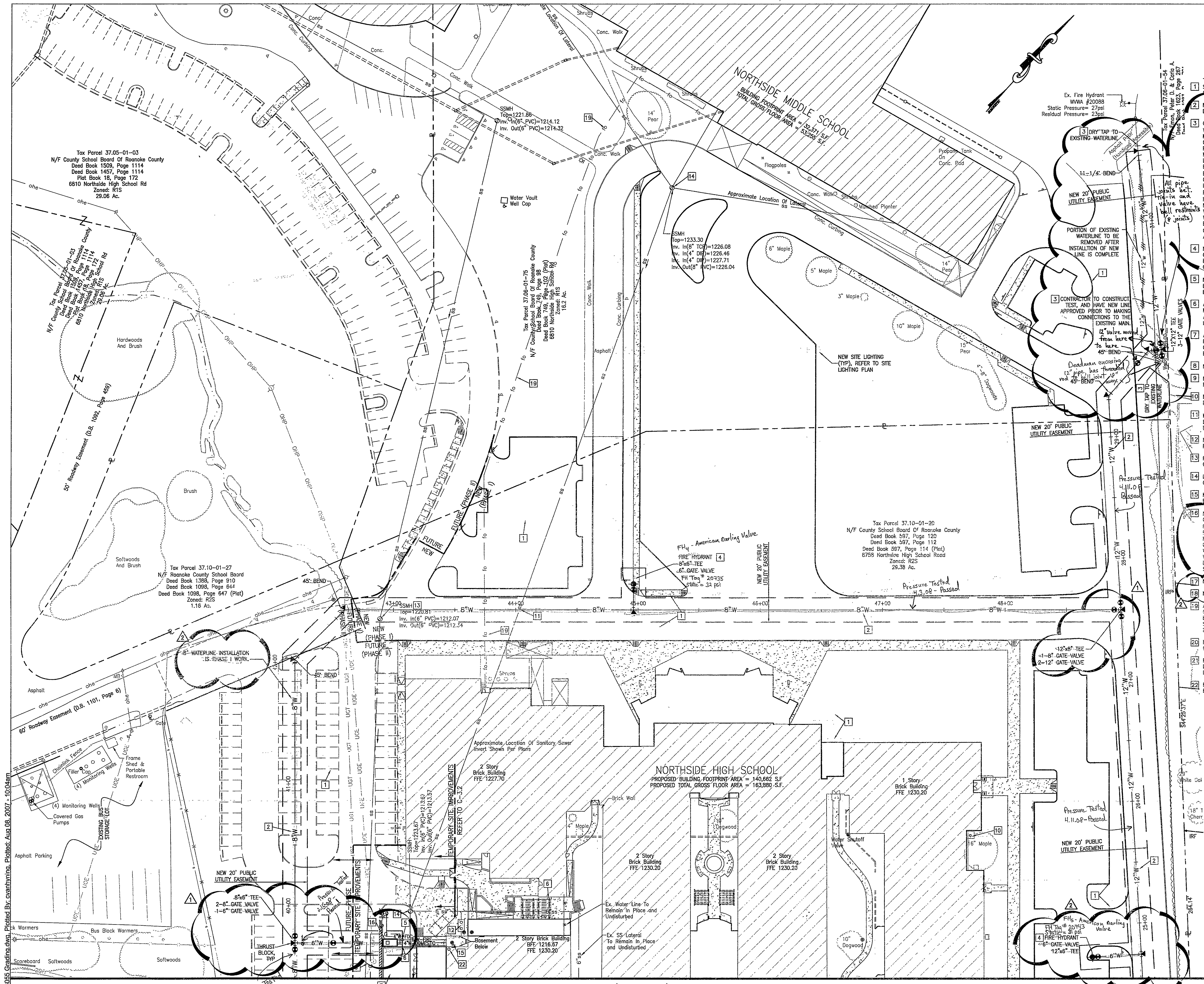




- KEYNOTES:**
- STORM DRAIN SHOWN HEREON FOR INFORMATION ONLY.
 - NEW PUBLIC WATER MAIN, SIZE AS INDICATED. SEE DETAIL ON C-5.4 FOR THRUST BLOCKING.
 - CONTRACTOR SHALL NOTIFY THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) TWO WEEKS PRIOR TO MAKING THE CONNECTIONS. CONTRACTOR TO CONSTRUCT, TEST, AND PRESURIZE WATER LINE PRIOR TO MAKING CONNECTIONS TO THE EXISTING MAIN. WVWA TO TAP WATER MAIN. THE FRIENDSHIP LANE WATER PUMP SHALL BE PUT ON AUTOMATIC BY THE WVWA PRIOR TO MAKING TAPS. THE EXISTING LINE FROM THE WATER TANK NORTHWEST OF THE MIDDLE SCHOOL TO THE VALVE AT THE INTERSECTION OF CONNIE DRIVE AND THIRLAW ROAD SHALL BE TURNED OFF DURING OFF-PEAK HOURS (11PM-4AM) DURING CONNECTION TO THE NEW LINE. DURING THAT TIME TWO CREWS SHALL WORK ON EACH CONNECTION CONCURRENTLY. WVWA STAFF MUST BE ON SITE THROUGH THE ENTIRETY OF THE CONNECTION PROCESS TO OPERATE THE VALVES AND TO OBSERVE/INSPECT ALL CONNECTIONS MADE TO THE EXISTING SYSTEM.
 - NEW PUBLIC FIRE HYDRANT AND ASSEMBLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING BURY DEPTH WITH OTHER UTILITIES. SEE SHEET C-5.4 FOR WATER SYSTEM DETAILS.
 - NEW POST INDICATING VALVE (PIV). PROVIDE ELECTRONIC SUPERVISION AND CONNECT TO BUILDING ALARM SYSTEM. SEE SHEET C-5.5.
 - APPROXIMATE LOCATION OF NEW GAS LINE AND METER. EXISTING GAS LINE AND METER TO BE ABANDONED/REMOVED AFTER NEW IS IN PLACE AND IN USE BY ROANOKE GAS COMPANY.
