

# SPECIAL EXCEPTION PLAT MSNV HILLBROOK

## SEA 90-M-003-3 MASON DISTRICT FAIRFAX COUNTY, VIRGINIA

NOVEMBER, 2007  
REVISED JUNE, 2008  
REVISED AUGUST, 2008  
REVISED DECEMBER, 2008

### ZONING REQUIREMENTS R-2 DISTRICT:

MINIMUM LOT SIZE: 15,000 SQ.FT.  
MINIMUM LOT WIDTH: 100 FEET  
MAXIMUM BUILDING HEIGHT: 60 FEET  
MINIMUM YARD REQUIREMENTS:  
FRONT: 45° ANGLE OF BULK PLANE, NOT LESS THAN 35 FEET  
SIDE: 40° ANGLE OF BULK PLANE, NOT LESS THAN 15 FEET  
REAR: 40° ANGLE OF BULK PLANE, NOT LESS THAN 25 FEET  
OPEN SPACE: NO REQUIREMENT  
MAXIMUM FLOOR AREA RATIO: 0.20

### AREA TABULATION:

SITE AREA:	
PARCEL 93B:	2.77 ACRES
PARCEL A:	0.46 ACRES
TOTAL:	3.23 ACRES
BUILDING AREA:	
EXISTING BLDG (TO REMAIN) AS PHASE I:	10,354 G.S.F.
PROPOSED ADDITION (PHASE II):	190 G.S.F.
PROPOSED ADDITION (PHASE III):	4,850 G.S.F.
UPPER LEVEL:	1,800 G.S.F.
LOWER LEVEL:	1,900 G.S.F.
TOTAL:	17,194 G.S.F.
FLOOR AREA RATIO:	
EXISTING (PHASE I)	0.07
PROPOSED (PHASE II)	0.07
PROPOSED (PHASE III)	0.12
OPEN SPACE:	2.30 AC. (71%)

### PARKING TABULATION:

<b>PHASES I AND II</b>	
PARKING REQUIRED:	
FACULTY/STAFF: 24 POSITIONS @ 1 SPACE/EA:	24 SPACES
VISITOR:	4 SPACES
PARKING REQUIRED:	28 SPACES
PARKING PROVIDED:	28 SPACES
<b>PHASE III</b>	
PARKING REQUIRED:	
FACULTY/STAFF: 24 POSITIONS @ 1 SPACE/EA:	24 SPACES
VISITOR:	4 SPACES
PARKING REQUIRED:	28 SPACES
PARKING PROVIDED:	28 SPACES (PHASE I) (EXISTING)
	29 SPACES (PHASE 3A)
	[INCLUDING TWO HANDICAP VAN ACCESSIBLE SPACES AND ONE BUS SPACE]
	37 SPACES (MAXIMUM) (PHASE 3B)
	[INCLUDING 2 HANDICAP VAN ACCESSIBLE SPACES AND TWO BUS SPACES]
LOADING SPACES REQUIRED:	1 LOADING SPACE
LOADING SPACES PROVIDED:	1 LOADING SPACE

### TRANSITIONAL SCREENING REQUIREMENTS:

APPLICANT HEREBY REQUESTS MODIFICATIONS TO THE TRANSITIONAL SCREENING AND BARRIER REQUIREMENTS:

**NORTHWEST SIDE:**  
A TYPE 1 TRANSITIONAL SCREENING IS REQUIRED, WHICH SHALL CONSIST OF AN UNBROKEN STRIP OF OPEN SPACE A MINIMUM OF 25 FEET WIDE. A TYPE 'D' BARRIER CONSISTING OF A 42-48 INCH CHAIN LINK FENCE IS ALSO REQUIRED.

THE EXISTING BUFFER IN THIS AREA CONSISTS OF EXISTING MATURE HARDWOOD TREES AND MATURE EVERGREEN TREES LOCATED WITHIN A 25-FOOT WIDE CONSERVATION EASEMENT. THERE IS NO FENCING LOCATED IN THIS AREA. A MODIFICATION OF THE TRANSITIONAL SCREENING YARD REQUIREMENTS IS BEING REQUESTED TO ALLOW THIS EXISTING CONDITION TO REMAIN. A SOLID WOOD FENCE WILL BE PROVIDED TO PROVIDE A BARRIER BETWEEN THE PARKING AREA AND THE ADJOINING RESIDENTIAL LOT.

**SOUTHWEST SIDE:**  
A TYPE 1 TRANSITIONAL SCREENING IS REQUIRED, WHICH SHALL CONSIST OF AN UNBROKEN STRIP OF OPEN SPACE A MINIMUM OF 25 FEET WIDE. A TYPE 'D' BARRIER CONSISTING OF A 42-48 INCH CHAIN LINK FENCE IS ALSO REQUIRED.

THE EXISTING BUFFER IN THIS AREA CONSISTS OF EXISTING MATURE HARDWOOD TREES AND MATURE EVERGREEN TREES LOCATED WITHIN A 25-FOOT WIDE CONSERVATION EASEMENT, AS WELL AS THE EXISTING TREES WITHIN THE 20' PUBLIC ACCESS EASEMENT ADJOINING THIS. A 6 FOOT HIGH CHAIN LINK FENCE EXISTS IN THIS AREA, WHICH ALSO SERVES AS THE ENCLOSURE FOR THE OUTDOOR PLAY AREA. THE FENCE WILL BE REALIGNED WITH ONE OF THE DEVELOPMENT PHASES AND WILL BE LOCATED APPROXIMATELY 28 FEET FROM THE PROPERTY LINE.

IT IS REQUESTED THAT THESE CONDITIONS SHALL BE DEEMED TO SATISFY THE TRANSITIONAL SCREENING YARD REQUIREMENTS APPLICABLE TO THIS PROPERTY LINE, WITH SUPPLEMENTAL PLANTING OF EVERGREEN TREES AS MAY BE REQUIRED ALONG THIS SIDE BY URBAN FORESTRY.

**SOUTH SIDE:**  
A TYPE 1 TRANSITIONAL SCREENING IS REQUIRED, WHICH SHALL CONSIST OF AN UNBROKEN STRIP OF OPEN SPACE A MINIMUM OF 25 FEET WIDE. A TYPE 'D' BARRIER CONSISTING OF A 42-48 INCH CHAIN LINK FENCE IS ALSO REQUIRED.

THE EXISTING BUFFER IN THIS AREA CONSISTS OF EXISTING MATURE HARDWOOD TREES LOCATED WITHIN A 25-FOOT WIDE CONSERVATION EASEMENT. A 6 FOOT HIGH CHAIN LINK FENCE EXISTS IN THIS AREA, WHICH ALSO SERVES AS THE ENCLOSURE FOR THE OUTDOOR PLAY AREA. THE FENCE WILL BE REALIGNED WITH ONE OF THE DEVELOPMENT PHASES AND WILL BE LOCATED APPROXIMATELY 35 FEET FROM THE PROPERTY LINE.

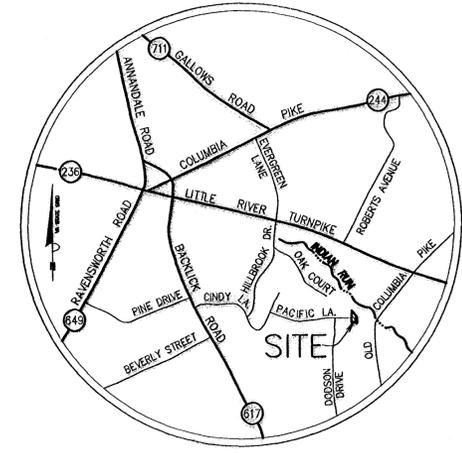
IT IS REQUESTED THAT THESE CONDITIONS SHALL BE DEEMED TO SATISFY THE TRANSITIONAL SCREENING YARD REQUIREMENTS APPLICABLE TO THIS PROPERTY LINE, WITH SUPPLEMENTAL PLANTING OF EVERGREEN TREES AS MAY BE REQUIRED ALONG THIS SIDE BY URBAN FORESTRY.

