

FLINT HILL LOWER SCHOOL (East Campus)

PROVIDENCE DISTRICT FAIRFAX COUNTY, VIRGINIA

GENERALIZED DEVELOPMENT PLAN / SPECIAL EXCEPTION AMENDMENT PLAT

RZ 2007-PR-002 SEA 84-P-105-03



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Application No. RZ 2007-PR-002-SEA 84-P-105-03
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
See Proffers Dated August 14, 2007
Date of (GDS) (PC) Approval Sept 10, 2007
Sheet 1 of 10

Concur. w/ SEA 84-P-105-3 w/ Dev. Cond. 29 Aug. 2007

FLINT HILL LOWER SCHOOL (East Campus)
GENERALIZED DEVELOPMENT PLAN / SPECIAL EXCEPTION AMENDMENT PLAT

NOTES

1. THIS GENERALIZED DEVELOPMENT PLAN (GDP)/SPECIAL EXCEPTION AMENDMENT (SEA) PLAT ACCOMPANIES TWO APPLICATIONS THAT HAVE BEEN FILED TO REZONE THE SUBJECT PROPERTY FROM THE R-4 DISTRICT TO THE R-3 DISTRICT AND TO AMEND THE CURRENTLY APPROVED DEVELOPMENT PROGRAM.

THE SUBJECT PROPERTY IS THE SITE OF A COMBINED PRIVATE SCHOOL OF GENERAL EDUCATION, A NURSERY SCHOOL AND CHILD CARE CENTER. THE PREVIOUSLY APPROVED AND CURRENTLY APPLICABLE SPECIAL EXCEPTION AMENDMENT THAT GOVERNS THIS USE IS REFERENCED AS 84-P-105-2, WHICH WAS APPROVED BY THE BOARD OF SUPERVISORS ON JUNE 29, 2000.

THE REZONING APPLICATION HAS BEEN FILED TO INCREASE THE PERMITTED FLOOR AREA RATIO (FAR) AND RESULTANT GROSS FLOOR AREA THAT WILL BE ASSOCIATED WITH AN EXPANSION OF THE EXISTING USE ON THE PROPERTY. THE SEA APPLICATION HAS BEEN FILED TO REPRESENT THE PROPOSED REVISED DEVELOPMENT PROGRAM.

IT IS TO BE NOTED THERE IS NO INCREASE PROPOSED TO THE STUDENT DAILY ENROLLMENT WHICH IS CURRENTLY APPROVED FOR 700 STUDENTS FOR THE COMBINED PRIVATE SCHOOL OF GENERAL EDUCATION AND CHILD CARE CENTER/NURSERY SCHOOL.

IT IS TO BE FURTHER NOTED THAT THE EXISTING NURSERY SCHOOL AND CHILD CARE CENTER PROGRAM THAT IS CONDUCTED IN THE CONVERTED DWELLING LOCATED ON THE EASTERN EDGE OF THE CAMPUS WILL BE RELOCATED TO BUILDINGS 2 AND 4 AS REPRESENTED ON THE GRAPHIC WHEN THE EXISTING BUILDING IS RAZED.

2. THE PROPERTY SHOWN ON THE GRAPHIC THAT IS THE SUBJECT OF THE GDP/SEA APPLICATIONS IS IDENTIFIED ON THE FAIRFAX COUNTY ZONING MAP AS 47-2 (11) 38A, 37, 38 AND 52A AND A PORTION OF ACADEMIC DRIVE. THE ENTIRE SITE IS ZONED R-1 AND CONTAINS 15.22 ACRES INCLUDING THE LAND AREA OF THAT PORTION OF ACADEMIC DRIVE LOCATED ON SITE THAT IS PROPOSED TO BE VACATED/ABANDONED.

3. THE TOPOGRAPHY REPRESENTED ON THE GRAPHIC IS AT A CONTOUR INTERVAL OF TWO (2) FEET TAKEN FROM A RECENT FIELD SURVEY.

4. THE BOUNDARY INFORMATION REPRESENTED ON THE GRAPHIC IS FROM AN ALTA/CASM SURVEY PREPARED BY WALTER L. PHILLIPS DATED SEPTEMBER 18, 1991 AND FROM EXISTING RECORDED DEEDS. THE INFORMATION HAS BEEN FIELD CHECKED.

5. THE MINIMUM YARD REQUIREMENTS IN THE R-3 DISTRICT FOR ALL OTHER STRUCTURES ARE AS FOLLOWS:

FRONT YARD: CONTROLLED BY A 40° ANGLE OF BULK PLANE, BUT NOT LESS THAN 30 FEET.

SIDE YARD: CONTROLLED BY A 35° ANGLE OF BULK PLANE, BUT NOT LESS THAN 10 FEET.

REAR YARD: CONTROLLED BY A 35° ANGLE OF BULK PLANE, BUT NOT LESS THAN 25 FEET.

6. THE EXISTING USE IS CURRENTLY SERVED BY PUBLIC SANITARY SEWER AND WATER THAT ARE LOCATED ON THE SITE.

7. THE COMPREHENSIVE SWM PROGRAM PROPOSED WITH THIS DEVELOPMENT INCLUDES MODIFICATIONS TO THE EXISTING DRY POND LOCATED ON THE PROPERTY AS WELL AS THE INSTALLATION OF SEVERAL LOW-IMPACT-DEVELOPMENT (LID) TECHNIQUES INCLUDING BIO-RETENTION BASINS/FILTERS, PERCOLATION TRENCHES, VEGETATED SWALES, RAINFOREST, AND/OR REFORESTATION. THIS SYSTEM WILL SATISFY THE STORMWATER MANAGEMENT (SWM) REQUIREMENTS FOR BOTH THE TWO (2) YEAR AND TEN (10) YEAR DESIGN STORMS. THE TWO (2) YEAR STORM EVENT DISCHARGES WILL BE DETAINED IN THE POND AND RELEASED AT A RATE BELOW THAT OF THE EXISTING FACILITY AND INTO AN ADEQUATE OUTFALL. THE BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS FOR THE SITE WILL BE ACHIEVED AS DESCRIBED ABOVE AND WILL INCLUDE REVISIONS TO THE EXISTING SWM DRY POND THAT INCLUDE CONVERTING IT TO AN EXTENDED DETENTION SWM FACILITY.

8. THERE IS NO FLOODPLAIN, NO RESOURCE PROTECTION AREA (RPA) OR NO ENVIRONMENTAL QUALITY CORRIDOR (EQC) LOCATED ON THE SUBJECT PROPERTY.

9. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO GRAVES LOCATED ON THE SUBJECT PROPERTY.

10. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO UTILITY EASEMENTS LOCATED ON THE SUBJECT PROPERTY THAT HAVE A WIDTH OF TWENTY-FIVE (25) FEET OR MORE AND THERE ARE NO MAJOR UNDERGROUND UTILITY EASEMENTS.

11. THERE ARE EXISTING STRUCTURES LOCATED ON THE CURRENTLY APPROVED SPECIAL EXCEPTION PROPERTY. ONE OF THE PRIMARY STRUCTURES, THE MILLER HOUSE, WHICH CONTAINS THE ADMINISTRATION BUILDING FOR THE SCHOOL, WAS CONSTRUCTED IN 1930 AND WAS RELOCATED TO THE SITE. THE OTHER PRIMARY STRUCTURES WERE CONSTRUCTED IN 1990, 1993 AND IN SUBSEQUENT YEARS. THEY WILL BE RETAINED. ACCORDING TO THE FAIRFAX COUNTY ASSESSMENT RECORDS, THE ONE STORY FRAME AND STONE STRUCTURE LOCATED ON LOT 47-2 (11) 52A WAS CONSTRUCTED IN 1953. THE DATE OF CONSTRUCTION OF THE STRUCTURE (RESIDENCE) ON LOT 47-2 (11) 37 IS UNKNOWN. LIKEWISE, THE DATES OF CONSTRUCTION OF THE FRESH TANNING STRUCTURE AND THE BARN LOCATED ON THE EASTERN PORTION OF LOT 38A ARE UNKNOWN. THE TWO EDUCATIONAL TRAILERS WERE PLACED ON THE CAMPUS IN 2001. NONE OF THE FREESTANDING STRUCTURES HAVE ANY HISTORICAL OR ARCHITECTURAL VALUE OR SIGNIFICANCE. ALL OF THEM WILL BE RAZED, AND THE EDUCATIONAL TRAILERS WILL BE REMOVED FROM THE SITE WITH THE FINAL IMPLEMENTATION OF THE PROPOSED DEVELOPMENT PROGRAM. (SEE NOTE 20 BELOW.)

12. THE COMPREHENSIVE PLAN LAND USE RECOMMENDATION FOR THE SUBJECT PROPERTY READS AS FOLLOWS:

3. THE FLINT HILL PREPARATORY SCHOOL SHOULD MAINTAIN A CHARACTER THAT IS COMPATIBLE WITH THE EXISTING AND PLANNED DEVELOPMENT IN THE VICINITY.

THE PROPOSED DEVELOPMENT PROGRAM FOR THE CAMPUS IS IN CONFORMANCE WITH THIS LAND USE RECOMMENDATION.

13. THE COMPREHENSIVE PLAN RECOMMENDS A MAJOR PAVED TRAIL ALONG JERMANTOWN ROAD AND ALONG CHAIN BRIDGE ROAD. THERE ARE EXISTING SIDEWALKS/TRAILS ON THESE TWO ROADS WHICH SATISFY THIS REQUIREMENT. THE COMPREHENSIVE PLAN ALSO RECOMMENDS A TRAIL ON MILLER ROAD. AN ADDITIONAL TWO (2) FEET OF RIGHT-OF-WAY WILL BE DEDICATED ALONG THE SITE FRONTAGE ON MILLER ROAD TO ACCOMMODATE THIS PROPOSED TRAIL TO BE CONSTRUCTED BY OTHERS. IN ADDITION, A FIVE (5) FOOT WIDE SIDEWALK WILL BE CONSTRUCTED AS REPRESENTED ON THE GRAPHIC ALONG THIS FRONTAGE.

14. THE STATEMENTS REQUIRED BY PAR. 7A-G OF SECT. 9-011 OF THE ZONING ORDINANCE ARE FURNISHED IN A SEPARATE DOCUMENT.

15. A WAIVER OF THE SERVICE DRIVE ALONG CHAIN BRIDGE ROAD, ROUTE 123, IS HEREBY REQUESTED IN ACCORDANCE WITH PRIOR APPROVALS. IT IS TO BE NOTED THAT THE PROPOSED DEVELOPMENT PROGRAM HAS BEEN DESIGNED TO ACCOMMODATE THE RESERVATION OF RIGHT-OF-WAY FOR THE PROPOSED IMPROVEMENT OF CHAIN BRIDGE ROAD BY OTHERS. IN THE INTERIM, IN CONJUNCTION WITH THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT PROGRAM, THE APPLICANT WILL CONSTRUCT THE PROPOSED RIGHT TURN LANE FROM SOUTHBOUND ROUTE 123 TO WESTBOUND JERMANTOWN ROAD AS REPRESENTED ON THE INSET PRESENTED ON SHEET 3.

16. THERE IS NO TRANSITIONAL SCREENING OR BARRIER REQUIRED ALONG THE EASTERN EDGE OF THE EXISTING PROPOSED USE. THERE IS A 25 FOOT TRANSITIONAL SCREENING YARD AND BARRIER REQUIRED ALONG THE SOUTHERN, WESTERN AND NORTHERN BOUNDARIES. A MODIFICATION OF THIS REQUIREMENT IS HEREBY REQUESTED IN ACCORDANCE WITH PRIOR APPROVALS SUBJECT TO THE PROPOSED LANDSCAPING AND THE PRESERVATION OF THE EXISTING LANDSCAPING AND EXISTING VEGETATION REPRESENTED ON THE GRAPHIC.

17. THE PROPOSED SIX (6) FOOT HIGH FENCE THAT IS REPRESENTED ALONG MILLER ROAD AND ALONG A PORTION OF THE WESTERN PROPERTY LINE WILL BE PROVIDED SUBJECT TO THE APPROVAL OF THE BOARD OF SUPERVISORS IN ACCORDANCE WITH NOTE 20 BELOW AND SUBJECT TO THE APPROVAL OF THE DIRECTOR OF PD/W&ES IN THE VICINITY OF THE PROPOSED STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICE DRY POND.

