

# PROSPERITY METRO

## 2675 & 2677 PROSPERITY AVENUE

### PROVIDENCE DISTRICT - FAIRFAX COUNTY, VIRGINIA

### CONCEPTUAL / FINAL DEVELOPMENT PLAN

### RZ/FDP # 2012-PR-009

#### NOTES

- OWNER OF TM 49-1-13-19B/APPLICANT:  
PROSPERITY METRO PLAZA OF VIRGINIA LLC.  
5530 WISCONSIN AVE. #1000  
CHEVY CHASE, MD 20815  
  
OWNER, PORTION OF DORR AVE TO BE VACATED:  
  
BOARD OF SUPERVISORS  
FAIRFAX COUNTY, VIRGINIA  
12000 GOVERNMENT CENTER PKWY  
FAIRFAX, VIRGINIA 22035
- THE PROPERTY SHOWN ON THIS PLAN IS IDENTIFIED ON THE FAIRFAX COUNTY TAX MAP AS 49-1-13-0019B. ALSO SHOWN ON THIS PLAN IS A PORTION OF PUBLIC R.O.W. BEING VACATED TO OWNER OF THE SUBJECT PROPERTY. THE PROPERTY IS CURRENTLY APPROXIMATELY ±151,300 SQUARE FEET OR ±3.47 ACRES PRIOR TO PUBLIC R.O.W. ADDITION. FOLLOWING VACATION OF R.O.W. TO THE SUBJECT PROPERTY, THE SITE AREA WILL TOTAL APPROXIMATELY ±162,155 OR ±3.72 ACRES.
- THE SITE IS CURRENTLY ZONED PDC (PLANNED DEVELOPMENT COMMERCIAL) AND PRM (PLANNED RESIDENTIAL MIXED USE). THE REZONING APPLICATION REQUESTS THAT ALL AREAS OF THE SITE BE REZONED TO PDC, INCLUDING THE ADDITIONAL SITE AREA CURRENTLY ZONED PRM. ALSO PROPOSED ARE REVISIONS TO THE PARKING AND DRIVE AISLE CONFIGURATION AND THE ADDITIONAL OFFICE BUILDING SQUARE FOOTAGE.
- THE PROPOSED DEVELOPMENT WILL MEET THE PARKING REQUIREMENTS OF ARTICLE 11 OF THE ZONING ORDINANCE. PARKING SHALL BE PROVIDED IN COMBINATION OF AN EXISTING PARKING STRUCTURE AND SURFACE SPACES.
- THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS FROM FIELD RUN AND AERIAL SURVEY BY WALTER L. PHILLIPS, INC. CONTOUR INTERVAL IS TWO (2) FEET.
- TO THE BEST OF OUR KNOWLEDGE, THE PROPOSED DEVELOPMENT WILL NOT POSE ANY ADVERSE IMPACTS ON THE ADJACENT OR NEIGHBORING PROPERTIES.
- IT IS ANTICIPATED THAT THE DEVELOPMENT OF THIS PROJECT WILL OCCUR IMMEDIATELY FOLLOWING COUNTY APPROVAL OF THE SITE PLAN.
- THERE ARE NO SPECIAL AMENITIES PROPOSED WITH THIS DEVELOPMENT.
- THE SITE IS SERVED BY PUBLIC WATER AND SEWER.
- THERE IS NO RESOURCE PROTECTION AREA OR ENVIRONMENTAL QUALITY CORRIDORS EXISTING ON THE PROPERTY.
- THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR FAIRFAX COUNTY, VIRGINIA, MAP NUMBER 51059C0165E, DATED SEPTEMBER 17, 2010, SHOWS THIS PROPERTY TO BE LOCATED WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO GRAVES LOCATED ON THE SITE.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO UTILITY EASEMENTS HAVING A WIDTH OF 25 FEET OR MORE ON THE PROPERTY.
- THIS PROPOSED DEVELOPMENT COMPLIES WITH THE CURRENT COMPREHENSIVE PLAN RECOMMENDATION FOR THE MERRIFIELD SUBURBAN CENTER.
- THERE ARE NO SCENIC ASSETS OR NATURAL FEATURES ON THIS PROPERTY DESERVING OF PROTECTION AND/OR PRESERVATION.
- THE PROPOSED APPLICATION CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS, EXCEPT FOR THE REQUEST TO REAFFIRM THE PARTIAL WAIVER OF WATER QUALITY CONTROLS FOR THE SUBJECT PROPERTY (WAIVER# 020775).
- ALL EXISTING STRUCTURES ONSITE ARE TO REMAIN.
- THIS PLAN IS CONCEPTUAL AND IS INTENDED TO BE USED IN CONJUNCTION WITH THE LAND USE APPROVAL PROCESS ONLY. IT IS NOT AN ENGINEERING CONSTRUCTION DRAWING, AND MINOR DEVIATIONS AND ADJUSTMENTS MAY BE REQUIRED, AND ARE PERMITTED PURSUANT TO ZONING ORDINANCE SECTION 18-204(5), AS PART OF THE FINAL DESIGN AND SITE PLAN APPROVAL PROCESS; HOWEVER, THE FINAL CONSTRUCTION DRAWINGS SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THIS PLAN.
- TO THE BEST OF OUR KNOWLEDGE NONE OF THE USES REPRESENTED ON THIS PLAN WILL GENERATE, UTILIZE, SORE, TREAT AND/OR DISPOSE OF ANY HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH IN TITLE 40, CODE OF FEDERAL REGULATIONS PART 116.4, 302.4, AND 355; ANY HAZARDOUS WASTE AS SET FORTH IN COMMONWEALTH OF VIRGINIA/DEPARTMENT OF WASTE MANAGEMENT VR 672-10-1 - VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATIONS; AND/OR ANY PETROLEUM PRODUCTS AS DEFINED IN TITLE 40, CODE OF FEDERAL REGULATIONS PART 280.

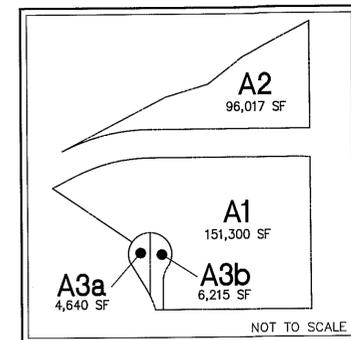
#### AREA TABULATION

A1 - EXISTING SITE AREA	= 151,300 SF
A2 - WMATA PARKING EXPANSION SITE (PREVIOUSLY DEDICATED)	= 96,017 SF*
A3 - DORR AVE. VACATED PUBLIC R.O.W.	= 10,855 SF
<b>TOTAL SITE AREA</b>	<b>= 258,172 SF</b>

<b>BUILDING AREA</b>	
EXISTING BUILDING "A"	= ±157,412 GSF
EXISTING BUILDING "B"	= ±151,748 GSF
PROPOSED BUILDING AREA	= ±52,280 GSF
<b>TOTAL BUILDING AREA</b>	<b>= ±361,440 GSF**</b>
PROPOSED F.A.R.	= ±1.40

