

**2024 SPECIFICATIONS, DETAILS AND DESIGN GUIDE REVISIONS LOG**  
**EFFECTIVE AS OF JAN 2024**

No	AW REFERENCE	REVISION	IMPACT
1	MSG-W-01 CZ	Detail name revised to MSG-W-01 CZ	Administrative
2	MSG-W-07 CZ	Detail name revised to MSG-W-07 CZ	Administrative
3	MSG-W-09 CZ	Detail name revised to MSG-W-09 CZ	Administrative
4	MSG-W-19	Detail revised to depict check valve more accurately without air gap.	Administrative
	MSG-W-19 CZ	Detail revised to depict check valve more accurately without air gap. Detail name revised to MSG-W-19 CZ	Administrative
5	MSG-W-20 CZ	Detail name revised to MSG-W-20 CZ	Administrative
6	MSG-W-23 CZ	Detail name revised to MSG-W-23 CZ	Administrative
7	MSG-W-24 CZ	Detail name revised to MSG-W-24 CZ	Administrative
8	MSG-W-28 CZ	Detail name revised to MSG-W-28 CZ	Administrative
9	MSG-WW-09	Detail revised to remove notes regarding no ladders permitted in MHs and no exterior coating of MHs.	Administrative

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10	MSG-WW-09 CZ	Detail revised to indicate minimum wall thickness required for different MH diameters. The base footing dimension revised to extend 6" outside MH walls and 12" deep. Detail name revised to MSG-WW-09 CZ	Construction
11	Design Guide Section 1.1	Section modified to clarify that the design guide is primarily for use by internal and external engineering resources responsible for project design.	Construction
12	Design Guide Section 1.13	Section updated to clarify that contractors and suppliers need to be a member of ISN to work with AW at military installations.	Administrative
13	Design Guide Section 1.13, Fall Protection	New subsection has been added to provide more clarity on fall protection requirements.	Administrative
14	Design Guide Section 1.3	Section modified to clarify that design guide deviations in design approach must be identified in the consultant's proposal to be considered by American Water.	Construction
15	Design Guide Section 1.11	Section revised to add clarity that the paint selected shall be suitable for the environment in which the equipment or materials are installed and also recommended by the manufacturer as suitable for that environment or particular use.	Administrative
16	Design Guide Section 1.15	Section has been revised to add bollards to protect AW assets in high traffic areas.	Construction
17	Design Guide - Section 1.23, E	A table summarizing the minimum SCADA assets and software requirement has been added.	Construction
18	Design Guide Section 2.34	New fire booster station section added to design guide.	Construction
19	Design Guide Section 2.35	New fire protection deluge tank section added to design guide.	Construction

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<b>20</b>	Design Guide Section 3.8	Section revised to provide clarity that the clean-outs are not permitted to directly connect to MHs, instead shall be connected to the sewer line.	Construction
<b>21</b>	Design Guide Section 4.3, 2	Section revised to include a minimum diameter of 4 ft for a small lift station.	Construction
<b>22</b>	Design Guide Section 4.4	Section revised to include a minimum diameter of 6 ft for a medium lift station.	Construction
<b>23</b>	Design Guide Section 4.5	Section revised to include a minimum diameter of 8 ft for a large lift station.	Construction
<b>24</b>	Design Guide - Appendix	New document added to Appendix - SCADA Ignition Server and Commissioning Standard	Construction
<b>25</b>	Design Guide - Appendix	New document added to Appendix - AW Ignition HMI Standards	Construction
<b>26</b>	Design Guide - Appendix	New document added to Appendix - SOP SCADA McAfee Installation	Construction
<b>27</b>	Design Guide - Appendix	New document added to Appendix - AW Infrastructure Cabling Bid Specification 2023	Construction
<b>28</b>	25 13 13	New standard specification SCADA Telemetry Systems	Construction
<b>29</b>	25 14 13	New standard specification PLC Control System	Construction