17. THE PROPOSED LIMITS OF CLEARING AND GRADING ARE REPRESENTED ON THE GRAPHIC.

18. TO THE BEST OF OUR KNOWLEDGE, THERE ARE LIMITED QUANTITIES OF GASOLINE, FERTILIZER AND CHEMICALS CURRENTLY LOCATED ON THE SUBJECT PROPERTY THAT ARE CUSTOMARILY ASSOCIATED WITH THE GROUNDS MAINTENANCE, BUILDING MAINTENANCE AND EDUCATIONAL PROGRAMS AT A SCHOOL OF GENERAL EDUCATION. THE PROPOSED AMENDMENT TO THE USE WILL NOT GENERATE, UTILIZE, STORE, TREAT OR DISPOSE OF ANY ADDITIONAL SUCH SUBSTANCES. TO THE BEST OF OUR KNOWLEDGE, SUCH SUBSTANCES ARE WILL BE UTILIZED, STORED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

19. THE LOCATIONS, ARRANGEMENT AND SIZES OF THE PROPOSED STRUCTURES AND SITE IMPROVEMENTS SHOWN ON THE GRAPHIC ARE APPROXIMATE AND MAY BE THE SUBJECT OF ADJUSTMENT BASED ON FINAL ARCHITECTURAL AND ENGINEERING DESIGN. THE GROSS FLOOR AREAS FOR THE INDIVIDUAL BUILDINGS ARE PRESENTED IN THE TABULATION FOR INFORMATION ONLY. IT IS TO BE NOTED THAT THE GROSS FLOOR AREA REPRESENTATIONS FOR THE EXISTING BUILDINGS ON THE CAMPUS HAVE BEEN RECALCULATED AND THEREFORE DIFFER FROM THE INDIVIDUAL BUILDING CALCULATIONS PRESENTED ON THE CURRENTLY APPROVED SPECIAL EXCEPTION AMENDMENT PLAT. IN ADDITION, IT IS TO BE NOTED THAT BOTH THE EXISTING AND PROPOSED BUILDINGS MAY HAVE CEILING SPACE WHICH SPACES WILL BE CALCULATED FOR PARKING IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 25 OF SECT. 11-102 OF THE ZONING ORDINANCE.

IT IS TO BE UNDERSTOOD THAT THE GROSS FLOOR AREA REPRESENTATIONS FOR THE INDIVIDUAL BUILDINGS MAY BE INCREASED AND/OR TRANSFERRED FROM ONE BUILDING TO ANOTHER AS LONG AS THE GRAND TOTAL GROSS FLOOR AREA THAT IS REPRESENTED IN THE TABULATION IS NOT EXCEEDED AND THE BUILDING FOOTPRINTS AND HEIGHTS ARE IN SUBSTANTIAL CONFORMANCE WITH THE REPRESENTATIONS SET FORTH ON THE GRAPHIC AND IN THE TABULATION.

IT IS TO BE FURTHER UNDERSTOOD THAT THE PROPOSED EDUCATIONAL BUILDING #4 LOCATED ON THE NORTHERN PORTION OF THE CAMPUS MAY BE CONSTRUCTED TO ENABLE THE FUTURE EXPANSION OF A THIRD FLOOR. THE GROSS FLOOR AREA OF THE POSSIBLE THIRD FLOOR WILL BE SUBJECT TO THE TOTAL GROSS FLOOR AREA FOR THE CAMPUS THAT IS REPRESENTED IN THE TABULATION.

20. IT IS TO BE UNDERSTOOD BOTH EXISTING AND PROPOSED FENCES OF VARYING HEIGHTS ARE/ WILL BE LOCATED THROUGHOUT THE SITE. A THREE (3) TO FOUR (4) FOOT HIGH CHAIN LINK FENCE WILL BE PROVIDED TO ENCLOSE ALL OR A PORTION OF THE PROPOSED PLAYGROUND/OUTDOOR ACTIVITY AREA IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS. FOR THAT FENCE IN EXCESS OF FOUR (4) FEET IN HEIGHT THAT WILL BE LOCATED IN THE FRONT YARD ADJACENT TO MILLER ROAD, REQUEST IS HEREBY MADE FOR BOARD APPROVAL OF AN INCREASE IN HEIGHT OF SAID FENCE IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 3H OF SECT. 10-104 OF THE ZONING ORDINANCE.

IN ADDITION, THERE ARE/ WILL BE WATER FOUNTAINS, BICYCLE RACKS, PICNIC TABLES, PLAY EQUIPMENT, TRASH RECEPTACLES, DUG OUTS, MOVEABLE BLEACHERS, FREESTANDING SIGNS, TRAILS, PATHS AND OTHER ACCESSORY FEATURES LOCATED THROUGHOUT THE SITE THAT ARE NOT REPRESENTED ON THE GRAPHIC. ALL SUCH ACCESSORY FEATURES WILL BE IN STRICT ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE ZONING ORDINANCE AND OTHER COUNTY REGULATIONS.

A SIDEWALK(S) OR DIRECT ACCESSIBILITY BETWEEN PROPOSED BUILDING 4 AND THE PROPOSED PLAYGROUND/OUTDOOR ACTIVITY AREA WILL BE PROVIDED. ADDITIONAL SIDEWALKS AND PATHS WILL BE CONSTRUCTED ON SITE ONCE EXPERIENCE SUGGESTS THE NEED AND BEST LOCATION/ALIGNMENT.

ALL SIGNS ACCESSORY TO THE EXISTING/PROPOSED USE WILL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS SET FORTH IN ARTICLE 12 OF THE ZONING ORDINANCE.

IT IS TO BE FURTHER UNDERSTOOD THAT THERE MAY BE FREESTANDING SUPPORT BUILDING(S) CONSTRUCTED IN THE SEVERAL APPROXIMATE LOCATIONS DESIGNATED ON THE GRAPHIC. THE SUPPORT BUILDINGS MAY BE USED FOR STORAGE OF MATERIALS AND EQUIPMENT RELATED TO THE SCHOOL OPERATIONS, GROUNDS MAINTENANCE AND/OR ATHLETIC PROGRAMS. THE GROSS FLOOR AREA(S) OF SAID SUPPORT BUILDING(S) WILL BE SUBJECT TO THE TOTAL GROSS FLOOR AREA FOR THE CAMPUS THAT IS REPRESENTED IN THE TABULATION. NO SUPPORT BUILDING WILL EXCEED TWENTY-FIVE (25) FEET IN HEIGHT.

LASTLY, IT IS TO BE UNDERSTOOD THAT THE EXISTING EDUCATIONAL TRAILERS ON THE SITE MAY BE RELOCATED ON SITE ON A TEMPORARY BASIS DURING THE PHASED CONSTRUCTION OF THE PROPOSED DEVELOPMENT PROGRAM WITH THE UNDERSTANDING THEY WILL BE COMPLETELY REMOVED FROM THE SITE WITHIN THREE (3) MONTHS OF ISSUANCE OF THE NON-RESIDENTIAL USE PERMIT (NON-RUP) FOR NEW BUILDING 4. THE SEVERAL POSSIBLE TEMPORARY VICINITY LOCATIONS FOR THE TRAILERS ARE IDENTIFIED BY A ★ ON THE GRAPHIC.

21. THE EXISTING/PROPOSED USE HAS/ WILL REQUIRE OUTSIDE LIGHTING OF THE PARKING AREAS. THE LOCATION AND HEIGHT OF THE LIGHT STANDARDS HAVE BEEN WILL BE PRESENTED ON THE SITE PLANS. NO LIGHTS ARE PROPOSED FOR THE ATHLETIC FIELDS. ALL LIGHTS WILL BE LOCATED AND DESIGNED TO REDUCE GLARE ON ADJOINING PROPERTIES IN ACCORDANCE WITH THE GLARE STANDARDS SET FORTH IN ARTICLE 14 OF THE ZONING ORDINANCE AND IN ACCORDANCE WITH PRIOR APPROVALS.

22. THE EXISTING/PROPOSED USE MAY REQUIRE OUTSIDE LOUDSPEAKERS, THE LOCATION OF WHICH WILL BE PRESENTED ON THE SITE PLANS. THE LOUDSPEAKERS WILL BE DESIGNED TO SATISFY THE NOISE STANDARDS SET FORTH IN ARTICLE 14 OF THE ZONING ORDINANCE. THEY WILL BE USED FOR EMERGENCY PURPOSES ONLY.

23. IT IS TO BE UNDERSTOOD THAT THE NUMBER OF PARKING SPACES REPRESENTED ON THE GRAPHIC AND ON THE TABULATION SATISFIES THE MINIMUM NUMBER THAT ARE REQUIRED AND THAT THE APPLICANT RESERVES THE RIGHT TO PROVIDE A GREATER OR LESSER NUMBER OF SPACES AS MAY BE APPROVED BY THE DIRECTOR SO LONG AS THE AMOUNT OF OPEN SPACE AS REPRESENTED IN THE TABULATION AND THE DISTANCES TO THE PERIPHERAL LOT LINES AS REPRESENTED ON THE GRAPHIC ARE NOT REDUCED.

IT IS TO BE FURTHER UNDERSTOOD THAT THE PROVISION OF PARKING SPACES MAY BE PHASED IN ACCORDANCE WITH THE PHASED EXPANSION OF THE SCHOOL AND THAT THE NUMBER OF PARKING SPACES AT ANY POINT IN TIME WILL ALWAYS EQUAL OR EXCEED THE NUMBER THAT IS REQUIRED AT THAT TIME. PARKING SPACES WILL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 11 OF THE ZONING ORDINANCE WITH THE UNDERSTANDING THAT A MODIFICATION OR WAIVER OF THE BUSIENESS SURFACE REQUIREMENT MAY BE REQUESTED FOR A PORTION OR ALL OF THE PROPOSED PARKING SPACES IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 11 OF SECT. 11-102 OF THE ZONING ORDINANCE.

24. IT IS TO BE UNDERSTOOD THAT THE PROPOSED DEVELOPMENT PROGRAM WILL OCCUR OVER TIME BASED ON THE AVAILABILITY OF FUNDS. THE BEGINNING OF DEVELOPMENT WILL COMMENCE AS SOON AS ALL NECESSARY APPROVALS ARE OBTAINED. IT IS CURRENTLY ANTICIPATED THAT INITIAL DEVELOPMENT WILL COMMENCE WITHIN THIRTY (30) MONTHS FROM THE APPROVAL DATE OF THE SPECIAL EXCEPTION AS REQUIRED BY THE PROVISION SET FORTH IN PAR. 1 OF SECT. 9-015 OF THE ZONING ORDINANCE. IT IS TO BE UNDERSTOOD, HOWEVER, THAT PORTIONS OF THE DEVELOPMENT PROGRAM MAY NOT BE STARTED WITHIN SAID TIMEFRAME. SINCE THE SPECIAL EXCEPTION USE HAS ALREADY BEEN ESTABLISHED, AND THE CHANGES PROPOSED BY THIS AMENDMENT ARE MERELY ACCESSORY TO THAT USE, THEN THE IMPLEMENTATION OF ANY OF THESE PROPOSED CHANGES WITHIN THE SAID TIMEFRAME SHALL BE SUFFICIENT FOR ALL SUCH CHANGES PROPOSED WITH THIS AMENDMENT TO BE DEEMED ESTABLISHED AND/OR COMMENCED.

25. INTENSITY CREDIT (FAR) FOR ANY AND ALL DEDICATIONS OF LAND FOR PUBLIC PURPOSES WILL BE RESERVED FOR THE CAMPUS IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PAR. 4 OF SECT. 2-309 OF THE ZONING ORDINANCE.

26. NOTWITHSTANDING THE GDP/SEA PLAT IS PRESENTED ON ONE DOCUMENT, THE APPLICANT RESERVES THE RIGHT TO FILE FOR ONLY A SPECIAL EXCEPTION AMENDMENT(S) FROM THE BOARD OF SUPERVISORS IN THE FUTURE IN ACCORDANCE WITH SECT. 9-014 OF THE ZONING ORDINANCE, WITHOUT FILING FOR AN AMENDMENT TO THE GENERALIZED DEVELOPMENT PLAN, SO LONG AS THE FLOOR AREA RATIO (FAR) IS NOT INCREASED AND ALL PROFFERED CONDITIONS ARE SATISFIED.

27. TO THE BEST OF OUR KNOWLEDGE, EXCEPT AS QUALIFIED ABOVE, THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO ALL CURRENT APPLICABLE LAND DEVELOPMENT ORDINANCES AND ADOPTED STANDARDS.

