

Garden City
Standard Construction Notes for Projects
That Contain Public Water, Public Sewer, Non-ACHD
Drainage and Private Roads

May 2019

Notes Applicable to All Construction

1. Compliance with the Environmental Protection Agency (EPA) requirements for protection from erosion by storm water is required for this project. A Responsible Party (RP) shall be responsible to comply with the EPA requirements. If the owner has not designated a RP, the contractor shall be required to provide a RP. The RP is required to prepare, file and comply with the Storm Water Pollution Prevention Plan (SWPPP) for this project. The RP is responsible to file a Notice of Intent (NOI) to construct with EPA. EPA must officially accept the NOI prior to beginning any site disturbance activities. The SWPPP is a document/plan that is required to be updated and amended to best fit the site as construction occurs. The RP is responsible to keep the plan current. At completion of all construction activities and after the project site is stabilized for erosion control, the RP is required to prepare and submit a Notice of Termination of the SWPPP with EPA.

-or, for sites under one acre-

2. The contractor shall comply with the City of Garden City's approved Erosion and Sediment Control Plan (ESCP) for this project. A Responsible Party (RP) shall be responsible to comply with the ESCP requirements. If the owner has not designated a RP, the contractor shall be required to provide a RP. The RP is required to comply with the City of Garden City's ordinance for control for erosion from this construction site. The ESCP is a document/plan that is required to be updated and amended to best fit the site as construction occurs. The RP is responsible to keep the plan current. At completion of all construction activities and after the project site is stabilized for erosion control, the ESCP is terminated.
3. All construction, materials, appurtenances and testing shall comply with the requirements of the 2017 edition of the Idaho Standards for Public Works Construction (ISPWC), unless specifically modified by these construction documents.
4. The contractor, all applicable sub-contractors, developer/owner, utility company representatives, a Garden City Department of Public Works representative and an Ada County Highway District representative shall attend a pre-construction conference prior to commencement of construction.
5. The contractor shall obtain a construction permit from the Ada County Highway District at least 24 hours prior to commencing construction of any of the improvements shown hereon located within public right-of-way.

6. Construction inspection shall be performed by the project engineer, the Ada County Highway District and/or the Garden City Department of Public Works. Inspection by the Garden City Department of Public Works will be for Department purposes only to spot check work compliance with the city's requirements. It is the project engineer's responsibility to assure compliance with the project plans and specifications.
7. The contractor shall verify site conditions and dimensions prior to beginning work. Any deviations, omissions or errors shall be presented to the project engineer for resolution. Any changes to the plans and specifications shall be submitted to and approved by the Garden City Department of Public Works prior to implementation of the change. Said change may also need to be submitted to the Idaho Department of Environmental Quality for approval.
8. The contractor shall contact Digline (811) and other appropriate utility providers for utility locations at least 72 hours prior to beginning any excavation.
9. Any waters created by dewatering shall not be permitted to directly discharge to any existing surface water facility. Prior to discharging to waters of the state of Idaho, the contractor shall secure a short-term activity exemption from the applicable regional office of the Idaho Department of Environmental Quality.
10. Horizontal and vertical separation of potable and non-potable pipelines shall meet the requirements of ISPWC Section 405 and ISPWC Drawing No. 407.

Sanitary Sewer Notes

11. All sewer pipe and fittings with cover greater than 3 feet, shall be Polyvinyl Chloride (PVC) conforming to the requirements of ASTM D-3034, SDR-35 for sizes 4-inch through 15-inch; ASTM F-679, SDR-35, T-1 wall for sizes 18-inch through 27-inch; or ASTM F-794, T-46 for sizes 18-inch through 36-inch. The minimum cover for all PVC sewer lines shall be 3 feet. Sewer pipe and fittings with cover less than 3 feet shall be Ductile Iron (DI) conforming to ANSI A-21.51 or AWWA C-151, minimum Class 50.
12. Sanitary sewer manholes shall be constructed of reinforced precast concrete per the ISPWC with a maximum of 12 inches of concrete grade rings, a 24-inch diameter cast iron ring and cover and a concrete collar per ISPWC drawings SD-501, SD-505, SD-507, SD-508, SD-509. Manholes shall not have steps. The sewer contractor shall field verify that no more than 12-inches of grade rings are necessary to adjust the manhole to final grade. Grade rings, ring and covers shall be provided by the sewer contractor. Manhole cones shall be eccentric for all manholes 4 feet and deeper. The vertical wall of the cone shall be placed upstream and rotated 45°. Concentric cones shall be used for manholes less than 4 feet deep.