- \* AREA RESERVED FOR DENSITY CREDIT
- \*\* EXCLUDES CELLAR IN GARAGE UNDER BUILDINGS A & B

#### AREA TABULATION SCHEMATIC



#### ZONING TABULATION

EXISTING ZONE: PDC, PLANNED DEVELOPMENT COMMERCIAL DISTRICT  
PRM, PLANNED RESIDENTIAL MIXED USE DISTRICT

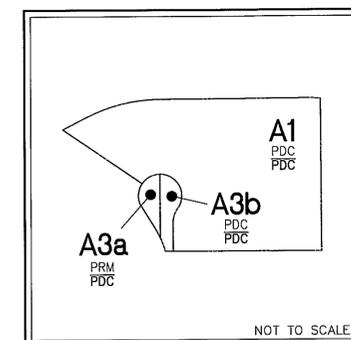
PROPOSED ZONE: ALL AREAS TO BE ZONED PDC

SITE AREA : ±162,155 SF OR ±3.72 ACRES\*

	REQUIRED	PROVIDED
MIN LOT AREA	NONE	±162,155 SF OR ±3.72 AC*
MIN LOT WIDTH	NONE	N/A
MAX BLD HT	135 FT**	±135 FT
MIN YARD REQUIREMENTS		
FRONT	NONE	±20 FT
SIDE	NONE	±9 FT
REAR	NONE	±12 FT
MAX FAR	1.40**	1.40
OPEN SPACE	15%	±20%

- \* EXISTING SITE AREA, INCLUDING DORR AVE. VACATED PUBLIC R.O.W. AND PROPOSED RIGHT-OF-WAY DEDICATION
- \*\* PERMITTED PER COMPREHENSIVE PLAN LANGUAGE

#### ZONING SCHEMATIC



A1	EXISTING ZONE = PDC	PROPOSED ZONE = PDC
A2	EXISTING ZONE = PDC	PROPOSED ZONE = PDC
A3a	EXISTING ZONE = PRM	PROPOSED ZONE = PDC
A3b	EXISTING ZONE = PDC	PROPOSED ZONE = PDC

#### PARKING TABULATION

##### REQUIRED PARKING

USE: OFFICE  
RATE: 2.6 SPACES/1,000 SF  
  
\* EXISTING = ±330,000 SF / 1,000 x 2.6 = 858 SPACES  
PROPOSED = ±52,280 SF / 1,000 x 2.6 = 136 SPACES

USE: FAST FOOD RESTAURANT  
RATE: 1 SPACE/2 SEATS

(70 SEATS/2 = 35 SPACES)\*\*

**TOTAL PARKING REQUIRED = 1,029 SPACES**

##### PROPOSED PARKING

PARKING PROVIDED = ±1,017 PARKING SPACES

- \*\* INCLUDES CELLAR SQUARE FOOTAGE
- \*\* INCLUDES BOTH OUTDOOR AND INDOOR SEATING

##### PARKING REDUCTION NOTE

A 25% PARKING REDUCTION, PREPARED BY WELLS & ASSOCIATES AND SUBMITTED UNDER SEPARATE COVER, HAS BEEN REQUESTED. IF THE PARKING REDUCTION IS NOT APPROVED, THE PARKING REQUIRED WILL BE REDUCED BY EITHER REDUCING THE TOTAL NUMBER OF SEATS PERMITTED AT THE FAST FOOD RESTAURANT OR BY REDUCING THE TOTAL AMOUNT OF OFFICE SQUARE FOOTAGE PROPOSED IN ORDER THAT THE PROVIDED PARKING EITHER EXCEEDS OR EQUALS THE REQUIRED PARKING. ANY EXCESS PARKING SPACES MAY BE USED FOR COMMERCIAL PARKING. THE EXCESS NUMBER OF PARKING SPACES AVAILABLE FOR COMMERCIAL PARKING MAY CHANGE OVER TIME DEPENDING UPON LATER COMBINATION OF USES ON THE PROPERTY.

#### PERMITTED PRIMARY AND SECONDARY USES

**PRINCIPAL USES:**  
BUSINESS SERVICE AND SUPPLY SERVICE ESTABLISHMENTS  
EATING ESTABLISHMENTS  
FINANCIAL INSTITUTIONS  
OFFICES  
PERSONAL SERVICE ESTABLISHMENTS  
RETAIL SERVICE ESTABLISHMENTS

**SECONDARY USES:**  
FAST FOOD RESTAURANT WITH SEASONAL OUTDOOR SEATING  
COMMERCIAL PARKING  
QUICK SERVICE FOOD STORES  
HEALTH CLUB  
COLLEGES, UNIVERSITIES  
MEDICAL CARE FACILITIES  
PRIVATE SCHOOLS OF SPECIAL EDUCATION

#### LOADING TABULATION

##### REQUIRED LOADING

USE: OFFICE  
RATE: 1 SPACE FOR THE FIRST 10,000 SF OF GROSS FLOOR AREA PLUS 1 SPACE FOR EACH ADDITIONAL 20,000 SF OR MAJOR FRACTION THEREOF  
  
±361,440 SF - 10,000 SF = 351,440 SF  
351,440/20,000 = 17.6 SPACES  
10,000 = 1 SPACE  
18.6 SPACES

**TOTAL LOADING REQUIRED = 5 SPACES\***

##### PROPOSED LOADING

LOADING PROVIDED = 5 SPACES

- \* PER ZONING ORDINANCE SECTION 11-202(15) NO MORE THAN 5 LOADING SPACES ARE REQUIRED

Application No: RZ 2012-PR-009 Staff: WOL

#### APPROVED DEVELOPMENT PLAN

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

SEE PROFFERS DATED: 10/3/12 FDP 10/9/12

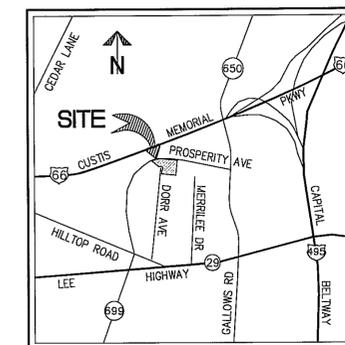
Date of (BOS) (PC) Approval: 10/16/12

Sheet: 1 of 18

Comments:

#### VICINITY MAP

SCALE: 1"=2000'



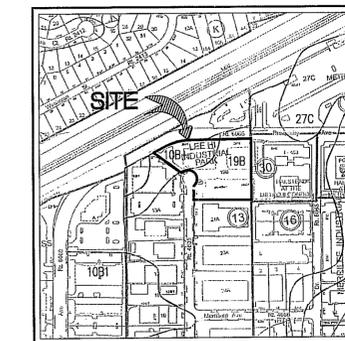
#### SOILS DATA TABLE

SOIL ID NUMBERS	SERIES NAME	FOUNDATION SUPPORT	SOIL DRAINAGE	SLOPE STABILITY	EROSION POTENTIAL	GEOTECH REPORT REQ'D	PROBLEM CLASS
10B+	BOWMANVILLE SILT LOAM	POOR	POOR	N/A	LOW	YES	III
19B	CHANTILLY CLOVER COMPLEX	FAIR	GOOD	N/A	MEDIUM	YES	IVB

SOIL INFORMATION WAS TAKEN FROM FAIRFAX COUNTY SOILS MAP AND DESCRIPTION AND INTERPRETIVE GUIDE TO SOILS IN FAIRFAX COUNTY, REVISED 2011.

