

Excerpt of 2022 approved Engineered Comprehensive Site Plan "Park Apartments Land Swap" - Site & Utility Layout

Waterline Service Design Table									
Building #	Design Flow Rate*	Service Line Size	Length	Water Meter Size	Type	Layout	Static Pressure	Residual Pressure**	Meter to Building Size Length Units per Meter
1&2	35	1"	65.5'	1"	No. 2 Box	B	94 psi	94 psi	1.5" 8.8' 8
3	31	1"	64.6'	1"	No. 2 Box	B	96 psi	96 psi	1.5" 6.3' 6
4&5	34	1"	27.2'	1"	No. 2 Box	B	96 psi	95 psi	1.5" 19.5' 12
6&7	40	1"	49.1'	1"	No. 2 Box	B	94 psi	94 psi	1.5" 8.8' 12
8	31	1"	49.8'	1"	No. 2 Box	B	93 psi	93 psi	1.5" 18.9' 6
9&10	30	1"	38.7'	1"	No. 2 Box	B	93 psi	93 psi	1.5" 4.1' 4
11	27	1"	26.1'	1"	No. 2 Box	B	94 psi	94 psi	1.5" 22.6' 8
* Per table 4-27A and 4-27C Fixture Count & Meter Demand									
** Per 4.3.4.1 Maximum Daily Demand									

Sanitary Service Design Table						
Building	Main Line Station	Invert Elevation	Invert at C/O	Size	Length to C/O	C/O to Bld
1&2	15+86.57	1287.994	1288.4366	6"	1%	44.26
3	15+86.57	1287.994	1288.7457	6"	1%	75.17
4&5	16+35.48	1288.29	1288.795	6"	1%	50.5
6&7	16+35.48	1288.29	1288.7768	6"	1%	48.68
8	17+73.62	1293	1293.52	6"	1%	52
9&10	17+73.62	1293	1293.433	6"	1%	43.3
11	12+12.66	1283.166	1283.644	6"	1%	47.8

MANHOLE TABLE			
MANHOLE #	NORTHING	EASTING	STATION
1	N: 6838614.57	E: 11372261.66	10+00.33
2	N: 6838749.20	E: 11372425.85	12+12.66
3	N: 6838892.76	E: 11372489.48	13+69.69
4	N: 6838963.64	E: 11372694.46	15+86.57
5	N: 6838921.46	E: 11372719.23	16+35.48
6	N: 6838783.86	E: 11372707.14	17+73.62
91	N: 6838646.06	E: 11372300.07	10+50.00

