

**LMSD - DESIGN AND CONSTRUCTION STANDARDS
CROSSWALK DOCUMENT - STANDARD DRAWINGS
31-Aug-09**

| Standard Drawings | | | | | |
|-------------------|--------------------------|--------------------------|--|---|--|
| Tab | Section | | Title | Major Revision | Reason for Revision |
| | Original | Revised | | | |
| Std. Dwgs | Division & Section Index | Division & Section Index | Division & Section Index | Revised as necessary. | NA |
| Drainage | DC-01-00 | DC-01-01 | Catch Basin Type 1 | Revised to allow use of precast unit. | Revised to be consistent with MSD's current practice. |
| Drainage | DC-02-01 | DC-02-02 | Catch Basin Type 2 | Revised to allow use of precast unit. | Revised to be consistent with MSD's current practice. |
| Drainage | DI-01-01 | DI-01-02 | Single Curb Inlet | Revised to allow use of precast unit. | Revised to be consistent with MSD's current practice. |
| Drainage | DI-02-01 | DI-02-02 | Double Curb Inlet | Revised to allow use of precast unit. | Revised to be consistent with MSD's current practice. |
| Drainage | DI-03-01 | DI-03-02 | Precast Surface Inlet Slab for Single Frame & Grate Type 1 | No Change | NA |
| Drainage | DI-04-01 | DI-04-02 | Precast Surface Inlet Slab for Single Frame & Grate Type 2 | Minor Change | NA |
| Drainage | DI-05-01 | DI-05-02 | Precast Surface Inlet Slab for Single Frame & Grate Type 3 | Minor Change | NA |
| Drainage | DI-06-00 | DI-06-01 | 18" x 18" Yard Drain | Revised to allow use of precast unit. | Revised to be consistent with MSD's current practice. |
| Drainage | NA | DI-07-00 | 12" x 12" Yard Drain | New Standard Drawing | To provide a standard drawing for an item in common use. |
| Drainage | DG-01-01 | DG-01-02 | Curb Catch Basin - Single Frame and Grate Type 1 | Minor Change | NA |
| Drainage | DG-02-02 | DG-02-03 | Curb Catch Basin - Single Frame and Grate Type 1-L | Minor Change | NA |
| Drainage | DG-03-01 | DG-03-02 | Curb Catch Basin - Double Frame and Grate Type 2 | Minor Change | NA |
| Drainage | DG-04-02 | DG-04-03 | Curb Catch Basin - Double Frame and Grate Type 2-L | No Change | NA |
| Drainage | DG-05-00 | DG-05-01 | Curb Catch Basin - Double Frame and Grate Type 3 | Minor Change | NA |
| Drainage | DG-06-02 | DG-06-03 | Catch Basin - Double Frame and Grate Type 3-L | No Change | NA |
| Drainage | DH-01-00 | DH-01-01 | Standard Headwall | Minor Change | NA |
| Drainage | DH-02-00 | DH-02-01 | Ell Headwall | Minor Change | NA |
| Drainage | DH-03-00 | DH-03-01 | "U" - Shaped Headwall | Minor Change | NA |
| Drainage | DE-01-00 | DE-01-01 | Flared End Section for R.C.P. | No Change | NA |
| Drainage | DE-02-00 | DE-02-01 | Flared End Section for Corrugated Metal Pipe | No Change | NA |
| Drainage | DE-03-00 | DE-03-01 | End Treatment for Driveway Pipe | Minor Change | NA |
| Drainage | DD-01-00 | DD-01-01 | Earth "V" Ditch | No Change | NA |
| Drainage | DD-02-00 | DD-02-01 | Paved "V" Ditch | Minor Change | NA |
| Drainage | DD-03-00 | DD-03-01 | Sloped Bottom Paved Ditch | Minor Change | NA |
| Drainage | DD-04-00 | DD-04-01 | Paved Ditch Intersection | Minor Change | NA |
| Drainage | DD-05-00 PAGE 1 | DD-05-01 Page 1 | Schematic Paved Channel Outlet | Standard Drawing revised to include a curtain wall at the end of the paved ditch. | To improve the design of the paved ditch to prevent movement and/or separation of the ditch. |
| Drainage | DD-05-00 PAGE 2 | DD-05-01 Page 2 | Paved Channel Outlet | Minor Change | NA |
| Drainage | DP-01-00 | DP-01-01 | Slope Paving Block | Minor Change | NA |
| Drainage | DS-01-00 | DS-01-01 | Drain Under Sidewalk Type 1 | Minor Change | NA |
| Drainage | DS-02-00 | DS-02-01 | Drain Under Sidewalk Type 2 | Minor Change | NA |
| Drainage | DT-01-00 | DT-01-01 | Trap for Circular Catch Basin or Manhole | Drawing revised to reflect the current products used for this application. | The product originally shown on the previous standard drawing is no longer used. |