#### SOILS MAP

SCALE: 1"=500'



#### SHEET INDEX

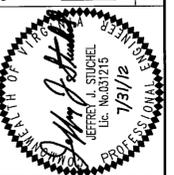
- P-0101 COVER SHEET
- P-0201 EXISTING CONDITIONS/EXISTING VEGETATION MAP
- P-0301 CONCEPTUAL/FINAL DEVELOPMENT PLAN
- P-0401 CONCEPTUAL LANDSCAPE PLAN
- P-0501 PRELIMINARY OUTFALL ANALYSIS
- P-0502 PRELIMINARY STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES
- P-0601 ILLUSTRATIVE ARCHITECTURAL ELEVATIONS - BUILDING A
- P-0602 ILLUSTRATIVE ARCHITECTURAL ELEVATIONS - BUILDING B

RECEIVED  
Department of Planning & Zoning  
AUG 09 2012  
Zoning Evaluation Division

#### COVER SHEET

**PROSPERITY METRO**  
**2675 & 2677 PROSPERITY AVENUE**  
PROVIDENCE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

**WALTER L. PHILLIPS**  
INCORPORATED  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS • ARBORISTS  
207 PARK AVENUE  
FALLS CHURCH, VIRGINIA 22046  
(703) 532-6163 Fax (703) 533-1301  
www.WLPINC.com



NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE

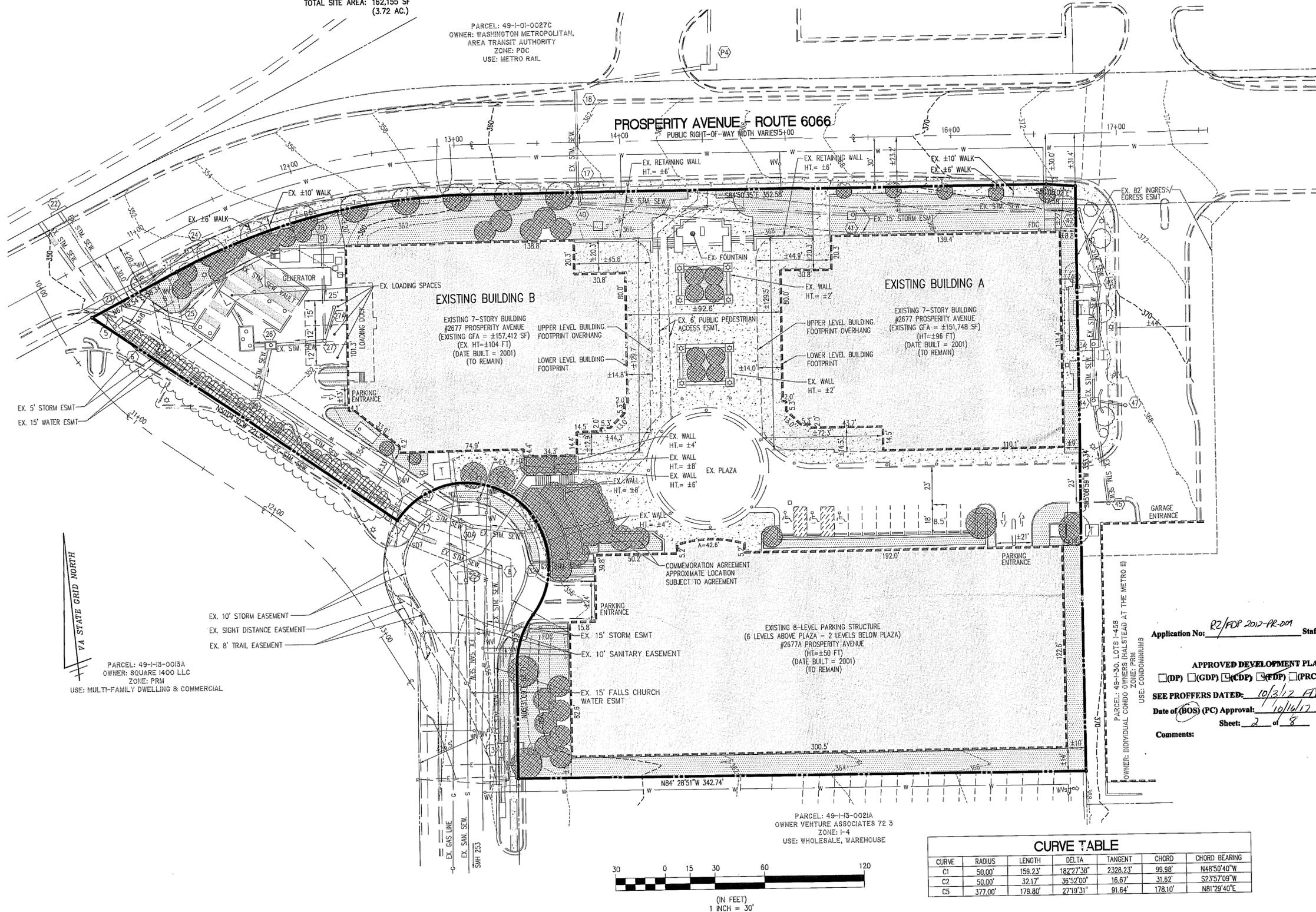
**LEGEND**

- AC ..... AIR CONDITIONER
- AL ..... AREA LIGHT
- CO ..... CLEANOUT
- CP ..... CONTROL PANEL
- CTV ..... CABLE TELEVISION VAULT
- DB ..... DEED BOOK
- ESMT ..... EASEMENT
- EST ..... ELECTRICAL STUBB
- G ..... GAS
- FT ..... FUEL TANK
- GEN ..... GENERATOR
- GRL ..... GROUND LIGHT
- IPF ..... IRON PIPE/PIN FOUND
- LSW ..... LANDSCAPING WALL
- NF ..... NAIL FOUND (PROPERTY CORNER)
- NF ..... NOW OR FORMERLY
- P ..... PLANTER
- POB ..... POINT OF BEGINNING
- PG ..... PAGE
- PKF ..... NAIL FOUND (PROPERTY CORNER)
- RBF ..... REBAR (IRON PIN) FOUND
- SMH ..... SANITARY SEWER MANHOLE
- ST ..... STORM STRUCTURE
- V ..... VENT SHAFT
- WM ..... WATER METER
- WSP ..... WATER STANDPIPE
- WV, WVs ..... WATER VALVE(S)
- HC ..... HEADER CURB
- CG ..... CURB AND GUTTER
- L ..... LIGHT
- GW ..... GUY WIRE
- OW ..... OVERHEAD WIRES
- ET ..... ELECTRIC TRANSFORMER
- UT ..... UNDERGROUND TELEPHONE LINE
- U ..... UTILITY POLE
- UGL ..... UNDERGROUND GAS LINE
- WL ..... WATER LINE

EXISTING VEGETATION MAP INFORMATION						
COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGE	CONDITION	ACREAGE	COMMENTS	
LANDSCAPED TREE CANOPY	OAK, MAPLE, CRAPMYRTLE, PINE	N/A	FAIR TO GOOD	11,562 SF (0.27 AC.)		
DEVELOPED LAND	BUILDINGS, PARKING AREAS, WALKS, ETC.	N/A	N/A	129,908 SF (2.98 AC.)		
MAINTAINED GRASSLANDS	LANDSCAPED AREAS, ATHLETIC FIELD	N/A	N/A	20,685 SF (0.47 AC.)		

TOTAL SITE AREA: 162,155 SF (3.72 AC.)

