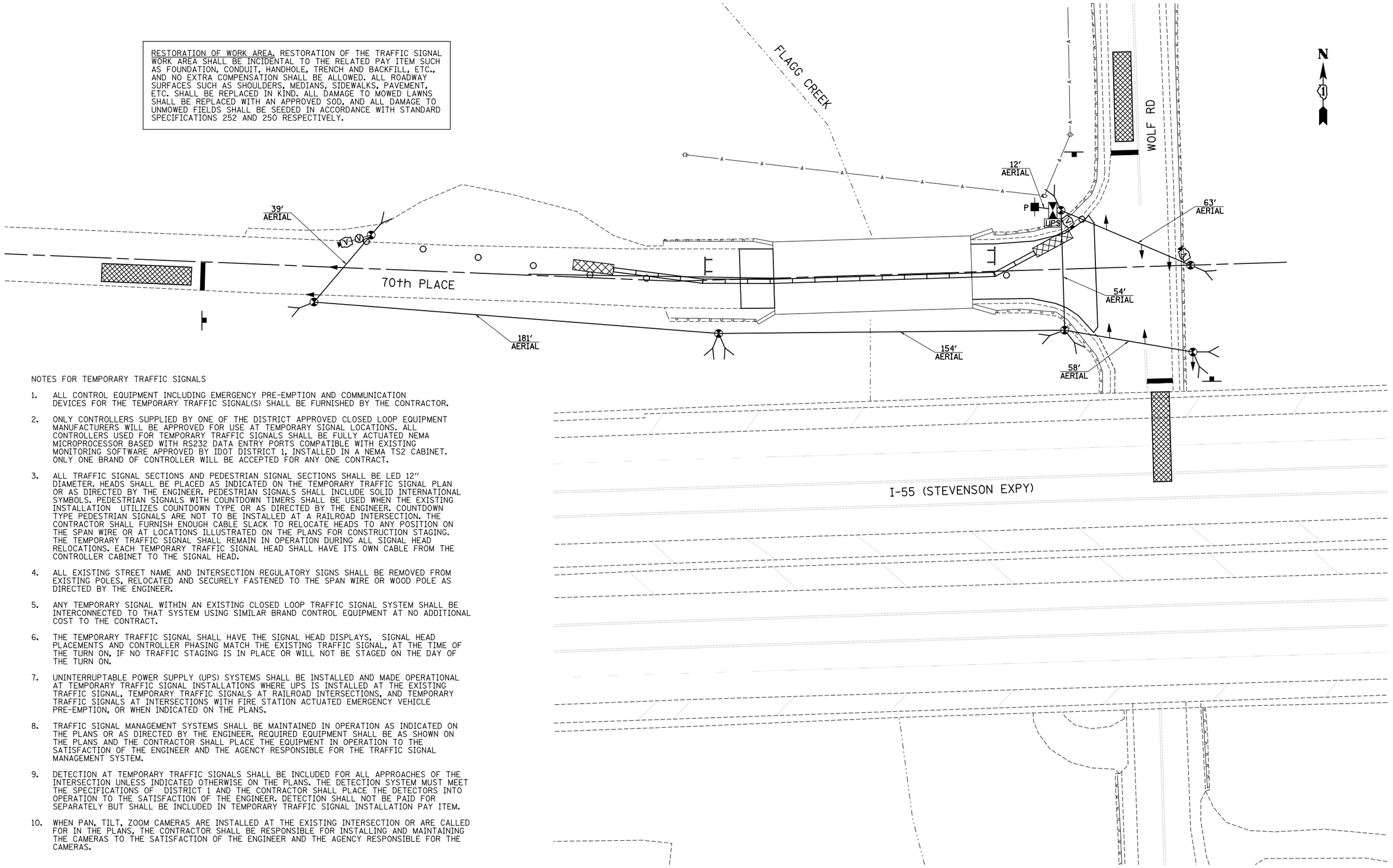
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	17
	TS-05	CONTRACT NO. 62A24		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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



NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.

2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA 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 LED 12" DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.

5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT AT NO ADDITIONAL COST TO THE CONTRACT.

6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

7. UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER. DETECTION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-TS-5.dgn	USER NAME = JDeen	DESIGNED - DJD	REVISED -
		DRAWN - RMD	REVISED -
	PLOT SCALE = 40.00 ' / in.	CHECKED - DJD	REVISED -
	PLOT DATE = 2/18/2015	DATE - 11/12/14	REVISED -

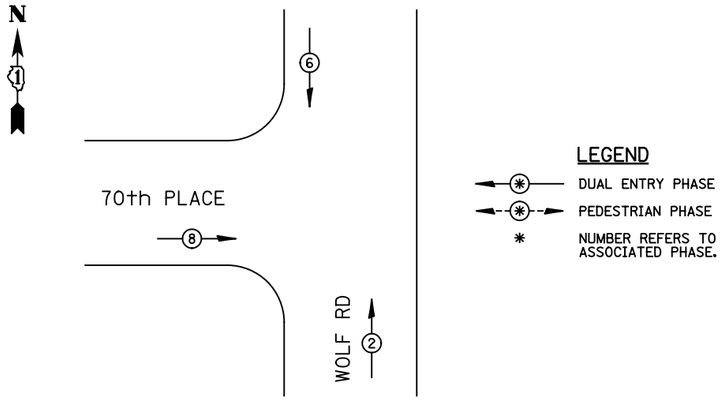
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL PLAN
70th PLACE OVER FLAGG CREEK

SCALE: 1"=20' | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	18
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

