

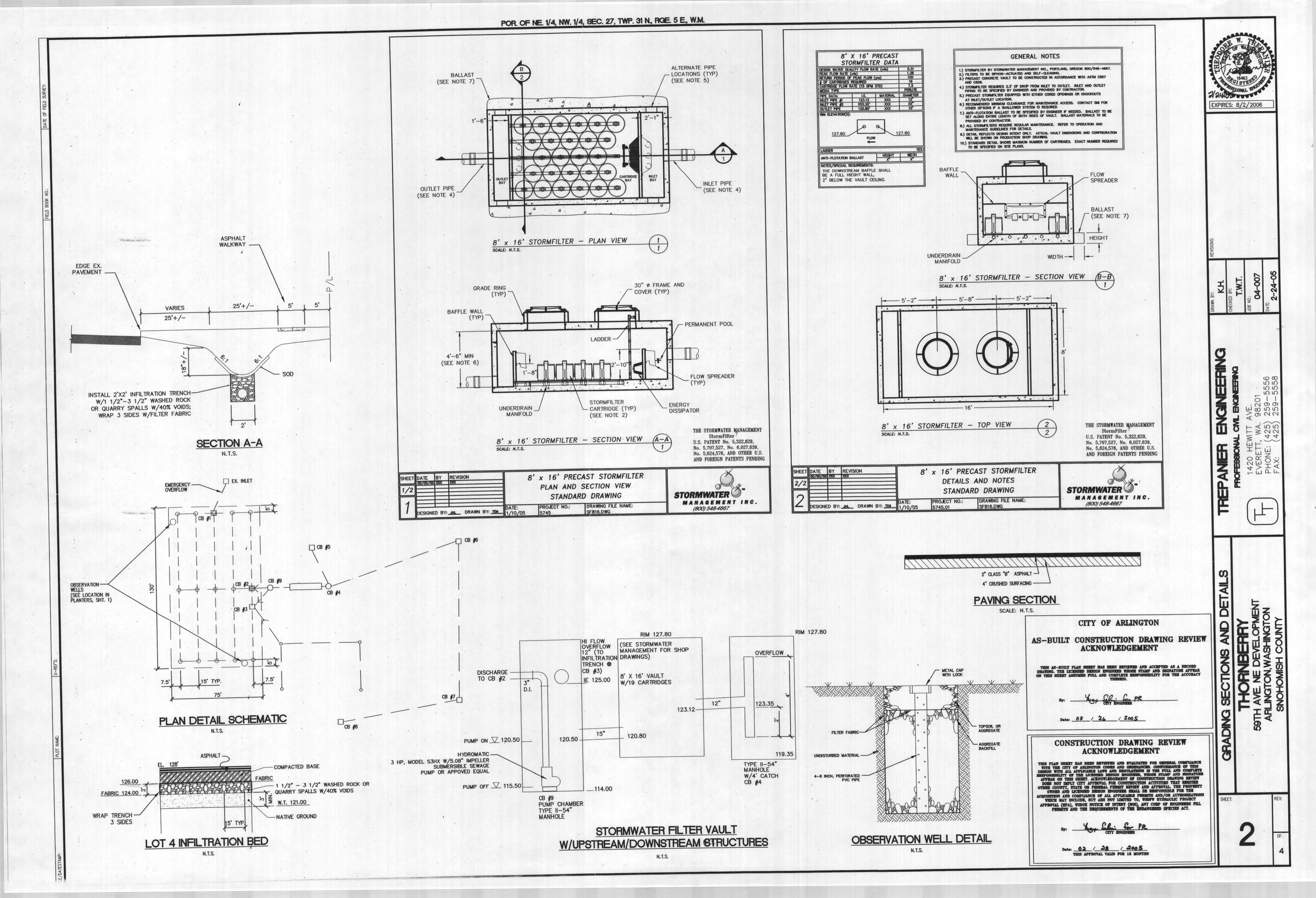
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Date: 02 / 28 / 2006

CONSTRUCTION PLANS AND VARIANCE TO THE PLAN AND PROFILE SHEETS SHALL BE SO NOTED ON THE PLANS AND THE WORD

"AS-BUILT" WITH THE CURRENT DATE SHALL BE WRITTEN OR STAMPED ON THE PLANS.

