

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 642 (IL 78)
SECTION (11BR-4)BDR
PROJECT HBFP-W46B(252)
TYPE of IMPROVEMENT: BRIDGE REPAIR
SN 008-0042 OVER THE
EAST PLUM RIVER
CARROLL COUNTY

C-92-072-22

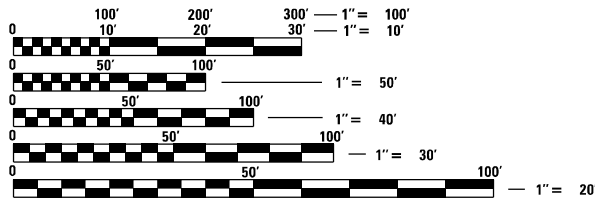
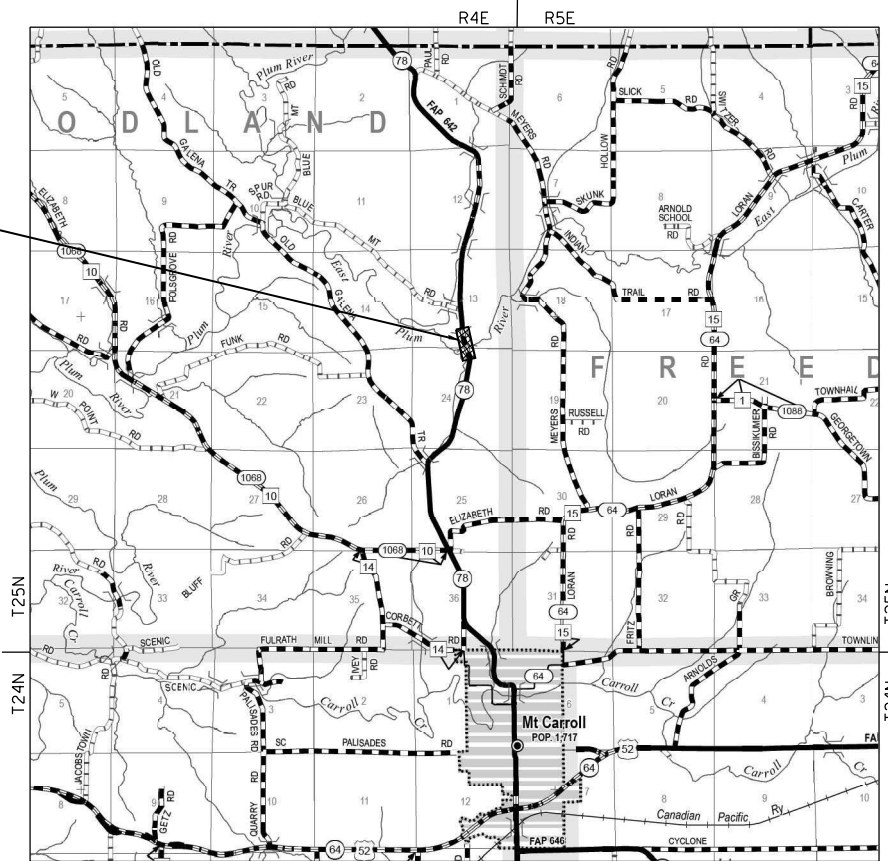
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	1
		ILLINOIS	CONTRACT NO. 64R48	

D-92-015-22



WOODLAND TOWNSHIP
T25N R4E, SECTION 13

SN 008-0042

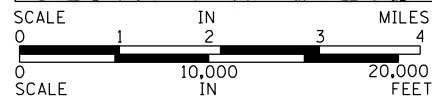


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

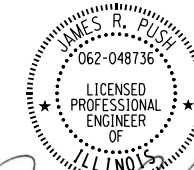
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: JAMES R. PUSH, PE (630) 930-6420
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64R48



GROSS LENGTH = 340.83 FT. = 0.065 MILE
NET LENGTH = 340.83 FT. = 0.065 MILE



James R. Push
DATE: 05/12/2022
JAMES R. PUSH, P.E.
LICENSE NO.: 062-048736
EXPIRES: NOVEMBER 30, 2023

QUANDEL CONSULTANTS
161 NORTH CLARK STREET
SUITE 2975
CHICAGO, IL 60601
312-634-6201
DESIGN FIRM - PROF/STRUCT ENGINEER
IL LIC. 184.005283-0006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED October 12, 2022
James R. Push
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
December 9, 2022
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT
December 9, 2022
Stephen McQuinn
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

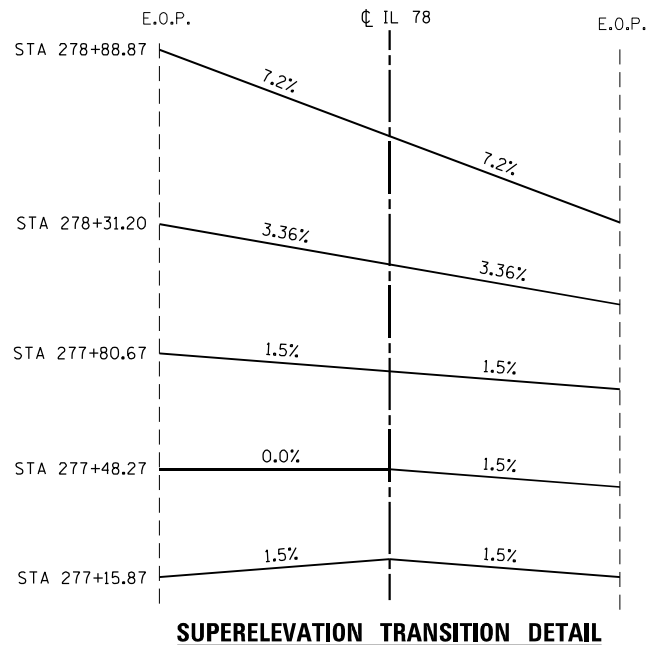
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STATE STANDARDS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 606001-08 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 630001-12 STEEL PLATE BEAM GUARDRAIL
- 631031-18 TRAFFIC BARRIER TERMINAL, TYPE 6
- 642006-01 SHOULDER RUMBLE STRIPS, 8 IN.
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701321-18 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701901-08 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS



GENERAL NOTES

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE THIS PROJECT IS STARTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

NO STREAM PERMITS HAVE BEEN PROCURED FOR THIS PROJECT. NONE ARE REQUIRED FROM THE REGULATORY AGENCIES IF THERE IS NO DEBRIS FALLING OR BEING PLACED INTO THE STREAM. ANY TEMPORARY FILL IN THE STREAM OR THE COMPROMISING OF THE DIKE (IF APPLICABLE) WILL NOT BE ALLOWED. IF THE CONTRACTOR CHOOSES TO USE ALTERNATE/MODIFIED CONSTRUCTION METHOD(S), THEY WILL BE RESPONSIBLE FOR OBTAINING THE PROPER PERMITS. NO RELIEF OR COMPENSATION WILL BE GIVEN FOR ANY DELAYS, WORKING DAYS CHARGED OR CALENDAR DAYS EXPIRED DUE TO THE LOSS OF TIME OR DELAY DURING THE RE-SUBMITTAL PROCESS TO PROCURE THE NECESSARY PERMIT(S) DUE TO THE CONTRACTOR CHOOSING ALTERNATE/MODIFIED CONSTRUCTION METHOD(S). ABSOLUTELY NO CONSTRUCTION ACTIVITIES WILL TAKE PLACE WITHOUT THE PROPER PERMITS BEING SECURED.

ALL ELEVATIONS SHOWN IN PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

IDOT DISTRICT 2 OPERATIONS TRAFFIC SIGNAL SECTION SHALL BE CONTACTED AT 815-284-2271 FOR CONTROLLER PROGRAMMING AND TIMING APPROVAL PRIOR TO ACTIVATING THE TEMPORARY BRIDGE TRAFFIC SIGNALS.

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S):	HMA CONC SURF CSE
PG:	PG 64 -22
DESIGN AIR VOIDS:	4.0% @ N DESIGN - 50
MIXTURE COMPOSITION:	IL 9.5
FRICTION AGGREGATE:	MIX "C"
QUALITY MANAGEMENT PROGRAM:	QC / QA
SUBLOT SIZE:	N / A

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:

- BITUMINOUS MATERIALS (TACK COAT) 0.05 LBS / SQ FT (ON PAVEMENT)
- BITUMINOUS MATERIALS (TACK COAT) 0.025 LBS / SQ FT (FOG)
- HOT-MIX ASPHALT MATERIAL 0.056 TON / SQ YD PER 1"
- AGGREGATE MATERIAL 1.60 TONS / CU YD

PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

- ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
- ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
- THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
- CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE.

- THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT.
- EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

MICROSILICA CONCRETE SHALL INCLUDE MACRO-SIZE, TYPE III, SYNTHETIC FIBERS MEETING THE 'BRIDGE DECK MICROSILICA CONCRETE OVERLAY' SPECIAL PROVISION.

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	2
CONTRACT NO. 64R48			ILLINOIS FED. AID PROJECT	

CONSTRUCTION CODE
BRIDGE 0047
80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 008-0042 CARROLL COUNTY
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	263	263
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	454	454
40600990	TEMPORARY RAMP	SQ YD	54	54
40604050	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "C", N50	TON	23	23
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	61	61
44000100	PAVEMENT REMOVAL	SQ YD	23	23
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	262	262
50102400	CONCRETE REMOVAL	CU YD	11	11
50300225	CONCRETE STRUCTURES	CU YD	11	11
50300300	PROTECTIVE COAT	SQ YD	898	898
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	48.6	48.6
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	18,750	18,750
50800515	BAR SPLICERS	EACH	145	145
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50	50
63302700	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	2	2
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	192	192
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2

* DENOTES SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	3
CONTRACT NO. 64R48			ILLINOIS FED. AID PROJECT	

CONSTRUCTION CODE
BRIDGE 0047
80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 008-0042 CARROLL COUNTY
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	825	825
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	42	42
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	344	344
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	2,518	2,518
70400100	TEMPORARY CONCRETE BARRIER	FOOT	675	675
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	675	675
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,698	1,698
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	6	6
* 78112000	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	3	3
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	43	43

* DENOTES SPECIALTY ITEM

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

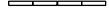


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DEPARTMENT OF TRANSPORTATION

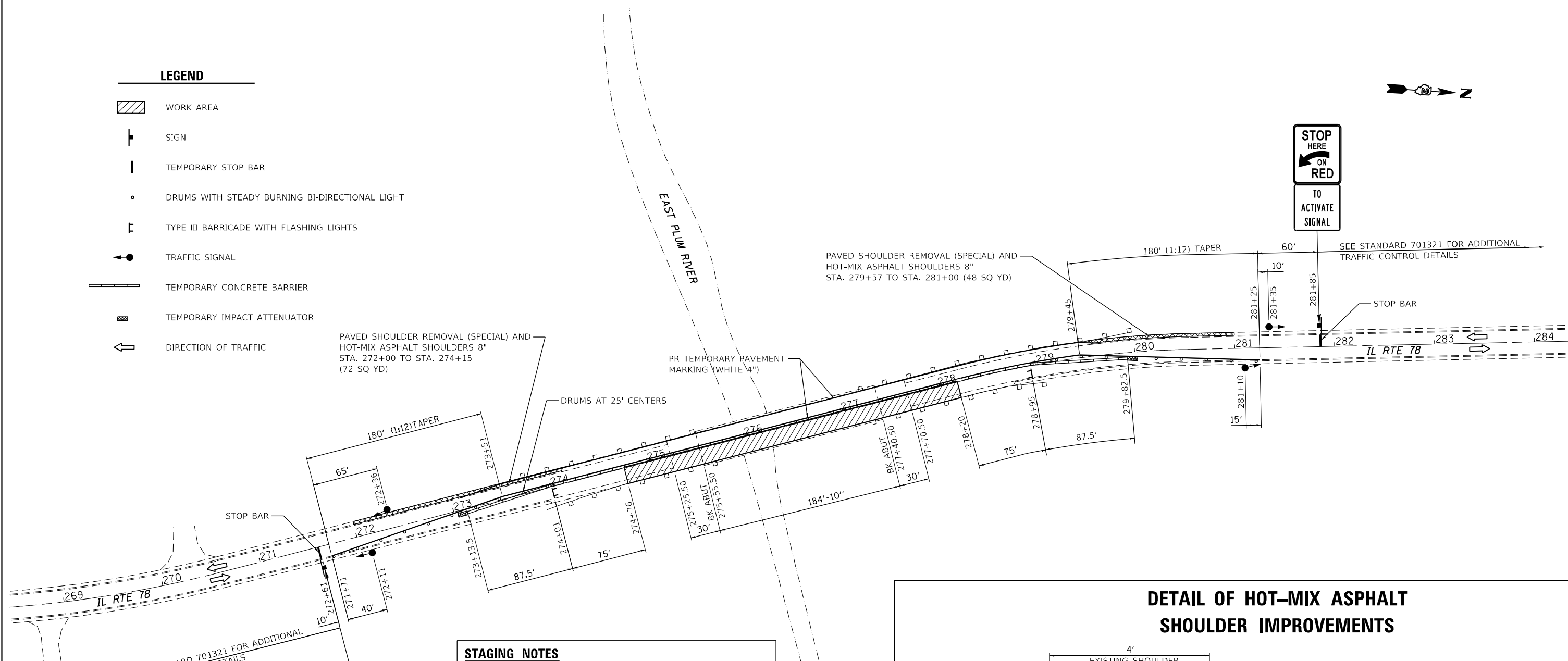
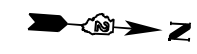
SUMMARY OF QUANTITIES

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	4
CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				

LEGEND

-  WORK AREA
-  SIGN
- TEMPORARY STOP BAR
- DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  TRAFFIC SIGNAL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  DIRECTION OF TRAFFIC



