



State of Delaware
Department of Natural Resources and Environmental Control
Delaware Division of Parks and Recreation
89 Kings Highway
Dover, Delaware 19901

**CONTRACT DOCUMENTS & TECHNICAL SPECIFICATIONS
ADDENDUM No. 1**

BELLEVUE STATE PARK

**Gun Club Road (Related Utilities and Amenities)
Contract No. 2013-NVF-100
December 16, 2013**

This Addendum shall be attached to the specifications and/or drawings of the above named project and shall become part of the contract documents. All statements made herein shall supersede statements in the main body of the specifications and items shown on the drawings with which they are in conflict. Work and materials not specifically mentioned herein shall be as described in the main body of the specifications and as shown on the drawings. The bidder must acknowledge the receipt of this addendum on page 00300-4 of the Bid Form.

CHANGES AND/OR ADDITIONS TO THE CONTRACT DOCUMENTS

Modification to Drawings:

Drawing C-100:

Add General Note 33: CCR services will be provided by DNREC.

Modification to Specifications:

Bid Form:

Replace Bid Form pages 00300-2 and 00300-3 with Bid Form pages 00300-2 and 00300-3 included with this addendum.

Section 01005 – ADMINISTRATIVE PROVISIONS

Replace Article 7 and Article 8 in their entirety with the following:

ARTICLE 7: ALLOWANCES

- 7.1 Schedule of Allowances: (Refer to Section 01020 - Allowances)

ARTICLE 8: ALTERNATES

- 8.1 Alternates quoted on Bid Forms will be exercised as Owner option. Accepted

**BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT (RELATED UTILITIES AND AMENITIES)
CONTRACT NO. 2013-NVF-100**

BID FORM

Alternates will be listed in Owner-Contractor agreement.

- 8.2 Coordinate related work and modify surrounding work affected by accepted Alternates as required to complete the work.
- 8.3 Schedule of Alternates: (Refer to Bid Form and Section 01030 - Alternates)

Section 01026 Unit Prices (page 01026-3)

Delete UNIT PRICE No. 5: Supply and install 12 ft wide Bituminous Paved Trail up to 3,000 LF; UNIT PRICE No. 6: Supply and install 12 ft wide Bituminous Paved Trail up to 7,000 LF; and UNIT PRICE No. 7: Supply and install 12 ft wide Bituminous Paved Trail up to 16,000 LF in their entirety.

Section 01030 Alternate Bid Items (page 01030-1)

ARTICLE 3: Schedule of Alternates:

ADD the following paragraph: “Alternate No. 3: Contractor shall supply all necessary materials and install the Bituminous Paved Trail as shown in Detail 3 on Drawing C-152. Work covered under this Alternate Bid Item will be for sections of trail that comprise up to 3,000 LF that are approved for installation by the State during a single mobilization. All costs associated with supplying and installing materials shown in the detail referenced above will be included in the price listed on Bid Form page 00300-2 as amended by Addendum. Should the actual quantity of work measured be less than 3,000 linear feet, the amount for Alternate No. 3 shall be reduced based on the Unit Price listed below. Prices for this Alternate shall be effective for the duration of the Contract. The State may exercise the option to include Alternate No. 3 in the project at any time during the execution of the Contract.

Unit of Measure:

(Estimated quantity of trail = 3,000 LF x Unit Price \$ _____ / Unite of Measure = \$ _____ Amount to be included in price for Alternate No. 3)

ADD the following paragraph: “Alternate No. 4: Contractor shall supply all necessary materials and install the Bituminous Paved Trail as shown in Detail 3 on Drawing C-152. Work covered under this Alternate Bid Item will be for sections of trail that comprise up to 7,000 LF that are approved for installation by the State during a single mobilization. All costs associated with supplying and installing materials shown in the detail referenced above will be included in the price listed on Bid Form page 00300-2 as amended by Addendum. Should the actual quantity of work measured be less than 7,000 linear feet, the amount for Alternate No. 4 shall be reduced based on the Unit Price listed below. Prices for this Alternate shall be effective for the duration of the Contract. The State may exercise the option to include Alternate No. 4 in the project at any time during the execution of the Contract.