TABULATION

EXISTING ZONING R-1
PROPOSED ZONING R-3

PROPOSED USE PRIVATE SCHOOL OF GENERAL EDUCATION NURSERY SCHOOL AND CHILD CARE CENTER
MAXIMUM NUMBER OF STUDENTS 700

LAND AREA (682,806± SF) 15.22± AC
PARCELS 38A, 37, 38, 52A (648,875± SF) 14.89115± AC
ACADEMIC DRIVE VACATED RIGHT-OF-WAY (14,131± SF) 0.32440± AC

PERMITTED/PROPOSED FLOOR AREA RATIO 0.25
PERMITTED/PROPOSED GROSS FLOOR AREA 165,700 SF

EXISTING/PROPOSED BUILDING PROGRAM

BUILDING NUMBER	USE	HEIGHT (±)	GROSS FLOOR AREA (±)
1	EXISTING ADMINISTRATION/DINING/ EDUCATIONAL	35'	7,219 SF
2	EXISTING EDUCATIONAL AND PROPOSED NURSERY SCHOOL/ CHILD CARE CENTER/DINING	45'	40,430 SF
3	EXISTING EDUCATIONAL ACTIVITY	40'	34,744 SF
SUBTOTAL EXISTING GROSS FLOOR AREA 82,393 SF			
4	PROPOSED EDUCATIONAL/NURSERY SCHOOL/CHILD CARE CENTER	30'	37,846± SF**
	2 FLOORS	45'	58,769± SF**
	3 FLOORS	25'	3,125± SF**
5	PROPOSED SUPPORT BUILDING(S)	45'	10,941± SF**
6	PROPOSED ATRIUM/BUILDING CONNECTOR	12'	2,880± SF**
7	EXISTING TEMPORARY TRAILERS (2)		
SUBTOTAL PROPOSED GROSS FLOOR AREA 83,307 SF**			

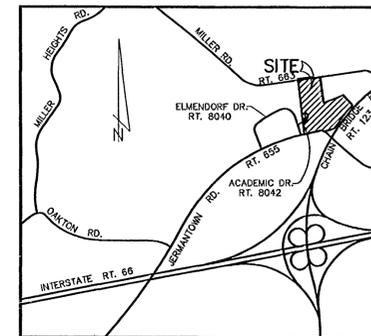
PARKING SPACES REQUIRED / PROVIDED 196**
CHILD CARE CENTER (0.19 SPACE PER 36 CHILDREN) 7
PRIVATE SCHOOL
ONE (1) SPACE PER FACULTY STAFF MEMBER/EMPLOYEE 120
PEAK DEMAND 69

OPEN SPACE PROVIDED NONE
OPEN SPACE PROVIDED (60%) 8.9± AC

APPROXIMATE EXISTING IMPERVIOUS AREA FACTOR 27%
APPROXIMATE PROPOSED IMPERVIOUS AREA FACTOR 31%

* SEE NOTE 19.
** SEE NOTES 19 AND 20.
*** SEE NOTE 23.

VICINITY MAP
1" = 2,000'



FLINT HILL LOWER SCHOOL (East Campus)
GENERALIZED DEVELOPMENT PLAN / SPECIAL EXCEPTION AMENDMENT PLAT

RZ 2007-PR-002
SEA 84-P-105-03

REV. JULY 2, 2007
REV. JUNE 1, 2007
REV. MAY 18, 2007
REV. APRIL 25, 2007
REV. APRIL 16, 2007
REV. MARCH 26, 2007
REV. FEBRUARY 28, 2007
JANUARY 11, 2007

SUBMISSION DATE

Applicant:
FLINT HILL SCHOOL
3320 JERMANTOWN ROAD
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M-10634

LEGEND

- EXISTING VEGETATION
- PROPOSED DECIDUOUS TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN
- PROPOSED SHRUB
- TREE COUNTED TOWARDS SATISFYING INTERIOR PARKING LOT LANDSCAPE REQUIREMENT
- POSSIBLE LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT FACILITY
- TO INCLUDE BIO-RETENTION BASIN/FILTER, PERCOLATION TRENCH, RAINFOREST, VEGETATED SWALE OR REFORESTATION
- PROPOSED LIMITS OF CLEARING AND GRADING
- EXISTING FENCE
- EXISTING/PROPOSED FENCE
- POSSIBLE TEMPORARY VICINITY LOCATION FOR EXISTING EDUCATIONAL TRAILERS - SEE NOTE 20

CURVE TABLE

NO.	RADIUS	DELTA	ARC	TANGENT	CHORD	BEARING
1	1477.39'	10°38'57"	274.60'	137.69'	274.20'	S43°17'59" W
2	188.24'	33°27'43"	109.94'	58.59'	108.38'	N84°19'27" W
3	1262.44'	03°17'37"	72.57'	36.29'	72.56'	S77°23'19" W

LANDSCAPE TABULATIONS

THE INFORMATION PROVIDED BELOW IS INTENDED TO REFLECT THE ABILITY TO SATISFY MINIMUM LANDSCAPE REQUIREMENTS WITHIN THE PROPOSED DEVELOPMENT PROGRAM. AT TIME OF SITE PLAN, INDIVIDUAL TREES IDENTIFIED MAY VARY AND/OR ADDITIONAL TREES MAY BE IDENTIFIED AS CONTRIBUTING TOWARDS MEETING THE LANDSCAPE REQUIREMENT AND/OR ADDITIONAL TREE COVER MAY BE CLAIMED FOR EXISTING TREES WITH LARGER CALIPER/TREE COVERAGE.

INTERIOR PARKING LOT LANDSCAPING TABULATION

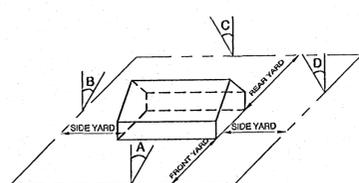
PARKING LOT AREA TO BE COUNTED	64,924 SF
INTERIOR PARKING LOT LANDSCAPING REQUIRED	3,246 SF (5%)
INTERIOR PARKING LOT LANDSCAPING PROVIDED	3,400 SF (5.24%)
17 CAT IV TREES @ 200 SF	= 3,400
TOTAL AREA REQUIRED	3,246 SF (5%)
TOTAL AREA PROVIDED	3,400 SF (5.24%)

TREE COVER TABULATION

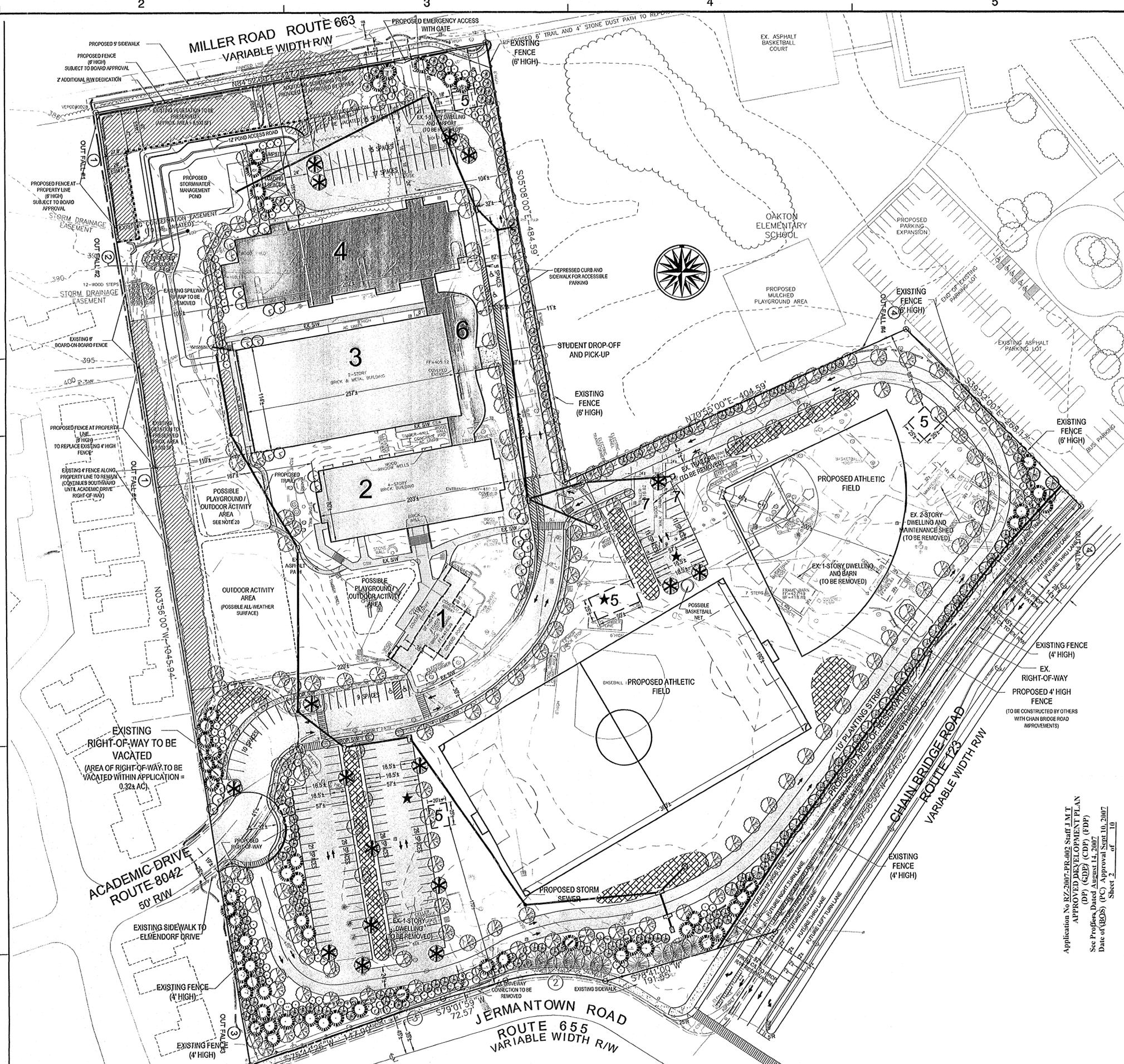
GROSS SITE AREA	662,983 SF (15,220 AC)
ADJUSTED SITE AREA	468,033 SF (10,745 AC)
LAND DEDICATIONS	28,950 SF (R/W DEDICATION AND RESERVATION)
DEDUCTIONS	98,000 SF (PLAYING FIELDS)
BLDG FOOTPRINT (SITE PLANS)	69,100 SF
TREE COVER REQUIRED	93,607 SF (20%)
TREE COVER PROVIDED	97,350 SF (20.80%)
CREDIT FOR TREES PLANTED	74,850 SF
199 CAT IV DECID @ 200 SF/TREE = 39,800 SF	
55 CAT IV EVER @ 200 SF/TREE = 11,000 SF	
21 CAT II EVER @ 150 SF/TREE = 3,150 SF	
160 CAT II EVER @ 100 SF/TREE = 16,000 SF	
23 CAT II DECID @ 100 SF/TREE = 2,900 SF	
CREDIT FOR TREES PRESERVED	18,000 SF X 1.25 = 22,500 SF

ANGLE OF BULK PLANE

MINIMUM REQUIRED YARD FOR BUILDING WITH 45' HEIGHT



- FRONT YARD: 1 A 45° WITH A BUILDING HEIGHT OF 45', THE FRONT YARD = 32' BUT NOT LESS THAN 32'
- SIDE YARD: 1 B 35° WITH A BUILDING HEIGHT OF 45', THE FRONT YARD = 32' BUT NOT LESS THAN 10'
- REAR YARD: 1 C 35° WITH A BUILDING HEIGHT OF 45', THE FRONT YARD = 32' BUT NOT LESS THAN 32'



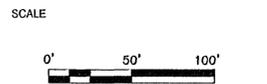
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**FLINT HILL LOWER SCHOOL
 (East Campus)**
 GENERALIZED DEVELOPMENT PLAN /
 SPECIAL EXCEPTION AMENDMENT PLAN
 SEA 84-P-105-03
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



