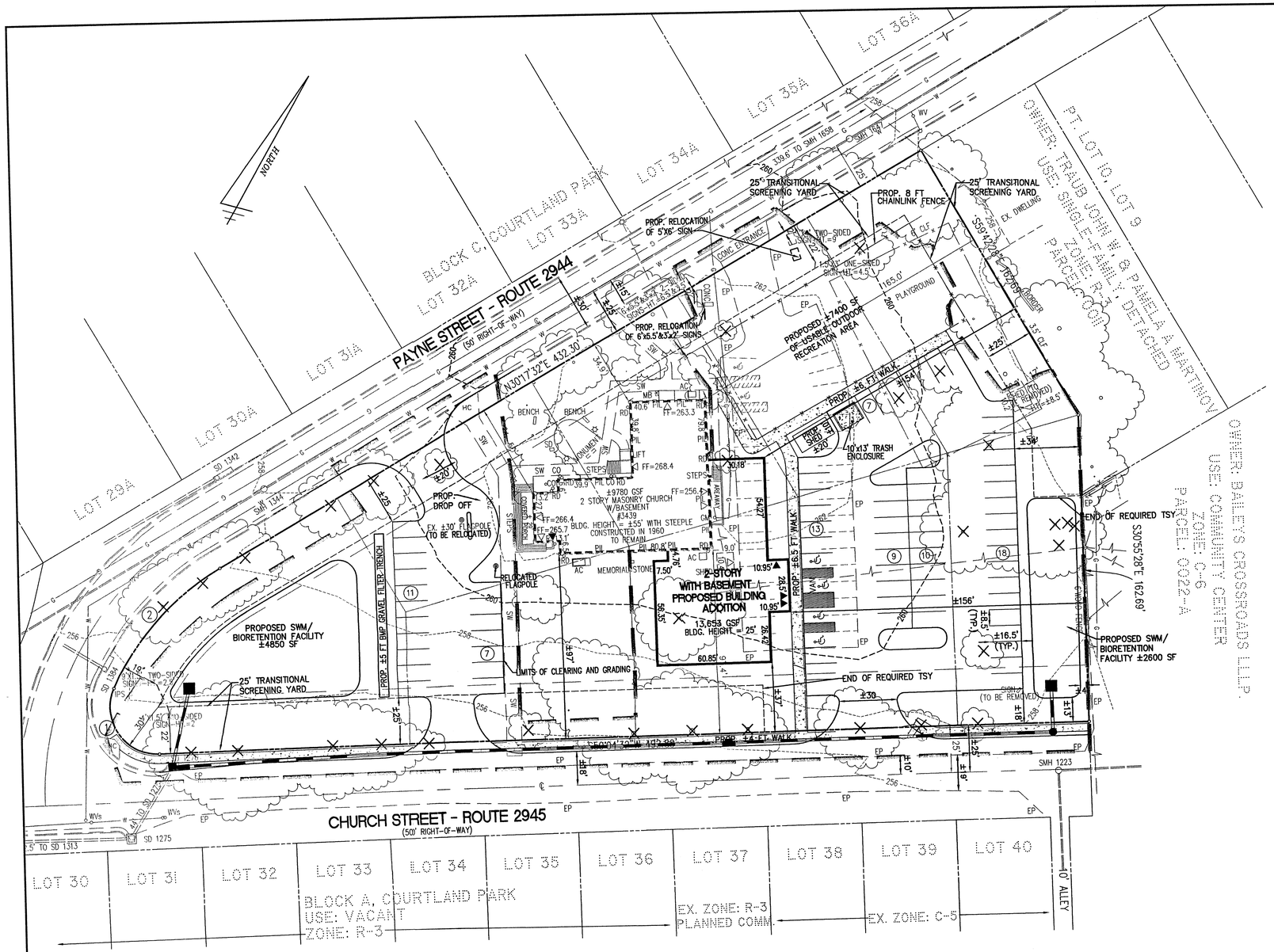



## SHEET INDEX:

1. SPECIAL PERMIT PLAN
2. PRELIMINARY STORMWATER MANAGEMENT PLAN
3. PRELIMINARY STORMWATER MANAGEMENT PLAN
4. EXISTING VEGETATION MAP
5. CONCEPTUAL LANDSCAPE PLAN

## PARKING TABULATION:

CHURCH: 236 SEATS* @ 1 SP/4 SEATS
REQUIRED = 236/4 = 59 SPACES
NURSERY SCHOOL: 50 CHILDREN @ 0.19 SP/CHILD
REQUIRED = 50*0.19 = 10 SPACES

TOTAL REQUIRED = 59+10 = 69 SPACES
**PROVIDED = 75 (INCLUDING 4 HC)**

* INCLUDES PROPOSED 80 SEAT BALCONY

## ZONING TABULATION:

**R-3, RESIDENTIAL DISTRICT: THREE DWELLING UNITS/ACRE**
**HIGHWAY CORRIDOR OVERLAY DISTRICT**

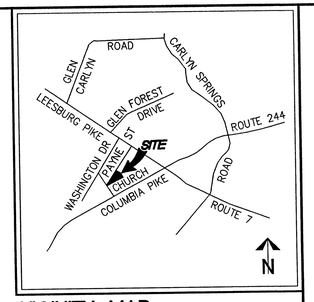
| | REQUIRED | PROVIDED |
|---|---|---|
| MIN. LOT AREA | 10,500 SF | ±98,755 SF |
| MIN. LOT WIDTH | 105 FT | 517 FT |
| MAX. BLDG. HT. | 60 FT | ±35 |
| MIN. YARD REQUIREMENTS | | |
| FRONT | 40' ABP, 30 FT | 34.9 FT (EXISTING), ±37 FT |
| SIDE | 35' ABP, 10 FT | ±154 FT, ±156 FT |
| REAR | 35' ABP, 25 FT | N/A |
| MAX. FAR | 0.25 | 0.24 |
| OPEN SPACE | N/A | ±55,000 SF |

