

LEGEND:

IPS	IRON PIN SET
IPF	IRON PIN FOUND
OT	OPEN TOP PIN
CT	CRIMP TOP PIN
RB	REINFORCING BAR (REBAR)
CL	CAPPED REBAR
R/W	RIGHT-OF-WAY
CONC	CONCRETE
PP	POWER POLE
LP	LIGHT POLE
GV	GAS VALVE
GM	GAS METER
SS	SANITARY SEWER
PRCP	PROPOSED
CMF	CONC MONUMENT FOUND
OU	OVERHEAD UTILITY LINE(S)
SSMH	SANITARY SEWER MAN HOLE
MHT	MAN HOLE TELEPHONE
CB	CATCH BASIN
J	JUNCTION BOX
DI	DROP INLET
SWCB	SINGLE WING CATCH BASIN
P	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
WV	WATER VALVE
CO	SANITARY SEWER CLEANOUT
LL	LAND LOT LINE
HW	HEAD WALL
OMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
SSE	SANITARY SEWER EASEMENT
PH	FIRE HYDRANT
DE	DRAINAGE EASEMENT
EP	ELECTRIC POWER BOX
ST	TREE STRUCTURAL
RP	ROOT PLATE
TR	TREE CRITICAL
TRP	TREE CRITICAL ROOT STRUCTURE
TRC	TREE CRITICAL ROOT
TRSI	STRUCTURE IMPACTED
TRP	PRESERVED TREES
TRD	DISTURBED/REMOVED TREES
TRPL	REPLACEMENT/PLANTED TREES

TREE LEGEND:

○	OAK	○	HOLLY
○	POP-AR	○	JUNIPER
○	PINE	○	MAGNOLIA
○	HICKORY	○	CRAPE MYRTLE
○	MAPLE	○	SPRUCE-FUR
○	SWEETGUM	○	BIRCH
○	TBD-HARDWOOD	○	WILLOW
○	DOGWOOD	○	ELV

EROSION CONTROL LEGEND

Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)
Ds4	DISTURBED AREA STABILIZATION (WITH PERMANENT SOD)
Du	DUS CONTROL
Sd1-S	TYPE 'SENSITIVE' SILT FENCE
Sd2-T	NET SEDIMENT TRAP
Sd2-T	NET SEDIMENT TRAP
Cc	CONSTRUCTION ENTRANCE
LD	LIMITS OF DISTURBANCE
Sd1-NS	TYPE 'NON-SENSITIVE' SILT FENCE
TF	TREE FENCE
CD-MD	CHECK DAM HAY BALES
Re	RETAINING WALL

CONTOUR LEGEND

960	EXISTING CONTOURS
980	PROPOSED CONTOURS
983.3	PROPOSED SPOT ELEVATION

NOTE: ALL TEMPORARY BMPs SHALL BE REMOVED UPON FINAL STABILIZATION.

