

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES

DESIGN-BUILD SERVICES  
BARRY FARM RECREATION CENTER

Solicitation #: DCAM-12-CS-0176

Addendum No. 2  
Issued: August 24, 2012

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This Addendum Number 02 is issued by e-mail on August 24, 2012. Except as modified hereby, the Request for Proposals (“RFP”) remains unmodified.

**Item #1**

**Requests for Information:** Below is a list of questions regarding the project and the Department’s response.

1. Is testing and inspection part of the scope of work? Please clarify. **Response: No. DGS will have a 3<sup>rd</sup> party material testing/inspections agent under contract for the project. Such testing and inspection services, however, are for the benefit of the Owner and will not relieve the contractor of its obligations to provide oversight over quality control and to deliver materials and workmanship that meet applicable standards.**
2. Please provide the geotechnical report as stated during the pre-proposal conference on 8/9/12. This report is not attached to the RFP. **Response: Please find attached the geotechnical report for the project.**
3. Section B.3.4.3 (page 11 of the RFP) indicates to provide watchman to protect the site. Is the watchman required during the working hours or non-working hours? **Response: This will be left to the Design-Builder to determine. Please note, however, that the Design-Builder is responsible for protecting the site and shall bear the risk of loss resulting from property damage until the site is turned over to DGS/DPR.**
4. Section B.3.4.4 (page 11 of the RFP) notes the Design-Builder is responsible for paying the water and electric consumptions during the construction period. Please confirm. **Response: Yes. The Design-Builder is responsible for paying water and electric consumption during the construction period.**

**Item #2**

**Form of Contract:** Attached to this Addendum is the Form of Contract. THE TERMS OF THE FORM OF CONTRACT SHALL PREVAIL OVER THE RFP. TO THE EXTENT THERE IS AN INCONSISTENCY BETWEEN THE FORM OF CONTRACT ISSUED HEREWITH AND THE RFP, THE FORM OF CONTRACT SHALL GOVERN.

**Item #3**

**District Resident Workforce Requirements:** Offerors are required to submit with their proposals a Workforce Utilization Plan outlining how they intend to increase participation by DC residents in the performance of the work on this Project. As part of this Workforce Utilization Plan, please discuss how you can involve Barry Farm/Ward 8 residents on this Project.

**Item #4**

**The bid date is hereby extended.** Proposals are now due by **Thursday, August 30, 2012 at 2:00 pm EDT.** Proposals that are hand-delivered should be delivered to **Frank D. Reeves Center, 2000 14<sup>th</sup> Street, NW, 8<sup>th</sup> floor, Washington, DC 20009.**

- End of Addendum No. 2 -

# GEOTECHNICAL ENGINEERING REPORT

**Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC**

Schnabel Reference #: 11612039  
July 30, 2012





July 30, 2012

Mr. Sherief Elfar, AIA, Principal  
Torti Gallas Urban, Inc.  
1316 9<sup>th</sup> Street NW  
Second Floor  
Washington, DC 20001

**Subject: Project 11612039, Geotechnical Engineering Report,  
Barry Farms Recreation Center, 1230 Sumner Road SE, Washington, DC**

Dear Mr. Elfar:

**SCHNABEL ENGINEERING CONSULTANTS, INC.** (Schnabel) is pleased to submit our geotechnical engineering report for this project. This report includes tables, figures, and appendices with relevant data collected for this study. This study was performed in accordance with our proposal dated February 11, 2011 and executed on May 5, 2011.

We appreciate the opportunity to be of service for this project. Please call us if you have any questions regarding this report.

Sincerely,

**SCHNABEL ENGINEERING CONSULTANTS, INC.**

A handwritten signature in blue ink, appearing to read 'J. Bentel'.

Joan Bentel, PE  
Senior Engineer

A handwritten signature in blue ink, appearing to read 'Bill Khouri'.

Bill Khouri, PE  
Principal

JB:BK:is

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[schnabel-eng.com](http://schnabel-eng.com)

Distribution:

Attn: Ms. Maria Valdivia  
Torti Gallas Urban, Inc.  
(1 Copy)

Attn: Mr. Scott Stewart, PE  
SK&A Structural Engineers  
(1 Copy)

**GEOTECHNICAL ENGINEERING REPORT  
BARRY FARMS RECREATION CENTER  
1230 SUMNER ROAD SE  
WASHINGTON, DC**

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## **1.0 EXECUTIVE SUMMARY**

This report presents the results of geotechnical investigation and testing conducted by Schnabel Engineering Consultants, Inc. (Schnabel) for the Barry Farms Recreation Center for Torti Gallas Urban, Inc. Based on our evaluation of the subsurface conditions revealed by our field investigation and the project data furnished to us, we have developed the following summary of our major conclusions and recommendations. Detailed recommendations are presented in the body of the report.

- Considering a maximum column load of 215 kips and lowest levels ranging between EL +37.5 to EL +47, we consider spread footings suitable for support of the proposed recreation center. Footings should be founded on suitable natural soils consisting of the medium stiff to stiff clay and silt of Strata B and C1, the medium dense sand of Stratum C2 or on new compacted structural fill. We recommend footings supported on these materials be designed for a net allowable soil bearing pressure of 3,000 psf.
- Some of the upper natural soils are soft and loose and will require additional undercutting and stabilization prior to placement of the new fill. In fill areas, such as B-1 and B-8 where new fill is anticipated to reach the lowest level, the existing fill will need to be completely removed prior to placement of new fill.
- Considering the lowest levels and groundwater observations, we anticipate groundwater to be well below the lowest levels (EL +37.5 to EL +47); therefore we do not anticipate under floor subdrainage. Subdrainage will be required behind the below-grade walls and retaining walls. Additional details are provided herein.
- We evaluated the Seismic Site Class for this project according to the International Building Code (IBC) Section 1615 (2009). Our analysis indicates Site Class D for this location. This Site Class was evaluated based on SPT values and shear strength values from pocket penetrometer test results.
- The proposed floor slabs should be supported on suitable natural soils of Strata B and C1 or new compacted structural fill. A modulus of subgrade reaction,  $k$ , of 100 kcf should be used in design of floor slabs.

We are providing this executive summary solely for purposes of overview. Any party that relies on this report must read the full report. This executive summary omits several details, any one of which could be very important to the proper application of the report.

## **2.0 SCOPE OF SERVICES**

Our proposal dated September 22, 2011 defines the scope of services for this project. The scope of services includes the following:

- Estimated subsurface conditions and groundwater levels within the area explored based on data collected in the subsurface exploration.
- Foundation recommendations for spread footings including a net allowable soil bearing pressure, bearing grades, estimated settlements, minimum dimensions and frost depth.
- Recommended Seismic Site Class in accordance with IBC 2009 for use in foundation design based on an extrapolation of data collected in the subsurface exploration.
- Recommendations for floor slab support, including a recommended modulus of subgrade reaction for use in slab design.
- Earthwork recommendations for construction of load-bearing fill including an assessment of site soils for use as fill, subgrade preparation and compaction criteria.
- Recommendations regarding permanent subdrainage design and installation.
- Recommended lateral earth pressures, subdrainage and backfill requirements for basement walls and retaining walls.
- Construction considerations related to the implementation of our recommendations.

### **3.0 DESCRIPTION OF SITE AND PROPOSED CONSTRUCTION**

We understand that a new recreation center is proposed at Barry Farms to the west of the Birney Elementary School off of Sumner Road in southeast Washington, DC. The site is currently occupied by a DC Housing Authority Management Building, a baseball field, a pool house and below-grade pool, two playgrounds, two jungle gyms and a baseball field. The remainder of the site is grass and tree covered with paved walkways running throughout the green areas. The existing structures will be demolished prior to construction of the new recreation center. No information regarding the lowest levels of the existing site structures was available at this time. Based on topographic plans supplied in the Concept Re-Submission, dated January 5, 2012, that the existing site grades range from about EL +35 at the northwest corner of the site to EL +53 at the southeast corner.

The new recreation center will house a gymnasium, pool and basketball courts. Below-grade parking and a mechanical room will lie below the basketball courts. The proposed lowest level of the recreation center will range from EL +37.5 to EL +47. The mechanical room, below the basketball courts along the northeast side, will have a lowest level at EL +39.5 and the pool will have a lowest level at EL +37.5. The lowest level of the parking garage will range from EL +47 at the northeast side to EL +43.5 at the southwest side, except in the area of the mechanical room. The remainder of the recreation center will have a lowest level at EL +43.5. Considering the existing topographic grades at the site and the proposed lowest levels, we anticipate that fills between 1 ft and 7 ft and cuts between 1 ft and 9 ft will be required to reach the proposed lowest levels of the recreation center. Based on the structural loading information provided by the structural engineer, we understand that the pool building and gymnasium will have a maximum column load of 65 kips and the basketball courts/parking will have a maximum column load of 215 kips.

Based on available WMATA drawings, dated 1977, we understand that the WMATA tunnel runs just south of the Martin Luther King Avenue SE overpass (Suitland Parkway) in a north-south direction. The tunnel lies to the northeast of our site (about 200 ft from the site boundaries). Considering the proximity of the tunnel, the proposed structures will not be within the zone of influence.

The above information is based on information provided by your office and the structural engineer, SK&A Structural Engineers; as well as our site reconnaissance.

## 4.0 SITE GEOLOGY AND SUBSURFACE CONDITIONS

### 4.1 Subsurface Exploration and Field Testing

#### 4.1.1 Test Borings

Our subcontractor, Connelly and Associates, Inc, drilled ten test borings between May 17 and May 23, 2012. Boring B-4 was originally staked in the concrete driveway just west of Birney School, this boring was offset into the grass area further west and referred to as B-4A herein. The Standard Penetration Test (SPT) was conducted at selected depths in the borings. Appendix A includes specific observations, remarks, and logs for the borings, classification criteria, drilling methods, and sampling protocols. Figure 2 included at the end of this report, indicates the approximate test boring locations. We will retain soil samples up to 45 days beyond the issuance of this report, unless you request other disposition.

### 4.2 Site Geology

The subsurface investigation revealed terrace clay overlying Potomac Group sand and clay. Some fill soils were also encountered and are believed to be associated with previous development on the site or past grading activities. Terrace deposits are typically the result of river currents. Below the terrace deposits, Cretaceous Age sediments that belong to the Potomac Group were encountered. Potomac Group soils are the oldest sedimentary deposits in the Washington, DC area.

### 4.3 Generalized Subsurface Stratigraphy

We characterized the following generalized subsurface stratigraphy based on the exploration and laboratory test data included in the appendices.

#### **Ground Cover:**

In borings B-1, B-3, B-5, B-6, B-7, B-9 and B-10 between 3 inches and 7 inches of topsoil was encountered. In borings B-2 and B-4A, 2 inches of asphalt underlain by 0 to 4 inches of gravel base was encountered. Two (2) inches of cement was encountered at surface grades in boring B-8. These depths may vary at other locations across the site.

#### **Stratum A: Fill and Probable Fill**

Fill was encountered below the ground surface to depths of 2.5 ft to 18.5 ft\* and sampled as sandy lean clay, sandy silt, sandy fat clay, silty sand and clayey sand containing gravel, asphalt, brick and roots. Based on the Standard Penetration Tests (SPT) performed, this stratum exhibits variable density and consistency (SPT values varied between 3 blows per foot and 17 blows per 1 inch\*).

#### **Stratum B: Terrace**

Below the ground surface and Stratum A in borings B-1, B-2, B-6, B-8, and B-9 to a depth of 23.5 ft below the ground surface, the borings encountered terrace deposits consisting of reddish brown, brown, light brown and light orangish brown sandy LEAN CLAY (CL), sandy FAT CLAY (CH) and sandy SILT (ML), with trace amounts of roots and organics. One sample of the Stratum B material was tested in our soil laboratory. The soil sample classified as sandy LEAN CLAY.

The sample had a liquid limit of 37 and a plasticity index of 17. The amount of material passing the No. 200 sieve was 62.3 percent. Based on the Standard Penetration Test (SPT) performed, this stratum exhibits soft to stiff consistency (SPT values varied between 4 blows per foot and 13 blows per foot).

**Stratum C1: Potomac (Cohesive)**

Below Strata A and B and interlayered with Stratum C2 to depths of 28.5 ft and 40 ft below the ground surface, the borings encountered Potomac Group soils consisting of varying shades of brown, gray and red FAT CLAY (CH), sandy LEAN CLAY (CL), sandy ELASTIC SILT (MH) and sandy FAT CLAY (CH) with varying amounts of sand and trace amounts of silt pockets, mica, gravel, roots and lignite. One sample of the Stratum C1 material was tested in our soil laboratory. The soil sample classified as FAT CLAY with sand. The liquid limit of the sample was 61 and the plasticity index of the sample was 39. The amount of material passing the No. 200 sieve was 72.4 percent. Based on the Standard Penetration Tests (SPT) performed, this stratum exhibits medium stiff to hard consistency (SPT values varied between 5 blows per foot and 33 blows per foot).

**Stratum C2: Potomac (Granular)**

Below Stratum B and interlayered with Stratum C1 to depths of 18.5 ft to 23.5 ft below the ground surface, the borings encountered Potomac Group soils consisting of gray and varying shades of brown clayey SAND (SC), silty SAND (SM) and poorly-graded SAND (SP) with trace amounts of gravel, clay and lignite. Based on the Standard Penetration Tests (SPT) performed, this stratum is generally loose to dense (SPT values varied between 8 blows per foot and 38 blows per foot).

*\* Please note that the deep fill was encountered in boring B-9 which is located within the proposed field.*

The above stratification is shown in detail on the boring logs in Appendix A. Numbers after description of the soil strata in the above tabulation indicate the minimum and maximum penetration resistances, or N values, recorded in each stratum. The sampling procedures used to determine N values are also presented in Appendix A.

The soil group symbols, indicated on the boring logs and in the generalized subsoil stratum descriptions above, represent the Unified Soil Classification System (USCS) group symbols and are based on visual observation of the specimens recovered, per ASTM D-2488. The criteria for visual identification of soil specimens are presented in Appendix A. It should be noted that there may be differences between visual classifications and laboratory classifications based on ASTM D-2487.

#### **4.4 Groundwater**

Groundwater was observed during drilling and upon completion. Groundwater was encountered in half of the borings at depths of 12 ft to 28 ft below existing grades, or between EL +31.8 and EL +8.8. The remaining borings exhibited dry conditions during drilling. Upon completion the borings indicated groundwater at depths ranging between 16 ft and 35 ft below existing grades, or between EL +31.5 and EL +1.8. No cave-in depths were recorded as borings were grouted upon completion for safety. The test boring logs in Appendix A include groundwater observations obtained during our subsurface exploration.

These data include depths to groundwater encountered during drilling and upon drilling completion. Based on the groundwater observations during drilling activities, groundwater is expected to be encountered below the proposed lowest levels considered herein.

The groundwater levels on the logs indicate our estimate of the hydrostatic water table at the time of our subsurface exploration. The final design should anticipate the fluctuation of the hydrostatic water table depending on variations in precipitation, surface runoff, pumping, tidal action, evaporation, leaking utilities, stream levels, and similar factors.

#### **4.5 Seismic Site Classification**

We evaluated the Seismic Site Class for this project according to the International Building Code (IBC) Section 1615 (2009). Our analysis indicates Site Class D for this location. This Site Class was evaluated based on SPT values and shear strength values from pocket penetrometer test results.

## 5.0 FOUNDATION RECOMMENDATIONS

We based our geotechnical engineering analysis on the information developed from our subsurface exploration and soil laboratory testing, along with the preliminary development plans, site plans, and structural loading furnished to our office. We recommend shallow spread footings for support of the proposed recreation center based on our analysis. The following sections of the report provide our detailed recommendations.

### 5.1 Spread Footings

Considering a maximum column load of 215 kips and lowest levels ranging between EL +37.5 and EL +47, we consider spread footings suitable for support of the proposed recreation center. Footings should be founded on suitable natural soils consisting of the medium stiff to stiff clay and silt of Strata B and C1, the medium dense sand of Stratum C2 or on new compacted structural fill. Compacted structural fill should meet the requirements outlined in Section 6.0. We recommend footings supported on these materials be designed for a net allowable soil bearing pressure of 3,000 psf. This bearing pressure provides a factor of safety against general bearing capacity failure of at least 3.0. Where design loads include combinations of transient wind and/or seismic loads that result in non-uniform soil bearing pressure distribution beneath the footing, the maximum allowable soil bearing pressure in these cases may be taken as 1.33 times the net allowable soil bearing pressure given above.

Some of the upper natural soils are soft and loose and will require additional undercutting as detailed herein. In some areas, such as B-1 and B-8 where new fill is anticipated to reach the lowest level, the existing fill will need to be completely removed prior to placement of new fill.

The grades at which natural soils suitable for the design bearing pressure of 3,000 psf were encountered in the test borings are presented in the table below:

**Estimated Elevation of Suitable Subgrade Soils**

<b>Boring Number</b>	<b>Estimated Elevation of Suitable Subgrade Soils (ft)</b>
B-1	EL +35
B-2	EL +41
B-3	EL +49
B-4A	EL +47
B-5	EL +41
B-6	EL +41
B-7	EL +37
B-8	EL +31

All footing subgrades should be observed by the Geotechnical Engineer prior to placement of concrete to verify subgrade materials are as anticipated. If unsuitable soils are encountered at the design bearing grade, these soils should be removed and replaced as recommended by the Geotechnical Engineer. Unsuitable soils should be replaced as described in Section 6.0.

Settlements of shallow foundations supported on suitable natural soils and on properly placed compacted structural fill are not expected to exceed about one (1) inch. Differential settlements between similarly loaded footings are not expected to exceed about half this value.

Column and wall footings should be at least 24 and 16 inches wide, respectively, for shear considerations. Exterior footings should be founded at least 2.5 ft below final exterior grades for frost protection. Interior footings may be founded at nominal depths below the floor slabs. Interior footings subject to freezing should be founded at least 2.5 ft below slab grade. If high plasticity soils are encountered at the proposed bearing elevations, the exterior footings should be lowered to at least 4 ft below final exterior grades. Where bearing grades between adjacent footings vary, the slope between the bottom edges of adjacent footings should not be steeper than 1.5H:1V.

## **6.0 SITE GRADING AND EARTHWORK**

Proposed building and site grades will require placement of up to 7 ft of compacted structural fill. Cuts of up to 9 ft are also anticipated. Recommendations for compacted fill subgrade preparation, fill soil requirements, placement and compaction criteria, are presented in subsequent sections.

### **6.1 Compacted Fill Subgrades**

Subgrades to receive compacted structural fill for building support should be stripped of vegetation, topsoil, and organic matter. Compacted structural fill subgrades should consist of stiff clay and silt of Stratum B soils or Stratum C1. Importation of fill will be likely as minimal suitable materials will be excavated. Criteria for compacted structural fill are provided in Section 6.2.

The topsoil and existing fill soils are not considered suitable for support of the proposed compacted structural fill or the proposed structure. These soils should be excavated from areas to receive compacted structural fill. Removal of unsuitable soils should extend at least 10 ft horizontally beyond the proposed building footprint.

The Geotechnical Engineer should evaluate the suitability of the fill subgrades. The stripped subgrades should be proofrolled with a loaded dump truck to evaluate the subgrade suitability for support of the compacted structural fill prior to any undercutting or initiation of fill placement. Areas that exhibit excessive pumping, weaving, or rutting should be scarified, dried and recompact, or undercut and replaced with compacted structural fill as recommended by the Geotechnical Engineer. Subgrade evaluation techniques complementary to proofrolling could include a combination of probing with a penetrometer, drilling hand augers, or observing test pits.

When excavation of unsuitable materials is required, it should be performed in a manner to limit disturbance of the underlying suitable material. The excavation should be performed under the observation of the Geotechnical Engineer to evaluate required excavation depths.

Compacted structural fill subgrades should be kept free of ponded water. Compacted structural fill subgrades should be free of snow, ice, and frozen soils. If snow, ice, or frozen soils are present at subgrade levels, these materials should be removed as recommended by the Geotechnical Engineer.

Existing structures present in the area of the proposed construction will need to be removed before earthwork construction. Therefore, buried foundations and other associated debris may be encountered during grading activities. Existing foundations should be completely removed from the proposed building area. Existing utilities and drainage structures within the building area should also be removed and replaced with compacted structural fill.

Compacted structural fill subgrades should not be steeper than about 4H:1V. If steeper slopes are present, subgrades should be benched to permit placement of horizontal lifts of fill.

## **6.2 Compacted Fill**

Compacted structural fill and backfill should consist of non-organic soils. If off-site borrow materials are needed, these soils should classify ML, SC, SM, SP, SW, GC, GM, GP or GW according to ASTM D2487. In addition, fill materials should exhibit Liquid Limit and Plasticity Index values of less than 40 and 20, respectively. Fill materials should not contain particles larger than 3 inches. On-site soils of Strata C2, if available, are generally expected to meet these criteria. The fill soils of Stratum A and the clay of Strata B and C1 are generally not considered suitable for re-use as compacted structural fill.

Compacted structural fill should be placed in maximum 8-inch thick horizontal, loose lifts. Fill should be compacted to at least 95 percent of the maximum dry density per ASTM D698 (Standard Proctor). Soil moisture contents at the time of compaction should be within 3 percent of the soils' optimum moisture content.

Backfill placed in excavations, trenches, and other areas that large compaction equipment cannot access should be placed in maximum 8-inch thick lifts. Backfill should meet the material, placement, and compaction requirements outlined above.

Successful re-use of the excavated, on-site soils as compacted structural fill will depend on their natural moisture contents during excavation. Laboratory test results indicate soils encountered in proposed borrow areas are wet of the optimum moisture content. Scarifying and drying of these soils should be anticipated to achieve the recommended compaction. Drying of these soils will likely result in some delays, and may not be possible during cooler, wetter weather. We recommend that the earthwork be performed during the warmer, drier times of the year.

## **7.0 FLOOR SLAB RECOMMENDATIONS**

The proposed floor slabs should be supported on existing fill of Stratum A, suitable natural soils of Strata B and C1 or new compacted structural fill. A modulus of subgrade reaction,  $k$ , of 100 kcf should be used in design of floor slabs.

A 4-inch crushed stone or washed gravel capillary moisture barrier should underlie floor slabs on grade. Moisture barrier material should consist of AASHTO No. 57 crushed stone. The Contractor should compact the stone in place with at least two passes of suitable vibratory compaction equipment.

The Contractor should compact floor slab subgrades to repair any disturbance that may occur due to construction operations before placing moisture barrier materials. Since floors will be slab-on-grade, footing and utility excavations should be backfilled with compacted structural fill as defined in Section 6.0.

Dewatering using local sump pumps and subdrainage below the lowest levels may be required if groundwater is encountered. However, based on the soil test borings, groundwater is expected to be below the lowest levels. Perched water conditions may occur due to the presence of granular layers overlaying permeable fine-grained clays.

## **8.0 BELOW-GRADE AND RETAINING WALL RECOMMENDATIONS**

We understand that the proposed recreation center includes below-grade walls and retaining walls. No information is available regarding the proposed retaining walls. Segmental retaining walls are also planned along the playing field and near the existing Birney School; however, recommendations for segmental retaining walls is not included in our scope of services for this project.

### **8.1 Below-Grade Walls**

Below-grade walls must be designed to resist lateral earth pressure developing from the backfill soils and any surcharge loads at the top of the wall. For a level backfill, we recommend an average at rest equivalent fluid pressure of  $60H$  (psf), where  $H$  is the height of the wall in feet, for the design of unbraced building walls below-grade and an average equivalent fluid pressure of  $50H$  (psf) for the design of braced building walls below-grade. These earth pressures are based on soils classifying as ML or more granular, as indicated below (Section 8.3). Horizontal pressure from surcharge if applicable will be 0.5 times the vertical surcharge for the unbraced condition and 0.42 times the vertical surcharge for the braced condition. A friction factor of 0.30 may be utilized between concrete footings and subgrade soils.

A diagram illustrating the design earth pressure recommendations on below-grade walls is included as Figure 3 and assumed level backfill. These design parameters do not consider hydrostatic pressure since we recommend subdrainage behind the walls. Below-grade walls should be backfilled as recommended below (Section 8.3) and should be damp proofed.

### **8.2 Retaining Walls**

Proposed retaining walls must be designed to resist lateral earth pressures developing from the backfill and any surcharge loads at the top of the wall. For a level backfill we recommend an equivalent active fluid pressure of  $40 H$  (psf), where  $H$  is the height of the wall in feet. This earth pressure is based on soils classifying as ML or more granular (see Section 8.3). A diagram illustrating the design earth pressure recommendations for retaining walls is included as Figure 4 and assumes a level backfill. Passive earth pressure should only be considered from the top of the footing. We recommend a passive fluid pressure of  $360 D$ , where  $D$  is the thickness of the footing as indicated on Figure 4. This recommendation considers ML or more granular material per Section 8.3. Weepholes or subdrainage should be provided as indicated in Figure 4 to allow drainage behind the face of the retaining walls. Additional details are provided in Section 8.4.

### **8.3 Compacted Fill Requirements**

On-site materials used for backfill should consist of material classifying ML, SC, SM, SP, SW, GP or GW according to ASTM D2487. This classification includes open-graded crushed stone such as AASHTO M43 No. 57. Some portions of the Stratum B material are expected to meet the above criteria, as well as the Stratum C2 materials. Excavation of suitable materials, based on the borings and proposed lowest levels, will be minimal and importation of suitable fill should be anticipated. On-site soils classifying as CL, CH and MH are not considered suitable for re-use as backfill behind retaining walls.

The Contractor should place backfill in maximum 8-inch thick loose lifts, and compact each lift to at least 95 percent of maximum dry density according to ASTM D698 (Standard Proctor). The Contractor should place crushed stone backfill in maximum 12-inch thick lifts, and compact each lift using suitable vibratory equipment. Only light hand-operated equipment should be used to compact backfill against walls. The Structural Engineer of Record should approve the size of the compaction equipment. Exterior grades around the buildings should be designed for positive runoff away from the buildings.

#### **8.4 Subdrainage Behind Walls**

Earth pressure recommendations provided above do not include hydrostatic pressure since subdrainage will be provided behind the below-grade walls and retaining walls. Subdrainage should consist of perimeter subdrains located on top of the wall footing, next to the wall. Subdrains should consist of 4-inch slotted, corrugated polyethylene tubing according to ASTM F405 surrounded by at least 6 inches of filter drainage material. A drainage geotextile should wrap around the drainage material. Subdrains should drain by gravity to an outlet, or to a sump or storm sewer.

Geocomposite drainage panels consisting of Miradrain G100N or equivalent should be installed on all below-grade walls. Drainage panels should be placed along the entire wall face to within 1.5 ft of finished grade. The Contractor should bind the edges of the panels with drainage geotextile to limit the potential for soil intrusion into the drainage system.

Wall subdrainage may be provided using weepholes for the retaining walls. Weepholes should be 3 inches in diameter and installed on 8 ft centers. A filter plug consisting of at least one (1) cubic foot of filter drainage material wrapped in drainage geotextile should be placed at the back of each weephole. Filter material should consist of AASHTO No. 78 aggregate. Drainage geotextile should consist of a non-woven geotextile such as Mirafi 140N or equivalent.