**SOUTHEAST SIDE:**  
A TYPE 1 TRANSITIONAL SCREENING IS REQUIRED, WHICH SHALL CONSIST OF AN UNBROKEN STRIP OF OPEN SPACE A MINIMUM OF 25 FEET WIDE. A TYPE 'D' BARRIER CONSISTING OF A 42-48 INCH CHAIN LINK FENCE IS ALSO REQUIRED.

THE EXISTING BUFFER IN THIS AREA CONSISTS OF EXISTING MATURE HARDWOOD TREES. A MINIMUM OF 25' CONSERVATION EASEMENT MAY BE PROVIDED FOR BMP MEASURES. A 6 FOOT HIGH CHAIN LINK FENCE EXISTS IN THIS AREA, WHICH ALSO SERVES AS THE ENCLOSURE FOR THE OUTDOOR PLAY AREA. CURRENT LOCATION OF THIS FENCE IS APPROXIMATELY 115 FEET FROM THE PROPERTY LINE. THIS PORTION OF THE FENCE WILL BE REALIGNED AS PART OF THE PROPOSED EXPANSION TO THE PLAY AREA. THERE IS A POTENTIAL THAT THIS WILL BE REALIGNED AGAIN IN THE FUTURE AS THEY EXPAND THE PLAY AREA. THE ULTIMATE LOCATION OF THE FENCE WILL BE LOCATED A MINIMUM OF 25 FEET FROM THE PROPERTY LINE.

IT IS REQUESTED THAT THESE CONDITIONS SHALL BE DEEMED TO SATISFY THE TRANSITIONAL SCREENING YARD REQUIREMENTS APPLICABLE TO THIS PROPERTY LINE.

**NORTHEAST SIDE:**  
THERE IS NO TRANSITIONAL SCREENING REQUIRED ADJACENT TO THE FAIRFAX COUNTY PARK AUTHORITY PROPERTY. HOWEVER, EXISTING MATURE HARDWOOD TREES IN THIS AREA ARE PROPOSED TO REMAIN UNDISTURBED FOR A MINIMUM DEPTH OF 15 FEET FROM THE PROPERTY LINE.



VICINITY MAP  
SCALE: 1" = 2000'

### PROJECT NARRATIVE:

THE PROJECT SHOWN ON THIS PLAT ENCOMPASSES THE PROPOSED EXPANSION OF THE EXISTING USES AND SITE DEVELOPMENT ON THE MSNV HILLBROOK PROPERTY, WHICH IS TO OCCUR IN PHASES, GENERALLY AS INDICATED BELOW:

**PHASE 1:**  
THIS PHASE WILL CONSIST PRIMARILY OF DEVELOPMENT CONDITION CHANGES SUCH AS AN INCREASE IN THE STUDENT AGE AND MAXIMUM ENROLLMENT. PHASE 1 COULD POSSIBLY INCLUDE INTERNAL BUILDING MODIFICATIONS, BUT WILL NOT RESULT IN ANY CONSTRUCTION OR SITE MODIFICATIONS EXTERNAL TO THE EXISTING BUILDING, WITH THE POSSIBLE EXCEPTIONS OF THE INSTALLATION OF SEVERAL SMALL STORAGE SHEDS ON THE SITE AND THE POSSIBLE RELOCATION OF SOME PORTIONS OF THE FENCING ENCLOSING THE OUTDOOR PLAY AREA.

**PHASE 2:**  
THIS PHASE WILL INVOLVE ACTUAL CONSTRUCTION AND SITE IMPROVEMENTS, TO INCLUDE THE CONSTRUCTION OF AN APPROXIMATELY 190-SQUARE-FOOT ADDITION TO THE SOUTHWEST CORNER OF THE EXISTING BUILDING AND THE OPTION TO INCREASE THE HEIGHT OF AN APPROXIMATELY 57' X 57' AREA IN THE SOUTHWEST CORNER OF THE BUILDING TO APPROXIMATELY 18 FEET. THE INSTALLATION OF A SPORT COURT ON THE SOUTHEAST SIDE OF THE SITE IS MAY ALSO OCCUR, AND THIS COURT MAY HAVE EITHER A PAVED SURFACE OR A PERVIOUS SURFACE. THIS PHASE MAY ALSO INCLUDE MINOR GRADING WITHIN THE OPEN PLAY AREA TO CREATE A RELATIVELY FLAT PLAY FIELD. ADDITIONAL FENCE RELOCATIONS OR INSTALLATIONS ON THE SOUTHEAST EAST SIDE OF THE PROPERTY ARE ALSO ANTICIPATED TO OCCUR IN THIS PHASE, AS WELL AS THE EXTENSION OF THE EXISTING STORM WATER PIPE AND ASSOCIATED GRADING ON THE SOUTHEAST SIDE OF THE PROPERTY. AS AN OPTION, THESE LATTER IMPROVEMENTS MAY OCCUR IN EITHER PHASE 2 OR PHASE 3.

**PHASE 3:**  
THE THIRD PHASE WILL ENCOMPASS THE REMAINDER OF THE PROPOSED SITE DEVELOPMENT NOT IMPLEMENTED WITH PRIOR PHASES. THIS WOULD INCLUDE THE EXPANSION OF THE EXISTING PARKING LOT AND ESTABLISHMENT OF ADDITIONAL PARKING AT THE REAR OF THE BUILDING, AS WELL AS THE NEW BUILDING ADDITION. THESE INDIVIDUAL IMPROVEMENTS MAY ALSO BE PHASED. THE CURRENTLY ANTICIPATED PHASING IS AS FOLLOWS, ALTHOUGH THE ACTUAL PHASING AND ORDER OF IMPLEMENTATION OF THESE IMPROVEMENTS MAY VARY:

**PHASE 3-A:**  
THIS PHASE IS ANTICIPATED TO ENCOMPASS THE CONSTRUCTION OF A BUILDING ADDITION, WHICH WILL HOUSE A GYMNASIUM. ALSO, NEW CLASSROOM SPACE WILL BE CONSTRUCTED OVER THE LOCATION OF AN EXISTING DECK. THE EXPANSION AND RECONFIGURATION OF THE EXISTING PARKING AREA AT THE NORTHERLY END OF THE SITE TO RECONFIGURE THE LOT FOR BETTER CIRCULATION AND TO ADD NEW PARKING SPACES MAY ALSO OCCUR DURING THIS PHASE. THESE IMPROVEMENTS MAY OCCUR CONCURRENTLY OR SEPARATELY AND ALSO OCCUR IN CONJUNCTION WITH AN EARLIER PHASE SO LONG AS ALL APPLICABLE REQUIREMENTS ARE MET.

**PHASE 3-B:**  
THIS PHASE, WHICH MAY OCCUR CONCURRENTLY WITH ALL OR A PORTION OF THE PHASE 3-A IMPROVEMENTS, OR EARLIER OR LATER AS A SEPARATE PHASE WILL ENCOMPASS THE CONSTRUCTION OF THE ADDITIONAL NEW PARKING AREA ON THE EAST SIDE OF THE EXISTING BUILDING TO ADD UP TO NINE NEW PARKING SPACES AND RELOCATE THE BUS PARKING SPACES.