REQUIRED.



WATER SYSTEM NOTES

CONSTRUCTION NOTES

1. TRENCHES SHALL BE EXCAVATED TO LINE AND DETPTH SO ALL NEW PIPELINES CONSTRUCTED SHALL NOT HAVE LESS THAN THREE (3) FEET OR IN EXCESS OF FOUR (4) FEET OF COVER, MEASURED FROM THE TOP OF THE PIPE TO THE APPROVED FINISH GRADE. IF A GRADE REVISION IS MADE, THE COVER OVER THE WATER MAIN MUST REMAIN WITHIN THESE LIMITS: OTHERWISE, THE WATER MAIN SHALL BE RECONSTRUCTED.

2. THE EXCAVATION SHALL BE MADE IN A STRAIGHT GRADE THROUGH LOCALIZED BREAKS IN GRADE. THE EXCAVATION SHALL BE DEEPENED GRADUALLY AT CHANGES IN THE STREET GRADES SO THAT THERE ARE NO ABRUPT CHANGES IN PIPELINE GRADE. DEFLECTIONS AT EACH PIPE JOINT SHALL NOT EXCEED THE MAXIMUM PERMISSIBLE DEFLECTION.

3. EXCEPT FOR UNUSUAL CIRCUMSTANCES WHERE APPROVED BY THE ENGINEER, THE TRENCH SIDES SHALL BE EXCAVATED VERTICALLY AND THE TRENCH WIDTH SHALL BE EXCAVATED ONLY TO SUCH WIDTHS AS ARE NECESSARY FOR ADEQUATE WORKING SPACE. THE MINIMUM TRENCH WIDTH AT THE TOP OF THE PIPE SHALL NORMALLY BE THE OUTSIDE DIAMETER OF THE PIPE BARREL PLUS 16 INCHES. THE TOP WIDTH OF THE TRENCH SHALL NOT EXCEED THE OUTSIDE DIAMETER OF THE PIPE PLUE 36 INCHES. THE TRENCH SHALL BE KEPT FREE FROM WATER UNTIL JOINTING IS COMPLETE. SURFACE WATER SHALL BE DIVERTED SO AS NOT TO ENTERTHE TRENCH. THE CONTRACTOR SHALL MAINTAIN SUFFICIENT PIPIMG EQUIPMENT ON THE JOB TO ENSURE THAT THESE PROVISIONS ARE CARRIED OUT. GRAVEL REQUIRED IN THE BOTTOM OF THE TRENCH DUE TO ACTION OF WEATHER OR WORKMAN SHALL BE FURNISHED BY THE CONTRACTOR. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCE ENCOUNTERED AND BOULDERS, ROOTS AND OTHER OBSTRUCTIONS SHALL BE ENTIRELY REMOVED OR CUT OUT TO THE NEW WIDTH OF THE TRENCH AND TO A DEPTH 6 INCHES BELOW WATER MAIN GRADE. WHERE MATERIAL IS REMOVED FROM BELOW WATER MAIN GRADE, THE TRENCH SHALL BE BACKFILLED TO GRADE WITH MATERIAL SATISFACTORY TO THE ENGINEER AND THOROUGHLY COMPACTED.

4. TRENCHING OPERATIONS SHALL NOT PROCEED MORE THAN 100 FEET IN ADVANCE OF PIPE LAYING, EXCEPT WITH WRITTEN APPROVAL OF THE CITY.

5. WHEN TRENCHING OPERATIONS CUT THROUGH CONCRETE PAVEMENT, THE PAVEMENT SHALL BE REMOVED TO A WIDTH OF 18 INCHES GREATER THAN THE TOP WIDTH OF THE TRENCH. THE CONCRETE SHALL BE CUT ON A STRAIGHT LINE AND SHALL BE BEVELED SO THAT THE CUT WILL BE APPROXIMATELY 1 INCH WIDER AT THE TOP THAN AT THE BOTTOM. ASPHALT PAVING SHALL BE CUT AHEAD OF THE TRENCHING EQUIPMENT TO PREVENT EXCESSIVE TEARING UP OF THE SURFACING AND TO ELIMINATE RAGGED EDGES.

