

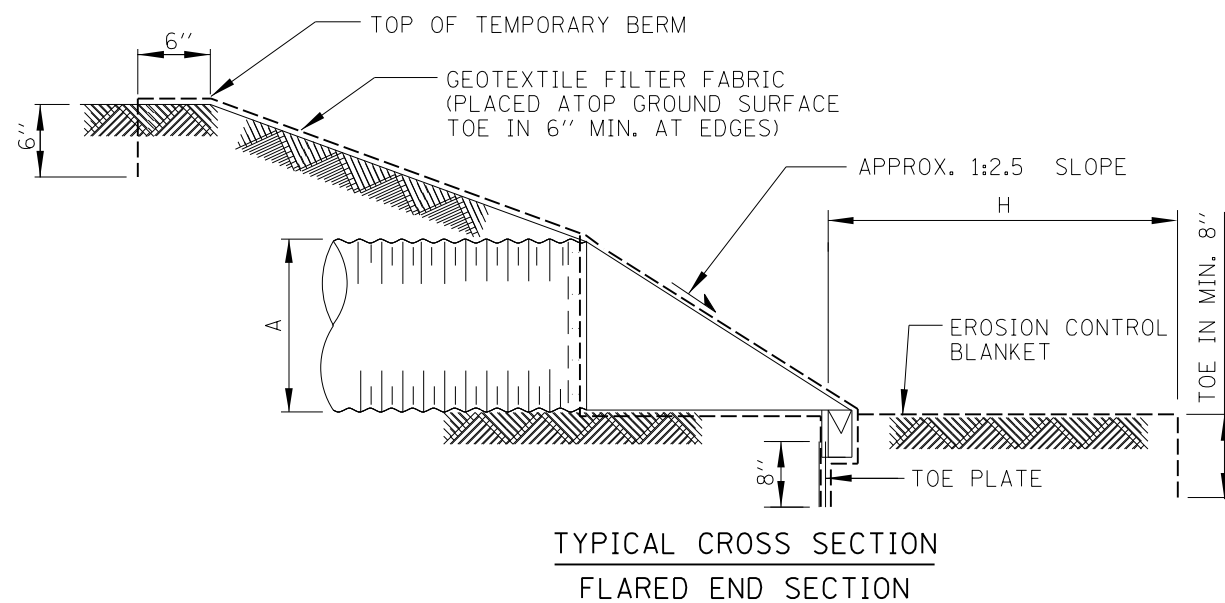
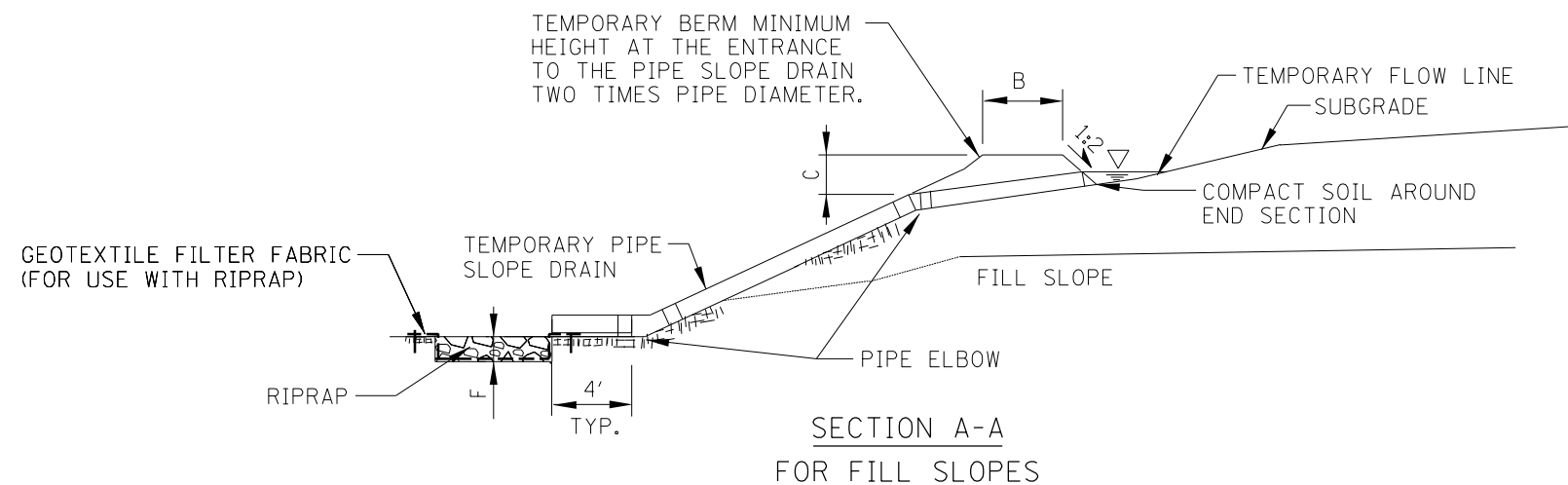
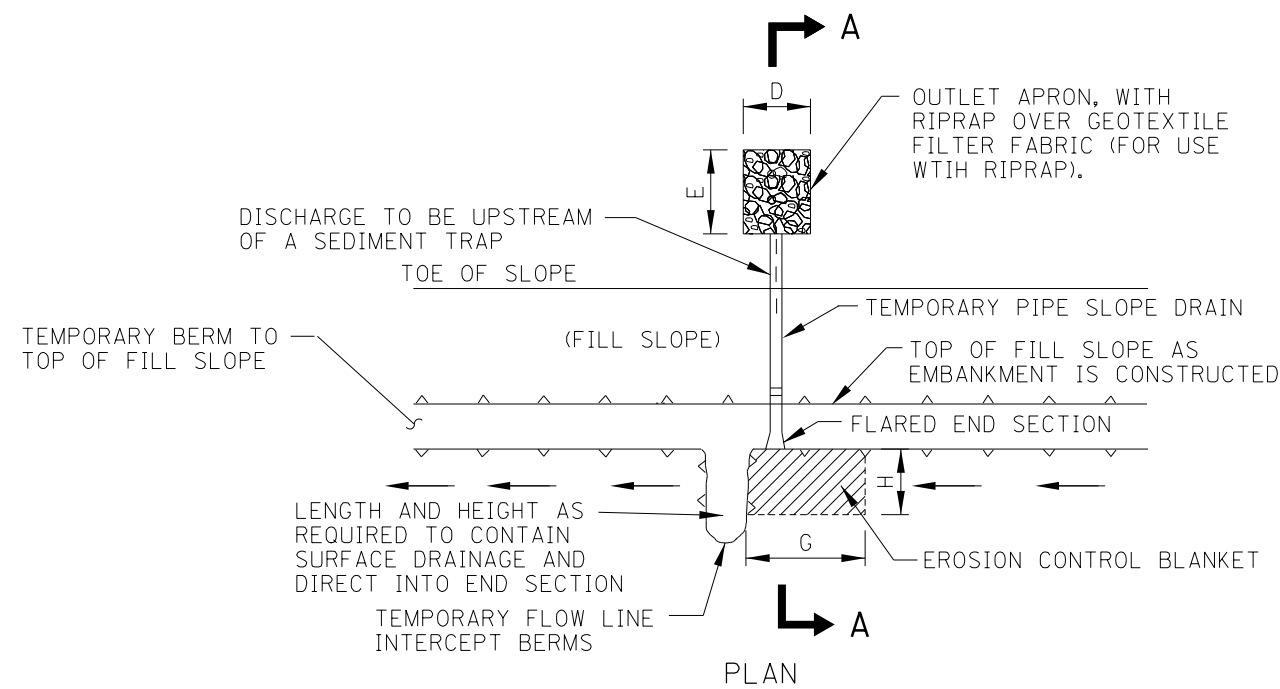
Illinois Tollway Base Sheet Revisions			
Section M	Base Sheet Drawings		
	Drawing	Modification Summary	Effective: 03-31-2016
	All	The electronic (pdf) version of the Standard Drawing are now made searchable (text).	
Erosion Sediment Control (ESC)-Series 200			
M-ESC-205	Sediment Basin Dewatering Device		
	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 dxv 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.		
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.		
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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-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



