

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>CHAPTER 1</b>				
1	Removal of 90 day permit rule	Ch. 1, p. 27		
2	Added Project Completion Procedures to manual	Ch. 1, p. 27		
3	Added CCTV requirement to as-built submittals	Ch.1. p. 27		
4	Added reference to Section 113	Ch. 1, p. 1		
5	Removed "Water and Sewer" from title of design manual	Ch. 1, p. 2		
6	Added EDU acronym	Ch. 1, p. 4		
7	Removed "County" from CWSP acronym	Ch. 1, p. 4		
8	Added Designer definition	Ch. 1, p. 8		
9	Added "and allocating EDUs"	Ch. 1, p. 12		
10	Added Section 113 clarification	Ch. 1, p. 12		
11	Added Zoning Ordinance Section 70.9.1.a reference	Ch. 1, p. 13		
12	Added "designated" to Commission's Project Manage reference	Ch. 1, p. 15		
13	Removed "Metropolitan Commission" from CWSP title	Ch. 1, p. 16		
14	Added reference to Commission's Project Manager	Ch. 1, p. 17		
15	Revised name of Water and Sewer Construction Plan Review Checklist and Sketch Plan submittal Form	Ch. 1, p. 26		
16	Revised vertical clearance between utilities	Ch. 1, p. 29		
17	Added minimum requirements clause	Ch. 1, p. 3		
18	Added Operational Acceptance definition for consistency	Ch. 1, p. 10		
<b>CHAPTER 2</b>				
1	Added section and note that any sleeve 12" or greater requires a ground penetrating radar test for SHA to find any voids	Ch. 2, p. 18		
2	Added section to manual specifying if water crosses under any sewer or storm drain the water main shall be encased in concrete 10 feet on either side of the crossing	Ch 2, p. 12		
3	Specified HDPE relax time in manual	Ch. 2, p. 14		
4	Updated manual, specifications, and standard detail with requirement to encase water meter in concrete when within 3' of a paved driveway	Ch. 2, p. 31		
5	Specified Individual meters for condos and townhomes in design manual	Ch. 2, p. 30-31		
6	Updated tee vs. tapping sleeve and valve connection requirements to match the checklist.	Ch. 2, p. 19		
7	Added requirement for all weather access road	Ch. 2, p. 9		
8	Added requirement for water lines to be above storm sewer lines.	Ch. 2, p. 11		
9	Added option to encase water line in concrete if below sanitary or storm sewer line	Ch. 2, p. 11		
10	Added hydrostatic pressure and leak tests for HDPE lines	Ch. 2, p. 6		
11	Added requirement for the extension of water lines the full length of the property	Ch. 2, p. 7		
12	Added requirement for a water main to terminate with a hydrant to allow for flushing	Ch. 2, p. 7		
13	Added requirement for all flanged mechanical joints to be secured by mega-lugs	Ch. 2 p. 16		

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>CHAPTER 4</b>				
1	Note added to the design manual and standard detail indicating a 5' manhole is required if more than 1 drop is proposed	Ch. 4, P. 24		
2	Added minimum and maximum forcemain cover to manual and specification	Ch. 4, p. 31		
3	Clearly added minimum and maximum slope for gravity sewer in manual	Ch. 4, p. 11		
4	Specified the requirement for a check valve at connection of the proposed forcemain to the existing forcemain in manual and specification	Ch. 4, p. 31		
5	Specified, in the manual, the SHC is required to be made into the 6"x6" horizontal wye; unless approval to connect into the vertical riser is obtained from the chief engineer PRIOR to time of connection. Formal request form will be added to the appendix section of the manual.	Ch. 4, p. 14; request form will be added to appendix		
6	Added section in the design manual requiring a duplex grinder pump for commercial and multi family developments	Ch. 4, p. 34		
7	Added a section to the design manual stating the maximum sewer slope 6%	Ch. 4, p.11		
8	Changed pipe diameter from 15 inches to 30 inches per ten states standard	Ch. 4, p. 21		
9	Add invert elevations of SHC cleanout at prop line to the profile	Ch. 4, p. 12		
10	Added requirement for all weather access road	Ch. 4, p. 9		
11	Added requirement for water lines to be above storm sewer lines.	Ch. 4, p. 17		
<b>CHAPTER 5</b>				
1	Added a note to the design manual that the macerator shall be channel mounted	Ch. 5, p. 3 & 12		
2	Added section specifying DIP to be used inside pump station vaults and PVC outside	Ch. 5, p. 9		
3	Specified, in the manual, a 50' turning radius in to and out of pump stations for the vac-con truck	Ch. 5, p. 9		