PARCEL: 49-1-01-0027C  
 OWNER: WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
 ZONE: PDC  
 USE: METRO RAIL



PARCEL: 49-1-13-0013A  
 OWNER: SQUARE 1400 LLC  
 ZONE: PRM  
 USE: MULTI-FAMILY DWELLING & COMMERCIAL

PARCEL: 49-1-13-0021A  
 OWNER: VENTURE ASSOCIATES 72 3  
 ZONE: I-4  
 USE: WHOLESALE, WAREHOUSE

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	50.00'	158.23'	182°27'38"	2328.23'	99.98'	N48°50'40"W
C2	50.00'	32.17'	36°52'00"	16.67'	31.62'	S23°57'09"W
C5	377.00'	179.80'	27°19'31"	91.64'	178.10'	N81°29'40"E

**EXISTING CONDITIONS / EXISTING VEGETATION MAP**

**PROSPERITY METRO  
 2675 & 2677 PROSPERITY AVENUE**

PROVIDENCE DISTRICT

FAIRFAX COUNTY, VIRGINIA

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NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE

Application No: R2/PDP 2017-PR-001 Staff: WSP

APPROVED DEVELOPMENT PLAN

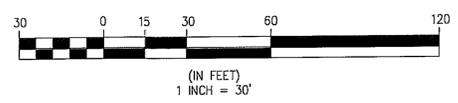
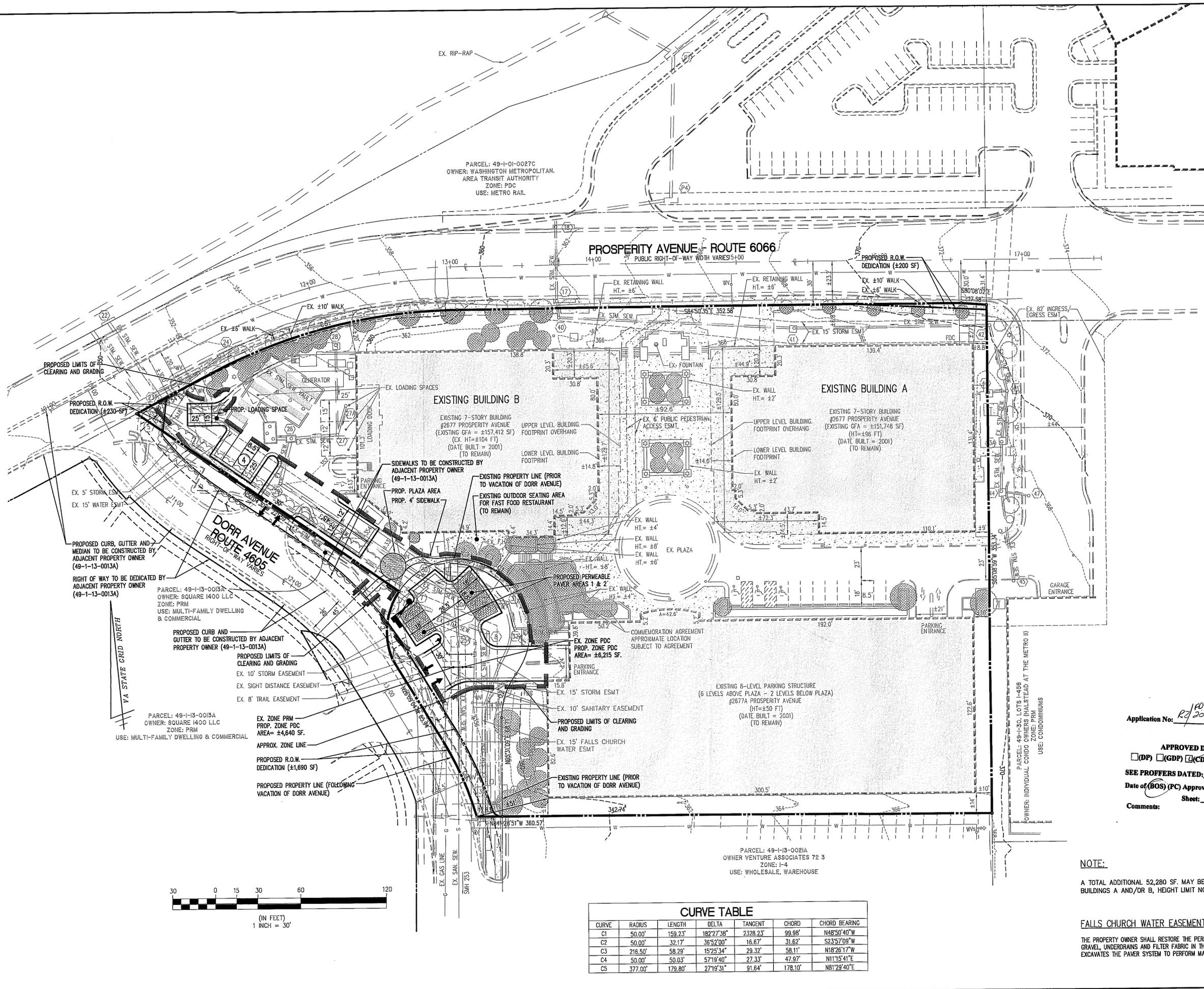
(DP)  (GDP)  (CDP)  (FDP)  (PRC)  (CP)

SEE PROFFERS DATED: 10/3/17, 10/16/17, 9/19/17

Date of (BOS) (PC) Approval: 10/16/17

Sheet: 2 of 8

Comments:



CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	50.00'	159.23'	182°27'38"	2328.23'	99.98'	N48°50'40"W
C2	50.00'	32.17'	36°52'00"	16.67'	31.62'	S23°57'09"W
C3	216.50'	58.29'	15°25'34"	29.32'	58.11'	N18°26'17"W
C4	50.00'	50.03'	57°19'40"	27.33'	47.97'	N11°15'41"E
C5	377.00'	179.80'	27°19'31"	91.64'	178.10'	N81°29'40"E

Application No: R2/2012-PR-009 Staff: LSD

APPROVED DEVELOPMENT PLAN  
 (DP)  (GDP)  (CDP)  (FDP)  (PRC)  (CP)  
 SEE PROFFERS DATED: 10/3/12 Approved 9/19/12  
 Date of (BOS) (PC) Approval: 10/4/12  
 Sheet: 3 of 8  
 Comments:

NOTE:  
 A TOTAL ADDITIONAL 52,280 SF. MAY BE ADDED TO EXISTING BUILDINGS A AND/OR B, HEIGHT LIMIT NOT TO EXCEED 135 FEET

FALLS CHURCH WATER EASEMENT NOTE:  
 THE PROPERTY OWNER SHALL RESTORE THE PERMEABLE PAVEMENT INCLUDING GRAVEL, UNDERDRAINS AND FILTER FABRIC IN THE EVENT FALLS CHURCH WATER EXCAVATES THE PAVEMENT SYSTEM TO PERFORM MAINTENANCE OF ITS WATER MAIN.

CONCEPTUAL / FINAL DEVELOPMENT PLAN

PROSPERITY METRO  
 2675 & 2677 PROSPERITY AVENUE  
 PROVIDENCE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

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INCORPORATED ESTABLISHED 1945  
 DATE: 4/22/2012; REV: 6/11/2012; 7/31/2012  
 SCALE: 1" = 30'

NO.	DESCRIPTION	DATE	APPROVED BY	DATE

**LEGEND**

- PROPOSED CATEGORY IV DECIDUOUS TREE
- PROPOSED CATEGORY IV DECIDUOUS TREE (COUNTED TOWARDS INTERIOR PARKING LOT LANDSCAPING)
- PROPOSED CATEGORY II EVERGREEN TREE
- PROPOSED CATEGORY III DECIDUOUS TREE
- PROPOSED SHRUBS
- EXISTING VEGETATION (COUNTED TOWARDS TREE COVER)

**TREE COVER CALCULATIONS**

TOTAL SITE AREA	162,155 S.F.
RIGHT OF WAY DEDICATION	- ±2,120 S.F.
ADJUSTED SITE AREA	±160,035 S.F.
PERCENT REQUIRED	X 10 %
<b>TREE COVER REQUIRED</b>	<b>±16,004 S.F.</b>
TREE COVER PROVIDED (PLANTED)	3,000 S.F.
12 DECIDUOUS TREES (CATEGORY IV) @ 250 SF	3,000 S.F.
5 EVERGREEN TREES (CATEGORY II) @ 125 SF	625 S.F.
21 DECIDUOUS TREES (CATEGORY III) @ 100 SF	+ 2,100 S.F.
	5,725 S.F.
EXISTING TREE COVERAGE	±10,690 S.F.
±8,555 x 1.25 = ±10,694 SF	
<b>TOTAL TREE COVERAGE PROVIDED</b>	<b>±16,415 S.F.</b>