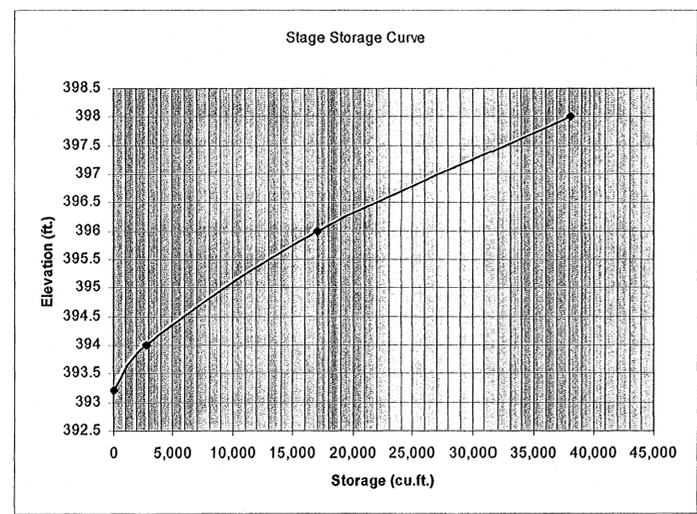
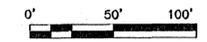
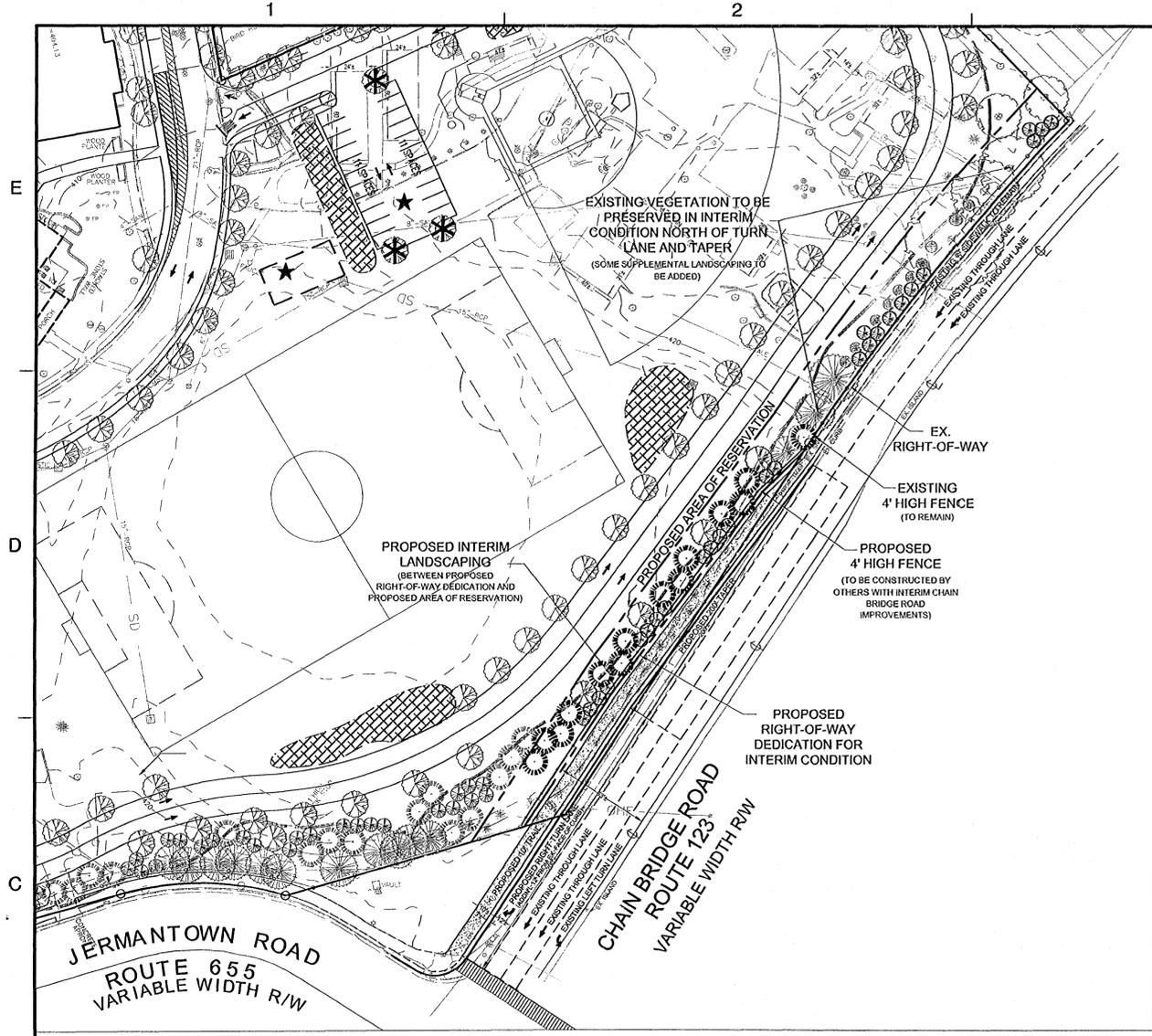
No.	DATE	BY	Description
7	07.02.07	GAH	
6	06.01.07	JMC	
5	05.18.07	GAH	
4	04.25.07	GAH	
3	04.16.07	GAH	
2	03.26.07	GAH	
1	02.28.07	GAH	

DRAWN BY: JMC
 APPROVED BY: PGY
 CHECKED BY: PGY
 DATE: JANUARY 11, 2007

TITLE
 FLINT HILL LOWER SCHOOL
 GENERALIZED DEVELOPMENT
 PLAN / SPECIAL EXCEPTION
 AMENDMENT
 SEA 84-P-105-03

DEVELOPMENT PLAN
 PROJECT NO. M-10634

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BMP Facility Design Calculation

Plan Name: Flint Hill Date: Jul-07
 Plan Number: Engineer: PCC

BMP Narrative

I. Water Quality Narrative
 The proposed pond will address BMP requirements for the proposed site. This pond design provides a total phosphorus removal of 41% which exceeds the minimum 40% requirement per the Occoquan method.

The best management requirements for the site, including that required for the improvements proposed with this site, were estimated as reflected in the computations on this sheet. The area draining to the pond has a proposed runoff value of C = 0.47. The computations reflect that the proposed pond will provide a total phosphorus removal of 41% which exceeds the minimum requirement. As proposed, the proposed pond will provide adequate BMP for the proposed improvements.

II. Watershed Information
 Part 1: List all of the Subareas and "C" Factors used in the BMP Computation

Subarea Designation and Description	"C"	Acres
Area B1' Onsite Uncontrolled	0.30	0.48
Area B2a-Off Off-Site Uncontrolled	0.51	2.2
Area B2a-Pond Onsite Controlled	0.41	12.68
Area B2a-LID Onsite Controlled	0.80	1.92
Area B2b' Offsite Uncontrolled	0.43	10.73
Area B3' Onsite Uncontrolled	0.30	0.05
Area B4' Onsite Controlled	0.30	0.09

III. Phosphorus Removal - "Occoquan Method"
 This section is for the use in the jurisdictions which do not utilize CBLAD's "Chesapeake Bay Method" for phosphorus removal calculations. The "Chesapeake Bay Method" is addressed in Section III.B of this worksheet. Please check with your local jurisdiction to determine which method to use.

Part 2: Compute the Weighted Average "C" Factor for the Site

Sub Area Designation	"C"	Acres	Product
Area B1' Onsite Uncontrolled	0.30	0.48	0.14
Area B2a-Off Off-Site Uncontrolled	0.45	12.68	5.71
Area B2a-LID Onsite Controlled	0.80	1.92	1.54
Area B3' Onsite Uncontrolled	0.30	0.05	0.02
Area B4' Onsite Controlled	0.30	0.09	0.03
	(b)		7.43

(c) Weighted Average "C" Factor (b)/(a)=(c) 0.49

Part 3: Compute the total Phosphorus Removal for the Site

Sub Area Designation	Area (Acres)	"C" Value	BMP type	Removal Eff (%)	Area Ratio	"C" Ratio	Product
Area B1' Onsite Uncontrolled	0.48	0.30	Uncontrolled	40%	0.83	0.92	0.00%
Area B2a-Pond Onsite Controlled	12.68	0.45	ED Dry Pond	40%	0.13	1.64	30.73%
Area B2a-LID Onsite Controlled	1.92	0.80	Bioretention	50%	-	-	10.34%
Area B3' Onsite Uncontrolled	0.05	0.30	Uncontrolled	-	-	-	0.00%
Area B4' Onsite Controlled	0.09	0.30	ED Dry Pond	40%	0.01	0.61	0.15%
					(a) Total		41.21%

Part 4: Determine Compliance with Phosphorus Removal Requirement
 Since 41.21% > 40% Phosphorus removal requirement is satisfied.

Weighted Average "C" Factor for Proposed BMP facility = 0.38

Determine the Storage Required for Facility

(A) Extended Detention Dry Pond
 Chart A8-40 value (Appendix 4-3) for BMP storage per acre
 [(4375x0.38) or (31.25 x %imp)] = (a) 772.954993 c/ac
 Design 1 (48 hour drawdown)

Actual Storage Volume of Pond = 11,784.38 cf
 Actual Area Provided with BMP = 18.11 Acres

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 (8-011 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) (16-302 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 5.

3. Provide:

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)
Dry Pond	14.35	10.09	24.44	118,94	26,050	4.8

(e.g. dry pond A, infiltration, trench, underground, vault, etc.)

Totals

4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 5. 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 5. Type of maintenance access road surface noted on the plat is N/A (e.g. 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 practice requirements will be met is provided on Sheet 3.

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 3.

9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 3.

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.

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

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

Industry Letter 05-03 dated 02/02/05

SWM NARRATIVE:
 The Flint Hill Lower School (East Campus) is bordered by Miller Road Route 63 and Jermantown Road Route 655 on the north and south side respectively and on the east side by Oakton Elementary School. The site is identified as Fairfax County Zoning Map 47-2 (11) lots 36A, 37, 38, and 52A for a total of 14.89 acres. The proposed plan includes the demolition of some existing buildings and parking and the addition of a road, parking lots and a building. The proposed improvements result in more than 20% increase in imperviousness. The comprehensive SWM program proposed with this development includes modifications to the existing dry pond located on the property as well as the installation of several Low-Impact-Development (LID) techniques including bio-retention basins/filters, percolation trenches, vegetated swales, Rainstore, and/or reforestation. This series of LID techniques will satisfy the stormwater management (SWM) requirements for both the two (2) year and ten (10) year design storms. The two (2) year storm event discharges will be detained in the pond and released at a rate below that of the existing facility into an adequate detention SWM facility. The best management practice (BMP) requirements for the site will be achieved as described above and will include revisions to the existing SWM dry pond that include converting it to an extended detention SWM facility. The pond will discharge at a controlled rate of 48 cfs into the existing 100-year drainage easement as per existing conditions.

Water Quality Requirements:
Extended Detention Dry Pond: Due to the increase in imperviousness, an extended detention dry pond will provide water quality requirements. The pond's riser structure will be designed to release stored runoff into the soil, recharging groundwater to treat stormwater therefore providing the required 40% phosphorus removal (see attached calculations).
Low-Impact-Development SWM: These facilities including bio-retention basins/filters, percolation trenches, Rainstore, vegetated swales or reforestation will be installed and detailed as necessary to meet BMP requirements.

Water Quantity (Detention) Requirements:
Extended Detention Dry Pond: Currently, stormwater runoff is released by an existing SWM, located along the north-west boundary of the site, pond into an existing 100-year drainage easement at a rate of 48 cfs. The proposed SWM pond will modify the existing pond bringing it up to code and will match the existing release rate into the existing 100-year drainage easement.
Low-Impact-Development SWM: These facilities including bio-retention basins/filters, percolation trenches, Rainstore, vegetated swales or reforestation will be installed and detailed as necessary to meet detention requirements.

Outfall Analysis:
Outfall Overview:
 The storm sewer from our site will outfall to a well defined existing drainage ditch with adequate bed and banks to convey the proposed discharges within the drainage easements. Our proposed pond is sized to match the predevelopment discharge rates in the drainage easement. The proposed discharge rate of 49.7 cfs is less than the existing discharge rate of 50.5 cfs (as shown on sheet 3A) into the drainage easement. Cross-sections within the drainage easement (see sheet 3A on attached plan 6590-MSP-001-2) are shown to be adequate.

The proposed pond was sized to detain on-site increases and does not include detention from off-site facilities. The Oakton Elementary School contributes an offsite drainage area of 11.90 ac while our site contributes a drainage area of 12.8 ac. The runoff from both drainage areas will be discharged into at the floodplain limit into an adequate water course channel leading to the main stream bed of Difficult Run. In our professional opinion the outfall is adequate and is limited to beds and banks of down stream channel in accordance with PFM section 6-203.3.

Outfall 1 (non-concentrated):
 Outfall 1 is located near the north-west border of the site. The runoff to this outfall is from the north-west portion of the site that does not drain into the existing and proposed SWM pond. The outfall drains directly into an existing 100-year drainage easement, D.B. 6068, PG. 400. The comparison of runoff from existing site conditions to proposed site conditions can be found in the table below. The proposed development results in a decrease in runoff from the site draining to offsite drainage areas by 0.81 acres for outfall 1.