STAGING NOTES

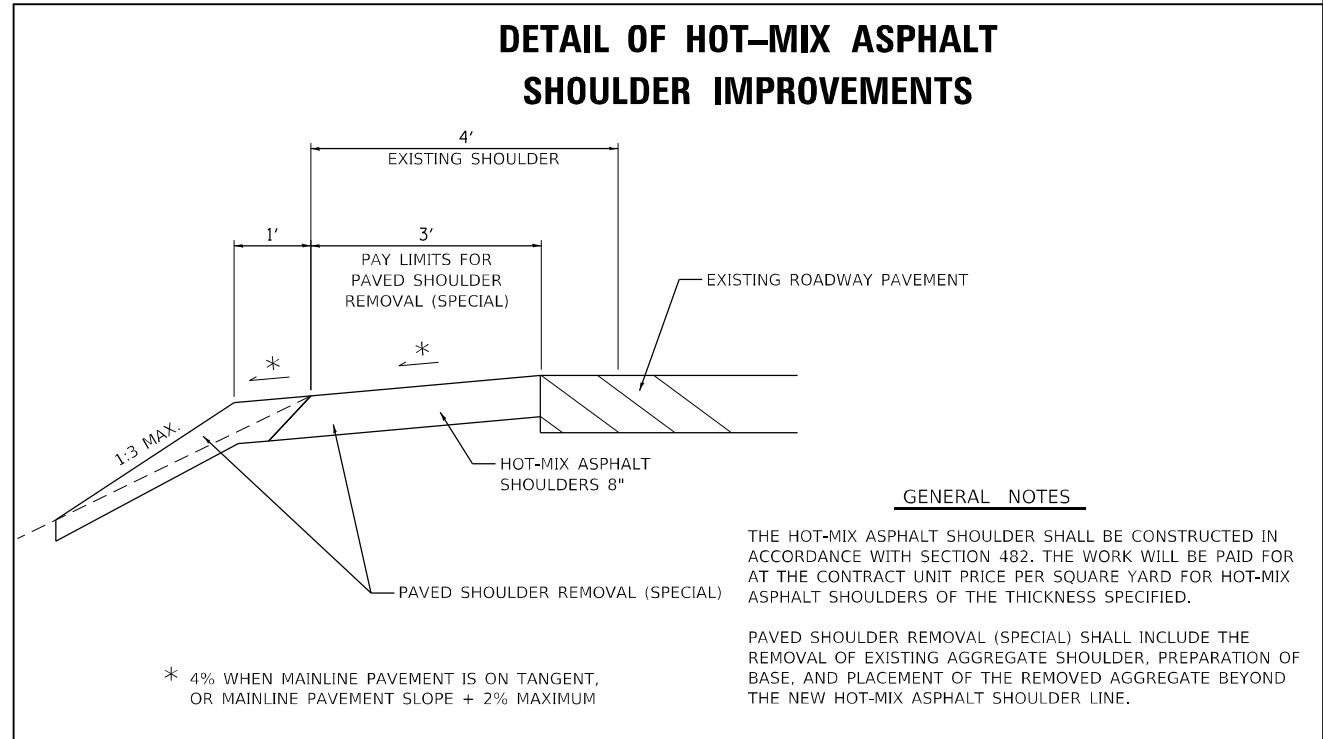
ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION.

ALL WORK WITHOUT TEMPORARY TRAFFIC SIGNALS IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201.

EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM STOP BAR TO STOP BAR. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE TEMPORARILY COVERED WITH PAVEMENT MARKING BLACKOUT TAPE. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

TYPE C REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25-FOOT CENTERS WHICH WILL BE MEASURED AND PAID FOR AS BARRIER WALL REFLECTORS, TYPE C, AND GUARDRAIL REFLECTORS, TYPE C (SPECIAL).

ADDITIONAL SIGNAGE SHOWN ON THE TRAFFIC CONTROL SHEETS WHICH ARE NOT PART OF HIGHWAY STANDARD 701321 SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.



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




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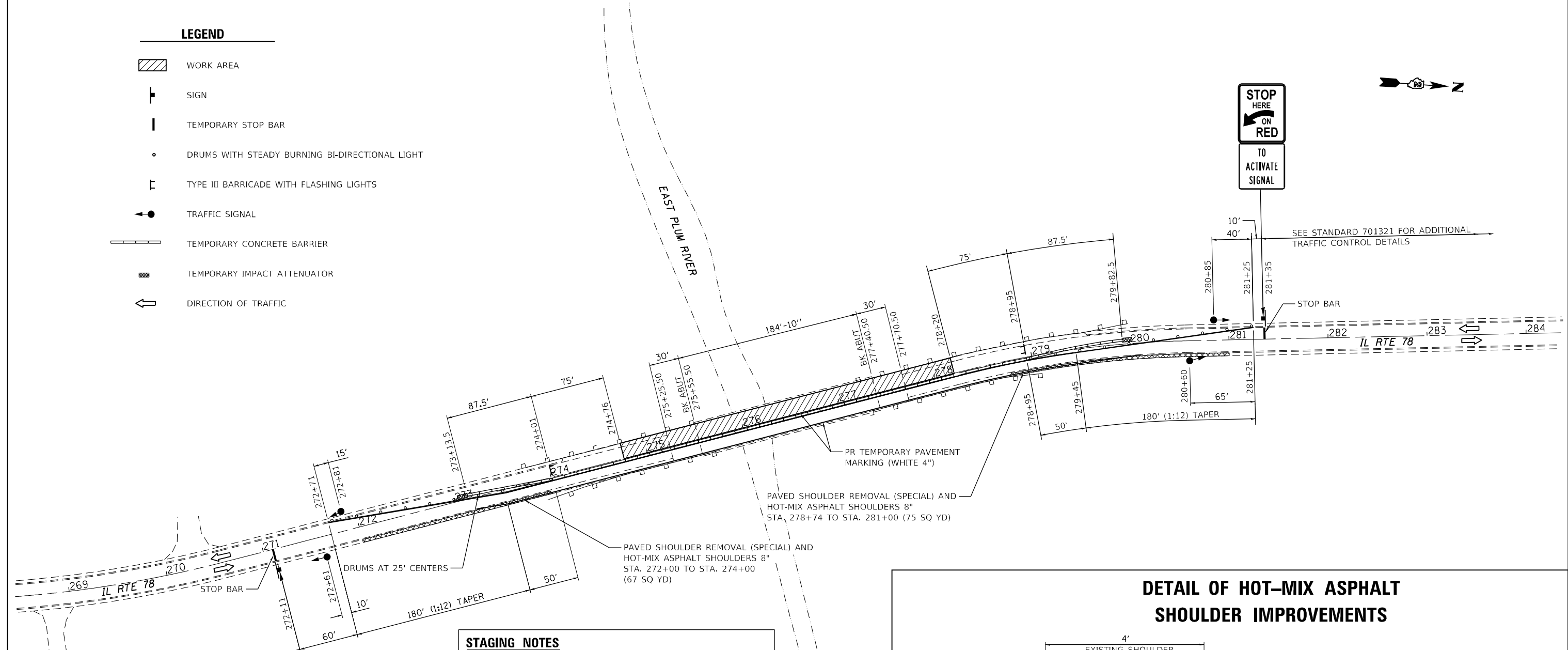
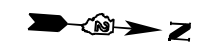
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL PLAN STAGE 1			
EAST PLUM RIVER SN 008-0042			
SCALE: 1" = 50'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	6
CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				

LEGEND

-  WORK AREA
-  SIGN
-  TEMPORARY STOP BAR
-  DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHT
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  TRAFFIC SIGNAL
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATOR
-  DIRECTION OF TRAFFIC



STAGING NOTES

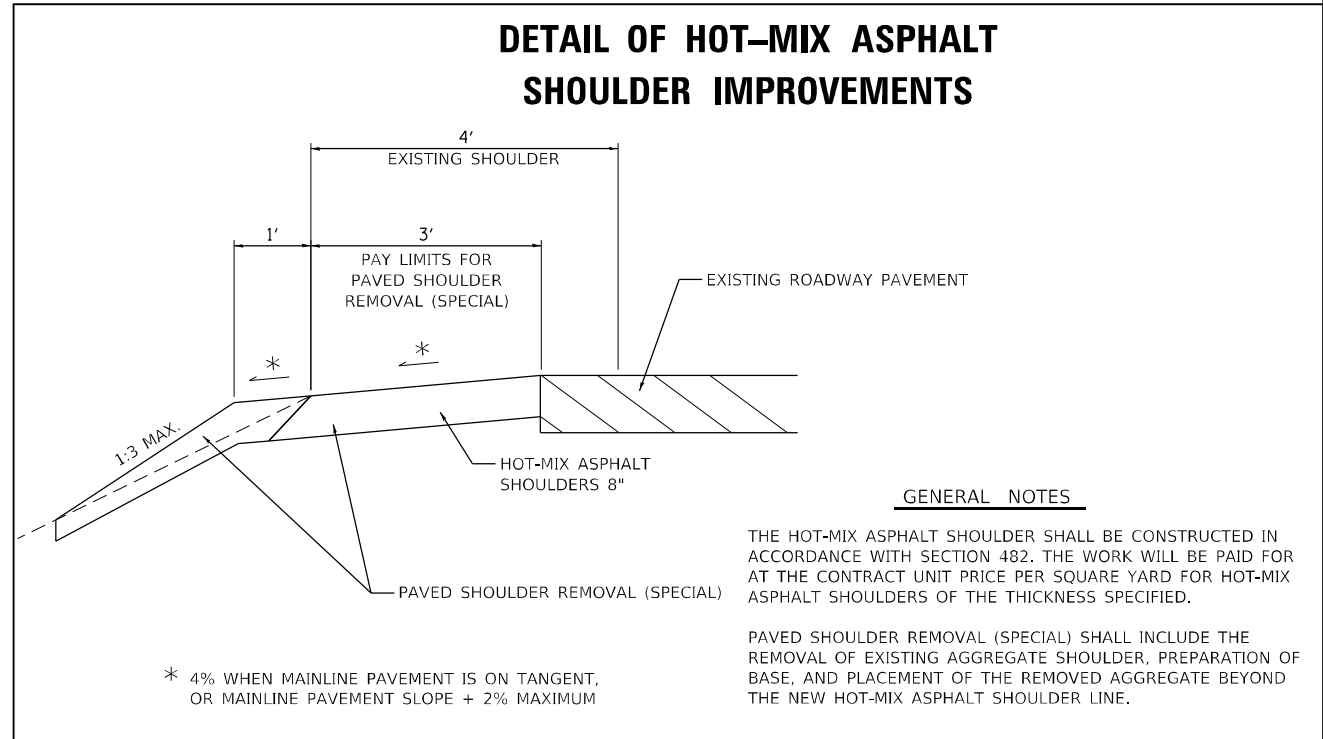
ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION.

ALL WORK WITHOUT TEMPORARY TRAFFIC SIGNALS IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201.

EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM STOP BAR TO STOP BAR. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE TEMPORARILY COVERED WITH PAVEMENT MARKING BLACKOUT TAPE. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

TYPE C REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25-FOOT CENTERS WHICH WILL BE MEASURED AND PAID FOR AS BARRIER WALL REFLECTORS, TYPE C, AND GUARDRAIL REFLECTORS, TYPE C (SPECIAL).

ADDITIONAL SIGNAGE SHOWN ON THE TRAFFIC CONTROL SHEETS WHICH ARE NOT PART OF HIGHWAY STANDARD 701321 SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL PLAN STAGE 2			
EAST PLUM RIVER SN 008-0042			
SCALE: 1" = 50'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	7
CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				

Existing Structure S.N. 008-0042 built in 1994. 4-Span PPC-I Beam R.C. Deck.
Total width out to out = 35'-2". Total length bk. to bk. abut. = 185'-0". R.C. Piers and Abuts. .

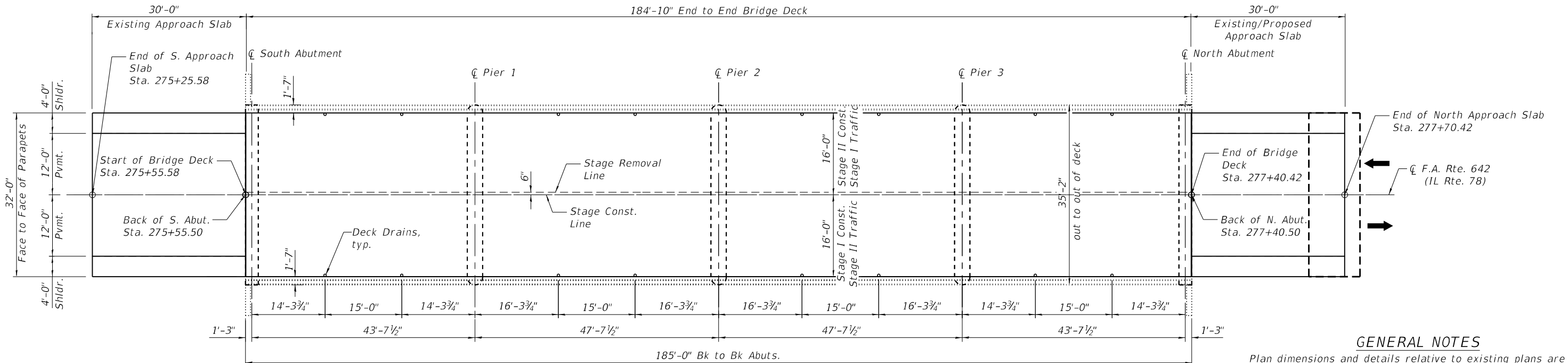
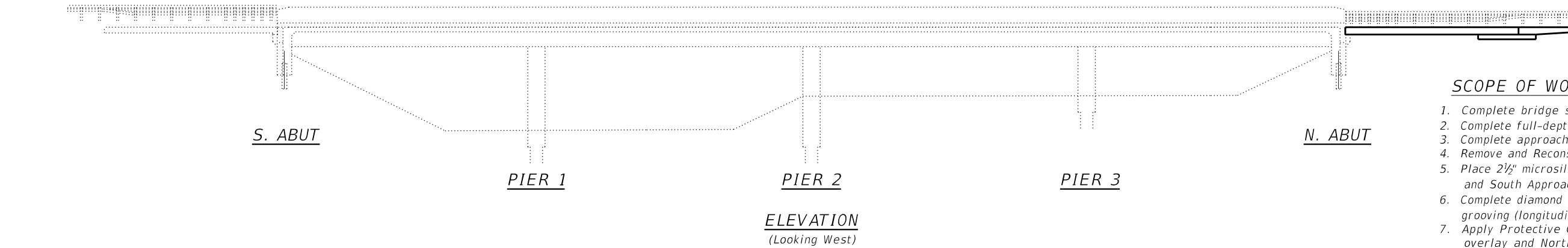
Traffic to be maintained during Stage Construction.

