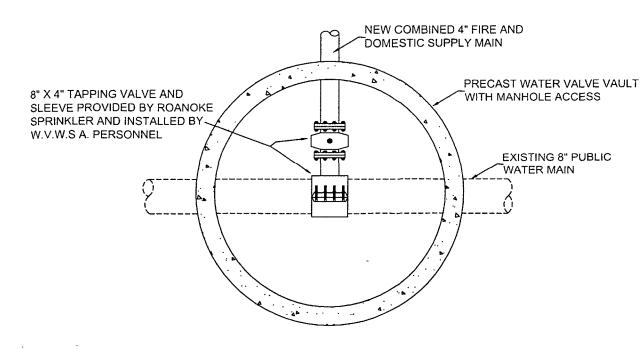


NOTE: PATCH REQUIRED TO BE MINIMUM 10'-0" WIDE PER DAN DURHAM CITY OF ROANOKE INSPECTOR ------ 10'-0" MINIMUM -----ASPHALT SURFACE LAYER NOTE 1, 7, 8 BASE ALL PAVEMENT SHALL BE SAW CUT WITH NEAT, UNIFORM LINES PRIOR TO EXCAVATION PIPE BEDDING MATERIAL SHALL BE CRUSHED STONE (VDOT NO. 25 OR 26) OR OPEN GRADED AGGREGATE (VDOT NO. 57, 68 7, OR 8). ALTERNATE MATERIALS MUST BE APPROVED BY THE CITY ENGINEER. MAXIMUM DEPTH OF PIPING BEDDING MATERIAL IF USING OPEN AGGREGATE FOR BEDDING. OPTIONAL CONCRETE EASEMENT FOR POWER OR COMMUNICATION CONDUIT. PROVIDE A MINIMUM OF 4" CONCRETE COVER FROM ALL SIDES OF CONDUIT. BACKFILL MATERIAL SHALL BE FLOWABLE FILL MEETING THE REQUIREMENTS OF VDOT SPECIAL PROVISIONS FOR FLOWABLE BACKFILL THE MATERIAL MUST BE PLANT CERTIFIED TO PROVIDE A 28 DAY COMPRESSIVE STRENGTH BETWEEN 30 AND 200 PSI. A CERTIFICATE OF MIX DESIGN MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO PLACING THI MATERIAL IN THE TRENCH. A MINIMUM OF FOUR 6X12 TEST CYLINDERS SHALL BE TAKEN EVER 50 CY OF PLACEMENT. CYLINDERS SHALL BE TESTED BY A QUALIFIED TESTING LABORATORY FOR 28 DAY STRENGTH. RESULTS SHALL BE PROVIDED TO THE INSPECTOR WITHIN 24 HOURS OF TESTING COMPLETION. THE COSTS OF ALL TESTING ARE THE RESPONSIBILITY OF THE PERMITTEE. IF THI REPORT INDICATES THE COMPRESSION STRENGTHS ARE NOT BETWEEN 30 AND 200 PSI, THE PERMITTEE SHALL BI RESPONSIBLE FOR REMOVING AND REPLACING THE BACKFILL AND COMPLETING THE RESTORATION OF THE STREET AT NO COST TO THE CITY. . ALL ASPHALT DEPTHS SHALL BE DETERMINED BY THE PRESENCE OF LANE STRIPPING ON THE STREET. FOR STREETS WITH LANE STRIPPING, THE MINIMUM DEPTH SHALL BE 8" AND CONSIST OF TWO 3" LIFTS OF ASPHALT BASE MIX AND ONE 2" LIF OF ASPHALT SURFACE MIX. FOR STREETS WITHOUT LANE STRIPPING, THE MINIMUM DEPTH SHALL BE 4" AND CONSISTS OF ONE 2 ½" LIFT OF ASPHALT BASE MIX AND ONE 1 ½" LIFT OF ASPHALT SURFACE MIX. THE ASPHALT SURFACE LAYER SHALL EXTEND OVER UNDISTURBED BASE A MINIMUM OF 12" ON ALL SIDES. ALL PAVEMENT MATERIALS SHALL MEET VDOT REQUIREMENTS FOR SURFACE MIX (SM-9.5AL, SM-9.5A OF SM-12.5D), BASE MIX (BM-25), AND STONE AGGREGATE (21A OF 21B). PLANT CERTIFICATION FOR EACH MIX INCORPORATED INTO THE WORK SHALL BE PROVIDED TO THE INSPECTOR WHEN MATCHING NONSTANDARD MATERIAL, THE INSPECTOR SHALL DETERMINE AN ACCEPTABLE MATERIAL. THE REPAIR SHALL BE RECTANGULAR AND SAW CUT IN STRAIGHT, UNIFORM LINES THAT ARE ALIGNED WITH THE STREE CENTERLINE. WHEN EDGES OF PAVEMENT HAVE BEEN UNDERMINED, PAVEMENT SHALL BE REMOVED TO A NEAT 12 BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER THAN 40 SQ.FT. MAY BI NON-RECTANGULAR, HOWEVER. THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES. ANY OTHER DEVIATION ON PATCH SHAPE MUST BE APPROVED BY THE INSPECTOR PRIOR TO THE REPAIRS BEING MADE. THE FINISHED PATCH SURFACE SHALL BE WITHIN  $\frac{1}{4}$ " AT ANY POINT ACROSS THE PATCH AS IT RELATES TO THE SURROUNDED STREET SURFACE. A FULL COVERAGE TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER. OFFICE OF THE CITY ENGINEER - ROANOKE VIRGINIA APPROVED UTILITY TRENCH REPAIR IN PAVEMENT USING CONTROLLED DENSITY FILL