**INTERIOR PARKING LOT LANDSCAPING CALCULATION**

TOTAL PARKING AREA	±23,590 S.F.
PERCENT REQUIRED	X 5 %
<b>REQUIRED</b>	<b>±1,180 S.F.</b>
PROPOSED 4 CATEGORY IV TREES @ 250 SF	1,000 S.F.
EXISTING TREES	+ 275 S.F.
<b>PROVIDED</b>	<b>1,275 S.F.</b>

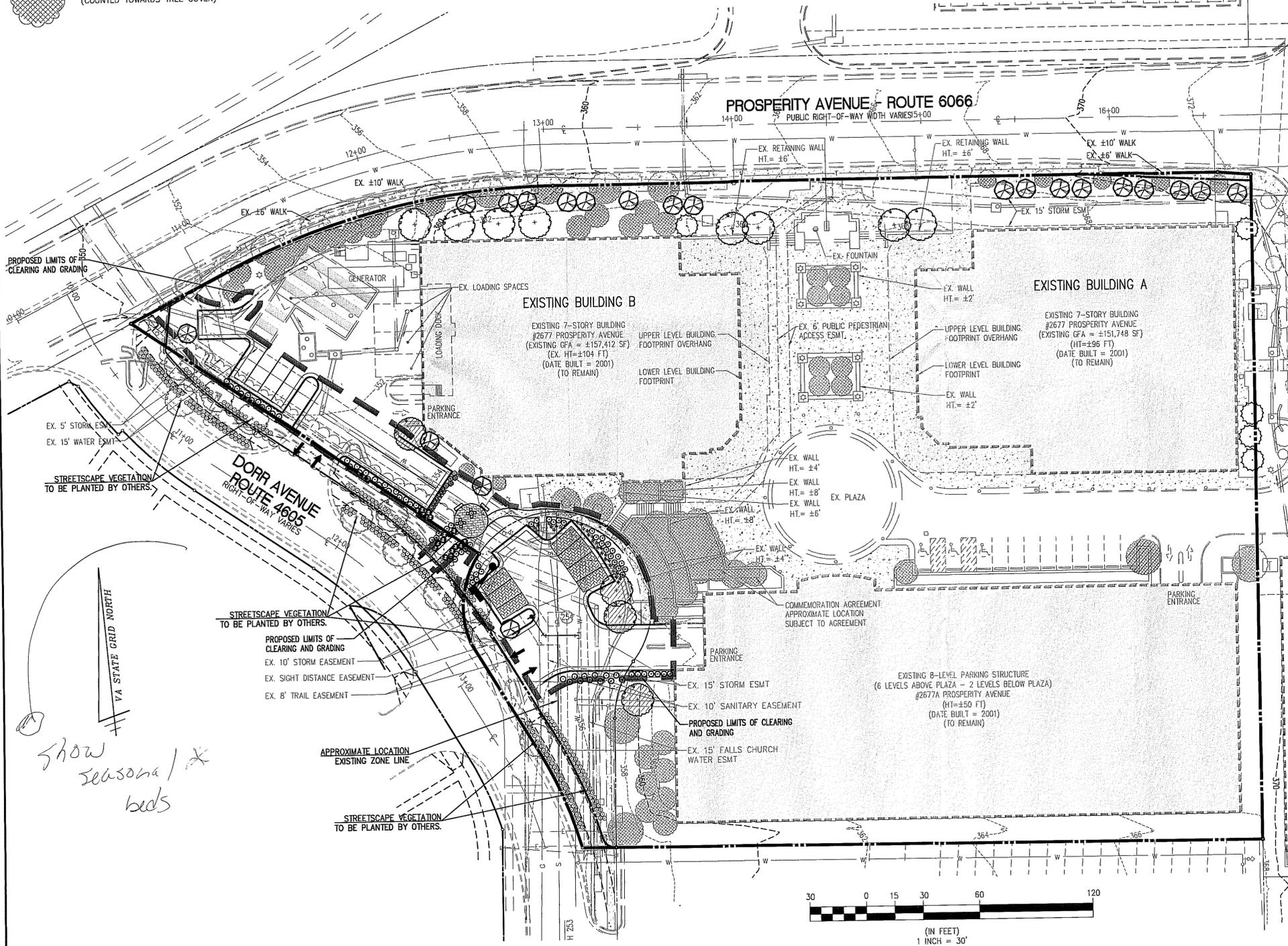
**TABLE 12.3**

TABLE 12.3 TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT

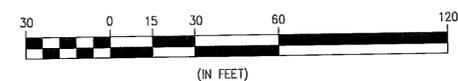
- PRE-DEVELOPMENT AREA OF EXISTING TREE CANOPY (FROM EVM): 11,562 SF
- PERCENTAGE OF GROSS SITE AREA COVERED BY EXISTING TREE CANOPY: 7.1% &
- PERCENTAGE OF 10-YEAR TREE CANOPY REQUIRED FOR SITE: 10% (TOTAL SITE AREA = 162,155 SF)
- PERCENTAGE OF 10-YEAR TREE CANOPY REQUIREMENT THAT SHOULD BE MET THROUGH TREE PRESERVATION: 7.1% = 1,141 SF (11,562 x 0.1)
- PROPOSED PERCENTAGE OF CANOPY REQUIREMENT THAT WILL BE MET THROUGH TREE PRESERVATION: (10,690 / 1,141) >100 %
- HAS THE TREE PRESERVATION TARGET MINIMUM BEEN MET? YES

**Table 12.10 10-year Tree Canopy Calculation Worksheet**

Step	Totals	Reference
<b>A. Tree Preservation Target and Statement</b>		
A 1	Place the Tree Preservation Target calculations and statement here preceding the 10-year tree canopy calculations	SEE TABLE 12.3 see § 12-0508.2 for list of required elements and worksheet
<b>B. Tree Canopy Requirement</b>		
B1	Identify gross site area =	162,155 § 12-0511.1A
B2	Subtract area dedicated to parks, road frontage, and	2,120 § 12-0511.1B
B3	Subtract area of exemptions =	2,120 § 12-0511.1C(1) through § 12-0511.1C(6)
B4	Adjusted gross site area (B1 - B2) =	162,110
B5	Identify site's zoning and/or use	FDC
B6	Percentage of 10-year tree canopy required =	10% § 12-0510.1 and Table 12.4
B7	Area of 10-year tree canopy required (B4 x B6) =	16,004
B8	Modification of 10-year Tree Canopy Requirements requested?	NO Yes or No
B9	If B8 is yes, then list plan sheet where modification request is located	N/A Sheet number
<b>C. Tree Preservation</b>		
C1	Tree Preservation Target Area =	1,141 SEE TABLE 12.3, THIS SHEET
C2	Total canopy area meeting standards of § 12-0400 =	8,555
C3	C2 x 1.25 =	10,694 § 12-0510.3B
C4	Total canopy area provided by unique or valuable forest or woodland communities =	0
C5	C4 x 1.5 =	0 § 12-0510.3B(1)
C6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	0
C7	C6 x 1.5 to 3.0 =	0 § 12-0510.3B(2)
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	0
C9	C8 x 1.0 =	0 § 12-0510.3C(1)
C10	Total of C3, C5, C7 and C9 =	10,690 If area of C10 is less than B7 then remainder of requirement must be met through tree planting - go to D
<b>D. Tree Planting</b>		
D1	Area of canopy to be met through tree planting (B7-C10) =	5,725
D2	Area of canopy planted for air quality benefits =	0
D3	x 1.5 =	0 § 12-0510.4B(1)
D4	Area of canopy planted for energy conservation =	0
D5	x 1.5 =	0 § 12-0510.4B(2)
D6	Area of canopy planted for water quality benefits =	0
D7	x 1.25 =	0 § 12-0510.4B(3)
D8	Area of canopy planted for wildlife benefits =	0
D9	x 1.5 =	0 § 12-0510.4B(4)
D10	Area of canopy provided by native trees =	0
D11	x 1.5 =	0 § 12-0510.4B(5)
D12	Area of canopy provided by improved cultivars and varieties =	0
D13	x 1.25 =	0 § 12-0510.4B(6)
D14	Area of canopy provided through tree seedlings =	0
D15	Area of canopy provided through native shrubs =	0 § 12-0510.4D(1)
D16	Percentage of D14 represented by D15 =	0 Must not exceed 33% of D14
D17	Total of canopy area provided through tree planting =	5,725
D18	Is an off-site planting relief requested?	NO Yes or No
D19	Tree Bank or Tree Fund?	N/A § 12-0512
D20	Canopy area requested to be provided through off-site banking or tree fund	N/A
D21	Amount to be deposited into the Tree Preservation and Planting Fund	N/A
<b>E. Total of 10-year Tree Canopy Provided</b>		
E1	Total of canopy area provided through tree preservation (C10) =	10,690
E2	Total of canopy area provided through tree planting (D17) =	5,725
E3	Total of canopy area provided through off-site mechanism (D19) =	N/A
E4	Total of 10-year Tree Canopy Provided = (E1+E2+E3)	16,415 Total of E1 through E3. Area should meet or exceed area required by B7



