PROFFER CONDITION AMENDMENT PLAT / DEVELOPMENT PLAN AMENDMENT / PRC PLAN

RESTON DISTRICT POLICE STATION AND COUNTY GOVERNMENTAL CENTER

HUNTER MILL DISTRICT

FAIRFAX COUNTY, VIRGINIA

AUGUST, 2011
REVISED: SEPTEMBER, 2011
REVISED: NOVEMBER 19, 2011
REVISED: DECEMBER 15, 2011
REVISED: DECEMBER 21, 2011

Application No: PCA 74-2-113-4 Staff: Mayle

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)
SEE PROFFERS DATED: 2-10-12
Date of (BOS) (PC) Approval: 2-28-12
Sheet: 1 of 14
Comments: 4 DPA 74-2-113-8
PRC 74-2-113-2 w/ conditions 1-17-12

ZONING REQUIREMENTS PRC DISTRICT:

MINIMUM LOT SIZE:	NO REQUIREMENT
MINIMUM LOT WIDTH:	NO REQUIREMENT
MAXIMUM BUILDING HEIGHT:	NO REQUIREMENT
MINIMUM YARD REQUIREMENTS:	THERE ARE NO GENERALLY REQUIRED MINIMUM YARDS FOR THE PRC ZONING DISTRICT NOR ARE THERE ANY ASSOCIATED WITH THE APPROVED DEVELOPMENT PLAN
MAXIMUM FLOOR AREA RATIO:	NO REQUIREMENT
LANDSCAPED OPEN SPACE:	NO REQUIREMENT

SITE TABULATION: (FOR PRC PLAN)

		TOTAL PROPERTY	DEVELOPMENT SITE
TOTAL SITE AREA:		8.44 ACRES	5.40 ACRES
TOTAL BUILDING GROSS FLOOR AREA:		38,000 GROSS SQ. FT.	38,000 GROSS SQ. FT.
FLOOR AREA RATIO:	PERMITTED:	N/A	N/A
	PROPOSED:	0.103	0.162
BUILDING HEIGHT:	PERMITTED:	N/A	N/A
	PROPOSED:	40'	40'
OPEN SPACE:	MINIMUM REQUIRED:	N/A	N/A
	PROPOSED:	36% (133,700± SQ. FT.)	29% (70,690± SQ. FT.)

*THE DEVELOPMENT SITE" IS THAT AREA OF THE PROPERTY LOCATED TO THE SOUTH AND WEST OF THE CENTERLINE OF CAMERON GLEN DRIVE.

PARKING TABULATION:

A. PUBLIC BUILDING AREAS (SUPERVISOR'S OFFICE AND COMMUNITY MEETING ROOM) / PUBLIC PARKING AREA

REQUIRED PARKING:

SUPERVISOR AND 7 COUNTY STAFF AT 1 SPACE/PERSON:	8 SPACES
VISITOR/COMMUNITY ROOM PARKING:	35 SPACES
TOTAL PUBLIC PARKING SPACES REQUIRED:	43 SPACES

PROPOSED PARKING:

TOTAL PUBLIC PARKING SPACES PROPOSED:	43 SPACES

NOTE: ALL 43 PARKING SPACES WILL TYPICALLY BE AVAILABLE FOR THE COMMUNITY MEETING ROOM DURING EVENING HOURS WHEN THE STAFF OFFICES ARE CLOSED.

B. SECURE BUILDING AREAS (DISTRICT POLICE FACILITY)/SECURE PARKING AREA

REQUIRED PARKING:

64 POLICE PERSONNEL PARKING AT ONE SPACE/PERSON:	64 SPACES
108 COUNTY POLICE VEHICLES AT ONE SPACE/VEHICLE:	100 SPACES
TOTAL SECURE PARKING SPACES REQUIRED:	164 SPACES (MAXIMUM)

PROPOSED PARKING:

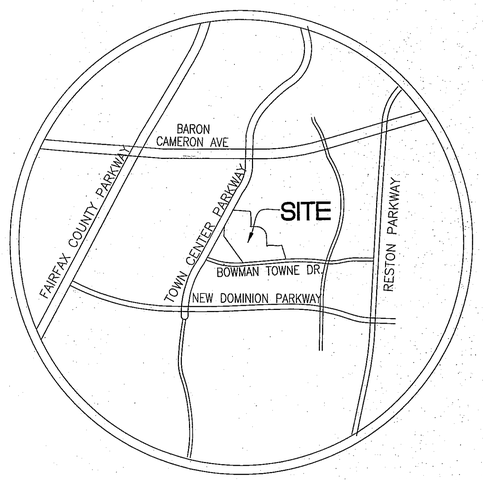
TOTAL PARKING SPACES PROPOSED:	164 SPACES (MAXIMUM)

NOTE: THE NUMBER OF POLICE PERSONNEL PARKING SPACES REQUIRED IS BASED ON CURRENTLY PROJECTED 20-YEAR STAFF GROWTH PROJECTIONS AND SHIFT OVERLAP REQUIREMENTS, AND MAY BE ADJUSTED WITH FINAL DESIGN, BUT WILL NOT BE INCREASED.

C. ACCESSIBLE PARKING

TOTAL NON-COUNTY VEHICLE PARKING SPACES PROPOSED:	107 SPACES
ACCESSIBLE PARKING SPACES REQUIRED:	5 SPACES
ACCESSIBLE PARKING SPACES PROPOSED:	5 SPACES

NOTE: ACCESSIBLE PARKING INCLUDES TWO VAN ACCESSIBLE SPACES.



VICINITY MAP
SCALE 1"=1000'

SOILS:

THE PORTION OF THE PROPERTY PROPOSED FOR REDEVELOPMENT, BEING THAT PORTION CONTAINED WITHIN THE SOUTHERN AND WESTERN SIDES OF CAMERON GLEN DRIVE HAS BEEN IDENTIFIED ON FAIRFAX COUNTY SOILS MAPS AS CONTAINING "SOILS CLASSIFIED AS "URBAN. LAND-WHEATON COMPLEX", HAVING THE FOLLOWING CHARACTERISTICS:

EROSION POTENTIAL: HIGH
SUITABILITY FOR INFILTRATION TRENCHES: MARGINAL
SUBSURFACE DRAINAGE: FAIR
FOUNDATION SUPPORT: GOOD

THE PORTION OF THE PROPERTY TO THE NORTH OF CAMERON GLEN DRIVE CONTAINS CODOROUS AND HATBORO AND GLENELG SOILS.
THE PORTION OF THE PROPERTY TO THE EAST OF CAMERON GLEN DRIVE CONTAINS HATTONTOWN SOIL.
* REFER TO SHEET 4 FOR MAPPING OF SOIL LOCATIONS.

SHEET INDEX

1. COVER SHEET
2A. PCA PLAT/ DEVELOPMENT PLAN AMENDMENT/ PRC PLAN – SCHEMATIC SITE LAYOUT
2B. PCA PLAT/ DEVELOPMENT PLAN AMENDMENT/ PRC PLAN – CONCEPTUAL GRADING PLAN
3. CONCEPTUAL LANDSCAPING PLAN
4. EXISTING CONDITIONS AND VEGETATION MAP
5–10. SWM MAPS, DETAILS AND NARRATIVES
11–13. BUILDING ELEVATIONS

NOTES:

1. THE PROPERTY SHOWN ON THIS PLAN/PLAT IS DELINEATED ON FAIRFAX COUNTY ASSESSMENT MAP NO. 17-1 AS ((1)) PARCEL 14B.
2. OWNER/APPLICANT: BOARD OF SUPERVISORS
   COUNTY OF FAIRFAX
   12000 GOVERNMENT CENTER PARKWAY, SUITE 533
   FAIRFAX, VA 22035
3. EXISTING DEVELOPMENT PLAN DESIGNATION: TOWN CENTER, PUBLIC FACILITY
4. PROPOSED PRC USE: PUBLIC USE (POLICE STATION AND GOVERNMENTAL CENTER).
5. EXISTING ZONING: PRC PLANNED RESIDENTIAL COMMUNITY DISTRICT.
6. PROPOSED ZONING: PRC PLANNED RESIDENTIAL COMMUNITY DISTRICT.
7. EXISTING TOPOGRAPHY AND FEATURES SHOWN HEREIN BASED ON FIELD-RUN TOPOGRAPHIC SURVEY BY COUNTY OF FAIRFAX SURVEYORS OFFICE. CONTOUR INTERVAL EQUALS 2 FEET.
8. THERE ARE NO BURIAL OR GRAVE SITES KNOWN TO EXIST ON THIS PROPERTY.
9. THERE IS NO 100-YEAR FLOOD PLAIN, NOR ANY RESOURCE PROTECTION AREA OR ENVIRONMENTAL QUALITY CORRIDOR, EXISTING ON THIS PROPERTY.
10. THIS PROPERTY IS SERVED BY PUBLIC WATER AND SANITARY SEWER FACILITIES.
11. STORM WATER DETENTION AND WATER QUALITY IMPROVEMENT/BEST MANAGEMENT PRACTICES REQUIREMENTS APPLICABLE TO THE PROPOSED SITE DEVELOPMENT ARE TO BE MET BY EXISTING OFF-SITE STORM WATER MANAGEMENT POND (REFER TO SHEET 4).
12. EXISTING UTILITY EASEMENTS, INCLUDING THOSE HAVING A WIDTH OF 25 FEET OR GREATER, ARE AS SHOWN HEREIN.
13. THERE ARE NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES OR HAZARDOUS WASTES EXISTING, GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF ON THIS PROPERTY, OTHER THAN GASOLINE AND DIESEL FUEL STORED IN UNDERGROUND TANKS.
14. THERE ARE NO AREAS ON THIS PROPERTY DEEMED TO BE A NATURAL FEATURE OR SCENIC ASSET DESERVING OF PROTECTION OR PRESERVATION.
15. THE COUNTY COMPREHENSIVE PLAN DOES NOT RECOMMEND ANY TRAILS ON OR IN THE VICINITY OF THE PROPERTY DELINIATED HEREIN.
16. THE PROPERTIES ADJOINING THIS PROPERTY ON ITS NORTHERN, SOUTHERN AND EASTERN SIDES ARE CURRENTLY DEVELOPED AS PUBLIC USES. THESE ADJOINING USES ARE COMPATIBLE WITH THE PROPOSED USE OF THE SUBJECT PROPERTY AND WOULD NOT BE SUBJECT TO ADVERSE IMPACTS AS A RESULT OF THE PROPOSED DEVELOPMENT OF THE PROPERTY. THE ADJOINING PROPERTY TO THE SOUTH IS OWNED BY THE FAIRFAX COUNTY HOUSING AND DEVELOPMENT AUTHORITY AND DEVELOPED AS TOWNHOUSE RESIDENTIAL. THERE IS A SOLID BRICK WALL ALONG PORTION OF THE NORTHEASTERLY BOUNDARY OF THAT PROPERTY WHERE IT ADJOINS THE SUBJECT PROPERTY, AND A 25' WIDE VEGETATED SCREENING YARD (MODIFIED TRANSITIONAL SCREENING YARD 1) WILL BE ESTABLISHED ON THE SUBJECT PROPERTY ADJACENT TO THAT COMMON BOUNDARY. PROPERTIES ON THE WESTERN, OR OPPOSING, SIDE OF TOWN CENTER PARKWAY, ARE CURRENTLY DEVELOPED AS TOWNHOUSE RESIDENTIAL AND A STORM WATER MANAGEMENT POND, AND ARE SEPARATED FROM THE SUBJECT PROPERTY BY THE 68' WIDE ROADWAY.
17. THE ONLY EXISTING STRUCTURE ON THIS PROPERTY IS THE EXISTING POLICE STATION/ GOVERNMENTAL CENTER BUILDING, CONSTRUCTED IN 1985, WHICH WILL BE DEMOLISHED WITH THE DEVELOPMENT OF THE PROPERTY.
18. SPECIAL AMENITIES PROPOSED: A COMMUNITY ROOM AVAILABLE FOR COMMUNITY FUNCTIONS WILL BE PROVIDED WITHIN THE BUILDING.
19. PROPOSED PUBLIC IMPROVEMENTS:
    a. PUBLIC WATER SYSTEM EXTENSIONS/RELOCATIONS ON THE SITE.
    b. PUBLIC SANITARY SEWER EXTENSION TO THE SITE FROM THE PUBLIC STREET.
20. THE PROPOSED DEVELOPMENT OF THIS PROPERTY WILL BE DESIGNED IN CONFORMANCE WITH ALL APPLICABLE REGULATIONS AND ADOPTED STANDARDS, SUBJECT TO THE GRANTING OF THE FOLLOWING WAIVERS AND/OR MODIFICATIONS:
    a. PURSUANT TO SECTION 6-0300 OF PUBLIC FACILITIES MANUAL, A REQUEST IS BEING MADE FOR A PERMISSION TO SATISFY STORM WATER DETENTION REQUIREMENTS APPLICABLE TO THE PROPOSED SITE DEVELOPMENT BY MEANS OF STORM WATER MANAGEMENT FACILITY LOCATED OUTSIDE OF THE SUBJECT PROPERTY.
    b. A MODIFICATION OF THE TRANSITIONAL SCREENING YARD REQUIREMENT APPLICABLE TO THE SOUTHWEST BOUNDARY OF THE PROPERTY IS BEING REQUESTED TO PERMIT THE LANDSCAPING WITH IN THE YARD TO BE AS SHOWN ON SHEET 3 IN ORDER TO MAINTAIN THE TREES AT A DISTANCE FROM THE SECURITY FENCE.
    c. SHOULD IT BE DEEMED NECESSARY TO SATISFY THE TREE PRESERVATION TARGET REQUIREMENT BASED SOLELY ON THE AREA OF THE PROPERTY LOCATED TO THE SOUTH AND WEST OF CAMERON GLEN DRIVE A DEVIATION FROM THE APPLICABLE REQUIREMENT MAY BE NECESSARY. (REFER TO SHEET 3 FOR RELEVANT PRELIMINARY CALCULATIONS)
21. THE USE OF THIS PROPERTY AS PROPOSED HEREIN IS IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE FAIRFAX COUNTY COMPREHENSIVE PLAN.
22. THE EXACT LOCATIONS, SHAPES AND SIZES OF THE PROPOSED BUILDING FOOTPRINTS, PARKING SPACES AND OTHER FEATURES, SHOWN HEREIN ARE PRELIMINARY AND SCHEMATIC AND ARE NOT TO BE CONSIDERED FINAL. THEY ARE SUBJECT TO ADJUSTMENT WITH FINAL ENGINEERING AND ARCHITECTURAL DESIGN SO LONG AS THEY REMAIN IN SUBSTANTIAL CONFORMANCE WITH THE REPRESENTATIONS SHOWN ON THESE PLANS.
23. IT IS ANTICIPATED THAT DEVELOPMENT OF THE PROPERTY AS PROPOSED HEREIN WILL COMMENCE AS SOON AS APPROVAL OF THIS APPLICATION AND SUBSEQUENT APPROVAL OF A SITE PLAN AND BUILDING PERMIT ARE OBTAINED. THE EXISTING POLICE STATION BUILDING WILL HAVE TO REMAIN AND FUNCTION WITH SUCH TIME AS THE NEW BUILDING IS OCCUPABLE AND THE POLICE FUNCTIONS CAN BE TRANSFERRED TO THE NEW BUILDING, AND CONSTRUCTION PHASING WILL BE ARRANGED TO MAINTAIN OPERATIONS WITHIN THE EXISTING BUILDING DURING CONSTRUCTION.
24. NO OFF-SITE CONSTRUCTION, OFF-SITE EASEMENTS OR LETTERS OF PERMISSION ARE ANTICIPATED TO BE REQUIRED FOR THIS PROJECT. A GEOTECHNICAL EVALUATION AND REPORT WILL BE REQUIRED IN CONJUNCTION WITH THE SITE PLAN.
25. THE PROJECT IS INCLUDED AS PART OF THE ADOPTED CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2012 THROUGH 2016.
26. ALL SIGNAGE INSTALLED ON THIS PROPERTY SHALL CONFORM TO ARTICLE 12 OF THE ZONING ORDINANCE.

COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No 035787
PROFESSIONAL ENGINEER

RECEIVED
Department of Planning & Zoning
MAR 02 2012
Zoning Evaluation Division

BURGESS & NIPLE
4160 PLEASANT VALLEY ROAD, CHANTILLY, VA 20151-1226
PH. (703) 631-9630 FAX (703) 631-6041

AECOM

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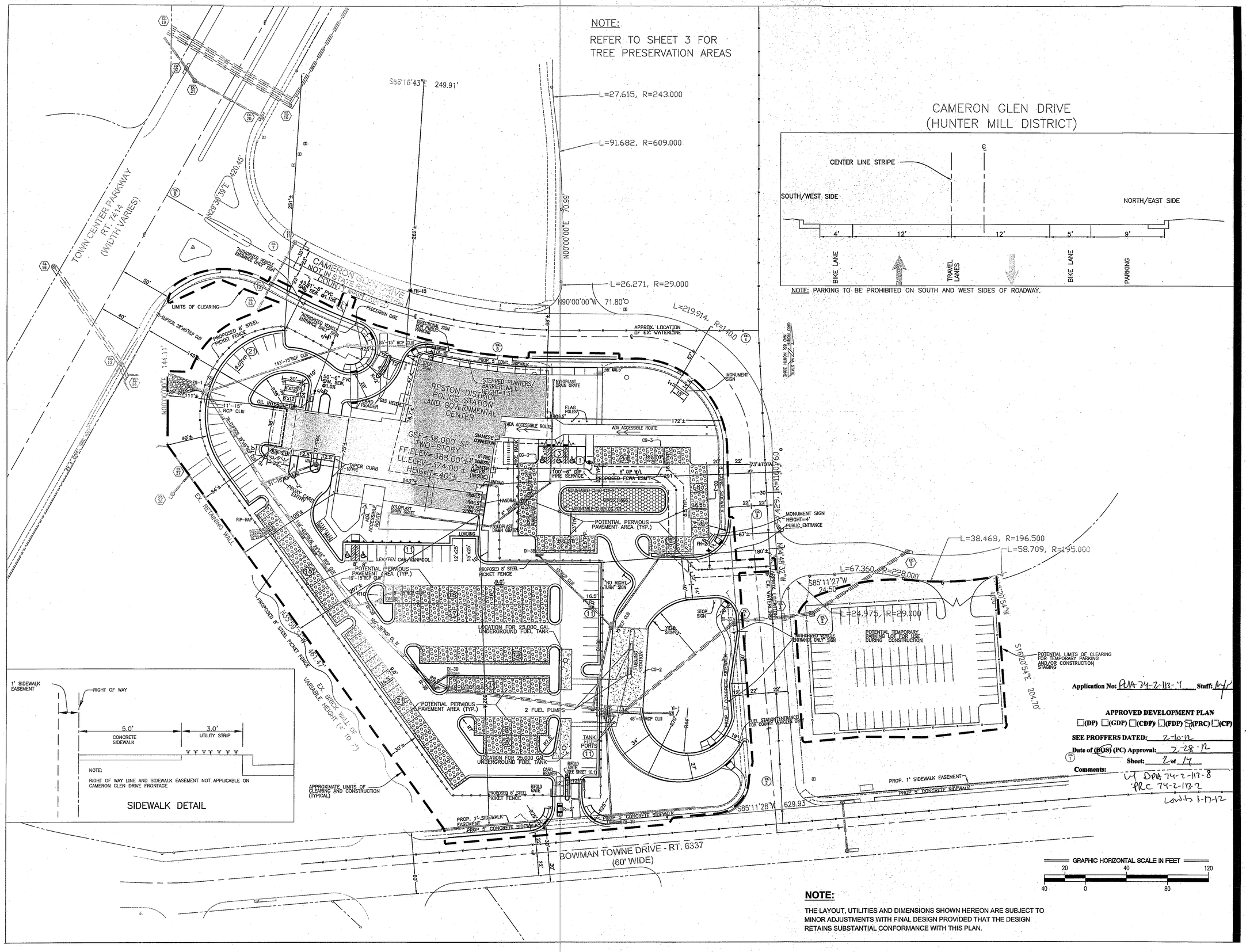
NOTE:

REFER TO SHEET 3 FOR TREE PRESERVATION AREAS

CAMERON GLEN DRIVE
(HUNTER MILL DISTRICT)

NOTE: PARKING TO BE PROHIBITED ON SOUTH AND WEST SIDES OF ROADWAY.