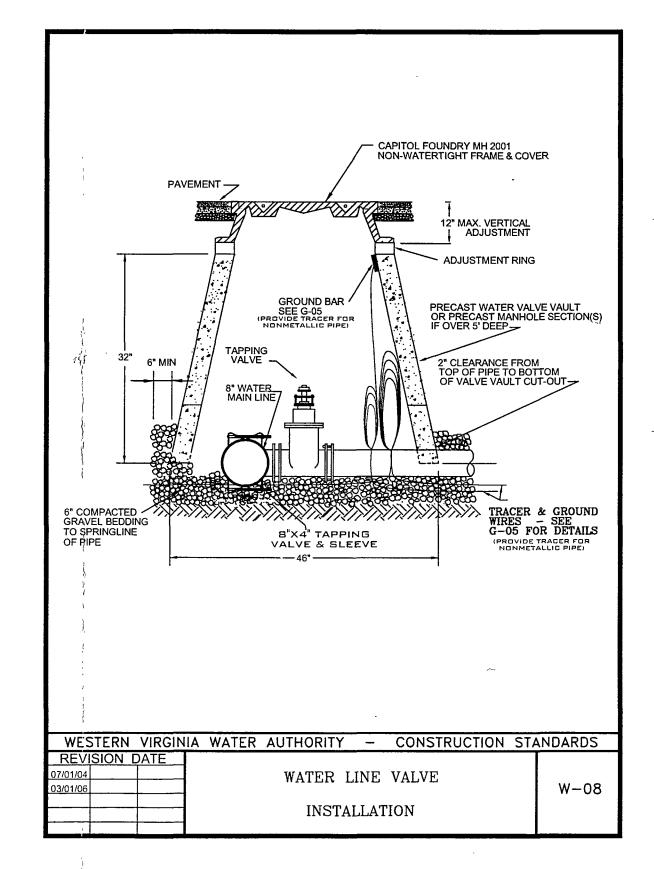
TRENCHING, BACKFILL AND STREET PATCH REQUIREMENTS



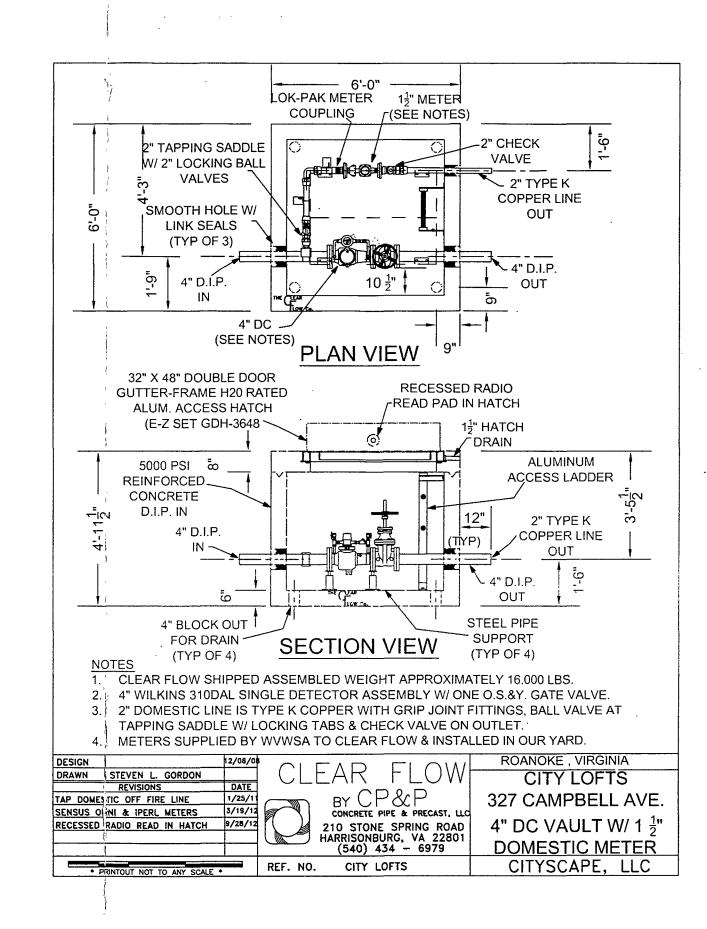
TAPPING VALVE & SLEEVE WITH SERVICE ACCESS MANHOLE AND PRECAST VAULT

**GENERAL PROJECT NOTES** 

- 1. R.S.I. TO SUPPLY TAPPING VALVE AND SLEEVE FOR W.V.W.S.A. TO MAKE TAP INTO 8" PUBLIC MAIN. 2. R.S.I. TO CUT, EXCAVATE AND PATCH STREET AS REQUIRED FOR MINIMUM 10'-0" WIDE PATCH AREA PER INSPECTOR DAN DURHAM WITH CITY OF ROANOKE. THE STREET WILL BE MILLED AT LEAST 1  $\,\%$ DEEP FOR THE 10'-0" WIDE PATCH. LINES OF RECTANGULAR PATCH SHALL BE A STRAIGHT, UNIFORM SAW CUT LINES ALIGNED WITH CENTERLINE OF THE STREET.
- 3. UTILITY TRENCH BACKFILLING AND STREET PATCHING REQUIREMENTS USING DENSITY FILL REQUIREMENTS PER DETAIL UTR-2 ABOVE.
- 4. BACK FILL OF DITCH AND EXCAVATION FOR TAP VAULT IN CAMPBELL AVENUE TO BE FLOWABLE FILL
- MEETING UTR-2 REQUIREMENTS.
- GENERAL CONTRACTOR TO CUT, EXCAVATE AND PATCH SIDEWALK AS REQUIRED. 4. UNDERGROUND FITTINGS TO BE MECHANICAL JOINT WITH RETAINER GLANDS IN LIEU OF THRUST
