F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR		KANE	38	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. _____		

KANE COUNTY
DIVISION OF TRANSPORATION

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 336 (ORCHARD ROAD – C.H. 83)
OVER I–88 TOLLWAY
SECTION 11–00202–03–BR
STRUCTURE REHABILITATION
KANE COUNTY

INDEX OF SHEETS

THIS PROJECT IS LOCATED IN THE CITY OF AURORA AND NORTH AURORA.

Call Before You Dig — Simply Call 811

48 HOURS BEFORE CONSTRUCTION

SECTION(S): S.W. 1/4 SEC. 6
N.W. 1/4 SEC. 7
TOWNSHIP: 38 NORTH
RANGE: 08 EAST OF 3RD P.M.

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

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

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

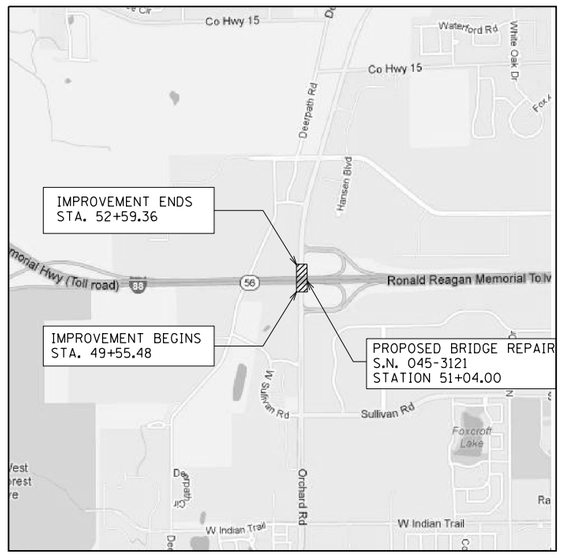
PROJECT ENGINEER JOHN CLARK
PROJECT MANAGER JEAN–ALIX PERALTE

CONTRACT NO. _____

FIELD ENGINEER:

AURORA TOWNSHIP R8E

T38N



LOCATION MAP SCALE: 1" = 1500'

GROSS LENGTH OF IMPROVEMENT: 303.88 LIN. FT. = 0.0576 MILES
EQUATIONS: NONE
OMISSIONS: NONE
NET LENGTH OF IMPROVEMENT: 303.88 LIN. FT. = 0.0576 MILES

N

DESIGN DESIGNATION:
SUBURBAN SRA ROUTE

TRAFFIC DATA
2008 AVERAGE DAILY TRAFFIC
NORTH OF PROJECT: 23,100
SOUTH OF PROJECT: 41,000
POSTED SPEED: 50 MPH
MOT STAGING SPEED: 30 MPH

LOCATION OF SECTION INDICATED THUS: – ■ –

KANE COUNTY
DIVISION OF TRANSPORATION

APPROVED _____

_____
COUNTY ENGINEER, KANE COUNTY

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges."

JOHN CLARK, P.E.
NO. 062-055684
EXP. DATE: 11/30/2013
SHEETS 1 - 14
SHEETS 22- 38

LAWRENCE KIRCHNER, P.E., S.E.
ILLINOIS STRUCTURE NO. 081-005343
EXP. DATE: 11/30/2012
SHEETS 15 - 21

STV Incorporated
engineers/architects/scientists/construction managers
200 W Monroe - Suite 1650
Chicago, Illinois 60606
(312) 553-0655
FAX: (312) 553-0661

GENERAL NOTES - MISCELLANEOUS

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND KANE COUNTY DIVISION OF TRANSPORTATION AS SHOWN.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER, OR AN AUTHORIZED SURVEYOR OR AGENT WILL WITNESS OR OTHERWISE REFERENCE AND RESET MONUMENTS AS NECESSARY. ALL PROPERTY CORNERS EXCEPT THOSE WITHIN AREAS WHERE THE SCHEDULE SHOWS PLACEMENT OF R.O.W. MARKERS, SHALL REMAIN UNDISTURBED.

THE CONTRACTOR, AS REQUIRED, SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WITH CONSTRUCTION. ANY FEES SHALL BE INCLUDED IN THE COST OF MOBILIZATION.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH STATE OR LOCAL REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.
THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS, AND THE AREA IMMEDIATELY ADJACENT TO PROPOSED CURB LINES. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.

THE CONTRACTOR'S PERSONNEL SHALL NOT BE ALLOWED TO PARK PERSONAL VEHICLES IN THE WORK AREA AND/OR CONSTRUCTION LIMITS.

EXISTING RIGHT-OF-WAY LIMITS SHOWN ON THE PLANS ARE APPROXIMATE.

THE CONTRACTOR IS REQUIRED TO REPAIR AND RESTORE ANY ROADWAY APPROACH PAVEMENT THAT IS DAMAGED BY THE CONTRACTOR'S FORCES DURING THE CONSTRUCTION OF THESE PLANS AT NO ADDITIONAL COST.

GENERAL NOTES - ROADWAY

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

REMOVAL OF EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INCLUDED IN THE COST OF BRIDGE DECK SCARIFICATION, 1½". REMOVAL OF EXISTING RECESSED PAVEMENT MARKINGS SHALL BE INCLUDED IN THE COST OF PAVEMENT MARKING REMOVAL.

THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE.

TEN FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

EXISTING FENCE THAT HAS BEEN DISCONNECTED AND/OR REMOVED FOR THE CONTRACTOR'S OPERATIONS OR DAMAGED BY THE CONTRACTOR SHALL BE RECONNECTED AND/OR REPLACED IN KIND AT NO ADDITIONAL COST TO THE CONTRACT.

THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.10 GAL. PER SQ. YD.

THE REMOVAL OF ALL EXISTING CONFLICTING SIGNS AND THE INSTALLATION OF ALL PROPOSED SIGNS (AS SPECIFIED IN THE PLANS AND AS DIRECTED BY THE ENGINEER) SHALL BE PERFORMED BY THE KDOT SIGN SHOP. THE CONTRACTOR SHALL CONTACT THE ENGINEER 72 HOURS PRIOR TO THE REMOVAL OF EXISTING SIGNS AND TWO WEEKS PRIOR TO THE INSTALLATION OF ALL NEW SIGNS.

GENERAL NOTES - DRAINAGE

THE COST OF MAKING ANY CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

LENGTHS AND SIZES OF STORM SEWERS AS SHOWN ON THE PLANS AND DRAINAGE STRUCTURE ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF DRAINAGE ITEMS. ELEVATIONS OF SEWER LINES WERE DETERMINED FROM AVAILABLE AS-BUILT PLANS. THE INVERTS OF THE PROPOSED DRAINAGE STRUCTURES MAY REQUIRE REVISIONS TO MEET EXISTING FIELD CONDITIONS. ANY ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE NOTED, ALL OFFSETS SHALL BE TO THE CENTER OF FRAMES AND GRATES, OR FRAMES AND LIDS. OFFSETS FOR CATCH BASINS WITH OPENINGS FOR TWO (2) FRAMES AND GRATES SHALL BE TO THE CENTER OF DRAINAGE STRUCTURE.

THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF THE ROAD DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS, AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT.

ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS, CROSSROAD PIPES, OR DRAINAGE STRUCTURES DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT.

GENERAL NOTES - UTILITIES

THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES. WHEN REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES AND THE COUNTY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

GENERAL NOTES - TRAFFIC CONTROL

THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED. ONE (1) WEIGHTED SAND BAG SHALL BE INSTALLED ACROSS EACH BOTTOM RAIL. ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

FLUORESCENT VESTS AND HARD HATS: ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT YELLOW/GREEN CONSTRUCTION VESTS CONFORMING TO ANSI CLASS 2 REQUIREMENTS AND HARD HATS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE CONTRACT.

THE CONTRACTOR IS ADVISED THAT IN THE EVENT OF SNOW, HE WILL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF ANY MAINTENANCE OF TRAFFIC PROTECTIVE DEVICES REQUIRED FOR HIS OPERATIONS THAT WOULD INTERFERE WITH SNOW REMOVAL OPERATIONS PERFORMED BY THE STATE OR LOCAL AGENCY.

THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.

THE CONTRACTOR SHALL COVER ANY EXISTING SIGNS THAT CONFLICT WITH THE INTENT OF THE TRAFFIC CONTROL PLAN. EXISTING SIGNS TO BE COVERED SHALL BE DIRECTED BY THE RESIDENT ENGINEER. THE COST FOR COVERING EXISTING SIGNS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARDS 701606 AND 701701.

GENERAL NOTES - BRIDGE AND APPROACH REPAIR

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GRADE 60. SEE SPECIAL PROVISIONS.

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.

LOCATIONS OF PARTIAL AND FULL DEPTH BRIDGE DECK REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD AT THE TIME OF CONSTRUCTION. CONCRETE AREAS SHALL BE REMOVED TO THE WIDTH, LENGTH AND DEPTH REQUIRED TO REACH SOUND CONCRETE AS DETERMINED BY THE ENGINEER.

ANY MATERIAL DEPOSITED INTO DRAINAGE STRUCTURES SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

THE EXISTING BRIDGE PLANS ARE AVAILABLE AT THE KANE COUNTY DIVISION OF TRANSPORTATION, AND WILL BE MADE AVAILABLE TO CONTRACTOR UPON WRITTEN REQUEST.

CONTRACTOR IS TO PROVIDE PROTECTIVE SHIELDING TO AVOID DEBRIS FROM FALLING ONTO TOLLWAY PROPERTY. THE DESIGN OF THE SHIELD WILL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW TO THE RESIDENT ENGINEER AND THE TOLLWAY. DESIGN OF PROTECTIVE SHIELDING SHALL INCORPORATE NECESSARY MAINTENANCE OF TRAFFIC PLANS FOR INSTALLATION OF PROTECTIVE SHIELDING AND SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF PROTECTIVE SHIELDING.

GENERAL NOTES - TRAFFIC SIGNALS

THE COST ASSOCIATED WITH THE DISCONNECTING AND RECONNECTING OF DETECTION LOOPS, PURCHASING, PULLING, AND REMOVING OF WIRE NEEDED FOR OPERATION OF VIDEO DETECTION CAMERAS SHALL BE INCLUDED IN THE COST OF THE VIDEO VEHICLE DETECTION SYSTEM.

IDOT HIGHWAY STANDARDS

701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
780001-03	TYPICAL PAVEMENT MARKINGS

KANE COUNTY HIGHWAY STANDARDS

KC781001-04	TYPICAL APPLICATIONS RECESSED REFLECTIVE PAVEMENT MARKERS

DISTRICT ONE STANDARDS

BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

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	DRAWN - SDZ	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JAP	REVISED -
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
GENERAL NOTES AND STANDARDS

SCALE: NTS | SHEET NO. 2 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	2
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	819
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	82
	40600300	AGGREGATE (PRIME COAT)	TON	2
	40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	98
	42001300	PROTECTIVE COAT	SQ YD	819
	44000100	PAVEMENT REMOVAL	SQ YD	819
	50102400	CONCRETE REMOVAL	CU YD	16.0
	50157300	PROTECTIVE SHIELD	SQ YD	146
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	16.0
	50300260	BRIDGE DECK GROOVING	SQ YD	2,543
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,040
	50800515	BAR SPLICERS	EACH	36
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	172
	58700300	CONCRETE SEALER	SQ FT	454
	59000200	EPOXY CRACK INJECTION	FOOT	438
	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	1.3
	67100100	MOBILIZATION	L SUM	1
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	8
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1499
	70300510	PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	835
	70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	43,640
	70300560	PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	2,059
	70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	461
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	18,521
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1012.5
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1050.0
Δ	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	291
Δ	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	13,000
Δ	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	1,582
Δ	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	563
Δ	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	161
Δ	X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	195
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	6,301
Δ	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
Δ	Z0012136	BRIDGE DECK SCARIFICATION 1 1/2"	SQ YD	2,765
Δ	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	10
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Δ	Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	216
Δ	Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2
Δ	Z0030332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2
Δ	Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	1
	Z-------	BRIDGE DECK LATEX CONCRETE OVERLAY, 1 1/2 INCHES	SQ YD	2,765
		ITEMS AS ORDERED BY THE ENGINEER	DOLLARS	200,000

ΔINDICATES SPECIALTY ITEM

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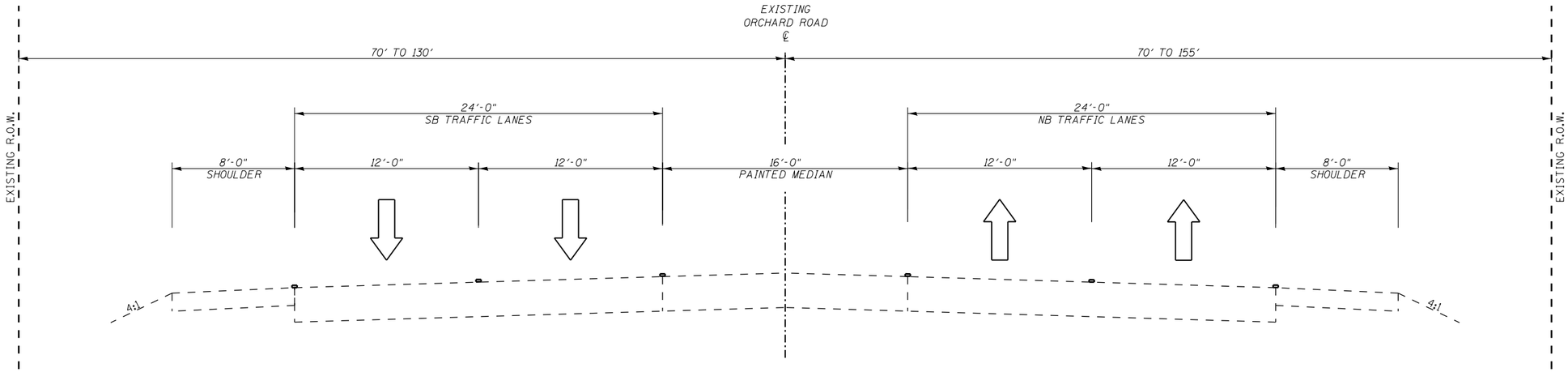
	DRAWN - SDZ	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED - JAP	REVISED -
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
SUMMARY OF QUANTITIES

SCALE: NTS | SHEET NO. 3 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	3
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



EXISTING CROSS SECTION

(LOOKING NORTH)

GENERAL NOTES:

FOR BRIDGE DECK TYPICAL SECTIONS
SEE PLAN SHEET 15

SHOULDERS WILL BE REMOVED AND REPLACED AS DIRECTED BY ENGINEER. REPLACEMENT OF SHOULDER WILL BE REQUIRED FOR DAMAGED DONE TO SHOULDERS CAUSED FROM THE CONSTRUCTION AND TRAFFIC STAGING PLANS.

SOME QUANTITES HAVE BEEN ADDED TO THE SUMMARY OF QUANTITES SHEET IN ANTICIPATION OF SOME SHOULDER WORK BEING REQUIRED. (APPRX. 30% OF UTILIZED SHOULDER AREA)

FILE NAME = i:\Projects\4015408\4015408_0001\90_CAD Models and Sheets\04_C_Civil\Sheets\Typical Section.dgn

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	DRAWN - RAB	REVISED -	
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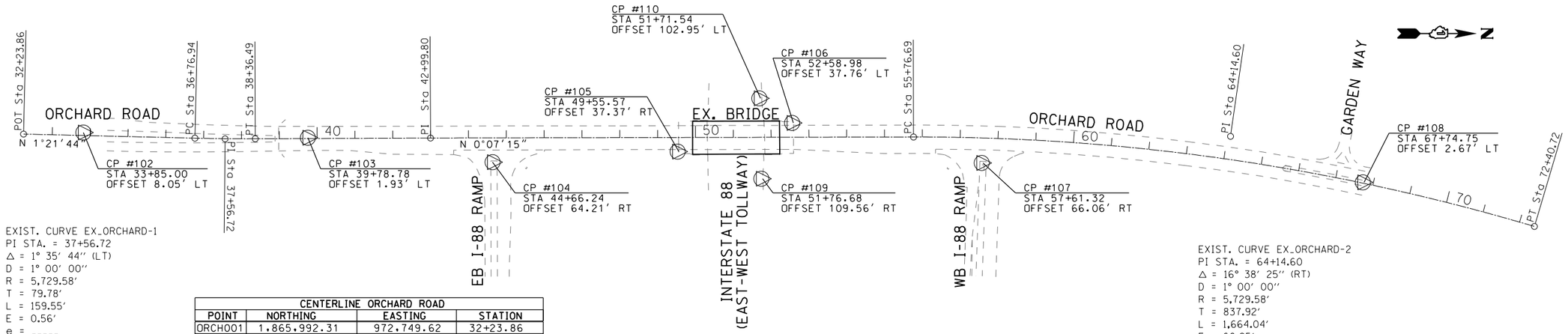
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
EXISTING TYPICAL SECTION

SHEET NO. 4 OF 38 SHEETS

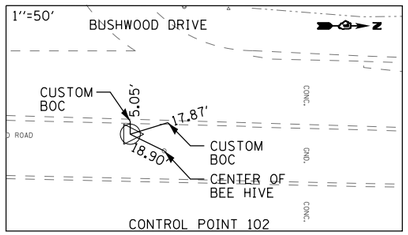
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	4
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

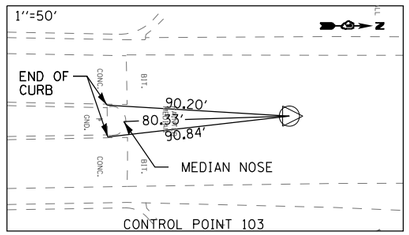


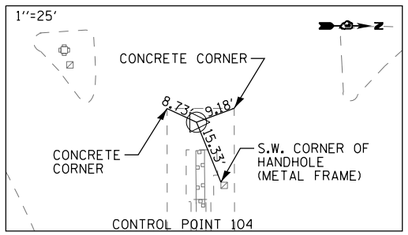
EXIST. CURVE EX_ORCHARD-1
PI STA. = 37+56.72
Δ = 1° 35' 44" (LT)
D = 1° 00' 00"
R = 5,729.58'
T = 79.78'
L = 159.55'
E = 0.56'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 36+76.94
P.T. STA. = 38+36.49

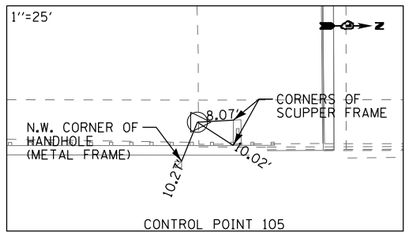
CENTERLINE ORCHARD ROAD			
POINT	NORTHING	EASTING	STATION
ORCH001	1,865,992.31	972,749.62	32+23.86
ORCH002	1,867,068.10	972,760.08	42+99.80

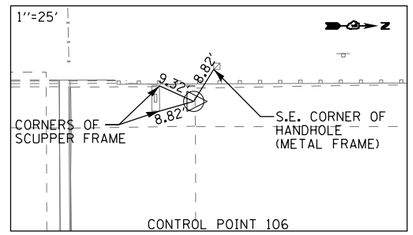
EXIST. CURVE EX_ORCHARD-2
PI STA. = 64+14.60
Δ = 16° 38' 25" (RT)
D = 1° 00' 00"
R = 5,729.58'
T = 837.92'
L = 1,664.04'
E = 60.95'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 55+76.69
P.T. STA. = 72+40.72

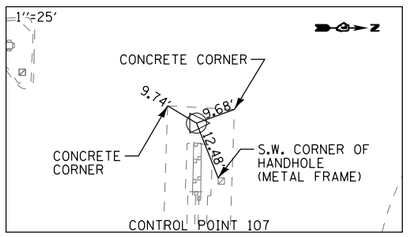


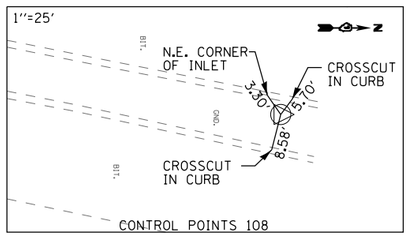


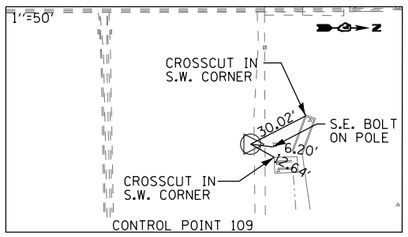


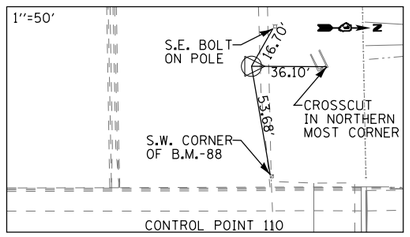












BENCHMARKS

BENCHMARK	ELEVATION	DESCRIPTION
OR1	687.315	CHISELED SQ. AT CENTER OF WEST END OF WALK OF SOUTH ON/OFF RAMP AT I-88
OR2	686.167	CHISELED SQ. ON N.E. CORNER OF SIGN FOUNDATION FOR ORCHARD ROAD BUISNESS PARK AT BUSHWOOD DRIVE (SOUTH END OF JOB)
OR3	687.540	CHISELED SQ. ON N.W. CORNER OF CONCRETE BASE OF COM ED VAULT NEAR S.W. CORNER OF PLAZA 64 AT NORTH RAMP (SOUTH END OF JOB)
OR4	692.019	CHISELED SQ. ON THE SOUTH EDGE OF LIGHT POLE ON NORTH SIDE OF GARDEN WAY AT NORTH END OF JOB, WEST SIDE
BM-88	680.749	CHISELED SQ. ON THE SOUTHEAST EDGE OF UTILITY VAULT ON WEST SIDE OF ORCHARD ROAD, NORTH OF INTERSTATE 88

NGS MONUMENTS

MONUMENT	ELEVATION
USGS 2 RGW 1963	704.43
USGS 2 RGW 1964	704.412
ZAU B 1995	692.946

CONTROL POINTS

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
102	1,866,153.454	972,745.428	689.004	IRC
103	1,866,747.079	972,759.450	685.422	MAG NAIL
104	1,867,235.506	972,823.936	690.862	MAG NAIL
105	1,867,724.777	972,796.070	701.581	CROSSCUT
106	1,868,027.199	972,720.292	702.280	CROSSCUT
107	1,868,528.433	972,826.875	690.500	MAG NAIL
108	1,869,535.978	972,877.073	691.411	IRC
109	1,867,946.039	972,867.793	680.452	MAG NAIL
110	1,867,940.458	972,655.296	681.059	MAG NAIL

GENERAL NOTE

ELEVATIONS BASED ON N.A.V.D. 88 DATUM

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
ALIGNMENTS, TIES AND BENCHMARKS

SCALE: 1" = 150' | SHEET NO. 5 OF 38 SHEETS | STA. 32+23.86 TO STA. 72+40.72

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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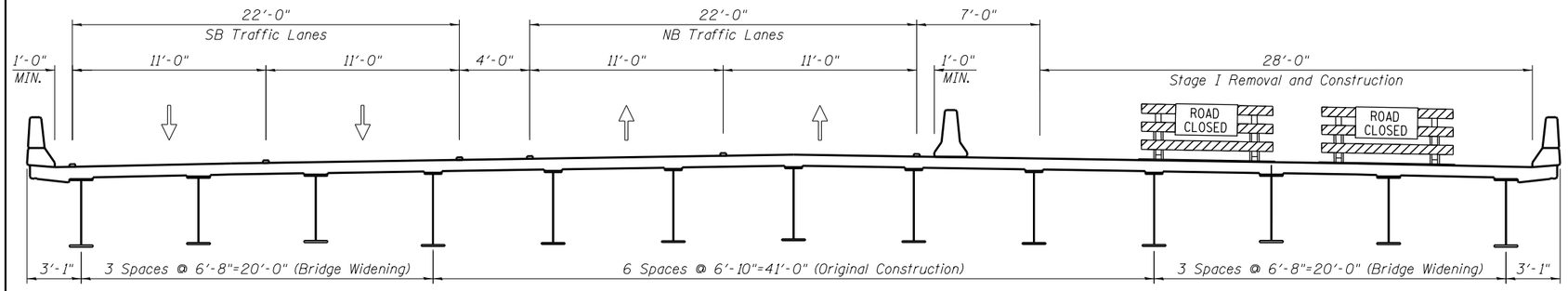
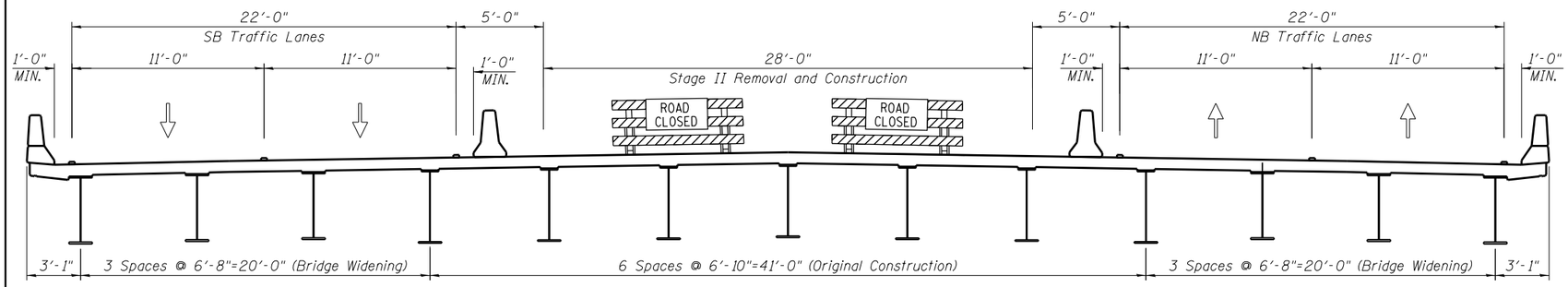
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