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<b>30</b>	32 92 00,2.02 - Fort Leonard Wood	Section revised to update the seed mixture as required per Missouri department of Conservation or the governing authority.	Construction
<b>31</b>	32 92 00,3.03 - Fort Leonard Wood	Section revised to update the seeding application rate to 10 lbs per 1,000 Sq. Ft.	Construction
<b>32</b>	32 92 00,3.03 - Fort Leonard Wood	Section revised to add timeline for seed and straw application to be between March 1st and November 1st, with exceptions depending on weather conditions.	Construction
<b>33</b>	32 92 00,2.03 - Fort Leonard Wood	Section revised to update the fertilizer grade to be 13-13-13, and application rate to 4lbs per 1,000 Sq Ft.	Construction
<b>34</b>	33 01 10.13, 3.01 A	Section revised to include AWWA C650 for PVC pipes.	Administrative
<b>35</b>	33 01 10.15, 3.03. 01	This section has been added to include pre-flushing of all constructed or modified water line, irrespective of the type of disinfection process used.	Construction
<b>36</b>	33 01 10.15, 3.03. 02	This section is added to flush lines a minimum of 2 pipe volumes or until water runs clear.	Construction
<b>37</b>	33 01 10.15, 3.03. 03, A	Pre-flushing section was removed under continuous feed method, as it has been rearranged to section 3.03.01, to apply to all disinfection methods.	Administrative
<b>38</b>	33 05 27, 3.01 B	Section revised to indicate marking tape to be installed 12" below grade, or 12" above the pipe.	Construction
<b>39</b>	33 11 00, 3.01 Y	Section revised to indicate marking tape to be installed 12" below grade, or 12" above the pipe.	Construction

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<b>40</b>	33 12 33, 2.01 E & G - Fort Johnson	Section revised to update base name to Ft Johnson.	Administrative
<b>41</b>	33 12 33, 3.01 Y	Section revised to indicate marking tape to be installed 12" below grade, or 12" above the pipe.	Construction
<b>42</b>	33 23 33. 3.08, A	Revised section to update newly revised base names - Fort Cavazos, Fort Novosel, Fort Johnson, Fort Walker and Vandenburg Space Force base.	Administrative
<b>43</b>	33 23 33. 3.08, A	Revised section to include Mayport in the table.	Construction

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<b>1</b>	MSG-ST-0.1	Notes are continued in MSG-ST-01A.	Administrative
<b>2</b>	MSG-ST-01A	Detail added to all bases.	Administrative
<b>3</b>	MSG-ST-01A, Note 15	Detail revised to indicate 10 ft of horizontal separation when waterline and sewer line are in parallel alignment.	Administrative
<b>4</b>	MSG-ST-01A, Note 16	Detail revised to indicate 2 ft of vertical clearance between water and sewer line crossing when they are crossing perpendicularly.	Administrative
<b>5</b>	MSG-ST-01A, Note 18	Note added on detail to indicate 3 ft of horizontal separation when water lines, sewer line or force mains are installed from any other existing or proposed utilities, such as gas lines, telephone lines, electric utilities, reclaimed water line, etc.	Construction
<b>6</b>	MSG-ST-01A, Note 19	Note added on detail to indicate 3 ft of horizontal separation when water lines, sewer line or force mains are installed from any existing or proposed pavement or sidewalks.	Construction
<b>7</b>	MSG-ST-01A-FS	Notes added on detail to match MSG-ST-01A.	Construction
<b>8</b>	MSG-ST-02 LB	Detail was revised to remove references to pea gravel.	Construction
<b>9</b>	MSG-ST-04	New detail on electrical safety added to indicate the type of electrical conductivity needed to be maintained through a bonding jumper wire.	Construction