Outfall 2 (concentrated):
 Outfall 2 begins at the outlet point of the existing SWM facility. The runoff to this outfall includes drainage from both the Flint Hill School site as well as some offsite drainage areas from the Oakton Elementary School site. Specifically, Outfall #2 conveys drainage from 13.41 ac of the Flint Hill School site and 11.90 ac of off-site area. These two areas produce an inflow hydrograph to the proposed SWM facility of 87.06 cfs for the 10-year storm. The flow from the proposed SWM facility continues downstream through my receiving channel in an existing 100-year drainage easement, D.B. 6068, PG. 400 at a controlled non-erosive release rate of 48 cfs that matches the existing discharge rate from the existing SWM facility. Three cross sections in this reach have been surveyed and hydraulic calculations prepared to show the capacity through this reach. These cross sections are shown on Sheet 3A of this plan set. The outfall then continues downstream to a point identified as Point C (on Sheet 3C). At this point 31.6 acres of offsite water converges with our outfall channel to mark the point of confluence of a tributary with at least 90% of four drainage area. The flow then continues from this downstream point of confluence under Miller Road in an existing culvert sized for this total flow as shown on Sheet 3A and 3B.

Outfall 3 (non-concentrated):
 Outfall 3 is located near the south-west corner of the site. The runoff to this outfall is from the south-west corner of the lot and does not drain into the existing and proposed SMW pond. The outfall drains offsite into Oak Marr Courts. The comparison of runoff from the existing site conditions to proposed site conditions can be found in the table below. The proposed development results in a decrease in runoff from the site draining to offsite drainage areas by 0.10 acres for outfall 3.

Outfall 4 (non-concentrated):
 Outfall 4 is located on the south-east border of the site. The runoff to this outfall initially drains offsite and then later conveyed through offsite drainage areas onto the site to outfall 2. The proposed development results in a decrease in runoff from the site draining to offsite drainage areas by 0.08 acres for outfall 4.

Outfall	Existing 2-yr Q (cfs)	Proposed 2-yr Q (cfs)	Existing 10-yr Q (cfs)	Proposed 10-yr Q (cfs)
1	2.79	0.89	3.43	1.99
2	40*	40	48*	48
3	0.27	0.09	0.33	0.11
4	4.16	0.38	5.10	0.47

* Existing release rate of existing pond into existing 100-year drainage easement.

STAGE-STORAGE CALCULATIONS

$$V = h/3 * [A1 + A2 + \sqrt{A1 * A2}]$$

ELEV (ft)	h (ft)	AREA (acres)	VOLUME (acre-ft)	TOTAL VOLUME (acre-ft)	(cubic ft)
393.2	0	0.040	0.000	0.000	0
394	0.8	0.127	0.064	0.064	2,768
396	2	0.203	0.327	0.391	17,014
398	2	0.284	0.485	0.875	38,129

BMP REQUIREMENT = 12,397 CF
 BMP ELEVATION = 395.5' CF
 BMP PROVIDED = 13,000 CF

Dewberry

Dewberry & Davis LLC
 845 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703 549 0100
 FAX: 703 549 0519
 www.dewberry.com

CHATELAIN Architects, p.c.
 3516 Connecticut Avenue NW
 Washington, DC 20008
 Tel: 202 244 0243
 Fax: 202 244 5593

FLINT HILL LOWER SCHOOL (East Campus)
 GENERALIZED DEVELOPMENT PLAN / SPECIAL EXCEPTION AMENDMENT PLAT
 RZ 2007-PR-002
 SEA 04-P-106-03
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA

SEAL
 COMMONWEALTH OF VIRGINIA
 PHILIP C. CHAMPAGNE
 No. 030073
 07/16/07
 PROFESSIONAL REGISTER

KEY PLAN

SCALE

No.	DATE	BY	Description
7	07.02.07	GAH	
6	06.01.07	JMC	
5	05.18.07	GAH	
4	04.25.07	GAH	
3	04.16.07	GAH	
2	03.26.07	GAH	
1	02.28.07	GAH	

REVISIONS

DRAWN BY: JMC
 APPROVED BY: PGY
 CHECKED BY: PGY
 DATE: JANUARY 11, 2007

TITLE: FLINT HILL LOWER SCHOOL GENERALIZED DEVELOPMENT PLAN / SPECIAL EXCEPTION AMENDMENT
 RZ 2007-PR-002
 SEA 04-P-106-03
 INTERIM ROAD IMPROVEMENTS
 STORMWATER CALCS & NARRATIVE
 PROJECT NO. M-10634

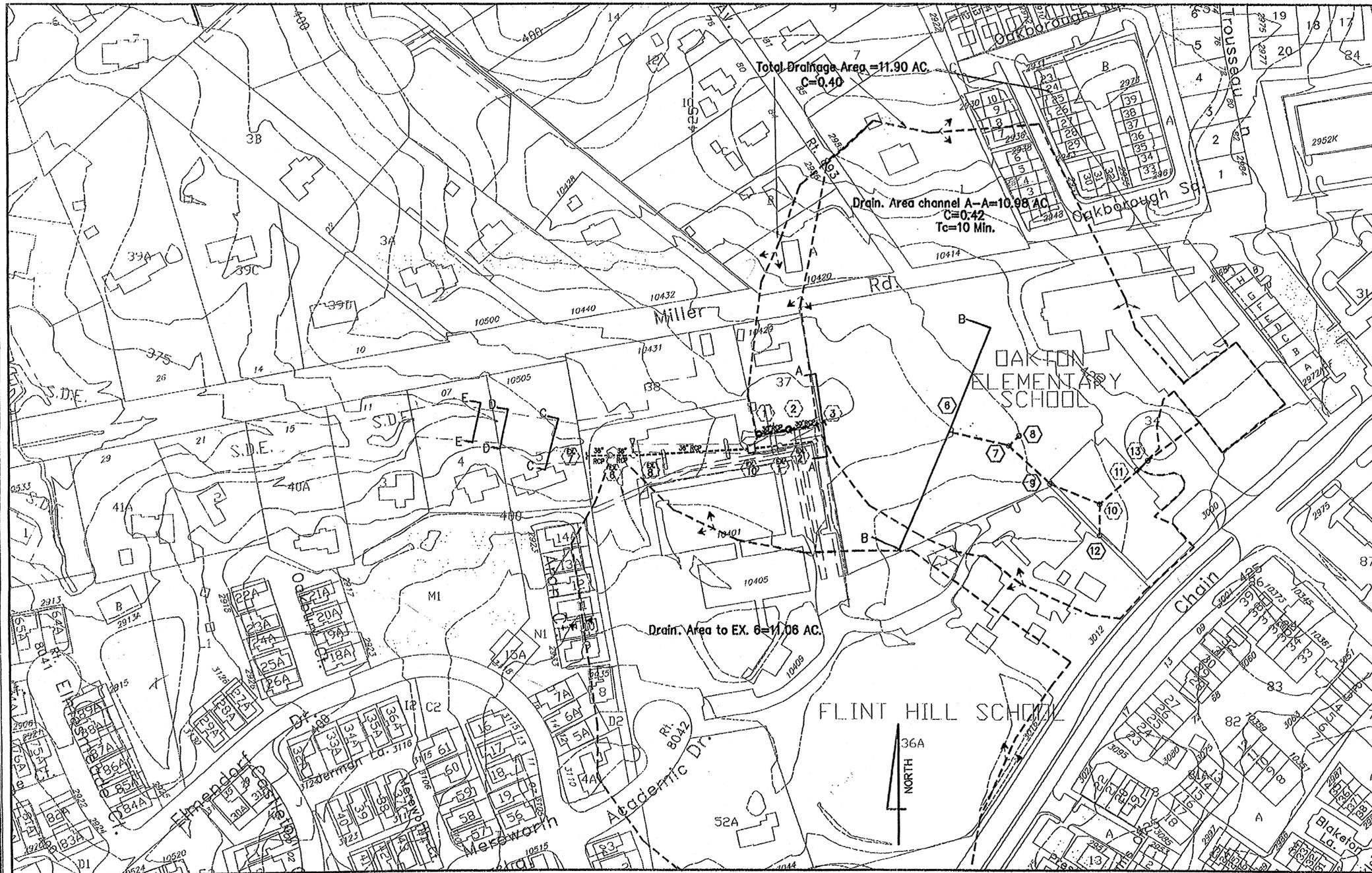
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SHEET NO. 3 OF 7
 M-10634

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OFF-SITE DRAINAGE AREA MAP

SCALE: 1" = 100'



PRE-DEVELOPMENT SITE CONDITIONS NARRATIVE:

The Oakton Elementary School site consists of 9.22 acres of land. The existing impervious area on this site is 2.95 acres including all buildings, parking lot area, side walks and recreation areas. The School Board of Fairfax County is seeking to add new parking lot to northeast of the existing parking, and new recreation area with new side walk.

Runoff Computations:

Total site area: 9.22 Ac

Existing condition:

- Existing parking lot area = 0.68 Ac.
- Existing building area = 1.40 Ac.
- Existing side walk area = 0.17 Ac.
- Existing Paved Area (Driveway) = 0.39 Ac.
- Existing Asphalt Basketball Area = 0.26 Ac.
- Existing Trailer = 0.048 Ac.
- Total existing impervious area = 2.95 Ac.
- Tc = 5.00 min.
- 12yr. = 5.45 in./hr.
- 10yr. = 7.27 in./hr.
- Cw = 2.95(0.9) + 6.27(0.30)/9.22 = 0.49
- Q2yr. = (0.49) (5.45) (9.22) = 24.62 cfs
- Q10yr. = (0.49) (7.27) (9.22) = 32.84 cfs

Proposed condition:

- Proposed side walk and recreation area = 0.0018 Ac.
- Proposed parking lot = 0.3004 Ac.
- Total impervious area = 3.25 Ac.
- Cw = (3.25) (0.9) + (5.97) (0.3)/9.22 = 0.51
- Q2yr. = (0.51) (5.45) (9.22) = 25.63 cfs
- Q10yr. = (0.51) (7.27) (9.22) = 34.19 cfs
- Q2yr. increase = 25.63 cfs - 24.62 cfs = 1.01 cfs
- Q10yr. increase = 34.19 cfs - 32.84 cfs = 1.35 cfs

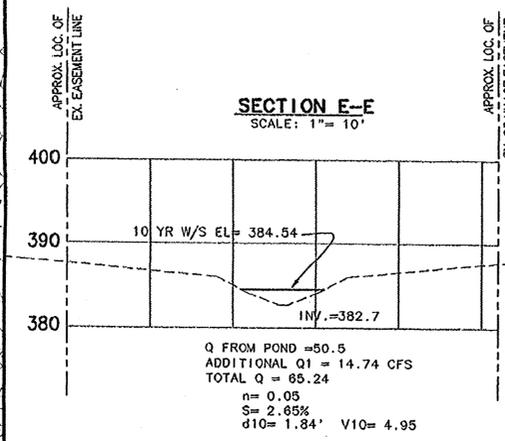
Application No. RZ-2007-PR-002 Staff J.M.T.
 APPROVED DEVELOPMENT PLAN
 (DP) (QDE) (CDP) (FDP)
 See Profiles Dated August 14, 2007
 Date of (QDS) (PC) Approval Sept. 10, 2007
 Sheet 3 of 10

Concur: w/ SEA 84-P-105-3 w/ Dev. Condit. 29 Aug. 2007 w/ M. D.P. 21 Aug. 07

DESIGN BY:	SJ
DRAWN BY:	JFO
CHECKED BY:	HM
DATE:	JANUARY 2008
DRAWING NO.:	1644
SHEET:	13 OF 13

OUTFALL NARRATIVE AND OFF-SITE DRAINAGE MAP
OAKTON ELEMENTARY SCHOOL
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA

PROFESSIONAL DESIGN GROUP, INC.
 14301-B SULLYFIELD CIRCLE, SUITE 203
 CHANTILLY, VIRGINIA, 20151
 ENGINEERS, SURVEYORS, CONSULTANT
 PHONE (703) 631-2344
 FAX (703) 378-2102



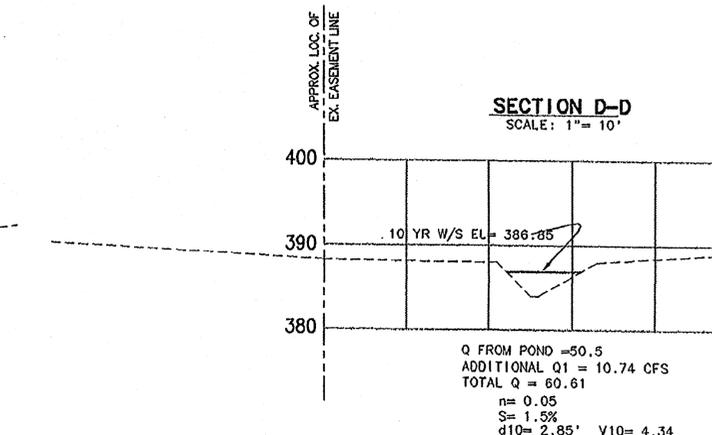
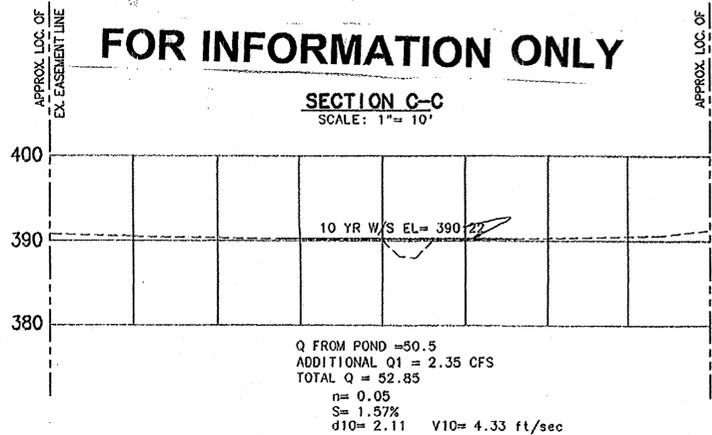
OUTFALL NARRATIVE

