

POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM SITE 31 SPECIAL EXCEPTION PLAT / 2232 REVIEW

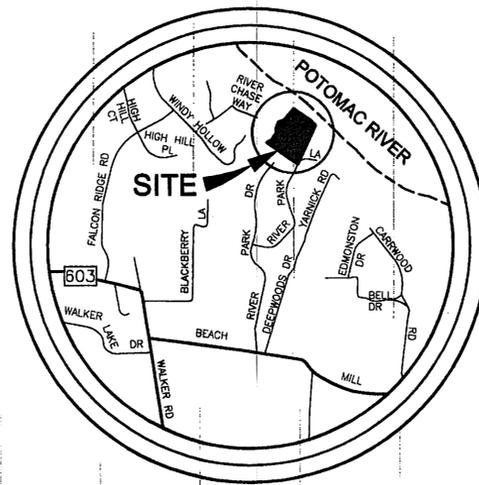
FAIRFAX COUNTY, VIRGINIA
DRANESVILLE DISTRICT
JANUARY 2010

OWNER

NORTHERN VIRGINIA REGIONAL PARK AUTHORITY
5400 OX ROAD
FAIRFAX STATION, VIRGINIA 22039
TELEPHONE: (703) 359-4615
FAX: (703) 273-0905
CONTACT PERSON: KATE RUDACILLE

APPLICANT

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
5000 OVERLOOK AVENUE, SW 5TH FLOOR
WASHINGTON D.C. 20032
TELEPHONE: (202) 787-2396
FAX: (202) 787-2453
CONTACT PERSON: BARRY LUCAS



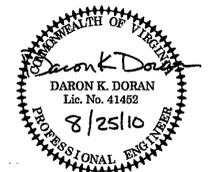
VICINITY MAP
SCALE: 1" = 2,000'

ENGINEER/ LANDSCAPE ARCHITECTS

A. MORTON THOMAS
12750 TWINBROOK PARKWAY
ROCKVILLE, MD 20852
TELEPHONE: (301) 881-2545
FAX: (301) 881-0814

ARCHITECT

VICTOR WILBORN ARCHITECTS, PC
2805 MCKINLEY PLACE, NW
WASHINGTON, D.C. 20016
TELEPHONE: (202) 244-0617
FAX: (202) 537-1143



Application No. SE 2010-DR-002 Staff S.Z.

Approved SE/DSP Plat
See Development Cond. dated 1-11-2011
Date of BOS PC approval 1-11-2011

Sheet 1 of 8

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
SE-001	COVER SHEET
SE-002	OVERVIEW PLAN
SE-003	EXISTING VEGETATION MAP & GENERAL NOTES
SE-004	SITE DETAILS
SE-005	PUBLIC ACCESS EXHIBIT
SE-006	ARCHITECTURAL ELEVATIONS
SE-007	ARCHITECTURAL PERSPECTIVE
SE-008	CORRESPONDENCE LETTERS



REDUCTION
VERIFICATION
SCALE

10 INCHES

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY	
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA	
SITE 31 COVER SHEET	
SCALE 1"=100'	DRAWN JET
INTERCEPTOR SYSTEM	CHECKED DKD
SURVEYED	SUBMITTED
DATE 04/12/10	RECOMMENDED D. DORAN
CADD FILE SE-001	RECOMMENDED

REVISED: AUGUST 25, 2010
JULY 30, 2010
JUNE 16, 2010
APRIL 12, 2010

SE-001

LEGEND

- PHOTO LOCATION
- AREA NOT INCLUDED IN SPECIAL EXCEPTION AREA
- SPECIAL EXCEPTION AREA
- 100-YEAR FLOODPLAIN
- RESOURCE PROTECTION AREA (PER FAIRFAX COUNTY MAPPING)
- APPROXIMATE LIMITS OF CLEARING AND GRADING
- TRAIL
- SOIL TYPE BOUNDARY
- SOIL TYPE LABEL
- BUILDING RESTRICTION LINE (BRL)

SPECIAL EXCEPTION BEARING/DISTANCES

ID	BEARING	DISTANCE
L-1	N55°01'01"W	209.17'
L-2	N34°58'59"E	50.00'
L-3	S55°01'01"E	85.26'
L-4	N10°30'00"W	99.97'
L-5	N01°29'27"W	99.97'
L-6	N43°34'43"E	50.00'
L-7	S34°25'21"E	20.72'
L-8	S64°24'54"W	103.06'
L-9	S04°07'34"E	48.79'
L-10	S16°14'27"E	156.82'
L-11	S24°34'59"W	65.94'

PROPOSED SPECIAL EXCEPTION AREA (SEA) TABULATIONS

ZONE	R-E (RESIDENTIAL ESTATE DISTRICT)
SITE AREA FOR SEA	2,103 AC
PARCEL AREA	91,590.1 SF
EXISTING USE	18,007 AC
PROPOSED USE	784,384.9 SF
USE LIMITATIONS	UNDEVELOPED
LOT WIDTH	CATEGORY 1 - LIGHT PUBLIC UTILITY SEWAGE PUMPING FACILITY AND USES IN FLOODPLAIN
USE REGULATIONS	NONE
MINIMUM LOT AREA	75,000 SF
BUILDING HEIGHT	60 FT
FRONT YARD	50 FT
ANGLE OF BULK PLANE*	55°
SIDE YARDS	20 FT
ANGLE OF BULK PLANE	45°
REAR YARD	25 FT
ANGLE OF BULK PLANE*	45°
CROSS FLOOR AREA	13,739 SF (MAX)
FLOOR AREA RATIO (FAR)	0.15 (MAX)
MAX DENSITY	N/A

* ANGLE OF BULK PLANE NOT SPECIFIED FOR THE FRONT AND REAR YARDS BECAUSE THE DISTANCE FROM THE SEA BOUNDARY LINES IS 660 FT AND 130 FT, RESPECTIVELY AND BULK PLANE ANGLES ARE SIGNIFICANTLY GREATER THAN THE 55° AND 45° REQUIRED.

OPEN SPACE

REQUIRED	NONE - NOT CLUSTER DEVELOPMENT
PROVIDED	N/A

OFF-STREET PARKING

ODOR ABATEMENT BUILDING FACILITY TO BE REMOTELY MONITORED WITH BIWEEKLY SERVICE INSPECTIONS AND ANNUAL MATERIALS DELIVERY/REMOVAL

NUMBER OF EMPLOYEES - MAJOR SHIFT	0
NUMBER OF COMPANY VEHICLES	1
SPACES REQUIRED	1
SPACES PROVIDED	1

SIGNS

N/A - NO PROPOSED SIGNS

TRAILS

THERE ARE TWO TRAILS SHOWN ON THE COMPREHENSIVE PLAN COUNTY WIDE TRAILS PLAN MAP AS A MAJOR REGIONAL TRAIL AND A STREAM VALLEY TRAIL ON THE PARCEL AND APPARENTLY CONNECT TO THE POTOMAC HERITAGE NATIONAL SCENIC TRAIL THAT IS APPROXIMATELY 1,200 FEET SOUTH EAST OF THE PARCEL BOUNDARY. THROUGH SITE VISIT INSPECTION IT APPEARS THAT THE MAJOR REGIONAL TRAIL AND STREAM VALLEY TRAIL SHARE THE SAME PATH THROUGH THE SPECIAL EXCEPTION AREA (SEA) ON THE NORTHERN PORTION OF THE SEA; A SECOND TRAIL COULD NOT BE FOUND NORTH OF THE SEA ALONG THE POTOMAC RIVER AS INDICATED ON THE COUNTY WIDE TRAILS PLAN. THE TRAIL CONTINUES TO THE WEST PARALLEL TO THE POTOMAC INTERCEPTOR AND TO THE EAST RUNS PARALLEL TO THE POTOMAC RIVER TO THE POTOMAC HERITAGE NATIONAL SCENIC TRAIL.

