

Illinois Tollway Base Sheet Revisions			
Section M	Base Sheet Drawings		
	Drawing	Modification Summary	Effective: 03-31-2016
	All	The electronic (pdf) version of the Standard Drawing are now made searchable (text).	
Erosion Sediment Control (ESC)-Series 200			
M-ESC-205	Sediment Basin Dewatering Device		
	Revised Note 7, removed proprietary name from skimmer device.		
Roadway (RDY)-Series 400			
M-RDY-408	Approach Slab, Mainline		
All	Changed Transverse Reinforcement size and spacing in the bottom mat of the bridge approach slab and transition approach shoulder slabs from #6@9" to #8@4" to be in conformance with IDOT ABD Memo 15.8.		
All	Changed Transverse Reinforcement size and spacing in the top mat of the bridge approach slab and transition approach shoulder slabs from #5@12" to #5@6" to be in conformance with IDOT ABD Memo 15.8.		
All	Changed Longitudinal Reinforcement size and spacing in the top mat of the bridge approach slab and transition approach shoulder slabs from #4@15" to #5@6" to be in conformance with IDOT ABD Memo 15.8.		
All	Added note *** to clarify that base sheet reinforcement is for approach slabs not located on retaining walls. If approach slab is placed on retaining wall, reinforcement shall be designed for TL-5 crash loading.		
All	Changed spacing and shape of both dx vertical bars in the barrier on the bridge approach slab and transition approach shoulder slab to match the vertical bars in the bridge parapet and moment slab barrier.		
All	Changed top mat reinforcement cover to 2.25" to be consistent with deck and moment slab clearances.		
Sheets 1,2	Updated Note to Designer for Drainage Structures. Designer to determine size, type and location.		
Sheets 1,2	Changed approach slab shoulder width requirements to match Structures Design Manual.		
Sheet 3	Added option of using subgrade aggregate, special under the transition approach slab.		
Sheet 3	Added additional Approach Slab Barrier Elevation to distinguish between non-integral and integral/semi-integral abutments.		
Sheet 3	Eliminated Optional Longitudinal Joint Within a Traffic Lane detail.		
Sheet 4	Changed Neoprene Sheet to Elastomeric Sheet to keep call out generic and not specific.		
Sheet 5	Revised Bill of Material to clarify Pay Items and Pay Item Numbers to be included.		
Sheet 5	Added note to Typical Barrier Transition Detail to clarify where the 1'-9" dimension should be measured.		
M-RDY-409	Approach Slab, Ramp		
All	Changed Transverse Reinforcement size and spacing in the bottom mat of the bridge approach slab and transition approach shoulder slabs from #6@9" to #8@4" to be in conformance with IDOT ABD Memo 15.8.		
All	Changed Transverse Reinforcement size and spacing in the top mat of the bridge approach slab and transition approach shoulder slabs from #5@12" to #5@6" to be in conformance with IDOT ABD Memo 15.8.		
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M-RDY-410	Reserved		
M-RDY-411	Emergency Turnaround Median Width ≥ 35 Ft		
Bridge (BRG)-Series 500			
M-BRG-506	Expansion Joint Repair		
	Base Sheet was removed since details did not match Special Provision.		
M-BRG-507	Crash Wall Modifications Median Piers		
	Note 4 - Changed Reinforcing bars to Reinforcement Bars.		
M-BRG-508	Crash Wall Modifications Shoulder Piers		
	Note 4 - Changed Reinforcing bars to Reinforcement Bars.		
M-BRG-525	Slopedwall Details		
Drainage (DRN)-Series 600			
M-DRN-601	Slope Drain		
	Revised storm sewer to "Class B, 12".		
M-DRN-602	Bioswale		

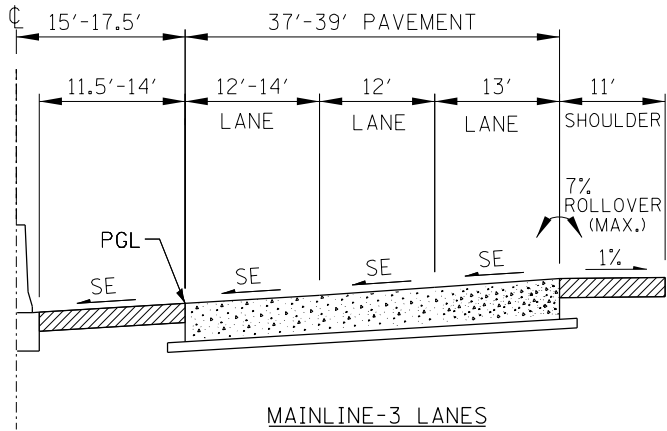
Tollway Base Sheet Revisions		
Section M	Base Sheet Drawings	
	Drawing	Modification Summary Effective: 03-31-2016
	Maintenance of Traffic (MOT)-Series 700	
	M-MOT-700	Temporary Concrete Barrier "Y" Connector Segment
		Revised Barrier Details Notes.
		Changed barrier edges chamfered from 1/2" to 1" on all edges (optional).
	Overhead Sign (OHS)-Series 720	
	M-OHS-720	Overhead Sign Structure Span Type Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-721	Overhead Sign Structure Cantilever Type Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-722	Overhead Sign Structure Entrance Monotube Type (Steel) Mainline Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table and Total Bill of Material.
	M-OHS-723	Overhead Sign Structure Exit Monotube Type (Steel) Mainline Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table and Total Bill of Material.
	M-OHS-724	Overhead Sign Structure Butterfly Type (Steel) Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Removed Truss Extension for Mounting Walkway detail and references
		Added "L" column and removed TGL and TGL1 from the Summary Table
	M-OHS-725	Overhead Sign Structure Entrance Monotube Type (Steel) AET Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-726	Overhead Sign Structure Exit Monotube Type (Steel) AET Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-727	Overhead Sign Structure Exit Monotube Type (Steel) Cash-IPO Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-728	Overhead Sign Structure Span Type (Steel) Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-729	Overhead Sign Structure ITS Gantry Frame (Steel) Single Span Structure Details
	Sheet 1	Revised Material Specification Table to specify ASTM A500 Gr C & B for Frame & Mounting Beam HSS, respectively.
	Sheet 4	Removed Note 6, referring to ASTM requirements of HSS members.
	Sheet 5	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 5	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 5	Updated anchor bolt note to allow ASTM F1554 bolts.
	Sheet 6	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 6	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 7	Added note 5 to clarify limits of protective coat and revised protective coat quantity in Median Foundation Schedule.
	M-OHS-730	Overhead Sign Structure ITS Gantry Frame (Steel) Two-Span Structure Details
	Sheet 1	Revised Material Specification Table to specify ASTM A500 Gr C & B for Frame & Mounting Beam HSS, respectively.
	Sheet 4	Removed Note 6, referring to ASTM requirements of HSS members.
	Sheet 6	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 6	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 6	Updated anchor bolt note to allow ASTM F1554 bolts.
	Sheet 7	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 7	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 8	Added note 5 to clarify limits of protective coat and revised protective coat quantity in Median Foundation Schedule.
	Pole Assembly-Series 1000	
	M-ITS-1000	ELEVATION VIEWS POLE MOUNTED ITS ELEMENT ASSEMBLY
		Added 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL.
	M-ITS-1001	GENERAL NOTES POLE MOUNTED ITS ELEMENT ASSEMBLY
		Added Note 16 regarding disconnect switch usage.
	M-ITS-1002	ITS STANDARD FOUNDATION: New Sheet
	Dynamic Message Sign (ITS) - Series 1100	
	M-ITS-1100	Revised conduit call-outs
	M-ITS-1103	Revised 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL. Removed pad mounted transformer.
	M-ITS-1104	Revised 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL. Revised Note 2 to eliminate 120/208V and pad mount.
	Cabinet Wiring-Series 1200	
	M-ITS-1200	Cabinet Wiring
	All	Added HOT3, NB, and GB to Duplex Receptacle.
	M-ITS-1255	Added HOT5 to Duplex Receptacle.
	M-ITS-1256	Deleted HOT5 from Video Distribution Panel.

Tollway Base Sheet Revisions

Section M	Base Sheet Drawings	
	Drawing	Modification Summary Effective: 03-31-2016
	Weigh-In-Motion - Series 1600	
	M-WIM-1600	WEIGH-IN-MOTION CABINET AND FOUNDATION DETAILS
	M-WIM-1601	WEIGH-IN-MOTION IP CAMERA DETAILS
	M-WIM-1602	WEIGH-IN-MOTION LOOP DETECTOR DETAILS
	M-WIM-1603	WEIGH-IN-MOTION DETECTOR LOOP AND QUARTZ SENSOR DETAIL
	M-WIM-1604	INSTALLATION DETAIL DETECTOR HOUSING & DETECTOR HOUSING ADAPTER
	M-WIM-1605	WEIGH-IN-MOTION DETECTOR HOUSING DETAIL
	Flashing Sign Beacon - Series 1700	
	M-ITS-1700	FLASHING SIGN BEACON INSTALLATION BREAKAWAY ELECTRICAL DETAIL
	M-ITS-1701	FLASHING SIGN BEACON INSTALLATION WIRING DIAGRAM
	Conduit Details at Integral Abutment-Series 1900	
	M-ITS-1900	CONDUIT DETAILS AT INTEGRAL ABUTMENT BRIDGE STANDARD SLOPE WALL
	Business Systems (BUS)- Series 2500	
	M-BUS-2500	CABLE CONDUIT SCHEDULE AND GENERAL NOTES
	M-BUS-2501	LEGEND SYMBOL LIST, ABBREVIATIONS AND EQUIPMENT SCHEDULES
	M-BUS-2502	SINGLE LINE DIAGRAM AND UTILITY POWER CABLE/CONDUIT SCHEDULE
	M-BUS-2503	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - MAIN PLAZA
	M-BUS-2504	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - REMOTE PLAZA
	M-BUS-2505	CONTROL BUILDING GROUNDING DETAILS - MAIN PLAZA
	M-BUS-2506	CONTROL BUILDING GROUNDING DETAILS - REMOTE PLAZA
	M-BUS-2507	GROUNDING SCHEMATIC
	M-BUS-2508	CONTROL BUILDING MISCELLANEOUS DETAILS
	M-BUS-2509	UPS SINGLE LINE AND WIRING DIAGRAM
	M-BUS-2510	MISCELLANEOUS SCHEMATIC DIAGRAMS
	M-BUS-2511	VIDEO POWER JUNCTION BOX DETAIL - MAIN PLAZA
	M-BUS-2512	VIDEO POWER JUNCTION BOX DETAIL - REMOTE PLAZA
	M-BUS-2513	VIDEO WATCHDOG CAMERA DETAILS
	M-BUS-2514	RAMP PLAZA MONOTUBE DETAILS ACM AND IPO LANES
	M-BUS-2515	LOOP JUNCTION BOX DETAIL
	M-BUS-2516	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN - MAIN PLAZA
	M-BUS-2517	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN -REMOTE PLAZA
	M-BUS-2518	MISCELLANEOUS CROSS SECTION DETAILS
	M-BUS-2519	COMED TRANSFORMER PAD DETAIL
	M-BUS-2520	ELECTRICAL SITE PLAN - ACM AND IPO LANES
	M-BUS-2521	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2522	PLAZA I-PASS PLANS - ACM AND IPO LANES
	M-BUS-2523	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2524	AUTOMATIC LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2525	IPASS ONLY (IPO) LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2526	TOLL EQUIPMENT WIRING DIAGRAM - ACM AND IPO LANES
	M-BUS-2527	LOOP AND TREADLE INSTALLATION DETAILS - ACM AND IPO LANES
	M-BUS-2528	CONTROL BUILDING TSIC - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2529	CONTROL BUILDING TSIC - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2530	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES
	M-BUS-2531	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2532	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2533	CONTROL BUILDING R3 RACK - MAIN PLAZA
	M-BUS-2534	CONTROL BUILDING R3 RACK - REMOTE PLAZA
	M-BUS-2535	MISCELLANEOUS DETAILS -ACM AND IPO LANES
	M-BUS-2536	PANELBOARD SCHEDULES FOR TP1 AND TP2 - ACM AND IPO LANES
	M-BUS-2537	PANELBOARD SCHEDULES FOR MDP AND UPS UNITS - ACM AND IPO LANES
	M-BUS-2538	FIBER INTERCONNECTIONS BETWEEN MAIN AND REMOTE PLAZAS - ACM AND IPO LANES
	M-BUS-2539	PLAZA LANE CONTROL SIGNAL - ACM AND IPO LANES
	M-BUS-2540	TRAFFIC LIGHT DETAILS - ACM LANES
	M-BUS-2541	TRAFFIC LIGHT DETAILS - IPO LANES
	M-BUS-2542	ELECTRICAL SITE PLAN AET LANES
	M-BUS-2543	UNDERGROUND CONDUIT PLAN - MAIN PLAZA
	M-BUS-2544	UNDERGROUND CONDUIT PLAN - MAIN PLAZA PLAN - REMOTE PLAZA
	M-BUS-2545	CONTROL BUILDING EQUIPMENT LAYOUT - REMOTE PLAZA
	M-BUS-2546	CONTROL BUILDING EQUIPMENT LAYOUT - MAIN PLAZA
	M-BUS-2547	CONTROL BUILDING TSIC - MAIN AND REMOTE PLAZAS - AET LANES
	M-BUS-2548	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES REMOTE PLAZAS - AET LANES
	M-BUS-2549	PANELBOARD SCHEDULES - MAIN PLAZA AET LANES
	M-BUS-2550	PANELBOARD SCHEDULES - REMOTE PLAZA AET LANES
	M-BUS-2551	WIRING DIAGRAM - AET 1-LANE LAYOUT
	M-BUS-2552	WIRING DIAGRAM - AET 3-LANE LAYOUT
	M-BUS-2553	LOOP PLAN - AET 1-LANE LAYOUT
	M-BUS-2554	LOOP PLAN - AET 3-LANE LAYOUT
	M-BUS-2555	VES WASH SYSTEM ENCLOSURE DETAIL
	M-BUS-2556	VES WASH SYSTEM PANEL DETAIL
	M-BUS-2557	VES WASH SYSTEM FLOW DIAGRAM AND MECHANICAL DETAIL
	M-BUS-2558	VES WASH SYSTEM SUGGESTED CONDUIT ROUTING
	M-BUS-2559	VES WASH SYSTEM MISCELLANEOUS POWER WIRING DIAGRAM
	M-BUS-2560	VES WASH SYSTEM CONTROL SWITCH SCHEMATIC

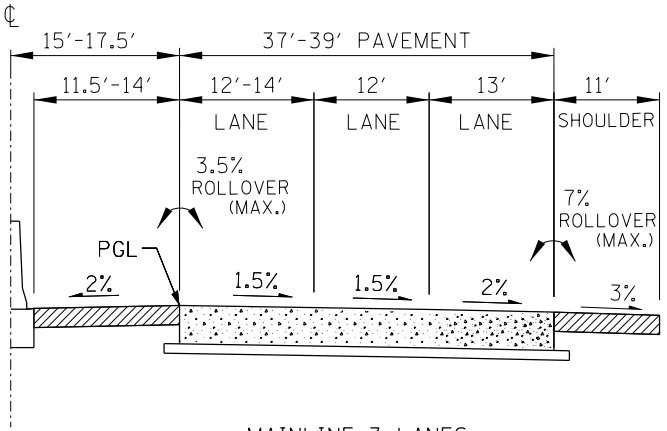
New Sheet

ILLINOIS TOLLWAY



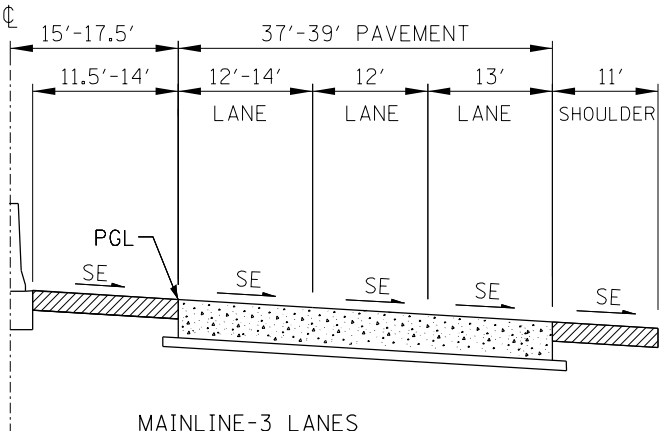
MAINLINE-3 LANES  
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