Unit of Measure:

(Estimated quantity of trail = 7,000 LF x Unit Price \$ _____ / Unite of Measure = \$ _____ Amount to be included in price for Alternate No. 4)

**BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT (RELATED UTILITIES AND AMENITIES)
CONTRACT NO. 2013-NVF-100**

BID FORM

ADD the following paragraph: “Alternate No. 5: Contractor shall supply all necessary materials and install the Bituminous Paved Trail as shown in Detail 3 on Drawing C-152. Work covered under this Alternate Bid Item will be for sections of trail that comprise up to 16,000 LF that are approved for installation by the State during a single mobilization. All costs associated with supplying and installing materials shown in the detail referenced above will be included in the price listed on Bid Form page 00300-2 as amended by Addendum. Should the actual quantity of work measured be less than 16,000 linear feet, the amount for Alternate No. 5 shall be reduced based on the Unit Price listed below. Prices for this Alternate shall be effective for the duration of the Contract. The State may exercise the option to include Alternate No. 5 in the project at any time during the execution of the Contract.

Unit of Measure:

(Estimated quantity of trail = 16,000 LF x Unit Price \$ _____ / Unit of Measure = \$ _____ Amount to be included in price for Alternate No. 5)

Response to Bidders Questions

- 1.) Is there a provision for rock excavation (ie unit price)? If not are there boring logs which we can review to make our own determinations?
Answer: There are no provisions for rock excavation. Boring logs have been included with this addendum.
- 2.) In ref to Drawing C-104 Note #1: Does New Castle County or any other entity have jurisdiction over this project which would require a permit? (demolition or other permit)
Answer: New Castle County does not have jurisdiction over this project. All permit requirements have been included in the bid documents.
- 3.) In ref to Dwg C-104 Note # 3: Can you provide a copy of the Del Dot permit so that we can review the MOT requirements?
Answer: MOT requirements have been included in the bid documents. The set of plans containing the DelDOT stamp and signature will be provided upon contract award. The contractor will be responsible for applying to DelDOT for the DelDOT Entrance Permit.
- 4.) Dwg C-104 under the DEMO Legend:
 - a. Could you please tell me where item 48 is located?
Answer: Item 48 is located in the Northwest corner of the site as shown on DWG C-104.
 - b. Who relocates the utility poles in items 45,47,55,66,67,72,119 etc.?
Answer: Items listed above will be relocated by others.
- 5.) Specification section 01005-2 Article 7 “Allowances” states NONE. Section 01020-3 Article 5 “Schedule of Allowances” provides 3 allowances. Section 01026-1 “Unit price schedule” shows 7 different unit prices with quantities which are to be included in the base bid. Are these also allowances? Could you please clarify the complete “Schedule of Allowances”?

**BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT (RELATED UTILITIES AND AMENITIES)
CONTRACT NO. 2013-NVF-100**

BID FORM

- Answer: Revisions to Specifications Section 01005 have been included with this addendum. Unit Prices are listed in Specifications Section 01026 and on Bid Form 00300-3 (as amended with this addendum). Quantities listed in Specification Section 01026 must be included in the Base Bid entered on Bid Form 00300-1. Allowance Items are listed in Specification Section 1020. The Lump Sum amount listed for each Allowance Item must be included in the Base Bid entered on Bid Form 00300-1.*
- 6.) The bid form under unit price #3 shows LF as the unit for debris removal and disposal. Should this be tons?
Answer: The correct unit for Unit Price #3 is TONS. The Bid Form 00300-3 has been amended with this addendum.
- 7.) Section 1500-3 Article 17, please clarify the size field trailer requested. Perhaps use the standard Del Dot designation.
Answer: Contractor shall provide a field office that conforms to DelDOT standards for a Type III field office.
- 8.) Section 017419-2 Article 1.4a: Is it required to hire a LEED Accredited Waste Management Coordinator for this project?
Answer: Yes.
- 9.) Section 033000-2 Part 2.2 A1 and A2, Can you please clarify whether the rebar for this project is to be galvanized or epoxy coated?
Answer: Rebar provided for this project shall conform to either the requirements listed in Section 033000-2 Part 2.2 A1, or Part 2.2 A2. The rebar can be either galvanized or epoxy coated, it is the contractor's discretion which they wish to use.
- 10.) Section 312319-1 "Dewatering"
- a. Can you please provide the size of the dewatering bag required as well as a source of supply? Will it need to handle 29,500gpm?
Answer: Size and number of dewatering bags will be contingent upon the size and number of pumps being used to meet the 29,500 gpm requirement. Since the exact details of the dewatering system are contingent upon the contractor's means and methods it is the contractor's responsibility to size the dewatering bags.
 - b. Is there a requirement for standby pumps?
Answer: No. However the system must be capable of pumping 29,500 gpm.
 - c. Is pumping the only means considered acceptable for diverting the water around the work area?
Answer: The deadline for Requests for Substitutions is 4:30 pm on December 24th. If a bidder wishes to base their bid on another means for dewatering, the designed system should be submitted prior to the deadline.
 - d. If the 29,500gpm is based on a storm event, could you also please provide the anticipated elevation of the Red Clay Creek during this same storm event?

**BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT (RELATED UTILITIES AND AMENITIES)
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BID FORM

Answer: The anticipated elevation of the Red Clay Creek at the project site during the designed storm event is roughly elevation 172. The cofferdam heights listed in Detail 1 on Drawing ES-151 account for the Red Clay Creek elevation during this storm event.

11.)Dwg C-157 detail 2 “HDPE Geomembrane :

- a. Will anything be placed over the geomembrane or will the membrane remain exposed to the elements?

Answer: The geomembrane will remain exposed to the elements.

12.)Since the Dept. of Labor has decided to issue two Prevailing Wage rates for this project instead of the one wage rate for the majority of the work; we need to know specifically which job task requires which Prevailing Wage rate. Nothing causes more problems on a project when you have two laborers working side by side on a project basically doing the same work and one makes \$38.30 per hour while the other makes \$28.95 per hour.

Answer: A description of the work covered by each set of Prevailing Wage Rates is included on the individual prevailing wage rate sheets provided by the Department of Labor and included in the specifications at the end of Specification Section 00100-12. It is the Contractor’s responsibility to manage subcontractors and staff as it pertains to the prevailing wage rate requirements.

13.)Please help me with the Cost Estimate for Project # 2013-NVF-100, Project Title :
BELLEVUE STATE PARK GUN CLUB ROAD, Bid Date : 01/03/2013

Answer: An Engineer’s Estimate will not be provided for this project.

BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT
CONTRACT No.2013-NVF-100

BID FORM

ALTERNATES

Alternate prices conform to applicable project specification sections. Refer to Specification Section 01030 - Alternates for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

ALTERNATE No. 1: Permeable Pavers Alternate 1 in lieu of Porous Asphalt

Add/Deduct: \$ _____
(Words)

\$ _____
(Figures)

ALTERNATE No. 2: Permeable Pavers Alternate 2 in lieu of Porous Asphalt

Add/Deduct: \$ _____
(Words)

\$ _____
(Figures)

ALTERNATE No. 3: Supply and install 12 ft wide Bituminous Paved Trail up to 3,000 lf

Add/Deduct: \$ _____
(Words)

\$ _____
(Figures)

ALTERNATE No. 4: Supply and install 12 ft wide Bituminous Paved Trail up to 7,000 lf

Add/Deduct: \$ _____
(Words)

\$ _____
(Figures)

ALTERNATE No. 5: Supply and install 12 ft wide Bituminous Paved Trail up to 16,000 lf

Add/Deduct: \$ _____
(Words)

\$ _____
(Figures)

BELLEVUE STATE PARK
GUN CLUB ROAD PROJECT
CONTRACT No.2013-NVF-100

BID FORM

UNIT PRICES

Unit prices conform to applicable project specification sections. Refer to Specification Section 01026 - Unit Prices for a complete description of the following Unit Prices:

Unit Price No. 1:

Over-excavation of unsuitable soils.

Add/Deduct \$ _____/CY

Unit Price No. 2:

Placement and compaction of backfill materials in over-excavation areas.

Add/Deduct \$ _____/CY

Unit Price No. 3:

Construction and demolition debris removal and offsite disposal.

Add/Deduct \$ _____/TON

Unit Price No. 4:

Removal of PCB-contaminated transformers.