LANDSCAPING AND SCREENING

ADJACENT USES	SINGLE FAMILY DETACHED DWELLINGS AND REGIONAL PARK AND VACANT LAND
PROPOSED USE	LIGHT PUBLIC UTILITY
SCREENING REQUIREMENTS: - OR BARRIER D, E, OR F	3 (50' WIDE UNBROKEN STRIP OF OPEN SPACE)
SCREENING PROVIDED	WAIVER REQUESTED*

* - WAIVER OF 50' TRANSITIONAL SCREENING IS REQUESTED WITH THIS APPLICATION DUE TO THE ODOR CONTROL BUILDING BEING SITED WITHIN A RAVINE. THE BUILDING LOCATION IS BETWEEN TWO RIDGES WITH ELEVATION CHANGES OF APPROXIMATELY 40 FT AND 50 FT TO THE EAST AND WEST, RESPECTIVELY, WHICH PROVIDE A FORESTED NATURAL TOPOGRAPHIC BARRIER. ALSO NOTED IS THAT THE SPECIAL EXCEPTION AREA AND THE REMAINDER OF THE PARCEL THAT IS NOT PART OF THIS SPECIAL EXCEPTION IS OWNED BY THE NORTHERN VIRGINIA REGIONAL PARK AUTHORITY (NVRPA) AND IS CLASSIFIED AS A RESOURCE BASED REGIONAL PARK BY THE COMPREHENSIVE PLAN. SINCE THE NVRPA IS TASKED WITH PRESERVING THE ENVIRONMENTAL FEATURES OF THIS PARCEL THE EXISTING FOREST AND TOPOGRAPHIC ELEVATION CHANGE WILL SCREEN THE ODOR CONTROL BUILDING FROM ADJACENT RESIDENTIAL PROPERTIES.



DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
POTOMAC INTERCEPTOR LONG-TERM
ODOR ABATEMENT PROGRAM
FAIRFAX COUNTY, VIRGINIA

SITE 31 OVERVIEW PLAN

CIVIL	
SCALE 1"=100'	DRAWN JET
INTERCEPTOR SYSTEM	CHECKED DKO
SURVEYED	SUBMITTED
DATE 04/12/10	D. DORAN
CADD FILE CS-001	RECOMMENDED



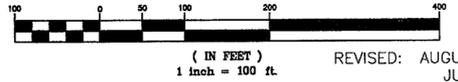
OVERVIEW PLAN
SCALE: 1"=100'

Application No. SE 2010-DR-002 Staff S.Z.

Approved SP Plat
See Development Cond. dated 1-11-2011
Date of BOS PC approval 1-11-2011

Sheet 2 of 8

GRAPHIC SCALE



REVISED: AUGUST 25, 2010
JULY 30, 2010
JUNE 16, 2010
APRIL 12, 2010



REDUCTION VERIFICATION SCALE

10 INCHES

GENERAL NOTES

- THE PROPERTY SHOWN HEREON IS IDENTIFIED ON FAIRFAX COUNTY TAX MAP 4-3(11) PARCEL 2 AND IS ZONED R-E.
 - TOTAL PARCEL AREA: 18.007 ACRES
 - TOTAL AREA OF SPECIAL EXCEPTION AREA (SEA): 2.1028 ACRES
- PROPERTY BOUNDARY INFORMATION FOR THIS SPECIAL EXCEPTION IS FROM DEEDS AND INFORMATION OF RECORD AND SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY. NO TITLE REPORT WAS FURNISHED.
- THE PROPERTY IS NOW IN THE NAME OF NORTHERN VIRGINIA REGIONAL PARK AUTHORITY (NVRPA) AS RECORDED IN D.B. 3537 AT PAGE 877 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA. THE DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY (DCWASA) WILL OWN AND OPERATE THE PROPOSED FACILITY AND IS THE PRIMARY APPLICANT OF THE SPECIAL EXCEPTIONS AND NVRPA IS A CO-APPLICANT.
- THE SUBJECT PROPERTY IS LOCATED WITHIN FIRM ZONE "X" AND ZONE "A" AS SHOWN ON FEMA FIRM COMMUNITY PANEL NO. 515625 0080D, DATED 03/05/80.
- FLOODPLAINS ASSOCIATED WITH THE POTOMAC RIVER AND POND BRANCH STREAM ARE LOCATED ON THE PARCEL. FLOODPLAIN INFORMATION SHOWN ON PLANS WAS TAKEN FROM THE FAIRFAX COUNTY GIS CHESAPEAKE BAY MAP AND INFORMATION OF RECORD.
- THERE IS A 1993 RPA AREA LOCATED ON THE PARCEL AS INDENTIFIED ON THE FAIRFAX COUNTY CHESAPEAKE BAY MAP.
- NO ZONING CHANGE IS REQUESTED AND ZONING WILL REMAIN R-E. SPECIAL EXCEPTIONS ARE REQUESTED FOR BUILDING WITHIN THE FLOODPLAIN AND FOR THE CATEGORY 1 - LIGHT PUBLIC UTILITY USE FOR THE PROPOSED SEWAGE PUMPING FACILITY (ODOR CONTROL BUILDING) ON THE R-E ZONED PARCEL.
- THE TOPOGRAPHIC INFORMATION SHOWN FOR THIS SPECIAL EXCEPTION IS INTERPOLATED FROM A HIGH FLIGHT AERIAL TOPOGRAPHY TAKEN FROM THE FAIRFAX COUNTY GIS TOPOGRAPHIC MAPS AND INFORMATION OF RECORD. THE CONTOUR INTERVAL IS 2 FOOT.
- NO GRAVE SITES WERE FOUND ON THE PARCEL OR WITHIN THE SPECIAL EXCEPTION APPLICATION AREA.
- NO EXISTING BUILDINGS ARE PRESENT IN THE SEA HOWEVER THERE ARE DIRT AND GRAVEL ROADS PROVIDING ACCESS TO 54" AND 78" SANITARY SEWER MAINS THAT ARE PART OF THE POTOMAC INTERCEPTOR SEWER SYSTEM AND A LARGE 10 FT DIAMETER MANHOLE (MH #31).
- MAXIMUM BUILDING HEIGHT WILL BE LIMITED TO NO MORE THAN 40 FT.
- THERE ARE TWO KNOWN (WITHOUT THE BENEFIT OF A TITLE REPORT) EXISTING SANITARY SEWER EASEMENTS OF 75' AND 100' WIDTHS WITHIN THE SPECIAL EXCEPTION APPLICATION AREA AND AN 8' OUTLET ROAD INGRESS/EGRESS EASEMENT ALONG THE GRAVEL DRIVE AS RECORDED IN D.B. 2135 PG. 1 AND D.B. 3537 PG. 681.
- EXISTING 40-INCH DIAMETER AND 30-INCH DIAMETER POPLAR TREES HAVE BEEN IDENTIFIED FOR PROTECTION AS PART OF THE PRESERVATION, SCENIC OR NATURAL FEATURES.
- 1 FOOT CONTOURS AND EXISTING TREES SHOWN HEREON ARE FROM A FIELD SURVEY PERFORMED BY CERVANTES & ASSOCIATES, P.C. IN JUNE OF 1999.
- THE PROPOSED DEVELOPMENT CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND STANDARDS EXCEPT AS MAY BE MODIFIED OR WAIVED.
- PROPOSED FACILITY SHOWN HEREON WILL BE SERVED BY PUBLIC SEWER (POTOMAC INTERCEPTOR) AND WATER SHALL BE PROVIDED BY A WELL SOURCE TO BE APPROVED BY THE HEALTH DEPARTMENT.
- THE FACILITY OPERATION UTILIZE FANS TO PULL ODOROUS AIR FROM THE POTOMAC INTERCEPTOR SEWER AND PUSH THE AIR THROUGH AN 8 FT DIAMETER BY 12 FT TALL TANK CONTAINING ACTIVATED CARBON, WHICH ADSORBS THE ODOROUS AIR. THE CONTAMINANTS THAT CAUSE THE ODOR, AFTER WHICH THE PURIFIED AIR IS DISCHARGED BACK INTO THE POTOMAC INTERCEPTOR. TWO TO THREE TIMES A YEAR AS DETERMINED BY THE ODOR-REMOVAL EFFICIENCY, THE ACTIVATED CARBON IS EITHER RECHARGED IN PLACE (BY FLOODING THE TANK WITH WATER WHICH DISSOLVES THE ORGANIC MATERIAL) AND THEN IS FLUSHED BACK INTO THE INTERCEPTOR IN SOLUTION OR REPLACEMENT OF THE SPENT CARBON.
- NO FRONTAGE IMPROVEMENTS ARE PROPOSED.
- NO SPECIAL ADVERTISEMENTS OFFERED FOR THIS SPECIAL EXCEPTION REQUEST.
- THESE FACILITIES WILL OPERATE CONTINUOUSLY DURING THE 24 HOUR DAILY CYCLE. THE ODOR REMOVAL PERFORMANCE, OPERATION PARAMETERS, AND SAFETY/SECURITY ALARM FUNCTIONS WILL BE MONITORED CONTINUOUSLY. MEASUREMENT DATA WILL BE DISPLAYED IN REAL TIME AT DCWASA OPERATING HEADQUARTERS.
- NO EMPLOYEE WORK SHIFTS ARE PLANNED AT THIS FACILITY. TWO FACILITY OPERATIONAL INSPECTION AND MAINTENANCE VISITS ARE PLANNED ROUTINELY FOR EACH WEEK. ADDITIONAL ROUTINE MAINTENANCE PROCEDURES FOR THE CLEANING AND DRYING OF THE DE-MISTER FILTER (WEEKLY OR MONTHLY DEPENDING ON OPERATING CONDITIONS), IN-PLACE FAN MOTOR MAINTENANCE (QUARTERLY) AND ACTIVATED CARBON RECHARGE/REPLACEMENT (2 TO 3 TIMES PER YEAR).
- DEVELOPMENT SCHEDULE WILL BE BASED ON SPECIAL EXCEPTION APPROVAL.
- THE FOLLOWING HAZARDOUS MATERIALS ARE REMOVED FROM THE ODOROUS AIR STREAM AND ADSORBED ONTO THE ACTIVATED CARBON GRANULES AS PART OF THE ODOR ABATEMENT PROCESS: HYDROGEN SULFIDE, SULFUR DIOXIDE AND POSSIBLE SMALL CONCENTRATIONS OF METHANE. AFTER ADSORPTION THESE MATERIALS WILL BE DISPOSED OF PERIODICALLY BY EITHER BEING DISSOLVED IN WATER AND RETURNED IN SOLUTION BACK TO THE POTOMAC INTERCEPTOR SEWER LINE OR REMOVED STILL ADSORBED WHEN THE ACTIVATED CARBON IS REPLACED.
- GRANULAR ACTIVATED CARBON IS HIGHLY FLAMMABLE, AND IF SUFFICIENTLY FINELY DIVIDED CAN BE CONSIDERED EXPLOSIVE.
- THE CLEAN AGENT FIRE SUPPRESSION SYSTEM USES A MIXTURE OF INERT ATMOSPHERIC GASES: NITROGEN, CARBON DIOXIDE, ARGON AND OTHERS AS WELL AS NOVEC FIRE PROTECTION MATERIAL WHICH HAS HAZARD LEVELS OF ZERO FOR HEALTH AND FLAMMABILITY AND ONE (SLIGHT HAZARD) FOR REACTIVITY.
- NO OPEN SPACE AREAS OR COMMUNITY (PUBLIC) FACILITIES BEING OFFERED SINCE THE PARCEL IS OWNED BY THE NORTHERN VIRGINIA REGIONAL PARK AUTHORITY AND IS INTENDED TO REMAIN UNDEVELOPED AS PARK LAND.
- THIS SPECIAL EXCEPTION APPLICATION IS IN COMPLIANCE WITH THE COMPREHENSIVE PLAN AND IS NOT LOCATED IN ANY OVERLAY DISTRICTS PER THE "ZONING OVERLAY DISTRICTS FAIRFAX COUNTY ZONING MAP" PREPARED NOVEMBER 2003, BY THE DEPARTMENT OF PLANNING AND ZONING, FAIRFAX COUNTY VIRGINIA, REVISED NOVEMBER 2007.
- THE APPROXIMATE LIMITS OF CLEARING AND GRADING ARE SHOWN ON THE PLANS. THESE LIMITS MAY CHANGE WITH FINAL ENGINEERING AND ARCHITECTURE DESIGN.