**DEMOLITION PLAN FOR:
PRITCHARD BUILDERS, INC**

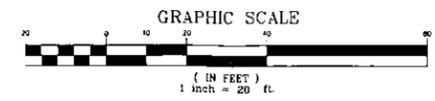
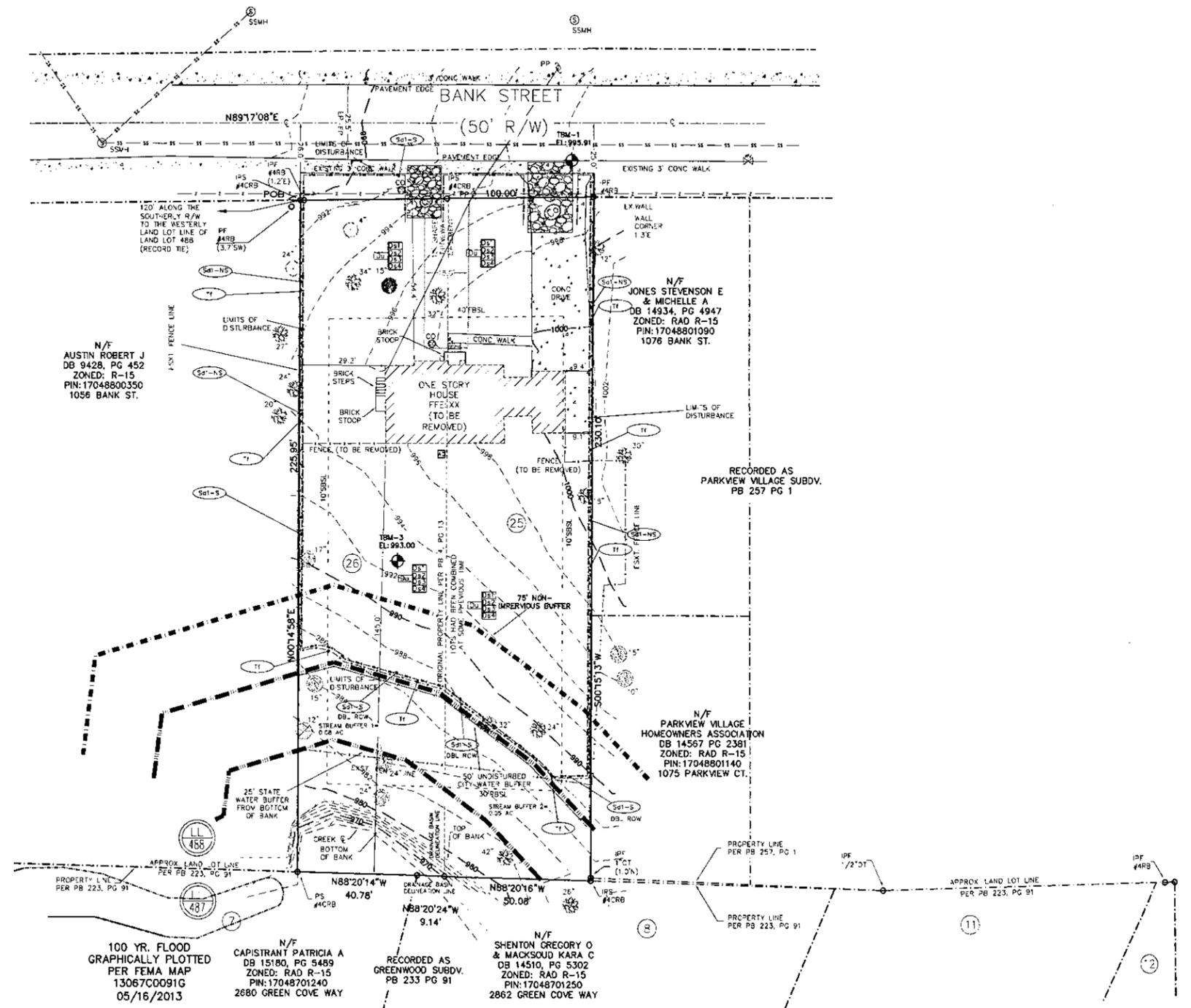
1068 BANK STREET, SE
LAND LOT 488, 17th DISTRICT
2nd SECTION
COBB COUNTY, GEORGIA
CITY OF SMYRNA
EXISTING ZONING: R-15
EXISTING PIN: 17048800360
LOT AREA
22,797 SQ FT
0.52 ACRES

ZONING/SETBACKS:
RAD ZONING (CONDITIONAL)
APPROVED ZONING REQUEST 2'15-0'0"
DATED JUNE 06, 2015
FRONT: 35 FT
SIDE: 5 FT
REAR: 30 FT