The storm runoff from the parking lot area will be collected through the On-Site closed storm sewer system running toward the west, and then draining into a adequate natural channel on site (see sheet 5 for Sections A & B), and then it will be collected by an existing storm sewer pipes on the Flint Hill School through existing structures #3 to #2 with capacity of 65.75 cfs. (please refer to attached plan #6330-SP-05) The 10 yr WSEL found to be within the existing 15' storm sewer easmt at Str#3 (please refer to sheet # 3). Existing Structure #3 is an end wall with existing rip-rap leading into it and is in good condition. Then from existing structures #2 The run off will be carried through structures #1, Ex 8, Ex 10, Ex 6 and finally drains to existing stormwater management pond. (please refer to storm sewer computations on sheet #9). The storm sewer after the pond will outfall to a well defined existing drainage ditch with adequate bed and banks to convey the proposed runoff within an existing drainage easements as demonstrated here on section C-C through E-B. (Refer to attached plan #6330, sheet 7 of 14)

The pond on Flint Hill School was sized based on post development offsite drainage area of 11.90 Ac that include the Oakton Elementary School at C = 0.40, plus a 0.90 AC from the Flint Hill School which contribute a total area of 12.80 AC at C = 0.41. The increase in impervious area of 0.30 AC at C = 0.90 by adding the parking lot will not change the post C of 0.41, please refer to attached plan # 6330-SP-01-A, for Storm Drainage Analysis. The pond was design to only detain the on-site increase and did not include any detention from offsite. The emergency spillway & structure is designed adequately for the increase in run off.

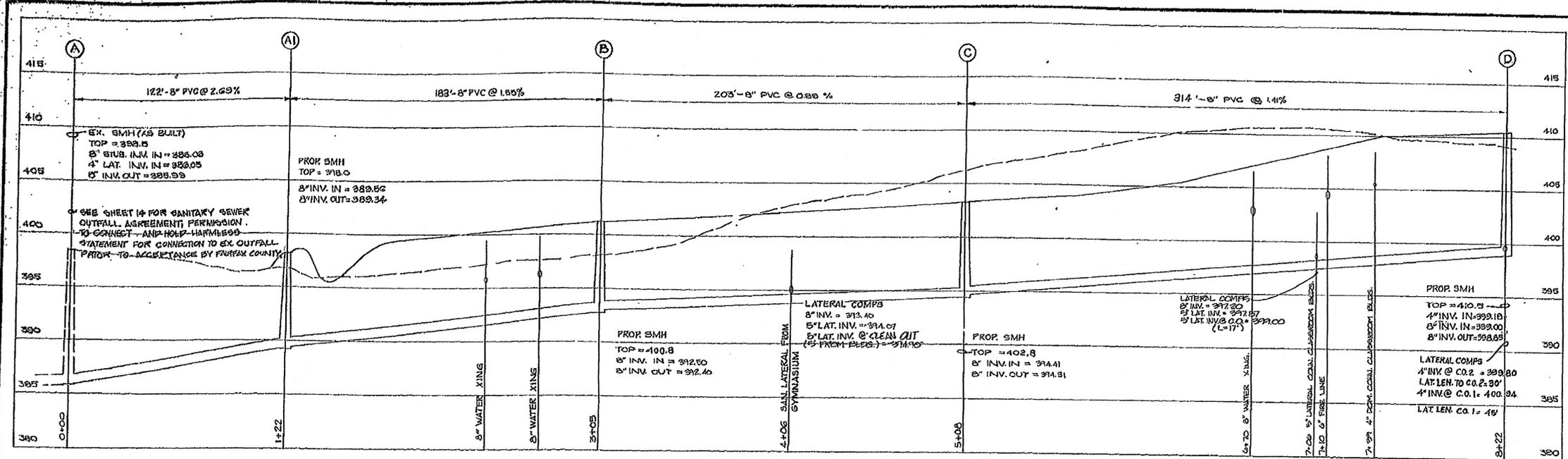
Finally, the runoff will be discharged at the flood plain limit into an adequate water course channel leading to the main stream bed of Difficult Run located to the northwest of this project.

The analysis is made to Section E-E which is at more than 150 ft downstream of existing structure 6 where the receiving channel is joined by another sub area that has a drainage area of 11.06 Ac. that is more than 90% of the size of the drainage area to section A-A at the point of confluence (Ex. Str. #6) in accordance with section 6-203.2A. In our professional opinion the outfall is adequate and is limited to beds and banks of Downstream Channel as shown on the computations in accordance with section 6-203.3 of PEM.



DATE	DESCRIPTION	BY
	REVISION BLOCK	

REVISION APPROVED BY DIVISION OF DESIGN REVIEW				
NO	DESCRIPTION	DATE	APPROVED	DATE

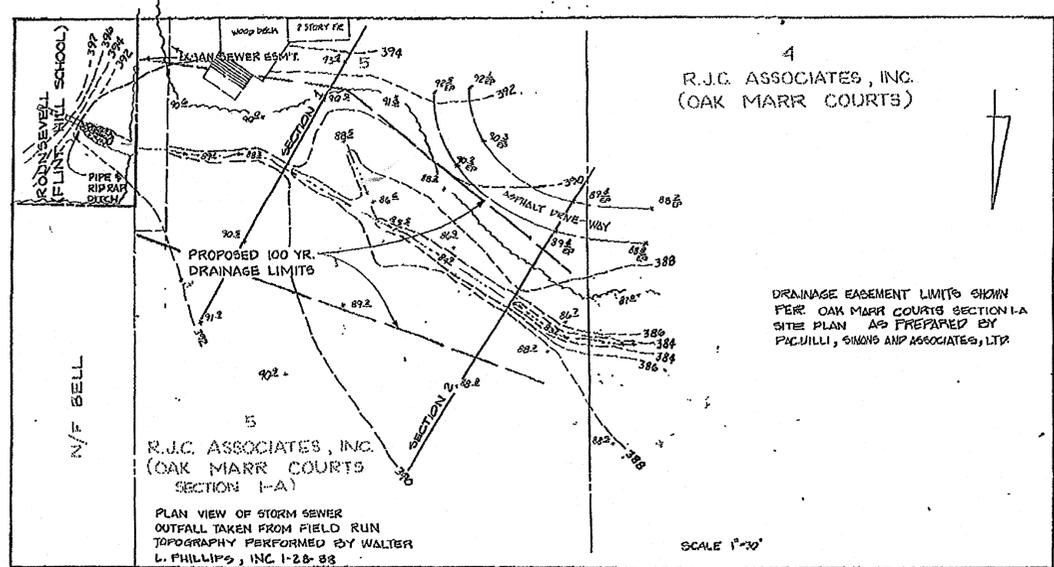


SANITARY SEWER PROFILES
SCALE: HOR. 1" = 30'
VER. 1" = 5'

SANITARY SEWER NOTE:
SEE DRAINAGE MAP ON SHEET 10 OF 14 FOR CAPACITY AND INVERT CONSIDERATION FOR POSSIBLE FUTURE CONNECTIONS.

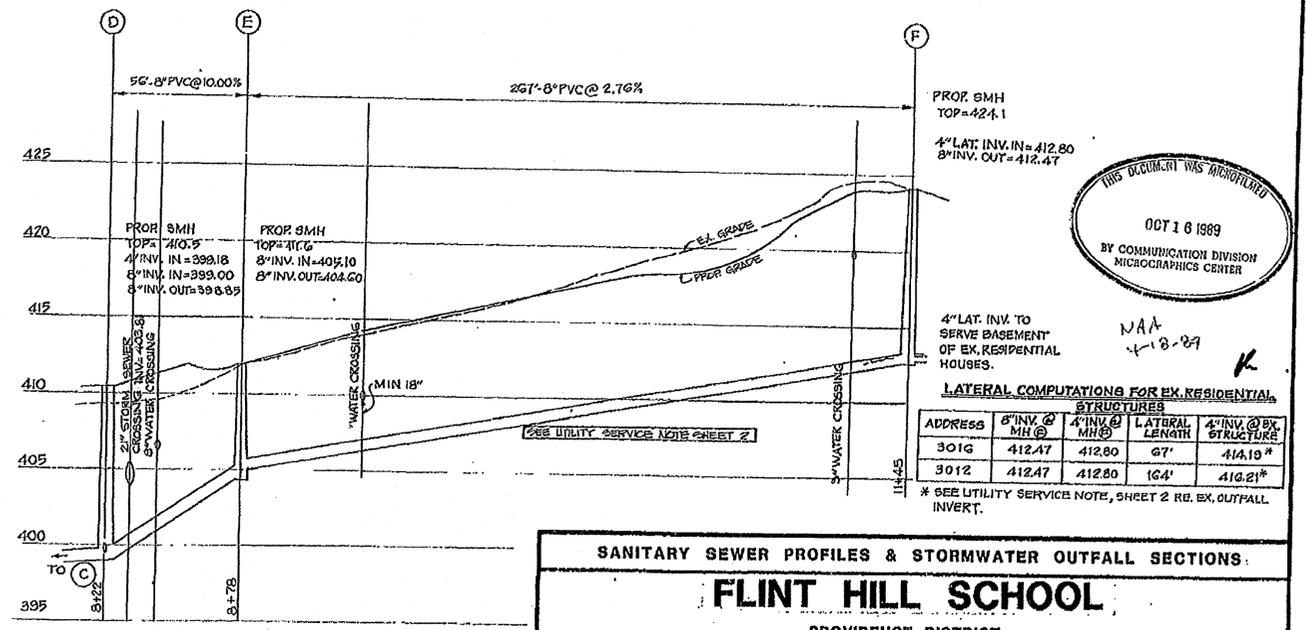
Application No RZ-2007-PR-002 Staff J.M.T.
APPROVED DEVELOPMENT PLAN
(DP) (CDD) (FDP) (FDD)
See Progress Report August 14, 2007
Date of (EOD) (PC) Approval Sept 10, 2007
Sheet 3 of 10
Invent. w/ SEA 84-P-105-3 w/ Dev. Cond. 29A Aug. 2007

STORMWATER DETENTION OUTFALL, SECTIONS & COMPUTATIONS



SECTION 1	SECTION 2
<p>DRAINAGE EASEMENT LIMITS</p> <p>100 YR. W.S. = 370.5'</p> <p>EXIST. GRADE</p> <p>Q₁₀ = 63 CFS (SEE DETENTION ROUTING, SHEET 9 OF 14)</p> <p>$Q = \frac{1.49}{n} (A)(R^{2/3}) \sqrt{S}$</p> <p>n = 0.05</p> <p>A = 225 SF</p> <p>P = 69.8 FT</p> <p>R = 0.326 R^{2/3} = 0.47</p> <p>S = 0.041%</p> <p>$a = \frac{87}{0.07} (12.2)(0.47)(1.024)$</p> <p>Q = 60 CFS</p> <p>SCALE: HORIZ. 1" = 30' VERT. 1" = 5'</p>	<p>DRAINAGE EASEMENT LIMITS</p> <p>100 YR. W.S. = 287.5'</p> <p>EXIST. GRADE</p> <p>Q₁₀ = ADDITIONAL OFF-SITE Q = 2.6 x 0.3 x 8.1 = 6.3 CFS FROM FLINT HILL DETENTION = 63 CFS TOTAL = 69.3 CFS</p> <p>$Q = \frac{1.49}{n} (A)(R^{2/3}) \sqrt{S}$</p> <p>n = 0.05</p> <p>A = 16.5 SF</p> <p>P = 12 FT</p> <p>R = 0.97 R^{2/3} = 0.95</p> <p>S = 0.025% S^{2/3} = 0.198</p> <p>$q = \frac{1.49}{0.05} (0.5)(0.98)(0.158)$</p> <p>Q = 76 CFS</p> <p>SCALE: HORIZ. 1" = 30' VERT. 1" = 5'</p>