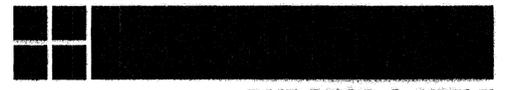
### NOTES:

- THE PROPERTIES DELINEATED ON THIS PLAT ARE LOCATED ON FAIRFAX COUNTY ASSESSMENT MAP NO. 071-2 ((B)) 93B, ZONED R-2 AND 071-2 ((B)) A, ZONED R-2.
- USE: CHILD CARE, NURSERY SCHOOL AND PRIVATE SCHOOL OF GENERAL EDUCATION
- TITLE OWNER OF PARCEL 93B: MONTESSORI SCHOOL OF NORTHERN VIRGINIA  
6820 PACIFIC LANE  
ANNANDALE, VIRGINIA 22003  
DEED BOOK 02912, PAGE 0728
- TITLE OWNER OF PARCEL A: MONTESSORI SCHOOL OF NORTHERN VIRGINIA  
6820 PACIFIC LANE  
ANNANDALE, VIRGINIA 22003  
DEED BOOK 19334P, PAGE 1043
- EXISTING FEATURES SHOWN HEREIN PER FIELD RUN TOPOGRAPHIC SURVEY BY CHARLES P JOHNSON AND ASSOCIATES. CONTOUR INTERVAL IS 2 FEET.
- THE EXISTING BUILDING WAS CONSTRUCTED IN 1967, EXPANDED IN 1999 AND THE BUILDING IS PROPOSED TO REMAIN.
- THERE ARE NO BURIAL OR GRAVE SITES KNOWN TO CURRENTLY EXIST ON THIS PROPERTY.
- THERE ARE NO 100-YEAR FLOOD PLAIN OR ENVIRONMENTAL QUALITY CORRIDOR AREAS ON THIS PROPERTY. THERE IS A RESOURCE PROTECTION AREA ON THIS PROPERTY, AS SHOWN HEREON.
- THE PROPERTY IS SERVED BY PUBLIC WATER AND SANITARY SEWER FACILITIES.
- THERE ARE NO KNOWN UTILITY EASEMENTS WITH A WIDTH OF 25 FEET OR MORE ON THE PROPERTY.
- THERE ARE NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES OR HAZARDOUS WASTES EXISTING, GENERATED, UTILIZED, STORED, TREATED, AND/OR DISPOSED OF ON THIS SITE.
- BASED ON THE COUNTY WIDE TRAILS PLAN AS ADOPTED BY THE FAIRFAX COUNTY BOARD OF SUPERVISORS ON JUNE 12, 2002 THERE IS NO TRAIL REQUIRED ON THIS PROPERTY.
- PROPOSED SIGNAGE SHALL CONFORM TO ARTICLE 12-208 OF THE ZONING ORDINANCE.
- APPLICANT HEREBY REQUESTS A MODIFICATION TO THE BARRIER REQUIREMENT AS APPLIED TO THE NORTHWESTERN BOUNDARY TO PROVIDE THAT A SOLID WOOD FENCE BE INSTALLED ALONG THAT PORTION OF THE PROPERTY THAT LIES BETWEEN THE PARKING LOT AND THE ADJOINING RESIDENTIAL LOT, BUT OTHERWISE, EXISTING CONDITIONS WILL REMAIN AND NO ADDITIONAL BARRIER WOULD BE REQUIRED IN THIS AREA OF THE SITE. APPLICANT ALSO REQUESTS THAT THE EXISTING VEGETATION ON THE PROPERTY BE DEEMED TO SATISFY THE TRANSITIONAL SCREENING YARD REQUIREMENTS APPLICABLE TO THE PROPERTY LINES, WITH LIMITED SUPPLEMENTAL EVERGREEN PLANTINGS ALONG THE SOUTHERLY BOUNDARY, AS PROPOSED HEREON.
- CONSTRUCTION MAY BE PHASED (REFER TO PROJECT NARRATIVE).
- EXISTING TREES TO BE SAVED TO EXTENT POSSIBLE.

### SHEET INDEX

- COVER SHEET
- EXISTING CONDITIONS AND VEGETATION MAP
- SPECIAL EXCEPTION PLAT
- STORM WATER INFORMATION

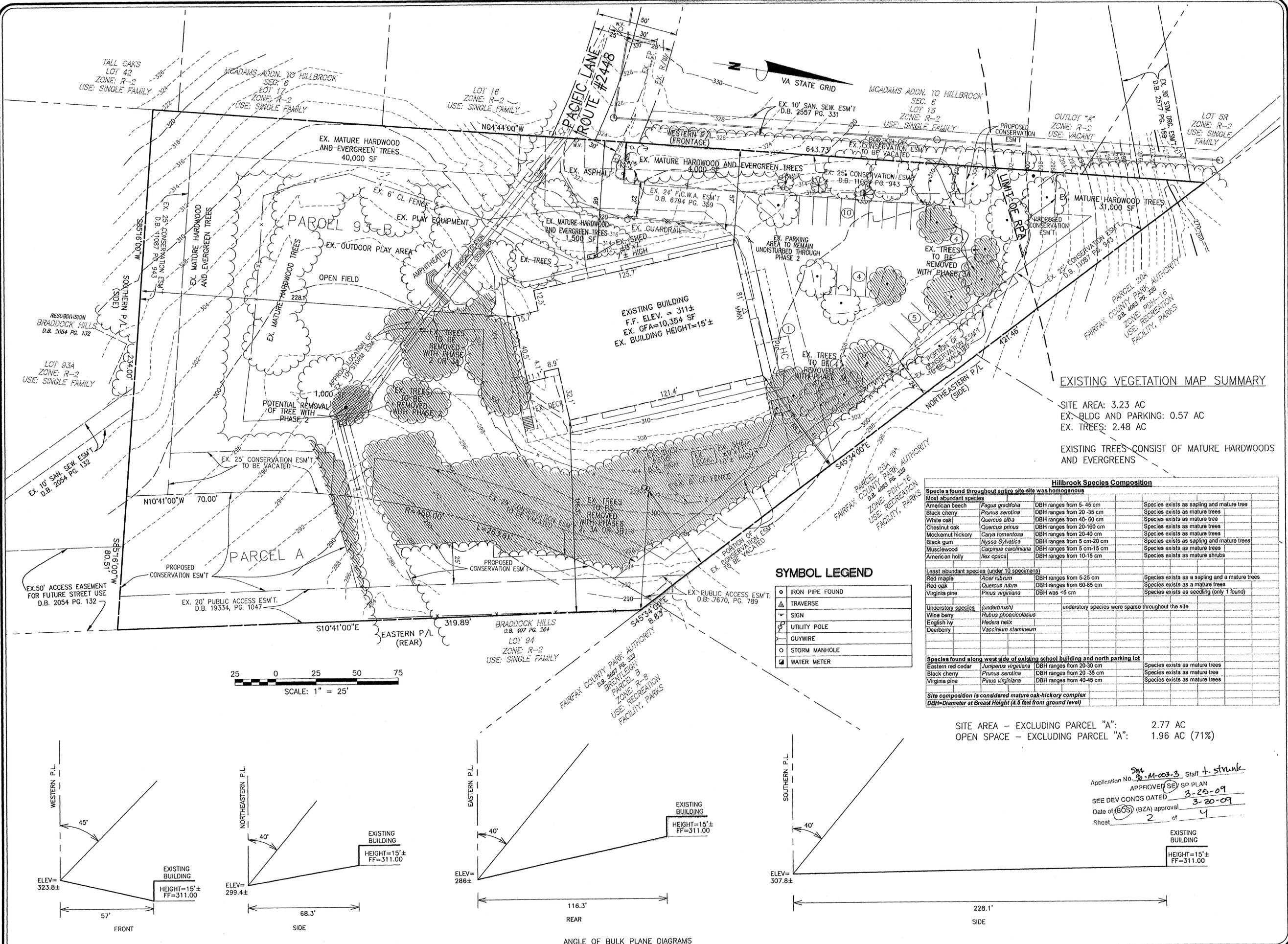
Application No. **SEA 90-M-003-3** Staff **t.srouk**  
APPROVED (SE) SP PLAN  
SEE DEV CONDS DATED **3-25-09**  
Date of (BOS) (BZA) approval **3-25-09**  
Sheet **9** of **4**



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

RECEIVED  
DEC 08 2008  
Department of Planning & Zoning  
Zoning Evaluation Unit

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**EXISTING VEGETATION MAP SUMMARY**

SITE AREA: 3.23 AC  
 EX. BLDG AND PARKING: 0.57 AC  
 EX. TREES: 2.48 AC

EXISTING TREES CONSIST OF MATURE HARDWOODS AND EVERGREENS

**Hillbrook Species Composition**

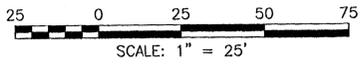
Species found throughout entire site-site was homogeneous