WAIVERS/MODIFICATION

- WAIVER OF STORM WATER QUANTITY CONTROL AS REQUIRED BY SECTION 6-2001 OF THE PUBLIC UTILITIES MANUAL DUE TO THE FACT THAT THE IMPROVEMENTS TO THE SITE ARE WITHIN THE FLOODPLAIN OF THE POTOMAC RIVER. SEE STORMWATER MANAGEMENT NARRATIVE, SHOWN ON THIS SHEET, FOR JUSTIFICATION.
- WAIVER OF THE TRANSITIONAL SCREENING AND BARRIER AS REQUIRED BY SECTIONS 13-303 AND 13-304 OF THE ZONING ORDINANCE. SEE LANDSCAPING AND SCREENING NOTES SHOWN ON SHEET SE-002 FOR JUSTIFICATION.

SOIL RATINGS

SOIL NO.	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	SEPTIC DRAIN FIELDS	INFILTRATION TRENCHES	EROSION POTENTIAL	OTHER NOTES
1A+	MIXED ALLUVIAL	A	POOR	POOR	POOR	POOR	LOW	HYD
1B1	ROCKYLAND (ACIDIC)	C	GOOD	MARG	POOR	POOR	HIGH	
21D2/E2	MANOR	C	GOOD	GOOD	GOOD	GOOD	HIGH	
30A+	HUNTINGTON	A	MARG	MARG	POOR	POOR	LOW	
55C2	GLENELG	C	GOOD	GOOD	GOOD	GOOD	HIGH	

TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT

A	Pre-development area of existing tree canopy	76,400 S.F. = 1.764 AC
B	Percentage of gross site covered by existing tree canopy	38.7% (76,400 S.F. / 197,000 S.F.)
C	Percentage of 10-year canopy requirement for site	30.0% (22,920 S.F.)
D	Percentage of 10-year tree canopy requirement that should be met through tree preservation	83.4% of "C" (19,116 S.F.)
E	Proposed percentage of canopy requirement that will be met through preservation	100% (22,920 S.F.)
F	Has the Tree Preservation Target Minimum Been Met?	Yes

STORMWATER MANAGEMENT BMP NARRATIVE

TOTAL PARCEL AREA: 18.007 ACRES
 TOTAL AREA OF SPECIAL EXCEPTION AREA (SEA): 2.1028 ACRES (91,690 SF)
 TOTAL EXISTING IMPERVIOUS AREAS (GRAVEL ROAD): 10,680 SF = 0.245 ACRES
 TOTAL PROPOSED IMPERVIOUS AREA (NEW BLDG & GRAVEL RD): 5,220 SF = 0.120 ACRES
 NEW TOTAL IMPERVIOUS AREA: 15,900 SF = 0.365 ACRES
 PROPOSED IMPERVIOUS PERCENTAGE OF SEA: 17.4%
 NEW IMPERVIOUS PERCENTAGE OF PARCEL: 5.7%

BECAUSE THE ODOR CONTROL BUILDING IS AN APPURTENANT STRUCTURE TO THE POTOMAC INTERCEPTOR SANITARY SEWER MAIN AND WILL BE OWNED BY THE DCWASA REGIONAL SERVICE AUTHORITY THE SITE IS LOCATED WITHIN THE 118-52 OF THE FAIRFAX COUNTY CODE CHESAPEAKE BAY PRESERVATION ORDINANCE AND A WAIVER OF THIS REQUIREMENT IS NOT REQUIRED.

ADEQUATE OUTFALL NARRATIVE

EXISTING CONDITIONS

THE PARCEL BORDERS THE POTOMAC RIVER TO THE NORTH AND HAS THE POND BRANCH STREAM FLOWING THROUGH THE WEST SIDE OF THE PARCEL GENERALLY PARALLEL TO THE WESTERN PROPERTY BOUNDARY. THE SPECIAL EXCEPTION AREA (SEA) IS MOSTLY WOODED WITH STEEP SLOPES GENERALLY LOCATED TO THE SOUTH ALONG THE GRAVEL ACCESS ROAD RUNNING NORTHSOUTH TO RIVER PARK LANE (PRIVATE STREET) AND RELATIVELY FLAT SLOPES ALONG THE POTOMAC INTERCEPTOR SEWER LINE AT THE NORTH END OF THE SEA. THERE IS MINIMAL CLEARING FOR THE GRAVEL ACCESS ROAD, THE DIRT ROAD AND TRAILS AT THE NORTH END OF THE SEA. DITCH SECTIONS EXIST ON BOTH SIDES AND PARALLEL TO THE GRAVEL ROAD AND CURRENTLY CONCENTRATE FLOW ORIGINATING FROM UPLAND RESIDENTIAL ESTATE PARCELS AND A PRIVATE SHARED DRIVEWAY. BOTH DITCHES DISCHARGE INTO FLAT LOWLAND AREAS THAT DRAIN TOWARD THE POTOMAC RIVER TO THE EAST AND POND BRANCH TO THE WEST THAT CURRENTLY DO NOT HAVE DEFINED CHANNELS.