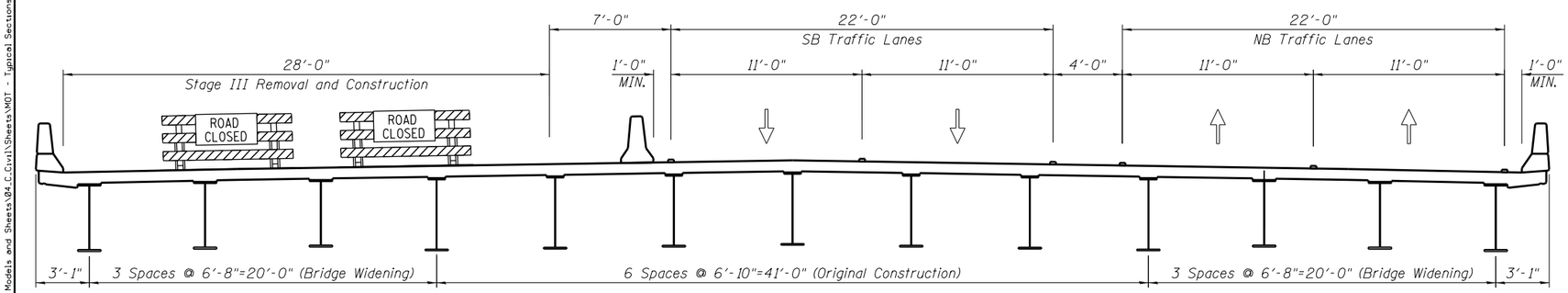
CROSS SECTION-STAGE I

(Looking North)



CROSS SECTION-STAGE II

(Looking North)



CROSS SECTION-STAGE III

(Looking North)

GENERAL NOTES FOR TRAFFIC CONTROL:

1. All the traffic control devices shall conform to the Traffic Control plans or the latest edition of the "Manual of Uniform Traffic Control Devices for Streets and Highways" and the Standard Specifications for Road and Bridge Construction Section 700 WORK ZONE TRAFFIC CONTROL, SIGNING AND PAVEMENT MARKING and shall be in place before removal for each stage is started.
2. The traffic control plans shall serve as a guide for safe diversion of traffic during execution of this Contract. However, the Contractor may improve or modify the traffic control plans for his/her construction needs but not at the expense of public safety or convenience. Any Contractor-proposed traffic control plans shall be submitted for the written approval of the Engineer.
3. A minimum of two 11'-0" lanes in each direction over the bridge shall be available to through traffic at all times. Additionally, a minimum of 1'-0" of shoulder shall be maintained at all times on either side of traveled way
4. The type, number, location and spacing of all signs and traffic control devices shall be according to the maintenance of traffic plans and Highway Standards 701606-08, 701701-08, and 701901-02 and may be adjusted to fit field conditions as directed by the Engineer at no additional cost to the Contract.
5. All signs shall be post mounted.
6. All temporary pavement marking tape shall be Type III.
7. Existing pavement markings in conflict with the temporary pavement markings for traffic control and protection shall be removed.
8. Speed limit through construction area shall be reduced to 30 MPH down from the existing posted speed limit of 50 MPH.
9. The Contractor shall not mount construction traffic control signs on existing signs.
10. An item and estimated quantity has been included for permanent paint pavement markings and replacement of paved shoulder. Permanent pavement markings and replacement of paved shoulder will be constructed only if approved by the Engineer.
11. Temporary traffic controls shall be in place at the beginning of each stage as shown on the plans, including necessary traffic signal modifications
12. Short term pavement markings shall be used as necessary at the direction of the engineer. Estimated quantities has been included for this work.

NARRATIVE FOR TRAFFIC CONTROL STAGES:

Two weeks prior to construction, contractor shall place changeable message boards beyond the northern and southern limits of the project. Message displayed on message boards shall be approved by the engineer.

Stage I Traffic
Traffic shall shift to the west to avoid the work zone on the east side of the bridge. Traffic lanes shall be a minimum of 11' wide on Orchard Road.

Stage I Construction
The 1 1/2" of bridge deck scarification and latex overlay shall be constructed on the eastern third (28') of the bridge deck and approach slabs. This includes repairs needed at the expansion joints.

Stage II Traffic
Northbound traffic shall shift to the east, while southbound traffic shall shift to the west to avoid the work zone on the center of the bridge. Traffic lanes shall be a minimum of 11' wide on Orchard Road.

Stage II Construction
The 1 1/2" of bridge deck scarification and latex overlay shall be constructed on the center third (28') of the bridge deck and approach slabs. This includes repairs needed at the expansion joints.

Stage III Traffic
Traffic shall shift to the east to avoid the work zone on the west side of the bridge. Traffic lanes shall be a minimum of 11' wide on Orchard Road.

Stage III Construction
The 1 1/2" of bridge deck scarification and latex overlay shall be constructed on the western third (28') of the bridge deck and approach slabs. This includes repairs needed at the expansion joints.

After bridge repairs have been completed, restoration of signal actuation and permanent pavement markings shall be restored. Additionally, evaluation and replacement of paved shoulders shall be completed as directed by the engineer.

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
STAGE CONSTRUCTION DETAILS

SCALE: NTS | SHEET NO. 6 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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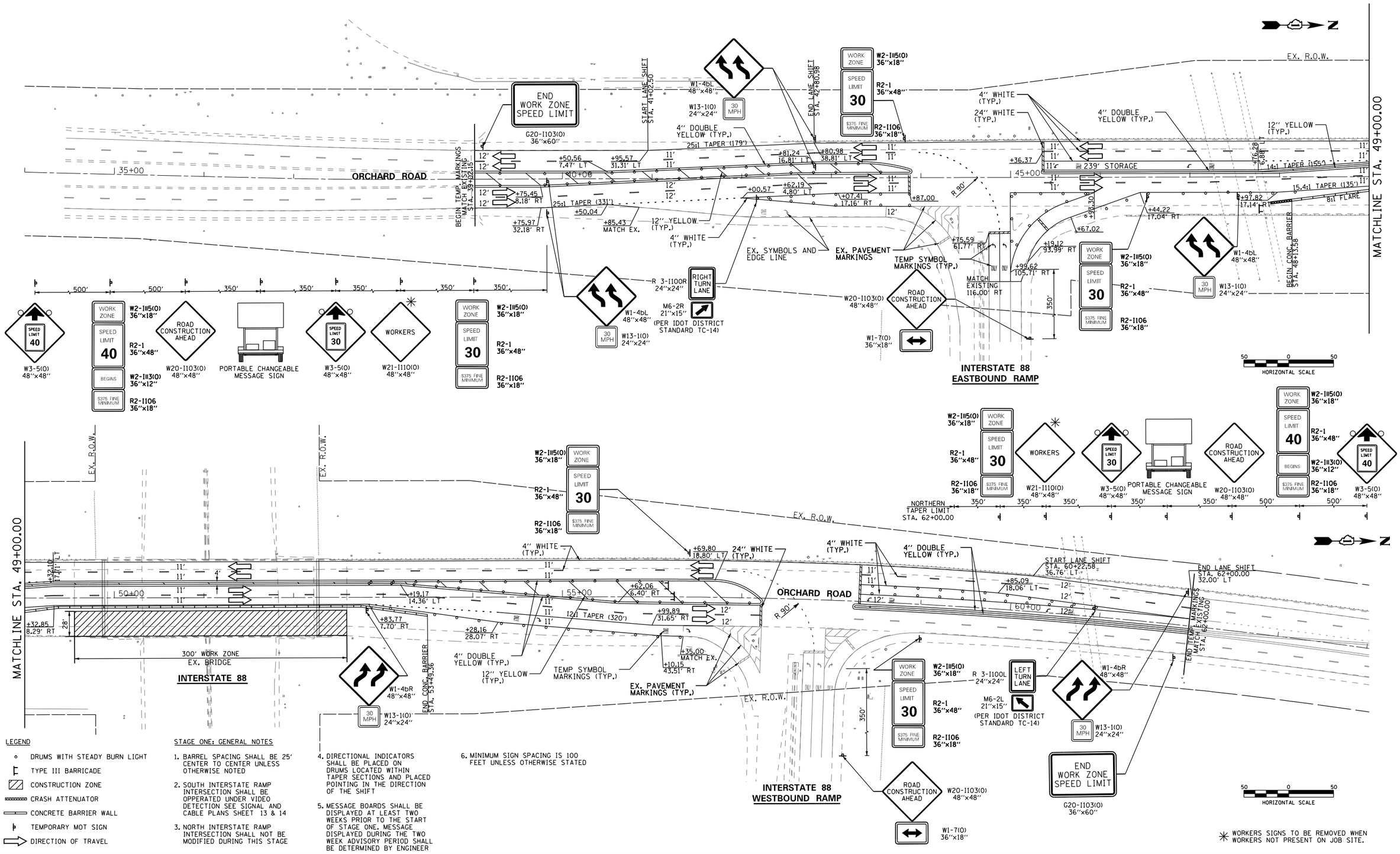
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



LEGEND

- DRUMS WITH STEADY BURN LIGHT
- TYPE III BARRICADE
- CONSTRUCTION ZONE
- CRASH ATTENUATOR
- CONCRETE BARRIER WALL
- TEMPORARY MOT SIGN
- DIRECTION OF TRAVEL

STAGE ONE: GENERAL NOTES

1. BARREL SPACING SHALL BE 25' CENTER TO CENTER UNLESS OTHERWISE NOTED
2. SOUTH INTERSTATE RAMP INTERSECTION SHALL BE OPPERATED UNDER VIDEO DETECTION SEE SIGNAL AND CABLE PLANS SHEET 13 & 14
3. NORTH INTERSTATE RAMP INTERSECTION SHALL NOT BE MODIFIED DURING THIS STAGE
4. DIRECTIONAL INDICATORS SHALL BE PLACED ON DRUMS LOCATED WITHIN TAPER SECTIONS AND PLACED POINTING IN THE DIRECTION OF THE SHIFT
5. MESSAGE BOARDS SHALL BE DISPLAYED AT LEAST TWO WEEKS PRIOR TO THE START OF STAGE ONE. MESSAGE DISPLAYED DURING THE TWO WEEK ADVISORY PERIOD SHALL BE DETERMINED BY ENGINEER
6. MINIMUM SIGN SPACING IS 100 FEET UNLESS OTHERWISE STATED

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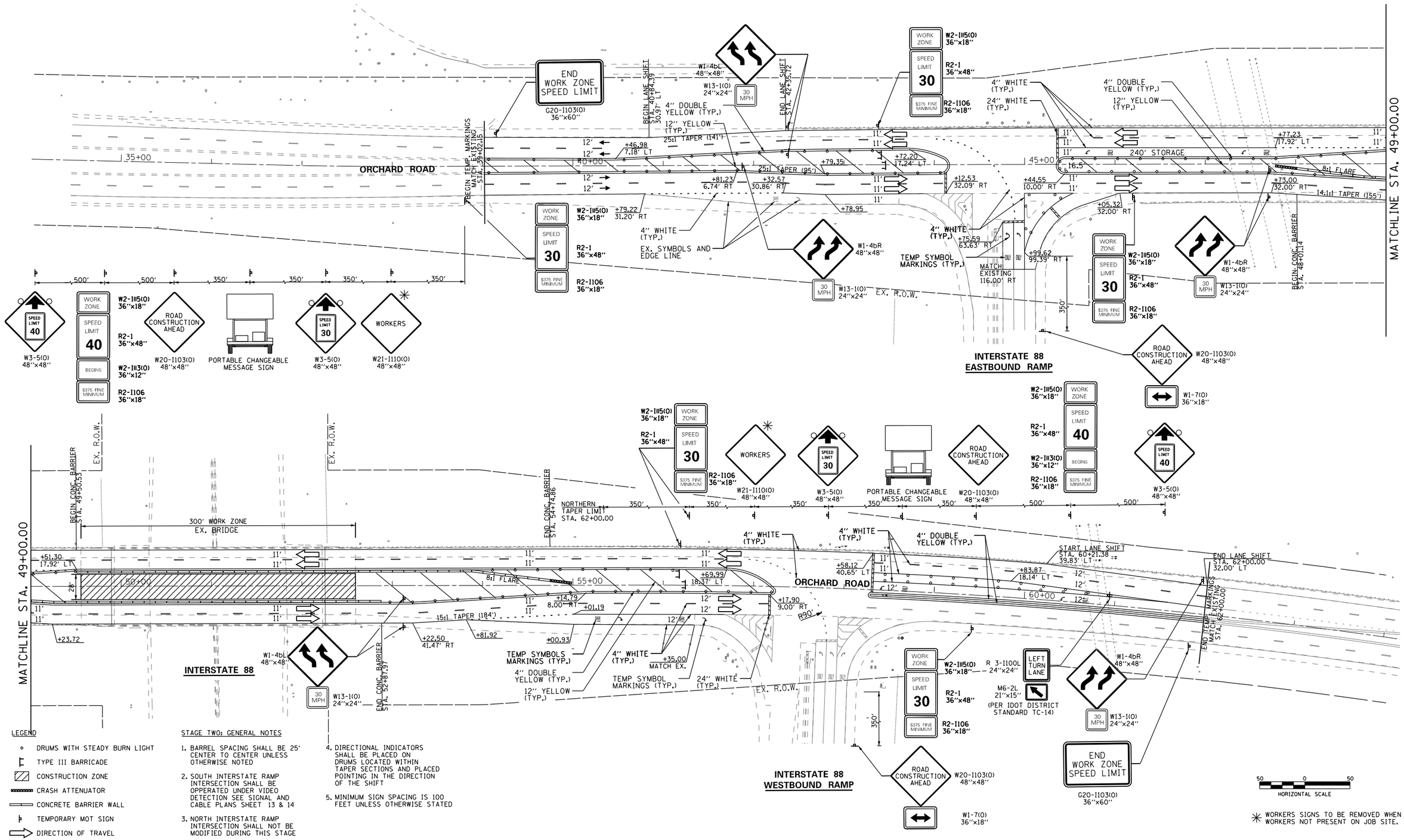
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL – STAGE 1

SCALE: 1" = 50' | SHEET NO. 7 OF 38 SHEETS | STA. 39+02.15 TO STA. 62+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	7
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



LEGEND

- DRUMS WITH STEADY BURN LIGHT
- TYPE III BARRICADE
- CONSTRUCTION ZONE
- CRASH ATTENUATOR
- CONCRETE BARRIER WALL
- TEMPORARY MOT SIGN
- DIRECTION OF TRAVEL

STAGE TWO: GENERAL NOTES

1. BARREL SPACING SHALL BE 25' CENTER TO CENTER UNLESS OTHERWISE NOTED
2. SOUTH INTERSTATE RAMP INTERSECTION SHALL BE OPPERATED UNDER VIDEO DETECTION SEE SIGNAL AND CABLE PLANS SHEET 13 & 14
3. NORTH INTERSTATE RAMP INTERSECTION SHALL NOT BE MODIFIED DURING THIS STAGE
4. DIRECTIONAL INDICATORS SHALL BE PLACED ON DRUMS LOCATED WITHIN TAPER SECTIONS AND PLACED POINTING IN THE DIRECTION OF THE SHIFT
5. MINIMUM SIGN SPACING IS 100 FEET UNLESS OTHERWISE STATED

✳ WORKERS SIGNS TO BE REMOVED WHEN WORKERS NOT PRESENT ON JOB SITE.

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL - STAGE 2

SCALE: 1" = 50' | SHEET NO. 8 OF 38 SHEETS | STA. 39+02.15 TO STA. 62+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	C-XX-XXX-XX	CONTRACT NO. XXXXX		
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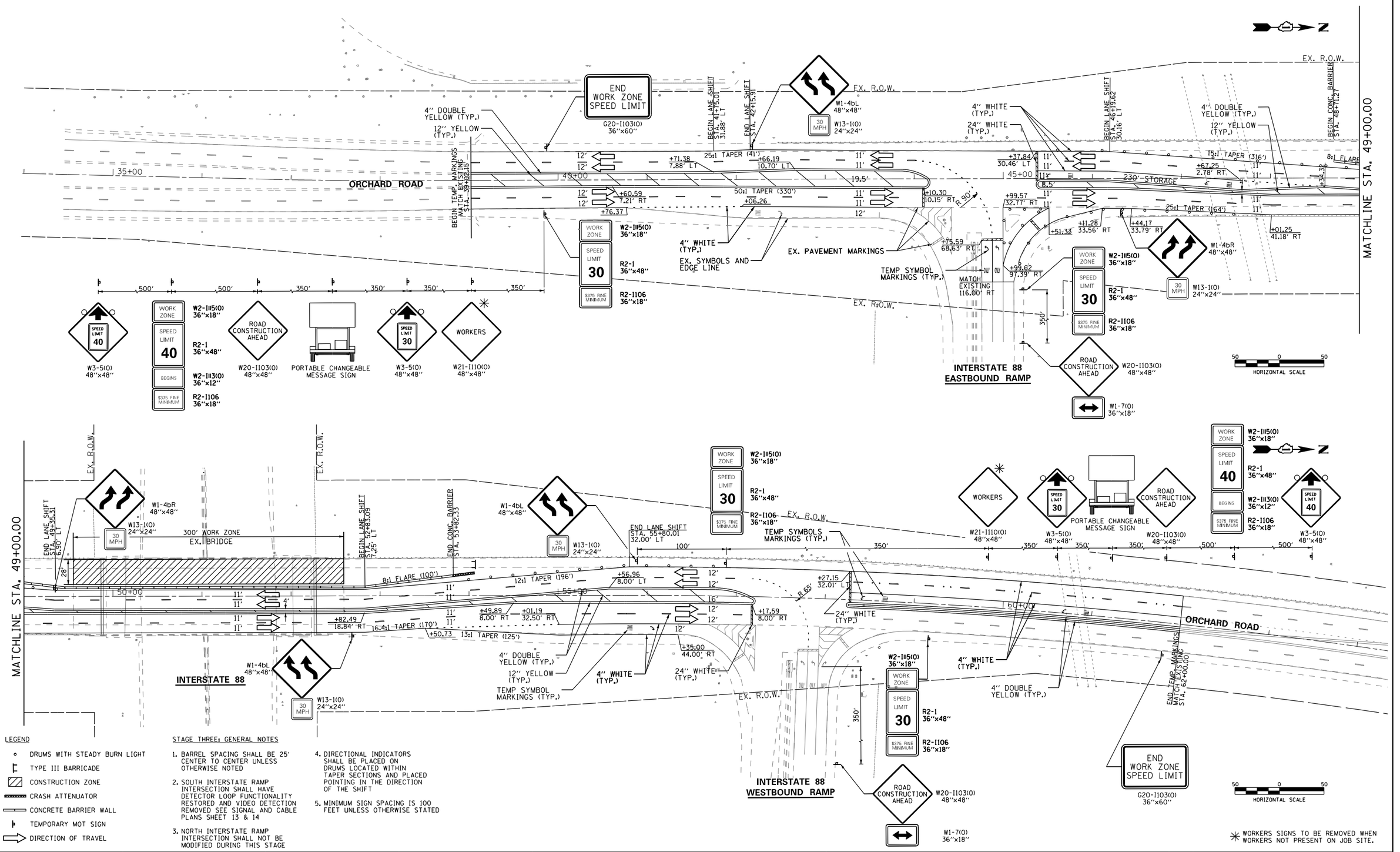

LEGEND

- DRUMS WITH STEADY BURN LIGHT
- TYPE III BARRICADE
- CONSTRUCTION ZONE
- CRASH ATTENUATOR
- CONCRETE BARRIER WALL
- TEMPORARY MOT SIGN
- DIRECTION OF TRAVEL

STAGE THREE: GENERAL NOTES

1. BARREL SPACING SHALL BE 25' CENTER TO CENTER UNLESS OTHERWISE NOTED
2. SOUTH INTERSTATE RAMP INTERSECTION SHALL HAVE DETECTOR LOOP FUNCTIONALITY RESTORED AND VIDEO DETECTION REMOVED SEE SIGNAL AND CABLE PLANS SHEET 13 & 14
3. NORTH INTERSTATE RAMP INTERSECTION SHALL NOT BE MODIFIED DURING THIS STAGE
4. DIRECTIONAL INDICATORS SHALL BE PLACED ON DRUMS LOCATED WITHIN TAPER SECTIONS AND PLACED POINTING IN THE DIRECTION OF THE SHIFT
5. MINIMUM SIGN SPACING IS 100 FEET UNLESS OTHERWISE STATED

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL – STAGE 3

SCALE: 1" = 50' | SHEET NO. 9 OF 38 SHEETS | STA. 39+02.15 TO STA. 62+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	C-XX-XXX-XX	CONTRACT NO. XXXXX		
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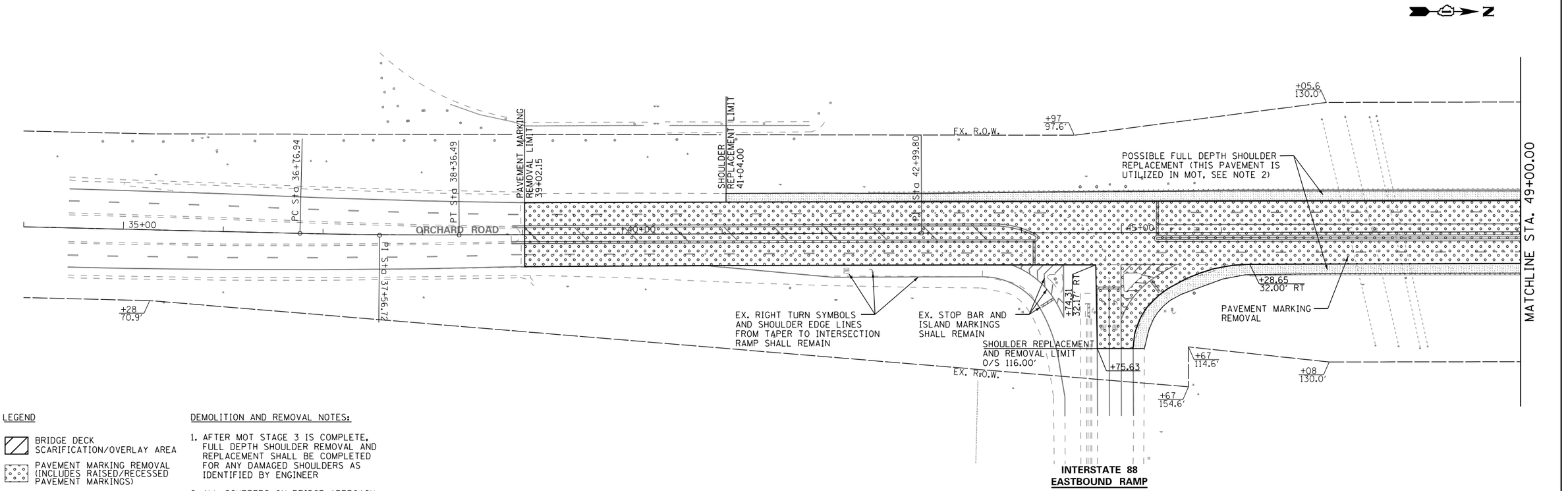
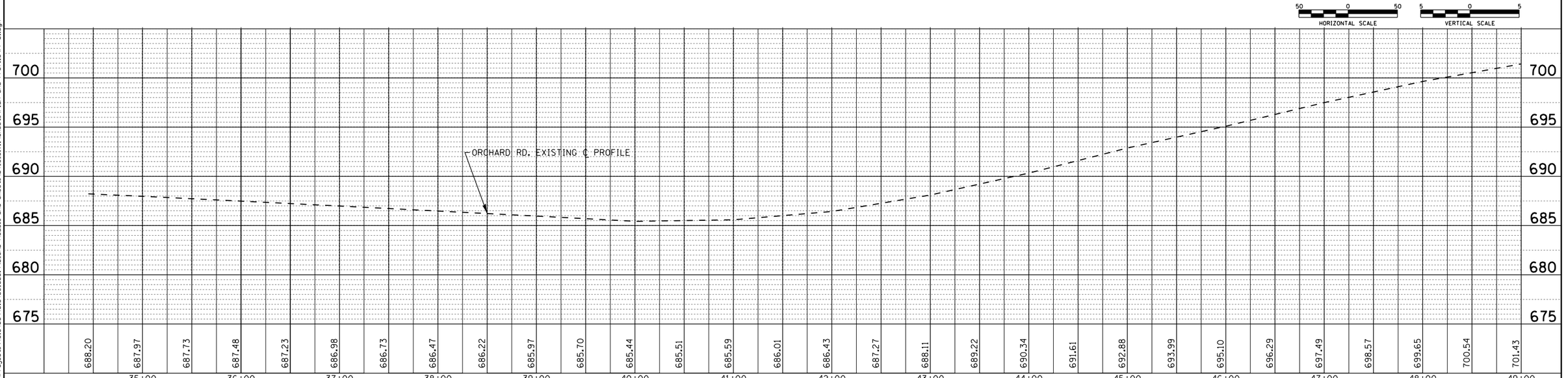