OWNER/BUILDER

PRITCHARD BUILDERS, INC.
3165 GREENFIELD DRIVE
MARIETTA, GA. 30068
678-300-0219

NOTE:
DEMOLITION PERMIT NOT ISSUED UNTIL TREE POSTING IS APPROVED



GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

THOMAS E. PEAY, III
LEVEE II CERTIFIED DESIGN PROFESSIONAL

CERTIFICATION NUMBER: D00006668
ISSUED: 08/19/2015 EXPIRES: 08/19/2018

SHEET 2 OF 10

3595 Canton Road
Suite 116, PMB 272
Marietta, GA 30066
FRONTLINE SURVEYING & MAPPING, INC. Ph. (678) 355-9805 Fax (678) 355-9805
www.frontlinesurveying.com

DATE OF FIELD SURVEY: 07/30/15
SCALE: 1" = 20'

REVISION	DATE

DEMOLITION PLAN FOR:
PRITCHARD BUILDERS, INC

LAND LOT 488	SECTION D	17th DISTRICT	COBB COUNTY, GEORGIA
LOT 26	UNIT	PHASE	FRONT LOT FLO WELLS
SUBDIVISION	B.A. GUTHRIE	PHASE	
PG 4	PG 1-3		
DB 15103	PG 6331		
MAP ID: 13087201391			

FOR THE FIRM REGISTERED SURVEYING & MAPPING, INC. LICENSE NO. 13087201391

309 # 56366

PER ZONING: TRACT 1 MAX IMPERVIOUS SURFACE AREA
3,971.45 SQ. FT = 0.09 AC = 35.0% OF LOT

WATER QUALITY TRACT 1:
 $WQV = (1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 419ft^3$ REQ'D FOR LOT
 $WQV =$ WATER QUALITY VOLUME (CUBIC FEET)
 $R =$ RUNOFF COEFFICIENT
 $A =$ AREA OF SITE = 0.26 ACRES
 $ac =$ MAXIMUM IMPERVIOUS SURFACE AREA = 35.0%

$R = 0.05 + 0.009(0)$ (WHERE 0 IS PERCENT IMPERVIOUS COVER)
 $R = 0.05 + 0.009(35.0) = 0.365 = 0.37$
SUB BASIN 1 (DA1):
 BASIN AREA = UNDIST. AREA + LANDSCAPED AREA + IMPERVIOUS AREA
 UNDISTURBED AREA = 0.00 ACRES, CN = 60
 LANDSCAPED AREA = 0.04 ACRES, CN = 70
 IMPERVIOUS AREA = 0.05 ACRES, CN = 98

DESIGN CREDITS:
 NATURAL AREA CONSERVATION = 0.00 ACRES
 STREAM BUFFERS = 0.00 ACRES
 VEGETATED CHANNELS = 0.00 ACRES
 NET AREA OF SUB BASIN = BASIN AREA - DESIGN CREDITS

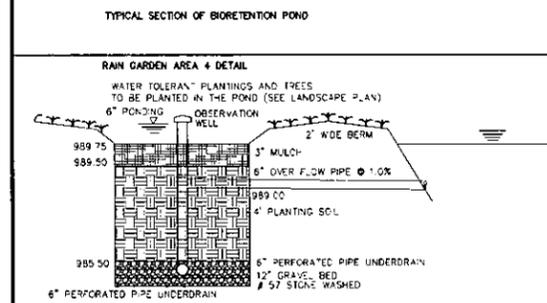
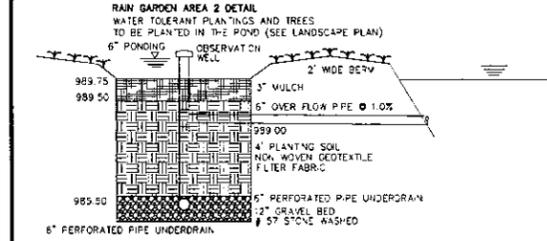
TOTAL AREA OF SUB BASIN 1 = 0.00 + 0.04 + 0.05 AC = 0.09 AC
 NET AREA OF SUB BASIN 1 = 0.09 - 0 - 0 = 0.09 AC
 $R = 0.554 = 0.55$
 $DA1$ WQV REQ'D = $(1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 215.6ft^3$ REQ'D FOR LOT
 # OF NOS FLO-WELLS: $(DA1$ WQV REQ'D)/(EFFECTIVE VOLUME OF BACKFILL MATERIAL)
 VOLUME OF FLO-WELL = $\pi \times (R^2/2) \times H = \pi \times (1/2) \times 2 = 6.3$ FT³
 VOID RATIO OF BACKFILL MATERIAL = 0.40
 EFFECTIVE VOLUME OF BACKFILL MATERIAL = $[(\pi \times (3/2) \times 4) - (6.28) \times 0.40 = 42.7$ FT³
 DIAMETER OF BACKFILL MATERIAL = 4"
 DEPTH GRAVEL UNDER FLO-WELL = 2"
 NUMBER OF FLO-WELLS REQUIRED = $215.6 / 42.7 = 5.05 = 5$ SINGLE STACKED FLO WELLS
 VOLUME PROVIDED: $5 \times (42.7 \times 0.3) = 248$ CUBIC FEET > 215.6 CUBIC FEET REQ'D