## **9.0 CONSTRUCTION CONSIDERATIONS**

### **9.1 Spread Footings**

The Contractor should exercise care during excavation for spread footings so that as little disturbance as possible occurs at the foundation level. The Contractor should carefully clean loose or soft soils from the bottom of the excavation before placing concrete. A Geotechnical Engineer from our firm should observe actual footing subgrades during construction to evaluate whether subgrade soils meet the requirements as recommended in this report.

Footing subgrades needing undercut may be concreted at the elevation of undercut or backfilled to the original design subgrade elevation with new compacted structural fill. We do not recommend open-graded crushed stone backfill since these materials provide a path for moisture to reach subgrade soils, resulting in an increased potential for shrink/swell related distress. The Contractor should place footing concrete immediately after excavation of the footing to prevent accumulation of water in the excavation or drying of foundation soils.

### **9.2 Site Grading and Earthwork**

The test boring data indicate the approximate depth of topsoil based on our visual identification procedures. The depth of stripping needed to provide a suitable base for placement and compaction of earthwork or for pavement subgrade preparation may include topsoil and other softer surficial layers, with or without organic matter. The depth of required stripping should be determined by the excavation Contractor prior to construction using test pits, probes, or other means that the Contractor wishes to employ, and this determination should be the excavation Contractor's responsibility.

The soils at this site primarily consist of moderately to highly plastic clays and silts. These soils are moisture sensitive, and will readily become disturbed by construction traffic on exposed surfaces of wet subgrades. We recommend avoiding wet weather site preparation and grading activities. If wet weather work is performed, the quantities of disturbed soils to be excavated can be expected to increase.

Traffic on stripped or undercut subgrades should be limited to reduce disturbance of underlying soils. Also, using lightweight, track-mounted dozer equipment for stripping will limit the disturbance of underlying soils, and may reduce the undercut volume needed. The Contractor should provide site drainage to maintain subgrades free of water and to avoid saturation and disturbance of the subgrade soils before placing compacted structural fill or moisture barrier material. This will be important during all phases of the construction work. The Contractor should be responsible for reworking of subgrades and compacted structural fill that were initially considered suitable but were later disturbed by equipment and/or weather.

We expect that some of the subgrade soils may be loose and soft at the proposed floor slab level. Therefore, the Contractor may need crushed stone and stabilization geotextile working platforms to provide a base on which to place compacted structural fill for the floor slab support. The Geotechnical Engineer can make recommendations for working platforms in the field, based on observation of subgrade conditions.

### **9.3 Subdrainage**

The Contractor should exercise care when placing and backfilling subdrainage pipe to avoid damage to the subdrainage system during installation.

### **9.4 Engineering Services During Construction**

The engineering recommendations provided in this report are based on the information obtained from the subsurface exploration and laboratory testing. However, conditions on the site may vary between the discrete locations observed at the time of our subsurface exploration. The nature and extent of variations between borings may not become evident until during construction.

To account for this variability, we should provide professional observation and testing of subsurface conditions revealed during construction as an extension of our engineering services. These services will also help in evaluating the Contractor's conformance with the plans and specifications. Because of our unique position to understand the intent of the geotechnical engineering recommendations, retaining Schnabel for these services will allow us to provide consistent service throughout the project construction.

## 10.0 GENERAL SPECIFICATION RECOMMENDATIONS

An allowance should be established to account for possible additional costs that may be required to construct earthwork and foundations as recommended in this report. Additional costs may be incurred for a variety of reasons including variation of soil between borings, greater than anticipated unsuitable soils, need for borrow fill material, wet on-site soils, obstructions, temporary dewatering, etc.

The project specifications should indicate the Contractor's responsibility for providing adequate site drainage during construction. Inadequate drainage will most likely lead to disturbance of soils by construction traffic and increased volume of undercut.

This report may be made available to prospective bidders for informational purposes. We recommend that the project specifications contain the following statement:

*Schnabel Engineering Consultants, Inc., has prepared this geotechnical engineering report for this project. This report is for informational purposes only and is not part of the contract documents. The opinions expressed represent the Geotechnical Engineer's interpretation of the subsurface conditions, tests, and the results of analyses conducted. Should the data contained in this report not be adequate for the Contractor's purposes, the Contractor may make, before bidding, independent exploration, tests and analyses. This report may be examined by bidders at the office of the Owner, or copies may be obtained from the Owner at nominal charge.*

Additional data and reports prepared by others that could have an impact upon the Contractor's bid should also be made available to prospective bidders for informational purposes.

## **11.0 LIMITATIONS**

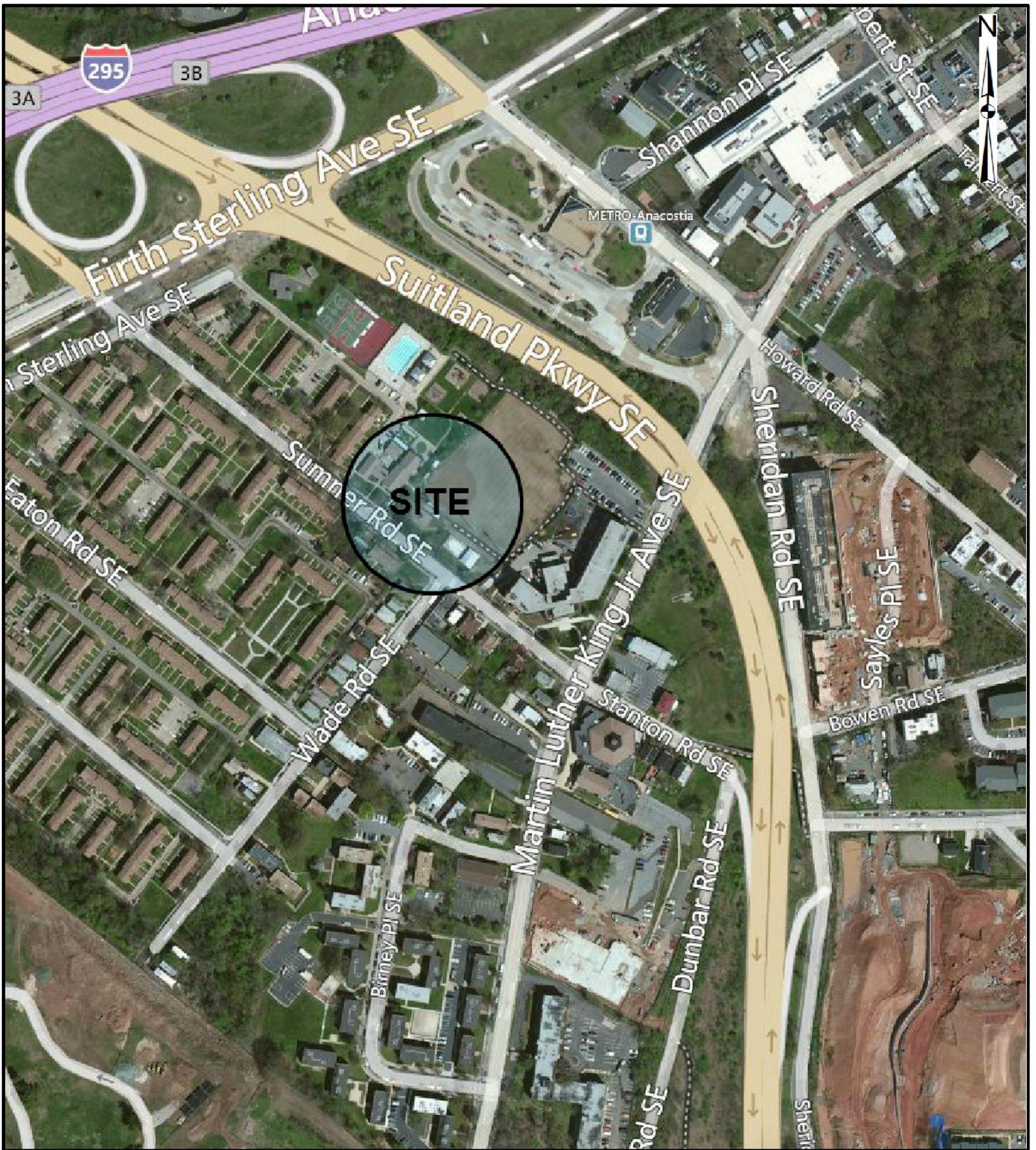
We based the analyses and recommendations submitted in this report on the information revealed by our exploration. We attempted to provide for normal contingencies, but the possibility remains that unexpected conditions may be encountered during construction.

This report has been prepared to aid in the evaluation of this site and to assist in the design of the project. It is intended for use concerning this specific project. We based our recommendations on information on the site and proposed construction as described in this report. Substantial changes in loads, locations, or grades should be brought to our attention so we can modify our recommendations as needed. We would appreciate an opportunity to review the plans and specifications as they pertain to the recommendations contained in this report, and to submit our comments to you based on this review.

We have endeavored to complete the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions as this project. No other representation, express or implied, is included or intended, and no warranty or guarantee is included or intended in this report, or other instrument of service.

# FIGURES

- Figure 1: Site Vicinity Map
- Figure 2: Approximate Boring Location
- Figure 3: Lateral Earth Pressure Diagram for Design of Below-Grade Walls
- Figure 4: Lateral Earth Pressure Diagram for Design of Retaining Walls



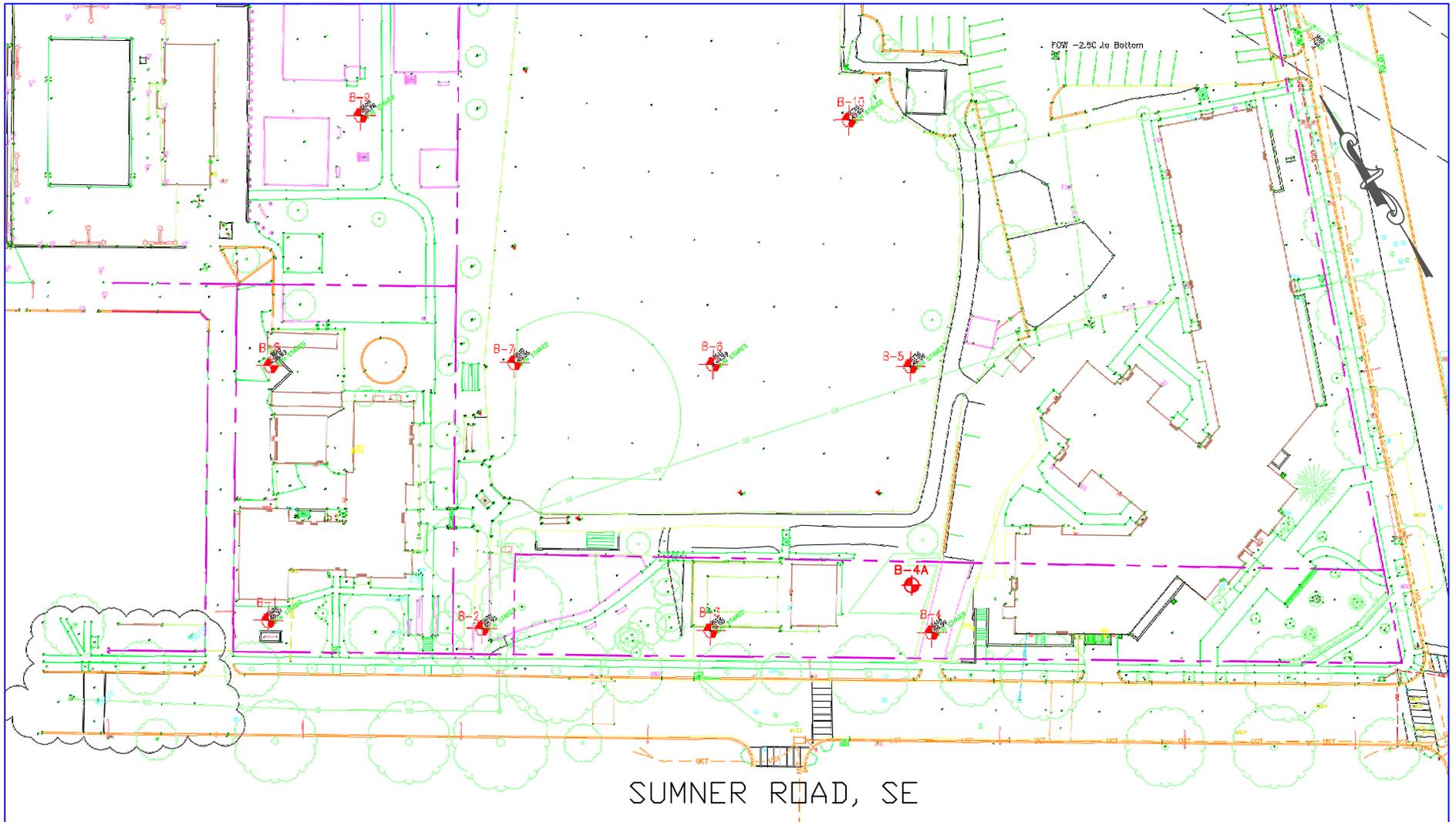
Source: ESRI Online Premium Services (©2011 BING)  
 Projection: WGS 1984 Web Mercator Auxiliary Sphere



**BARRY FARMS RECREATION CENTER**  
 1230 SUMNER ROAD SE  
 WASHINGTON, DC  
 PROJECT NO. 11612039

**SITE LOCATION MAP**

FIGURE 1



**LEGEND**

 APPROXIMATE TEST BORING LOCATION  
 B-1

Base plan provided by Wiles Mensch.



BARRY FARMS RECREATION CENTER  
 1230 SUMNER ROAD SE  
 WASHINGTON, DC

APPROXIMATE TEST BORING  
 LOCATION PLAN

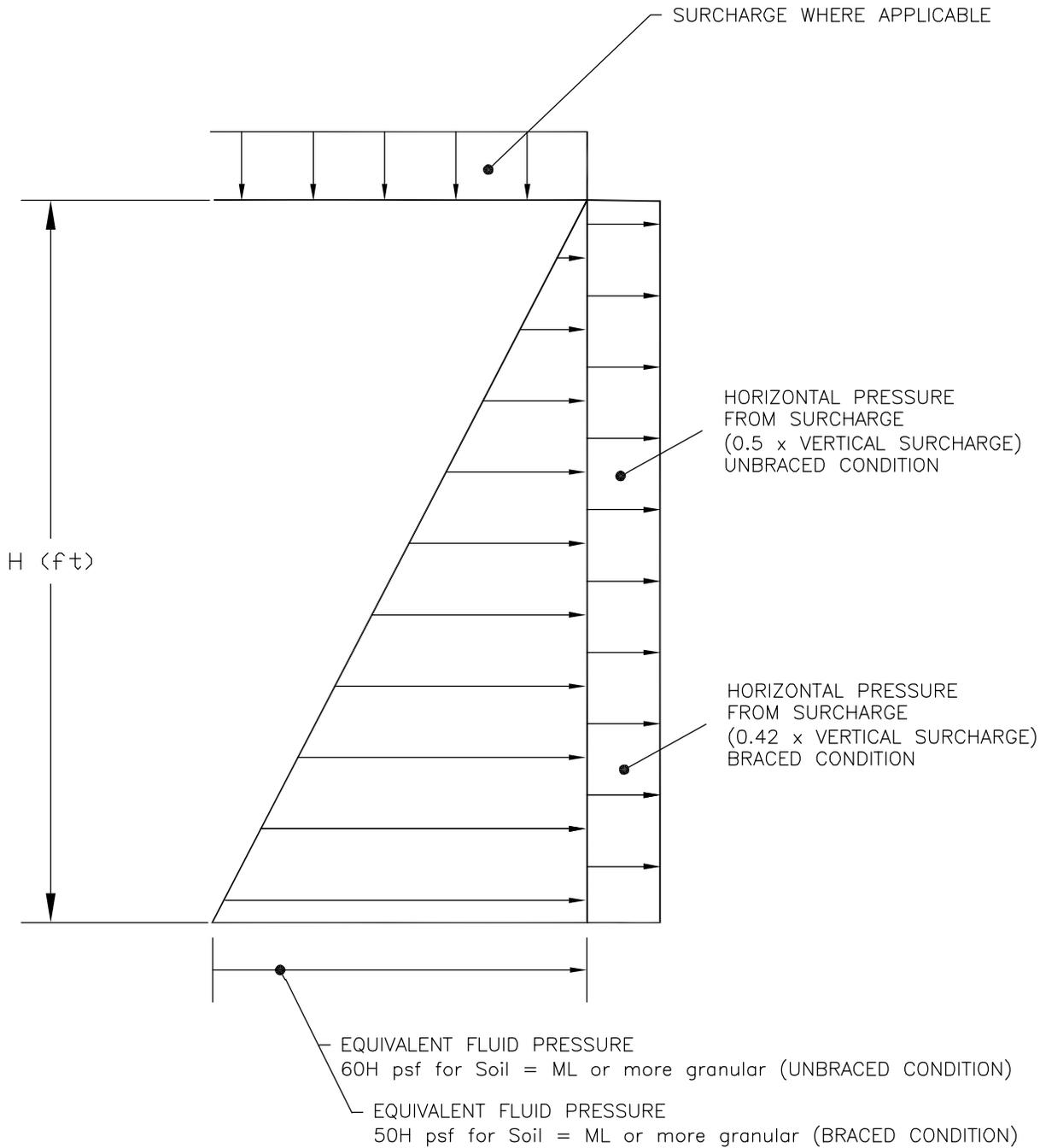
PROJECT NO. 11612039  
 FIGURE 2

DRAWN BY:  
 J. BENTEL

REVIEWED BY:  
 B. KHOURI

APPROXIMATE SCALE:  
 NOT TO SCALE

DATE:  
 JUNE 2012



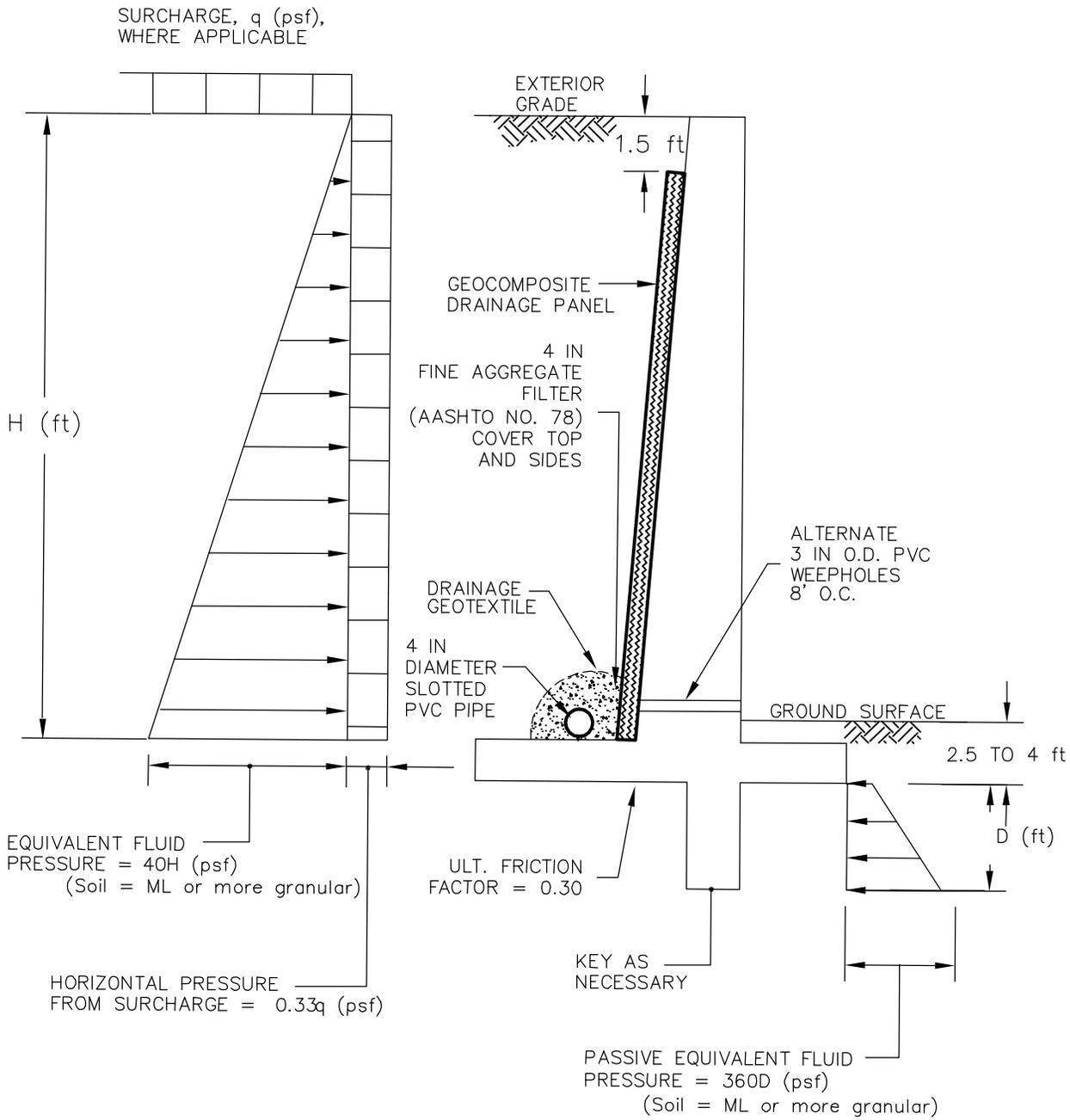
### EARTH PRESSURE NOTES

PRESSURE DIAGRAM SHOWN ASSUMES FULL DRAINAGE OF HYDROSTATIC PRESSURE AND BACKFILL CONSISTING OF MATERIAL CLASSIFIED AS ML OR MORE GRANULAR PER ASTM D-2487 WITH A LIQUID LIMIT AND PLASTICITY INDEX NOT EXCEEDING 40 AND 20, RESPECTIVELY.

REFER TO REPORT FOR ADDITIONAL DESIGN DETAILS.

<b>LATERAL EARTH PRESSURES - BELOW GRADE WALLS</b>	<b>Drawn by:</b> J. BENTEL	<b>Approximate Scale:</b> NOT TO SCALE
BARRY FARMS RECREATION CENTER 1230 SUMNER ROAD SE WASHINGTON, DC	<b>Reviewed by:</b> B. KHOURI	<b>Date:</b> JUNE 2012
PROJECT NO. 11612039 FIGURE 3		





EARTH PRESSURE NOTES

PRESSURE DIAGRAM SHOWN ASSUMES FULL DRAINAGE OF HYDROSTATIC PRESSURE AND BACKFILL CONSISTING OF MATERIAL CLASSIFIED AS NONEXPANSIVE ML OR MORE GRANULAR PER ASTM D2487 WITH A LIQUID LIMIT AND PLASTICITY INDEX NOT EXCEEDING 40 AND 20, RESPECTIVELY, AND A MATERIAL UNIT WEIGHT OF 120 PCF. REFER TO REPORT FOR ADDITIONAL DESIGN DETAILS.

<p><b>Approximate Scale:</b> NOT TO SCALE</p> <p><b>Date:</b> JUNE 2012</p>	<p><b>Drawn by:</b> J. BENTEL</p> <p><b>Reviewed by:</b> B. KHOURI</p>	<p><b>LATERAL EARTH PRESSURES RETAINING WALLS</b></p> <p>PROJECT NO. 11612039 FIGURE 4</p>	<p><b>BARRY FARMS RECREATION CENTER 1230 SUMNER ROAD SE WASHINGTON, DC</b></p>

# APPENDIX A

## SUBSURFACE EXPLORATION DATA

Subsurface Exploration Procedures  
General Notes for Subsurface Exploration Logs  
Identification of Soil  
Boring Logs, B-1 through B-10

# **SUBSURFACE EXPLORATION PROCEDURES**

## **Test Borings – Hollow Stem Augers**

The borings are advanced by turning an auger with a center opening of 2¼ or 3¼ inches. A plug device blocks off the center opening while augers are advanced. Cuttings are brought to the surface by the auger flights. Sampling is performed through the center opening in the hollow stem auger, by standard methods, after removal of the plug. Usually, no water is introduced into the boring using this procedure.

## **Standard Penetration Test Results**

The numbers in the Sampling Data column of the boring logs represent Standard Penetration Test (SPT) results. Each number represents the blows needed to drive a 2-inch O.D., 1½-inch I.D. split-spoon sampler 6 inches, using a 140-pound hammer falling 30 inches. The sampler is typically driven a total of 18 or 24 inches. The first 6 inches are considered a seating interval. The total of the number of blows for the second and third 6-inch intervals is the SPT “N value.” The Standard Penetration Test is conducted according to ASTM D1586.

## **Soil Classification Criteria**

The group symbols on the logs represent the Unified Soil Classification System Group Symbols (ASTM D2487) based on visual observation and limited laboratory testing of the samples. Criteria for visual identification of soil samples are included in this appendix. Some variation can be expected between samples visually classified and samples classified in the laboratory.

## **Pocket Penetrometer Results**

The values following “PP=” in the sampling data column of the logs represent pocket penetrometer readings. Pocket penetrometer readings provide an estimate of the unconfined compressive strength of fine-grained soils.

## **Boring Locations and Elevations**

Borings locations were staked by Wiles Mensch. Approximate boring locations are shown on Figure 2. Boring B-4 was offset, as indicated on the boring log (B-4A), as the boring was staked in an active driveway. Ground surface elevations at the boring locations were provided by the surveyor and are indicated on the boring logs. The boring elevation for the offset B-4A location was estimated from the Concept Re-Submission plans dated January 5, 2012. Locations and elevations should be considered no more accurate than the methods used to determine them.