| Sanitary | SD-01-00 | SD-01-01 | P.V.C. Vertical Drop Inlet | No Change | NA |
| Sanitary | SD-02-00 | SD-02-01 | P.V.C. Slanting Drop Inlet | No Change | NA |
| Sanitary | SD-03-00 | NA | V.C.P. Vertical Drop Inlet | Standard Drawing deleted. | MSD no longer allows the use of VCP. |
| Sanitary | SD-04-00 | NA | V.C.P. Slanting Drop Inlet | Standard Drawing deleted. | MSD no longer allows the use of VCP. |
| Sanitary | SD-05-00 | SD-05-01 | Internal Drop Inlet | Minor changes | NA |
| Sanitary | SS-01-00 | SS-01-01 | Stack Connection To 30" or Smaller Pipe | Minor changes | NA |
| Sanitary | SS-02-00 | SS-02-01 | Stack Connection To 33" or Larger Pipe | Minor changes | NA |

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| Sanitary | SP-01-00 | SP-01-01 | Property Service Connection | Added note requiring the installation of detectable marking tape. | Consistency with standard specifications. |
| Sanitary | SC-01-01 | SC-01-02 | One Way Cleanout | Added specification for pipe type and dimensions. | Previously not indicated. |
| Sanitary | SC-02-01 | SC-02-02 | Two Way Cleanout | Added specification for pipe type and dimensions. | Previously not indicated. |
| Sanitary | SG-01-01 | SG-01-02 | 1000 Gallon Concrete Grease Trap | Revisions to inlet, internal and outlet piping. | Revised to meet current standards as set by MSD's IWD. |
| Sanitary | SF-01-00 | SF-01-01 | Force Main to Manhole | Minor changes | NA |
| Sanitary | SM-01-01 | SM-01-02 | Monitoring Station for Industrial Waste (36" Sewer and Under) | Minor changes | NA |
| Sanitary | SM-02-00 | SM-02-01 | Gauging Manhole | Minor changes | NA |
| Sanitary | SM-03-00 | NA | Parshall Flume | Standard Drawing deleted. | Not needed. |
| Sanitary | SM-04-00 | NA | Parshall Flume | Standard Drawing deleted. | Not needed. |
| Sanitary | SM-05-00 | NA | Parshall Flume | Standard Drawing deleted. | Not needed. |
| General | GM-01-03 | GM-01-04 | Precast Manhole - Type 1 Pages 1 & 2 | Standard Drawing was revised to include the changes required in the Design Manual, including the requirements for MH cover insert, exterior joint wrap, base sections shall be monolithic and installation of flexible push-on joint 3' from MH for settlement. | Revised to match Design Manual and to reduce the potential for I/I entering the MH. |
| General | GM-02-03 | GM-02-04 | Precast Manhole - Type 2 Pages 1 & 2 | Standard Drawing was revised to include the changes required in the Design Manual, including the requirements for MH cover insert, exterior joint wrap, base sections shall be monolithic and installation of flexible push-on joint 3' from MH for settlement. | Revised to match Design Manual and to reduce the potential for I/I entering the MH. |
| General | GM-03-03 | GM-03-04 | Precast Manhole - Type 3 Pages 1 & 2 | Standard Drawing was revised to include the changes required in the Design Manual, including the requirements for MH cover insert, exterior joint wrap, base sections shall be monolithic and installation of flexible push-on joint 3' from MH for settlement. | Revised to match Design Manual and to reduce the potential for I/I entering the MH. |
| General | GM-04-00 | GM-04-01 | Manhole Channelization | Standard Drawing was revised to require a minimum elevation drop across new manholes and larger diameter manholes of 0.1 feet for changes in pipe direction greater than 45 degrees and that the depth of the bench be 1.1 times the pipe diameter. | Revised to improve flow characteristics through the MH. |
| General | GM-05-02 | GM-05-03 | Standard Manhole Frame and Lid | No Change | NA |
| General | GM-06-00 | GM-06-01 | Watertight Manhole Frame and Lid | No Change | NA |
| General | GM-07-00 | GM-07-01 | Precast Concrete Collar | No Change | NA |
| General | GM-08-01 | GM-08-02 | Trapped Manhole or Catch Basin - Precast | Minor Change | NA |