SIDEWALK DETAIL

NOTE:

THE LAYOUT, UTILITIES AND DIMENSIONS SHOWN HEREON ARE SUBJECT TO MINOR ADJUSTMENTS WITH FINAL DESIGN PROVIDED THAT THE DESIGN RETAINS SUBSTANTIAL CONFORMANCE WITH THIS PLAN.

Application No: PCA 74-2-113-4 Staff: M/L

APPROVED DEVELOPMENT PLAN

☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☐(PRC) ☐(CP)

SEE PROFFERS DATED: 2-10-12

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Sheet: 2 of 17

Comments: W/ DPA 74-2-113-8
PRC 74-2-113-2
Lovitz 1-17-12

P:\PR48401\Civil\SE-R00-S01\02A-LAYOUT.DWG (LAYOUT1)

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PROJECT

RESTON POLICE STATION & GOV'T CENTER
12000 BOWMAN TOWNE DRIVE
RESTON, VA 20190

CLIENT

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PLANNING & DESIGN DIVISION
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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No 035787
PROFESSIONAL ENGINEER
12/21/11

REVISIONS

NO.	DATE	DESCRIPTION
3	12/21/11	RESTON P&Z COMMITTEE COMMENTS
2	12/14/11	COUNTY COMMENTS
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PROJECT NUMBER
60212377

SHEET TITLE
PCA PLAT/ DEVELOPMENT PLAN AMENDMENT/ PRC PLAN - SCHEMATIC SITE LAYOUT

SHEET NUMBER
2A

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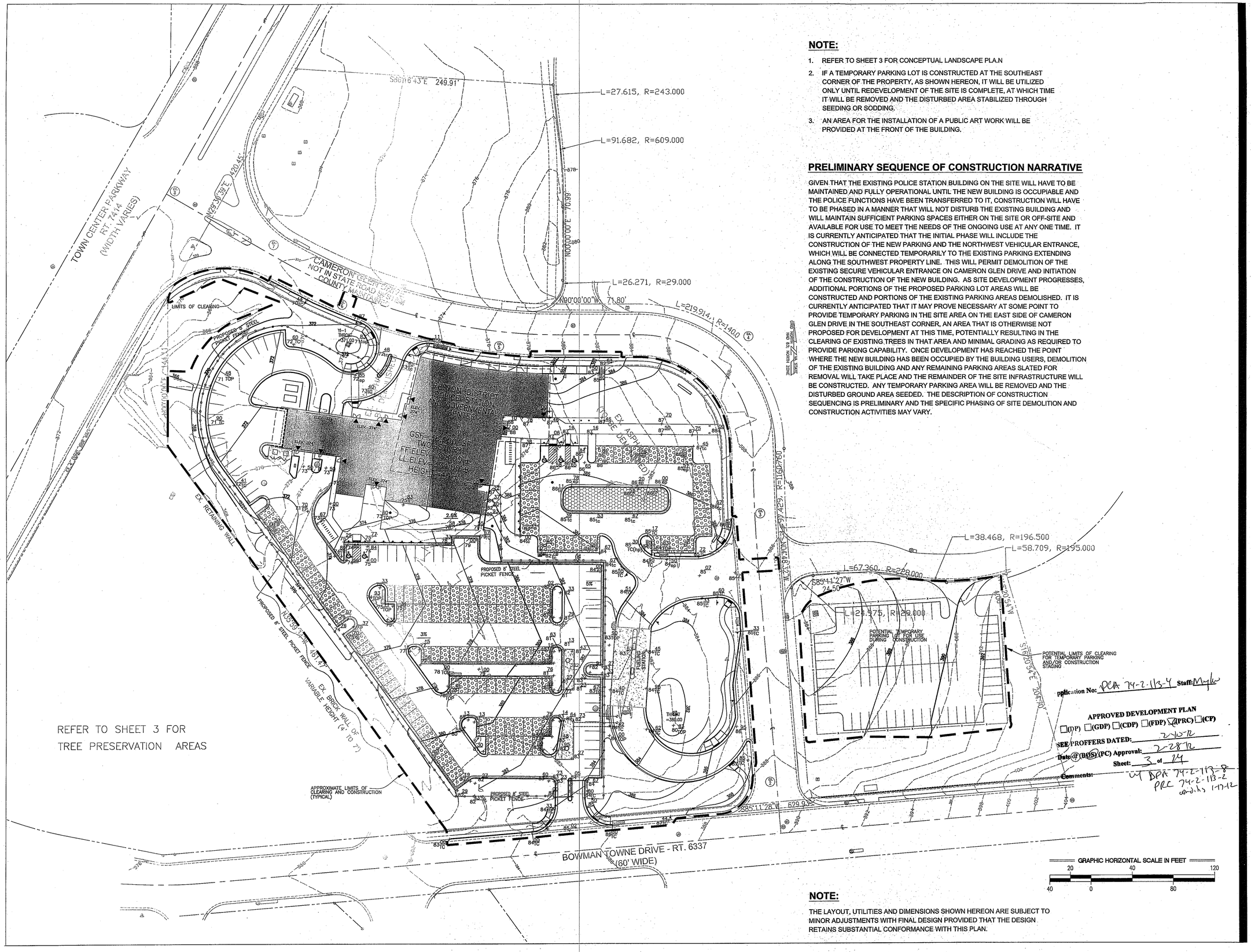

GRAPHIC HORIZONTAL SCALE IN FEET
20 40 120
40 0 80

NOTE:

1. REFER TO SHEET 3 FOR CONCEPTUAL LANDSCAPE PLA.N
2. IF A TEMPORARY PARKING LOT IS CONSTRUCTED AT THE SOUTHEAST CORNER OF THE PROPERTY, AS SHOWN HEREON, IT WILL BE UTILIZED ONLY UNTIL REDEVELOPMENT OF THE SITE IS COMPLETE, AT WHICH TIME IT WILL BE REMOVED AND THE DISTURBED AREA STABILIZED THROUGH SEEDING OR SODDING.
3. AN AREA FOR THE INSTALLATION OF A PUBLIC ART WORK WILL BE PROVIDED AT THE FRONT OF THE BUILDING.

PRELIMINARY SEQUENCE OF CONSTRUCTION NARRATIVE

GIVEN THAT THE EXISTING POLICE STATION BUILDING ON THE SITE WILL HAVE TO BE MAINTAINED AND FULLY OPERATIONAL UNTIL THE NEW BUILDING IS OCCUPIABLE AND THE POLICE FUNCTIONS HAVE BEEN TRANSFERRED TO IT, CONSTRUCTION WILL HAVE TO BE PHASED IN A MANNER THAT WILL NOT DISTURB THE EXISTING BUILDING AND WILL MAINTAIN SUFFICIENT PARKING SPACES EITHER ON THE SITE OR OFF-SITE AND AVAILABLE FOR USE TO MEET THE NEEDS OF THE ONGOING USE AT ANY ONE TIME. IT IS CURRENTLY ANTICIPATED THAT THE INITIAL PHASE WILL INCLUDE THE CONSTRUCTION OF THE NEW PARKING AND THE NORTHWEST VEHICULAR ENTRANCE, WHICH WILL BE CONNECTED TEMPORARILY TO THE EXISTING PARKING EXTENDING ALONG THE SOUTHWEST PROPERTY LINE. THIS WILL PERMIT DEMOLITION OF THE EXISTING SECURE VEHICULAR ENTRANCE ON CAMERON GLEN DRIVE AND INITIATION OF THE CONSTRUCTION OF THE NEW BUILDING. AS SITE DEVELOPMENT PROGRESSES, ADDITIONAL PORTIONS OF THE PROPOSED PARKING LOT AREAS WILL BE CONSTRUCTED AND PORTIONS OF THE EXISTING PARKING AREAS DEMOLISHED. IT IS CURRENTLY ANTICIPATED THAT IT MAY PROVE NECESSARY AT SOME POINT TO PROVIDE TEMPORARY PARKING IN THE SITE AREA ON THE EAST SIDE OF CAMERON GLEN DRIVE IN THE SOUTHEAST CORNER, AN AREA THAT IS OTHERWISE NOT PROPOSED FOR DEVELOPMENT AT THIS TIME, POTENTIALLY RESULTING IN THE CLEARING OF EXISTING TREES IN THAT AREA AND MINIMAL GRADING AS REQUIRED TO PROVIDE PARKING CAPABILITY. ONCE DEVELOPMENT HAS REACHED THE POINT WHERE THE NEW BUILDING HAS BEEN OCCUPIED BY THE BUILDING USERS, DEMOLITION OF THE EXISTING BUILDING AND ANY REMAINING PARKING AREAS SLATED FOR REMOVAL WILL TAKE PLACE AND THE REMAINDER OF THE SITE INFRASTRUCTURE WILL BE CONSTRUCTED. ANY TEMPORARY PARKING AREA WILL BE REMOVED AND THE DISTURBED GROUND AREA SEEDED. THE DESCRIPTION OF CONSTRUCTION SEQUENCING IS PRELIMINARY AND THE SPECIFIC PHASING OF SITE DEMOLITION AND CONSTRUCTION ACTIVITIES MAY VARY.

NOTE:

THE LAYOUT, UTILITIES AND DIMENSIONS SHOWN HEREON ARE SUBJECT TO MINOR ADJUSTMENTS WITH FINAL DESIGN PROVIDED THAT THE DESIGN RETAINS SUBSTANTIAL CONFORMANCE WITH THIS PLAN.

Application No: PCA 74-2-113-4 Staff: Mylo

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No 035787
PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	DESCRIPTION
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2	12/14/11	COUNTY COMMENTS
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PROJECT NUMBER
60212377

SHEET TITLE
PCA PLAT/ DEVELOPMENT PLAN AMENDMENT/ PRC PLAN- CONCEPTUAL GRADING PLAN

SHEET NUMBER
2B

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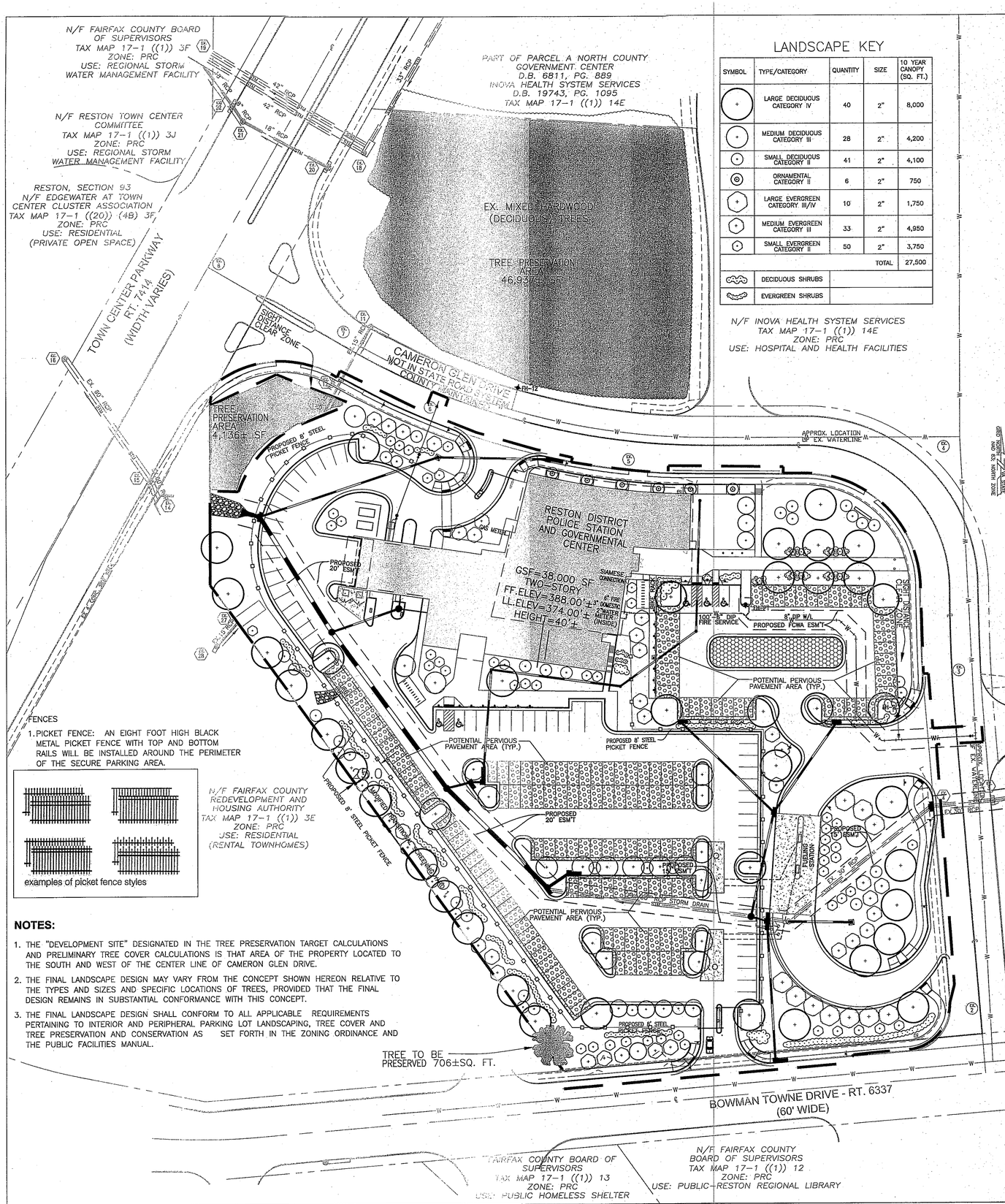
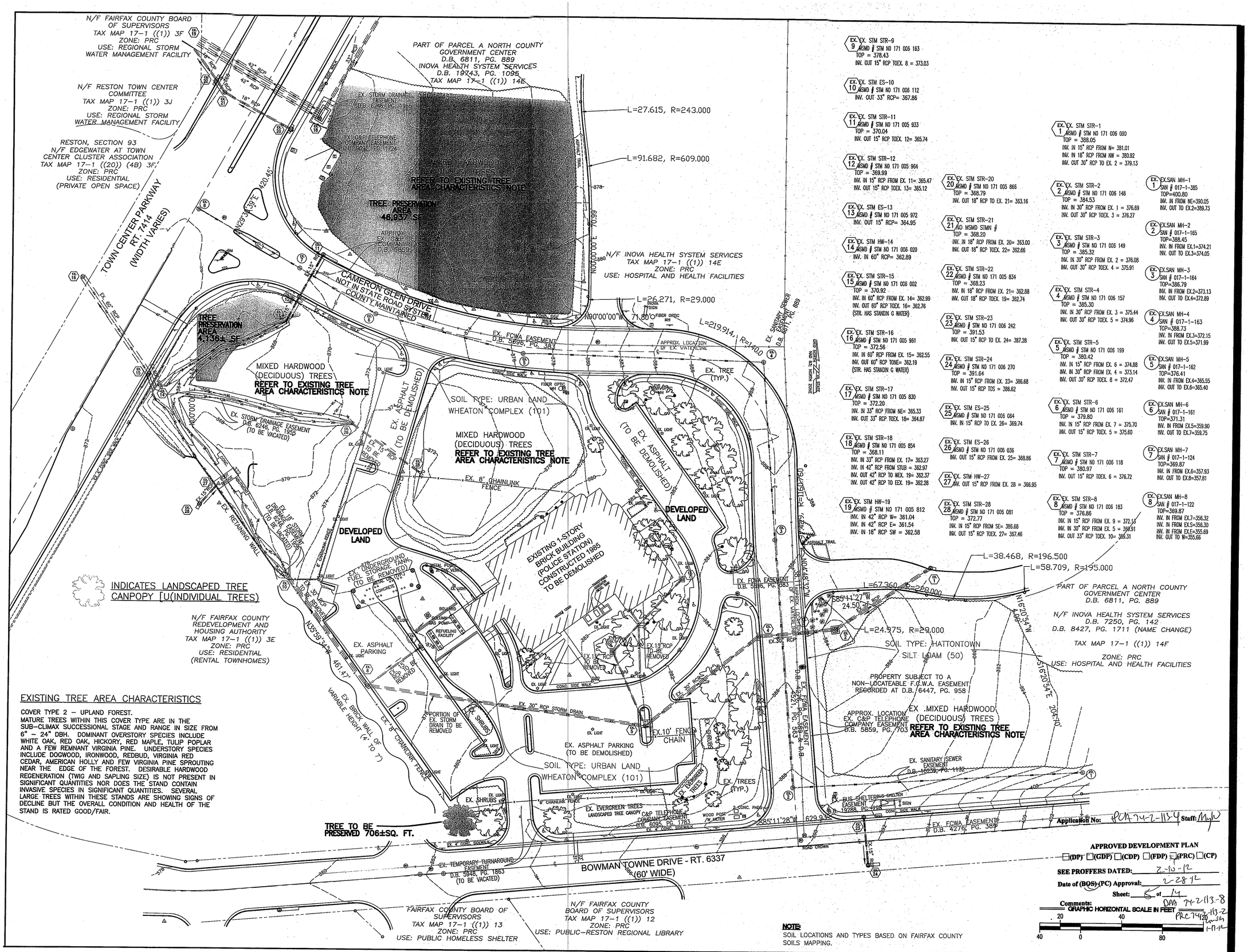