LEGEND

- BRIDGE DECK SCARIFICATION/OVERLAY AREA
- PAVEMENT MARKING REMOVAL (INCLUDES RAISED/RECESSED PAVEMENT MARKINGS)
- HMA SHOULDER REMOVAL AND REPLACEMENT (SEE NOTE #2) AS DIRECTED BY ENGINEER

DEMOLITION AND REMOVAL NOTES:

1. AFTER MOT STAGE 3 IS COMPLETE, FULL DEPTH SHOULDER REMOVAL AND REPLACEMENT SHALL BE COMPLETED FOR ANY DAMAGED SHOULDERS AS IDENTIFIED BY ENGINEER
2. ALL SCUPPERS ON BRIDGE APPROACH SLABS SHALL BE PROPERLY PROTECTED FROM DEBRIS. FILTRATION BASKETS SHALL BE INSTALLED THROUGHOUT ALL STAGES OF PROJECT ON THESE STRUCTURES



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KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
PLAN AND PROFILE

SCALE: 1" = 50' | SHEET NO. 10 OF 38 SHEETS | STA. 39+02.15 TO STA. 49+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	10
	C-xx-xxx-xx	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT HSIP-xxxx (xxx)			

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PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, BM. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO.____, BY, DATE

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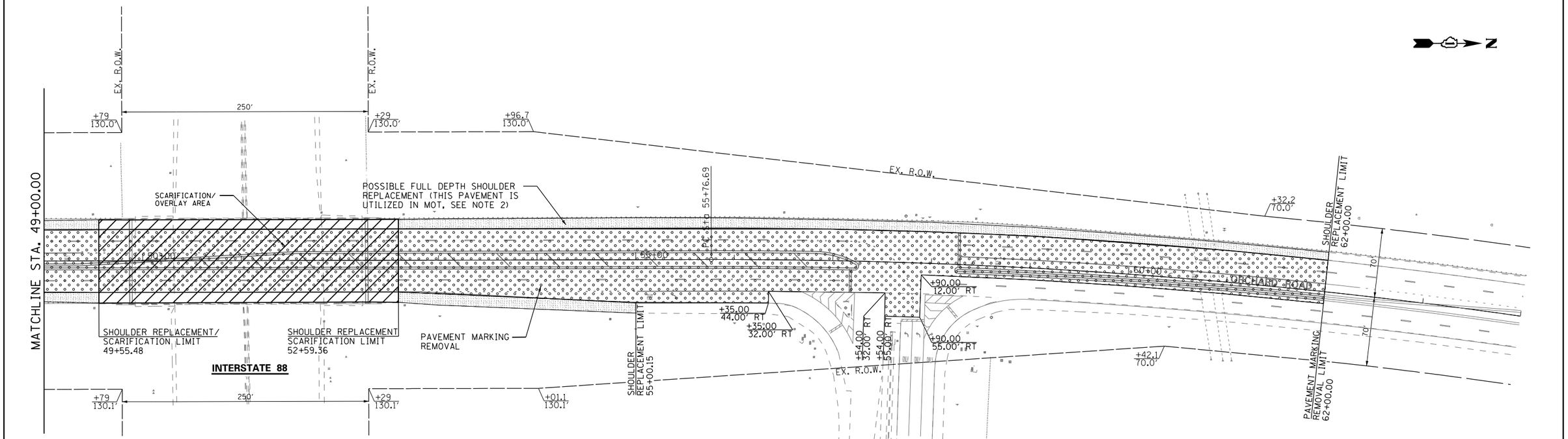


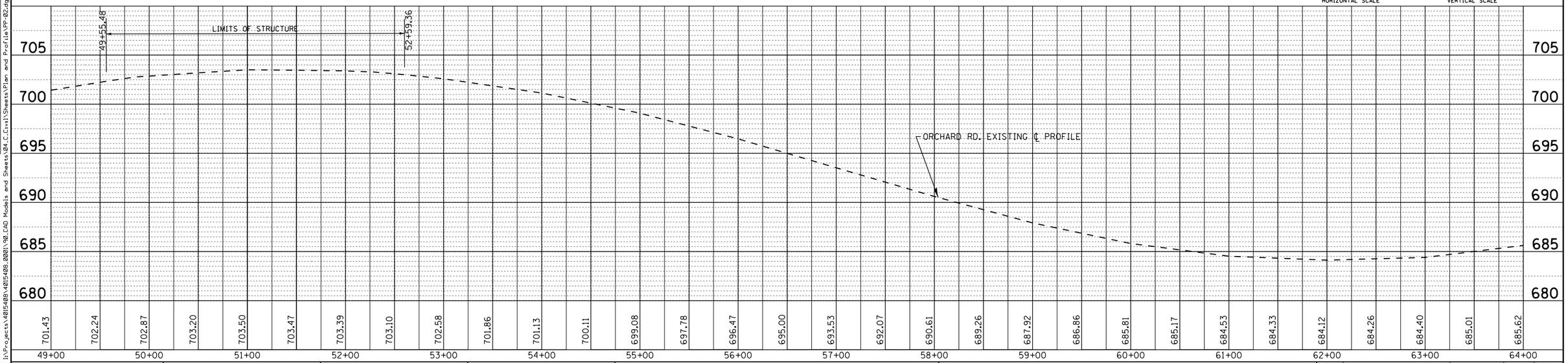
LEGEND

- BRIDGE DECK SCARIFICATION/OVERLAY AREA
- PAVEMENT MARKING REMOVAL (INCLUDES RAISED/RECESSED PAVEMENT MARKINGS)
- HMA SHOULDER REMOVAL AND REPLACEMENT (SEE NOTE #2) AS DIRECTED BY ENGINEER

DEMOLITION AND REMOVAL NOTES:

1. AFTER MOT STAGE 3 IS COMPLETE, FULL DEPTH SHOULDER REMOVAL AND REPLACEMENT SHALL BE COMPLETED FOR ANY DAMAGED SHOULDERS AS IDENTIFIED BY ENGINEER

2. ALL SCUPPERS ON BRIDGE APPROACH SLABS SHALL BE PROPERLY PROTECTED FROM DEBRIS. FILTRATION BASKETS SHALL BE INSTALLED THROUGHOUT ALL STAGES OF PROJECT ON THESE STRUCTURES



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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
PLAN AND PROFILE

SCALE: 1" = 50' | SHEET NO. 11 OF 38 SHEETS | STA. 49+00.00 TO STA. 62+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	C-xx-xxx-xx	CONTRACT NO.		
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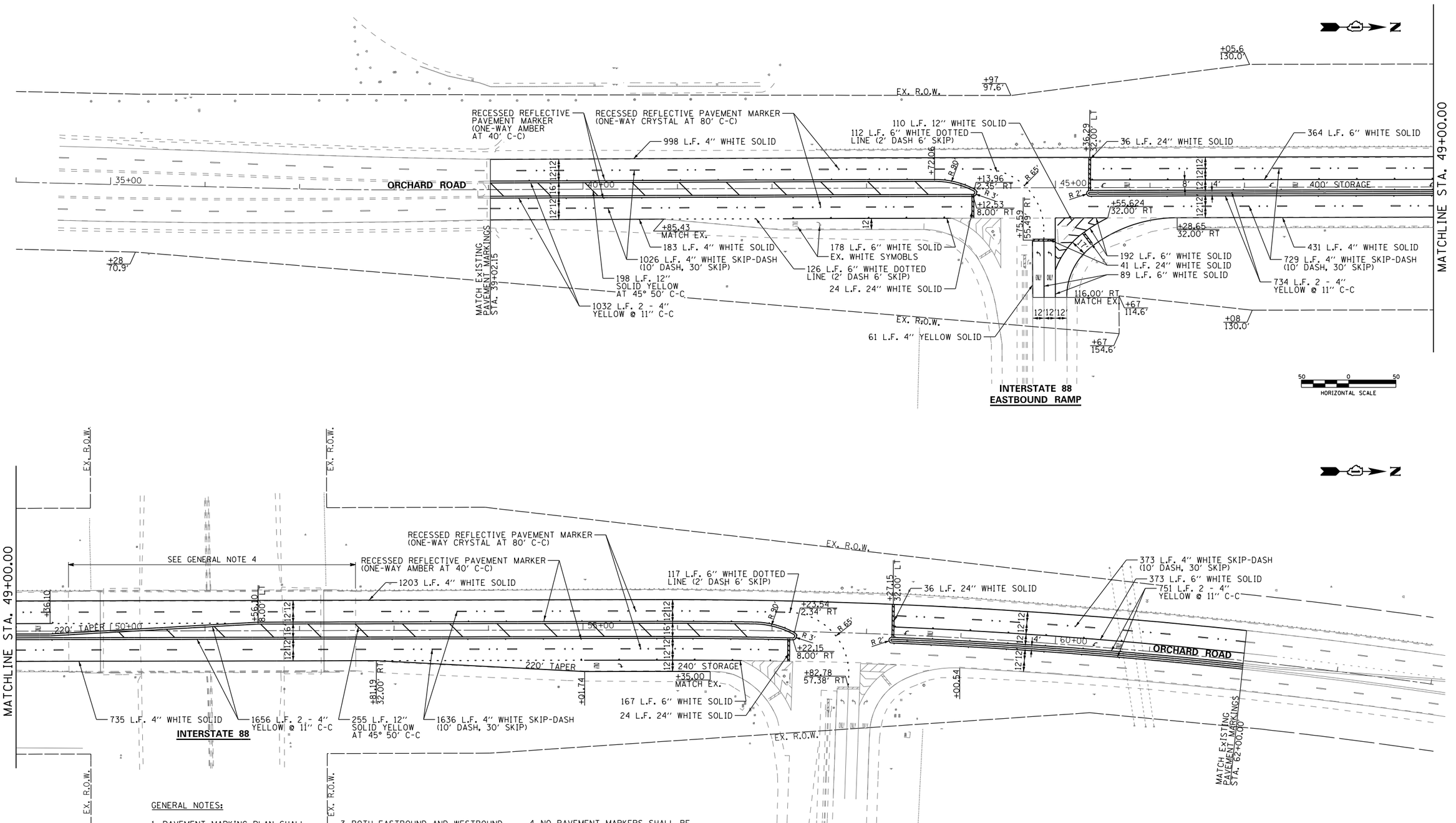

GENERAL NOTES:

1. PAVEMENT MARKING PLAN SHALL NOT BE INITIATED UNTIL AFTER SHOULDER FULL DEPTH REPLACEMENT HAS BEEN COMPLETED
2. RECESSED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED PER STANDARD KC781001-04
3. BOTH EASTBOUND AND WESTBOUND RAMP INTERSECTIONS SHALL HAVE THEIR EXISTING TRAFFIC SIGNAL DETECTION AND PHASING RESTORED TO THE SATISFACTION OF COUNTY ENGINEER
4. NO PAVEMENT MARKERS SHALL BE INSTALLED IN THE BRIDGE DECK PAVEMENT OR THE BRIDGE APPROACH SLAB PAVEMENT

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
PROPOSED PAVEMENT MARKING PLAN

SCALE: 1" = 50' | SHEET NO. 12 OF 38 SHEETS | STA. 39+02.15 TO STA. 62+00.00

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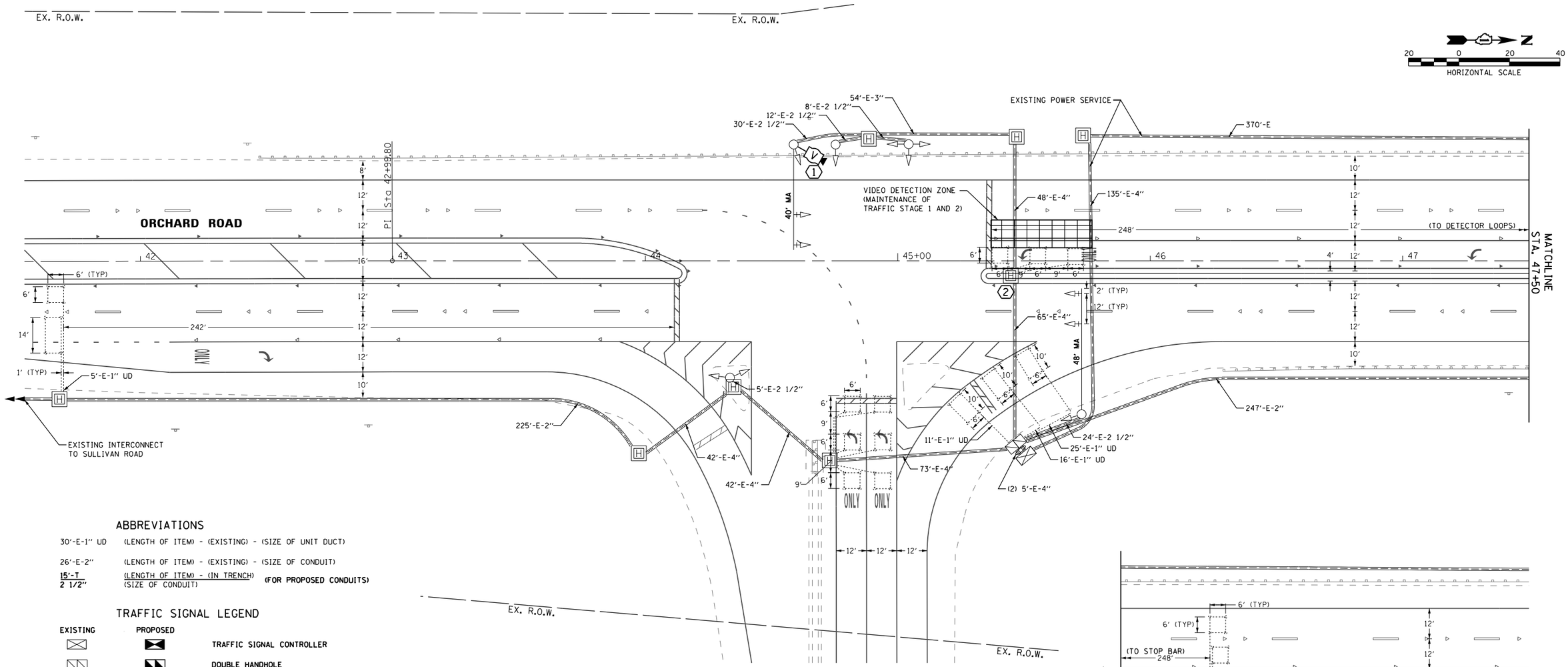


ABBREVIATIONS

30'-E-1" UD	(LENGTH OF ITEM) - (EXISTING) - (SIZE OF UNIT DUCT)	
26'-E-2"	(LENGTH OF ITEM) - (EXISTING) - (SIZE OF CONDUIT)	
15'-T / 2 1/2"	(LENGTH OF ITEM) - (IN TRENCH) / (SIZE OF CONDUIT)	(FOR PROPOSED CONDUITS)

TRAFFIC SIGNAL LEGEND

EXISTING	PROPOSED	
⊠	◪	TRAFFIC SIGNAL CONTROLLER
▨	◪	DOUBLE HANDHOLE
▧	◪	HANDHOLE
H	H	HEAVY DUTY HANDHOLE
J	J	JUNCTION BOX
▭	▭	DETECTOR LOOP
○——●	●——●	MAST ARM ASSEMBLY AND POLE, STEEL
○	●	SIGNAL POST
—▷	—►	SIGNAL HEAD
+▷	+►	SIGNAL HEAD WITH BACK PLATE
◁	◀	EMERGENCY VEHCILE SYSTEM DETECTOR
▯	▮	SIGNAL HEAD, PEDESTRIAN
◎	◉	PEDESTRIAN PUSHBUTTON DETECTOR
▷—◁	►—◀	CONFIRMATION BEACON
V	V	VIDEO DETECTION SYSTEM
▬▬	— — —	CONDUIT IN TRENCH OR PUSHED
·····	———	UNIT DUCT

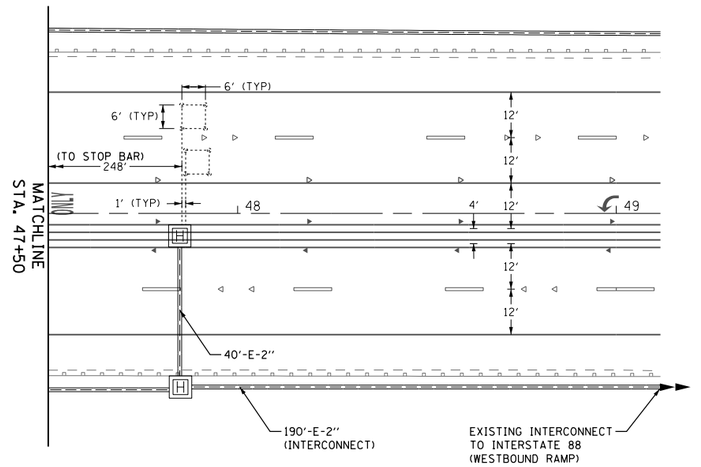
CONSTRUCTION NOTES:

(1) INSTALL VIDEO DETECTION SYSTEM, POST MOUNTED, PRIOR TO THE START OF THE FIRST STAGE OF THE MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE VIDEO DETECTION SYSTEM PRIOR TO EACH MAINTENANCE OF TRAFFIC STAGE. ALIGNMENT OF VIDEO DETECTION SYSTEM SHALL DETECT THE SOUTHBOUND LEFT TURN LANE TRAFFIC AT ALL TIMES. CONTRACTOR SHALL REMOVE THE VIDEO DETECTION SYSTEM AND RESTORE EXISTING LOOP DETECTOR OPERATION AFTER COMPLETION OF STAGE 2 OF THE MAINTENANCE OF TRAFFIC PLAN.

(2) CONTRACTOR SHALL DISCONNECT THE SOUTHBOUND LEFT DETECTOR LOOPS FROM THE TRAFFIC SIGNAL CONTROLLER AFTER THE INSTALLATION AND SUCCESSFUL TESTING OF THE VIDEO DETECTION SYSTEM. THE DISCONNECTED DETECTOR LOOP WIRES SHALL BE PROTECTED. CONTRACTOR SHALL RESTORE THE DETECTOR LOOP CONNECTION ALONG WITH PROPER LOOP OPERATION PRIOR TO THE REMOVAL OF THE VIDEO DETECTION SYSTEM.

GENERAL NOTE:

EXISTING TRAFFIC SIGNAL SIGNALS, HANDHOLES, DETECTOR LOOPS, AND CONDUITS ARE SHOWN FOR REFERENCE ONLY. EXACT SIZE, TYPE, AND LOCATION SHALL BE FIELD VERIFIED. CONTRACTOR SHALL CONTACT DESIGN ENGINEER IMMEDIATELY FOR ANY VARIATIONS NOT CONSISTENT WITH THE PLAN.



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE WORK PERFORMED AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, 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 SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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USER NAME = zulkowsd	DESIGNED - JAC	REVISED -	
	DRAWN - SDZ	REVISED -	
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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
TEMPORARY TRAFFIC SIGNAL MODIFICATION PLAN

SCALE: 1" = 20' | SHEET NO. 13 OF 38 SHEETS | STA. 41+00.00 TO STA. 49+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	13
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

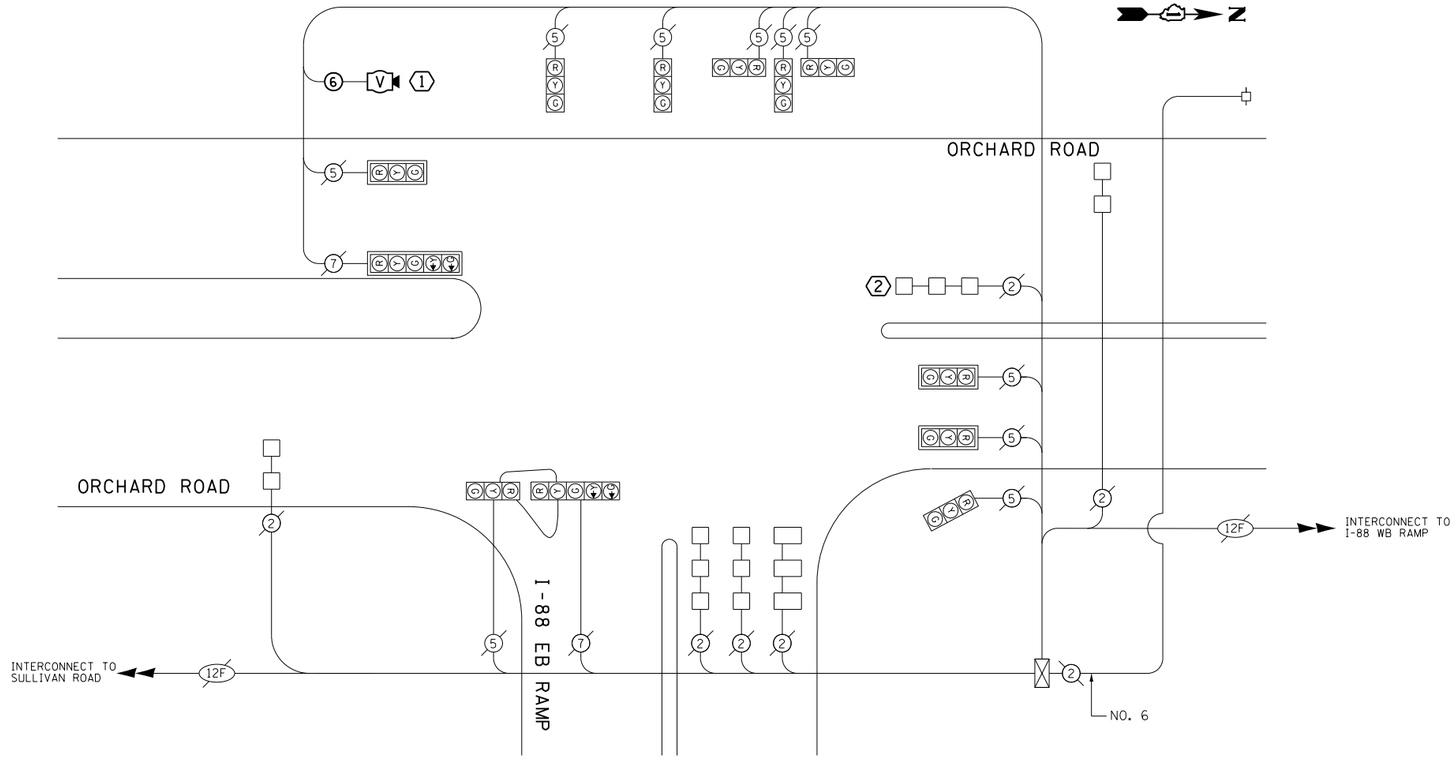
CABLE PLAN LEGEND

EXISTING	PROPOSED	
	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
C D	C D	12" PEDESTRIAN SIGNAL HEAD, WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

EXISTING	PROPOSED	
R Y G ←Y ←G	R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
12F	12F	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F
24F	24F	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
V	V	VIDEO DETECTION CAMERA

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	L SUM	1



CABLE PLAN
(NOT TO SCALE)

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

CLEARANCE NOTES FOR RIGHT TURN OVERLAPS WITH 3-SECTION RIGHT TURN SIGNAL HEAD DISPLAYS

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

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

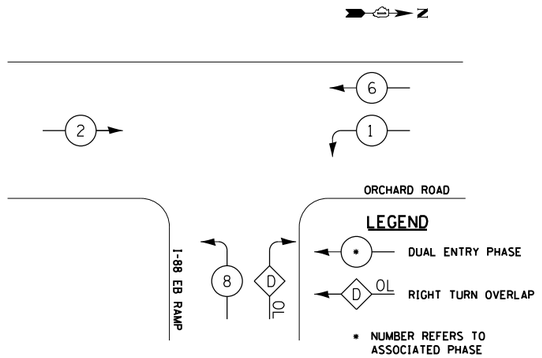
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	* %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.00
(YELLOW)	12	-	25	0.25	75.00
(GREEN)	12	-	15	0.25	45.00
ARROW	16	-	12	0.10	19.20
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	-	100	1.00	100.00
ILLUM. SIGN	-	-	25	0.05	-
FLASHER	-		25	0.50	-
ENERGY COSTS TO:				TOTAL =	341.20

KANE COUNTY, DIVISION OF TRANSPORTATION
41W01 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

JENNIFER HILKEMANN
(630) 232-1503
CITY OF GENEVA

CONTROLLER SEQUENCE

REFERRING TO STANDARD 857001, THE VEHICULAR PHASES USED ARE DESIGNATED BELOW.