INDEX OF SHEETS

1. General Plan & Elevation
2. Cross Section
3. Wearing Surface Plan
4. Deck Slab and Approach Slab Repair Plan
5. Bridge Approach Slab
6. Bridge Approach Slab Details
7. Bar Splicers
8. Original GPE

SCOPE OF WORK:

1. Complete bridge scarification, 3/4".
2. Complete full-depth deck patching in bridge deck.
3. Complete approach slab repair at South Approach Slab.
4. Remove and Reconstruct the North Approach Slab.
5. Place 2 1/2" microsilica concrete overlay on bridge deck and South Approach Slab.
6. Complete diamond grinding 1/4" and bridge deck grooving (longitudinal).
7. Apply Protective Coat to the surface of the new overlay and North Approach Slab.



GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

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

Microsilica Concrete shall include macro-size, Type III, synthetic fibers; meeting Note 7 in the Bridge Deck Microsilica Concrete Overlay Special Provision.

Protective coat shall be applied to the top of the new overlay and approach slab.

Areas of repairs shown are estimated. The Engineer shall show actual locations of the repairs on AS-BUILT PLANS.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Cost included with Deck Slab Repair.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Scarification 3/4"	Sq. Yd.	768
Pavement Removal	Sq. Yd.	23
Approach Slab Removal	Sq. Yd.	152
Concrete Removal	Cu. Yd.	11
Concrete Structures	Cu. Yd.	11
Reinforcement Bars, Epoxy Coated	Pound	18,750
Bar Splicers	Each	145
Concrete Superstructure (Approach Slab)	Cu. Yd.	48
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	1
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	25
Approach Slab Repair (Partial Depth)	Sq. Yd.	7
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	768
Diamond Grinding (Bridge Section)	Sq. Yd.	770
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	653
Protective Coat	Sq. Yd.	898
HMA Surface Removal - Butt Joint	Sq. Yd.	302
HMA Surface Course, IL 9.5 Mix "C" N50	Ton	16
Pavement Connector (HMA)	Sq. Yd.	61
Remove and Reerect Steel Plate Beam Guardrail, Type A	Foot	50
Remove and Reerect Traffic Barrier Terminals, Type 6	Each	2

PLAN



05/05/2022
JEFFREY P. BUCHOLC, S.E.
LICENSE NO.: 081-005605
EXPIRES: NOVEMBER 30, 2024

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N. 008-0042

SHEET 1 OF 8 SHEETS

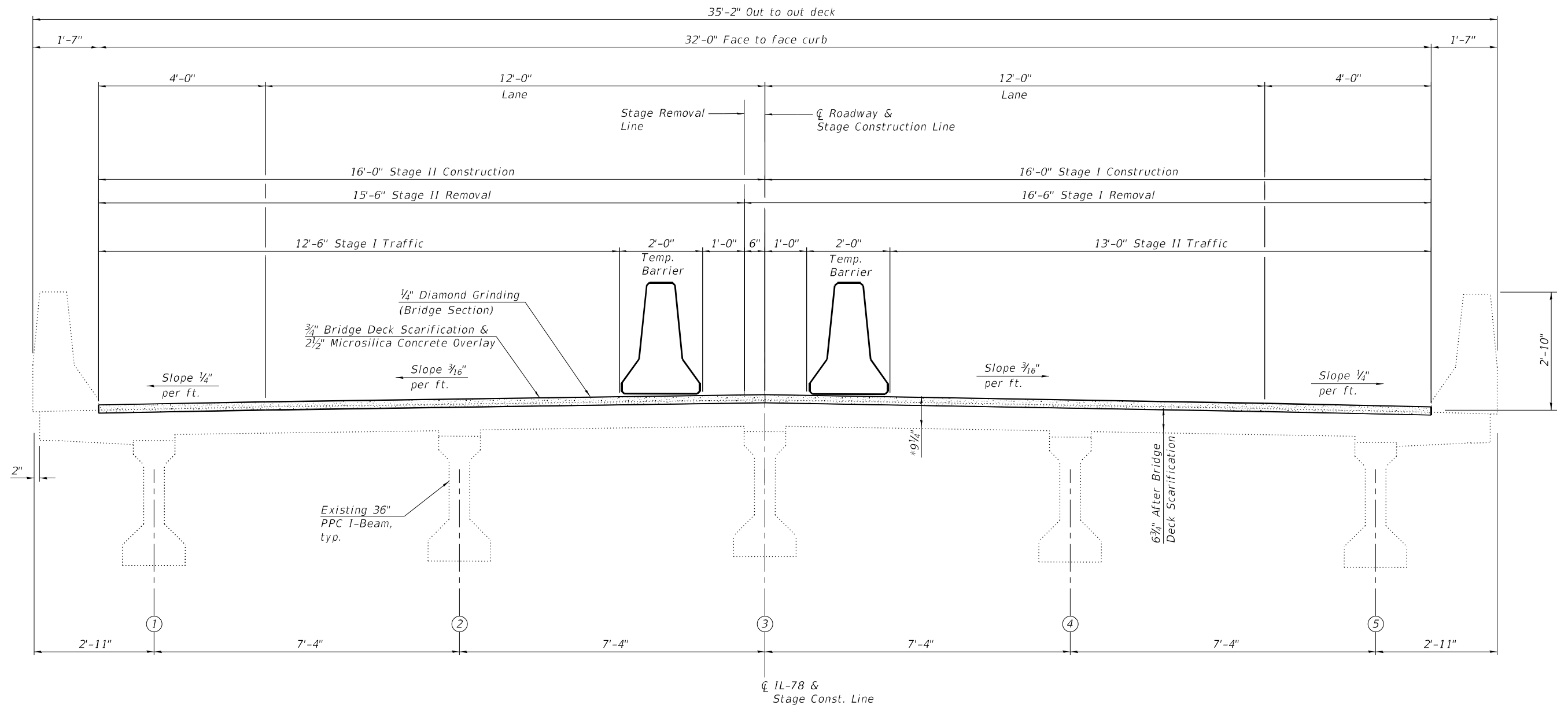
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642	(11BR-4)BDR	CARROLL	23	8
CONTRACT NO. 64R48				

ILLINOIS FED. AID PROJECT

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Washington, IL 61571
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PLOT DATE = 5/5/2022	DRAWN - JLM	REVISED -
	CHECKED - JRT	REVISED -



CROSS SECTION
(Looking North)

* Prior to grinding

MODEL: 2D Sheet H
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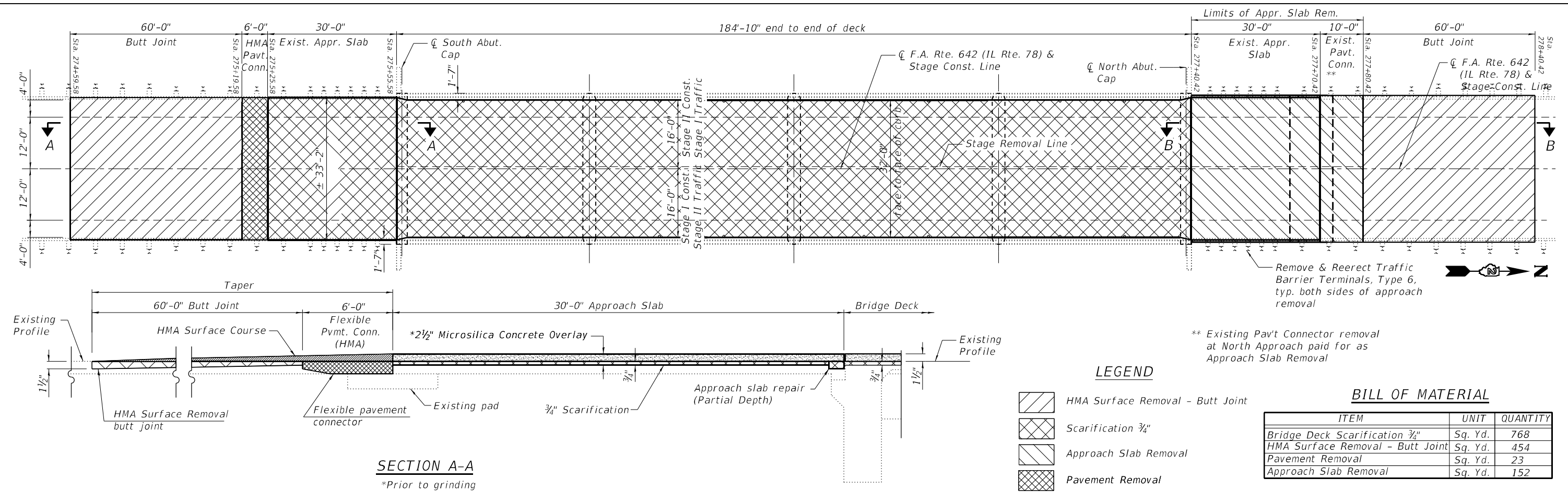
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTION
S.N. 008-0042**

SHEET 2 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	9
CONTRACT NO. 64R48				
		ILLINOIS	FED. AID PROJECT	

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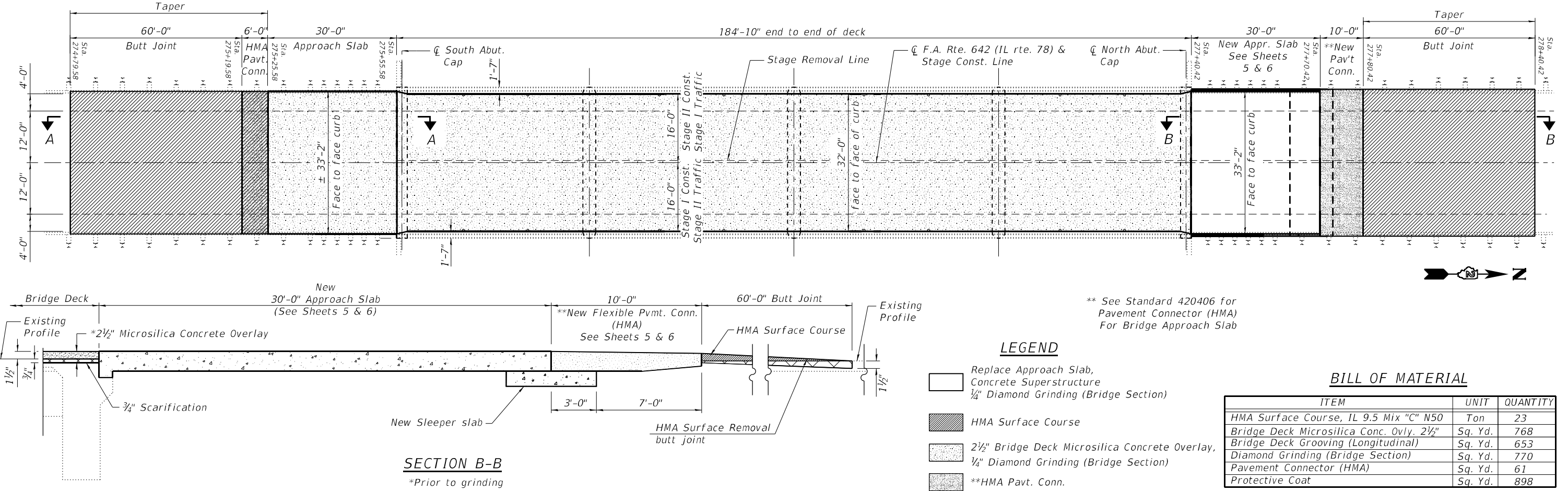
SECTION A-A
 *Prior to grinding

LEGEND

- HMA Surface Removal - Butt Joint
- Scarification 3/4"
- Approach Slab Removal
- Pavement Removal

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Scarification 3/4"	Sq. Yd.	768
HMA Surface Removal - Butt Joint	Sq. Yd.	454
Pavement Removal	Sq. Yd.	23
Approach Slab Removal	Sq. Yd.	152



SECTION B-B
 *Prior to grinding

LEGEND

- Replace Approach Slab, Concrete Superstructure
- 1/4" Diamond Grinding (Bridge Section)
- HMA Surface Course
- 2 1/2" Bridge Deck Microsilica Concrete Overlay, 1/4" Diamond Grinding (Bridge Section)
- **HMA Pavt. Conn.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
HMA Surface Course, IL 9.5 Mix "C" N50	Ton	23
Bridge Deck Microsilica Conc. Ovly. 2 1/2"	Sq. Yd.	768
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	653
Diamond Grinding (Bridge Section)	Sq. Yd.	770
Pavement Connector (HMA)	Sq. Yd.	61
Protective Coat	Sq. Yd.	898

** See Standard 420406 for Pavement Connector (HMA) For Bridge Approach Slab

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEARING SURFACE PLAN
S.N. 008-0042