TEMPORARY PIPE SLOPE DRAIN

NOTES:

1. ALL TEMPORARY PIPE SLOPE DRAINS TO DISCHARGE INTO THE BACK OF SEDIMENT TRAPS, INTO SEDIMENT BASINS OR DITCHES DISCHARGING INTO TRAPS OR BASINS.
2. GEOTEXTILE SHALL BE PLACED AROUND THE FLARE END SECTION.
3. AN EROSION CONTROL BLANKET TO BE INSTALLED AT THE FLARE END SECTION EXTENDING ALONG THE TEMPORARY FLOW LINE.
4. TEMPORARY PIPE SLOPE DRAINS WILL BE SIZED AND SPACED ALONG THE FILL TO ADEQUATELY HANDLE THE RUNOFF FROM THE CONTRIBUTING AREA. A MINIMUM TWO TEMPORARY PIPE SLOPE DRAINS WILL BE PLACED IN EVERY SAG.
5. THE PIPE SHALL BE INSTALLED WITH WATER-TIGHT CONNECTING BANDS AND SHALL BE SECURELY ANCHORED BY HOLD DOWN STAKES AND CABLES.
6. STAPLES SHALL BE USED TO ANCHOR GEOTEXTILE AND EROSION CONTROL BLANKET IN CONFORMANCE TO MANUFACTURER'S REQUIREMENTS.
7. THE OUTLET RIPRAP APRON PROTECTION SHALL BE BASED ON THE PIPE DIAMETER AND DISCHARGE VELOCITY OF STORMWATER FLOWS.
8. REFERENCE DESIGN CRITERIA:
ILLINOIS URBAN MANUAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL.
9. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

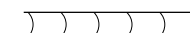
THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS		VALUES
DRAINAGE AREA/SLOPE DRAIN	X (ACRES)	
PIPE SLOPE DRAIN DIAMETER	A (INCHES)	
PIPE SLOPE DRAIN SPACING	S (FEET)	
BERM AT INLET TOP WIDTH	B (FEET)	
BERM AT INLET HEIGHT	C (FEET)	
OUTLET APRON WIDTH	D (FEET)	
OUTLET APRON LENGTH	E (FEET)	
OUTLET APRON DEPTH	F (FEET)	
OUTLET APRON RIPRAP	GRADATION	
EROSION CONTROL BLANKET LENGTH	G (FEET)	
EROSION CONTROL BLANKET WIDTH	H (FEET)	