*Show seasonal beds*



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 DATE: 02/20/12, REV: 01/11/2012, 01/20/12  
 SCALE: 1" = 30'  
 ESTABLISHED 1945  
 INCORPORATED  
 PROFESSIONAL

**CONCEPTUAL LANDSCAPE PLAN**  
**PROSPERITY METRO**  
**2675 & 2677 PROSPERITY AVENUE**  
 PROVIDENCE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

REVISION APPROVED BY: [ ] DATE: [ ]  
 APPROVED BY: [ ] DATE: [ ]  
 NO. DESCRIPTION DATE BY

Application No: *RE 2012-PR-009* Staff: *WLD*  
 APPROVED DEVELOPMENT PLAN  
 (DP)  (GDP)  (CDP)  (FDP)  (PRC)  (CP)  
 SEE PROFFERS DATED: *10/3/12 F.P. record 9/19/12*  
 Date of (BOS) (FC) Approval: *10/16/12*  
 Sheet: *4* of *8*  
 Comments:

SHEET: P-0401

**PRELIMINARY BMP FACILITY DESIGN CALCULATIONS**

THE EXISTING PROPERTY IS CURRENTLY AND ADEQUATELY SERVED BY THREE (3) VORTECHS WATER QUALITY DEVICES INSTALLED WHEN THE PMP FACILITIES WHICH CONSIST OF REDEVELOPED UNDER PLAN NUMBER 5171-SP-01-2. WITH THIS PLAN, PROPERTY WAS PREVIOUSLY REDEVELOPED AGAIN. THEREFORE, UNDER PFM SECTION 6-0401.2C, THE PROPERTY WILL BE THAT THE PROPOSED PHOSPHOROUS LOAD AFTER REDEVELOPMENT SHALL NOT EXCEED THE EXISTING PHOSPHOROUS LOAD. THE FOLLOWING COMPUTATIONS DEMONSTRATE THAT THE SITE'S IMPERVIOUSNESS WILL BE REDUCED THEREBY REDUCING THE PHOSPHOROUS LOAD AND COMPLYING WITH THE WATER QUALITY REQUIREMENT.

SITE AREA = 3.72 AC.  
 EXISTING PERCENT IMPERVIOUS AREA = 3.07/3.72\*100 = 83%  
 POST-REDEVELOPMENT PERCENT IMPERVIOUS AREA = 2.99/3.72\*100 = 80%

WHILE THE PROPOSED REDEVELOPMENT PROJECT REQUIRES NO ADDITIONAL WATER QUALITY MEASURES, THIS PROJECT PROPOSES TO INSTALL PERMEABLE PAVERS (DESIGN 1, WITHOUT INFILTRATION) IN SOME OF THE PROPOSED NEW PARKING SPACES. THE COMPUTATIONS BELOW COMPUTE THE PHOSPHOROUS REMOVAL THAT WILL BE PROVIDED BY THE PERMEABLE PAVERS.

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

SUBAREA DESIGNATION AND DESCRIPTION	"C"	ACRES
(1)	(2)	(3)
A <sub>1</sub> ONSITE DRAINAGE AREA TO PERMEABLE PAVER AREAS #1 & 2	0.75	0.11

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

(A) AREA OF THE SITE (a) 3.72 ACRES

(B) WEIGHTED AVERAGE "C" FACTOR = 0.78

(SEE OVERALL SITE DRAINAGE SUMMARY, THIS SHEET)

**PART 3: COMPUTE THE ADDITIONAL PHOSPHOROUS REMOVAL FOR THE SITE**

SUBAREA DESIGNATION	BMP TYPE	REMOVAL EFF. (%)	AREA RATIO	"C" FACTOR RATIO	PRODUCT
(1)	(2)	(3)	(4)	(5)	(6)
A <sub>1</sub>	ONSITE DRAINAGE AREA TO PERMEABLE PAVER AREAS #1 & 2	35	0.11/3.72	0.75/0.78	= 1.00%
(a) TOTAL =					1.00%

**NOTE**

THIS SUMMARY IS PRELIMINARY AND SUBJECT TO CHANGE AT TIME OF SITE PLAN.

**BMP NARRATIVE**

THE PROPOSED CONSTRUCTION IS CONSIDERED REDEVELOPMENT AS THERE IS LESS THAN A 20% INCREASE IN IMPERVIOUS AREA IN A RMA (THERE IS ACTUALLY A DECREASE IN IMPERVIOUS AREA). THE C-FACTOR DECREASES FROM 0.80 PRE-DEVELOPMENT TO 0.78 POST-DEVELOPMENT. THE EXISTING DEVELOPMENT IS CURRENTLY ADEQUATELY SERVED BY BMP MEASURES. THEREFORE, THE PHOSPHOROUS REMOVAL REQUIREMENT FOR THIS REDEVELOPMENT IS THAT THERE CAN BE NO INCREASE IN PHOSPHOROUS LOAD RESULTING FROM THE PROPOSED REDEVELOPMENT. WITH THE DECREASE IN IMPERVIOUS AREA AND THEREFORE PHOSPHOROUS LOAD, THE BMP REQUIREMENTS ARE MET WITHOUT THE NEED FOR ANY ADDITIONAL BMP MEASURES. HOWEVER, ADDITIONAL BMP FACILITIES ARE CURRENTLY PROPOSED ON THIS PLAN. PERMEABLE PAVERS ARE CURRENTLY PROPOSED THAT WILL REMOVE 1.00% PHOSPHOROUS IN ADDITION TO THE EXISTING SITE BMP FACILITIES AS SHOWN IN THE ABOVE COMPUTATIONS.