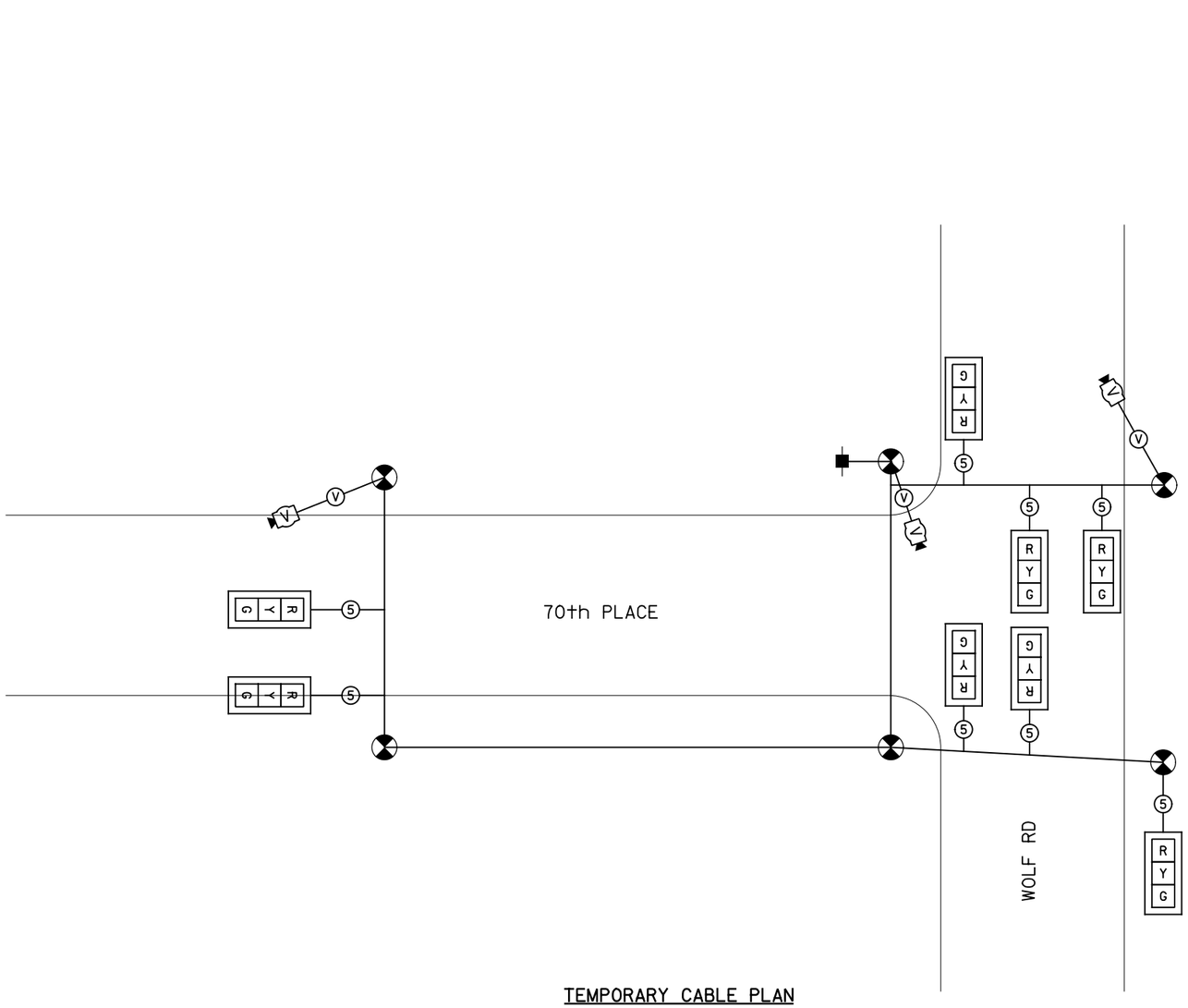
TEMPORARY CONTROLLER SEQUENCE



LEGEND

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

TEMPORARY PHASE DESIGNATION DIAGRAM



TEMPORARY CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAN.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	8	-	17	0.50	68.0
(YELLOW)	8	-	25	0.25	50.0
(GREEN)	8	-	15	0.25	30.0
ARROW	-	-	12	0.10	-
PED. SIGNALS	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
VIDEO SYSTEM	1	150	-	1.00	150.0
ENERGY COSTS TO:				TOTAL =	398.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: JIM GLOVER
PHONE: (815) 724-5054
COMPANY: COM ED

FILE NAME = V:\Transportation\3238.01\CADD SHTS\D162A24-SHT-TS-6.dgn	USER NAME = JDeen	DESIGNED - DJD	REVISED -
		DRAWN - RMD	REVISED -
	PLOT SCALE = 40.00 ' / in.	CHECKED - DJD	REVISED -
	PLOT DATE = 2/18/2015	DATE - 11/12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM
70th PLACE OVER FLAGG CREEK

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	19
		CONTRACT NO. 62A24		
	ILLINOIS	FED. AID PROJECT		

EXISTING STRUCTURE:

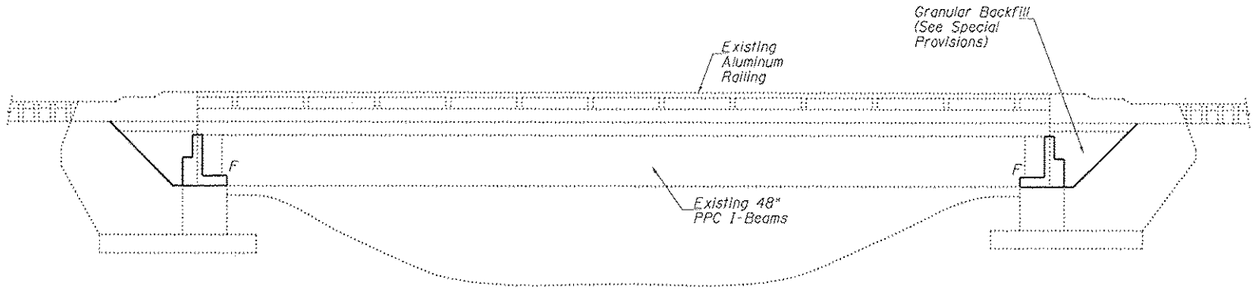
SN 016-1063 was constructed in 1963 as F.A.I. Route 55, Section 0202-602-HB, Station 1140+41.64. The existing structure is a Single Span with PPC I-Beams and Concrete Deck Superstructure supported on Open Type Abutments with Spread Footing and 0° Skew, 89'-10" Back to Back Abutments, and 32'-4" O. to O. Deck. Stage Construction shall be utilized to maintain one-lane traffic during construction.

No Salvage.

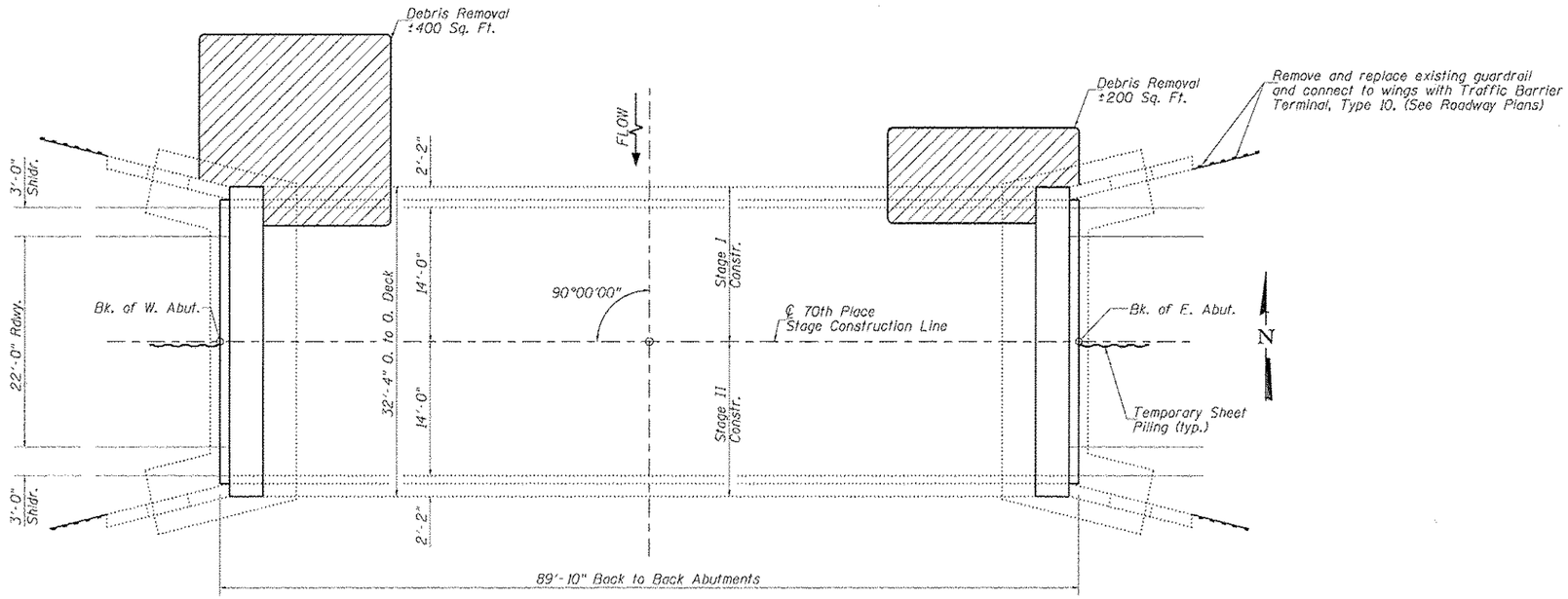
SCOPE OF WORK

1. Scarify existing concrete deck.
2. Excavate at back of abutments and remove back wall and ends of deck slab.
3. Repair bridge deck and repair ends of girders.
4. Replace back wall and end of deck slab as integral type abutment.
5. Place new latex concrete overlay on deck.
6. Place granular backfill at abutments and reconstruct approach roadway with bituminous concrete.
7. Remove debris from waterway and clean up.