N/F FAIRFAX COUNTY BOARD OF SUPERVISORS
TAX MAP 17-1 ((1)) 3F
ZONE: PRC
USE: REGIONAL STORM WATER MANAGEMENT FACILITY
N/F RESTON TOWN CENTER COMMITTEE
TAX MAP 17-1 ((1)) 3J
ZONE: PRC
USE: REGIONAL STORM WATER MANAGEMENT FACILITY
RESTON, SECTION 93
N/F EDGEWATER AT TOWN CENTER CLUSTER ASSOCIATION
TAX MAP 17-1 ((20)) (48) 3F
ZONE: PRC
USE: RESIDENTIAL (PRIVATE OPEN SPACE)
TOWN CENTER PARKWAY
RT. 7414
(WIDTH VARIES)
PART OF PARCEL A NORTH COUNTY GOVERNMENT CENTER
D.B. 6811, PG. 889
INOVA HEALTH SYSTEM SERVICES
D.B. 19743, PG. 1095
TAX MAP 17-1 ((1)) 14E
EX. MIXED HARDWOOD (DECIDUOUS) TREES
TREE PRESERVATION AREA 46,937± SF
N/F INOVA HEALTH SYSTEM SERVICES
TAX MAP 17-1 ((1)) 14E
ZONE: PRC
USE: HOSPITAL AND HEALTH FACILITIES
CAMERON GLEN DRIVE
NOT IN STATE ROAD SYSTEM
COUNTY MAINTAINED
SIGHT DISTANCE CLEAR ZONE
TREE PRESERVATION AREA 4,136± SF
PROPOSED 8' STEEL PICKET FENCE
APPROX. LOCATION OF EX. WATERLINE
RESTON DISTRICT POLICE STATION AND GOVERNMENTAL CENTER
GSF=38,000 SF±
TWO-STORY
FF.ELEV=388.00'±
LL.ELEV=374.00'±
HEIGHT=40'±
GAS METER
PROPOSED 20' ESM'T
SIAMESE CONNECTION
FIRE & DOMESTIC WATER METER (INSIDE)
100' 8" DIP FIRE SERVICE
8" DIP W/L PROPOSED FCWA ESM'T
POTENTIAL PERVIOUS PAVEMENT AREA (TYP.)
PROPOSED 8' STEEL PICKET FENCE
PROPOSED 15' ESM'T
PROPOSED 8' ESM'T
PROPOSED 10' ESM'T
PROPOSED STORM DRAIN
EX. 30" RCP
EX. 24" RCP
EX. 18" RCP
EX. 60" RCP
EX. 42" RCP
EX. 36" RCP
EX. 15" RCP
EX. 12" RCP
EX. 8" DIP W/L
EX. 6" DIP W/L
EX. 8" SAN
EX. 15" SAN
EX. 8" GAS
EX. 6" GAS
EX. 12" GAS
EX. 4" GAS
EX. 2" GAS
EX. 1" GAS
EX. 6" FCWA
EX. 8" FCWA
EX. 12" FCWA
EX. 16" FCWA
EX. 24" FCWA
EX. 30" FCWA
EX. 36" FCWA
EX. 42" FCWA
EX. 48" FCWA
EX. 54" FCWA
EX. 60" FCWA
EX. 72" FCWA
EX. 84" FCWA
EX. 96" FCWA
EX. 108" FCWA
EX. 120" FCWA
EX. 132" FCWA
EX. 144" FCWA
EX. 156" FCWA
EX. 168" FCWA
EX. 180" FCWA
EX. 192" FCWA
EX. 204" FCWA
EX.



EX. 1 EX. STM STR-9 — MSMD # STM NO 171 006 163 — TOP = 378.43 — INV. OUT 15" RCP TOEX. 8 = 373.03

EX. 10 EX. STM ES-10 — MSMD # STM NO 171 006 112 — INV. OUT 33" RCP= 367.86

EX. 11 EX. STM STR-11 — MSMD # STM NO 171 005 933 — TOP = 370.04 — INV. OUT 15" RCP TOEX. 12= 365.74

EX. 12 EX. STM STR-12 — MSMD # STM NO 171 005 964 — TOP = 369.99 — INV. IN 15" RCP FROM EX. 11= 365.47 — INV. OUT 15" RCP TOEX. 13= 365.12

EX. 13 EX. STM ES-13 — MSMD # STM NO 171 005 972 — INV. OUT 15" RCP= 364.95

EX. 14 EX. STM HW-14 — MSMD # STM NO 171 006 020 — INV. IN 60" RCP= 362.69

EX. 15 EX. STM STR-15 — MSMD # STM NO 171 006 002 — TOP = 370.92 — INV. IN 60" RCP FROM EX. 14= 362.99 — INV. OUT 60" RCP TOEX. 16= 362.76 — (STR. HAS STANDIN G WATER)

EX. 16 EX. STM STR-16 — MSMD # STM NO 171 005 961 — TOP = 372.56 — INV. IN 60" RCP FROM EX. 15= 362.55 — INV. OUT 60" RCP TONE= 362.19 — (STR. HAS STANDIN G WATER)

EX. 17 EX. STM STR-17 — MSMD # STM NO 171 005 830 — TOP = 372.20 — INV. IN 33" RCP FROM NE= 365.33 — INV. OUT 33" RCP TOEX. 18= 364.67

EX. 18 EX. STM STR-18 — MSMD # STM NO 171 005 854 — TOP = 368.11 — INV. IN 33" RCP FROM EX. 17= 363.27 — INV. IN 42" RCP FROM STUB = 362.97 — INV. OUT 42" RCP TO WEX. 19= 362.37 — INV. OUT 42" RCP TO EEX. 19= 362.28

EX. 19 EX. STM HW-19 — MSMD # STM NO 171 005 812 — INV. IN 42" RCP W= 361.04 — INV. IN 42" RCP E= 361.54 — INV. IN 18" RCP SW = 362.58

EX. 20 EX. STM STR-20 — MSMD # STM NO 171 005 865 — TOP = 368.79 — INV. OUT 18" RCP TO EX. 21= 363.16

EX. 21 EX. STM STR-21 — NO MSMD STMN # — TOP = 368.20 — INV. IN 18" RCP FROM EX. 20= 363.00 — INV. OUT 18" RCP TOEX. 22= 362.66

EX. 22 EX. STM STR-22 — MSMD # STM NO 171 005 834 — TOP = 368.23 — INV. IN 18" RCP FROM EX. 21= 362.88 — INV. OUT 18" RCP TOEX. 19= 362.74

EX. 23 EX. STM STR-23 — MSMD # STM NO 171 006 242 — TOP = 391.53 — INV. OUT 15" RCP TO EX. 24= 387.28

EX. 24 EX. STM STR-24 — MSMD # STM NO 171 006 270 — TOP = 391.64 — INV. IN 15" RCP FROM EX. 23= 386.68 — INV. OUT 15" RCP TOS = 386.62

EX. 25 EX. STM ES-25 — MSMD # STM NO 171 006 064 — INV. IN 15" RCP TO EX. 26= 369.74

EX. 26 EX. STM ES-26 — MSMD # STM NO 171 006 036 — INV. OUT 15" RCP FROM EX. 25= 368.86

EX. 27 EX. STM HW-27 — INV. OUT 15" RCP FROM EX. 28 = 366.95

EX. 28 EX. STM STR-28 — MSMD # STM NO 171 006 081 — TOP = 372.77 — INV. IN 15" RCP FROM SE= 386.68 — INV. OUT 15" RCP TOEX. 27= 367.46

EX. 1 EX. STM STR-1 — MSMD # STM NO 171 006 089 — TOP = 388.05 — INV. IN 15" RCP FROM N= 381.01 — INV. IN 18" RCP FROM NW = 380.92 — INV. OUT 30" RCP TO EX. 2 = 379.13

EX. 2 EX. STM STR-2 — MSMD # STM NO 171 006 148 — TOP = 384.53 — INV. IN 30" RCP FROM EX. 1 = 376.69 — INV. OUT 30" RCP TOEX. 3 = 376.27

EX. 3 EX. STM STR-3 — MSMD # STM NO 171 006 149 — TOP = 385.32 — INV. IN 30" RCP FROM EX. 2 = 376.08 — INV. OUT 30" RCP TOEX. 4 = 375.91

EX. 4 EX. STM STR-4 — MSMD # STM NO 171 006 157 — TOP = 385.30 — INV. IN 30" RCP FROM EX. 3 = 375.44 — INV. OUT 30" RCP TOEX. 5 = 374.96

EX. 5 EX. STM STR-5 — MSMD # STM NO 171 006 199 — TOP = 380.42 — INV. IN 15" RCP FROM EX. 6 = 374.88 — INV. IN 30" RCP FROM EX. 4 = 373.14 — INV. OUT 30" RCP TOEX. 8 = 372.47

EX. 6 EX. STM STR-6 — MSMD # STM NO 171 006 161 — TOP = 379.80 — INV. IN 15" RCP FROM EX. 7 = 375.70 — INV. OUT 15" RCP TOEX. 5 = 375.60

EX. 7 EX. STM STR-7 — MSMD # STM NO 171 006 118 — TOP = 380.97 — INV. OUT 15" RCP TOEX. 6 = 376.72

EX. 8 EX. STM STR-8 — MSMD # STM NO 171 006 183 — TOP = 376.86 — INV. IN 15" RCP FROM EX. 9 = 372.16 — INV. IN 30" RCP FROM EX. 5 = 368.91 — INV. OUT 33" RCP TOEX. 10= 366.31

EX. 1 EX.SAN MH-1 — SAN # 017-1-385 — TOP=400.80 — INV. IN FROM NE=390.05 — INV. OUT TO EX.2=389.73

EX. 2 EX.SAN MH-2 — SAN # 017-1-165 — TOP=388.45 — INV. IN FROM EX.1=374.21 — INV. OUT TO EX.3=374.05

EX. 3 EX.SAN MH-3 — SAN # 017-1-164 — TOP=386.79 — INV. IN FROM EX.2=373.13 — INV. OUT TO EX.4=372.89

EX. 4 EX.SAN MH-4 — SAN # 017-1-163 — TOP=388.73 — INV. IN FROM EX.3=372.15 — INV. OUT TO EX.5=371.99

EX. 5 EX.SAN MH-5 — SAN # 017-1-162 — TOP=376.41 — INV. IN FROM EX.4=365.55 — INV. OUT TO EX.6=365.40

EX. 6 EX.SAN MH-6 — SAN # 017-1-161 — TOP=371.31 — INV. IN FROM EX.5=359.90 — INV. OUT TO EX.7=359.75

EX. 7 EX.SAN MH-7 — SAN # 017-1-124 — TOP=369.87 — INV. IN FROM EX.6=357.93 — INV. OUT TO EX.8=357.81

EX. 8 EX.SAN MH-8 — SAN # 017-1-122 — TOP=369.87 — INV. IN FROM EX.7=356.32 — INV. IN FROM EX.S=356.30 — INV. IN FROM EX.E=355.69 — INV. OUT TO W=355.66

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No 035787
PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	DESCRIPTION
2	12/14/11	COUNTY COMMENTS
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PROJECT NUMBER
60212377

SHEET TITLE
EXISTING CONDITIONS AND VEGETATION MAP

SHEET NUMBER
4

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MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under the following Zoning Ordinance paragraphs:

Special Permits (9-011 2J & 2L)	Special Exceptions (9-011 2J & 2L)
Cluster Subdivision (9-615 1G & 1N)	Commercial Revitalization Districts (9-622 2A (12) & (14))
Development Plans PRC District (16-302 3 & 4L)	PRC Plan (16-303 1E & 1O)
FDP P Districts (except PRC) (16-502 1F & 1Q)	Amendments (18-202 10F & 10I)

☐ 1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100').

☒ 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet 2.

☒ 3. Provide:

Facility Name/ Type & No. (e.g. dry pond A, infil. trench, underground vault, etc.)	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
BMP/SWM WET POND	8.4 AC	118.4 AC	127.2 AC	168,112SF	546,374 CF	16 FT
Totals	8.4 AC	118.4 AC	127.2 AC	168,112SF	546,374 CF	16 FT

☒ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet n 2
Pond inlet and outlet pipe systems are shown on Sheet 2.

☒ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet N/A.
Type of maintenance access road surface noted on the plat is N/A (asphalt, geoblock, gravel, etc.).

☒ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 2.

☒ 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 5.

☒ 8. A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet 5.

☒ 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 5.

☒ 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheets 4; NOTE ON SHEET 1

☐ 11. A submission waiver is requested for N/A.

☐ 12. Stormwater management is not required because N/A.

NOTES:

1. THE PERVIOUS PAVERS DEPICTED ON THE PLAN AS "POTENTIAL" ARE NOT NECESSARY TO SATISFY MINIMUM STORM WATER DETENTION OR WATER QUALITY IMPROVEMENT/ BEST MANAGEMENT REQUIREMENTS APPLICABLE TO THE REDEVELOPMENT OF THIS SITE, WHICH REQUIREMENTS WILL BE FULLY SATISFIED BY AN EXISTING OFF-SITE STORM WATER MANAGEMENT/ BMP FACILITY. IF IMPLEMENTED, THESE FACILITIES WILL BE CONSIDERED TO BE SUPPLEMENTAL AND NOT REQUIRED.
2. APPLICANT RESERVES THE RIGHT TO USE AN ALTERNATIVE TO PERVIOUS PAVERS, SUCH AS PERVIOUS CONCRETE SURFACE, IN LIEU OF PAVERS IF IMPLEMENTING SUPPLEMENTAL DETENTION AND/OR BMP MEASURES ON THE SITE.

BMP FACILITY DESIGN CALCULATIONS

Part 1: **LIST OF SUBAREAS AND "C" FACTORS USED**

SUBAREA DESIGNATION AND DESCR.	C	AREA ACRES
(1) TO WET POND #1, OFF-SITE	0.69	8.4
		8.4 SITE AREA

Part 2: **COMPUTE WEIGHTED AVERAGE "C" FACTOR FOR THE SITE**

(A) SITE AREA 8.4 AC

(B) SUBAREA DESIGNATION	C	X	ACRES	= PRODUCT
(1) TO WET POND #1, OFF-SITE	0.69		8.4	5.80
	TOTAL=		8.4	TOTAL= 5.80

WEIGHTED AVERAGE "C" FACTOR FOR THE SITE= 5.80 / 8.4 = 0.69

Part 3: **COMPUTE THE TOTAL PHOSPHORUS REMOVAL FOR THE SITE**

SUB-AREA	BMP TYPE	EFF.	OFF SITE	AREA RATIO	"C" FACTOR RATIO	PRO-DUCT
(1)	TO WET POND #1, OFF-SITE	50		8.40 / 8.4 = 1.00	0.69 / 0.69 = 1.00	50.00
					TOTAL SITE PHOSPHORUS REMOVAL =	50.0

Part 4: **DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT**

REQUIREMENT: 40% FOR THE ENTIRE SITE
PHASE I PHOSPHORUS REMOVAL= 50.0 % > 40.00 %

BMP VOLUME COMPUTATIONS

WET POND #1

Part 7: **COMPUTE THE WEIGHTED C FACTOR FOR THE PROPOSED BMP FACILITY**

SUBAREA DESIGNATION	C		ACRES		PRODUCT
(1) TO WET POND #1, OFF-SITE	0.80	x	166.4	=	133.12
			166.40		133.12
WEIGHTED AVERAGE C FACTOR= 0.80					

Part 8: **DETERMINE THE STORAGE REQUIRED**

(B) WET POND
VOLUME OF RUNOFF PER ACRE FROM MEAN STORM
1452 x C= 1162 CF/AC
Design 2 (4.0x VOLUME OF RUNOFF FROM MEAN STORM)
4 x 166.40 x 1162 = 773,161 CF

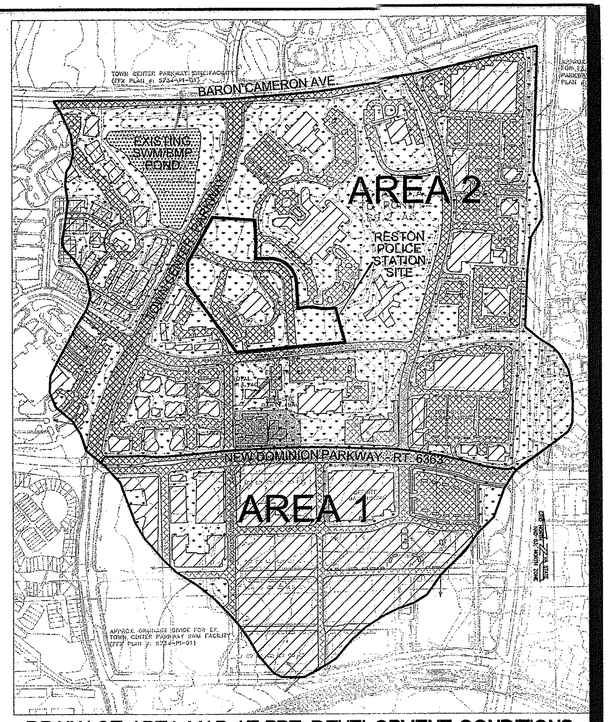
WET STORAGE AVAILABLE = 19.3 AC-FT = 840,708 CF

PREDEVELOPMENT CN VALUE FOR ENTIRE SHED INCLUDING POLICE STATION

SUB-AREAS	DRAINAGE AREAS DA AC	CURVE NUMBER CN	DA*CN
AREA 1 - COMMERCIAL AND BUSINESS	41.7	94	3,919.8
AREA 2 - IMPERVIOUS AREA	57.5	98	5,635.0
AREA 2 - PERVIOUS AREA	58.8	69	4,057.2
POLICE STATION SITE - IMPERVIOUS AREA	2.2	98	215.6
POLICE STATION SITE - PERVIOUS AREA	6.2	69	427.8
TOTAL	166.4		14,255.4
WEIGHTED CURVE NUMBER FOR SHED CNw=		85.67	