 - APPROXIMATE LOCATION OF TRANSFORMER PAD. EXACT LOCATION TO BE DETERMINED BY POWER COMPANY. REFER TO ELECTRICAL PLANS FOR LOCATION OF ELECTRIC SERVICE LINES.
 - NEW 6" FIRE SERVICE LINE.
 - NEW IRRIGATION LINE. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
 - NEW DRINKING FOUNTAIN. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
 - MAINTAIN AT LEAST 18" CLEAR BETWEEN BOTTOM OF EXISTING SEWER PIPE AND TOP OF NEW WATER LINE.
 - NEW GREASE INTERCEPTOR. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
 - RAISE RIM TO FLUSH WITH NEW GRADE. SEE GENERAL NOTE 10.
 - LOWER RIM TO FLUSH WITH NEW GRADE. SEE GENERAL NOTE 10.
 - MAINTAIN EXISTING WELL ACCESS. RAISE RIM TO FLUSH WITH NEW GRADE.
 - NEW 6.5"x12" WATER VAULT BY THE CLEAR FLOW COMPANY. CONTRACTOR TO EXCAVATE PIT AND PROVIDE/INSTALL A 6" CRUSHED STONE LEVELING PAD. THE VAULT SHALL INCLUDE THE DOMESTIC WATER SETTER, METER, AND DOUBLE DETECTOR CHECK VALVE. THE ACCESS HATCH LID SHALL BE WATER TIGHT. CONTRACTOR SHALL CONNECT ALL WATER LINES TO THE VAULT AND EXTEND THE DOMESTIC AND FIRE FROM THE VAULT. THE SEE SHEET C-5.4 FOR DETAILS.
 - NOT USED.
 - NOT USED.
 - APPROXIMATE LOCATION OF EXISTING FIBER OPTIC CABLE. CONTRACTOR TO CONFIRM LOCATION BEFORE LAND DISTURBING ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE TO THE LINE.
 - NEW UNDERGROUND ELECTRIC TO REPLACE EXISTING OVERHEAD ELECTRIC.
 - REPLACE EXISTING SANITARY SEWER LATERALS WITH NEW. MATCH EXISTING MATERIALS, SIZES, AND INVERTS.
 - FIRE SPRINKLER RISER. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.

KEY PLAN

AREA "C" AREA "B" AREA "D" AREA "A"

