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 dxx 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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	Sheet 5	Added note to Typical Barrier Transition Detail to clarify where the 1'-9" dimension should be measured.
	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	**Slopewall 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.
		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 A618 for Frame HSS, ASTM A500 for Mounting Beam HSS.
	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 A618 for Frame HSS, ASTM A500 for Mounting Beam HSS.
	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 Distributiom Panel.

	Base Sheet Drawings		
	Drawing	Modification Summary	Effective: 03-31-2016
Tollway Base Sheet Revisions			
		Weigh-In-Motion - Series 1600	
Section M	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

NOTE TO DESIGNER

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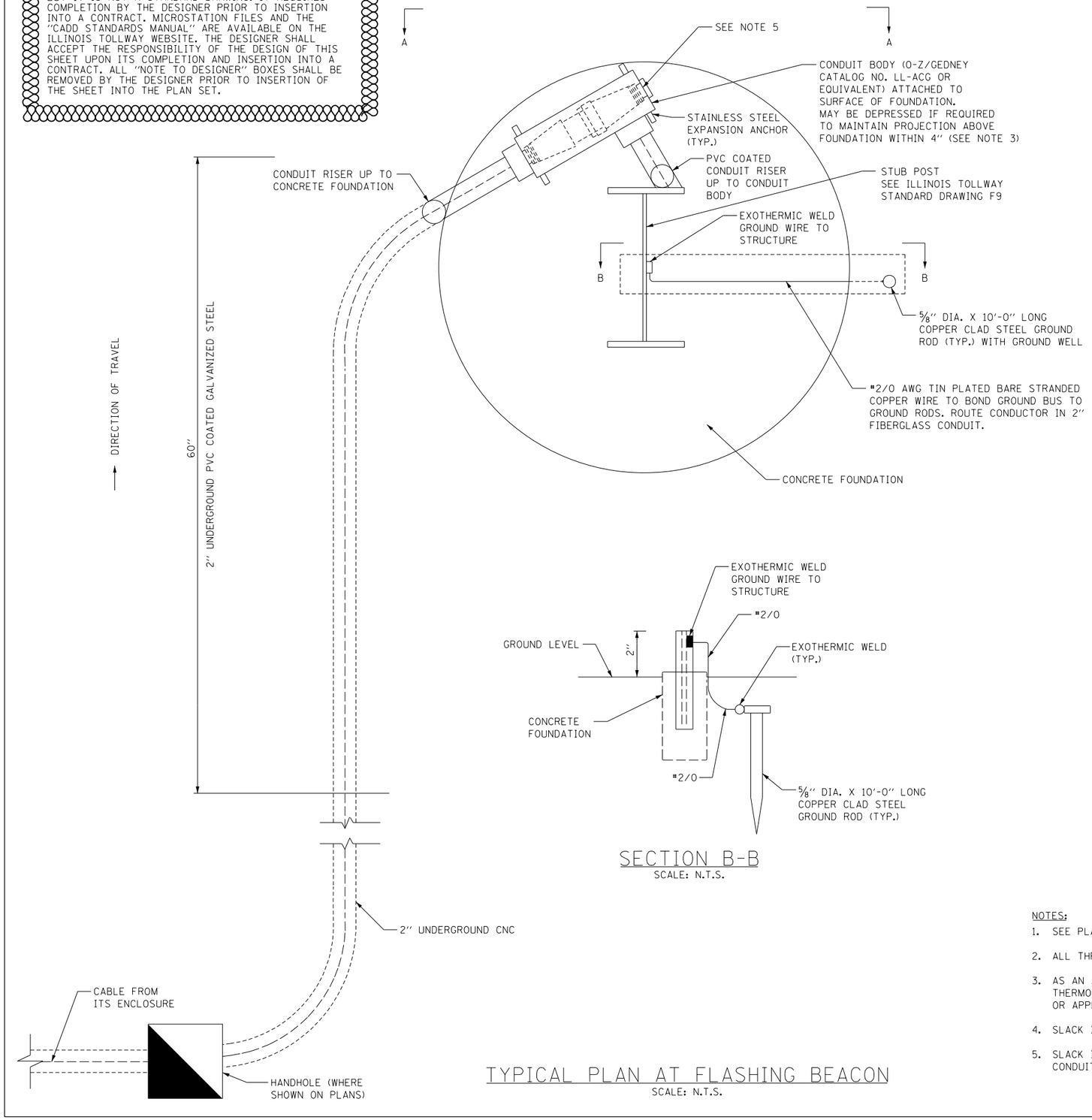
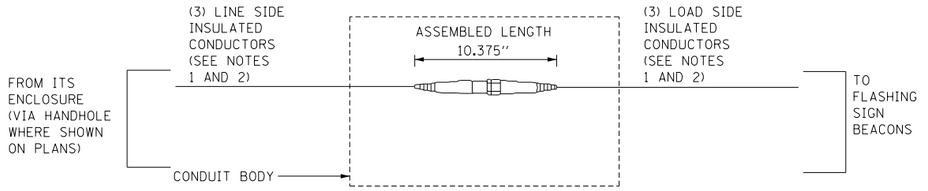