PHASE SIGNAL DIAGRAM
DUAL ENTRY - ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING

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" (600mm)	10 (3,0)	CONTROLLER CAB.	1 (0,5)	BRACKET MOUNTED	13 (4,0)
30" (750mm)	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)

CONSTRUCTION NOTES:

(1) INSTALL VIDEO DETECTION SYSTEM, POST MOUNTED, PRIOR TO THE START OF THE FIRST STAGE OF THE MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE VIDEO DETECTION SYSTEM PRIOR TO EACH MAINTENANCE OF TRAFFIC STAGE. ALIGNMENT OF VIDEO DETECTION SYSTEM SHALL DETECT THE SOUTHBOUND LEFT TURN LANE TRAFFIC AT ALL TIMES. CONTRACTOR SHALL REMOVE THE VIDEO DETECTION SYSTEM AND RESTORE EXISTING LOOP DETECTOR OPERATION AFTER COMPLETION OF STAGE 2 OF THE MAINTENANCE OF TRAFFIC PLAN.

(2) CONTRACTOR SHALL DISCONNECT THE SOUTHBOUND LEFT DETECTOR LOOPS FROM THE TRAFFIC SIGNAL CONTROLLER AFTER THE INSTALLATION AND SUCCESSFUL TESTING OF THE VIDEO DETECTION SYSTEM. THE DISCONNECTED DETECTOR LOOP WIRES SHALL BE PROTECTED. CONTRACTOR SHALL RESTORE THE DETECTOR LOOP CONNECTION ALONG WITH PROPER LOOP OPERATION PRIOR TO THE REMOVAL OF THE VIDEO DETECTION SYSTEM.

GENERAL NOTE:

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
CABLE PLANS, PHASING, AND SCHEDULE OF QUANTITIES

SCALE: 1" = 20' | SHEET NO. 14 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	14
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

SCOPE OF WORK

(In order of sequence)

1. Remove top 1½" of existing concrete wearing surface.
2. Remove existing expansion joints.
3. Apply Concrete Sealer to existing abutment seats.
4. Install strip seal joints and concrete at joints.
5. Perform all partial depth deck repairs.
6. Place 1½" latex modified concrete overlay.
7. Perform Structural Repair of Concrete on bridge parapets.

DESIGN SPECIFICATIONS

IDOT 2012 Standard Specifications for Road and Bridge Construction

LOADING

HS20-44

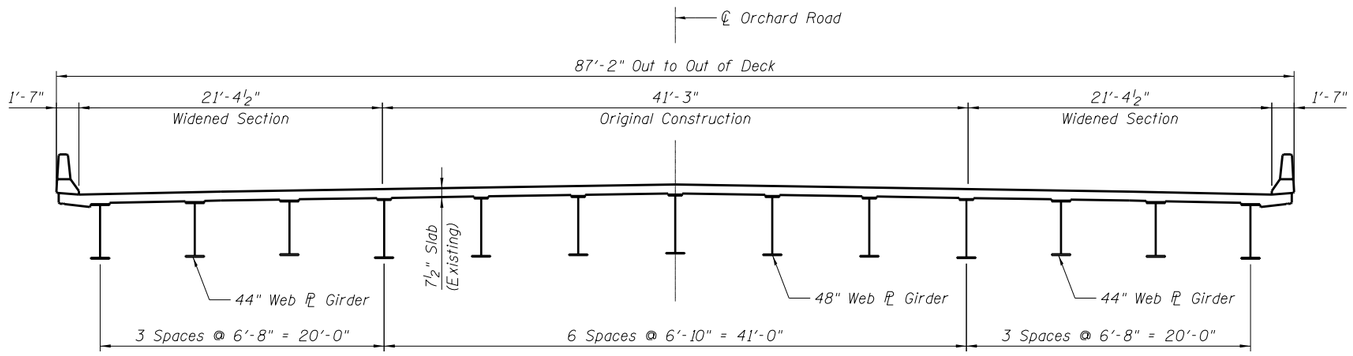
DESIGN STRESSES

FIELD UNITS

f'c= 3,500 psi
fy= 60,000 psi (Reinforcement)

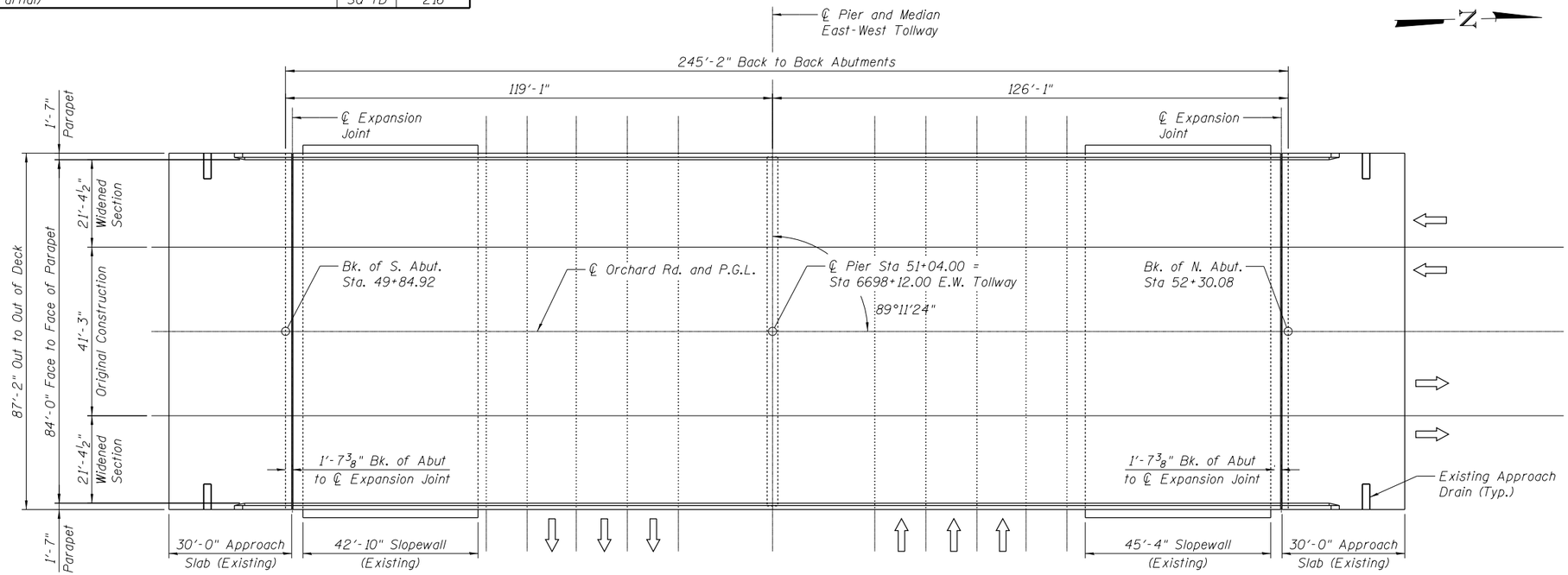
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	CU YD	16
Protective Shield	SQ YD	146
Concrete Superstructure	CU YD	16
Bridge Deck Grooving	SQ YD	2,543
Reinforcement Bars, Epoxy Coated	POUND	2,040
Bar Splicers	EACH	36
Preformed Joint Strip Seal	FOOT	172
Concrete Sealer	SQ FT	454
Epoxy Crack Injection	FOOT	438
Controlled Low-Strength Material	CU YD	1.3
Bridge Deck Latex Concrete Overlay, 1½ Inches	SQ YD	2,765
Bridge Deck Scarification, 1½ Inches	SQ YD	2,765
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	SQ FT	10
Deck Slab Repair (Partial)	SQ YD	216



CROSS SECTION

(Existing)



PLAN

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KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
GENERAL PLAN AND SECTION
SHEET NO. 15 OF 38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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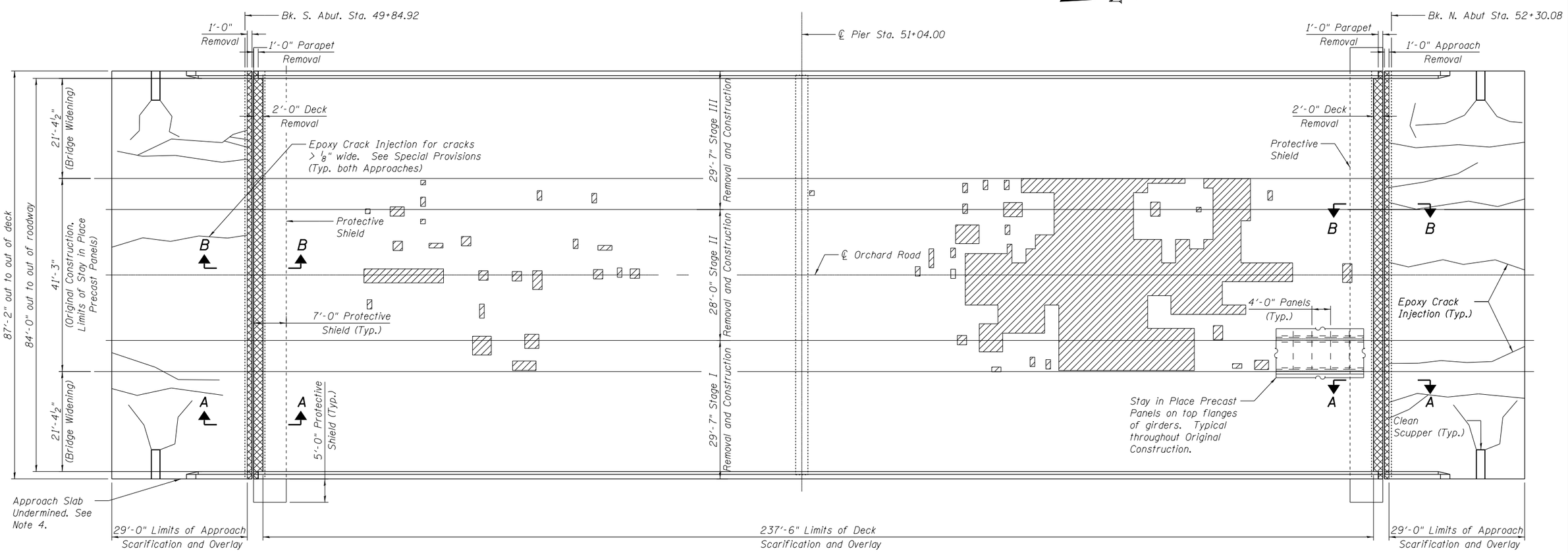
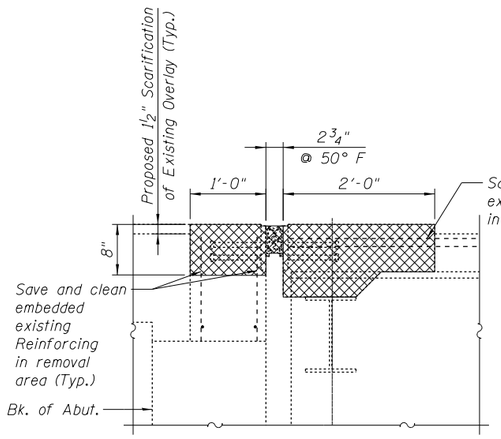
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

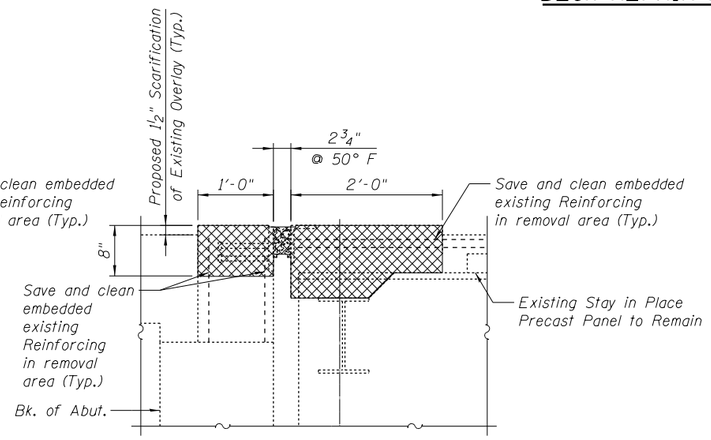


DECK REPAIR PLAN



SECTION A-A

(Existing joint at bridge expansion and new back wall)



SECTION B-B

(Existing joint at original bridge and new back wall)

NOTES

1. See Sheet 15 for Deck Repair Details.
2. See Sheet 16 for additional parapet repairs.
3. See Sheet 17 for Expansion Joint Repair Details.
4. For filling slab undermining, use Controlled Low Strength Material. See Special Provisions.
5. Following completion of expansion joint removal Concrete Sealer shall be applied to the top side of the existing abutments per Section 587 of the Standard Specifications.
6. Areas of Deck Slab Repair (Partial) are shown for reference only. Following Deck Scarification, the Engineer shall sound the deck to determine areas of Deck Slab Repair (Partial). See Special Provisions.

LEGEND

- Area of Deck Slab Repair (Partial)
- Concrete Removal
- Crack

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	CU YD	16
Protective Shield	SQ YD	146
Bridge Deck Grooving	SQ YD	2,543
Concrete Sealer	SQ FT	454
Epoxy Crack Injection	FOOT	438
Controlled Low Strength Material	CU YD	1.3
Bridge Deck Latex Concrete Overlay, 1½ Inches	SQ YD	2,765
Bridge Deck Scarification, 1½ Inches	SQ YD	2,765
Deck Slab Repair (Partial)	SQ YD	216

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KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
DECK REPAIR PLAN REMOVAL AND BILL OF MATERIAL
SHEET NO. 16 OF 38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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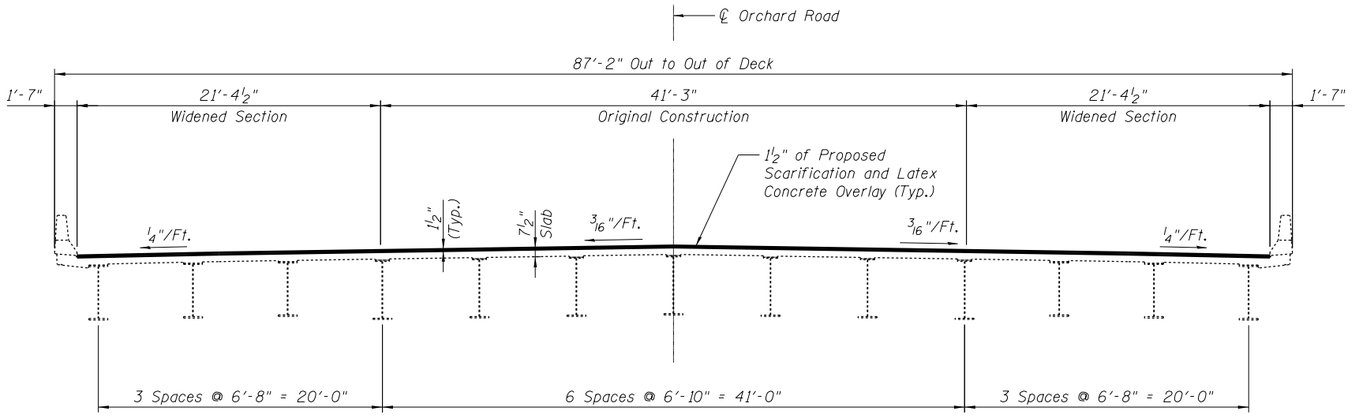
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			

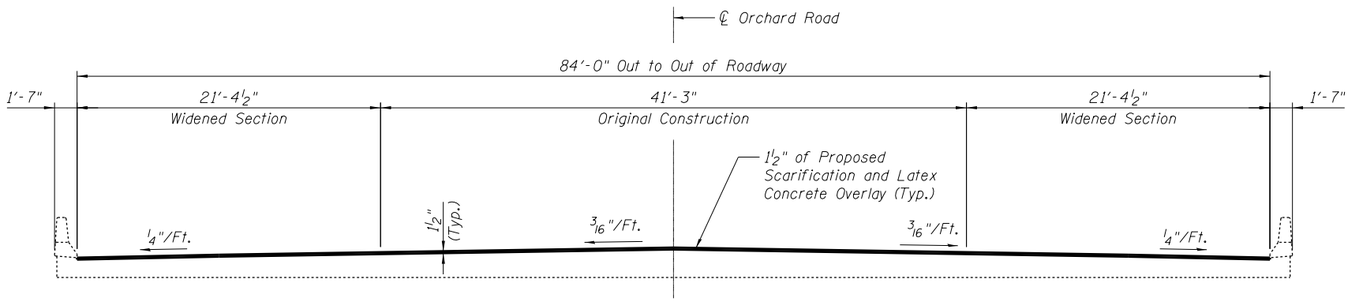


BRIDGE CROSS SECTION

(Existing, Removal & Proposed)

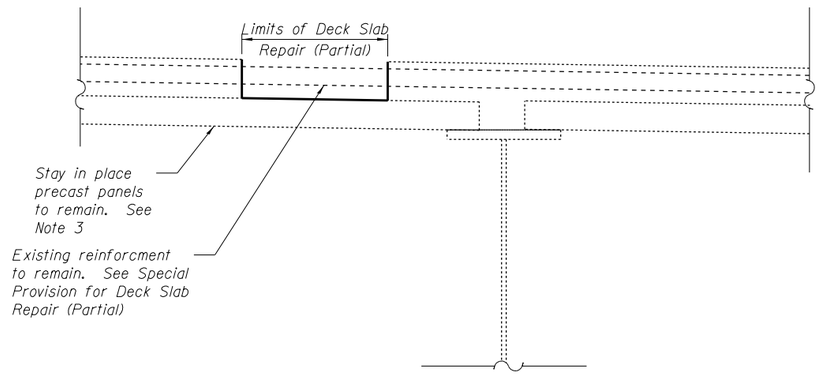
NOTES

1. The finished surface of the proposed concrete overlay and deck shall be grooved in accordance with section 503 of the Standard Specifications for Road and Bridge Construction.
2. The entire bridge deck surface and approach pavement shall be overlayed and grooved. The deck area at the expansion joints shall not be overlayed.
3. Contractor to verify location and thickness of precast panels in field at locations requiring Deck Slab Repair (Partial). Precast panels to remain in place during Deck Slab Repair (Partial).
4. See Sheet 6 for Staging details.



APPROACH CROSS SECTION

(Existing, Removal & Proposed)



DECK SLAB REPAIR (PARTIAL) AT ORIGINAL BRIDGE CONSTRUCTION

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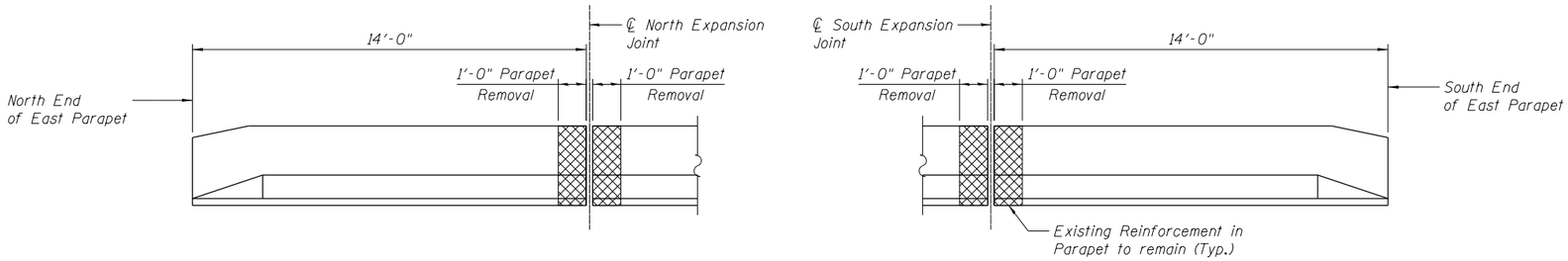
KANE COUNTY
DIVISION OF TRANSPORTATION

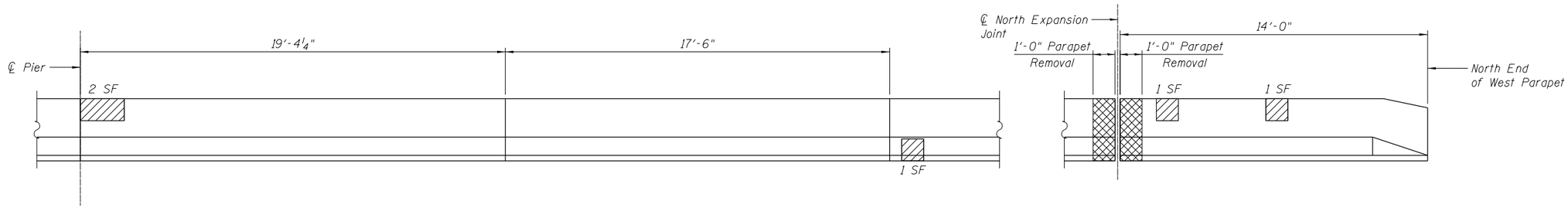
ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
DECK REPAIR DETAILS
SHEET NO. 17 OF 38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	17
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



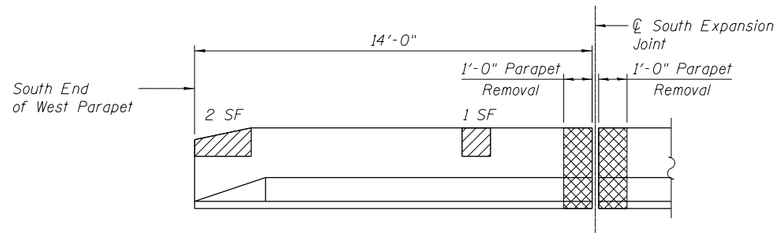
INSIDE ELEVATION OF EAST PARAPET

(Looking East, Both Spans)



INSIDE ELEVATION OF WEST PARAPET

(Looking West, North Span)



INSIDE ELEVATION OF WEST PARAPET

(Looking West, South Span)

NOTES

1. See Sheet 17 for proposed parapet repair details.
2. See Sheet 18 for strip seal joint in parapets at expansion joints.