Add/Deduct \$ _____/GAL

Summary Of Laboratory Tests

Appendix
Sheet 1 of 1
Project Number: 12615019

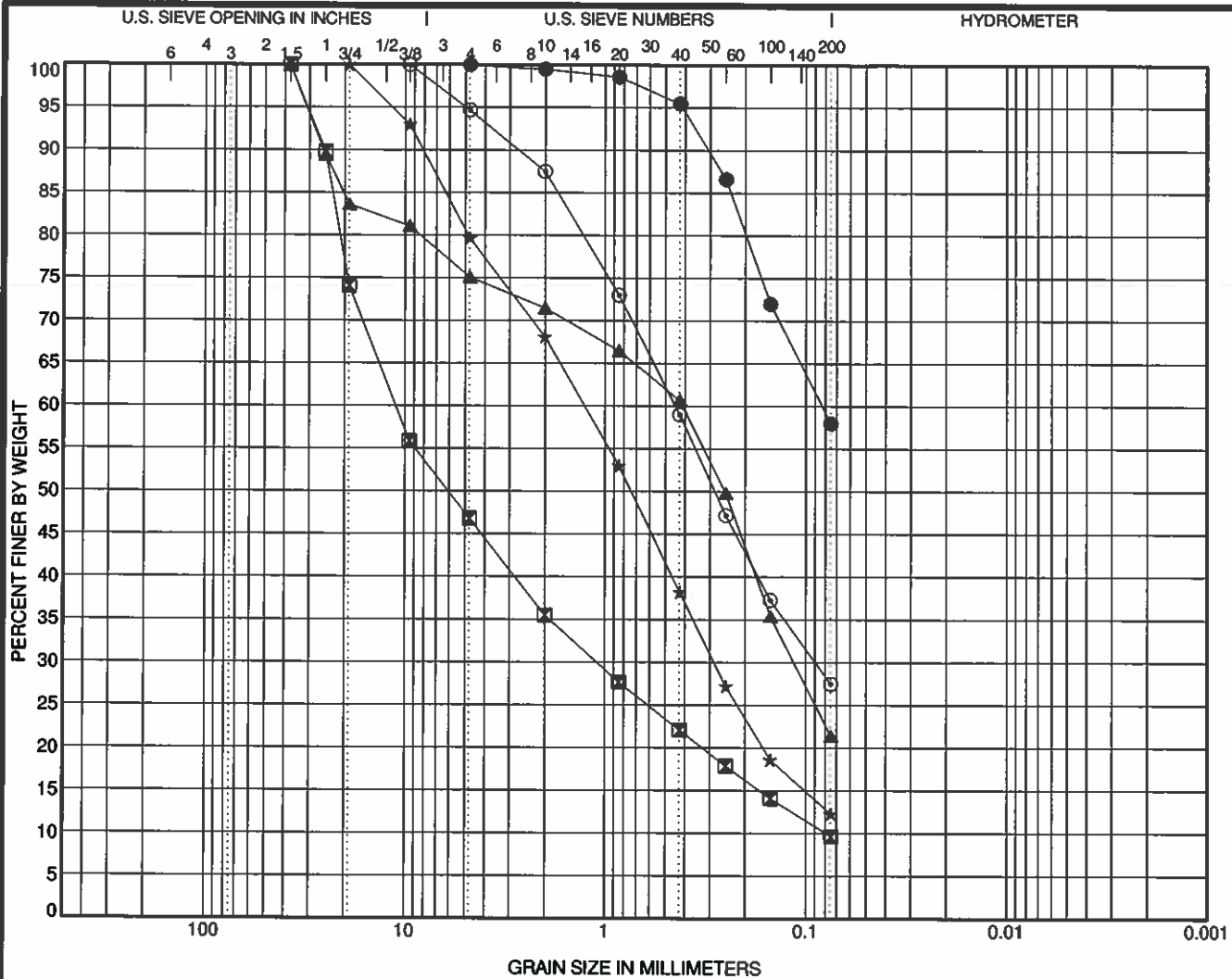
Boring No.	Sample Depth ft		Sample Type	Description of Soil Specimen	Natural Moisture (%)	Percent Gravel	Percent Sand	Percent Fines
	Elevation ft							
B-5	4.0 - 6.0		Jar	SANDY LEAN CLAY (CL)	25.1	0.0	42.0	58.0
	178.0 - 176.0							
B-5	8.0 - 10.0		Jar	WELL-GRADED GRAVEL with SILT and SAND (GW-GM)	10.6	53.2	37.1	9.7
	174.0 - 172.0							
B-5	13.0 - 15.0		Jar	SILTY SAND with GRAVEL (SM)	17.1	24.9	53.7	21.4
	169.0 - 167.0							
B-6	8.0 - 10.0		Jar	SILTY SAND with GRAVEL (SM)	15.3	20.3	67.4	12.3
	174.0 - 172.0							
B-7	18.0 - 20.0		Jar	SILTY SAND (SM)	8.4	5.3	67.2	27.5
	162.0 - 160.0							