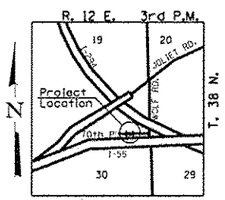
INDEX OF SHEETS



ELEVATION



PLAN



LOCATION SKETCH

BENJAMIN A. NEBEL 081-006522 LICENSED STRUCTURAL ENGINEER OF JACKSONVILLE ILLINOIS

2/18/2015

Lic. Exp. 11/30/2016

DESIGN STRESSES

FIELD UNITS

(New Construction)
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO Standard Specifications for Highway Bridges (17th Edition)

LOADING HS15-44

(Original Construction)

GENERAL PLAN AND ELEVATION
70th PLACE OVER FLAG CREEK
SECTION 0202-602-HB-BR
COOK COUNTY
STR. NO. 016-1063

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - JOH	REVISED -
PLOT SCALE = NONE	CHECKED - BAN	REVISED -
PLOT DATE =	DRAWN - JCW	REVISED -
	CHECKED - JOH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N 016-1063
SHEET NO. 1 OF 8 SHEETS

MS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	20
		CONTRACT NO. 62A24		
		ILLINOIS FED. AID PROJECT		

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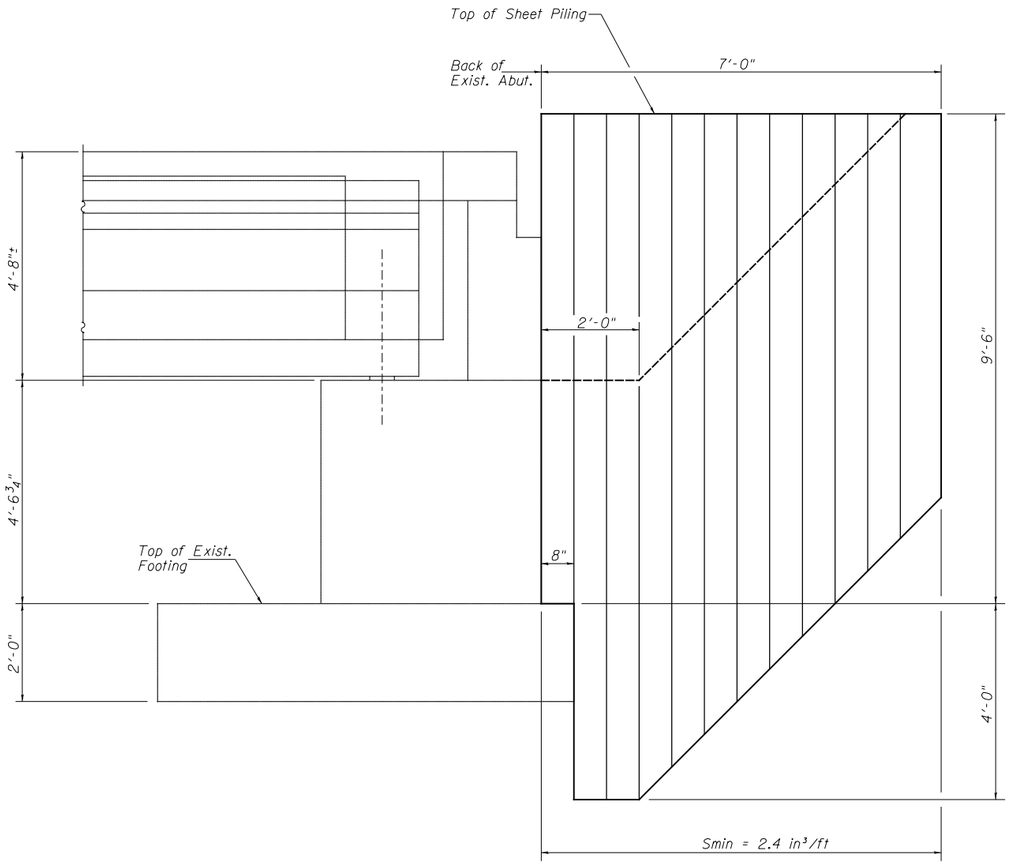
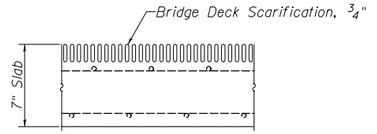


ELEVATION - TEMPORARY SHEET PILING

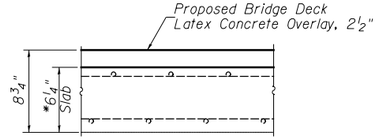
S_{min} = Minimum Section Modulus Required ($in^3/ft.$)

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

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



EXISTING BRIDGE DECK CROSS SECTION



PROPOSED BRIDGE DECK CROSS SECTION

*After Deck Scarification

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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.

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.

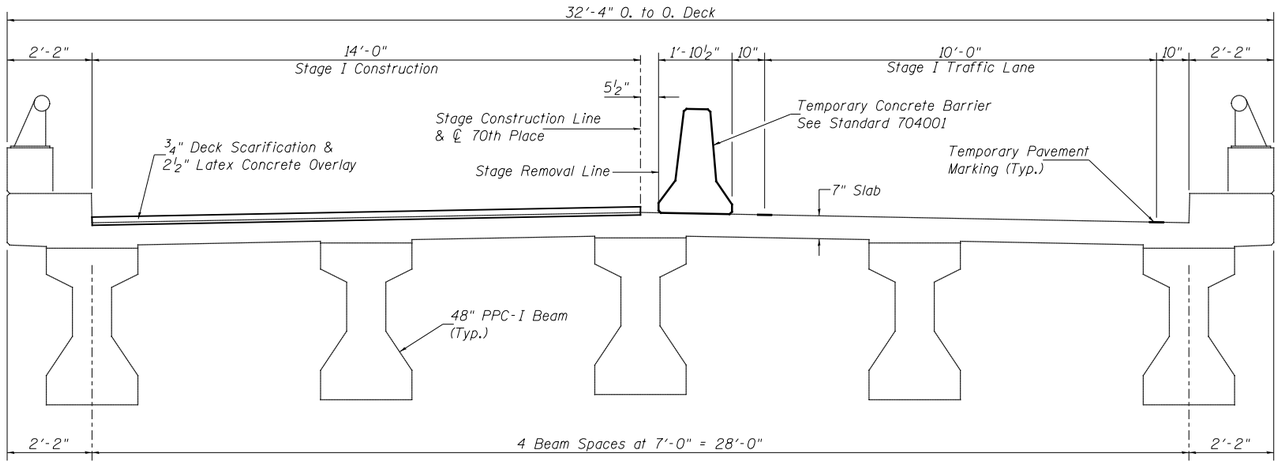
Areas of deck repairs shown are estimated. The Engineer shall show actual location of deck repairs on As-built Plans.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