POSTDEVELOPMENT CN VALUE FOR ENTIRE SHED INCLUDING POLICE STATION

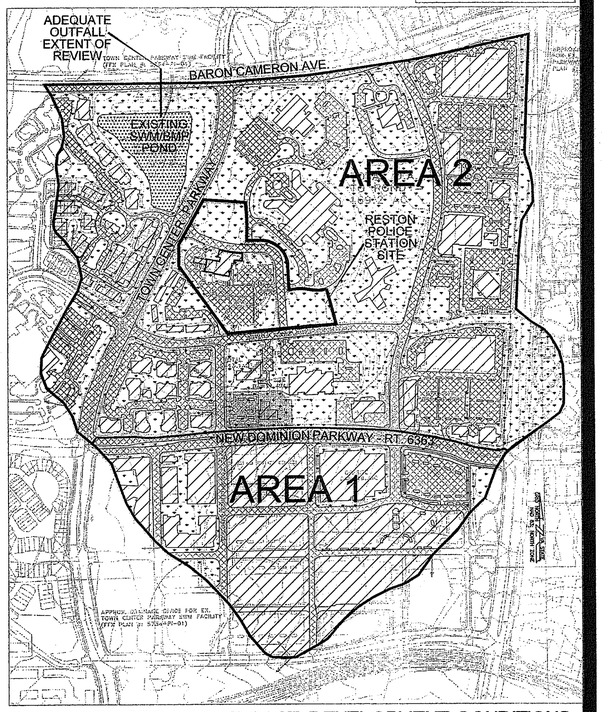
SUB-AREAS	DRAINAGE AREAS DA AC	CURVE NUMBER CN	DA*CN
AREA 1 - COMMERCIAL AND BUSINESS	41.7	94	3,919.8
AREA 2 - IMPERVIOUS AREA	57.5	98	5,635.0
AREA 2 - PERVIOUS AREA	58.8	69	4,057.2
POLICE STATION SITE - IMPERVIOUS AREA	3.04	98	297.9
POLICE STATION SITE - PERVIOUS AREA	5.36	69	369.8
TOTAL	166.4		14,279.8
WEIGHTED CURVE NUMBER FOR SHED CNw=		85.82	



DRAINAGE AREA MAP AT PRE-DEVELOPMENT CONDITIONS

SCALE: 1"=400'

LEGEND
- BUILDING AREA
- PAVEMENT AREA
- PERVIOUS AREA
- EX. POND AREA



DRAINAGE AREA MAP AT POST-DEVELOPMENT CONDITIONS

SCALE: 1"=400'

Application No: RPA 74-2-113-4 Staff: MJW

APPROVED DEVELOPMENT PLAN

☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)

SEE PROFFERS DATED: 2-10-12

Date of (BOS) (PC) Approval: 2-28-12

Sheet: 6 of 14

Comments: w/ RPA 74-2-113-8
PRC 74-2-113-2
Conds 1-17-12

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No 035787
11/5/11
PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	DESCRIPTION
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PLAN NORTH

PROJECT NUMBER
60212377

SHEET TITLE

SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER

5

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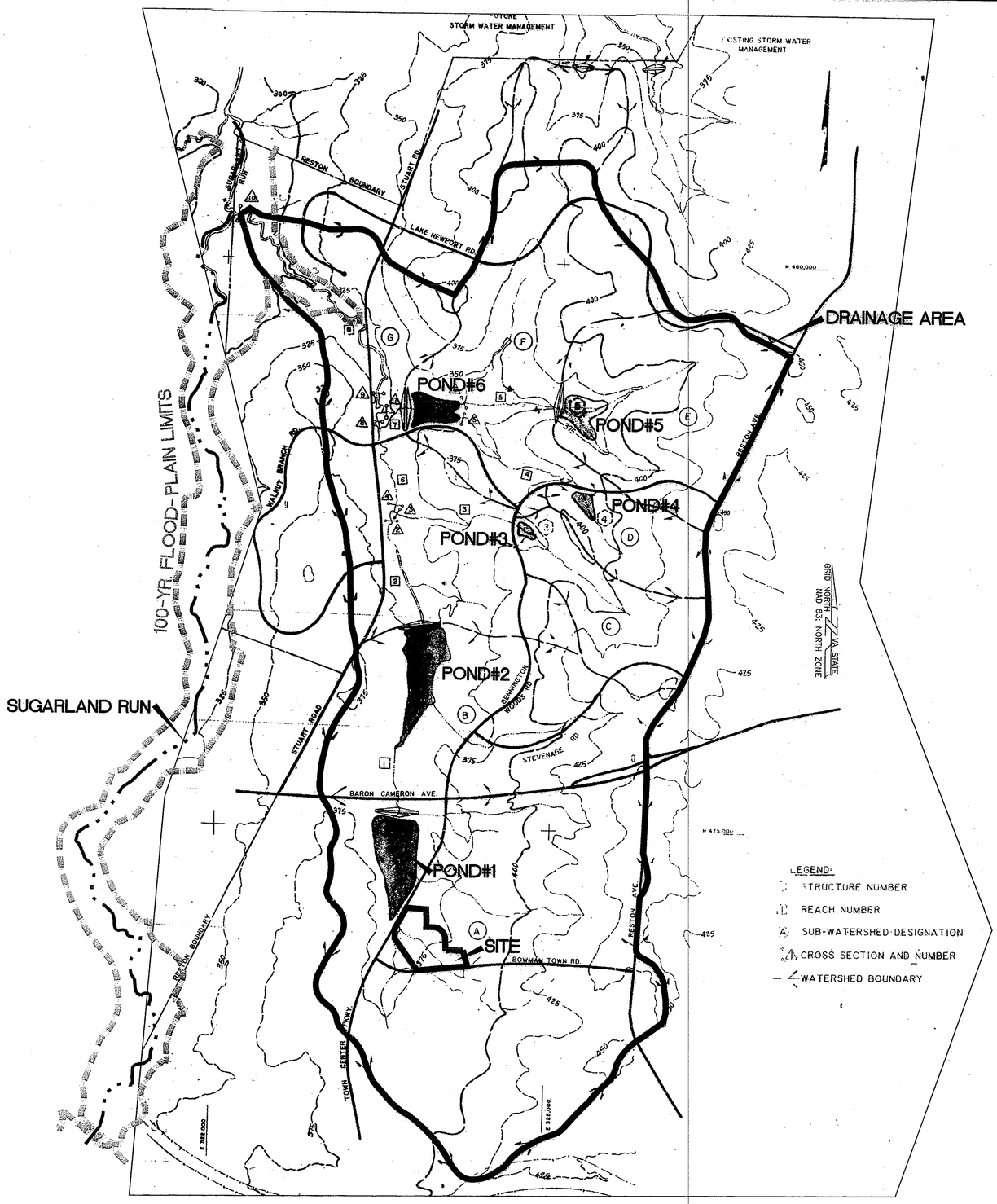

STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES NARRATIVE

THE PURPOSE OF THIS PROJECT IS TO EXPAND AND REDEVELOP THE EXISTING RESTON POLICE STATION AND GOVERNMENTAL CENTER SITE LOCATED AT 12000 BOWMAN TOWNE DRIVE. STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP) REQUIREMENTS FOR THE EXISTING DEVELOPED SITE ARE CURRENTLY BEING MET BY AN OFF-SITE REGIONAL SWM/BMP POND LOCATED TO THE NORTHWEST OF THE PROPERTY, ACROSS TOWN CENTER PARKWAY. THIS EXISTING POND WAS DESIGNED TO PROVIDE SWM/BMP FOR A DRAINAGE AREA OF 0.26 SQUARE MILES (166.40 ACRES), INCLUDING THE SUBJECT SITE, WITH AN OVERALL DESIGN SOIL CONSERVATION SERVICES (SCS) WEIGHTED CURVE NUMBER (CN) OF 87.00.

AT THE CURRENT CONDITION, THE WEIGHTED CN VALUE FOR THE OVERALL DRAINAGE AREA TO THE EXISTING REGIONAL POND IS 82.90. WITH THE PROPOSED REDEVELOPMENT OF THE POLICE SITE, THE WEIGHTED CN VALUE WILL INCREASE TO 83.24, WHICH IS STILL BELOW THE POND DESIGN VALUE OF 87.00. THEREFORE, THE POND WILL CONTINUE TO SATISFY SWM/BMP REQUIREMENTS APPLICABLE TO THE SITE, AND NO ADDITIONAL SWM/BMP FACILITIES WILL BE REQUIRED IN CONJUNCTION WITH THE REDEVELOPMENT OF THE SITE.

THE EXISTING REGIONAL POND IS IDENTIFIED AS POND #1 IN THE OVERALL RESTON SUGARLAND RUN REGIONAL SWM SYSTEM AND IT WAS REFERRED TO AS THE TOWN CENTER PARKWAY SWM FACILITY IN THE DESIGN PLANS (5734-PI-01). THE RESTON SUGARLAND RUN STORM WATER MANAGEMENT SYSTEM CONSISTS OF SIX (6) REGIONAL PONDS. AS SHOWN ON THE DRAINAGE DIVIDE MAP ON THIS SHEET, EACH POND IS NUMBERED FROM 1 TO 6, AND THE ASSOCIATED DRAINAGE AREAS ARE LABELED FROM A TO H, RESPECTIVELY. THE EXISTING POND COMPUTATIONS AND NARRATIVES FOR POND #1, SHOWN ON SHEET 7, INDICATE THAT STORMWATER MANAGEMENT REQUIREMENTS FOR THE 2-YEAR AND 10-YEAR STORMS HAVE BEEN MET.

POND #1 IS OWNED BOTH BY THE RESTON TOWN CENTER JOINT COMMITTEE AND THE FAIRFAX COUNTY BOARD OF SUPERVISORS. POND MAINTENANCE IS PERFORMED BY THE RESTON TOWN CENTER JOINT COMMITTEE, BUT THE COUNTY IS RESPONSIBLE FOR 30% OF THE MAINTENANCE COSTS.

SUMMARY OF DESIGN FACTORS FOR EXISTING REGIONAL POND #1:

DESIGN DRAINAGE AREA 0.26 SQ. MILES (166.40 ACRES)SHEET 4 & 5DESIGN CN VALUE (ULTIMATE CONDITION)87SHEET 8POND BOTTOM ELEVATION 356.00SHEET 6PERMANENT BMP POOL ELEVATION364.00SHEET 6EMERGENCY SPILLWAY CREST ELEVATION369.00SHEET 610-YEAR ELEVATION367.10SHEET 6100-YEAR ELEVATION369.00SHEET 6DESIGN FLOOD ELEVATION (2.5 X 100YR)372.30SHEET 6EMBANKMENT CREST ELEVATION373.50SHEET 6FREEBOARD PROVIDED 1.2 FTSHEET 6REQUIRED BMP VOLUME773,161 CFSHEET 4PROVIDED BMP VOLUME840,708 CFSHEET 4

AS SHOWN ON THE BMP COMPUTATIONS ON SHEET 4, THE REQUIRED WATER QUALITY VOLUME NECESSARY TO SERVE A DRAINAGE AREA OF 166.40 ACRES IN ITS ULTIMATE DVELOPEMENT CONDITION IS 773,161 CUBIC FEET. THE ACTUAL WATER QUALITY PERMANENT POOL VOLUME PROVIDED BY EXISTING POND #1 IS 840,708 CUBIC FEET. THEREFORE, BMP REQUIREMENTS WILL BE MET FOR THE RESTON POLICE STATION SITE BY THE OFFSITE POND, AND NO ADDITIONAL BMP FACILITY IS REQUIRED. HOWEVER, SUPPLEMENTAL BMP FACILITIES MAY BE PROVIDED ON THE SITE. IF SUCH ADDITIONAL FACILITIES ARE PROVIDED ON THE SITE, THEY WILL NOT BE NECESSARY TO MEET ANY APPLICABLE REQUIREMENTS.

OUTFALL NARRATIVE:

THERE IS ONE PRIMARY STORM DRAINAGE OUTFALL FOR THE RESTON POLICE SITE. STORM RUNOFF FROM THE REDEVELOPED SITE WILL BE COLLECTED BY THE PROPOSED ONSITE STORM SEWER SYSTEM AND CONVEYED, AS IT CURRENTLY IS, TO THE EXISTING OFFSITE REGIONAL STORM WATER MANAGEMENT POND (POND #1) VIA THE EXISTING STORM SEWER SYSTEM CROSSING RESTON TOWN CENTER PARKWAY. AS EXPLAINED IN THE SWM NARRATIVE ABOVE. THE EXISTING POND IS LOCATED NORTHWEST OF THE SITE ACROSS RESTON TOWN CENTER PARKWAY, AND IS ONE OF SIX PONDS INCLUDED IN THE RESTON SUGARLAND RUN OVERALL SWM SYSTEM. RUNOFF FROM THE SUBJECT SITE IS CONVEYED TO SUGARLAND RUN AS FOLLOWS:

- RUNOFF FROM THE RESTON POLICE STATION OUTFALLS TO EXISTING POND #1 VIA THE EXISTING CLOSED SYSTEM IN TOWN CENTER PARKWAY.
- EXISTING POND #1 OUTFALLS INTO THE EXISTING DOWNSTREAM POND #2, ACROSS BARON CAMERON AVENUE, VIA A COMBINATION OF CLOSED AND OPEN STORM SEWER SYSTEMS.
- RUNOFF FROM EXISTING POND #2 OUTFALLS INTO AN EXISTING UNAMED TRIBUTARY CHANNEL, WHERE IT IS CONVEYED TO THE 100 YEAR FLOOD PLAIN AND RPA LIMIT OF SUGARLAND RUN.

AT THE POINT WHERE THE UNAMED TRIBUTARY CHANNEL DISCHARGES TO THE FLOODPLAIN OF SUGARLAND RUN, THE TOTAL CONTRIBUTING UPSTREAM DRAINAGE AREA TO THE FLOODPLAIN IS GREATER THAN 1.00 SQUARE MILES (640 ACRES). THE CONTRIBUTING DRAINAGE AREA FROM THE UNAMED TRIBUTRARY IS APPROXIMATELY 1.33 SQUARE MILES (850 ACRES).

AT THE SITE PLAN STAGE, THE EXTENT OF REVIEW FOR THIS OUTFALL WILL BE BASED ON THE REQUIREMENTS OF PFM 6-0203.2A, WHICH STATES THAT THE EXTENT OF REVIEW SHALL BE TO A POINT THAT IS AT LEAST 150 FEET DOWNSTREAM OF A POINT WHERE THE RECEIVING PIPE OR CHANNEL IS JOINED BY ANOTHER THAT HAS A DRAINAGE AREA THAT IS AT LEAST 90 PERCENT OF THE SIZE OF THE FIRST DRAINAGE AREA AT THE POINT OF CONFLUENCE. FOR THE RESTON POLICE SITE, EXISTING POND #1 WILL BE CONSIDERED AS THE CONFLUENCE POINT, AND THE REQUIRED EXTENT OF REVIEW WILL BE TO A POINT 150 FEET DOWNSTREAM OF THE CONTROL STRUCTURE FOR POND #1. AS SHOWN ON THE EXISTING POND PLAN VIEW ON SHEET 6 AND PROFILES ON SHEET 9, THE POND DISCHARTGES INTO A 114-FOOT-LONG, 60-INCH REINFORCED CONCRETE PIPE THAT OUTFALLS INTO THE HEADWALL OF DUAL 82-FEET-LONG, 72-INCH CULVERTS AT BARON CAMERON AVENUE. THEREFORE, THE EXTENT OF REVIEW WILL END AT THE EXISTING DUAL CULVERTS. BASED ON THE EXISTING PIPE COMPUTATIONS FOR THE POND OUTFALL PIPE AND DUAL CULVERTS SHOWN ON SHEET 9, IT IS MY PROFESSIONAL OPINION THAT ADEQUATE OUTFALL REQUIREMENTS WILL BE MET WITH THIS DEVELOPMENT.

NOTE:
EXISTING HYDROLOGY AND HYDRAULIC INFORMATION WAS TAKEN FROM COUNTY PLAN #5734-PI-01-1.