6. THE CONTRACTOR SHALL NOT OPERATE ANY GATE VALVE OR MAKE ANY CONNECTIONS TO THE EXISTING WATER MAIN WITHOUT PRIOR APPROVAL OF THE CITY.

7. THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS WITH THE CITY FOR THE CONNECTION TO THE EXISTING WATER MAIN.

8. THE CITY MAY ELECT TO FURNISH THE MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR MAKING THE CONNECTIONS AND THE CONTRACTOR SHALL PAY THE CITY FOR ALL COSTS FOR THE CONNECTION. IN THE EVENT THE CITY DOES NOT ELECT TO MAKE THE CONNECTION, THEY MAY AUTHORIZE THE CONTRACTOR TO FURNISH THE CITY APPROVED MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR MAKING THE CONNECTION UNDER THE SUPERVISION OF THE CITY.

9. ALL MATERIALS USED FOR THE CONNECTION SHALL BE THOROUGHLY STERILIZED BY SWABING THE INTERIOR WITH A CHLORINE SOLUTION OF 50 PPM.

10. BACKFLOW PREVENTION REQUIREMENTS SHALL BE COMPLETED PRIOR TO CONSTRUCTION.

11. ALL TRENCHING OPERATIONS SHALL BE PERFORMED IN STRICT COMPLIANCE WITH APPLICABLE FEDERAL, STATE, LOCAL AND INDUSRY SAFETY REGULATIONS AND REQUIREMENTS.

12. ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS, AWWA SPECIFICATIONS, AND THE INSTRUCTIONS OF THE MANUFACTURER SUBJECT TO THE APPROVAL OF THE CITY. ALL PIPE ENDS SHALL BE SQUARE WITH THE LONGITUDINAL AXIS OF THE PIPE AND ANY DAMAGE TO THE ENDS SHALL BE CUT OFF BEFORE INSTALLATION. WHERE NECESSARY TO CUT THE PIPE, THE PIPE SHALL BE CUT WITH APPROVED CUTTING TOOLS.

1. WATER PIPE

A. DUCTILE IRON PIPE SHALL BE NEW, CLASS 52, CEMENT-LINED, CONFORMING TO ANSI STANDARD A21.51 (AWWA C-51). B. DUCTILE IRON PIPE SHALL BE PUSH-ON JOINT (TYTON JOINT ONLY) OR MECHANICAL JOINT. PIPE WITH PUSH-ON JOINTS SHALL BE FURNISHED WITH A SINGLE RUBBER GASKET. ALL GASKETS, INCLUDING MJ SHALL BE LUBRICATED TO AFFECT THE SEAL. PIPE WITH MECHANICAL JOINTS SHALL BE FURNISHED WITH A MECHANICAL JOINT OF THE STUFFING BOX TYPE, INCLUDING RUBBER GASKET, CAST-IRON GLAND, AND TEE-HEAD BOLTS AND NUTS TO EFFECT SEAL. ALL JOINTS SHALL

C. FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B16.1.

D. INTERNALLY LOCKED JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND EQUAL TO U.S. PIPE TR FLEX OR

E. BELL AND SOCKET JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.10 AND EQUAL TO U.S. PIPE "UNIFLEX". F. STANDARD THICKNESS CEMENT MORTAR LINING SHALL BE IN ACCORDANCE WITH ANSI STANDARD A21.4 (AWWA C-104).

G. THE CONTRACTOR SHALL FURNISH CERTIFICATION FROM THE MANUFACTURER OF THE PIPE AND GASKET SUPPLIED THAT THE INSPECTION AND ALL OF THE SPECIFIED TEST HAVE BEEN MADE AND THE RESULTS THEROF COMPLY WITH THE REQUIREMENTS OF THIS STANDARD.