SUB BASIN 2 (DA2):
 BASIN AREA = UNDIST. AREA + LANDSCAPED AREA + IMPERVIOUS AREA
 UNDISTURBED AREA = 0.00 ACRES, CN = 60
 LANDSCAPED AREA = 0.04 ACRES, CN = 70
 IMPERVIOUS AREA = 0.05 ACRES, CN = 98

DESIGN CREDITS:
 NATURAL AREA CONSERVATION = 0.00 ACRES
 STREAM BUFFERS = 0.00 ACRES
 VEGETATED CHANNELS = 0.00 ACRES
 NET AREA OF SUB BASIN = BASIN AREA - DESIGN CREDITS

TOTAL AREA OF SUB BASIN 2 = 0.00 + 0.04 + 0.05 AC = 0.09 AC
 NET AREA OF SUB BASIN 2 = 0.09 - 0 - 0 = 0.09 AC
 $R = 0.255 = 0.25$
 AREA OF RAIN GARDEN 2, AT PROVIDED = 200 SQUARE FEET
 A1. Surface area of filter bed = $(WQV)/(d) \times (1/11/12m) = 217.19$ SQUARE FEET REQ'D
 d1. Filter bed depth = 4 FEET
 VOID RATIO = 40%
 K. Coefficient of permeability of filter media = 0.5 IN/HR
 H. Average height of water above filter bed = 0.5 LINEAR FEET
 T. Design filter bed depth = 2 DAYS
 AREA PROVIDED: 200 SQUARE FEET > 217.19 SQUARE FEET REQ'D
 VOLUME PROVIDED: 320 CUBIC FEET > 217.19 CUBIC FEET REQ'D

TRACT 1 REQ'D WATER QUALITY VOLUME
 WQV REQUIRED = $(1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 419ft^3$ REQ'D FOR LOT
 WQV PROVIDED = WQV FLO-WELLS + WQV RAIN GARDEN 2
 WQV PROVIDED = 245 ft³ + 320 ft³ = 565 ft³ PROVIDED > 419 ft³ REQ'D FOR LOT



Rain Garden Activity Schedule
 Pruning and weeding to maintain appearance.
 Mulch replacement when erosion is evident.
 Remove trash and debris as needed.
 Inspect filter strip/grass channel for erosion or gully. Re-seed or sod as necessary.
 Trees and shrubs should be inspected to evaluate their health and remove any dead or severely diseased vegetation Semi-annually
 The planting soils should be tested for pH to establish acidic levels. If the pH is below 5.2, limestone should be applied. If the pH is above 7.0 to 8.0, then iron sulfate plus sulfur can be added to reduce the pH annually Replace mulch over the entire area.
 Replace pea gravel dapphram if warranted. 2 to 3 years
 Additional Maintenance Considerations and Requirements
 The surface of the ponding area may become clogged with fine sediment over time. Core aeration or cultivating of unvegetated areas may be required to ensure adequate filtration.
 Regular inspection and maintenance is critical to the effective operation of bioretention facilities as designed. Maintenance responsibility for a bioretention area should be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval.