Notes:
 1. Soil tests in general accordance with ASTM standards.
 2. Soil classifications are in general accordance with ASTM D2487 (as applicable), based on testing indicated and visual classification.
 3. Key to abbreviations: NP=Non-Plastic; -- indicates no test performed



Schnabel
ENGINEERING

Project: NVF Bridges
 NVF Yorklyn Site (DE-0071)
 Yorklyn, DE



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen	Sample Description	LL	PL	PI
● B-5 4.0 ft	SANDY LEAN CLAY (CL)	--	--	--
☒ B-5 8.0 ft	WELL-GRADED GRAVEL with SILT and SAND (GW-GM)	--	--	--
▲ B-5 13.0 ft	SILTY SAND with GRAVEL (SM)	--	--	--
★ B-6 8.0 ft	SILTY SAND with GRAVEL (SM)	--	--	--
◎ B-7 18.0 ft	SILTY SAND (SM)	--	--	--

Specimen	Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-5 4.0 ft	ASTM D422	4.75	0.083			0.0	42.0	58.0	
☒ B-5 8.0 ft	ASTM D422	37.5	11.105	1.094	0.079	53.2	37.1	9.7	
▲ B-5 13.0 ft	ASTM D422	37.5	0.411	0.115		24.9	53.7	21.4	
★ B-6 8.0 ft	ASTM D422	19	1.264	0.286		20.3	67.4	12.3	
◎ B-7 18.0 ft	ASTM D422	9.5	0.447	0.09		5.3	67.2	27.5	



Schnabel
ENGINEERING

GRADATION CURVES

Project: NVF Bridges
 NVF Yorklyn Site (DE-0071)
 Yorklyn, DE
 Contract: 12615019

SIEVE 5 SHEET 12615019 NVF BRIDGES.GPJ SCHNABEL DATA TEMPLATE 2008_04 22.GDT 10/23/12



Project: NVF Bridges
 NVF Yorklyn Site (DE-0071)
 Yorklyn, Delaware

Boring Number: B-5
Contract Number: 12615019
Sheet: 1 of 1

Contractor: Connelly & Associates, Inc.
 Dover, Pennsylvania

Contractor Foreman: C. Lindhorst

Schnabel Representative: J. Beideman

Equipment: Diedrich D-50 (ATC)

Method: 3-1/4" I.D. Hollow Stem Auger,
 NQ Double Barrel

Hammer Type: Auto Hammer (140 lb)

Dates Started: 9/4/12 **Finished:** 9/4/12

Location: See Location Plan

Groundwater Observations

	Date	Time	Depth	Casing	Caved
Encountered ∇	9/4	10:55 AM	7.5'	6.0'	---
Casing Pulled	9/4	3:12 PM	---	---	1.5'