## NOTES:

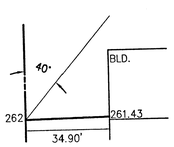
1. THE PROPERTY SHOWN ON THIS PLAT IS DELINEATED ON FAIRFAX COUNTY TAX ASSESSMENT MAP NUMBER 061-2-17-B-0012 AND IS CURRENTLY ZONED R-3. TOTAL COMPUTED AREA OF THE PROPERTY, BASED ON A CURRENT FIELD SURVEY, IS 98,755 SQUARE FEET OR 2.2671 ACRES.
2. THIS SPECIAL PERMIT APPLICATION IS FOR AN ADDITION TO A GROUP 3 INSTITUTIONAL USE AND INCREASE ENROLLMENT TO 99 CHILDREN AT THE NURSERY SCHOOL.
3. OWNER/APPLICANT: ST. PAUL'S EPISCOPAL CHURCH
   3439 PAYNE STREET
   FALLS CHURCH, VA 22041
4. PROPOSED BUILDING ADDITION FOR FELLOWSHIP/ADMINISTRATION/RELIGIOUS EDUCATION CLASSES. EXISTING USES INCLUDE A CHURCH WITH A NURSERY SCHOOL/CHILD CARE CENTER.
5. THIS PLAT AND THE SURVEY ON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS WHICH ARE OBSERVABLE AND CAN BE MEASURED USING NORMAL SURVEYING METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS, AND EXISTING RECORDS.
6. BASED ON CURRENT AVAILABLE MAPS AND RECORDS, THERE IS NO RPA OR EQC ON THIS PROPERTY.
7. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 5155250093D. DATED MARCH 1990, THIS PROPERTY IS SHOWN AS ZONE X, AREAS DETERMINED TO BE OUTSIDE OF THE 500-YEAR FLOOD PLAIN.
8. TOPOGRAPHIC INFORMATION IS FIROM FIELD SURVEY BY THIS FIRM. CONTOUR INTERVAL IS TWO FEET.
9. THIS PLAT DOES NOT NECESSARILY SHOW ALL EASEMENTS, COVENANTS, AND RESTRICTIONS THAT MAY APPLY TO THE SUBJECT PROPERTY.
10. THERE ARE NO PROPOSED TRAILS ON THIS SITE.
11. ACCORDING TO FAIRFAX COUNTY RECORDS, THERE ARE NO GRAVES OR BURIAL SITES ON THIS PROPERTY.
12. THIS SITE IS SERVED BY PUBLIC WATER AND SANITARY SEWER.
13. THERE ARE NO KNOWN UTILITY EASEMENTS ON THE PROPERTY HAVING A WIDTH OF 25 FEET OR MORE.
14. UNLESS NOTED OTHERWISE, ALL SIGNS ARE TO REMAIN. CONSTRUCTION DATES OF SIGNS ARE UNKNOWN.
15. THE ACTUAL SIZING AND LOCATION OF ALL SWM/BMP FACILITIES IS SUBJECT TO DPWES APPROVAL AS PART OF THE FINAL SITE PLAN PROCESS; THE APPLICANT RESERVES THE RIGHT TO MAKE ADJUSTMENTS IN THE TYPE AND LOCATION OF THESE FACILITIES IN ORDER TO SATISFY THE PFM REQUIREMENTS.
16. THE LANDSCAPE PLAN WILL INCORPORATE PLANT MATERIAL IN AND AROUND THE BIORETENTION FACILITY. SPECIES SELECTED ARE TAKEN FROM THE RECOMMENDATIONS CONTAINED IN THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

## WAIVERS/MODIFICATIONS REQUESTED:

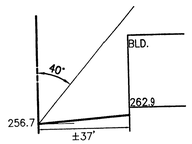
1. MODIFY TRANSITIONAL SCREENING REQUIREMENTS TO USE EXISTING AND PROPOSED PLANTINGS ON ALL SIDES OF SITE WHERE APPLICABLE.
2. MODIFY TRANSITIONAL SCREENING REQUIREMENTS FOR THE PROPOSED PARKING AREAS. THE EASTERN AND WESTERN PARKING LOTS, RESPECTIVELY, HAVE 18 FT AND 20 FT WIDE TRANSITIONAL SCREENING YARDS AT THE NARROWEST POINTS.
3. WAIVE ALL BARRIER REQUIREMENTS.



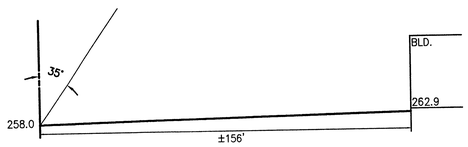

VICINITY MAP SCALE: 1"=2000'



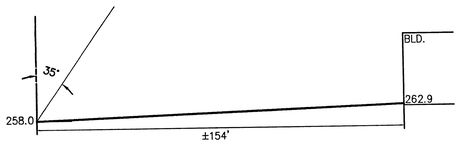

BULK PLANE DETAIL - PAYNE STREET
1" = 30'




BULK PLANE DETAIL - CHURCH STREET
1" = 30'




BULK PLANE DETAIL - PARCEL 22-A
1" = 30'




BULK PLANE DETAIL - PARCEL 11
1" = 30'

GRAPHIC SCALE
0 15 30
( IN FEET )
1 inch = 30 ft.