Species	Scientific Name	DBH ranges	Notes
<b>Most abundant species</b>			
American beech	<i>Fagus grandifolia</i>	DBH ranges from 5-45 cm	Species exists as sapling and mature tree
Black cherry	<i>Prunus serotina</i>	DBH ranges from 20-35 cm	Species exists as mature trees
White oak	<i>Quercus alba</i>	DBH ranges from 40-60 cm	Species exists as mature tree
Chestnut oak	<i>Quercus prinus</i>	DBH ranges from 20-160 cm	Species exists as mature trees
Mockernut hickory	<i>Carya tomentosa</i>	DBH ranges from 20-40 cm	Species exists as mature trees
Black gum	<i>Nyssa sylvatica</i>	DBH ranges from 5 cm-20 cm	Species exists as sapling and mature trees
Musclewood	<i>Carpinus caroliniana</i>	DBH ranges from 5 cm-15 cm	Species exists as mature trees
American holly	<i>Ilex opaca</i>	DBH ranges from 10-15 cm	Species exists as mature shrubs
<b>Least abundant species (under 10 specimens)</b>			
Red maple	<i>Acer rubrum</i>	DBH ranges from 5-25 cm	Species exists as a sapling and a mature trees
Red oak	<i>Quercus rubra</i>	DBH ranges from 60-85 cm	Species exists as a mature trees
Virginia pine	<i>Pinus virginiana</i>	DBH was <5 cm	Species exists as seedling (only 1 found)
<b>Understory species (underbrush)</b>			
Wine berry	<i>Rubus phoenicolasius</i>		understory species were sparse throughout the site
English ivy	<i>Hedera helix</i>		
Deerberry	<i>Vaccinium stamineum</i>		
<b>Species found along west side of existing school building and north parking lot</b>			
Eastern red cedar	<i>Juniperus virginiana</i>	DBH ranges from 20-30 cm	Species exists as mature trees
Black cherry	<i>Prunus serotina</i>	DBH ranges from 20-35 cm	Species exists as mature tree
Virginia pine	<i>Pinus virginiana</i>	DBH ranges from 40-45 cm	Species exists as mature trees

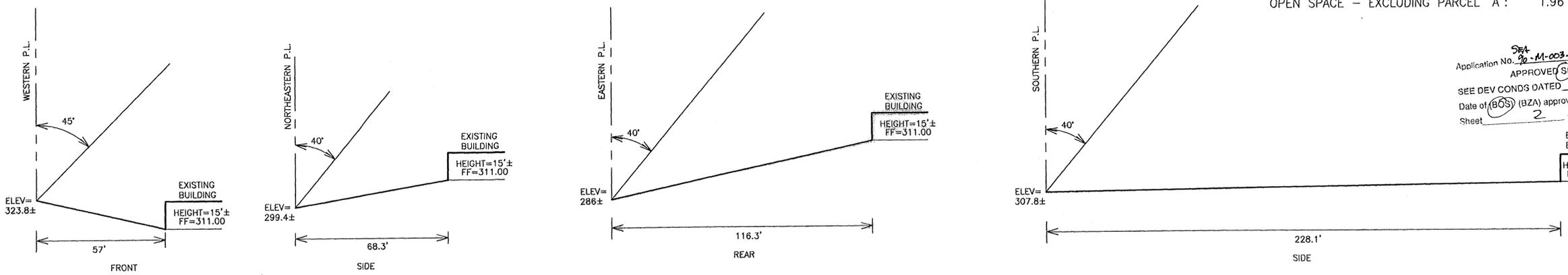
Site composition is considered mature oak-hickory complex  
 DBH=Diameter at Breast Height (4.5 feet from ground level)

**SYMBOL LEGEND**

- IRON PIPE FOUND
- ▲ TRAVERSE
- SIGN
- UTILITY POLE
- GUYWIRE
- STORM MANHOLE
- WATER METER



SITE AREA - EXCLUDING PARCEL "A": 2.77 AC  
 OPEN SPACE - EXCLUDING PARCEL "A": 1.96 AC (71%)



ANGLE OF BULK PLANE DIAGRAMS

**BURGESS & NIPLE**  
 4180 PLEASANT VALLEY ROAD, CHANTILLY, VA 20151-1226  
 PH. (703) 631-9630 FAX (703) 631-6041

REVISIONS	ADD. TREES, ACCESS, ESMT.	REVISIONS	DATE

**EXISTING CONDITIONS AND VEGETATION MAP**

**MSNV - HILLBROOK**

MASON DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

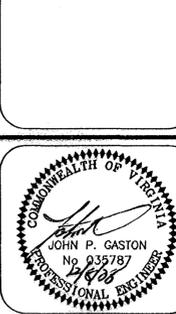
Application No. **20-M-003-3** Staff: **+** struck  
 APPROVED (SE) SP PLAN  
 SEE DEV CONDS DATED **3-23-09**  
 Date of (BOS) (BZA) approval **3-20-09**  
 Sheet **2** of **4**

EXISTING BUILDING  
 HEIGHT=15'±  
 FF=311.00

DATE: NOVEMBER 2007  
 SCALE: 1" = 25'  
 DESIGN: VK DRAWN: VK  
 CHECK: JPG CHECK: JLM  
 JOB NO.:  
 P.R. NO.: 45042  
 SHEET 2 OF  
 FILE NO.: **C-4688**

CHANGES PER CLIENT	REVISIONS	DATE

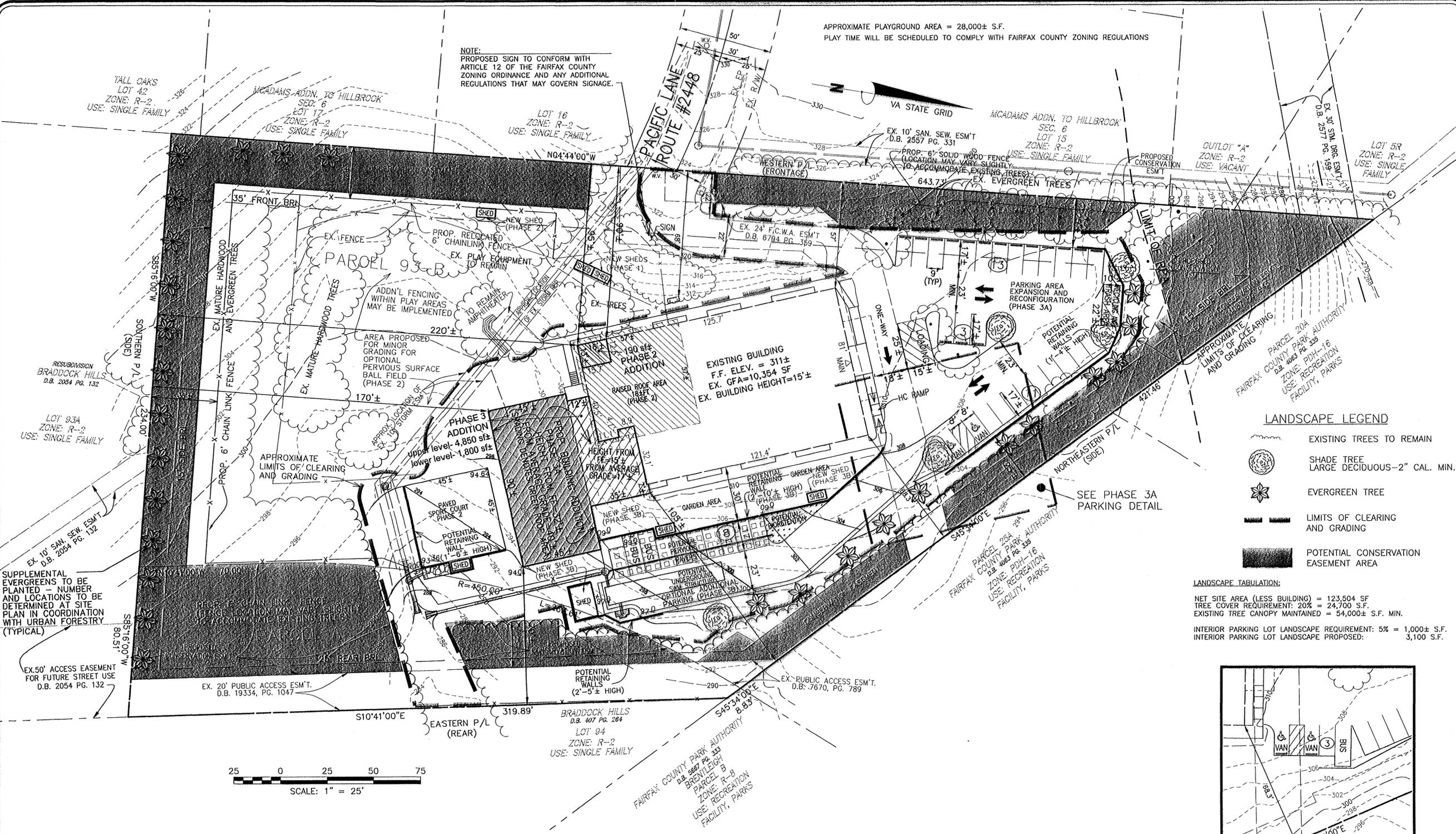
**SPECIAL EXCEPTION PLAT**  
**MSNV - HILLBROOK**  
 MASON DISTRICT  
 FAIRFAX COUNTY, VIRGINIA



