



HYDRANT FLOW TEST REPORT

GENERAL

Requested by: Bobby Wampler
Location: 5647 Starkey Road
Date of Test: 10/17/2013 Time of Test: 8:15
Prepared by: N. Carroll

FLOW

	Hydrant 1	Hydrant 2	Hydrant 3
ID	HYD-21959	HYD-21963	
Tag Number	21959	21963	
Static Pressure (psi)	94	92	
Pilot Pressure (psi)	56		
Flow (gpm)	1250		
Residual Pressure (psi)		72	
Size of Main (Inches)	6"	6"	

COMMENTS



HYDRANT FLOW TEST REPORT

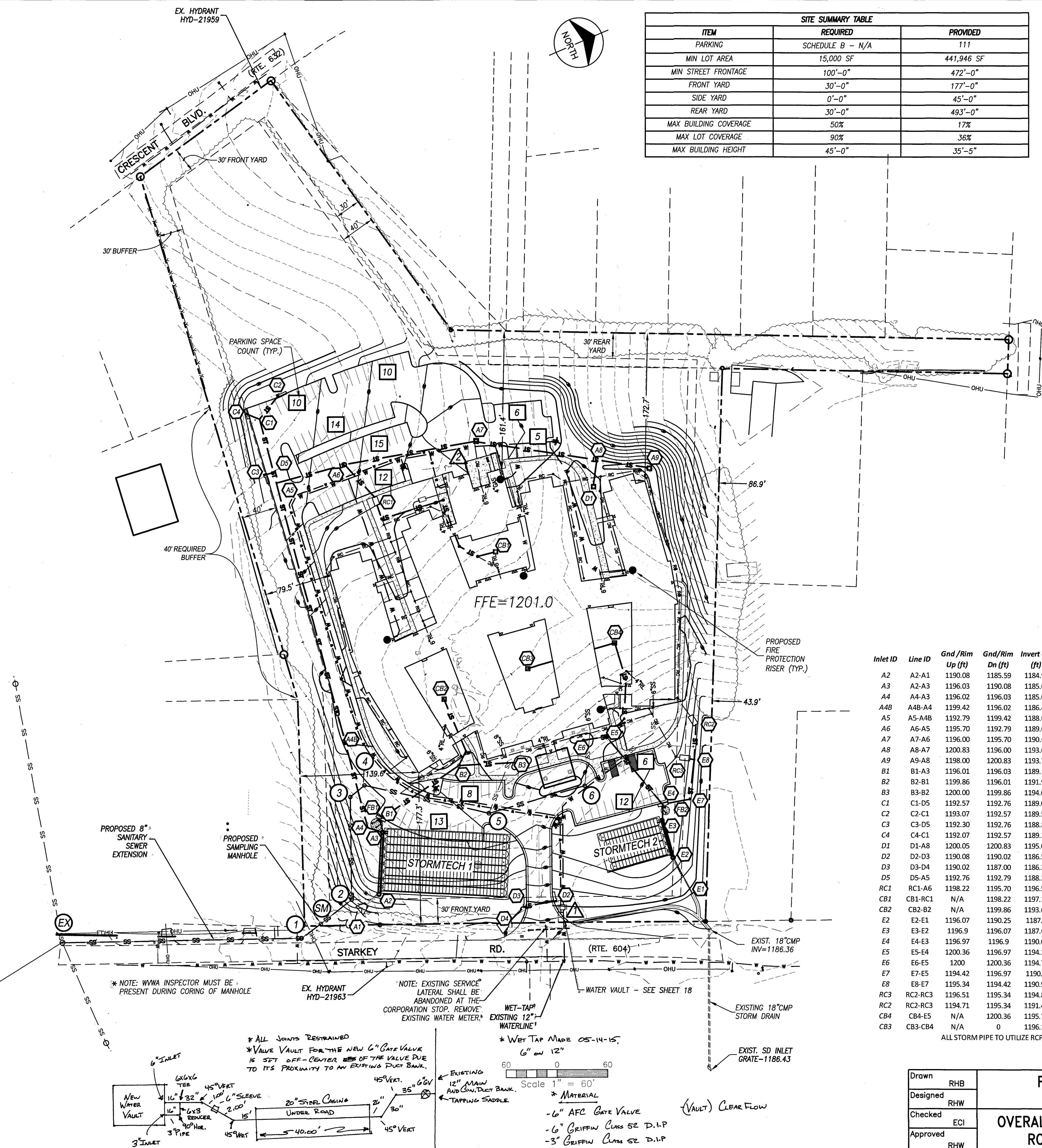
GENERAL

Requested by: Bobby Wampler
Location: 5647 Starkey Road
Date of Test: 10/17/2013 Time of Test: 8:25
Prepared by: N. Carroll