Ground Surface Elevation: 182± (ft) **Total Depth:** 29.6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DATA		TESTS	REMARKS
					DEPTH	DATA		
0.1	1" Topsoil		181.9			S-1, SPT 2+6+6+5 REC=12", 50%		FILL
2.0	FILL, sampled as silty sand, fine to coarse grained sand; moist, brown, contains mica	FILL	180.0	A		S-2, SPT 6+5+3+2 REC=12", 50%		
4.0	FILL, sampled as poorly graded gravel, fine gravel sized, angular particles; wet, gray	CL	178.0	B	5	S-3, SPT 2+2+2+2 REC=24", 100%	MC = 25.1% % Passing #200 = 58.0	ALLUVIAL
7.5	SANDY LEAN CLAY, fine to coarse grained sand; moist, gray, contains roots, slight organic odor Change: wet		174.5			S-4, SPT 11+8+8+12 REC=24", 100%		RESIDUAL
	WELL GRADED GRAVEL WITH SILT AND SAND, fine to coarse grained sand, angular particles; moist, brown and white, estimated 10 - 15% rock fragments, contains mica Change: wet	GW-GM			10	S-5, SPT 14+16+16+14 REC=12", 50%	MC = 10.6% % Passing #200 = 9.7	
13.0	SILTY SAND WITH GRAVEL, fine to medium grained sand, angular particles; moist, orangish brown and black, estimated 10 - 15% rock fragments, contains mica, relict rock structure Change: white with bands of orangish brown, relict rock structure	SM	169.0	C	15	S-6, SPT 7+7+9+12 REC=12", 50%	MC = 17.1% % Passing #200 = 21.4	
20.5	DISINTEGRATED ROCK		161.5		20	S-7, SPT 13+18+21+27 REC=24", 100%		Drill action indicates alternating layers of hard and soft rock.
24.5	DISINTEGRATED ROCK, sampled as silty sand, fine to coarse grained sand; moist, brown with bands of white, contains mica, relict rock structure	DR	157.5	D	25	C-1, CORE Run = 4.0 ft REC=0", 0% RQD=0", 0%		
25.1	DISINTEGRATED ROCK		156.9			S-8, SPT 21+4/1" REC=4", 57%		Drill action indicates alternating layers of hard and soft rock.
29.6	DISINTEGRATED ROCK		152.4			C-2, CORE Run = 4.5 ft REC=0", 0% RQD=0", 0%		

Bottom of Boring at 29.6 ft.
 Auger refusal at 20.5 ft.
 Boring terminated at selected depth.
 Boring backfilled with cuttings upon completion.

TEST BORING LOG 12615019 NVF BRIDGES.GPJ SCHNABEL DATA TEMPLATE 2008.07.06.GDT 10/15/12



TEST BORING LOG

Project: NVF Bridges
 NVF Yorklyn Site (DE-0071)
 Yorklyn, Delaware

Boring Number: B-6
Contract Number: 12615019
Sheet: 1 of 1

Contractor: Connelly & Associates, Inc.
 Dover, Pennsylvania

Contractor Foreman: C. Lindhorst

Schnabel Representative: J. Beideman

Equipment: Diedrich D-50 (ATC)

Method: 3-1/4" I.D. Hollow Stem Auger,
 NQ Double Barrel

Hammer Type: Auto Hammer (140 lb)

Dates Started: 9/4/12 **Finished:** 9/4/12

Location: See Location Plan

Groundwater Observations

	Date	Time	Depth	Casing	Caved
Encountered ∇	9/4	4:15 PM	3.0'	3.0'	---
Casing Pulled ∇	9/4	5:15 PM	1.0'	---	3.0'

Ground Surface Elevation: 182± (ft) **Total Depth:** 16.6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.5	FILL, sampled as silty gravel, fine gravel sized, angular particles; dry, gray	FILL	181.5	A		S-1, SPT 5+6+10+7 REC=24", 100%		FILL
3.0	FILL, sampled as silty sand, fine to medium grained sand; moist, black, estimated 50 - 100% coal ash	FILL	179.0					ALLUVIAL
7.0	SILTY SAND WITH GRAVEL, fine to coarse grained sand, angular to rounded particles; moist, light brown to gray	SM	175.0	B	5	S-2, SPT 4+2+1+1 REC=6", 25%		RESIDUAL
	SILTY SAND WITH GRAVEL, fine to coarse grained sand, angular particles; moist, brown, estimated 10 - 15% rock fragments, contains mica	SM		C	10	S-3, SPT 5+5+10+10 REC=19", 79%	MC = 15.3% % Passing #200 = 12.3	
13.0	DISINTEGRATED ROCK, sampled as silty gravel with sand; wet, brown, estimated 50 - 100% rock fragments	DR	169.0			SPT 22+50/4" REC=10", 100%		Rig chatter at 15'
16.6	Bottom of Boring at 16.6 ft. Auger refusal at 16.5 ft. Boring terminated at SPT results of 50/1". Boring backfilled with cuttings upon completion.		165.4	D	15	SPT 50/1"		