DATE: NOVEMBER 2007  
 SCALE: 1" = 25'  
 DESIGN: VK DRAWN: VK  
 CHECK: JPG CHECK: JPG  
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 P.R. NO.: 45042  
 SHEET 3 OF  
 FILE NO.: C-4688

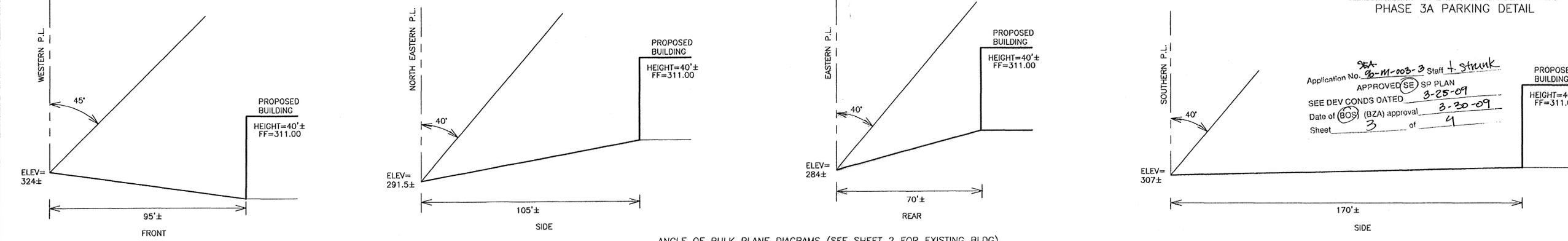
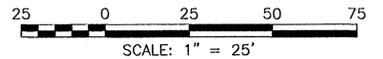
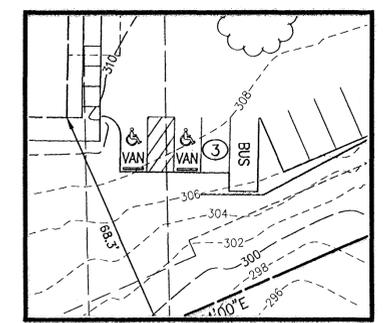
APPROXIMATE PLAYGROUND AREA = 28,000± S.F.  
 PLAY TIME WILL BE SCHEDULED TO COMPLY WITH FAIRFAX COUNTY ZONING REGULATIONS

NOTE:  
 PROPOSED SIGN TO CONFORM WITH  
 ARTICLE 12 OF THE FAIRFAX COUNTY  
 ZONING ORDINANCE AND ANY ADDITIONAL  
 REGULATIONS THAT MAY GOVERN SIGNAGE.



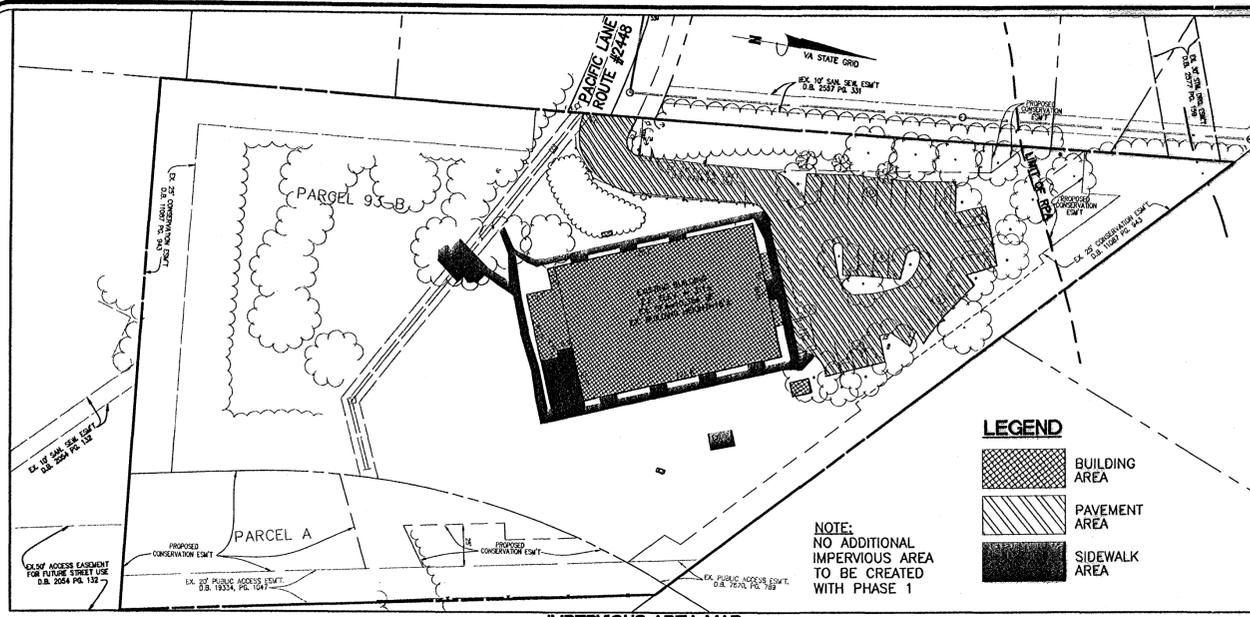
- LANDSCAPE LEGEND**
- EXISTING TREES TO REMAIN
  - SHADE TREE  
LARGE DECIDUOUS-2" CAL. MIN.
  - EVERGREEN TREE
  - LIMITS OF CLEARING  
AND GRADING
  - POTENTIAL CONSERVATION  
EASEMENT AREA

**LANDSCAPE TABULATION:**  
 NET SITE AREA (LESS BUILDING) = 123,504 SF  
 TREE COVER REQUIREMENT: 20% = 24,700 S.F.  
 EXISTING TREE CANOPY MAINTAINED = 54,000± S.F. MIN.  
 INTERIOR PARKING LOT LANDSCAPE REQUIREMENT: 5% = 1,000± S.F.  
 INTERIOR PARKING LOT LANDSCAPE PROPOSED: 3,100 S.F.