Application No: PCA 74-2-113-4 **Staff:** Moglu

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)

SEE PROFFERS DATED: 2-10-12

Date of (BOS) (PC) Approval: 2-28-12

Sheet: 7 **of** 14

Comments: DPA 74-2-113-8
PRC 74-2-113-2
comments 1-17-12

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No. 035787
PROFESSIONAL ENGINEER
11/9/11

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
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KEY PLAN

PLAN NORTH

PROJECT NUMBER
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SHEET TITLE
SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER
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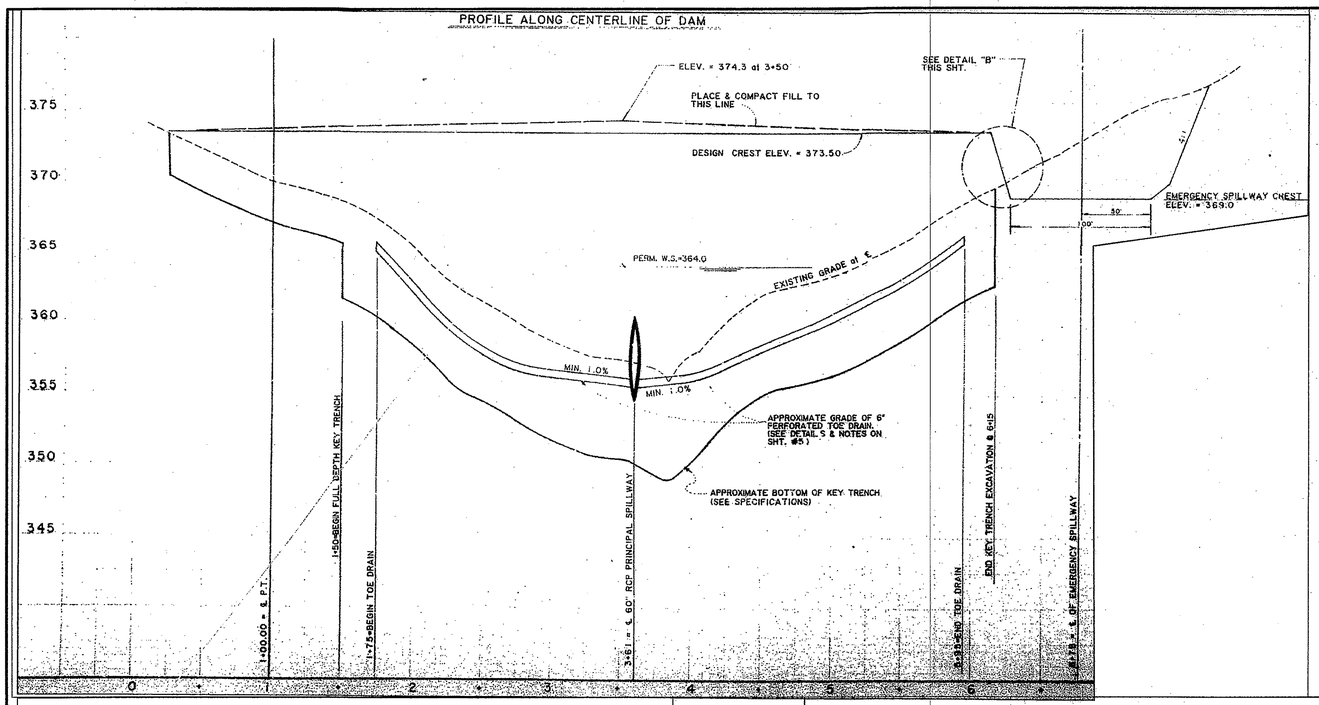

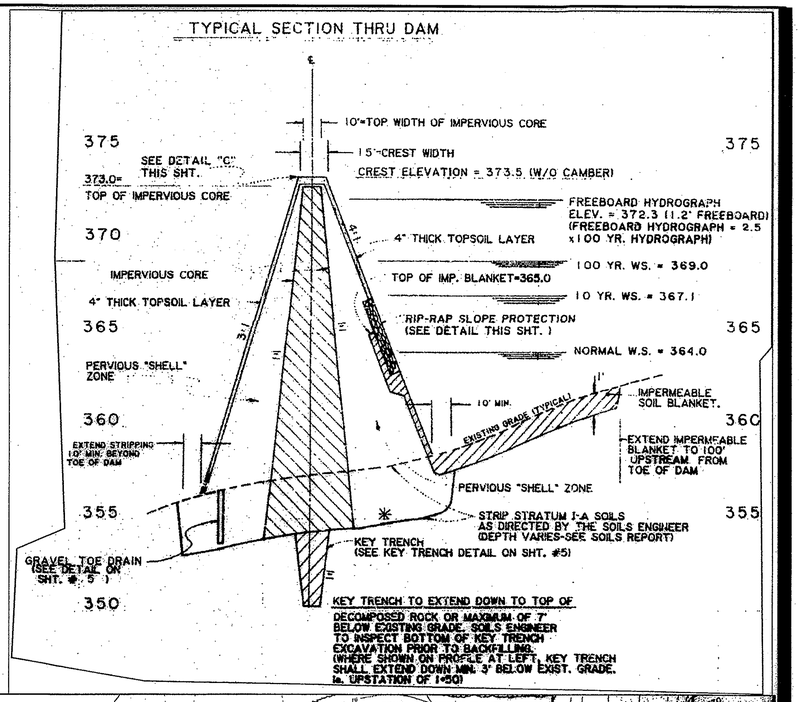

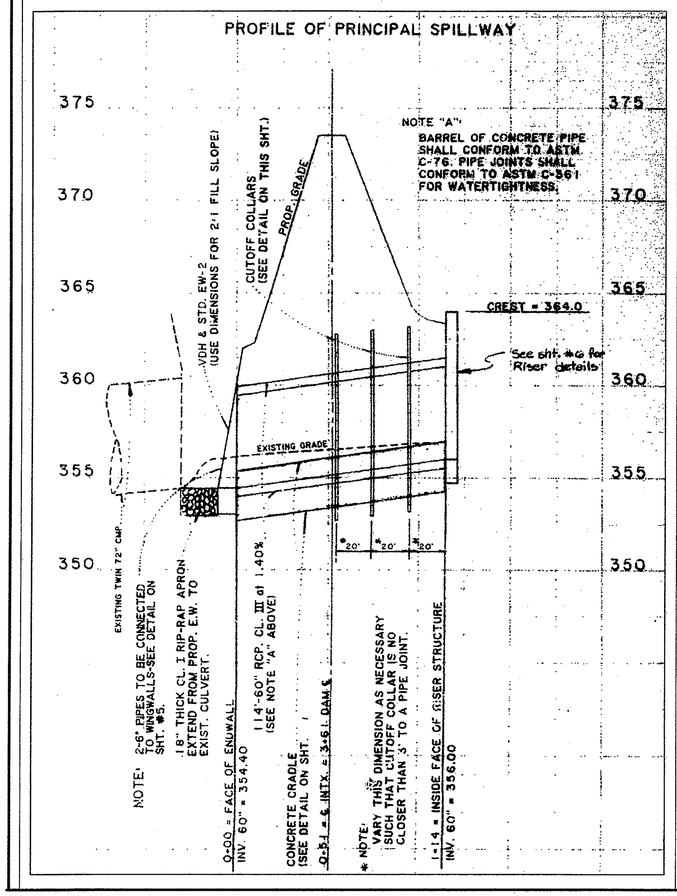

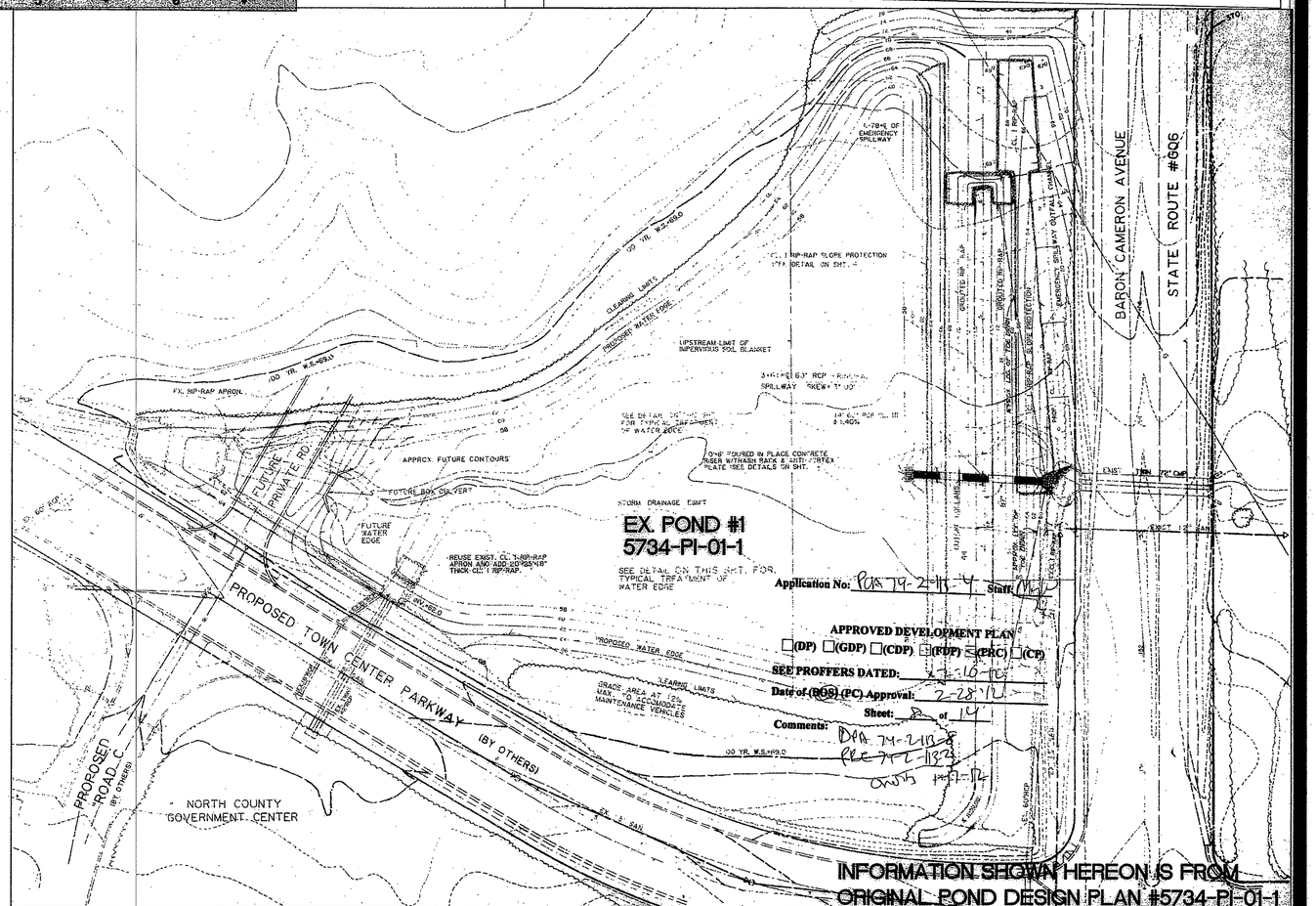

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PROJECT

RESTON POLICE STATION & GOV'T CENTER

12000 BOWMAN TOWNE DRIVE
RESTON, VA 20190

CLIENT

DPWES

PLANNING & DESIGN DIVISION
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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No. 035787
PROFESSIONAL ENGINEER

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PLAN NORTH

PROJECT NUMBER
60212377

SHEET TITLE
SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER
7

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2 YR & 10 YR WATERSHED UNDEVELOPED

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RESTON UNNAMED TRIBUTARY TO THE SUGARLAND RUN (UNDE
TR-20 HYDROLOGY
          PROGRAM DATE - FEB. 14, 1974          8/360
EXECUTIVE CONTROL CARD   OPERATION INCREM.   MAIN TIME INCREMENT= .17            PASS=100
EXECUTIVE CONTROL CARD   OPERATION COMPUT.   FROM XSECTN/STRUCT 0/ 1   TO XSECTN/STRUCT 10/ 0
   STARTING TIME= 0.00   RAIN DEPTH= 3.50   RAIN DURATION= 1.00   RAIN TABLE NO.= 3   SOIL CONDITION= 2
   ALTERNATE NO.= 1      STORM NO.= 1

SUBROUTINE RUNOFF   STRUCTURE 1
(A)  AREA= .26   INPUT RUNOFF CURVE= 66.0   TIME OF CONCENTRATION= .72
     PEAK TIMES 12.37   PEAK DISCHARGES 66.173   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 1
     SURFACE ELEVATION= 364.00
     PEAK TIMES 12.37   PEAK DISCHARGES 66.173   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 1
     LENGTH= 1600.00   INPUT COEFFICIENT= .5400   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.996   AVERAGE ROUTING COEFF= .5400   NUMBER OF ROUTINGS= .72
     PEAK TIMES 12.59   PEAK DISCHARGES 59.154   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   CROSS SECTION 1
(B)  AREA= .13   INPUT RUNOFF CURVE= 66.0   TIME OF CONCENTRATION= .42
     PEAK TIMES 12.17   PEAK DISCHARGES 44.520   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   CROSS SECTION 1
     INPUT HYDROGRAPHS= 6,5   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.45   PEAK DISCHARGES 81.215   PEAK ELEVATIONS (NULL)

SUBROUTINE RESVOR   STRUCTURE 2
     SURFACE ELEVATION= 336.00
     PEAK TIMES 12.45   PEAK DISCHARGES 81.215   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 3
(C)  AREA= .05   INPUT RUNOFF CURVE= 58.0   TIME OF CONCENTRATION= .42
     PEAK TIMES 12.22   PEAK DISCHARGES 7.823   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 3
     SURFACE ELEVATION= 343.00
     PEAK TIMES 12.22   PEAK DISCHARGES 7.823   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 3
     LENGTH= 1200.00   INPUT COEFFICIENT= .6200   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.774   AVERAGE ROUTING COEFF= .6200   NUMBER OF ROUTINGS= .45
     PEAK TIMES 12.35   PEAK DISCHARGES 6.038   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 2
     LENGTH= 1100.00   INPUT COEFFICIENT= .5100   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.769   AVERAGE ROUTING COEFF= .5100   NUMBER OF ROUTINGS= .53
     PEAK TIMES 12.43   PEAK DISCHARGES 39.726   PEAK ELEVATIONS (NULL)

SUBROUTINE ADDHYD   CROSS SECTION 4
     INPUT HYDROGRAPHS= 7,5   OUTPUT HYDROGRAPH= 6
     PEAK TIMES 12.60   PEAK DISCHARGES 82.408   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 8
     LENGTH= 900.00   INPUT COEFFICIENT= .5000   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.700   AVERAGE ROUTING COEFF= .5000   NUMBER OF ROUTINGS= .44
     PEAK TIMES 12.73   PEAK DISCHARGES 79.479   PEAK ELEVATIONS (NULL)

SUBROUTINE SAVMOV   CROSS SECTION 8
     INPUT HYDROGRAPH= 5   OUTPUT HYDROGRAPH= 2

SUBROUTINE RUNOFF   STRUCTURE 4
(D)  AREA= .03   INPUT RUNOFF CURVE= 59.0   TIME OF CONCENTRATION= .33
     PEAK TIMES 12.1[illegible]   PEAK DISCHARGES 5.467   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 4
     SURFACE ELEVATION= 373.00
     PEAK TIMES 12.16   PEAK DISCHARGES 5.447   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 5
     LENGTH= 1500.00   INPUT COEFFICIENT= .6500   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 3.157   AVERAGE ROUTING COEFF= .6500   NUMBER OF ROUTINGS= .51
     PEAK TIMES 12.27   PEAK DISCHARGES 4.75[illegible]   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 5
(E)  AREA= .10   INPUT RUNOFF CURVE= 58.0   TIME OF CONCENTRATION= .32
     PEAK TIMES 12.16   PEAK DISCHARGES 17.200   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 5
     SURFACE ELEVATION= 352.20
     PEAK TIMES 12.16   PEAK DISCHARGES 17.2[illegible]   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 6
     LENGTH= 1100.00   INPUT COEFFICIENT= .5800   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.348   AVERAGE ROUTING COEFF= .5800   NUMBER OF ROUTINGS= .45
     PEAK TIMES 12.27   PEAK DISCHARGES 14.695   PEAK ELEVATIONS (NULL)

SUBROUTINE ADDHYD   STRUCTURE 6
     INPUT HYDROGRAPHS= 7,6   OUTPUT HYDROGRAPH= 5
     PEAK TIMES 12.27   PEAK DISCHARGES 19.450   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 6
(F)  AREA= .13   INPUT RUNOFF CURVE= 61.0   TIME OF CONCENTRATION= .45
     PEAK TIMES 12.21   PEAK DISCHARGES 27.392   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   STRUCTURE 6
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES [illegible]   PEAK DISCHARGES 46.[illegible]   PEAK ELEVATIONS (NULL)

SUBROUTINE RESVOR   STRUCTURE 6
     SURFACE ELEVATION= 323.00
     PEAK TIMES [illegible]   PEAK DISCHARGES 46.[illegible]   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 7
     LENGTH= 500.00   INPUT COEFFICIENT= .5100   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.769   AVERAGE ROUTING COEFF= .5100   NUMBER OF ROUTINGS= .24
     PEAK TIMES 12.31   PEAK DISCHARGES 41.646   PEAK ELEVATIONS (NULL)

