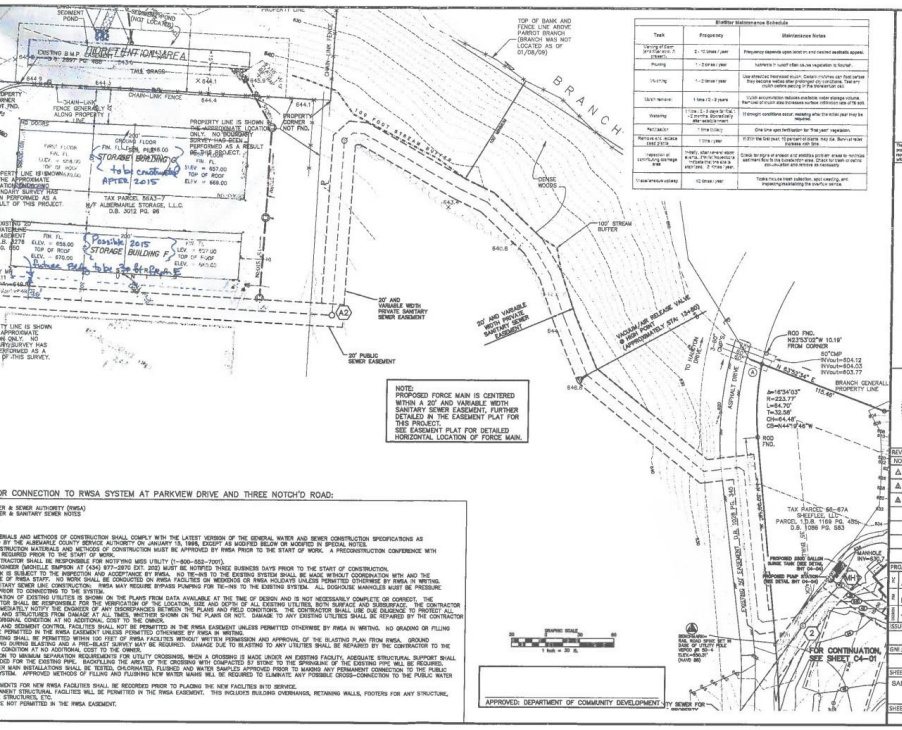



| Biofilter Maintenance Schedule | | |
|---|---|---|
| Task | Frequency | Maintenance Notes |
| Clearing of Berm (and Filter strips, if shown) | 2 - 12 times / year | Frequency depends upon land use and desired aesthetic appeal. |
| Pruning | 1 - 2 times / year | Remove no "wood" often as vegetation is flushed. |
| Mulching | 1 - 2 times / year | Use shredded hardwood mulch. Delaid mulches can float before they become effective in controlling pollutants. Use only mulch before planting, if it is a bioretention cell. |
| Mulch removal | 1 time / 2 - 3 years | Until accumulation reduces available water storage volume, the rate of infiltration decreases as surface infiltration rate of fill soil. |
| Watering | 1 time / 2 - 3 days for first 12 months (depending on weather) | If drought conditions occur, watering after the initial year may be required. |
| Fertilization | 1 time (only) | One time spot fertilization for "first year" vegetation. |
| Replacement of dead plants | 1 time / year | 10-20% the first year, 10 percent of plants may die. Survival rates increase with time. |
| Inspection of contributing drainage area | Initially, after several storm events, 2 times / year thereafter | Check for signs of erosion and sediment pollution; areas to minimize sediment flow to the bioretention area. Check for trash or debris accumulation and remove as necessary. |
| Check sediment volume | 12 times / year | Trains include trash collection, spot weeding, and replacing/maintaining the overflow device. |

GAY AND NEEL, INC.
CONSULTING ENGINEERS • ENVIRONMENTAL SCIENTISTS • SURVEYORS
12000 Bedford Street
Charlottesville, Virginia 22911
Phone: (540) 971-0011
Fax: (540) 971-0775
E-mail: info@gayandneel.com
Web: www.gayandneel.com

The drawing, design, and digital files resulting from this project are the property of Gay and Neel, Inc. The reproduction, copying or other use of this drawing without GN's written consent is prohibited.

EMERSON COMMONS
SITE DEVELOPMENT PLAN
ALBEMARLE COUNTY, VIRGINIA

JOHN T. NEEL
Lic. No. 035790
1/22/2015

| REVISIONS | | |
|---|---|---|
| NO. | COMMENTS | DATE |
| 1 | CONSTRUCTION MODIFICATIONS AND AS-BUILTS | 10/20/2015 |
| 2 | COUNTY REVIEW COMMENTS | 10/02/2015 |
| 3 | OWNER REVISIONS | 07/13/2015 |
| | | |
| | | |
| | | |
| | | |