TYPICAL PLAN AT FLASHING BEACON

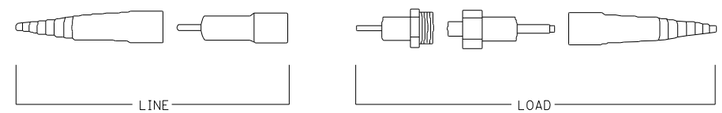
SCALE: N.T.S.

SECTION B-B

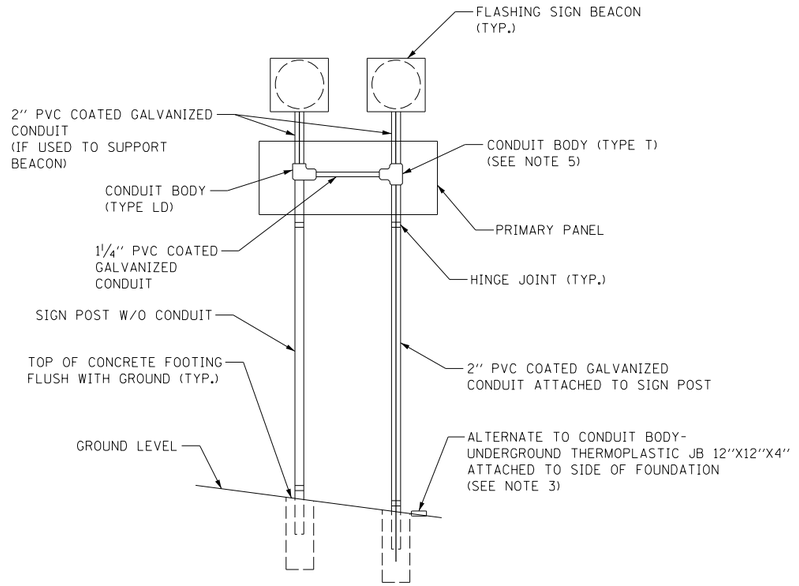
SCALE: N.T.S.



NON-FUSED BREAKAWAY ELECTRICAL CONNECTORS



NON-FUSED BREAKAWAY ELECTRICAL CONNECTORS EXPLODED VIEW



ELEVATION A-A

SCALE: N.T.S.

NOTES:

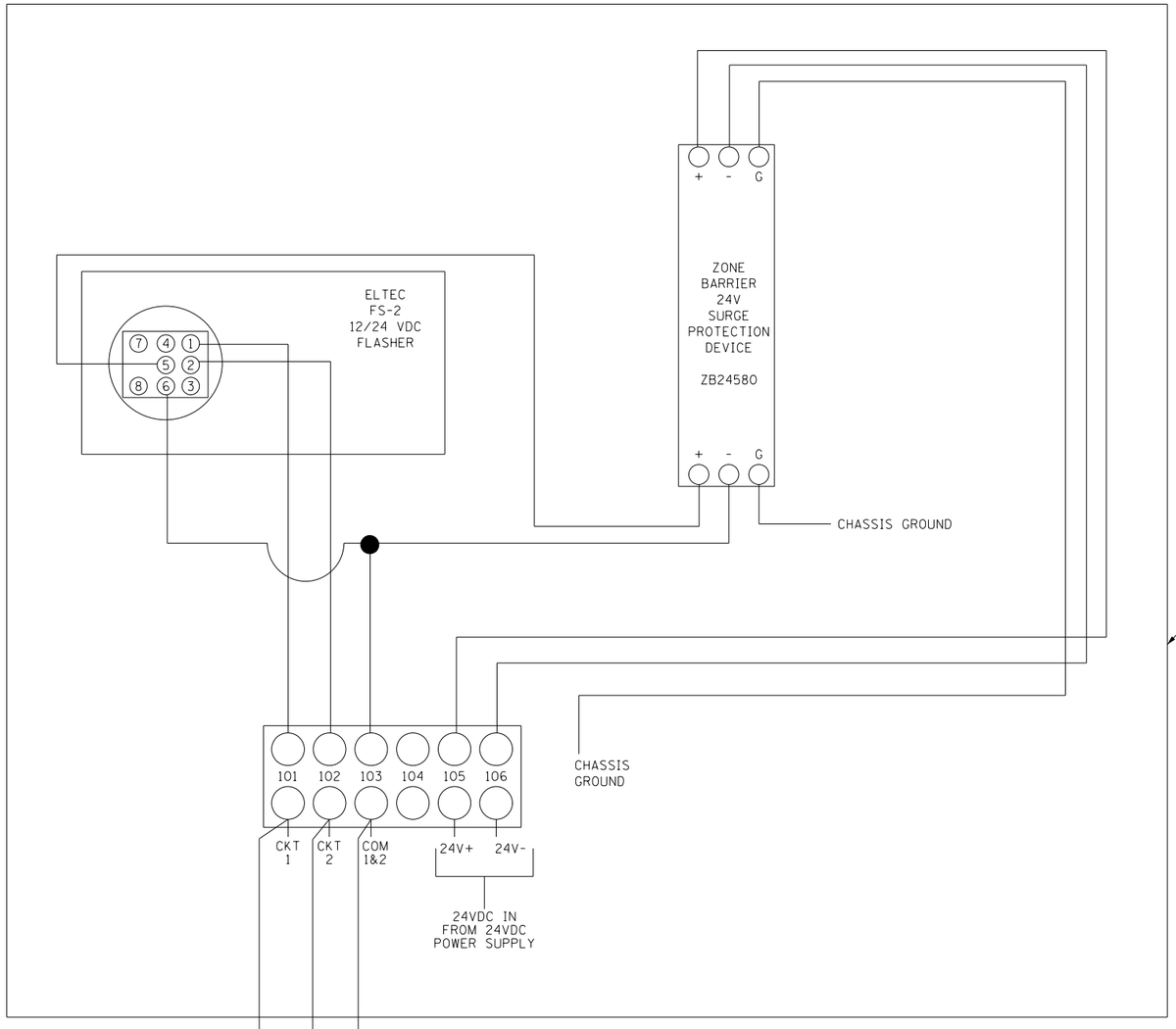
1. SEE PLANS FOR REQUIRED CONDUCTOR SIZES.
2. ALL THREE CONDUCTORS SHALL BE IN ONE HARNESS.
3. AS AN ALTERNATE TO THE CONDUIT BODY ON FOUNDATION, USE THERMOPLASTIC JUNCTION BOXES (CARLON PART NO. E989UUN OR APPROVED EQUAL)
4. SLACK IN LINE SIDE CABLE SHALL BE PROVIDED IN HANDHOLE.
5. SLACK IN LOAD SIDE CABLE SHALL BE PROVIDED IN TYPE "T" CONDUIT BODY, BUT CABLE SHALL BE TIED.

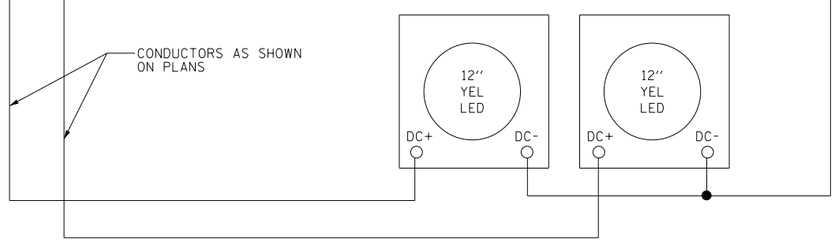
M-ITS-1700

Illinois Tollway

FLASHING SIGN BEACON INSTALLATION BREAKAWAY ELECTRICAL DETAIL

DATE
3-31-2016





24V FLASHING BEACON ASSEMBLY	
QUANTITY	PART AND DESCRIPTION
1	ZB2458O 24VDC SURGE PROTECTION DEVICE
1	ELTEC FS2 24/12VDC FLASHER
1	8 PIN HARNESS FOR FS2 FLASHER
1	MARATHON 1506 TERMINAL BLOCK
2	TRASTAR, INC. DURALIGHT LED, JXC300-HFTDCY, 24VDC
2	12" SIGNAL HOUSING FOR LED
2	12" TUNNEL VISORS (FOR ABOVE)

NOTE: SIGNAL HOUSING SHALL BE POLYCARBONATE YELLOW BODY, BLACK DOOR, WITH BLACK TUNNEL VISOR AND LED MODULE INSTALLED.

FS-2 WIRING HARNESS		
PIN	COLOR	FUNCTION
1	BLUE	FLASH OUTPUT 1
2	ORANGE	FLASH OUTPUT 2
5	RED	12V-32VDC IN
6	BLACK	DC COMMON

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THE DESIGNER SHALL DETERMINE THE WIRING SIZE AND TYPE FROM THE FLASHING UNIT TO THE LED HEADS.

M-ITS-1701

Illinois Tollway

FLASHING SIGN BEACON
INSTALLATION
WIRING DIAGRAM

DATE
3-31-2016