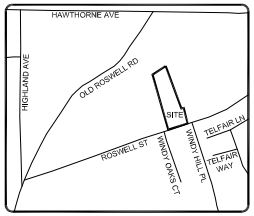
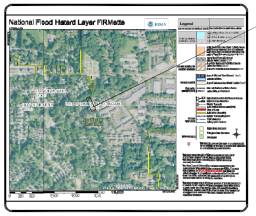


Location Map
N.T.S.



FEMA Map
N.T.S.

TOTAL SITE AREA = 0.567 ACRES
DISTURBED SITE AREA = 0.32 ACRES

24 HOUR EMERGENCY CONTACT: THOMAS TREBUS 404-643-5775

Site Notes:

1. THE SITE CONTAINS: 0.567 ACRES 24,707 SF
   TOTAL DISTURBED ACREAGE: 0.32 ACRES
2. CURRENT STREET ADDRESS: 1529 ROSWELL STREET SE, SMYRNA, GA 30080
3. THE NORTH ARROW AND SCALE ARE SHOWN ON THIS PLAN
4. SURVEY INFORMATION TAKEN FROM SURVEYS PERFORMED BY McCLUNG SURVEYING DATED JANUARY 10, 2020.
5. NO PORTIONS OF THIS PROPERTY ARE INSIDE DESIGNATED F.E.M.A. SPECIAL FLOOD HAZARD AREA AS PER THE FLOOD INSURANCE RATE MAP #13067C0119 H, DATED MARCH 4, 2013.
6. THERE ARE NO WATERS OF THE STATE OF GEORGIA (LAKES OR STREAMS) WITHIN 200 FEET OF THE SITE. ALL APPROPRIATE STATE WATER BUFFERS ARE SHOWN ON THE SITE PLANS. THERE ARE NO PROPOSED IMPACTS TO ANY STATE WATER BUFFERS.
7. TO THE BEST OF OUR KNOWLEDGE, THERE NO CEMETERIES, ARCHITECTURAL, OR ARCHEOLOGICAL LANDMARKS EXIST ON SITE. IN THE EVENT THAT THESE LANDMARKS ARE DISCOVERED DURING CONSTRUCTION, THE ENGINEER MUST BE CONTACTED IMMEDIATELY FOR REVIEW AND AMENDING THE CONSTRUCTION PLANS
8. ALL KNOWN UTILITY EASEMENTS PER THE SURVEY ARE SHOWN ON THIS PLAN
9. SANITARY SEWER WILL BE PROVIDED TO THE NEW HOUSE THROUGH AN EXISTING CLEANOUT CONNECTION TO COBB COUNTY SEWER SYSTEM. NO ONSITE SEPTIC SYSTEM IS PROPOSED.
10. THE EXISTING UTILITIES SHOWN ON THE PLANS ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS, SIZES, MATERIALS, OR DEPTH FOR THE UTILITIES SHOWN OR THE UTILITIES WHICH MAY EXIST ON THE SITE BUT ARE NOT SHOWN. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD. THE CONTRACTOR SHALL ALSO HAVE THE RESPONSIBILITY BEFORE STARTING ANY WORK TO MAKE SUCH EXPLORATIONS AND PROBES NECESSARY TO ASCERTAIN ANY SEWER LINES, WATER SUPPLY LINES, GAS LINES, ELECTRICAL LINES, CABLE LINES, TELEPHONE LINES, OR OTHER UTILITY LINE.
11. CONTRACTOR SHALL CONTACT THE UTILITY LOCATOR AS REQUIRED BY GEORGIA LAW AND HAVE ALL UTILITIES MARKED PRIOR TO ANY CONSTRUCTION ACTIVITY. CONTRACTOR WILL HAVE PRIVATE UTILITY LOCATOR LOCATE ALL UTILITIES WITHIN THE CONSTRUCTION LIMITS NOT COVERED BY THE UTILITY PROTECTION CENTER.
12. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR ERRORS THAT HE MAY DISCOVER IN THESE PLANS.