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<b>10</b>	MSG-W-01	Detail was revised to add Note 7, to indicate the corporation stop shall be installed between 45 degrees and 90 degrees to the water main.	Administrative
<b>11</b>	MSG-W-01 -HAFB	Detail was revised to remove the POD indicated on the detail. Note 7 was added to indicate the corporation stop shall be installed between 45 degrees and 90 degrees to the water main.	Administrative
<b>12</b>	MSG-W-01 -MD	Detail was revised to add Note 7, to indicate the corporation stop shall be installed between 45 degrees and 90 degrees to the water main.	Administrative
<b>13</b>	MSG-W-01 -FH	Detail was revised to add Note 7, to indicate the corporation stop shall be installed between 45 degrees and 90 degrees to the water main.	Administrative
<b>14</b>	MSG-W-01 -HAFB	Detail was revised to remove the POD indicated on the detail. Note 7 was added to indicate the corporation stop shall be installed between 45 degrees and 90 degrees to the water main.	Administrative
<b>15</b>	MSG-W-07 -FH	Revised Fire Hydrant detail to include bollards in high traffic areas when directed by AW. Provided gravel fill under the bollards and around the hydrant to the bottom of the trench. Added note 6, to provide two to four bollards around the fire hydrant in high traffic areas or as directed by AW.	Construction
<b>16</b>	MSG-W-09	Detail revised to add dimension labeling for the sides and thickness of the meter vault.	Administrative
<b>17</b>	MSG-W-09 VA	Detail revised to add dimension labeling for the sides and thickness of the meter vault.	Administrative

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<b>18</b>	MSG-W-09 FH	Detail revised to add dimension labeling for the sides and thickness of the meter vault.	Administrative
<b>19</b>	MSG-W-15	Revised detail to indicate outlet to be fitted with stainless steel insect screen of 16 mesh size or less.	Construction
<b>20</b>	MSG-W-17	Revised detail to provide clarity in the plan and profile sections. Revised detail to indicate a gravel floor inside the enclosure. Included concrete collar to anchor the enclosure, and a lead free strainer . Revised detail to include a UV resistant enclosure with removable covers. Removed the screened drain line. Added Note 2, to indicate the assembly shall not be subject to flooding. Added Note 6, to allow for reduced clearance for 2" and smaller units provided clear access for testing and maintenance is provided and is approved by AW. Added Note 8, to provide strainer when directed by AW. Added Note 9, to provide isolation valves outside the enclosure when directed by AW. Added Note 10, to provide two to four bollards around the enclosure in high traffic areas when directed by AW project manager. Added Note 11, to provide concrete collar around the enclosure when directed by AW. Added Note 12, to provide accessibility to the assembly per UFC.	Construction
<b>21</b>	MSG-W-17 FH	Removing FH specific detail, as the generic detail captures the requirements.	Construction



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<b>22</b>	MSG-W-18	<p>Revised detail to provide clarity in the plan and profile sections.</p> <p>Revised detail to include a reinforced concrete slab floor for the enclosure.</p> <p>Revised detail to include a UV resistant enclosure with removable covers.</p> <p>Included a lead free strainer.</p> <p>Removed the screened drain line.</p> <p>Added Note 2, to indicate the assembly shall not be subject to flooding.</p> <p>Added Note 6, to allow for reduced clearance for 2" and smaller units provided clear access for testing and maintenance is provided and is approved by AW.</p> <p>Added Note 8, to provide strainer when directed by AW.</p> <p>Added Note 9, to provide isolation valves outside the enclosure when directed by AW.</p> <p>Added Note 10, to provide two to four bollards around the enclosure in high traffic areas when directed by AW project manager.</p> <p>Added Note 11, to provide concrete collar around the enclosure when directed by AW.</p> <p>Added Note 12, to provide accessibility to the assembly per UFC.</p>	Construction
<b>23</b>	MSG-W-18 FH	Removing FH specific detail, as the generic detail captures the requirements.	Construction
<b>24</b>	MSG-W-19	<p>Revised detail to add Note 2 to provide isolation valves on either sides of the backflow device as directed by AW project manager.</p> <p>Air gap added to the detail.</p>	Construction
<b>25</b>	MSG-W-19	Added to Joint Base San Antonio's Webpage.	Construction