FLOW

	Hydrant 1	Hydrant 2	Hydrant 3
ID	HYD-21963	HYD-20538	
Tag Number	21963	20538	
Static Pressure (psi)	104	101	
Pilot Pressure (psi)	74		
Flow (gpm)	1445		
Residual Pressure (psi)		76	
Size of Main (Inches)	12"	6"	

COMMENTS



SITE SUMMARY TABLE		
ITEM	REQUIRED	PROVIDED
PARKING	SCHEDULE B - N/A	111
MIN LOT AREA	15,000 SF	441,946 SF
MIN STREET FRONTAGE	100'-0"	472'-0"
FRONT YARD	30'-0"	177'-0"
SIDE YARD	0'-0"	45'-0"
REAR YARD	30'-0"	493'-0"
MAX BUILDING COVERAGE	50%	17%
MAX LOT COVERAGE	90%	36%
MAX BUILDING HEIGHT	45'-0"	35'-5"

PARKING TABULATION SUMMARY:
1. THE FRIENDSHIP HEALTH AND REHAB CENTER SOUTH IS A 120-BED SKILLED NURSING FACILITY. THE PARKING REQUIREMENTS FOR THIS FACILITY FALL UNDER SCHEDULE B, TO BE DETERMINED BY THE ZONING ADMINISTRATOR. FRIENDSHIP RETIREMENT COMMUNITY HAS CAREFULLY ASSESSED THEIR PARKING NEEDS BASED ON THE FOLLOWING:
a. STAFFING REQUIRED FOR THE FACILITY
b. NUMBER OF BEDS / OCCUPANTS
c. HISTORICAL USE OF SIMILAR FACILITIES THEY OPERATE
d. POTENTIAL EXPANDED USES

2. BASED ON FRIENDSHIP RETIREMENT COMMUNITY'S ASSESSMENT OF PARKING NEEDS, THIS PROJECT HAS INCORPORATED 111 TOTAL PARKING SPACES, INCLUDING 4 HANDICAP ACCESSIBLE SPACES.

3. THERE IS APPROXIMATELY 2 ACRES OF REMAINING PROPERTY THAT WILL BE UNDEVELOPED WITH COMPLETION OF THIS PROJECT THAT WILL BE AVAILABLE FOR FUTURE EXPANSION OF THIS FACILITY, PARKING, OR OTHER USES. FUTURE EXPANSIONS WILL BE SUBMITTED FOR THE REVIEW AND APPROVAL BY ROANOKE COUNTY.

4. FRIENDSHIP RETIREMENT COMMUNITY FEELS THE PROPOSED PARKING FOR FRIENDSHIP HEALTH AND REHAB CENTER SOUTH WILL BE ADEQUATE FOR THIS BUILDING AND THE PROPOSED USES.

ZONING TABULATION:
MINIMUM LOT AREA REQUIRED/PROVIDED: 15,000SF/441,946SF

MINIMUM STREET FRONTAGE REQUIRED/PROVIDED: 100'/472'

FRONT YARD REQUIRED/PROVIDED: 30'/177'

SIDE YARD REQUIRED/PROVIDED: 0'/45'

REAR YARD REQUIRED/PROVIDED: 30'/493'

MAXIMUM BUILDING COVERAGE ALLOWED/PROVIDED: 50%/17%

MAXIMUM LOT COVERAGE ALLOWED/PROVIDED: 90%/36%

PROPOSED BUILDING HEIGHT: 35'-5", SEE ARCHITECTURAL PLANS

TRIP GENERATION:
TRIP GENERATION PROJECTED FOR THE 120-UNIT SKILLED NURSING FACILITY (72,300 SF) IS ESTIMATED USING THE ITE TRIP GENERATION MANUAL, 9TH EDITION.

(LAND USE CODE 620 - NURSING HOME)

TRIPS PER KSF AT AM PEAK HOUR = 0.55

723 X 0.55 = 40 VPH AM PEAK

TRIPS PER BED ON AT PM PEAK HOUR = 0.74

723 X 0.74 = 54 VPH PM PEAK

ENTRANCE LOCATION:
1. THE PROPOSED ENTRANCE IS LOCATED TO BE ALIGNED DIRECTLY ACROSS FROM ROCKBRIDGE COURT.