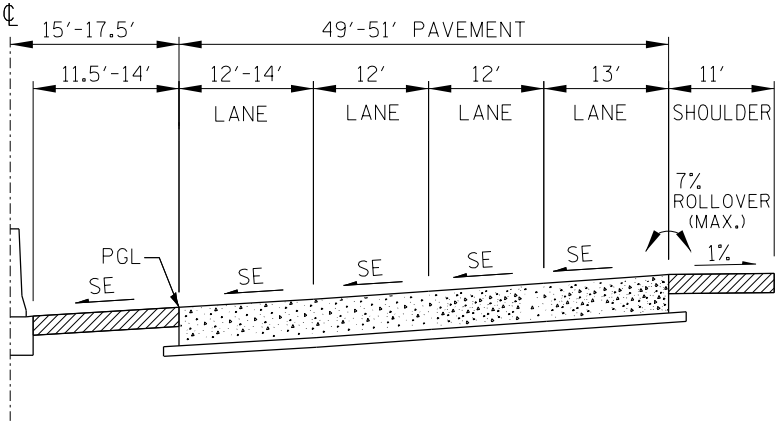
MAINLINE-3 LANES  
NORMAL CROWN

ILLINOIS TOLLWAY



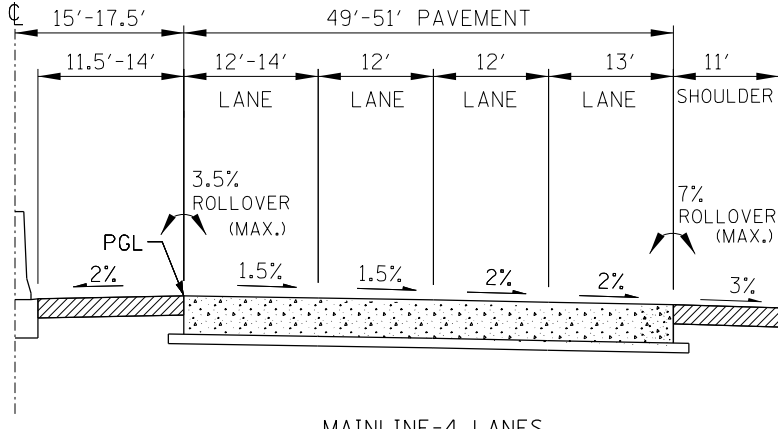
MAINLINE-3 LANES  
SUPERELEVATION, RIGHT

ILLINOIS TOLLWAY



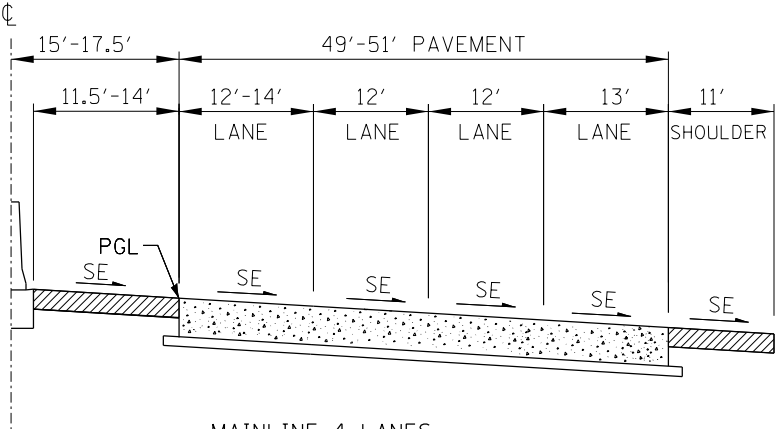
MAINLINE-4 LANES  
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



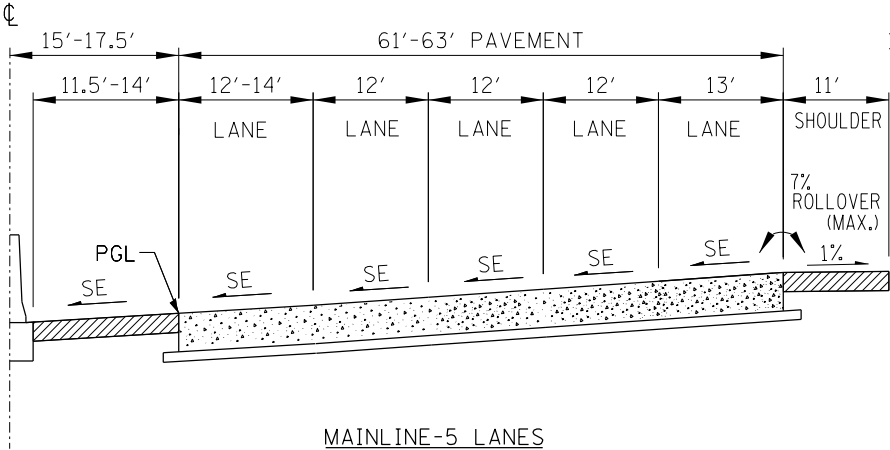
MAINLINE-4 LANES  
NORMAL CROWN

ILLINOIS TOLLWAY



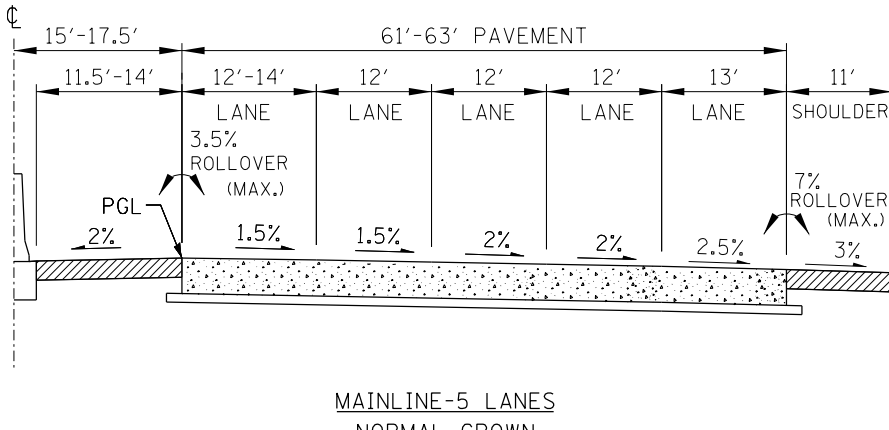
MAINLINE-4 LANES  
SUPERELEVATION, RIGHT

ILLINOIS TOLLWAY



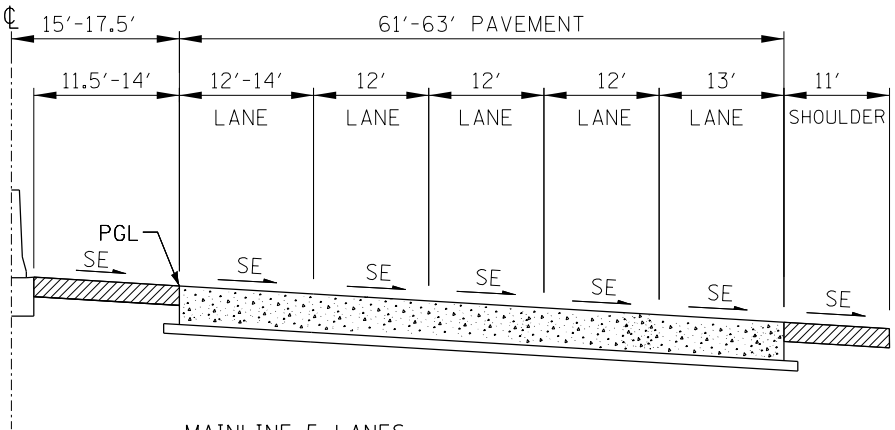
MAINLINE-5 LANES  
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



MAINLINE-5 LANES  
NORMAL CROWN

ILLINOIS TOLLWAY



MAINLINE-5 LANES  
SUPERELEVATION, RIGHT

NOTES

REFERENCE ILLINOIS TOLLWAY STANDARD DRAWING B24,  
PIPE UNDERDRAIN, FOR PLACEMENT LOCATION.

NOTE TO DESIGNER

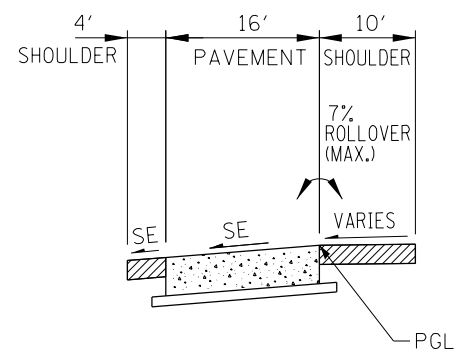
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M-RDY-400

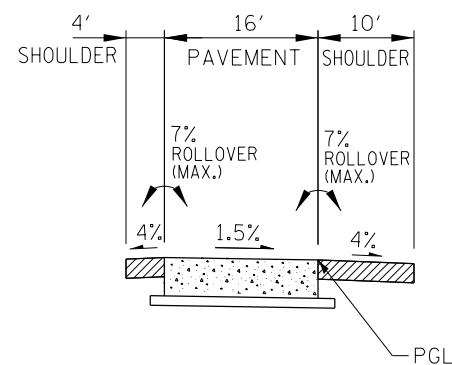


ROADWAY TYPICAL SECTIONS  
GROUP A

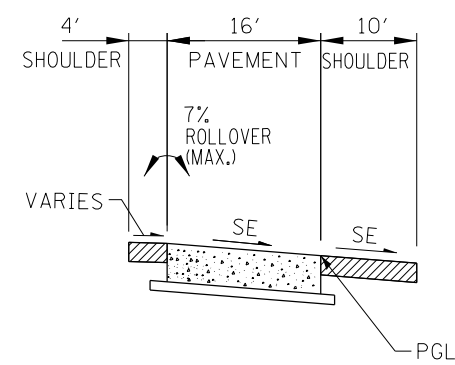
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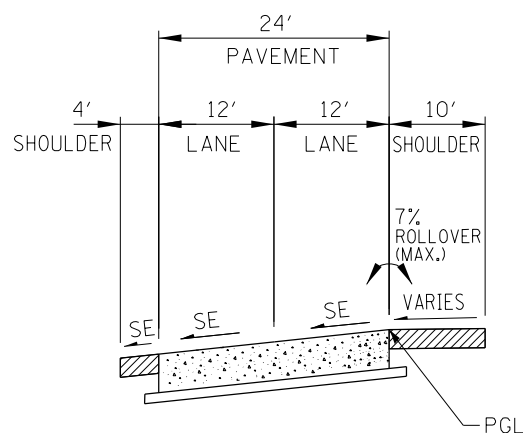
RAMP-1 LANE  
SUPERELEVATION LEFT



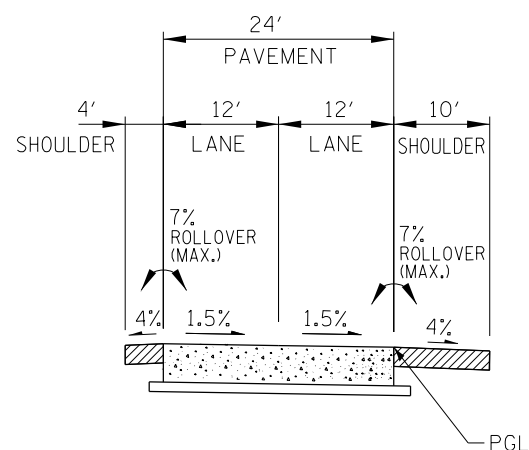
RAMP-1 LANE  
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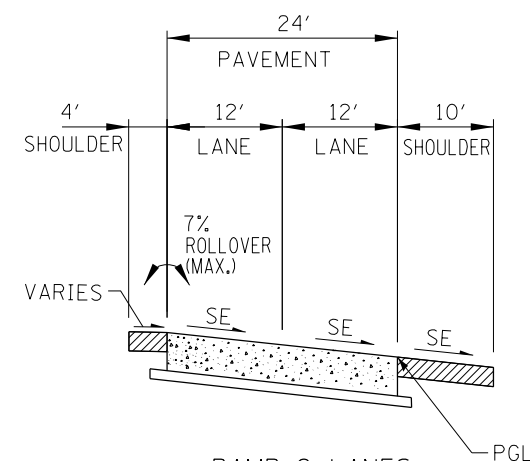
RAMP-1 LANE  
SUPERELEVATION RIGHT



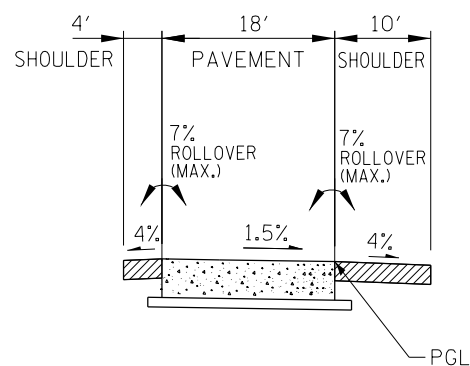
RAMP-2 LANES  
SUPERELEVATION LEFT



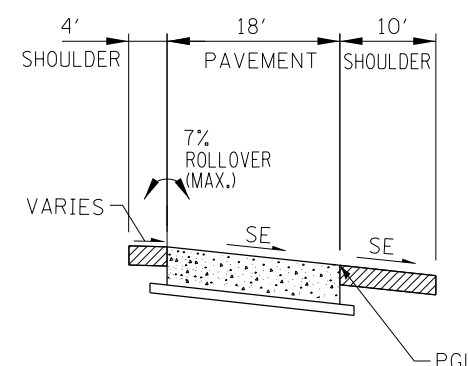
RAMP-2 LANES  
NORMAL CROWN



RAMP-2 LANES  
SUPERELEVATION RIGHT



LOOP RAMP  
NORMAL CROWN



LOOP RAMP  
SUPERELEVATION RIGHT

#### NOTES

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PIPE UNDERDRAIN, FOR PLACEMENT LOCATION.

#### NOTE TO DESIGNER

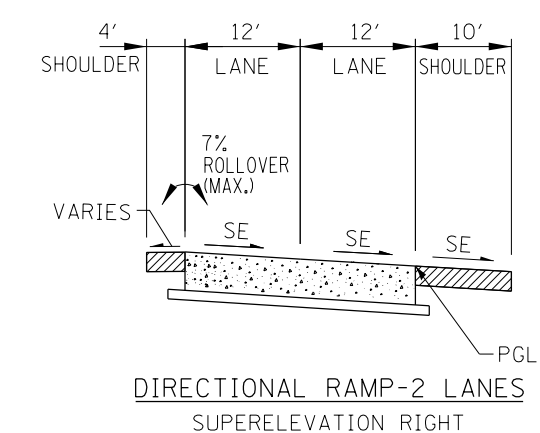
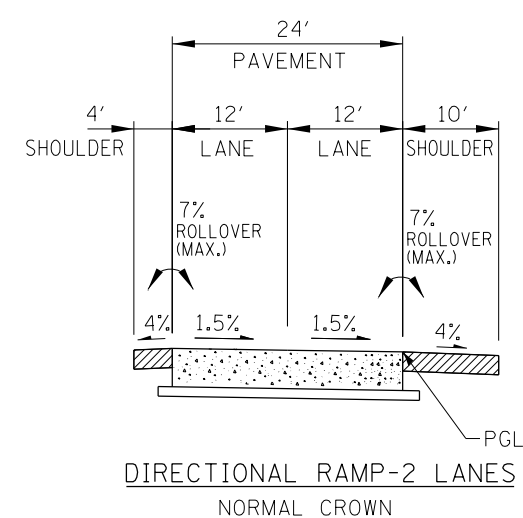
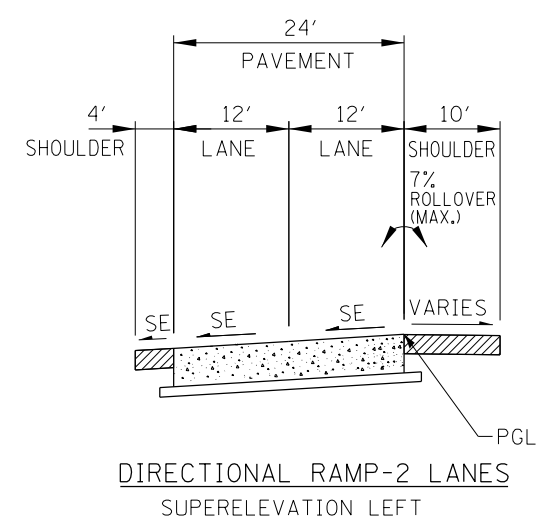
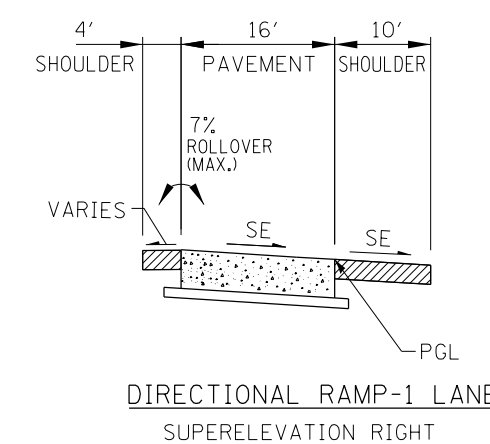
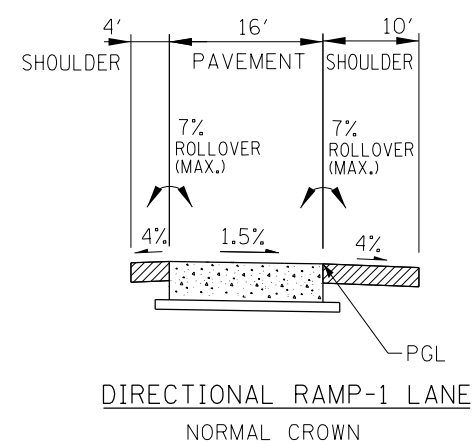
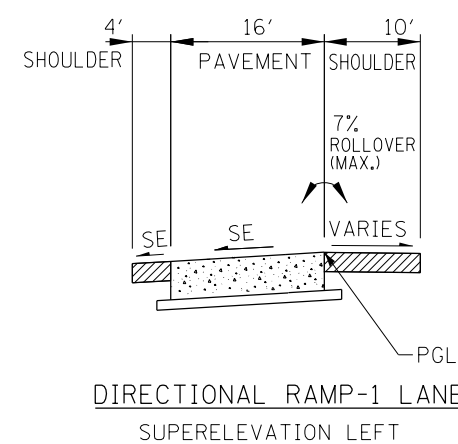
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M-RDY-401



ROADWAY TYPICAL SECTIONS  
GROUP B

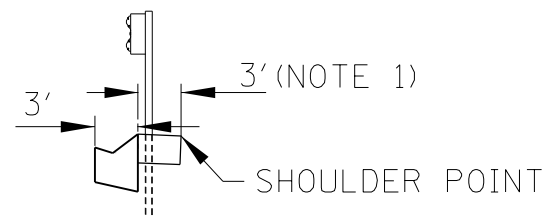
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**NOTES**  
REFERENCE ILLINOIS TOLLWAY STANDARD DRAWING B24,  
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**NOTE TO DESIGNER**  
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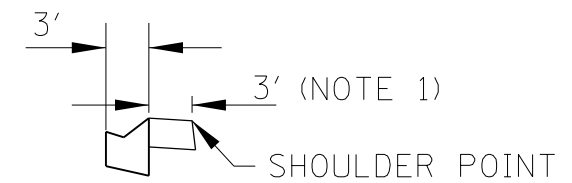




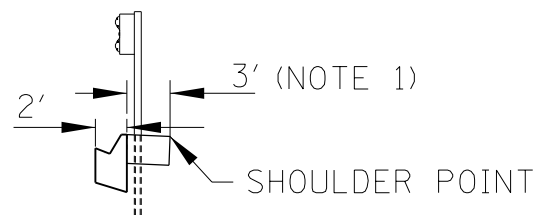
GUTTER, TYPE G-3  
WITH GUARDRAIL



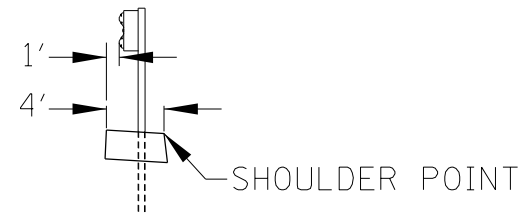
AGGREGATE  
SHOULDER  
(NOTE 2)



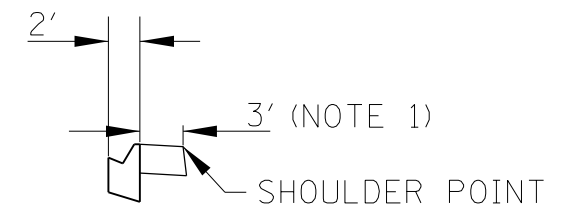
GUTTER, TYPE G-3



GUTTER, TYPE G-2  
WITH GUARDRAIL



AGGREGATE SHOULDER  
WITH GUARDRAIL  
(NOTE 2)



GUTTER, TYPE G-2

NOTES:

1. SLOPE TOWARD GUTTER AT 6% WHEN IN CUT SECTION AND SLOPE AWAY FROM GUTTER AT 6% WHEN IN FILL SECTION.
2. AGGREGATE SHOULDER SLOPE SHALL NOT BE FLATTER THAN ADJACENT PAVED SHOULDER.

