

The Maryland National Capital Park and Planning Commission

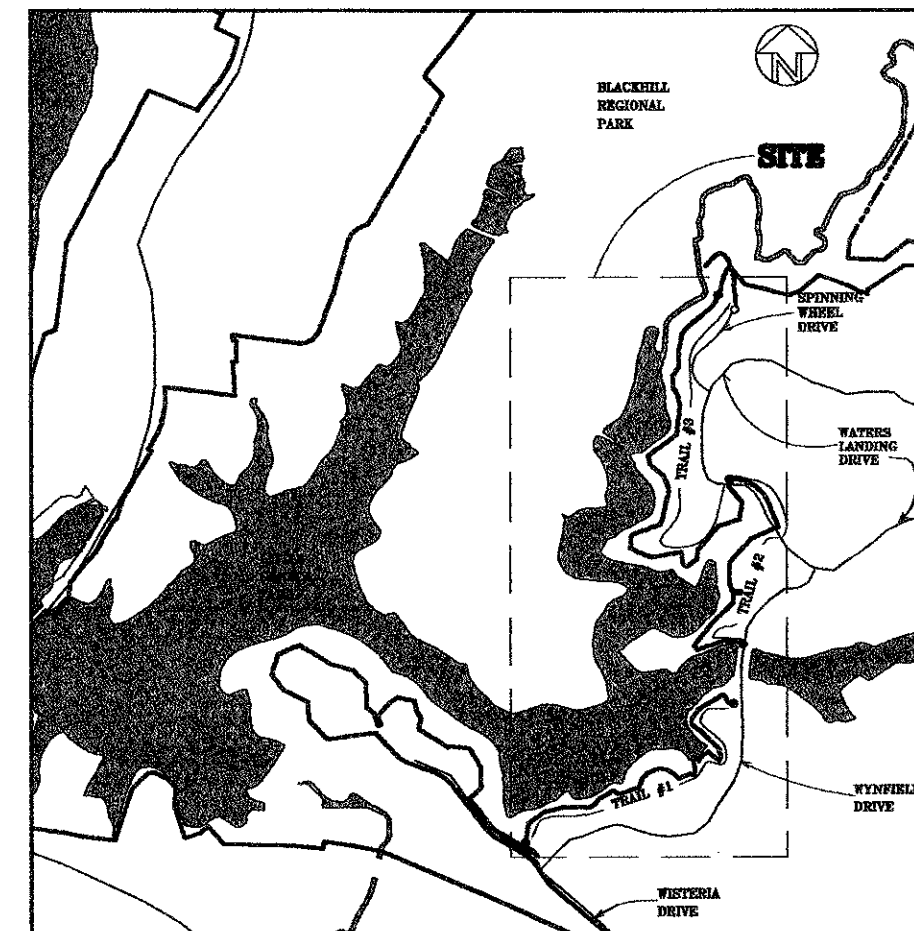
# BLACK HILL REGIONAL PARK HARD SURFACE TRAIL RENOVATIONS

FROM WISTERIA DRIVE TO SPINNING WHEEL DRIVE  
20930 LAKE RIDGE DRIVE BOYDS, MARYLAND 20841

DPS SHEET #	SHEET #	DESCRIPTION	R.O.W. WORK SHT. #
SC-1	1	COVER SHEET - TRAILS #1, 2 & 3	1 OF 8
SC-2	2	GEOMETRIC LAYOUT	
	3	WORK IN RIGHT-OF-WAYS	2 OF 8
	4	GENERAL DETAILS	3 OF 8
SC-3	5	TYPICAL PAVING SECTIONS AND DETAILS	
	6	BORING LOCATIONS	
	7	BORING LOGS	
	8	BORING LOGS	
SC-4	9	TRAIL #1 SITE DEVELOPMENT PLAN 0+00 TO 12+50	4 OF 8
SC-5	10	TRAIL #1 SITE DEVELOPMENT PLAN 12+50 TO 29+50	
SC-6	11	TRAIL #1 SITE DEVELOPMENT PLAN 29+50 TO 40+00	5 OF 8
SC-7	12	TRAIL #2 SITE DEVELOPMENT PLAN 0+00 TO 17+00	6 OF 8
SC-8	13	TRAIL #2 SITE DEVELOPMENT PLAN 17+00 TO 22+18 TRAIL #3 SITE DEVELOPMENT PLAN 0+00 TO 8+00	7 OF 8
SC-9	14	TRAIL #3 SITE DEVELOPMENT PLAN 8+00 TO 27+50	
SC-10	15	TRAIL #3 SITE DEVELOPMENT PLAN 27+50 TO 40+00	
SC-11	16	TRAIL #3 SITE DEVELOPMENT PLAN 40+00 TO 50+50	
SC-12	17	TRAIL #3 SITE DEVELOPMENT PLAN 50+50 TO 63+46	8 OF 8
SC-13	18	TRAIL #4 SITE DEVELOPMENT PLAN 0+00 TO 4+13	
SC-14	19	SEQUENCE OF CONSTRUCTION	
SC-15	20	EROSION AND SEDIMENT CONTROL NOTES	
SC-16	21	EROSION AND SEDIMENT CONTROL DETAILS	
SC-17	22	TRAIL #1 SEDIMENT CONTROL PLAN 0+00 TO 12+50	
SC-18	23	TRAIL #1 SEDIMENT CONTROL PLAN 12+50 TO 29+50	
SC-19	24	TRAIL #1 SEDIMENT CONTROL PLAN 29+50 TO 40+00	
SC-20	25	TRAIL #2 SEDIMENT CONTROL PLAN 0+00 TO 17+00	
SC-21	26	TRAIL #2 SEDIMENT CONTROL PLAN 17+00 TO 22+18 TRAIL #3 SEDIMENT CONTROL PLAN 0+00 TO 8+00	
