Appendix B

STANDARD DETAILS

Manholes and Appurtenances

010 Standard Manhole
020 Pre-cast Concrete Manhole Base
030 Pre-Cast Rubber Gasket Manhole
040 Shallow Flat Top Manhole
050 Flat Top Manhole
060 Mechanical Inside Drop Manhole
070 Partitioned Inside Drop Manhole
080 Open Inside Drop Manhole
090 Inside Drop Manhole, with Bowl
100 Manhole Step
110 Suburban and Standard Manhole Frame and Cover (Sanitary)
120 Stormwater Manhole Lid
130 Water Tight Manhole Frame and Cover
140 Concrete Manhole Closure Collar
150 Manhole Chimney Seal
160 Large Pre-Cast Concrete Manhole
170 Large Pre-Cast Concrete Manhole – Bases
180 Large Pre-Cast Concrete Manhole – Types
190 Large Pre-Cast Concrete Manhole Base Slabs
200 Large Pre-Cast Concrete Manhole – Long. Base Section Reinforcement
210 Large Pre-Cast Concrete Manhole – Base Section Reinforcement 108” & 120”
220 Large Pre-Cast Concrete Manhole – Top Slabs
230 T- Top Manhole with 48” Riser
240 Water Quality Manhole (Mechanical)
250 Water Quality Manhole (Snout) A
260 Water Quality Manhole (Snout) B
270 Detention Manhole

Storm Structures

300 Gutter and Curb Inlet Catch Basin (CG – 2)
310 Gutter and Curb Inlet Catch Basin (CG – 2) Reinforcement
320 Catch Basin Frame and Grate (CG – 2)
330 Inlet Catch Basin (CG – 30)
340 Inlet Catch Basin (CG – 48)
350 Curb Inlet Manhole (CG - 48 M.H.)
360 Modified Curb Inlet Manhole (MOD.CG – 48 M.H.)
370 Top – Curb Inlet Manhole and Modified Curb Inlet Manhole (CG – 48M.H. and MOD. CG – 48 M.H.)
380 Area Drain Type II
390 Ditch Inlet
400 Ditch Inlet Frame and Grate
**Pipes**

500   Standard Cleanout  
510   Cleanout Frame and Cover  
520   Side Sewer / Side Storm Pipeline  
530   Inserta – Tee  
540   Indexed PVC Gasketed Saddle  
550   Concrete Cap  
560   Concrete Encasement / Closure Collar  
570   Concrete Anchor Wall  
580   ODOT Pipe Slope Anchor  
590   Trench Backfill Details  
600   T – Cut Asphalt Details  
610   Bore Detail  
620   Creek Crossing Restoration  

**Water Quality**

700   Water Quality Swale  
710   Water Quality Swale Construction and Maintenance Notes  
720   Outflow Control Structure  
730   Orifice Plate and Guide  
740   Chain Link Fence and Gate  
750   Concrete Spreader Detail  
760   Removable Bollard  
770   Rip Rap Specifications  
780   Tree Planting – Container/Burlapped  
790   Vegetated Corridor Signage  

**Erosion Control**

Erosion Prevention:

800   Matting Channel Installation  
805   Matting Slope Installation  
810   Plastic Sheeting  

Runoff Control:

815   Pipe Slope Drain  
820   Outlet Protection - Rip Rap  
825   Outlet Protection - Stilling Basin  
830   Surface Roughening - Cat Tracking  
835   Surface Roughening - Stair Stepping/Grooving Slopes  
840   Check Dam - Rock  
845   Check Dam - Bio Filter Bag  
850   Diversion Dike/Swale  

Sediment Control:

855   Construction Entrance
860  Oak Mats
865  Tire Wash - Manual Hose Wash
870  Tire Wash - Drive Through
875  Sediment Fence
880  Wattles
885  Wattles - Single Family Application
890  Filter Berm Rock/Brush
895  Sidewalk Subgrade
900  Inlet Protection - Type 1
905  Inlet Protection - Type 2
910  Inlet Protection - Type 3
915  Inlet Protection - Type 4
920  Inlet Protection - Type 5
925  Inlet Protection - Type 6
930  Sediment Trap
935  Sediment Basin
940  Spacing Tables
945  Standard Erosion Control Notes for Sites Less Than 1 Acre

**Pump Stations**
1001  Wastewater Pump Station and Force Main Design Data Summary Table (Page 1)
1002  Wastewater Pump Station and Force Main Design Data Summary Table (Page 2)
1003  Conceptual Site Schematic
1005  Chain Link Fence & Gate
1007  Force Main Pressure Gauge
1009  Yard Hydrant
1011  Reduced Pressure Backflow Preventer
1070  General Title Sheet
1070b  Electrical Abbreviations & Symbols (E00)
1071  Electrical One-Line Diagram (E01)
1072  Electrical Interior Enclosure-01 (E02)
1073  Electrical Interior Enclosure – 02 (E03)
1074  Electrical Control Panel Detail (E04)
1075  Electrical Sequence Control Diagram (E05)
1076  Electrical Control Panel Detail (E06)
1077  Electrical Enclosure Rain Hood Detail Reference (E07)
1078  Electrical Intrinsically Safe Example (E08)
1079  Electrical Wetwell Level Detail (E09)
1080  Electrical Disconnect Air-Gap Junction Box (E10)
1081  Electrical Detail (E11)

**Flow Monitoring**
1100  Sanitary Sewer Permanent Flow Monitor Details (Manhole Conduit Installation)
1105  Conduit Trench Backfill Details (Flow Monitors)
Testing Forms
1200 Air Test Form
1205 Nomograph
1210 Manhole Vacuum Test Form
1215 Manhole Hydrostatic Test

Computational Aids
1250 Average velocities for Estimating Travel Time for Overland Flows
1255 Headwater Depth for Corrugated Pipe W/Inlet Control
1260 Headwater Depth for Smooth Interior Pipe Culverts with Inlet Control
1265 Head for Culverts (Pipe / “N” = 0.012), Flowing Full with Outlet Control
1270 Head for Culverts (Pipe / “N” = 0.024), Flowing Full with Outlet Control
1275 Rational Method Rainfall Intensities
1280 24-Hour Rainfall Depths
1285 Design Storm Distribution Chart