**PRELIMINARY OVERALL SITE DRAINAGE SUMMARY**

**I. PRE-DEVELOPMENT:**

- A. TOTAL AREA = 3.72 AC.  
 CONTRIBUTING AREAS:  
 3.07 AC. @ 0.90 (IMPERVIOUS AREA ON-SITE)  
 0.65 AC. @ 0.30 (GREEN AREA ON-SITE)  
 3.72 AC.
- B. WEIGHTED "C":  
 $(3.07)(0.90) + (0.65)(0.3) = 0.80$   
 3.72
- C. TIME OF CONCENTRATION = 5 MIN.
- D. RUNOFF: Q<sub>2</sub> = (0.80)(5.45)(3.72) = 16.22 CFS  
 Q<sub>10</sub> = (0.80)(7.27)(3.72) = 21.64 CFS

**II. POST-DEVELOPMENT:**

- A. CONTRIBUTING AREAS:  
 2.99 AC. @ 0.90 (IMPERVIOUS AREA ONSITE)  
 0.73 AC. @ 0.30 (GREEN AREA ONSITE)  
 3.72 AC.
- B. WEIGHTED "C":  
 $(2.99)(0.90) + (0.73)(0.30) = 0.78$   
 3.72
- C. RUNOFF: Q<sub>2</sub> = (0.78)(5.45)(3.72) = 15.81 CFS  
 Q<sub>10</sub> = (0.78)(7.27)(3.72) = 21.09 CFS

**III. INCREASE:**

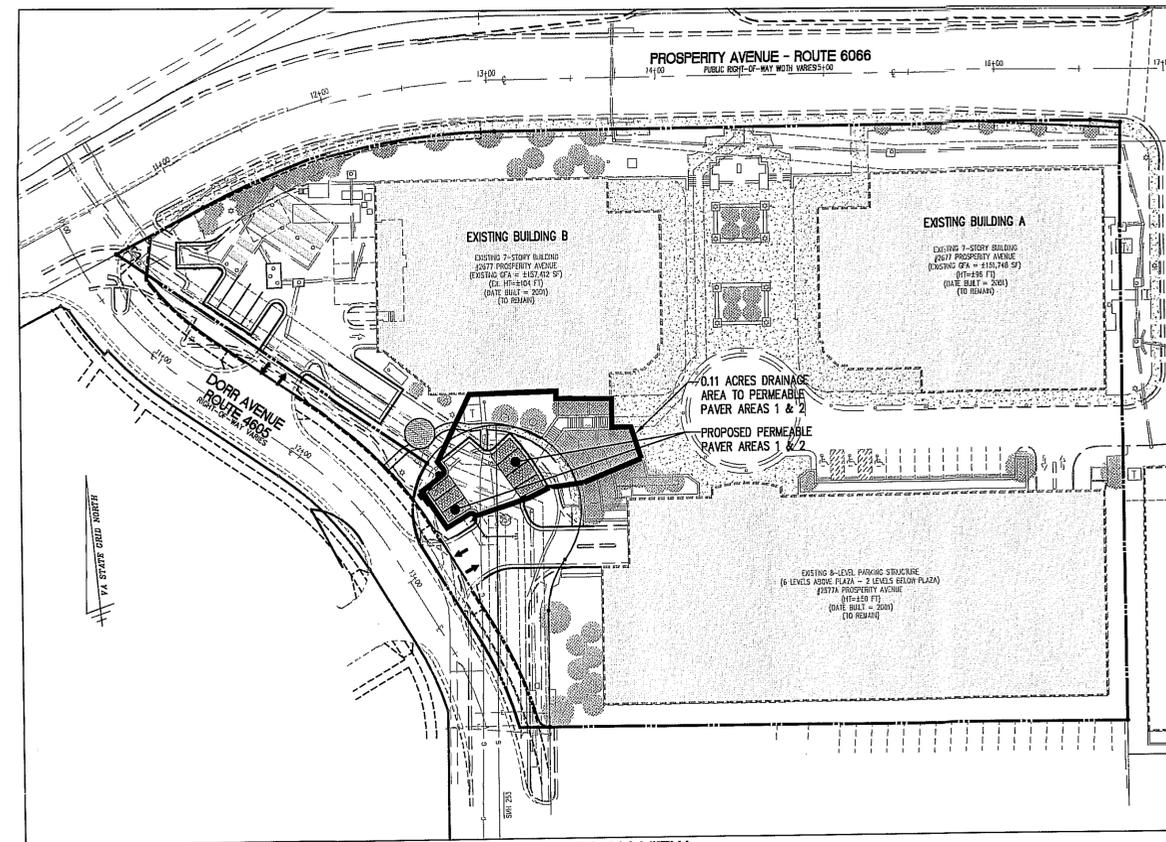
- Q<sub>2</sub> = 15.81 - 16.22 = -0.41 CFS (DECREASE)
- Q<sub>10</sub> = 21.09 - 21.64 = -0.55 CFS (DECREASE)

**NOTE**

THIS SUMMARY IS PRELIMINARY AND SUBJECT TO CHANGE AT TIME OF SITE PLAN.

**SWM NARRATIVE**

THE EXISTING DEVELOPED SITE HAS AN UNDERGROUND DETENTION FACILITY. THE ALLOWABLE RUNOFF PEAK RELEASE RATE FROM THE SITE WITH THE PROPOSED REDEVELOPMENT SHALL BE THE RELEASE RATE FROM THE SITE IN ITS CURRENT DEVELOPED CONDITION. THE 2-YEAR ALLOWABLE RELEASE RATE WILL BE 16.22 CFS AND THE 10-YEAR ALLOWABLE RELEASE RATE WILL BE 21.64 CFS. NO ADDITIONAL STORMWATER DETENTION IS REQUIRED BEYOND THE EXISTING FACILITY FOR THIS REDEVELOPMENT AS THE REDEVELOPED SITE HAS A LOWER C-FACTOR AND RUNOFF RATE THAN CURRENTLY EXISTS.



PLAN VIEW

SCALE: 1"=50'



(IN FEET)  
1 INCH = 50'

Application No: R2/FDP 2012-PR-007 Staff: WSD

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

SEE PROFFERS DATED: 10/3/12 FDP and 9/12/12

Date of (BOS) (PC) Approval: 10/6/12

Sheet: 5 of 8

Comments:

**STORMWATER MANAGEMENT CHECKLIST**

**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 EX\_UG DETENTION SHOWN ON SH. P-0201.
- 3. Provide: EXISTING ONSITE UNDERGROUND DETENTION  

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
Totals						
- 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet P-0301  
 Pond inlet and outlet pipe systems are shown on Sheet N/A.
- 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 P-0201, P-0401
- 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet P-0501
- 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 P-0502
- 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet P-0502
- 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 P-0201
- 11. A submission waiver is requested for N/A
- 12. Stormwater management is not required because PROPOSED RUNOFF WILL BE REDUCED BY REDUCING THE IMPERVIOUS AREA.

**PRELIMINARY STORMWATER MANAGEMENT PLAN**

**PROSPERITY METRO  
 2675 & 2677 PROSPERITY AVENUE  
 PROVIDENCE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA**

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 www.wlpinc.com  
 DATE: 10/12/12; REV: 6/11/2012; 7/31/2012  
 SCALE: 1"=50'  
 ESTABLISHED 1945