LEGEND

- Structural Repair of Concrete
- Concrete Removal

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT	10

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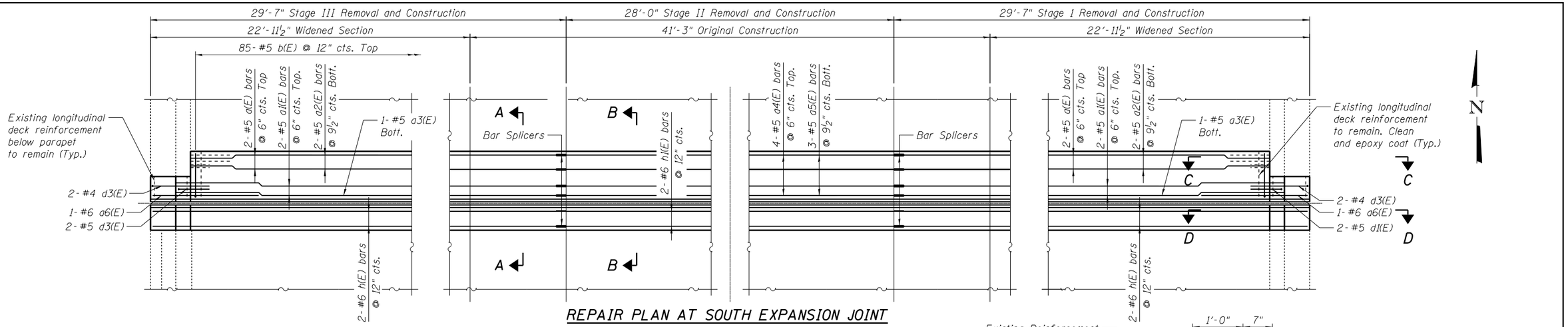
KANE COUNTY
DIVISION OF TRANSPORTATION

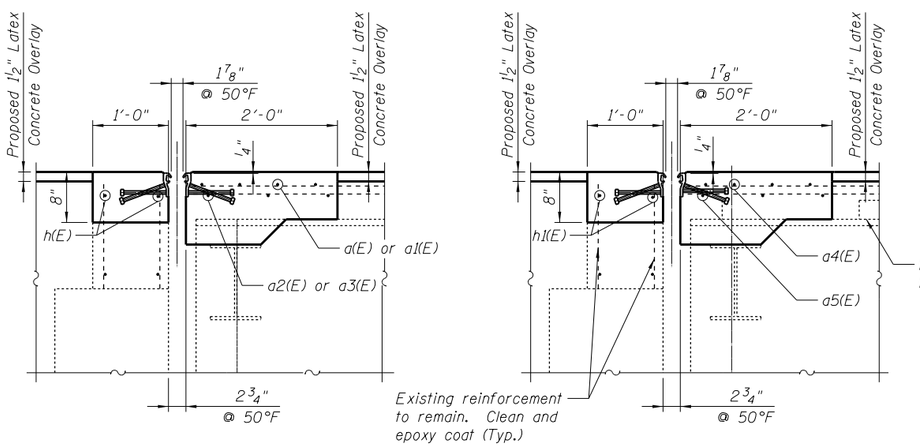
ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
PARAPET REPAIRS
SHEET NO. 18 OF 38 SHEETS

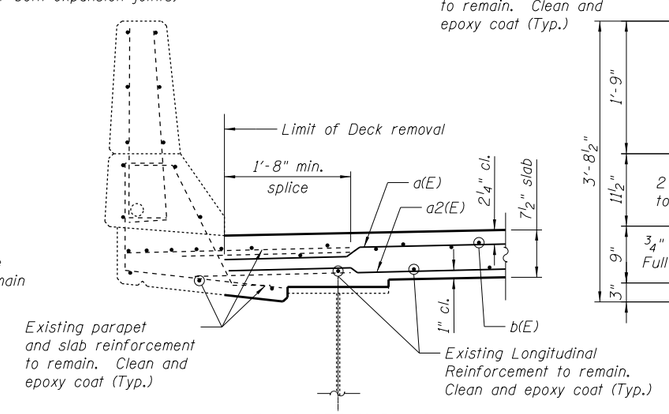
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	18
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



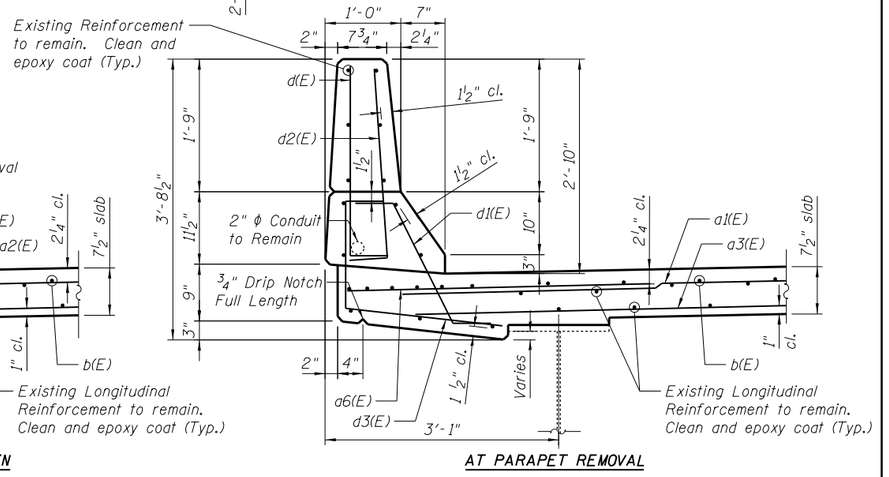
REPAIR PLAN AT SOUTH EXPANSION JOINT

(Typical of both expansion joints)





AT PARAPET TO REMAIN



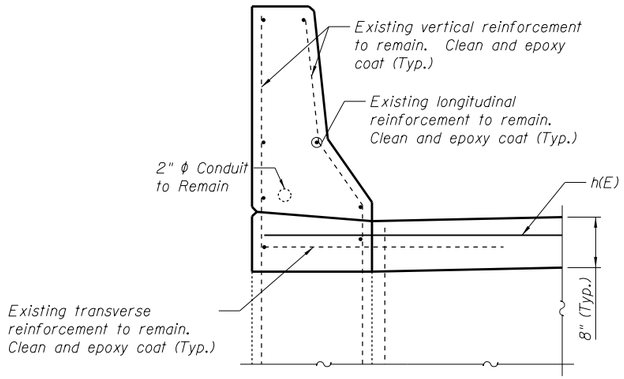
AT PARAPET REMOVAL

SECTION A-A

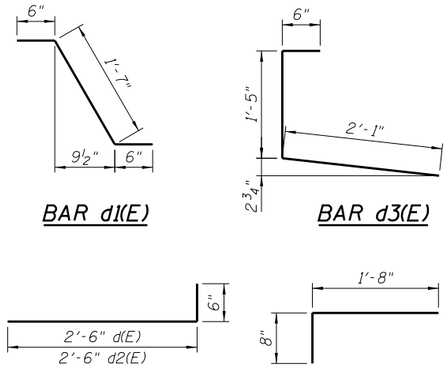
(Proposed joint and concrete repair at bridge expansion and new back wall)

SECTION B-B

(Proposed joint and concrete repair at original bridge and new back wall)



SECTION D-D



BAR d1(E)

BAR d3(E)

BAR d(E) & d2(E)

BAR b(E)

SECTION C-C

(Proposed joint and concrete repair at original bridge and new back wall)

BILL OF MATERIAL

For one expansion joint replacement

Bar	No.	Size	Length	Shape
a(E)	4	#5	28'-0"	
a1(E)	4	#5	28'-7"	
a2(E)	4	#5	28'-0"	
a3(E)	2	#5	28'-7"	
a4(E)	4	#5	28'-0"	
a5(E)	3	#5	28'-0"	
a6(E)	2	#6	4'-0"	
b(E)	85	#5	2'-4"	
d(E)	4	#4	3'-0"	
d1(E)	4	#5	2'-7"	
d2(E)	4	#5	3'-0"	
d3(E)	4	#4	4'-0"	
h(E)	4	#6	28'-0"	
h1(E)	2	#6	28'-0"	
Reinforcement Bars, Epoxy Coated			POUND	1,020
Concrete Superstructure			CU YD	8.0

NOTES

1. Details this sheet are typical of both expansion joints.
2. See Sheet 18 for Strip Seal Joint details.
3. See Sheet 19 for Bar Splicer Details.
4. Strip Seal rail studs shall be fabricated to remain clear of existing stay in place precast panels as shown in Section B-B.
5. Bars designated as (E) shall be epoxy coated.
6. Protective coat shall be applied to the new parapet concrete and shall be incidental to Concrete Superstructure.

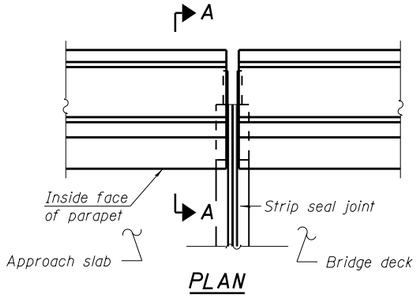
FILE NAME = I:\Projects\4015408\4015408.2001\90_CAD Models and Sheets\04_CJ_Bridge\Working Set\S-006 Expansion Joint Repair Details.dgn

USER NAME = zulkowsd	DESIGNED - RAB	REVISED -
	DRAWN - RAB	REVISED -
PLOT SCALE = 8.0000 ' / in.	CHECKED - JAN	REVISED -
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -

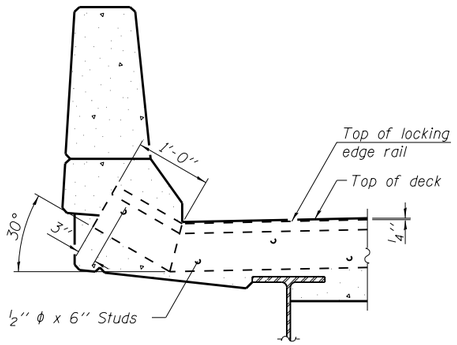
KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
EXPANSION JOINT REPAIR DETAILS
SHEET NO. 19 OF 38 SHEETS

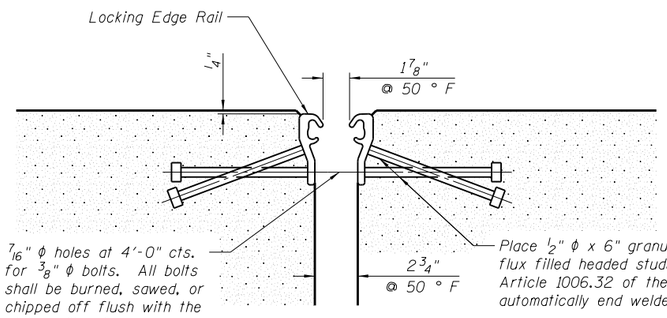
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	19
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
		ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)		



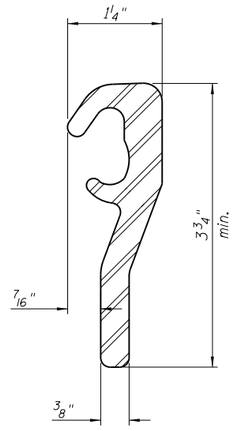
PLAN



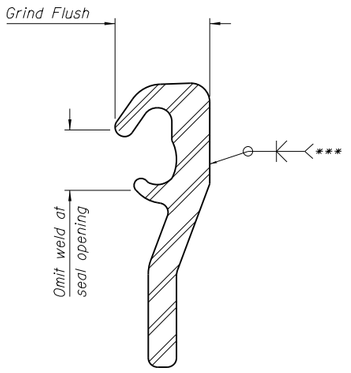
SECTION A-A



SECTION THRU ROLLED RAIL JOINT



LOCKING EDGE RAIL



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

LOCKING EDGE RAIL SPLICE

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

Rolled rail shown, welded rail similar.

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 Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. 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.

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 County.

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

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails at stage lines and within 10 ft of curbs shall be welded.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	FOOT	172

FILE NAME = i:\Projects\4015408\4015408.0201\90_CAD Models and Sheets\04_C.I.Bridge\Working Set\S-007 Strip Seal Details.dgn

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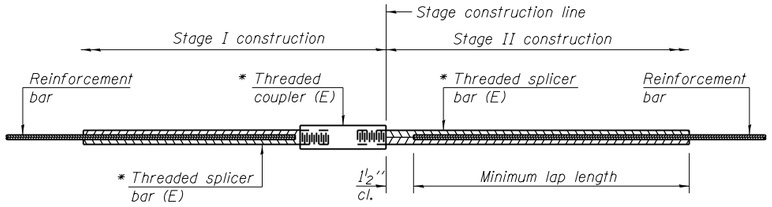
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
STRIP SEAL DETAILS
SHEET NO. 20 OF 38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	20
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



STANDARD BAR SPLICER ASSEMBLY

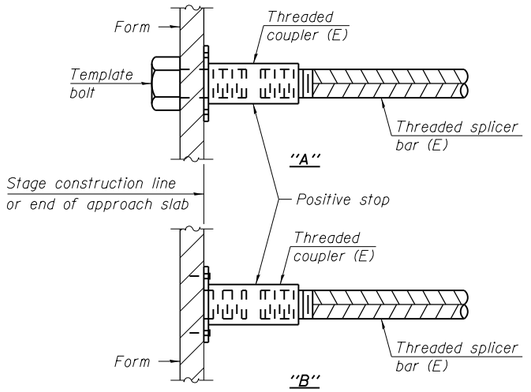
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

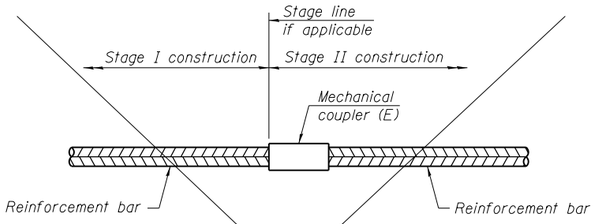
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
N. Expansion Joint	#5	14	Table 4
S. Expansion Joint	#5	14	Table 4
N. Expansion Joint	#6	4	Table 4
S. Expansion Joint	#6	4	Table 4



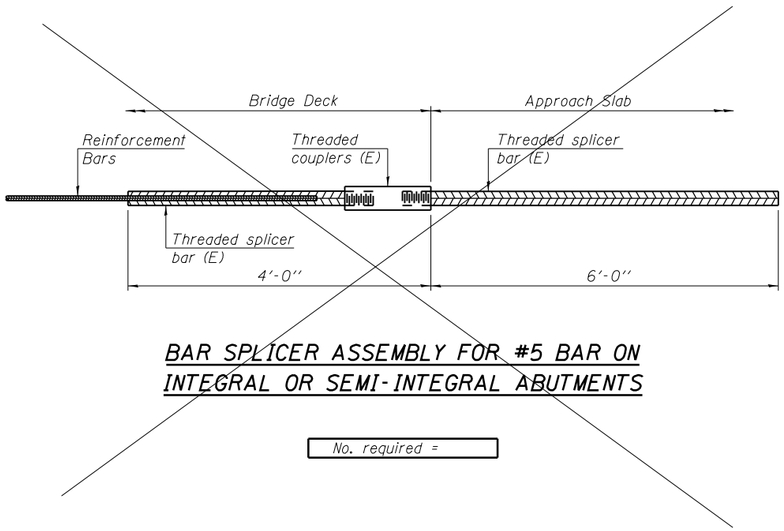
INSTALLATION AND SETTING METHODS

"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.



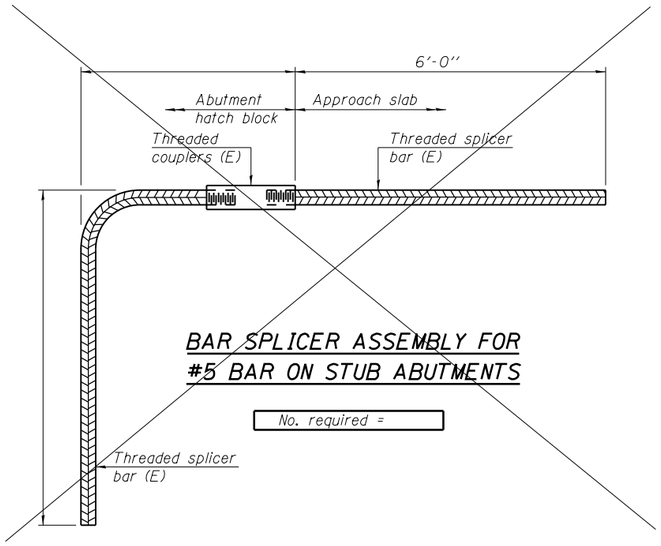
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. 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

1-27-12

FILE NAME = I:\Projects\4015408\4015408.0201\90.CAD Models and Sheets\04.CJ.Bridge\Working Set\S-808 Bar Splicer Assembly.dgn

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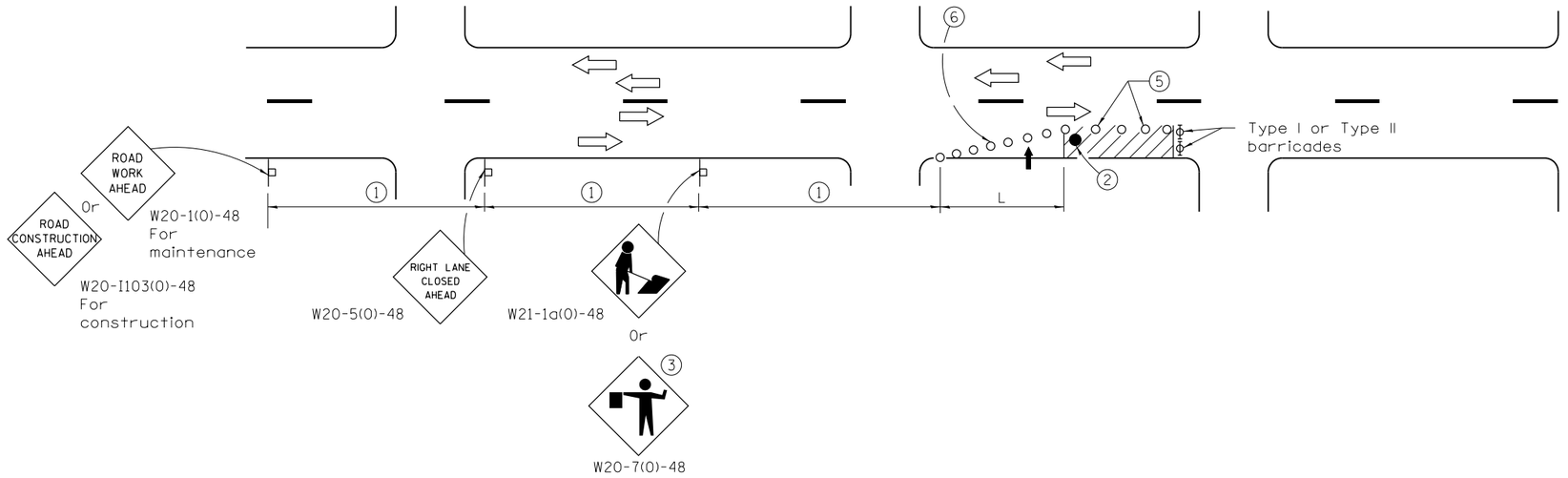
KANE COUNTY
DIVISION OF TRANSPORTATION

ORCHARD ROAD OVER I-88 STRUCTURE NO. 045-3121
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
SHEET NO. 21 OF 38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	21
	C-XX-XXX-XX	CONTRACT NO. XXXXX		
	ILLINOIS	FED. AID PROJECT HSIP-XXXX (XXX)		



SIGN SPACING	
Posted Speed	Sign Spacing
55	500′ (150 m)
50-45	350′ (100 m)
<45	200′ (60 m)

SYMBOLS

- Arrow board
- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Type III barricade with flashing lights
- Flagger with traffic control sign.

(1) Refer to SIGN SPACING TABLE for distances.

(2) Required for speeds > 40 mph.

(3) Use flagger sign only when flagger is present.

(4) For approved sideroad closures.

(5) Cones at 25′ (8 m) centers for 250′ (75 m). Additional cones may be placed at 50′ (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.

(6) Cones, drums or barricades at 20′ (6 m) centers in taper.

(7) Repeat every 1 mile (1.6 km).

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one or more traffic lanes in an Urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

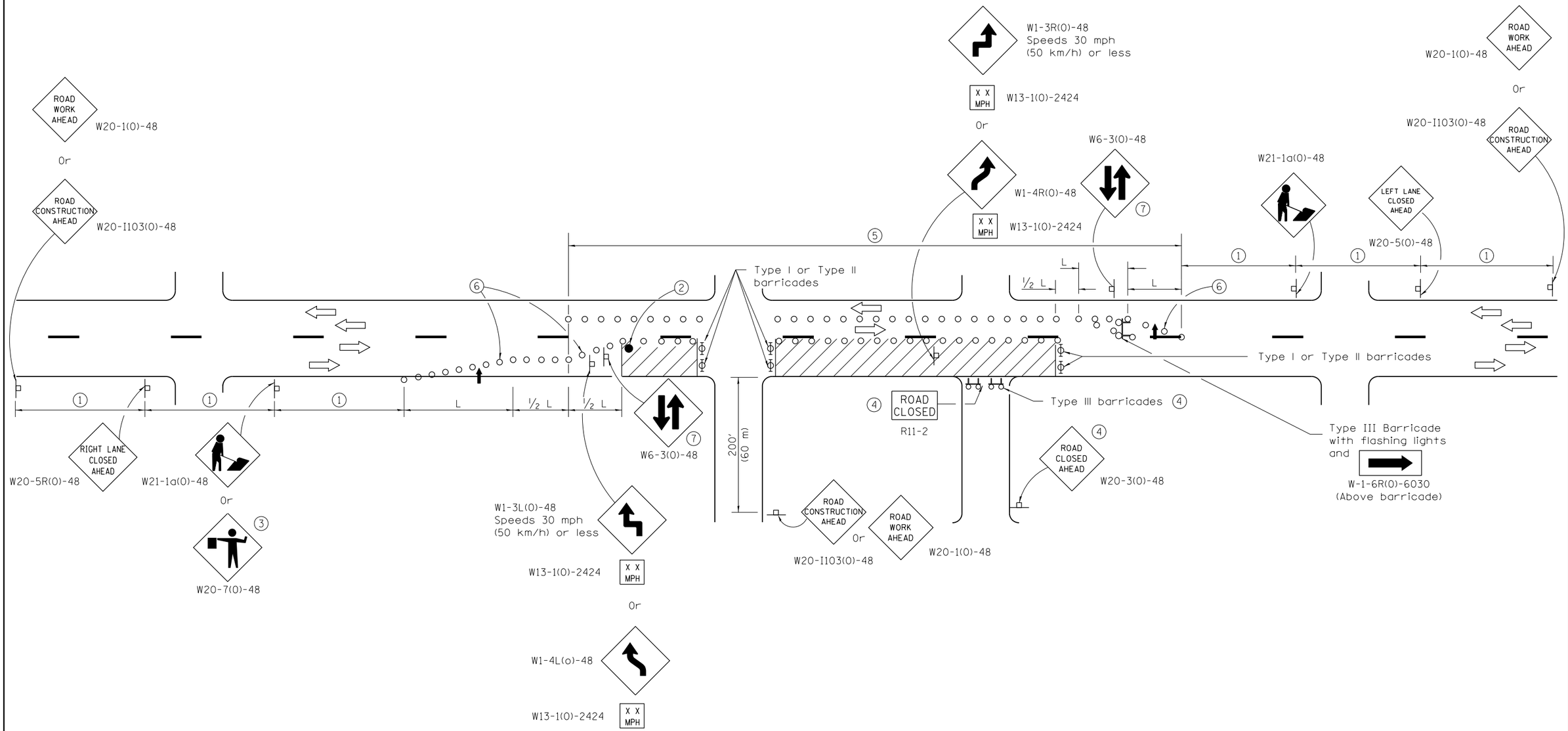
S = Normal posted speed mph (km/h).

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

URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

(Sheet 1 of 2)

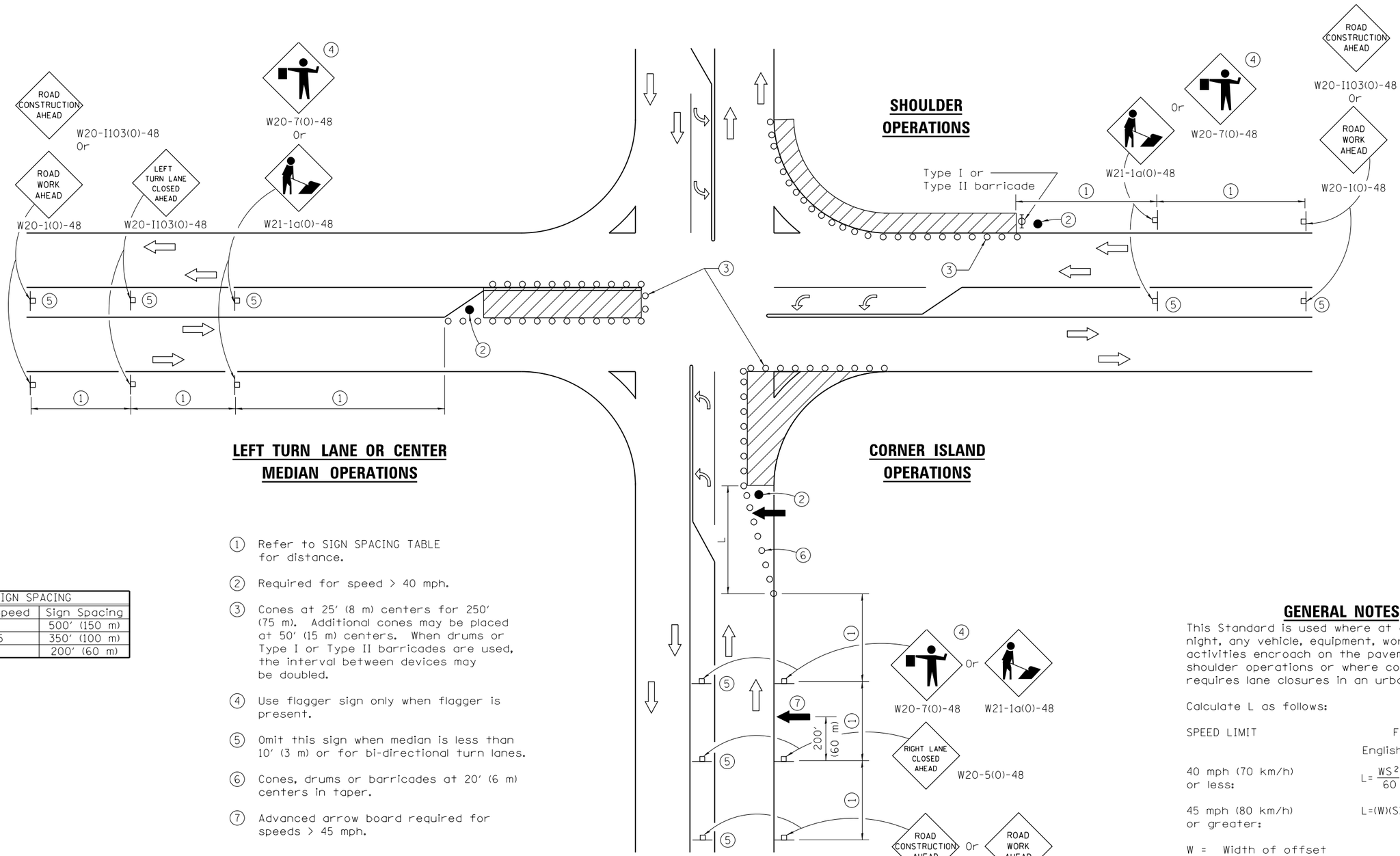
STANDARD 701606–08



URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

(Sheet 2 of 2)

STANDARD 701606–08



SIGN SPACING	
Posted Speed	Sign Spacing
55	500′ (150 m)
50-45	350′ (100 m)
<45	200′ (60 m)

① Refer to SIGN SPACING TABLE for distance.