NOTE TO DESIGNER

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STANDARD SYMBOL

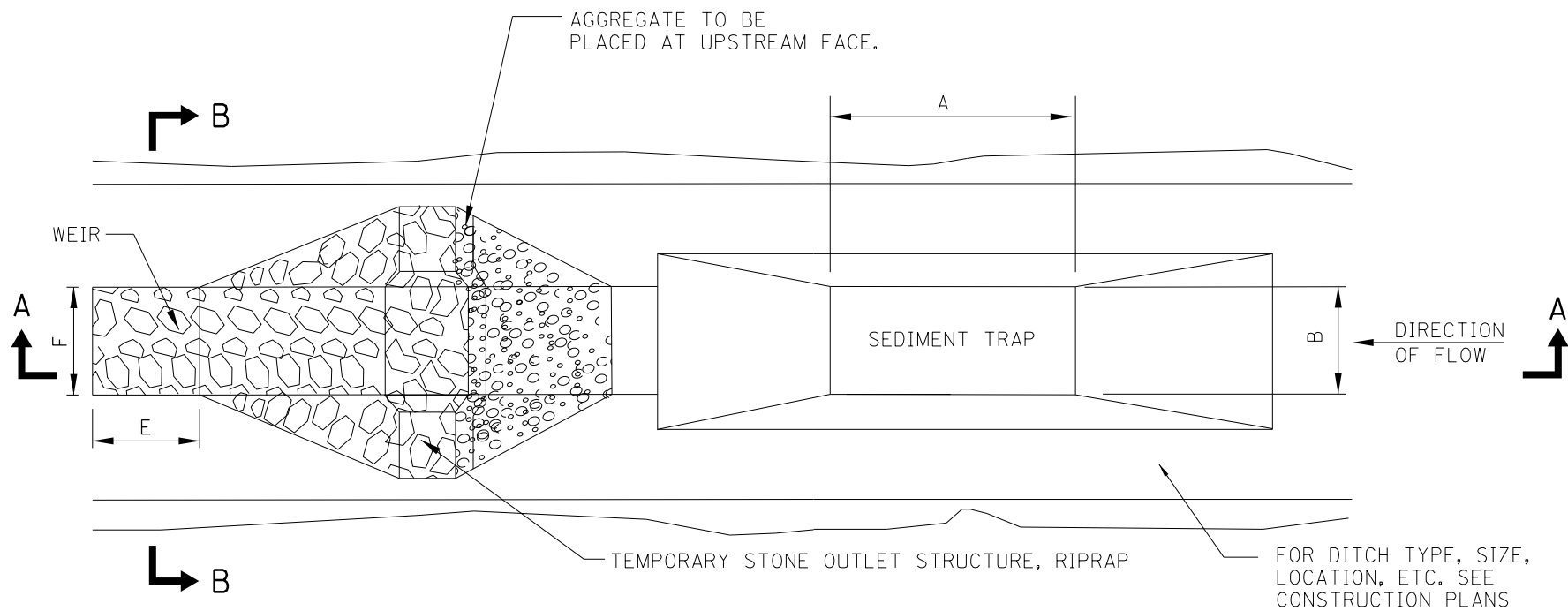


M-ESC-200

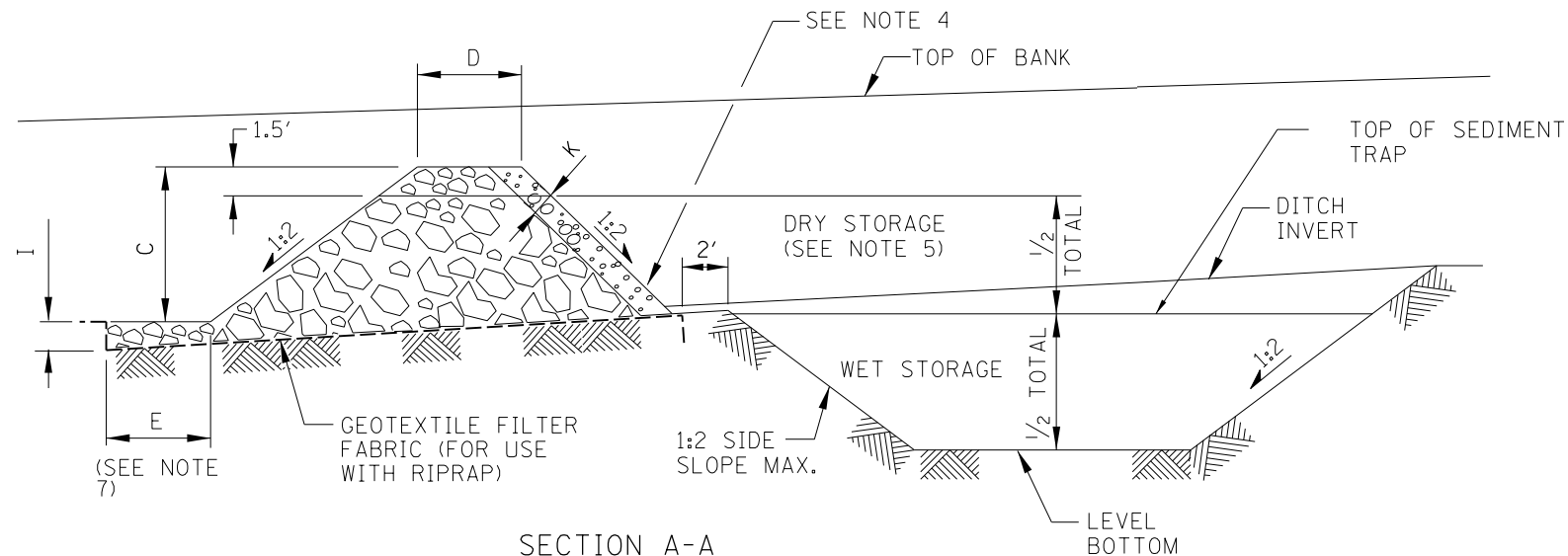


TEMPORARY PIPE
SLOPE DRAIN

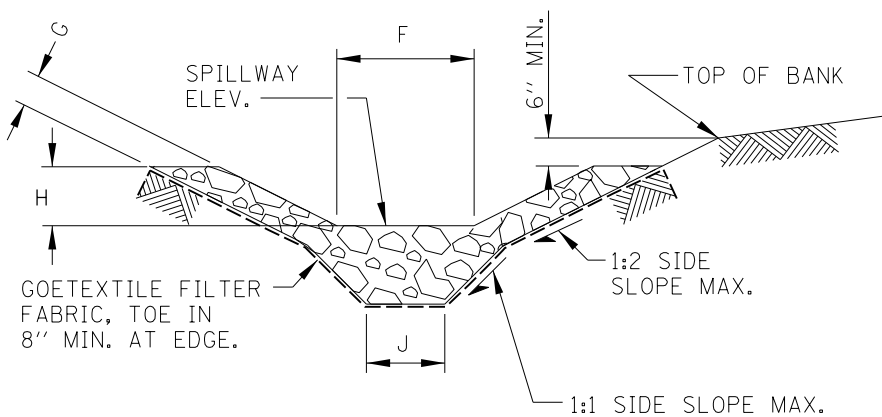
DATE
2-7-2012



PLAN



SECTION A-A



SECTION B-B

NOTES:

1. STONE OUTLET STRUCTURES TO BE USED IN EXISTING, PROPOSED AND TEMPORARY DITCHES OF ALL TYPES.
2. THE STONE OUTLET STRUCTURES SHALL BE REPLACED DUE TO WASHOUT, CONSTRUCTION TRAFFIC DAMAGE OR SILT ACCUMULATION. THE SILT SHALL BE CLEANED OUT WHEN WET STORAGE PORTION OF TRAP IS 50% FULL.
3. A LAYER OF AGGREGATE SHALL BE PLACED AGAINST THE UPSTREAM FACE OF THE TEMPORARY STONE OUTLET STRUCTURE.
4. THE DETENTION STORAGE SHALL BE COMPOSED OF EQUAL VOLUMES OF "WET" AND "DRY" STORAGE AREAS. HALF THE DETENTION STORAGE SHALL BE BELOW THE PERMEABLE FILL.
5. THE MINIMUM LENGTH TO WIDTH RATIO OF SEDIMENT TRAP SHALL BE 2:1.
6. THE SPILLWAY WEIR SHALL BE DETERMINED BY THE DRAINAGE RUNOFF FROM THE CONTRIBUTING AREA.
7. REFERENCE DESIGN CRITERIA:
ILLINOIS URBAN MANUAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL
8. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

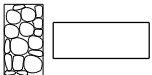
THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS		VALUES
DRAINAGE AREA	X (ACRES)	
SEDIMENT TRAP: STORAGE CAPACITY	V (CU. YD.)	
WET DETENTION STORAGE	$\frac{1}{2}V$ (CU. YD.)	
DRY DETENTION STORAGE	$\frac{1}{2}V$ (CU. YD.)	
SEDIMENT TRAP LENGTH	A (FEET)	
SEDIMENT TRAP WIDTH	B (FEET)	
STONE OUTLET STRUCTURE HEIGHT	C (FEET)	
STONE OUTLET STRUCTURE TOP WIDTH	D (FEET)	
WEIR LENGTH	E (FEET)	
WEIR TOP WIDTH	F (FEET)	
WEIR SIDE SLOPE THICKNESS	G (FEET)	
WEIR SIDE SLOPE HEIGHT	H (FEET)	
WEIR DEPTH	I (FEET)	
WEIR BASE WIDTH	J (FEET)	
RIPRAP	GRADATION	
AGGREGATE	GRADATION	
STONE OUTLET AGGREGATE THICKNESS	K (FEET)	

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.