- BLOCKING PER N.F.P.A. #24.
- 5. NEW FIRE MAIN TO BE INSTALLED, TESTED AND FLUSHED IN ACCORDANCE WITH N.F.P.A. #24.



TAPPING VALVE & SLEEVE WITH SERVICE ACCESS MANHOLE AND



WVWA - Engineering

SCALE: \frac{1}{4}" = 1'-0" 

CLIENT: CITYSCAPE LLC RONOKE SPRINKLER, INC. FIRE PROTECTION SYSTEMS

As- Builts SPRINKLERS COMMENTS 1334 7TH STREET N.E. PLAN NORTH SYSTEM DESIGN CRITERIA SYMBOLS 3 WAY FIRE HYDRANT DATE: REVISIONS: Type of System: 

Wet □Dry □ Preaction □ Other □ ROANOKE, VIRGINIA 24012 M.J. ELL (540) 981-0009 FAX (540) 981-1010 Occupancy: Mercantile & residential Hazard: Light EXISTING Authority Having Jurisdiction: City of Roanoke & W.V.W.S.A. UNDERGROUND NEWT TAP, UNDERGROUND AND VAULT, NOTES AND DETAILS Underground Pipe Type: Ductile iron slip joint Type of Fittings: M.J. with retainer glands DATE 2-4-1\_ \_ \_ \_ NEW UNDERGROUND DESIGNER C.SPOTTSWOOF 327 CAMPBELL AVE. UNDERGROUND GATE POST INDICATOR VALVE OF **BLOCK** ROANOKE, VIRGINIA VALVE W/ ROADBOX SCALE AS NOTE