② Required for speed > 40 mph.

③ Cones at 25′ (8 m) centers for 250′ (75 m). Additional cones may be placed at 50′ (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.

④ Use flagger sign only when flagger is present.

⑤ Omit this sign when median is less than 10′ (3 m) or for bi-directional turn lanes.

⑥ Cones, drums or barricades at 20′ (6 m) centers in taper.

⑦ Advanced arrow board required for speeds > 45 mph.

SYMBOLS

- Work area
- Cone, drum or barricade
- Sign on portable or permanent support
- Arrow board
- Barricade or drum with flashing light
- Flagger with traffic control sign

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in an urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

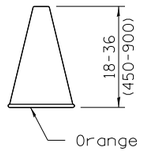
W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

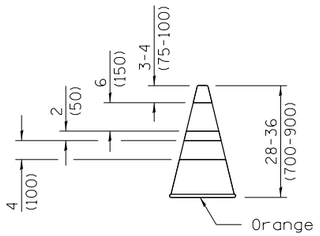
All dimensions are in inches (millimeters) unless otherwise shown.

URBAN LANE CLOSURE, MULTILANE INTERSECTION

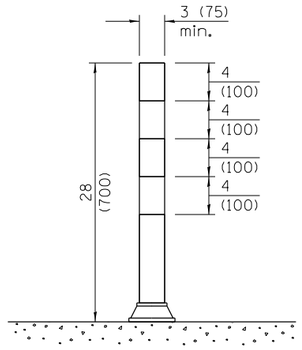
STANDARD 701701–08



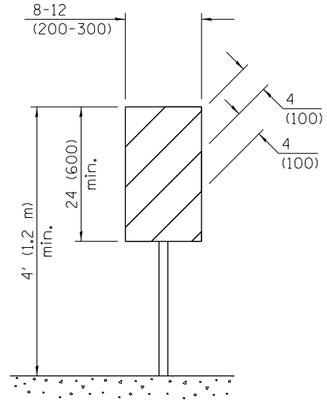
CONE



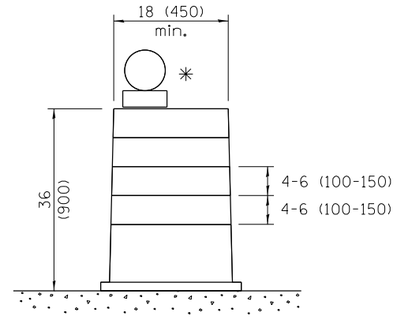
REFLECTORIZED CONE



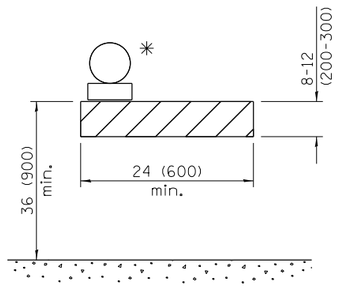
FLEXIBLE DELINEATOR



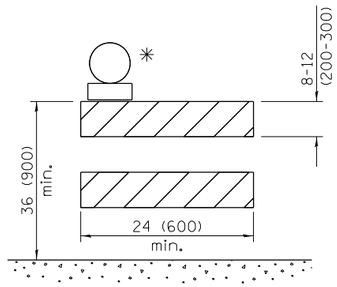
VERTICAL PANEL
POST MOUNTED



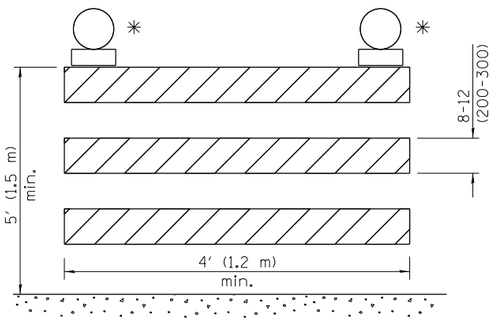
DRUM



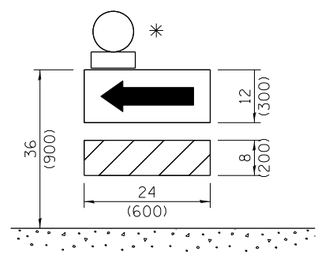
TYPE I BARRICADE



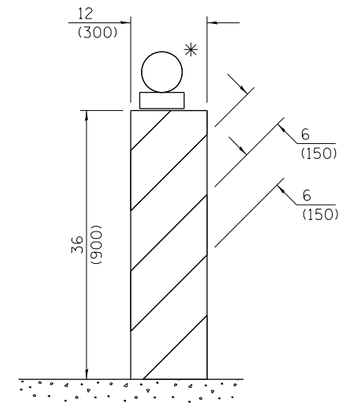
TYPE II BARRICADE



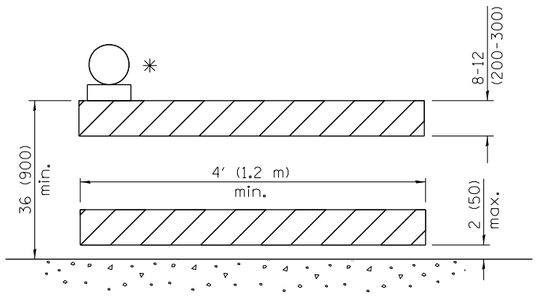
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

✳ Warning lights (if required)

GENERAL NOTES

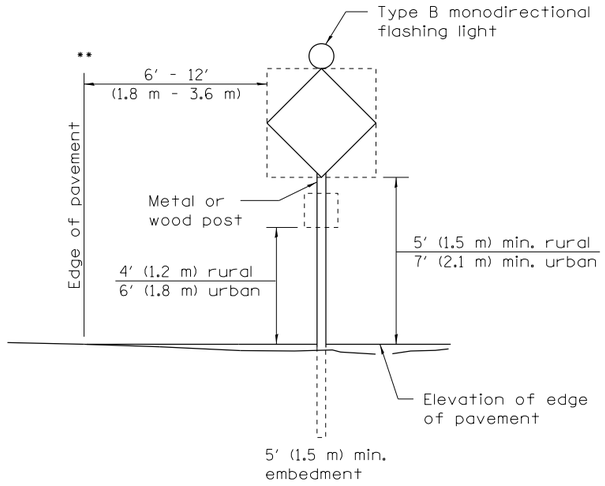
All heights shown shall be measured above the pavement surface.

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

TRAFFIC CONTROL DEVICES

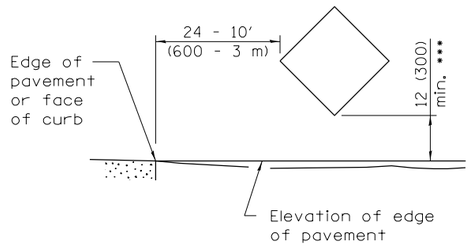
(Sheet 1 of 3)

STANDARD 701901–02



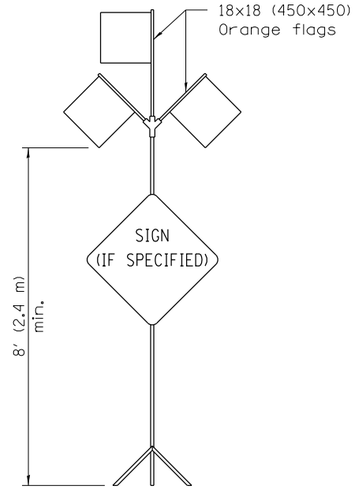
POST MOUNTED SIGNS

** When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6′ (1.8 m) to the outside edge of the paved shoulder.

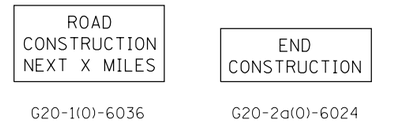


SIGNS ON TEMPORARY SUPPORTS

*** When work operations exceed four days, this dimension shall be 5′ (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen by motorists.



HIGH LEVEL WARNING DEVICE



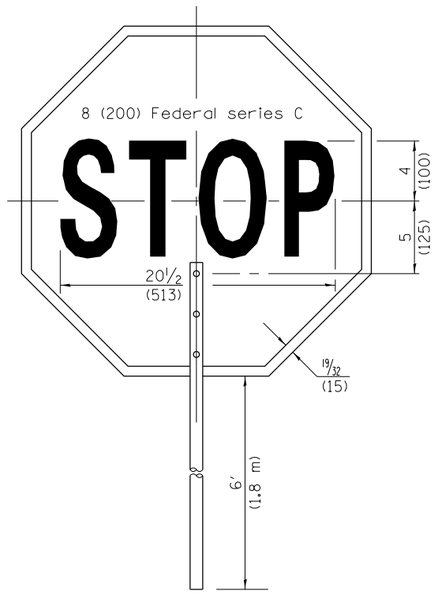
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500′ (150 m) in advance of project limits.

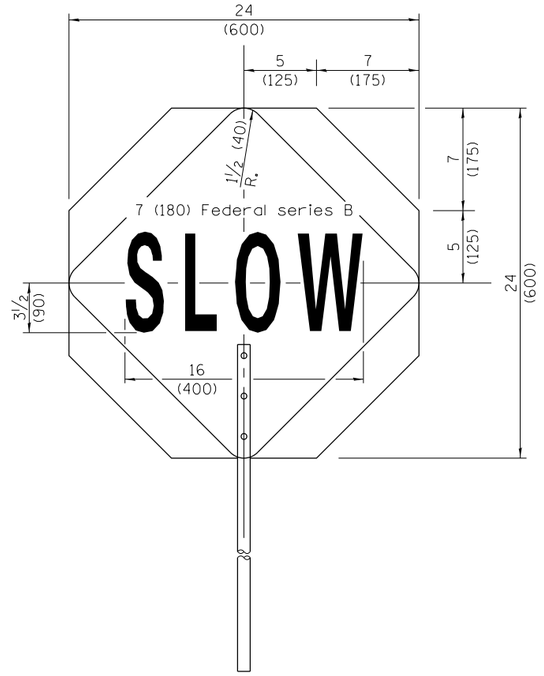
END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING



FRONT SIDE



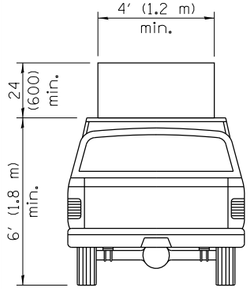
REVERSE SIDE

FLAGGER TRAFFIC CONTROL SIGN

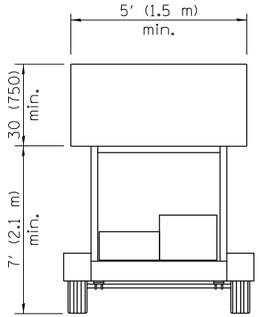
All dimensions are in inches (millimeters) unless otherwise shown.

TRAFFIC CONTROL DEVICES

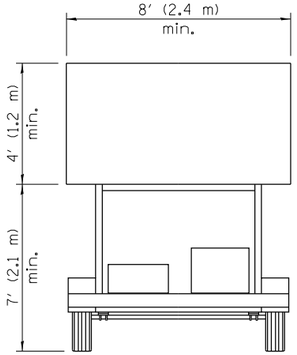
STANDARD 701901–02



TYPE A ROOF MOUNTED

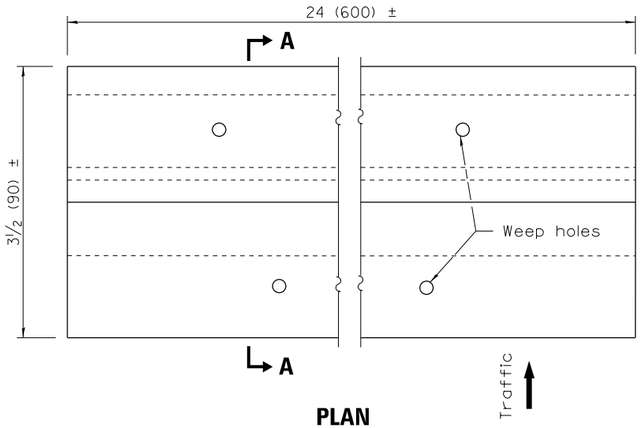


TYPE B ROOF OR TRAILER MOUNTED

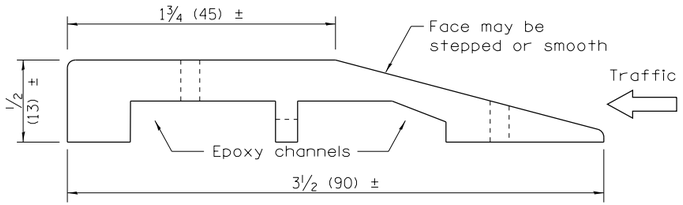


TYPE C TRAILER MOUNTED

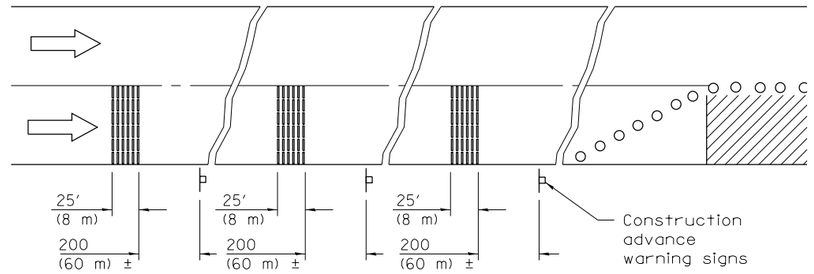
ARROW BOARDS

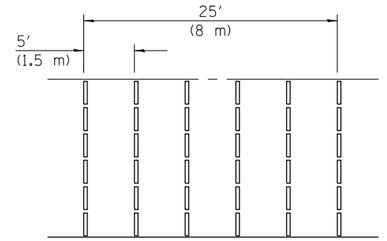


PLAN



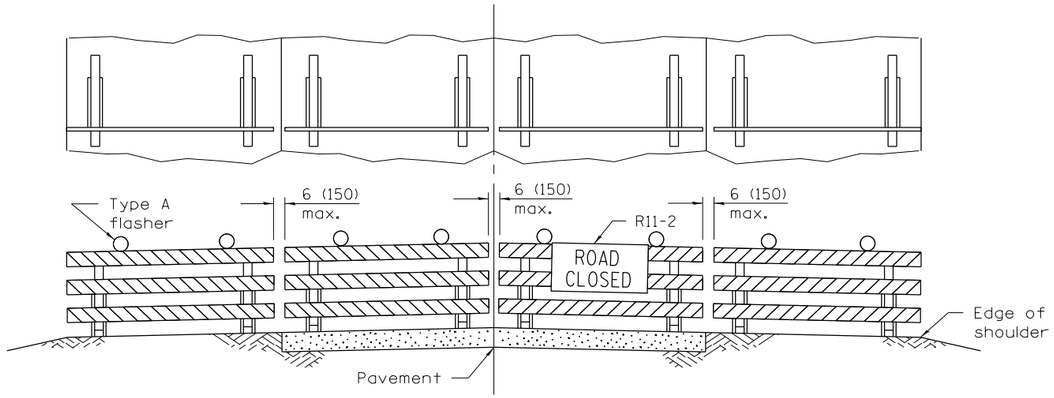
SECTION A–A





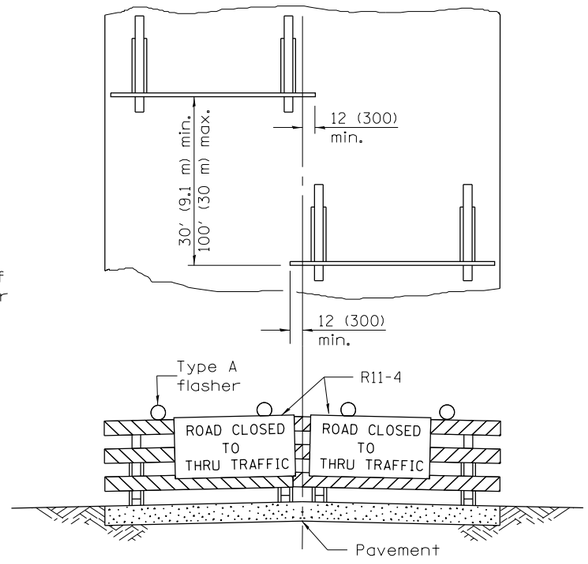
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



ROAD CLOSED TO THRU TRAFFIC

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

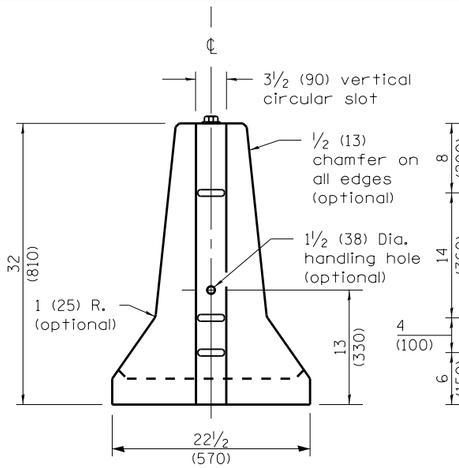
TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD

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

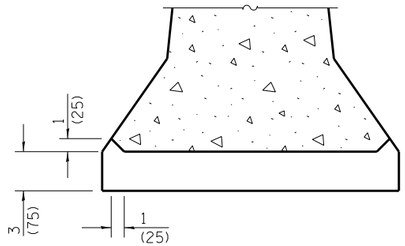
TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

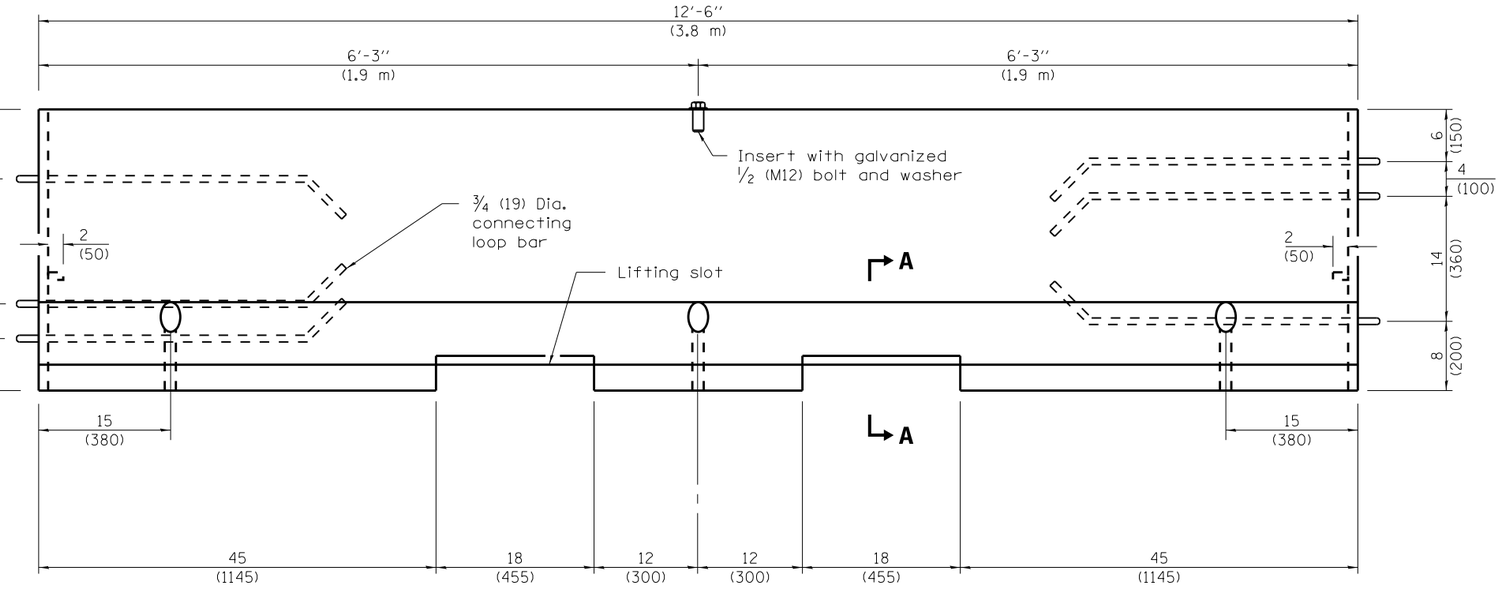
STANDARD 701901–02



END VIEW
(Showing lifting slot)

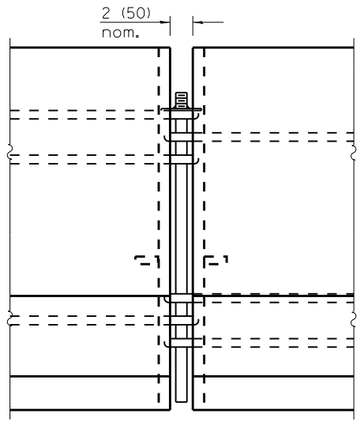


SECTION A–A
LIFTING SLOT

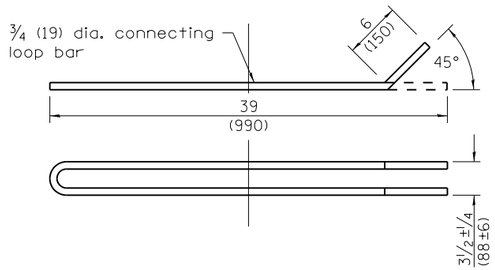


ELEVATION
(Showing connecting loop bars and vertical panel bolt/insert)

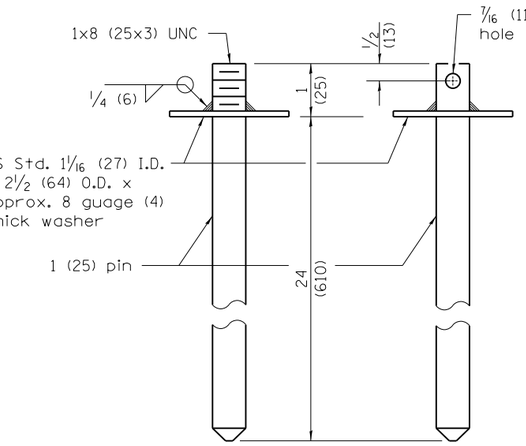
PLAN



CONNECTING DETAIL

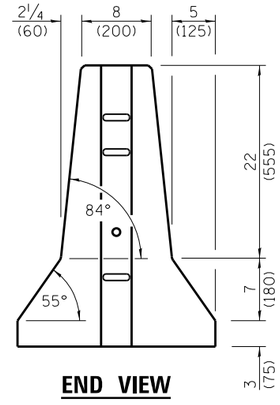


CONNECTING LOOP BAR

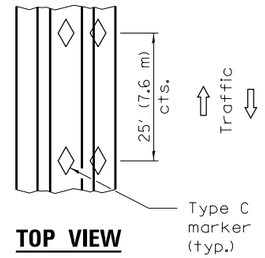


CONNECTING AND ANCHOR PINS
(End may be beveled ¼ (6) max.)