STANDARD SYMBOL

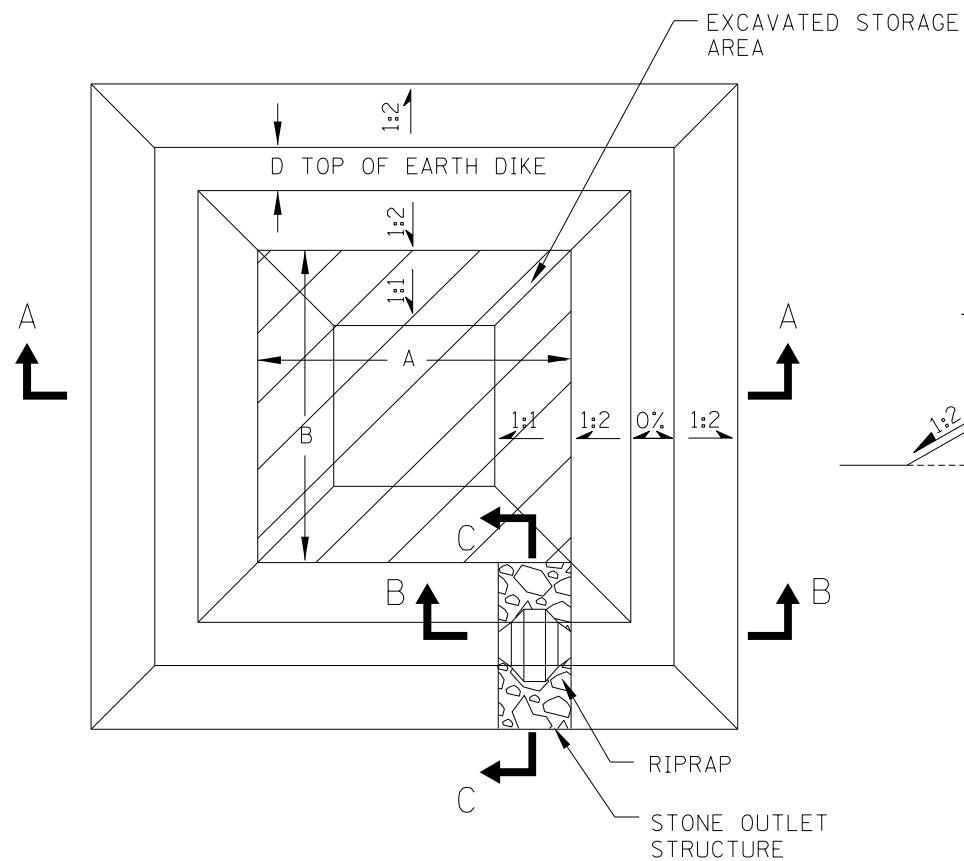


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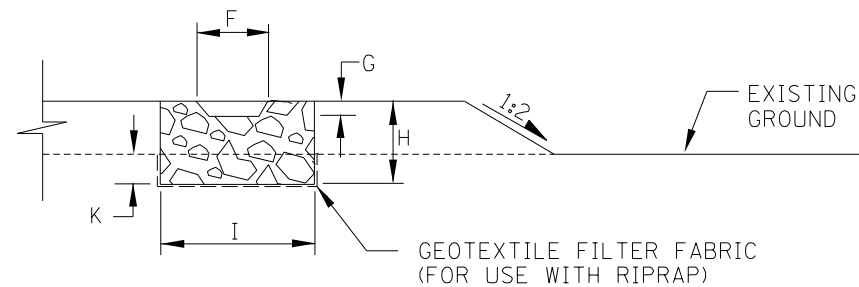


STONE OUTLET STRUCTURE
SEDIMENT TRAP

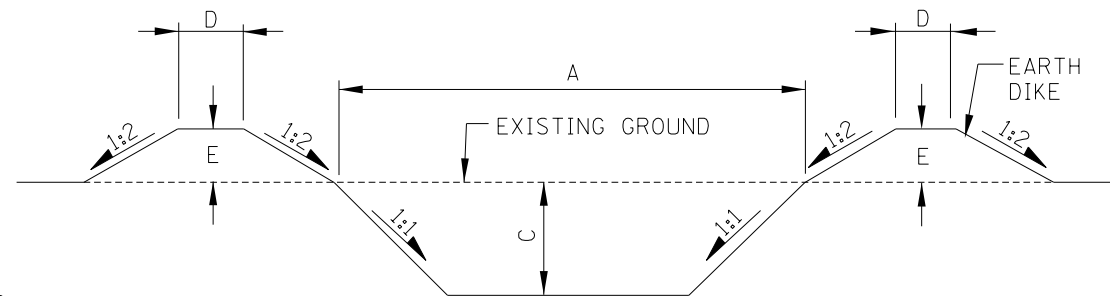
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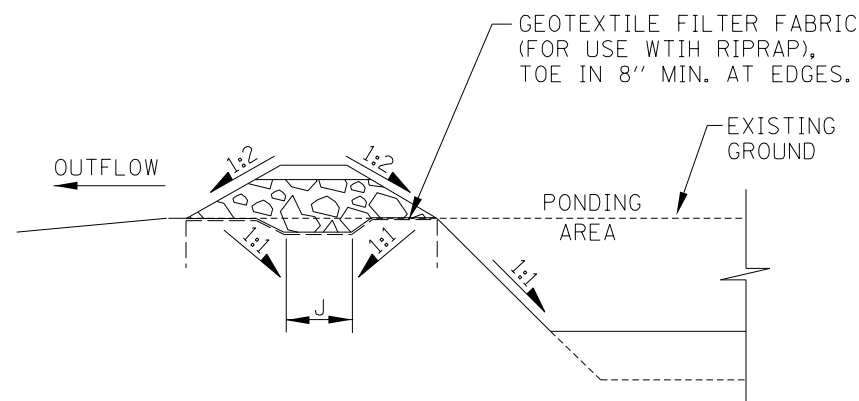
PLAN VIEW



SECTION B-B



SECTION A-A



SECTION C-C

NOTES:

1. ANY DEWATERING OF THE CONSTRUCTION AREA SHALL BE FILTERED THROUGH A DEWATERING BASIN PRIOR TO ENTERING RECEIVING WATERS.
2. PUMPING INTO THESE BASINS SHALL CEASE WHEN THE EFFLUENT FROM THE BASIN BECOMES SEDIMENT LADEN. SURFACE FLOWS SHALL BE DIVERTED AROUND THIS DEVICE.
3. ONCE THE DEWATERING BASIN BECOMES FILLED TO $\frac{1}{2}$ OF THE EXCAVATED DEPTH, ACCUMULATED SEDIMENT SHALL BE REMOVED.
4. THE OUTFALL FROM THE BASIN(S) SHALL HAVE A STABILIZED CONVEYANCE TO RECEIVING WATERS.
5. REFERENCE DESIGN CRITERIA:
ILLINOIS URBAN MAUNAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL.
6. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS		VALUES
STORAGE CAPACITY	V (CU. YD.)	
BASIN TOP WIDTH	A (FEET)	
BASIN TOP LENGTH	B (FEET)	
BASIN DEPTH	C (FEET)	
EARTH DIKE TOP WIDTH	D (FEET)	
EARTH DIKE HEIGHT	E (FEET)	
STONE OUTLET STRUCTURE RIPRAP	GRADATION	
STONE OUTLET SPILLWAY TOP WIDTH	F (FEET)	
STONE OUTLET SPILLWAY DEPTH	G (FEET)	
STONE OUTLET STRUCTURE HEIGHT	H (FEET)	
STONE OUTLET BASE WIDTH	I (FEET)	
STONE OUTLET BASE LENGTH	J (FEET)	
STONE OUTLET BASE DEPTH	K (FEET)	