PROJECT TEAM
E: JOHN T. NEEL, PE
R: KEVIN D. CONNER, LA
D: TES, LHS

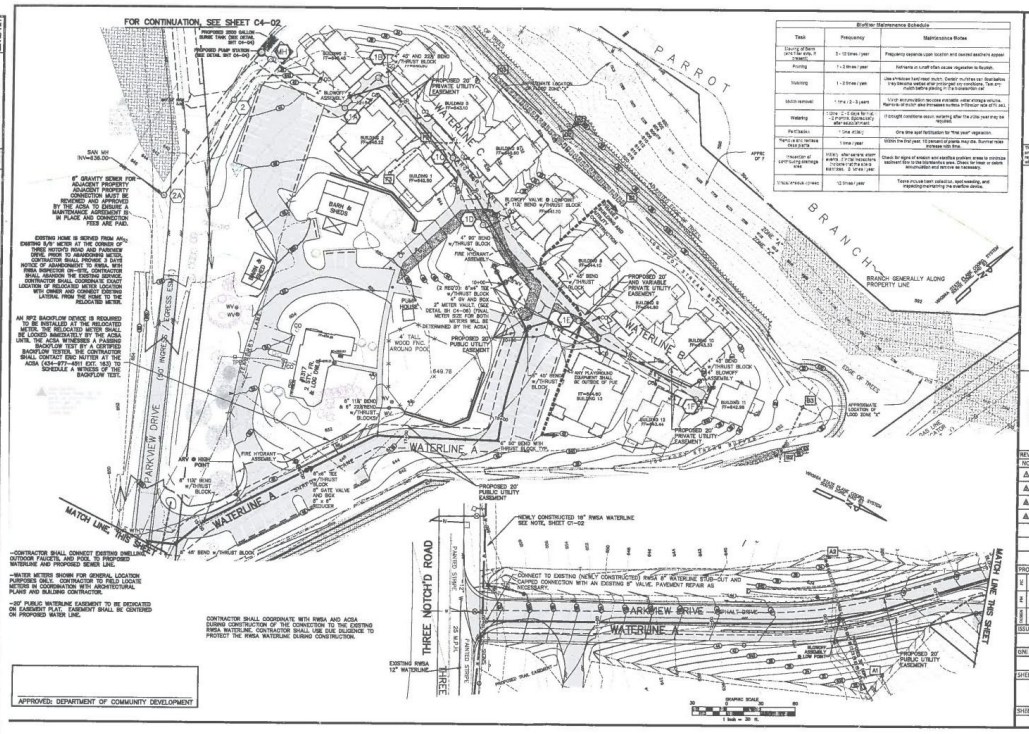
ISSUE DATE: 02/02/2015
G/N JOB NO: 1770.3
SHEET TITLE: SANITARY SEWER FORCE MAIN PLAN
SHEET NUMBER: C4-02

OR CONNECTION TO RWSA SYSTEM AT PARKVIEW DRIVE AND THREE NOTCH'D ROAD:

RK & SEWER AUTHORITY (RWSA)
ER & SANITARY SEWER NOTES

ERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST VERSION OF THE GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS AS BY THE ALBEMARLE COUNTY SERVICE AUTHORITY ON JANUARY 15, 1998, EXCEPT AS MODIFIED BELOW OR MODIFIED IN SPECIAL NOTES.
STRUCTION MATERIALS AND METHODS OF CONSTRUCTION MUST BE APPROVED BY RWSA PRIOR TO THE START OF WORK. A PRECONSTRUCTION CONFERENCE WITH REQUIRED PRIOR TO THE START OF WORK.
TRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7001).
GINEER (MICHELLE SIMPSON AT (434) 977-2970 EXT. 205) MUST BE NOTIFIED THREE BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION.
E IS SUBJECT TO THE INSPECTION AND ACCEPTANCE BY RWSA. NO TIE-INS TO THE EXISTING SYSTEM SHALL BE MADE WITHOUT COORDINATION WITH AND THE T OF RWSA STAFF. NO WORK SHALL BE CONDUCTED ON RWSA FACILITIES ON WEEKENDS OR RWSA HOLIDAYS UNLESS PERMITTED OTHERWISE BY RWSA IN WRITING.
TRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AS MAY REQUIRE BYPASS PUMPING FOR TIE-INS TO THE EXISTING SYSTEM. ALL DISCHARGE MANIFOLDS MUST BE PRESSURE PRIOR TO CONNECTING TO THE SYSTEM.
ATION OF EXISTING UTILITIES IS SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF DESIGN AND IS NOT NECESSARILY COMPLETE OR CORRECT. THE TOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATION, SIZE AND DEPTH OF ALL EXISTING UTILITIES, BOTH SURFACE AND SUBSURFACE. THE CONTRACTOR IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE CONTRACTOR SHALL USE DUE DILIGENCE TO PROTECT ALL AND STRUCTURES FROM DAMAGE AT ALL TIMES, WHETHER SHOWN ON THE PLANS OR NOT. DAMAGE TO ANY EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
AND SEDIMENT CONTROL FACILITIES SHALL NOT BE PERMITTED IN THE RWSA EASEMENT UNLESS PERMITTED OTHERWISE BY RWSA IN WRITING. NO GRADING OR FILLING PERMITTED IN THE RWSA EASEMENT UNLESS PERMITTED OTHERWISE BY RWSA IN WRITING.
TING SHALL BE PERMITTED WITHIN 100 FEET OF RWSA FACILITIES WITHOUT WRITTEN PERMISSION AND APPROVAL OF THE BLASTING PLAN FROM RWSA. GROUND NG DURING BLASTING AND A PRE-BLAST SURVEY MAY BE REQUIRED. DAMAGE DUE TO BLASTING TO ANY UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE CONDITION AT NO ADDITIONAL COST TO THE OWNER.
ED FOR THE EXISTING PIPE. BACKFILLING FOR UTILITY CROSSINGS, WHEN A CROSSING IS MADE UNDER AN EXISTING FACILITY, ADEQUATE STRUCTURAL SUPPORT SHALL ED FOR THE EXISTING PIPE. BACKFILLING FOR UTILITY CROSSINGS WHEN EMPHASIZED BY RWSA TO THE SPRINKLING OF THE EXISTING PIPE WILL BE REQUIRED.
R MAIN INSTALLATIONS SHALL BE TESTED, CHLORINATED, FLUSHED AND WATER SAMPLES APPROVED PRIOR TO MAKING ANY PERMANENT CONNECTION TO THE PUBLIC SYSTEM. APPROVED METHODS OF FILLING AND FLUSHING NEW WATER MAINS WILL BE REQUIRED TO ELIMINATE ANY POSSIBLE CROSS-CONNECTION TO THE PUBLIC WATER
MENTS FOR NEW RWSA FACILITIES SHALL BE RECORDED PRIOR TO PLACING THE NEW FACILITIES INTO SERVICE.
MANENT STRUCTURAL FACILITIES WILL BE PERMITTED IN THE RWSA EASEMENT. THIS INCLUDES BUILDING OVERHANGS, RETAINING WALLS, FOOTERS FOR ANY STRUCTURE, STRUCTURES, ETC.
E NOT PERMITTED IN THE RWSA EASEMENT.