GENERAL NOTES

- CONTRACTOR TO CONFIRM LOCATION & INVERT PRIOR TO INSTALLATION OF NEW SERVICE LINES.
- CONTRACTOR TO CONTACT THE WESTERN VIRGINIA WATER AUTHORITY (853-5700) PRIOR TO EXTENDING WATER & SEWER SERVICE LINES AND TO COORDINATE THE CONNECTION TO THE EXISTING WATER AND SEWER MAINS. CONTRACTOR SHALL CONSULT WITH AMERICAN ELECTRIC POWER CO. TO DETERMINE EXACT LOCATION OF TRANSFORMER PAD.
- CLEAN-OUTS IN PAVEMENT OR SIDEWALK SHALL BE SET IN 6" DIAMETER CAST IRON VALVE BOX WITH TOP SET FLUSH WITH FINISHED PAVED GRADE.
- GAS SERVICE LINE IS SHOWN FOR GENERAL INFORMATION ONLY. EXACT LOCATION TO BE DETERMINED AND INSTALLED BY ROANOKE GAS COMPANY.
- SANITARY SEWER LATERALS SHALL BE INSTALLED AT 1.0% SLOPE (MIN.) FROM POINT OF CONNECTION TO BUILDING. CONTRACTOR TO CONFIRM INVERT OF EXISTING MAIN OR LATERAL PRIOR TO INSTALLATION OF LATERAL.
- REFER TO BUILDING PLANS FOR EXACT LOCATION OF UTILITY SERVICE CONNECTIONS.
- ALL WATER AND SEWER WORK SHALL CONFORM TO WESTERN VIRGINIA WATER AUTHORITY STANDARDS.
- ALL EXTERIOR LIGHTING FIXTURES SHALL BE DESIGNED, LOCATED AND ARRANGED SO AS NOT TO DIRECT GLARE ON ADJOINING STREETS OR RESIDENTIAL PROPERTIES. THE INTENSITY AT ADJOINING STREETS OR RESIDENTIAL PROPERTIES SHALL NOT EXCEED 0.5 FOOT CANDLES.
- WHERE MODIFICATION TO EXISTING MANHOLES ARE REQUIRED CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING NEW PRE-CAST RISER JOINTS WITH EXISTING STRUCTURE JOINTS OF OLD STRUCTURES.
- UNDERGROUND UTILITIES HAVE BEEN LOCATED USING THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL EXCAVATE WITH CARE TO LOCATE ALL AFFECTED UTILITIES PRIOR TO WORK WITHIN THOSE AREAS. VERIFY UTILITY DEPTH, SIZE, AND POSITION AND NOTIFY A/E IMMEDIATELY IF NOT AS SHOWN OR CONFLICTS WITH WORK. UTILITIES OF CONCERN INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
 - a.) SANITARY SEWER FROM MIDDLE SCHOOL GYM TO LOT C.
 - b.) SANITARY SEWER FROM MIDDLE SCHOOL TO BELOW LOADING DOCK AREA AT HIGH SCHOOL.
 - c.) FIBER OPTIC LINE FROM MIDDLE SCHOOL TO HIGH SCHOOL AREA C.
 - d.) WATER MAIN EAST OF MIDDLE SCHOOL.
 - e.) BLDG STORM DRAIN PASSING BENEATH HIGH SCHOOL AREAS B & C TO LOT C.
 - f.) UDRV IN LOT C.
 - g.) SAN. SEWER BELOW LOT A AND NEW DETENTION BASIN.

UTILITY CONTACTS

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Fax: (540) 772-2108

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Martin McGhee
American Electric Power
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Roanoke, VA 24022-2121
River Avenue Service Center
802 River Avenue
(540) 427-3664

Cable Television:
Cox Communications
P.O. Box 13726
Roanoke, VA 24036
(540) 776-3844, Ext. 120
Fax: (540) 776-8362

Gas:
Donald S. Jones, P. E., Project Engineer
Roanoke Gas Company
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ADDITIONS AND RENOVATIONS TO

NORTHSIDE HIGH SCHOOL
ROANOKE COUNTY PUBLIC SCHOOLS
VA DOE #80-52G

SPECTRUM DESIGN PROJECT NO. 08055

COMMONWEALTH OF VIRGINIA
MICHAEL A. RAYMOND
Professional Engineer
No. 028959
6/9/07

DATE: 15 APRIL, 2007
DESIGN ARCHITECT: PROJECT ARCHITECT
PROJECT ENGINEER: CHECKED BY
DRAWN BY: REVISIONS
COUNTY REVIEW: DATE
VE REVISION: NUMBER 1 DATE 5/25/07 6/7/07

SHEET TITLE

UTILITY PLAN - AREA 'NORTH'

C-1.6

MATCHLINE AREA 'SOUTH' - SEE SHEET C-1.5

REVISION 2 CHANGES:
PARKING LOTS C AND G AND ASSOCIATED AREAS ARE SHOWN ON THIS PLAN AS FUTURE WORK (PHASE II). PHASE II WILL BE CONSTRUCTED AT A LATER DATE. REFER TO SHEET C-3.2 FOR TEMPORARY IMPROVEMENTS BETWEEN NEW AND FUTURE WORK.

ALL GAS, SEWER, TELEPHONE, AND WATER IMPROVEMENTS ARE PART OF PHASE I WORK. SEE TEMPORARY ELECTRICAL SERVICE IMPROVEMENTS ON SHEET C-3.2.

PUBLIC WATER IS AVAILABLE TO THE PROJECT SITE AS SHOWN HEREON AND IS CONFIRMED BY WESTERN VIRGINIA WATER AUTHORITY AVAILABILITY NO. 07-073 DATED MARCH 7, 2007.