Infiltration Rain Garden Notes:
 1. Native Plants are preferred for planting, because non-native and invasive species can reproduce downstream damage to habitat and change hydrology. If non-natives are chosen, be sure that they will not damage downstream waterways.
 2. Build and vegetate rain garden as early as possible to establish plantings before directing stormwater runoff to it.
 3. Infiltration (Rain Garden) areas shall be staked / fenced off to prevent compaction of the subgrade. Dirt tracking onto any layer of the area and stockpiling of construction materials may clog the surface.
 4. During excavation of native soils to the bottom of the gardens, rainfall may cause fine aggregate to clog the surface of the gardens. If this occurs during construction, hand rake the surface to a sufficient depth to restore infiltration capacity.

**TRACT 1
11,347 SQ FT
0.26 ACRES**

PROPOSED HOUSE TYPE:
 LOT 1:
 BUILDING COVERAGE: 3,042 SQ FT
 BUILDING HEIGHT: 34'-0"
TOTAL AREA LOT 1: 11,347 SQ FT
 0.26 AC.
IMPERVIOUS AREA LOT 1:
 TOTAL IMP. AREA: 3,447 SQ FT
 TOTAL IMP. AREA %: 30.4%

**WATER QUALITY PLAN FOR:
PRITCHARD BUILDERS, INC**
 1068 BANK STREET, SE
 LAND LOT 488, 17th DISTRICT
 2nd SECTION
 COBB COUNTY, GEORGIA
 CITY OF SMYRNA
EXISTING ZONING: R-15
 EXISTING PIN: 17048800360
 22,797 SQ FT
 0.52 ACRES
 LIMITS OF DISTURBANCE: 0.42 AC.

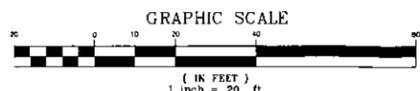
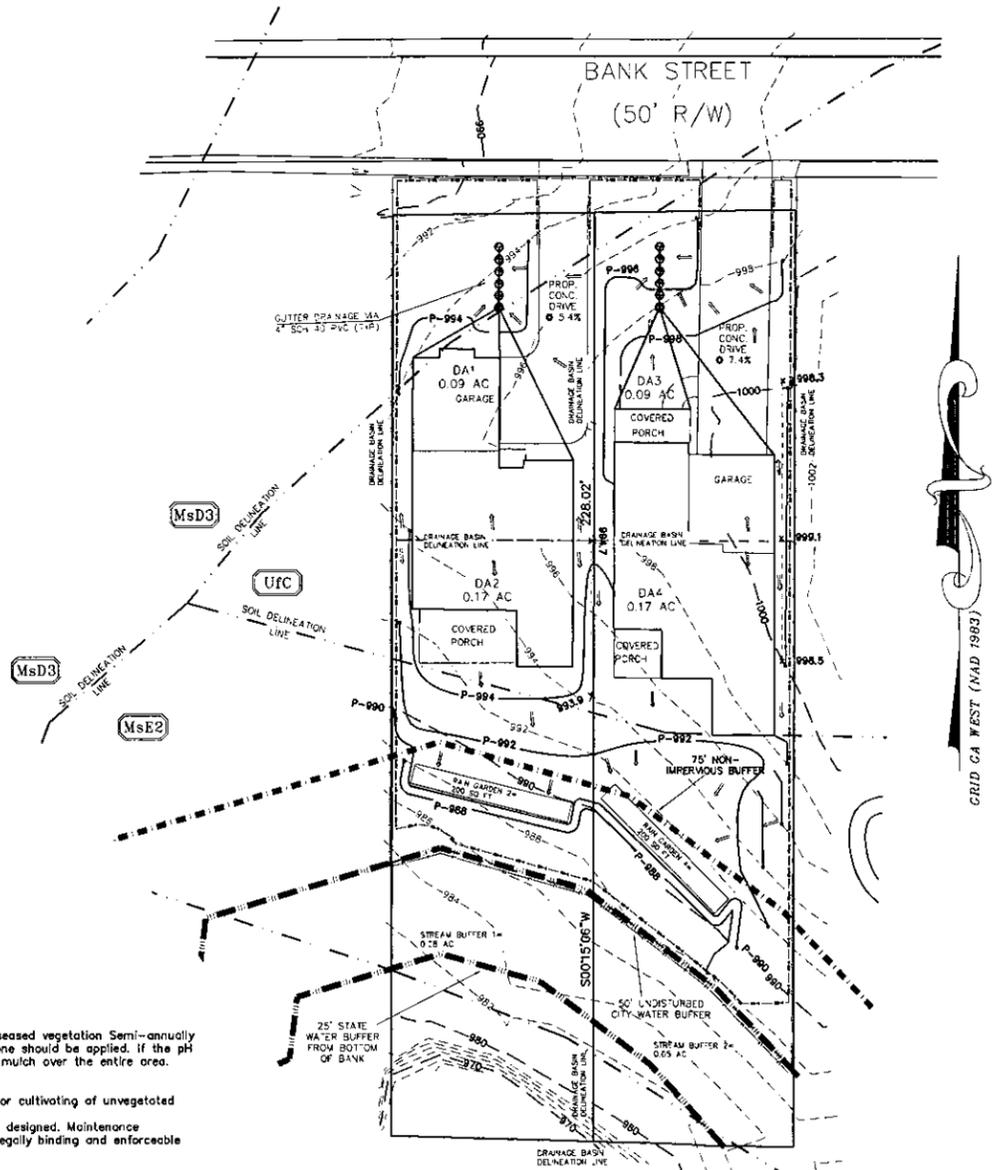
**TRACT 2 AREA
11,450 SQ FT
0.26 ACRES**