# GENERAL NOTES FOR SUBSURFACE EXPLORATION LOGS

1. Numbers in sampling data column next to Standard Penetration Test (SPT) symbols indicate blows required to drive a 2-inch O.D., 1 $\frac{3}{8}$ -inch I.D. sampling spoon 6 inches using a 140 pound hammer falling 30 inches. The Standard Penetration Test (SPT) N value is the number of blows required to drive the sampler 12 inches, after a 6 inch seating interval. The Standard Penetration Test is performed in general accordance with ASTM D1586.
2. Visual classification of soil is in accordance with terminology set forth in "Identification of Soil." The ASTM D2487 group symbols (e.g., CL) shown in the classification column are based on visual observations.
3. Estimated water levels indicated on the logs are only estimates from available data and may vary with precipitation, porosity of the soil, site topography, and other factors.
4. Refusal at the surface of rock, boulder, or other obstruction is defined as an SPT resistance of 100 blows for 2 inches or less of penetration.
5. The logs and related information depict subsurface conditions only at the specific locations and at the particular time when drilled or excavated. Soil conditions at other locations may differ from conditions occurring at these locations. Also, the passage of time may result in a change in the subsurface soil and water level conditions at the subsurface exploration location.
6. The stratification lines represent the approximate boundary between soil and rock types as obtained from the subsurface exploration. Some variation may also be expected vertically between samples taken. The soil profile, water level observations and penetration resistances presented on these logs have been made with reasonable care and accuracy and must be considered only an approximate representation of subsurface conditions to be encountered at the particular location.
7. Key to symbols and abbreviations:



S-1, SPT  
5+10+1

Sample No., Standard Penetration Test  
Number of blows in each 6-inch increment



UD-1, UNDIST  
Rec=24", 100%

Sample No., 2" or 3" Undisturbed Tube Sample  
Recovery in inches, Percent Recovery



C-1, CORE  
Run = 5.0 ft  
REC = 60", 100%  
RQD = 60", 100%  
MC  
PP  
FD  
PD  
GP  
LL  
PL  
TPH

Core No., Rock Core  
Run length in feet  
Recovery in inches, Percent Recovery  
RQD in inches, Percent RQD  
Moisture Content  
Pocket Penetrometer Reading (tsf)  
Flame Ionization Detector Reading (ppm)  
Photoionization Detector Reading (ppm)  
Geostick Penetration Reading (inches)  
Liquid Limit  
Plastic Limit  
Total Petroleum Hydrocarbons

# IDENTIFICATION OF SOIL

## I. DEFINITION OF SOIL GROUP NAMES (ASTM D2487)

		SYMBOL	GROUP NAME
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels – More than 50% of coarse fraction retained on No. 4 sieve Coarse, ¾" to 3" Fine, No. 4 to ¾"	Clean Gravels Less than 5% fines	GW WELL GRADED GRAVEL
			GP POORLY GRADED GRAVEL
		Gravels with fines More than 12% fines	GM SILTY GRAVEL
			GC CLAYEY GRAVEL
	Sands – 50% or more of coarse Fraction passes No. 4 sieve Coarse, No. 10 to No. 4 Medium, No. 40 to No. 10 Fine, No. 200 to No. 40	Clean Sands Less than 5% fines	SW WELL GRADED SAND
			SP POORLY GRADED SAND
		Sands with fines More than 12% fines	SM SILTY SAND
			SC CLAYEY SAND
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays – Liquid Limit less than 50 Low to medium plasticity	Inorganic	CL LEAN CLAY
			ML SILT
		Organic	OL ORGANIC CLAY
			OS ORGANIC SILT
	Silts and Clays – Liquid Limit 50 or more Medium to high plasticity	Inorganic	CH FAT CLAY
			MH ELASTIC SILT
		Organic	OH ORGANIC CLAY
			OS ORGANIC SILT
Highly Organic Soils	Primarily organic matter, dark in color and organic odor	PT	PEAT

## II. DEFINITION OF SOIL COMPONENT PROPORTIONS (ASTM D2487)

				Examples
Adjective Form	GRAVELLY SANDY	>30% to <50% coarse grained component in a fine-grained soil		GRAVELLY LEAN CLAY
	CLAYEY SILTY	>12% to <50% fine grained component in a coarse-grained soil		SILTY SAND
"With"	WITH GRAVEL WITH SAND	>15% to <30% coarse grained component in a fine-grained soil		FAT CLAY WITH GRAVEL
	WITH GRAVEL WITH SAND	>15% to <50% coarse grained component in a coarse-grained soil		POORLY GRADED GRAVEL WITH SAND
	WITH SILT WITH CLAY	>5% to <12% fine grained component in a coarse-grained soil		POORLY GRADED SAND WITH SILT

## III. GLOSSARY OF MISCELLANEOUS TERMS

- SYMBOLS** ..... Unified Soil Classification Symbols are shown above as group symbols. A dual symbol "-" indicates the soil belongs to two groups. A borderline symbol "/" indicates the soil belongs to two possible groups.
- FILL**..... Man-made deposit containing soil, rock and often foreign matter.
- PROBABLE FILL**..... Soils which contain no visually detected foreign matter but which are suspect with regard to origin.
- DISINTEGRATED ROCK (DR)**..... Residual materials with a standard penetration resistance (SPT) between 60 blows per foot and refusal. Refusal is defined as an SPT of 100 blows for 2" or less penetration.
- PARTIALLY WEATHERED ROCK (PWR)**..... Residual materials with a standard penetration resistance (SPT) between 100 blows per foot and refusal. Refusal is defined as an SPT of 100 blows for 2" or less penetration.
- BOULDERS & COBBLES** ..... Boulders are considered rounded pieces of rock larger than 12 inches, while cobbles range from 3 to 12-inch size.
- LENSES**..... 0 to ½-inch seam within a material in a test pit.
- LAYERS**..... ½ to 12-inch seam within a material in a test pit.
- POCKET** ..... Discontinuous body within a material in a test pit.
- MOISTURE CONDITIONS**..... Wet, moist or dry to indicate visual appearance of specimen.
- COLOR** ..... Overall color, with modifiers such as light to dark or variation in coloration.



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-1  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland  
**Contractor Foreman:** R. Mohler  
**Schnabel Representative:** S. Celik  
**Equipment:** CME 550B  
**Method:** 2-1/4" I.D. Hollow Stem Auger  
**Hammer Type:** Auto Hammer (140 lb)  
**Dates Started:** 5/22/12 **Finished:** 5/22/12  
**Location:** See Location Plan  
**Ground Surface Elevation:** 40.4 (ft) **Total Depth:** 30.0 ft

Groundwater Observations					
	Date	Time	Depth	Casing	Caved
Encountered	5/22	---	Dry	---	---
Completion	5/22	---	-	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DATA		TESTS	REMARKS
					DEPTH	DATA		
0.6	Topsoil		39.8			SS 5+5+4 REC=15", 83%		
2.5	FILL, sampled as sandy lean clay; moist, dark reddish brown, contains gravel and asphalt SANDY LEAN CLAY; moist, reddish brown, estimated <5% roots Change: with streaks of black	FILL CL	37.9	A B		SS 3+2+2 REC=12", 67%	PP = 0.75 tsf	
					5	SS 2+2+4 REC=16", 89%	PP = 0.75 tsf	
8.5	SANDY FAT CLAY; moist, gray and brownish red, trace orangish brown Change: brownish red with mottles of gray	CH	31.9			SS 1+2+4 REC=18", 100%	PP = 0.75 tsf	
					15	SS 3+4+7 REC=18", 100%	PP = 3.50 tsf	
					20	SS 6+8+11 REC=18", 100%	PP = 3.50 tsf	
					25	SS 3+3+6 REC=18", 100%	PP = 0.75 tsf	
28.5	SANDY LEAN CLAY; moist, brownish gray, estimated 5 - 10% silt pockets, estimated <5% mica, trace dark gray and red	CL	11.9			SS 3+3+4 REC=18", 100%	PP = NA tsf	
30.0			10.4		30			

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS: 11612039.GPJ, SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT, 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-2  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** R. Mohler

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/23/12 **Finished:** 5/23/12

**Location:** See Location Plan

**Ground Surface Elevation:** 45.9 (ft) **Total Depth:** 30.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
Encountered	5/23	---	-	---	---
Completion	5/23	---	-	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DATA		TESTS	REMARKS
					DEPTH	DATA		
0.4	Asphalt		45.5					
0.8	GRAVEL		45.1	A				
2.5	FILL, sampled as sandy lean clay; moist, brown, contains asphalt	FILL	43.4			SS 1+2+3 REC=16", 89%	PP = 0.25 tsf	
	SANDY LEAN CLAY; moist, brown, estimated <5% organics	CL		B	5	SS 2+2+2 REC=18", 100%	PP = 1.00 tsf	
8.5	CLAYEY SAND; moist, gray and orangish brown, estimated <5% gravel		37.4			SS 2+3+3 REC=12", 67%		
		SC		C2	10	SS 3+6+10 REC=16", 89%		
					15	SS 6+9+11 REC=18", 100%		
18.5	SANDY FAT CLAY; moist, brownish gray, trace dark brown		27.4			SS 8+13+16 REC=18", 100%	PP > 4.50 tsf	
	Change: with speckles of brown	CH		C1	20	SS 9+12+17 REC=18", 100%	PP = 3.75 tsf	
	Change: red with mottles of gray				25	SS 6+11+16 REC=18", 100%	PP > 4.50 tsf	
30.0	Bottom of Boring at 30.0 ft. Boring grouted upon completion.		15.9		30			

pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS-11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-3  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland  
**Contractor Foreman:** R. Mohler  
**Schnabel Representative:** S. Celik  
**Equipment:** CME 550B  
**Method:** 2-1/4" I.D. Hollow Stem Auger  
**Hammer Type:** Auto Hammer (140 lb)  
**Dates Started:** 5/22/12 **Finished:** 5/22/12  
**Location:** See Location Plan  
**Ground Surface Elevation:** 51.6 (ft) **Total Depth:** 30.0 ft

Groundwater Observations					
	Date	Time	Depth	Casing	Caved
Encountered	5/22	---	-	---	---
Completion	5/22	---	-	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.4	Topsoil		51.2	A		SS 5+8+9 REC=14", 78%	MC = 8.2%	
2.5	PROBABLE FILL, sampled as sandy silt; moist, orangish brown and brown, contains gravel	FILL	49.1					
	FAT CLAY WITH SAND; moist, brown with speckles of reddish brown, estimated <5% gravel, estimated <5% roots Change: gray with mottles of reddish brown, no gravel or roots	CH		C1	5	SS 3+4+5 REC=15", 83%	MC = 25.2% PP = 1.50 tsf	
	Change: gray with mottles of reddish brown, no gravel or roots				10	SS 3+3+4 REC=12", 67%	MC = 30.8% PP = 1.00 tsf	
	Change: brownish gray with streaks of brown, estimated <5% gravel							LL = 61 PL = 22 MC = 22.2% % Passing #200 = 72.4 PP = 2.75 tsf
13.5	CLAYEY SAND; moist, light brownish gray	SC	38.1	C2	15	SS 5+9+11 REC=18", 100%		
	Change: dark orangish brown							
19.8	SANDY LEAN CLAY; moist, light brownish gray	CL	31.8	C1	20	SS 9+15+15 REC=18", 100% SS	PP = NA tsf	
23.5	SANDY FAT CLAY; moist, dark brownish gray	CH	28.1			25	SS 6+11+14 REC=18", 100%	PP > 4.50 tsf
	Change: brown with mottles of gray							PP > 4.50 tsf
30.0	Bottom of Boring at 30.0 ft. Boring grouted upon completion.		21.6		30	SS 11+13+17 REC=18", 100%		

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS: 11612039.GPJ, SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT, 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-4A  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** R. Mohler

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/21/12 **Finished:** 5/21/12

**Location:** See Location Plan

**Ground Surface Elevation:** 52.5 (ft) **Total Depth:** 30.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
<b>Encountered</b> ▽	5/21	---	24.0'	---	---
<b>Completion</b> ▼	5/21	---	21.0'	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.2	Topsoil		52.3					
2.5	FILL, sampled as sandy lean clay; moist, brown and black, contains asphalt, brick, glass and roots	FILL	50.0	A		SS 3+4+5 REC=10", 56%	MC = 16.8%	
5.0	PROBABLE FILL, sampled as sandy silt with gravel; moist, reddish brown and dark brown	FILL	47.5		5	SS 3+5+5 REC=8", 44%	MC = 12.5%	
8.5	SANDY LEAN CLAY; moist, brown and gray, trace black	CL	44.0			SS 3+3+3 REC=15", 83%	MC = 19.8% PP = 1.50 tsf	
13.5	SANDY FAT CLAY; moist, reddish brown with mottles of gray	CH	39.0	C1	10	SS 4+6+8 REC=18", 100%	MC = 26.0% PP = 3.00 tsf	
18.5	CLAYEY SAND; moist, light brownish gray	SC	34.0	C2	15	SS 8+12+15 REC=18", 100%		
23.5	POORLY GRADED SAND; moist, light gray, estimated 5 - 10% clay	SP	29.0		20	SS 11+17+21 REC=18", 100%		
30.0	SANDY FAT CLAY; moist, gray with streaks of brown	CH	22.5	C1	25	SS 5+6+5 REC=18", 100%	PP = 3.50 tsf	
	Change: dark brown and gray				30	SS 6+9+13 REC=18", 100%	PP > 4.50 tsf	

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
Boring offset from original location (B-4) due to location in concrete driveway and blocking access to school facility.  
Boring offset about 10 ft to the northwest of the original staked location (approximately 13 ft to the northwest of the chain link fence and 34 ft northeast of the sidewalk bordering Sumner Road), B-4A. Elevation estimated from topographic plans.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS 11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-5  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** V. Monzanes

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/17/12 **Finished:** 5/17/12

**Location:** See Location Plan

**Ground Surface Elevation:** 46.4 (ft) **Total Depth:** 30.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
Encountered	5/17	---	Dry	---	---
Completion	5/17	---	Dry	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.3	Topsoil		46.0					
	FILL, sampled as sandy silt; moist, dark brown, contains roots and asphalt	FILL				SS 3+3+4 REC=12", 67%		
2.5	PROBABLE FILL, sampled as sandy fat clay; moist, brownish gray and reddish brown, contains asphalt	FILL	43.9	A		SS 3+3+5 REC=6", 33%		
5.0	SANDY LEAN CLAY; moist, light brownish gray and brown, estimated <5% roots	CL	41.4	C1	5	SS 5+6+8 REC=18", 100%	PP = 0.75 tsf	
8.5	CLAYEY SAND; moist, light yellowish brown, estimated 5 - 10% lignite		37.9		10	SS 8+10+12 REC=18", 100%		
	Change: orangish brown and brown	SC		C2	15	SS 5+8+10 REC=18", 100%		
18.5	SANDY FAT CLAY; moist, gray		27.9		20	SS 3+6+7 REC=18", 100%	PP = 3.25 tsf	
	Change: dark brown and bluish gray	CH		C1	25	SS 6+14+16 REC=18", 100%	PP > 4.50 tsf	
	Change: dark brown							
30.0			16.4		30	SS 7+14+19 REC=18", 100%	PP > 4.50 tsf	

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS-11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-6  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland  
**Contractor Foreman:** R. Mohler  
**Schnabel Representative:** S. Celik  
**Equipment:** CME 550B  
**Method:** 2-1/4" I.D. Hollow Stem Auger  
  
**Hammer Type:** Auto Hammer (140 lb)  
**Dates Started:** 5/18/12 **Finished:** 5/18/12  
**Location:** See Location Plan  
  
**Ground Surface Elevation:** 44.4 (ft) **Total Depth:** 30.0 ft

Groundwater Observations						
	Date	Time	Depth	Casing	Caved	
Encountered	5/18	---	13.5'	---	---	
Completion	5/18	---	Dry	---	---	

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.5	Topsoil		43.9					
	FILL, sampled as silty sand; moist, brown, contains roots and gravel	FILL		A		SS 3+4+5 REC=16", 89%		
2.5	SANDY FAT CLAY; moist, light brown and light orangish brown	CH	41.9	B		SS 4+4+6 REC=16", 89%	PP = 2.25 tsf	
5.0	SANDY FAT CLAY; moist, light brownish gray and brown, estimated <5% roots	CH	39.4	C1	5	SS 3+5+6 REC=18", 100%	PP = 2.50 tsf	
8.5	CLAYEY SAND; moist, orangish brown and brown		35.9		10	SS 4+8+11 REC=18", 100%		
	Change: orangish brown and gray	SC		C2	15	SS 5+8+4 REC=18", 100%		
18.5	SANDY FAT CLAY; moist, bluish gray and greenish brown		25.9		20	SS 4+7+7 REC=18", 100%	PP = 0.75 tsf	
	Change: dark brown	CH		C1	25	SS 6+13+19 REC=18", 100%	PP > 4.50 tsf	
30.0	Change: brownish gray with mottles of brown		14.4		30	SS 8+10+20 REC=18", 100%	PP > 4.50 tsf	

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS: 11612039.GPJ; SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT; 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-7  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** R. Mohler

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/18/12 **Finished:** 5/18/12

**Location:** See Location Plan

**Ground Surface Elevation:** 43.3 (ft) **Total Depth:** 35.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
<b>Encountered</b>	5/18	---	Dry	---	---
<b>Completion</b>	5/18	---	Dry	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.5	Topsoil FILL, sampled as sandy silt; moist, brown, contains gravel Change: contains roots and brick	FILL	42.8	A		SS 3+5+6 REC=16", 89%		
5.0	SANDY LEAN CLAY; moist, reddish brown, estimated <5% gravel	CL	38.3		5	SS 1+3+3 REC=18", 100%	PP = 1.25 tsf	
8.5	SANDY FAT CLAY; moist, brown with mottles of reddish brown and gray Change: reddish brown	CH	34.8	C1	10	SS 3+4+5 REC=18", 100%	PP = 2.50 tsf	
	Change: with mottles of brown				15	SS 5+7+10 REC=18", 100%	PP > 4.50 tsf	
	Change: bluish gray with mottles of brownish red				20	SS 4+6+11 REC=18", 100%	PP = 2.75 tsf	
	Change: bluish gray with mottles of greenish brown, estimated <5% lignite				25	SS 2+3+5 REC=18", 100%	PP = 1.00 tsf	
					30	SS 3+5+6 REC=18", 100%	PP = 2.25 tsf	
33.5	SANDY ELASTIC SILT; moist, gray and brown	MH	9.8			SS 3+4+6 REC=18", 100%	PP = NA tsf	
35.0	Bottom of Boring at 35.0 ft. Boring grouted upon completion.		8.3					

TEST BORING LOG BORING LOGS 11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12

pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-8  
**Contract Number:** 11612039  
**Sheet:** 1 of 2

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** R. Mohler

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/22/12 **Finished:** 5/22/12

**Location:** See Location Plan

**Ground Surface Elevation:** 36.8 (ft) **Total Depth:** 40.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
<b>Encountered</b> ▽	5/22	---	28.0'	---	---
<b>Completion</b> ▼	5/22	---	35.0'	---	---

TEST BORING LOG BORING LOGS 11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
0.2	Concrete		36.6					
2.5	PROBABLE FILL, sampled as silty sand; moist, brown	FILL	34.3	A		SS 3+3+4 REC=15", 83%		
5.0	PROBABLE FILL, sampled as clayey sand; moist, brown	FILL	31.8	B	5	SS 2+2+2 REC=12", 67%	MC = 16.0%	
8.5	SANDY LEAN CLAY; moist, brown and reddish brown	CL	28.3		10	SS 3+3+3 REC=14", 78%	LL = 37 PL = 20 MC = 20.6% % Passing #200 = 62.3	
13.5	SANDY FAT CLAY; moist, reddish brown with speckles of black	CH	23.3		15	SS 3+5+7 REC=18", 100%	PP = 2.25 tsf	
	SANDY LEAN CLAY; moist, reddish brown and brown	CL			20	SS 2+3+3 REC=10", 56%	PP = 0.75 tsf	
	Change: gray and light brown			C1	25	SS 2+3+4 REC=18", 100%	PP = 1.00 tsf	
	Change: dark grayish brown				30	SS 2+2+3 REC=18", 100%	PP = 0.25 tsf	
	Change: very moist, gray and brown					SS 2+3+3 REC=8", 44%	PP = NA tsf	slight petroleum odor
33.5	SANDY FAT CLAY; moist, reddish brown	CH	3.3			SS 2+3+4	PP = 1.00 tsf	

(continued)



**Schnabel** TEST BORING LOG  
ENGINEERING

Project: Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

Boring Number: **B-8**  
Contract Number: 11612039  
Sheet: 2 of 2

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING		TESTS	REMARKS
					DEPTH	DATA		
40.0	SANDY FAT CLAY; moist, reddish brown <i>(continued)</i>  Change: dark brown and brown	CH 	-3.2	C1		REC=18", 100%  SS 7+14+18 REC=18", 100%	PP > 4.50 tsf	

Bottom of Boring at 40.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-9  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** R. Mohler

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/23/12 **Finished:** 5/23/12

**Location:** See Location Plan

**Ground Surface Elevation:** 33.8 (ft) **Total Depth:** 30.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
<b>Encountered</b> ▽	5/23	---	14.0'	---	---
<b>Completion</b> ▼	5/23	---	26.0'	---	---

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DATA		TESTS	REMARKS
					DEPTH	DATA		
0.4	Topsoil FILL, sampled as sandy lean clay; moist, reddish brown, contains gravel and roots	FILL	33.4			SS 4+3+3 REC=14", 78%		
5.0	FILL, sampled as sandy lean clay; moist, red with mottles of light brown, trace black  Change: reddish brown  Change: contains asphalt	FILL	28.8	A	5	SS 2+3+4 REC=5", 28%		
					10	SS 1+1+2 REC=5", 28%		
					15	SS 8+7+2 REC=8", 44%		
18.5	SANDY LEAN CLAY; moist, brown	CL	15.3	B	20	SS 3+7+6 REC=8", 44%	PP = 0.00 tsf	
23.5	SANDY LEAN CLAY; moist, brown and gray, estimated <5% lignite	CL	10.3	C1	25	SS 2+2+3 REC=18", 100%	PP = 0.25 tsf	
28.5	SILTY SAND; wet, gray	SM	5.3	C2				
30.0	Bottom of Boring at 30.0 ft. Boring grouted upon completion.		3.8		30	SS 3+4+4 REC=18", 100%		

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS 11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12



**Project:** Barry Farms Recreation Center  
1230 Sumner Road SE  
Washington, DC

**Boring Number:** B-10  
**Contract Number:** 11612039  
**Sheet:** 1 of 1

**Contractor:** Connelly and Associates, Inc.  
Frederick, Maryland

**Contractor Foreman:** V. Monzanes

**Schnabel Representative:** S. Celik

**Equipment:** CME 550B

**Method:** 2-1/4" I.D. Hollow Stem Auger

**Hammer Type:** Auto Hammer (140 lb)

**Dates Started:** 5/17/12 **Finished:** 5/17/12

**Location:** See Location Plan

**Ground Surface Elevation:** 43.8 (ft) **Total Depth:** 30.0 ft

**Groundwater Observations**

	Date	Time	Depth	Casing	Caved
Encountered $\nabla$	5/17	---	12.0'	---	---
Completion $\nabla$	5/17	---	26.0'	---	---
Casing Pulled $\nabla$	5/17	---	16.0'	---	-

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DATA		TESTS	REMARKS
					DEPTH	DATA		
0.3	Topsoil SANDY SILT; moist, brown, estimated <5% roots Change: light brown	ML	43.5	B		SS 2+2+3 REC=16", 89%		
5.0	CLAYEY SAND; moist, light brown	SC	38.8		5	SS 2+4+6 REC=18", 100%		
8.5	POORLY GRADED SAND; moist, light brownish gray	SP	35.3	C2	10	SS 5+8+8 REC=18", 100%		
13.5	SANDY LEAN CLAY; moist, light grayish brown	CL	30.3		15	SS 4+8+8 REC=18", 100%	PP = NA tsf	
18.5	SANDY FAT CLAY; moist, bluish gray and brown Change: dark brown	CH	25.3	C1	20	SS 8+8+11 REC=2", 11%	PP = 3.25 tsf	
					25	SS 4+7+7 REC=14", 78%	PP > 4.50 tsf	
30.0	Change: gray with speckles of red				30	SS 5+10+15 REC=18", 100%	PP > 4.50 tsf	
						SS 5+11+13 REC=18", 100%		

Bottom of Boring at 30.0 ft.  
Boring grouted upon completion.  
pp = pocket penetrometer (unconfined compressive strength)  
NA = reading could not be obtained from sample

TEST BORING LOG BORING LOGS-11612039.GPJ SCHNABEL DATA TEMPLATE 2008\_07\_06.GDT 6/14/12

# APPENDIX B

## SOIL LABORATORY TEST DATA

Summary of Laboratory Tests  
Gradation Curves

# Summary Of Laboratory Tests

Boring No.	Sample Depth ft	Sample Type	Description of Soil Specimen	Natural Moisture (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	% Retained No. 4 Sieve
	Elevation ft								
B-3	0.0 - 1.5	Jar		8.2	--	--	--	--	--
B-3	2.5 - 4.0	Jar		25.2	--	--	--	--	--
B-3	5.0 - 6.5	Jar		30.8	--	--	--	--	--
B-3	8.5 - 10.0	Jar	FAT CLAY WITH SAND (CH), brown	22.2	61	22	39	72.4	0.3
B-4	1.0 - 2.5	Jar		16.8	--	--	--	--	--
B-4	2.5 - 4.0	Jar		12.5	--	--	--	--	--
B-4	5.0 - 6.5	Jar		19.8	--	--	--	--	--

- 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



**Project:** Barry Farms Recreation Center

DYNAMIC LAB SUMMARY BARRY FARMS TEST RESULTS.GPJ SCHNABEL DATA TEMPLATE 2008\_04\_22.GDT 6/11/12

# Summary Of Laboratory Tests

Boring No.	Sample Depth ft	Sample Type	Description of Soil Specimen	Natural Moisture (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	% Retained No. 4 Sieve
	Elevation ft								
B-4	8.5 - 10.0	Jar		26.0	--	--	--	--	--
B-8	2.5 - 4.0	Jar		16.0	--	--	--	--	--
B-8	5.0 - 6.5	Jar	SANDY LEAN CLAY (CL), brown	20.6	37	20	17	62.3	0.0

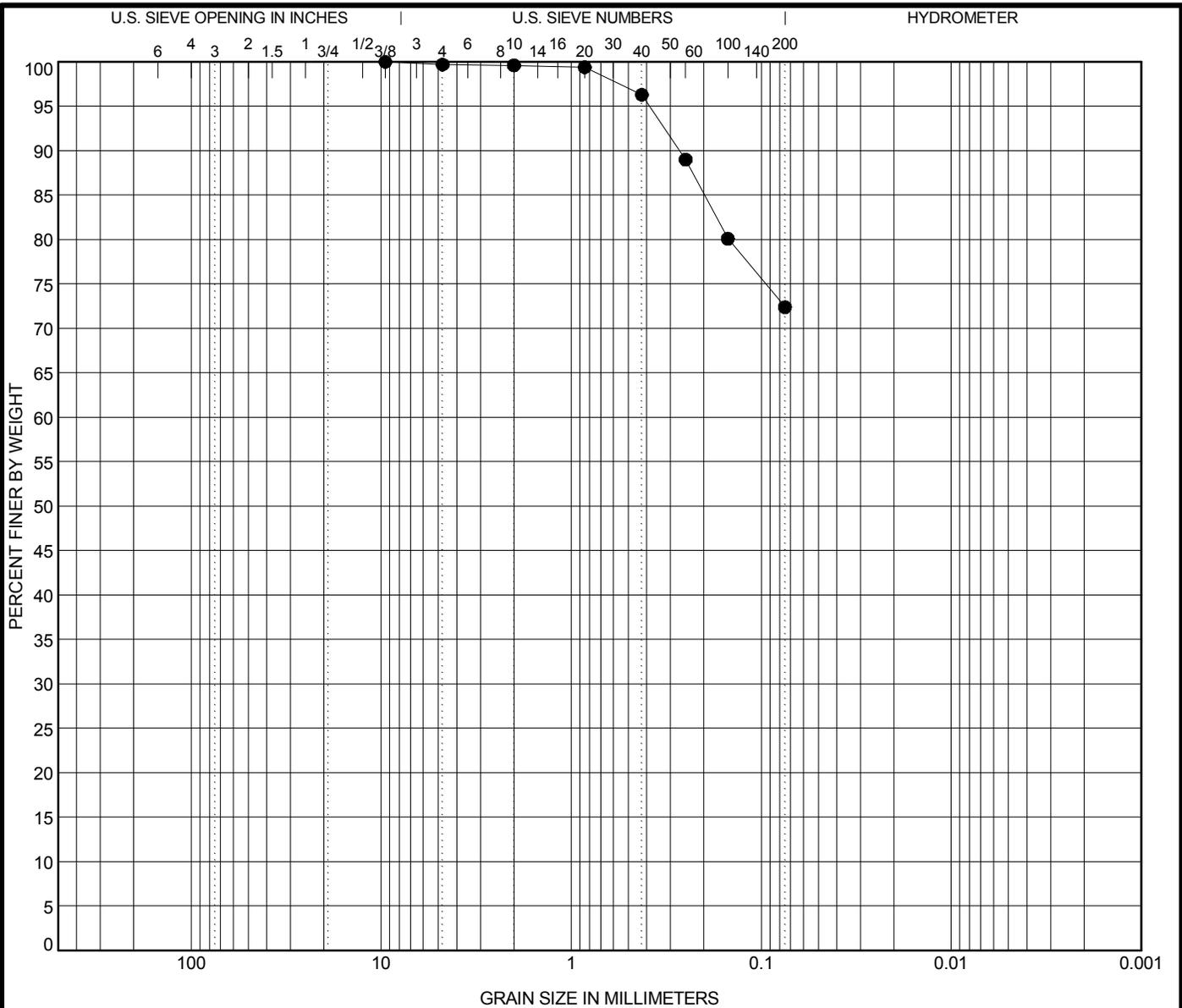
DYNAMIC LAB SUMMARY BARRY FARMS TEST RESULTS.GPJ SCHNABEL DATA TEMPLATE 2008\_04\_22.GDT 6/11/12