13. Manufactured compression boots shall be used in manholes where pipelines enter and leave the manhole.
14. Sewer service lines shall be ISPWC type "A" or "B" and constructed and marked per ISPWC Drawing SD-511A. Services shall not be deeper than 5 feet at the property line, unless specifically approved by the city. Services shall extend horizontally 10 feet beyond the property line. Service lines shall include an inspection cleanout placed directly adjacent to and inside public street right-of-way or the sewer easement line. The cleanout shall conform to SD-506A & SD-506B (bolt down cover option) with the riser being the same size as the service line.
15. Service line connections to new mainlines shall use a full service tee. Service line connections to existing mainlines that are concrete or a concrete derivative shall use a tapping saddle. Service connections to existing mainlines that are not concrete or a concrete derivative shall use an Inserta-Tee or a prior approved equal.
16. All sewer mains and services shall be bedded per the requirements of Type I bedding, except that bedding material shall be select ¾-inch maximum crushed gravel chips. All bedding shall be thoroughly shovel-sliced under the pipe.
17. Groundwater levels shall be maintained below the trench bottom at all times during construction. Groundwater shall not be permitted to enter the pipeline system during construction. As soon as possible the contractor shall install a removable watertight plug in the new pipeline at the point of connection to the existing sewer system.
18. Sewers shall be cleaned and tested after all utilities are installed and prior to paving. Material cleaned from the construction shall not be permitted to discharge to the downstream receiving pipeline. All installed sewer pipes shall be tested in accordance with Division 500 of the ISPWC. A representative of the city must be present must observe the testing. Mainline pipeline testing shall include air pressure, deflection and closed circuit television (CCTV) visual inspection. Service line testing shall include air pressure and closed circuit television (CCTV). The CCTV report shall be in the form of a VHS videotape or DVD and a written log. Manholes shall be vacuum or hydrostatically tested for leakage. The sewer system shall not accept any flows until the city issues an initial acceptance of the system.
19. The contractor shall guarantee all work for a period of at least a one-year following the city's initial acceptance.

Waterline Notes

20. All water mains shall be Polyvinyl Chloride (PVC) conforming to the requirements of AWWA C-900, Class 235, DR-18. All fittings shall be mechanical joint or flanged ductile iron conforming to the requirements of AWWA C-110. All plastic

pipe shall be installed with a #12 direct burial tracer wire placed along the north and east side of the main. The tracer wire will not be extended up in to or along valve boxes, but shall continue along the mainline, uninterrupted. Minimum burial depths for water mains shall be 4 feet from finish grade to the top of the pipe.

21. Individual or dual water service connections 1-inch or smaller shall be Polyethylene pipe conforming to AWWA C-901, Class 200, DR-7.3. Services shall be constructed conforming to the Garden City standard drawing. Service pipelines shall be a minimum 1-inch, unless otherwise noted.
22. Individual water service connections larger than 1-inch shall be Polyethylene pipe conforming to AWWA C-901, Class 200, DR-7.3. Services shall be constructed conforming to the ISPWC SD-402. Service pipelines shall be a minimum 2-inch, unless otherwise noted.
23. Water valves shall be resilient-seat gate valves conforming to AWWA C-509 or AWWA C-515. All water valves shall be installed with a standard 5-1/4 inch diameter, two piece adjustable cast iron valve box, Tyler/Union series 6855, or equal. The cast iron cover shall be marked with the word "Water" as an integral part of the cover.
24. Fire hydrants shall conform to AWWA C-502 and ISPWC Drawing SD-404. The pumper nozzle outlet shall be equipped with a "Storz" adapter.
25. All water mains and services shall be bedded per the requirements of Type I bedding, except that bedding material shall be select 3/4-inch maximum crushed gravel chips for water mains and 3/8-inch maximum crushed gravel chips for service lines. All bedding shall be thoroughly shovel-sliced under the pipe.
26. All installed water lines shall be tested for leakage in accordance with Section 401.3.6 of the ISPWC following installation of all utilities and prior to paving. Each meter setter shall be opened to be sure that the service corporation stop is open and the service is functional prior to paving. A representative of the city must be present must observe the testing. All installed water lines shall be flushed, disinfected and tested for bacteria in accordance with Section 401.3.9 of the ISPWC. The water system shall not be opened to the city system until the city issues an initial acceptance of the system.
27. The contractor shall guarantee all work for a period of at least a one-year following the city's initial acceptance.