2. DISTANCE NORTH TO INTERSECTION WITH ARTHUR STREET IS 521'.

3. DISTANCE SOUTH TO INTERSECTION WITH BUCK MOUNTAIN ROAD IS 856'.

4. INTERSECTION SIGHT DISTANCE BOTH NORTH AND SOUTH EXCEED 390'.

5. ENTRANCE LOCATION MEETS ACCESS MANAGEMENT REGULATIONS FOR INTERSECTION SPACING.

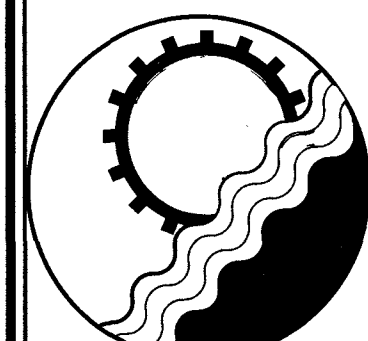
Inlet ID	Line ID	Gnd/Rim Up (ft)	Gnd/Rim Dn (ft)	Invert Up (ft)	Invert Dn (ft)	Size (in)	Length (ft)	Slope (%)	Structure
A2	A2-A1	1190.08	1185.59	1184.90	1182.84	24	19.22	10.72	48" MH-2
A3	A2-A3	1196.03	1190.08	1185.00	1185.00	24	71.49	0.00	72" MH-2
A4	A4-A3	1196.02	1196.03	1185.07	1185.00	24	17.88	0.39	60" MH-2
A4B-A4		1199.42	1196.02	1186.41	1185.17	24	184.35	0.67	48" MH-2
A5	A5-A4B	1192.79	1199.42	1188.07	1186.51	24	232.57	0.67	60" MH-2
A6	A6-A5	1195.70	1192.79	1189.00	1188.17	24	82.54	1.01	60" MH-2
A7	A7-A6	1196.00	1195.70	1190.62	1189.10	24	155.05	0.98	DI-7
A8	A8-A7	1200.83	1196.00	1193.00	1190.70	24	145.39	1.58	60" MH-2
A9	A9-A8	1198.00	1200.83	1193.77	1193.10	24	61.95	1.08	DI-7
B1	B1-A3	1196.01	1196.03	1189.17	1186.50	24	15.96	16.73	8" DI-3C
B2	B2-B1	1199.86	1196.01	1191.90	1189.34	24	111.51	2.30	48" MH-2
B3	B3-B2	1200.00	1199.86	1194.00	1192.00	24	68.47	2.92	DI-1
C1	C1-D5	1192.57	1192.57	1189.03	1188.40	24	62.62	1.01	48" MH-2
C2	C2-C1	1193.07	1192.57	1189.57	1189.13	4	35.57	1.24	6"x4" FILTERRA INLET
C3	C3-D5	1192.30	1192.76	1188.80	1188.30	6	11.14	4.49	13"x7" FILTERRA INLET
C4	C4-C1	1192.07	1192.57	1189.30	1189.13	18	17.32	0.98	12" DI-3C
D1	D1-A8	1200.05	1200.83	1195.00	1194.50	18	31.34	1.60	DI-1
D2	D2-D3	1190.08	1190.02	1186.58	1186.52	4	35.21	0.17	6"x4" FILTERRA INLET
D3	D3-D4	1190.02	1187.00	1186.33	1185.50	4	26.27	3.18	6"x4" FILTERRA INLET
D5	D5-A5	1192.76	1192.79	1188.30	1188.17	24	13.17	0.99	48" MH-2
RC1	RC1-A6	1198.22	1195.70	1196.55	1189.00	10	49.94	15.12	12"x6" FILTERRA RD
CB1	CB1-RC1	N/A	1198.22	1197.11	1196.55	10	117.72	0.48	DI-1
CB2	CB2-B2	N/A	1199.86	1193.62	1193.07	10	115.60	0.48	DI-1
E2	E2-E1	1196.07	1190.25	1187.5	1187.4	18	48.67	0.21	60" MH-2
E3	E3-E2	1196.9	1196.07	1187.61	1187.61	24	42.95	0.00	60" MH2
E4	E4-E3	1196.97	1196.9	1190.04	1187.87	24	18.53	11.71	4" DI-3C
E5	E5-E4	1200.36	1196.97	1194.38	1190.08	24	103.87	4.14	48" MH-2
E6	E6-E5	1200	1200.36	1194.75	1194.48	24	27.30	0.99	DI-1
E7	E7-E5	1194.42	1196.97	1190.4	1190.08	10	31.90	1.00	24" NYLOPLAST CB
E8	E8-E7	1195.34	1194.42	1190.97	1190.5	10	47.08	1.00	24" NYLOPLAST CB
RC3	RC3-RC3	1196.51	1195.34	1194.84	1192	10	4.82	58.92	12"x6" FILTERRA RD
RC2	RC2-RC3	1194.71	1195.34	1191.48	1191.07	10	41.00	1.00	12"x6" FILTERRA RD
CB4	CB4-E5	N/A	1200.36	1195.76	1195.38	8	102.46	0.37	DI-1
CB3	CB3-CB4	N/A	0	1196.11	1195.76	8	92.80	0.38	DI-1

ALL STORM PIPE TO UTILIZE RCP UNLESS SPECIFIED RD=ROOF DRAIN

Drawn	RHB
Designed	RHW
Checked	ECI
Approved	RHW

FRIENDSHIP HEALTH AND REHAB CENTER SOUTH
OVERALL SITE & UTILITY EXTENSIONS
ROANOKE COUNTY, VIRGINIA

1"=60'
DATE: 7/10/14
PROJECT: 13106
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ENGINEERING CONCEPTS, INC.

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