NOTE TO DESIGNER

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STANDARD SYMBOL

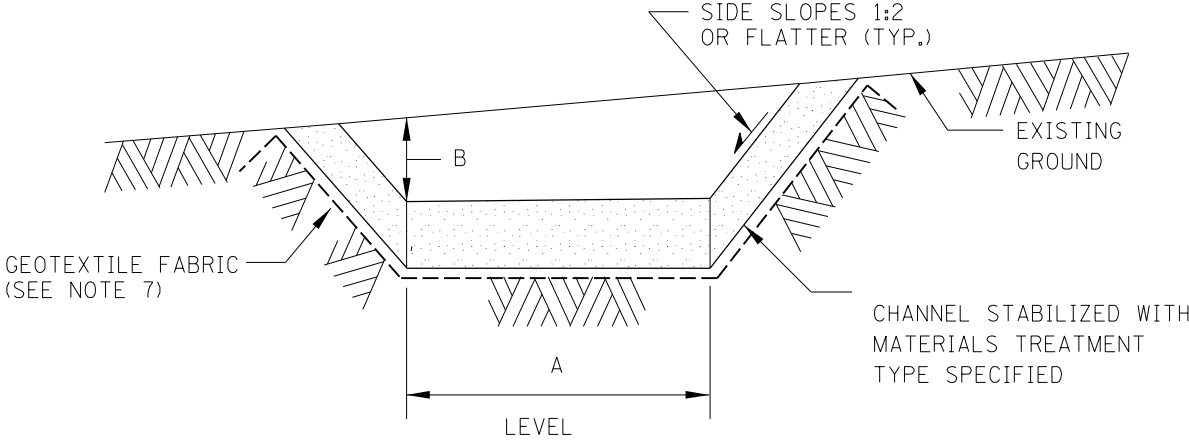
DB

M-ESC-202



DEWATERING
BASIN

DATE
2-7-2012



CROSS-SECTION

NOTES:

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS-SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE, SHALL BE STABILIZED.
7. CHANNEL STABILIZATION TYPE TO BE DETERMINED BY CHANNEL GRADE (%) AND DRAINAGE AREA INTO THE TEMPORARY SWALE.
8. WIDTH OF FLOW CHANNEL TO BE SIZED FOR DRAINAGE AREA INTO THE TEMPORARY SWALE.
9. REFERENCE DESIGN CRITERIA:
ILLINOIS URBAN MANUAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL.
10. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS	DATA	VALUES
DRAINAGE AREA	X (ACRES)	
FLOW CHANNEL WIDTH	A (FEET)	
FLOW CHANNEL DEPTH	B (FEET)	
CHANNEL GRADE	%	
CHANNEL STABILIZATION	TREATMENT TYPE	

NOTE TO DESIGNER

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STANDARD SYMBOL

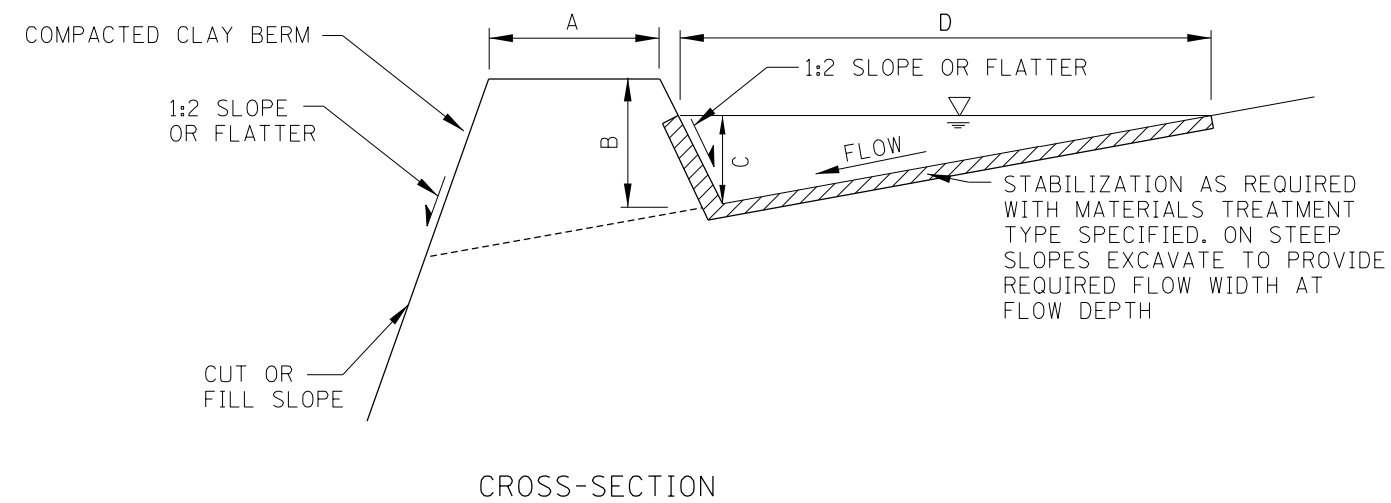


M-ESC-203



TEMPORARY
SWALE

DATE
2-7-2012



NOTES:

1. ALL DIKES SHALL BE COMPACTED.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
7. STABILIZATION OF FLOW AREA ALONG DIVERSION DIKE TO BE DETERMINED BY CHANNEL GRADE (%) AND DRAINAGE AREA INTO DIVERSION DIKE.
8. DIVERSION DIKE AND EMBANKMENT FLOW STABILIZATION DIMENSION TO BE SIZED FOR DRAINAGE AREA INTO DIVERSION DIKE.
9. REFERENCE DESIGN CRITERIA:
ILLINOIS URBAN MANUAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL.
10. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS		VALUES
DRAINAGE AREA	X (ACRES)	
WIDTH OF DIKE	A (FEET)	
HEIGHT OF DIKE	B (FEET)	
CHANNEL FLOW HEIGHT	C (FEET)	
CHANNEL FLOW WIDTH	D (FEET)	
CHANNEL GRADE	%	
CHANNEL STABILIZATION	TREATMENT TYPE	