SC-22	27	TRAIL #3 SEDIMENT CONTROL PLAN 8+00 TO 27+50	
SC-23	28	TRAIL #3 SEDIMENT CONTROL PLAN 27+50 TO 40+00	
SC-24	29	TRAIL #3 SEDIMENT CONTROL PLAN 40+00 TO 50+50	
SC-25	30	TRAIL #3 SEDIMENT CONTROL PLAN 50+50 TO 63+46	
SC-26	31	TRAIL #4 SEDIMENT CONTROL PLAN 0+00 TO 4+13	
SC-27	32	TRAIL #2 STREAM RESTORATION PLAN 18+08 TO 21+90	
SC-28	33	STREAM RESTORATION DETAILS	
	34	TRAIL #2 BRIDGE A & BRIDGE & BOARDWALK B PLAN & PROFILE	
	35	TRAIL #1 BOARDWALK #1 PLAN & PROFILE	
	36	TRAIL #1 BOARDWALK #2 PLAN, PROFILE & TIE IN PLAN	
	37	TRAIL #1 BOARDWALK #3 PLAN & PROFILE	
	38	TRAIL #4 BOARDWALK #4 PLAN & PROFILE, RETAINING WALL #3 PROFILE	
	39	TRAILS #1, 2 AND 3 BOARDWALK DETAILS	
	40	TRAILS #1, 2 AND 3 BOARDWALK DETAILS	
	41	TRAIL #1 RETAINING WALL #1 AND #1A AND #2 PROFILE	
	42	SEGMENTAL BLOCK WALL DETAILS	
	43	FENCING AND ANCHORING DETAILS	
	44	TRAIL #1 FINAL FCP / PLANTING PLAN 0+00 TO 12+50	
	45	TRAIL #1 FINAL FCP / PLANTING PLAN 12+50 TO 29+50	
	46	TRAIL #1 FINAL FCP / PLANTING PLAN 29+50 TO 40+00	
	47	TRAIL #2 FINAL FCP / PLANTING PLAN 0+00 TO 17+00	
	48	TRAIL #2 FINAL FCP / PLANTING PLAN 17+00 TO 22+18 TRAIL #3 FINAL FCP / PLANTING PLAN 0+00 TO 8+00	
	49	TRAIL #3 FINAL FCP / PLANTING PLAN 8+00 TO 27+50	
	50	TRAIL #3 FINAL FCP / PLANTING PLAN 27+50 TO 40+00	
	51	TRAIL #3 FINAL FCP / PLANTING PLAN 40+00 TO 50+50	
	52	TRAIL #3 FINAL FCP / PLANTING PLAN 50+50 TO 63+46	
	53	TRAIL #4 FINAL FCP / PLANTING PLAN 0+00 TO 4+13	
	54	FINAL FCP / PLANTING PLAN DETAILS	
	55	FINAL FCP / PLANTING PLAN DETAILS	
	56	FINAL FCP / PLANTING PLAN DETAILS	