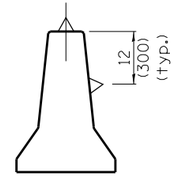
F SHAPE DESIGN



END VIEW



TOP VIEW



BARRIER WALL MARKERS

GENERAL NOTES

Each F shape barrier shall be clearly marked with "ILLINOIS F SHAPE", the Producer's mark and the date of manufacture. The markings shall be indented on the barrier or painted thereon with waterproof paint/ink.

The insert for the ½ (M12) bolt shall be capable of 3,000 lb (13 kN) pull-out strength.

When barrier separates opposing flows of traffic markers shall be on both sides of barrier.

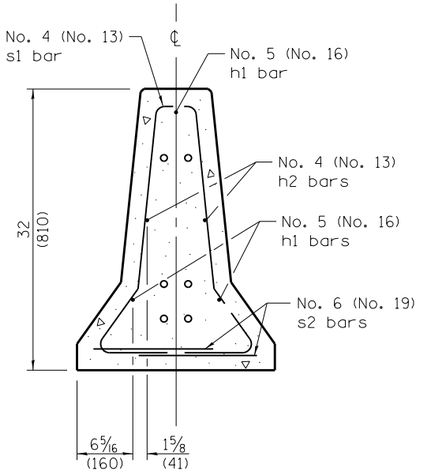
See Standard 635011 for dimensions of Type C marker.

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

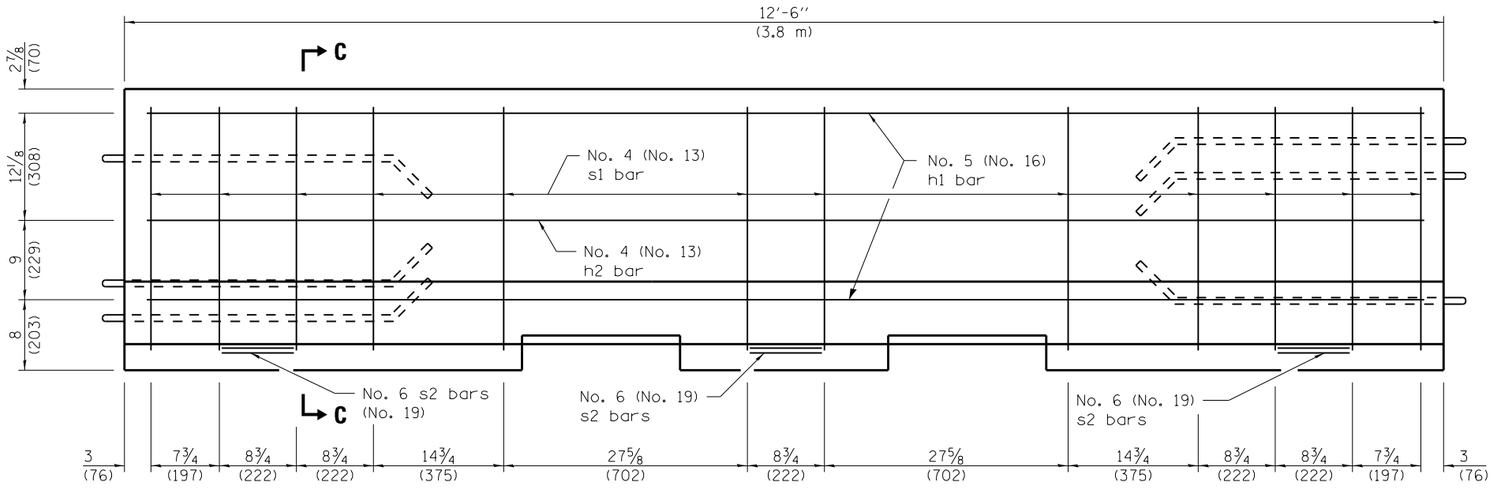
TEMPORARY CONCRETE BARRIER

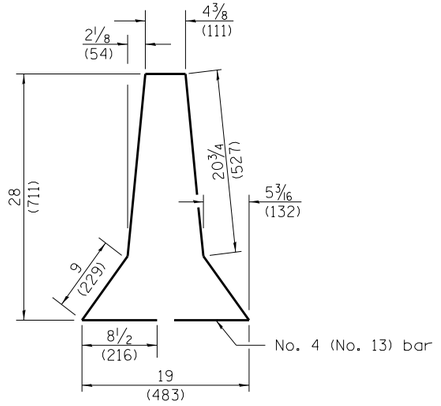
(Sheet 1 of 2)

STANDARD 704001–07



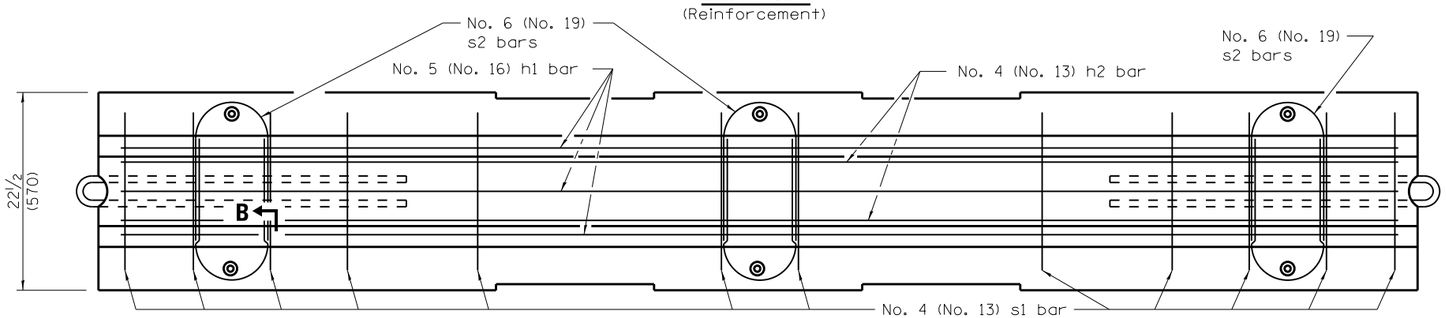
SECTION C–C





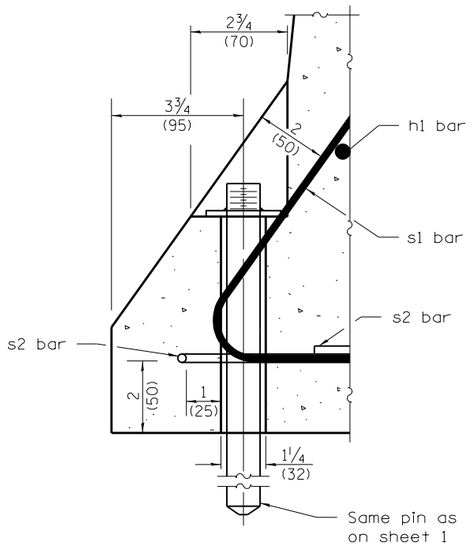
s1 BAR

ELEVATION
(Reinforcement)

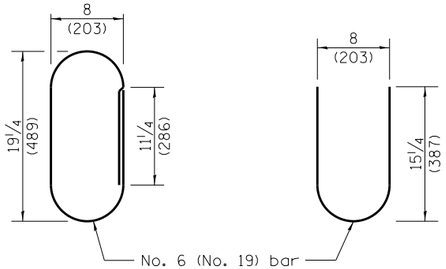


PLAN

ALTERNATE s1 BAR



SECTION B–B
ANCHORING DETAIL

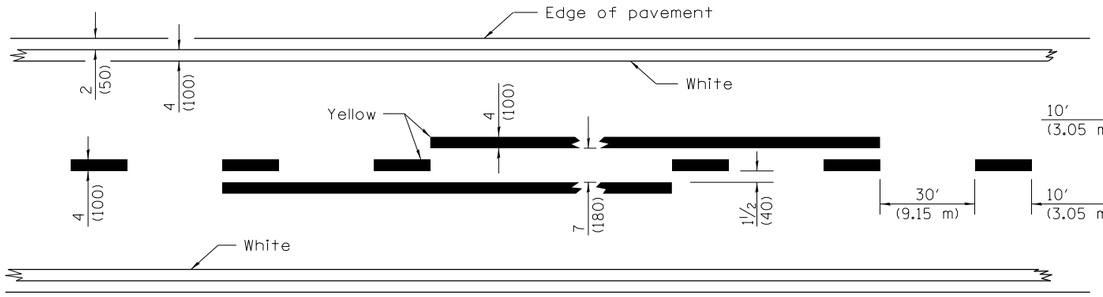


ALTERNATE s2 BARS

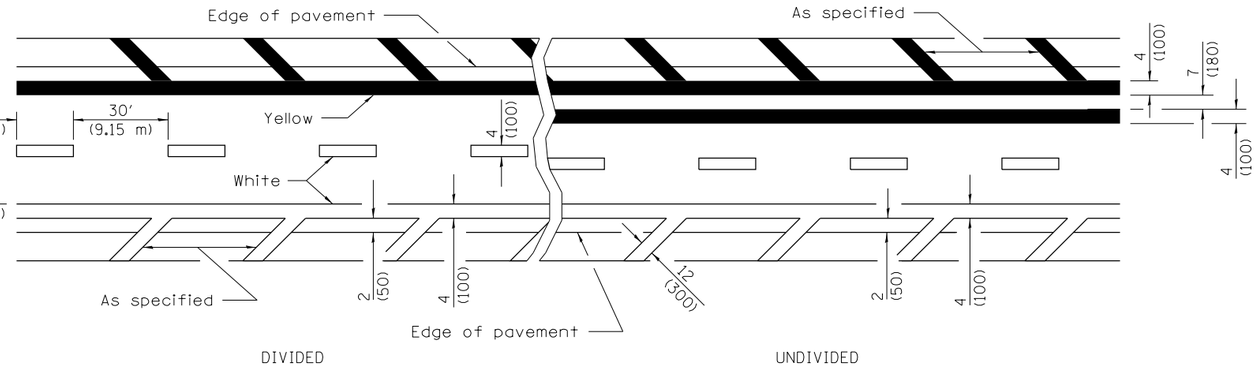
TEMPORARY CONCRETE BARRIER

(Sheet 2 of 2)

STANDARD 704001–07

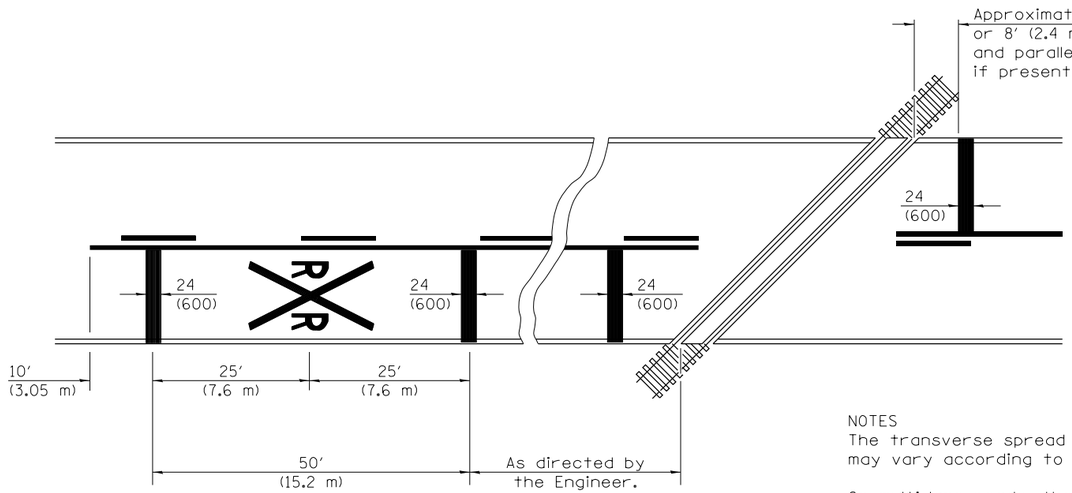


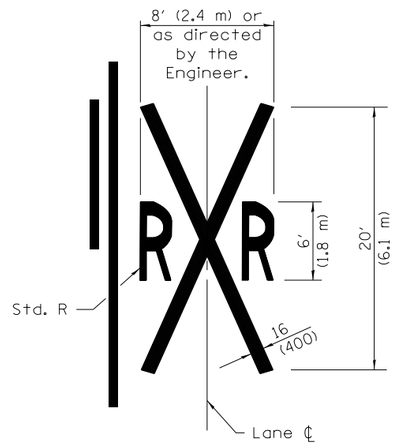
2 LANE



MULTI LANE

LANE AND EDGE LINES





NOTES
The transverse spread of the "X" may vary according to lane width.

On multi-lane roads, the stop lines shall extend across all approach lanes and separate RXR symbols shall be placed adjacent to each other in each lane.

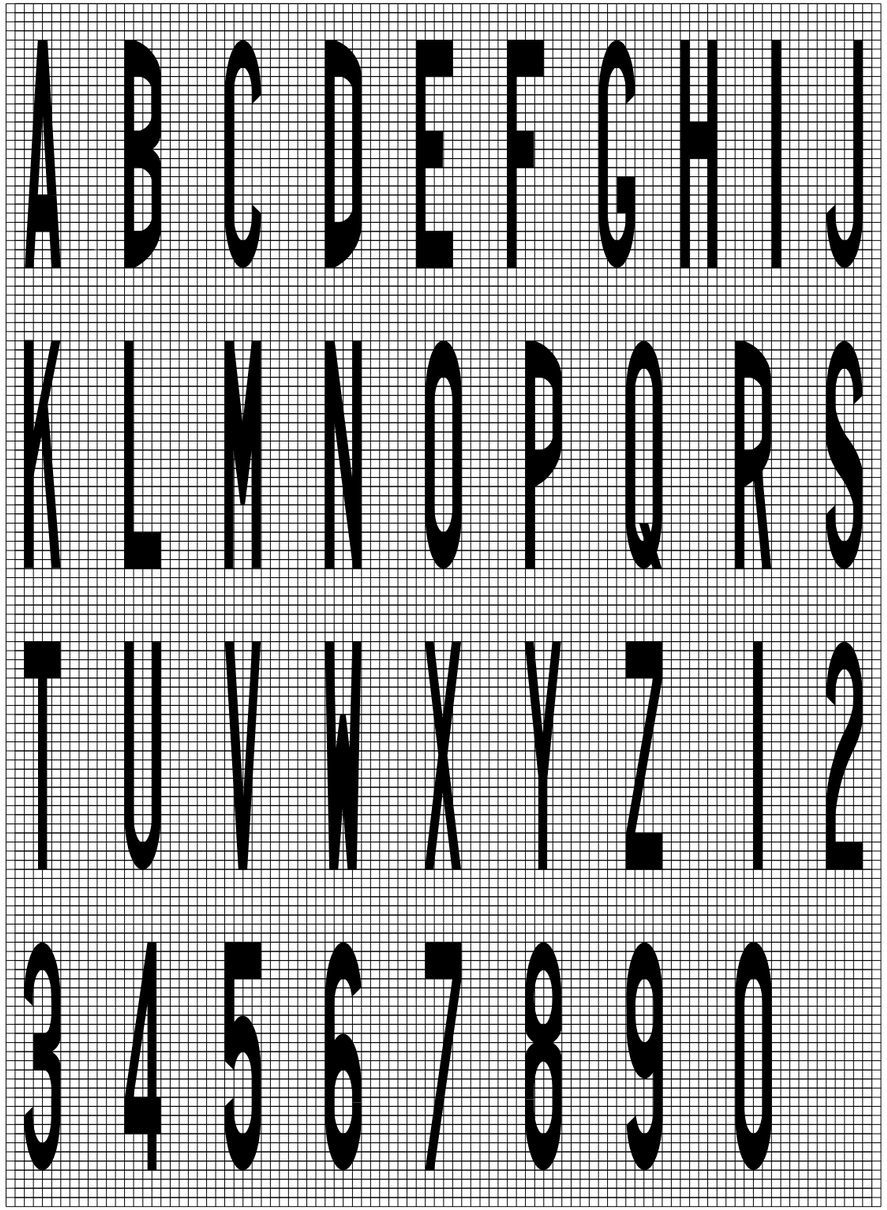
When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.

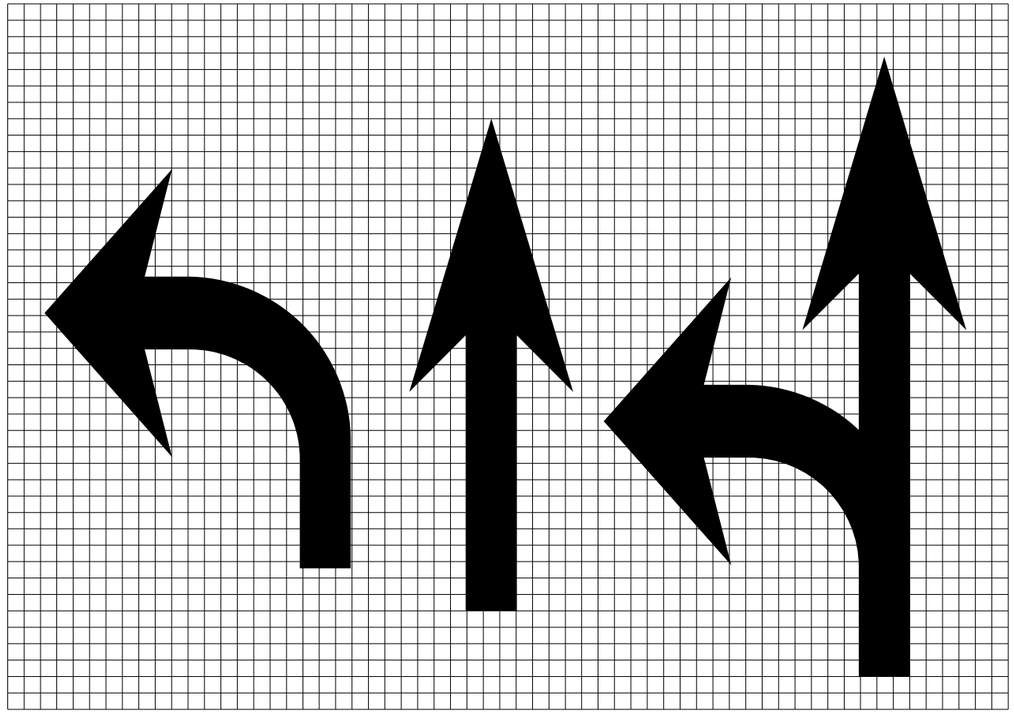
PAVEMENT MARKINGS AT RAILROAD–HIGHWAY GRADE CROSSING

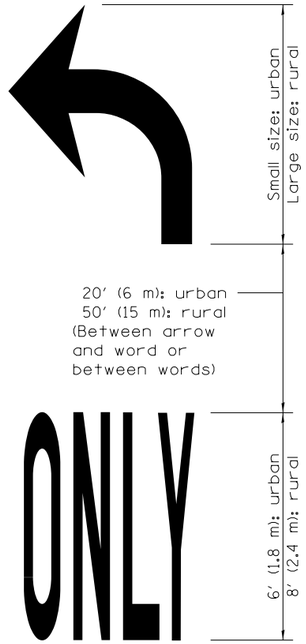
All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL PAVEMENT MARKINGS

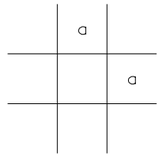
STANDARD 780001–03







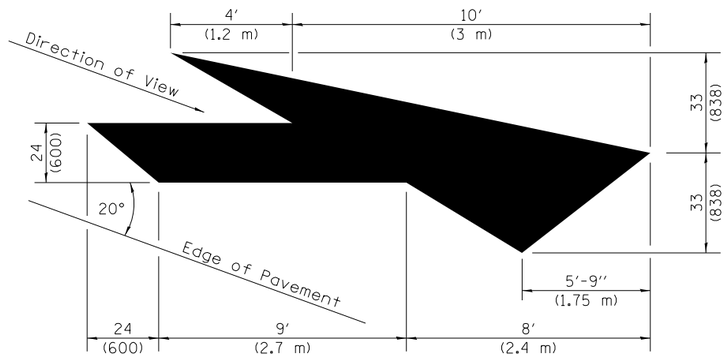
WORD AND ARROW LAYOUT



Legend Height	Arrow Size	a
6′ (1.8 m)	Small	2.9 (74)
8′ (2.4 m)	Large	3.8 (96)

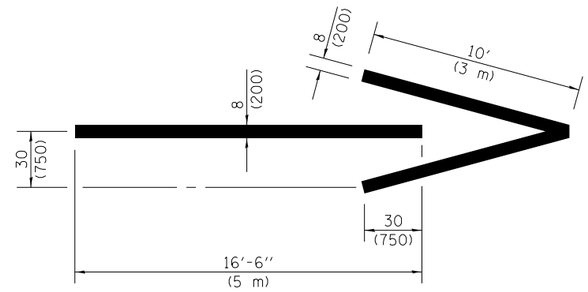
The space between adjacent letters or numerals should be approximately 3 (75) for 6′ (1.8 m) legend and 4 (100) for 8′ (2.4 m) legend.

LETTER AND ARROW GRID SCALE



LANE DROP ARROW

Right lane drop arrow shown.
Use mirror image for left lane.



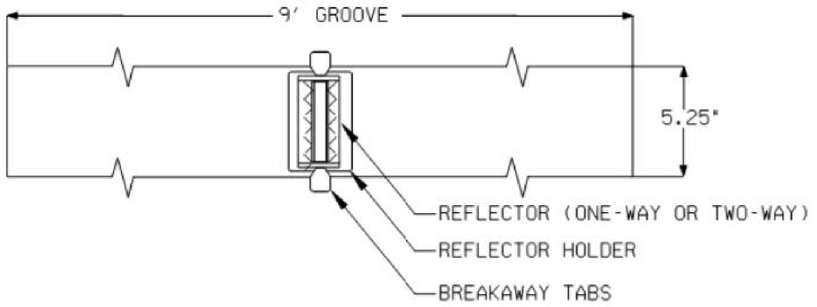
WRONG WAY ARROW

TYPICAL PAVEMENT MARKINGS

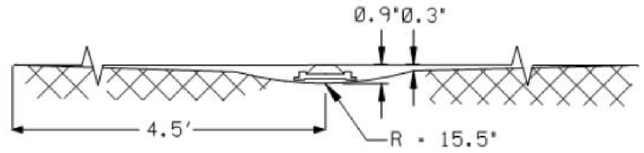
(Sheet 2 of 2)

STANDARD 780001–03

TYPICAL RECESSED REFLECTIVE PAVEMENT MARKERS



PLAN



ELEVATION

NOTES

1. SAW CUT TO DIMENSIONS SHOWN
2. SAW CUT AREAS ARE TO BE DRY AND FREE OF MATERIAL THAT ADVERSELY AFFECTS THE ADHESIVE BOND.
3. INSTALL THE REFLECTOR WITH AN APPROVED TWO-COMPONENT EPOXY ADHESIVE. EPOXY SHOULD NOT OBSECURE OR BLOCK THE LENS.
4. REFLECTOR SHALL BE 3M SERIES 190 OR ENGINEERING APPROVED EQUIVALENT.
5. THE REFLECTOR HOLDER SHALL BE MARKERONE SERIES R100 REFLECTOR HOLDER OR ENGINEER APPROVED EQUIVALENT.
6. FOR 1-WAY MARKERS HEADING UPHILL, UPHILL GRIND TAPER MAY BE OMITTED.

PAGE	Typical Recessed Reflelective Pavement Markers
1 OF 2	Standard KC781001-04 Rev. 11/15/2008

FILE NAME = i:\Projects\4015408\4015408_0001\3D_CAD Models and Sheets\04_C_Civil\Sheets\Standard Drawings\CAD-Final PDFs\1-KDOT.dgn

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	DRAWN - SDZ	REVISED -
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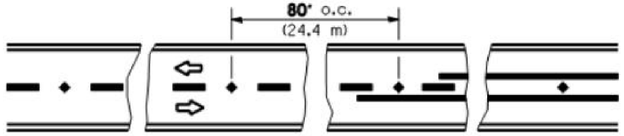
PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

TYPICAL RECESSED REFLECTIVE PAVEMENT MARKERS

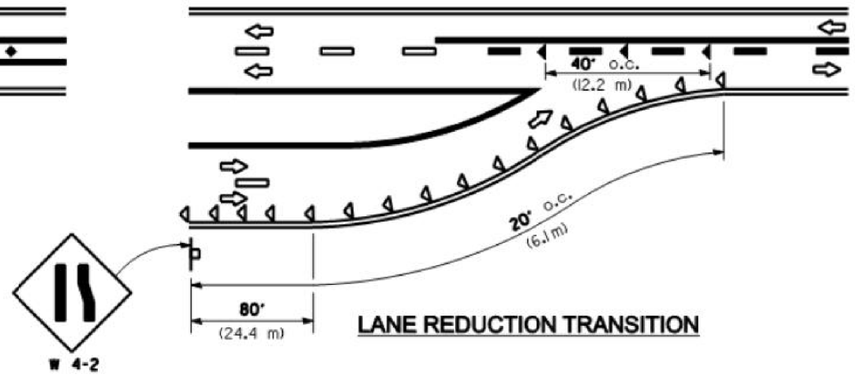
SCALE: NTS | SHEET NO. 32 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	32
	C-XX-XXX-XX		CONTRACT NO. XXXXX	
	ILLINOIS	FED. AID PROJECT HSIP-XXXX (XXX)		

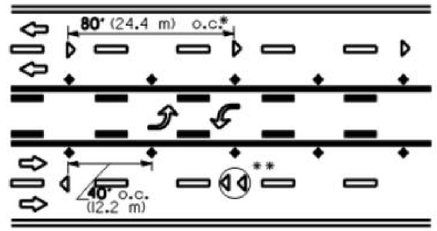


Reduce to 40' (12.2 m) o.c. on curves with posted or advisory speeds of 45 mph (70 km/h) or less.