2. ATER SERVICE PIPE

A. DRISCOPIPE CTS CL 200 HI MOL POLY PIPE ALL DIAMETER 1"-2".

B. LARGE DIAMETER WATER SERVICE PIPE SHALL BE DRISCOPIPE CTS CL 200 HI MOL POLY PIPE (200psi). DRISCOPIPE SHALL CONFORM TO ASTM D-2737-SDR9 (PE3408). CTS 110 SS LINERS FOR POLYPIPE SHALL BE USED.

C. ATER SERVICES 1 ½ " TO 4" IN SIZE REQUIRE A MAINLINE SIZE TEE WITH 6" FLANGE AND 6" R.S.G.V. WITH ADAPTER TO SERVICE SIZE.

3. DUCTILE IRON FITTINGS

A. DUCTILE IRON FITTINGS SHALL BE SHORT BODY FOR PRESSURE RATING OF 150 PSI, UNLESS OTHERWISE NOTED. METAL THICKNESS AND MANUFACTURING PROCESS SHALL CONFORM TO APPLICABLE PORTIONS OF ANSI STANDARD A21.10, A21.11, A21.53, B16.2 AND B16.4.

A21.11 (AWWA C-111).

B. STANDARD CEMENT MORTAR LINING IN ACCORDANCE WITH ANSI STANDARD A21.4 (AWWA C-104).

D. WHERE RESTRAINED JOINTS ARE REQUIRED FITTINGS MAY BE MANUFACTURED WITH U.S. PIPE TR FLEX, GRIFFEN "SNAP LOK" OF PACIFIC STATES RESTRAINED JOINT. MEGA-LUG RETAINER GLANDS MAY BE USED.

4. GATE VALVES, RESILIENT SEAT A. VALVES 12" AND SMALLER SHALL CONFORM TO REQUIREMENTS OF AWWA STANDARD SPECIFICATIONS FOR GATE VALVES

FOR ORDINARY WATER WORKS SERVICE NO. C-509, EXCEPT AS SUPERSEDED BY THE FOLLOWING: THEY SHALL BE IRON BODY WITH EPOXY COATING INSIDE, RESILIENT SEAL RUBBER VULCANIZED TO GATE, OR S.S. SEAT RING ATTACHED WITH S.S. SCREWS. THE VALVES SHALL BE NON-RISING STEM, OPEN TO THE LEFT, AND SHALL BE EQUIPPED WITH STANDARD 2" SQUARE OPERATING NUTS. VALVES SHALL BE EQUIPPED WITH "O-RING" PACKING. VALVES TO BE EQUAL TO AMERICAN-80 "CRS". WATEROUS SERIES 500 OR MUELLER A-2370.

A. BUTTERFLY VALVES 14" AND LARGER SHALL BE CLASS 150 OR BETTER, SIMILAR AND EQUAL TO DRESSER "450" OR PRATT "GROUNHOG" AND SHALL MEET OR EXCEED ALL STRENGTH REQUIREMENTS OF AWWA C-504-70, EXCEPT THAT CERTAIN DEVIATIONS IN THE CONSTRUCTION DETAILS OF VALVE SEATS AND SHAFT SEALS WILL BE CONSIDERED BY THE CITY.

B.VALVE SHAFTS SHALL MEET OR EXCEED THE STRENGTH REQUIREMENTS OF AWWA, C-504-70 AND BE ONE-PIECE. PACKING SHALL BE "O-RING" EXCEPT THE CITY MAY REVIEW OTHER TYPES OF PACKING C. BUTTERFLY VALVES TO BE INSTALLED UNDERGROUND SHALL HAVE SEALED MECHANICAL OPERATORS AND 2" STANDARD

D. THE VALVE OPENING NUT SHALL NOT EXCEED 4 FEET IN DEPTH. AN EXTENSION SHALL BE PROVIDED AS REQUIRED.

E. COMPLETE MANUFACTURER'S SPECIFICATIONS FOR THE VALVES PROPOSED FOR USE SHALL BE SUBMITTED TO THE

F. NO VALVES SHALL BE USED WHICH HAVE NOT BEEN APPROVED BY THE CITY.

MATERIALS

6. VALVE BOXES VALVE BOXES SHALL BE TWO-PIECE, CAST IRON VALVE BOX WITH AUJUSTABLE SECTIONS EQUAL TO OLYMPIC FOUNDRY PART #VB1. W / DEEP SKIRT LIDS.