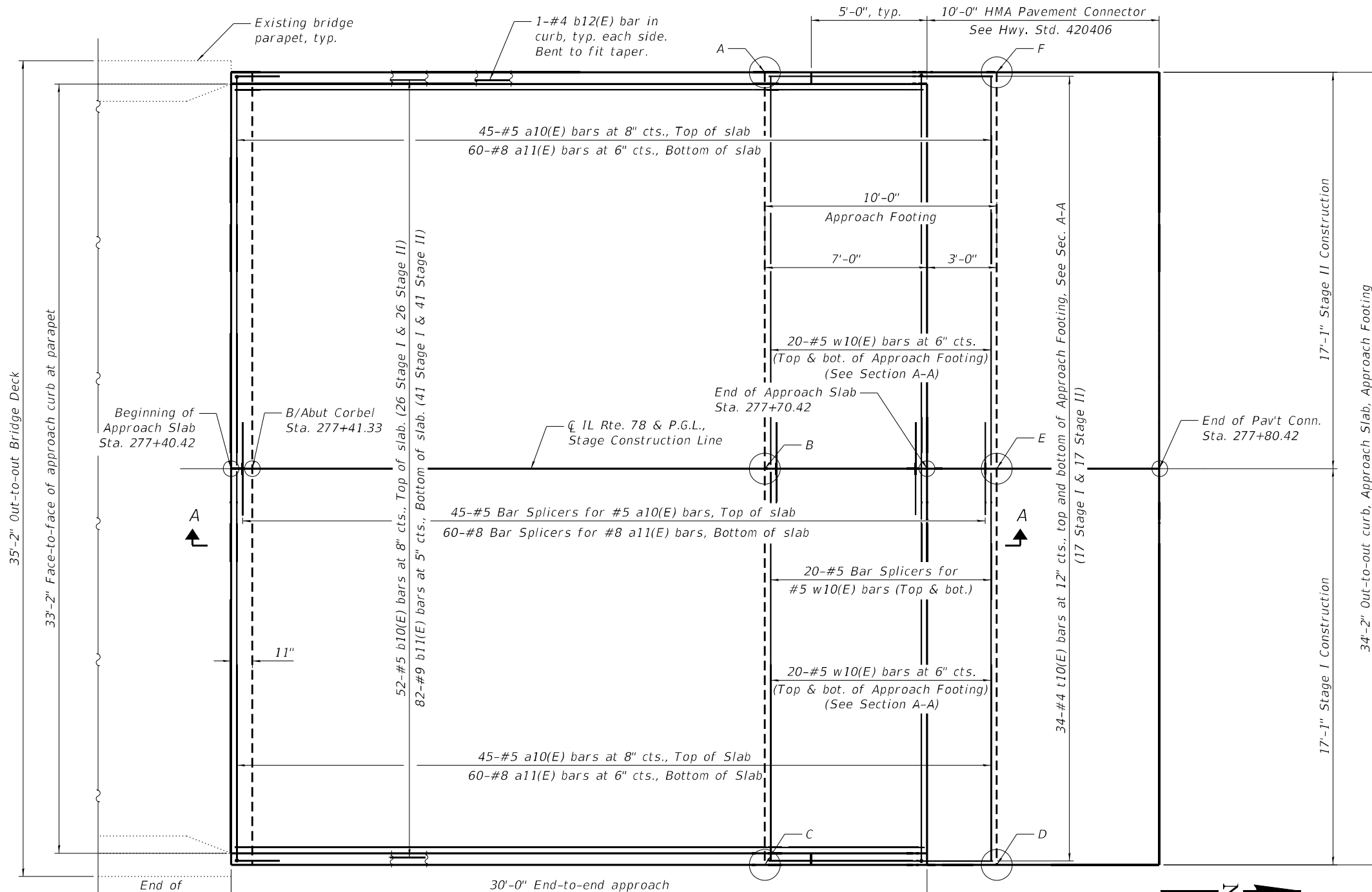
SHEET 3 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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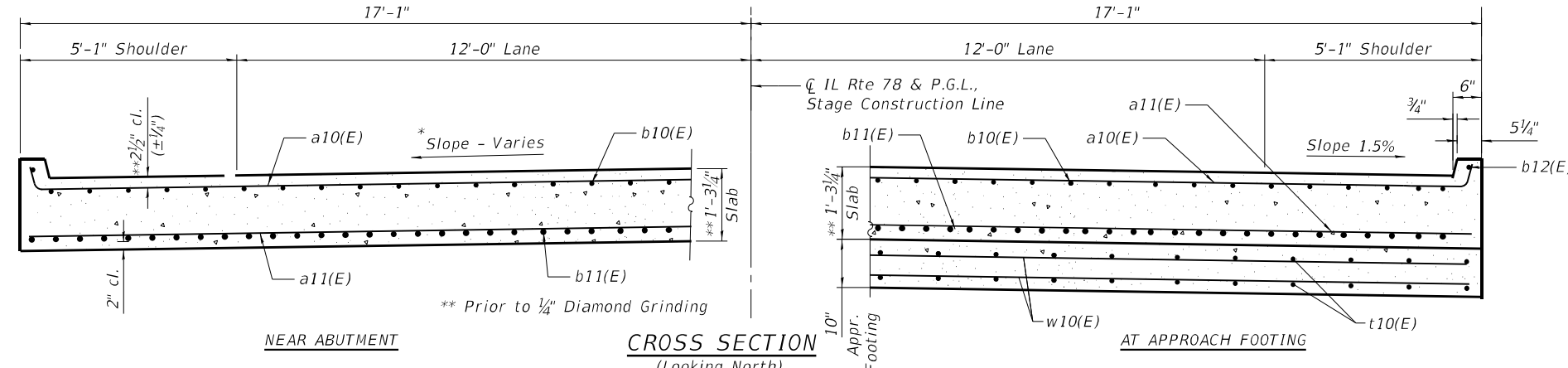
CONTRACT NO. 64R48

ILLINOIS FED. AID PROJECT

MODEL: Approach Slab 1
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NORTH APPROACH SLAB - PLAN



NEAR ABUTMENT

CROSS SECTION (Looking North)

AT APPROACH FOOTING

* TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point/Location	Top	Bottom
A -	645.627	644.794
B -	645.507	644.674
C -	645.240	644.407
D -	645.530	644.697
E -	645.723	644.890
F -	645.225	644.392

* Elevations are based on original PGL and curve information, assuming an additional 1 1/2" overlay on the bridge deck. Elevations shown are also estimated after 1/4" Diamond Grinding. Contractor will be required to verify elevations required for new approach slab based on the actual conditions surveyed.

NOTES:

See Sheet 6 for Section A-A, reinforcement bar details and bill of material.

MINIMUM BAR LAP

- #5 bar = 3'-4" Approach Slab
- #8 bar = 4'-9" Approach Slab
- #5 bar = 3'-0" Footing



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PLOT DATE =	DRAWN - KCM	REVISED -
	CHECKED - JRT	REVISED -

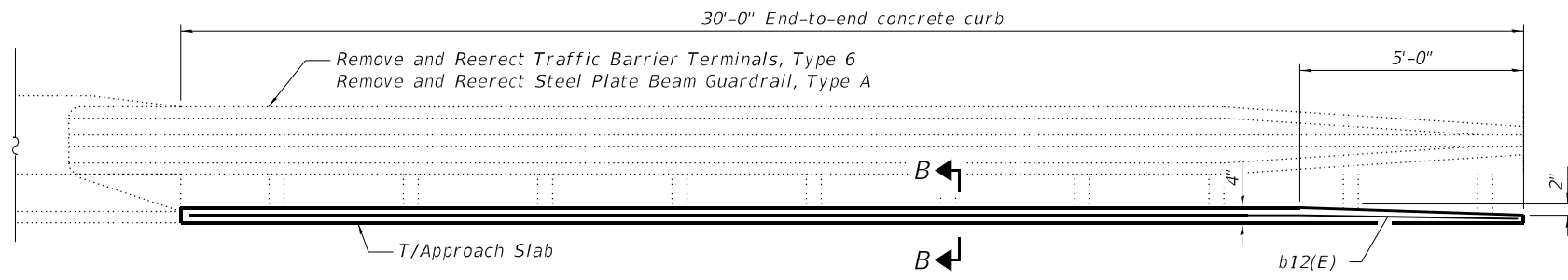
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

N. BRIDGE APPROACH SLAB DETAILS (1 OF 2)
 S.N. 008-0042

SHEET 5 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				

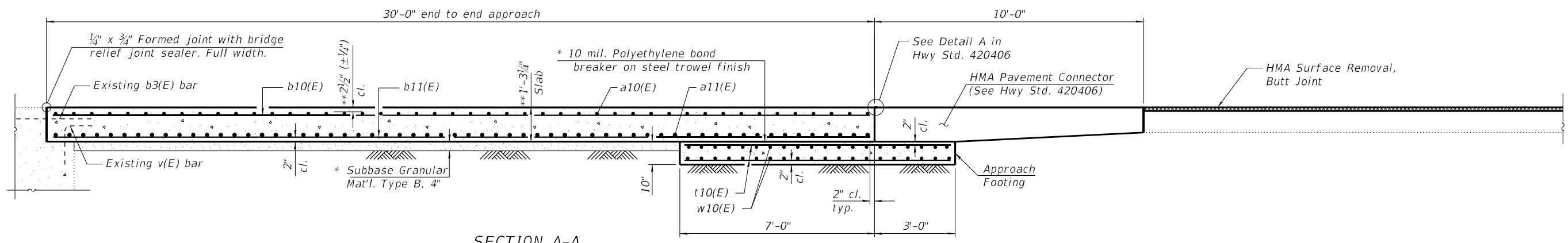
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INSIDE ELEVATION OF CURB

Notes:

1. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
2. Approach footing concrete shall be paid for as Concrete Structures.
3. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
4. Cost of excavation for approach footing included with Concrete Structures.
5. Removal of existing approach slab and pavement connector shall be paid for as Approach Slab Removal.
6. Removal of existing approach footing included with Concrete Removal.



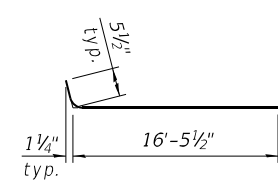
SECTION A-A

* Cost included with Concrete Superstructure (Approach Slab)
 ** Prior to 1/4" Diamond Grinding

BILL OF MATERIAL
 (North Approach Slab)

Bar	No.	Size	Length	Shape
a10(E)	90	#5	16'-9"	—
a11(E)	120	#8	16'-11"	—
b10(E)	52	#5	29'-8"	—
b11(E)	82	#9	29'-8"	—
b12(E)	2	#4	29'-8"	—
t10(E)	68	#4	9'-8"	—
w10(E)	80	#5	16'-10"	—
Concrete Superstructure (Approach Slab)			Cu. Yd.	48.6
Concrete Structures			Cu. Yd.	11
Reinforcement Bars, Epoxy Coated			Pound	18,750
Concrete Removal			Cu. Yd.	11
Approach Slab Removal			Sq. Yd.	152
Bar Splicers			Each	145

See Sheet 07 for Bar Splicer details.



BAR a11(E)



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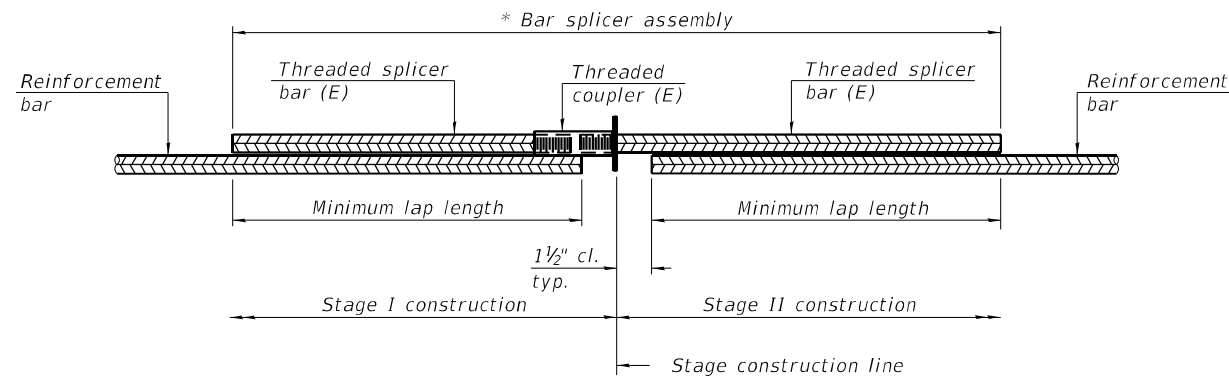
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

N. BRIDGE APPROACH SLAB DETAILS (2 OF 2)
S.N. 008-0042

SHEET 6 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	13
CONTRACT NO. 64R48				

ILLINOIS FED. AID PROJECT

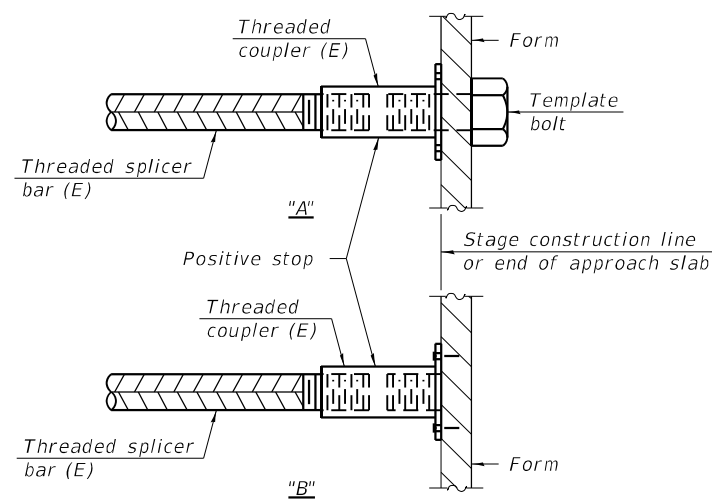


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
N Approach Slab, Transverse Bars, Top of Slab	#5	45	3'-4"
N Approach Slab, Transverse Bars, Bottom of Slab	#8	60	4'-9"
N Approach Footing, Transverse Bars, Top of Footing	#5	20	3'-0"
N Approach Footing, Transverse Bars, Bottom of Footing	#5	20	3'-0"

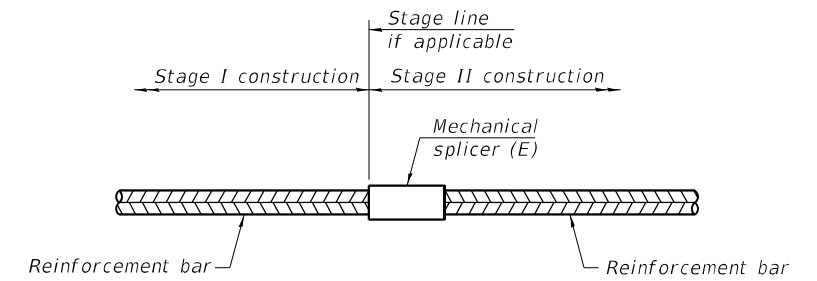


INSTALLATION AND SETTING METHODS

"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
N/A	N/A	N/A

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.

