

GENERAL WATER AND PAVEMENT NOTES

THE WESTERN VIRGINIA WATER AUTHORITY WILL MAKE THE CONNECTION TO THE EXISTING 8" LINE. ALL REQUIRED EXCAVATIONS AND SHORING WILL BE PERFORMED BY THE CONTRACTOR. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR REMOVING THE EXISTING BLOWOFF VALVE, EXTENDING THE NEW 8" WATERLINE AND INSTALLING ALL REMAINING SERVICE WATERLINES, WATER VAULTS, METERS, VALVES, DETECTOR CHECKS AND FIRE HYDRANTS WILL ALSO BE INSTALLED BY THE CONTRACTOR.

THE NEW 8" WATERLINE FROM THE POINT OF CONNECTION TO THE EXISTING 8" LINE, TO BE CLASS 350 DUCTILE IRON PIPE OR AN APPROVED PIPE SPECIFIED IN THE 2012 WESTERN VIRGINIA REGIONAL DESIGN & CONSTRUCTION STANDARDS.

THE NEW 6" WATERLINE FROM THE VAULT TO THE BUILDING TO BE DR14 PVC PIPE, MEETING ASTM D-1785 & AWWA C-900-07 PIPE REQUIREMENTS.

THE NEW 3" DOMESTIC LINE FROM THE VAULT TO THE BUILDING TO BE POLYETHYLENE CTS O.D. PIPE, PE3408, RATED FOR 160 PSI, MEETING ASTM D 3035 REQUIREMENTS.

THE NEW 2" DOMESTIC LINE FROM THE TEE AT THE NEW 3" LINE TO THE TEE AT THE EXISTING 2" LINE, TO BE POLYETHYLENE CTS O.D. PIPE, PE3408, RATED FOR 160 PSI, MEETING ASTM D 3035 REQUIREMENTS.

THE NEW 4" LINE FROM THE BUILDING TO THE FDC STANDPIPE LOCATED NEAR THE VAULT, TO BE DR14 PVC PIPE, MEETING ASTM D-1785 & AWWA C-900-07 PIPE REQUIREMENTS.

REFERENCE SECTIONS 605.3 AND 605.5 OF THE COMMONWEALTH OF VIRGINIA PLUMBING CODE FOR WATERLINE REQUIREMENTS AND SECTION 312 FOR WATERLINE TESTING.

WATERLINE INSTALLATION SHALL COMPLY WITH THE LATEST INSTRUCTIONS OF THE PIPE MANUFACTURER.

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED WATER LINES.

THE WATERLINE, VALVES, WATER METERS, WATER VAULT & FIRE HYDRANT SHALL MEET THE REQUIREMENTS OF THE WESTERN VIRGINIA WATER AUTHORITY REGULATIONS, THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC), AND THE COMMONWEALTH OF VIRGINIA PLUMBING CODE.

ALL VALVES LOCATED IN THE WATER VAULT SHALL BE POSITIONED TO ALLOW FREE MOVEMENT OF THE VALVE LEVERS & VALVE OPERATION.

UPON COMPLETION OF THE WATER LINES AND IMMEDIATELY PRIOR TURNING THE LINES OVER FOR OPERATIONS, THE CONTRACTOR WILL VERIFY THAT ALL VALVES ARE TO BE FULLY OPENED.

ALL TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT.

CONTRACTOR RESPONSIBLE FOR ALL PAVEMENT PATCHING. ASPHALT PAVEMENT PATCH IN KINGSMAN ROAD, IF NEEDED, SHALL MATCH THE EXISTING PAVEMENT SECTION. THE MINIMUM PAVEMENT SECTION OF THE PAVEMENT PATCH SHALL BE CONSTRUCTED WITH 10" COMPACTED AGGREGATE SUBBASE MATERIAL, VDOT 21B, 6" COMPACTED BITUMINOUS CONCRETE BASE COURSE, TYPE BM-25.0 AND 1.5" COMPACTED BITUMINOUS CONCRETE SURFACE COURSE, TYPE SM-9.5A. (THICKNESS AFTER COMPACTION)

CONTRACTOR TO PROVIDE AS-BUILT PLANS OF THE NEW WATERLINE TO THE DESIGN ENGINEER AND TO THE WESTERN VIRGINIA WATER AUTHORITY.