APPROVED: DEPARTMENT OF COMMUNITY DEVELOPMENT




| Bioflitter Maintenance Schedule | | |
|---|---|---|
| Task | Frequency | Maintenance Notes |
| Clearing of Berm (and Filter strips, if shown) | 2 - 12 times / year | Frequency depends upon location and desired aesthetic appeal. |
| Pruning | 1 - 2 times / year | Remove no "wood" often as vegetation is flushed. |
| Mulching | 1 - 2 times / year | Use shredded hardwood mulch. Delaid mulches can float before they become effective in controlling pollutants. Use only mulch before planting, if it is a bioretention cell. |
| Mulch removal | 1 time / 2 - 3 years | Until accumulation reduces available water storage volume, the rate of infiltration decreases surface infiltration rate of fill soil. |
| Watering | 1 time / 2 - 3 days for first 12 months (depending on weather) | If drought conditions occur, watering after the initial year may be required. |
| Fertilization | 1 time (only) | One time spot fertilization for "first year" vegetation. |
| Replacement of dead plants | 1 time / year | 10-20% the first year, 10 percent of plants may die. Survival rates increase with time. |
| Inspection of contributing drainage area | Initially, after several storm events, 2 times / year thereafter | Check for signs of erosion and sediment pollution; areas to minimize sediment flow to the bioretention area. Check for trash or debris accumulation and remove as necessary. |
| Check sediment volume | 12 times / year | Trains include trash collection, spot weeding, and replacing/maintaining the overflow device. |

GAY AND NEEL, INC.
CONSULTING ENGINEERS • ENVIRONMENTAL SCIENTISTS • SURVEYORS
12000 Bedford Street
Charlottesville, Virginia 22911
Phone: (540) 971-0011
Fax: (540) 971-0775
E-mail: info@gayandneel.com
Web: www.gayandneel.com

The drawing, design, and digital files resulting from this project are the property of Gay and Neel, Inc. The reproduction, copying or other use of this drawing without GN's written consent is prohibited.

EMERSON COMMONS
SITE DEVELOPMENT PLAN
ALBEMARLE COUNTY, VIRGINIA

JOHN T. NEEL
Lic. No. 035790
1/22/2015

| REVISIONS | | |
|---|---|---|
| NO. | COMMENTS | DATE |
| 1 | CONSTRUCTION MODIFICATIONS AND AS-BUILTS | 10/20/2015 |
| 2 | COUNTY REVIEW COMMENTS | 10/02/2015 |
| 3 | OWNER REVISIONS | 07/13/2015 |
| 4 | RWSA REVISIONS | 06/04/2015 |
| | | |
| | | |
| | | |
| | | |

PROJECT TEAM
E: JOHN T. NEEL, PE
R: KEVIN D. CONNER, LA
D: TES, LHS

ISSUE DATE: 02/02/2015
G/N JOB NO: 1770.3
SHEET TITLE: SITE UTILITY PLAN
SHEET NUMBER: C4-01

APPROVED: DEPARTMENT OF COMMUNITY DEVELOPMENT