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>SPECIFICATION UPDATES</b>				
<b>Multiple Specifications</b>				
1	Added Material Storage Note in multiple specifications: Materials shall be stored in order to insure the preservation of their quantity, quality and fitness for Work. The Contractor shall place materials on wooden platforms, or other hard, clean surfaces, not on the ground, and the materials shall be placed under cover when directed by the Owner. Stored materials shall be located in order to facilitate prompt inspection by the Owner. Lawns, grass plots, or other private or public property shall not be used for storage purposes without written permission of the owner or lessee. Unless directed or noted otherwise into the Contract documents, there will be no payment for stored materials.		Multiple Specs	
<b>Specification 02050</b>				
1	Revised sections 4.A, 4.B, 5.A.3.b & c		02050, Multiple Sections	
<b>Specification 02250</b>				
1	Revised minimum trench width to 3x diameter of the pipe		02250-7, Sec. 3.B.7.a	
2	Revised specification and standard detail to indicate backfill in 6" to 12" lifts		02250-9, Sec. 3.C.3	
3	Revised sections 1.C.3.b, 2.C.1, and 2.C.2.c; Added section 2.D.2.c		02250, Multiple Sections	
<b>Specification 02310</b>				
1	Specified in specifications that a single boring shall not to exceed 400' in length; if a greater boring length is required then multiple pits will be required		02310-2 Sec. 3.A.1	
2	Added drilling system requirements for gravity sewers		02310-2 Sec. 3.A.2.a	
3	Technology requirement for pipe alignment		02310-4, Sec. 3.C.5	
<b>Specification 02551</b>				
1	Indicated 150 psi is the required HDPE test pressure in specification		02551-9, Sec. C.2.c.3	
2	Revised section 4.A, 5.A.2.d, 5.B; Deleted sections 4.B, 5.C, and 5.D		02551, Multiple Sections	
3	Joint restraint requirement for PVC pipes		02551-3, Sec. 2.E.3.d	
<b>Specification 02553</b>				
1	Specified type of tracer wire in specifications; THHN solid, soft copper wire		02553-4; 02563-3; 02566-2	
2	Change stainless steel tapping saddle to non-lead brass saddle		02553-2	
3	Updated manual, specifications, and standard detail with requirement to encase water meter in concrete when within 3' of a paved driveway		02553-4	
4	Added requirement that meters shall not be located in ditches		02553-4	
5	Added requirement that all meter vaults shall be plumb with the surface		02553-2	

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>Specification 02554</b>				
1	Revised sections 2.D.2, 4.B, 5.B.1, 5.B.2, and 5.C; Added section 2.D.3.k		02554, Multiple Sections	
<b>Specification 02561</b>				
1	Revised sections 2.D.2, 2.E.1.a, 3.D.3.b; Deleted sections 2.E.3, 3.B.1.b, 3.D.2.c		02561-8; 02565-13	
<b>Specification 02562</b>				
1	Added Epoxy lining info to manhole specification		02562-3	
2	Revised section 1.A; Added the sections 2.C.3, 2.D.14 & 15, 3.E, and 5.F		02562, Multiple Sections	
<b>Specification 02563</b>				
1	Added minimum and maximum forcemain cover to manual and specification		02563-4, Sec 3.A.2.i	
2	Specified the requirement for a check valve at connection of the proposed forcemain to the existing forcemain in manual and specification		02563-4, Sec 3.A.6	
3	Specified type of tracer wire in specifications; THHN solid, soft copper wire		02563-3	
<b>Specification 02565</b>				
1	Created section for Sewer CCTV inspections		02565-2 Sec. C.2.b.1	
2	Revised sections 2.D.2, 2.E.1.a, 3.D.3.b; Deleted sections 2.E.3, 3.B.1.b, 3.D.2.c		02561-8; 02565-13	
<b>Specification 02566</b>				
1	Added section for HDPE Fusion in specification		02566-2, Sec B.1.a	
2	Specified type of tracer wire in specifications; THHN solid, soft copper wire		02553-4; 02563-3; 02566-2	
<b>Specification 02800</b>				
1	Added sections 1.B.12, 13, and 14; Revised sections 2.D, 3.B, 3.C, 4, and 5		02800, Multiple Sections	
<b>Specification 11307</b>				
1	Added a note in Grinder Pump specification that explains the sizing is based on chapter 5 of the MetCom Design Manual		11307-1, Sec 1.B.2.a	
2	Added section to the grinder pump specification indicating the control panel should be mounted at a height 36" (+/- 4") to the bottom		11307-4, Sec 2.D.1	
3	Revised piping and/fittings to Sch 80 from Sch 40 in grinder pump specification		11307-9, Sec 3.C.2.h.1	
4	Corrected conflicting information in specification and standard details; Check valve should be 6" from basin		11307-9, Sec 3.C.2.h	
5	Clarified the grinder pump maintenance and responsibilities in specification		11307-7, Sec. 3.C.1.b	
6	Added a section indicating the need for an easement over electric lines from the control panel to the pump if the pump is located elsewhere beside the immediate vicinity of the grinder pump		11307-4, Sec. 2.D.1.	
7	Added section to specifications stating that grinder pump control panel must be visible from the pump		11307-4, Sec. 2.D.1	
8	Revised sections 2.F.2, 3.C.1.b, 3.C.2.g, 3.C.2.h, 3.C.2.h.1		11307-5 - 11307-9	