GENERAL SEWER NOTES

THE SANITARY SEWER LINES TO BE SDR35 PVC.

SEWER INSTALLATION SHALL COMPLY WITH THE LATEST INSTRUCTIONS OF THE PIPE MANUFACTURER.

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED WATER LINES.

THE SEWER LINES & CLEANOUTS SHALL MEET THE REQUIREMENTS OF THE WESTERN VIRGINIA WATER AUTHORITY REGULATIONS, THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC), AND THE COMMONWEALTH OF VIRGINIA PLUMBING CODE.

ALL CLEANOUTS TO BE FLUSH WITH FINAL GRADE. CLEANOUTS IN PAVEMENT TO BE EQUIPPED WITH A TRAFFIC BEARING CLEANOUT BOX.

ALL TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT.

CONTRACTOR RESPONSIBLE FOR ALL PAVEMENT PATCHING, SIDEWALK REPAIR AND CURB REPAIR AS A RESULT OF SEWER INSTALLATION.

CONTRACTOR TO PROVIDE AS-BUILT PLANS OF THE NEW SEWER LINE TO THE DESIGN ENGINEER AND TO THE WESTERN VIRGINIA WATER AUTHORITY.

Water Line
8" Ductile Iron
Abandon States
Class 350
8" & 6" valves
American Standard
Resistant Seal
Fire Hydrant
R/VK 2730
Cost 2014
Tag # 21413

NEW COMMERCIAL WATER METER VAULT. REFER TO THE WYMA DETAIL W-7. ENTER THE VAULT WITH A 6" DUCTILE IRON PIPE. INSIDE THE VAULT: ON THE 6" LINE - INSTALL A SINGLE DETECTOR CHECK WITH BYPASS METER AND AN OS&Y GATE VALVE. ON THE 3" LINE - INSTALL A GATE VALVE, A 2" METER AND ANOTHER GATE VALVE. EXIT THE VAULT WITH A 6" DR14 PVC PIPE, AND A 3" POLYETHYLENE PE3408 PIPE, TOP OF VAULT TO BE FLUSH WITH FINISHED GRADE.

STATIC PRESSURE AT NEW METER: +/-115 PSI. PRV LOCATED IN NEW BUILDING

NEW 13" WATERLINE EASEMENT
NEW 8" TEMPORARY END OF LINE BLOWOFF VALVE (WYMA DETAIL W-11)
NEW 8" GATE VALVE W/ VAULT (WYMA DETAIL W-9)

NEW FIRE DEPARTMENT CONNECTION, 4" STANDPIPE. "KNOX" LOCKING CAP IS REQUIRED FOR THE FDC

NEW 4" WATERLINE TO FDC

NOTE: WATER LINES & ELECTRICAL CONDUITS TO BE INSTALLED SO AS NOT TO CAUSE CONFLICTS WITH PHASE II

REFER TO WATER, SANITARY AND ELECTRIC PROFILES ON PROFILE SHEET

COORDINATE GAS SERVICE WITH ROANOKE GAS CO.

FIRE & RESCUE NOTES:

"KNOX" BOX TO BE LOCATED AT MAIN ENTRANCE WHERE ANNUNCIATOR IS LOCATED. COORDINATE WITH FIRE MARSHALL THE EXACT LOCATION BEFORE INSTALLING.

COORDINATE WITH FIRE MARSHALL ON ANY CLOSING OF EGRESS DURING CONSTRUCTION.