A. METER BOXES SHALL BE MID STATES PLASTIC W / DUCTILE IRON LIDS AND 1 ? " HOLE IN LID FOR "TOUCH READ" MOUNT. ALL METER BOXES SHALL BE A MINIMUM OF 3 FEET FROM CURB CUT. FOR 5/8 & 1" METERS USE THE MSBCF 1324-12.

FOR 1 1/2 " & 2" METERS USE THE MSBCF 1730-18.

A. FIRE HYDRANTS SHALL BE MACH 929 RELIANT W / 5 1/2" MVO OR MUELLER SUPER CENTRION 250 W / 5 1/4" MVO ONLY. INSTALL AS PER FIRE HYDRANT ASSEMBLY STANDARD DETAIL W-1.

B. FIRE HYDRANTS SHALL BE FITTED WITH AN APPROVED 5" STORZ TO 4 1/2" NST FEMALE ADAPTER. C. HYDRANT RUNS FROM 6" VALVE SHALL NOT BE LESS THAN 24" BUT NOT TO EXCEED 18' IF THE HYDRANT RUN IS TO EXCEED THE MAXIMUM IT WILL BE REQUIRED TO INSTALL A RESTRAINT

SYSTEM. (GRINNELL 595 SHACKLE CLAMP). D. ALL FIRE HYDRANTS MUST BE A MINIMUM OF SIX FEET FROM THE OUTSIDE EDGE OF ANY

E. FIRE HYDRANTS SHALL BE FITTED WITH BOTH ALL THREAD ROD AND MEGA LUGS. RESTRAINTS SHALL BE USED ON VALVE AND AT THE HYDRANT. (EYE BOLTS TO BE USED ON ALL THREAD ROD

F. HYDRANTS ARE TO BE PAINTED BEFORE FINAL INSPECTION (EQUIPMENT YELLOW / CAT YELLOW)

G. ALL FIRE HYDRANTS THAT ARE INSTALLED DURING CONSTRUCTION SHALL BE BAGGED INDICATING IT TO BE OUT OF SERVICE.

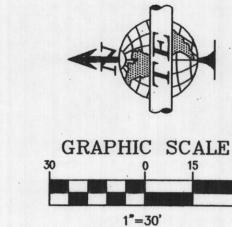
H. HYDRANT GUARDS TO BE INSTALLED ON ALL UNPROTECTED HYDRANTS AT THE DISCRETION OF THE CITY OF ARLINGTON. (I.E. TRAFFIC AREAS, NARROW PLANTERS, PARKING STALLS ETC.) I. THE DISTANCE BETWEEN THE NEAREST POINT OF THE HYDRANT AND THE TRAFFIC OR FACE

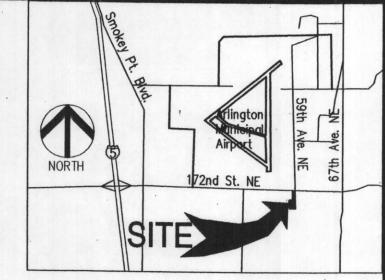
OF THE CURB SHALL BE A MINIMUM OF 24". J. INSTALL BLUE PAVEMENT MARKER IF HYDRANT IS IN RIGHT-OF-WAY.

A. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED, A SEPARATE METERED WATER SERVICE IS REQUIRED AND A DOUBLE CHECK VALVE ASSEMBLY (DCVA) SHALL BE INSTALLED AFTER THE METER BEFORE ANY BRANCH CONNECTION.