MODEL: Approach Slab 1
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BSD-1

1-1-2020



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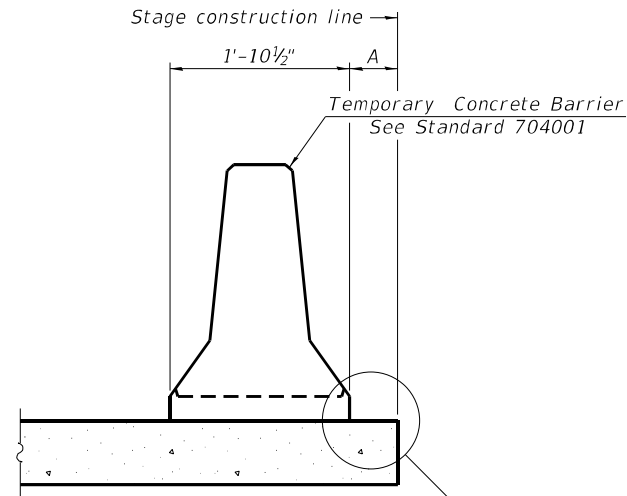
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICE DETAILS
 S.N. 008-0042

SHEET 7 OF 9 SHEETS

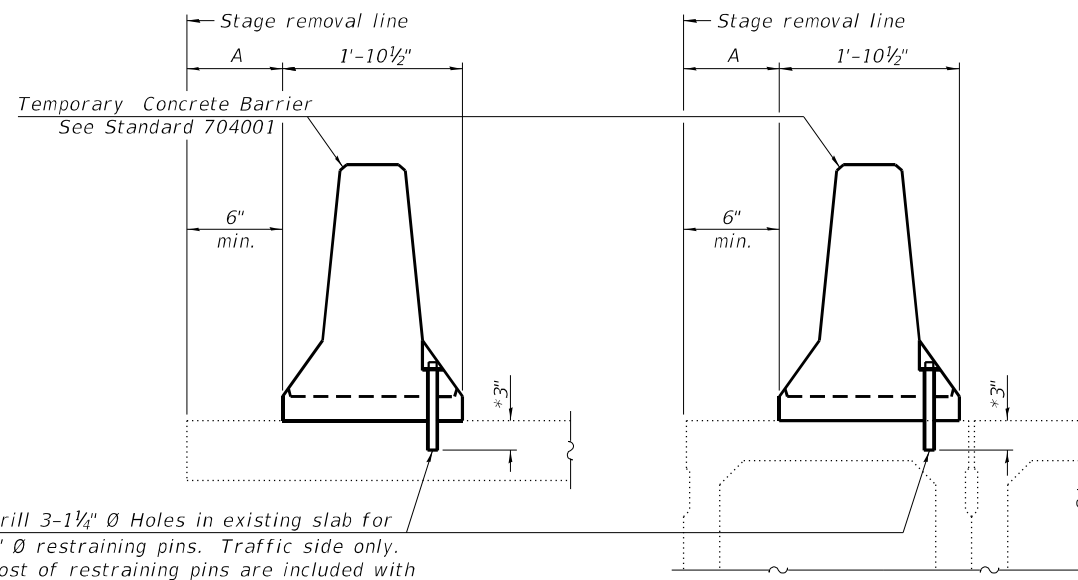
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CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				

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 7/22/2022 11:09:37 AM



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1". See Detail I, II or III

NEW SLAB OR NEW DECK BEAM

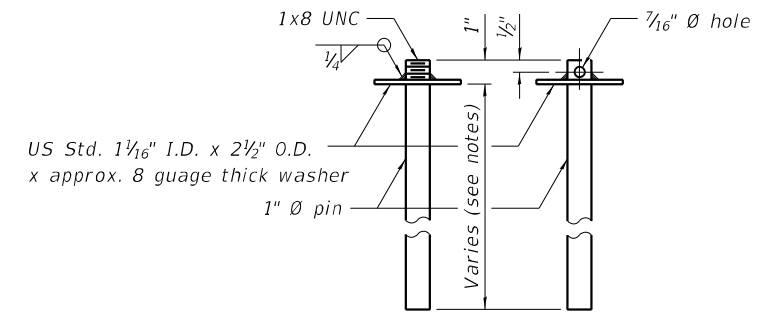


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

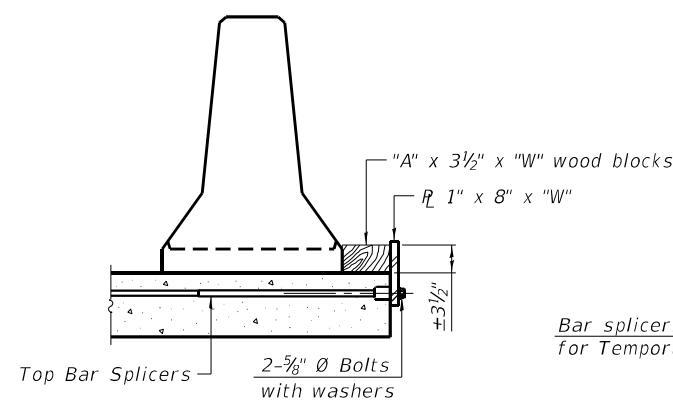
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM



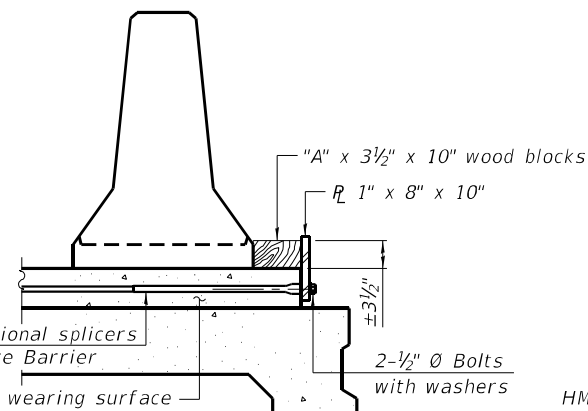
RESTRAINING PIN

SECTIONS THRU SLAB OR DECK BEAM

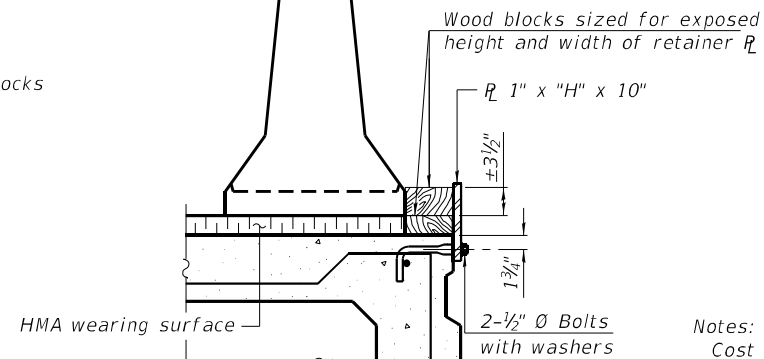


DETAIL I

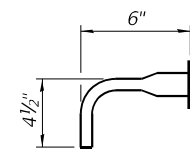
Bar splicers and additional splicers for Temporary Concrete Barrier



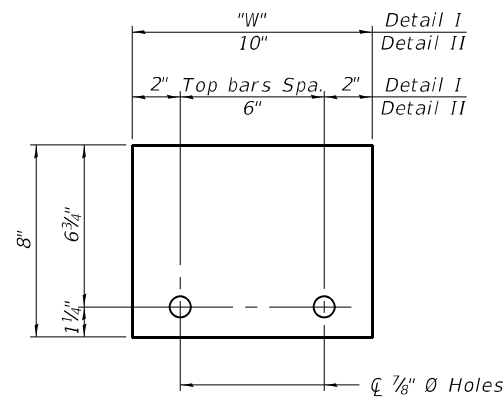
DETAIL II



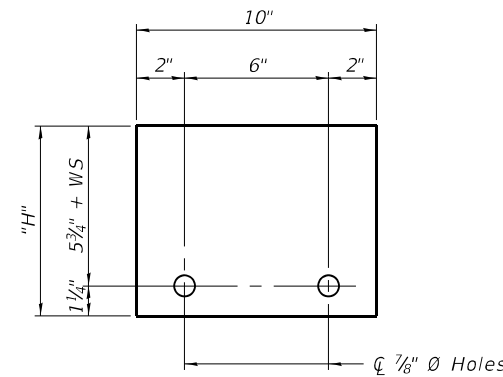
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate center of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I** - Installation for a new bridge deck or bridge slab.
- Detail II** - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III** - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27 2-17-2017



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PLOT DATE =	DRAWN - JRT	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

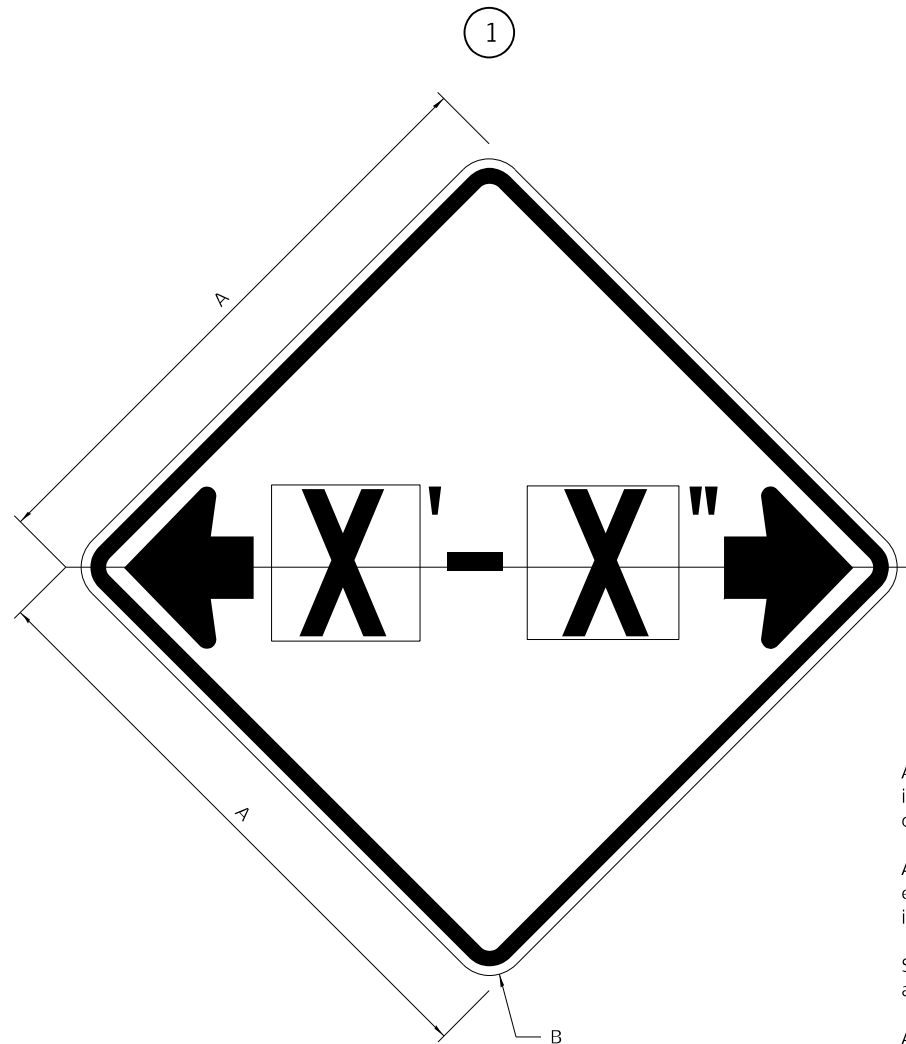
**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 008-0042**

SHEET 8 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	15
CONTRACT NO. 64R48				
ILLINOIS		FED. AID PROJECT		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD W12-I102



GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR LEGEND AND BORDER BACKGROUND BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

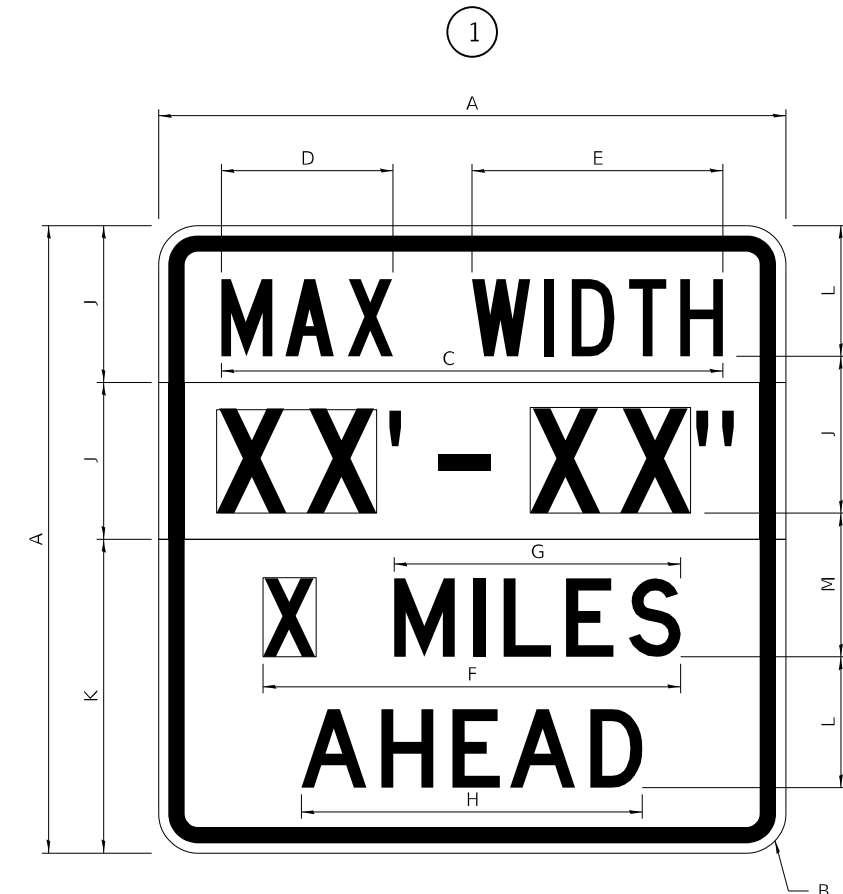
SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

① Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

ILLINOIS STANDARD W12-I103



COLOR LEGEND AND BORDER BACKGROUND BLACK WHITE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

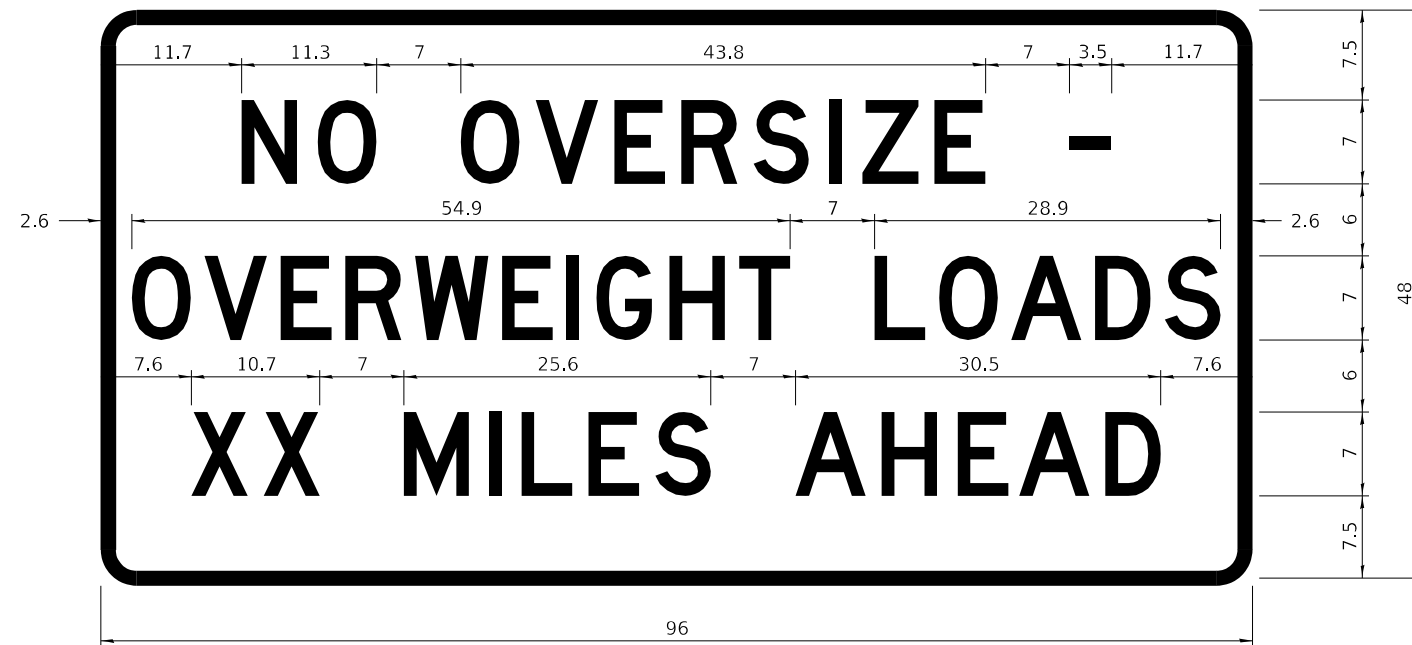
XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE. 642	SECTION (11BR-4)BDR	COUNTY CARROLL	TOTAL SHEETS 24	SHEET NO. 18
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	PLOT DATE = 5/12/2022	DATE -	REVISED -									

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS

STOP LINE SIGN FOR TEMPORARY SIGNALS



COLOR	LEGEND AND BORDER BACKGROUND	BLACK ORANGE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	--------------	---------------------------------

COLOR	LEGEND AND BORDER BACKGROUND	BLACK WHITE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	-------------	---------------------------------

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;
 [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;
 Table of letter and object lefts.

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

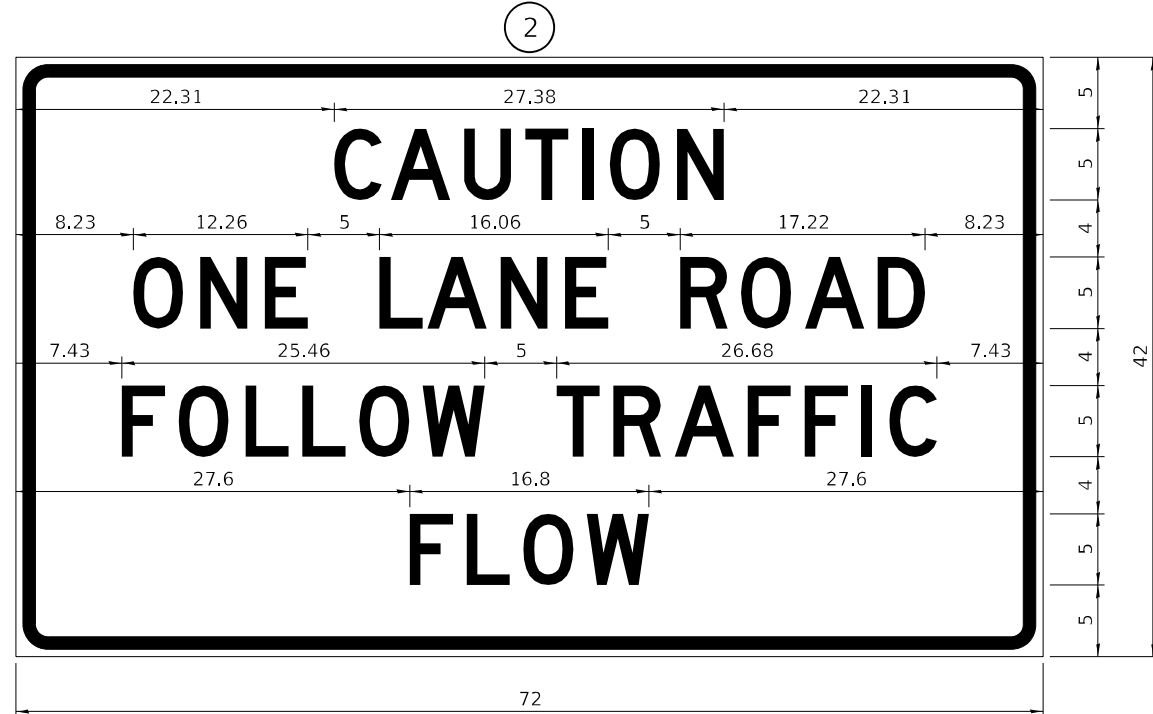
Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -		642	(11BR-4)BDR	CARROLL	24	19			
	PLOT DATE = 5/12/2022	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET 3 OF 4 SHEETS	STA.	TO STA.	CONTRACT NO. 64R48			
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

**ENTRANCE SIGN FOR USE
WITH TEMPORARY SIGNALS**

WORK ZONE SIGN DETAILS



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

② This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

22.31	C	3.36	0.62	A	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
-------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	-------

8.23	O	3.51	1.17	N	3.36	1.18	E	3.04
------	---	------	------	---	------	------	---	------

5.00	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05
------	---	------	------	---	------	------	---	------	------	---	------

5.00	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23
------	---	------	------	---	------	------	---	------	------	---	------	------

7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------

5.00	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------

27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60
-------	---	------	------	---	------	------	---	------	------	---	------	-------

Sign not to scale

GENERAL NOTES

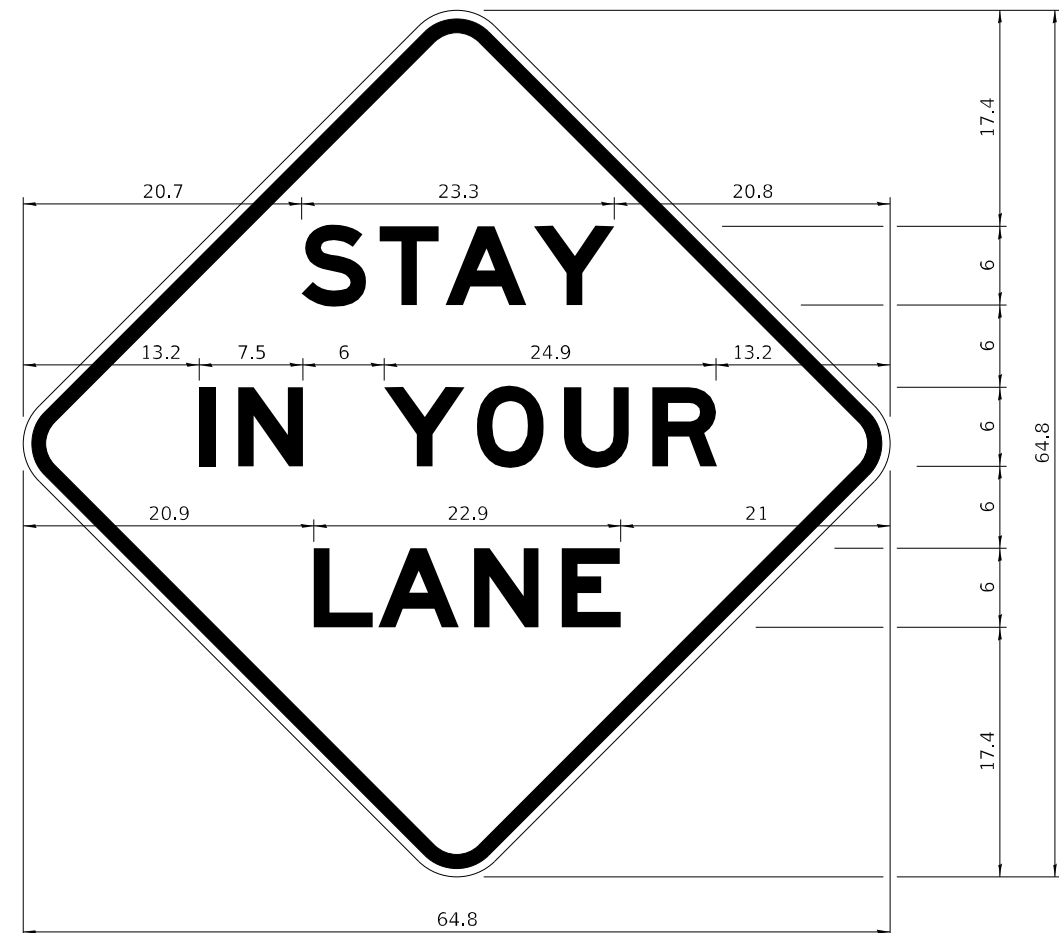
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

STAY IN YOUR LANE



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

Table of Letter and Object Lefts

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

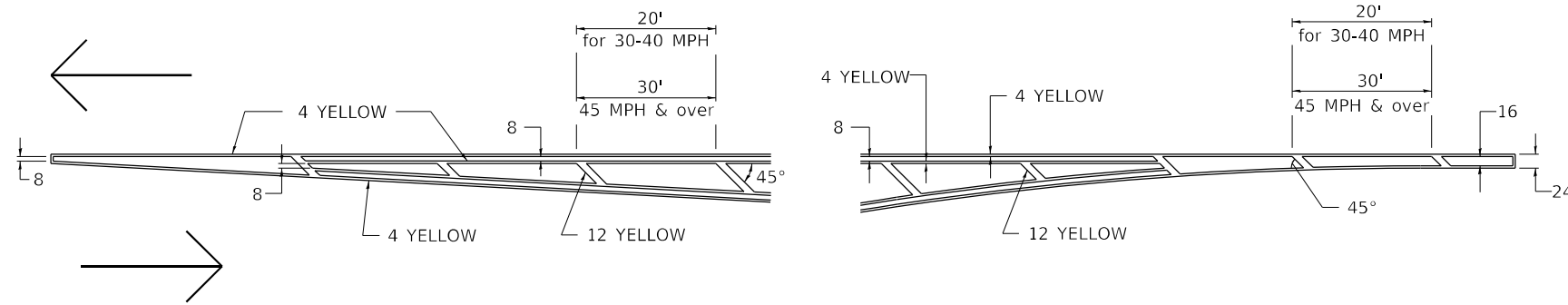
L	A	N	E
20.9	25.8	33.1	39.4

Sign not to scale

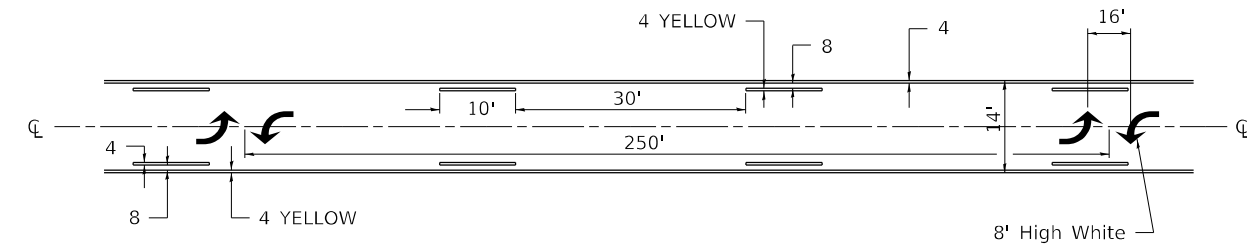
FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE. 642	SECTION (11BR-4)BDR	COUNTY CARROLL	TOTAL SHEETS 24	SHEET NO. 20
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET 4 OF 4 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 64R48			
	PLOT DATE = 5/12/2022	DATE -	REVISED -		WORK ZONE SIGN DETAILS SHEET 4 OF 4 34.1						