SUBROUTINE SAVMOV   CROSS SECTION 8
     INPUT HYDROGRAPH= 2   OUTPUT HYDROGRAPH= 6

SUBROUTINE ADDHYD   CROSS SECTION 9
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.40   PEAK DISCHARGES 106.614   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 10
     LENGTH= 2200.00   INPUT COEFFICIENT= .5900   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.946   AVERAGE ROUTING COEFF= .5900   NUMBER OF ROUTINGS= .88
     PEAK TIMES [illegible]   PEAK DISCHARGES 101.679   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   CROSS SECTION 10
(G)  AREA= .18   INPUT RUNOFF CURVE= [illegible]   TIME OF CONCENTRATION= 1.05
     PEAK TIMES [illegible]   PEAK DISCHARGES [illegible]   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   CROSS SECTION 10
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES [illegible]   PEAK DISCHARGES [124.[illegible]]   PEAK ELEVATIONS (NULL)   <- PEAK 2 YR. Q
ENDCMP
```

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EXECUTIVE CONTROL CARD   OPERATION COMPUT.   FROM XSECTN/STRUCT 0/ 1   TO XSECTN/STRUCT 10/ 0   PASS=101
   STARTING TIME= 0.00   RAIN DEPTH= 5.20   RAIN DURATION= 1.00   RAIN TABLE NO.= 3   SOIL CONDITION= 2
   ALTERNATE NO.= 1      STORM NO.= 2

SUBROUTINE RUNOFF   STRUCTURE 1
(A)  AREA= .26   INPUT RUNOFF CURVE= 66.0   TIME OF CONCENTRATION= .72
     PEAK TIMES 12.32   PEAK DISCHARGES 175.687   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 1
     SURFACE ELEVATION= 364.00
     PEAK TIMES 12.32   PEAK DISCHARGES 175.687   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 1
     LENGTH= 1600.00   INPUT COEFFICIENT= .5400   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.996   AVERAGE ROUTING COEFF= .5400   NUMBER OF ROUTINGS= .72
     PEAK TIMES 12.54   PEAK DISCHARGES 158.010   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   CROSS SECTION 1
(B)  AREA= .13   INPUT RUNOFF CURVE= 66.0   TIME OF CONCENTRATION= .42
     PEAK TIMES 12.13   PEAK DISCHARGES 114.917   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   CROSS SECTION 1
     INPUT HYDROGRAPHS= 6,5   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.34   PEAK DISCHARGES 218.175   PEAK ELEVATIONS (NULL)

SUBROUTINE RESVOR   STRUCTURE 2
     SURFACE ELEVATION= 336.00
     PEAK TIMES 12.34   PEAK DISCHARGES 218.175   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 3
(C)  AREA= .05   INPUT RUNOFF CURVE= 58.0   TIME OF CONCENTRATION= .42
     PEAK TIMES 12.16   PEAK DISCHARGES 26.057   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 3
     SURFACE ELEVATION= 343.00
     PEAK TIMES 12.16   PEAK DISCHARGES 26.057   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 3
     LENGTH= 1200.00   INPUT COEFFICIENT= .6200   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.774   AVERAGE ROUTING COEFF= .6200   NUMBER OF ROUTINGS= .45
     PEAK TIMES 12.26   PEAK DISCHARGES 23.374   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 2
     LENGTH= 1100.00   INPUT COEFFICIENT= .5100   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.769   AVERAGE ROUTING COEFF= .5100   NUMBER OF ROUTINGS= .53
     PEAK TIMES 12.54   PEAK DISCHARGES 208.031   PEAK ELEVATIONS (NULL)

SUBROUTINE ADDHYD   [illegible]
     PEAK TIMES 12.50   PEAK DISCHARGES 224.402   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 8
     LENGTH= 900.00   INPUT COEFFICIENT= .5000   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.700   AVERAGE ROUTING COEFF= .5000   NUMBER OF ROUTINGS= .44
     PEAK TIMES 12.66   PEAK DISCHARGES 215.730   PEAK ELEVATIONS (NULL)

SUBROUTINE SAVMOV   CROSS SECTION 8
     INPUT HYDROGRAPH= 5   OUTPUT HYDROGRAPH= 2

SUBROUTINE RUNOFF   STRUCTURE 4
(D)  AREA= .03   INPUT RUNOFF CURVE= 59.0   TIME OF CONCENTRATION= .33
     PEAK TIMES 12.09   PEAK DISCHARGES 19.334   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 4
     SURFACE ELEVATION= 373.00
     PEAK TIMES 12.09   PEAK DISCHARGES 19.334   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 5
     LENGTH= 1500.00   INPUT COEFFICIENT= .6500   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 3.157   AVERAGE ROUTING COEFF= .6500   NUMBER OF ROUTINGS= .51
     PEAK TIMES 12.21   PEAK DISCHARGES 17.103   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 5
(E)  AREA= .10   INPUT RUNOFF CURVE= 58.0   TIME OF CONCENTRATION= .32
     PEAK TIMES 12.08   PEAK DISCHARGES 64.682   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE RESVOR   STRUCTURE 5
     SURFACE ELEVATION= 352.20
     PEAK TIMES 12.08   PEAK DISCHARGES 61.682   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 6
     LENGTH= 1100.00   INPUT COEFFICIENT= .5800   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.349   AVERAGE ROUTING COEFF= .5800   NUMBER OF ROUTINGS= .45
     PEAK TIMES 12.20   PEAK DISCHARGES 56.221   PEAK ELEVATIONS (NULL)

SUBROUTINE ADDHYD   STRUCTURE 6
     INPUT HYDROGRAPHS= 7,6   OUTPUT HYDROGRAPH= 5
     PEAK TIMES 12.21   PEAK DISCHARGES 73.319   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   STRUCTURE 6
(F)  AREA= .13   INPUT RUNOFF CURVE= 61.0   TIME OF CONCENTRATION= .45
     PEAK TIMES 12.17   PEAK DISCHARGES 86.318   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   STRUCTURE 6
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.19   PEAK DISCHARGES 159.189   PEAK ELEVATIONS (NULL)

SUBROUTINE RESVOR   STRUCTURE 6
     SURFACE ELEVATION= 323.00
     PEAK TIMES 12.19   PEAK DISCHARGES 159.189   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 7
     LENGTH= 500.00   INPUT COEFFICIENT= .5100   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 1.769   AVERAGE ROUTING COEFF= .5100   NUMBER OF ROUTINGS= .24
     PEAK TIMES 12.24   PEAK DISCHARGES 148.544   PEAK ELEVATIONS (NULL)

SUBROUTINE SAVMOV   CROSS SECTION 8
     INPUT HYDROGRAPH= 2   OUTPUT HYDROGRAPH= 6

SUBROUTINE ADDHYD   CROSS SECTION 9
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.42   PEAK DISCHARGES 316.646   PEAK ELEVATIONS (NULL)

SUBROUTINE REACH   CROSS SECTION 10
     LENGTH= 2200.00   INPUT COEFFICIENT= .5900   INPUT ROUTINGS= 0.00
     AVERAGE WATER VELOCITY= 2.446   AVERAGE ROUTING COEFF= .5900   NUMBER OF ROUTINGS= .88
     PEAK TIMES 12.72   PEAK DISCHARGES 295.828   PEAK ELEVATIONS (NULL)

SUBROUTINE RUNOFF   CROSS SECTION 10
(G)  AREA= .18   INPUT RUNOFF CURVE= 62.0   TIME OF CONCENTRATION= 1.05
     PEAK TIMES 12.57   PEAK DISCHARGES 75.084   PEAK ELEVATIONS (RUNOFF)

SUBROUTINE ADDHYD   CROSS SECTION 10
     INPUT HYDROGRAPHS= 5,6   OUTPUT HYDROGRAPH= 7
     PEAK TIMES 12.69   PEAK DISCHARGES [347.98[illegible]]   PEAK ELEVATIONS (NULL)   <- PEAK 10 YR Q
ENDCMP
```

RESTON - SUGARLAND RUN STORMWATER MANAGEMENT COMPS

DESCRIPTION:

STORMWATER MANAGEMENT IS TO BE PROVIDED FOR THE AREAS AS SHOWN ON THE WATERSHED MAP. THE 2 YR. AND THE 10 YR. Q IN THE TRIBUTARY IN THE FULLY DEVELOPED CONDITION WILL BE LESS THAN THE RESPECTIVE FLOWS DURING THE UNDEVELOPED CONDITION BY AN AMOUNT WHICH IS SUFFICIENT TO COMPENSATE FOR THE AREAS WHICH DO NOT FLOW INTO THE TRIBUTARY.

THE AREAS FOR WHICH STORMWATER MANAGEMENT IS TO BE PROVIDED BUT WHICH DO NOT FLOW INTO THE TRIBUTARY ARE AS FOLLOWS:

67.9 ac.	S.F. DETACHED	C=.45
0.8 ac.	RECREATION	C=.35
21.7 ac.	TOWNHOUSE	C=.75
2.7 ac.	OFFICE	C=.85
7.0 ac.	SCHOOL	C=.60
4.2 ac.	CHURCH	C=.60

TOTAL AREA = 104.3 ACRES
COMPOSITE C = .54

THE TIME OF CONCENTRATION IN THE SUGARLAND RUN TO THE CONFLUENCE WITH THE TRIBUTARY = 2.1 HOUR. THIS TIME WILL BE USED TO COMPUTE THE RAINFALL INTENSITY USED TO COMPUTE THE REQUIRED REDUCTION IN RATE OF FLOW FOR PROVIDING STORMWATER MANAGEMENT FOR THE ABOVE AREAS.

$I_2 = 0.55$ in/hr. $I_{10} = 1.4$ in/hr

ASSUME THAT THE PREDEVELOPED C FACTOR = .35 (SINCE THE MAJORITY OF THE GRADES > 6%)
∴ DIFFERENCE IN C FACTORS = .54 - .35 = .19

USE THE RATIONAL FORMULA TO DETERMINE THE REQUIRED FLOW REDUCTION - Q = CIA   C = .19
A = 104.3
$I_2 = 0.55$ $I_{10} = 1.4$

∴ REDUCE 10 YR. Q BY .19 × 1.4 × 104.3 = 28 cfs
REDUCE 2 YR. Q BY .19 × .55 × 104.3 = 19 cfs

PEAK 10 YR. Q IN THE TRIBUTARY BEFORE DEVELOPMENT = 368 cfs. AFTER WATERSHED IS FULLY DEVELOPED AND ALL DETENTION PONDS ARE BUILT, THE PEAK 10 YR. Q SHALL BE ≤ 368 - 28 = 340 cfs.

PEAK 2 YR. Q IN THE TRIBUTARY BEFORE DEVELOPMENT = 125 cfs AFTER FULL DEVELOPMENT, THE PEAK 10 YR. Q SHALL BE ≤ 125 - 19 = 106 cfs

COMPUTE RUNOFF VOLUME REDUCTION:

REDUCE THE PEAK 2 YR. - 2 HR. VOLUME IN THE TRIBUTARY BY AN AMOUNT SUFFICIENT TO PROVIDE STORMWATER MANAGEMENT FOR THE ABOVE AREAS:

2 YR. - 2 HR. RAINFALL = 2.0"
C = .19
A = 104.3 ACRES
∴ REDUCE VOLUME BY .19 × 104.3 × 2/12 = 3.30 AC. FT.

PEAK 2 YR. - 2 HR. VOLUME BEFORE DEVELOPMENT = 13.83 AC-FT
PEAK 2 YR. - 2 HR. VOLUME AFTER DEVELOPMENT = 9.63 AC-FT
SINCE 13.83 - 9.63 = 4.20 AC-FT. WHICH IS GREATER THAN 3.30 AC-FT, THE CRITERIA FOR NO INCREASE IN 2 YR. - 2 HR. RUNOFF VOLUME IS SATISFIED.

2 YR HYDROGRAPHS IN THE TRIBUTARY AT THE CONFLUENCE WITH THE MAIN STEM OF THE SUGARLAND RUN

SUMMARY:

PEAK 2 YR. Q AFTER DEVELOPMENT = 105 cfs
MAX. ALLOWABLE = 106 cfs

PEAK 10 YR. Q AFTER DEVELOPMENT = 236 cfs
MAX. ALLOWABLE = 340 cfs

∴ THE CRITERIA FOR NO INCREASE IN PEAK 2 YR. OR 10 YR. Q IS SATISFIED.

NOTE: AS A CHECK, THE ENTIRE SUGARLAND RUN WATERSHED (DOWN TO THE CONFLUENCE WITH THE TRIBUTARY) WAS RUN ON THE TR-20 MODEL. THE WATERSHED WAS RUN WITH NO DEVELOPMENT WITHIN RESTON, AND WITH FULL DEVELOPMENT WITHIN RESTON. THE RESULTS ARE AS FOLLOWS:

	UNDEVELOPED	FULLY DEVELOPED
2 YR.	657 cfs	652 cfs
10 YR.	1687 cfs	1682 cfs

RESTON - SUGARLAND RUN REGIONAL STORMWATER MANAGEMENT SYSTEM

NARRATIVE DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE STORMWATER MANAGEMENT FOR AREAS OF RESTON WHICH ARE WITHIN THE SUGARLAND RUN WATERSHED. (SEE THE MAPS ON SHT. # 8 FOR DELINEATION OF THE AREAS WHICH APPLY TO THIS PROJECT.)

THE PROJECT CONSISTS OF SIX DETENTION PONDS. THREE OF THE PONDS HAVE ALREADY BEEN SUBMITTED TO AND REVIEWED BY FAIRFAX COUNTY. THESE PONDS ARE:

- STRUCTURES #3 & #4 - SEE CONSTRUCTION DRAWINGS FOR BENNINGTON WOODS ROAD - PHASE I; PREPARED BY URBAN ENGINEERING & ASSOC. FX. CO. PLAN #4877-PI-02-1
- STRUCTURE #5 - SEE CONSTRUCTION DRAWINGS FOR RESTON SECTION 45 STORMWATER MANAGEMENT; PREPARED BY COLDWELL & ASSOC. INC. FX. CO. PLAN # 4877-PI-03-2

THREE OF THE PONDS ARE ARE BEING SUBMITTED FOR COUNTY REVIEW CONCURRENT WITH THESE DRAWINGS. THEY ARE:

- STRUCTURE #1 - TOWN CENTER PARKWAY STORMWATER MANAGEMENT FACILITY FX. CO. PLAN # 5734-PI-01-1
- STRUCTURE #2 - RESTON SECTION 43 STORMWATER MANAGEMENT FACILITY FX. CO. PLAN # 5733-PI-01-1
- STRUCTURE #6 - AUTUMNWOOD PARK STORMWATER MANAGEMENT FACILITY FX. CO. PLAN # 5733-PI-02-1

THE AREAS FOR WHICH STORMWATER MANAGEMENT IS TO BE PROVIDED CAN BE DIVIDED INTO TWO CATEGORIES: THOSE AREAS WHICH FLOW INTO THE UN-NAMED TRIBUTARY OF THE SUGARLAND RUN, AND THOSE AREAS WHICH DO NOT FLOW INTO THE TRIBUTARY. THE STORMWATER MANAGEMENT STUDY WAS PERFORMED AS FOLLOWS:

1) TWO YEAR AND TEN YEAR STORMS WERE SIMULATED IN THE TRIBUTARY WATERSHED WITH NO DEVELOPMENT. (USING THE S.C.S.' TR-20 MODEL)
2) TWO YEAR AND TEN YEAR STORMS WERE SIMULATED IN THE TRIBUTARY WATERSHED - FULLY DEVELOPED WITH 6 DETENTION PONDS.
3) THE AREAS WHICH DO NOT FLOW INTO THE TRIBUTARY WERE STUDIED IN ORDER TO DETERMINE THE AMOUNT BY WHICH THE DEVELOPMENT OF THESE AREAS WILL INCREASE THE 2 YR. AND 10 YR. FLOWS IN THE SUGARLAND RUN. IT IS ASSUMED THAT THE FLOWS IN THE TRIBUTARY (FROM STEP 2) SHOULD BE LESS THAN THE PREDEVELOPED FLOWS BY AN AMOUNT AT LEAST EQUAL TO THE FLOW INCREASES COMPUTED IN STEP # 3.
4) AS A CHECK, THE ENTIRE SUGARLAND RUN WATERSHED WAS RUN ON THE TR-20 MODEL BEFORE AND AFTER THE DEVELOPMENT OF RESTON IN ORDER TO ASSURE THAT THE DEVELOPMENT OF RESTON WILL NOT INCREASE FLOWS IN THE SUGARLAND RUN.

Application No: PCA 74-2-113-4 Staff: [signature]

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☑(PRC) ☐(CP)
SEE PROFFERS DATED: 2-10-12
Date of (BOS) (PC) Approval: 2-28-12
Sheet: 9 of 14
Comments: w/ DPA 74-2-113-8
PRC 74-2-113-2
[illegible]
1-17-12

INFORMATION SHOWN HEREON IS FROM ORIGINAL POND DESIGN PLAN #5734-PI-01-1

AECOM

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SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER
8

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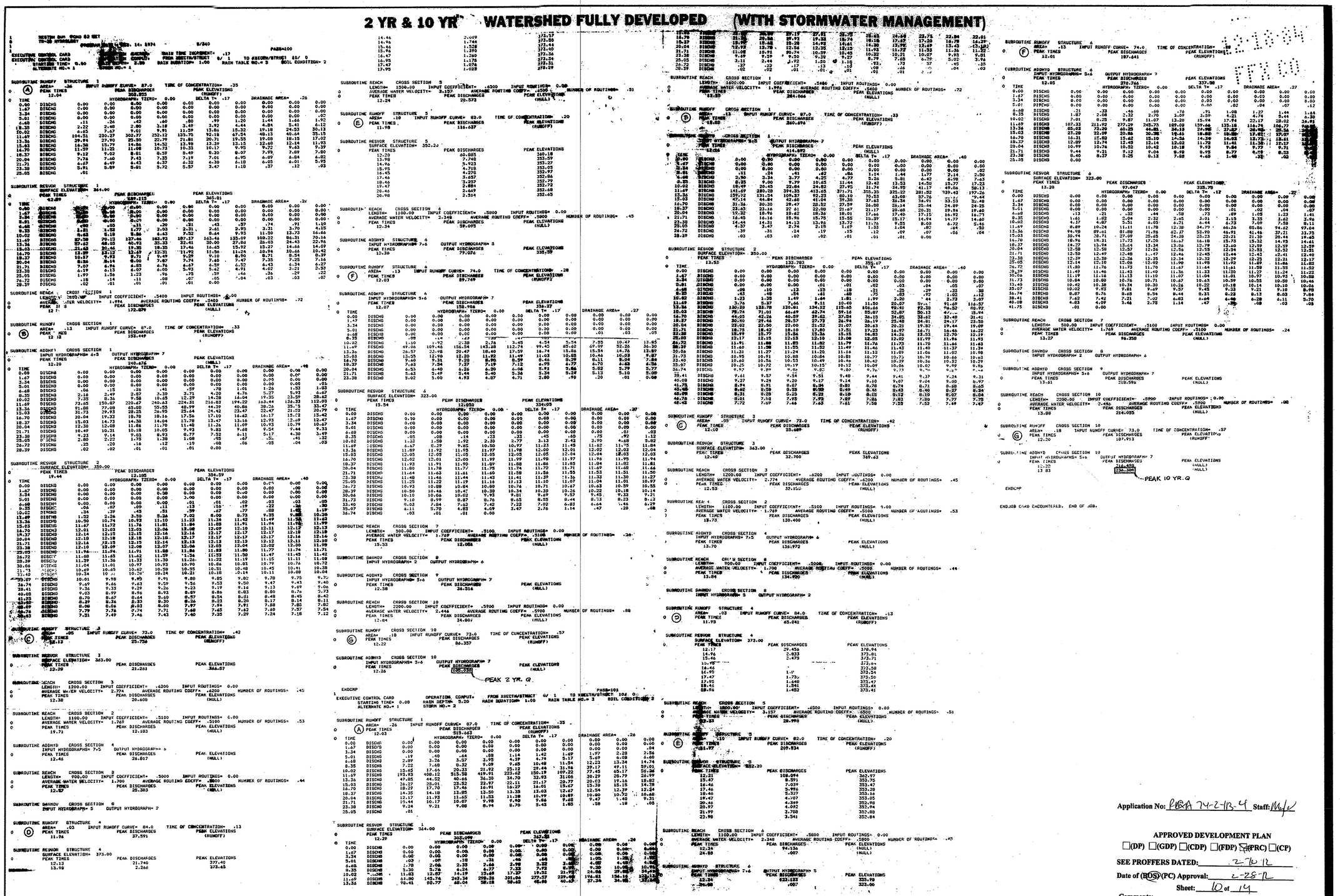
2 YR & 10 YR WATERSHED FULLY DEVELOPED (WITH STORMWATER MANAGEMENT)



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CIVIL ENGINEERING CONSULTANT

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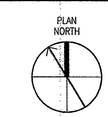
COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No. 035787
PROFESSIONAL ENGINEER

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
1	11/19/11	COUNTY COMMENTS

KEY PLAN



PROJECT NUMBER
60212377

SHEET TITLE
SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER
9

Application No: PRBA 74-2-113-4 Staff: [illegible]

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)

SEE PROFFERS DATED: 2-7-12

Date of (BOS)(PC) Approval: 2-28-12

Sheet: 10 of 14

Comments:
DPA 74-2-113-8
PRC 74-2-113-2
cmtnss 1-17-12

INFORMATION SHOWN HEREON IS FROM ORIGINAL POND DESIGN PLAN #5734-PI-01-1

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① STA. 1+98
EW-7 (13° SKEW 4) TWIN
INV.= 348.50 (66")
INV.= 350.00 (15" IN EAST)
INV.= 351.00 (15" IN WEST)