- 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



**Project:** Barry Farms Recreation Center

SIEVE 1/SHEET BARRY FARMS TEST RESULTS.GPJ SCHNABEL DATA TEMPLATE 2008 04 22.GDT 6/11/12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen	Sample Description	LL	PL	PI				
B-3 8.5 ft	FAT CLAY WITH SAND (CH), brown	61	22	39				
Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D6913	9.5				0.3	27.3	72.4	

Percent Finer								
Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4	3/8 in.
% Finer	72.4	80.1	89.0	96.3	99.4	99.6	99.7	100.0

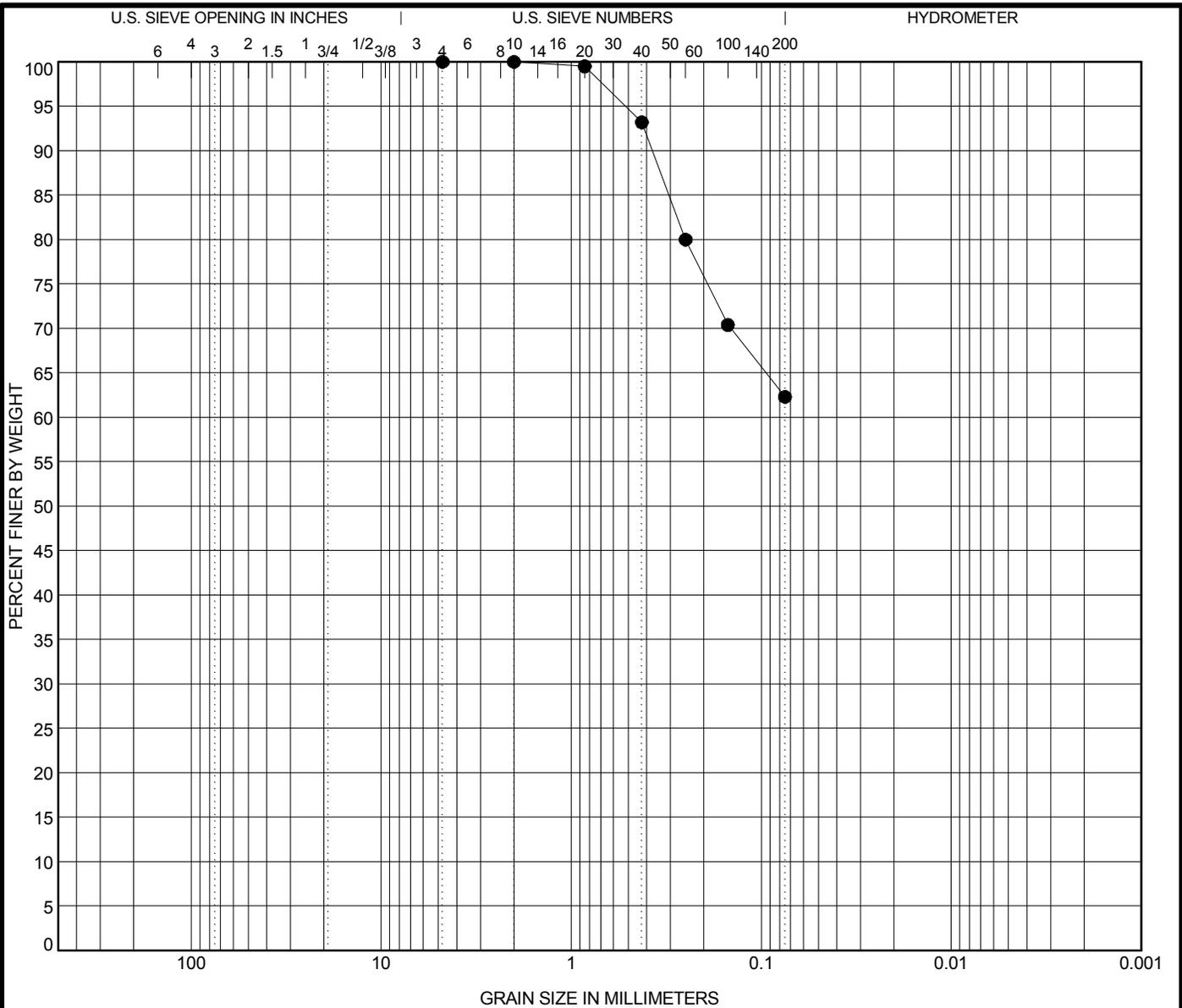


**GRADATION CURVE**

**Project:** Barry Farms Recreation Center

**Contract:** 11612039.00

SIEVE 1/SHEET BARRY FARMS TEST RESULTS.GPJ SCHNABEL DATA TEMPLATE 2008 04 22.GDT 6/11/12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen	Sample Description	LL	PL	PI				
B-8 5.0 ft	SANDY LEAN CLAY (CL), brown	37	20	17				
Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D6913	4.75				0.0	37.7	62.3	

**Percent Finer**

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	62.3	70.4	80.0	93.2	99.5	100.0	100.0



**GRADATION CURVE**

**Project:** Barry Farms Recreation Center

**Contract:** 11612039.00

**DESIGN-BUILD AGREEMENT  
BARRY FARM RECREATION CENTER**

**BY AND BETWEEN**

**THE DEPARTMENT OF GENERAL SERVICES  
AND**

**[SELECTED OFFEROR]**

**DESIGN-BUILD AGREEMENT  
FOR BARRY FARM RECREATION CENTER  
[CONTRACT NUMBER]**

**THIS AGREEMENT** (“Agreement”) is made by and between the **DISTRICT OF COLUMBIA GOVERNMENT**, acting by and through its **DEPARTMENT OF GENERAL SERVICES** (the “Department”) and **[SELECTED OFFEROR]**, duly organized under the laws of \_\_\_\_\_, and with a place of business at \_\_\_\_\_ (the “Design-Builder”).

**WITNESSETH:**

**WHEREAS**, the Department wishes to retain the Design-Builder to provide design-build services for the construction of the Barry Farm Recreation Center, located at 1230 Sumner Road, SE, Washington, DC (the “Project”). The Project includes two phases: Preconstruction and Construction;

**WHEREAS**, the Department has commissioned a preliminary set of drawings and specifications. Such drawings and specifications are incomplete;

**WHEREAS**, subject to the terms and conditions set forth in the Contract, the Design-Builder wishes to further complete the drawings and specifications and to provide the construction and related services necessary to complete the Project;

**WHEREAS**, the Department has retained the services of a Program Manager (the “Program Manager”) to advise it concerning the Project; and

**WHEREAS**, the Department desires that the project be completed no later than May 15, 2014.

**NOW, THEREFORE**, the Department and Design-Builder, for the consideration set forth herein, mutually agree as follows.

**ARTICLE 1  
GENERAL PROVISIONS**

**Section 1.1 Relationship of Parties.** The Design-Builder accepts the relationship of trust and confidence established with the Department by this Agreement, and covenants with the Department to furnish the Design-Builder’s reasonable skill and judgment and to cooperate with the Program Manager in furthering the interests of the Department. The Design-Builder shall use its best efforts to perform the Project in an expeditious and economical manner consistent with the interests of the Department. The Department shall endeavor to promote harmony and cooperation among the Department, Design-Builder, the design component of the Design-Builder (the “Architect/Engineer”), the Program Manager, and other persons or entities

employed by the Department for the Project. In performing its duties under this Contract, the Design-Builder shall at all times use the standard of care used by Design-Builders that construct state-of-the-art recreation facilities in large, urban areas. Whenever the term “competent” is used herein to describe the Design-Builder’s actions or duties, that term shall refer to the level of competence customarily possessed by those Design-Builders that construct elementary schools in large, urban areas.

**Section 1.2 Project Description.** As a general description, the Project consists of Preconstruction, Design, and Construction Services as well as Abatement and Demolition Services necessary to demolish the existing Barry Farm Recreation Center and to fully construct the new Barry Farm Recreation Center of approximately 47,000 square feet (32,000 sq. ft. for the recreation center facility as well as a partially below-grade parking structure of approximately 15,000 sq. ft.) as well as a synthetic turf athletic field, playgrounds and other site improvements in accordance with the drawings and specifications attached as **Exhibit [ ]** (the “Design Development Documents”). The new Barry Farm Recreation Center shall be designed and constructed in accordance with the United State Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System™, with the goal of achieving, at a minimum, LEED Silver certification, however, it Department desires that a higher level of certification be achieved if possible.

**Section 1.3 Program Manager.** The Department has engaged a Program Manager (or “PM”) to provide certain program management functions. Such Program Manager shall, at all times, be acting solely for the benefit of the Department, not the Design-Builder. The Design-Builder acknowledges that the Program Manager is not authorized to modify any of the rights or obligations of the Department or the Design-Builder pursuant to this Contract, or to issue Change Orders or Change Directives.

**Section 1.4 General Description of Design-Builder’s Duties.** The Design-Builder shall perform the services described in Articles 2 through 4. The Design-Builder shall supply and furnish at the location where the Work is to be performed all design services, labor, materials, equipment, tools, services, and supervision, and shall bear all items of expense, necessary to complete and satisfactorily perform this Contract, except such items that the Department, in this Contract, specifically agrees to supply or furnish to or for the use of Design-Builder. Any labor, materials, equipment, tools, services or supervision not specifically described in this Contract, but which may be fairly implied as required thereby or necessary to properly complete the Contract Work, shall be deemed within the scope of the Contract Work and shall be provided by Design-Builder at Design-Builder’s sole expense.

The services to be provided under Article 2 constitute the preconstruction phase services to be performed by the Design-Builder (the “Preconstruction Phase Services”). Article 3 provides for the process by which the Design-Builder and the Department shall agree upon a Guaranteed Maximum Price (“GMP”) for this Project. Article 4 constitutes the design-build phase during which the Design-Builder shall carry-out the bulk of the construction and manage the completion of the design (the “Construction Phase Services”).

**ARTICLE 2**  
**DESIGN-BUILDER'S PRECONSTRUCTION SERVICES**

**Section 2.1 Consultation and Analysis.** Throughout the Preconstruction Phase, the Design-Builder shall schedule and attend regular meetings with the Department and the Program Manager. In cooperation with the Department and the Program Manager, the Design-Builder shall conduct value engineering, constructability reviews, and provide scheduling and cost analysis for each phase of design with the goal of developing an acceptable Guaranteed Maximum Price proposal, as is defined more fully in this Article. Without limiting the generality of the foregoing, the Design-Builder shall perform the following tasks:

- .1 The Design-Builder shall consult with the Department and the Program Manager regarding site improvements, and the selection of materials, building systems and equipment with respect to such issues as maintainability and initial versus life-cycle costs.
- .3 The Design-Builder shall provide recommendations on construction feasibility; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; and factors related to construction costs including estimates of alternative designs or materials, preliminary budgets and possible economies.

**Section 2.2 Preliminary Evaluation.**

**Section 2.2.1 Cost Estimate.** The Design-Builder shall within Twenty (20) days of a Notice to Proceed for Preconstruction Phase Services review the existing drawings and specifications and provide the Department and its Program Manager with a detailed cost estimate of the Project. To the extent such an estimate indicates that the estimated cost is likely to exceed the Department's budget for this Project, the Design-Builder shall include with such an estimate value engineering ideas that would eliminate the proposed overage. In addition, the Design-Builder shall provide the Department and its Program Manager with a written report that addresses the completeness of the existing design documents as well as a summary of any design work that needs to be completed.

**Section 2.2 Initial Project Schedule.** Within ten (10) days of the issuance of a Notice to Proceed for Preconstruction Phase Services, the Design-Builder shall submit to the Department for its approval a schedule of Preconstruction Phase activities. During the Preconstruction Phase, the Design-Builder shall monitor the Project's progress and promptly notify the Department of any delays, regardless of their cause, the causes of such delays, and the Design-Builder's best projection of the effect of such delays on the Substantial Completion, and Final Completion of the Project. The Department's receipt of, and lack of objection to, any schedule update showing Substantial or Final Completion later than the scheduled Substantial or Final Completion Date shall not be regarded as the Department's agreement that the Design-

Builder may have an extension of time, or as a waiver of any of the Department's rights, but merely as the Design-Builder's representation that, as a matter of fact, the Project may not be completed by the applicable Substantial or Final Completion Date. The Project Schedule shall be maintained and updated during the Preconstruction and Construction Phases.

### **Section 2.3 Design Services.**

**Section 2.3.3 Design Development.** Based on the Design-Builder's review of the existing design documents and the budget, schedule and other requirements for the project, the Design-Builder shall cause the design element of its team (the "Architect/Engineer") to further develop such documents into one or more set(s) of documents suitable for bidding with trade subcontractors (the "Bid Set"). The Design-Builder shall ensure that the Design Development Documents are progressed in a manner consistent with the Department's budget for the Project, *i.e.*, designed to budget. The Bid Set shall serve as the basis for the Guaranteed Maximum Price ("GMP") for the Project. The Design-Builder shall develop a GMP Proposal in accordance with Article 3 of this Contract.

The Bid Set shall contain at least the level of detail as contemplated for design development documents in the standard AIA agreement. With regard to the building's systems and finishes, however, a greater level of detail shall be provided. Specifically, the Bid Set shall coordinate the mechanical, electrical, plumbing, fire protection, fire alarm, elevators, parking, energy conservation, lighting, telecommunications, streetscaping, and landscaping of the Project in sufficient detail to establish final sizing criteria and capacities, square footage requirements, required chases and risers, clearances, equipment layout, and other related components for the Project. With regard to the finishes, the Bid Set shall provide a finish schedule and sketches showing key interior and exterior views. The finish documents shall contain a sufficient level of detail so as to permit both the Department and the Design-Builder to understand the level of quality and the aesthetic appearance of the finished Project. The Bid Set shall be subject to review and approval by the Department in accordance with Section 2.4 of this Contract.

### **Section 2.4 Trade Bids.**

**Section 2.4.1 Subcontractors and Suppliers; Bidding Procedures.** The Design-Builder shall seek to develop subcontractor interest in the Project. No later than October 15, 2012, the Design-Builder shall provide to the Department a written submission on the proposed bidding procedures. Such procedures shall include: (i) a list of proposed trades packages; (ii) a list of trade subcontractors that will be invited to bid on each such package; and (iii) a narrative description of the process.

**Section 2.4.2 Bidding.** Following the Department's approval of the Bid Set, the Design-Builder shall solicit bids from trade subcontractors and suppliers based on the Bid Set. The Design-Builder shall solicit a minimum of three (3) bids for each trade package unless such package has an expected value of less than One Hundred Thousand Dollars (\$100,000) or the Department approves otherwise. In addition to the information normally required in such bids,

the Design-Builder shall also require subcontractors to provide an estimate of the percentage of labor hours performed in completing the subcontracted work which will be performed by District residents.

The Design-Builder shall provide to the Department tabulations of the trade bids. Such bid tabulations shall include, in addition to pricing information, LSDBE Utilization information and Workforce Utilization Estimates, as defined in Section 2.4.3. The Design-Builder represents and warrants that the bid tabs so submitted shall fairly represent the results of the subcontractor bidding process and that the Design-Builder shall not misrepresent any such data to the Department or its Program Manager. The Design-Builder shall forfeit its Preconstruction Fee in the event it fails to solicit bids or provide bid tabulations as set forth in this Section 2.4.2.

**Section 2.4.3 Workforce Utilization.** In consultation with the Design-Builder and as part of negotiating and accepting the GMP, the Department shall establish a minimum requirement of the percentage labor hours for the Project which must be performed by District of Columbia residents (such requirement, the Workforce Utilization Goal). As part of the subcontractors' bids for the work, the Design-Builder shall require that each subcontractor submit an estimate of the total number of the hours that will be required to complete the subcontracted work, and the estimated number of hours of such work that will be performed by District residents (the "Workforce Utilization Estimate"). The Design-Builder shall submit with the bid tabulations required by Section 2.4.2 of this Agreement the Workforce Utilization Estimate provided by each subcontractor. The Design-Builder shall ensure that the Workforce Utilization Estimate is considered as part of its subcontractor selection process.

**Section 2.5 Value Engineering.** Based on the trade bids received, the Design-Builder shall prepare a written report of suggested value engineering strategies necessary to reconcile the costs of constructing the Project with the Project Budget. The Design-Builder shall meet with the Department's representatives to discuss any value engineering and changes in scope necessary to ensure that the performance specifications are met and that the Project Budget is not exceeded. Based on these discussions, the Architect/Engineer shall complete any revisions to the design documents and prepare any additional drawings necessary to complete the Project.

**Section 2.6 Long-Lead Time Items & Early Release Work.**

**Section 2.6.1 Long Lead Time Items.** The Design-Builder shall recommend to the Department a schedule for procurement of long-lead time items which will constitute part of the Work as required to meet the Project Schedule. If the Department so determines, it may direct the Design-Builder to purchase such long items prior to commencement of the Construction Phase. In the event the Department issues any such directive, the Design-Builder shall make such purchases as the agent for the Department and any such subcontracts or purchase orders shall be assignable to the Department in the event the Department terminates this Agreement or the parties are unable to agree upon a GMP. Upon the Department's acceptance of the Design-Builder's Guaranteed Maximum Price Proposal, all then existing contracts for such items shall

be assigned by the Department to the Design-Builder, who shall accept responsibility for such items as if procured by the Design-Builder.

**Section 2.6.2 Early Release Work.** The parties anticipate that demolition of the existing structure, pool, play structure and other site fixtures will commence during the preconstruction phase. Prior to undertaking such demolition or other early release work, the Design-Builder shall obtain the prior written approval of the Department.

**Section 2.7 Conformance with Laws.** It shall be the responsibility of the Design-Builder to perform the Contract in conformance with the Department's Procurement Regulations (5 DCMR § 3900 *et seq.*) and all statutes, laws, codes, ordinances, regulations, rules, requirements and orders of governmental bodies, including, without limitation, the U.S. Government and the District of Columbia government; and it is the sole responsibility of the Design-Builder to determine the Procurement Regulations, statutes, laws, codes, ordinances, regulations, rules, requirements and orders that apply and their effect on the Design-Builder's obligations thereunder. This Section 2.7 shall apply during both the Design and Preconstruction Phase and the Construction Phase.

**Section 2.8 Warranties and Representations**

**Section 2.8.1** All disclosures, representations, warranties, and certifications the Design-Builder makes in its proposal in response to the RFP shall remain binding and in effect throughout the term of the Contract. The Design-Builder reaffirms that all such disclosures, representations, warranties, and certifications are true and correct.

**Section 2.8.2** If any disclosure, representation, warranty or certification the Design-Builder has made or makes pursuant to the RFP or the Contract, including, without limitation, representations concerning the Design-Builder's construction or design experience and qualifications, claims or litigation history or financial condition, is materially inaccurate, that shall constitute a material breach of the Contract, entitling the Department to all available remedies.

**Section 2.8.3** The terms and conditions of Section 2.8 shall apply during both the Preconstruction and Construction Phases.

**Section 2.9 Responsibility for Agents and Contractors.** At all times and during both the Preconstruction and Construction Phases, the Design-Builder shall be responsible to the Department for any and all acts and omissions of the Design-Builder's agents, employees, Subcontractors, Sub-Subcontractors, material suppliers, and laborers, and the agents and employees of the Subcontractors, Sub-Subcontractors, material suppliers, and laborers performing or supplying Work in connection with the Project. This Section 2.9 shall apply during both the Preconstruction and Construction Phases.

**ARTICLE 3**  
**FORMATION OF GMP PROPOSAL**

**Section 3.1 General.** During the Preconstruction Phase, the Design-Builder shall cause the Architect/Engineer to prepare a set of Drawings and Specifications upon which the Design-Builder's Guaranteed Maximum Price for construction the Project will be based (such Drawings and Specifications are referred to herein as the "GMP Drawings & Specifications"). Based upon the GMP Drawings & Specifications, the Design-Builder shall propose a Guaranteed Maximum Price (referred to as the "GMP Proposal"). The GMP Proposal shall be submitted in accordance with this Article. The Design-Builder acknowledges and understands that the GMP Drawings & Specifications will be based on the Bid Set and any value engineering strategies or other changes accepted by the Department, and that such GMP Drawings and Specifications shall be an advanced set of design development documents. Although complete construction documents will not be available and many details will not be shown on GMP Drawings & Specifications or will otherwise need to be adjusted, the Guaranteed Maximum Price proposed in the Design-Builder's GMP Proposal shall be intended to represent the Design-Builder's offer to Fully Complete the Project. As part of the GMP Amendment, the Design-Builder shall certify that the GMP established thereby (i) contains sufficient amounts to perform all Work necessary to Fully Complete the Project; and (ii) contains sufficient amounts to provide and construct any items or facilities that are not contained in the GMP Drawings & Specifications but which are necessary for a fully functioning, state of the art recreation center that represent a logical development of the existing design documents.. The Design-Builder will further covenant and agree in the GMP Amendment that it will perform all of the construction work necessary to Fully Complete the Project, including, without limitation, aspects of the Work that are not shown on the GMP Drawings and Specifications but which are a logical development of the design intent reflected in the GMP Drawings and Specifications, for an amount not to exceed the Guaranteed Maximum Price.

**Section 3.2 Review of GMP Drawings & Specifications.** The Department has selected the Design-Builder because of its special expertise in constructing similar projects. Before submitting its Guaranteed Maximum Price, the Design-Builder shall review the GMP Drawings & Specifications for accuracy, constructability and completeness and shall bring such deficiencies to the attention of the Department and shall cause its Architect/Engineer to address any such deficiencies. To the extent that any such deficiencies in the GMP Drawings & Specifications could have been identified by such review by a competent Design-Builder, such deficiencies shall not be the basis for a change in the GMP or delaying the Project Schedule.

**Section 3.3 Contingency.** The Cost of the Work shall include a Contingency, a sum established by the Department and the Design-Builder to cover, among other things costs necessary to address scope expansion that is a logical development of the design, issues arising under Section 3.2 and other costs which are properly reimbursable as Cost of the Work but not the basis for a Change Order, such as costs that were not reasonably foreseeable as of the effective date of this Agreement, including such items as emergencies, unforeseeable changes in market conditions for materials or labor, or subsurface, soils or site conditions that were neither

known nor reasonably discoverable as of the effective date of the Contract. During the Construction Phase, the Design-Builder shall keep the Program Manager informed as to the status of the Contingency and shall, at a minimum, (i) advise the Program Manager or any significant draws upon the Contingency in a timely manner; and (ii) provide the Program Manager with running status of the Contingency balance at least once every two (2) weeks.

**Section 3.4 Basis of Guaranteed Maximum Price.** The Design-Builder shall include with the GMP Proposal a written statement of its basis, which shall include:

- .1 A list of the Drawings and Specifications, including all addenda thereto, which were used in preparation of the GMP Proposal.
- .2 A list of allowances and a statement of their basis; provided, however, that only such allowances as are agreed to by the Department shall be included.
- .3 A list of the clarifications and assumptions made by the Design-Builder in the preparation of the GMP Proposal to supplement the information contained in the Drawings and Specifications. These clarifications will include specific reference to any exclusions from the building components, systems, and furniture, fixtures & equipment (FF&E) required by the Educational Specifications. Any such clarification or assumption that materially alters the functionality or aesthetics of the Work reflected in the GMP Drawings and Specification shall be brought to the attention of the Program Manager and the Department prior to submission of the proposal in sufficient time for any discrepancies to be reconciled.
- .4 The proposed Guaranteed Maximum Price, including a statement of the detailed cost estimate organized by trade categories, allowances, Contingency, and other items and the fee that comprise the Guaranteed Maximum Price.
- .5 An agreed upon design schedule that the Design-Builder has negotiated with its Architect/Engineer.
- .6 A proposed Construction Phase Schedule which shall include, but not be limited to, the Substantial and Final Completion Dates
- .7 An LSDBE Utilization Plan setting for the estimated dollar volume of the work that will be perform by small, local and disadvantaged business enterprises, as certified by the Department of Small and Local Business Development, upon which the GMP is based.
- .8 A Workforce Utilization Plan setting forth, by subcontractor, the percentage participation of District residents in performing the labor necessary for the Project upon which the proposed Guaranteed Maximum Price is based.

**Section 3.5 Department Review of GMP Proposal.** The Design-Builder shall meet with the Department to review the GMP Proposal and the written statement of its basis. In the event that the Department discovers any inconsistencies or inaccuracies in the information presented, the Department shall promptly notify the Design-Builder, who shall make appropriate adjustments to the GMP Proposal, its basis or both.

**Section 3.6 Department Acceptance of GMP Proposal.** The Department and the Design-Builder shall meet to negotiate over the terms of the GMP Proposal. Unless the Department accepts the GMP Proposal in writing on or before the date specified in the proposal for such acceptance and so notifies the Design-Builder, the GMP Proposal shall not be deemed accepted by the Department.

**Section 3.7 GMP Amendment.** Upon acceptance by the Department of the GMP Proposal, the Guaranteed Maximum Price and its basis shall be set forth in the Guaranteed Maximum Price Amendment (“GMP Amendment”). The GMP Amendment shall be in substantially the form of **Exhibit A** hereto. In the event an acceptable Guaranteed Maximum Price Proposal is not developed, the Contract will be terminated. In such event, the Design-Builder shall forfeit the Preconstruction Fee. In the event the Contract is terminated pursuant to this Section 3.8, the Department shall be free to use any of the information developed during the Preconstruction Phase to retain a new contractor to complete the Project.