PROPOSED CONDITIONS

THE IMPROVEMENTS FOR THE ODOR CONTROL BUILDING AND APPURTENANCES ARE LOCATED WITHIN THE POTOMAC RIVER FLOODPLAIN AND ARE APPROXIMATELY 400 FT SOUTH EAST FROM THE CONFLUENCE OF POND BRANCH STREAM WITH THE POTOMAC RIVER. THE PROPOSED BUILDING IS TO BE LOCATED ON THE EAST SIDE OF THE EXISTING GRAVEL ROAD AND WILL REQUIRE THE DIVERSION OF FLOW FROM THE EAST SIDE DITCH AROUND THE BUILDING AND WILL DISCHARGE AT THE SAME LOCATION THAT THE EXISTING EAST GRAVEL ROADWAY DITCH RUNOFF DISCHARGES CURRENTLY. THE DIVERSION OF THE EAST DITCH FLOW WILL BE DISCHARGED IN A MANNER THAT MIMICS THE EXISTING CONDITION INTO THE FLAT WOODLAND AREA NEAR THE EXISTING MANHOLE #31 AT THE BASE OF THE GRAVEL ROAD AND ULTIMATELY DRAIN TO THE POTOMAC RIVER ACROSS 300 FEET OF FLAT LOWLAND AREAS. THE FLOW PATH ALONG THE WEST SIDE OF THE GRAVEL ACCESS ROAD WILL BE SLIGHTLY DIVERTED FOR THE CONSTRUCTION OF THE MATERIAL STORAGE AREA AND GRAVEL ROAD IMPROVEMENTS AND DRAINS APPROXIMATELY 200 FEET OVERLAND TOWARD THE POND BRANCH STREAM.

STORMWATER MANAGEMENT NARRATIVE

STORMWATER ANALYSIS COMPUTATIONS

PREDEVELOPMENT			
TOTAL SITE AREA:	C=0.30	2.103 ACRES	
WOODED AREAS:		1.858 ACRES	
GRAVEL ROAD:	C=0.60	0.245 ACRES	
		CA = 0.7744	
		C = 0.33	

STORM	C	I	A	PEAK FLOW
2-YR	0.33	5.45	2.103	3.78
10-YR	0.33	7.27	2.103	5.05

POSTDEVELOPMENT

TOTAL SITE AREA:			
TOTAL SITE AREA:	C=0.30	2.103 ACRES	
WOODED AREAS:		1.738 ACRES	
GRAVEL ROAD:	C=0.60	0.328 ACRES	
PROPOSED BUILDING:	C=0.90	0.037 ACRES	
		CA = 0.7615	
		C = 0.38	

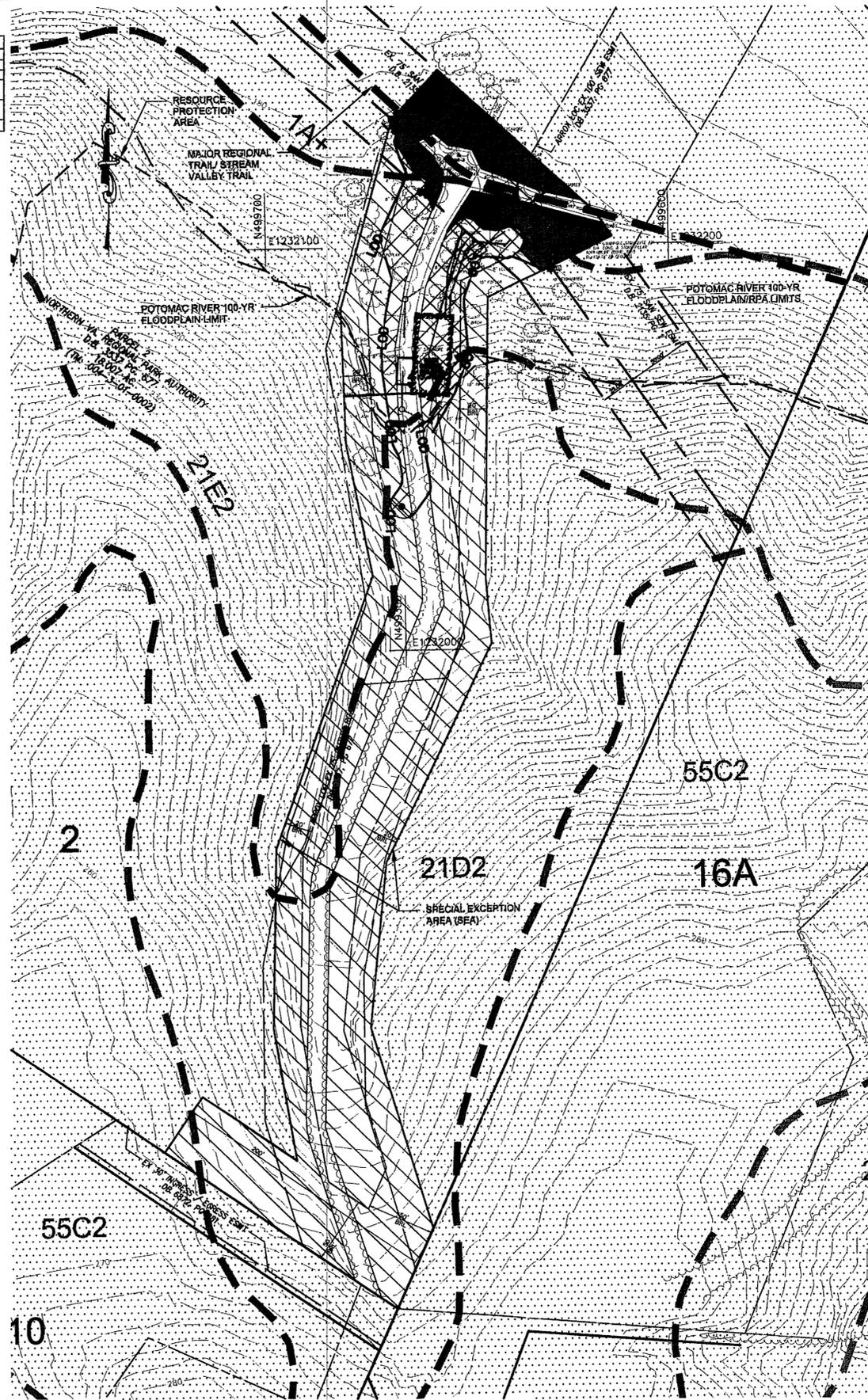
STORM	C	I	A	PEAK FLOW
2-YR	0.34	5.45	2.103	4.09
10-YR	0.34	7.27	2.103	5.46

STORMWATER MANAGEMENT NARRATIVE

THE PRE-DEVELOPMENT RUNOFF IS 3.78 CFS AND 5.05 CFS FOR THE 2-YEAR AND 10-YEAR STORM EVENTS AND THE UNCONTROLLED POST-DEVELOPMENT RUNOFF IS 4.09 CFS AND 5.46 CFS FOR THE 2-YEAR AND 10-YEAR STORM EVENTS. SINCE THE PARCEL BORDERS THE POTOMAC RIVER AND THE SPECIAL EXCEPTION AREA SITE IS LOCATED WITHIN THE POTOMAC RIVER 100-YR FLOODPLAIN A WAIVER OF THE DETENTION OF THE INCREASE IN RUNOFF IS BEING REQUESTED AS PART OF THIS APPLICATION. BASIS FOR THIS REQUEST IS THAT THE INCREASE IN RUNOFF (0.31 CFS AND 0.41 CFS FOR THE 2-YR AND 10-YR STORM EVENTS, RESPECTIVELY) FROM THE SITE IS INSIGNIFICANT COMPARED TO THE PEAK RUNOFF OF THE POTOMAC RIVER AND THE POND BRANCH STREAM WATERWAYS. BECAUSE THE INCREASE IN PEAK FLOW RATES IS INSIGNIFICANT AND THE SITE IS LOCATED WITHIN THE FLOODPLAIN OF THE POTOMAC RIVER AND ANY NEW STORMWATER MANAGEMENT FACILITIES WOULD ALSO BE LOCATED WITHIN THE FLOODPLAIN THE WAIVER OF STORMWATER MANAGEMENT REQUIREMENTS IS JUSTIFIED.

SLOPE AND EROSION CLASSES

SLOPE CLASSES		POTENTIAL EROSION SYMBOLS	
A	0-2 PERCENT	±SOIL ACCUMULATION (LOW)	
B	2-7 PERCENT	0-NO EROSION (LOW)	
C	7-14 PERCENT	1-SLIGHT EROSION (LOW)	
D	14-25 PERCENT	2-MODERATE EROSION (MOD)	
E	25+ PERCENT	3-SEVERE EROSION (HIGH)	



EXISTING VEGETATION MAP

SCALE: 1"=50'

Application No. SE 2010-DR-002 Staff S.Z.