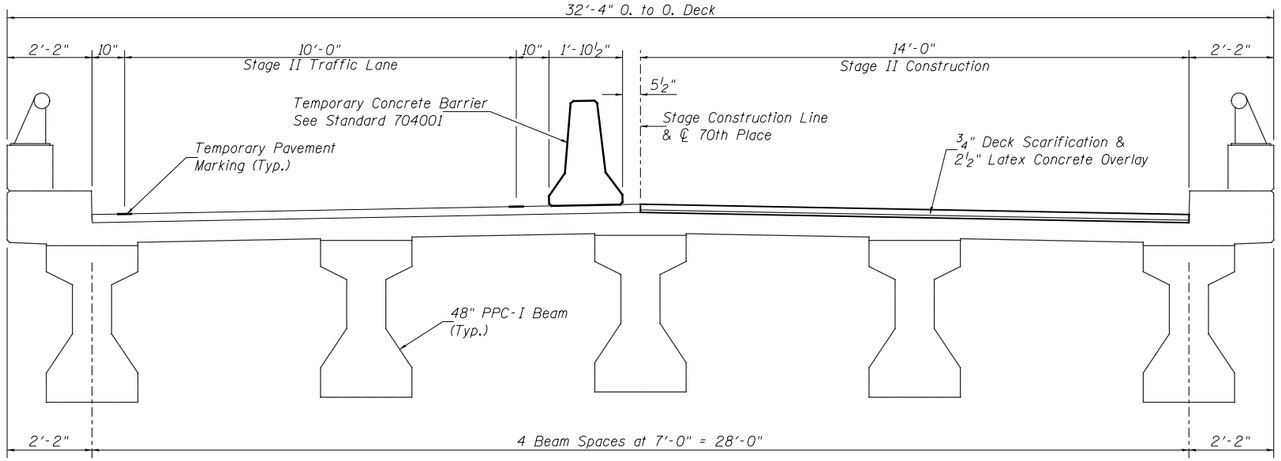
See Special Provisions for Debris Removal. Quantities and location are estimated from visual inspection.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	CU YD	22.0
Structure Excavation	CU YD	54
Concrete Superstructure	CU YD	28.0
Bridge Deck Grooving	SQ YD	255
Reinforcement Bars, Epoxy Coated	POUND	2,010
Bar Splicers	EACH	24
Granular Backfill for Structures	CU YD	38
Bridge Deck Latex Concrete Overlay, 2 1/2"	SQ YD	266
Bridge Deck Scarification, 3/4"	SQ YD	266
Structural Repair of Concrete (Depth Equal To or Less Than 5")	SQ FT	15
Debris Removal	CU YD	65
Temporary Sheet Piling	SQ FT	159

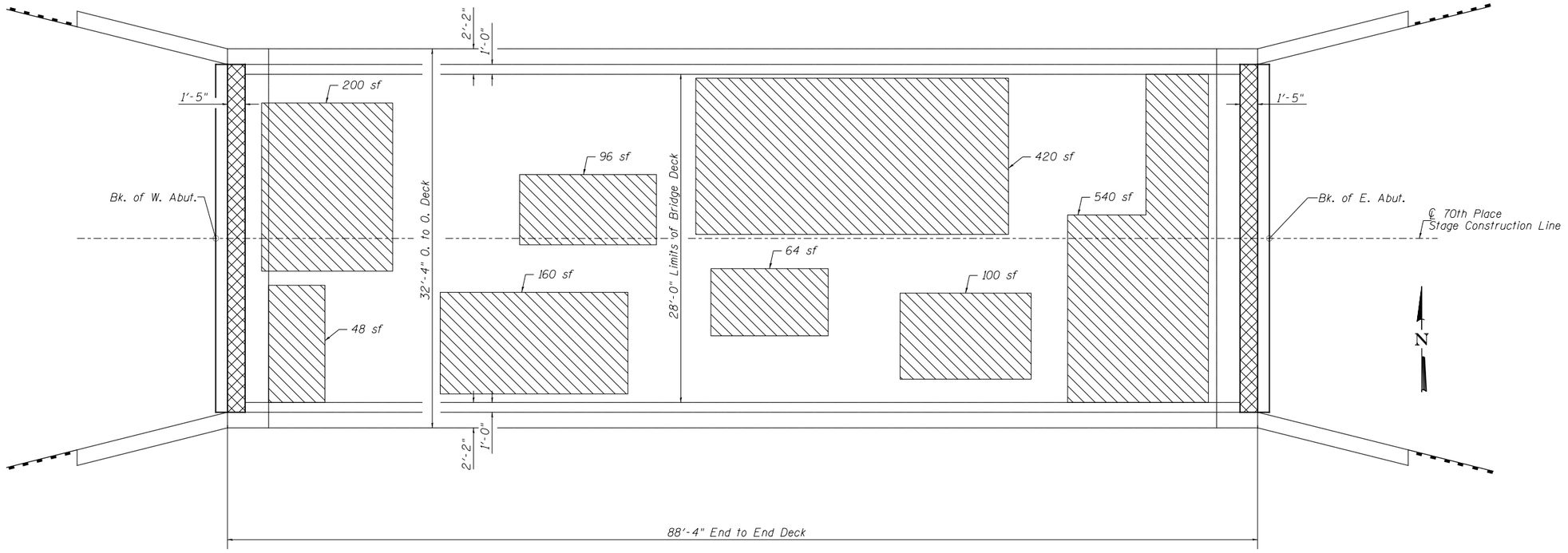


STAGE I CROSS SECTION
(Looking East)



STAGE II CROSS SECTION
(Looking East)

See roadway plans for quantity of Temporary Concrete Barrier.



PLAN

LEGEND

	Deck Slab Repair (Partial Depth) (FOR INFORMATION ONLY)
	Concrete Removal
sf	Square Feet

Notes:
Deck Condition Survey performed October, 2014.
There is an estimated 180 sq. yards of Partial Depth Deck Slab Repair required. Partial depth repairs shall be included with Bridge Deck Scarification. See Special Provision for Bridge Deck Latex Concrete Overlay.
Repair of the existing deck slab shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction. The Engineer shall show actual location of repairs on As-Built plans.
See sheet 7 of 8 for details of concrete removal.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	7.0
Bridge Deck Grooving	Sq. Yd.	255
Bridge Deck Latex Concrete Overlay $2\frac{1}{2}$"	Sq. Yd.	266
Bridge Deck Scarification $\frac{3}{4}$"	Sq. Yd.	266

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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PLOT DATE =	DRAWN - JCW	REVISED -
	CHECKED - JOH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK SLAB REPAIR
S.N 016-1063
SHEET NO. 4 OF 8 SHEETS

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	23
		CONTRACT NO. 62A24		
	ILLINOIS	FED. AID PROJECT		