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | TANGENT | CHORD | CHORD BEARING |
|---|---|---|---|---|---|---|
| 1 | 25.00' | 50.54' | 115°50'23" | 39.88' | 42.37' | N63°00'17"W |
| 2 | 139.00' | 85.82' | 35°22'37" | 44.33' | 84.47' | N12°36'13"E |

Application No. SPA 98-M-036-02
Chairman, Board of Zoning Appeals

RECEIVED
Department of Planning & Zoning
MAR 30 2005
Zoning Evaluation Division

# SPECIAL PERMIT PLAT
# ST. PAUL'S EPISCOPAL CHURCH
MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA


WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 FAX (703) 533-9301 WWW.WLPINC.COM


DATE: 06/04/04 REV. 10/8/04 REV. 12/27/04 REV. 1/17/05
REV. 08/10/04 REV. 12/10/04 REV. 3/21/05 REV. 3/29/05
SCALE: 1" = 30' DRAWN: MEF

COMMONWEALTH OF VIRGINIA
CHARLES F. DUNLAP
No. 1309B
6/4/04
LAND SURVEYOR

REVISION APPROVED BY

| NO. | DESCRIPTION | DATE | REV. BY | APPROVED | DATE |
|---|---|---|---|---|---|
| | | | | | |

SHEET: 1 OF 5

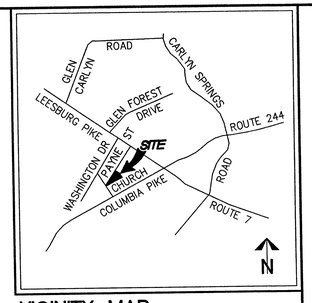
File No. FE-15 Tax Map No. 61-2 Job No. 04-012 Cadd Dwg. File: 04012SP3 Xref:

## STORMWATER MANAGEMENT/BMP NARRATIVE:

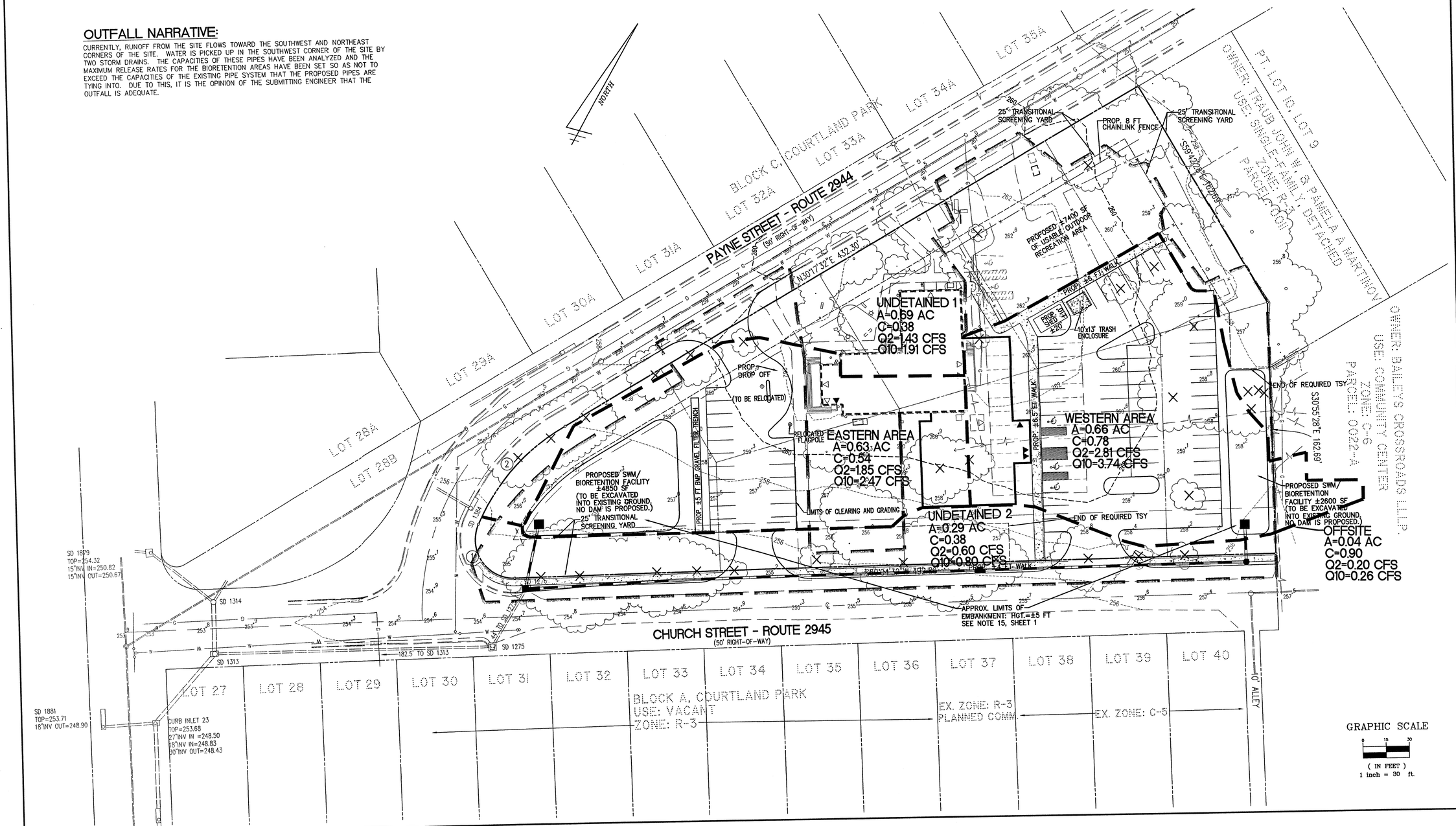
THE SITE CONSISTS OF A 2.27 AC PARCEL. BMP COVERAGE IS PROVIDED FOR THE ULTIMATE DEVELOPMENT WITH THIS PLAN. THE PURPOSE OF THIS PROJECT IS TO ADD AN ADDITION TO AN EXISTING CHURCH. ±0.63 DISTURBED ACRES ON THE WESTERN SIDE OF THE SITE ARE DIRECTED TOWARDS THE ±4850 SF BIORETENTION AREA. BMP COVERAGE AS WELL AS STORMWATER MANAGEMENT IS PROVIDED FOR THE ENTIRE ±0.63 ACRES DRAINING TO THE WESTERN BIORETENTION AREA. ±0.66 DISTURBED ACRES ON THE EASTERN SIDE OF THE SITE ARE DIRECTED TOWARDS THE ±2600 SF BIORETENTION AREA. BMP COVERAGE AS WELL AS STORMWATER MANAGEMENT IS PROVIDED FOR THE ENTIRE ±0.66 ACRES DRAINING TO THE EASTERN BIORETENTION AREA. THIS SITE IS LOCATED IN THE CHESAPEAKE BAY PRESERVATION AREA AND THEREFORE REQUIRES THAT THE PHOSPHORUS LOAD AFTER DEVELOPMENT BE REDUCED BY 40%. THE PHOSPHORUS LOAD WILL BE REDUCED BY ±45.3% FOR SITE BY THE TWO BIORETENTION AREAS. AN ADDITIONAL WATER QUALITY MEASURE WILL BE PROVIDED WITH THE GRAVEL FILTER TRENCH IN THE WESTERN DRAINAGE AREA. ALL BMP/SWM FACILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED. THE ACTUAL SIZING AND LOCATION OF ALL FACILITIES IS SUBJECT TO DPWES APPROVAL AS PART OF THE FINAL SITE PLAN PROCESS. THE APPLICANT RESERVES THE RIGHT TO MAKE ADJUSTMENTS IN THE TYPE AND LOCATION OF THESE FACILITIES IN ORDER TO SATISFY THE PFM REQUIREMENTS.