**Section 3.8 Tax Exempt Status.** The Department expects that the Project will qualify as tax-exempt under the applicable laws, and such tax exemption shall be reflected in the Guaranteed Maximum Price.

**Section 3.9 Certification.** As part of the Guaranteed Maximum Price Proposal submitted in accordance with Article 3 of this Agreement, the Design-Builder agrees to specifically acknowledge and declare that the Contract Documents are sufficiently complete to have enabled the Design-Builder to determine the Cost of the Work therein in order to enter into the GMP Amendment and to enable the Design-Builder to agree to construct the Work outlined therein in accordance with applicable laws, statutes, building codes and regulations to the best of Design-Builder’s knowledge, and otherwise to fulfill all its obligations hereunder. The Design-Builder shall further acknowledge that it has visited the site, examined all conditions affecting the Work, is fully familiar with all of the conditions thereon and affecting the same, and, has carefully examined all drawings and specifications provided to it.

**Section 3.10** [intentionally omitted]

**Section 3.11** [intentionally omitted]

**Section 3.12 Extent of Responsibility and Soils Conditions**

**Section 3.12.1** The Design-Builder does not warrant or guarantee estimates and schedules except those that are included as part of the Guaranteed Maximum Price Amendment.

The recommendations and advice of the Design-Builder concerning design alternatives shall be subject to the review and approval of the Department and the Department's professional consultants.

**Section 3.12.2** During the Preconstruction Phase, the Design-Builder shall carefully examine all information the Department has provided concerning site conditions, including, but not limited to, soils and subsurface conditions, and shall carry out any further examinations, investigations, tests, borings, analyses and/or other studies of site conditions (including, but not limited to, surface, water, subsurface and soils conditions) that the Design-Builder deems necessary.

**Section 3.12.3** The Design-Builder will be held to have satisfied itself as to transportation, facilities, the kind of facilities required before and during construction of the Project, access, working space and to have become acquainted with the labor conditions, the ecological and environmental conditions to be followed in performing this Contract.

**Section 3.12.4** The Department expressly disclaims any representation or warranty that any information it has provided about the site is either accurate or complete. This disclaimer applies, without limitation, to any boring logs, geotechnical studies, or other data relating to site conditions, including, without limitation, soils or subsurface conditions. The Design-Builder, by entering into the Contract, agrees to assume all risks arising from site conditions, at or above the surface, foreseeable or unforeseeable, naturally occurring or man-made. The Design-Builder, however, shall be entitled to an equitable adjustment to Differing Soils Conditions and Hazardous Materials Remediation Costs in accordance with Section 3.13 of the Agreement. (The terms "Differing Soils Conditions" and "Hazardous Materials Remediation Costs" are defined in Article 16 of this Agreement.) Except as regards Differing Soils Conditions and Hazardous Materials Remediation Costs, the Design-Builder shall not be entitled to adjustments to the Substantial or Final Completion Date, the Guaranteed Maximum Price, the Preconstruction Fee, or the Design-Build Fee due to site condition of any kind, whether known or unknown at the time the GMP Amendment is entered into, and whether foreseeable at that time or not.

### **Section 3.13 Unsafe Materials and Hazardous Materials**

**Section 3.13.1** The Design-Builder shall not bring, spill or release onto the site asbestos, PCBs, or any other Hazardous Material that is not customarily used in a facility of the type and similar to the Project, and shall bring to the Department's attention any specification of such Hazardous Materials in the design documents. If the Design-Builder believes that anything in the Contract would require that it use or bring onto the site asbestos, PCBs, or any Hazardous Material that is not customarily used in a facility of the type and similar to the Project, it shall immediately inform the Department and seek direction before proceeding.

**Section 3.13.2** If the Design-Builder discovers Hazardous Materials on the site, it shall immediately notify the Department, in writing, and shall promptly coordinate with separate

contractors engaged by the Department to remove, treat, encapsulate, passivate, and/or dispose of the Hazardous Materials. The Design-Builder shall comply with all laws, including, without limitation, all laws relating to safety, health welfare, and protection of the environment, in removing, treating, encapsulating, passivating, and/or disposing of Hazardous Materials.

**Section 3.14 Assignment Upon Failure to Reach GMP.** In the event that the Department and the Design-Builder are unable to agree upon a GMP, the Department shall have the right to terminate this Agreement and the Design-Builder shall assign any trade Subcontracts to the Department upon such terms and conditions and at the time requested by the Department. In such event, the Design-Builder shall forfeit the Preconstruction Fee, and the Architect/Engineer shall only be entitled to earn 90% of the fees earned by the Architect/Engineer through the date of termination.

**Section 3.15 Initial Not-to-Exceed Amount.** Unless and until the GMP Amendment is executed and approved by the Council for the District of Columbia, this Contract has a not-to-exceed amount of [AMOUNT] (\$[NUMBER]) (such amount, the “Initial Not-to-Exceed Amount”). In no event shall the Contractor be entitled to recover more than such amount unless the Contractor is authorized to exceed such amount by the Department in advance and in writing. Prior to expending or committing any portion of the Initial Not-to-Exceed Amount, the Contractor shall obtain the Department’s written approval of such expenditure or commitment.

#### **ARTICLE 4 CONSTRUCTION PHASE**

**Section 4.1 General.** The Construction Phase shall commence when the GMP Amendment is executed by the Department and the Design-Builder and the Department issues a Notice to Proceed for Construction Phase Services. The Design-Builder shall, through Subcontractors or, with the written consent of the Department, with its own forces, perform all of the Work necessary to construct the Project so that it is complete, safe, and properly built in strict accordance with the GMP Drawings and Specifications and the other requirements of this Contract. Without limitation, the Design-Builder shall provide all of the labor, materials, tools, equipment, temporary services, and facilities necessary to complete the construction and installation of the Project. The Work shall be carried out in a good and workmanlike, first-class manner, and in timely fashion. All materials and equipment to be incorporated into the Project shall be new and previously unused, unless otherwise specified, and shall be free of manufacturing or other defects.

**Section 4.2 Design and Approval Process.** The Design-Builder is required to complete the design of the Project so that it includes all Work required by the GMP Drawings and Specifications. The Design-Builder shall be required to forward copies of all construction document packages and any material change thereto to the Department. The Department shall be given a reasonable period of time, in light of the Project Schedule and the needs of the Project, to review such documents. In all cases other than time sensitive changes arising from field conditions, the Department shall be provided with at least forty eight (48) hours to review such

documents and the Design-Builder shall not proceed with Work that is objected to by the Department until such Work is approved by the Department. The Department can disapprove the design construction document packages for any reason; provided, however, the Design-Builder shall be entitled to an adjustment to the GMP and/or the Contract Time if the Department disapproves a package unless such a package departs from the Scope of Work fairly reflected in the GMP Drawings and Specifications and in such an event the Design-Builder shall be required to prepare a revised design that complies with the GMP Drawings and Specifications and without any entitlement to an increase in the GMP or an adjustment of the Contract Time.

### **Section 4.3 Subcontracting and Administration**

**Section 4.3.1** It is contemplated that all or substantially all of the construction of the Project will be carried out by trade Subcontractors and that those trade subcontracts will be awarded through the competitive bid process contemplated in Section 2.4. The trade subcontractors will be under written contract with the Design-Builder. All subcontracts and agreements for the supply of equipment or materials awarded for the Project shall be fixed-price contracts unless otherwise expressly authorized by the Department, in writing; provided, however, that such subcontracts shall include unit prices or other appropriate contractual provisions designed to address coordination issues related to the fast-track nature of the Project and the fact that certain aspects of the Work will not have been fully designed when the subcontracts are purchased. The Design-Builder and its affiliates may not carry out trade work with its own forces without the Department's written permission, which permission may be withheld or conditioned by the Department in its sole and absolute judgment.

**Section 4.3.2** In addition to the open book reporting requirements set forth in Section 4.10, the Design-Builder shall provide to the Department a copy of all quotes or proposals submitted by potential Subcontractors.

**Section 4.3.3** The Design-Builder shall develop a purchasing strategy to address the expedited schedule and conditions of this Project and shall include appropriate provisions in the subcontracts to minimize the cost impact associated with such conditions. Such strategies may include, but are not limited to (i) obtaining from subcontractors unit price quotes for typical coordination items; (ii) setting aside allowances for coordination work; and (iii) such other techniques as may be employed by the Design-Builder.

**Section 4.3.4** The Design-Builder shall carefully document its procedures for making available bid packages to potential bidders, the contents of each bid package, discussions with bidders at any pre-bid meetings, bidders' compliance with bid requirements, all bids received, the Design-Builder's evaluations of all bids, and the basis for the Design-Builder's recommendation as to which bidders should be chosen. The Department shall be afforded access to all such records at all reasonable times so that, among other things, it may independently confirm the Design-Builder's adherence to all Contract requirements including, without limitation, affirmative action requirements and subcontracting requirements.

**Section 4.3.5** The Department may, in its sole discretion, reject any or all bids and proposals received for any bid package, and may require the Design-Builder to obtain new or revised bids or proposals.

**Section 4.3.6** The Department may, in its sole discretion, direct the Design-Builder to accept a bid from a qualified bidder other than the bidder to whom the Design-Builder recommends award of a subcontract or supply agreement. If the Department chooses this option, it shall issue a Change Order to the Design-Builder for any difference between the cost of the subcontract or supply agreement awarded and the bid price of the Subcontractor or supplier recommended by the Design-Builder, but without any adjustment to the Design-Build Fee.

**Section 4.3.7** The Department must approve all Subcontractors and suppliers. The Department may elect to review the form of any subcontract or agreement with a material supplier to insure that such contract incorporates the contractual provisions required by this Agreement.

**Section 4.3.8** The Design-Builder must contract for provision of all services and materials for the Project (other than Self-Performed Work) via written subcontracts or, for contracts requiring provision of materials or equipment only, and not labor, via written supply agreements. All subcontracts and supply agreements shall include the following provisions:

- .1 that, to the extent of the Work or supply within the agreement's scope, the Subcontractor or supplier is bound to the Design-Builder for the performance of all obligations which the Design-Builder owes the Department under the Contract;
- .2 that the Subcontractor or supplier is not in privity with the Department and shall not seek compensation directly from the Department on any third-party beneficiary, quantum meruit, or unjust enrichment claim, or otherwise, except as may be permitted by any applicable mechanic's lien law;
- .3 that the Department is a third-party beneficiary of the subcontract or supply agreement, entitled to enforce any rights thereunder for its benefit;
- .4 that the Subcontractor or supplier consents to assignment of its agreement to the Department, at the Department's sole option, if the Design-Builder is terminated for default;
- .5 that the Subcontractor or supplier shall comply immediately with a written order from the Department to the Design-Builder to suspend or stop work;
- .6 that the Subcontractor or supplier shall maintain records of all Work it is requested or authorized to do on a time and material or cost-plus basis, or with respect to claims that it has asserted on a time and materials or cost-plus basis, during the Project and for a period of time specified in the General Conditions and

requiring the Subcontractor or supplier to make those records available for review or audit by the Department during that time;

- .7 [Intentionally omitted]
- .8 that the Subcontractor shall obtain and maintain, throughout the Project, workers' compensation insurance in accordance with the laws of the District of Columbia (This provision is not applicable to supply agreements.);
- .9 that, if the Department terminates the Contract for convenience, the Design-Builder may similarly terminate the subcontract or supply agreement for convenience, upon seven (7) days' written notice to the Subcontractor or supplier, and that the Subcontractor or supplier shall, in such a case, be entitled only to the costs set forth in the Termination for Convenience provisions of this Agreement;
- .10 that the Department shall have the right to enter into a contract with the Subcontractor or supplier for the same price as its subcontract or supply agreement price less amounts already paid, if the Design-Builder files a voluntary petition in bankruptcy or has an involuntary petition in bankruptcy filed against it;
- .11 that, if it comes to the Department's attention that a Subcontractor or supplier has not been paid in timely fashion (other than for disputed amounts), and if the Design-Builder fails to cure the problem within five (5) calendar days after the Department gives it written notice of the problem, the Department may make payments to the Subcontractor or supplier and Design-Builder by joint check;
- .12 that the Subcontractor or supplier shall not be entitled to payment for defective or non-conforming work, materials or equipment, and shall be obligated promptly to repair or replace non-conforming work, materials or equipment at its own cost;
- .13 a provision substantially similar to Section 4.3.8 of this Agreement, requiring that Subcontractors and suppliers promptly pay Subcontractors and suppliers at lower tiers, imposing upon the Subcontractors and suppliers a duty to pay interest on late payments, and barring reimbursement for interest paid to lower tier Subcontractors or suppliers due to a Subcontractor's or supplier's failure to pay them in timely fashion;
- .14 a provision requiring that all Subcontractors at all tiers comply with the provisions of Article 11 (Economic Inclusion Goals); provided, however, that the Design-Builder may, in its reasonable discretion impose a different LSDBE subcontracting goal on some or all of its Subcontractors; provided, further, however, that nothing in this provision shall be deemed to excuse the Design-Builder from using its best efforts to achieve the LSDBE subcontracting goal on an aggregate basis for the Project;

- .15 a provision which allows the Design-Builder to withhold payment from the Subcontractor if the Subcontractor does not meet the requirements of the Subcontract;
- .16 lien and claim release and waiver provisions substantially identical to those in this Agreement.

**Section 4.3.9** Within seven (7) days of receiving any payment from the Department including amounts attributable to Work performed, or materials or equipment supplied, by a Subcontractor or supplier, the Design-Builder shall either pay the Subcontractor or supplier for its proportionate share of the amount paid to the Design-Builder for the Subcontractor's or supplier's Work or materials or equipment, or notify the Department and the Subcontractor or supplier, in writing, of the Design-Builder's intention to withhold all or part of the payment and state the reason for the withholding. All monies paid to the Design-Builder under the Agreement shall be used first to pay amounts due to Subcontractors or suppliers supplying labor or materials for the Project and only money remaining after such payments are made may be used for other items such as the Cost of the General Conditions, the Preconstruction Fee or the Design-Build Fee. Monies paid by joint check shall be deemed to have been paid fully to the Subcontractor or supplier named as a joint payee, unless the Department agrees otherwise in writing. Any interest paid to Subcontractors or suppliers because the Design-Builder has failed to pay them in timely fashion shall not be reimbursable as part of the Cost of the Work.

**Section 4.3.10** The Design-Builder shall not enter into any profit sharing, rebate, or similar arrangement with any Subcontractor or supplier at any tier with respect to the Project or the Work to be carried out for the Project.

**Section 4.3.11** The Design-Builder shall not substitute or replace any Subcontractor or supplier approved by the Department without the Department's prior written consent.

**Section 4.3.12** The Department has the right to contact Subcontractors or suppliers at all tiers or material or equipment suppliers directly to confirm amounts due and owing to them or amounts paid to them for Work on the Project, and to ascertain from the Subcontractors or suppliers at all tiers their projections of the cost to complete their Work or to supply their material or equipment, or the existence of any claims or disputes. In doing so the Department shall not issue any directions to Subcontractors or Suppliers at any tier.

**Section 4.3.13** If it comes to the Department's attention that a Subcontractor or supplier has not been paid in timely fashion (other than for disputed amounts), and if the Design-Builder fails to cure the problem within five (5) calendar days after the Department gives it written notice of the failure to pay, the Department may make payments to the Subcontractor or supplier and Design-Builder by joint check.

**Section 4.4 Progress Meetings.** The Design-Builder shall schedule and conduct, at a minimum, bi-weekly progress meetings at which the Department, the Architect/Engineer, the Program Manager, the Design-Builder and appropriate Subcontractors can discuss the status of the Work. The Design-Builder shall prepare and promptly distribute meeting minutes.

**Section 4.5 Written Reports.** The Design-Builder shall provide monthly written reports to the Department, the Program Manager on the progress of the entire Work in accordance with Section 4.9. The Design-Builder shall also maintain a daily log containing a record of weather, Subcontractors working on the site, number of workers, major equipment on the site, Work accomplished, problems encountered and other similar relevant data as the Department may reasonably require. The log shall be available to the Department, the Architect/Engineer and the Program Manager.

**Section 4.6 Cost Control System.** The Design-Builder shall maintain accurate records of the Cost of the Work and shall identify variances between actual and estimated costs and report the variances to the Department and the Program Manager at regular intervals.

**Section 4.7 Key Personnel.** To carry out its duties, the Design-Builder shall provide at least the key personnel identified in **Exhibit D** to this Agreement, who shall carry out the functions identified in the Exhibit. Among other things, the Key Personnel shall include the project managers that will be responsible for managing the Work related to the Project's structural, mechanical, electrical and special systems. It is contemplated that these project managers will work from the design stage, purchasing and throughout the bulk of the field work. The Design-Builder's obligation to provide adequate staffing is not limited to providing the key personnel, but is determined by the needs of the Project. The Design-Builder shall not replace any of the key personnel without the Department's prior written approval, which shall not be unreasonably withheld. If any of the key personnel become unavailable to perform services in connection with the Contract due to death, illness, discharge or resignation, then the Design-Builder shall promptly appoint a replacement acceptable to the Department. The Department shall be entitled to complete information on each such replacement, including a current resume of his or her qualifications and experience.

**Section 4.8 Qualified Personnel/Cooperation.** The Design-Builder shall employ on the Project only those employees and Subcontractors who will work together in harmony and who will cooperate with one another on the Project. The Design-Builder shall enforce strict discipline, good order and harmony among its employees and its Subcontractors and shall remove from the site any person who is unfit for the work or fails to conduct himself in a proper and cooperative manner. If the Department requests removal of any person as unfit or as having behaved inappropriately, the Design-Builder shall promptly comply.

**Section 4.9 Monthly Reports.** On the fifth (5<sup>th</sup>) day of each month, from Notice to Proceed until Final Completion of the Project, the Design-Builder shall deliver to the Department and the Program Manager a written report including the following elements:

**.1 Schedule Update.** Each monthly update shall reflect actual conditions of Project progress as of the date of the update. The update shall reflect the actual progress of construction, identify developing delays, regardless of their cause, and reflect the Design-Builder's best projection of the actual date by which Substantial Completion and Final Completion of the Project will be achieved. Via a narrative statement (not merely a critical path method schedule), the Design-Builder shall identify the causes of any potential delay and state what, in the Design-Builder's judgment, must be done to avoid or reduce that delay. The Design-Builder shall point out, in its narrative, changes that have occurred since the last update, including those related to major changes in the scope of work, activities modified since the last update, revised projections of durations, progress and completion, revisions to the schedule logic or assumptions, and other relevant changes. Any significant variance from the previous schedule or update shall also be identified in a narrative, together with the reasons for the variance and its impact on Project completion. All schedule updates shall be in a form reasonably acceptable to the Department. The Department may make reasonable requests during the Project for changes to the format or for further explanation of information provided. Submission of updates showing that Substantial Completion or Final Completion of the Project will be achieved later than the applicable scheduled completion date shall not constitute requests for extension of time and shall not operate to change the scheduled completion date. The Department's receipt of, and lack of objection to, any schedule update showing Substantial Completion or Final Completion later than the dates agreed upon in the Project Schedule shall not be regarded as the Department's agreement that the Design-Builder may have an extension of time, or as a waiver of any of the Department's rights, but merely as the Design-Builder's representation that, as a matter of fact, Substantial Completion or Final Completion of the Project may not be completed by the agreed upon date in the Project Schedule. Changes to the scheduled completion dates may be made only in the circumstances and only by the methods set forth in this Agreement.

**.2 Cost Update.** The monthly update shall reflect, by Guaranteed Maximum Price line item, the original line item amount, approved, pending, and projected Change Order amounts, the cost incurred to date, the projected cost to complete the Work of the line item, and any variance between the actually approved budgeted balance of the line item and the projected cost to complete. A clear distinction must be made between approved Change Orders and those merely requested or anticipated. The report shall explain all variances including "buy-outs" or final actual costs including those below their respective Guaranteed Maximum Price line item. In addition, the report must disclose any instances in which the Design-Builder has transferred amounts from one line item to another, or from the Contingency to any other line item. Neither submission of, nor the Department's failure to reject, an update reflecting that the projected cost to complete the Project will exceed the Guaranteed Maximum Price will operate to increase the Guaranteed Maximum Price or waive the Department's right to enforce the

Guaranteed Maximum Price; nor shall such submission or failure to reject by the Department constitute approval of the expenditure of contingency funds or the transfer of funds from one line item to another. If the report reflects budget overruns, it must also include a recovery plan.

- .3 Economic Inclusion Report.** The monthly report shall include a detailed summary of the Design-Builder's efforts and results with respect to the economic inclusion goals set forth in this Agreement. Such report shall be in a format acceptable to the Department and shall include, at a minimum (i) the Design-Builder's overall performance with respect to the goals; (ii) a listing of subcontracts and agreements with material suppliers let by the Design-Builder and its Subcontractors during the month and the percentage of those subcontracts and agreements with material suppliers awarded to LSDBEs; (iii) a listing of subcontracts let by the Design-Builder and its Subcontractors during the month and the estimated percentage of the labor hours to be worked by District of Columbia residents pursuant to those subcontracts; and (iv) a description of the major subcontracting and supply opportunities that will be solicited during the next three (3) months and the actions being undertaken to meet the subcontracting goals.
- .4 Cash Flow Update.** If there have been any changes to the anticipated cash flow for the Project, they shall be disclosed and explained in the monthly report. If there are no such changes, the report shall so state.
- .5 Quality Assurance Report.** The monthly report shall include a detailed summary of the steps that are being employed in order to ensure quality construction and workmanship. Each report should specifically address issues that were raised by the Department and/or its Program Manager during the prior month and outline the steps that are being taken to address such issues.
- .6 Progress Photos.** The monthly report shall include updated progress photos that shall detail changes in the Work during the month.

**Section 4.10 Open Book Reporting.** The Design-Builder shall maintain an open book reporting system with the Department, allowing the Department or its consultants access to the Design-Builder's Subcontractors and material suppliers, invoices, purchase orders, Change Order estimates, records for Self-Performed Work, and other relevant documentation and sources of information concerning the Work or costs. The Department shall not use its access to the Subcontractors to give instructions or directions to them. All instructions or directions shall be given only to the Design-Builder.

#### **Section 4.11 Claims for Additional Time**

**Section 4.11.1** Time is of the essence of this Contract.

**Section 4.11.2** The Design-Builder will perform the Work so that it shall achieve Substantial Completion by the Substantial Completion Date. Unless the failure to achieve Substantial Completion by the Substantial Completion Date is a result of an Excusable Delay, as defined in Section 4.11.3, the delay shall be deemed Non-Excusable and the Design-Builder shall not be entitled to an extension of time. Without limiting the generality of the foregoing, delays for the following reasons shall be regarded as Non-Excusable and shall not entitle the Design-Builder to an extension of time:

- .1 Delays due to job site labor disputes, work stoppages, or suspensions of work;
- .2 Delays due to adverse weather, unless the Design-Builder establishes that the adverse weather was of a nature and duration in excess of averages established by data from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration for the Project locale for the ten (10) years preceding the effective date of the Contract. For purposes of this clause, weather shall only be deemed “Excusable” if the weather in question was more severe than that encountered at the Project site over the last ten (10) years for the month in question. Such determinations shall be made based on the number of rain/snow days or the cumulative precipitation total for the month in question. Notwithstanding the foregoing, named storms shall conclusively be deemed “Excusable”;
- .3 Delays due to the failure of the Design-Builder or Subcontractors or material suppliers at any tier to perform in timely or proper fashion, without regard to concepts of negligence or fault; or
- .4 Delays due to Site conditions whether known or unknown as of the effective date of the Contract, foreseeable or unforeseeable at that time, naturally occurring or man-made; provided, however, that delays due to Differing Soils Conditions or Hazardous Materials Remediation shall be deemed an Excusable Delay.

**Section 4.11.3** The Design-Builder shall be entitled to an adjustment in the Substantial Completion Date due to an Excusable Delay. The term “Excusable Delay” shall mean:

- .1 Delays due to adverse weather other than those that are classified as a Non-Excusable delay;
- .2 Delays due to acts of God, war, unavoidable casualties, civil unrest, and other similar causes of delay that are beyond the control of the Design-Builder; provided, however, that in no event shall a Non-Excusable delay or the action of the Design-Builder, or any of its employees, agents, Subcontractors or material suppliers be deemed an Excusable Delay; or

**.3 Delays caused by Differing Soils Conditions or Hazardous Materials Remediation.**

In addition to the forgoing, a delay shall be deemed to be an Excusable Delay only to the extent that such delay (i) warrants an extension in the Substantial or Final Completion Date; (ii) has not been caused by the Design-Builder or any of its employees, agents, Subcontractors or material suppliers; (iii) is of a duration of not less than three (3) days; (iv) is on Project's critical path; and (v) is in addition to any time contingency periods set forth in the critical path.

**Section 4.11.4** If the Design-Builder wishes to make a claim for an increase in the Contract time, written notice as provided herein shall be given. The Design-Builder's claim shall include an estimate of the cost and of the probable effect of delay on the progress of the Work. In the case of continuing delay, only one claim is necessary.

**Section 4.11.5** In no event shall the Design-Builder be entitled to an increase in the GMP, the Preconstruction Fee, or the Design-Build Fee as a result of either an Excusable or Non-Excusable Delay.

**Section 4.12 Site Safety and Clean-Up.**

**Section 4.12.1** The Design-Builder will be required to provide a safe and efficient site, with controlled access.

**Section 4.12.2** The Design-Builder shall be required to provide wheel washing stations on site so as to prevent the accumulation of dirt and other refuse on the streets surrounding the Project site.

**Section 4.12.3** The Design-Builder shall be responsible for site security and shall be required to provide such watchman as are necessary to protect the site from unwanted intrusion.

**Section 4.12.4** The Design-Builder shall be responsible for the cost of temporary power used during the construction of the Project, including, but not limited to, the cost of installing such temporary wiring as may be required to bring power to the site. The Design-Builder shall also be responsible for the cost of all temporary construction necessary on the site.

**Section 4.13 Close-out & FF&E.**

**Section 4.13.1** The Design-Builder shall be responsible for purchasing and providing, or, at the Department's request, coordinating the delivery and installation of FF&E. Unless otherwise approved by the Department, all loose FF&E shall be purchased from the Department's preferred vendor. A detailed list of FF&E requirements will be developed during the preconstruction phase.

**Section 4.13.2** The Design-Builder shall be required to prepare and submit at close-out a

complete set of product manuals, warranties, etc. The Design-Builder shall also provide the Department with a complete set of its Project files, including, but not limited to, shop drawings, etc. at close out so as to assist the Department and/or DCPS in operating the building.

**Section 4.13.3** An allowance for cleaning and other move-in services as directed by the Department shall be included in the GMP. This allowance is in addition to cleaning services that would otherwise be required by the Design-Builder, including, but not limited to, the obligation to deliver a broom clean building at the end of construction.

**Section 4.14 Control of the Site.** The Department anticipates that the Design-Builder will take control of the site during the late fall of 2012. The Design-Builder shall install the necessary construction fences and other devices to properly secure the site.