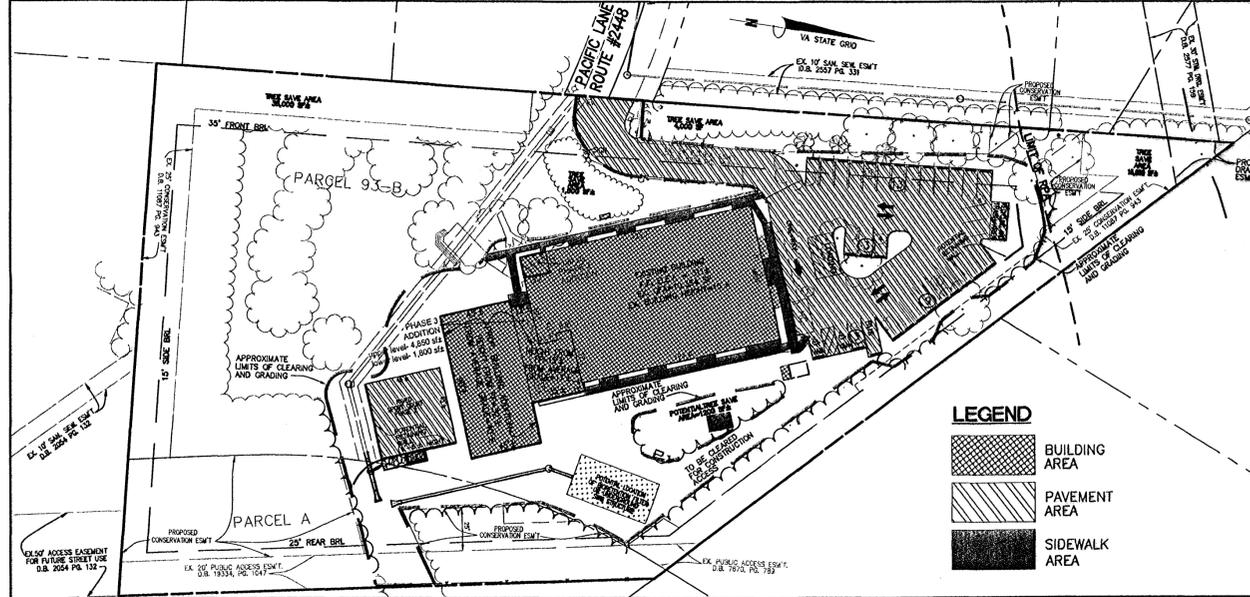


ANGLE OF BULK PLANE DIAGRAMS (SEE SHEET 2 FOR EXISTING BLDG)

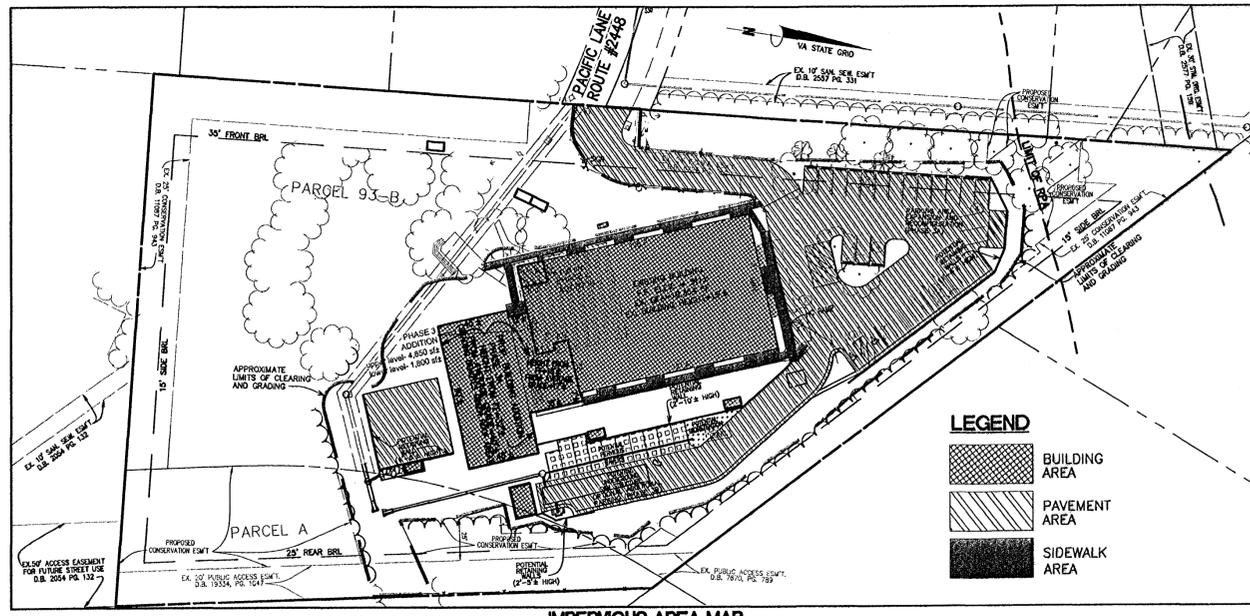
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**IMPERVIOUS AREA MAP  
PRE-DEVELOPMENT AND PHASE 1 CONDITIONS**



**IMPERVIOUS AREA MAP  
POST-DEVELOPMENT CONDITIONS FOLLOWING COMPLETION OF PHASE 3A**



**IMPERVIOUS AREA MAP  
POST-DEVELOPMENT CONDITIONS FOLLOWING COMPLETION OF PHASE 3B**

**PRELIMINARY STORM WATER MANAGEMENT/BEST MANAGEMENT PRACTICES NARRATIVE**

ALL PHASES OF THE IMPROVEMENTS PROPOSED HEREIN THROUGH A PORTION OF PHASE 3 WILL MEET COUNTY CRITERIA FOR CLASSIFICATION AS REDEVELOPMENT RELATIVE TO THE APPLICATION OF BEST MANAGEMENT PRACTICES (BMP) REQUIREMENTS, SINCE THE TOTAL INCREASE IN IMPERVIOUS AREA IS LESS THAN 20 PERCENT. AS A RESULT, THE MAXIMUM PHOSPHOROUS REMOVAL REQUIREMENT APPLICABLE TO THESE REDEVELOPMENT PHASES WILL BE APPROXIMATELY 23 PERCENT. WHEN PHASE 3 IMPROVEMENTS RESULT IN A CUMULATIVE INCREASE IN IMPERVIOUS AREA WILL EXCEEDING 20 PERCENT OF THE EXISTING VALUE, THEN THOSE IMPROVEMENTS MAY NOT QUALIFY AS REDEVELOPMENT AND A PHOSPHOROUS REMOVAL RATE OF 40 PERCENT MAY BE REQUIRED ANY NEW IMPERVIOUS AREA RESULTING FROM THOSE IMPROVEMENTS.

BMP REQUIREMENTS APPLICABLE TO THE EXISTING SITE DEVELOPMENT ARE CURRENTLY SATISFIED BY OPEN SPACE CREDITS APPLICABLE TO SITE AREAS CONTAINED WITHIN EXISTING CONSERVATION EASEMENTS. AS DEVELOPMENT OCCURS ON THE SITE, THE MAJOR PORTION OF THESE CONSERVATION EASEMENT AREAS WILL REMAIN AS ORIGINALLY ESTABLISHED WITH SOME MODIFICATION AND ADDITION TO SOME OF THE AREAS OCCURRING. ULTIMATELY, THE NET RESULT WILL BE THAT THE OVERALL SITE AREA CONTAINED WITHIN CONSERVATION EASEMENTS WILL BE INCREASED.

PHASE 1: NO NEW SITE DEVELOPMENT OR IMPERVIOUS AREA IS PROPOSED WITH PHASE ONE. WITH THE EXCEPTION OF THE POSSIBLE ADDITION OF SEVERAL SMALL STORAGE SHEDS AND PARTIAL FENCE RELOCATIONS. THIS WILL RESULT IN NO MEASURABLE INCREASE IN THE RATE OF STORM RUNOFF FROM THE SITE AND NO ADDITIONAL DETENTION MEASURES SHOULD BE REQUIRED FOR THIS PHASE. SUBJECT TO A WAIVER OF ANY REQUIREMENT, THE CUMULATIVE TOTAL AREA OF THE SHEDS WILL BE BELOW THE THRESHOLD REQUIREMENT FOR WATER QUALITY TREATMENT AND NO WATER QUALITY/BEST MANAGEMENT PRACTICES (BMP) FACILITIES WILL BE REQUIRED.