PROPOSED HOUSE TYPE:
 LOT 2:
 BUILDING COVERAGE: 2,780 SQ FT
 BUILDING HEIGHT: 35'-0"
TOTAL AREA LOT 2: 11,450 SQ FT
 0.26 AC.
IMPERVIOUS AREA LOT 2:
 TOTAL IMP. AREA: 3,716 SQ FT
 TOTAL IMP. AREA %: 32.5%

GENERAL SOIL AND HYDROLOGY SITE NOTES:

MAP SYMBOL	MAPPING UNIT	SLOPE	ERODIBILITY	PERMEABILITY	EROSION
C01	CHATEAU SOILS	-	-	0.6-2.0	0.17
MAE2	MADISON AND PACOLET SOILS	15-25%	ERODE	0.6-2.0	0.17
MAE3	MADISON AND PACOLET SOILS	10-15%	ERODE	0.6-2.0	0.10
L1C	URBAN LAND-DEVELOPMENT	2-10%	-	0.6-2.0	0.10

USDA ON-LINE SOILS MAP SHOWS SOIL TYPE AS ABOVE IN CHART.



PER ZONING: TRACT 2 MAX IMPERVIOUS SURFACE AREA
4,007.50 SQ. FT = 0.09 AC = 35.0% OF LOT

WATER QUALITY TRACT 2:
 $WQV = (1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 419ft^3$ REQ'D FOR LOT
 $WQV =$ WATER QUALITY VOLUME (CUBIC FEET)
 $R =$ RUNOFF COEFFICIENT
 $A =$ AREA OF SITE = 0.26 ACRES
 $ac =$ MAXIMUM IMPERVIOUS SURFACE AREA = 35.0%

$R = 0.05 + 0.009(0)$ (WHERE 0 IS PERCENT IMPERVIOUS COVER)
 $R = 0.05 + 0.009(35.0) = 0.365 = 0.37$
SUB BASIN 3 (DA3):
 BASIN AREA = UNDIST. AREA + LANDSCAPED AREA + IMPERVIOUS AREA
 UNDISTURBED AREA = 0.00 ACRES, CN = 60
 LANDSCAPED AREA = 0.04 ACRES, CN = 70
 IMPERVIOUS AREA = 0.05 ACRES, CN = 98