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

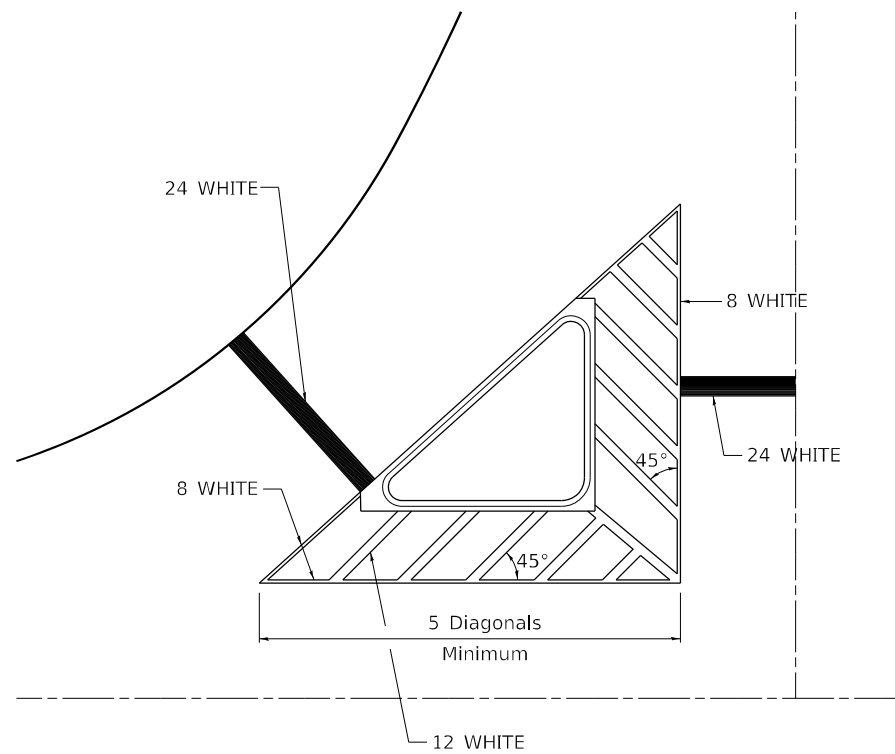


MEDIAN PAVEMENT MARKING



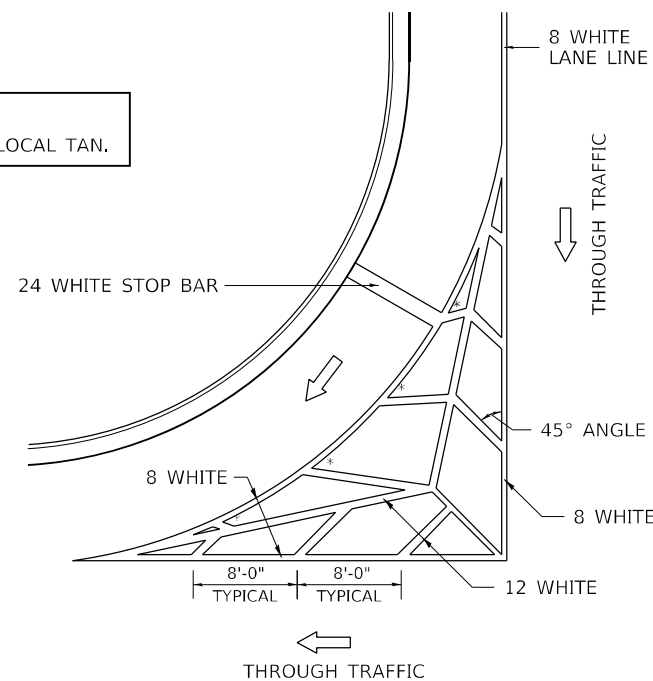
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



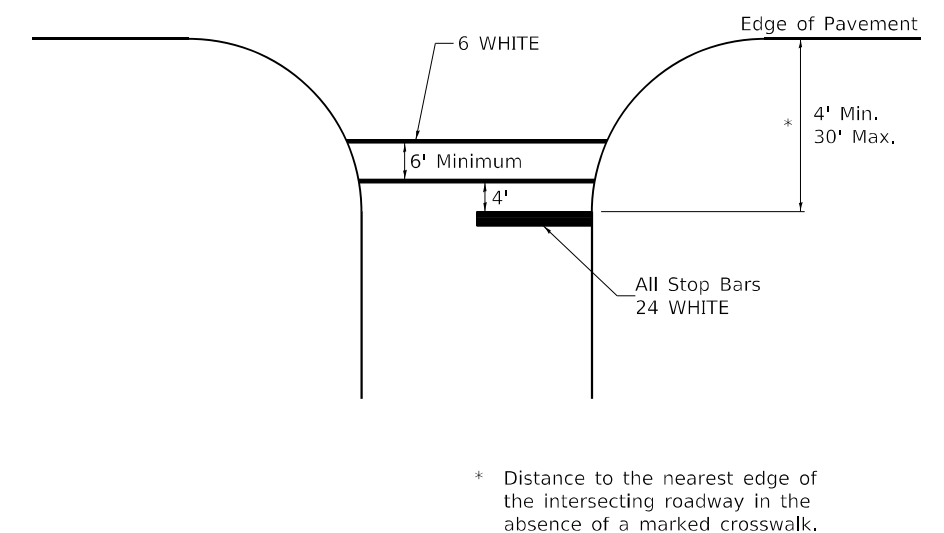
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

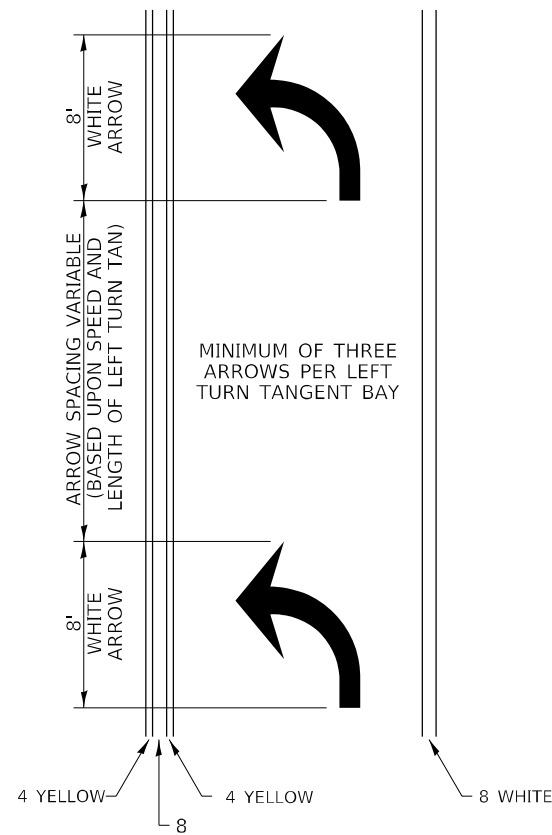
See Schedules for Locations



FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE. 642	SECTION (11BR-4)BDR	COUNTY CARROLL	TOTAL SHEETS 24	SHEET NO. 21
	PLOT SCALE = 100,000' / in.	CHECKED -	REVISED - 3-05-12		SCALE: N.T.S.	SHEET 1 OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 64R48				
PLOT DATE = 5/12/2022	DATE -	REVISED -					ILLINOIS FED. AID PROJECT					

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT

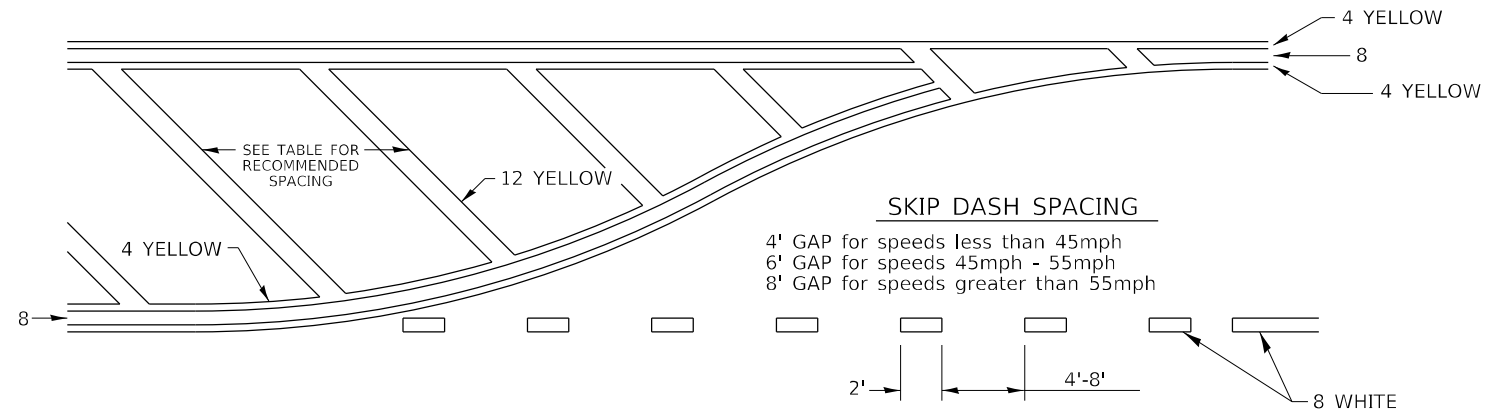


- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

6 at 40' O.C. APPROACH SIDE ONLY

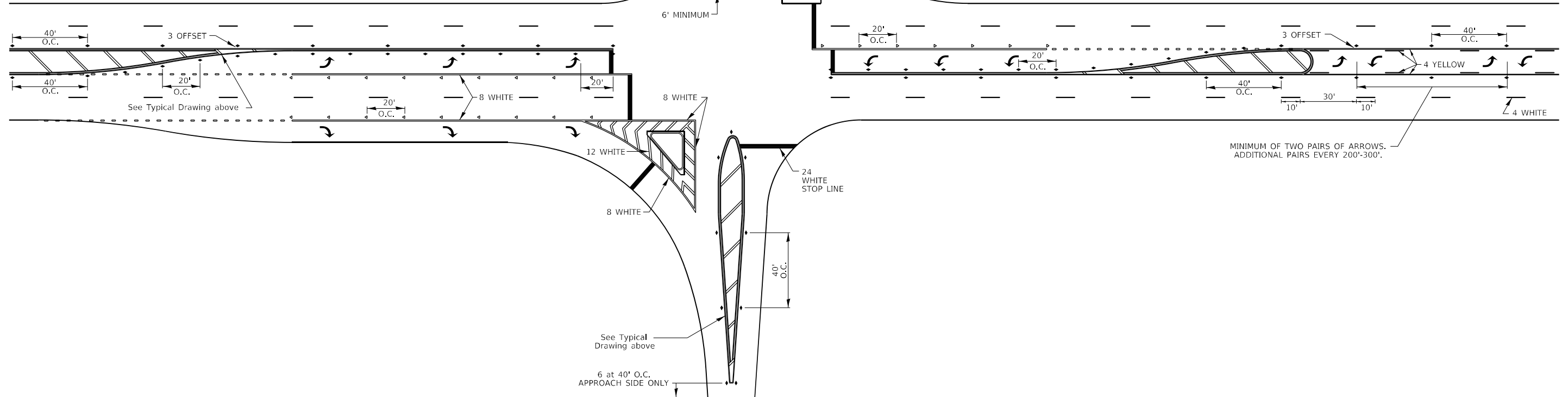
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

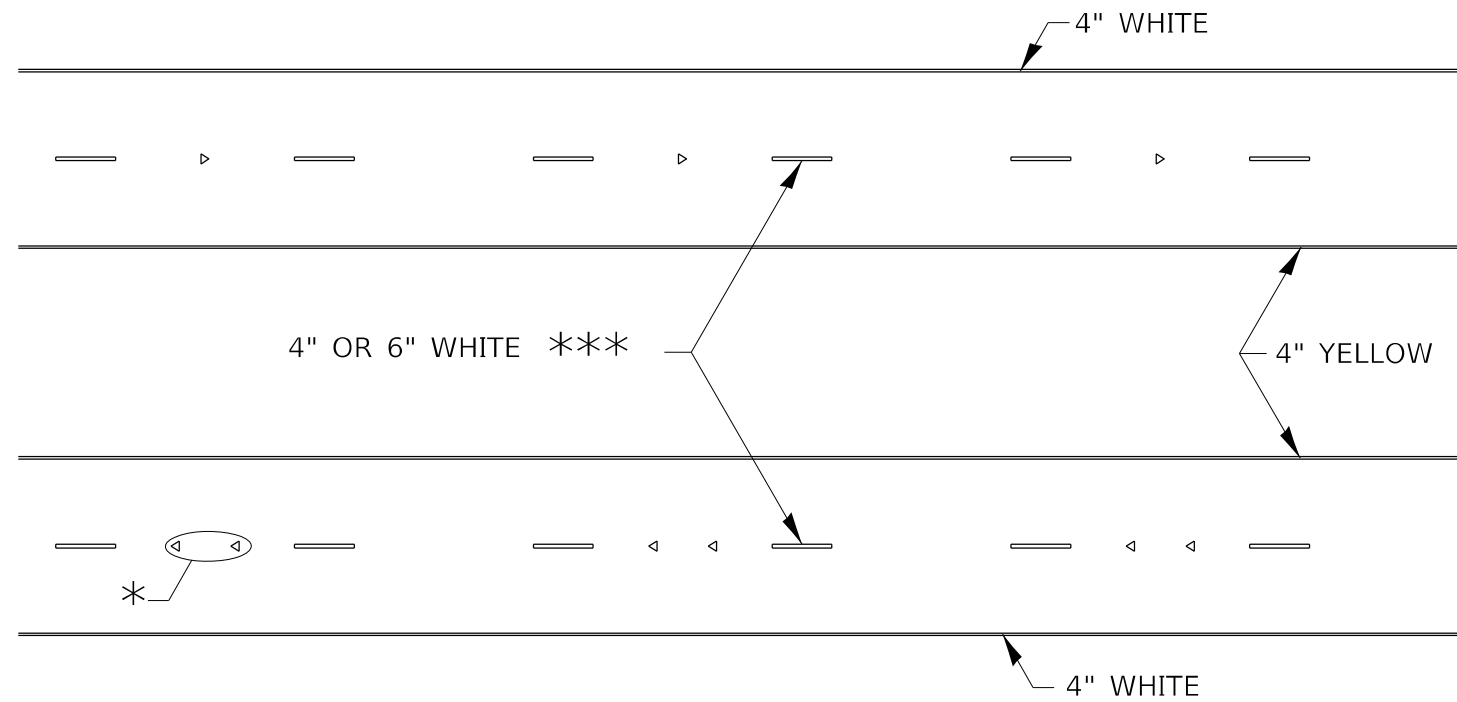
Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