**GENERAL NOTES**

- To All Bidders: The General Contractor and all major subcontractors shall visit the site to familiarize themselves with existing conditions prior to submitting Bid.
- Detail drawings and schedules describe construction at given areas. The General Contractor and all Subcontractors shall utilize equivalent construction methods in all areas and use "Low Impact" equipment throughout site.
- All notes and details shown on the drawings shall be assumed as typical unless otherwise shown or noted.
- It shall be the duty of the General Contractor to verify all dimensions and conditions given on the drawings and to report to the M-NCPPC's Construction Manager in writing any error or inconsistency with the actual circumstances in the field before commencing work.
- The General Contractor shall be responsible for any and all items required to provide a site clear of obstructions (above and below grade) and rough grade to specified elevations where required.
- All work shall be performed in accordance with the latest applicable codes, standards and specifications of M-NCPPC, Montgomery County, Maryland State and Federal requirements. Unless noted otherwise all work shall be new and M-NCPPC will not provide any equipment, material or labor for the work.
- A pre-construction meeting will be scheduled and conducted by the Construction Manager. Prior to this meeting the General Contractor shall not perform any construction related activity at the project site, except limited clearance for stakeout and flagging of LOD. The LOD shall be approved by the Construction Manager and Permitting Agencies. Construction Manager may require minor adjustments to the LOD to reduce impacts on existing infrastructure and natural resources that are to remain. This adjustment shall be performed at no additional cost to M-NCPPC.
- All existing conditions to remain shall be verified, photographed and documented prior to construction. If they are different the Construction Manager shall be notified before proceeding with the work. All other damages shall be corrected and restoration work shall be performed in accordance with the M-NCPPC requirements and to the satisfaction of the Construction Manager at no additional cost.
- Any work within the public right-of-way, shall be performed in accordance with the latest MCDOT standards and specification. This work includes, but not limited to: Repairing; Restoring; and obtaining final inspection approvals.
- Tree Protection fencing should be 14-gauge welded wire type (with metal stakes at 10 feet O.C.) and must be maintained throughout construction. Tree Protection fence should be installed by the contractor and inspected by M-NCPPC Arborist prior to start of construction.
- If it is determined that the trees are damaged during construction, a certified Arborist shall inspect them and submit a report recommending appropriate action either to repair or replace. If approved by the Construction Manager, corrective work shall be performed at no additional cost.
- Location for Stabilized Construction Entrance and Access Routes shall be identified and adjusted in the field. Construction Manager shall provide the approval.
- Staging and Storage Areas shall be approved by Construction Manager and shall be secured by the General Contractor at no additional expense to M-NCPPC.
- All existing Utilities at the project may not be shown on the drawings. Prior to start of construction related activity, all Utilities within the LOD shall be located and identified utilizing appropriate instruments. The location shall be staked and flagged.
- The Construction Manager shall be notified immediately if existing Utilities are found within the work area (during utility survey) that are not shown on the drawings and they impact the contract work.



VICINITY MAP  
Scale: 1" = 2000'

**GENERAL NOTES CONT**

- Damages to existing Utilities shall be corrected immediately in accordance with the requirements of the affected Utility. Upon completion of the corrective action, a copy of the approval document for the Utility shall be submitted to the Construction Manager.
- All Erosion and Sediment Control Devices shall meet current Montgomery County Department of Permitting Services, Standards and Directives. These shall be approved by Permitting Authorities prior to the start of construction.
- Before start of construction the On-Site Representative of the General Contractor shall have a certificate of attendance at the Department of Natural Resources approved training program for the control of Sediment and Erosion.
- Upon complying with all the applicable requirements stated above, construction of the project within the approved LOD may start.
- No work shall be performed outside of the LOD. Areas disturbed outside approved LOD shall be restored.
- During construction, the facility shall remain open for use by Park Staff and the General Public. Safe access for all users shall be provided with appropriate detours, temporary facilities, signage, etc. and shall be approved by Construction Manager.
- During construction, if the General Contractor finds conflicts that exist among various contract documents, the General Contractor shall comply with the most stringent requirement.
- Grading work shall be done to provide positive drainage unless otherwise shown.
- Surfaced Roadway and Parking Areas shall be maintained in a clean condition. Appropriate means shall be provided to clean mud and dust from these areas. Trucks and other equipment shall not track mud into nearby roadways.
- All Planting Substitutions shall be approved by the Construction Manager. Plant materials and locations shall be inspected by the Construction Manager prior to installation. Construction Manager shall be notified at least three (3) working days in advance for inspection.
- Prior to vegetative stabilization, all disturbed areas must be topsoiled per the Montgomery County "Standards and Specifications for Topsoil" (see DPS sheet 4 of 8) and M-NCPPC Technical Specifications. If on-site materials do not meet requirements of topsoil, coordinate with M-NCPPC regarding tilling-in of certified compost to on-site soils in order to meet specification.
- Any discrepancies, omissions, ambiguities, or conflicts in or among the construction documents or doubt about their meaning, shall be brought to the attention of the M-NCPPC Construction Manager for direction before proceeding with work. If ambiguities exist, the better quality and greater quantity of work shall be bid upon and installed by the Contractor unless otherwise indicated by the M-NCPPC's Construction Manager in writing.
- Topography information is taken from Montgomery County GIS and Survey Data dated June, 2006.
- Field run Topography Survey in the area of the Bridges and Trail #4 was provided by AB Consultants in April, 2008 and Shanaberger and Lane in September, 2010. Survey is in State Plane Datum NAD83 and NAVD83.
- 100 Year Floodplain shown on plans from existing contour 392.
- Site is located in the Washington Metropolitan Watershed within Montgomery County. Runoff from site drains into Little Seneca Lake or Public Storm Drain System.