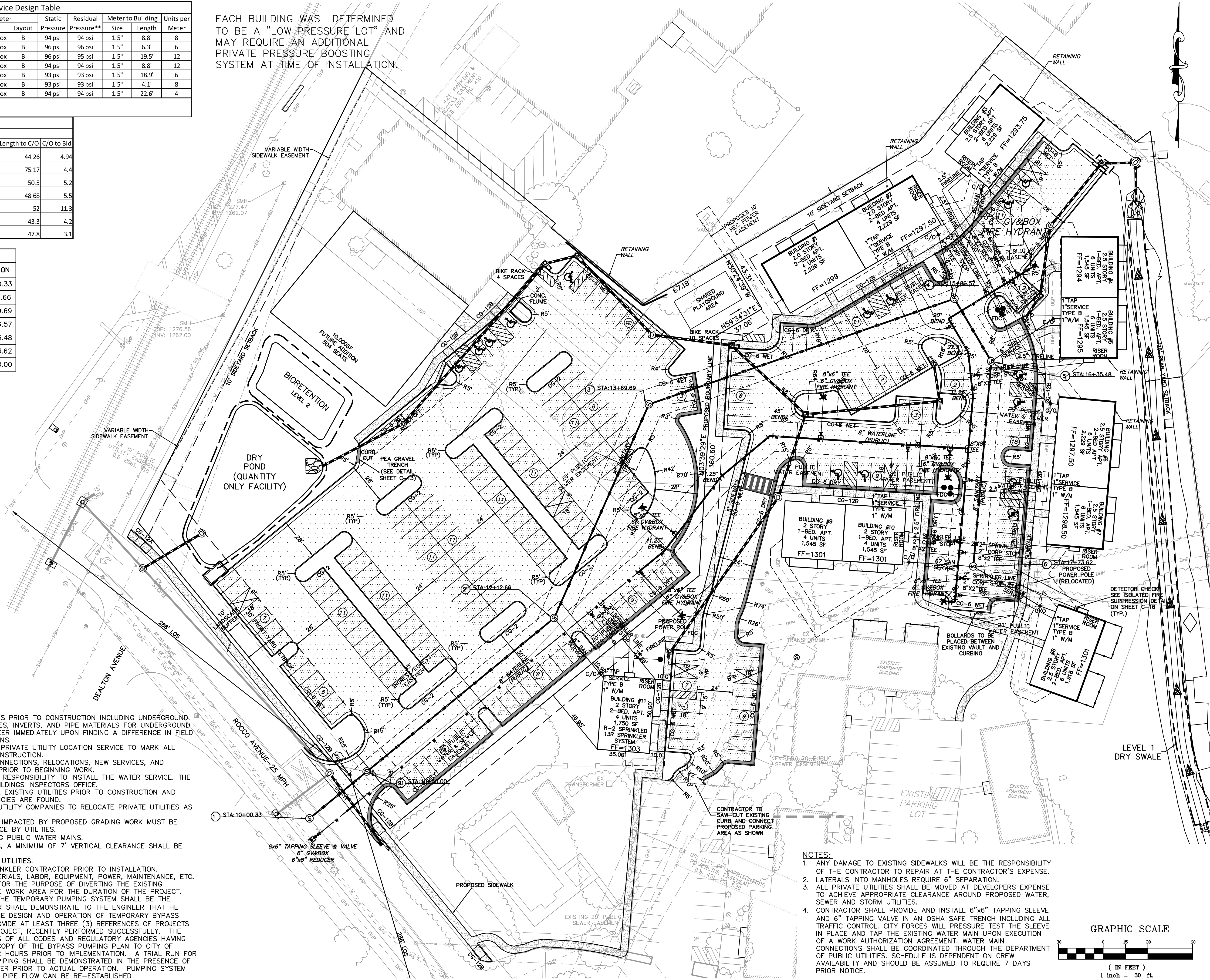
SANITARY MANHOLE QUANTITY TABLE	
MANHOLE #	RIM TO SUMP HEIGHT
1	3.85
2	5.81
3	6.87
4	7.06
5	7.11
6	6.37
91	3.55

SANITARY SEWER PIPE TABLE		
PIPE NAME	BEARING	LENGTH
1-2	N50°38'55"E	162.66'
2-3	N23°54'14"E	157.02'
3-4	N70°55'33"E	216.89'
4-5	S30°25'29"E	48.91'
5-6	S5°01'11"W	138.13'

SITE SPECIFIC NOTES:

- CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO CONSTRUCTION INCLUDING UNDERGROUND UTILITY CONNECTION POINTS, RECEIVING PIPE SIZES, INVERTS, AND PIPE MATERIALS FOR UNDERGROUND STRUCTURES. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY UPON FINDING A DIFFERENCE IN FIELD CONDITIONS AND WHAT IS DEPICTED ON THE PLANS.
- CONTRACTOR SHALL ENGAGE MISS UTILITY OR A PRIVATE UTILITY LOCATION SERVICE TO MARK ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS, RELOCATIONS, NEW SERVICES, AND TEMPORARY SERVICES WITH THE UTILITY OWNER PRIOR TO BEGINNING WORK.
- BEYOND THE WATER METER IT IS THE PLUMBER'S RESPONSIBILITY TO INSTALL THE WATER SERVICE. THE WATER SERVICE IS TO BE INSPECTED BY THE BUILDINGS INSPECTORS OFFICE.
- CONTRACTOR SHALL VERIFY THE INVERTS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE FOUND.
- CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES TO RELOCATE PRIVATE UTILITIES AS NECESSARY.
- ANY EXISTING VALVE BOXES, ETC. THAT WILL BE IMPACTED BY PROPOSED GRADING WORK MUST BE ADJUSTED TO FINAL GRADE PRIOR TO ACCEPTANCE BY UTILITIES.
- BLASTING NOT PERMITTED WITHIN 50' OF EXISTING PUBLIC WATER MAINS.
- ALL AREAS WHERE GUY WIRES CROSS SIDEWALKS, A MINIMUM OF 7' VERTICAL CLEARANCE SHALL BE MAINTAINED.
- ALL PRIVATE UTILITIES TO CROSS UNDER PUBLIC UTILITIES.
- 2" SPRINKLER RUN IS TO BE VERIFIED WITH SPRINKLER CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR IS REQUIRED TO FURNISH ALL MATERIALS, LABOR, EQUIPMENT, POWER, MAINTENANCE, ETC. TO IMPLEMENT A TEMPORARY PUMPING SYSTEM FOR THE PURPOSE OF DIVERTING THE EXISTING SANITARY SEWER SYSTEM CAPACITY AROUND THE WORK AREA FOR THE DURATION OF THE PROJECT. THE DESIGN, INSTALLATION AND OPERATION OF THE TEMPORARY PUMPING SYSTEM SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT HE AND/OR HIS SUBCONTRACTOR SPECIALIZES IN THE DESIGN AND OPERATION OF TEMPORARY BYPASS PUMPING SYSTEMS. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) REFERENCES OF PROJECTS OF A SIMILAR SIZE AND COMPLEXITY AS THIS PROJECT, RECENTLY PERFORMED SUCCESSFULLY. THE BYPASS SYSTEM SHALL MEET THE REQUIREMENTS OF ALL CODES AND REGULATORY AGENCIES HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE A COPY OF THE BYPASS PUMPING PLAN TO CITY OF HARRISONBURG PUBLIC UTILITIES DEPARTMENT 72 HOURS PRIOR TO IMPLEMENTATION. A TRIAL RUN FOR LEAKAGE OF THE BYPASS PUMPING DISCHARGE PIPING SHALL BE DEMONSTRATED IN THE PRESENCE OF THE CITY UTILITIES INSPECTOR USING CLEAN WATER PRIOR TO ACTUAL OPERATION. PUMPING SYSTEM MUST BE CONTINUOUSLY MANNED UNTIL GRAVITY PIPE FLOW CAN BE RE-ESTABLISHED.