Approved SE/SP Plat
 See Development Cond. dated 1-11-2011
 Date of BOS/PC approval 1-11-2011

Sheet 3 of 8

EXISTING VEGETATION MAP SUMMARY:

COVER	AREA (SF)	AREA (AC)
UPLAND FOREST TREE CANOPY	68,436	1.5711
BOTTOMLAND FOREST TREE CANOPY	7,963	0.1828
OPEN SPACE	15,191	0.3487
TOTAL	91,590	2.1028
TOTAL CANOPY TO BE REMOVED	10,868	0.2496
TOTAL PRESERVED TREE CANOPY	65,531	1.5044

EXISTING VEGETATION LEGEND

- EXISTING UPLAND FOREST TREE CANOPY WITHIN SPECIAL EXCEPTION AREA (S.E.A.) TO BE PRESERVED. UPLAND FOREST CANOPY CHARACTERISTICS: PRIMARY SPECIES: CHESTNUT OAK, RED OAK & AMERICAN BEECH; GENERAL HEALTH & VIGOR: GOOD; QUALITY: GOOD.
- UPLAND FOREST TREE CANOPY TO BE REMOVED WITH S.E.A. SEE ABOVE FOR UPLAND FOREST STAND CHARACTERISTICS AND CONDITION.
- EXISTING BOTTOM LAND FOREST TREE CANOPY WITHIN S.E.A. TO BE PRESERVED. BOTTOM LAND FOREST CANOPY CHARACTERISTICS: PRIMARY SPECIES: TULIP TREE, NORTHERN RED OAK, BLACK GUM, EASTERN COTTONWOOD, & AMERICAN SYCAMORE; GENERAL HEALTH & VIGOR: GOOD; QUALITY: GOOD.
- EXISTING BOTTOM LAND FOREST TREE CANOPY TO BE REMOVED WITH S.E.A. SEE ABOVE FOR BOTTOM LAND FOREST STAND CHARACTERISTICS AND CONDITION.
- MAJOR REGIONAL TRAIL/STREAM VALLEY TRAIL
- SOIL TYPE BOUNDARY
- AREA NOT INCLUDED AS PART OF THE S.E.A.

Tree Preservation Notes:

The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or registered consulting arborist, and shall be subject to the review and approval of the Urban Forest Management Division, DPWES.

The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 10 inches in diameter and greater, and 25 feet in either side of the limits of clearing and grading shown on the SE plat for the area shown as special exception site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SE plat and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.

Tree Preservation Walk-Through

The Applicant shall retain the services of a certified arborist or registered consulting arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Applicant's certified arborist or registered consulting shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.

Limits of Clearing and Grading

The Applicant shall conform strictly to the limits of clearing and grading as shown on the SE plat, subject to allowances specified in these development conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the SE plat, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES.

Tree Preservation Fencing

All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the phase I & II erosion and sediment control sheets, as may be modified by the "Root Pruning" development condition below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD, DPWES.

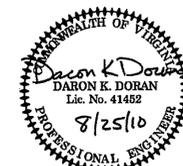
Root Pruning

The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the site plan submission. The details for these treatments shall be reviewed and approved by the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:

- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
- Root pruning shall take place prior to any clearing and grading, or demolition of structures.
- Root pruning shall be conducted under the direct supervision of a certified arborist.
- An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.

Site Monitoring

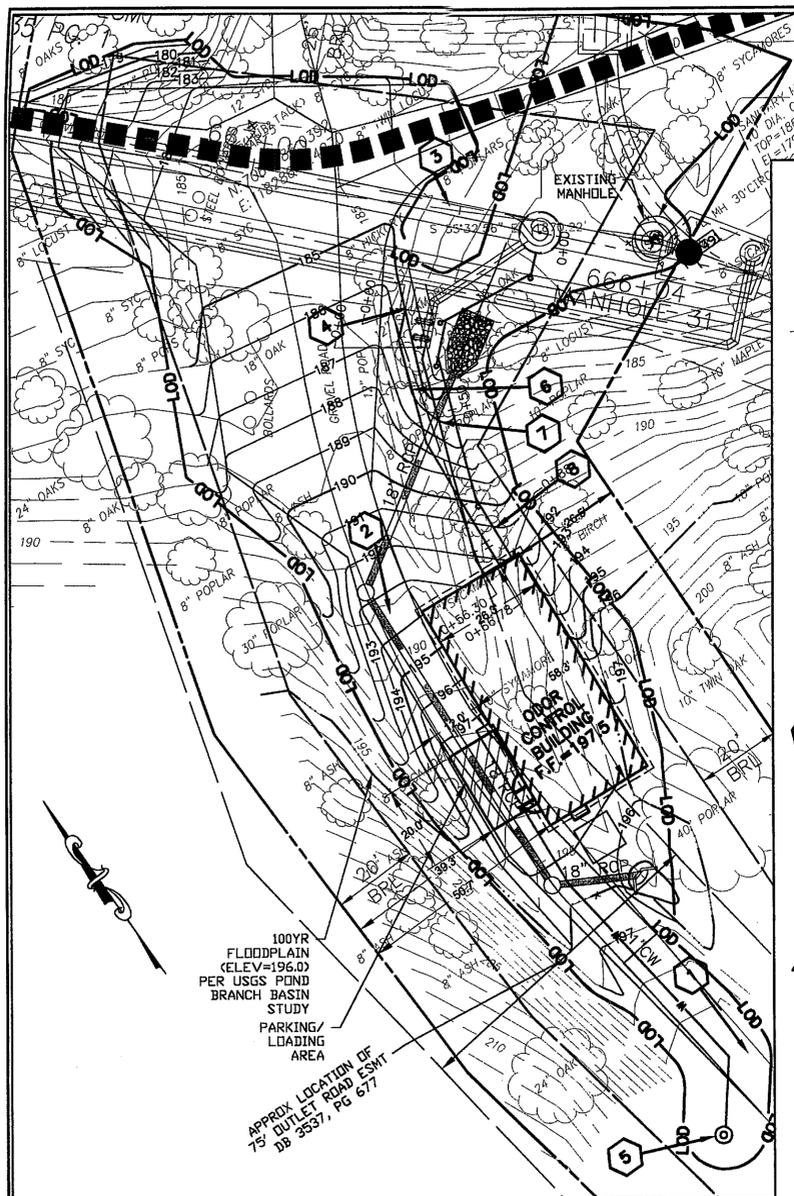
During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as per the development conditions and as approved by the UFMD. The Applicant shall retain the services of a certified arborist or registered consulting arborist to monitor all construction and tree preservation efforts in order to ensure conformance with all tree preservation development conditions, and UFMD approvals. The monitoring schedule shall be described and detailed in the Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES.



DISTRICT OF COLUMBIA
 WATER AND SEWER AUTHORITY
 POTOMAC INTERCEPTOR LONG-TERM
 ODOR ABATEMENT PROGRAM
 FAIRFAX COUNTY, VIRGINIA
SITE 31
EXISTING VEGETATION MAP & GENERAL NOTES

CIVIL	
SCALE 1"=50'	DRAWN JET
INTERCEPTOR SYSTEM	CHECKED DKD
SURVEYED	SUBMITTED
DATE 04/12/10	RECOMMENDED D. DORAN
CADD FILE SE-003	

SE-003



PARCEL B
HARRY MARTIN
D.B. 13301 PG. 1853
5.84 AC
(TM: 004-3-01-0001-B)

PARCEL 2
NORTHERN VA. REGIONAL PARK AUTHORITY
D.B. 3537 PG. 677
18.007 AC
(TM: 004-3-01-0002)

LOT 16A
REGINALD W. NORRIS
D.B. 6377 PG. 190
5.00 AC
(TM: 004-3-07-0016-A)

PARCEL 2
NORTHERN VA. REGIONAL PARK AUTHORITY
D.B. 3537 PG. 677
18.007 AC
(TM: 004-3-01-0002)