PHASE 2: THIS PHASE WILL INVOLVE THE CONSTRUCTION OF A 190 SQUARE FOOT BUILDING ADDITION AT THE SOUTHWEST CORNER OF THE EXISTING BUILDING, IN CONJUNCTION WITH THE RAISING OF THE ROOF ELEVATION IN THAT PORTION OF THE BUILDING, THE CONSTRUCTION OF A SPORT COURT NEAR THE SOUTHEAST CORNER OF THE BUILDING AND, POSSIBLY, THE GRADING OF A PORTION OF THE EXISTING PLAY AREA TO ESTABLISH A RELATIVELY FLAT, PERMEABLE-SURFACE PLAY FIELD. IF THE SPORT COURT IS CONSTRUCTED WITH AN IMPERVIOUS SURFACE, THESE IMPROVEMENTS WILL RESULT IN AN INCREASE IN IMPERVIOUS AREA ON THE SITE OF APPROXIMATELY 3,300 SQUARE FEET, OR 0.08 ACRES, GREATLY INCREASING THE RATE OF STORM RUNOFF FROM THE SITE OF 0.38 CFS PER TEN-YEAR STORM EVENT (CFS) FOR A TWO-YEAR STORM EVENT AND 0.48 CFS PER SECOND (CFS) FOR A TEN-YEAR STORM EVENT. THE 0.48 CFS INCREASE IN THE TEN-YEAR RATE OF RUNOFF WILL BE NEGLIGIBLE. HOWEVER, IF NECESSARY, A SMALL DETENTION TRENCH ASSOCIATED WITH THE PROPOSED SPORT COURT OR ANOTHER MEANS OF DETENTION WILL BE IMPLEMENTED WITH PHASE 2 TO REDUCE THE RATE TO A PRE-DEVELOPMENT LEVEL.

BMP REQUIREMENTS APPLICABLE TO THE INCREASE IN IMPERVIOUS AREA WILL BE MET THROUGH THE USE OF EXCESS OPEN SPACE CREDITS AVAILABLE WITH THE EXISTING CONSERVATION EASEMENTS. THE EXISTING CREDITS WERE ESTABLISHED WITH A PRE-MINOR SITE PLAN FOR THE PROPERTY, WHICH WAS APPROVED IN 1997. BASED ON THE COMPUTATIONS INCLUDED ON THAT PLAN, THE PHOSPHOROUS REMOVAL RATE REQUIRED FOR THE IMPROVEMENTS THEN BEING PROPOSED ON THAT PLAN, AND CURRENTLY EXISTING, WAS 10 PERCENT, AND CREDITS AVAILABLE TO A REMOVAL RATE OF 28.15 PERCENT WERE BEING PROVIDED. THE EXCESS 18.15 PERCENT REMOVAL RATE WILL BE APPLIED TO THE INCREASED BMP REQUIREMENT APPLICABLE TO THE PHASE 2 REDEVELOPMENT PROPOSED HEREIN. THERE IS ALSO AN EXISTING RAIN BARREL THAT IS CONNECTED TO ONE OF THE ROOF DRAINS ON THE EXISTING BUILDING, AND THIS PROVIDES A MINOR SUPPLEMENTAL BMP FUNCTION.

PHASE 3A: THIS IS ANTICIPATED TO INVOLVE THE CONSTRUCTION OF A BUILDING ADDITION WITH A FOOTPRINT AREA OF APPROXIMATELY 5,500 SQUARE FEET SQUARE FEET AND THE EXPANSION AND RECONFIGURATION OF THE EXISTING PAVED PARKING AREA AT THE NORTHERLY END OF THE SITE. BMP REQUIREMENTS FOR THIS PHASE WILL BE MET BY A COMBINATION OF OPEN SPACE CREDITS (EXISTING AND PROPOSED), INCLUDING A PORTION OF THE EXISTING EXCESS CREDITS AVAILABLE, A "GREEN" BUILDING ROOF AND, POTENTIALLY, A BIO-RETENTION FACILITY OR UNDERGROUND STORM WATER MANAGEMENT FACILITY. DETENTION REQUIREMENTS APPLICABLE TO THIS PHASE WILL BE MET WITH THE PROPOSED BIO-RETENTION FACILITY, UNLESS PHASE 3B, IS IMPLEMENTED CONCURRENTLY WITH PHASE 3A (SEE BELOW). THE MAJOR PORTION OF THE IMPERVIOUS AREA INCREASE ASSOCIATED WITH THIS PHASE WILL RESULT FROM THE NEW ROOF AREA OF THE BUILDING ADDITION, AND THE IMPLEMENTATION OF A "GREEN" ROOF ON THE MAJOR PORTION OF THE NEW ROOF AREA WILL PROVIDE BOTH BMP AND DETENTION MEASURES FOR THAT AREA, WITH BMP/WATER QUALITY TREATMENT PROVIDED BY FILTERING THE RUNOFF AND DETENTION PROVIDED BY INCREASING THE TIME OF CONCENTRATION ASSOCIATED WITH THE RUNOFF AND DECREASING THE RATE OF RUNOFF. AS A RESULT, IT IS ANTICIPATED THAT ANY INCREASE IN RUNOFF RESULTING FROM THE BUILDING ADDITION WILL BE MINIMAL AND NEGLIGIBLE. BASED ON PRELIMINARY EVALUATIONS, THE PRE-DEVELOPMENT RUNOFF RATE FOR THE SITE AREA CONTAINING THE BUILDING ADDITION IS 0.25 CFS FOR A TWO-YEAR STORM EVENT AND 0.31 CFS FOR A TEN-YEAR STORM EVENT. WITH A CONVENTIONAL ROOF SYSTEM, THE COMPARABLE POST-DEVELOPMENT RUNOFF RATES WOULD BE 0.83 CFS AND 0.79, RESPECTIVELY. WITH A "GREEN" ROOF SYSTEM, THESE RATES ARE ANTICIPATED TO BE APPROXIMATELY 0.49 CFS AND 0.41 CFS, RESPECTIVELY, REPRESENTING INCREASES ON OF ONLY 0.38 CFS AND 0.48 CFS, RESPECTIVELY. THESE ARE CONSIDERED TO BE RELATIVELY MINOR INCREASES, BUT, AS INDICATED BELOW, WILL, IN ANY CASE, BE ELIMINATED WITH THE IMPLEMENTATION OF STORM WATER MANAGEMENT MEASURES. AN ADDITIONAL MINOR INCREASE IN THE RATE OF RUNOFF WILL RESULT FROM THE SLIGHT EXPANSION OF THE EXISTING PARKING AREA THAT WILL OCCUR IN THIS PHASE. THE RESULTING INCREASE IN IMPERVIOUS AREA WILL BE APPROXIMATELY 1,200 SQUARE FEET, PRODUCING AN INCREASE OF 0.09 CFS FOR A TWO-YEAR STORM EVENT AND 0.12 CFS FOR A TEN-YEAR STORM EVENT. IN ORDER TO ELIMINATE ANY INCREASE IN THE RATE OF RUNOFF THAT WOULD RESULT FROM THE PHASE 3A SITE IMPROVEMENTS, A PORTION OF THE STORM RUNOFF THAT CURRENTLY DISCHARGES FROM THE PARKING AREA, AND ULTIMATELY FROM THE SITE, AS SHEET FLOW WILL BE CAPTURED AND CONVEYED TO AN ON-SITE BIO-RETENTION FACILITY OR AN UNDERGROUND STORM WATER MANAGEMENT FACILITY THAT WILL PROVIDE BOTH DETENTION AND WATER QUALITY IMPROVEMENT, THUS REDUCING THE OVERALL RATE OF STORM RUNOFF FROM THE SITE TO A LEVEL AT OR BELOW THE CURRENT PRE-DEVELOPMENT RATE. AS AN OPTION, THE UNDERGROUND FACILITY PROPOSED WITH PHASE 3B MAY BE INSTALLED WITH PHASE 3A, EVEN IF THE REMAINDER OF THE PHASE 3B IMPROVEMENTS ARE NOT BEING IMPLEMENTED AT THAT TIME.

PHASE 3B: THIS PHASE IS ANTICIPATED TO INVOLVE THE CONSTRUCTION OF AN ADDITIONAL PARKING AREA ON THE EAST SIDE OF THE SITE. IT MAY OCCUR SEPARATELY WITH PHASE 3A OR SEPARATELY, AT ANOTHER TIME. IN EITHER CASE, THE RESULTING INCREASE IN RUNOFF FROM THE NEW PARKING AREA WILL BE APPROXIMATELY 0.43 CFS FOR A TWO-YEAR STORM EVENT AND 0.55 CFS FOR A TEN-YEAR STORM EVENT. TO REDUCE THIS RATE TO LESS THAN THE PRE-DEVELOPMENT LEVEL, ALL OF THE STORM FLOW FROM THE PARKING AREA WILL BE COLLECTED AND ROUTED TO AN UNDERGROUND STORM WATER MANAGEMENT FACILITY THAT WILL PERFORM BOTH DETENTION AND WATER QUALITY IMPROVEMENT FUNCTIONS. AS AN OPTION, THIS PHASE MAY ALSO INCLUDE THE USE OF PERVIOUS PAVERS AND/OR A BIO-RETENTION FACILITY TO SUPPLEMENT OTHER STORM WATER MANAGEMENT MEASURES.