TEST BORING LOG 12615019 NVF BRIDGES.GPJ SCHNABEL DATA TEMPLATE 2008_07_06.GDT 10/15/12



TEST BORING LOG

Project: NVF Bridges
 NVF Yorklyn Site (DE-0071)
 Yorklyn, Delaware

Boring Number: B-7
Contract Number: 12615019
Sheet: 1 of 1

Contractor: Connelly & Associates, Inc.
 Dover, Pennsylvania

Contractor Foreman: C. Lindhorst

Schnabel Representative: L. Geake

Equipment: Diedrich D-50 (ATC)

Method: 3-1/4" I.D. Hollow Stem Auger,
 NQ Double Barrel

Hammer Type: Auto Hammer (140 lb)

Dates Started: 8/31/12 **Finished:** 8/31/12

Location: See Location Plan

Groundwater Observations

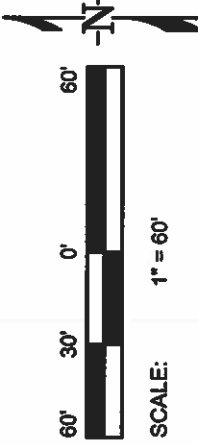
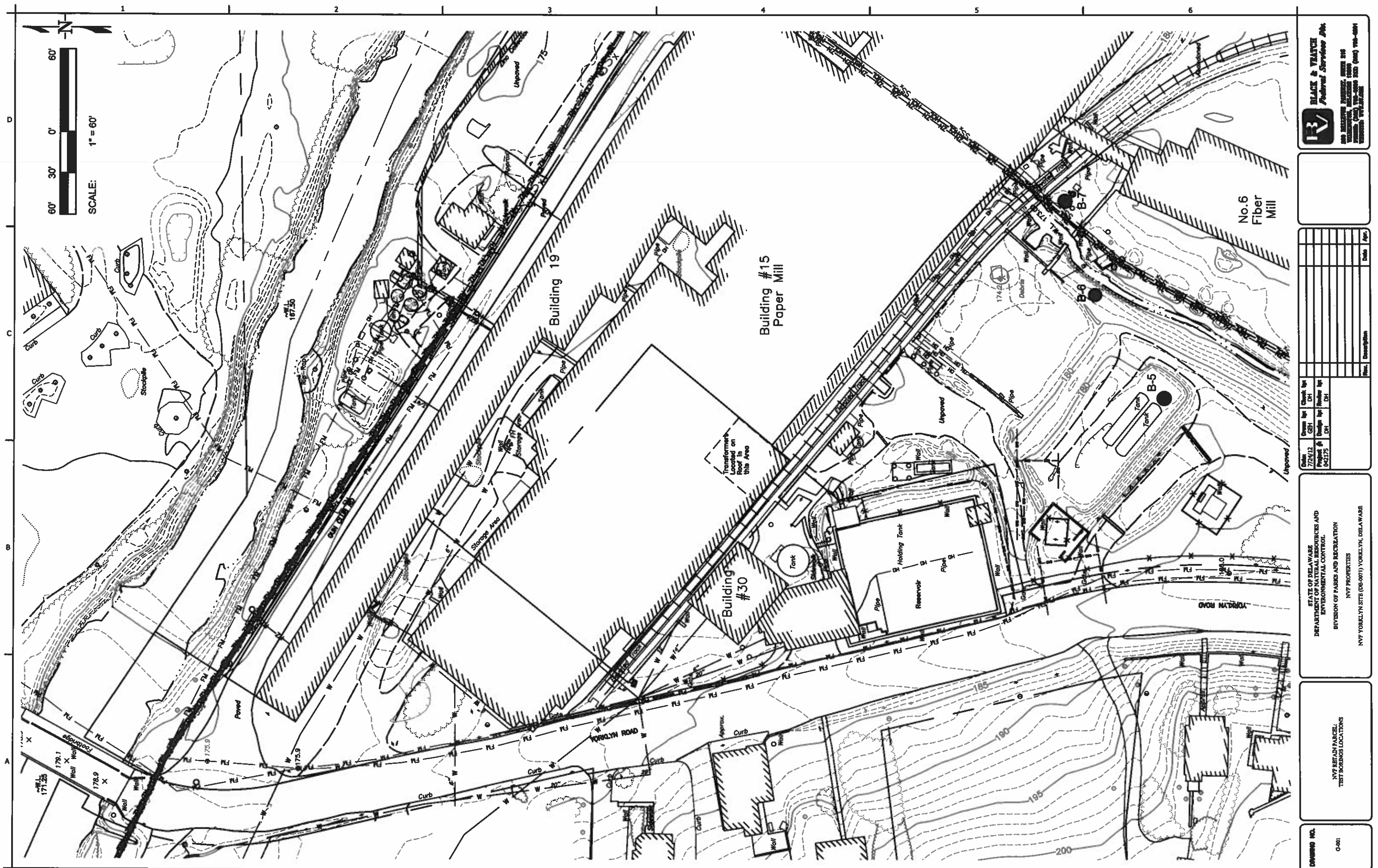
	Date	Time	Depth	Casing	Caved
Encountered ∇	8/31	9:57 AM	7.0'	6.0'	---