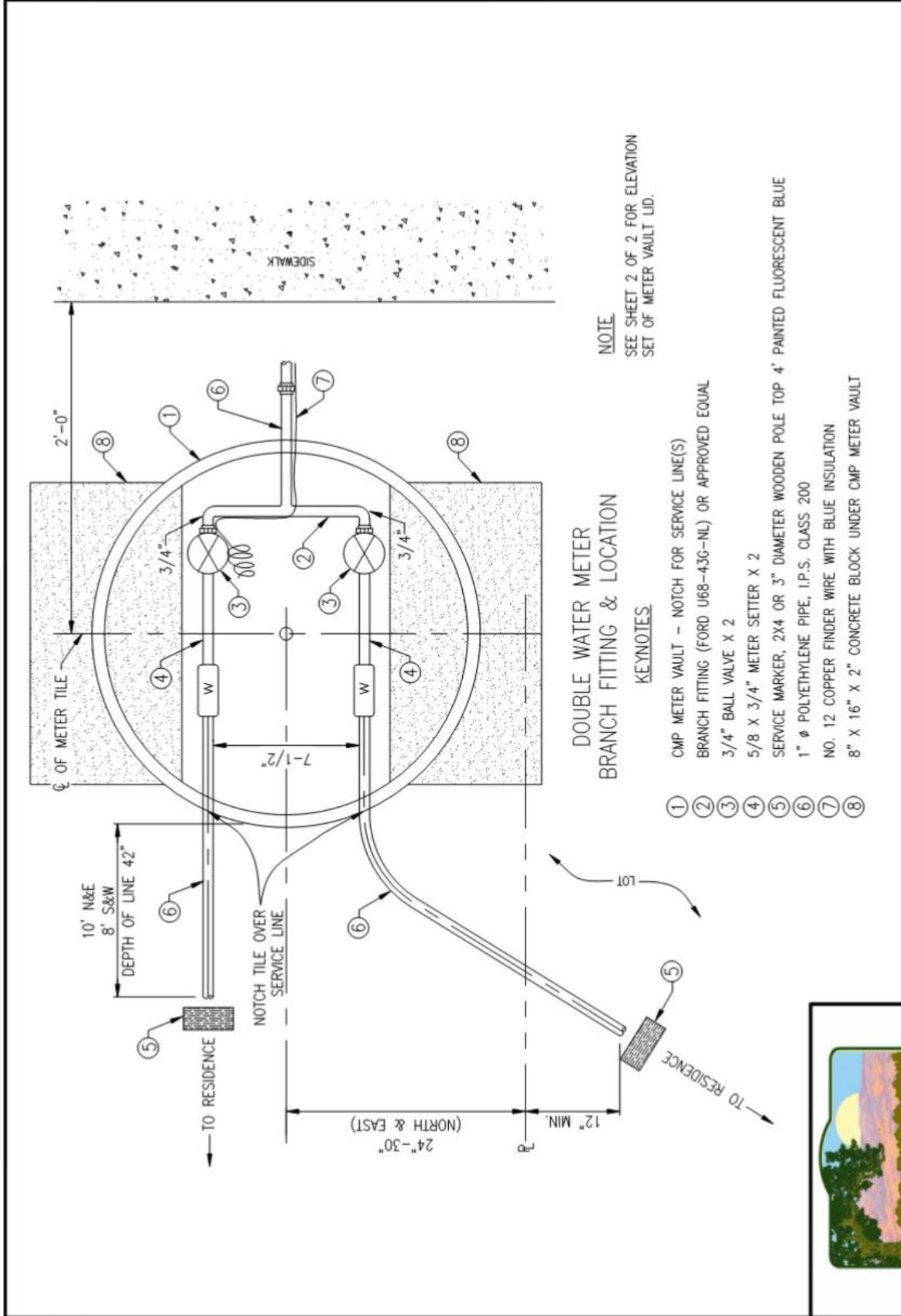
Drainage Notes

28. All inspections shall require a 24-hour notice prior to the requested inspection time. Call the inspection hot line at 208-472-2920.
29. Prior to any earthwork a 24-hour notice to begin construction is required. Call Inspection hot line at 208-472-2920.