**Section 4.15 Salvaged and Stored Items.** The Design-Builder shall be responsible for salvaging and storing all items as identified by the Department.

**Section 4.16 Sediment and Erosion Control.** The Design-Builder shall be responsible for installing sediment and erosion control measures, inclusive of, but not limited to: silt fencing, inlet protection, stabilized construction entrances, and other control measures.

**Section 4.17 Quality Control.** The Design-Builder shall be responsible for all activities necessary to manage, control, and document work to ensure compliance with Contract Documents. The Design-Builder's responsibility includes ensuring adequate quality control services are provided by the Design-Builder's employees and its subcontractors at all levels. The work activities shall include safety, submittal management, document reviews, reporting, and all other functions related to quality construction.

The Design-Builder shall implement a Quality Control Plan for the Project. A draft of such plan shall be submitted to the Department no later than November 1, 2012, and a final plan shall be agreed upon and approved by the Department's Program Manager prior to commencing of the Work in the field. The Quality Control Plan shall be tailored to the specific products/type of construction activities contemplated by the GMP Basis Documents, and in general, shall include a table of contents, quality control team organization, duties/responsibilities of quality control personnel, submittal procedures, inspection procedures, deficiency correction procedures, documentation process, and a list of any other specific actions or procedures that will be required for key elements of the Work.

During the construction phase, the Design-Builder shall perform daily quality control inspections and create reports based on such inspections. The daily quality control reports shall be provided to the Department on a weekly basis. The Design-Builder shall incorporate a quality control section in the progress meetings to discuss outstanding deficiencies, testing/inspections, and upcoming Work. The monthly report shall include a detailed summary of the steps that are being employed to provide quality construction and workmanship. The monthly report should specifically address issues raised during the month and outline the steps that are being used to

address such issues.

**Section 4.18** **Warranty.** The Design-Builder warrants to the Department that materials and equipment furnished under the Contract Documents will be of good quality and new unless otherwise required or permitted by the Contract Documents, that for the one (1) year period following the Substantial Completion Date the construction work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. The Design-Builder's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Design-Builder, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

**Section 4.19** **Prolog.** The Contractor shall utilize the Department's Prolog system to submit any and all documentation required to be provided by the Contractor for the Project, including, but not limited to, (i) requests for information; (ii) submittals; (iii) meeting minutes; (iv) proposed Changes; and (v) applications for payment. The Contractor also shall require all subcontractors and subconsultants to utilize prolog for the Project.

## **ARTICLE 5** **DEPARTMENT'S RESPONSIBILITIES**

### **Section 5.1** **Information and Services**

**Section 5.1.1** The Department shall provide full information in a timely manner regarding the requirements of the Project, including a program which sets forth the Department's objectives, constraints and criteria, including space requirements and relationships, flexibility and expandability requirements, special equipment and systems, and site requirements.

**Section 5.1.2** In the Preconstruction Phase, the Department shall furnish the following with reasonable promptness and at the Department's expense:

- 1** Reports, surveys, drawings and tests concerning the conditions of the site that are required by law.
- .2** Surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; adjacent drainage, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All information on the survey shall be referenced to a Project benchmark.

**Section 5.2 Department's Designated Representative.** The Department designates the individual(s) identified in **Exhibit E** as its representative with express authority to bind the Department with respect to all matters requiring the Department's approval or authorization. Subject to the limitations on their authority specified in **Exhibit E**, these representative(s) shall have the exclusive authority to make decisions on behalf of the Department concerning estimates and schedules, construction budgets, changes in the Work, and execution of Change Orders or Change Directives, and shall render such decisions promptly and furnish information expeditiously, so as to avoid unreasonable delay in the services or Work of the Design-Builder. In order for the Department to effectively manage the Project and assure that the Design-Builder does not receive conflicting instructions regarding the Work, the Design-Builder shall promptly notify the Department's representative upon receiving any instructions or other communication in connection with the Design-Builder's Work from any employee of the Department or other purported agent of the Department other than the Department's representative.

**Section 5.3 Design-Builder's Designated Representative.** The Design-Builder designates the individual(s) identified in **Exhibit F** as its representative with express authority to bind the Design-Builder with respect to all matters requiring the Design-Builder's approval or authorization. In addition, the Department retains the right to approve candidates for key on-site personnel in accordance with their experience with similar projects and local marketplace conditions. Once approved, individuals cannot be changed without the Department's prior approval. During the entire term, it is agreed that the Design-Builder's designated representative will devote his time exclusively to the Project, unless the Department consents to a reduction in time. All services provided by the Design-Builder shall be performed in accordance with the highest professional standards recognized and adhered to by Design-Builders that build first-class state-of-the-art schools in large urban areas.

## **ARTICLE 6** **COMPENSATION AND PAYMENTS FOR PRECONSTRUCTION PHASE SERVICES**

### **Section 6.1 Compensation**

**Section 6.1.1** The Department shall compensate and make payments to the Design-Builder for Preconstruction Services in accordance with this Article 6 and Article 9. For Preconstruction Services, the Design-Builder's compensation shall be \$[Insert Amount] (the "Preconstruction Fee").

**Section 6.1.2** The Department shall compensate and make payments to the Design-Builder for design services in accordance with this Article 6, Article 7 and Article 9. For design services, the maximum compensation to which the Design-Builder shall be entitled is \$[Insert Amount] (the "Design Fee").

**Section 6.1.3** The Design Fee, the Preconstruction Fee shall be the Design-Builder's sole compensation for Preconstruction Phase Services. Among other things, the Preconstruction Fee includes amounts necessary to compensate the Design-Builder for preconstruction reviews and estimating, home office overhead and profit.

## **Section 6.2 Payments**

**Section 6.2.1** Payments for Preconstruction Phase Services shall be made monthly following presentation of the Design-Builder's invoice and shall be in proportion to services performed. In no event, however, will the aggregate of the Design-Builder's monthly invoices for Preconstruction Phase Services exceed the Preconstruction Fee plus the Design Fee.

**Section 6.2.2** Payments are due and payable in accordance with Article 9 of this Agreement. Amounts unpaid after the date of which payments due shall bear interest in accordance with the Prompt Payment Act.

## **ARTICLE 7**

### **COMPENSATION FOR CONSTRUCTION PHASE SERVICES**

#### **Section 7.1 Compensation**

**Section 7.1.1** The Department shall compensate and make payments to the Design-Builder for Construction Phase Services in accordance with this Article 7 and Article 9. For Design-Build Phase Services, the Design-Builder's compensation shall be \$[Insert Amount] (the "Design-Build Fee").

**Section 7.1.2** Subject to the terms and conditions of this Agreement, the Design-Build Fee shall be increased by Ten Percent (10%) if both of the objectives set forth below are met and shall be decreased by Ten Percent (10%) if either or both of the objectives set forth below are not met. The objectives are as follows:

- .1 On-Time Completion.** Substantial Completion is achieved on or before May 15, 2014.
- .2 Cost Control.** The total amount paid to the Design-Builder for Work performed under this Contract is less than or equal to the GMP and regardless of any increases authorized by subsequent Change order plus Five Hundred Thousand Dollars (\$500,000).

In determining whether these objectives have been met, the Department will evaluate whether the stated objectives have, in fact, been achieved. This decision shall be made regardless of the reason why the objectives have or have not been met, and the Design-Builder acknowledges and agrees that the Design-Builder can lose entitlement to such portion of the Design-Build Fee even if objectives are not met due to the fault of the Department, the Architect/Engineer, the Code

Official, events of force majeure or otherwise. In addition, the Design-Build Fee shall be increased by Five Percent (5%) if the Design-Builder achieves the Workforce Utilization Goal established by the Department in the GMP Amendment.

**Section 7.1.3** The Design-Build Fee, as adjusted in accordance with Section 7.1.2 shall be the Design-Builder's sole compensation for Construction Services. The Design-Build Fee shall include, but not be limited to, amounts necessary to compensate the Design-Builder for:

- Profit
- Home office overhead
- Home office staff

**Section 7.2** [Intentionally omitted.]

**Section 7.3** **Maximum Cost of General Conditions.** The Design-Builder shall not be entitled to recover more than \$[Insert Amount] for the Cost of General Conditions (such amount, the "Maximum Cost of General Conditions"). To the extent the Design-Builder incurs General Conditions costs in excess of this amount, the Design-Builder shall not be entitled to reimbursement for such amounts. Nonetheless, in such an event, the Design-Builder exceeds the Maximum Cost of General Conditions, the Design-Builder shall be required to adequately staff the Project.

**Section 7.4** **Changes in The Work**

**Section 7.4.1** **Changes Authorized.** The Department may, without invalidating the Contract, and without notice to or approval of any surety, order changes in the Work, including additions, deletions or modifications. Any such change must be conveyed by the Department to the Design-Builder via written Change Directive or Change Order.

**Section 7.4.2** **Executed Change Directive/Change Order Required.** Only a written Change Directive or Change Order, executed by the Department, may make changes to the Contract. In particular, but without limitation, a written Change Directive or Change Order executed by the Department is the only means by which changes may be made to the Substantial or Final Completion Date, the Preconstruction Fee, the Design-Build Fee, or the Guaranteed Maximum Price.

**Section 7.4.3** **Department-Initiated Changes**

- .1 If the Department wishes to make a change in the Work or to accelerate the Work, it will execute and issue to the Design-Builder a written Change Directive, either directing the Design-Builder to proceed at once with the changed Work or directing it to not to proceed, but to inform the Department, in writing, of the amount, if any, by which the Design-Builder believes that Substantial or Final

Completion Date and/or the Guaranteed Maximum Price should be adjusted to take the Change Order or Change Directive into account.

- .2 Within ten (10) days of receiving a Change Directive, the Design-Builder shall provide the Department with a written statement of all changes in the Contract, including, without limitation, any changes to the Substantial or Final Completion Date or the Guaranteed Maximum Price to which it believes it is entitled as a result of the Change Directive. If additional time is sought, a schedule analysis supporting the requested extension should be included. The schedule analysis should include a written narrative explanation. If a change in the Guaranteed Maximum Price is sought (or if the Department has requested a deduct change), the statement should include a breakdown, by line item, of the estimated cost changes attributable to the proposed change. The Department may request, and the Design-Builder shall provide, further cost breakdowns, clarifications, documentation or back-up if the Department reasonably believes such additional information is needed to understand and evaluate the request. The additional information required may include cost and pricing data in accordance with the Department's regulations. Any requested adjustment to the Guaranteed Maximum Price shall be limited to increased Cost of the Work due to the Change Directive. The Design-Builder is not entitled to any markup on any kind of change orders except as authorized in Section 7.4.8, and if so authorized, any mark-up shall be in accordance with Section 7.4.11. All deductive Change Orders shall include a corresponding reduction in the Design-Build Fee.
- .3 If the Department has not yet directed the Design-Builder to proceed with the Change described by a Change Directive, the Department may rescind it. If the Department wishes to proceed, or has already directed the Design-Builder to proceed, the Design-Builder shall immediately proceed with the changed Work and, the Department and the Design-Builder shall use their good faith best efforts to reach an agreement upon the modifications to the Substantial or Final Completion Date, and/or the Guaranteed Maximum Price that are justified by the Change Directive. If they reach agreement, the agreement shall be set forth in a Change Order and the Design-Builder shall also execute it, at which point it will become binding on both parties.
- .4 If the parties fail to reach an agreement within sixty (60) days after the Department receives the Design-Builder's detailed statement pursuant to Subparagraph 7.4.3.2, and such other documentation as the Department may request, the Design-Builder may assert a claim in accordance with this Agreement. In such a case, and subject to adjustment via the claims and disputes process, the Department shall unilaterally grant the Design-Builder such adjustments, if any, to the Substantial or Final Completion Date, the Guaranteed Maximum Price, and/or the Preconstruction or Construction and Design Management Fee as the Department has judged to be appropriate.

**Section 7.4.4 Notice of Change Event.** The Design-Builder must give the Department written notice of any Change Event within ten (10) calendar days of the date on which the Design-Builder knew, or reasonably should have known, of the Change Event. To the extent available, the notice must state the nature of the Change Event and describe, generally, all changes in the Contract to which the Design-Builder believes it is entitled. Such notice is an express condition precedent to any claim or request for adjustment to the Substantial or Final Completion Date, or the Guaranteed Maximum Price arising from the Change Event and, if the notice is not given within the required time, the Design-Builder will have waived the right to any adjustment to the Substantial or Final Completion Date, or the Guaranteed Maximum Price arising from the Change Event.

**Section 7.4.5 Detailed Change Request.** Within twenty (20) days after giving notice of a change event, the Design-Builder shall submit a written change request describing, in reasonable detail, all adjustments it seeks to the Substantial or Final Completion Date or the Guaranteed Maximum Price as a result of the Change Event. The change request shall include the same information as described in Subparagraph 7.4.3 with respect to any Contract changes the Design-Builder seeks due to the Change Event, and the amount of any requested adjustment to the Guaranteed Maximum Price shall be limited in accordance with that Subparagraph.

**Section 7.4.6 Changes to GMP.** Subject to the condition precedent that the Design-Builder have complied with the notice and documentation provisions of this Article, and subject to the limitations stated in this Agreement, the Design-Builder is entitled to an adjustment to the Guaranteed Maximum Price in the following cases:

- .1 If the Department issues a Change Directive or Change Order that directs the Design-Builder to proceed with work which is beyond the scope of Work included within the Guaranteed Maximum Price Amendment; or
- .2 The Design-Builder encounters Differing Soil Conditions or Hazardous Materials not identified in the Preconstruction Phase.

**Section 7.4.7 Deductive Change Orders.** The Department is likewise entitled to issue deduct Change Orders (reducing the Guaranteed Maximum Price or the Substantial or Final Completion Date) when changes are effected, by Change Directive or otherwise, which will decrease the cost of completing the Work or the time within which it can be completed.

**Section 7.4.8 No Adjustments to Fee.** It is the Department's intent to engage the Design-Builder to put into place work in an amount equal to the Project Budget over the approximately sixteen week period from mid March to mid August. As such, the Design-Builder shall not be entitled to any additional fees or general conditions unless (i) the Department makes additions to the scope provided for the in the GMP Amendment which cause the GMP to increase by more than ten percent (10%); or (ii) the Department makes additions to the scope provided for the in the GMP Amendment which (other than for punchlist or warranty work)

require the Design-Builder's services at the Project School to extend beyond June 15, 2014. The Design-Builder understands and agrees that the Design Fee, Preconstruction Fee, Design-Build Fee and the Maximum Cost of General Conditions shall not be increased or decreased as a result of any such Change Orders or Change Directive.

**Section 7.4.9 Executed Change Orders Final.** The Design-Builder agrees that any Change Order executed by the Department and Design-Builder constitutes its full and final adjustment for all costs, delays, disruptions, inefficiencies, accelerations, schedule impacts, or other consequences arising from the change in question, whether a Change Directive, or a Change Event, or from any claimed cumulative effect of changes made to the date of the Change Order, and that no further adjustments in compensation or time shall be sought or made with respect to the Change Directive or the Change Event giving rise to the Change Order. Although the parties anticipate that most Change Orders will not require an adjustment to the Cost of General Conditions, if the Work described in a Change Order requires an increase or decrease in the Maximum Cost of General Conditions established in Section 7.3 (i.e. because such a Change requires additional field staff or other equipment that would be classified as General Conditions), the Change Order shall contain a separate line item adjusting such amount. The cost of processing a Change Order shall not be considered an event that will require an increase in the Maximum Cost of General Conditions.

**Section 7.4.10 Failure to Agree.** If the Design-Builder claims entitlement to a change in the Contract, and the Department does not agree that any action or event has occurred to justify any change in time or compensation, or if the parties fail to agree upon the appropriate amount of the adjustment in time or compensation, the Department will unilaterally make such changes, if any, to the Contract, as it determines are appropriate pursuant to the Contract. The Design-Builder shall proceed with the Work and the Department's directives, without interruption or delay, and shall make a claim as provided in Article 12. Failure to proceed due to a dispute over a change request shall constitute a material breach of the Contract and entitle the Department to all available remedies for such breach, including, without limitation, termination for default.

**Section 7.4.11 Mark-Up on Trade Work.** The maximum mark up for change order work shall be as follows:

- .1 For Work performed by a Subcontractor with its own forces, the Subcontractor shall be entitled to a mark-up of not more than fifteen percent (15%) (covering home office overhead, the cost of insurance and bonds, field supervision, general conditions and profit) on the Direct Costs of the Work. For Work that the Owner permits the Design-Builder to self-perform, the Design-Builder shall also be entitled to a mark-up of not more than fifteen percent (15%) of the Direct Cost of the Work. With regard to any such Work that is self-performed by the Design-Builder, the markup contemplated in this Section 7.4.11.1 shall be the Design-Builder's exclusive compensation and it shall not be entitled to the markup contemplated in Section 7.4.11.3;

- .2 Intervening tier Subcontractors shall be entitled to a mark-up of five percent (5%) (covering home office overhead, the cost of insurance and bonds, field supervision, general conditions and profit) on Work Performed by lower-tier Subcontractors;
- .3 To the extent permitted by Section 7.4.8, the Design-Builder shall be entitled to an increase in its Design-Build Fee at a rate of [Design-Build Fee as percentage of Construction Budget] on work perform by Subcontractors. Such markup shall cover the same cost elements that were included in the Design-Build Fee;
- .4 In no event shall the maximum mark-up on the Direct Cost of the Work exceed twenty five percent (25%).

Direct Cost of the Work shall mean labor, material and other costs reasonably and necessarily incurred in the proper performance of the Work as approved by the Owner. Such costs do not include, however, home office overhead, field supervision, general conditions or profit of either the Subcontractor or the Design-Builder. No personnel above the level of a working foreman shall be considered a Direct Cost of the Work.

## **ARTICLE 8** **COST OF THE WORK FOR CONSTRUCTION PHASE**

**Section 8.1 Cost of the Work.** The term “Cost of the Work” shall mean the costs necessarily incurred by the Design-Builder in the proper performance of the Work and shall include only the following:

- .1 Payments made by the Design-Builder to Subcontractors and suppliers, but only in accordance with the subcontracts and supply agreements (“Subcontractor Costs”);
- .2 The Cost of General Conditions, subject however to the Maximum Cost of General Conditions;
- .3 All amounts due to the Design-Builder under the terms of the Department's written authorization for the Design-Builder to perform any portion of the Work as Self-Performed Work. If an authorization for the Design-Builder to engage in Self-Performed Work is not on a fixed-price basis, then, as to that Work, the following costs shall be within the Cost of the Work:
  - (a) **Labor.** Properly documented wages actually paid to Project superintendents, foremen, construction workers, and other personnel in the direct employ of the Design-Builder, while engaged in approved Self-Performed Work, together with contributions, assessments, payroll taxes,

or fringe benefits required by the laws or applicable collective bargaining agreements.

- (b) **Incorporated Materials.** The cost, net of trade discounts, of all materials, products, supplies and equipment incorporated into the Self-Performed Work, including, without limitation, costs of transportation and handling.
  - (c) **Unincorporated Materials.** The cost of materials, products, supplies and equipment not actually installed or incorporated into the Self-Performed Work, but required to provide a reasonable allowance for waste or spoilage, subject to the Design-Builder's agreement to turn unused excess materials over to the Department at the completion of the Project or, at the Department's option, to sell the material and pay the proceeds to the Department or give the Department a credit in the amount of the proceeds against the Cost of the Work.
- .4 Royalty and license fees paid for use of a design, process or product, if its use is required by this Contract or has been approved in advance by the Department;
  - .5 Fees for obtaining all required approvals or permits associated with the abatement, demolition, utilities abandonment, and utility relocation, as well as all trade permit fees. The Department shall be responsible for the building permit fees;
  - .6 Cost of the Architect/Engineer's contract, reimbursed at cost and without markup provided, however, that such costs shall not exceed the Design Fee, as defined in Section 6.1.3. Any amounts in excess of about the Design Fee shall not be reimbursable as a Cost of the Work;
  - .7 All fees and other costs necessarily incurred to carry out testing and inspection required by the Contract or applicable laws, or otherwise to maintain proper quality assurance. The costs the Design-Builder incurs to schedule and coordinate any additional testing and inspections the Department may decide to conduct itself shall be within Cost of the Work unless the additional testing establishes that the Work tested was defective or otherwise failed to satisfy Contract requirements, in which case the Design-Builder shall pay the costs, without reimbursement;
  - .8 All bonds to jurisdictional agencies (utilities, storm water management, land disturbance, and grading); and
  - .9 All performance and payment bonds, builder's risk insurance, and general liability insurance.

**Section 8.2 Cost of General Conditions.** Items included in the Cost of General Conditions are all items necessary to perform Construction Phase Services described herein including, but not limited to:

- .1** Cost of construction staff (only staff stationed in the field is reimbursable; however, exceptions will be made for scheduling, cost estimating and accounting services if such functions are normally provided by the Design-Builder's regional and/or home office personnel)
- .2** Fringe Benefits associated with field staff costs
- .3** Payroll taxes and payroll insurance associated with field staff costs
- .4** Staff costs associated with obtaining permits and approvals
- .5** Out-of-house consultants
- .6** Travel, Living and Relocation expenses
- .7** Job vehicles
- .8** Field office for CM including but not limited to: (i) trailer purchase and/or rent; (ii) field office installation, relocation and removal; (iii) utility connections and charges during the Construction Services Phase; (iv) furniture; (v) office supplies;
- .9** Office equipment including but not limited to: (i) computer hardware and software; (ii) fax machines; (iii) copying machines; (iv) telephone installation, system and use charges; (v) job radios
- .10** Local delivery and overnight delivery costs
- .11** Field computer network
- .12** Watchmen
- .13** First aid facility
- .14** Progress photos
- .15** Consumption charges for utility service during construction

**Section 8.3 Costs Not to Be Reimbursed.** All costs not specifically listed in Paragraph 8.1 as being within the Cost of the Work are excluded from the Cost of the Work. In particular, but without limitation, the Cost of the Work does not include any of the following:

- .1 Any personnel or labor costs other than those set forth in **Exhibit G.** Without limiting the generality of the foregoing, Cost of the Work excludes salaries or other compensation of the Design-Builder's personnel at the Design-Builder's home office or Project-responsible offices or any branch offices.
- .2 Fees for any permits or licenses the Design-Builder requires to conduct its general business operations.
- .3 Capital expenses and interest on capital employed for the Work.
- .4 Direct or indirect costs of any kind, except those expressly included in Paragraph 8.1.
- .5 Sales or use taxes, unless the Design-Builder establishes that applicable law required payment of such taxes.
- .6 Costs due to the errors or omissions of the Design-Builder or its Subcontractors or suppliers at all tiers, negligent or otherwise.
- .7 Costs dues to breach of Contract by the Design-Builder or its Subcontractors or material suppliers at all tiers, including, without limitation, costs arising from defective or damaged Work or its correction, disposal of materials or equipment erroneously supplied, and repairs to property damaged by the Design-Builder or its Subcontractors or material suppliers at all tiers.
- .8 Any costs incurred in performing work of any kind before Notice to Proceed, unless specifically authorized by the Department.

**Section 8.4 Discounts, Rebates And Refunds**

**Section 8.4.1** Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to the Department, and the Design-Builder shall make provisions so that they can be secured.

**Section 8.4.2** Amounts that accrue to the Department in accordance with the provisions of Subparagraph 8.4.1 shall be credited to the Department as a deduction from the Cost of the Work.

**Section 8.5 Facilitating Tax Exempt Purchases.** The Department expects that the Project will qualify as tax-exempt under applicable laws. The Department will provide the

Design-Builder with the necessary information relating to the tax exemption. In the event any savings are attributable to the tax-exempt status of the Project, the Design-Builder shall not be entitled to share in such savings.

**Section 8.6 Accounting Records.** The Design-Builder shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under the Contract, the accounting and control systems shall be satisfactory to the Department. The Department, its representatives, and the Department's accountants shall be afforded access to the Design-Builder's records, books, correspondence, instruction, drawings, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to this Project, and the Design-Builder shall preserve these for a period of three years after final payment, or for such longer period as may be required by law.

## **ARTICLE 9** **CONSTRUCTION PHASE**

**Section 9.1 Progress Payments.** The Design-Builder shall be paid its compensation in a series of progress payments and a final payment, for Work completed in accordance with the Contract, and for which proper Applications for Payment have been submitted and approved. The amount of each progress payment shall be as follows:

The Costs of Work Completed to Date

Plus  $\frac{\text{Cost of Work for Pay Period}}{\text{Current approved estimated Cost of Work through completion}}$  x Design-Build Fee

Minus Applicable Retainage

Minus Amounts previously paid by the Department

**Section 9.2 Retention.** The Department shall withhold from each progress payment an amount equal to ten percent (10%) of the payment related to: (i) each Subcontract and supply agreement, (ii) the Preconstruction Fee, (iii) Design-Build Fee, (iv) the Cost of General Conditions, and (v) the Cost of the Work related to each item of Self-Performed Work, until such time as fifty percent (50%) of the then currently budgeted cost associated with each such an item has been invoiced at which point the Department may cease retaining against such item. The Department may elect to increase the retention on any trade subcontractor up to ten percent (10%) in the event the Department determines that the situation so warrants. The Department, in its sole and absolute discretion, may elect to reduce the retainage relating to a particular trade Subcontractor, the Cost of General Conditions, or the Cost of the Work related to a specific item of Self-Performed Work to zero upon: (x) satisfactory completion of such Work; (y) submission of all required warranties, certifications, and operating or maintenance instructions with respect to that Work; and (z) execution of appropriate waivers of lien and releases of claims. However,

in no event shall the total retainage held by the Department be reduced to an amount that is less than two and one-half percent (2.5%) of the GMP.

**Section 9.3 Documents Required with Application for Payment.** Each Application for Payment shall be accompanied by the Design-Builder's job cost ledgers in a form satisfactory to the Department, the Subcontractors' and Suppliers' Applications for Payment on AIA Documents G702 and G703 or other form acceptable to the Department, and such other supporting documentation as the Department may reasonably request. Each Application for Payment shall include detailed documentation of costs as a condition to approving progress payments, but the Design-Builder shall nevertheless maintain complete documentation of the costs.

**Section 9.4 Stored Materials.** The Department shall not be required to pay for materials stored at the site or stored at other locations, absent its express agreement to do so, which may be withheld at the Department's sole discretion. If the Department expressly agrees to pay for materials stored at the site but not yet incorporated into the Work, the Application for Payment may also include a request for payment of the cost of such materials, if the materials have been delivered to the site, and suitably stored. Such requests shall be documented by appropriate invoices and bills of sale. Payment for stored materials shall be conditioned also on the Design-Builder's representation that it has inspected the material and found it to be free from defect and otherwise in conformity with this Contract, and on satisfactory evidence that the materials are insured under the builder's risk policy. Further, if the Design-Builder requests the Department to allow payments for storage of materials offsite, the Design-Builder shall be required, inter alia, to agree to execution of proper documentation to afford the Department a secured interest in the materials upon payment.