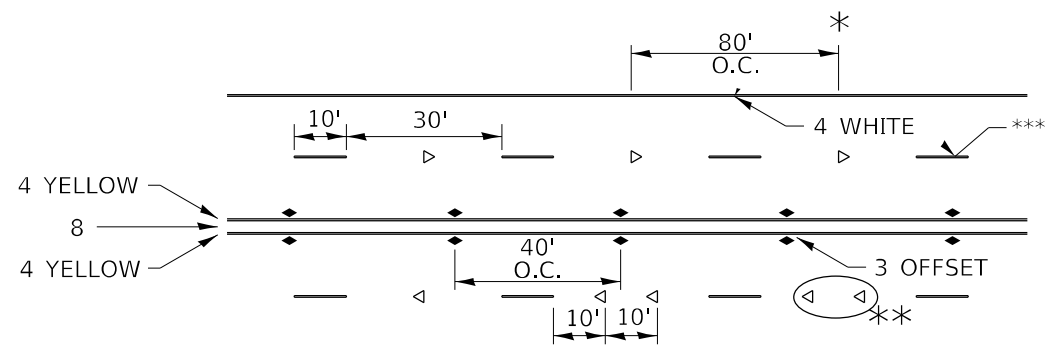
FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED - 3-05-12					642	(11BR-4)BDR	CARROLL	24	22
	PLOT DATE = 5/12/2022	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET 2 OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 64R48				
								ILLINOIS FED. AID PROJECT				

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI-LANE / DIVIDED



* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

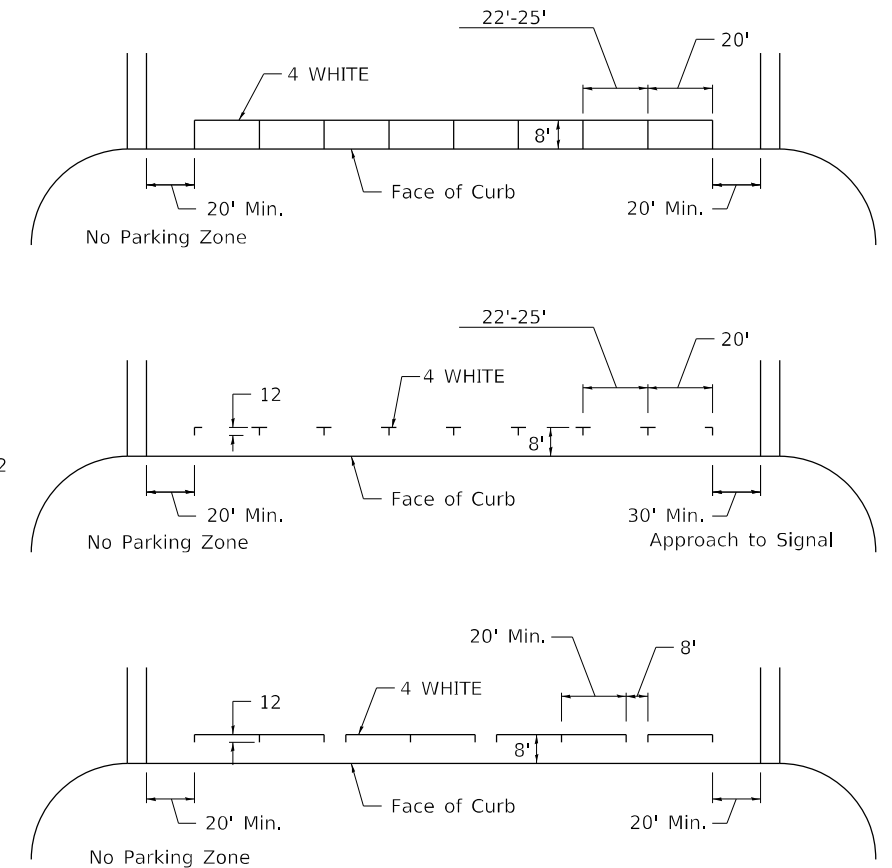
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

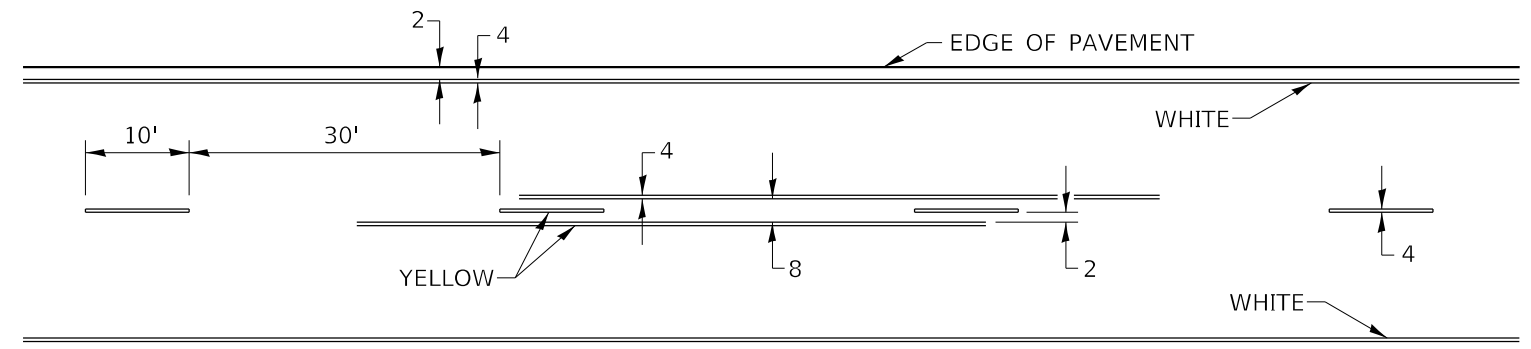
MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PARKING SPACING



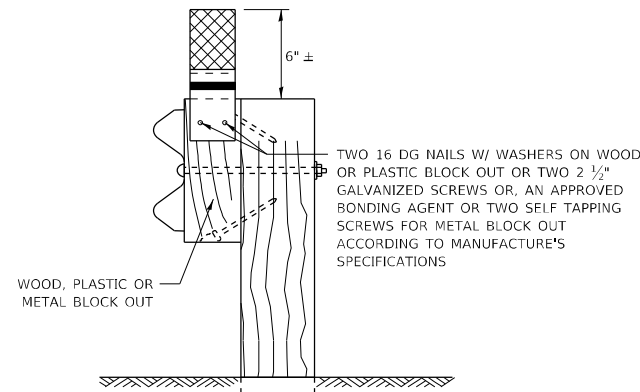
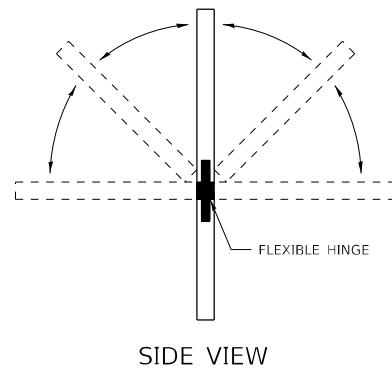
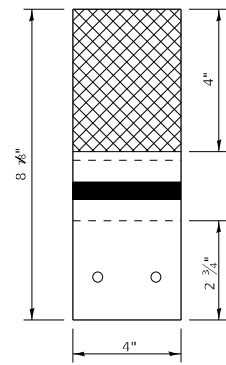
TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



SYMBOLS

FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE. 642	SECTION (11BR-4)BDR	COUNTY CARROLL	TOTAL SHEETS 24	SHEET NO. 23
	PLOT SCALE = 100,000' / in.	CHECKED -	REVISED - 8-27-13					CONTRACT NO. 64R48				
	PLOT DATE = 5/12/2022	DATE -	REVISED - 11-28-12		SCALE: N.T.S.	SHEET 3	OF 3 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			

GUARDRAIL REFLECTORS, TYPE C (SPECIAL)

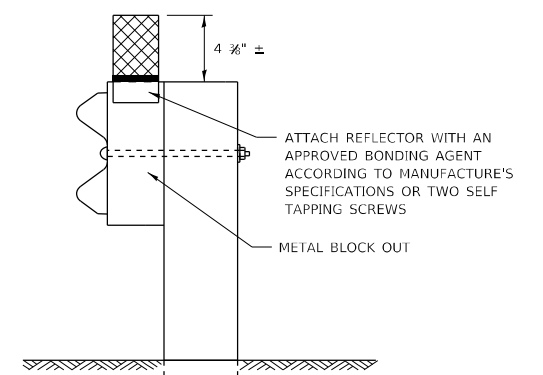
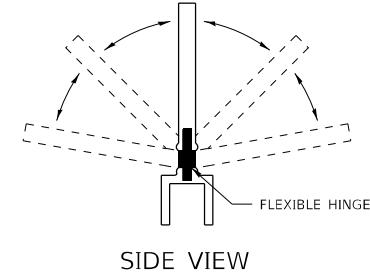
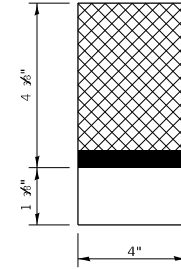


MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO WOOD OR PLASTIC BLOCK OUTS.

REFLECTORS MOUNTED ON WOODEN OR PLASTIC BLOCK OUT SHALL BE MOUNTED USING TWO 16 DG NAILS AND TWO 3/16" WASHERS OR TWO 2 1/2" GALVANIZED SCREWS WITH WASHERS.

REFLECTORS MOUNTED ON WOOD OR PLASTIC GUARDRAIL BLOCK OUT



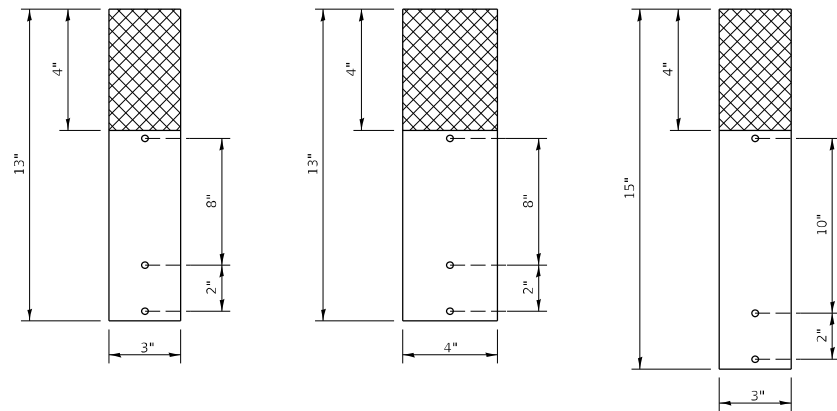
MOUNTED ON A METAL GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO METAL BLOCK OUT.

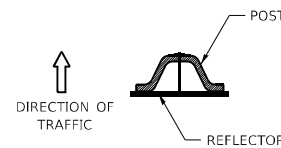
REFLECTORS MOUNTED ON METAL BLOCK OUT SHALL BE MOUNTED USING AN APPROVED BONDING AGENT PER THE MANUFACTURE'S SPECIFICATIONS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.

REFLECTORS MOUNTED ON METAL GUARDRAIL BLOCK OUT

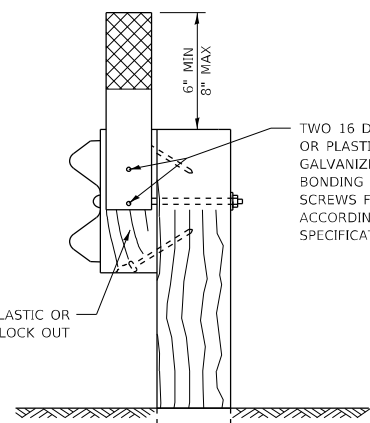
STRAIGHT GUARDRAIL / DELINEATOR REFLECTOR



SIDE VIEW



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHED AS SHOWN ABOVE.



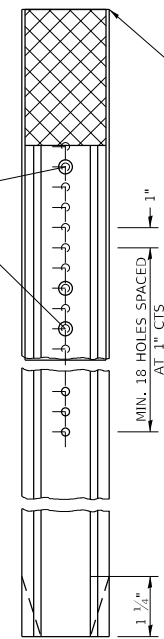
MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

REFLECTORS MAY BE MOUNTED TO DELINEATOR POST USING TWO 10/24 X 1 1/2" BOLTS WITH NUTS AND WASHERS.

ADDITIONAL HOLES SHALL BE DRILLED IN THE REFLECTORS AS SHOWN ABOVE.

10/24 X 1 1/2" BOLTS WITH WASHERS AND NUT (ADDITIONAL HOLES MAY BE DRILLED AS NEEDED)

ADDITIONAL SHEETING MAY BE ADDED AS NEEDED FOR TURN AROUNDS AS SHOWN IN THE PLANS



TOP OF REFLECTOR PLACED FLUSH WITH TOP OF POST UNLESS DOUBLE SIDED REFLECTOR IS CALLED FOR, THEN REFLECTOR SHALL BE PLACED SUCH THAT THE REFLECTOR IS ABOVE THE TOP OF THE POST AND VISIBLE.

MOUNTED ON A DELINEATOR POST

NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS/NAILS, WASHERS OR BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS SHALL BE SINGLE SIDED CRYSTAL.

SHEETING COLOR SHALL BE CALLED OUT IN THE PLANS.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

REFLECTORS MOUNTED ON GUARDRAIL SHALL BE 4" WIDE.

REFLECTORS MOUNTED ON DELINEATOR POST SHALL BE 3" WIDE.

FILE NAME: Z64R48-SHT-D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-21-21
		DRAWN -	REVISED -
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 5/12/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REGION 2 / DISTRICT 2 STANDARD

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	(11BR-4)BDR	CARROLL	24	24
CONTRACT NO. 64R48				
ILLINOIS FED. AID PROJECT				