30. Drainage inspections shall be conducted at any given time or upon request, during construction, verifying compliance with the city requirements and construction activities are followed as per the approved plans.
31. All drainage construction observations must be performed by the applicant's design engineer.
 - a) Submit to the Garden City Environmental Division the following documentation prior signature of the city on a final subdivision plat or prior to the final inspection for a Certificate of Occupancy, whichever occurs first:
 - i) The design engineer's drainage construction observation reports.
 - ii) A signed, written statement from the design engineer that all drainage structures and appurtenances were constructed in accordance to the approved plans.
32. The drainage system and any filter fabric shall not be covered prior to inspection. Call the inspection hot line at 208-472-2920.
33. The size and location of the drainage system shall correspond with the approved drainage system plan and shall be inspected.
34. Final inspection of the storm drainage system shall be conducted following the paving and final landscaping.
35. All drainage conveyance access points shall be stenciled or marked with identifying statement for the public "Do Not Dump – System Drains to Groundwater" or "River", whichever is relevant to the system disposal design.
36. Traffic rated manhole lids shall be used.
37. All parking lot grades shall be at least 1% for asphaltic-concrete and 0.4% for concrete.

Roadway Construction Notes

38. Manhole grade rings, cast iron rings and covers shall be provided by the sewer contractor. The road contractor shall install the sewer grade rings, cast iron rings, covers and concrete collars to finish grade. Water valve boxes and covers shall be provided by the water contractor. The road contractor shall install the water valve boxes covers and concrete collars to finish grade.



NOTE
SEE SHEET 2 OF 2 FOR ELEVATION
SET OF METER VAULT LID.

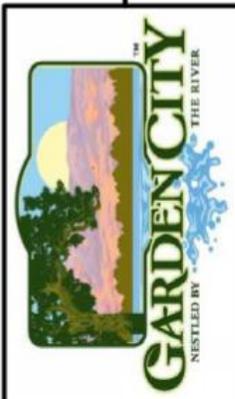
**DOUBLE WATER METER
BRANCH FITTING & LOCATION**

KEYNOTES

- ① CMP METER VAULT - NOTCH FOR SERVICE LINE(S)
- ② BRANCH FITTING (FORD U68-43G-NL) OR APPROVED EQUAL
- ③ 3/4" BALL VALVE X 2
- ④ 5/8 X 3/4" METER SETTER X 2
- ⑤ SERVICE MARKER, 2X4 OR 3" DIAMETER WOODEN POLE TOP 4' PAINTED FLUORESCENT BLUE
- ⑥ 1" ϕ POLYETHYLENE PIPE, I.P.S. CLASS 200
- ⑦ NO. 12 COPPER FINDER WIRE WITH BLUE INSULATION
- ⑧ 8" X 16" X 2" CONCRETE BLOCK UNDER CMP METER VAULT

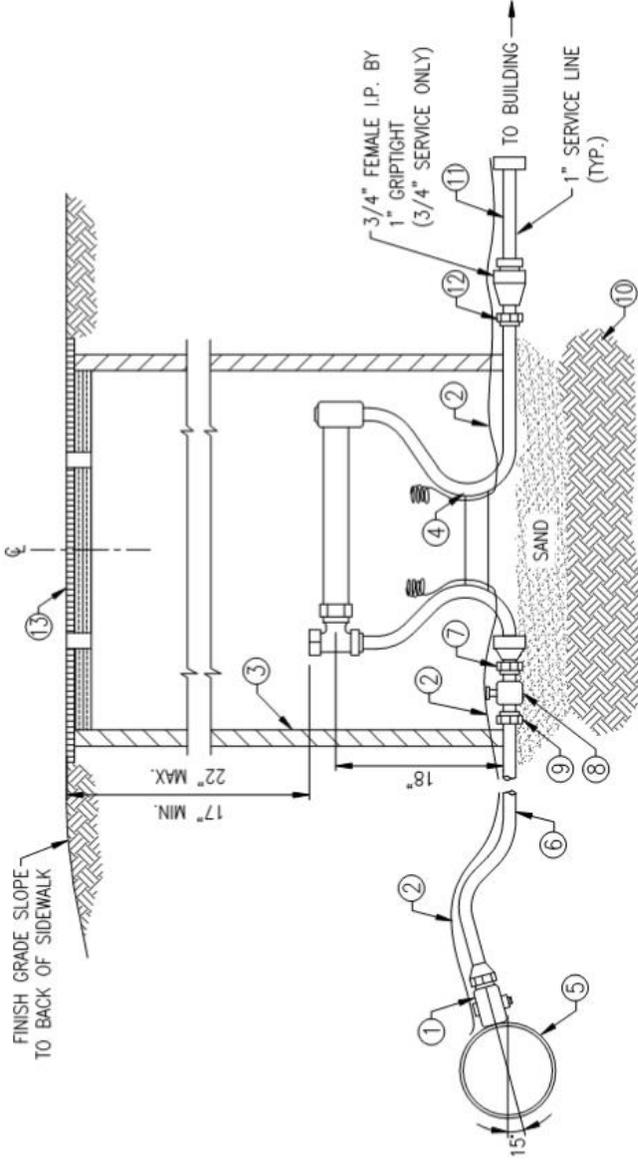
Garden City 5/8" x 3/4" Single or Double Water Service Connection
NOT TO SCALE