**Section 9.5 Design-Builder's Certification.** Each Application for Payment shall be accompanied by the Design-Builder's signed certification that all amounts paid to the Design-Builder on the previous Application for Payment that were attributable to Subcontractor Work or to materials or equipment being supplied by any supplier has been paid over to the appropriate Subcontractors and suppliers; that all amounts currently sought for Subcontractor Work or supply of materials or equipment are currently due and owing to the Subcontractors and material or equipment suppliers; and that all Work, materials or equipment for which payment is sought is, to the best of the Design-Builder's knowledge, free from defect and meets all of the Contract requirements. The Design-Builder shall not include in an Application Payment amounts for Work for which the Design-Builder does not intend to pay.

**Section 9.6 Lien Waivers.** Each Application for Payment shall be accompanied by written waivers of the right to file a mechanic's lien and all other claims, in a form substantially similar to **Exhibit M** for the Design-Builder and all Subcontractors and material suppliers at all tiers who have supplied labor or material or both for which payment is requested, subject only to receipt of payment. If the Department so requests, the Design-Builder shall also submit unconditional waivers of liens for itself and all Subcontractors and material suppliers at all tiers with respect to Work or materials or equipment for which payment has been previously made,

and additional forms of waiver acknowledging receipt of final payment under the Contract, and providing final release of such liens.

**Section 9.7 Warranty of Title.** By submitting an Application for Payment, the Design-Builder warrants to the Department that title to all Work for which payment is sought will pass to the Department, without liens, claims, or other encumbrances, upon the receipt of payment by the Design-Builder. The Department may require execution of appropriate documents to confirm passage of clear title. Passage of title shall not operate to pass the risk of loss with respect to the Work in question. Risk of loss remains with the Design-Builder until Substantial Completion, unless otherwise agreed by the Department, in writing.

**Section 9.8 Submission.** On the twenty-fifth day of each month the Design-Builder shall submit to the Department (with a copy to the Program Manager) an Application for Payment, which Application for Payment shall cover the entire month during which the Application for Payment is submitted. All amounts formally submitted via Application for Payment and not disputed by the Department shall be due and payable on the last day of the month following submission or, if that is not a business day, on the following business day. If the Design-Builder and Department are unable to agree on the amounts properly due and owing, the Department shall pay in accordance with its good faith determination and the Design-Builder may protest and pursue a claim as provided in this Agreement.

**Section 9.9 Right to Withhold Payments.** The Department will notify the Design-Builder within fifteen (15) days after receiving any Application for Payment of any defect in the Application for Payment or the Design-Builder's performance which may result in the Department's declining to pay all or a part of the requested amount. The Department may withhold payment from the Design-Builder, in whole or part, as appropriate, if:

- .1 the Work is defective and such defects have not been remedied; or
- .2 the Department has determined that the Design-Builder's progress has fallen behind the Project Schedule, and the Design-Builder fails, within ten (10) calendar days of the Department's written demand, to provide the Department with a realistic and acceptable plan to recover the delays; or
- .3 the Design-Builder's monthly schedule update reflects that the Design-Builder has fallen behind the Project Schedule, and the Design-Builder fails to include, in the same monthly report, a realistic and acceptable plan to recover the delays; or
- .4 the Design-Builder has failed to provide reports in full compliance with Section 4.5 of this Agreement; or
- .5 the Design-Builder has failed to pay Subcontractors or suppliers promptly or has made false or inaccurate certifications that payments to Subcontractors or suppliers are due or have been made; or

- .6 any mechanic's lien has been filed against the Department, the site or any portion thereof or interest therein, or any improvements on the site, even though the Department has paid all undisputed amounts due to the Design-Builder, and the Design-Builder, upon notice, has failed to remove the lien, by bonding it off or otherwise, within ten (10) calendar days; or
- .7 the Department has reasonable evidence that the Work will not be completed by the Substantial Completion Date, as required, that the unpaid balance of the Guaranteed Maximum Price would not be adequate to cover actual or liquidated damages arising from the anticipated delay; or
- .8 the Department has reasonable evidence that the Work cannot be completed for the unpaid balance of the Guaranteed Maximum Price; or
- .9 the Design-Builder is otherwise in substantial breach of this Contract (including, without limitation, failures to comply with CBE Utilization requirements in Article 11).

**Section 9.10 Payment Not Acceptance.** Payment of any progress payment or final payment shall not constitute acceptance of Work that is defective or otherwise fails to conform to the Contract, or a waiver of any rights or remedies the Department may have with respect to defective or nonconforming Work.

**Section 9.11 Department Not Obligated to Others.** The Department shall have no obligation to pay or be responsible in any way for payments to a consultant or subcontractor performing portions of the Work. The Department shall have no obligation, after assignment of the Design Contract to the Design-Builder, to pay or be responsible in any way for payments to the Architect/Engineer.

**Section 9.12 Final Payment.** Final payment shall be made by the Department to the Design-Builder when (i) Final Completion has been achieved; and (ii) a final Application for Payment and a final accounting for the Cost of the Work have been submitted by the Design-Builder and reviewed by the Department's accountants. The Department shall make such final payment not more than thirty (30) days after the Department receives such report from its accountants.

**Section 9.12.1** The amount of the final payment shall be calculated as follows:

- .1 Take the sum of the Cost of the Work substantiated by the Design-Builder's final accounting and the Preconstruction Fee and the Design-Build as adjusted to reflect whether the goals established in Section 7.1.2 have been met; but not more than the Guaranteed Maximum Price.

- .2 Subtract amounts, if any, for which the Department withholds pursuant to the Contract.
- .3 Subtract the aggregate of previous payments made by the Department. If the aggregate of previous payments made by the Department exceeds the amount due the Design-Builder, the Design-Builder shall promptly reimburse the difference to the Department.
- .4 The final payment shall take into account any savings accruing to the Department or the Design-Builder.

**Section 9.12.2** The Department's accountants will review and report in writing on the Design-Builder's final accounting within 30 days after delivery of the final accounting to the Department by the Design-Builder. Based upon such Cost of the Work as the Department's accountants report to be substantiated by the Design-Builder's final accounting, and provided the other conditions of Subparagraph 9.12.1 have been met, the Department will, within seven days after receipt of the written report of the Department's accountants, shall notify the Design-Builder of any amount that the Department will withhold and the reasons therefor. The time periods stated in this Paragraph 9.12 supersede those for typical progress payments.

**Section 9.12.3** If the Department's accountants report the Cost of the Work as substantiated by the Design-Builder's final accounting to be less than claimed by the Design-Builder, the Design-Builder shall be entitled to proceed in accordance with Article 12 without a further decision of the Department. Unless agreed to otherwise, the Design-Builder shall make a demand for mediation or arbitration pursuant to Article 12 of the disputed amounts within 60 days after the Design-Builder's receipt of the Department's final payment. Failure to make such demand within this 60-day period shall result in the substantiated amount reported by the Department's accountants becoming binding on the Design-Builder. Pending a final resolution of the disputed amount, the Department shall pay the Design-Builder the amount that the Department determines to be appropriate.

**Section 9.13 Liquidated Damages.** If the Design-Builder fails to achieve Substantial Completion by the Substantial Completion Date, the parties acknowledge and agree that the actual damage to the Department for the delay will be impossible to determine, and in lieu thereof, the Design-Builder shall pay to the Department, as fixed, agreed and liquidated delay damages in the amount of Four Thousand Dollars (\$4,000) per day for each calendar day of delay for failure to meet the Substantial Completion Date. The Design-Builder and the Department agree that the liquidated damages set forth in this Section 9.13 do not constitute, and shall not be deemed, a penalty but represent a reasonable approximation of the damages to the Department associated with a delay in the Project. Notwithstanding anything to the contrary in this Agreement, in no event shall the liquidated damages, or the amount be assessed against the Design-Builder for late delivery, exceed Four Hundred Thousand Dollars (\$400,000).

**Section 9.14 Early Completion.** In the event the Design-Builder achieves Substantial Completion of the Project prior to the Substantial Completion Date, the Design-Builder shall maintain the completed Project, at its own expense, until such time that the Department agrees to occupy and use the Project for its intended use.

## **ARTICLE 10** **INSURANCE AND BONDS**

### **Section 10.1 Insurance Required by the Project**

**Section 10.1.1** The Design-Builder will be required to maintain the following types of insurance throughout the life of the contract.

- .1** Commercial general public liability insurance (“Liability Insurance”) against liability for bodily injury and death and property damage, such Liability Insurance to be in an amount not less than Five Million Dollars (\$5,000,000) for liability for bodily injury, death and property damage arising from any one occurrence and Five Million Dollars (\$5,000,000) from the aggregate of all occurrences within each policy year. The policy should include completed operations coverage.
- .2** Workers’ compensation and Employers Liability coverage providing statutory benefits for all persons employed by the Design-Builder, or its contractors and subcontractors at or in connection with the Work.
- .3** Automobile Liability, including Hired and Non-Owned Auto Liability in the amount of at least One Million Dollars (\$1,000,000) for each occurrence for bodily injury and property damage.
- .4** Excess umbrella liability coverage (on at least a follow form basis) having an aggregate limit of at least Ten Million dollars (\$10,000,000).
- .5** Builder’s risk insurance written on an “all risk” basis and covering the value of the improvements being constructed. This coverage does not need to be maintained until such time as construction operations begin.
- .6** With respect to the Architect/Engineer, errors and omissions coverage written on a claims made basis and having an aggregate policy limit of at least Five Million Dollars (\$5,000,000).

In the event that a claim for or related to the Project is made on any such policy or any other policy, the Design-Builder shall be responsible for the payment of any applicable deductible and shall not be entitled to an increase in GMP for the costs of paying such deductible.

**Section 10.1.2** Each insurance policy shall be issued in the name of the Design-Builder

and shall name as additional insured parties the Department and the District of Columbia, and the officers, agents and employees of each. Such insurance shall not be cancelable or reduced without thirty (30) days prior written notice to the Department.

**Section 10.1.3** All such insurance shall contain a waiver of subrogation against the Department and the District of Columbia, and their respective agents.

**Section 10.1.4** All such insurance policies shall be written by a company that is rated at least A- by A.M. Best and having a surplus size rating of at least XV.

**Section 10.2 Performance Bond and Payment Bond.** The Design-Builder shall, before commencing the Design-Build Phase, provide to the Department a payment bond and performance bond, each with a penal sum equal to the full value of the GMP. Such bond shall remain in full force and effect until Final Completion is achieved and the Department shall be able to draw upon such bond regardless of the amount paid by the Department to the Design-Builder, even if such amount exceeds the penal value of such bond. Unless otherwise directed by the Department, the Design-Builder shall require all Subcontractors whose Subcontract prices exceed One Hundred Thousand Dollars (\$100,000) to provide payment and performance bonds, with a penal sum equal to one hundred percent (100%) of the subcontract price. All bonds must be in a form acceptable to the Department, its lenders or bond trustee, and issued by a surety authorized to do business in the District of Columbia and bonding company listed on the United State Department of Treasury's Listing of Approved Sureties. All subcontractors' bonds must include a dual obligee rider, naming the Design-Builder and the Department as dual obligees. If the Guaranteed Maximum Price is increased pursuant to the terms of the Contract, the Department may require that the amount of the bonds be increased in the amount of one hundred percent (100%) of the increase, and the Design-Builder shall promptly comply. The Design-Builder shall furnish a copy of its bonds to any potential beneficiary of the bonds, or permit that person or company to make a copy. If the bonds provided become unacceptable to the Department, the Design-Builder shall promptly provide substitute security acceptable to the Department. If the Design-Builder intends to exercise its rights as dual obligee under any trade Subcontractor's bond, it shall first give the Department twenty (20) days written notice, so that the Department may lodge any objection it may reasonably have to the proposed action.

## **ARTICLE 11** **ECONOMIC INCLUSION REQUIREMENTS**

### **Section 11.1 LSDBE Utilization.**

**Section 11.1.1** The Design-Builder shall ensure that Local, Small and Disadvantaged Business Enterprises will participate in at least 50% of the Contract. Of this amount, thirty-five percent (35%) must be awarded to entities that are certified as either Small or Disadvantaged Business Enterprises by the District of Columbia Department of Small and Local Business Development and twenty percent (20%) to entities that are certified as Disadvantaged Business Enterprises. The LSDBE certification shall be, in each case, as of the effective date of the

subcontract. Supply agreements with material suppliers shall be counted toward meeting this goal.

**Section 11.1.2** The Design-Builder has developed a CBE Utilization Plan that is attached hereto as **Exhibit L**. The Design-Builder shall comply with the terms of the CBE Utilization Plan in making purchases and administering its Subcontractors and Supply Agreements.

**Section 11.1.3** Neither the Design-Builder or a Subcontractor may remove a Subcontractor or tier-Subcontractor if such Subcontractor or tier-Subcontractor is certified as an LSDBE company unless the Department approves of such removal. The Department may condition its approval upon the Design-Builder developing a plan that is, in the Department's sole and absolute judgment, adequate to maintain the level of LSDBE participation on the Project.

## **Section 11.2 Equal Employment Opportunity and Hiring of District Residents**

**Section 11.2.1** The Design-Builder shall comply with applicable laws, regulations and special requirements of the Contract Documents regarding equal employment opportunity and affirmative action programs.

**Section 11.2.2** The Design-Builder shall ensure that at least fifty-one percent (51%) of the Design-Builder's Team and every subconsultant's and subcontractor's employees hired after the effective date of the Contract, or after such subconsultant or subcontractor enters into a contract with the Design-Builder, to work on the Project shall be residents of the District of Columbia. This percentage shall be applied in the aggregate, and not trade by trade. In addition, the Contractor shall be required to comply with the workforce percentage goals established by the recently adopted amendments to the First Source Employment Agreement Act of 1984 (D.C. Code §§ 2-219.01 *et seq.*) and any implementing regulations, including, but not limited to the following requirements:

- (i) At least 20% of journey worker hours by trade shall be performed by District residents;
- (ii) At least 60% of apprentice hours by trade shall be performed by District residents;
- (iii) At least 51% of the skilled laborer hours by trade shall be performed by District residents; and
- (iv) At least 70% of common laborer hours shall be performed by District residents.

**Section 11.2.3 Workforce Incentive Program.** In addition to the requirement imposed by Section 11.2.2, the Department shall establish a Workforce Utilization Goal for the performance of labor hours on the Project. The Design-Builder shall ensure that the Workforce Utilization Goal is met. It is understood and agreed that: (i) the Design-Builder shall be entitled to an incentive payment as described in Section 11.2.3.2 if the Project's Workforce Goal is met;

and (ii) each Trade Subcontractor shall receive an incentive payment as described in Section 11.2.3.1.

- .1 Each Trade Subcontractor shall be paid an amount equal to Ten Percent (10%) of the Bare Salary paid to employees who are (i) a bona fide resident of the District of Columbia; and (ii) working on the Project. Bare Salary shall mean wages paid to employees for work performed on the job site and excludes the cost of benefits or taxes associated with such employees. Only those employees who are directly employed on the job site shall count toward this calculation. Employees who work in home or regional offices and who support multiple projects shall not be eligible for this incentive. In calculating this incentive payment, the certified payrolls collected and maintained as part of the Davis-Bacon Act shall be used.
- .2 The Department shall established a goal for the percentage of all hours worked on the Project that shall be worked by District residents (such goal, the “Workforce Utilization Goal”). It is understood that the Workforce Utilization Goal shall be establish as a percentage not less than thirty-five percent (35%). In the event the Project’s Workforce Utilization Goal is met or exceeded, the Design-Builder’s Design-Build Fee, as set forth in this Agreement, shall be increased as set forth in Section 7.1.2.

**Section 11.2.4** Thirty five percent (35%) of all apprentice hours worked on the Project shall be worked by District residents.

### **Section 11.3 Economic Inclusion Reporting Requirements**

**Section 11.3.1** Upon execution of the Contract, the Design-Builder and all its member firms, if any, and each of its Subcontractors shall submit to the Department a list of current employees and apprentices that will be assigned to the Contract, the date they were hired and whether or not they live in the District of Columbia.

**Section 11.3.2** The Design-Builder and its constituent entities shall comply with subchapter III of Chapter 11 Title 1, and subchapter II of Chapter 11 of Title 1 of the D.C. Code, and all successor acts thereto and the rules and regulations promulgated thereunder. The Design-Builder and all member firms and Subcontractors shall execute a First Source Agreement with the District of Columbia Department of Employment Services (“DOES”) prior to beginning Work at the Project site.

**Section 11.3.3** The Design-Builder shall maintain detailed records relating to the general hiring of District of Columbia and community residents.

**Section 11.3.4** The Design-Builder shall be responsible for: (i) including the provisions of this Section 11.3 in all subcontracts; (ii) collecting the information required in this Section 11.3

from its Subcontractors; and (iii) providing the information collected from its Subcontractors in the reports required to be submitted by the Design-Builder pursuant to Section 11.3.

**Section 11.4 Compliance with the Apprenticeship Act.** The Design-Builder agrees to comply with the requirements of the Apprenticeship Act of 1946, D.C. Code §§ 36-401, *et seq.*

**Section 11.5 Subcontractor Support and Mentoring Program.** [PROVISIONS REGARDING SUBCONTRACTOR SUPPORT AND MENTORING PROGRAM DEVELOPED PURSUANT TO SECTION A.6 OF THE DEPARTMENT'S REQUEST FOR PROPOSALS TO BE DEVELOPED AND INSERTED HERE].

## **ARTICLE 12** **ALTERNATIVE DISPUTE RESOLUTION**

**Section 12.1 Notice of Claim.** If the Design-Builder has complied with all provisions in Section 7.4 regarding changes, and the Department has denied the changes requested in a written Change Proposal, or has failed to respond to a written Change Proposal within thirty (30) days, and the Design-Builder wishes to pursue a claim over the disputed item, it shall inform the Department, in writing, of its claim. The notice must be delivered to the Department within fifteen (15) days of the Department's decision, or within thirty (30) days of the written request for a Change Order, if the Department has failed to respond to the request. If the Design-Builder wishes to assert a claim, as such term is defined in the General Conditions, over a dispute not arising from matters related to a Change Event, Change Order or Change Directive, the written notice of claim must be delivered within fifteen (15) days of the date the Design-Builder knew or should reasonably have known of the events giving rise to the claim or dispute.

**Section 12.2 Contents of Notice.** The notice of claim shall state the nature of the claim, the events or circumstances giving rise to the claim, the type of relief requested, and the amount of time or additional compensation, or other damages sought. If the amount of time, compensation, or other damages sought is not reasonably ascertainable at the time, the Design-Builder shall so state, explain why, and provide whatever estimates it can reasonably provide. The notice shall state clearly that the Design-Builder intends to assert a claim in arbitration with respect to the claimed items.

**Section 12.3 Mediation.** Unless the parties hereafter otherwise agree, all disputes arising from or in connection with this Contract or its breach, or relating to the Project, whether framed in contract, tort or otherwise, shall first be referred to non-binding mediation in accordance with the American Arbitration Association's Construction Industry Mediation Rules. Within a reasonable time following the execution of the Contract, the Department, subject to the Design-Builder's reasonable approval, shall appoint an independent mediator(s), which will be charged with overseeing the mediation process.

**Section 12.4 Procedures.** Unless the parties hereafter otherwise agree, all disputes arising under or in connection with the Agreement or its breach, or relating to the Project,

whether framed in contract, tort or otherwise, and which are not resolved by mediation, shall be resolved by the District of Columbia Board of Contract Appeals in accordance with Title X of the *Procurement Practices Reform Act of 2010* (PPRA). However, if a third party brings any claim against the Department, including, without limitation, claims of infringement of patents, copyrights or other intellectual property rights, the Department may bring an action for defense or indemnification against the Contractor in the court in which such claim is being litigated.

## **ARTICLE 13** **MISCELLANEOUS PROVISIONS**

**Section 13.1 Extent of Contract.** The Contract, which includes this Agreement and the other documents incorporated herein by reference, represents the entire and integrated agreement between the Department and Design-Builder and supersedes all prior negotiations representations or agreements, either written or oral. The Contract may be amended only by written instrument signed by both the Department and Design-Builder. If anything in any document incorporated into this Agreement is inconsistent with this Agreement, this Agreement shall govern.

**Section 13.2 Ownership And Use of Documents.** The Drawings, Specifications and other documents prepared by the Architect/Engineer shall become the property of the Department.

**Section 13.3 Governing Law.** The Contract shall be governed by and construed in accordance with the laws of the District of Columbia, without regard to its conflict of laws principles.

**Section 13.4 Assignment.** The Department and Design-Builder respectively bind themselves, their partners, members, joint venturers, constituent entities, successors, assigns and legal representative to the other party hereto and to partners, members, joint venturers, constituent entities, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

### **Section 13.5 Retention of Records and Inspections and Audits**

**Section 13.5.1** The Design-Builder shall maintain books, records, documents and other evidence directly pertinent to performance under the Contract in accordance with generally accepted professional practice and appropriate accounting procedures and practices consistently applied in effect on the date of execution of the Contract.

**Section 13.5.2** The Design-Builder shall also maintain the financial information and data used in the preparation and support of the costing and cost summary submitted to the Department and the required cost submissions in effect on the date of execution of the Department.

**Section 13.5.3** The Department, the District of Columbia government, the District of Columbia Financial Responsibility and Management Assistance Office, the Comptroller General of the United States, the U.S. Department of Labor and any of their authorized representatives shall have access to the books, records, documents and other evidence held, owned or maintained by the Design-Builder for the purpose of inspection, audit and copying during normal business hours and upon advance written notice to the Design-Builder. The Design-Builder shall provide proper facilities for such access and inspection.

**Section 13.5.4** The Design-Builder agrees to include the wording of this Section in all its subcontracts in excess of five thousand dollars (\$5,000) that directly relate to Project performance.

**Section 13.5.5** Audits conducted pursuant to this Section will be in accordance with generally acceptable auditing principles and established procedures and guidelines of the applicable reviewing or audit agency.

**Section 13.5.6** The Design-Builder agrees to the disclosure of all information and reports, resulting from access to records, to any authorized representative of the Department. Where the audit concerns the Design-Builder, the auditing agency will afford the Design-Builder an opportunity for an audit exit conference and an opportunity to comment on the pertinent portions of the draft audit report. The final audit report will include the written comments, if any, of the audited parties.

**Section 13.5.7** The Design-Builder shall preserve all records described herein from the effective date of the Contract completion and for a period of seven (7) years after a final settlement. In addition, those records which relate to any dispute, appeal or litigation, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until seven (7) years after the date of resolution of such dispute, appeal, litigation, claim or exception.

### **Section 13.6 Inspection For Supplies And Services**

**Section 13.6.1** To the extent applicable or appropriate, the Department may, in its sole discretion, enter the place of business of the Design-Builder or the place of business of any Subcontractor in order to inspect or test supplies or services for acceptance by the Department. If inspections and tests are performed at the place of business of the Design-Builder or any Subcontractor, the inspections and tests shall be performed in a manner so as to not unduly delay the Work. Inspections and tests by the Department shall not relieve the Design-Builder or any Subcontractor of responsibility for defects or other failures to meet Contract requirements, and shall not constitute or imply acceptance.

**Section 13.6.2** Notwithstanding the Department's acceptance of or payment for any product or service delivered by Design-Builder, the Design-Builder shall remain liable for latent defects, fraud, gross mistakes amounting to fraud and the Department's rights under any warranty or guarantee.

**Section 13.6.3** The Department shall have the right to enter the place of business of the Design-Builder or the place of business of any Subcontractor in order to investigate any contractor or offeror with respect to a debarment or suspension of the Design-Builder or any such Subcontractor.

**Section 13.7 Laws And Regulations Incorporated by Reference.** All federal and District of Columbia laws and regulations, and all Department procedures now or hereafter in effect, whether or not expressly provided for or referred to in the Contract, are incorporated by reference herein and shall be binding upon the Design-Builder and the Department. It shall be the responsibility of the Design-Builder to perform the Contract in conformance with the Department's procurement regulations and all statutes, laws, codes, ordinances, regulations, rules, requirements, and orders of governmental bodies, including, without limitation, the U.S. Government and the District of Columbia government; and it is the sole responsibility of the Design-Builder to determine the procurement regulations, statutes, laws, codes, ordinances, regulations, rules, requirements, and orders that apply and their effect on the Design-Builder's obligations thereunder. However, if the application of a future law or regulation requires the Design-Builder to undertake additional work that is materially different in scope than that presently contemplated or required, the Design-Builder shall be entitled to an equitable adjustment for such additional work.

**Section 13.8 Tax Exemption Provision.** Any tax exemptions applicable to the District of Columbia, including the gross receipts sales tax exemption for the sale of tangible personal property to the District, codified in D.C. Code § 47-2005, shall apply to the performance of the Contract.

**Section 13.9 Anti-Competitive Practices and Anti-kickback Provisions**

**Section 13.9.1** The Design-Builder recognizes the need for markets to operate competitively and shall observe and shall comply with all applicable law, rules, and regulations prohibiting anti-competitive practices. The Design-Builder shall not engage, directly or indirectly, in collusion or other anti-competitive practices that reduces or eliminates competition or restrains trade. The Department shall report to the appropriate authority any activity that evidences a violation of the antitrust laws, and take such other further action to which it is entitled or obligated under the law.

**Section 13.9.2** The Design-Builder shall observe and comply with all applicable law, rules, and regulations prohibiting kickbacks and, without limiting the foregoing, Design-Builder shall not (i) provide or attempt to provide or offer to provide any kickback; (ii) solicit, accept, or

attempt to accept any kickback; or (iii) include, directly or indirectly, the amount of any kickback in the contract price charged by Design-Builder or a Subcontractor of the Design-Builder to the Department. The Design-Builder shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in this subparagraph in its own operations and direct business relationships. The Department may take any recourse available to it under the law for violations of this anti-kickback provision.

**Section 13.9.3** The Design-Builder represents and warrants that it did not, directly or indirectly, engage in any collusive or other anti-competitive behavior in connection with the bid, negotiation or award of the Contract.

**Section 13.10 [Intentionally Omitted]**

**Section 13.11 Ethical Standards For Department's Employees And Former Employees.** The Department expects the Design-Builder to observe the highest ethical standards and to comply with all applicable law, rules, and regulations governing ethical conduct or conflicts of interest. Neither the Design-Builder, nor any person associated with the Design-Builder, shall provide (or seek reimbursement for) any gift, gratuity, favor, entertainment, loan or other thing of value to any employee of the District or the Department not in conformity with applicable law, rules or regulations. The Design-Builder shall not engage the services of any person or persons in the employment of the Department or the District for any Work required, contemplated or performed under the Contract. The Design-Builder may not assign to any former Department or District employee or agent who has joined the Design-Builder's firm any matter on which the former employee, while in the employ of the Department, had material or substantial involvement in the matter. The Design-Builder may request a waiver to permit the assignment of such matters to former Department personnel on a case-by-case basis. The Design-Builder shall include in every subcontract a provision substantially similar to this section so that such provisions shall be binding upon each Subcontractor or vendor.