NOTE TO DESIGNER

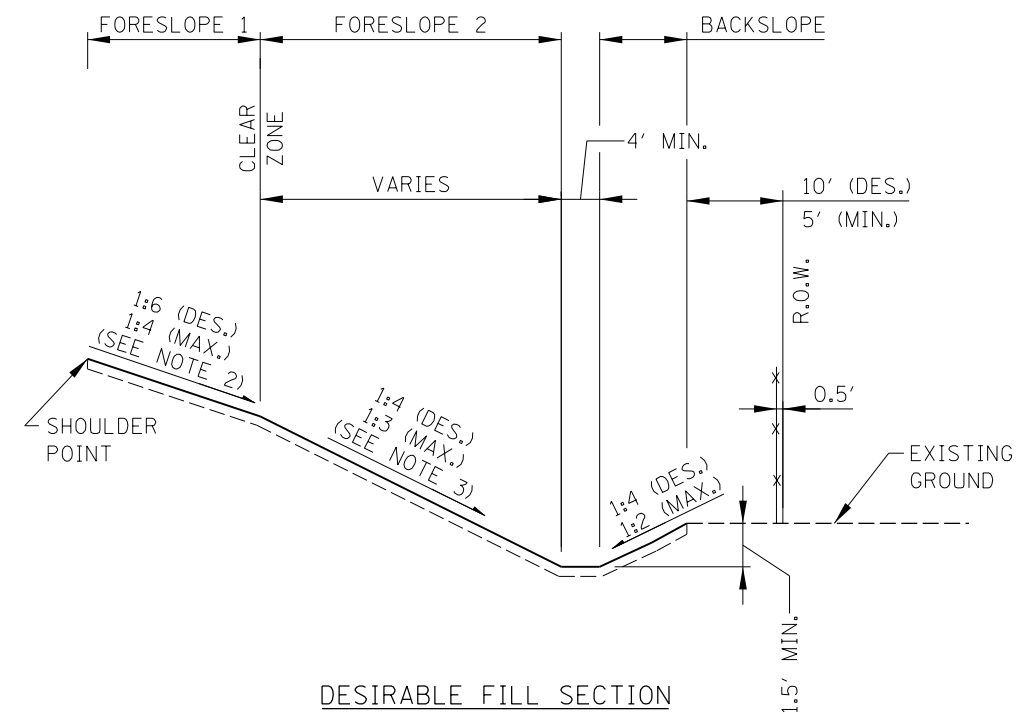
THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

M-RDY-403



ROADWAY TYPICAL SECTIONS  
GROUP D

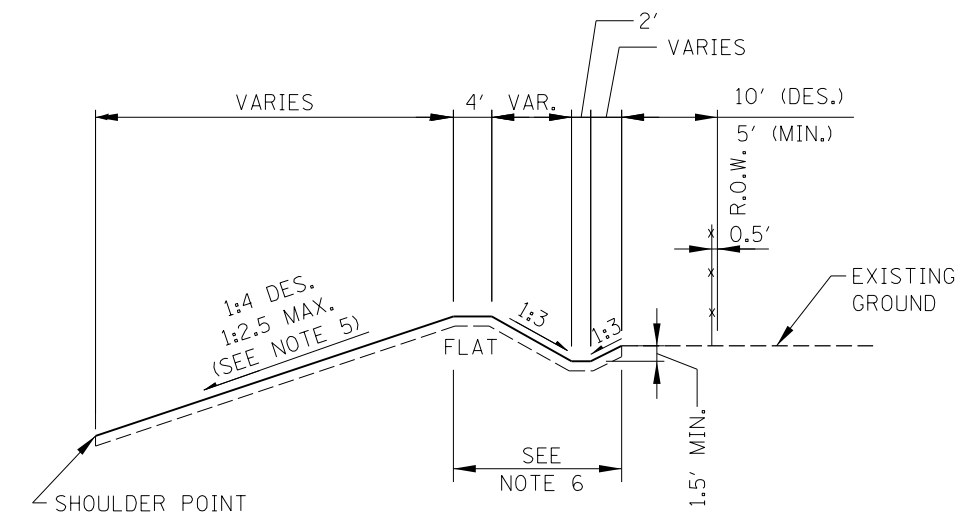
DATE  
11-1-2012



FILL SECTION SIDESLOPES HIERARCHY (IN ORDER OF PREFERENCE)			
FORESLOPE 1	FORESLOPE 2	DITCH	BACKSLOPE
1:6	-	4	1:4
1:6	1:4	4	1:4
1:6	1:4	4	1:3
1:6	1:3	4	1:3
1:4	-	4	1:3
1:4	-	4	1:2
1:4	1:3	4	1:3
1:6	1:3	4	1:2
1:4	1:3	4	1:2
1:6	1:2.5 **	4	1:2
1:2.5 *	-	4	1:3
1:2.5 *	-	4	1:2
1:2.5 *	-	2	1:2

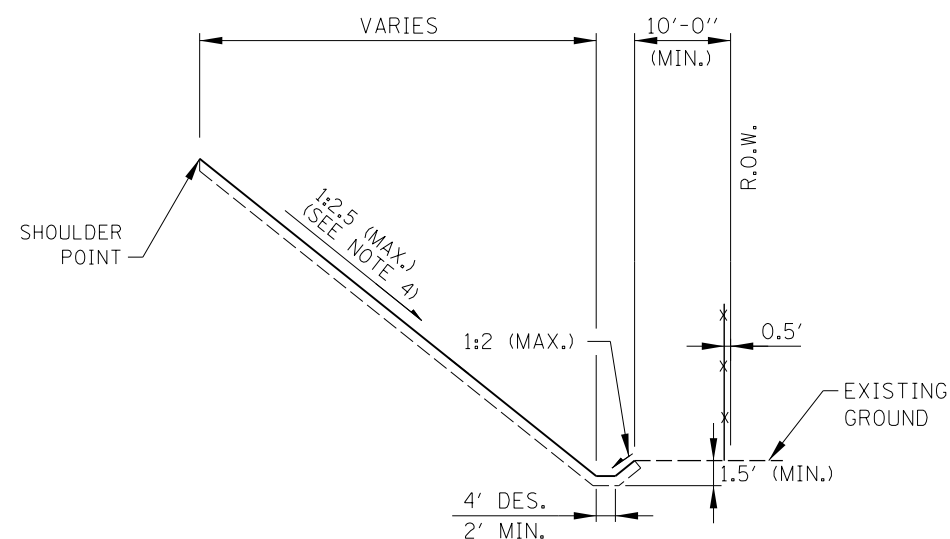
\* DESIGN DEVIATION IF FILL HEIGHT IS LESS THAN 9'

\*\* DESIGN DEVIATION IN ALL CASES



#### NOTES:

- ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENTS TO UNITS OF HORIZONTAL DISPLACEMENTS (V:H).
- SLOPE SHALL BE 1:6 OR FLATTER BEHIND GUTTER WITHOUT GUARDRAIL; IN ALL OTHER CASES THE MAXIMUM SLOPE SHALL BE 1:4. IF 1:4 SLOPE IS USED, INCREASE WIDTH BASED ON CLEAR ZONE REQUIREMENTS.
- FORESLOPE 2 STEEPER THAN 1:3 USED FOR THE LOWER SLOPE ON A BARN-ROOF SECTION REQUIRES A DESIGN DEVIATION.
- FORESLOPES STEEPER THAN 1:4 USED WHEN BARN-ROOF SECTION IS NOT USED AND WHEN FILL HEIGHT IS LESS THAN 9' REQUIRE A DESIGN DEVIATION.
- BACKSLOPES STEEPER THAN 1:2.5 FROM THE SHOULDER POINT IN A CUT SECTION REQUIRE A DESIGN DEVIATION.
- CAN BE OMITTED WHEN EXISTING GROUND SLOPES AWAY FROM R.O.W. LINE



FILL ≥ 9'  
(CLEAR ZONE UNDEFINED)

#### NOTE TO DESIGNER

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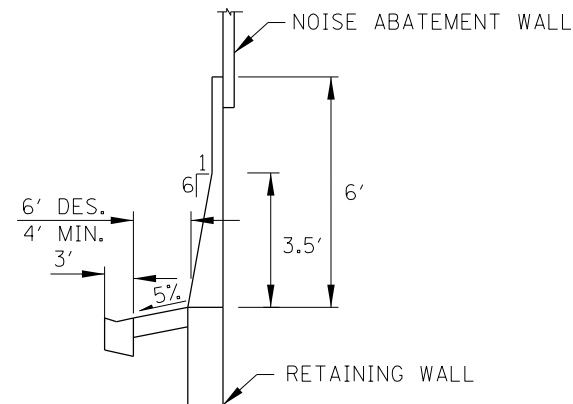
M-RDY-404



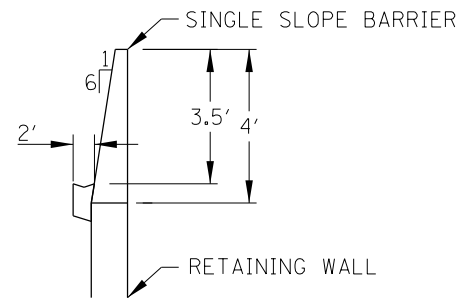
ROADWAY TYPICAL SECTIONS  
GROUP E

DATE  
3-11-2015

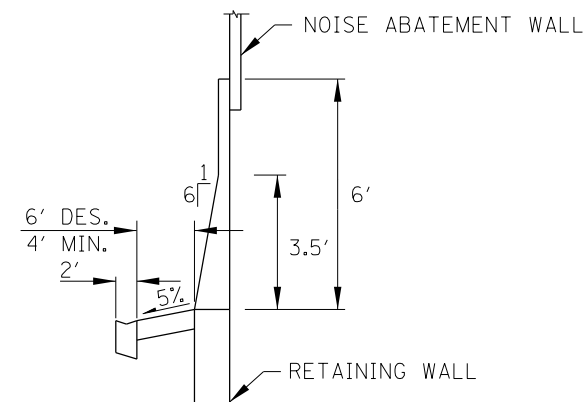




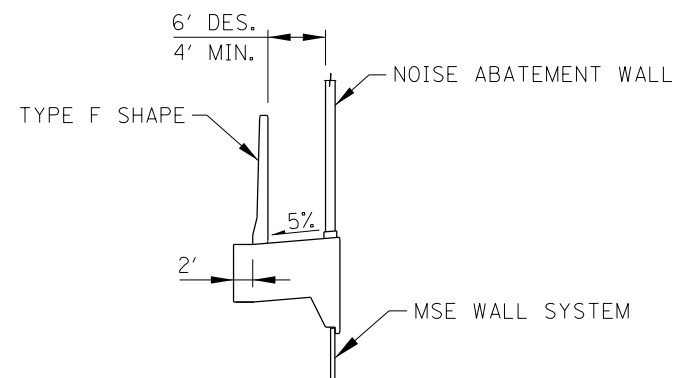
TYPE G-3 MODIFIED GUTTER  
W/RETAINING WALL, SINGLE SLOPE BARRIER,  
AND ATTACHED NOISE ABATEMENT WALL



MODIFIED GUTTER  
W/RETAINING WALL AND SINGLE SLOPE BARRIER



TYPE G-2 MODIFIED GUTTER  
W/RETAINING WALL, SINGLE SLOPE BARRIER,  
AND ATTACHED NOISE ABATEMENT WALL



2' GUTTER WITH F-SHAPE SINGLE  
FACE BARRIER, MOMENT SLAB, MSE WALL  
AND NOISE ABATEMENT WALL

#### NOTE TO DESIGNER

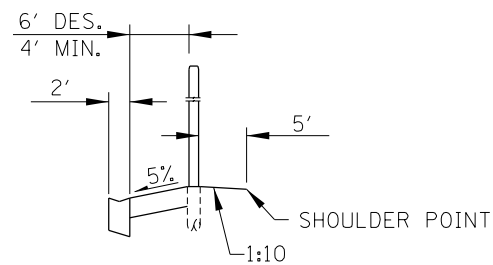
THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

M-RDY-405

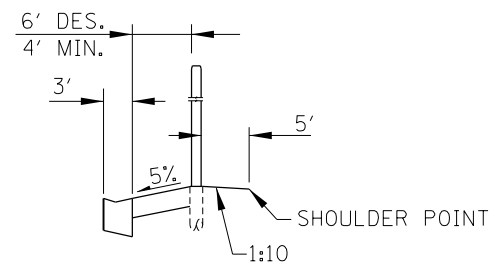


ROADWAY TYPICAL SECTIONS  
 GROUP F

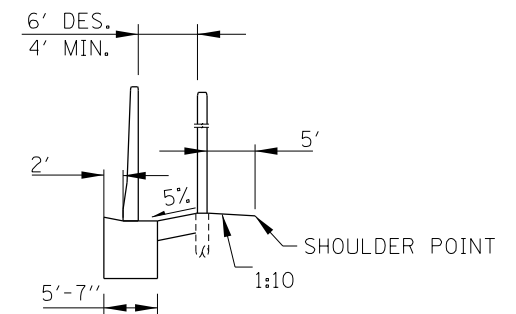
DATE  
 3-11-2015



GUTTER, TYPE G-2, MODIFIED  
W/CRASHWORTHY NOISE ABATEMENT WALL



GUTTER, TYPE G-3, MODIFIED  
W/CRASHWORTHY NOISE ABATEMENT WALL



SINGLE FACE REINFORCED BARRIER  
W/NON-CRASHWORTHY NOISE ABATEMENT WALL

### NOTE TO DESIGNER

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M-RDY-406



ROADWAY TYPICAL SECTION  
GROUP G

DATE  
3-11-2015

### NOTE:

ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

EARTHWORK SCHEDULE OF QUANTITIES																										
LOCATION (STATION)	LENGTH	EARTHWORK VOLUMES (CY)																					EARTHWORK BALANCE [EXCESS (+) /			
		TOPSOIL STRIPPING			CUT			ROCK EXCAVATION			UNSUITABLE MATERIAL			ADJUST FOR SHRINKAGE (15%)			FILL			TOPSOIL PLACEMENT			SHORTAGE (-)]			
		A			B			C			D			E			F			G			E-F			
		STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	
400+00																										
401+00	100.0	244.4	60.0	0.0	6100.0	1200.0	0.0	0.0	0.0	0.0	1100.0	500.0	0.0	4250.0	595.0	0.0	4300.0	900.0	0.0	200.0	85.0	0.0	-50.0	-305.0	0.0	
402+00	100.0	318.5	52.0	0.0	7000.0	1150.0	0.0	0.0	0.0	0.0	1000.0	200.0	0.0	5100.0	807.5	0.0	4550.0	1250.0	0.0	225.0	65.0	0.0	550.0	-442.5	0.0	
403+00	100.0	490.7	43.0	0.0	7150.0	2100.0	0.0	100.0	50.0	0.0	400.0	100.0	0.0	5652.5	1657.5	0.0	5150.0	1800.0	0.0	250.0	58.0	0.0	502.5	-142.5	0.0	
404+00	100.0	388.9	64.0	0.0	6950.0	1650.0	120.0	150.0	64.0	0.0	50.0	350.0	0.0	5737.5	1050.6	102.0	5900.0	1475.0	100.0	225.0	50.0	0.0	-162.5	-424.4	2.0	
405+00	100.0	213.0	72.0	0.0	5850.0	1400.0	154.0	0.0	0.0	0.0	150.0	100.0	0.0	4845.0	1105.0	130.9	5500.0	1500.0	220.0	225.0	46.0	0.0	-655.0	-395.0	-89.1	
406+00	100.0	269.0	18.0	0.0	5200.0	1402.0	0.0	0.0	0.0	0.0	600.0	120.0	0.0	3910.0	1089.7	0.0	4800.0	1480.0	80.0	189.0	52.0	0.0	-890.0	-390.3	-80.0	
407+00	100.0	375.0	93.0	0.0	5100.0	1305.0	0.0	0.0	0.0	0.0	500.0	115.0	0.0	3910.0	1011.5	0.0	4950.0	1520.0	0.0	220.0	65.0	0.0	-1040.0	-508.5	0.0	