FOR INFORMATION PURPOSES ONLY



THIS DOCUMENT WAS MICROFILMED
OCT 16 1989
BY COMMUNICATION DIVISION
MICROGRAPHICS CENTER

STORM SEWER OUTFALL NARRATIVE
THE STORM SEWER OUTFALL FOR THIS SITE IS A WELL DEFINED EXISTING DRAINAGE SWALE WITH ADEQUATE BED AND BANKS TO CONVEY PROPOSED RUNOFFS FROM THIS SITE. PER THE ADJACENT SECTIONS AND COMPUTATIONS, ADEQUATE DRAINAGE EASEMENTS ON THE ADJACENT OAK MARR COURTS SITE PLAN HAVE BEEN PROVIDED AS PREPARED BY PLANS FOR DOWNSTREAM DEVELOPMENT. (BY OTHERS)

SANITARY SEWER PROFILES & STORMWATER OUTFALL SECTIONS:

FLINT HILL SCHOOL
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163

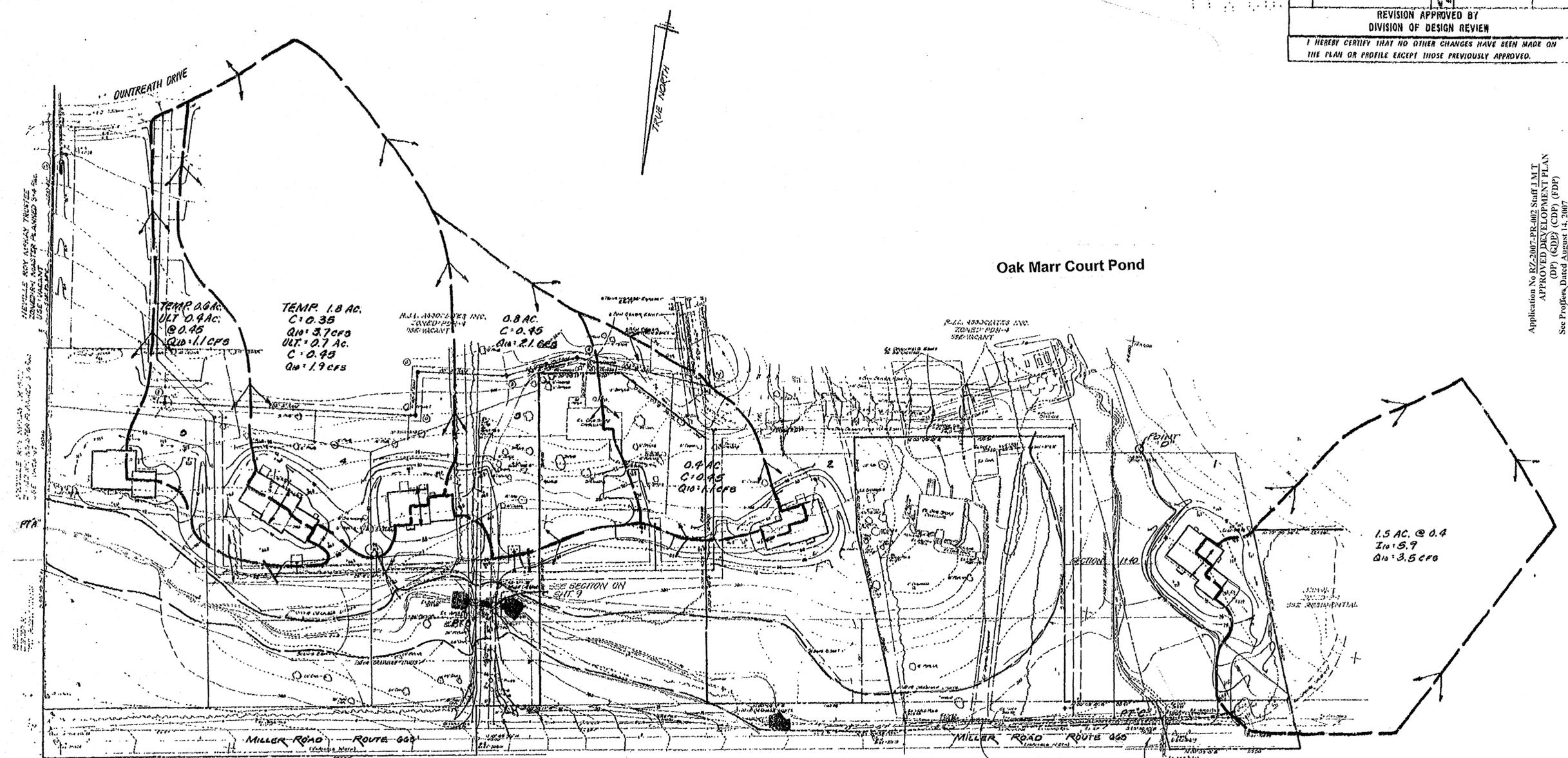
SCALE: AS SHOWN DATE: 8-13-05 DRAWN: J.P. SHEET 7 OF 14

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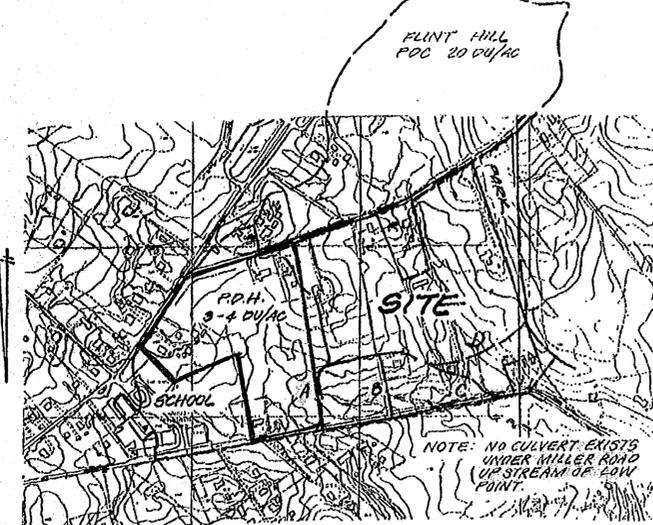
NO.	DESCRIPTION	APPROVED	DATE
3	ADDED CWD		12/2/02
2	ADDED TO # CONV'S 11/2/03		
1	EXTERIOR DRAINAGE 11/6/03		

REVISION APPROVED BY
DIVISION OF DESIGN REVIEW

I HEREBY CERTIFY THAT NO OTHER CHANGES HAVE BEEN MADE ON THE PLAN OR PROFILE EXCEPT THOSE PREVIOUSLY APPROVED.



Application No RZ-2007-PR-002, Staff J.M.T.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
See Profiles Dated August 14, 2007
Date of (BOS) (PC) Approval Sept. 10, 2007
Sheet 6 of 10
Concur. w/ SEA 84-P-105-3 w/ Dev. Cont. 29 Aug. 2007



OFF SITE DRAINAGE DIVIDE MAP
SCALE: 1"=500'

DRAINAGE COMPUTATIONS

TO POINT "C"
31.6 AC @ 0.44 = 13.70
TC = 16 MIN
I₁₀₀ = 6.9 in/hr.
Q₁₀₀ = 96 CFS

TO POINT "B"
28.3 AC @ 0.44 = 12.45
TC = 13 MIN
I₁₀₀ = 7.6 in/hr
I₁₀ = 5.5 in/hr
Q₁₀₀ = 95 CFS
Q₁₀ = 68 CFS

TO POINT "A"
23.1 AC @ 0.45 = 10.40
TC = 11 MIN
I₁₀₀ = 8.0 in/hr.
Q₁₀₀ = 83 CFS.

TO POINT "D"
20.1 AC @ 0.35 = 21.04
TC = 19 MIN.
I₁₀₀ = 7.05 in/hr
I₁₀ = 5.10 in/hr
Q₁₀₀ = 143 CFS
Q₁₀ = 107 CFS

NOTE: SEE SHEET 9 FOR TOTAL DRAINAGE CROSSING MILLER ROAD.

TIME OF CONCENTRATION

POINT A:
 $\Delta T = 42' \cdot L = 1050'$
 $T_c = 0.6 \cdot 2 = 11$

POINT B:
 $T_c = 11' \cdot \frac{100}{2500} = 13'$

POINT C:
 $T_c = 13' \cdot \frac{600}{2500} = 15'$
USED 16' (44%)

THIS SHEET FOR DRAINAGE DIVIDE PURPOSES ONLY !!

FOR INFORMATION ONLY

ALL CONSTRUCTION SHALL CONFORM TO FAIRFAX COUNTY AND/OR V.D.H. & T. STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.

THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.

ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST U.S. DEPT. OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS.

ALL INFORMATION IS FROM FAIRFAX COUNTY SOILS MAPS. NO SUBSURFACE INVESTIGATION HAS BEEN MADE BY THIS FIRM.

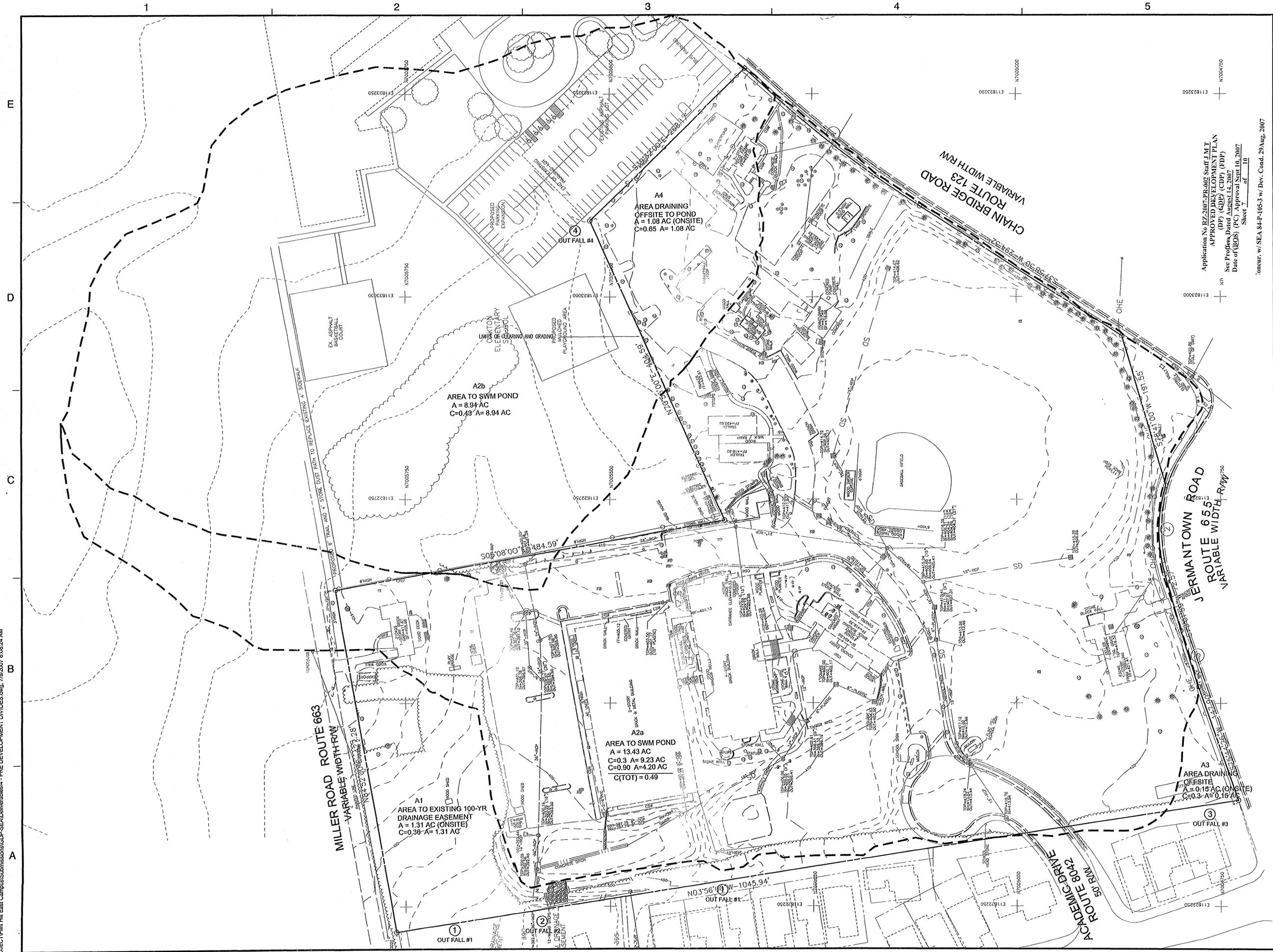


REVISIONS	DRAINAGE DIVIDES	MAY 1983
	SECTION 1 A	SCALE 1"=50'
	OAK MARR COURTS	DRAWN: JWS
	PROVIDENCE DISTRICT	DESIGN: RD
	FAIRFAX COUNTY, VIRGINIA	CHECK: DAB