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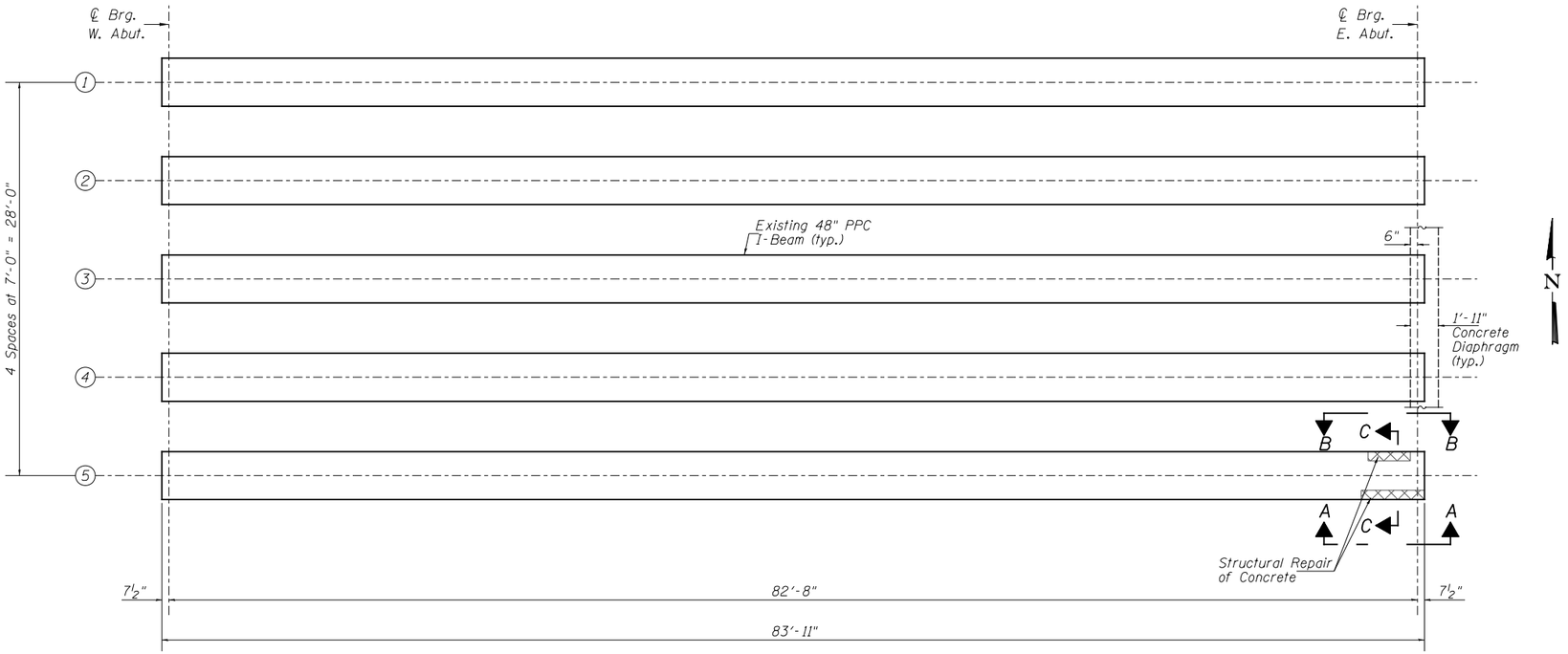
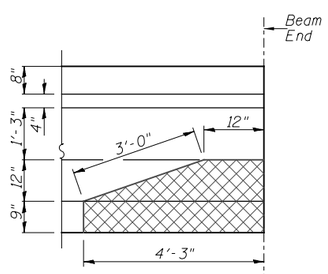
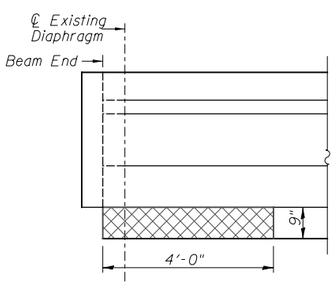


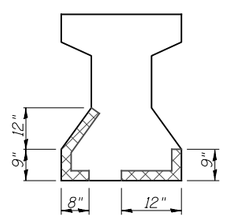
FRAMING PLAN



VIEW A-A



VIEW B-B



SECTION C-C

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal To or Less Than 5")	Sq. Ft.	15

Notes:
Any spalling of the beams inside the limits of the proposed concrete diaphragm shall be removed prior to pouring the concrete diaphragm. Cost included with Concrete Superstructure.

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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PLOT SCALE = NONE	CHECKED - BAN	REVISED -
PLOT DATE =	DRAWN - JCW	REVISED -
	CHECKED - JOH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PPC I-BEAM REPAIRS
S.N 016-1063
SHEET NO. 5 OF 8 SHEETS

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	24
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

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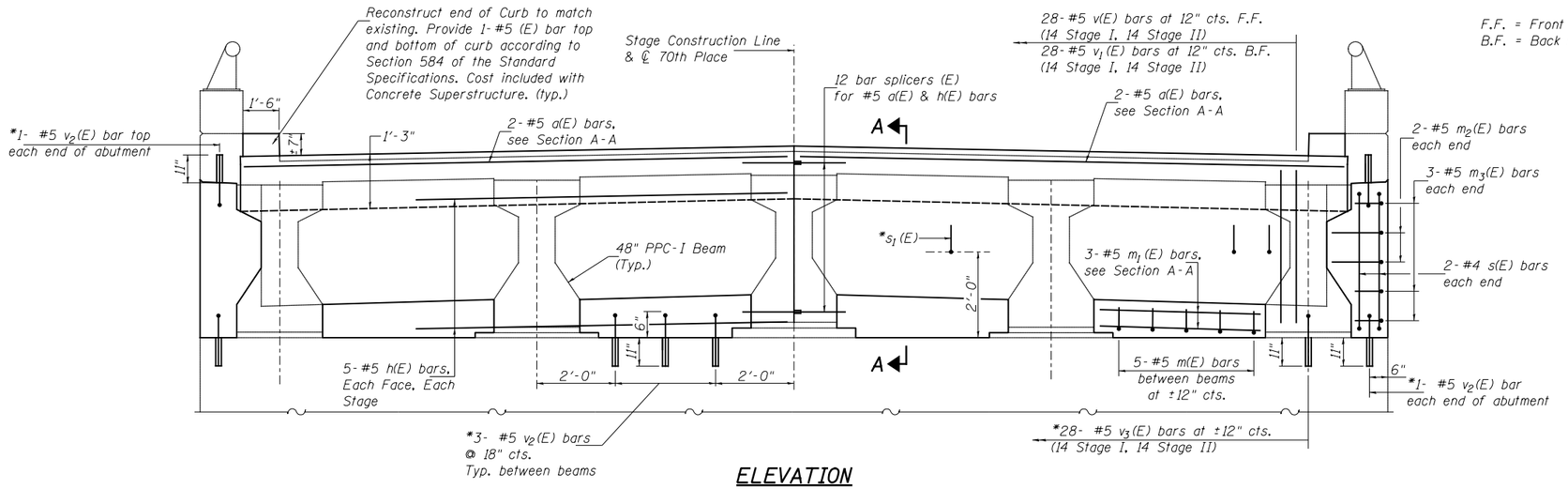
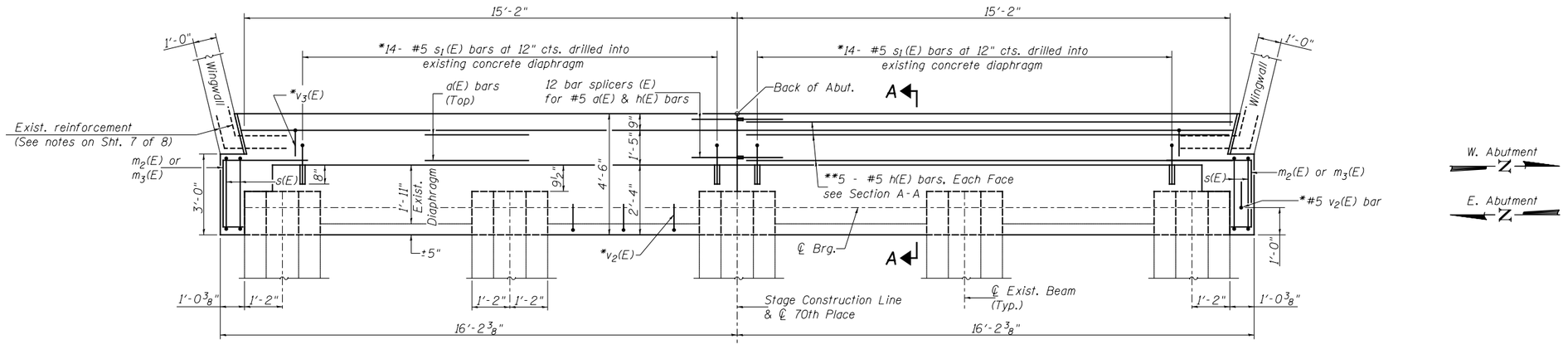


ELEVATION

*Epoxy grouted bars in accordance with Article 584 of the Standard Specifications.

