

1. CONTRACTOR TO CONFIRM LOCATION & INVERT OF EXISTING UTILITY LINES AND NEW SERVICE LINE PRIOR TO INSTALLATION ON ANY NEW UTILITY LINES. REFER TO BUILDING PLANS FOR EXACT LOCATION AND INVERT OF SERVICE LINES / LATERALS EXITING THE BUILDING. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER IMMEDIATELY UPON DISCOVERY OF DISCREPANCIES OR CONFLICTS.

2. CONTRACTOR TO CONTACT THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) PRIOR TO EXTENDING WATER & SEWER SERVICE LINES TO COORDINATE THE CONNECTION TO THE EXISTING WATER AND SEWER MAINS AND TO ARRANGE FOR ALL REQUIRED PRE-CONSTRUCTION CONFERENCES AND INSPECTIONS.

3. CLEAN-OUTS IN PAVEMENT OR SIDEWALK SHALL BE SET IN TRAFFIC BEARING CAST IRON VALVE BOX OR APPROVED CLEAN-OUT BOX WITH TOP SET FLUSH WITH FINISHED PAVED GRADE (CAPITAL FOUNDRY MODEL #VB-9*S, OR APPROVED EQUAL).

4. UNLESS OTHERWISE NOTED, SANITARY SEWER LATERALS SHALL BE INSTALLED AT 1/4" PER 1' SLOPE (MIN.) FROM POINT OF CONNECTION TO BUILDING. CONTRACTOR TO CONFIRM INVERT OF EXISTING MAIN OR LATERAL PRIOR TO INSTALLATION OF LATERAL. REFER TO INTERNATIONAL PLUMBING CODE (IPC) FOR OTHER REQUIREMENTS.

5. WHERE APPLICABLE ALL WATER AND SEWER WORK (BOTH PUBLIC AND PRIVATE) SHALL CONFORM TO THE WESTERN VIRGINIA WATER AUTHORITY STANDARDS, LATEST EDITION. SEWER LATERALS AND DOMESTIC WATER SERVICE LINES SHALL CONFORM TO INTERNATIONAL PLUMBING CODE, LATEST ADOPTED EDITION.

6. CONTRACTOR SHALL ENSURE THAT EXISTING WATER AND SEWER SERVICES LINES WHICH RUN THROUGH OR ADJOIN THE SITE REMAIN IN SERVICE AT ALL TIMES UNLESS A SHUTDOWN IS APPROVED BY THE WESTERN VIRGINIA WATER AUTHORITY.

7. IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE SECTION 3312.1, AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.

FD-1: USE GROUP: B, R-2, S-2 (REFER TO ARCHITECTURAL SHEET AO.1)
 MOST RESTRICTIVE USE GROUP: R-2

FD-2: CONSTRUCTION TYPE: VB (UNPROTECTED WOOD FRAME).

FD-3: USE GROUP AND CONSTRUCTION TYPE PROVIDED BY PROJECT ARCHITECT IN ACCORDANCE WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND INTERNATIONAL BUILDING CODE.

FD-4: FIRE FLOW REQUIRED (BY CODE): 2,000 GPM.

FD-5: FIRE FLOW AVAILABLE:

AT FIRE HYDRANT HYD-12930 (ADJACENT TO SITE);

- STATIC PRESSURE = 60 PSI
- RESIDUAL PRESSURE = 28 PSI
- FLOW (MEASURED AT TEST) = 750 GPM
- FLOW AT 20 PSI (CALCULATED) = 846 GPM

AT FIRE HYDRANT HYD-12089 (234'-FEET NORTHWEST OF SITE);

- STATIC PRESSURE = 66 PSI
- RESIDUAL PRESSURE = 18 PSI
- FLOW (MEASURED AT TEST) = 712 GPM
- FLOW AT 20 PSI (CALCULATED) = 698 GPM

AT FIRE HYDRANT HYD-11686 (450'-FEET EAST OF SITE);

- STATIC PRESSURE = 65 PSI
- RESIDUAL PRESSURE = 34 PSI
- FLOW (MEASURED AT TEST) = 872 GPM
- FLOW AT 20 PSI (CALCULATED) = 1066 GPM

FIRE FLOW AVAILABLE (AT 20 PSI) IS BASED ON FLOW TEST INFORMATION PROVIDED BY THE WESTERN VIRGINIA WATER AUTHORITY.