DESIGN CREDITS:
 NATURAL AREA CONSERVATION = 0.00 ACRES
 STREAM BUFFERS = 0.00 ACRES
 VEGETATED CHANNELS = 0.00 ACRES
 NET AREA OF SUB BASIN = BASIN AREA - DESIGN CREDITS

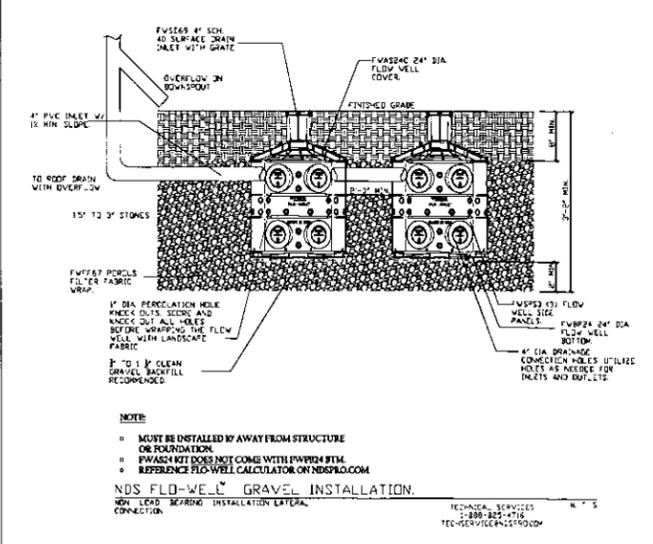
TOTAL AREA OF SUB BASIN 3 = 0.00 + 0.04 + 0.05 AC = 0.09 AC
 NET AREA OF SUB BASIN 3 = 0.09 - 0 - 0 = 0.09 AC
 $R = 0.554 = 0.55$
 $DA3$ WQV REQ'D = $(1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 215.6ft^3$ REQ'D FOR LOT
 # OF NOS FLO-WELLS: $(DA3$ WQV REQ'D)/(EFFECTIVE VOLUME OF BACKFILL MATERIAL)
 VOLUME OF FLO-WELL = $\pi \times (R^2/2) \times H = \pi \times (1/2) \times 2 = 6.3$ FT³
 VOID RATIO OF BACKFILL MATERIAL = 0.40
 EFFECTIVE VOLUME OF BACKFILL MATERIAL = $[(\pi \times (3/2) \times 4) - (6.28) \times 0.40 = 42.7$ FT³
 DIAMETER OF BACKFILL MATERIAL = 4"
 DEPTH GRAVEL UNDER FLO-WELL = 2"
 NUMBER OF FLO-WELLS REQUIRED = $215.6 / 42.7 = 5.05 = 5$ SINGLE STACKED FLO WELLS
 VOLUME PROVIDED: $5 \times (42.7 \times 0.3) = 248$ CUBIC FEET > 215.6 CUBIC FEET REQ'D

SUB BASIN 4 (DA4):
 BASIN AREA = UNDIST. AREA + LANDSCAPED AREA + IMPERVIOUS AREA
 UNDISTURBED AREA = 0.00 ACRES, CN = 60
 LANDSCAPED AREA = 0.04 ACRES, CN = 70
 IMPERVIOUS AREA = 0.05 ACRES, CN = 98

DESIGN CREDITS:
 NATURAL AREA CONSERVATION = 0.00 ACRES
 STREAM BUFFERS = 0.00 ACRES
 VEGETATED CHANNELS = 0.00 ACRES
 NET AREA OF SUB BASIN = BASIN AREA - DESIGN CREDITS