B. ALL ASSEMBLIES SHALL APPEAR ON THE STATE OF WASHINGTON DEPARTMENT OF HEALTH LIST OF APPROVED ASSEMBLIES. C. ALL ASSEMBLIES SHALL BE TESTED BY A STATE OF WASHINGTON AND CITY OF ARLINGTON APPROVED

CERTIFIED BACKFLOW ASSEMBLY TESTER, AT OWNER'S EXPENSE. D. THE CITY OF ARLINGTON SHALL INSPECT THE ASSEMBLY PRIOR TO BEING TESTED. A COPY OF THE TEST REPORT SHALL BE PROVIDED TO THE CITY OF ARLINGTON UTILITIES DIVISION BEFORE FINAL







VICINITY MAP

SANITARY SEWER SYSTEM NOTES

1. PVC PIPE AND FITTINGS SHALL BE INTEGRAL WALL BELL AND SPIGOT, RUBBER GASKET JOINT, PVC CONFORMING TO ASTM 3034 SDR 35.

2. ALL PVC SEWER PIPE AND FITTINGS MANUFACTURED AND INSTALLED SHALL BE IN ACCORDANCE WITH THE ASTM RECOMMENDED SPECIFICATIONS D3034-73, CURRENT REVISIONS, AND ALL INSTALLATIONS SHALL BE IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DIRECTIONS. ALL PIPE SHALL BE CLEARLY MARKED WITH THE DATE OF MANUFACTURE. THERE SHALL BE NO REDUCTION IN PIPE WALL THICKNESS AT THE BELL AS A RESULT OF BELL FORMATION. ALL PIPE SHALL BE PROVIDED WITH A REFERENCE MARK FOR PROPER SPIGOT INSERTION. JOINT GASKETS SHALL BE FABRICATED FROM A COMPOUND OF WHICH THE BASIC POLYMER SHALL BE A SYNTHETIC RUBBER CONSISTING OF STYRENE, BUTADIENE, OR ANY COMBINATION THEREOF AND SHALL MEET THE REQUIREMENTS OF ASTM F477,

3. CONNECTIONS FOR SIDE SEWER STUBS SHALL BE 6 INCHES INSIDE DIAMETER TEE FITTINGS FABRICATED IN THE MANUFACTURER'S PLANT. "Y" BRANCHES SHALL BE USED WHERE THE SEWER MAIN SIZE IS LESS THAN 8" INSIDE DIAMETER. NO FIELD CUT-IN TEES OR "YS" WILL BE ALLOWED UNDER THESE SPECIFICATIONS WITHOUT WRITTEN APPROVAL BY THE CITY.

4. MANHOLES (SEE C.O.A. STANDARD DETAIL S-1) SHALL BE OF THE OFFSET TYPE AND SHALL BE PRECAST CONCRETE SECTIONS WITH EITHER A CAST IN PLACE BASE OR A PRECAST BASE MADE FROM A 3,000 PSI STRUCTURAL CONCRETE. JOINTS BETWEEN PRECAST WALL SECTIONS SHALL BE CONFINED "O" RING OR AS OTHERWISE SPECIFIED. THEY SHALL BE CONSTRUCTED IN FULL COMPLIANCE WITH ASTM C478 AND THE DETAILS SHOWN ON STANDARD SPECIFICATIONS PRECAST MANHOLE AND AS FURTHER SPECIFIED HEREIN.

5. MANHOLE SECTIONS SHALL BE PLACED AND ALIGNED SO AS TO PROVIDE VERTICAL SIDES AND VERTICAL ALIGNMENT OF THE LADDER STEPS. THE COMPLETED MANHOLE SHALL BE RIGID, TRUE TO DIMENSION AND BE WATERTIGHT. ROUGH UNEVEN SURFACES WILL NOT BE

6. WHERE WORK IS LOCATED IN PUBLIC RIGHT-OF-WAY, NOT LESS THAN 14 INCHES NOR MORE THAN 26 INCHES SHALL BE PROVIDED BETWEEN THE TOP OF THE CONE OR SLAB AND THE TOP OF THE MANHOLE FRAME.

7. CHANNELS SHALL BE MADE TO CONFORM ACCURATELY TO THE SEWER GRADE AND SHALL BE BROUGHT TOGETHER SMOOTHLY WITH WELL-ROUNDED JUNCTIONS, SATISFACTORY TO THE CITY ENGINEER.