**LEGEND**

	EXISTING PATH
	PROPOSED PATH
	EXISTING TREE LINE
	LIMIT OF DISTURBANCE (OCF)
	LIMIT OF DISTURBANCE-TREE PROTECTION FENCE
	LIMIT OF DISTURBANCE-TRENCHLESS SUPER SILT FENCE
	SUPER SILT FENCE
	EXISTING 5' CONTOUR
	EXISTING 1' CONTOUR
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	TREES LARGER THAN 6-24"
	NEWLY PLANTED TREES (APPROX. LOCATION)
	EXISTING STORM DRAIN
	EXISTING SANITARY SEWER
	BOTTOM OF WALL
	TOP OF WALL
	INVERT ELEVATION
	SOIL BORING
	NON-TIDAL WETLAND (APPROX. STREAM BUFFER)
	STABILIZED CONSTRUCTION ENTRANCE

**R.O.W. NOTES:**

- PRIOR TO ANY CLEARING (ROOT PRUNING), INSTALLING SEDIMENT CONTROL MEASURES OR GRADING IN THE RIGHT-OF-WAY, A PRE-CONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR (311) 48 HOURS NOTICE; THE MCDPS ROW INSPECTOR JOHN LOEY (301-370-3689) 48 HOURS NOTICE; THE M-NCPPC PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR (301-495-4571) 48 HOURS NOTICE; THE M-NCPPC, PARK DEVELOPMENT DIVISION, CONSTRUCTION STAFF (301-495-2574) 48 HOURS NOTICE; PHOENIX ENGINEERING, INC. SITE MANAGER (410-274-8833) 48 HOURS NOTICE.

**- SEDIMENT CONTROL / STORMWATER MANAGEMENT CERTIFICATION -**

**OWNER'S/DEVELOPER'S CERTIFICATE**

"I/We hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning this project."

Signature: *William Payne* Date: 03/23/11  
Printed Name and Title: William Payne - Project Manager

**CERTIFICATION OF THE QUANTITIES**

"I hereby certify that the amount of excavation and fill as shown on these plans has been computed to 1,000 cubic yards of excavation, 1,000 cubic yards of fill and the total area to be disturbed as shown on these plans has been determined to be 293,612 square feet."

Signature: *John Heinrichs* Date: JAN. 12, 2011  
Printed Name: JOHNNIE RAY HEINRICHS Registration Number: 14920  
Note: The earthwork cut and fill quantities and the area of disturbance indicated in this certificate are calculated for the purpose of plan Approval and should not be used for contractual obligations.

**DESIGN CERTIFICATION**

"I hereby certify that this plan has been prepared in accordance with the '1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control', Montgomery County Department of Permitting Services Executive Regulations 5-90, 7-02AM and 36-90, and Montgomery County Department of Public Works and Transportation "Storm Drain Design Criteria", dated August 1988."

Signature: *John Heinrichs* Date: FEB. 09, 2011  
Printed Name: JOHNNIE RAY HEINRICHS Registration Number: 14920

**APPROVED FOR PROCUREMENT**

Approved By: *M. P. Johnson* Date: 3/23/2011  
Chief, Park Development Division

**MONTGOMERY COUNTY DEPT OF PERMITTING SERVICES APPROVED FOR:**

Stormwater Management:	Sediment Control Technical Requirements	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	_____

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT.

SEDIMENT CONTROL PERMIT NO. \_\_\_\_\_  
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

Designer's Name: Phoenix Engineering, Inc.  
Address: 1920 Job Ave, Baltimore, MD, 21227  
Telephone Number: \_\_\_\_\_

DESIGN		
Landscape Architect	Date	Checked By:
Architect	Date	Checked By:
Engineer	Date	Checked By:
Drawn by	Date	Checked By:

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 14920  
Expiration Date: 5/12/12



The Maryland-National Capital Park and Planning Commission  
Montgomery County Department of Parks  
9500 Brunnet Avenue  
Silver Spring, Maryland 20901  
(301) 495-2535  
Construction Manager, Robert Kane (301) 495-2555

REVIEW AND APPROVAL	
Project Manager	Date
Construction Manager	Date
Park Manager	Date

ISSUED FOR PROCUREMENT ON		
REVISIONS		
Rev. No.	Date	Description

Cover Sheet - - Trails #1, 2 & 3  
Black Hill Regional Park  
Hard Surface Trail Renovations

SCALE: AS SHOWN Liber Folio

SC # 1 of 28  
ROW # 1 of 8  
SHT # 1 of 56