NOTE TO DESIGNER

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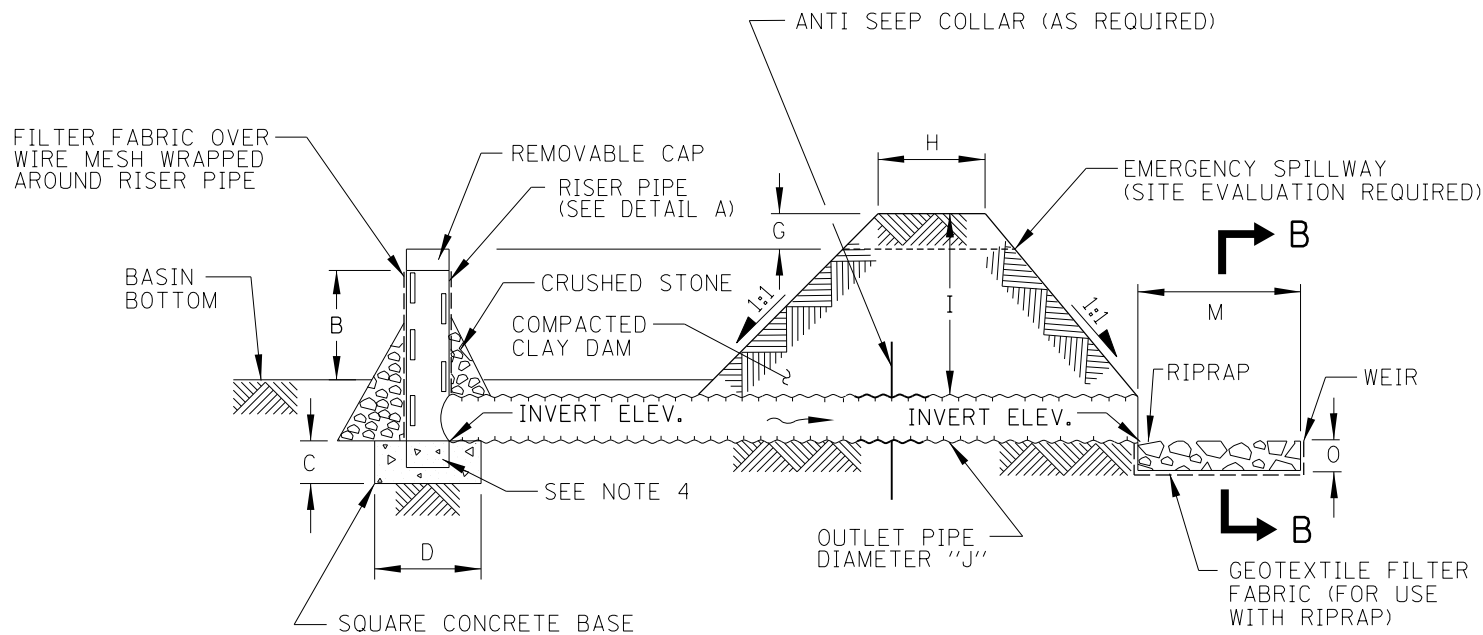


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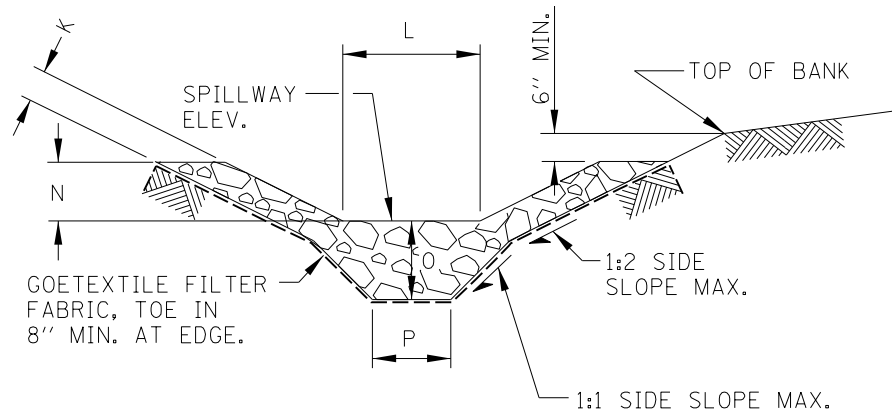


DIVERSION
DIKE

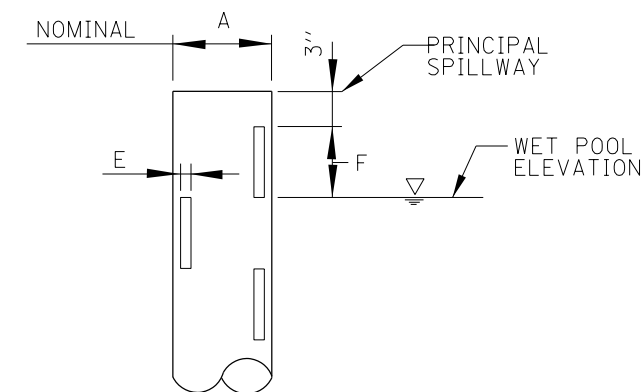
DATE
2-7-2012



SECTION ON CENTERLINE



SECTION B-B



DETAIL A
RISER PIPE-SLOTTED INLET

NOTES:

1. OUTLET PIPE AND SLOTTED RISER SHALL BE FABRICATED FROM CORRUGATED METAL, SMOOTH STEEL OR PVC.
2. SLOTS SHALL BE CUT CLEANLY AND DEBURRED. ENDS OF SLOTS MAY BE ROUND OR SQUARE.
3. ROWS OF VERTICAL SLOTS TO BE CENTERED AND PLACED BASED ON RISER DIAMETER.
4. FABRICATED OR STANDARD ELBOW; FABRICATED OR STANDARD TEE WITH THE PIPE OR PLUG IN UPSTREAM END; OR STANDARD TEE WITH ONE END EMBEDDED IN CONCRETE.
5. THE RISER PIPE AND DRAIN PIPE TO BE SIZED TO CARRY THE PEAK IN FLOW PER DESIGN STORM CRITERIA.
6. HOLES MAY BE SUBSTITUTED FOR SLOTS IN RISER PIPE. PROVIDE THE REQUIRED NUMBER OF HOLES PER FOOT OF RISER ARE FOR SPECIFIED DIAMETER OF RISER PIPE.
7. AN ALTERNATE TO THE PERFORATED RISER PIPE IS A SKIMMER DEVICE.
8. SEDIMENT TO BE REMOVED WHEN BASIN IS 50% FULL.
9. FILTER FABRIC OVER WIRE MESH SHALL BE WRAPPED AROUND THE RISER STAND PIPE.
10. REFERENCE DESIGN CRITERIA: ILLINOIS URBAN MANUAL AND IDOT BUREAU OF DESIGN AND ENVIRONMENTAL MANUAL.
11. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

THE DESIGNER SHALL DESIGN THE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURE SHOWN ON THIS SHEET. DESIGN VALUES SHALL BE INSERTED INTO THE TABLE.

DESIGN ELEMENTS		VALUES
STORAGE VOLUME	V (CU. YD.)	
CLAY DAM TOP WIDTH	H (FEET)	
CLAY DAM HEIGHT	I (FEET)	
INLET CAPACITY OF RISER PIPE	Q (CU. FT./SEC.)	
VERTICAL RISER PIPE DIAMETER	A (FEET)	
VERTICAL RISER PIPE HEIGHT	B (FEET)	
RISER CONCRETE BASE DEPTH	C (FEET)	
RISER CONCRETE WIDTH/LENGTH	D (FEET)	
SLOTTED INLETS	X (NUMBER)	
SLOTTED INLET WIDTH	E (INCHES)	
SLOTTED INLET LENGTH	F (FEET)	
HORIZONTAL OUTLET PIPE DIAMETER	J (FEET)	
ANTI SEEP COLLAR PIPE DIAMETER	R (FEET)	
FREEBOARD HEIGHT	G (FEET)	
CRUSHED STONE	GRADATION	
WEIR LENGTH	M (FEET)	
WEIR TOP WIDTH	L (FEET)	
WEIR SIDE SLOPE THICKNESS	K (FEET)	
WEIR SIDE SLOPE HEIGHT	N (FEET)	
WEIR DEPTH	O (FEET)	
WEIR BASE WIDTH	P (FEET)	
RIPRAP	GRADATION	

NOTE TO DESIGNER

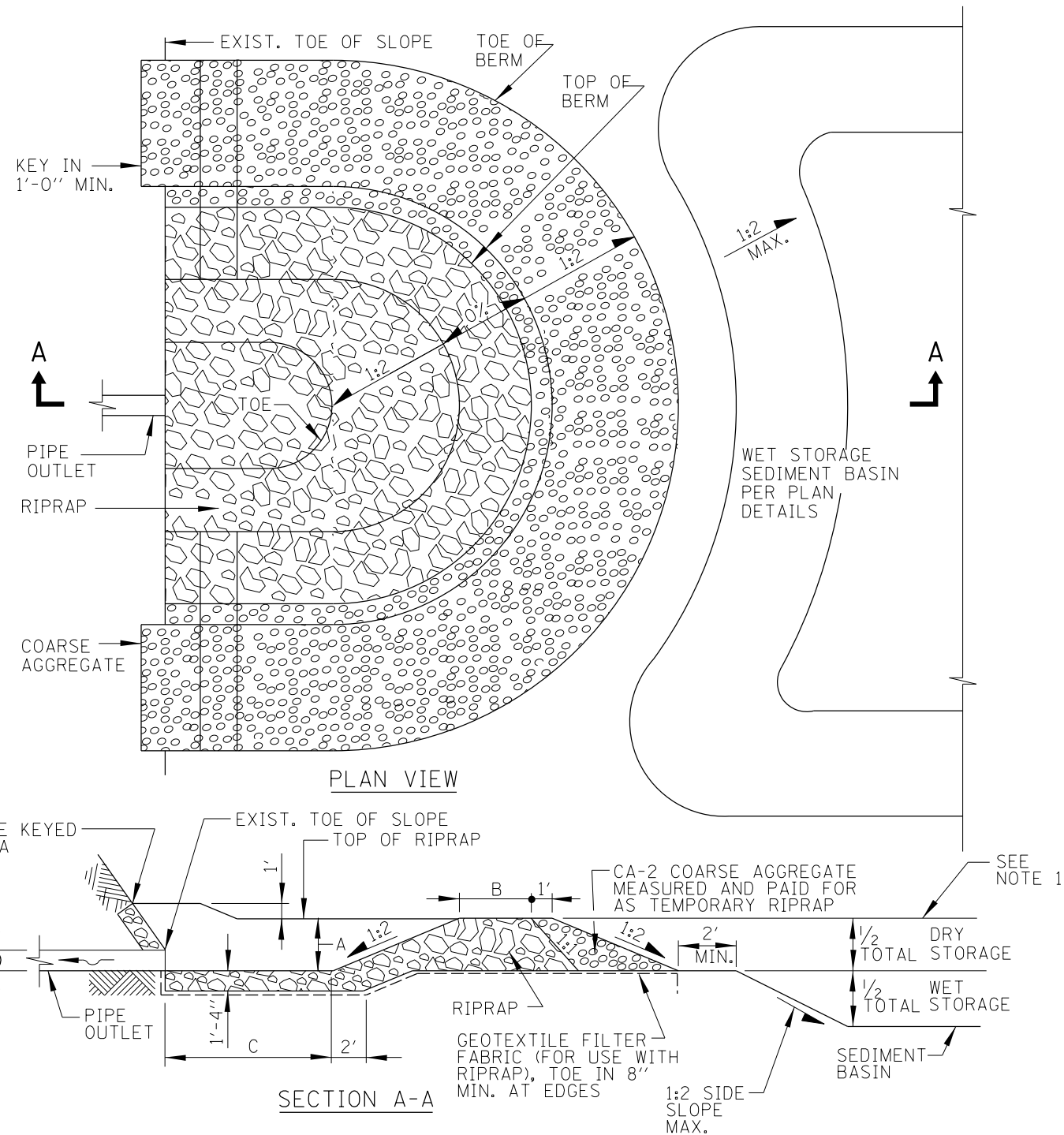
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M-ESC-205



SEDIMENT BASIN
DEWATERING DEVICE

DATE
3-31-2016



NOTES:

1. WHEN SEDIMENT BASIN AGGREGATE BERM IS USED FOR OUTLET CONTROL, THE DETENTION STORAGE SHALL BE COMPOSED OF EQUAL VOLUMES OF "WET" AND "DRY" STORAGE AREAS. HALF THE DETENTION STORAGE SHALL BE BELOW THE PERMEABLE FILL. DRAINAGE AREA INCLUDES BOTH ON-SITE AND OFF-SITE TRIBUTARY AREAS.
2. TO MINIMIZE EXCAVATION, THE BOTTOM OF THE WET STORAGE BASIN MAY BE DESIGNED AT THE PIPE OUTLET INVERT ELEVATION. PROVIDE COMPACTED CLAY DAM BELOW AGGREGATE BERM.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED. THE AGGREGATE BERM SHALL BE REPLACED IF WASHED OUT, DAMAGED BY CONSTRUCTION OR SILT ACCUMULATION. THE SILT SHALL BE CLEANED OUT WHEN THE WET STORAGE POOL PORTION OF BASIN IS 50% FULL.
4. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

NOTE:

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DESIGN ELEMENTS		VALUES
DRAINAGE AREA	X (ACRES)	
SEDIMENT BASIN: STORAGE CAPACITY	V (CU. YD.)	
WET DETENTION STORAGE	$\frac{1}{2}V$ (CU. YD.)	
DRY DETENTION STORAGE	$\frac{1}{2}V$ (CU. YD.)	
AGGREGATE BERM HEIGHT	A (FEET)	
AGGREGATE BERM TOP WIDTH	B (FEET)	
OUTLET WEIR LENGTH	C (FEET)	
OUTLET PIPE DIAMETER	D (FEET)	
RIPRAP	GRADATION	
COURSE AGGREGATE	GRADATION	