SEE ENLARGED PLAN
THIS SHEET

- FLOODPLAIN REGULATION NOTES:**
1. THE PROPOSED STRUCTURE IS CONSIDERED A SEWAGE PUMPING FACILITY USE AND WILL PROVIDE ODOR CONTROL FOR THE ADJACENT POTOMAC INTERCEPTOR (PI) SEWER MAIN THAT IS LOCATED AT THE NORTHERN SIDE OF THE SPECIAL EXCEPTION AREA (SEA). THE PROPOSED BUILDING IS LOCATED WHOLLY WITHIN THE MAJOR 100-YR FLOODPLAIN OF THE POTOMAC RIVER.
 2. ACCESS TO THE SITE IS PROVIDED BY A PRIVATE STREET (RIVER PARK LA) AND AN EXISTING GATED GRAVEL ROAD LOCATED WITHIN A 75 FT OUTLET ROAD EASEMENT (DB 3537, PG. 677).
 3. THE GRADING FOR THE CONSTRUCTION OF THE ODOR CONTROL BUILDING IS CONSIDERED MINOR WITH LIMITED AMOUNTS OF CUT AND FILL FOR THE IMPROVEMENTS FOR THE BUILDING, GRAVEL ROAD AND STORM DRAIN PIPE SYSTEM.
 4. ALTHOUGH THE SITE IS GOING TO HAVE A NET FILL EARTHWORK VOLUME OF 843.74 CY THE DECREASE IN CROSS SECTION AREA IS GOING TO BE INSIGNIFICANT IN RELATION TO THE MUCH LARGER OVERALL CROSS SECTIONAL AREA OF THE POTOMAC RIVER AT THIS LOCATION. IN ADDITION THE SITE IS LOCATED WITHIN A RAVINE AND ANY FLOODING WILL BE STANDING BACKWATER DUE TO THE SHELTERED TOPOGRAPHY AT THIS LOCATION. SINCE THE DECREASE IN CROSS SECTIONAL AREA CAN BE CONSIDERED INSIGNIFICANT AND THE SITE IS LOCATED IN A SHELTERED RAVINE NO IMPACTS ARE ANTICIPATED TO UPSTREAM OR DOWNSTREAM PROPERTIES DUE TO FILL WITHIN THE FLOODPLAIN LIMITS. THIS PROPOSAL HAS MINIMAL POTENTIAL TO CAUSE AN INCREASE IN FLOODING, EROSION OR JEOPARDIZE HUMAN LIFE.
 5. THE CONSTRUCTION OF THE ODOR CONTROL BUILDING HAS BEEN LIMITED TO MINIMIZE CLEARING IMPACTS TO THE WOODED AREA ALONG THE EXISTING GRAVEL ROAD PROVIDING ACCESS TO THE PI. WATER QUALITY IMPACTS ARE ANTICIPATED TO BE MINIMAL SINCE RUNOFF FROM THE PROPOSED ODOR CONTROL BUILDING WILL DRAIN OVERLAND THROUGH DENSELY VEGETATED AND FLAT AREA THAT WILL FILTER ANY POLLUTANTS BEFORE DISCHARGING INTO THE POTOMAC RIVER.
 6. THE GENERAL FLOODPLAIN INFORMATION SHOWN ON THIS PLAN IS TAKEN FROM FAIRFAX COUNTY GIS CHEESEPEAKE BAY MAPS AND INFORMATION OF RECORD. UPON MEETING WITH FAIRFAX COUNTY STORMWATER MANAGEMENT STAFF DETERMINED THAT AT THIS LOCATION, NO ENGINEERED FLOODPLAIN INFORMATION IS AVAILABLE FROM FEMA FOR THE 100-YR FLOODPLAIN ELEVATION.
 7. AS AGREED UPON WITH COUNTY STAFF THE POTOMAC RIVER 100-YR FLOODPLAIN SHOULD BE BASED ON THE BACKWATER CONDITION ELEVATION OF 198.0 FT (AS SHOWN IN THE FLOODPLAIN STUDY OF THE POND BRANCH BASIN PREPARED BY USGS AT THE CONFLUENCE OF POND BRANCH WITH THE POTOMAC RIVER. THE ODOR CONTROL BUILDING WILL BE ALMOST ENTIRELY WITHIN THE 100-YEAR FLOOD PLAN. NO FEDERAL AND/OR STATE PERMITS ARE ANTICIPATED TO BE REQUIRED.
 8. DUE TO OPERATIONAL CONSTRAINTS THE ODOR CONTROL BUILDING SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE PI TO OPERATE EFFICIENTLY. THE BUILDING LOCATION WAS SELECTED BASED ON PROXIMITY TO THE PI AND A LOCATION WHERE THE FINISHED FLOOR COULD BE ABOVE THE POTOMAC RIVER FLOODPLAIN WATER SURFACE ELEVATION.
 9. THIS PLAN REPRESENTS A COLLABORATIVE EFFORT BETWEEN DOWASA AND NVRPA TO MAINTAIN THE HIGH QUALITY, DIVERSE PARK AND RECREATION SYSTEM THAT EXISTS ON THE NVRPA OWNED PARCEL THAT THE SPECIAL EXCEPTION IS A PORTION OF. THE ODOR CONTROL BUILDING SERVES TWO FUNCTIONS, FIRST TO PRESERVE AND PROTECT THE PI (THAT IS AN IMPORTANT AND VALUABLE COMMUNITY INFRASTRUCTURE RESOURCE) BY REMOVING THE CORROSIVE ELEMENTS AND SECOND TO ADDRESS ODOR ISSUES DUE TO THESE CORROSIVE ELEMENTS ALONG THE ENTIRE PI LENGTH FROM THE DULLES AIRPORT TO THE BLUE PLAINS WASTEWATER TREATMENT PLANT. ODOR ISSUES ARE GOING TO BE ADDRESSED BY CLOSING THE EXISTING VENTS AND USING THE FANS IN THE ODOR CONTROL BUILDING TO PULL THE ODOROUS AND CORROSIVE AIR FROM THE PI INTO AN ACTIVATED CARBON FILTER THAT WILL ADSORB THE ODOROUS AND CORROSIVE COMPONENTS AND RELEASE THE FILTERED GAS TO THE ATMOSPHERE AND IMPROVING THE AIR QUALITY ALONG THE ENTIRE LENGTH OF THE PI. BY ADDRESSING THE ODOR ISSUES ALONG THE POTOMAC RIVER THIS PROJECT WILL BE AN ENHANCEMENT TO THE COMMUNITY THAT WILL BENEFIT ALL THE USERS OF THE TRAIL SYSTEM ALONG THE POTOMAC RIVER AND RESIDENTS THAT LIVE IN CLOSE PROXIMITY TO THE PI.

ENLARGED PLAN
SCALE: 1"=20'

AREA FILL=395.0 SF
AREA FILL=282.7 SF
AREA CUT=2730.3 SF

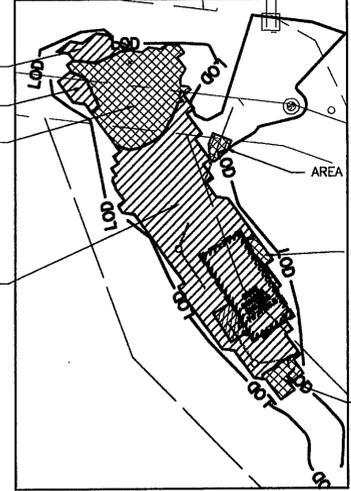
EARTHWORK TABLE

	VOL (CY)
CUT	71.54
FILL	4154.94
BALANCE (FILL)	4083.41

EARTHWORK LEGEND



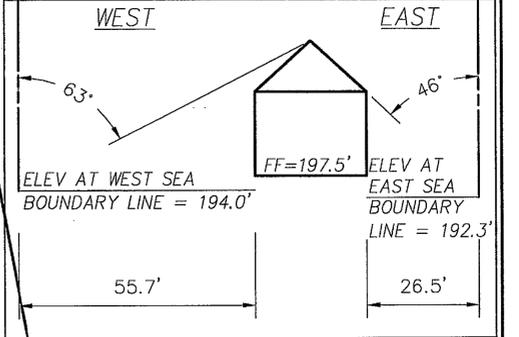
AREA FILL=7419.7 SF



EARTHWORK PLAN
SCALE: 1"=50'

CODED NOTES

- 1 CONTRACTOR SHALL PROVIDE ACCESS TO WASA PIPELINES AND FACILITIES SOUTH OF THE ODOR CONTROL BUILDING
- 2 GRAVEL ROAD
- 3 REHABILITATION WORK BY OTHERS, SEE REHABILITATION SEGMENT MH-31 TO MH-30 (DCFA 375-WA)
- 4 REMOVE CAP AND CONNECT TO FRPMP
- 5 PROPOSED WATER SUPPLY WELL LOCATION
- 6 30" ODOROUS AIR PIPE
- 7 24" ODOROUS AIR PIPE
- 8 4" SANITARY CONNECTION



ANGLE OF BULK PLANE
SCALE: 1"=20'



DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
POTOMAC INTERCEPTOR LONG-TERM
ODOR ABATEMENT PROGRAM
FAIRFAX COUNTY, VIRGINIA

**SITE 31
SITE DETAILS**

SCALE	1"=20'	DRAWN	JET
INTERCEPTOR		CHECKED	DKD
SYSTEM		SUBMITTED	
SURVEYED			D. DORAN
DATE	04/12/10	RECOMMENDED	
CADD FILE	SE-004		



SPECIAL EXCEPTION PLAN
SCALE: 1"=50'

Application No. SE 2010-DR-002 Staff S.Z.
Approved SE/SP Plat
See Development Cond. dated 1-11-2011
Date of BOS/PC approval 1-11-2011
Sheet 4 of 8