EARTHWORK BILL OF MATERIAL

PAY ITEM NO.	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	TOTAL	CALCULATION NOTES:
JI211110	TOPSOIL EXCAVATION AND PLACEMENT	1534.0	402.0	0.0	1936.0	WHEN G<A, THEN G OR WHEN G>A, THEN A
JI211112	TOPSOIL EXCAVATION AND DISPOSAL	765.6	0.0	0.0	765.6	A-G
JI211124	TOPSOIL FURNISH AND PLACE, 4"	0.0	171.0	0.0	171.0	WHEN G>A, THEN (G-A)/THICKNESS IN YARDS
20200100	EARTH EXCAVATION	43350.0	10207.0	274.0	53831.0	B
20200200	ROCK EXCAVATION	1745.0	2608.2	167.1	4520.3	C
20400800	FURNISHED EXCAVATION	3800.0	1485.0	0.0	5285.0	WHEN F>E, THEN F-E
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERAIL	250.0	114.0	0.0	364.0	D

NOTE TO DESIGNER

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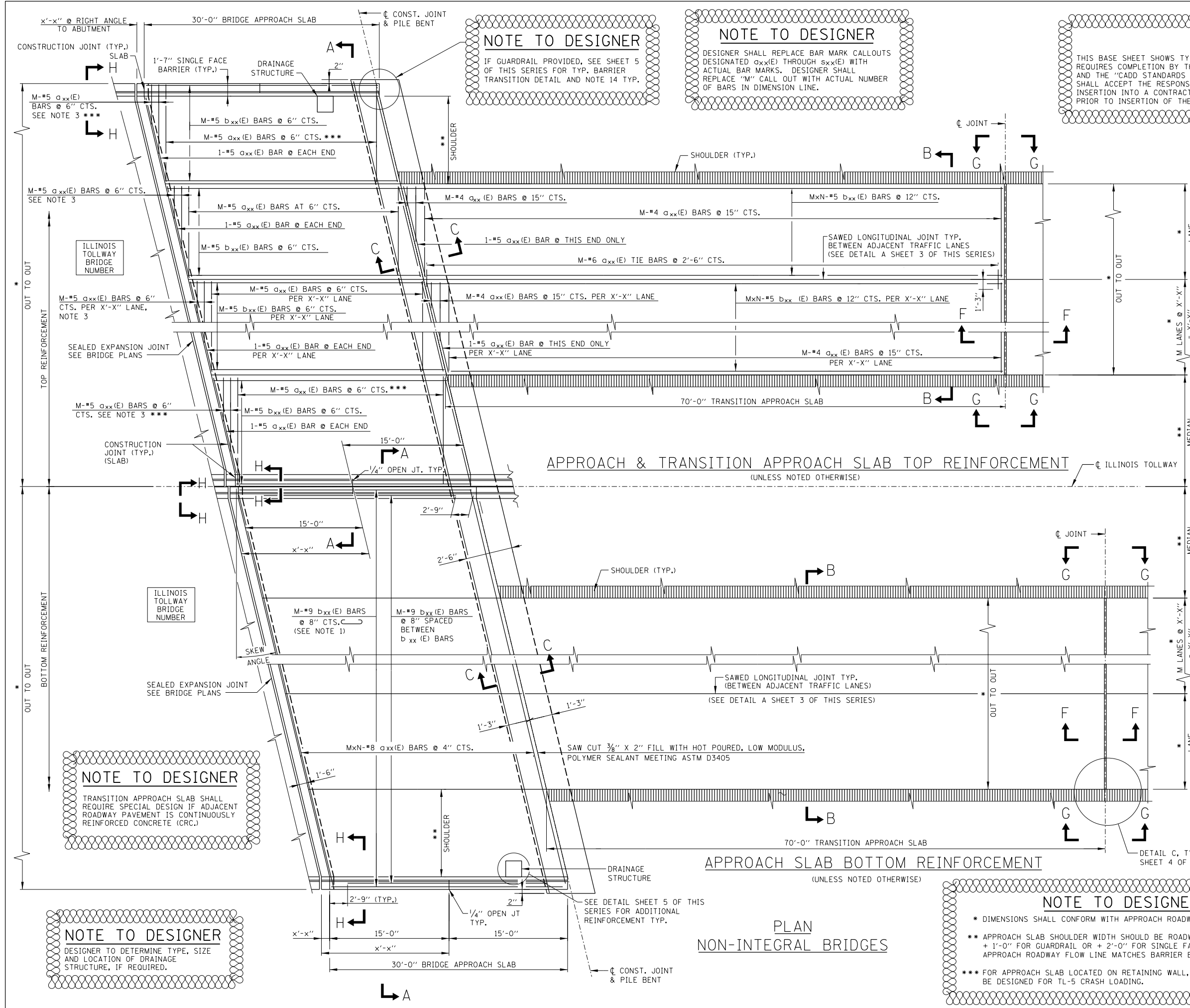
M-RDY-407



EARTHWORKS  
SCHEDULE

DATE

3-31-2014



APPROACH SLAB,  
MAINLINE

DATE  
3-31-2016

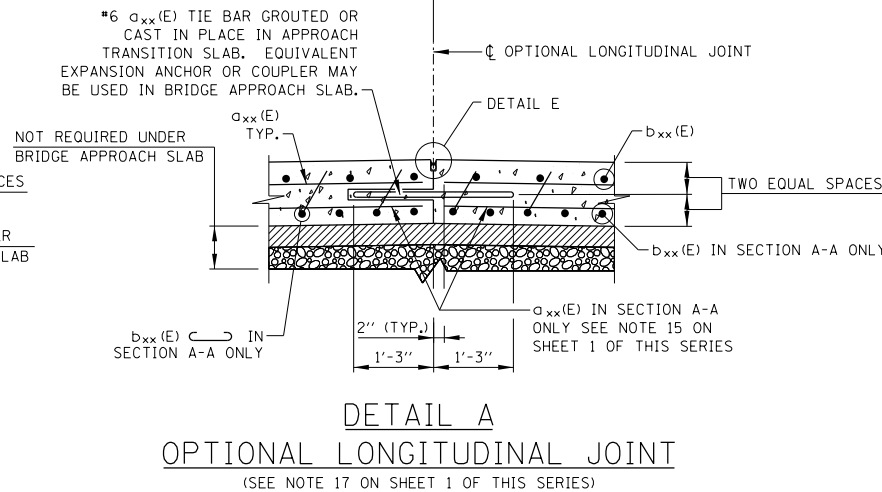
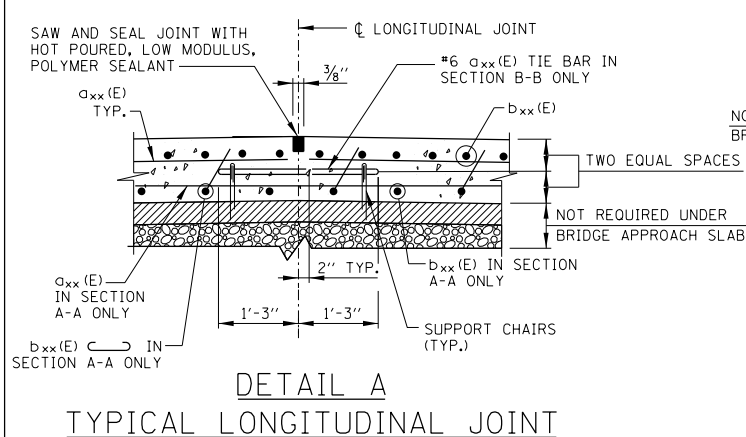
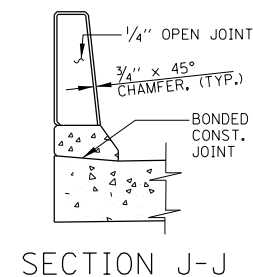
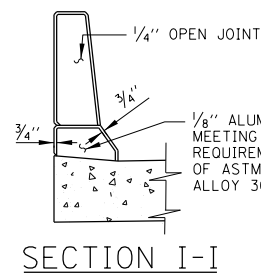
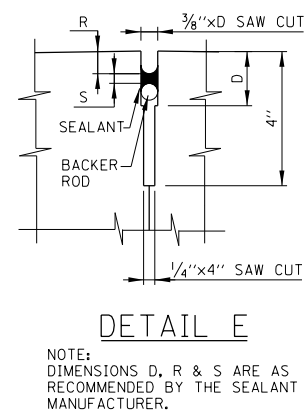
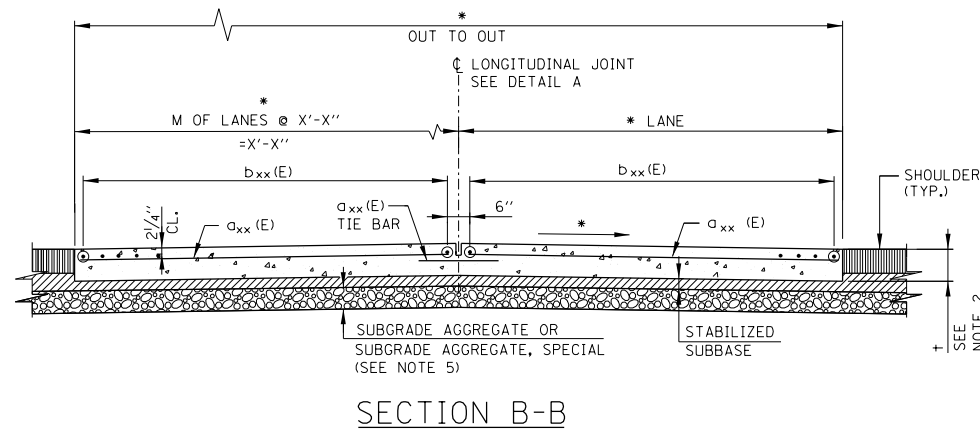
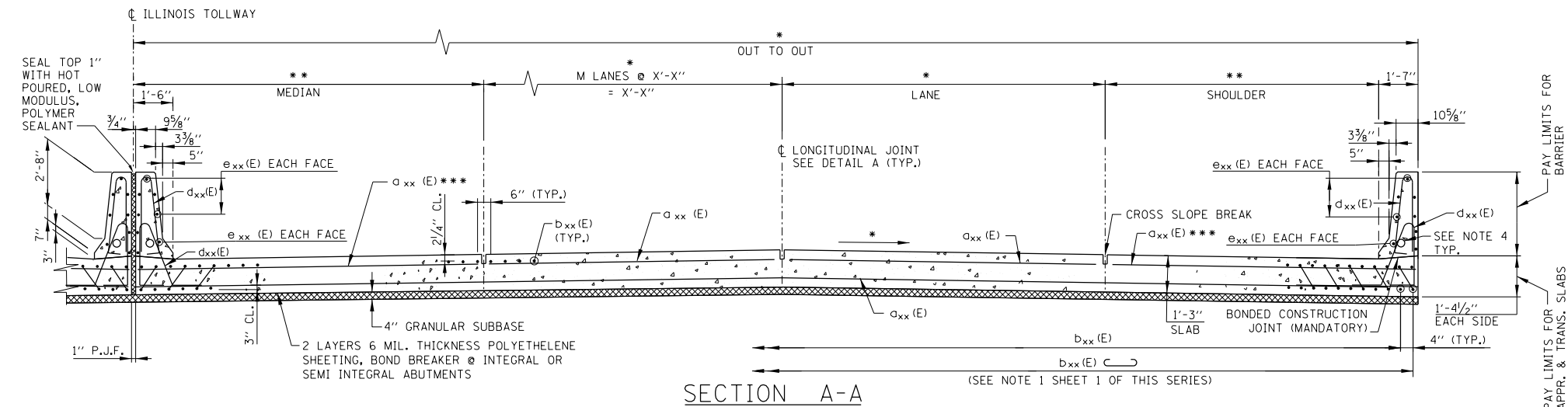
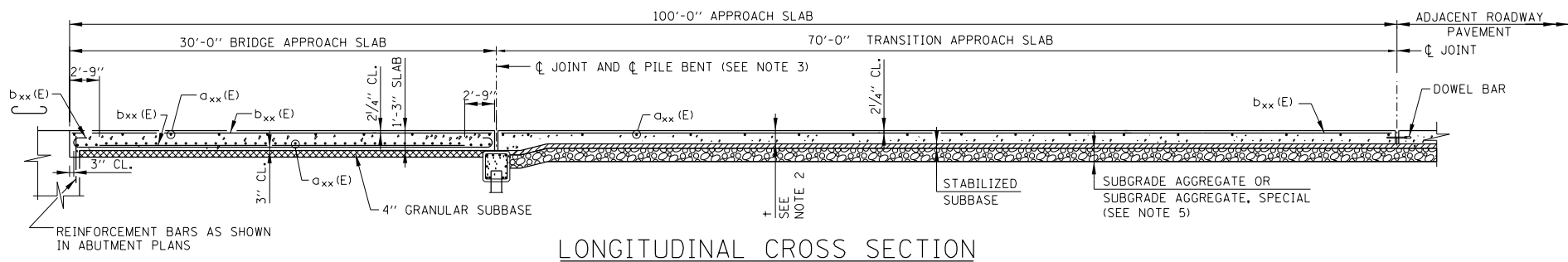
**NOTE TO DESIGNER**

\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

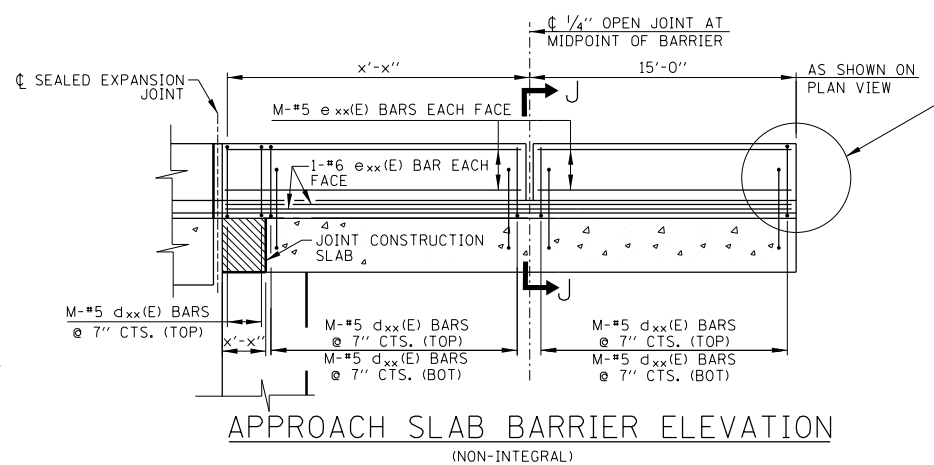
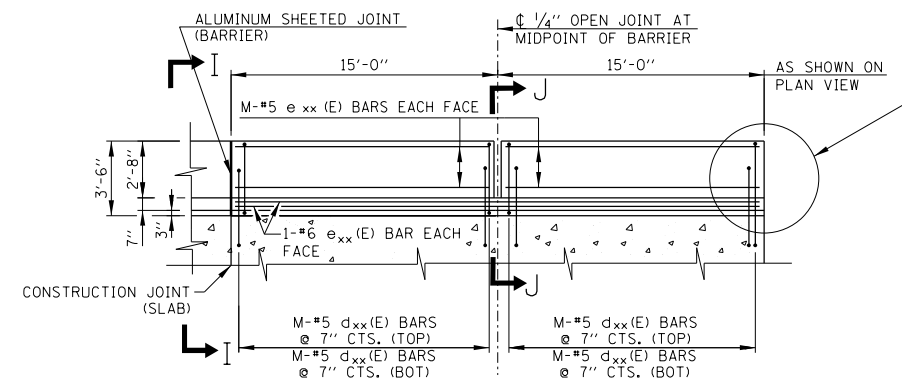
\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

\*\*\* FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.





**NOTE TO DESIGNER**  
IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL



- NOTES:**
- SEE SHEET 1 OF THIS SERIES FOR GENERAL NOTES.
  - THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
  - INTEGRAL ABUTMENT JOINT SHOWN NON-INTERGRAL ABUTMENT JOINT SIMILAR, SEE SHEET 4 OF THIS SERIES.
  - COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
  - THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.

**NOTE TO DESIGNER**  
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**NOTE TO DESIGNER**  
DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED a\_xx(E) THROUGH s\_xx(E) WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER IN DIMENSION LINE.