TOTAL AREA OF SUB BASIN 4 = 0.05 + 0.04 + 0.05 AC = 0.17 AC
 NET AREA OF SUB BASIN 4 = 0.17 - 0 - 0 = 0.17 AC
 $R = 0.255 = 0.25$
 AREA OF RAIN GARDEN 4, AT PROVIDED = 200 SQUARE FEET
 A1. Surface area of filter bed = $(WQV)/(d) \times (1/11/12m) = 123.59$ SQUARE FEET REQ'D
 d1. Filter bed depth = 4 FEET
 VOID RATIO = 40%
 K. Coefficient of permeability of filter media = 0.5 IN/HR
 H. Average height of water above filter bed = 0.5 LINEAR FEET
 T. Design filter bed depth = 2 DAYS
 AREA PROVIDED: 200 SQUARE FEET > 123.59 SQUARE FEET REQ'D
 VOLUME PROVIDED: 320 CUBIC FEET > 123.59 CUBIC FEET REQ'D

TRACT 2 REQ'D WATER QUALITY VOLUME
 WQV REQUIRED = $(1.2R^2A)/12 + 1.2R^2(0.37+0.26ac^2)(43560ft^2/ac^2)(1/11/12m) = 419ft^3$ REQ'D FOR LOT
 WQV PROVIDED = WQV FLO-WELLS + WQV RAIN GARDEN 4
 WQV PROVIDED = 245 ft³ + 320 ft³ = 565 ft³ PROVIDED > 419 ft³ REQ'D FOR LOT



NOTE:
 - MUST BE INSTALLED BY AWAY FROM STRUCTURE OR FOUNDATION
 - FLOW WELL SHALL BE INSTALLED WITH FINISHED GRADE
 - REFERENCE FLO-WELL CALCULATOR ON NDSFLO.COM
NDS FLO-WELL GRAVEL INSTALLATION.
 NON LEAD BEARING INSTALLATION LATERAL CONNECTION.

TECHNICAL SERVICES
 1-888-825-4716
 TECHSERVICE@NDSFLO.COM

FLO WELL NOTES:
 1. Water quality devices to be installed at the time of final landscaping.
 2. All collected water shall be directed to the water quality devices.
 3. Distribute runoff within a linear gravel device using a slotted/perforated flex pipe, for downspout connections to the device use a solid walled pvc (schedule 20 minimum).
 4. Provide a cleanout and an emergency bypass for excess flows installed on the piping system prior to piping reaching the infiltration device.
 5. Infiltration devices should be placed on a 0% grade.
 6. Install a non woven filter fabric between the soil and the device and gravel.
 7. Roof drains to tie to proposed flow well downspout to have overflow pipe.

3595 Canton Road
 Suite 116, PMB 272
 Marietta, GA 30066
FRONTLINE SURVEYING & MAPPING, INC.
 Ph. (678) 355-9805
 Fax (678) 355-9805
 www.frontlinesurveying.com

DATE OF FIELD SURVEY: 07/30/15
 SCALE: 1" = 20'
 COBB COUNTY, GEORGIA
 17th DISTRICT
 2nd SECTION
 FRONT LOT FLO WELLS

SECTION D
 UNIT
 PHASE
 SUBDIVISION: B.A. GUTHRIE
 I HAVE THIS DATE EXAMINED THE OFFICIAL FLOOD HAZARD MAP AND FOUND THAT THE GRAPHIC FLOOD ZONING ON THE SUBJECT PARCEL IS IN ACCORDANCE WITH THE OFFICIAL FLOOD HAZARD MAP.
 MAP ID: 138220218
 EFFECTIVE DATE: 05-04-15

PRITCHARD BUILDERS, INC
 LAND LOT 488
 SECTION D
 UNIT
 PHASE
 SUBDIVISION: B.A. GUTHRIE
 I HAVE THIS DATE EXAMINED THE OFFICIAL FLOOD HAZARD MAP AND FOUND THAT THE GRAPHIC FLOOD ZONING ON THE SUBJECT PARCEL IS IN ACCORDANCE WITH THE OFFICIAL FLOOD HAZARD MAP.
 MAP ID: 138220218
 EFFECTIVE DATE: 05-04-15