REVISED: AUGUST 25, 2010
JULY 30, 2010
JUNE 16, 2010
APRIL 12, 2010

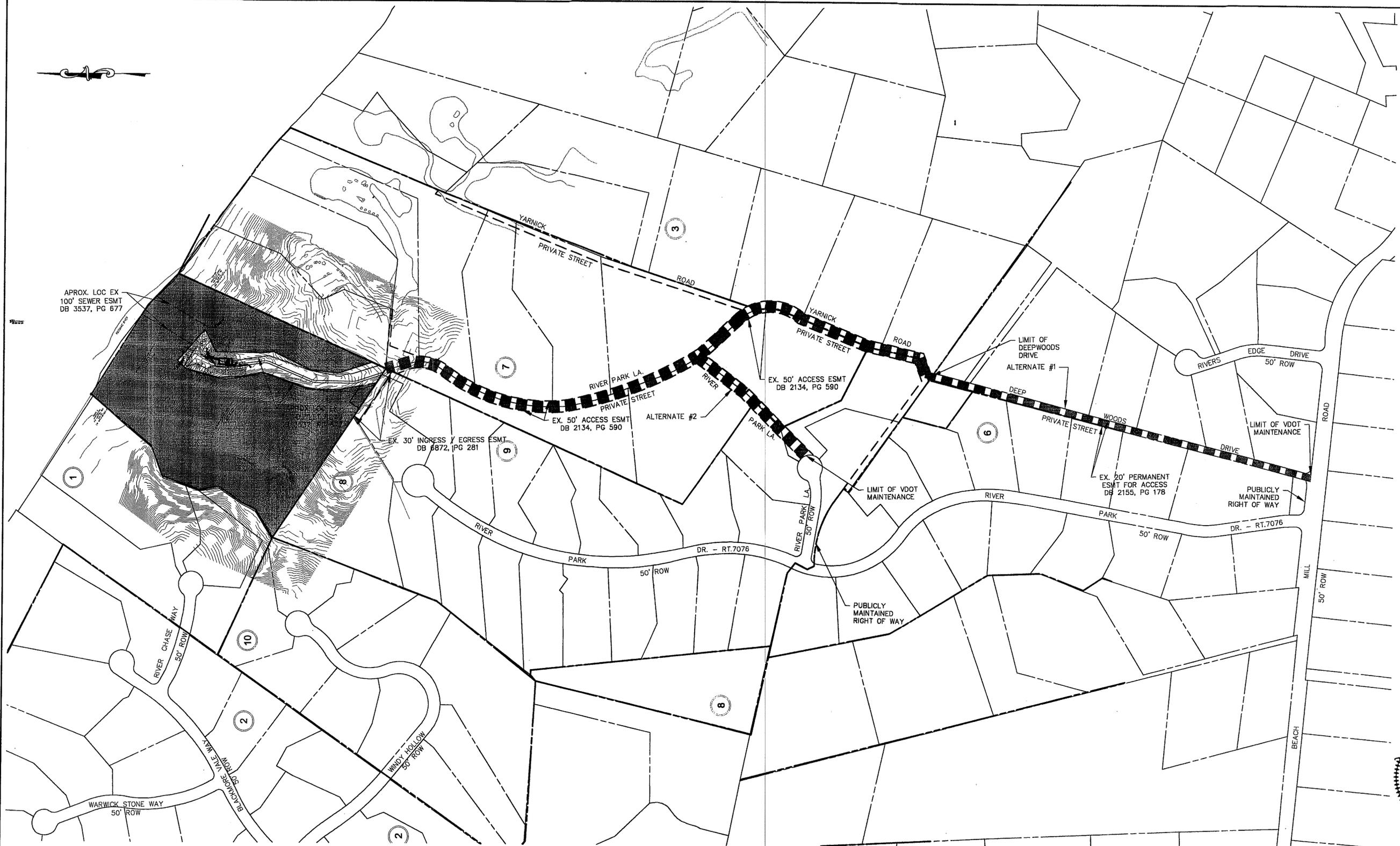
REDUCTION VERIFICATION SCALE

10 INCHES

SE-004



APROX. LOC EX
100' SEWER ESMT
DB 3537, PG 677



LEGEND

-  PATHS FOR ACCESS TO/FROM SITE TO PUBLICLY MAINTAINED ROADWAY.
-  PARCEL AREA OUTSIDE OF SPECIAL EXCEPTION AREA
-  PARCEL AREA OF SPECIAL EXCEPTION

Application No. SE 2010-DR-002 Staff S.Z.
 Approved SE/SP Plat
 See Development Cond. dated 1-11-2011
 Date of (BOS) PC approval 1-11-2011
 Sheet 5 of 8

REVISED: AUGUST 25, 2010
 JULY 30, 2010
 JUNE 16, 2010
 DATE 04/12/10
 APRIL 12, 2010

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY	
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA	
SITE 31 PUBLIC ACCESS EXHIBIT	
SCALE 1"=200'	CIVIL
INTERCEPTOR SYSTEM	DRAWN JET
SURVEYED	CHECKED DKD
DATE 04/12/10	SUBMITTED
CADD FILE SE-005	RECOMMENDED D. DORAN

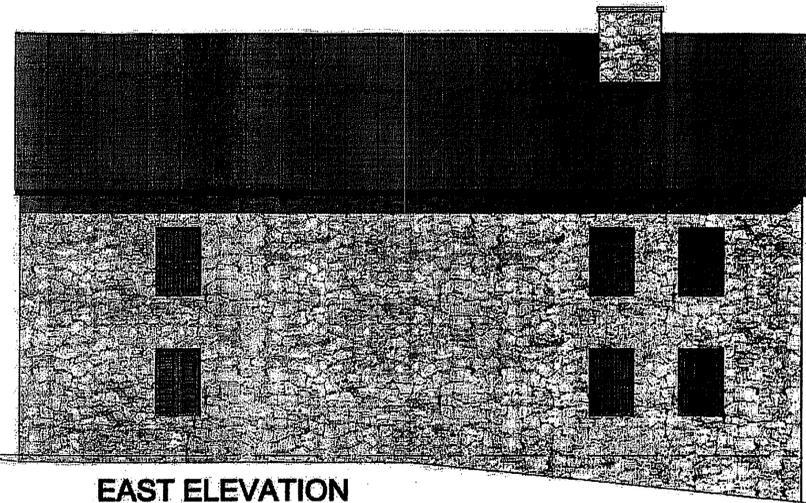
BLACK & VEATCH
Corporation
Gaithersburg, Maryland

AMT A. MASON THOMAS AND ASSOCIATES, INC.
CONSULTING ENGINEERS
1000 WASHINGTON BLVD., SUITE 200
FALLS CHURCH, VA 22044
TEL: 703/441-0000 FAX: 703/441-0001

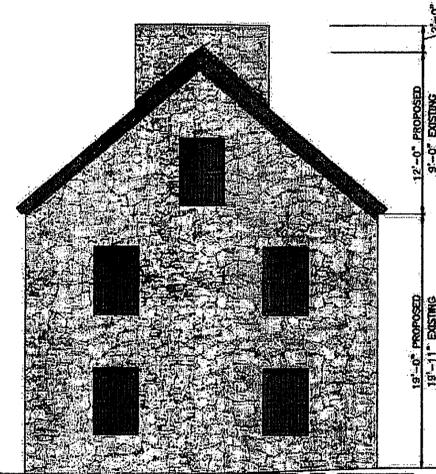
REDUCTION VERIFICATION SCALE

10 INCHES

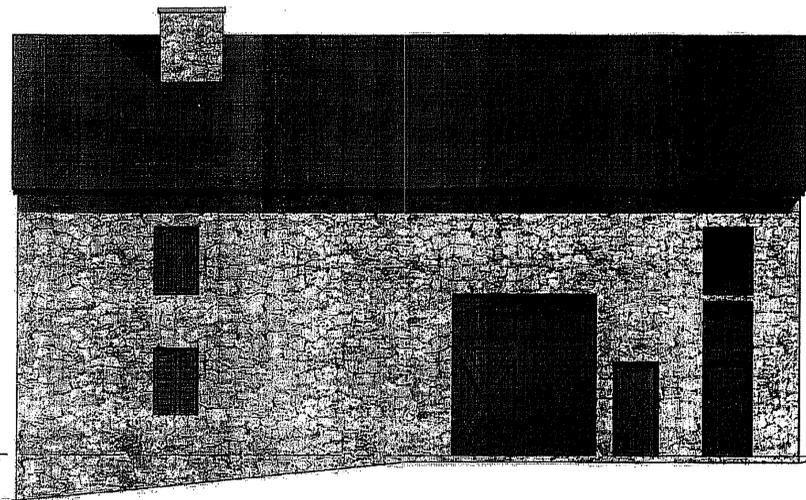
POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM



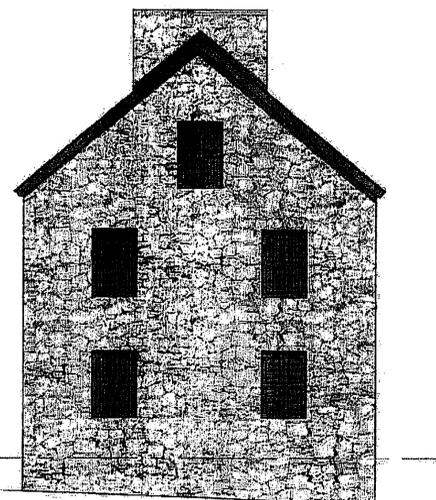
EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION

SITE 31 PROPOSED ELEVATIONS



Application No. SE 2010-DR-002 Staff S.Z.