JANUARY 2017
DWG. NO. GC-W-100
1 OF 2



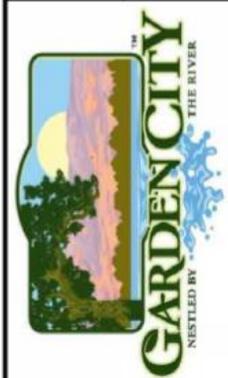
NOTES

1. NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS SHALL BE USED. THE CITY REQUIRES THAT ALL WATER METERS AND WATERWORKS BRASS BE ANSI/NSF 61 CERTIFIED AND MEET EPA NO LEAD REQUIREMENTS.
2. SERVICE PIPE SHALL BE 1" ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE PIPE CONFORMING TO ASTM D 2239, SDR 7, CLASS 200 IN IRON PIPE SIZE. STIFFENERS MUST BE USED WITH POLYETHYLENE PIPE.
3. SADDLE COUPLINGS SHALL BE USED FOR CONNECTION OF ALL SERVICE LINES DIRECT TAP TO PVC MAIN. ALL SERVICE SADDLES SHALL BE EPOXY COATED OR NYLON AND CONSIST OF A STAINLESS STEEL BAND AND MUELLER THREADS, TYPE IP.
4. NO SERVICE CONNECTION SHALL BE MADE WITHIN EIGHTEEN (18") INCHES OF THE PIPE ENDS. MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE SHALL BE STAGGERED ON THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF EIGHTEEN (18") INCHES.
5. METER VAULTS LOCATED IN CONCRETE DRIVEWAYS SHALL BE CENTERED IN A 4' X 4' SQUARE OF CONCRETE, SEPARATED FROM THE REST OF THE DRIVEWAY CONCRETE BY EXPANSION JOINT MATERIAL.
6. FINDER WIRE SHALL BE TAPED TO SERVICE LINES AT 5" MAXIMUM SPACING. TAPE TO SERVICE NOT MORE THAN 6" FROM ANGLE STOP (WITH 10 MIL WATERPROOF TAPE).



KEYNOTES

- | | |
|---|---|
| <ol style="list-style-type: none"> ① BALL CORPORATION STOPS (1") APPROVED: FORD FB1101-4-G-NL OR APPROVED EQUAL ② NO. 12 COPPER FINDER WIRE WITH BLUE INSULATION ③ 21" DIA. X 36" CMP VAULT, NOTCH FOR SERVICE LINES. CMP SHALL BE PLACED ON CONCRETE BLOCKS (2 EA) SEE SHEET 1 OF 2 FOR LOCATION ④ 5/8" X 3/4" METER SETTER WITH LOCKABLE KEY VALVE APPROVED: FORD VBHC92-18W-81-33J-NL ⑤ WATER MAIN ⑥ 1" SERVICE LINE (TYPICAL) NO SPlicing ALLOWED ⑦ MALE SWIVEL END ⑧ FULL OPENING BALL VALVE APPROVED: FORD B11-333-NL | <ol style="list-style-type: none"> ⑨ CURB STOP ADAPTER APPROVED: FORD C86-34-G-NL ⑩ FIRM UNDISTURBED EARTH ⑪ EXTEND 10" FROM METER VAULT AND PROVIDE TEMPORARY PLUG (THREADED IN HIGH GROUNDWATER AREAS) ⑫ DOUBLE PURPOSE COUPLING (PROPERTY LINE) ⑬ LID SHALL CONTAIN ONE OR TWO FACTORY DRILLED "TOUCH READ" HOLES FOR SINGLE OR DOUBLE METERS. THE METER CAN SHALL BE 21-INCH DIAMETER CMP (CUT TO MATCH LID ELEVATION TO FINISH GRADE AND THE CAN NOTCHED AT BOTTOM FOR SERVICE LINES) AND THE CAN LID SHALL BE A D&L FOUNDRY B5020 FOR NON-TRAFFIC AREAS OR A D&L FOUNDRY B6018 FOR TRAFFIC AREAS. SERVICE PIPELINES SHALL BE A MINIMUM 1-INCH, UNLESS OTHERWISE NOTED, WITH MINIMUM 5/8" X 3/4" METER SETTERS. |
|---|---|



Garden City 5/8" x 3/4" Single or Double Water Service Connection

NOT TO SCALE