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<b>No</b>	<b>AW REFERENCE</b>	<b>REVISION</b>	<b>IMPACT</b>
<b>26</b>	MSG-W-19-FH	Detail added on FH page. Two isolation valves have been included to provide access for maintenance. AW POD indicated on the detail. Air gap added to the detail.	Construction
<b>27</b>	MSG-W-20	Revised detail to include a strainer upstream of the backflow preventor. The screened drain line with a check valve has been removed. Note 1 added to indicate the assembly not to be subject to flooding. Note 4 added to provide strainer when directed by AW Project Manager.	Construction
<b>28</b>	MSG-W-20	Added to Joint Base San Antonio's Webpage.	Construction
<b>29</b>	MSG-W-20-FH	Detail added on FH page. Revised detail to include a strainer upstream of the backflow preventor. Two isolation valves have been included to indicate AW POD to provide access for maintenance. The screened drain line with a check valve has been removed. Note 1 added to indicate the assembly not to be subject to flooding. Note 4 added to provide additional pipe supports as necessary. Note 5 added to indicate the assembly to be readily assessable per the TCEQ requirements and per the UFC.	Construction

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No	AW REFERENCE	REVISION	IMPACT
30	MSG-W-21	Revised detail to provide clarity in the plan and profile sections. Revised detail to include a concrete collar to anchor the enclosure. Revised detail to include a UV resistant enclosure with removable covers. Included a lead free strainer. Removed the screened drain line. Added Note 7, to allow for reduced clearance for 2" and smaller units provided clear access for testing and maintenance is provided and is approved by AW. Added Note 9, to provide strainer when directed by AW. Added Note 10, to provide concrete collar when directed by AW project Manager. Added Note 11, to provide two to four bollards around the enclosure in high traffic areas or as directed by AW. Added Note 12, to provide accessibility to the assembly per UFC.	Construction
31	MSG-W-22	Revised detail to include the vault mounted on a concrete pad. Revised detail to Included a lead free strainer. Included floor drain piping with check valve. Included a note to provide bollards in high traffic areas and when requested by AW project manager. Meter removed from the bypass line. Revised detail to provide clarity in the plan and profile sections. Revised detail to include a reinforced concrete slab floor for the enclosure. Revised detail to include a UV resistant enclosure with removable covers. Included a lead free strainer. Removed the screened drain line. Added Note 2, to indicate the assembly shall not be subject to flooding. Added Note 7, to provide strainer when directed by AW. Added Note 8, to provide isolation valves outside the enclosure when directed by AW. Added Note 9, to provide two to four bollards around the enclosure in high traffic areas when directed by AW project manager. Added Note 10, to provide accessibility to the assembly per UFC.	Construction

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<b>32</b>	MSG-W-23	Detail revised to correct the strainer orientation. Detail revised to add union fitting on either sides of the assembly. Drain line removed. Note 2 added to provide strainer when directed by AW Project Manager. Note 4, describing the drain line sizing removed.	Construction
<b>33</b>	MSG-W-23	Added to Joint Base San Antonio's Webpage.	Construction
<b>34</b>	MSG-W-23-FH	Detail added on FH page. Two isolation valves have been included to provide access for maintenance. AW POD indicated on the drawing. Detail revised to correct the strainer orientation. Drain line removed. Note 3, added to provide strainer when directed by AW Project Manager. Note 4, describing the drain line sizing removed. Added new note 4, to indicate the assembly shall not be subject to flooding. Note 5 added to indicate the assembly to be readily assessable per the TCEQ requirements and per the UFC.	Construction
<b>35</b>	MSG-W-24	Revised detail to provide clarity and to indicate the minimum clearance around the assembly. Revised detail to include a lead free strainer upstream of the assembly. Added Note 3, that the assembly shall not be subject to flooding Added Note 4, to indicate the assembly must be installed above the 100 year flood level. Added Note 5, added to provide strainer when directed by AW Project Manager.	Construction

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<b>36</b>	MSG-W-24	Added to Joint Base San Antonio's Webpage.	
<b>37</b>	MSG-W-24-FH	Detail added on FH page. Two isolation valves have been included to provide access for maintenance. Revised detail to indicate the minimum clearance around the assembly. Meter removed from the bypass line. AW POD indicated on the drawing. Included a lead free strainer. Added Note 4, to provide a lead free strainer when requested by AW. Added Note 5, to indicate the assembly to be readily assessable per the TCEQ requirements and per the UFC.	Construction
<b>38</b>	MSG-W-28 FH	New bollards detail around backflow enclosures.	Construction
<b>39</b>	MSG-W-29	New detail for a typical water sampling station.	Construction
<b>40</b>	MSG-WW-07	Cleanout box revised to label frame and cover. Revised cover depth to 8in min.	Administrative
<b>41</b>	MSG-WW-11	Revised detail to indicate reinforced concrete slab to be 4,000 psi.	Construction