## OUTFALL NARRATIVE:

CURRENTLY, RUNOFF FROM THE SITE FLOWS TOWARD THE SOUTHWEST AND NORTHEAST CORNERS OF THE SITE. WATER IS PICKED UP IN THE SOUTHWEST CORNER OF THE SITE BY TWO STORM DRAINS. THE CAPACITIES OF THESE PIPES HAVE BEEN ANALYZED AND THE MAXIMUM RELEASE RATES FOR THE BIORETENTION AREAS HAVE BEEN SET SO AS NOT TO EXCEED THE CAPACITIES OF THE EXISTING PIPE SYSTEM THAT THE PROPOSED PIPES ARE TYING INTO. DUE TO THIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE OUTFALL IS ADEQUATE.




VICINITY MAP SCALE: 1"=2000'




**WALTER L. PHILLIPS**
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE, FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 FAX (703) 533-9301 WWW.WLPINC.COM

SCALE: 1" = 30'
DATE: 08/04/04 REV. 10/8/04 REV. 12/27/04 REV. 1/17/05
REV. 08/10/04 REV. 12/10/04 REV. 3/21/05 REV. 3/29/05
DRAWN: MEF

COMMONWEALTH OF VIRGINIA
CHARLES F. DUNLAP
No. 13098
6/4/04
LAND SURVEYOR

| NO. | DESCRIPTION | DATE | REV. BY | APPROVED |
|---|---|---|---|---|
| | | | | |

REVISION APPROVED BY

# PRELIMINARY STORMWATER MANAGEMENT PLAN

# ST. PAUL'S EPISCOPAL CHURCH

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA



File No. FE-15 Tax Map No. 61-2 Job No. 04-012 Cadd Dwg. File: 04012SP3 Xref:

# STORMWATER MANAGEMENT SUMMARY (ENTIRE SITE)

## I. TOTAL SITE PRE-DEVELOPMENT (EXISTING CONDITIONS)

A. CONTRIBUTING AREAS:

1.82 AC. @ 0.30 (GREEN AREA ON-SITE)
0.45 AC. @ 0.90 (ROOFS, DRIVEWAYS, SIDEWALKS, ETC.)
2.27 AC.

B. WEIGHTED 'C':

$$\frac{(1.82)(0.30)+(0.45)(0.90)}{2.27} = 0.42$$

C. TIME OF CONCENTRATION = 5 MIN.

D. RUNOFF:

Q2 = (0.42)(5.45)(2.27) = 5.20 CFS
Q10 = (0.42)(7.27)(2.27) = 6.93 CFS
Q100 = (0.42)(9.84)(2.27) = 9.38 CFS

## II. TOTAL SITE POST-DEVELOPMENT (PROPOSED CONDITIONS)

A. CONTRIBUTING AREAS:

1.36 AC. @ 0.30 (GREEN AREA ON-SITE)
0.91 AC. @ 0.90 (ROOFS, DRIVEWAYS, SIDEWALKS, ETC.)
2.27 AC.

B. WEIGHTED 'C':

$$\frac{(1.36)(0.30)+(0.91)(0.90)}{2.27} = 0.54$$

C. RUNOFF:

Q2 = (0.54)(5.45)(2.27) = 6.68 CFS
Q10 = (0.54)(7.27)(2.27) = 8.91 CFS

## III. DETENTION REQUIREMENT:

QRUNOFF INCREASE = QPOST - QPRE

Q2 = 6.68 - 5.20 = 1.48 CFS
Q10 = 8.91 - 6.93 = 1.98 CFS

## IV. POST-DEVELOPMENT UNDETAINED

A. CONTRIBUTING AREA = 0.98 AC

B. C = 0.38

C. RUNOFF:

Q2 = (0.38)(5.45)(0.98) = 2.03 CFS
Q10 = (0.38)(7.27)(0.98) = 2.71 CFS

## V. POST-DEVELOPMENT TO SWM

A. OFFSITE AREAS:

0.04 AC. @ 0.90 (ROOFS, DRIVEWAYS, SIDEWALKS, ETC.)

C = 0.90

Q2 = (0.90)(5.45)(0.04) = 0.20 CFS
Q10 = (0.90)(7.27)(0.04) = 0.26 CFS

B. ONSITE AREAS:

0.51 AC. @ 0.30 (GREEN AREA ON-SITE)
0.78 AC. @ 0.90 (ROOFS, DRIVEWAYS, SIDEWALKS, ETC.)
1.29 AC.

WEIGHTED 'C':