Water Quality/ Detention Pond Summary:

TOTAL IMPERVIOUS AREA FOR THE SITE IS = 9,453 SQUARE FEET. RUNOFF REDUCTION IS PROVIDED ONLY FOR THE NEW IMPERVIOUS AREA OF 8,689 SQUARE FEET FOR PROPOSED HOUSE WITH GARAGE, PATIO, POOL, UPPER POOL DECK, STEPS, WALKWAY, WALLS, &DRIVEWAY. SEE LOT COVERAGE CHART BELOW.

THERE WILL BE ONE STONE STORAGE TRENCH WITH 5' PERFORATED PIPE WHICH WILL BE LOCATED IN THE FRONT OF THE PROPERTY. THE PERFORATED PIPE SYSTEM WILL DETAIN FOR A TOTAL OF 8,689 SF OF RUNOFF FROM THE PROPOSED IMPERVIOUS AREA. THE REQUIRED VOLUME OF THE UNDERGROUND PERFORATED PIPE SYSTEM IS 924.00 CUBIC FEET. THE TOTAL VOLUME PROVIDED BY THE STONE STORAGE TRENCH WITH PERFORATED PIPE IS 942.7 CF. THE POSITION OF THE PERFORATED PIPE SYSTEM IS LOCATED IN SUCH A WAY THAT IT IS AT LEAST 10 FEET AWAY FROM THE STRUCTURES AND PROPERTY LINE. THE BOTTOM OF THE PERFORATED PIPE SYSTEM IS 6 FEET DEEP. ANY OVERFLOW DRAINAGE FROM THE SYSTEMS WILL FLOW TO THE SOUTH SIDE OF THE PROPERTY.

THE RUNOFF REDUCTION VOLUMES PROVIDED BY THE BMP SHOWN EXCEED THE RUNOFF REDUCTION STORAGE REQUIREMENTS. THE AMENDED FILTER STRIPS SOIL BERMS WILL PROMOTE GROUNDWATER RECHARGE WHILE RESPECTING THE REQUIRED CRITICAL ROOT ZONE OF SAVE TREES. BECAUSE OF THE AVAILABLE SPACE, A LARGER SURFACE AREA FILTER STRIPS BERMS WERE DESIGNED TO KEEP THE STORAGE FACILITY AS SHALLOW AS POSSIBLE AND PROMOTE MORE DIRECT INFILTRATION.

Owners Installation/Maintenance Manual:

FOR INFILTRATION TRENCH

VEGETATION
THE LANDSCAPED AREA ABOVE THE SURFACE OF TRENCH CAN BE LANDSCAPED WITH SOD OR MAY BE COVERED WITH AN ENGINEERED SOIL MIX, AND PLANTED WITH MANAGED TURF OR OTHER HERBACEOUS VEGETATION. THE STONE STORAGE IS FOR STORAGE ONLY AND CAN BE GRADED ABOVE PER THE GRADING PLAN WITH A MINIMUM COVER OF 6".

MAINTENANCE

MONTHLY
- ENSURE THAT CONTRIBUTING AREA, FACILITY AND INLETS ARE CLEAR OF DEBRIS.
- ENSURE THAT THE CONTRIBUTING AREA IS STABILIZED.
- REMOVE SEDIMENT AND OIL/GREASE FROM PRETREATMENT DEVICES, AS WELL AS OVERFLOW STRUCTURES.
- MOW GRASS FILTER STRIPS SHOULD BE MOWED AS NECESSARY. REMOVE GRASS CLIPPINGS.

SEMIANNUAL INSPECTION
-
- CHECK OBSERVATION WELLS FOLLOWING 3 DAYS OF DRY WEATHER. FAILURE TO PERCOLATE WITHIN THIS TIME PERIOD INDICATES CLOGGING.
- INSPECT PRETREATMENT DEVICES AND DIVERSION STRUCTURES FOR SEDIMENT BUILD–UP AND STRUCTURAL DAMAGE.
- REMOVE TREES THAT START TO GROW IN THE VICINITY OF THE TRENCH.REPLACE PEA GRAVEL/TOPSOIL/GRASSING AND TOP SURFACE FILTER FABRIC (WHEN CLOGGED).