| General | GC-01-00 | GC-01-01 | Crushed Stone Cradle | No Change | NA |
| General | GC-02-00 | GC-02-01 | Crushed Stone Encasement | No Change | NA |
| General | GC-03-00 | GC-03-01 | Concrete Cap | No Change | NA |
| General | GC-04-00 | GC-04-01 | Concrete Encasement | No Change | NA |
| General | GS-01-00 | GS-01-01 | Stormwater Advertisement Sign | No Change | NA |
| General | GS-02-00 | GS-02-01 | Wastewater Advertisement Sign | No Change | NA |
| General | GG-01-00 | GG-01-01 | Guard Post Type A | No Change | NA |
| General | GG-02-00 | GG-02-01 | Guard Post Type B | No Change | NA |
| General | GG-03-00 | GG-03-01 | Guard Post Layout | No Change | NA |
| General | GG-04-00 | GG-04-01 | Standard Pipe Gate | No Change | NA |
| General | GB-01-00 | GB-01-01 | Bore/Tunnel Section | Minor revisions. | Revised to be consistent with the Design Manual. |
| Pavement | PC-01-00 | PC-01-01 | Vertical Curb and Gutter | Minor Change | NA |
| Pavement | PC-02-00 | PC-02-01 | Roll Curb and Gutter | No Change | NA |
| Pavement | PC-03-00 | PC-03-01 | Curb to Catch Basin Transition | No Change | NA |
| Pavement | PR-01-00 | PR-01-00 | Concrete Pavement Restoration | No Change | NA |
| Pavement | PR-02-01 | PR-02-01 | Asphalt Pavement Restoration | No Change | NA |
| Pavement | PR-03-01 | PR-03-01 | Asphalt Pavement Restoration with Overlay | No Change | NA |

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| Pavement | PR-04-00 | PR-04-00 | Trench Backfill for Pipe with a Roadway Embankment | Minor Change | NA |
| Pavement | PD-01-00 | PD-01-00 | Concrete Driveway with Pipe | Added contraction control joints to the driveway construction and added 4" of DGA under the driveway. | Revised to improve the quality of the driveway replacement and minimize cracking. |
| Pavement | PD-02-00 | PD-02-00 | Asphalt Driveway with Pipe | No Change | NA |
| Pavement | PD-03-00 | PD-03-01 | Concrete Driveway with Trench Drain | Added contraction control joints to the driveway construction and added 4" of DGA under the driveway. | Revised to improve the quality of the driveway replacement and minimize cracking. |
| Pavement | PD-04-00 | PD-04-01 | Concrete Driveway with Swale | Added contraction control joints to the driveway construction and added 4" of DGA under the driveway. | Revised to improve the quality of the driveway replacement and minimize cracking. |
| Erosion Control | EC-01-01 | EC-01-01 | Restoration of Channels with Unconsolidated Beds over Soil | No Change | NA |
| Erosion Control | EC-02-01 | EC-02-01 | Restoration of Channels with Unconsolidated Beds over Rock | No Change | NA |
| Erosion Control | EC-03-01 | EC-03-01 | Restoration of Channels with Rock Bed | No Change | NA |
| Erosion Control | EC-04-00 PAGE 1 | EC-04-00 PAGE 1 | Surface Roughening Method 1 of 3 | No Change | NA |
| Erosion Control | EC-04-00 PAGE 2 | EC-04-00 PAGE 2 | Surface Roughening Method 1 of 3 | Roughened areas by tracking must be seeded and mulched immediately (rather than 14 days). | Consistency with Design Manual. |
| Erosion Control | EC-05-00 PAGE 1 | EC-05-00 PAGE 1 | Surface Roughening Method 2 of 3 | No Change | NA |
| Erosion Control | EC-05-00 PAGE 2 | EC-05-00 PAGE 2 | Surface Roughening Method 2 of 3 | Graded areas should be seeded immediately (rather than 14 days). | Consistency with Design Manual. |
| Erosion Control | EC-06-00 PAGE 1 | EC-06-00 PAGE 1 | Surface Roughening Method 3 of 3 | No Change | NA |
| Erosion Control | EC-06-00 PAGE 2 | EC-06-00 PAGE 2 | Surface Roughening Method 3 of 3 | Graded areas should be seeded immediately (rather than 14 days). | Consistency with Design Manual. |
| Erosion Control | EC-07-00 PAGE 1 | EC-07-00 PAGE 1 | Orientation of Netting and Matting | No Change | NA |
| Erosion Control | EC-07-00 PAGE 2 | EC-07-00 PAGE 2 | Orientation of Netting and Matting | No Change | NA |