② STA. 3+60
MOD. JB-1 W/PRECAST
DI-7 ON TOP
TOP= 359.50
INV.= 351.56 (TWIN 66" IN)
INV.= 351.05 (TWIN 66" OUT)
INV.= 354.40 (27" IN)
INV.= 355.40 (15" IN)

③ STA. 5+46
MOD. JB-1 W/
"TYPE C" TOWER
TOP= 362.20
INV.= 353.20 (EX. 72" IN)
INV.= 353.14 (EX. 72" IN)
INV.= 352.60 (TWIN 66" OUT)
INV.= 355.50 (EX. 18")
INV.= 355.50 (NEW 30" IN)

④ STA. 0+45
ES-1
INV.= 356.95 (30" IN)

⑤ STA. 0+68
ES-1 (27")
INV.= 355.06 (27" OUT)

⑥ STA. 0+28
ES-1 (15")
INV.= 355.82

HYDRAULIC GRADE LINE COMPUTATIONS

STRUCT NO	Outlet Water Surface Elev	Do	Qo	Lo	S_{fo}	H_f	Vo	Ho	Qi	Vi	$V_i^2/2g$	$V_o^2/2g$	Hi	angle	H_Δ	Ht	1.3 Ht	0.5 Ht	FINAL Ht	Inlet Water Surface Elev	Rim/Top Elev
	CROWN																				
1	354.00	66"	534	162	[illegible]	[illegible]	[illegible]	0.10	504	[illegible]	1.74	1.86	0.17			0.27			1.42	355.48	359.50
2	357.06	66"	504	186	0.57	1.05	10.6	0.08	472	8.4	1.08	1.75	0.11			0.19			1.24	358.30	362.30

FROM FFx. Co. CHART A6-30 & A6-31, PFM

PIPE DESIGN

NOTE: ALL PIPE IS R.C.P. [illegible] UNLESS SHOWN OTHERWISE

STR. NO'S FROM	TO	AREA (ACRE) INC	TOTAL	C INC	AVG	T	I	Q cfs	PIPE SIZE	PIPE SLOPE	VEL. (F.P.S.) partial / full	PIPE CAP.	PIPE LENGTH	TIME IN PIPE	ACCUM. TIME	INVERTS UPPER	LOWER	"REMARKS"
EX. EW-1	EX. EW-2		169.2					303										SEE NOTE 1
			31.5		0.60	7'	6.7	169								354.40	353.14	SEE NOTE 2
			200.7					472	2-72"	1.04						354.4[illegible]	358.20	EX. TWIN 72"
																		EX. EW-2 IS REMOVED
4	3		5.0		0.85	5'	7.3	31	30"	1.00	9.0 / 6.3	42	74			355.95	355.50	& BUILD STR. 3
3	2	1.10		0.45														SEE NOTE 3
		5.00	206.8	0.35	0.80		6.7	504	2-66"	0.56	11.6 / 10.6	504	186			355.82	356.50	
6	2		0.70		0.85	5'	7.3	4.3	15"	1.50	6.5 / 3.5	8.1	28			355.82	355.40	
5	2		4.59		0.90	5'	7.3	28.4	27"	1.00	8.7 / 7.1	38.0	108			355.08	354.40	
2	1	4.59		0.85														
		0.70	212.08	0.85	0.85		6.7	534	2-66"	1.57	18.5 / 11.4	840	162			351.00	348.50	

NOTE: 1. FLOW FROM RESTON-SUGARLAND RUN REGIONAL" COUNTY NO. 5734-PI-01 FROM POND #1
2. FLOW FROM TOWN CENTER PARKWAY" PHASE I COUNTY NO. 4417-PI-01
3. AREA FROM FFx Co. JOB [illegible]-PI-01 BENNINGTON WOODS ROAD

ROUTE 100 YEAR THRU POND #1

```
1        ROUTE 100 YR THRU POND #1 & #2
0        TR-20 HYDROLOGY
3                 PROGRAM DATE - FEB. 14, 1974              S/360
                                                                        PASS=100
EXECUTIVE CONTROL CARD    OPERATION  INCREM,   RAIN TIME INCREMENT=  .17
EXECUTIVE CONTROL CARD    OPERATION  COMPUT,   FROM XSECTN/STRUCT  0/ 1    TO XSECTN/STRUCT  0/ 2
      STARTING TIME= 0.00  RAIN DEPTH= 7.30    RAIN DURATION= 1.00   RAIN TABLE NO.= 3   SOIL CONDITION= 2
      ALTERNATE NO.= 1     STORM NO.= 1

SUBROUTINE RUNOFF   STRUCTURE  1
      AREA=   .26    INPUT RUNOFF CURVE= 87.0    TIME OF CONCENTRATION=  .35
0     PEAK TIMES              PEAK DISCHARGES            PEAK ELEVATIONS
        12.02                    778.927                    (RUNOFF)
0  TIME                HYDROGRAPH, TZERO=  0.00              DELTA T=  .17      DRAINAGE AREA=   .26
    0.00  DISCHG    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    1.67  DISCHG    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    3.34  DISCHG    0.00    0.00     .06     .38     .61     .97    1.35    1.72    2.12    2.57
    5.01  DISCHG    2.97    3.38    3.82    4.21    4.66    5.16    5.59    6.07    6.62    7.06
    6.68  DISCHG    7.42    8.27    8.77    9.41   10.16   10.71   11.43   12.36   12.91   13.76
    8.35  DISCHG   14.79   15.50   16.54   17.83   18.57   20.03   21.78   22.83   24.62   26.[illegible]
   10.02  DISCHG   28.28   31.56   33.94   38.36   43.31   50.48   54.23   65.72   81.49   9[illegible]
   11.69  DISCHG  308.67  631.19  778.92  476.22  331.37  221.15  160.12  113.21   95.09   82.0[illegible]
   13.36  DISCHG   69.48   64.79   59.13   52.77   50.41   47.83   45.09   43.95   41.[illegible]   39.[illegible]
   15.03  DISCHG   38.08   36.24   34.08   33.26   32.02   30.64   30.06   26.98   [illegible]   [illegible]
   16.70  DISCHG   26.45   25.59   25.24   24.44   23.51   23.14   22.64   22.10   [illegible]   21.34
   18.37  DISCHG   20.72   20.47   20.00   19.48   19.26   18.80   18.29   18.0[illegible]   17.[illegible]   [illegible]
   20.04  DISCHG   17.55   17.20   16.80   16.63   16.26   15.84   15.69   15.56   15.45   1[illegible]
   21.71  DISCHG   15.04   14.65   14.50   14.37   14.26   14.21   13.93   13.64   13.53   1[illegible]
   23.38  DISCHG   13.30   13.25   13.07   12.87   12.52    7.81    2.66     .64     [illegible]
   25.05  DISCHG     .01

SUBROUTINE RESVOR   STRUCTURE   1
      SURFACE ELEVATION=  364.00
0     PEAK TIMES              PEAK DISCHARGES            PEAK ELEVATIONS
        12.38                    349.014                    368.95
0  TIME                HYDROGRAPH, TZERO=  0.00              DELTA T=  .17      DRAINAGE AREA=   [illegible]
    0.00  DISCHG    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    [illegible]   [illegible]
    1.67  DISCHG    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    [illegible]   [illegible]
    3.34  DISCHG    0.00    0.00     .01     .04     .13     .27     .46     .69    [illegible]   [illegible]
    5.01  DISCHG    1.38    1.93    2.29    2.66    3.04    3.45    3.86    4.29    4.[illegible]   [illegible]
    6.68  DISCHG    5.65    6.14    6.65    7.18    7.74    8.32    8.91    9.5[illegible]  10.[illegible]  [illegible]
    8.35  DISCHG   11.61   12.37   13.16   14.03   14.94   15.89   16.97   18.[illegible]  19.[illegible]  [illegible]
   10.02  DISCHG   22.20   23.84   25.79   28.40   31.11   34.33   40.22   46.[illegible]  55.[illegible]  [illegible]
   11.69  DISCHG  112.98  228.30  320.88  342.79  348.91  345.64  339.02  325.64  [illegible]  [illegible]
   13.36  DISCHG  211.42  164.95  129.95  104.21   85.30   73.84   64.71   57.97   [illegible]  [illegible]
   15.03  DISCHG   45.38   42.64   40.15   37.99   36.20   34.73   33.78   32.8[illegible]  [illegible]  [illegible]
   16.70  DISCHG   30.06   29.19   28.37   27.61   26.83   26.07   25.39   24.74   [illegible]  [illegible]
   18.37  DISCHG   23.05   22.52   22.03   21.53   21.07   20.63   20.16   19.75   [illegible]  [illegible]
   20.04  DISCHG   18.72   18.43   18.12   17.82   17.52   17.20   16.89   16.6[illegible]  [illegible]  [illegible]
   21.71  DISCHG   15.97   15.73   15.48   15.25   15.05   14.87   14.70   14.5[illegible]  [illegible]  [illegible]
   23.38  DISCHG   13.96   13.81   13.67   13.52   13.34   12.66   11.06    9.0[illegible]  [illegible]  [illegible]
   25.05  DISCHG    4.48    3.52    2.76    2.16    1.70    1.33    1.04     .0[illegible]   [illegible]  [illegible]
   26.72  DISCHG     .40     .31     .24     .19     .15     .12     .09     .0[illegible]   [illegible]  [illegible]
   28.39  DISCHG     .03     .03     .02     .02     .01     .01     .01     .0[illegible]   [illegible]  [illegible]
```

ROUTE 2.5x100 YR

```
2        ROUTE  2.5*100 YR THRU POND #1
0        TR-20 HYDROLOGY
1                 PROGRAM DATE - FEB. 14, 1974              S/360
1                                                                       PASS=100

  DISCHARGE HYDROGRAPH, HYDROGRAPH LOCATION 2

  STARTING TIME=  9.00      TIME INCREMENT=   .17     DRAINAGE AREA=    .26     BASE FLOW=   0.00

8 READHD      48.0000     30.0000     55.0000     57.0000     63.0000
8 READHD      48.0000     70.0000     80.0000     90.0000     96.0000
8 READHD     109.0000    126.0000    135.0000    165.0000    204.0000
8 READHD     241.0000    770.0000   1578.0000   1947.0000   1565.0000
8 READHD     827.0000    552.0000    400.0000    282.0000    237.0000
8 READHD     203.0000    175.0000    150.0000    132.0000    126.0000
8 READHD     120.0000    113.0000    110.0000    102.0000     98.0000
8 READHD      95.0000     90.0000     85.0000     83.0000     80.0000
9 ENDTBL
EXECUTIVE CONTROL CARD        OPERATION  INCREM,     MAIN TIME INCREMENT=   .17
EXECUTIVE CONTROL CARD        OPERATION  COMPUT,     FROM XSECTN STRUCT   0/ 1     TO XSECTN/STRUCT   0  1
      STARTING TIME=  9.00    RAIN DEPTH= 18.30      RAIN DURATION=  1.00     RAIN TABLE NO.= 3     SOIL CONDITION= 2
      ALTERNATE NO.= 1        STORM NO.= 2

SUBROUTINE RESVOR   STRUCTURE   1
        SURFACE ELEVATION=  364.00
0       PEAK TIMES                PEAK DISCHARGES               PEAK ELEVATIONS
          12.19                      1541.419                      372.26
0  TIME                      HYDROGRAPH, TZERO=  9.00          DELTA T=  .17        DRAINAGE AREA=    .26
    9.00   DISCHG      0.00    10.56    19.60    27.44    34.46    44.52    52.6[illegible]    66.12    [illegible]    [illegible]
   10.67   DISCHG     85.25    96.13   108.08   122.[illegible]   144.1[illegible]   176.2[illegible]   267.6[illegible]   35[illegible]   1193.[illegible]   153[illegible]
   12.34   DISCHG   1332.36   910.54   550.41   370.7[illegible]   36[illegible]   357.9[illegible]   347.[illegible]   3[illegible]   31[illegible]   31[illegible]
   14.01   DISCHG    280.41   238.19   201.69   176.7[illegible]   14[illegible]   129.[illegible]   116.[illegible]   [illegible]   [illegible]   [illegible]
   15.68   DISCHG     75.15    50.09    33.96    26.[illegible]   2[illegible]   16.39   12.[illegible]   [illegible]   [illegible]   6.21
   17.35   DISCHG      4.87     3.82     3.00     2.35     1.85     1.45     1.14     .8[illegible]     [illegible]     .[illegible]
   19.02   DISCHG       .43      .34      .26      .2[illegible]      .16      .12      .1[illegible]     .0[illegible]     .0[illegible]     .0[illegible]
   20.69   DISCHG       .04      .03      .02      .02      .01      .01      .01      .01      .01     0.00

   ENDCMP

ENDJOB CARD ENCOUNTERED.  END OF JOB.
```

NOTES:

1. STAGE - STORAGE CURVE ABOVE INCLUDES THE EFFECT OF THE FUTURE PRIVATE ROAD AS SHOWN ON THE GRADING PLAN.
2. STAGE - DISCHARGE RELATIONSHIP FOR PRINCIPAL SPILLWAY COMPUTED AS FOLLOWS:
   a. WHERE RISER CONTROLS - USE WEIR FORMULA $Q=CLH^{3/2}$
      C=3.1 , L=EFFECTIVE PERIMETER , H=HEAD
      (EFFECTIVE PERIMETER = TOTAL PERIMETER MINUS ZONE OF INTERFERENCE AT EACH CORNER)
   b. WHERE CONDUIT CONTROLS - USE CULVERT CHARTS FOR INLET CONTROL OR OUTLET CONTROL AS APPLICABLE. (THE EFFECT OF THE TAILWATER FROM BARON CAMERON AVENUE IS CONSIDERED.)
3. STAGE - DISCHARGE RELATIONSHIP FOR EMERGENCY SPILLWAY IS COMPUTED USING THE CRITERIA OF THE SCS FOR VEGETATED SPILLWAYS. (THIS IS MORE CONSERVATIVE THAN USING THE WEIR FORMULA.)

STAGE	RISER Q	CONDUIT Q	EM. SPILLWAY Q	TOTAL Q
64.0	0			0
64.5	35			35
65.0	93			93
65.5	154			154
66.0	210			210
66.5	257			257
67.0	295			295
67.5		318		318
68.0		330		330
68.5		340		340
69.0		350		350
69.5		360	10	370
70.0		360*	60	420
70.5		320*	380	700
71.0		280*	700	980
71.5		290*	960	1250
72.0		300*	1150	1450

* CONDUIT CONTROLLED BY TAILWATER

INFORMATION SHOWN HEREON IS FROM ORIGINAL POND DESIGN PLAN #5734-PI-01-1

Application No: PCA 74-2-113-4 Staff: MJW

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)
SEE PROFFERS DATED: 2-20-12
Date of (BOS) (PC) Approval: 2-28-12
Sheet: 11 of 14
Comments: DPA 74-2-113-3
PRC 74-2-113-2
conds
1-17-12

AECOM

PROJECT

RESTON POLICE STATION & GOV'T CENTER
12000 BOWMAN TOWNE DRIVE
RESTON, VA 20190

CLIENT

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No 035787
12/5/11
PROFESSIONAL ENGINEER

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
1	11/19/11	COUNTY COMMENTS

KEY PLAN

PLAN NORTH

PROJECT NUMBER
60212377

SHEET TITLE
SWM MAPS, COMPUTATIONS & NARRATIVES

SHEET NUMBER
10

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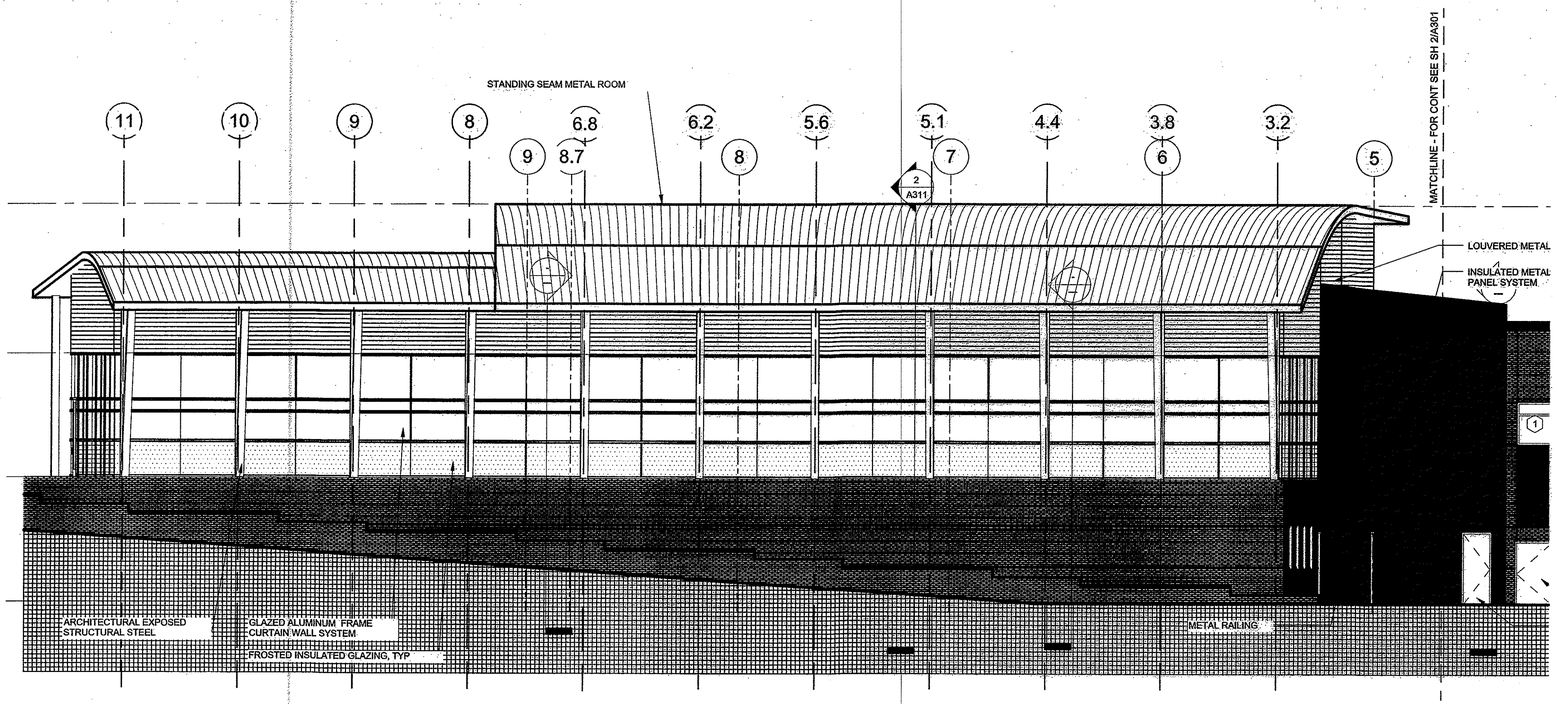
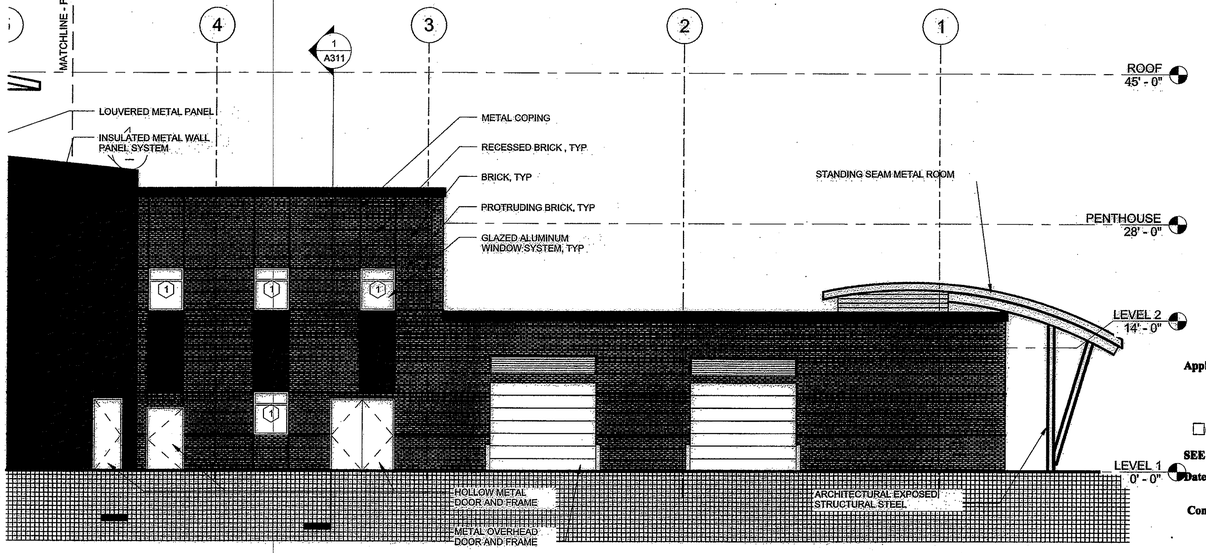