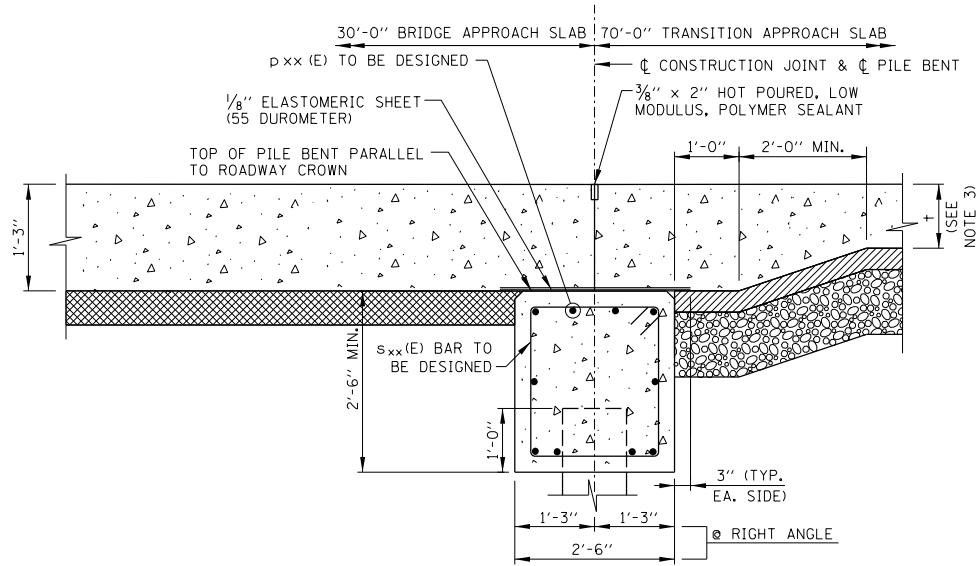
**NOTE TO DESIGNER**  
\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.  
\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.  
\*\*\* FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

SHEET 3 OF 5  
BASE SHEET M-RDY-408

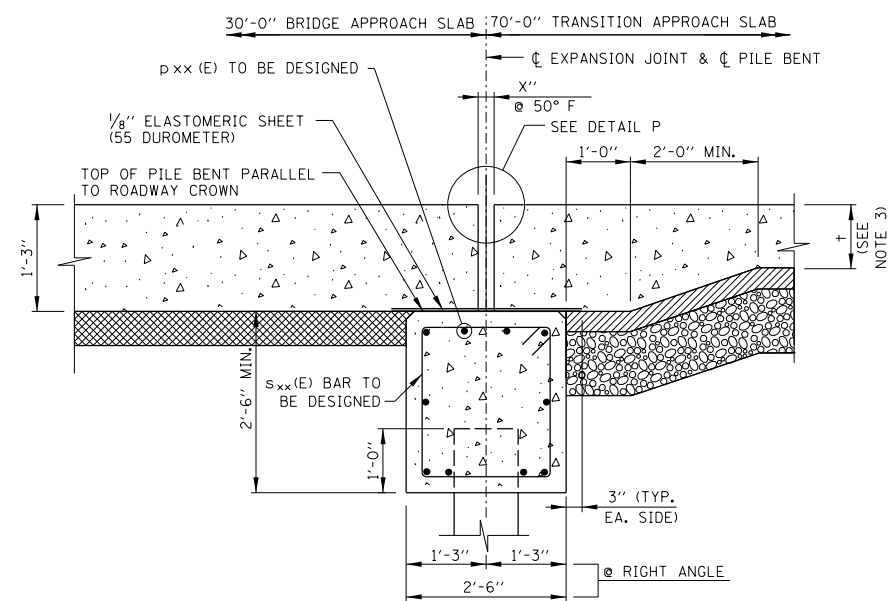


APPROACH SLAB,  
MAINLINE

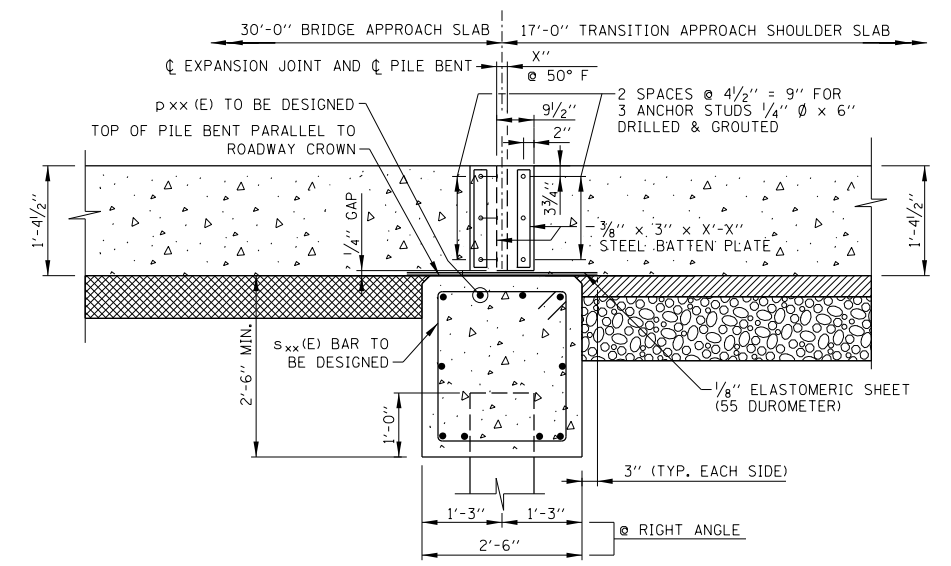
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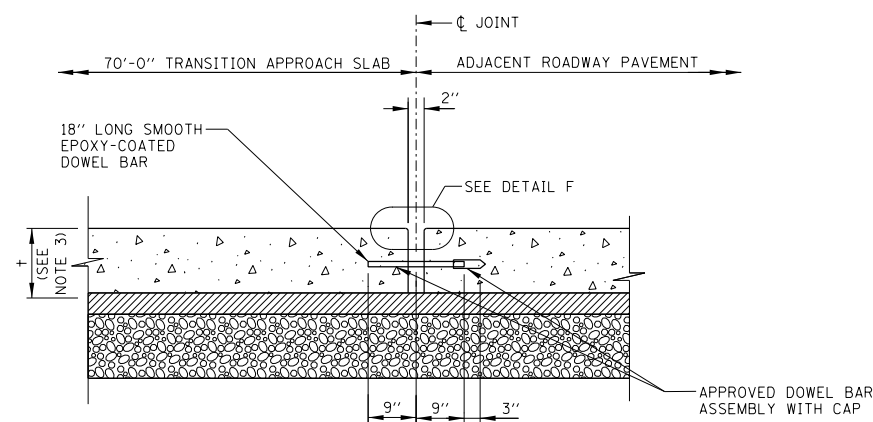
SECTION C-C  
FOR NON-INTEGRAL ABUTMENT



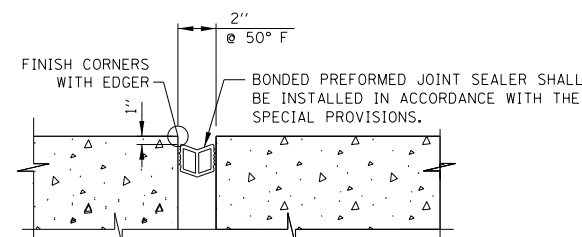
SECTION D-D  
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



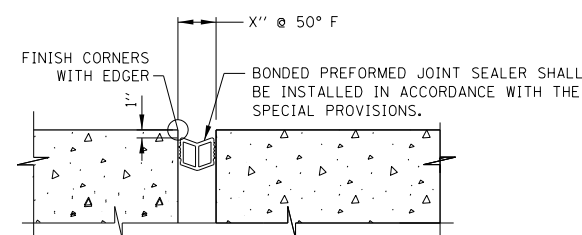
VIEW E'-E'  
END ELEVATION OF EXPANSION JOINT



SECTION F-F

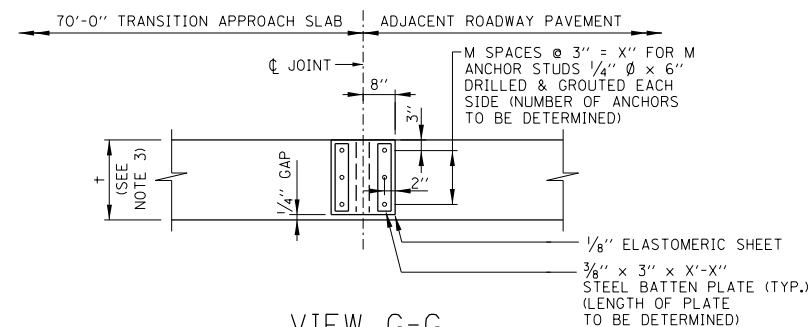


DETAIL F  
TRANSITION JOINT

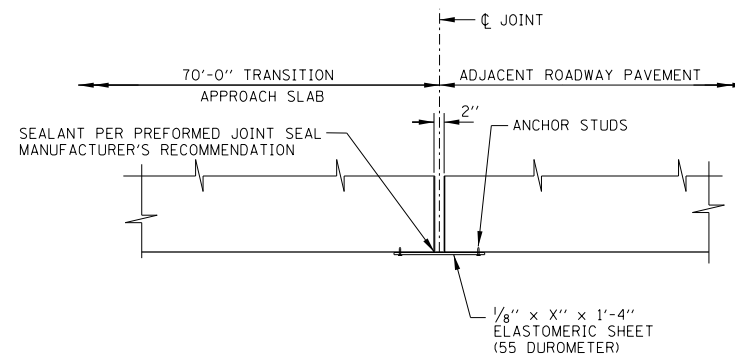


DETAIL P  
APPROACH & TRANSITION JOINT

**NOTE TO DESIGNER**  
DESIGNER TO PROVIDE JOINT SIZE AND OPENING CONSISTENT WITH BRIDGE AND APPROACH CONTRIBUTING LENGTH. DESIGNER TO DETERMINE NUMBER OF ANCHORS AND SIZE OF BATTEN PLATE.



VIEW G-G  
END ELEVATION OF JOINT



DETAIL C  
END PLAN OF JOINT

### LEGEND

	CONCRETE
	STABILIZED SUBBASE
	SUBGRADE AGGREGATE OR SUBGRADE AGGREGATE, SPECIAL
	GRANULAR SUBBASE

### NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED pxx(E) THROUGH sxx(E) WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

### NOTE TO DESIGNER

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### NOTES:

- IN SECTION E'-E' AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS. STEEL PLATES, ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED.
- THE THICKNESSES OF STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR PILE BENT DETAILS AND QUANTITIES SEE SHEET XX.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

SHEET 4 OF 5  
BASE SHEET M-RDY-408



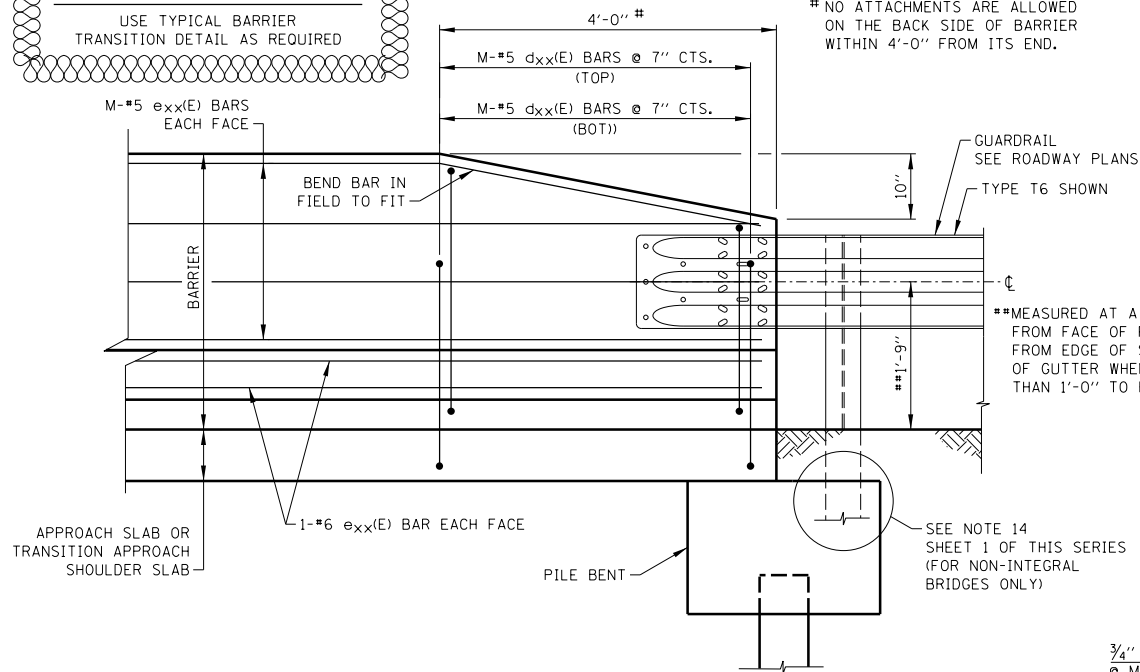
APPROACH SLAB,  
MAINLINE

DATE  
3-31-2016



### NOTE TO DESIGNER

USE TYPICAL BARRIER  
TRANSITION DETAIL AS REQUIRED



### TYPICAL BARRIER TRANSITION DETAIL

(CURB AND GUTTER NOT SHOWN FOR CLARITY)

### NOTE TO DESIGNER

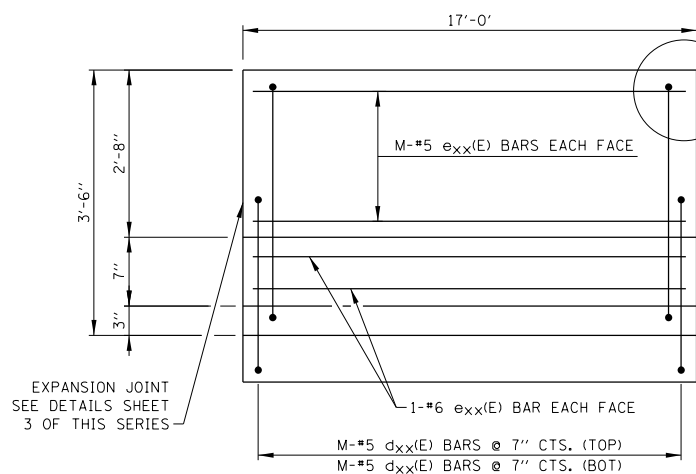
\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

\*\*\* FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

### NOTE TO DESIGNER

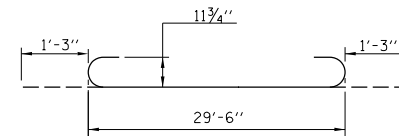
DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED  $\alpha_{xx}(E)$  THROUGH  $s_{xx}(E)$  WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.



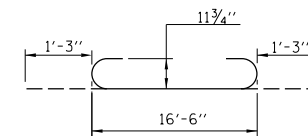
### TRANSITION APPROACH SHOULDER SLAB BARRIER ELEVATION

### NOTE TO DESIGNER

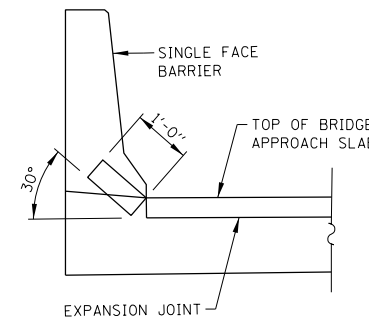
THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.



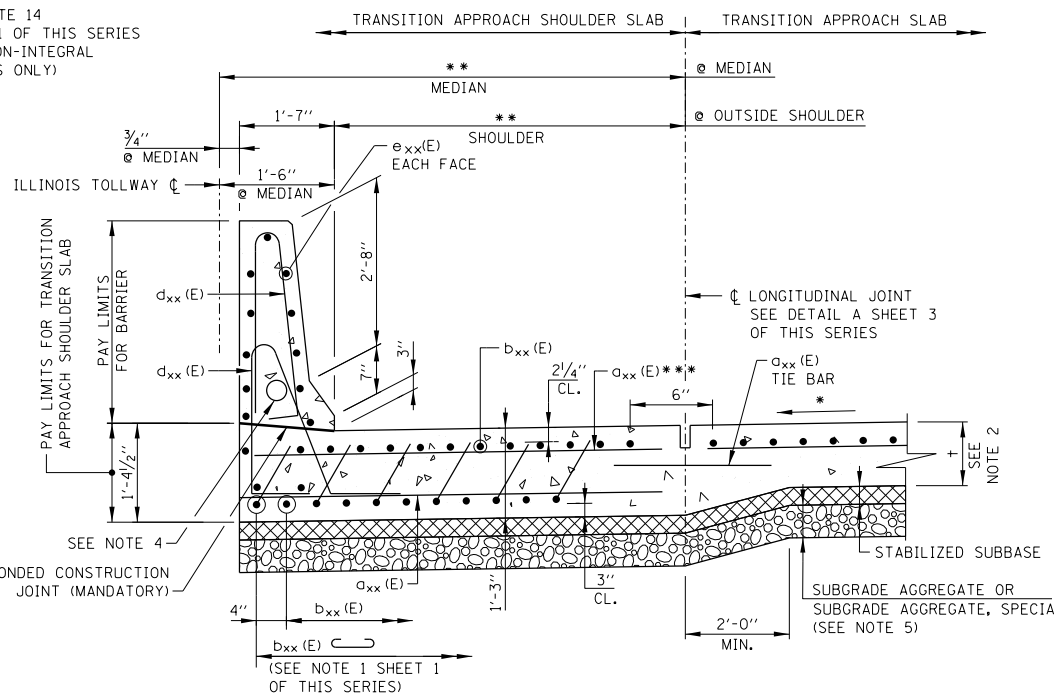
### BARS $b_{xx}(E)$



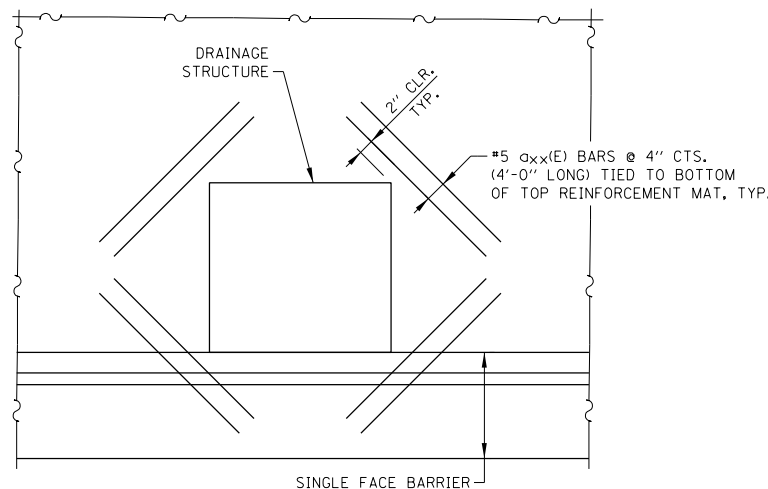
### BARS $b_{xx}(E)$



### SECTION H-H



### SECTION M-M



### ADDITIONAL REINFORCEMENT AT DRAINAGE STRUCTURES

CUT TRANSVERSE  $\alpha_{xx}(E)$  BARS AND LONGITUDINAL  $b_{xx}(E)$  BARS IN SLAB TO CLEAR DRAINAGE STRUCTURE. RESPACE  $\alpha_{xx}(E)$  BARS TO MISS DRAINAGE STRUCTURE.