TWO - LANE / TWO-WAY

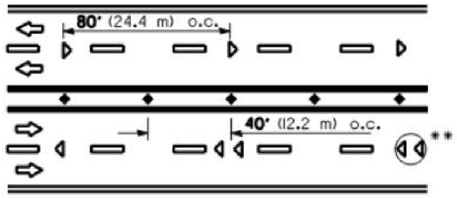


LANE REDUCTION TRANSITION



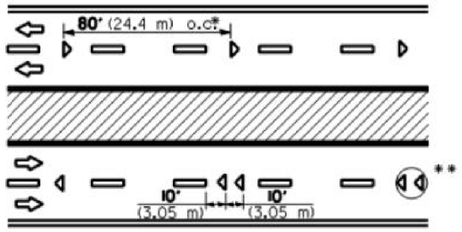
*,** see MULTILANE DIVIDED detail for lane marker notes.

TWO-WAY LEFT TURN



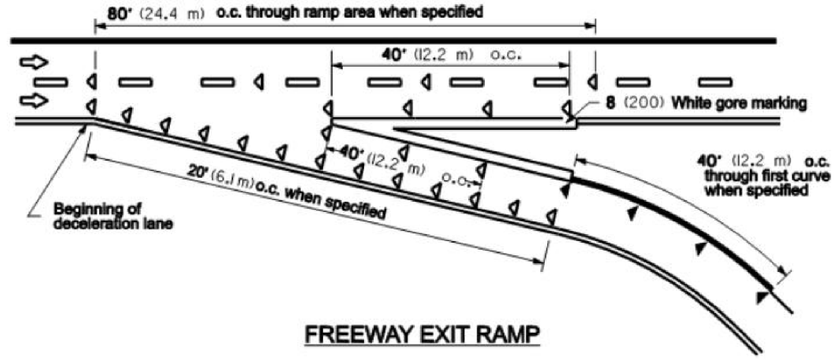
*,** see MULTILANE DIVIDED detail for lane marker notes.

MULTI-LANE UNDIVIDED



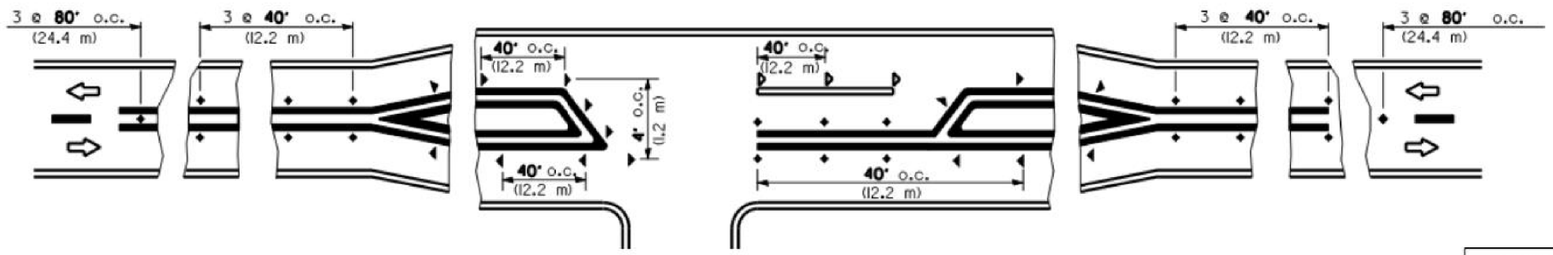
* Reduce to 40' (12.2 m) o.c. on curves where advisory speeds are 10 mph (15 km/h) lower than posten speeds.

** Where double lane line markers are specified, they shall be spaced as shown



FREEWAY EXIT RAMP

MULTI-LANE DIVIDED



RURAL LEFT TURN

SYMBOLS

- Yellow stripe
- White stripe
- One-way amber marker
- One-way crystal marker
- Two-way amber marker

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

PAGE 2 OF 2

TYPICAL APPLICATIONS RECESSED REFLECTIVE PAVEMENT MARKERS

Standard KC781001-04

Rev. 11/15/2008

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PLOT DATE = 10/16/2012	DATE - 10-17-2012	REVISED -	

TYPICAL RECESSED REFLECTIVE PAVEMENT MARKERS

SCALE: NTS | SHEET NO. 33 OF 38 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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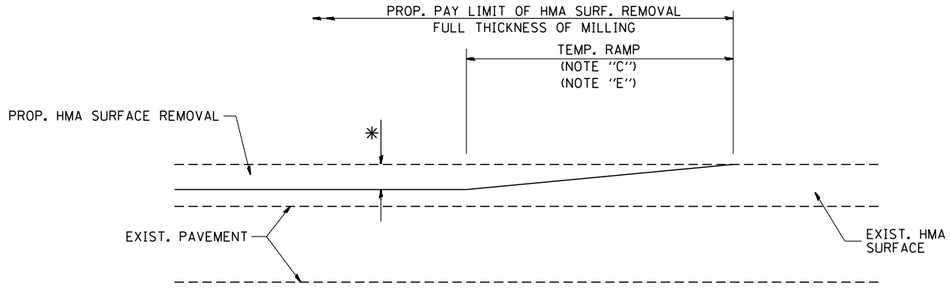
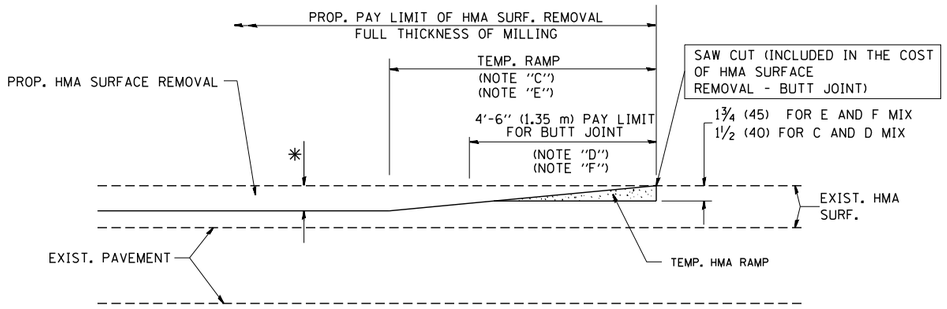
	ILLINOIS FED. AID PROJECT HSIP-XXXX (XXX)			



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

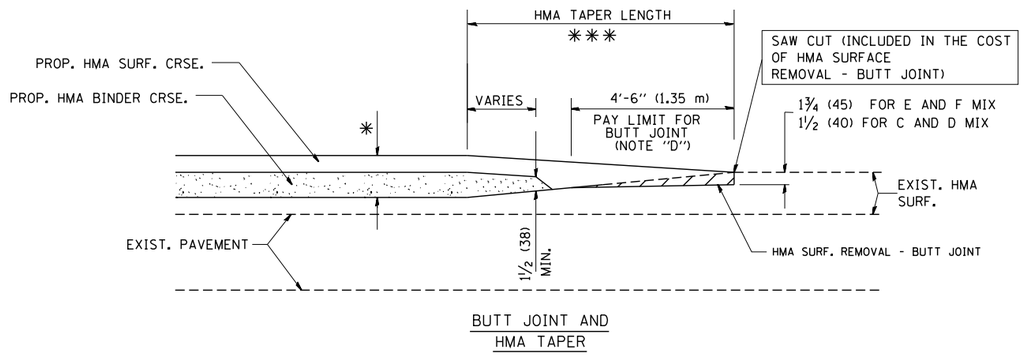


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

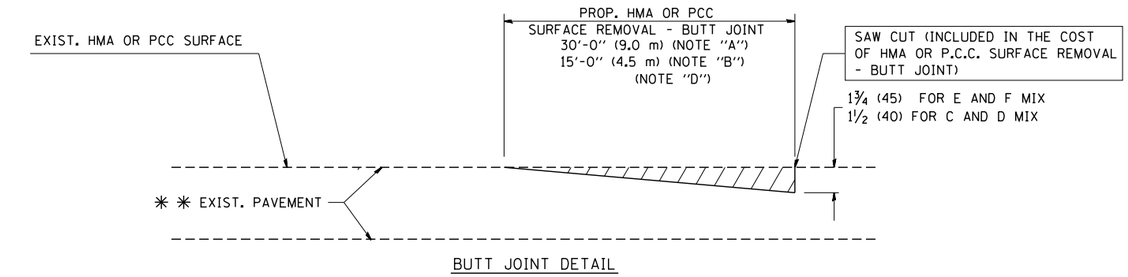
OPTION 2

TYPICAL TEMPORARY RAMP

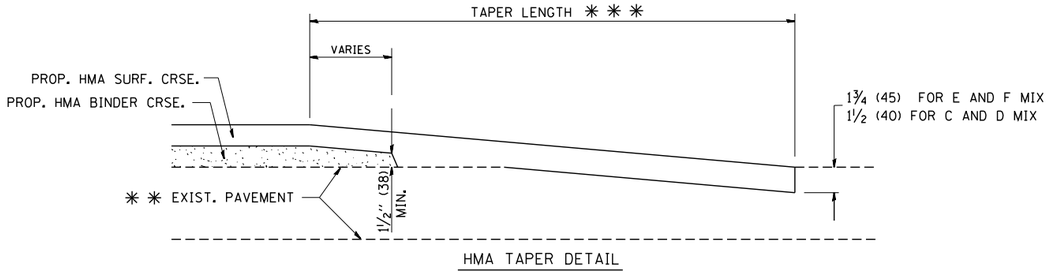


BUTT JOINT AND HMA TAPER

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.

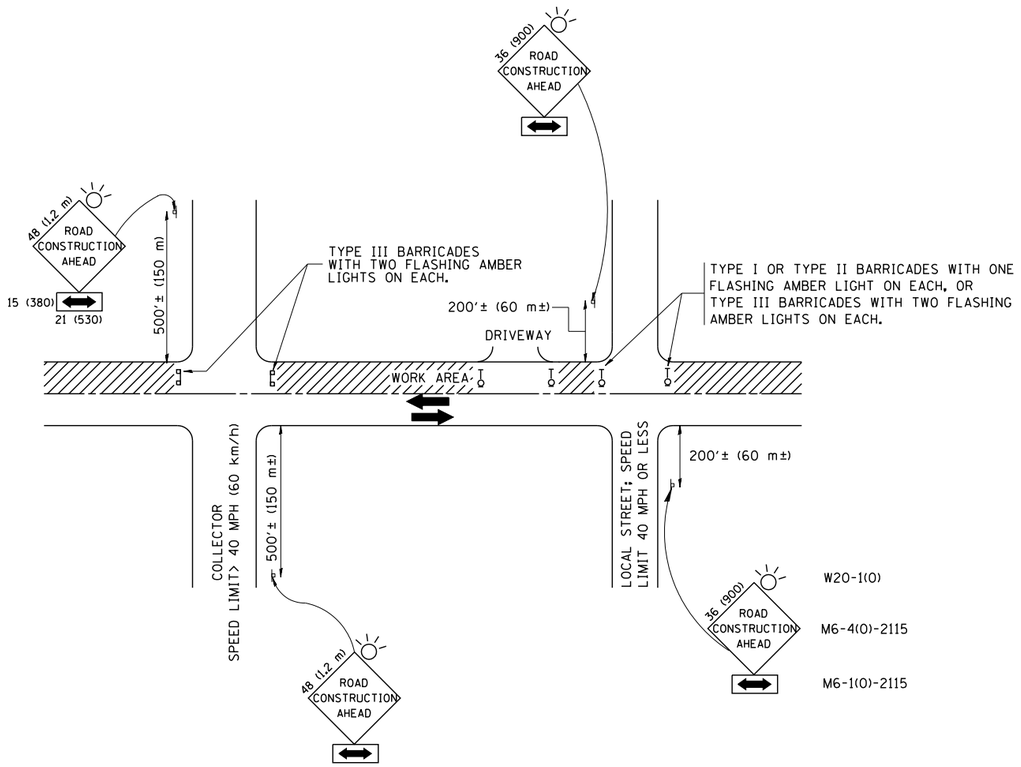
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	34
	BD400-05 BD32	CONTRACT NO.		
FED. ROAD DIST. NO. 1	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.

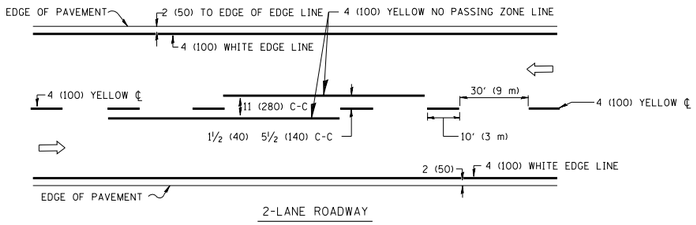
FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

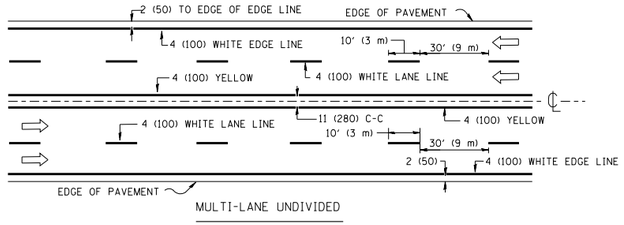
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

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

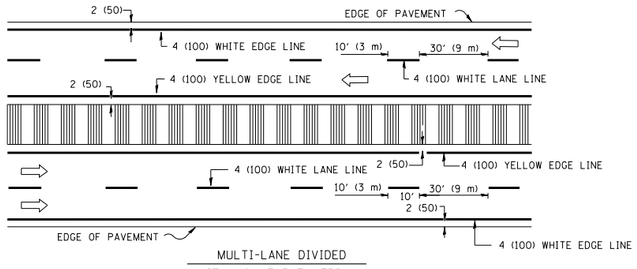
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	35
	TC-10	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



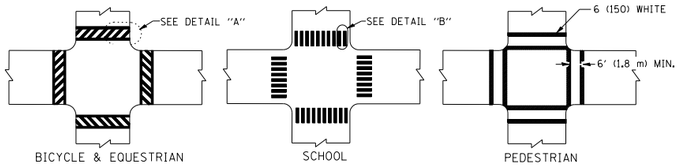
MULTI-LANE UNDIVIDED

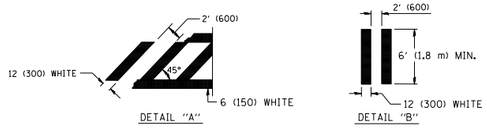


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

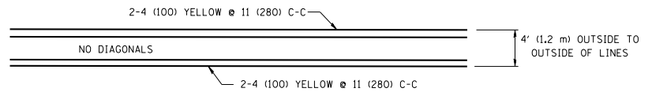
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

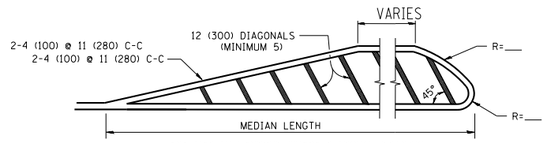




TYPICAL CROSSWALK MARKING



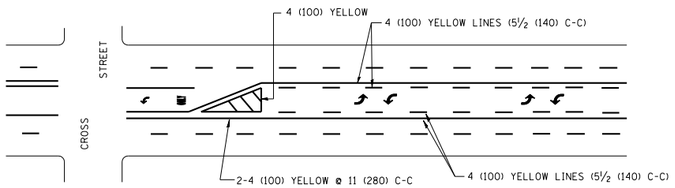
4' (1.2 m) WIDE MEDIANS ONLY



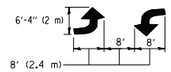
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

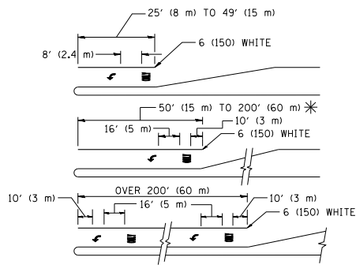


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

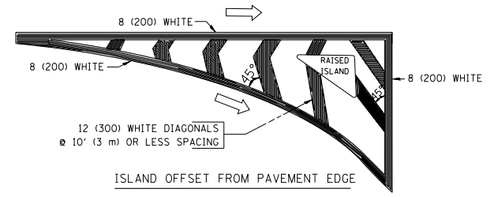


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

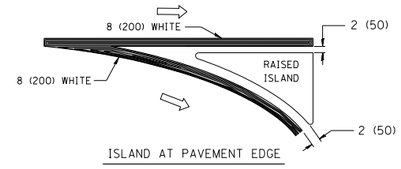
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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 ø 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ø 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 ø 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 ø 6 (150) 12 (300) ø 45° 12 (300) ø 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 ø 4 (100) WITH 12 (300) DIAGONALS ø 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 ø 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 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) ø 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 -

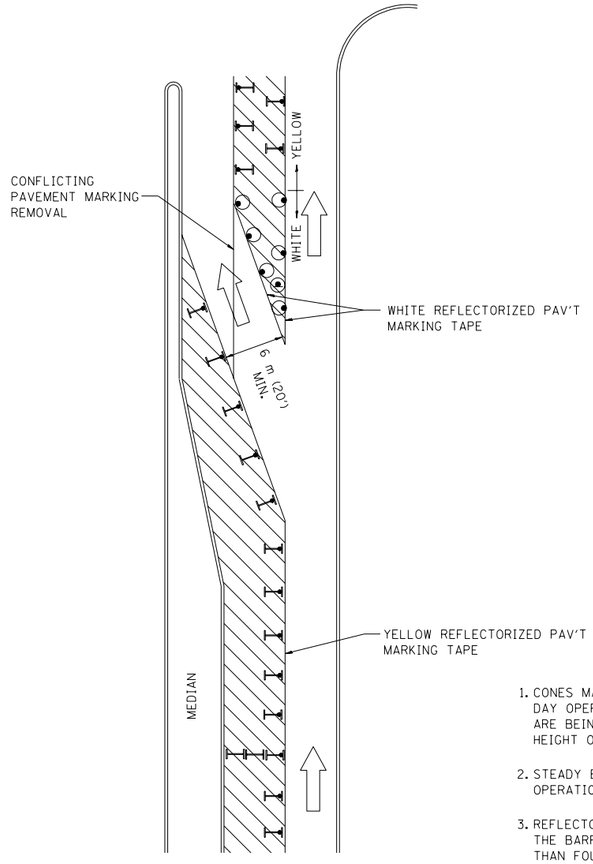
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

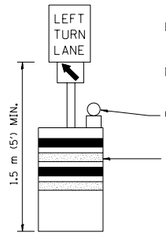
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00202-03-BR	KANE	38	36
	TC-13	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00202-03-BR	KANE	38	37
STA. N/A		TO STA. N/A		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





R 3-1100L 600 x 600 (24 x 24)

M6-2L 530 x 380 (21 x 15)

OPTIONAL FLASHING LIGHT

STANDARD 702001
DRUM FILLED WITH ENOUGH
SAND (BAGS) FOR STABILIZATION

GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

WORK AREA

LANE OPEN TO TRAFFIC

TYPE I OR II BARRICADE WITH
STEADY BURN LIGHT

DRUM WITH STEADY BURN LIGHT

DRUM WITH SIGN (WITH OPTIONAL FLASHING
LIGHT) SEE DETAIL

TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION
AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE

DATE: 10/18/2002

DRAWN BY

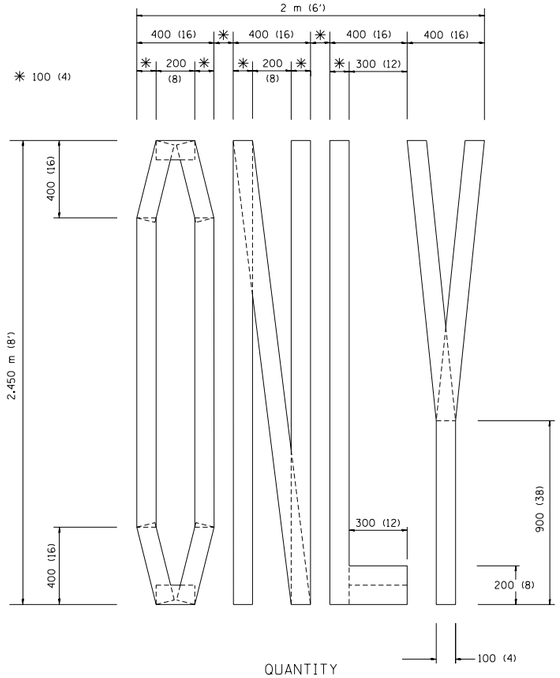
CHECKED BY LHA

TC-14

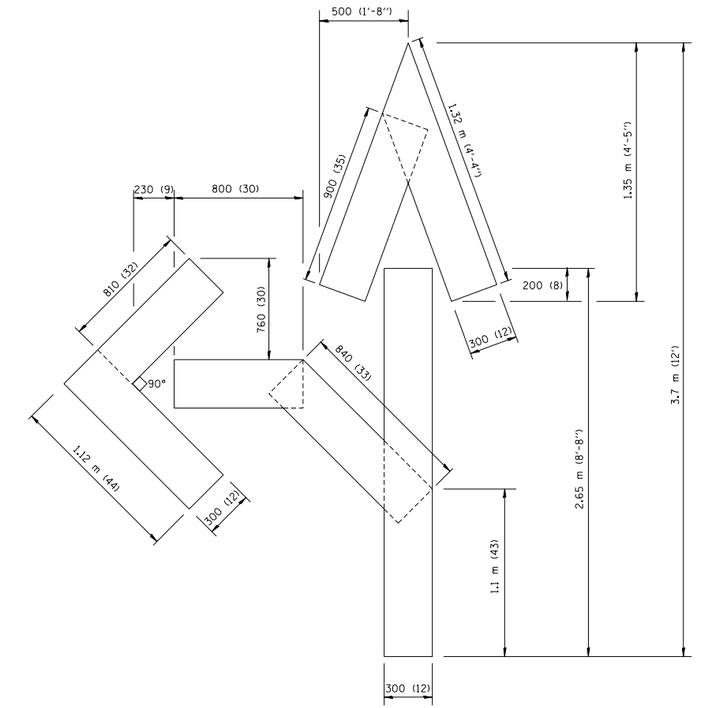
REVISION DATE: 01/06/00

•DATE-TIME•
•DGN-SPEC•
VI-TC14

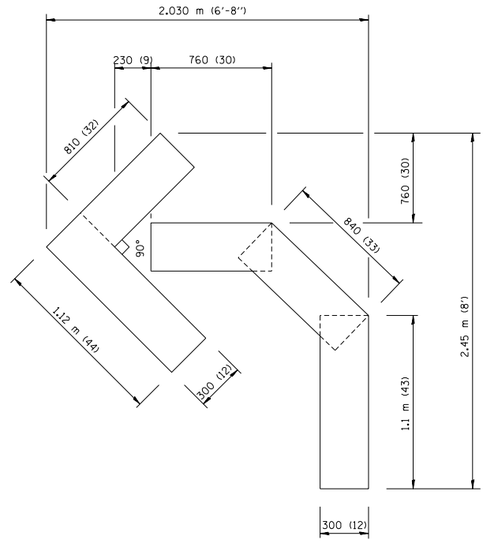
F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00202-03-BR	KANE	38	38
STA. N/A		TO STA. N/A		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



QUANTITY
100 (4) LINE = 19.7 m (64.1 ft.)
1.97 sq. m (21.1 sq. ft.)



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



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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE
DRAWN BY CADD
DATE 10/18/2002
CHECKED BY
TC-16
REVISION DATE: 08/28/00

Friday October 18,2002 @ 10:23:21 AM
c:\projects\diststd\tc16.dgn LV=35,63
VI-TC16