1 PARTIAL NORTH ELEVATION

A-301 REF. A101, A102 SCALE: 1/8" = 1'-0"



2 PARTIAL NORTH ELEVATION

A-301 REF. A101, A102 SCALE: 1/8" = 1'-0"

Application No: RPA 74-2-113-4 Staff:

APPROVED DEVELOPMENT PLAN

☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)

SEE PROFFERS DATED: 2-6-12

Date of (BOS)(PC) Approval: 2-28-12

Sheet: 10 of 19

Comments: 4 DPA 74-2-113-8
PRC 74-2-113-2
conditions
1-17-12

GRAPHIC SCALE:

1/8" = 1' 4 0 4 8 12 16 20

SCALE FEET

AECOM

PROJECT

RESTON POLICE STATION & GOV'T CENTER

12000 BOWMAN TOWNE DRIVE
RESTON, VA 20190

CLIENT

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ARCHITECT

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No. 035787
PROFESSIONAL ENGINEER

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REVISIONS

NO.	DATE	DESCRIPTION

KEY PLAN

PLAN NORTH

PROJECT NUMBER

60212377

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

11

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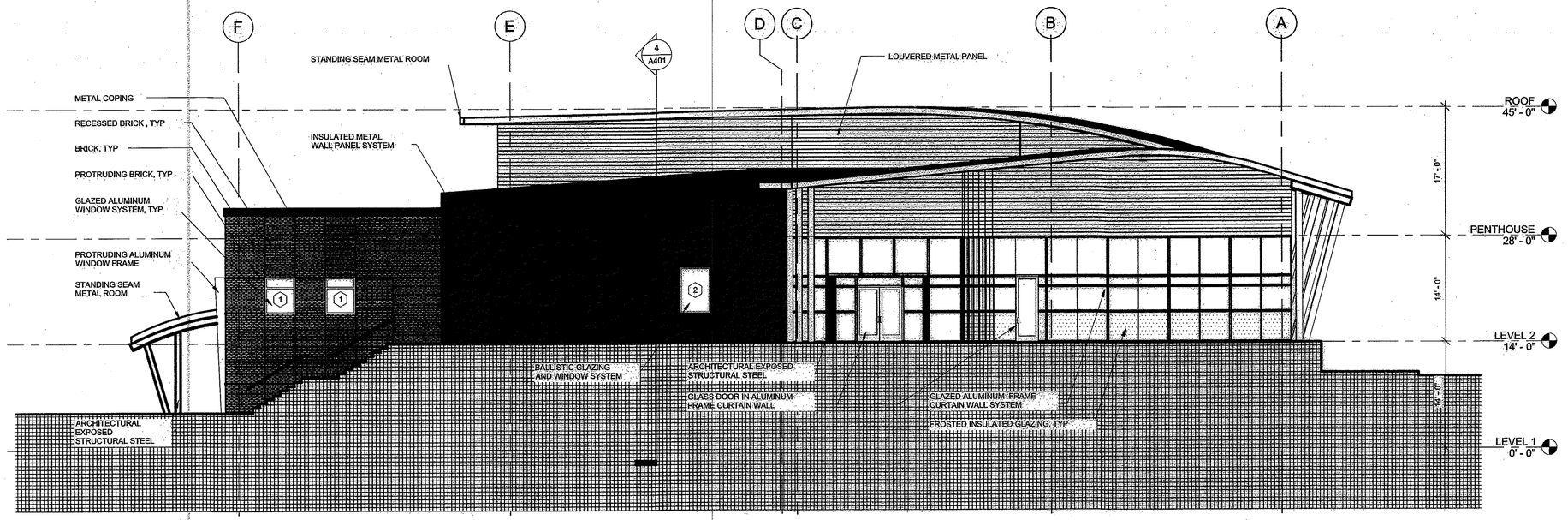
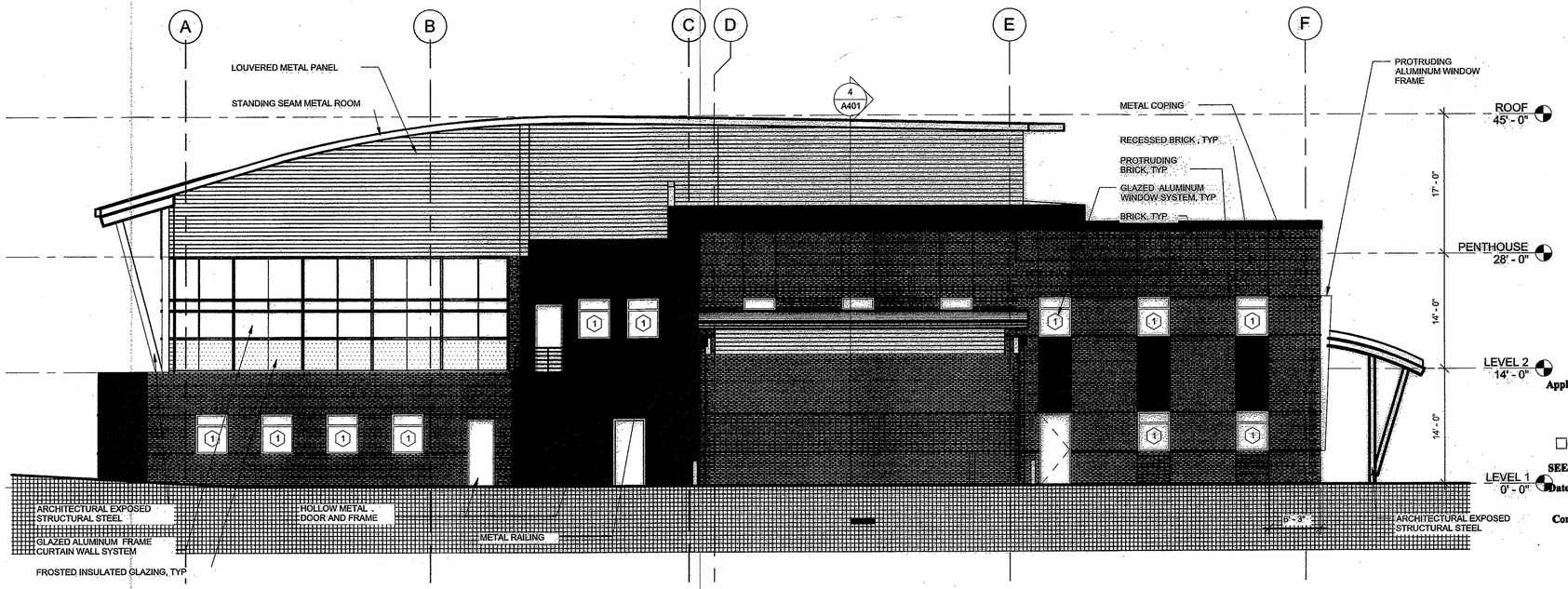


1 EAST ELEVATION

A-302 REF. A101, A102 SCALE: 1/8" = 1'-0"



2 WEST ELEVATION

A-302 REF. A101, A102 SCALE: 1/8" = 1'-0"

Application No: PUA 74-2-113-4 Staff: [illegible]

APPROVED DEVELOPMENT PLAN

☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)

SEE PROFFERS DATED: 2-10-12

Date of (BOS) (PC) Approval: 2-28-12

Sheet: 13 of 14

Comments: w/ DPA 74-2-113-8 PRC 74-2-113-2 cond. hs 1-17-12

GRAPHIC SCALE:

1/8" = 1' 4 0 4 8 12 16 20 SCALE FEET

AECOM

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JOHN P. GASTON
No. 035787
12/10/11
PROFESSIONAL ENGINEER

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
-	-	-

KEY PLAN

PLAN NORTH

PROJECT NUMBER

60212377

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

12

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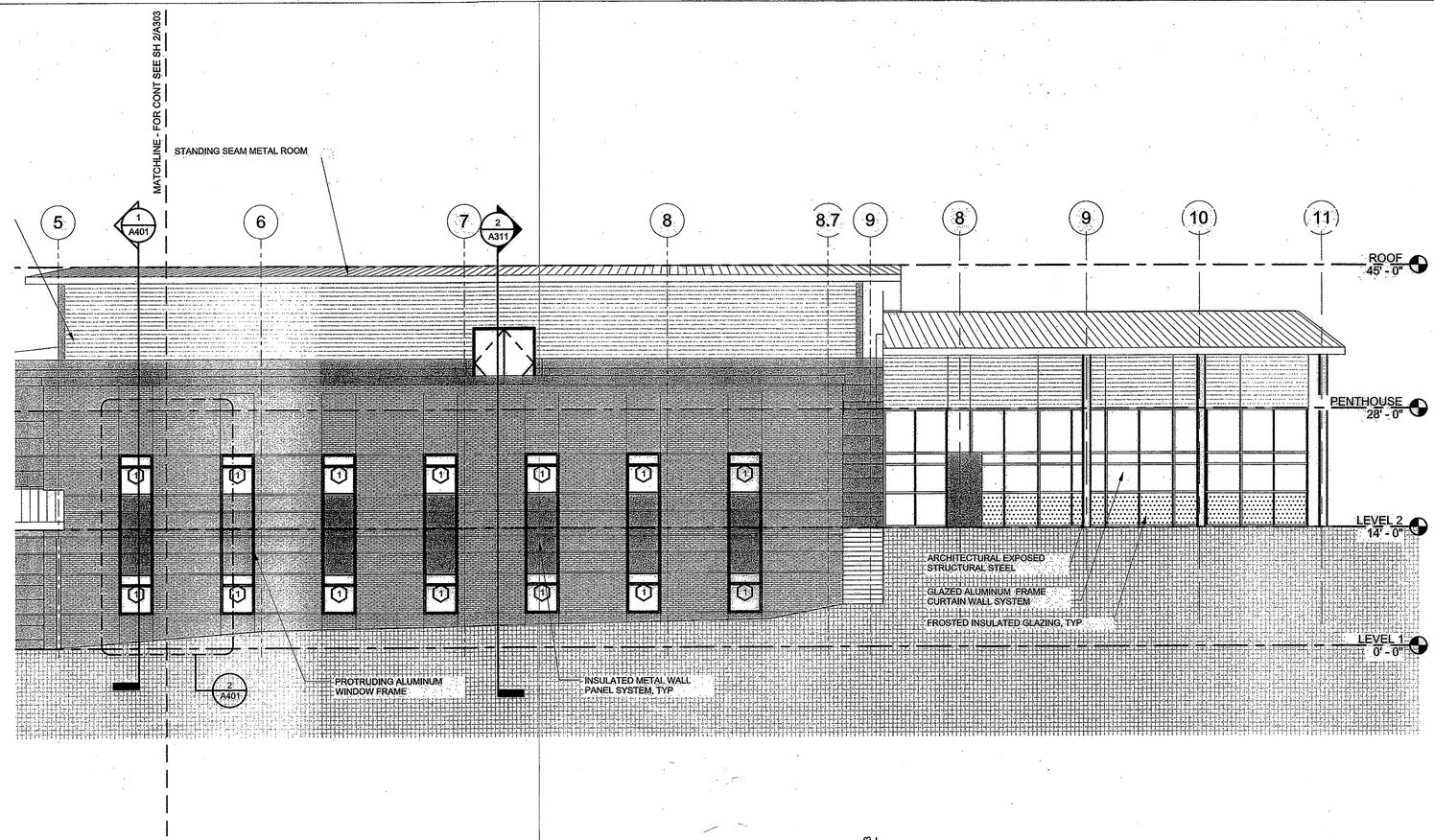
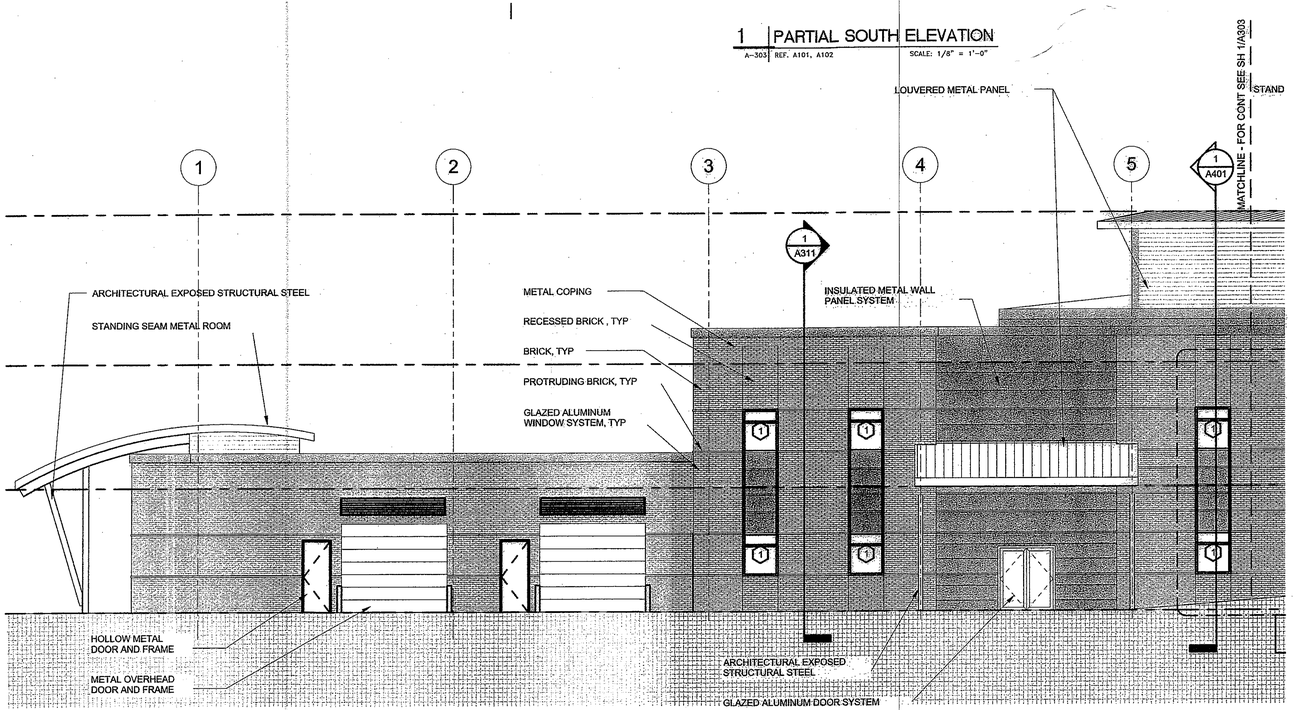


1 PARTIAL SOUTH ELEVATION
A-303 REF. A101, A102 SCALE: 1/8" = 1'-0"



2 PARTIAL SOUTH ELEVATION
A-303 REF. A101, A102 SCALE: 1/8" = 1'-0"

Application No: RPA 74-2-113-4 Staff: Mylk

APPROVED DEVELOPMENT PLAN
☐(DP) ☐(GDP) ☐(CDP) ☐(FDP) ☒(PRC) ☐(CP)
SEE PROFFERS DATED: 2-10-14
Date of ~~(BOS)~~ (PC) Approval: 2-28-12
Sheet: 14 of 14
Comments: RPA 74-2-113-8
PRC 74-2-113-2
conf. to 1-17-12

GRAPHIC SCALE:
1/8" = 1' 4 0 4 8 12 16 20
SCALE FEET

AECOM

PROJECT

RESTON POLICE STATION & GOV'T CENTER

12000 BOWMAN TOWNE DRIVE
RESTON, VA 20190

CLIENT

DPWES

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COMMONWEALTH OF VIRGINIA
JOHN P. GASTON
No. 035787
PROFESSIONAL ENGINEER

NOT CERTIFIED AS TO DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
-	-	-

KEY PLAN

PLAN NORTH

PROJECT NUMBER
60212377

SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER
13

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