### BILL OF MATERIAL FOR APPROACH AND TRANSITION SLABS

BAR	NO.	SIZE	LENGTH	SHAPE
$\alpha_{xx}(E)$				
$b_{xx}(E)$		#9	32'-0"	
$b_{xx}(E)$		#9	19'-0"	
$d_{xx}(E)$		#5	8'-4"	
PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
J1420040	BRIDGE APPROACH SLAB	SQ. YD.		
J1420041	TRANSITION APPROACH SLAB	SQ. YD.		
J1420046	TRANSITION APPROACH SHOULDER SLAB	SQ. YD.		
JT525135	BONDED PREFORMED JOINT SEAL	FT.		
*	REINFORCEMENT BARS, EPOXY COATED	LBS.		
*	PROTECTIVE COAT	SQ. YD.		
*	BRIDGE DECK GROOVING	SQ. FT.		

\* FOR INFORMATION ONLY

### BILL OF MATERIAL FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$		#5	6'-10"	
$\alpha_{xx}(E)$				
PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.		
50800205	REINFORCEMENT BARS, EPOXY COATED	LBS.		
50300300	PROTECTIVE COAT	SQ. YD.		

### NOTES:

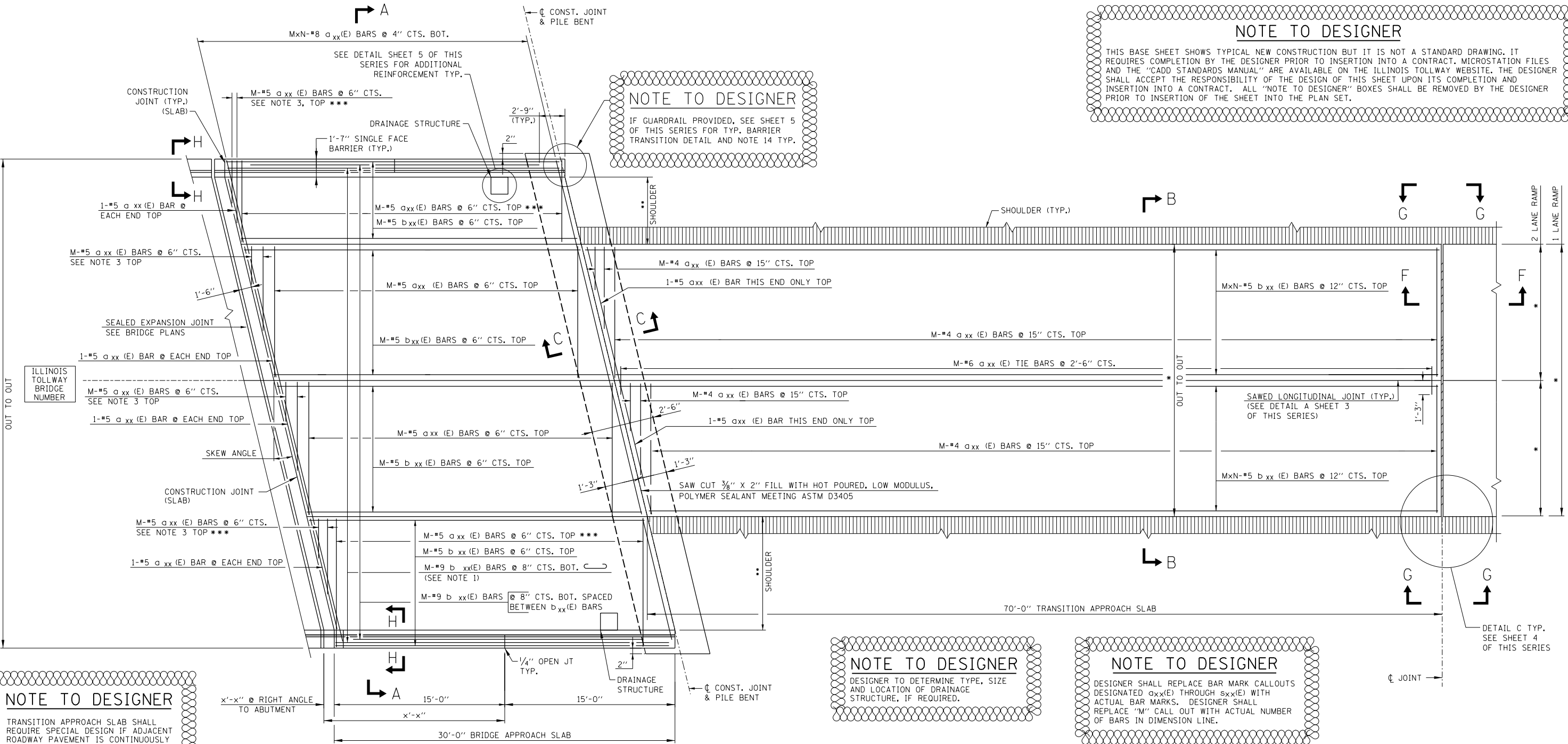
- THE AREA OF EACH BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB AND TRANSITION APPROACH SHOULDER SLAB WILL BE MEASURED IN PLACE AND COMPUTED IN SQUARE YARDS. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.
- COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
- THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.

SHEET 5 OF 5  
BASE SHEET M-RDY-408



APPROACH SLAB,  
MAINLINE

DATE  
3-31-2016



### NOTE TO DESIGNER

TRANSITION APPROACH SLAB SHALL REQUIRE SPECIAL DESIGN IF ADJACENT ROADWAY PAVEMENT IS CONTINUOUSLY REINFORCED CONCRETE (CRC.)

### NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL AND NOTE 14 TYP.

### NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

### NOTE TO DESIGNER

DESIGNER TO DETERMINE TYPE, SIZE AND LOCATION OF DRAINAGE STRUCTURE, IF REQUIRED.

### NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED  $\alpha_{xx}(E)$  THROUGH  $s_{xx}(E)$  WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

### NOTE TO DESIGNER

\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

\*\*\* FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

### GENERAL NOTES:

1. TILT HOOK OF #9 BARS FOR MINIMUM  $2\frac{1}{4}$ " CLEARANCE.
2. USE 2'-0" MIN. LAP FOR #4 BARS. USE 2'-6" MIN. LAP FOR #5 BARS. USE 3'-0" MINIMUM LAP FOR #6 BARS.
3. CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END, OR DISCARD OFF SITE. PAINT EXPOSED ENDS WITH EPOXY PAINT.
4. FOR SECTIONS A-A AND B-B SEE SHEET 3 OF 5; FOR SECTIONS C-C, D-D, E-E, F-F AND VIEWS E'-E' AND G-G SEE SHEET 4; AND FOR SECTIONS H-H AND M-M SEE SHEET 5.
5. PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF BARRIERS.
6. TOOL EDGES OF EXPANSION JOINTS TO  $\frac{1}{4}$ " RADIUS.
7. REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE STANDARD SPECIFICATIONS.
8. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
9. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
10. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
11. EXPOSED CONCRETE EDGES SHALL HAVE  $\frac{3}{4}$ " x 45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
12. CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503 AND 508 OF THE STANDARD SPECIFICATIONS.
13. THE NOTATION MxN FOR REINFORCEMENT BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE.
14. IN THE CORNERS OF THE APPROACH SLAB BENT WHEN APPROACH GUARDRAIL IS PROVIDED, THE BENT CORNER SHALL BE BLOCKED OUT AND THE REINFORCEMENT STEEL SHALL BE RESPALED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
15. IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 3 OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCEMENT BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS. PAINT EXPOSED ENDS WITH EPOXY PAINT.
16. EXPANSION ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO SECTION 1006 OF THE STANDARD SPECIFICATIONS.
17. AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.
18. SEE SPECIAL PROVISIONS, BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB, AND BONDED PREFORMED JOINT SEAL.

SHEET 1 OF 5  
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

DATE  
3-31-2016

NOTE TO DESIGNER

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NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL TYP.

NOTE TO DESIGNER

DESIGNER TO DETERMINE TYPE, SIZE AND LOCATION OF DRAINAGE STRUCTURE, IF REQUIRED.

PLAN (INTEGRAL OR SEMI-INTEGRAL ABUTMENTS)

NOTES:

1. FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

NOTE TO DESIGNER

TRANSITION APPROACH SLAB SHALL REQUIRE SPECIAL DESIGN IF ADJACENT ROADWAY PAVEMENT IS CONTINUOUSLY REINFORCED CONCRETE (CRC.)

NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED  $\alpha_{xx}(E)$  THROUGH  $s_{xx}(E)$  WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

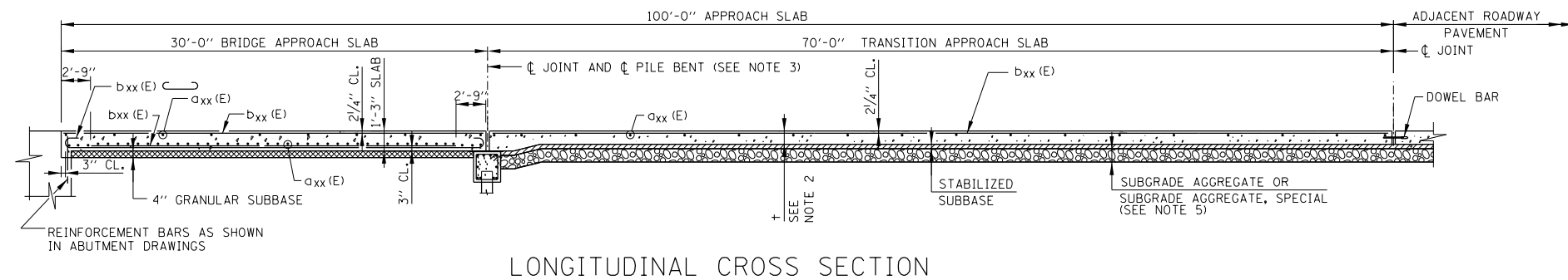
- \* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.
- \*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.
- \*\*\* FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

SHEET 2 OF 5  
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

DATE  
3-31-2016

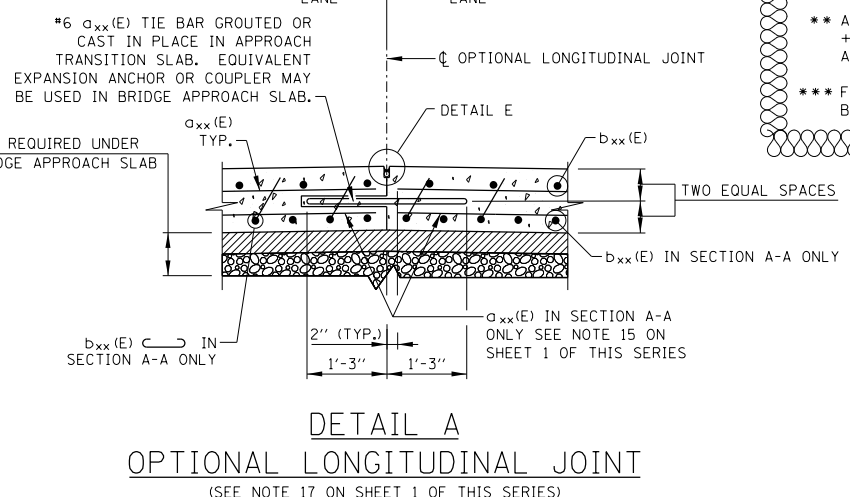
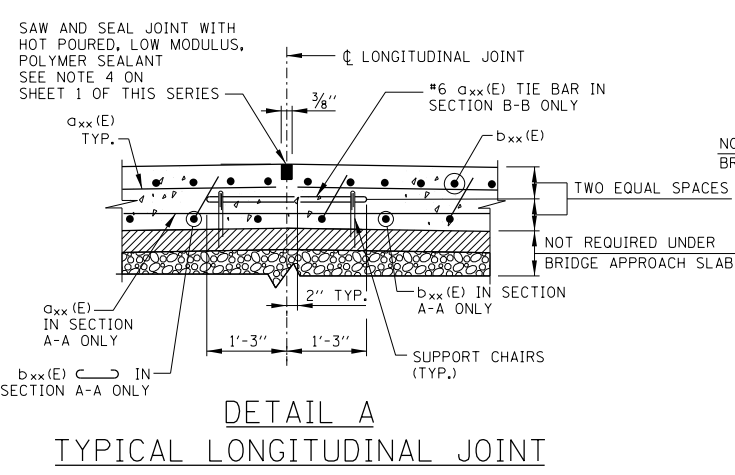
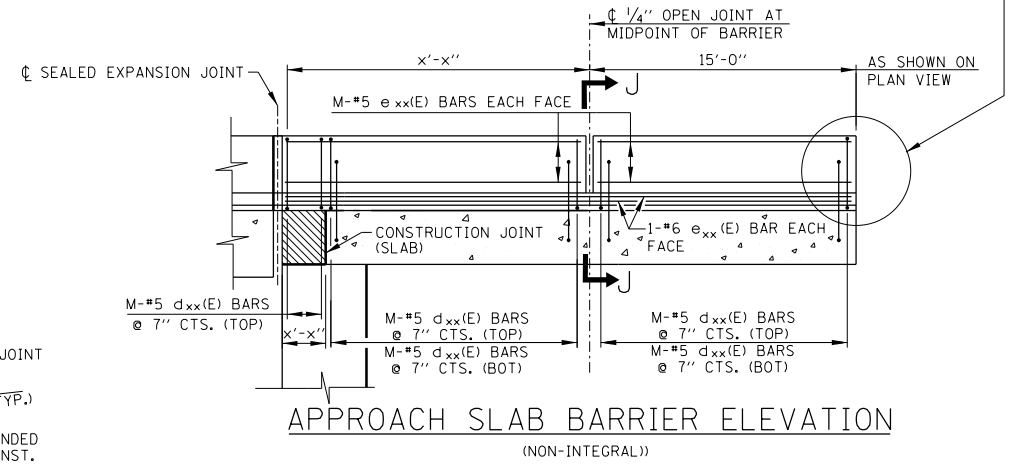
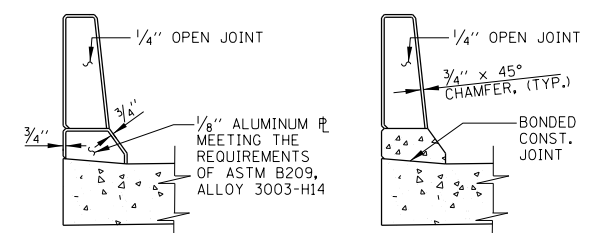
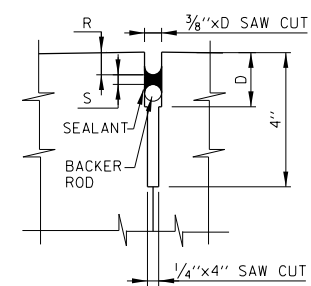
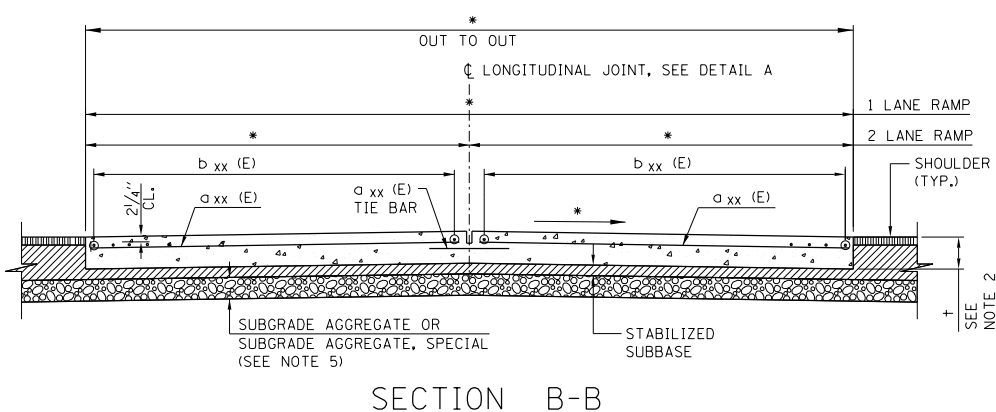
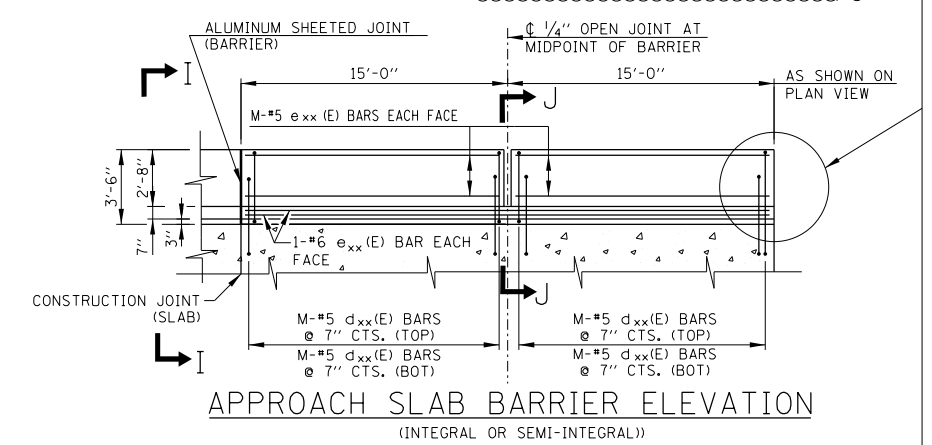
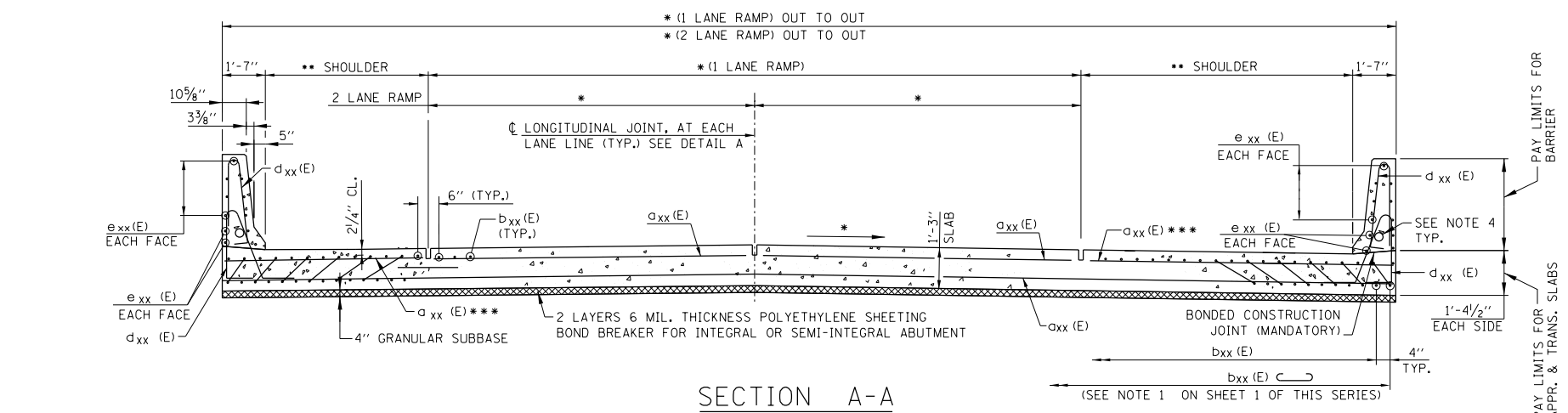