**Section 13.12 Gratuities and Officers Not to Benefit Provisions**

**Section 13.12.1** If it is found, after notice and hearing, by the Department that gratuities (in the form of entertainment, gifts, payment, offers of employment or otherwise) were offered or given by the Design-Builder, or any agent or representative of the Design-Builder, to any official, employee or agent of the Department or the District with a view toward securing the Contract or any other contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performance of the Contract, the Department may, by written notice to the Design-Builder, terminate the right of the Design-Builder to proceed under the Contract and may pursue such other rights and remedies provided by law and under the Contract.

**Section 13.12.2** In the event the Contract is terminated as provided in Section 13.12.1, the Department shall be entitled:

- .1 to pursue the same remedies against the Design-Builder as it could pursue in the event of a breach of the Contract by the Design-Builder; and
- .2 as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Department) which shall be not less than ten times the costs incurred by the Design-Builder in providing any such gratuities to any such officer or employee.

**Section 13.12.3** No member of, nor delegate to Congress, Mayor or City Council Member, nor officer nor employee of the District, nor officer nor employee of the Department shall be admitted to any share or part of the Contract or to any benefit that may arise therefrom, and all agreements entered into by the authorized representative of the Department in which he or any officer or employee of the Department shall be personally interested as well as all agreements made by the Department in which the Mayor or City Council Member or officer or employee of the District shall be personally interested shall be void and no payments shall be made on any such contracts by the Department or by any officer thereof; but this provision shall not be construed or extend to the agreement if the share of or benefit to the member of, or delegate to Congress, Mayor or City Council Member, or officer or employee of the District is de minimus.

**Section 13.13 Covenant Against Contingent Fees Provisions.** The Design-Builder warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon an agreement or understanding for a Commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Design-Builder for the purpose of securing business. For breach or violation of this warranty, the Department shall have the right to terminate the Contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of the Department, percentage, brokerage of contingent fee.

**Section 13.14 Non-Discrimination in Employment Provisions**

**Section 13.14.1** The Design-Builder agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, sex, age, marital status, personal appearance, sexual orientation, family responsibilities, matriculation, political affiliation, or physical handicap. The affirmative action shall include, but not be limited to, the following:

- .1 Employment, upgrading, or transfer;
- .2 Recruitment or recruitment advertising;
- .3 Demotion, layoff, or termination;
- .4 Rates of pay, or other forms of compensation; and

**.5 Selection for training and apprenticeship.**

**Section 13.14.2** Unless otherwise permitted by law and directed by the Department, the Design-Builder agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Department setting forth the provisions of this Section concerning non-discrimination and affirmative action.

**Section 13.14.3** The Design-Builder shall, in all solicitations or advertisements for employees placed by or on behalf of the Design-Builder, state that all qualified applicants will receive consideration for employment pursuant to the non-discrimination requirements set forth in this Section.

**Section 13.14.4** The Design-Builder agrees to send to each labor union or representative of workers with which it has a collective bargaining agreement, or other contract or understanding, a notice to be provided by the Department, advising each labor union or workers' representative of the Design-Builder's commitments under this Section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

**Section 13.14.5** The Design-Builder agrees to permit access by the Department to all books, records and accounts pertaining to its employment practices for purposes of investigation to ascertain compliance with this Section, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.

**Section 13.14.6** The Design-Builder shall include in every subcontract the equal opportunity clauses of this Section so that such provisions shall be binding upon each Subcontractor or vendor.

**Section 13.14.7** The Design-Builder shall take such action with respect to any Subcontractor as the Contracting Officer may direct as a means of enforcing these provisions, including sanctions for non-compliance.

**Section 13.15 Buy American Act Provision.** The Design-Builder shall comply with the provisions of the Buy American Act (41 U.S.C. § 10a), including, but not limited to, the purchase of steel.

**Section 13.16 Contract Work Hours And Safety Standards Act Provision.** The Design-Builder agrees that the construction work performed under this Contract shall be subject to the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333).

**Section 13.17 Davis-Bacon Act Provision.** The Design-Builder agrees that the construction work performed under this Contract shall be subject to the Davis-Bacon Act (40 U.S.C. §§ 276a-276a-7). The wage rates applicable to this Project are attached as **Exhibit K.**

The Design-Builder further agrees that it and all of its subcontractors shall comply with the regulations implementing the Davis-Bacon Act and such regulations are hereby incorporated by reference.

**Section 13.18 False Claims Act.** Design-Builder shall be governed by all laws and regulations prohibiting false or fraudulent statements and claims made to the government, including the prescriptions set forth in District of Columbia Code § 22-2514.

**Section 13.19 Interpretation of Contract.** All of the documents comprising the Contract should be read as complementary, so that what is called for by one is called for by all. Ambiguities should be construed in favor of a broader scope of work for the Design-Builder, as the intent of the Contract is, with specific identified exceptions, to require the Design-Builder to assume entire responsibility for construction of the Project. If there is any inconsistency among the documents comprising the Contract, the order of precedence among them is as follows, with the first listed document having the highest priority: this Agreement and its Exhibits, the General Conditions, the Construction Documents released by the Department, and the GMP Amendment. Any Change Order issued and executed by the Department shall supersede those portions of earlier dated contract documents to which it pertains.

**Section 13.20 Independent Design-Builder.** In carrying out all its obligations under the Contract, the Design-Builder shall be acting as an independent Contractor, and not as an employee or agent of the Department, or joint venturer or partner with the Department. The Design-Builder shall have exclusive authority to manage, direct, and control the Work, and shall be responsible for all construction means, methods, techniques, sequences, and procedures, as well as for Project safety.

**Section 13.21 Confidential Information.** In the course of the Design-Builder's performance of the Work, the Department may make available to the Design-Builder information that the Department designates as trade secrets or other confidential engineering, technical and business information. As long as, and to the extent that, such information remains confidential and available to others only with the consent of the Department, or is not generally available to the public from other sources, the Design-Builder shall maintain such information in strict confidence and shall not disclose any such information to others (including its employees or Subcontractors), except to the extent necessary to enable the Design-Builder to carry out the Project. The Design-Builder shall similarly obligate any and all persons to whom such information is necessarily disclosed to maintain the information in strict confidence. The Design-Builder agrees that, in the event of any breach of this confidentiality obligation, the Department shall be entitled to equitable relief, including injunctive relief or specific performance, in addition to all other rights or remedies otherwise available.

**Section 13.22 No Third-Party Beneficiary Rights.** Nothing in this Agreement shall be construed as creating third-party beneficiary rights in any person or entity, except as otherwise expressly provided in this Agreement.

**Section 13.23 Media Releases.** Neither the Design-Builder, its employees, agents or Subcontractors or material suppliers shall make any press release or similar media release related to the Project unless such press release have been discussed with the Department prior to its issuance.

**Section 13.24 Construction.** This Agreement shall be construed fairly as to all parties and not in favor of or against any party, regardless of which party prepared the Agreement.

**Section 13.25 Notices.** All notices or communications required or permitted under the Contract shall be in writing and shall be hand delivered or sent by telecopier or by recognized overnight carrier to the intended recipient at the address stated below, or to such other address as the recipient may have designated in writing. Any such notice or communication shall be deemed delivered as follows: if hand delivered, on the day so delivered, if sent by telecopier, on confirmation of successful transmission, and if sent by recognized overnight carrier, the next business day.

If to the Department:

Brian J. Hanlon  
Director  
Department of General Services  
2000 14<sup>th</sup> Street, NW  
Washington, DC 20009

If to the Design-Builder:

[NAME]  
[TITLE]  
[COMPANY]  
[ADDRESS]  
[ADDRESS]

This Paragraph shall be read as imposing minimum requirements for distribution of required contractual notices, and not as displacing distribution requirements with respect to design documents, construction submittals, periodic reports, and other documents.

**Section 13.26 Limitations.** The Design-Builder agrees that any statute of limitations applicable to any claim or suit by the Department arising from this Contract or its breach shall not begin to run, or shall be deemed to be tolled, until Final Completion or, with respect to latent defects or nonconformities, such later time as the Department knew or should have known of the defect or nonconformity.

**Section 13.27 Binding Effect; Assignment.** The Contract shall inure to the benefit of, and be binding upon and enforceable by, the parties and their respective successors and permitted assigns. The Design-Builder acknowledges that, in entering into the Contract, the Department is relying on the particular qualifications of the Design-Builder, and the Design-Builder therefore shall not delegate or assign any of its duties or obligations under the Contract, except in accordance with the Contract's provisions relating to subcontracting, or pursuant to the Department's prior written consent. The Design-Builder shall not assign its rights under the Contract, including the right to all or a portion of its compensation, without the Department's prior written consent. Any delegation or assignment made contrary to the provisions of this Paragraph shall be null and void.

**Section 13.28 Survival.** All agreements warranties, and representations of the Design-Builder contained in the Contract or in any certificate or document furnished pursuant to the Contract shall survive termination or expiration of the Contract.

**Section 13.29 No Waiver.** If the Department waives any power, right, or remedy arising from the Contract or any applicable law, the waiver shall not be deemed to be a waiver of the power, right, or remedy on the later recurrence of any similar events. No act, delay, or course of conduct by the Department shall be deemed to constitute the Department's waiver, which may be effected only by an express written waiver signed by the Department.

**Section 13.30 Remedies Cumulative.** Unless specifically provided to the contrary in the Contract, all remedies set forth in the Contract are cumulative and not exclusive of any other remedy the Department may have, including, without limitation, at law or in equity. The Department's rights and remedies will be exercised at its sole discretion, and shall not be regarded as conferring any obligation on the Department's to exercise those rights or remedies for the benefit of the Design-Builder or any other person or entity.

**Section 13.31 Headings/Captions.** The headings or captions used in this Agreement or its table of contents are for convenience only and shall not be deemed to constitute a part of the Contract, nor shall they be used in interpreting the Contract.

**Section 13.32 Entire Agreement; Modification.** The Contract supersedes all contemporaneous or prior negotiations, representations, course of dealing, or agreements, either written or oral. No modifications to the Contract shall be effective unless made in writing signed by both the Department and the Design-Builder, unless otherwise expressly provided to the contrary in the Contract.

**Section 13.33 Severability.** In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement, and in lieu of each such invalid, illegal or unenforceable provision, there shall be added automatically as a part of this Agreement a provision as similar in terms to such invalid, illegal or unenforceable provision as may be possible and be valid, legal and enforceable; each part of this Agreement is intended to be severable.

**Section 13.34 Anti-Deficiency Act.** The Department's obligations and responsibilities under the terms of the Contract and the Contract Documents are and shall remain subject to the provisions of (i) the federal Anti-Deficiency Act, 31 U.S.C. §§1341, 1342, 1349, 1350, 1351, (ii) the D.C. Code 47-105, (iii) the District of Columbia Anti-Deficiency Act, D.C. Code §§ 47-355.01 - 355.08, as the foregoing statutes may be amended from time to time, and (iv) Section 446 of the District of Columbia Home Rule Act. Neither the Contract nor any of the Contract Documents shall constitute an indebtedness of the Department, nor shall it constitute an obligation for which the Department is obligated to levy or pledge any form of taxation, or for

which the Department has levied or pledged any form of taxation. **IN ACCORDANCE WITH § 446 OF THE HOME RULE ACT, D.C. CODE § 1-204.46, NO DISTRICT OF COLUMBIA OFFICIAL IS AUTHORIZED TO OBLIGATE OR EXPEND ANY AMOUNT UNDER THE CONTRACT OR CONTRACT DOCUMENTS UNLESS SUCH AMOUNT HAS BEEN APPROVED, IS LAWFULLY AVAILABLE AND APPROPRIATED BY ACT OF CONGRESS.**

**ARTICLE 14**  
**TERMINATION OR SUSPENSION**

**Section 14.1 Cancellation Before Notice to Proceed.** The Department may cancel the Contract at any time before issuance of a Notice to Proceed, in the Department's sole discretion. Such a cancellation shall not be a breach of the Contract, and the Design-Builder shall not be entitled to any compensation or damages if cancellation occurs.

**Section 14.2** [Intentionally omitted]

**Section 14.3 Termination for Default.** The Department may terminate the Contract for default if the Design-Builder fails materially to perform any of its duties or obligations under the Contract. In particular, but without limitation, the Department may terminate the Contract if:

- .1 the Design-Builder fails to prosecute the Work diligently, in accordance with the Project Schedule or to make such progress in the Work as the Department reasonably believes is necessary to complete the Project within the time required by the Contract; or
- .2 the Design-Builder fails to perform the Work in a good and workmanlike manner or to correct defects in the Work promptly upon notice by the Department; or
- .3 the Department reasonably determines that the Design-Builder has abandoned the Work, or has failed to pay laborers, mechanics, materialmen, Subcontractors or suppliers when payment is due; or
- .4 becomes insolvent, makes an assignment for the benefit of creditors, files a voluntary petition under any chapter of the Bankruptcy Code or has an involuntary petition filed against it under any chapter of the Bankruptcy Code, or has a receiver appointed, or files for dissolution or otherwise is dissolved; or
- .5 the Design-Builder fails to pay its debts in a timely manner or becomes insolvent, or the Department reasonably determines that the Design-Builder does not have the financial ability to carry out its obligations under the Contract and the Design-Builder fails to give the Department prompt and reasonable assurances of its ability to perform.

- .6 The Department must provide the Design-Builder with written notice of its intent to terminate the Contract under this provision seven (7) days before actually putting the termination into effect. If the Design-Builder has begun its curative action and has made progress satisfactory to the Department within the seven days, the Department may so notify the Design-Builder and the termination will not take effect. Otherwise, the termination shall take effect after seven days without further notice or opportunity to cure.
- .7 If the Department terminates the Contract for default, the Department will have the right to take over the Work, to accept assignment of some or all Subcontracts or agreements with material suppliers, to take possession of the Project, to take and use all tools, equipment and supplies then being used in connection with the Work, and to finish the Project by whatever method it deems expedient, including accepting assignment of all outstanding Subcontracts and Supply Agreements.

#### **Section 14.4 Termination for Convenience**

**Section 14.4.1** The Department may, upon seven (7) days written notice to the Design-Builder, terminate the Contract in whole or specified part, for its convenience, whether the Design-Builder is in breach of Contract or not. The notice of termination shall state the effective date of termination, the extent of the termination, and any specific instructions.

**Section 14.4.2** After receiving notice of termination for convenience, the Design-Builder shall (1) stop work on the terminated portion of the Project as of the effective date of the termination and stop placing subcontracts or supply agreements thereunder; (2) consult with the Department regarding the disposition of existing orders and subcontracts, and use its best efforts to terminate them on terms favorable to the Department; (3) consult with the Department to decide what actions should be taken to protect work in place and equipment that has been delivered and not yet installed, and to render the site safe, and proceed to take such actions as may be agreed upon or, absent agreement, as may be reasonable; (4) take necessary or directed action to protect and preserve property in the Design-Builder's possession in which the Department has or may acquire an interest and, as directed by the termination notice or other order from the Department, deliver the property to the Department; and (5) promptly deliver to the Department all computer files it has prepared relating to the Project. The Design-Builder shall also promptly notify the Department, in writing, of any legal proceeding arising from any subcontract or supply agreement related to the terminated portion of the Project, and, in consultation with the Department, settle outstanding liabilities arising out of the terminated portion of the Project on the best terms reasonably possible.

**Section 14.4.3** The Design-Builder shall be entitled to receive only the following with respect to the terminated portion of the Project: (1) Cost of Work performed up to the date of termination; (2) reasonable costs of terminating outstanding subcontracts and supply agreements and other similar wind-up costs in a reasonable amount; (3) a fair and reasonable portion of the Design-Build Fee attributable to the Work performed on the terminated portion of the Project, up

to the time of termination. The Design-Builder shall not be entitled to recover the Design-Build Fee or overheads or profits on unperformed portions of the Work. Further, if it appears to the Department that the Cost of Work, added to the Construction and Design Management Fee and Preconstruction Fee, would have exceeded the GMP, the Department shall have the right to adjust the settlement figure downward in an appropriate amount. In no case shall the Design-Builder be entitled to receive an amount in settlement for termination for convenience that would exceed the percentage value of the Work actually performed in accordance with the Contract, multiplied by the GMP, and reduced by any damages, liquidated or otherwise, the Design-Builder may owe the Department.

**Section 14.4.4** Payment of such amounts shall be the Design-Builder's sole remedy for termination for convenience.

**Section 14.4.5** The Design-Builder shall, promptly after termination, submit a proposal for settlement of the amounts due to it as a result of the termination for convenience. The proposal shall be consistent with the requirements of Subparagraphs 14.4.2 through 14.4.4, and shall be accompanied by such documentation of costs as the Department may reasonably require. Such documentation may include cost and price data in accordance with the Department's Regulations.

**Section 14.5 Effect of Wrongful Termination.** Any termination for cause which is later determined to have been improperly effected shall be deemed to have been a termination for convenience pursuant to Paragraph 14.4 and shall be governed by that Paragraph.

**Section 14.6 Continued Responsibility After Termination.** If the Design-Builder is terminated, either for default or otherwise, the Design-Builder shall remain responsible for defects or non-conformities in all Work performed to the date of the termination.

**Section 14.7 Suspension**

**Section 14.7.1 Suspension at the Convenience of the Department.** The Department may at any time, with or without cause, suspend, delay, reduce or interrupt performance of all or any portion of the Work for such period or periods as the Department elects by giving the Design-Builder written notice specifying which portion of the Work is to be suspended and the effective date of such suspension. Such suspension, delay or interruption shall continue until the Department terminates such suspension, delay or interruption by written notice to the Design-Builder. No such suspension, delay, interruption or reduction by the Department shall constitute a breach or default by the Department under the Contract Documents. The Design-Builder shall continue to diligently perform any remaining Work that is not suspended, delayed, reduced or interrupted and shall take all actions necessary to maintain and safeguard all materials, equipment, supplies and Work in progress affected by the suspension, delay, reduction or interruption.

**Section 14.7.2 Payment Upon Suspension For Convenience.** In the event of

suspension, delay, reduction or interruption for convenience by the Department, the Department shall pay the Design-Builder and the Guaranteed Maximum Price shall be increased by such amounts (subject to the payment and related requirements of the Contract Documents) as follows:

**Section 14.7.2.1** Additional Costs of the Work, if any, which are incurred by the Design-Builder, its Subcontractors and Vendors as a result of continuing to maintain dedicated personnel, materials and equipment at the Site at the Department's request during any suspension, delay or interruption period, including for the purpose of safeguarding all material, equipment, supplies and the Design-Builder's Work in progress caused solely by such suspension, delay or interruption ordered by the Department for convenience, but the Guaranteed Maximum Price shall be increased only if and to the extent such delay, suspension or interruption exceeds a period of thirty (30) consecutive days following commencement of the Work; and

**Section 14.7.2.2** Other reasonable and unavoidable Costs of the Work, if any, which are directly related to any subsequent re-mobilization of the suspended, delayed or interrupted the Design-Builder's Work caused solely by such suspension, delay or interruption ordered by the Department for convenience, but the Guaranteed Maximum Price shall be increased only if and to the extent such delay, suspension or interruption exceeds a period of thirty (30) consecutive days following commencement of the Work.

**Section 14.7.2.3** Provided, however, that no adjustment shall be made to the extent that performance was otherwise subject to suspension, delay or interruption by another cause for which the Design-Builder is responsible. Furthermore, the Design-Builder shall not be entitled to an increase in its Construction and Design Management Base Fee for a suspension ordered by the Department.

## **ARTICLE 15** **OTHER CONDITIONS AND SERVICES**

This Contract and the rights and obligations of the Department and Design-Builder herein are subject to the approval of the Council for the District of Columbia.

## **ARTICLE 16** **DEFINITIONS**

**Section 16.1 Agreement.** The term Agreement shall mean this Agreement consisting of 58 pages. It does not include exhibits attached hereto or any document incorporated by reference.

**Section 16.2 Change Directive.** A written direction signed and issued by the Department ordering the Design-Builder either to provide pricing and schedule impact

information for a described change to the Work or to proceed with a described change and provide pricing and schedule impact information after beginning the changed Work.

**Section 16.3 Change Event.** Any condition, event, act, omission or breach, other than the issuance of a Change Directive, which the Design-Builder believes entitles it to a change in the Guaranteed Maximum Price, the Preconstruction Fee, the Construction and Design Management Fee, or the Substantial or Final Completion Date.

**Section 16.4 Change Order.** A written document, executed by the Department and the Design-Builder, setting forth the agreed terms upon which a change to the Contract has been made.

**Section 16.5 Construction Documents.** The final Drawings and Specifications, as prepared, sealed by the Architect/Engineer's design professional in accordance with the law, and issued by the Design-Builder for the purpose of obtaining bids from potential trade Subcontractors and material suppliers for use in constructing the Project.

**Section 16.6 Cost of General Conditions.** Those portions of the Cost of the Work that are typically considered to be general conditions which include, but are not necessarily limited to, those costs which are reimbursable under Article 6.

**Section 16.7 Contract.** The entire, integrated agreement between the Department and the Design-Builder with respect to the Project, consisting of this Agreement and the Exhibits to the Agreement, the Construction Documents released for the Design-Builder's use and any Change Directives or Change Orders that have been executed by the Department.

**Section 16.8 [Intentionally omitted]**

**Section 16.9 Differing Soils Conditions.** The term Differing Soils Conditions shall mean subsurface conditions on or adjacent to the Project site which differ materially from those indicated in the geotechnical reports prepared by the Architect/Engineer and its subconsultants. It shall be the responsibility of the Design-Builder to work with the Architect/Engineer during the Preconstruction Phase to review the reports prepared by the Architect/Engineer. The GMP Amendment shall identify the geotechnical reports upon which it is based. The term Differing Soils Conditions shall also include unknown physical conditions at the site of an unusual nature which differ materially from those ordinarily encountered and generally recognized as inhering to work of the character provided for in this Contract. During the Preconstruction Phase, the Design-Builder shall be required to conduct a thorough review of the Project site and the surrounding area and shall document its findings. In the event the Design-Builder fails to undertake and document such a thorough review, the Design-Builder shall be deemed to have known of those conditions which a thorough review would have detected.

**Section 16.10 Drawings.** The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and wherever issued, showing the design, locations and

dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

**Section 16.11 Final Completion.** The point at which Substantial Completion has been achieved, all punch list items noted at Substantial Completion have been completed and all documents the Design-Builder is required to deliver to the Department as a condition to receiving final payment.

**Section 16.12 Final Completion Date.** The date established in the GMP Amendment by which the Design-Builder shall achieve Final Completion. The Final Completion Date may be modified only by Change Order or Change Directive in accordance with the Agreement.

**Section 16.13 Fully Complete.** To undertake all of the Work necessary to fully construct and complete the Project and execute all tasks necessary to obtain the final Certificate of Occupancy for the Project from the District of Columbia; submit final lien releases from the Design-Builder and Subcontractors and material suppliers; complete all punch list items to the Department's approval and sign-off; and cause all representations, warranties and guarantees to be honored and otherwise fulfill all of the requirements set forth in the Contract.

**Section 16.14 Guaranteed Maximum Price or GMP.** The maximum amount, including, but not limited to, the Preconstruction Fee, the Design-Build Fee and the Cost of the Work, that will be paid the Design-Builder to Fully Complete the Project. The GMP may be modified only by Change Order or Change Directive in accordance with the Agreement. The GMP shall be established in the GMP Amendment.

**Section 16.15 Hazardous Material.** Any toxic substance or hazardous chemical defined or regulated pursuant to federal, state or local laws relating to pollution, treatment, storage or disposal of waste, or protection of human health or the environment. Such laws include, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, the Clean Water Act, the Clean Air Act and laws relating to emission, spills, leaks, discharges, releases or threatened releases of toxic material. The term Hazardous Materials shall also include petroleum and petroleum bi-products

**Section 16.16** [Intentionally omitted]

**Section 16.17 Notice to Proceed.** A written notice to proceed, signed by the Department, directing the Design-Builder to proceed with the Project or any portion of the Project.

**Section 16.18 Project Schedule.** The schedule for the project agreed to by the Department and the Design-Builder as part of the GMP Amendment. Such schedule shall not be changed except by a Change Order or Change Directive issued by the Department. The schedule shall be in a form and contain such detail as may be agreed upon by the parties.

**Section 16.19 Self-Performed Work.** Trade work performed by employees of (1) the Design-Builder; (2) any entity that is a partner or member of the entity comprising the Design-Builder; (3) any entity that controls, is controlled by, or is under common control with the Design-Builder; or (4) any entity that controls, is controlled by, or is under common control with any entity that is part of the Design-Builder. Self-Performed Work is distinguished from trade work performed by Subcontractors unaffiliated with the Design-Builder or the entities of which the Design-Builder is comprised.

**Section 16.20 Specifications.** The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

**Section 16.21 Subcontractor.** Any person, natural or legal, to whom the Design-Builder delegates performance of any portion of the Work required by the Contract. The term "Subcontractor," used without a qualifier, shall mean a subcontractor in direct privity with the Design-Builder. "Subcontractors at all tiers" shall mean not only those Subcontractors in direct privity with the Design-Builder, but also those performing Work pursuant to sub-subcontracts, subsubsubcontracts, and so on. "Subcontractors" shall include both those who are retained to perform labor only and those who are retained both to perform labor and to supply material or equipment. "Subcontractors" shall also include design professionals who are not the Design-Builder's employees and to whom the Design-Builder delegates any part of its responsibilities under the Contract, except that references to "trade Subcontractors" shall exclude design professionals.

**Section 16.22 Substantial Completion.** Substantial Completion shall mean that all of the following have occurred: (1) the construction and installation work have been completed with only minor punch list items remaining to be completed; (2) a permanent certificate of occupancy and all other required permits or approvals have been obtained; (3) all operating and maintenance manuals, training videotapes and warranties required by the Contract have been delivered to the Department; (4) any supplemental training session required by the Contract for operating or maintenance personnel have been completed; (5) all clean-up required by the Contract has been completed; and (6) the Project is ready for the Department to use it for its intended purpose. "Minor punch list items" are defined for this purpose as items that, in the aggregate, can be completed within ninety (90) days without interfering with the Department's normal use of the Project.

**Section 16.23 Substantial Completion Date.** The date established in the GMP Amendment by which the Design-Builder shall achieve Substantial Completion. The Substantial Completion Date may be modified only by Change Order or Change Directive in accordance with the Agreement.

**Section 17 RFP and Proposal.** Reference is made to the Request for Proposals issued by the Department and the proposal submitted by the Design-Builder in response thereto. Copies of the cover pages of those documents are attached as **Exhibit I**. Those documents are

subordinate to the terms of this Agreement. To the extent that either of those documents is inconsistent with the terms of the Agreement, the terms of the Agreement shall prevail. Reference is also made to **Exhibit J** which sets forth certain clarifications and assumption as to the costs that are included within the Maximum Cost of General Conditions.

**Section 18 General Conditions.** To the extent that this Agreement is silent on an action or requirement of the Design-Builder, and the edition of the AIA Document A201, General Conditions of the Contract for Construction, current as of the date of this Agreement speaks to such action or requirement, such AIA Document 201 shall govern Design-Builder's obligations with respect to such action or requirement under this Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the date first written above.

**DEPARTMENT OF GENERAL SERVICES**, an agency within the executive branch of the Government of the District of Columbia

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**[INSERT COMPANY NAME]**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_  
Date: \_\_\_\_\_