NEW 1000 GAL GREASE TRAP. PROVIDE RISERS AS NECESSARY TO ASSURE MANHOLE TOPS ARE FLUSH WITH FINISHED PAVEMENT GRADE. MH TOP ELEVATIONS @ 1034.05 & 1033.90 INV(IN) 1029.20, INV(OUT) 1029.04 INSTALL CLEANOUTS OUTSIDE OF TRAP, ONE AT EACH END. TOP OF CLEANOUTS TO BE FLUSH WITH FINAL GRADE. REFER TO THE WESTERN VA WATER AUTHORITY DETAIL SHEET

GREASE INTERCEPTORS SHALL BE INSPECTED & APPROVED BY THE WYMA FORTY-EIGHT (48) HOURS PRIOR TO INSTALLATION. THE CONTRACTOR SHALL COMPLETE THE FOLLOWING:
1. SUBMIT SHOP DRAWINGS TO CASSIE ALICE, 601 S. JEFFERSON ST., SUITE 300, ROANOKE, VA 24011.
2. CALL (540) 537-3460 TO SCHEDULE GREASE INTERCEPTOR INSPECTION. THE INSPECTION SHALL OCCUR PRIOR TO THE CONTRACTOR COVERING THE GREASE INTERCEPTOR.

RESIDENCE

ASPHALT DRIVE

LOCATE TELEPHONE LINE

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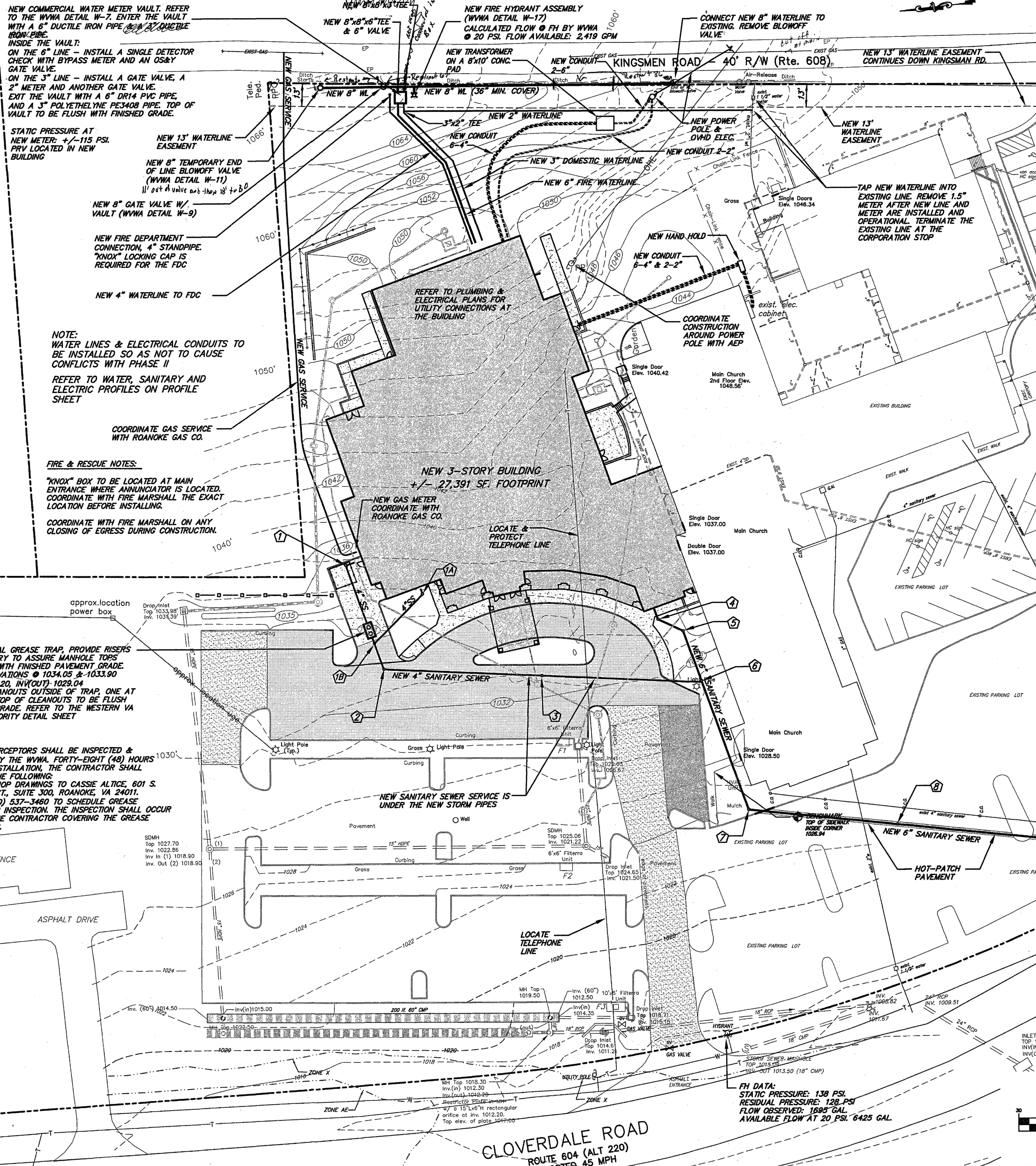
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NEW SANITARY SEWER SCHEDULE