$$\frac{(0.51)(0.30)+(0.78)(0.90)}{1.29} = 0.66$$

Q2 = (0.66)(5.45)(1.29) = 4.64 CFS
Q10 = (0.66)(7.27)(1.29) = 6.19 CFS

C. COMBINED RUNOFF:

Q2 = 4.64 + 0.20 = 4.84 CFS
Q10 = 6.12 + 0.26 = 6.38 CFS

## VI. MAX RELEASE FROM DETENTION:

MAX. REL. = Q(PRE) - Q(POST UNDETAINED) + Q(OFFSITE)

MAD(2) = 5.20 - 2.03 + 0.20 = 3.37 CFS
MAD(10) = 6.93 - 2.71 + 0.26 = 4.48 CFS

## VII. ACTUAL RELEASE FROM DETENTION QMAX REL.

Q10 = 1.75 ≤ 4.48 O.K.

POST DEVELOPMENT FLOW DOES NOT EXCEED PRE-DEVELOPMENT RATES.

# BMP FACILITY DESIGN CALCULATIONS

## II. WATERSHED INFORMATION

PART 1: LIST ALL OF THE SUBAREAS AND "C" FACTORS USED IN THE BMP COMPUTATIONS

| SUBAREA DESIGNATION AND DESCRIPTION (1) | | "C" | ACRES (3) |
|---|---|---|---|
| $A_1$ | EASTERN DRAINAGE AREA | 0.54 | 0.63 |
| $A_2$ | WESTERN DRAINAGE AREA | 0.78 | 0.66 |
| $A_3$ | UNDETAINED | 0.38 | 0.98 |
| | TOTAL | | 2.27 |

PART 2: COMPUTE THE WEIGHTED AVERAGE "C" FACTOR FOR THE SITE

(A) AREA OF THE SITE (a) 2.27 ACRES

| (B) SUBAREA DESIGNATION (1) | | "C" (2) | | ACRES (3) | PRODUCT (4) |
|---|---|---|---|---|---|
| $A_1$ | EASTERN DRAINAGE AREA | 0.54 | x | 0.63 | = 0.34 |
| $A_2$ | WESTERN DRAINAGE AREA | 0.78 | x | 0.66 | = 0.51 |
| $A_3$ | UNDETAINED | 0.38 | x | 0.98 | = 0.37 |
| | | | | | (b) TOTAL = 1.22 |

(C) WEIGHTED AVERAGE "C" FACTOR (b)/(a) = (c) 0.54

PART 3: COMPUTE THE TOTAL PHOSPHORUS REMOVAL FOR THE SITE

| SUBAREA DESIGNATION (1) | BMP TYPE (2) | REMOVAL EFF. (%) (3) | | AREA RATIO (4) | | "C" FACTOR RATIO (5) | PRODUCT (6) |
|---|---|---|---|---|---|---|---|
| $A_1$ | RAINGARDEN | 65 | x | 0.63/2.27 | x | 0.54/0.54 | = 18.04 |
| $A_2$ | RAINGARDEN | 65 | x | 0.66/2.27 | x | 0.78/0.54 | = 27.30 |
| | | | | | | | (a) TOTAL = 45.34% |

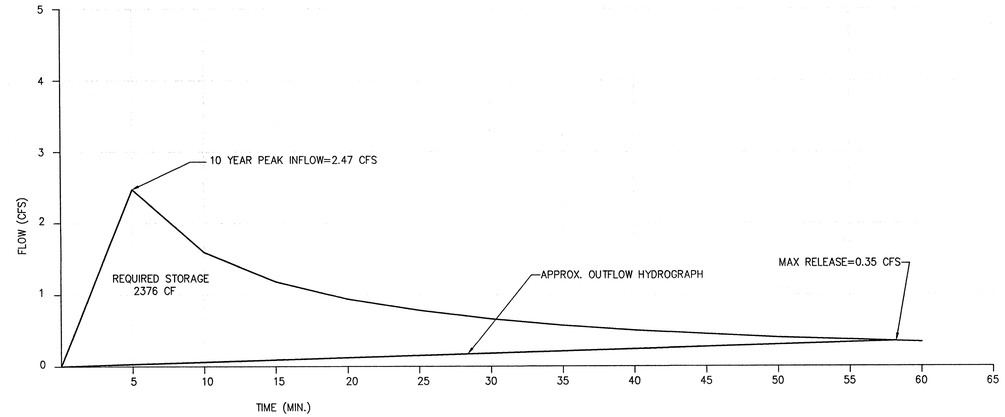
PART 4: DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT

(A) SELECT REQUIREMENT (a) 40%

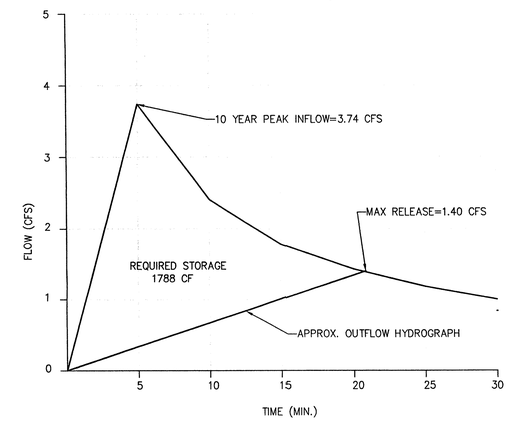
* WATER SUPPLY OVERLAY DISTRICT (OCCOQUAN WATERSHED) = 50 %
* CHESAPEAKE BAY PRESERVATION AREA (NEW DEVELOPMENT) = 40 %
* CHESAPEAKE BAY PRESERVATION AREA (REDEVELOPMENT) = [1-0.9 x ("1"POST)] x 100 = [1-0.9 x (0.56/0.60)] x 100 = %

(B) IF LINE 3(a) 45.34 ≥ LINE 4(a) 40 THEN PHOSPHORUS REMOVAL REQUIREMENT IS SATISFIED.