FD-6: EXISTING FIRE HYDRANT (WVWA FH# 12930) TO BE RELOCATED. FIRE HYDRANT (PUBLIC) IS LOCATED AT THE SOUTHEAST CORNER OF THE SITE AND IS WITHIN 300- FEET OF THE MOST REMOTE PART OF THE BUILDING AND IS WITHIN 100- FEET OF PROPOSED FDC (SEE KEYNOTE 16).

FD-7: BUILDING TO BE FULLY SPRINKLER PER NFPA 13.

FD-8: KNOX BOX (3200 SERIES OR ABOVE) TO BE WALL-MOUNTED WHERE SHOWN.
SEE KEYNOTE NO. 15.

FD-9 WALL-MOUNTED FIRE DEPARTMENT CONNECTION WHERE SHOWN / INDICATED
SEE KEYNOTE NO. 16.

	GAS METER
	WATER METER
	SANITARY SEWER LINE/ LATERAL W/CLEANOUT
	WATER LINE (SIZE AS INDICATED)
	AREA OF OPEN CUT IN PAVEMENT
	SITE LIGHT - SHOWN FOR REFERENCE ONLY
	FIRE HYDRANT
	GATE VALVE
	MANHOLE NUMBER/STRUCTURE NUMBER
	SANITARY MANHOLE