**Cut h(E) bars to fit in field.



ABUTMENT PLAN

Notes:
Any spalling of the beams inside the limits of the proposed concrete diaphragm shall be removed prior to pouring the concrete diaphragm. Cost included with Concrete Superstructure.
See Sht. No. 7 of 8 for Section A-A.

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - JOH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT REPAIRS S.N 016-1063	MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NONE	CHECKED - BAN	REVISED -			4010	0202-602-HB-BR	COOK	30	25
	PLOT DATE =	DRAWN - JCW	REVISED -						CONTRACT NO. 62A24	
		CHECKED - JOH	REVISED -		SHEET NO. 6 OF 8 SHEETS			ILLINOIS	FED. AID PROJECT	

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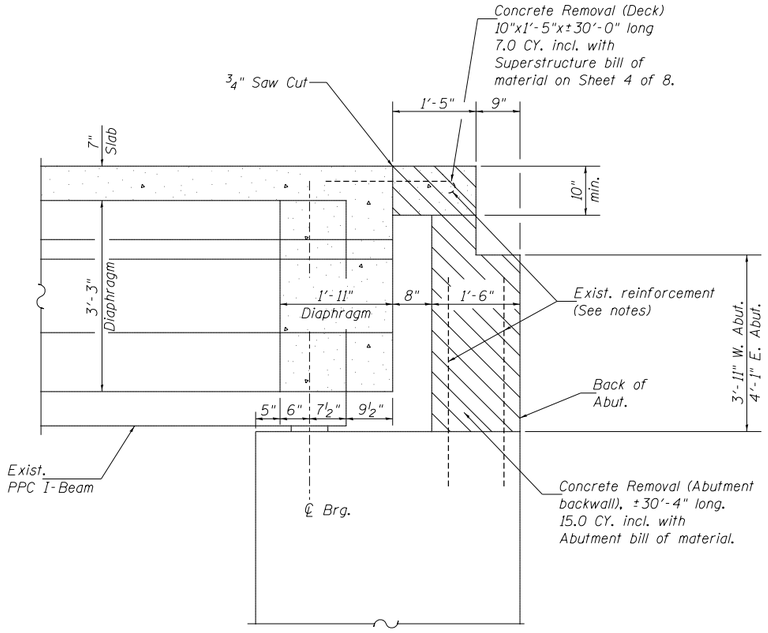
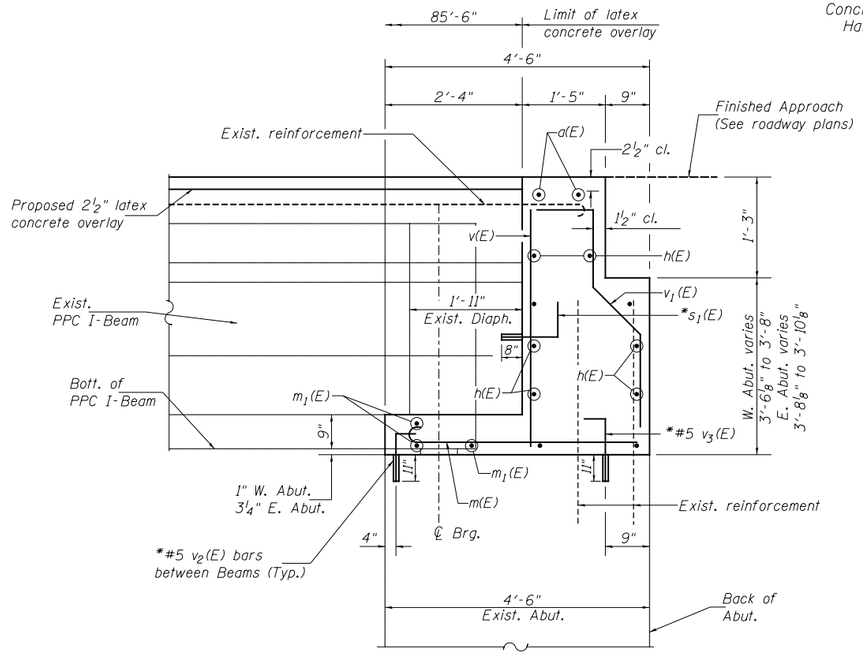


SECTION THRU EXISTING ABUTMENT



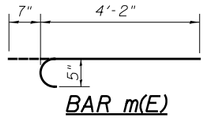
SECTION A-A PROPOSED

Notes:
Existing reinforcement bars extending into the concrete removal area shall be cleaned straightened and incorporated in the the new construction. Any reinforcement bars damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
Hatched area indicates concrete removal.

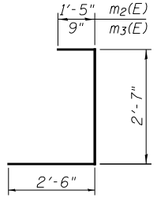
TWO ABUTMENTS BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a(E)	8	#5	14'-10"	
h(E)	40	#5	15'-9"	
m(E)	40	#5	4'-9"	
m_1(E)	24	#5	4'-3"	
m_2(E)	8	#5	6'-6"	
m_3(E)	12	#5	5'-10"	
s(E)	8	#4	13'-7"	
s_1(E)	56	#5	2'-3"	
v(E)	56	#5	4'-6"	
v_1(E)	56	#5	5'-7"	
v_2(E)	32	#5	2'-3"	
v_3(E)	56	#5	2'-6"	
Concrete Removal			Cu. Yd.	15.0
Concrete Superstructure			Cu. Yd.	28.0
Reinforcement Bars, Epoxy Coated			Pound	2,010

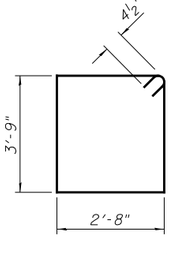
*Epoxy grouted bars in accordance with Article 584 of the Standard Specifications.



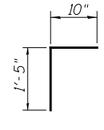
BAR m(E)



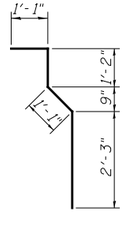
BARS m_2(E) & m_3(E)



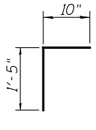
BARS s(E)



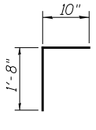
BAR s_1(E)



BAR v_1(E)



BAR v_2(E)



BAR v_3(E)

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	PLOT DATE =	DRAWN - JCW	REVISED -	
		CHECKED - JOH	REVISED -	

ABUTMENT DETAILS
S.N 016-1063
SHEET NO. 7 OF 8 SHEETS

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	26
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

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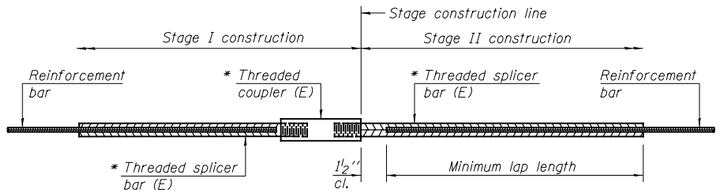