Approved SE/SP Plat
See Development Cond. dated 1-11-2011
Date of BOS PC approval 1-11-2011

Sheet 6 of 8

1 ARCHITECTURAL ELEVATIONS
NOT TO SCALE



REDUCTION
VERIFICATION
SCALE

10 INCHES



REVISED: AUGUST 25, 2010
JULY 30, 2010
JUNE 16, 2010
APRIL 12, 2010

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY	
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA	
SITE 31 ARCHITECTURAL ELEVATIONS	
CIVIL	
SCALE NOT TO SCALE	DRAWN JET
INTERCEPTOR	CHECKED DKD
SYSTEM	SUBMITTED
SURVEYED	D. DORAN
DATE 04/12/10	RECOMMENDED
CADD FILE SE-006	

SE-006



SITE 31



BLACK & VEATCH
 Corporation
 GAITHERSBURG, MARYLAND
 VICTOR WILBURN ARCHITECTS P.C.
 WASHINGTON D.C.

Application No. SE 2010-DR-002 Staff S.Z.
 Approved SE/SP Plat
 See Development Cond. dated 1-11-2011
 Date of BOS PC approval 1-11-2011
 Sheet 7 of 8

POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM

2 **ARCHITECTURAL PERSPECTIVE**
 NOT TO SCALE



DISTRICT OF COLUMBIA
 WATER AND SEWER AUTHORITY
 POTOMAC INTERCEPTOR LONG-TERM
 ODOR ABATEMENT PROGRAM
 FAIRFAX COUNTY, VIRGINIA
SITE 31
ARCHITECTURAL PERSPECTIVE

BLACK & VEATCH
 Corporation
 Gaithersburg, Maryland

AMT A. MORTON THOMAS AND ASSOCIATES, INC.
 CONSULTING ENGINEERS
 10300 FARMERS ROAD, SUITE 100
 FORT BELLEVILLE, VIRGINIA
 703.941.1000
 FAX 703.941.0000

REVISED: AUGUST 25, 2010
 JULY 30, 2010
 JUNE 16, 2010
 APRIL 12, 2010

SCALE		DRAWN		JET	
INTERCEPTOR	NOT TO SCALE	CHECKED	DKD		
SYSTEM		SUBMITTED			
SURVEYED				D. DORAN	
DATE	04/12/10			RECOMMENDED	
CADD FILE	SE-007				

REDUCTION
 VERIFICATION
 SCALE

10 INCHES

SE-007



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

January 6, 2010

Fairfax County
Department of Planning and Zoning
RZ/SE Evaluation Branch
Zoning Evaluation Division
12055 Government Center Parkway
Suite 801
Fairfax, Virginia 22035-5509

Subject: Special Exception Application: District of Columbia Water and Sewer Authority (DCWASA) - Potomac Interceptor Long Term Odor Abatement Program - Site 31 Fairfax County Special Exception Tracking Number: SE 2009-0291

To Whom It May Concern:

As part of the Potomac Interceptor Long Term Odor Abatement Program, the District of Columbia Water and Sewer Authority (DCWASA) proposes to construct an odor control building classified as a sanitary sewer pumping facility use that will be located within the 100-yr floodplain of the Potomac River in the vicinity of the existing Potomac Interceptor sewer at manhole number 31.

The purpose of this letter is to acknowledgement that flood insurance may be required and that the flood insurance rates may increase because of the building location and associated risks in accordance with Fairfax County Zoning Ordinance Floodplain Regulation requirement Part 9 2-904 2.C.(3) - (Special Exception Uses).

Sincerely,


Barry Lucas, P.E.
Program Manager
Planning & Design Branch
Department of Engineering & Technical Services

cc: J. Russell, DCWASA
J. Sillers, EPMC IIIB
JD. Benoit, Black & Veatch
D. Doran, A. Morton Thomas



January 11, 2010

Fairfax County
Department of Planning and Zoning
RZ/SE Evaluation Branch
Zoning Evaluation Division
12055 Government Center Parkway
Suite 801
Fairfax, Virginia 22035-5509

Re: Special Exception Application: District of Columbia Water and Sewer Authority (DCWASA) - Potomac Interceptor Long Term Odor Abatement Program - Site 31 Fairfax County Special Exception Tracking Number: SE 2009-0291

To Whom It May Concern:

On behalf of the applicant and building owner DCWASA (5000 Overlook Avenue, S.W.; 5th Floor; Washington, DC 20032) we are proposing an odor control building classified as a sanitary sewer pumping facility use to be located almost entirely within the 100-yr floodplain of the Potomac River. Per the Flood Insurance Rate Map (FIRM) Community Panel Number 515525 0050 D dated March 5, 1990 the proposed building location is within an area designated as Zone A. Per meetings with Fairfax County staff it has been determined that there is no engineered 100-year floodplain information available from FEMA in the vicinity of Site 31; however USGS has prepared a floodplain study on the Pond Branch Basin listing the backwater condition elevation at the confluence of Pond Branch with the Potomac River to be at an elevation of 196.0 feet. Since the Pond Branch confluence is in relatively close proximity to the site we have been directed by County staff to use this elevation for the 100-year floodplain elevation.

The purpose of this letter is to inform Fairfax County of our intent to certify the following stated quotation, taken from FEMA Form 81-65, that the proposed Odor Control Building floodproofing will comply with all Fairfax County, State and Federal requirements at the Final Engineering Site Plan review stage. This request letter is applicable due to our zoning special exception request to build within the floodplain precedes the final engineering building design efforts necessary to certify the Non-Residential Floodproofed Construction Certification listed in FEMA's Technical Bulletin 3-93 for construction design plans. It is our intent to design and specify methods of floodproofing at Site 31 that are consistent with acceptable standards however it is premature to certify the following statement at this time.

"I certify that based on development and/or review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

The structure, together with attendant utilities and sanitary facilities, will be watertight to the selected floodproofed design elevation, with walls that are substantially impermeable to the passage of water.

All structural components will be capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

I certify that the information on this certificate represents my best effort to interpret the data available. I understand that any false statement on this statement certification may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Black & Veatch Corporation - 18310 Montgomery Village, Ave. Ste. 500 - Gaithersburg, MD 20879 - Tel: 301-840-1123 FAX 301-821-2862

Black & Veatch
Fairfax County Department of Planning and Zoning

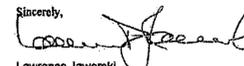
Page 2
January 11, 2010

Lawrence P. Jaworski
Certifier's Name
16745
Virginia License Number (or Affix Seal)

Black & Veatch
Company Name

18310 Montgomery Village Ave
Address
Gaithersburg, Maryland 20879
City State Zip

01/11/10 301-556-4290
Date Phone

Sincerely,

Lawrence P. Jaworski
Vice President

Black & Veatch Corporation - 18310 Montgomery Village, Ave. Ste. 500 - Gaithersburg, MD 20879 - Tel: 301-840-1123 FAX 301-821-2862

Application No. SE 2010-DR-002 Staff S.Z.

Approved SE/SP Plat
See Development Cond. dated 1-11-2011
Date of BOS/PC approval 1-11-2011

Sheet 8 of 8



REDUCTION
VERIFICATION
SCALE

10 INCHES



REVISED: AUGUST 25, 2010
JULY 30, 2010
JUNE 16, 2010
APRIL 12, 2010

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY			
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA			
SITE 31 CORRESPONDENCE LETTERS			
SCALE NOT TO SCALE		CIVIL	
INTERCEPTOR	DRAWN	JET	
SYSTEM	CHECKED	DKD	
SURVEYED	SUBMITTED		
DATE			D. DORAN
CADD FILE	RECOMMENDED		

SE-008