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

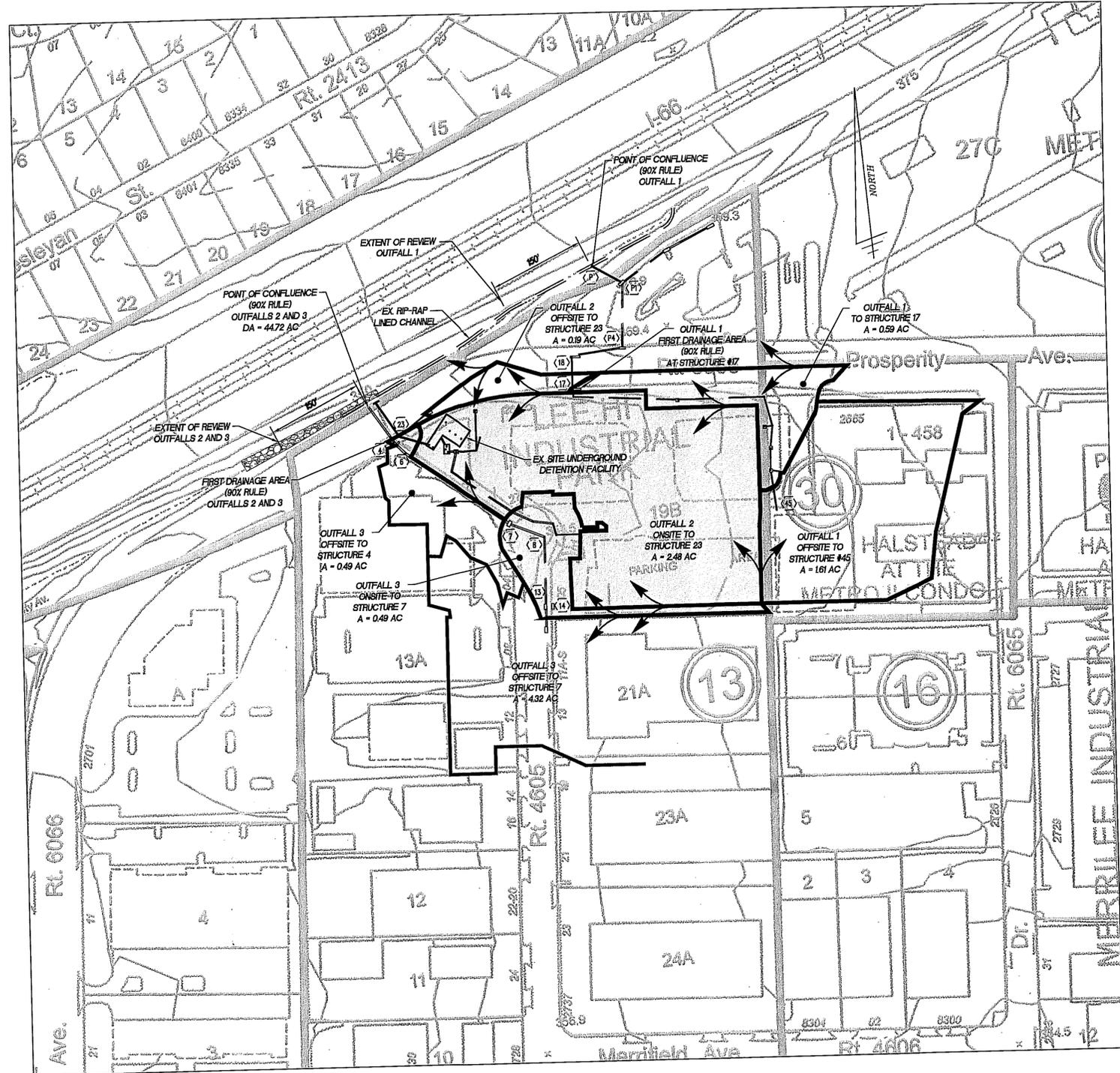
**OUTFALL NARRATIVE**

**EXISTING CONDITIONS:**  
 THE SITE IS CURRENTLY DEVELOPED AS AN OFFICE PARK WITH MOSTLY STRUCTURED PARKING. RUNOFF IS COLLECTED BY STORM DRAINS AND LEAVES THE SITE VIA THREE OUTFALLS, ALL OF WHICH CROSS UNDER PROSPERITY AVENUE TO THE NORTH AND NORTHWEST OF THE SITE. ALL THREE OUTFALL STORM SEWERS EMPTY INTO A RIPRAP LINED CHANNEL THAT FLOWS TO THE SOUTHEAST IN THE I-66 RIGHT-OF-WAY. THE SITE RUNOFF WHICH FLOWS TO OUTFALL 2, WHICH IS MOST OF THE SITE, IS ROUTED THROUGH AN UNDERGROUND DETENTION FACILITY LOCATED IN THE NORTHWEST CORNER OF THE PROJECT SITE BEFORE BEING RELEASED INTO A STORM SEWER SYSTEM THAT LEAVES THE SITE AND CROSSES UNDER PROSPERITY AVENUE. THE SITE RUNOFF TO THE OTHER TWO OUTFALLS LEAVES THE SITE UNDETAINED. REFER TO THE OUTFALL PLAN THIS SHEET.

**PROPOSED CONDITIONS:**  
 POST DEVELOPMENT THE RUNOFF FROM THE SITE WILL CONTINUE TO BE CONVEYED TO THE SAME THREE OUTFALLS AS CURRENTLY EXIST AS DESCRIBED ABOVE. THE OUTFALL 2 RUNOFF WILL CONTINUE TO BE ROUTED THROUGH THE EXISTING UNDERGROUND DETENTION FACILITY WITH NO CHANGES TO THE FACILITY. AS THERE WILL BE A NET DECREASE IN IMPERVIOUS AREA AND RESULTING RUNOFF WITH THE REDEVELOPMENT, NO ADDITIONAL STORMWATER DETENTION WILL BE REQUIRED OR PROVIDED TO COMPLY WITH THE PFM REQUIREMENTS.

IN ACCORDANCE WITH PFM SECTION 6-0203.2A, THE EXTENT OF DOWNSTREAM OUTFALL REVIEW CAN END 150' DOWNSTREAM OF A POINT WHERE A 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 IF THAT 150' OUTFALL SECTION IS ADEQUATE. FOR ALL THREE OUTFALLS, THE DRAINAGE AREA FOR THE CHANNEL IN THE I-66 ROW IS MUCH MORE THAN 90% OF THE FIRST DRAINAGE AREA SO THIS 90% RULE FOR EXTENT OF OUTFALL REVIEW WILL BE APPLIED WHERE THE SITE OUTFALLS ENTER THE CHANNEL. AS A RESULT, THE EXTENT OF REVIEW FOR THE ADEQUATE OUTFALL ANALYSIS APPLIES 150' DOWNSTREAM OF THE POINT WHERE THE SITE OUTFALLS ENTER THE EXISTING RIPRAP LINED CHANNEL. FOR ALL THREE OUTFALLS, THE STORM SEWER BETWEEN THE SITE AND THE I-66 CHANNEL AND THE 150' OF CHANNEL DOWNSTREAM OF THE STORM SEWER OUTLETS ARE ADEQUATE. THE STORM SEWERS AND CHANNEL HAVE ADEQUATE CAPACITY FOR A 10-YEAR EVENT AND 2-YEAR STORM FLOWS IN THE CHANNEL ARE NOT EROSIIVE. THEREFORE, IT IS OUR OPINION THAT ALL THREE SITE OUTFALLS WILL BE ADEQUATE.

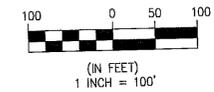
DRAINAGE DIVIDES AND CHANNEL INFORMATION WERE DETERMINED USING AVAILABLE RECORD INFORMATION AND TOPOGRAPHY AS WELL AS INFORMATION GATHERED IN THE FIELD. THIS OUTFALL ANALYSIS IS SUBJECT TO CHANGE WITH FINAL ENGINEERING AND WILL BE REEVALUATED AND VERIFIED AT SITE PLAN.



**OUTFALL PLAN**  
 SCALE: 1"=100'

Application No: PC/FDP 2012-PRO Staff: W010

APPROVED DEVELOPMENT PLAN  
 (DP)  (GDP)  (EDP)  (FDP)  (PRC)  (CP)  
 SEE PROFFERS DATED: 10/3/12 10/24/12  
 Date of (BOS) (PC) Approval: 10/24/12  
 Sheet: 6 of 8  
 Comments:



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NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE

**PRELIMINARY OUTFALL ANALYSIS**  
**PROSPERITY METRO**  
**2675 & 2677 PROSPERITY AVENUE**  
 PROVIDENCE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA