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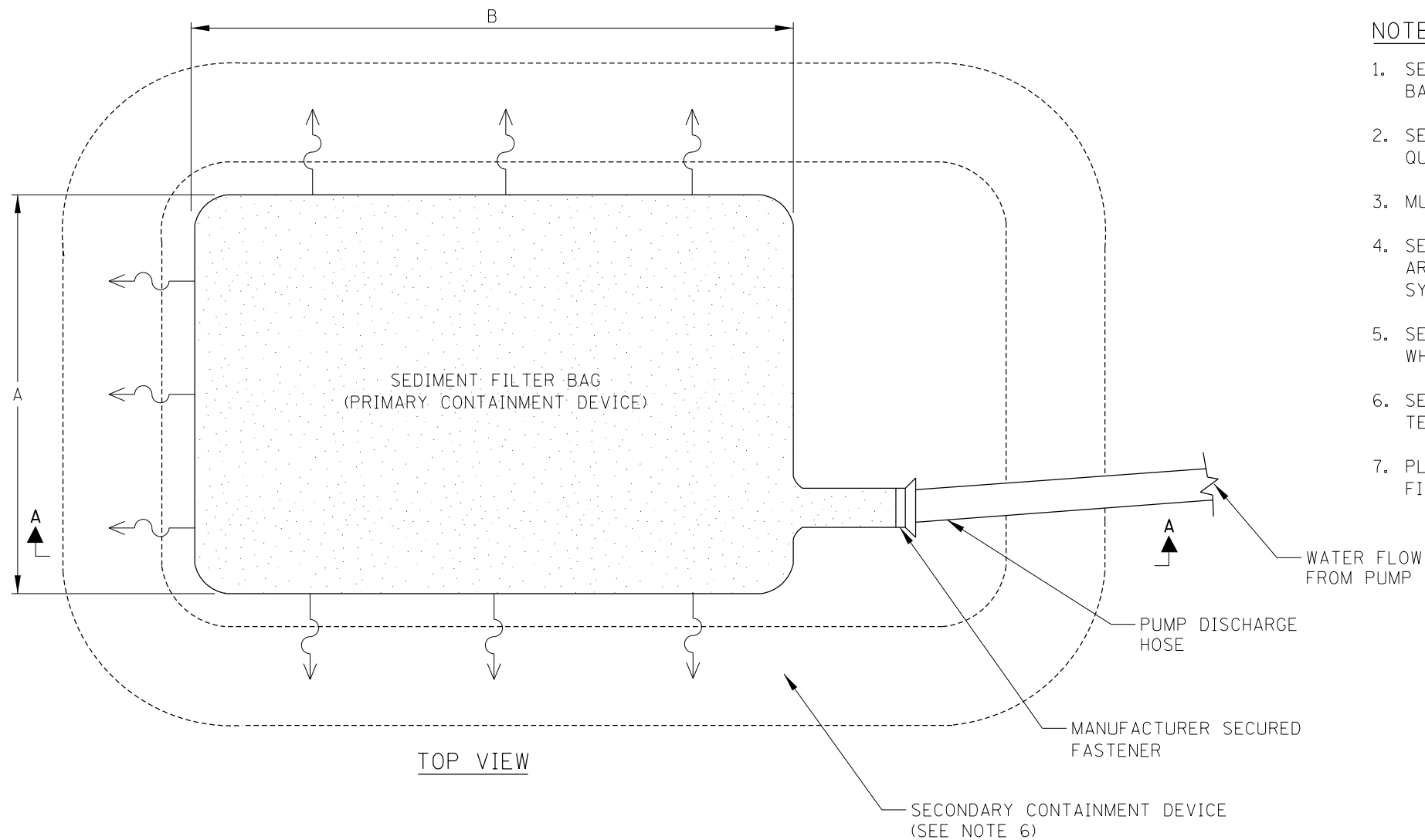


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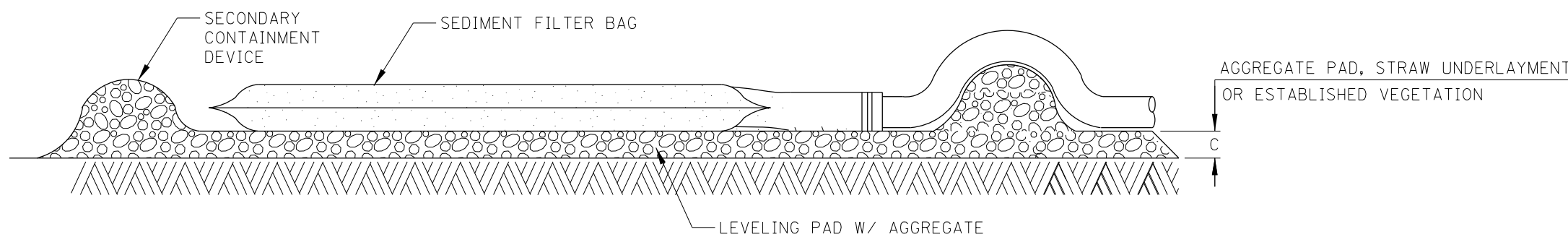


SEDIMENT BASIN
AGGREGATE BERM

DATE
2-7-2012



TOP VIEW



SIDE VIEW
SECTION A-A

- NOTES:**
1. SEDIMENT FILTER BAGS TO BE CONSIDERED AN ALTERNATE FOR SITES WHERE SEDIMENT BASIN INSTALLATION IS PROBLEMATIC.
 2. SEDIMENT FILTER BAGS TO BE SIZED BASED ON VOLUME OF WATER BEING PUMPED, QUANTITY AND TYPE OF SEDIMENT AND THE PERMITIVITY OF THE SPECIFIC BAG SIZE.
 3. MULTIPLE DISCHARGES INTO A SINGLE BAG ARE NOT PERMITTED.
 4. SEDIMENT FILTER BAG SHALL BE ORIENTATED TO DIRECT FLOW AWAY FROM CONSTRUCTION AREA AND DISCHARGE FILTERED WATER INTO APPROVED RECEIVING AREA OR CONTAINMENT SYSTEM.
 5. SEDIMENT FILTER BAG SHALL BE REPLACED WHEN IT BECOMES 1/2 FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED DISCHARGE FLOW RATE BELOW DESIGN REQUIREMENTS.
 6. SECONDARY CONTAINMENT DEVICE SHALL BE COMPRISED OF AGGREGATE MATERIAL, TEMPORARY DITCH CHECK OR EQUIVALENT.
 7. PLACE STRAPS, CROSS CHAINS, PALLETS OR OTHER LIFTING DEVICE UNDER THE SEDIMENT FILTER BAG WHEN REPLACEMENT IS ANTICIPATED.

NOTE:
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DESIGN ELEMENTS		VALUES
STORAGE CAPACITY VOLUME	V (CU. FT.)	
SEDIMENT FILTER BAG WIDTH	A (FEET)	
SEDIMENT FILTER BAG LENGTH	B (FEET)	
PUMP FLOW RATE	X1 (GPM)	
SEDIMENT FILTER BY FLOW RATE	X2 (GPM/SQ. FT.)	
PUMP DISCHARGE HOSE DIAMETER	D (INCH)	
AGGREGATE PAD	GRADATION	
AGGREGATE PAD DEPTH	C (INCH)	
STRAW UNDERLAYMENT DEPTH	C (INCH)	

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