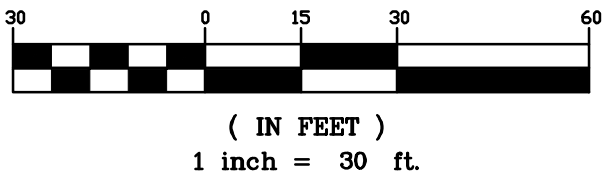
EACH BUILDING WAS DETERMINED TO BE A "LOW PRESSURE LOT" AND MAY REQUIRE AN ADDITIONAL PRIVATE PRESSURE BOOSTING SYSTEM AT TIME OF INSTALLATION.



NOTES:

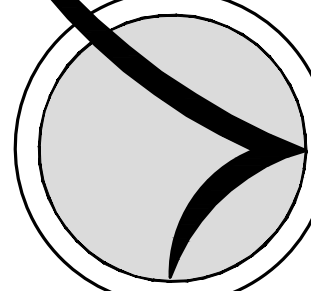
- ANY DAMAGE TO EXISTING SIDEWALKS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT THE CONTRACTOR'S EXPENSE. LATERALS INTO MANHOLES REQUIRE 6" SEPARATION.
- ALL PRIVATE UTILITIES SHALL BE MOVED AT DEVELOPERS EXPENSE TO ACHIEVE APPROPRIATE CLEARANCE AROUND PROPOSED WATER, SEWER AND STORM UTILITIES.
- CONTRACTOR SHALL PROVIDE AND INSTALL 6"x6" TAPPING SLEEVE AND 6" TAPPING VALVE IN AN OSHA SAFE TRENCH INCLUDING ALL TRAFFIC CONTROL. CITY FORCES WILL PRESSURE TEST THE SLEEVE IN PLACE AND TAP THE EXISTING WATER MAIN UPON EXECUTION OF A WORK AUTHORIZATION AGREEMENT. WATER MAIN CONNECTIONS SHALL BE COORDINATED THROUGH THE DEPARTMENT OF PUBLIC UTILITIES. SCHEDULE IS DEPENDENT ON CREW AVAILABILITY AND SHOULD BE ASSUMED TO REQUIRE 7 DAYS PRIOR NOTICE.

GRAPHIC SCALE



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PARK APARTMENTS

LAND SWAP
CITY OF HARRISONBURG, VIRGINIA

SITE & UTILITY LAYOUT

REVISIONS

DATE	ITEM
02/26/21	CITY COMMENTS
06/11/21	CITY COMMENTS
09/22/21	CITY COMMENTS
04/11/22	CITY COMMENTS
06/20/22	CITY COMMENTS

DATE
07 / 14 / 2020

SCALE
1" = 30'

PROJECT MANAGER
BRIAN C. MITCHELL, P.E.

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CHECKED BY

PROJ.#
20190303

SHEET #
C - 4