STANDARD BAR SPLICER ASSEMBLY

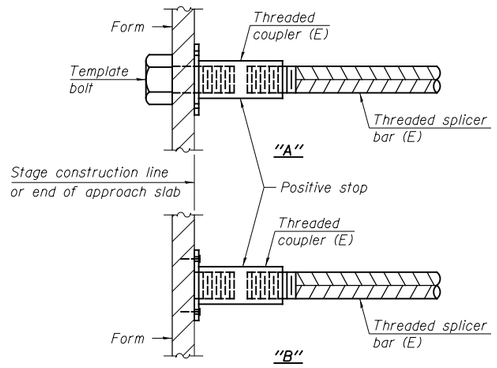
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

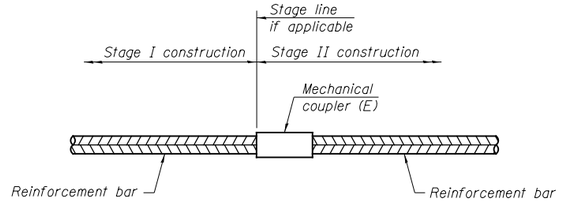
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut.	#5	12	Table 3
E. Abut.	#5	12	Table 3



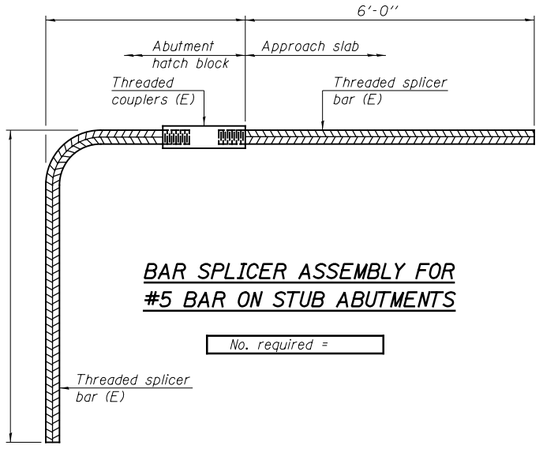
INSTALLATION AND SETTING METHODS

"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.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 8-31-12

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 016-1063
SHEET NO. 8 OF 8 SHEETS

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	27
		CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			

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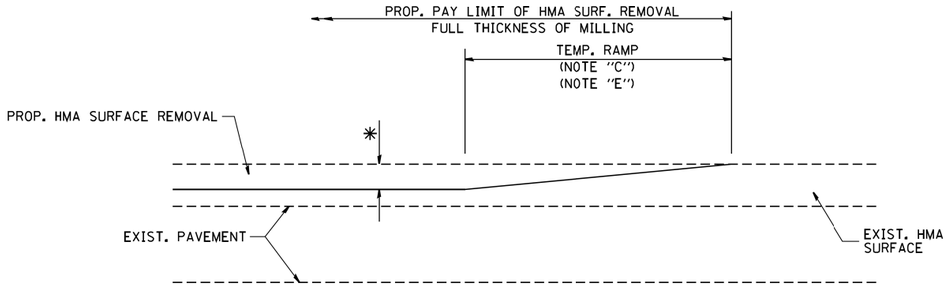
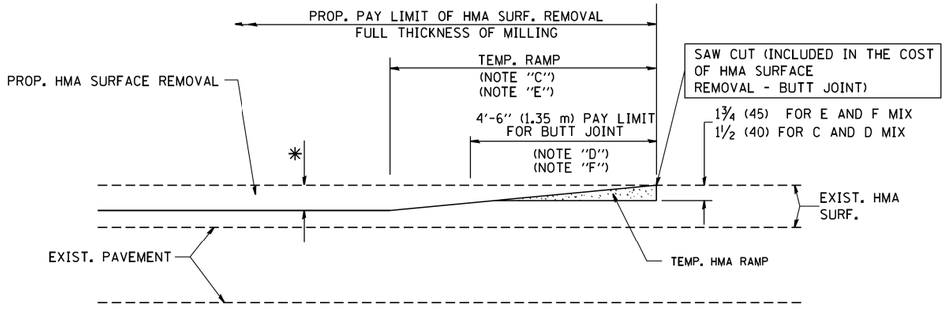


MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

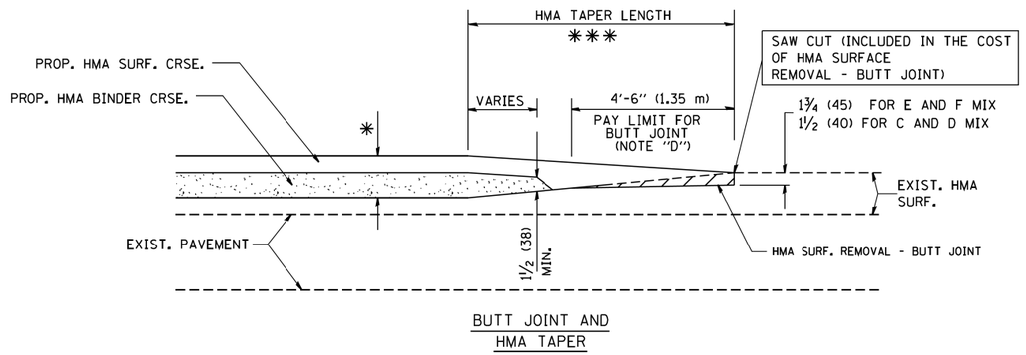


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

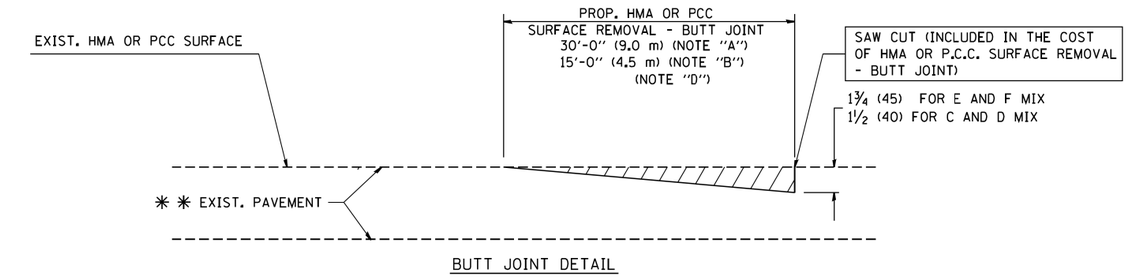
OPTION 2

TYPICAL TEMPORARY RAMP

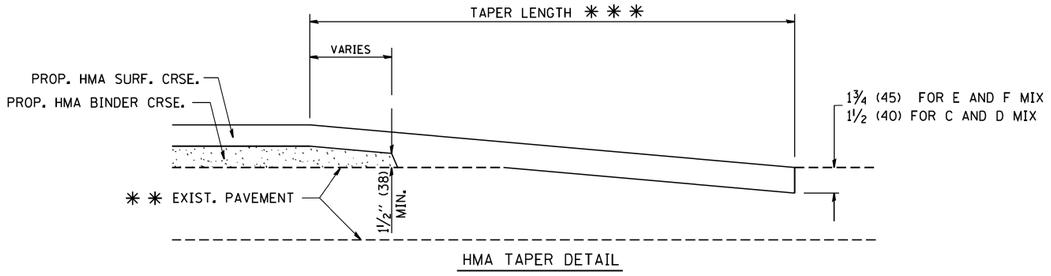


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

BASIS OF PAYMENT:

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

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

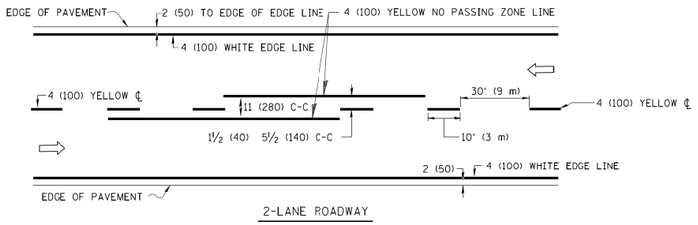
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

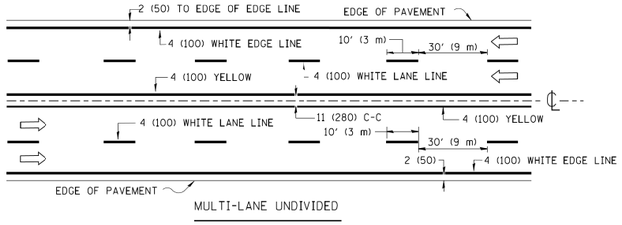
BUTT JOINT AND HMA TAPER DETAILS

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

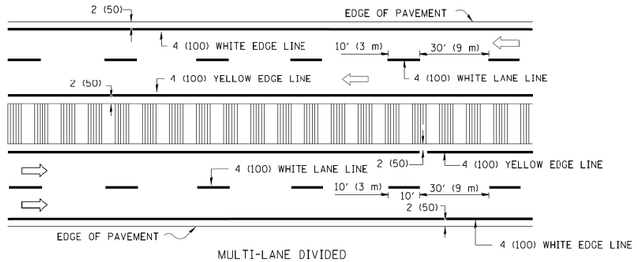
MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	28
	BD400-05 BD32	CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			



2-LANE ROADWAY



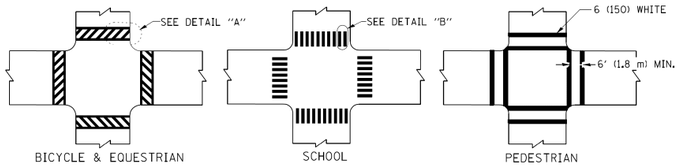
MULTI-LANE UNDIVIDED

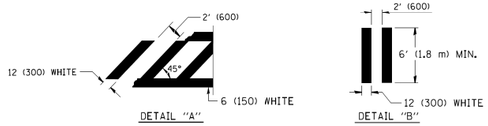


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

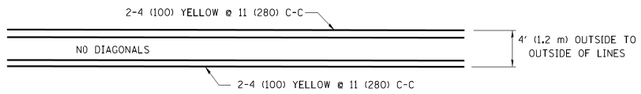
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

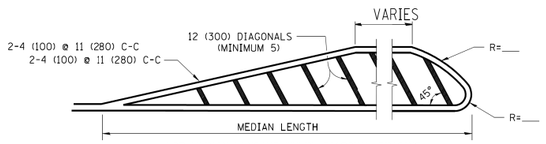




TYPICAL CROSSWALK MARKING



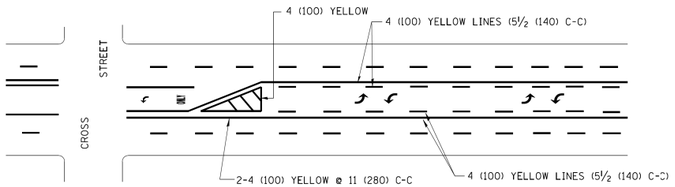
4' (1.2 m) WIDE MEDIANS ONLY



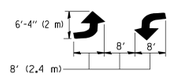
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

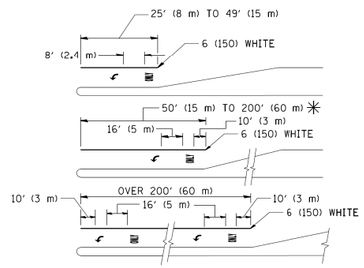


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

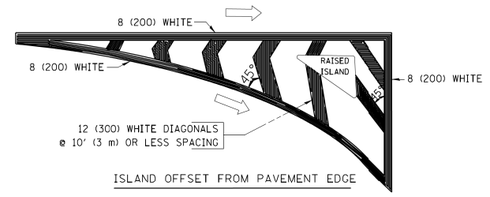


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) **ONLY** AREA = 20.8 SQ. FT. (1.9 m²)

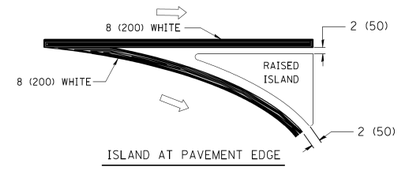
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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 UNDIVIDED PAVEMENT	2 ⌀ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⌀ 4 (100)	SOLID SOLID	YELLOW YELLOW	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 6' (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.

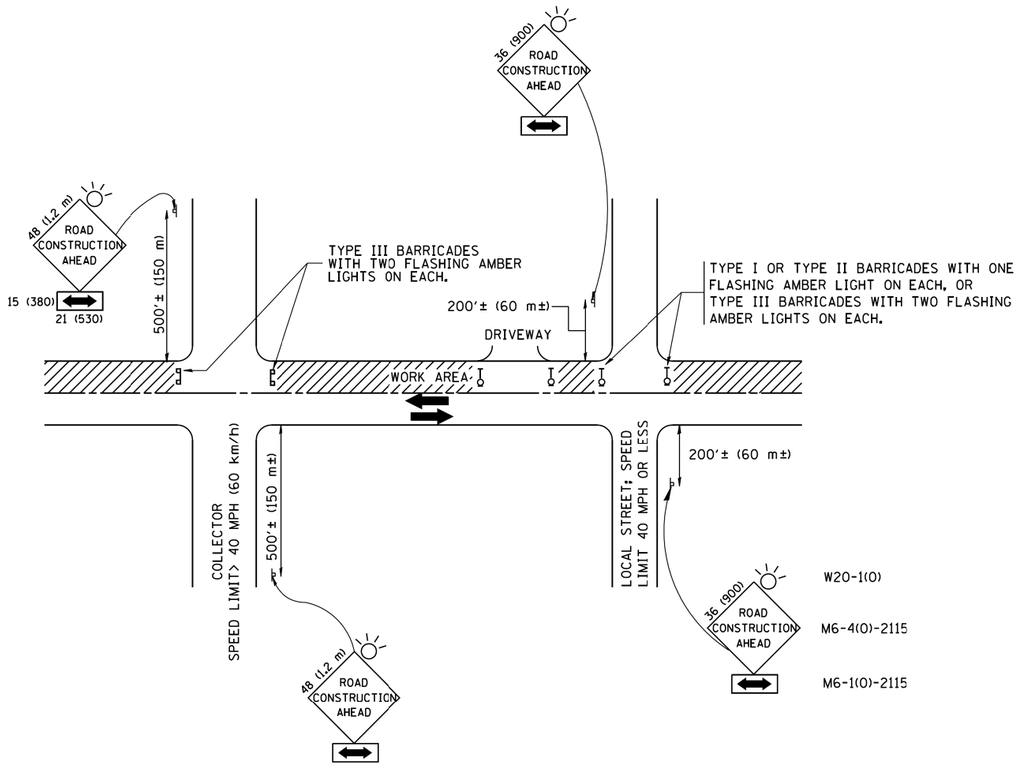
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	29
	TC-13	CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

MS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4010	0202-602-HB-BR	COOK	30	30
	TC-10	CONTRACT NO. 62A24		
	ILLINOIS FED. AID PROJECT			