8. THE CHANNELS SHALL BE FIELD POURED AFTER THE INLET AND OUTLET PIPES HAVE BEEN LAID AND FIRMLY GROUTED INTO PLACE AT THE PROPER ELEVATION. ALLOWANCES SHALL BE MADE FOR A MINIMUM OF 1/10 FOOT (0.1') DROP IN ELEVATION ACROSS THE MANHOLE 9. BACKFILLING AND SURFACE RESTORATION SHALL CLOSELY FOLLOW INSTALLATION AND TESTING OF THE PIPE SO THAT NO MORE THAN

100 FEET OF PIPE SHALL BE LEFT EXPOSED WITHOUT EXPRESS APPROVAL OF THE ENGINEER. CARE SHALL BE TAKEN TO INSURE THAT THE PIPE AND ITS PROTECTIVE COATINGS ARE NOT DAMAGED. NO ROCKS OR STONE SHALL BE PERMITTED WITHIN 12" OF THE PIPE.

10. WHEN REQUIRED IN AREAS OF UNSUITABLE TRENCH BOTTOM, FOUNDATION GRAVEL SHALL CONSIST OF CLEAN, GRANULAR MATERIAL FREE FROM OBJECTIONABLE MATERIALS SUCH AS VEGETABLE MATTER OR OTHER DELETERIOUS SUBSTANCES WITH AT LEAST 90 MATERIAL RANGING FROM 1" IN DIAMETER TO 3" IN DIAMETER AND 100% 3" IN DIAMETER OR LESS.

11. 3/8° CLEAN MANUFACTURED PEA GRAVEL BEDDING SHALL BE REQUIRED.

12. BEDDING MATERIAL SHALL BE CAREFULLY PLACED AND FIRMLY COMPACTED TO PROVIDE A FIRM, UNIFORM CRADLE FOR THE PIPE. THE MINIMUM THICKNESS OF THE LAYER OF BEDDING MATERIAL REQUIRED SHALL BE 4 INCHES UNDER THE BELL FOR ALL PIPE SIZES OF 27 INCHES DIAMETER AND SMALLER, 6 INCHES FOR ALL PIPE SIZES 30 INCHES DIAMETER AND LARGER AND 6 INCHES UNDER THE BELL OF THE PIPE FOR ALL DIAMETER PIPES WHERE ROCK IS EXCAVATED. TO PROVIDE THIS FIRM, CONTINUOUS SUPPORT FOR THE PIPE, IT IS NECESSARY TO HAND TAMP OR "SLICE" BEDDING MATERIAL SOLIDLY UNDER THE PIPE.

13. AFTER THE PIPE LAYING OPERATION, ADDITIONAL BEDDING MATERIAL SHALL BE PLACED AND COMPACTED BY HAND TOOLS FOR THE FULL WIDTH OF THE TRENCH TO A HEIGHT OF 12" ABOVE THE TOP OF THE SEWER MAIN AND 6" ABOVE THE TOP OF THE WATER MAIN.

14. IT IS ASSUMED THAT EXCAVATED MATERIAL IS SUITABLE FOR TRENCH BACKFILL. WHERE EXCAVATED MATERIAL IS NOT APPROVED FOR BACKFILL, GRAVEL BASE, CLASS B, CONFORMING TO THE REQUIREMENTS OF SECTION 9-03.10 OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, OR GRANULAR MATERIAL COMMONLY KNOWN AS BANK RUN GRAVEL,

15. ALL JOINTS SHALL BE MADE UP IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DIRECTIONS AND ALL SEWER PIPE MANUFACTURED SHALL MEET OR EXCEED THE ASTM AND CPAW RECOMMENDED SPECIFICATIONS, CURRENT REVISIONS.

16. FURTHER, ALL 8" OR LARGER PVC PIPE LAID SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH SECTION 7-17-3 OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION. FOR ACCEPTANCE, PVC PIPE SHALL NOT HAVE ANY DIAMETER DECREASED BY 5 PER CENT OR MORE.