| Erosion Control | EC-08-00 PAGE 1 | EC-08-00 PAGE 1 | Sodding | No Change | NA |
| Erosion Control | EC-08-00 PAGE 2 | EC-08-00 PAGE 2 | Sodding | Inspect every 7 days within 24 hours of rain events >0.5 inch or more precipitation. | Consistency with Design Manual. |
| Erosion Control | EF-01-01 PAGE 1 | EF-01-01 PAGE 1 | Filter Fabric Inlet Protection | No Change | NA |
| Erosion Control | EF-01-01 PAGE 2 | EF-01-01 PAGE 2 | Filter Fabric Inlet Protection | No Change | NA |
| Erosion Control | EF-03-01 PAGE 1 | EF-03-01 PAGE 1 | Stone Bag Inlet Protection | No Change | NA |
| Erosion Control | EF-03-01 PAGE 2 | EF-03-01 PAGE 2 | Stone Bag Inlet Protection | Minor Change | NA |
| Erosion Control | EF-05-01 | EF-05-01 | Straight Headwall Inlet Protection | Minor Change | NA |
| Erosion Control | EF-06-01 | EF-06-01 | Winged Headwall Inlet Protection | Minor Change | NA |
| Erosion Control | EF-07-01 | EF-07-01 | Ell Headwall Inlet Protection | Minor Change | NA |
| Erosion Control | EF-09-01 PAGE 1 | EF-09-01 PAGE 1 | Silt Fence | Minor Change | NA |
| Erosion Control | EF-09-01 PAGE 2 | EF-09-01 PAGE 2 | Silt Fence | No Change | NA |
| Erosion Control | EF-10-01 PAGE 1 | EF-10-01 PAGE 1 | Reinforced Silt Fence | No Change | NA |
| Erosion Control | EF-10-01 PAGE 2 | EF-10-01 PAGE 2 | Reinforced Silt Fence | Added Inspection and Maintenance section to page 2. | Reformatted font on page 2 and page 3 so that the drawing can be displayed on two sheets for efficiency. |
| Erosion Control | EF-10-01 PAGE 3 | NA | NA | Deleted | NA |
| Erosion Control | EF-12-01 PAGE 1 | EF-12-01 PAGE 1 | Stone Bag Check Dam in Small Ditch | No Change | NA |
| Erosion Control | EF-12-01 PAGE 2 | EF-12-01 PAGE 2 | Stone Bag Check Dam in Small Ditch | No Change | NA |
| Erosion Control | EF-13-00 PAGE 1 | EF-13-00 PAGE 1 | Block and Gravel Drop Inlet Protection | No Change | NA |
| Erosion Control | EF-13-00 PAGE 2 | EF-13-00 PAGE 2 | Block and Gravel Drop Inlet Protection | Minor Change | NA |
| Erosion Control | EF-14-00 PAGE 1 | EF-14-00 PAGE 1 | Gravel and Wire Mesh Inlet Sediment Filter | No Change | NA |
| Erosion Control | EF-14-00 PAGE 2 | EF-14-00 PAGE 2 | Gravel and Wire Mesh Inlet Sediment Filter | No Change | NA |

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| Erosion Control | EB-03-00 PAGE 1 | EB-03-00 PAGE 1 | Rock Ditch Check | Modified filter fabric installation. | Filter fabric shown installed beneath channel lining and keyed into substrate at request of MSD. Control measure more effective when filter fabric is installed as shown. |
| Erosion Control | EB-03-00 PAGE 2 | EB-03-00 PAGE 2 | Rock Ditch Check | Minor Change | NA |
| Erosion Control | ER-01-01 PAGE 1 | ER-01-01 PAGE 1 | Stabilized Construction Entrance | No Change | NA |
| Erosion Control | ER-01-01 PAGE 2 | ER-01-01 PAGE 2 | Stabilized Construction Entrance | Minor Changes | NA |
| Erosion Control | ER-01-01 PAGE 3 | ER-01-01 PAGE 3 | Stabilized Construction Entrance | No Change | NA |
| Erosion Control | ER-02-01 PAGE 1 | ER-02-01 PAGE 1 | Construction Road Stabilization Temporary Low Water Crossing | No Change | NA |
| Erosion Control | ER-02-01 PAGE 2 | ER-02-01 PAGE 2 | Construction Road Stabilization Temporary Low Water Crossing | Permit application language modified. | Added language regarding the need for a Section 401 Permit from Kentucky Division of Water for such activities. |
| Erosion Control | ER-02-01 PAGE 3 | ER-02-01 PAGE 3 | Construction Road Stabilization Temporary Low Water Crossing | No Change | NA |
| Erosion Control | ED-01-00 Page 1 | ED-01-00 Page 1 | Pump-Around Flow Diversion | Sandbag callout removed | Sandbag callout removed by request of MSD. Allows for use of other materials to construct flow diversion. |
| Erosion Control | ED-01-00 Page 2 | ED-01-00 Page 2 | Pump-Around Flow Diversion | Minor Change | NA |
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