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>Standard Detail Updates</b>				
1	Note added to the design manual and standard detail indicating a 5' manhole is required if more than 1 drop is proposed			Note added to S-4
2	Revised standard detail showing the use of Mega-lugs instead of concrete kickers on fire hydrant connections			Note added to W-1
3	Corrected conflicting information in specification and standard details; Check valve should be 6" from basin			Revision to P-9 and 9A
4	Revised 4" dimension in standard details to 6"			Revision to S-10 and S-11
5	Create new oversized meter standard detail with indoor room dimensions			Created detail W-18
6	Create standard detail for interior meters 3" or larger			Created detail W-19
7	Added a note to the standard detail indicating how to bond riser pipe to tee and couplings to prevent rotation when plug is removed to prevent riser assembly from rotating			Note revised on P-3, P-4, P-5, and P-6
8	Added section and note that any sleeve 12" or greater requires a ground penetrating radar test for SHA to find any voids			Note added to G-8
9	Adding pavement detail for pump stations to carry 66k lbs. which is th GVW of the Vac-con truck			Revision to G-23, PS-4, PS-1
10	Specified in manual that the inlet pipe to the grinder pump is to be 36" from bottom of the basin			Revision to P-9 and P-9A
11	Revising standard detail to require mega-lugs instead of tying (strapping) back mechanical joints (flanges) with 3/4" rebar			Revising detail
12	Revised detail to show bend instead of tee at the end in meter pit			Revision to PS-2
13	Updated standard detail with requirement to encase water meter in concrete when within 3' of a paved driveway			Note added to W-4A, W-4B, W-5, and W-6
14	Notes: change "nay" to "shall" and delete "in lieu of poured concrete"			Note changed in various details
15	Create Cast Gravity Sewer Service Clean-Out Block detail			New detail created
16	Add to Notes: "Pre-cast sewer block shall be used on vertical wye"			Note added to P-10
17	Add minimum slope and maximum length notes the sewer connection details			Notes added to S-10 and S-11
18	Remove reducer from dewer connection details			Revision to S-10 and S-11

	Comment	Location in Design Manual	Location in Spec	Location in Detail
<b>Appendix Updates</b>				
1	Added approved macerator brands to the list of approved material and manufacturers: Franklin Miller, JWC Environmental	Appendix A		
2	Added approved generator brands to the list of approved materials and manufacturers: Kohler, Detroit Diesel, Katolight	Appendix A		
3	Add Homa Pumps to submersible station retrofits w/o macerators	Appendix A		
4	Added requirement to checklist that the sewer invert elevation be shown on all structures and the SHC invert elevation where it connects to the main be shown on plans	Construction Plan Checklist p. 4		
5	Added statement to General Notes on checklist: "No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain, which in turn is connected directly or indirectly to a public sanitary sewer."	Added to General Notes on Construction Plan Checklist		
6	Added Backflow Prevention note to general notes: "All backflow devices shall comply with the National Standard Plumbing Code and The St. Mary's County Metropolitan Commission Cross Connection Control Program. The backflow devices shall comply with the proposed use's health hazard level as specified in the National Standard Plumbing Code."	Added to General Notes on Construction Plan Checklist		
7	Added the following EDU Uses to the EDU table: Manufacturing, seafood processing, museum	EDU Table		
8	Deleted Project Close Out and added Standard Procedures & Policies	Appendix		
9	Updated vertical clearance in checklist	Construction Plan Checklist p. 5		
10	Added check valve requirement for connecting force main to existing force main	Construction Plan Checklist p. 5		
11	Removed "Condominium" from note 5 of EDU Table	EDU Table		
12	Revised force main minimum diameters in Construction Plan Checklist	Construction Plan Checklist p. 5		
13	Updated cost estimate spreadsheet			