Ground Surface Elevation: 180± (ft) **Total Depth:** 33.4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.3	3" Topsoil		179.7					
4.0	FILL, sampled as silty sand with gravel, fine to coarse grained sand; moist, dark brown with black, contains cinders, contains brick fragments, contains coal	FILL	176.0	A	5	S-1, SPT 2+2+2+2 REC=7', 29% S-2, SPT 3+2+2+1 REC=8", 33% S-3, SPT 2+2+1+1 REC=6", 25% S-4, SPT 8+5+4+5 REC=6", 25% S-5, SPT 4+4+4+4 REC=17", 71%		FILL
9.0	FILL, sampled as silty gravel with sand; moist, yellowish brown with black, contains cinders, contains coal Change: wet, brown with yellowish brown	FILL	171.0	B	10			ALLUVIAL
13.0	SILTY SAND; moist, grayish brown and orangish brown, contains mica	SM	167.0	C	15	S-6, SPT 9+10+11+18 REC=20", 83%		RESIDUAL Rig chatter at 15'
23.0	SILTY SAND; moist, grayish brown with bands of white, contains mica, relict rock structure	SM	157.0	D	20	S-7, SPT 18+23+30+32 REC=16", 67%	MC = 8.4% % Passing #200 = 27.5	Rig chatter at 26'
29.0	DISINTEGRATED ROCK, sampled as silty sand; moist, grayish brown with bands of white, contains mica, relict rock structure	DR	151.0	E	25	S-8, SPT 47+50/5" REC=11", 100%		WISSAHICKON FORMATION - Wakefield Marble
33.4	MARBLE, moderately weathered to highly weathered, highly fractured (2.5 - 8 in) to intensely fractured (< 2.5 in), grayish white and light brown		146.6		30	S-9, SPT 50/1" REC=0", 0% R-1, CORE Run = 4.3 ft REC=39", 75% RQD=0", 0%		

Bottom of Boring at 33.4 ft.
 Auger refusal at 29.0 ft.
 Boring terminated at selected depth.
 Boring backfilled with cement/bentonite grout upon completion.

TEST BORING LOG: 12615019 NVF BRIDGES.GPJ SCHNABEL DATA TEMPLATE 2008 07_06.GDT 10/15/12



BLACK & VEATCH
Federal Services Div.
1700 Broadway, Suite 2000
Denver, CO 80202
Tel: 303.733.1000
Fax: 303.733.1001

Drawn by	Checked by	Date	Appr.
GEH	DH		
Design by	Review by		
DGJ	DH		

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION AND
ENVIRONMENTAL CONTROL
NVT PROPERTIES
NVT YORBLYN SITE (08-0071) YORBLYN, DELAWARE

NVT RETAIN PARCEL
TEST BORING LOCATIONS

DRAWING NO.
0-001

Figure 2