**NOTE TO DESIGNER**

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED  $a_{xx}(E)$  THROUGH  $s_{xx}(E)$  WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

**NOTE TO DESIGNER**

IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL



**NOTE TO DESIGNER**

\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

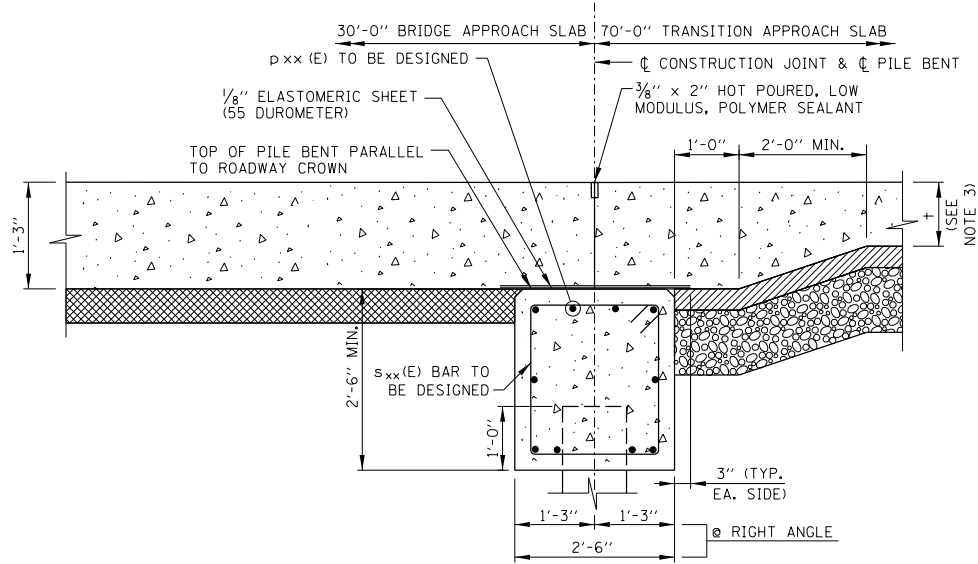
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**NOTE TO DESIGNER**

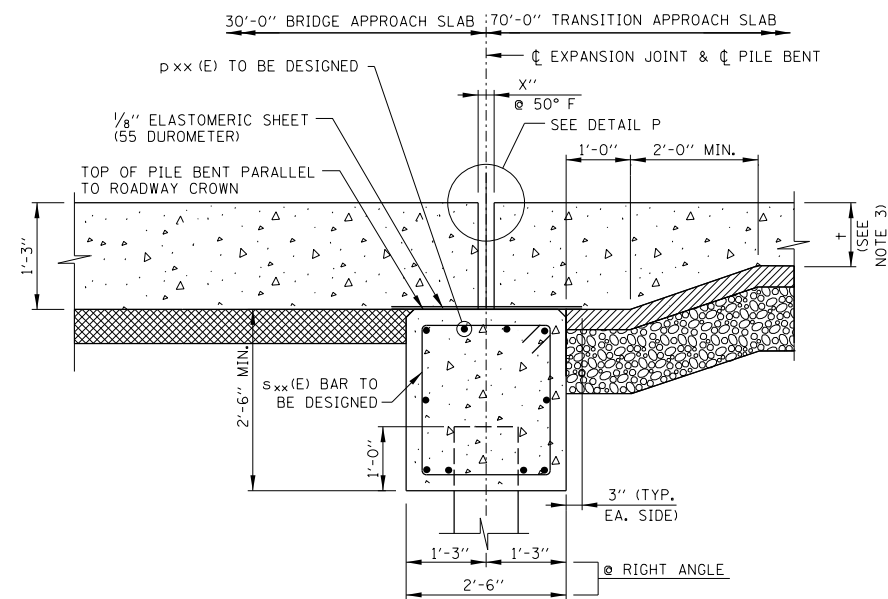
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- NOTES:**
- SEE SHEET 1 OF THIS SERIES FOR GENERAL NOTES.
  - THE DIMENSION T IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
  - INTEGRAL ABUTMENT JOINT SHOWN NON-INTERGRAL ABUTMENT JOINT SIMILAR. SEE SHEET 4 OF THIS SERIES.
  - COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
  - THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.

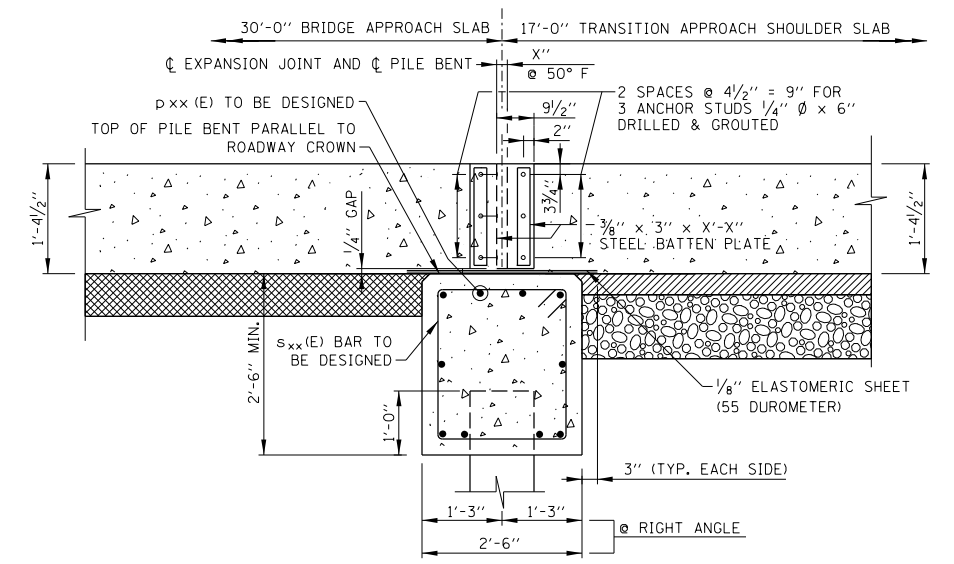




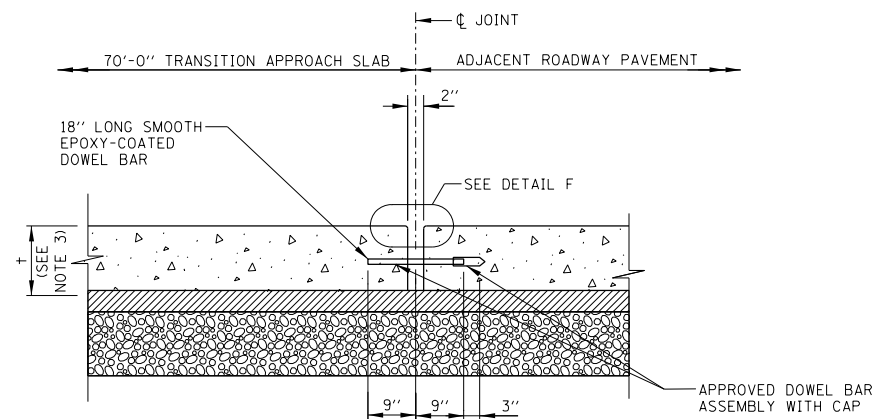
SECTION C-C  
FOR NON-INTEGRAL ABUTMENT



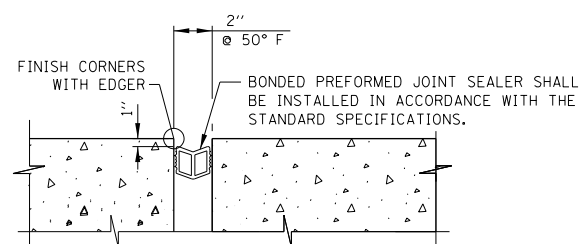
SECTION D-D  
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



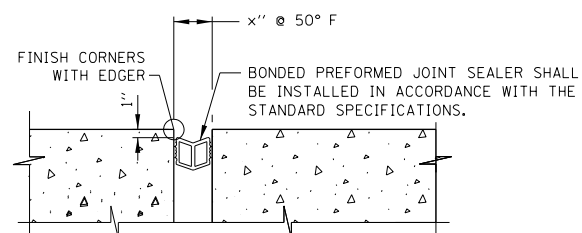
VIEW E'-E'  
END ELEVATION OF EXPANSION JOINT



SECTION F-F

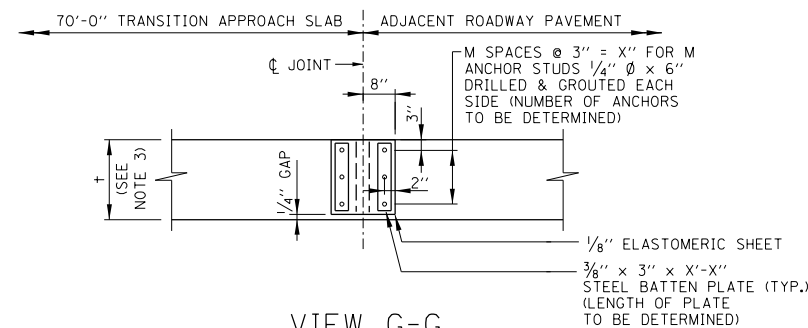


DETAIL F  
TRANSITION JOINT

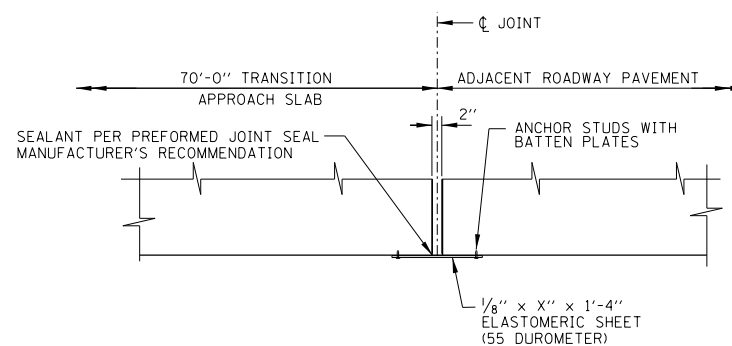


DETAIL P  
APPROACH & TRANSITION JOINT

**NOTE TO DESIGNER**  
DESIGNER TO PROVIDE JOINT SIZE AND OPENING CONSISTENT WITH BRIDGE AND APPROACH CONTRIBUTING LENGTH. DESIGNER TO DETERMINE NUMBER OF ANCHORS AND SIZE OF BATTEN PLATE.



VIEW G-G  
END ELEVATION OF JOINT



DETAIL C  
END PLAN OF JOINT

#### LEGEND

	CONCRETE
	STABILIZED SUBBASE
	SUBGRADE AGGREGATE OR SUBGRADE AGGREGATE, SPECIAL
	GRANULAR SUBBASE

#### NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED  $s_{xx}(E)$  THROUGH  $s_{xx}(E)$  WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

#### NOTE TO DESIGNER

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#### NOTES:

- IN SECTION E'-E' AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS. STEEL PLATES, ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED.
- THE THICKNESSES OF STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR PILE BENT DETAILS AND QUANTITIES SEE SHEET XX.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

SHEET 4 OF 5  
BASE SHEET M-RDY-409

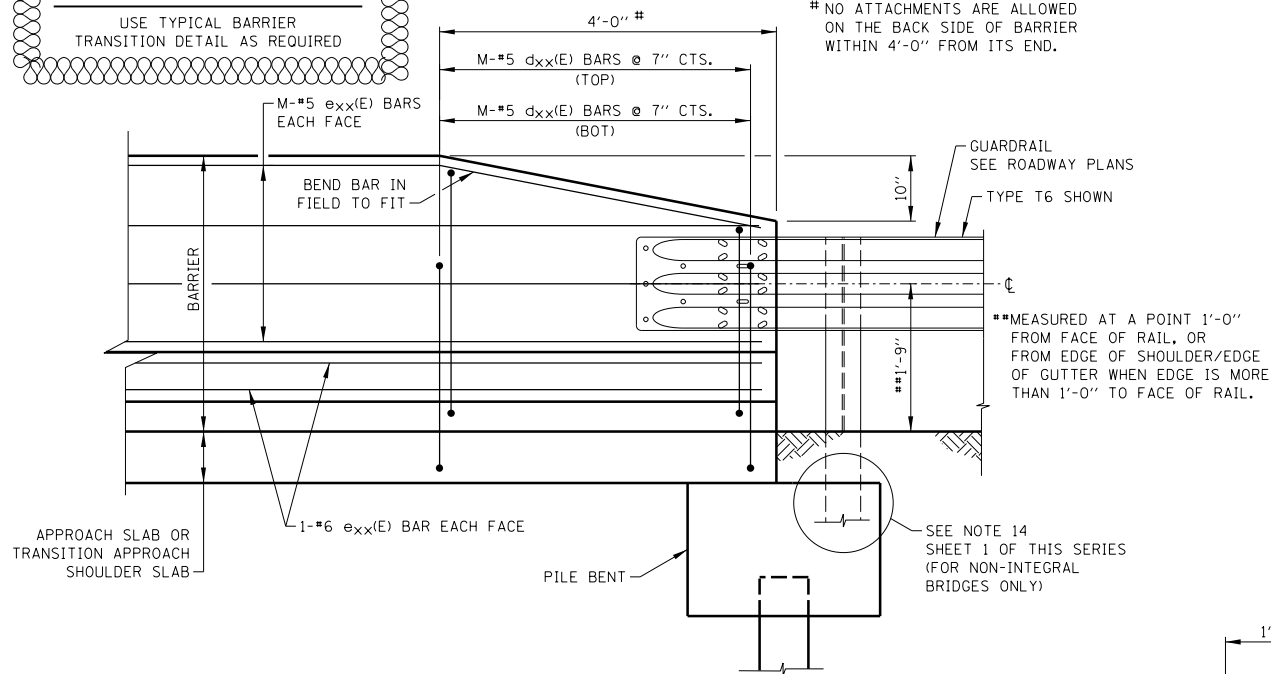


APPROACH SLAB, RAMP

DATE  
3-31-2016

### NOTE TO DESIGNER

USE TYPICAL BARRIER  
TRANSITION DETAIL AS REQUIRED



### TYPICAL BARRIER TRANSITION DETAIL

(CURB AND GUTTER NOT SHOWN FOR CLARITY)

### NOTE TO DESIGNER

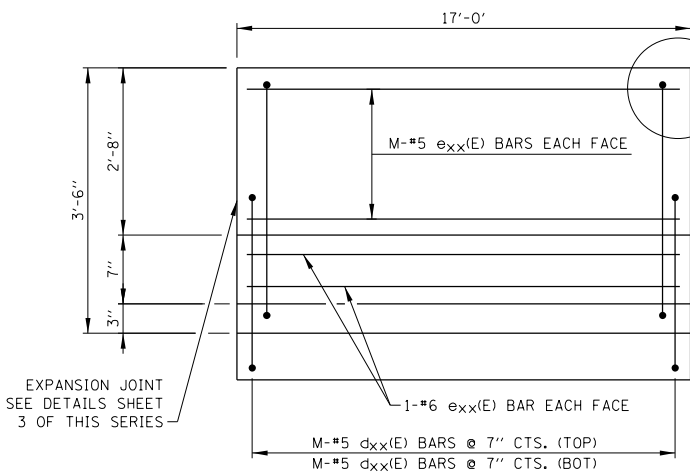
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### NOTE TO DESIGNER

\* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

\*\* APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

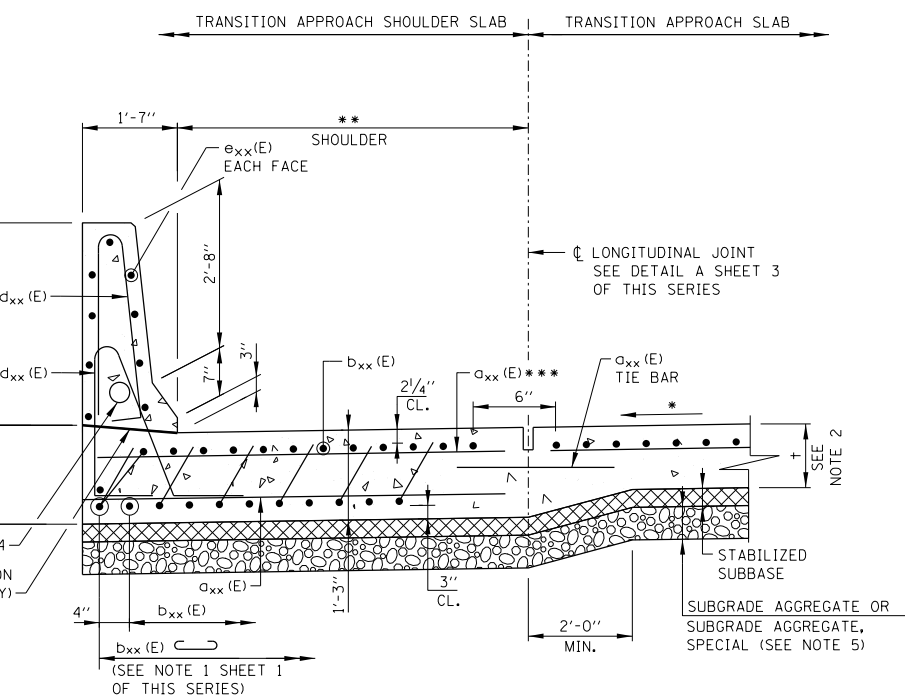
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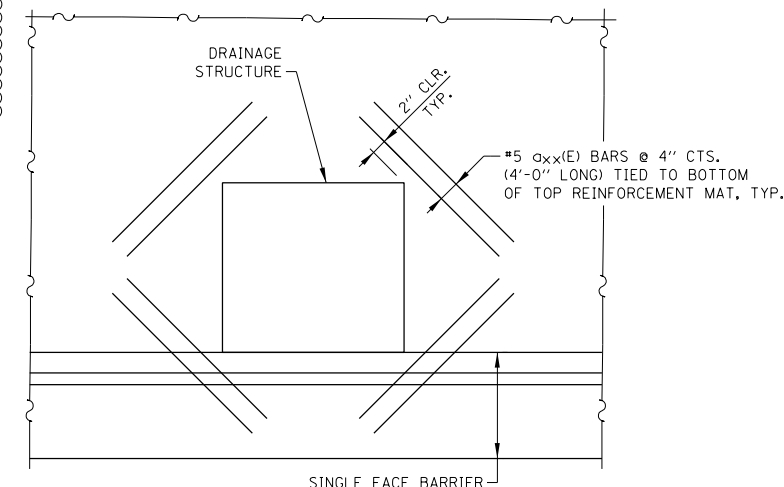
### TRANSITION APPROACH SHOULDER SLAB BARRIER ELEVATION

### NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE TYP.  
BARRIER TRANSITION DETAIL.



### SECTION M-M

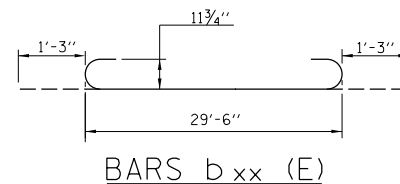


### ADDITIONAL REINFORCEMENT AT DRAINAGE STRUCTURES

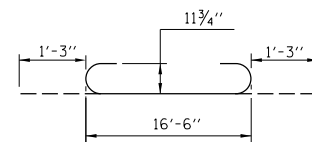
CUT TRANSVERSE  $d_{xx}(E)$  BARS AND LONGITUDINAL  $b_{xx}(E)$  BARS IN SLAB TO CLEAR DRAINAGE STRUCTURE. RESPACE  $d_{xx}(E)$  BARS TO MISS DRAINAGE STRUCTURE.

### NOTE TO DESIGNER

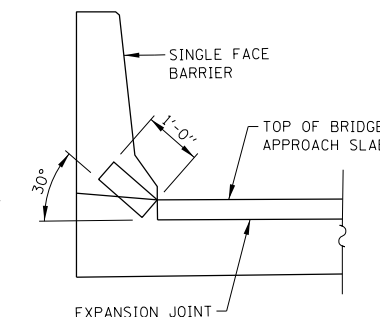
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### BARS $b_{xx}(E)$



### BARS $b_{xx}(E)$



### SECTION H-H

### BILL OF MATERIAL FOR APPROACH AND TRANSITION SLABS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$				
$b_{xx}(E)$		#9	32'-0"	
$b_{xx}(E)$		#9	19'-0"	
$d_{xx}(E)$		#5	8'-4"	
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
J1420040	BRIDGE APPROACH SLAB		SQ. YD.	
J1420041	TRANSITION APPROACH SLAB		SQ. YD.	
J1420046	TRANSITION APPROACH SHOULDER SLAB		SQ. YD.	
JT525135	BONDED PREFORMED JOINT SEAL		FT.	
*	REINFORCEMENT BARS, EPOXY COATED		LBS.	
*	PROTECTIVE COAT		SQ. YD.	
*	BRIDGE DECK GROOVING		SQ. FT.	

\* FOR INFORMATION ONLY

### BILL OF MATERIAL FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$		#5	6'-10"	
$e_{xx}(E)$				
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
50300255	CONCRETE SUPERSTRUCTURE		CU. YD.	
50800205	REINFORCEMENT BARS, EPOXY COATED		LBS.	
50300300	PROTECTIVE COAT		SQ. YD.	

### NOTES:

- THE AREA OF EACH BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB AND TRANSITION APPROACH SHOULDER SLAB WILL BE MEASURED IN PLACE AND COMPUTED IN SQUARE YARDS. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.
- COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
- THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.

SHEET 5 OF 5  
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

DATE  
3-31-2016

RESERVED

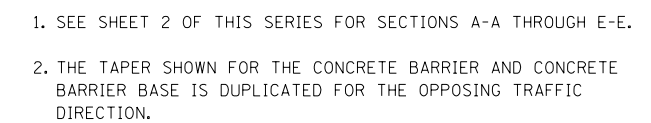
M-RDY-410



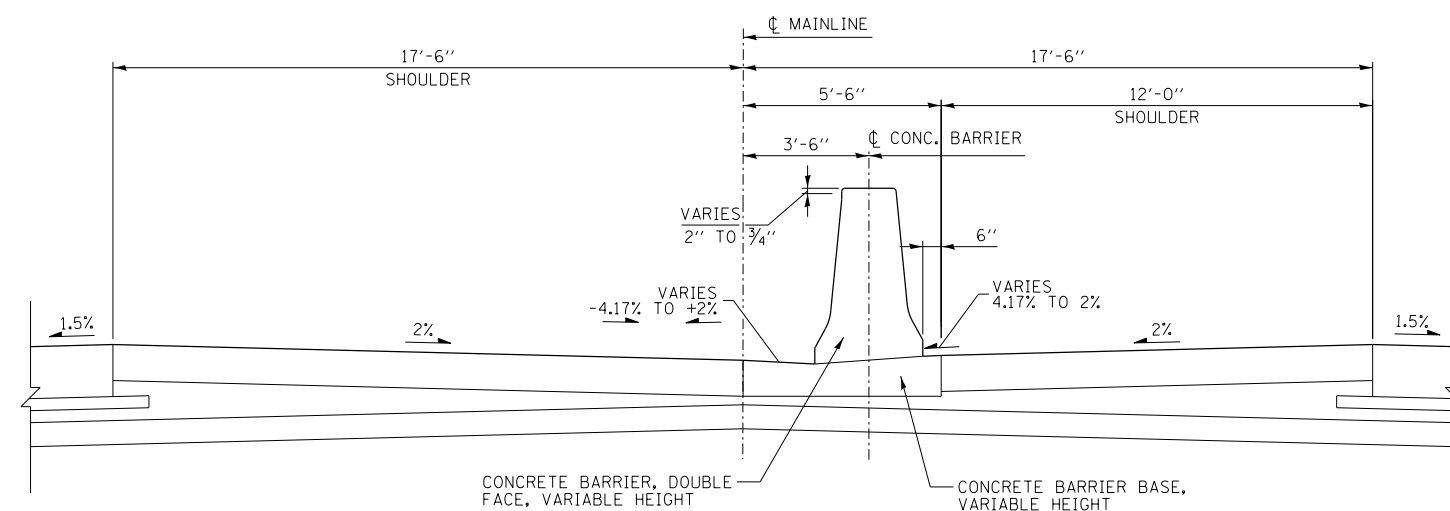
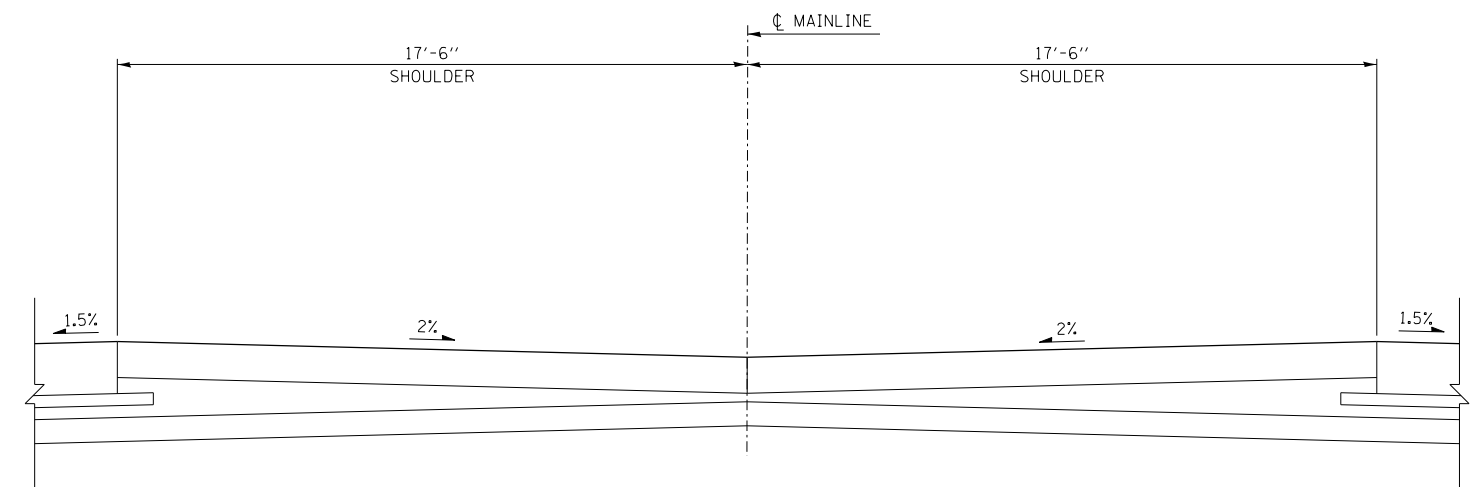
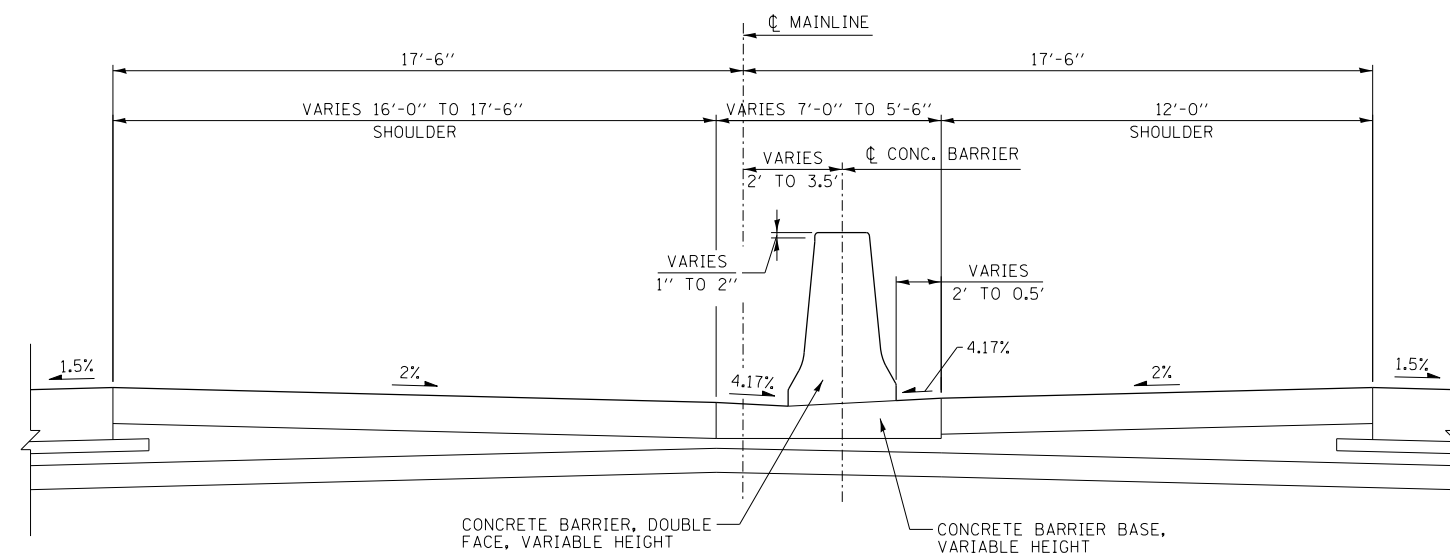
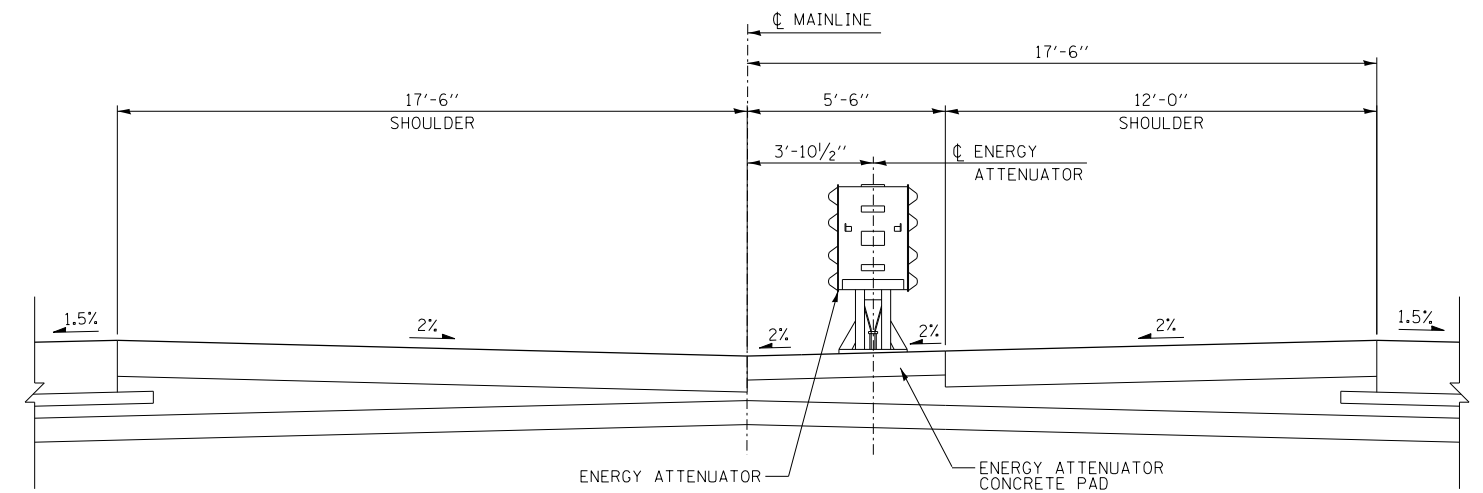
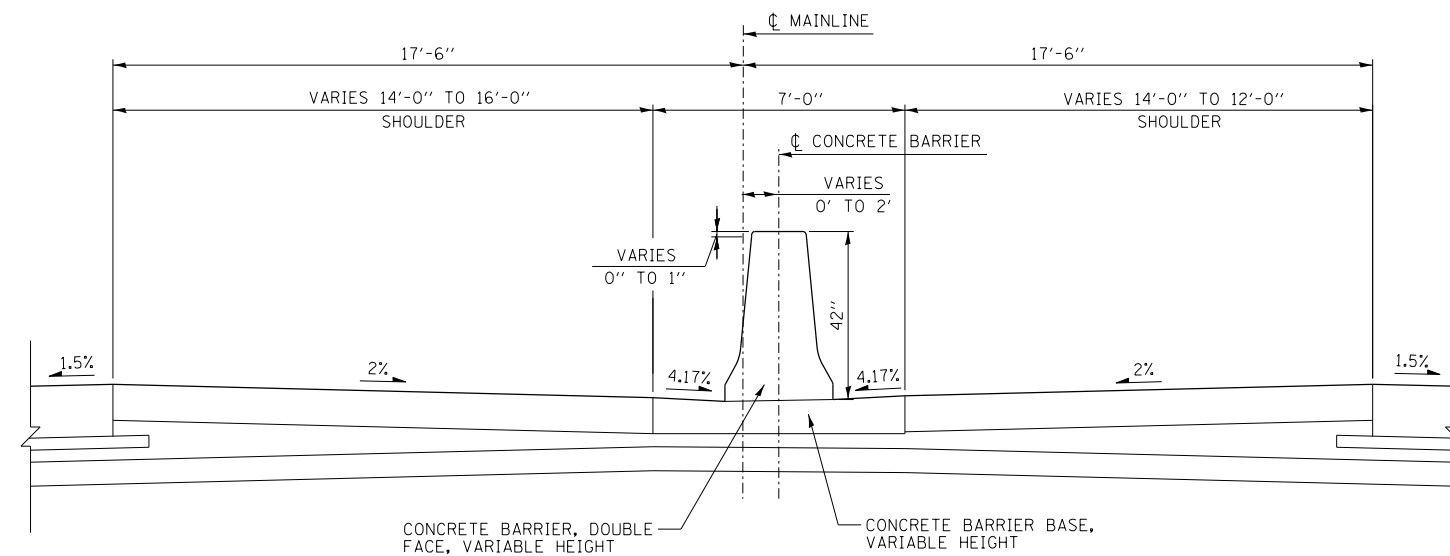
RESERVED

DATE  
3-31-2016





DATE  
3-31-2016



**NOTE TO DESIGNER**

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