- 1 4" CLEANOUT AT BEND, TOP 1034.95 INV. 1030.00
- 2 GREASE TRAP: 35'-4" SDR35 PVC @ 2.29% GREASE TRAP-20' 20'-4" SDR35 PVC @ 2.70%
- 3A 4" CLEANOUT, TOP 1035.00, INV. 1030.00
- 3A-1B 38'-4" SDR35 PVC @ 2.74%
- 3B 4" CLEANOUT AT BEND, TOP 1033.60 INV. 1028.95
- 4 4" CLEANOUT AT BEND, TOP 1032.95 INV. 1028.50
- 5 90'-4" SDR35 PVC @ 2.11%
- 6 4" CLEANOUT IN-LINE, TOP 1032.50 INV. 1026.60
- 7 91'-4" SDR35 PVC @ 2.20%
- 8 4" CLEANOUT AT BEND, TOP 1033.65 INV. 1030.00
- 9 16'-6" SDR35 PVC @ 11.25%
- 10 4" CLEANOUT AT BEND, TOP 1033.80 INV. 1028.20
- 11 31'-6" SDR35 PVC @ 11.61%
- 12 4" CLEANOUT @ 4"x6" WYE, TOP 1031.30 INV. 1024.60
- 13 78'-6" SDR35 PVC @ 5.51%
- 14 4" CLEANOUT @ BEND, TOP 1024.00 (VERIFY) INV. 1020.30
- 15 85'-6" SDR35 PVC @ 3.18%
- 16 4" CLEANOUT IN-LINE, TOP 1022.60 (VERIFY) INV. 1017.60
- 17 85'-6" SDR35 PVC @ 3.06%
- 18 4" CLEANOUT IN-LINE, TOP 1020.00 (VERIFY) INV. 1015.00
- 19 58'-6" SDR35 PVC @ MIN. 3.45%
- 20 4" CLEANOUT @ BEND, TOP 1017.00 (VERIFY) INV. 1013.00
- 21 16'-6" SDR35 PVC @ MIN. 6.25%
- E11 CONNECT NEW 6" PVC TO EXISTING MANHOLE W/OUTSIDE DROP CONNECTION, INV. @ TOP OF DROP @ INV. 1012.00. BOTTOM OF DROP INV. IN MANHOLE AT 1007.00. VERIFY EXISTING INVERT PRIOR TO BEGINNING ANY SEWER LINE INSTALLATION

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ALTERATIONS & ADDITIONS FOR BONSACK BAPTIST CHURCH Roanoke County, VA

DRAWN BY: wmw
CHECKED BY: mja

UTILITY PLAN

6/16/14
MARK JOHN AYLES
Lic. No. 034100
PROFESSIONAL ENGINEER

COMMISSION No. 11020.002

SHEET SP-7

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