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<b>42</b>	MSG-WW-16	Revised detail to depict mechanical joints on the pipe.	Administrative
<b>43</b>	MSG-WW-23 FH	New detail for MH covers in non-paved areas at Fort Hood locations.	Construction
<b>44</b>	Design Guide Section 2.	Electrical Safety section added to design guide describing the situation when electrical conductivity is needed to be maintained through a bonding jumper wire.	Construction
<b>45</b>	Design Guide Section 2.19	Section added to provide guidance on designing of a pressure reducing valve station.	Construction
<b>46</b>	Design Guide Section 2.21	Section revised to provide required compaction testing results for water main and service connections. Any modification to the required compaction testing frequency due to small scale of a project must be preapproved by AW via variance request.	Construction
<b>47</b>	Design Guide Section 2.26	A section describing the ground water disinfection treatment practice is included.	Construction
<b>48</b>	Design Guide Section 2.31,1	Section updated to include guidance on multiple pump design for redundancy.	Administrative
<b>49</b>	Design Guide Section 2.31,5	Section updated to include guidance on surge analysis.	Administrative
<b>50</b>	Design Guide Section 3.10, h	Adequate provisions shall be made for ventilation of deep MHs. Gravity sewers must be adequately vented through holes in MH covers when infiltration/inflow is not a problem, or through other means.	Construction

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<b>51</b>	Design Guide Section 3.11.	Section revised to indicate all pressure and leakage tests to be successfully completed for all gravity mains, pressured mains, manholes, valves and other appurtenances installed.	Administrative
<b>52</b>	Design Guide Section 3.11.	Section revised to provide required compaction testing results for sewer main and laterals. Any modification to the required compaction testing frequency due to small scale of a project must be preapproved by AW via variance request.	Administrative
<b>53</b>	Design Guide Section 4.14, 3	Design guidance was revised to include a continuous sleeve enclosure within 10 ft of the watermain when a new force main crosses under an existing waterline.	Construction
<b>54</b>	Design Guide Section 4.4, 9	Auxiliary power generating unit size shall be adequate to provide power for pump motor starting current and for lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation of the lift station.	Construction
<b>55</b>	Design Guide Appendix A	Appendix A updated with the latest request for signature transmittal form.	Administrative
<b>56</b>	Design Guide Appendix B	Appendix B added to design guide. HAFB specific requirements included in Appendix B.	Construction
<b>57</b>	09 97 00, 3.02 B	Section added to indicate any appurtenances installed shall be in a manner that ensures no damage to the tank, coating, water quality, or corrects any damages that occur.	Construction
<b>58</b>	33 16 13, 1.02, 7	Section revised to indicate all finished water storage structures shall have watertight roofs which excludes birds, animals, insects, and excessive dust.	Construction
<b>59</b>	34 16 13.11, 3.04,B	Section revised to indicate the bacteriological testing results shall be submitted to the State or local governing agency per their requirement, and approved prior to placing the tank in service or being accepted by AW.	Administrative

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<b>60</b>	35 16 13.11-VAFB, 3.04,B	Section revised to indicate the bacteriological testing results shall be submitted to the State or local governing agency per their requirement, and approved prior to placing the tank in service or being accepted by AW.	Administrative
<b>61</b>	32 01 00, 1.03	Section added to provide more description of the paving, repair and restoration work involved.	Administrative
<b>62</b>	33 12 16.11, 2.2 B	AWWA Standard C515 reference was added to include reduced-wall resilient seated gate valve.	Construction
<b>63</b>	33 31 00.15, 3.8 D	Revised specifications to install a single cleanout on all new individual service connections.	Construction