## AREA 1 - 10 YEAR STORM INFLOW/OUTFLOW HYDROGRAPHS




## AREA 2 - 10 YEAR STORM INFLOW/OUTFLOW HYDROGRAPHS




## EXISTING STORM SEWER DESIGN COMPUTATIONS

| Structure From | Structure To | Length (ft) | Drainage Area (acres) Increment | Drainage Area (acres) Total | Runoff Coefficient "C" | "A" * "C" Increment | "A" * "C" Total | Flow Time Min. To Upper End | Flow Time Min. In Section | Rainfall Intensity (in/hr) | Total Runoff (cfs) | Pipe Diameter (inches) | Full Capacity (cfs) | Velocity (fps) Flowing Full | Velocity (fps) Design Flow | Invert Flow Upper End | Invert Flow Lower End | Manhole Invert Drop | Slope of Sewer (ft/ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1276 | 1275 | 44 | 0.29 | 0.29 | 0.36 | 0.10 | 0.10 | 5 | 5 | 7.27 | 0.73 | 15 | 7.12 | | 3.55 | 251.06 | 250.60 | 0.40 | 0.0105 |
| 1275 | 1313 | 182.5 | 1.19 | 1.48 | 0.50 | 0.60 | 0.70 | 5 | 5 | 7.27 | 5.09 | 15 | 5.65 | | 4.87 | 250.20 | 249.00 | 0.14 | 0.0066 |
| 1313 | 23 | 59 | 0.33 | 1.81 | 0.50 | 0.17 | 0.87 | 5 | 5 | 7.27 | 6.32 | 27 | 26.02 | | 5.12 | 248.86 | 248.50 | 0.07 | 0.0061 |
| 23 | 1894 | 62 | 0.13 | 1.94 | 0.50 | 0.07 | 0.94 | 5 | 5 | 7.27 | 6.83 | 30 | 30.57 | | 4.76 | 248.43 | 248.13 | | 0.0048 |

NOTE: ALL STORMWATER MANAGEMENT CALCULATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE ON THE SITE PLAN.


WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046 WWW.WLPINC.COM
(703) 532-6163 FAX (703) 533-1801


DATE: 06/04/04 REV. 10/8/04 REV. 12/27/04 REV. 1/17/05
REV. 08/10/04 REV. 12/10/04 REV. 3/21/05 REV. 3/29/05
DRAWN: MEF
SCALE: 1" = 30'

COMMONWEALTH OF VIRGINIA
CHARLES F. DUNLAP
No. 13098
6/6/05
LAND SURVEYOR

| NO. | DESCRIPTION | DATE | REV. BY | APPROVED | DATE |
|---|---|---|---|---|---|
| | | | | | |

REVISION APPROVED BY

PRELIMINARY STORMWATER MANAGEMENT PLAN

ST. PAUL'S EPISCOPAL CHURCH
MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA



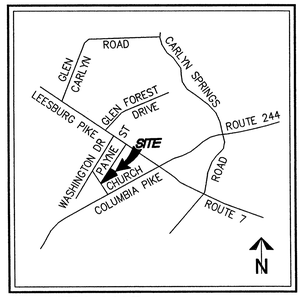
File No. FE-15 Tax Map No. 61-2 Job No. 04-012 Cadd Dwg. File: 04012SP3 Xref:

## EXISTING VEGETATION MAP INFORMATION

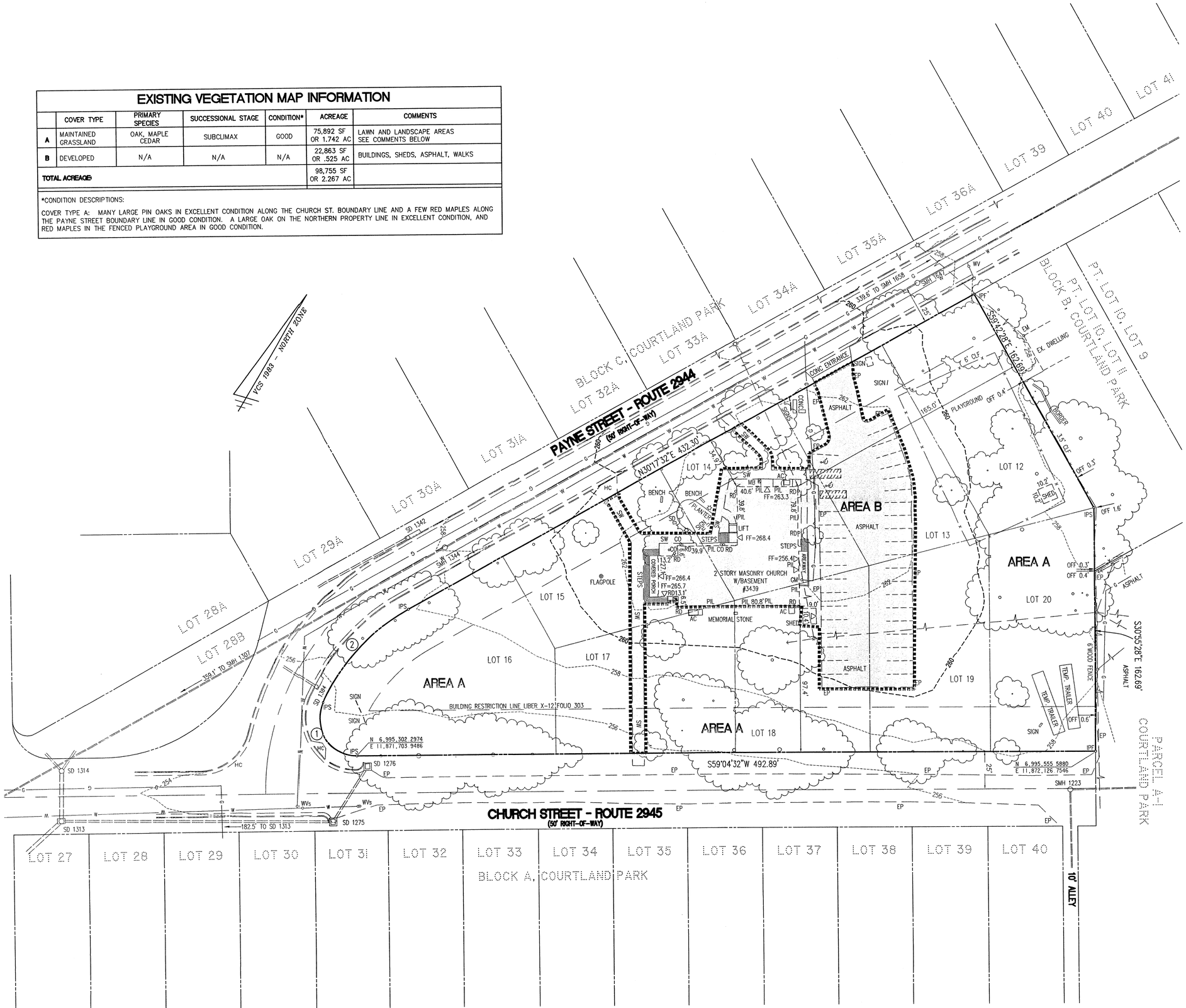
| | COVER TYPE | PRIMARY SPECIES | SUCCESSIONAL STAGE | CONDITION* | ACREAGE | COMMENTS |
|---|---|---|---|---|---|---|
| A | MAINTAINED GRASSLAND | OAK, MAPLE CEDAR | SUBCLIMAX | GOOD | 75,892 SF OR 1.742 AC | LAWN AND LANDSCAPE AREAS SEE COMMENTS BELOW |
| B | DEVELOPED | N/A | N/A | N/A | 22,863 SF OR .525 AC | BUILDINGS, SHEDS, ASPHALT, WALKS |
| TOTAL ACREAGE: | | | | | 98,755 SF OR 2.267 AC | |

*CONDITION DESCRIPTIONS:

COVER TYPE A: MANY LARGE PIN OAKS IN EXCELLENT CONDITION ALONG THE CHURCH ST. BOUNDARY LINE AND A FEW RED MAPLES ALONG THE PAYNE STREET BOUNDARY LINE IN GOOD CONDITION. A LARGE OAK ON THE NORTHERN PROPERTY LINE IN EXCELLENT CONDITION, AND RED MAPLES IN THE FENCED PLAYGROUND AREA IN GOOD CONDITION.




VICINITY MAP SCALE: 1"=2000'