IN SUMMARY, UPON COMPLETION OF THE OVERALL REDEVELOPMENT OF THE SITE AS PROPOSED, THE RATE OF STORM RUNOFF FROM THE PROPERTY WILL HAVE BEEN REDUCED TO A LEVEL BELOW THAT WHICH OCCURS WITH THE SITE AS CURRENTLY DEVELOPED. THIS WILL INCLUDE A REDUCTION IN THE DRAINAGE THAT CURRENTLY LEAVES THE SITE AND ENTERS THE ADJOINING STREAM VALLEY BY SHEET FLOW. SIMILARLY, APPLICABLE REQUIREMENTS FOR WATER QUALITY IMPROVEMENT/BEST MANAGEMENT PRACTICES WILL HAVE BEEN FULLY SATISFIED.

**PRELIMINARY STORM WATER OUTFALL NARRATIVE**

CURRENTLY, THE NORTHERMOST SECTOR OF THE PROPERTY, INCLUDING A PORTION OF THE EXISTING PARKING LOT, DRAINS BY SURFACE SHEET FLOW INTO AN EXISTING RESOURCE PROTECTION AREA (RPA) ON THE PROPERTY AND THEN INTO AN ADJOINING 100-YEAR FLOOD PLAIN ASSOCIATED WITH INDIAN RUN. RUNOFF FROM ADDITIONAL PORTIONS OF THE NORTHERLY AND EASTERLY SECTOR, INCLUDING THE REMAINING PORTION OF THE PARKING LOT AND EXISTING BUILDING ROOF DRAINS, ALSO DRAINS BY SURFACE SHEET FLOW TO THE INDIAN RUN FLOOD PLAIN. THE SOUTHERLY PORTION OF THE SITE, COMPRISED PRIMARILY OF AN EXISTING PLAY AREA AND FORESTED SURROUNDINGS, DRAINS TO AN EXISTING YARD INLET, WHERE IT ENTERS AN UNDERGROUND STORM PIPE SYSTEM THAT IS CONVEYING STORM FLOW FROM OFF-SITE DEVELOPED AREAS TO THE WEST OF THE SITE. THIS SYSTEM DISCHARGES INTO A NATURAL DRAINAGE CHANNEL, THAT IS TRIBUTARY TO INDIAN SPRING AND CONVEYS THE SITE AND OFF-SITE DRAINAGE TO THE 100-YEAR FLOOD PLAIN AND THE MAIN STREAM CHANNEL.

PRELIMINARY ANALYSIS OF THE NATURAL CHANNEL CONVEYING THE CONCENTRATED FLOW FROM THE PIPE DISCHARGE IN THE SOUTHEAST SECTOR OF THE PROPERTY DETERMINED THAT THE CHANNEL IS ADEQUATE TO CONVEY THE FLOW FROM THE SITE TO THE MAIN STREAM CHANNEL. UPON ENTERING THE CHANNEL, THE DRAINAGE IS DISCHARGING INTO AN EXISTING DRAINAGE CHANNEL THAT IS CONVEYING STORM DRAINAGE FROM AN UPSTREAM AREA THAT COMPRISES OVER 400 ACRES, OR MORE THAN 100 TIMES THE TOTAL 3.23-ACRE SIZE OF THE SUBJECT SITE.

BASED ON THE PRELIMINARY EVALUATION OF DOWNSTREAM OUTFALL CONDITIONS, THE EXISTING NATURAL CHANNEL CONVEYING DRAINAGE FROM THE SITE TO THE 100-YEAR FLOOD PLAIN IS DEEMED ADEQUATE TO CONVEY THAT DRAINAGE. BECAUSE THE PROPOSED DEVELOPMENT PROPOSED HEREIN WILL INCLUDE STORM WATER MANAGEMENT MEASURES TO REDUCE THE POST-DEVELOPMENT RATE OF RUNOFF TO LEVELS AT OR BELOW CURRENT RATES, THERE WILL BE NO ADVERSE IMPACTS RESULTING FROM THE DEVELOPMENT.

**SPECIAL EXCEPTION  
MSNV - HILLBROOK**

**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 J & 2L) Special Exceptions (9-011 J & 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 Sheets 2 & 3

3. Provide:

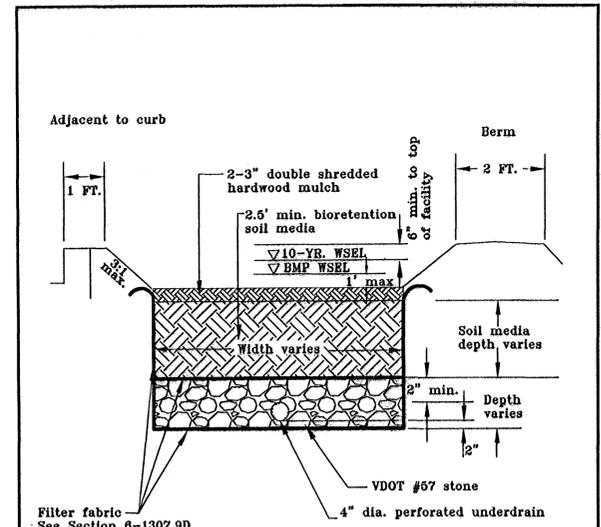
Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
(A) GREEN ROOF	0.08 AC	0.0 AC	0.08 AC	3,639 SF	0 CF	N/A
(B) BIORETENTION/	0.20 AC	0.0 AC	0.20 AC	5,100 SF	775 CF	N/A
(C) UNDERGR. STR.	0.47 AC	0.0 AC	0.47 AC	700 SF	1,500 CF	N/A
Totals	0.75 AC	0.0 AC	0.75 AC	9,439 SF	2,275 CF	

- 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 2 & 3.  
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 N/A.
- 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 4.
- 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 4.
- 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 4.
- 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 2; NOTE ON SHEET 1
- 11. A submission waiver is requested for N/A
- 12. Stormwater management is not required because N/A

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

CHANGES PER CLIENT	12/1/2008	DATE
REVISE NARRATIVE, ADD DETAIL <td>8/26/2008 <td></td> </td>	8/26/2008 <td></td>	
UPDATED <td>6/11/2008 <td></td> </td>	6/11/2008 <td></td>	
UPDATED WORKSHEET <td>5/20/2008 <td></td> </td>	5/20/2008 <td></td>	

**FAIRFAX COUNTY PUBLIC FACILITIES MANUAL**



Notes:  
1) Side slopes of the facility excavated below ground may be as steep as the in situ soils will permit. All excavation must be performed in accordance with VOSH requirements.  
2) All pipe shall be in accordance with Section 6-1307.9C.

**CROSS SECTION VIEW (NTS)**

Ref. Sec. 6-1307 et. seq.	<b>BIORETENTION FILTER OR BASIN WITH STONE STORAGE</b>	PLATE NO. 82-6	STD. NO.
Rev. 3-07			

Application No. 20-M-033 Staff: J. Strunk  
APPROVED: [Signature] / SP PLAN  
SEE DEV CONDS DATED 3-25-09  
Date of (BOS) (BZA) approval 3-30-09  
Sheet 4 of 4

**STORM WATER INFORMATION  
MSNV - HILLBROOK**

COMMONWEALTH OF VIRGINIA  
MASON DISTRICT  
FAIRFAX COUNTY, VIRGINIA  
JOHN P. GASTON  
No. 035787  
PROFESSIONAL ENGINEER

DATE: NOVEMBER 2007	SCALE: 1"=50'
DESIGN: VK	DRAWN: VK
CHECK: JPG	CHECK: JPG
JOB NO.:	
P.R. NO.: 45042	
SHEET 4 OF	
FILE NO.: C-4688	