17. THE SEWER PIPE, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, SHALL BE INSTALLED UPGRADE FROM POINT OF CONNECTION ON THE EXISTING SEWER OR FROM A DESIGNATED STARTING POINT TO LINE AND GRADE PER APPROVED PLANS. THE SEWER PIPE SHALL BE INSTALLED WITH THE BELL END FORWARD OR UPGRADE. WHEN THE PIPE LAYING IS NOT IN PROGRESS, THE FORWARD END OF THE PIPE SHALL BE KEPT TIGHTLY CLOSED WITH AN APPROVED TEMPORARY PLUG. WHEREVER MOVABLE SHORING (STEEL BOX) IS USED IN THE DITCH, CARE SHALL BE TAKEN SO THAT THE PIPE AND/OR JOINTS DO NOT MOVE WHEN THE SHORING OR BOX IS MOVED. ANY INDICATION THAT JOINTS ARE NOT BEING ADEQUATELY HELD SHALL BE OF SUFFICIENT REASON FOR THE CITY ENGINEER TO REQUIRE RESTRAINTS, whether or not moveable shoring is being used .

18. AT THE TIME OF THE BUILDING PERMIT, INDIVIDUAL LOT OWNERS MAY BE REQUIRED TO INSTALL MONITORING MANHOLES AS REQUIRED 19. ALL MANHOLE STRUCTURES SHALL BE INSPECTED AND SIGNED OFF PRIOR TO BACKFILL BEING ADDED TO THE EXCAVATION.

20. ACCESS SHALL BE PROVIDED TO THE CONSTRUCTION SITE AT ALL TIMES FOR INSPECTION PURPOSE.

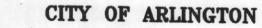
21. SEWER TRACER TAPE REQUIRED OVER ALL SEWER PIPE INSTALLATION.

22. INSTALL SIDE SEWER STUBS TO ONE SIDE OR THE OTHER OF CEMENT/ASPHALT DRIVEWAYS WHEN POSSIBLE. 23. SITE SEWERS ARE TO BE CAPPED AND MARKED BY A 2'X4' MARKED S/S. THE STUB MARKER MUST INCLUDE LOT NUMBER AND DEPTH

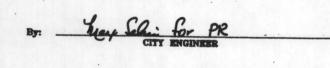
OF STUB INVERT. (SEE SERVICE CONNECTION DETAIL, S-8) 24. SEWER BACKFILL WITHIN THE CITY RIGHT OF WAY TO BE COMPACTED TO 95%, WITH TESTING RESULTS TO THE CITY OR CDF BACKFILL REQUIRED. 25. ALL SANITARY SEWER MANHOLES OUTSIDE OF PAVED OR CONCRETE AREAS MUST HAVE A 6'X6' REINFORCED CONCRETE PAD SET TO FINISH GRADE.

26. SANITARY SEWER MARKER POSTS ARE REQUIRED TO HAVE A 12-18 GAGE WIRE TO THE STUB. 27. ALL SANITARY SIDE SEWERS ARE TO BE DIMENSION FROM THE NEAREST DOWNSTREAM MANHOLE RATHER THAN THE INVERT OF THE PIPE. 28. WYES ARE NOT ALLOWED ON LINES 8" AND LARGER, TEES ARE REQUIRED.

29. SIDE SEWERS STUBS MUST EXTEND A MINIMUM OF 10' BEYOND THE PROPERTY LINE AND A WITH OF 5' BEYOND THE UTILITY BASEMENT.



AS-BUILT CONSTRUCTION DRAWING REVIEW ACKNOWLEDGEMENT



Date: 05 / 26 / 2005

CONSTRUCTION DRAWING REVIEW ACKNOWLEDGEMENT

ACQUISITION AND COMPLIANCE OF ALL APPLICABLE PERMITS AND/OR AUTHORIZATION WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WEDFW HYDRAULIC PROJECT APPROVAL (HPA), WEDGE NOTICE OF INTENT (NOI), ANY CORP OF ENGINEERS FILL PERMITS AND THE REQUIREMENTS OF THE ENDANGERED SPECIES ACT.

Date: 02 / 28 / 2005

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