# WALTER L. PHILLIPS

INCORPORATED

CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS

207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046 WWW.WLPINC.COM

(703) 532-6163 FAX (703) 533-1301

DATE: 06/04/04 REV. 10/8/04 REV. 12/27/04 REV. 1/17/05
REV. 08/10/04 REV. 12/10/04 REV. 3/21/05 REV. 3/29/05

SCALE: 1"=30' DRAWN: KLM

COMMONWEALTH OF VIRGINIA
CHARLES F. DUNLAP
No. 1309B
6/1/04
LAND SURVEYOR

REVISION APPROVED BY

| NO. | DESCRIPTION | DATE | REV. BY | APPROVED | DATE |
|---|---|---|---|---|---|
| | | | | | |

# EXISTING VEGETATION MAP

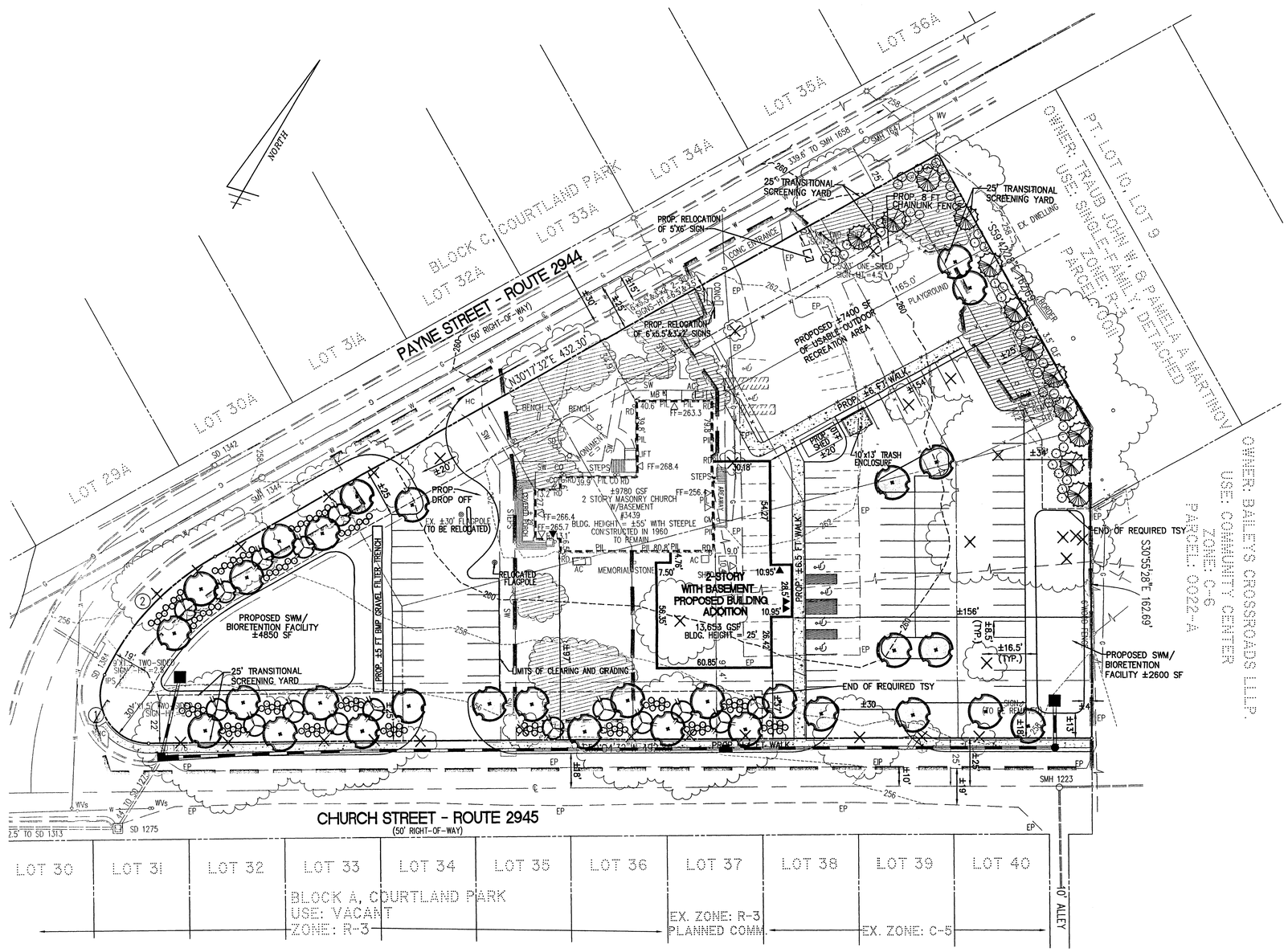
# ST. PAUL'S EPISCOPAL CHURCH

MASON DISTRICT

FAIRFAX COUNTY, VIRGINIA

SHEET: 4 OF 5

File No. FE-15 Tax Map No. 61-2 Job No. 04-012 Cadd Dwg. File: 04-012EVM Xref:




## LEGEND

- PROPOSED DECIDUOUS TREES
- PROPOSED FLOWERING TREES
- LARGE EVERGREEN TREES (40'+)
- MEDIUM EVERGREEN TREES (20–40')
- PROPOSED SHRUBS
- TREES TO BE REMOVED
- TREES COUNTED TOWARD INTERIOR PARKING LOT LANDSCAPING
- EX. TREES TO BE PRESERVED

## TREE COVER CALCULATIONS

| | | |
|---|---|---|
| TOTAL SITE AREA | 98,755 | S.F. |
| OUTDOOR REC. AREA | – 7,400 | S.F. |
| BUILDING FOOTPRINT | – 10,000± | S.F. |
| ADJUSTED SITE AREA | 81,355 | S.F. |
| PERCENT REQUIRED | x 20 | % |
| **TREE COVER REQUIRED** | **16,271** | **S.F.** |

TREE COVER PROVIDED (PLANTED)

| | | |
|---|---|---|
| 31 LARGE DECIDUOUS TREES @ 250 SF | 7,750 | S.F. |
| 12 LARGE. EVERGREEN TREES @ 250 SF | 3,000 | S.F. |
| 16 FLOWERING TREES @ 100 SF | 1,600 | S.F. |
| 46 MED. EVERGREEN TREES @ 100 SF | 4,600 | S.F. |
| EXISTING TREE COVERAGE | + 10,450 | S.F. |
| **TOTAL TREE COVERAGE** | **27,400** | **S.F. (34%)** |

## INTERIOR PARKING LOT LANDSCAPING CALCULATIONS

| | |
|---|---|
| TOTAL PARKING AREA | 26,210 S.F. |
| PERCENT REQUIRED | x 5 % |
| **REQUIRED** | **1,311 S.F.** |
| **PROPOSED (9 CATEGORY IV DEC. TREES @ 250 EA.)** | **2,250 S.F.** |

GRAPHIC SCALE

0 15 30

( IN FEET )
1 inch = 30 ft.

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | TANGENT | CHORD | CHORD BEARING |
|---|---|---|---|---|---|---|
| 1 | 25.00' | 50.54' | 115°50'23" | 39.88' | 42.37' | N63°00'17"W |
| 2 | 139.00' | 85.82' | 35°22'37" | 44.33' | 84.47' | N12°36'13"E |

File No. FE-15 Tax Map No. 61-2 Job No. 04-012 Cadd Dwg. File: 04012SP3 Xref:


**WALTER L. PHILLIPS**
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046 WWW.WLPINC.COM
(703) 532-6163 FAX (703) 533-1001


SCALE: 1" = 30' DRAWN: MEF
DATE: 06/04/04 REV. 10/8/04 REV. 12/27/04 REV. 1/17/05
REV. 08/10/04 REV. 12/10/04 REV. 3/21/05 REV. 3/29/05

COMMONWEALTH OF VIRGINIA
CHARLES F. DUNLAP
No. 13099
6/4/04
LAND SURVEYOR

| NO. | DESCRIPTION | DATE | REV. BY | APPROVED | DATE |
|---|---|---|---|---|---|
| | | | | | |

REVISION APPROVED BY

# CONCEPTUAL LANDSCAPE PLAN

# ST. PAUL'S EPISCOPAL CHURCH

MASON DISTRICT
FAIRFAX COUNTY, VIRGINIA