- 1** POINT OF CONNECTION TO EXISTING PUBLIC WATERLINE FOR NEW WATER SERVICE. CONTRACTOR SHALL CONTACT WWA - UTILITY LINE SERVICES ENGINEERING COORDINATOR (MR. MARK SINK) AT 540-537-3460 AT LEAST 72 HOURS IN ADVANCE OF PERFORMING WORK. CONNECTION TO BE PERFORMED WITH "OUT-IN TEE" IN ACCORDANCE WITH WESTERN VIRGINIA WATER AUTHORITY (WWVA) STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED FITTINGS AND COUPLINGS NEEDED TO JOIN THE NEW LINE TO EXISTING LINE. REFER TO KEYNOTE 8 FOR ADDITIONAL INFORMATION REGARDING TRENCH BACKFILLING AND COMPACTION AND PAYMENT RESTORATION.
- 2** NEW DOMESTIC AND FIRE WATER SERVICE LINE (SIZE AS INDICATED) AND COMMERCIAL METER VAULT. WATER SYSTEM APPURTENANCES (VALVE, BENOS, TEES, ETC.) ARE AS INDICATED HEREON. SEE WWVA DETAIL W-7 (COMMERCIAL METER VAULT) ON SHEET C4.3 FOR ADDITIONAL INFORMATION.
- 3** NEW FIRE HYDRANT ASSEMBLY. CONNECT NEW 6-INCH FIRE HYDRANT LEG TO EXISTING PUBLIC MAINS WITH "OUT-IN TEE" IN ACCORDANCE WITH WESTERN VIRGINIA WATER AUTHORITY (WWVA) STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED FITTINGS AND COUPLINGS NEEDED TO JOIN THE NEW LINE TO EXISTING LINE. SITE UTILITY CONTRACTOR IS RESPONSIBLE FOR COORDINATING BURY DEPTH TO ENSURE NO CONFLICTS OCCUR WITH OTHER UTILITIES. SEE WWVA DETAIL W-17 ON SHEET C4.3 FOR FIRE HYDRANT ASSEMBLY DETAIL AND ADDITIONAL INFORMATION. NO PLANTING, ERECTION OR OTHER OBSTRUCTION SHALL BE ALLOWED WITHIN FOUR FEET OF THE FIRE HYDRANT. ALL HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THE FIRE MARSHAL.
- 4** NEW SANITARY SEWER MAIN. REFER TO SHEET C4.2 FOR PROFILE. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH WESTERN VIRGINIA WATER AUTHORITY STANDARDS AND DETAILS. WHEN WORK IS WITHIN THE RIGHT-OF-WAY REFER TO KEYNOTE 8 FOR ADDITIONAL INFORMATION REGARDING TRENCH BACKFILLING AND COMPACTION AND PAYMENT RESTORATION. EXISTING SANITARY SEWER PURPOSES TO BE REMOVED/ABANDONED (SEE SHEET C2.1) IS SHOWN HEREON FOR COORDINATION PURPOSES. SEE KEYNOTE 9 ON SHEET C2.1 FOR ADDITIONAL INFORMATION.
- 5** NEW SANITARY SEWER LATERAL (SIZE INDICATED) WITH CLEAN-OUTS PLACED AS SHOWN. PIPE MATERIAL SHALL CONFORM TO INTERNATIONAL PLUMBING CODE (IPC) REQUIREMENTS FOR UNDERGROUND BUILDING DRAINAGE AND VENT PIPE. REFER TO BUILDING PLUMBING PLANS FOR ADDITIONAL INFORMATION.
- 6** NEW OIL SEPARATOR. REFER TO DETAIL ON SHEET C4.3. A "GREASE INTERCEPTOR SUBMITTAL" SHALL BE COMPLETED AND SUBMITTED TO WESTERN VIRGINIA WATER AUTHORITY (WWVA) FOR APPROVAL PRIOR TO INSTALLATION. CONNECTION TO THE PUBLIC SEWER SYSTEM SHALL NOT BE PERMITTED UNTIL THIS DATA IS PROVIDED TO AND APPROVED BY WWVA.
- 7** NEW AND EXISTING STORM DRAIN LINES AND STRUCTURES SHOWN HEREON FOR UTILITY COORDINATION INFORMATION ONLY. REFER TO SHEET C5.1 FOR DETAILED STORM DRAINAGE AND GRADING PLAN AND ADDITIONAL INFORMATION.
- 8** OPEN CUT ASPHALT PAVEMENT FOR INSTALLATION OF NEW SANITARY SEWER OR WATER LINE. REPAIR/REPLACE DAMAGED CURB TO MATCH ORIGINAL AS NEEDED AFTER INSTALLATION. RESTORE PAVEMENT IN ACCORDANCE WITH WESTERN VIRGINIA WATER AUTHORITY (WWVA) DETAIL C-12 AS SHOWN ON SHEET C4.2. TRENCH BACKFILLING AND COMPACTION, AND PAVEMENT RESTORATION MUST MEET THE SPECIFICATIONS FOUND IN THE CITY OF ROANOKE "RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS". REFER TO DETAIL UTR-1 ON SHEET C4.3 FOR ADDITIONAL INFORMATION. UNLESS OTHERWISE NOTED IN THE "RIGHT-OF-WAY EXCAVATION PERMIT" ALL PAVEMENT MUST BE RESTORED WITHIN 48 HOURS OR COMPLETION OF WORK AND SHALL BE COORDINATED WITH CITY OF ROANOKE.
- 9** NEW GAS METER AND SERVICE LINE BY ROANOKE GAS COMPANY. COORDINATE LOCATION OF METER AND INCOMING LINE WITH GAS COMPANY AND BUILDING PLANS.
- 10** SITE LIGHT FIXTURE (TYPICAL). REFER TO LIGHTING PLAN (SHEET E1-1) FOR ADDITIONAL INFORMATION.
- 11** CONCRETE ELECTRICAL TRANSFORMER PAD (BY CONTRACTOR) IN ACCORDANCE WITH DETAILS AND SPECIFICATIONS PROVIDED BY A.E.P.
- 12** ELECTRICAL CONDUITS FOR PRIMARY AND SECONDARY POWER OR BRANCH CIRCUITS SHOWN FOR COORDINATION AND GENERAL ROUTING PURPOSES ONLY. REFER TO SHEET E2.1 FOR REQUIREMENTS. SITE UTILITY CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND/OR POWER COMPANY DURING INSTALLATION OF CONDUITS / LINES.
- 13** TELEPHONE AND/OR COMMUNICATIONS CONDUITS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO SHEET E2.1 FOR REQUIREMENTS. SITE UTILITY CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND/OR TELEPHONE COMPANY DURING INSTALLATION OF CONDUITS / LINES.
- 14** ENERGY GENERATOR WITHIN SCREENED ENCLOSURE. REFER TO SHEETS E1.1/E2.1 (POWER PLAN) AND A1.1 (ENLARGED GENERATOR PLAN DETAIL) FOR ADDITIONAL INFORMATION, DETAILS AND REQUIREMENTS.
- 15** KEY BOX (KNOX) LOCATION - WALL-MOUNTED NEXT TO ENTRANCE DOOR IN ACCORDANCE WITH CITY OF ROANOKE FIRE MARSHAL REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 16** WALL-MOUNTED FIRE DEPARTMENT CONNECTION WITH "KNOX BOX" LOOKING CAP, 5" STORZ" COUPLING, AND 30-DEGREE ELBOW. REFER TO SHEET SP.1 FOR ADDITIONAL INFORMATION. REFER TO FIRE DATA / KEYNOTE HEREON FOR ADDITIONAL INFORMATION.
- 17** NEW 4-INCH POST INDICATOR VALVE WITH VERTICAL UL/FM INDICATOR POST AND SUPERVISORY / TAMPER SWITCH. REFER TO FIRE PROTECTION PLAN FOR ADDITIONAL DETAILS AND REQUIREMENTS.
- 18** UPON ESTABLISHMENT OF NEW SERVICE / COMPLETION OF PROJECT, EXISTING WATER SERVICE TO BE CUT AND CAPPED AT THE WATERMAIN IN MEMORIAL AVE. AND VAULT REMOVED/ABANDONED.