AS NEEDED
- PERFORM TOTAL REHABILITATION OF THE TRENCH TO MAINTAIN DESIGN STORAGE CAPACITY.
- EXCAVATE TRENCH WALLS TO EXPOSE CLEAN SOIL UPON FAILURE.

Water Quality Calculations:

PROPOSED IMPERVIOUS AREA CALCULATIONS

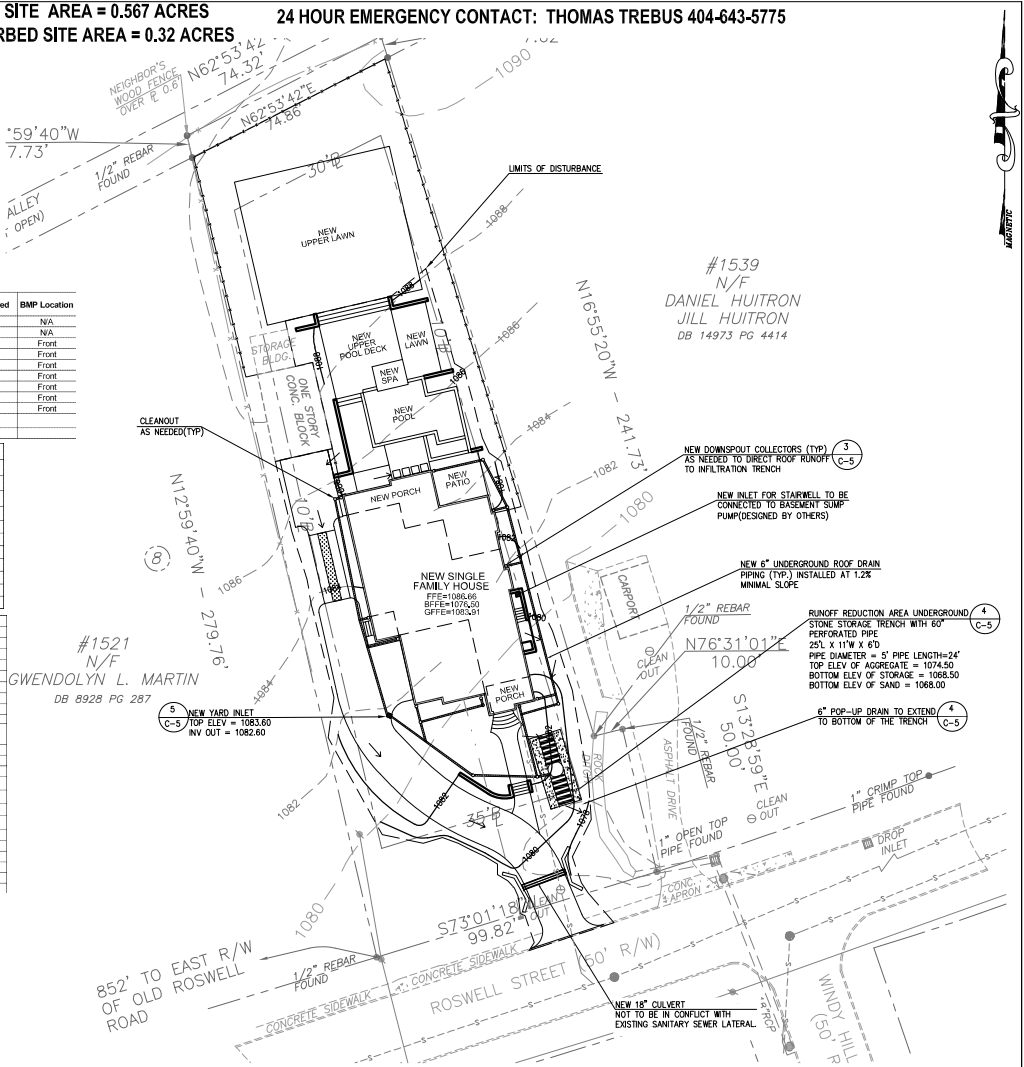
Site Location	Square Footage (Sq. Ft.)	Not/Treated	BMP Location
Existing Garage	592	Exempt	N/A
Existing Storage Building	172	Exempt	N/A
Proposed House	3488	Treated	Front
Proposed Patio	262	Treated	Front
Proposed Pool	796	Treated	Front
Proposed Upper Pool Deck & Steps	986	Treated	Front
Proposed Walkway & Steps	373	Treated	Front
Proposed Walls	101	Treated	Front
Proposed Driveway	2683	Treated	Front
Total ProposedImpervious Area	9,453	SF	
Total Treated Impervious Area	8,689	SF	