1479-33 C-4733 SHEET 10 OF 10

SHEET 3C

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Application No RZ-2007-PR-002 Staff J.M.T.
 APPROVED DEVELOPMENT PLAN
 (DP) (GDP) (CDP) (FDP)
 See Programs Dated August 14, 2007
 Date of (RDS) (PC) Approval Sept. 10, 2007
 Sheet 7 of 10

Concur. w/ SEA 84-P-105-3 w/ Dev. Cond. 29 Aug. 2007



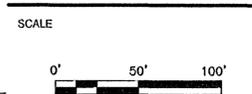
Dewberry & Davis LLC
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.849.0100
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 www.dewberry.com

CHATELAIN Architects, p.c.
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FLINT HILL LOWER SCHOOL
 (East Campus)
 GENERALIZED DEVELOPMENT PLAN /
 SPECIAL EXCEPTION AMENDMENT PLAT
 RZ-2007-PR-002
 SEA 84-P-105-03
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



No.	DATE	BY	Description
7	07.02.07	GAH	
6	06.01.07	JMC	
5	05.18.07	GAH	
4	04.25.07	GAH	
3	04.16.07	GAH	
2	03.26.07	GAH	
1	02.28.07	GAH	

REVISIONS

DRAWN BY JMC
 APPROVED BY PGY
 CHECKED BY PGY
 DATE JANUARY 11, 2007

TITLE FLINT HILL LOWER SCHOOL
 GENERALIZED DEVELOPMENT
 PLAN / SPECIAL EXCEPTION
 AMENDMENT
 RZ-2007-PR-002
 SEA 84-P-105-03
 PRE-DEVELOPMENT
 DRAINAGE DIVIDES
 PROJECT NO. M-10634

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Application No RZ-2007-PR-002 Staff J.M.T.
 APPROVED DEVELOPMENT PLAN
 (DP) (CDP) (CDP) (FDP)
 See Proffers Dated August 14, 2007
 Date of (EOs) (PC) Approval Sept 10, 2007
 Sheet 8 of 10
 Concurrent w/ SEA 84-P-105-3 w/ Dev. Cond. 29 Aug. 2007



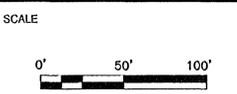
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**FLINT HILL LOWER SCHOOL
 (East Campus)**
 GENERALIZED DEVELOPMENT PLAN /
 SPECIAL EXCEPTION AMENDMENT PLAT
 RZ 2007-PR-002
 SEA 84-P-105-03
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



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2	03.26.07	GAH	
1	02.28.07	GAH	

REVISIONS

DRAWN BY: JMC
 APPROVED BY: PGY
 CHECKED BY: PGY
 DATE: JANUARY 11, 2007

TITLE
**FLINT HILL LOWER SCHOOL
 GENERALIZED DEVELOPMENT
 PLAN / SPECIAL EXCEPTION
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 RZ 2007-PR-002
 SEA 84-P-105-03

POST-DEVELOPMENT
 DIVIDES
 PROJECT NO. M-10634

5

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Application No RZ-2007-PR-002 Staff J.M.T.
 APPROVED DEVELOPMENT PLAN
 (DP) (GDP) (CDP) (FDP)
 See Profiles, Dated August 14, 2007
 Date of (GDS) (FC) Approval Sept. 10, 2007
 Sheet 9 of 10
 Date: w/ SEA 84-P-105-3 w/ Dev. Cont. 29 Aug. 2007

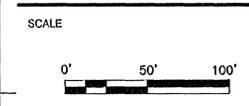
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**FLINT HILL LOWER SCHOOL
 (East Campus)**
 GENERALIZED DEVELOPMENT PLAN /
 SPECIAL EXCEPTION AMENDMENT PLAN
 RZ 2007-PR-002
 SEA 84-P-105-03
 PROVIDENCE DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



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2	03.28.07	GAH	
1	02.28.07	GAH	

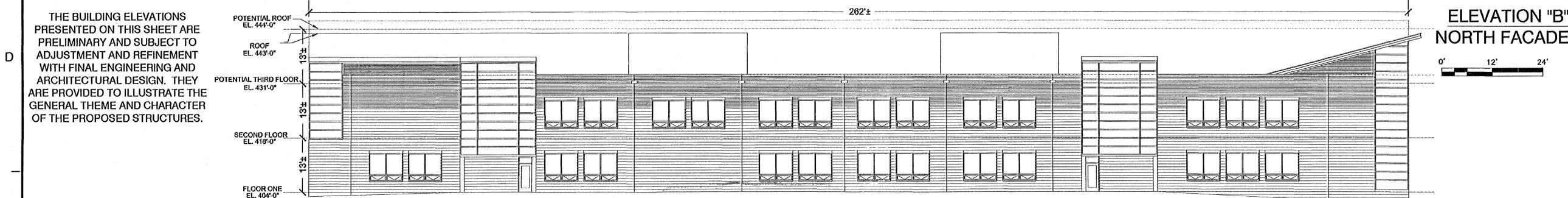
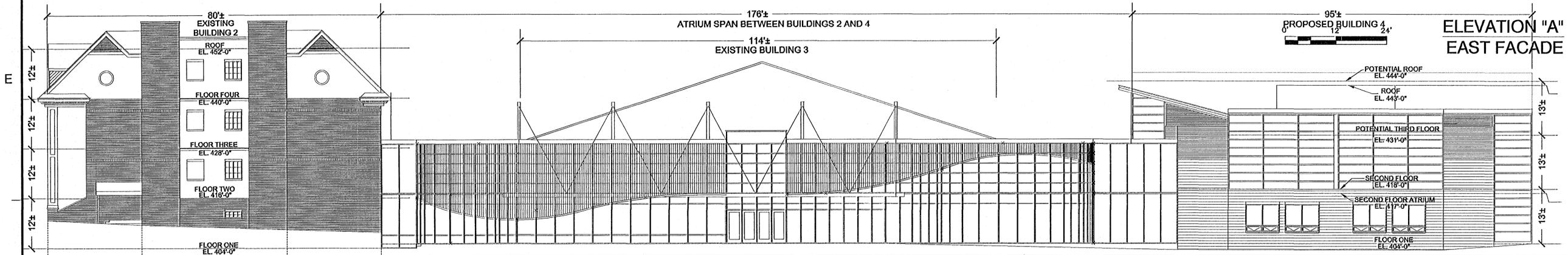
REVISIONS

DRAWN BY JMC
 APPROVED BY PGY
 CHECKED BY PGY
 DATE JANUARY 11, 2007

TITLE
**FLINT HILL LOWER SCHOOL
 GENERALIZED DEVELOPMENT
 PLAN / SPECIAL EXCEPTION
 AMENDMENT**
 RZ 2007-PR-002
 SEA 84-P-105-03
OUTFALL PLAN

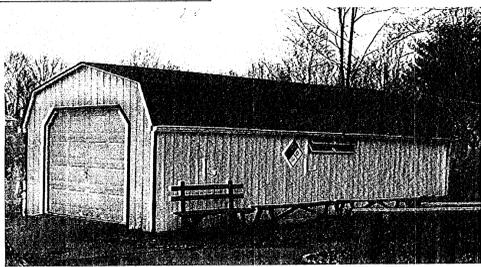
PROJECT NO. M-10634

ARCHITECTURAL ELEVATIONS

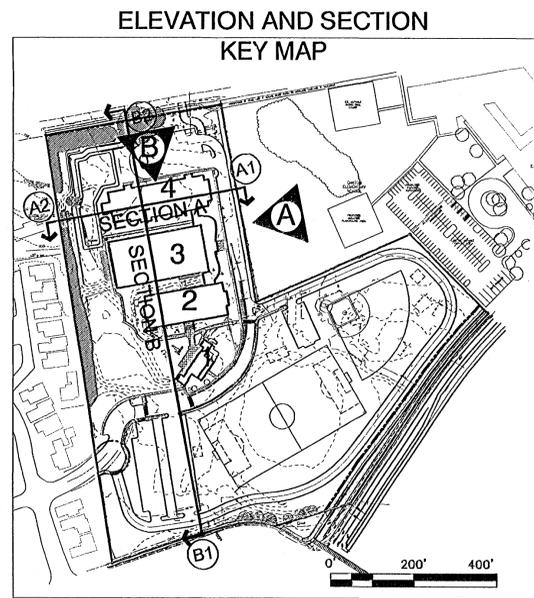


THE BUILDING ELEVATIONS PRESENTED ON THIS SHEET ARE PRELIMINARY AND SUBJECT TO ADJUSTMENT AND REFINEMENT WITH FINAL ENGINEERING AND ARCHITECTURAL DESIGN. THEY ARE PROVIDED TO ILLUSTRATE THE GENERAL THEME AND CHARACTER OF THE PROPOSED STRUCTURES.

SUPPORT BUILDINGS - TYPICAL

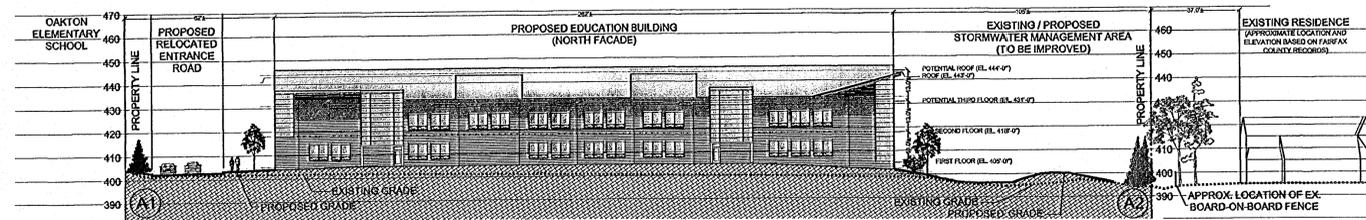
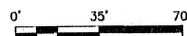


THIS PHOTOGRAPH IS OF AN EXISTING SUPPORT BUILDING ON THE FLINT HILL LOWER SCHOOL CAMPUS AND IS INTENDED TO REFLECT THE GENERAL CHARACTER OF THE PROPOSED SUPPORT BUILDINGS. MATERIALS/COLORS MAY VARY AT TIME OF CONSTRUCTION BUT OVERALL DIMENSIONS SHALL BE LIMITED TO THOSE REPRESENTED ON THE GDP/SEA.

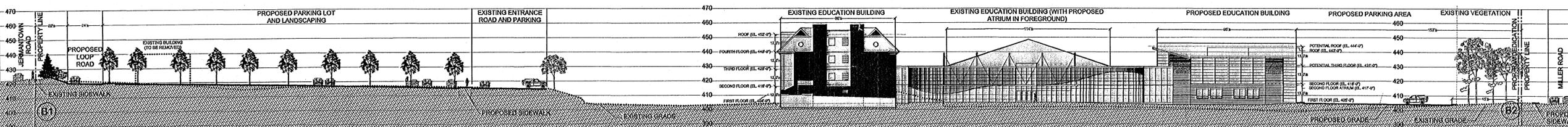
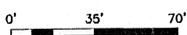


SECTION ELEVATIONS

SECTION A



SECTION B



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GENERALIZED DEVELOPMENT PLAN /
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RZ 2007-PR-002
SEA 84-P-105-3
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA



KEY PLAN
SCALE
AS NOTED

Application No. RZ 2007-PR-002 Staff: J.M.T.
APPROVED DEVELOPMENT PLAN
(DP) / GDP / CDD / FDP
See Professor's Report August 14, 2007
Date of (RDS) (SC) Approval Sept. 10, 2007
Sheet 10 of 10

Consent w/ SEA 84-P-105-3 w/ Dev. Cond. 29 Aug. 2007
w/ Dev. Cond. DATED 29 Aug. 2007

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3	04.16.07	GAH	
2	03.26.07	GAH	SHEET ADDED
1	02.28.07	GAH	

REVISIONS

DRAWN BY: JMC
APPROVED BY: PGY
CHECKED BY: PGY
DATE: JANUARY 11, 2007

TITLE
FLINT HILL LOWER SCHOOL
GENERALIZED DEVELOPMENT
PLAN / SPECIAL EXCEPTION
AMENDMENT
RZ 2007-PR-002
SEA 84-P-105-3
**ARCHITECTURAL
ELEVATIONS AND SECTIONS**
PROJECT NO. M-10634

7

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