ELECTRIC:
APPALACHIAN POWER COMPANY
P.O BOX 2021
ROANOKE VA 24022
RIVER AVENUE SERVICE CENTER
802 RIVER AVENUE
(540) 427-3643

P.O. BOX 13726
ROANOKE, VA 24036
(540) 776-3844, EXT. 120
(540) 776-8362 (FAX)

P.O. BOX 13007
ROANOKE, VA 24030
(540) 983-3800
(540) 777-3851
(540) 777-3864 (FAX)

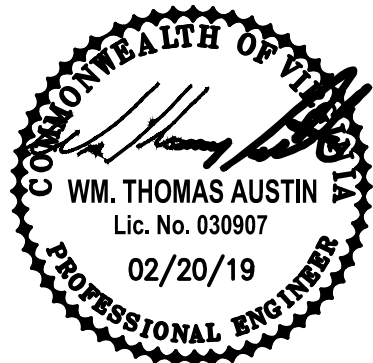
2012 S. JEFFERSON STREET
ROANOKE, VA 24014
(540) 853-5688
(540) 853-1017 (FAX)

4843 OAKLAND BOULEVARD
ROANOKE, VA 24012
(540) 265-7510
(540) 265-2858 (FAX)

Mattern & Craig
ENGINEERS•SURVEYORS

701 FIRST STREET, S.W.
ROANOKE, VIRGINIA 24016
(540) 345-9342
FAX (540) 345-7691

GENERAL NOTES



M&C 3836

PROJECT TITLE

ROANOKE FIRE-EMS STATION #7

BID SET

S F C S | Architecture
Engineering
Planning
Interiors

SFCS Inc. ■ 305 South Jefferson Street
Roanoke, Virginia 24011.2003
540.344.6664 ■ Fax 540.343.6925
www.sfcs.com

PROJECT DESIGNER	:
PROJECT ARCHITECT	:
PROJECT ENGINEER	: WTA
DRAWN BY	: ARB
CHECKED BY	: WTA
APPROVED BY	: WTA

NO.	REVISION DESCRIPTION	DATE
1	Addendum No. 4	3/22/1
2	Addendum No. 5	7/11/1

DRAWING TITLE

UTILITY PLAN

COMM. NO. 17503.00	DATE FEBRUARY 20, 2019
-----------------------	---------------------------

C4.1

OF