Water Quality Calculations Per GSWMM Section 2.2.4.1

Water Quality Volume			
Site Area (A) =	24707	SF	
Treated Impervious Area =	8689	SF	
% impervious (I) =	36	%	
RRv = 0.05 + I *(0.009)			
Rv =	0.374		
WQv = 1.2*Rv*A/12			
WQv =	924	Cubic Feet Required	

Front Stose Storage Infiltration Trench with Pipe Calculations

Water Quality Calculations	1.2" required for required area impervious		
Required WQ Volume =	924.0	CF	
Pipe Volume			
Diameter of Pipe	5.0	FT	
Length of Pipe	24.0	FT	
Volume of Pipe	471.2	CF	
Required Volume Of Gravel (Required WQ Volume - Volume of Pipe)	452.8	CF	
All Volume to be provided in Stone Storage Infiltration Trench			
Infiltration Trench w/ 40% void Ratio (Required WQ Volume - Volume of Pipe) / 0.40 =	1132.0	CF	
Length of Trench	25.0	FT	
Width of Trench	11.0	FT	
Depth of Trench	6.0	FT	
Volume of Gravel	1178.8	CF	
Provided Stone Strage + Pipe Volume =	942.7	CF OF STORAGE	
Required Volume =	924.0	CF OF STORAGE	
Percent of VolumeProvided over required	102%		
Provided Volume is Greater than Required Volume			



TREE SAVE FENCE FOR THE ENTIRE SITE MUST BE INSTALLED, INSPECTED AND APPROVED PRIOR TO THE INSTALLATION OF EROSION CONTROL MEASURES. NO LAND DISTURBANCE OR DEMOLITION IS ALLOWED BEFORE THE TREE SAVE FENCING HAS BEEN INSPECTED AND APPROVED Y THE COMMUNITY DEVELOPMENT DIRECTOR.

ALL EXISTING TREES, SPECIMEN, AND NON-SPECIMEN, COUNTED FOR EDF CREDITS MUST BE FULLY PRESERVED DURING INDIVIDUAL LOT PERMITTING

City of Smyrna Notes:

1. ALL ROOF GUTTERS SHALL DRAIN TO INFILTRATION TRENCH (ABOVE OR BELOW GRADE).
2. INDIVIDUAL DETENTION FACILITY MAINTENANCE IS RESPONSIBILITY OF HOMEOWNER

Prepared By:
CRESCENT VIEW ENGINEERING, LLC.
Tim Fleming, PE
2870 Atlanta Road SE
Marietta, GA 30060
678-432-4410
www.crescentviewengr.com

Prepared For
Thomas Trebus
2870 Atlanta Rd.
Smyrna, GA 30080

Stormwater Plan

REVISIONS			
DATE	9-25-20		
SCALE	AS SHOWN		
DRAWN	PZ		
CHECKED	GHB		

Single Family Residential Plans For
1529 Roswell Street SE
Land Lot 592 17th District
City of Smyrna, Georgia

CVE Pl.# 20-219

Sheet No.
C-2