

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. Contract Number DCKA-2007-B-0131	Page of Pages 1 30	
2. Amendment/Modification Number 6		3. Effective Date 10/15/2007		4. Requisition/Purchase Request No. N/A	
5. Solicitation Caption Construction of Bicycle Transit					
6. Issued By: DDOT District Department of Transportation Office of Contracting and Procurement 2000 14th Street, NW, 6th Floor Washington, DC 20009		Code		Procurement Support Branch 2000 14th Street, NW, 3rd Floor Washington, DC 20009	
8. Name and Address of Contractor (No. Street, city, country, state and ZIP Code)			(X)	9A. Amendment of Solicitation No. DCKA-2007-B-0131	
				9B. Dated (See Item 11) 9/4/2007	
				10A. Modification of Contract/Order No.	
				10B. Dated (See Item 13)	
Code		Facility			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input checked="" type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or fax which includes a reference to the solicitation and amendment number. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or fax, provided each letter or telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. Accounting and Appropriation Data (If Required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14					
A. This change order is issued pursuant to: (Specify Authority)					
The changes set forth in Item 14 are made in the contract/order no. in item 10A.					
B. The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation date, etc.) set forth in item 14, pursuant to the authority of 27 DCMR, Chapter 36, Section 3601.2.					
C. This supplemental agreement is entered into pursuant to authority of:					
D. Other (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.					
14. Description of amendment/modification (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.)					
Amendment No. 6 is being issued to address questions resulting from the Pre-Bid Conference (1) Questions and responses dated October 15, 2007, (consisting of six pages are attached with this amendment). (2) DELETE Pay Item Schedule in its entirety and REPLACE with the revised Pay Item Schedule pages 1R to 7R attached with this amendment. (3) REPLACE Section 08800 (Glass and Glazing consisting of (8 Pages). (4) REPLACE Section 09000 (Field Surface Preparation & Touch-up consisting of (3 Pages). (5) REPLACE Section 10426(Signage consisting of (2 Pages). (6) REPLACE Section 10800 (Accessories consisting of (2 Pages). (7) REPLACE Section 11141(Bicycle Racks consisting of (2 Pages). The OCP will not respond to any questions received after issuance of this Amendment.					
Except as provided herein, all terms and conditions of the document referenced in Item (9A or 10A) remain unchanged and in full force and effect					
15A. Name and Title of Signer (Type or print)			16A. Name of Contracting Officer Jerry M. Carter		
15B. Name of Contractor (Signature of person authorized to sign)		15C. Date Signed	16B. District of Columbia (Signature of Contracting Officer)		16C. Date Signed 10/15/2007

Second Round of Questions and Answers
Bid Solicitation
Bicycle Transit Center at Union Station
District Department of Transportation
DCKA 2007 B 0131
October 15, 2007

- 1:** Tree Gratings are described in Specification 02870 but none are shown in the drawings or in the Pay Item Schedule, are these required?
- A:** No, there are no tree gratings required.
- 2:** Is the seating referred to under paragraph 2.4 of Specification 02870 the same as detailed on the Architectural drawings for the dressing room bench (custom fabricated)?
- A:** Yes, it is the same seating, and yes, it is to be a custom fabricated, built-in sheet aluminum bench.
- 3:** Is there any site seating required?
- A:** No, there is no exterior site seating.
- 4:** The Pay Item Schedule lists Floor Finish based on 1,750 SF and the plan view on the drawings appears to have the paving as the floor finish, what is the allowance to include (from concrete up) and what materials shall the allowance be based on?
- A:** Please refer to the revised Pay Item Schedule (Page 3). The Floor Finish item has been removed. The concrete should be finished as per standard DDOT concrete slab specifications.
- 5:** Drawing A29 shows custom signage to be placed in various places on the glass exterior, is there a specification for this signage? If so please advise if we are to include an allowance for this work and if so, based on what type of application (film, etched, painted...?), and if it should include the 'Local Bike Shop Logo & Information'. Are we to add this line item to the Pay Item Schedule?
- A:** Please refer to Specification 10426 and the revised Pay Item Schedule (Page 3) issued with these answers.

6: Drawing C23 shows signage for the site. Where can specifications and details be found for signage #7 thru #15 and how are these to be mounted?

A: The signage is hereby changes as follows:

Sign #7: delete

Sign #8: delete

Sign #9: change to D11-1, "Bike Route" sign

Sign #10: keep, but delete the white "MBT" circle. Use MUTCD sign D1-1b

Sign #11: delete

Sign #12: delete

Sign #13: delete

Sign #14: delete

Sign #15: see MUTCD sign R1-5a, but use "stop" instead of "yield."

7: Does the description and unit quantity given on the Pay Item Schedule supersede the bid drawings?

A: Yes, the Pay Item Schedule quantities should be the numbers bid on and supersede the bid drawings.

8: Is there a specification for the aluminum panels, pay item 06160-2?

A: Yes, please refer to Metal Fabrications 05500 Metals, part 2.1-K.

9: Is there a specification for the floor finish, pay item 09600-1?

A: Please refer to the revised Pay Item Schedule. The Floor Finish item has been removed. The concrete should be finished as per standard DDOT concrete slab specifications. (also see Q4 above)

10: Is there a specification for the dressing room benches, pay item 02870-1?

A: Please refer to Specification 05550 – Metal Fabrications, Section 2.1K and Drawings A24 and A25.

11: Please clarify the number of stand up bike racks, double decker bike racks and outside back racks? They are listed with units of Spaces in the Pay Item List not rack quantities.

A: The number of racks has been revised from those shown on Drawing A-34. Please refer to the revised Pay Item Schedule for updated quantities and pay items associated with the bicycle racks. The changes consist of adding one double deck rack (12 bikes) and the removing the single “stand up” racks.

The racks are now as follows:

- 11 Sets of 6 double deck racks (132 bikes),
- 30 Exterior “inverted-U” racks: (60 bikes). (This is more than called for outside in the Plans, but 8 of these will be supplied, uninstalled, for use inside.)

This has been reflected in the revised Pay Item Schedule issued with this addendum.

12: Is there a specification for the miscellaneous specialties, pay item 02800-1, dressing room mirrors, pay item 08830-1, and dressing room hooks, pay item 12500-1?

A: Please refer to revised Specification 10800 issued with the answers.

13: Is a Ground System required for the building structure, none is shown?

A: The ground system is shown in the Electric Riser Diagram on sheet E-3.

14: Generally Pepco requires a spare service entrance conduit; the drawings only show one conduit, is this correct?

A: Pepco’s *Customer Design Manual* does not require spare conduit. They note the use of single ducts for underground services and the sample meter installation detail only shows one conduit. Larger services can require additional ducts and Pepco could ask for a spare during continued coordination.

15: What size conduit is required for the telephone service?

A: The size is shown on drawing E-1. One 2 ½” conduit is called for. Pepco and the telephone service can share the same duct bank provided there is a minimum 3” concrete or 12” earth between, per Pepco’s manual.

- 16:** With respect to the telephone service entry, what are the length, size and number of conduits and location of origination?
- A:** Details such as length, size and number of conduits and location of origination should be coordinated with the telephone company. There are at least 2 telephone duct banks under First Street (see UL-5).
- 17:** Drawing UL-1 shows electric conduit crossing First St. and intersecting with a Pepco 8-way duct bank. No manhole is shown. Is this where the electric service originates?
- A:** The electric service connection will need to be coordinated with PEPCO. The service application has been filed with PEPCO, however, further coordination will need to be conducted.
- 18:** The quantity shown in the Pay Item Schedule (page 4) for the exhaust fans does not match the quantities shown in the Drawing M-1, which quantity should we use?
- A:** Please refer to the revised Pay Item Schedule pages included in this Addendum; they include the revised exhaust fan quantities to match the 6 called for in the schedule on Drawing M-1.
- 19:** Specification Section 08800, Paragraph 2.5 describes Photovoltaic Panels however there are no other reference to this type of panels in the RFP documents; in particular on the electrical plans, the glazing types in Drawing A28 and Specifications. However, Pay Item Schedule, Item # 08800-1 refers to PV Glass. Please clarify.
- A:** Please refer to the revised Specification 08800 included in this Addendum the Photovoltaic Panels are no longer part of this project.
- 20:** Drawing UL-1 shows electric conduit crossing First St. and intersecting with a Pepco 8-way duct bank. No manhole is shown. Is this where the electric service originates? Reference previous Grunley Walsh question asked, "Does the description and unit quantity given on the Pay Item Schedule supersede the bid drawings?" To further clarify our question, are we to price this project on the basis of the description and quantities given in the Pay Item Schedule, regardless of whether it matches the RFP documents? Or are we to alter the schedule as needed? For example: Electrical, 16000-6, Type A fixture, embedded, sealed lists a quantity of 19, documents show 9.

- A:** Please price the project on the basis of the description and quantities given in the Pay Item Schedule and subsequent revisions included in the addenda.
- 21:** Pay Item Schedule lists Subcontractor's General Conditions under 15000-14, Mechanical. No breakout is called out for other subcontractors (glass, electrical, site). Should general conditions be included for other subcontractors?
- A:** Please refer to the revised Pay item Schedule pages included in this Addendum, the General Condition Item 15000-14 has been removed from the Pay Item Schedule.
- 22:** Pay Item Schedule under Telecommunication lists 16000-24, Allow for telecom service to retail space; Question/Answer 8 in Amendment 3 states that we will need to coordinate telecom service with the local provider. Is the allowance to be the cost for our coordination efforts (only) or for the telecom service itself - furnished, installed and coordinated?
- A:** The Pay Item is to include coordination and coordination efforts as well as for the complete service connection/installation. An allowance has been added for telecommunications.
- 23:** Window Details shown on A20 show a motorized operator. The Pay Item Schedule lists 16000-23, allow for electric control of operable louvers. Is this for the windows? YES. If for operable windows: Is the control low voltage? YES In conduit or loose wire? Where is it to be run in relation to the structure/windows? Please provide installation details and material specification if we are to assign a reasonable allowance for this work.
- A:** The Operable Windows operation and performance is defined in Specifications - Section 8600. The performance of the control equipment is defined in section 5900 of the specifications. The electrical service for these units will depend on the unit chosen by the bidder. The conduit should be surface mounted in the least conspicuous manner, minimizing runs where possible – mounted to the structural elements as required.
- 24:** Is the award of this project going to be based on the lowest responsible bid? If so, in order to provide a level playing field, will predetermined allowances be provided to us for the line items from the Pay Item Schedule listed below? Normally, allowances are given to the bidders so everyone uses the same amount. Please advise.
- 05100-7 Miscellaneous metals and embeds, allowance

02800-1 Miscellaneous specialties - is this an allowance?
16000-23 Allow for electric control of operable louvers
16000-24 Allow for telecom service to retail space
16000-50 Allow for local panelboard grounding
02210-1 Subsurface Investigation - Tunnel Survey
01320-1 Co-ordination & Monitoring of WMATA
03050-1 Training Provision - Concrete Finisher

A: Please refer to the revised Payment Item Schedule. Items 05100-7 and 02800-1 have been removed. Those items and associated costs should be included in the other relevant pay items. Allowances for Pay Item 16000-24 (telecom service) along with added Pay Item 1600-51 Electrical Service Connection and Coordination have been assigned the following amounts as allowances:

16000-24 Allow for telecom service to retail space - \$10,000
16000-51 Allow for Electrical Service Connection and Coordination - \$20,000

The other items listed (02210-1 and 01320-1 and 03050-1) are all to be bid as normal Pay Items and not assigned allowances by DDOT.

25: Reference Specification Section 11141 - Bicycle Racks: The Josta racks are being quoted to us with galvanized finish but they are also available with a powder coat finish. Which finish should be bid?

A: Galvanized, per Specification 11141.

26. Must all materials be made in the United States?

A. See DDOT Standard Specifications for Highways and Bridges, Division 103, Article 24. Special exceptions may be possible for components not available in the United States.

08800 GLASS AND GLAZING

PART 1 – GENERAL

1.1 SUMMARY

- A. Provide glass and glazing as shown and as specified.

1.2 SUBMITTALS

- A. Submit copies of manufacturer's specifications and installation instructions for all materials required with a statement from the glass manufacturer and fabricator that they have reviewed glazing details including the use of special frames, hardware, sealants and gaskets, and that each product to be furnished is recommended for the application shown.
- B. Submit the following samples:
1. Glass: 12 inch by 12 inch samples of each type, except clear glass, with fritting where applicable. Provide samples of the segment A glazing with double frit layer) sufficient in size to determine if moiré pattern occurs, in which case modification of the pattern will be made.
 2. Exposed Edge Samples: Provide a sample of all glass types with an exposed edge included laminated glass showing the profile and the finish of the exposed edge.
 3. Submit color range samples if production run color variations are expected.
 4. Glazing Gaskets: Submit 12 inch long samples.
 5. Sealants: Submit cured glazing sealant samples including a sample of a molded corner. Refer to Section 07920 JOINT SEALANTS.
- C. Contract Closeout Submittals:
1. Maintenance Data: Include copies of manufacturer's maintenance manual including cleaners and detergents compatible with glass types
 2. Warranty the glass against delamination, deterioration of laminating films, loss of transparency, color change or other forms of deterioration due to defective materials or lamination. Warranty the Low-e coating against peeling and damage from normal weather conditions. Warranty shall include condition of exposed edge of laminated glass where exposed to exterior or unconditioned environment. The period of the warranty shall be an extension to 5 years starting on the date of substantial completion.

1.3 QUALITY ASSURANCE

- A. Comply with recommendations and requirements of the Glazing Manual and Sealants Manual published by FGMA. For heat absorbing, tinted reflective, glass and insulating glass, comply with the manufacturer's recommendations when at variance with FGMA, but only after notification of the Architect and receipt of approval for such variance.
- B. Test building glass following the procedures of ASTM E 998 Standard Test Method for Structural Performance of Glass in Windows, Curtain Walls, and Doors under the Influence of Uniform Static Loads by Nondestructive Method, Procedure B shall be used for wind event test loads, and ASTM E 997 Standard Test Method for Structural Performance of Glass in Exterior Windows, Curtain Walls, and Doors under the Influence of Uniform Static Loads by Destructive Methods.
 - 1. In the event the glass is fabricated outside the United States, alternative test methods may be submitted for evaluation. Proposed tests shall be submitted in accordance with ASTM C 162 Standard Terminology of Glass and Glass Products. A direct line by line comparison of the proposed test to the required tests and results shall be made evident if alternate tests are proposed.
 - 2. Refer to Section 08970 STRUCTURAL GLAZING ASSEMBLIES for additional performance requirements.
- C. Pre-Installation Conference: After approval of the glazing manual and prior to the installation of glazing, and at the Contractor's direction, meet at the project site with the manufacturer's representative to review the installation procedures and methods. Refer to Section 01300 ADMINISTRATIVE REQUIREMENTS.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver glazing materials to project site in manufacturers' unopened containers, fully identified with trade name, color, size, hardness, type, class, and grade.
- B. Store glass in accordance with manufacturer's recommendations, protected from weather, staining, damage and loss. During storage and handling of glass protect faces from scratches and abrasion and provide cushions at edges to prevent impact damage.
- C. Avoid contact between specialty glass and moisture to avoid delamination.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Do not perform glass installation when temperature is below 40 degrees F. If job progress or other conditions require glazing work when temperatures are below 40 degrees F. or below the minimum temperature recommended by the manufacturer, consult the manufacturer and establish the minimum provisions required to ensure satisfactory work.

1.6 WARRANTY

- A. Special Warranty: Submit copies of written warranties, signed by the manufacturer, fabricator, installer and Contractor, agreeing to repair or replace defective work which has failed. Repairs and replacements required because of failure of materials or workmanship shall be completed without additional expense to the Owner.
1. Insulating Glass: Warranty to not develop obstruction of vision as a result of condensation, water, dust or film formation on the internal glass surfaces as a result of failure of the hermetic seal. Include warranty against non-delamination, cohesive and adhesive failure of secondary seal. During the period of the warranty, remove and replace with new glass all defective units. The period of the warranty shall be an extension to 10 years starting on the date of acceptance by the Owner for substantial completion.
 2. Laminated Glass: Warranty the glass against delamination, deterioration of laminating films, loss of transparency, color change or other forms of deterioration due to defective materials or lamination. The period of the warranty shall be an extension to 5 years starting on the date of acceptance by the Owner for substantial completion. Warranty shall include condition of exposed edge of laminated glass where exposed to exterior or unconditioned environment.
 3. Low Emissivity Glass: Warranty the coating against peeling and damage from normal weather conditions. The period of the warranty shall be an extension to 10 years starting on the date of acceptance by the Owner for substantial completion.

PART 2 - PRODUCTS

2.1 GLASS CONFIGURATIONS

- A. See drawings for glass configurations.
- B. Safety Glazing and Structural Requirements: Provide the appropriate glazing thickness, heat strengthening and tempering where shown and as required to comply with the local building jurisdiction, building codes and window and curtain wall performance and design criteria.
- C. Coatings:
- 1 Exterior / Enclosure Glazing – Provide low-e laminated or laminated/insulated glass as specified in drawings. Provide tinted inboard layer as well as low-e outboard layer for all exterior glazing as appropriate. Tinted layer to be green as specified (Viracon Low-e series – VE 2-52 or approved equal).
 - 2 Interior (wall between retail and parking) - Provide laminated / insulated glass as specified in drawings. All interior glazing to be clear.

- D. Ceramic Frit Pattern:
1. Fuse ceramic frit in accordance with ASTM C1048. Frit on segments A and C only in horizontal lay out transitioning from bands of equal spacing wider at the top and narrower down the structure. See the drawings for pattern, glass types and faces where the frit pattern is located.
 2. In the case of double frit layers mock up will be required to determine if moiré patterns occur in which case a modification of the pattern may be required.

2.2 HEAT STRENGTHENED GLASS

- A. Full Tempered Glass: Provide glass certified by a recognized certification agency as meeting the requirements of 16 CFR 1201. Treat glass in a horizontal batch type reciprocating furnace. Roller distortion shall be parallel to the horizontal dimension of the installed glass. Overall bow shall not exceed 0.188 inch.
- B. Heat Strengthened Glass: Fabricate in accordance with requirements for tempered glass as specified. In addition, every tenth light shall be subject to a surface compression measurement using a DSR instrument properly calibrated. The measured surface compression shall be no less than 5500 pounds per square inch, nor greater than 7500 pounds per square inch.
- C. Sizes and Cutting: Prior to tempering or heat strengthening, cut glass to required sizes as determined by accurate measurement of openings to be glazed, making allowance for required edge clearances. Cut and process edges in accordance with glass manufacturer's recommendations. Do not cut or treat edges in the field.

2.3 LAMINATED GLASS

- A. Glass for laminating shall be of quality as specified for each type
- B. Adhesive Laminating Film: Use polyvinyl butyral plastic sheet intended specifically for laminating glass with 0.06 inch minimum thickness. All laminated glass with edges exposed to exterior or unconditioned spaces shall be specially treated as specified below.
- C. Laminate all units at the factory using the manufacturer's standard heat-plus-pressure process. Exercise extreme care to exclude dirt and other foreign materials from the lamination and to eliminate all voids and delaminated surfaces from the work.
1. Cut units to proper size at the factory so that no cutting of laminated glass will be required at the project site. Cutting and edge treatment shall be in accordance with the glass manufacturer's recommendations.

2. Coordinate the location and size of hardware opening through the shop drawing process specified in Section 08970 STRUCTURAL GLAZING ASSEMBLIES.
 3. Arrange each course or laminate in the order shown and label the exterior, or interior, face of each completed unit so that there will be no error in placement during installation.
 4. Conceal processed and coated glass surfaces in the lamination, unless shown otherwise.
- D. Exposed Edges: Provide special treatment for edges of glass exposed to exterior or unconditioned environments. Treatment shall consist of a factory applied, baked on fluoropolymer based sealer applied after the lamination process in accordance with the direction of the glass laminator. Coating shall require no maintenance and shall act to seal the edges of the laminate against moisture and vapor penetration. Edges of glass shall be finished and polished as required prior to application of the treatment.
1. Product and Manufacturer: Goldray Edgeseal, Goldray Corporation.

2.4 LOW EMISSIVITY GLASS

- A. Float glass, heat absorbing tinted glass or heat treated glass, refer to glass configurations shown.
- B. Corner glass locations will have extended edges beyond the insulated encapsulation. Fabricate glass with coating providing edge deletion of coating for extended edges. Coating on extended edges, outside of the insulating encapsulation, will not be permitted.

2.5 MISCELLANEOUS GLAZING MATERIALS

- A. Setting Blocks: Neoprene or silicone blocks of 80 to 90 Shore A durometer hardness, tested for compatibility with glazing sealant.
- B. Spacers: Neoprene or silicone blocks of 40 to 50 Shore A durometer hardness, adhesive backed on one face only, and tested for compatibility with glazing sealant.
- C. Structural Glazing: 1 part silicone sealant certified by the manufacturer for the specific application equal to or better than 4000 Series, GE Silicones Construction Products, General Electric Co.
- D. Joint Fillers: Expanded polyethylene joint filler (EPEJF) Closed cell not less than 5.0 psi for 25 percent compression deflection, resistant to petroleum oils and solvents and with surface water absorption of not more than 5 percent.

1. Ethafoam SB, Dow Chemical Co.
2. Sonofoam Closed Cell Backer-Rod, ChemRex Inc., Sonneborn Building Products.
3. Tremco Joint Backing, Tremco Mfg. Co.

2.6 FABRICATION

- A. Cutting: Obtain sizes from shop drawings or by field measurement. Cut glass to fit each opening with minimum edge clearances and bite on glass as recommended by glass manufacturer. Do not nip glass edges. Factory cut heat absorbing, tinted reflective, glass 3/8 inch thick and above and plate or float glass 1/2 inch thick and above. Edges may be wheel cut or wet sawed at manufacturer's option, no dry cutting, sawing or seaming will be permitted. For glass to be cut at site, provide glass 2 inches larger in both dimensions than required and prohibit seaming or nipping. Do not cut, seam, nip or abrade tempered or heat-strengthened after tempering.
1. When glass is to be precut to sizes obtained from shop drawings take field measurements of each opening, before glazing, to verify adequate bite on the glass and minimum edge clearance. Openings which do not fall within the tolerances for which precut glass has been sized shall be glazed only with glass specially cut to fit such openings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine the substrates and the conditions under which the work is to be performed. Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean glazing channels, stops and rabbets to receive glazing materials of obstructions and substances which might impair the work. Remove protective coatings which might fail in adhesion or impair bond of sealants.
- B. Comply with manufacturer's instructions for final wiping of surfaces immediately before application of primer and glazing compounds or tapes. Wipe metal surfaces with zylol or toluol.
- C. Not more than 30 minutes before glazing, prime surfaces to receive glazing compounds in accordance with manufacturer's recommendations using recommended primers.

3.3 INSTALLATION, GENERAL

- A. All glass shall be installed in accordance with the FGMA "Glazing Manual" or the manufacturer's recommendations. Glazing procedures for each type of glass shall be provided for use by the installers. No variance from the glazing procedures will be permitted without prior written approval of the Architect.

3.4 CLEANING AND PROTECTION

- A. Clean excess sealant or compound from glass and framing members immediately after application using solvents or cleaners recommended by manufacturer.
- B. Protect glazing materials during the construction period so that they will be without any indication of damage or deterioration at the time of acceptance by the Owner.
- C. Do not apply warning markings directly to glass.
- D. Remove and replace glass, during the construction period, which is broken cracked, chipped or damaged in any way and from any source, including weather, vandalism or accidents.

- E. Maintain glass in a reasonably clean condition throughout construction so that it will not become stained and will not contribute to the deterioration of glazing materials.
- F. When glass is installed adjacent to or below concrete or other masonry surfaces which are exposed to weather, examine glass throughout the construction. Wash glass immediately when inspection reveals dirt, scum, deposits or staining and after rainstorms to remove any corrosive wash or dirt which may adhere.
- G. Wash glass on both faces not more than 4 days prior to acceptance by the Owner. Comply with instructions and recommendations of the glass manufacturer and glazing materials manufacturer for cleaning.

END OF SECTION 08800

PART 1 – GENERAL

Field Surface Preparation & Touch-up:

A. General Requirements

1. Prior to application of primer, surfaces shall be prepared to receive specified coating system in compliance with manufacturer's recommendations and specifications of Steel Structures painting Council as indicated in Schedule below

2. Clean surfaces of residual deposits of grease, scale, rust, oil, dirt, and other foreign matter, immediately prior to priming. Surfaces to be coated shall be clean, dry, smooth and free from dust and foreign matter which will adversely affect adhesion or appearance.

B. Surface Preparation of Steel

1. Fabrication Defects:

- a. Correct steel and fabrication defects revealed by surface preparation.
- b. Remove weld spatter and slag.
- c. Round sharp edges and corners of welds to a smooth contour.
- d. Smooth weld undercuts and recesses.
- e. Grind down porous welds to pinhole-free metal.
- f. Remove weld flux from surface.

2. Ensure surfaces are dry.

3. Remove visible oil, grease, dirt, dust, mill scale, rust, paint oxides, corrosion products, and other foreign matter in accordance with SSPC-SP 6/NACE3, unless otherwise specified.

4. Abrasive Blast-Cleaned Surfaces: Coat abrasive blast-cleaned surfaces with primer before visible rust forms on surface. Do not leave blast-cleaned surfaces uncoated for more than 8 hours.

C. Provide paint to match shop paint as required for field painting and touch up.

Field Quality Control

A. Testing Laboratory Services:

1. Field Painting Inspection:

- a. Verify cleaning operations to surfaces are to condition specified.
- b. Verify conformance of paint to specification.
- c. Check for thickness of each coating and final thickness.
- d. Check touch up for final finish.

B. Environmental Requirements

1. Weather:

- a. Air and Surface Temperatures: Prepare surfaces and apply and cure coatings within air and surface temperature range in accordance with manufacturer's instructions.
- b. Surface Temperature: Minimum of 5 degrees F (3degrees C) above dew point.
- c. Relative Humidity: prepare surfaces and apply and cure coatings within relative humidity range in accordance with manufacturer's instructions.
- d. Precipitation: Do not prepare surfaces or apply coatings in rain, snow, fog, or mist.
- e. Wind: do not spray coatings if wind velocity is above manufacturer's limit.

2. Ventilation:

- a. Schedule coating work to avoid excessive dust and airborne contaminants.
- b. Protect work areas from excessive dust and airborne contaminants during coating application and curing.

Repair

- A. Materials and Surfaces not scheduled to be coated: repair or replace damaged materials and surfaces not scheduled to be coated
- B. Damaged coatings: touch up or repair damaged coatings. Touch-up of minor damage shall be acceptable where result is not visibly different from adjacent surfaces. Recoat entire surface where touch-up result is visibly different, either in screen, texture, or color.

- C. Coating Defects: Repair in accordance with manufacturer's instructions coatings that exhibit film characteristics or defects that would adversely affect performance or appearance of coating systems.

Signage

PART 1 – GENERAL

1.1 Summary:

- A. Furnish and install graphic computer cut signs as shown and specified.

1.2 Submittals:

- A. Manufacturer's Data: Submit specifications and applications instructions
- B. Samples: submit for each type of lettering two samples of color and finish.
- C. Shop Drawings: submit shop drawings indicating dimensions and layout of signs. Include elevations indicating conditions at glass framing.

1.3 job Conditions:

- A. Take field measurements to assure proper fit.

PART 2 – PRODUCTS

2. Vinyl Graphics Signs:

- A. General:
 - 1. provide vinyl graphics materials, including films, adhesives, inks infills and coatings by one manufacturer to assure compatibility of sign system components.
 - 2. Adhesives: Either pressure-sensitive or dry vacuum applied and heat activated adhesive may be used, subject to the recommendations of the manufacturer. For field applied graphics, use repositionable adhesive film, Controltac by 3M or equal.
- B. Non-reflective Vinyl:
 - 1. Surface printed: Adhesive backed vinyl equal to Controltac, Scotchcal or Scotchcal Electrocut by 3M with graphics screen or surface printed with permanent vinyl inks as recommended by film manufacturer.
 - 2. Die Cut: Adhesive backed vinyl film as above in color shown, or with permanent ink color coat. Graphics die cut and carrier mounted in shop. Use SCPM -3 Scotchcal Premask applications tape or equal.

3. Clear Coating: Clear coat vinyl ink with inhibitors, equal to Scotchcal Screen printing in by 3M.
- C. Typeface: arial lower case 12 inch letters on Northwest Southeast walls. Arial capital 6 inch letters on Southeast wall. Arial 6 inch letters on glass panel at Entrance.

PART 3 – Execution

- A. Signs shall be free of glue, fingerprints, grease or any other imperfection upon completion of installation.
- B. Remove adhesive back of signs level, plumb and at height indicated on glass surfaces.
- C. Provide all procedures required for protection of installed signs from damage or deterioration until acceptance of work.

Accessories

PART 1 – GENERAL

1.1 SUMMARY

- A. Provide framed mirror as shown and as specified.
- B. Provide door mounted Coat Rack as shown and specified.

1.2 SUBMITTALS

- A. Manufacturer's Data: Submit copies of manufacturer's specifications and installation instructions for all accessories as required.

PART 2 - PRODUCTS

2.1 ACCESSORIES

- A. Coat Rack : Provide one double coat rack as follows – Aluminum, dull finish, 2 alum knobs - 2 ¼" long, Base - 2 ½" H x 8 ½" W – Coat Rack shall be as manufactured by McMaster-Carr, Style 33 Item # 17645A65 or approved equal.
- B. Channel Frame Mirror - 48" x 36":
 - 1. Mirror shall have frame fabricated of alloy 18-8 stainless steel, 20 gauge with mitered corners. Roll-formed one piece construction. Exposed surfaces shall have No 4 satin finish. Edges and corners shall be burr free. Top and bottom wall mounting brackets shall be spot welded into "H"
 - 2. Glass: Standard glazing is No 1 quality, 1/4" inch (6.4mm) thick tempered, silver coated and hermetically sealed with a uniform copper plating, and warranted against silver spoilage for 15 years. Mirror shall meet Federal Spec DD-M-411C, ASTM C-1036-91.
 - 3. Filler: Expanded polyethylene microcell foam sheet material, abrasion resistant and shock absorbing, water resistant, 1/8" inch (3.2mm) total layer thickness.
 - 4. Channel Frame Mirror shall be Model No 0620- as manufactured by American Specialties, Inc., 441 Saw Mill River Road, Yonkers, New York 10701-4913 , or approved equal

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine the substrates and the conditions under which the work is to be performed. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Installation - Coat Rack: Install rack at the location shown in accordance with manufacturer's installation instructions anchored securely to supporting construction as shown. Mounting Plate to be centered on interior face of door, mounted 48" AFF.
- B. Installation –Mirror: Bottom edge of mirror shall be 35" above finished floor height, centered beneath light fixture. Install "H" wall brackets level and plumb per diagram location using only No 10 Pan Head screws (by others). Hang mirror on brackets and tighten locking screw at bottom (note: this screw should be started prior to hanging mirror on wall brackets). Mirror shall be secured to lower bracket with a locking screw. Finish of unit shall be protected from marring by easily removed self adhesive polyvinyl (PVC) film.

END OF SECTION 10800

11141 BICYCLE RACKS

PART 1 – GENERAL

1.1 SUMMARY

- A. Provide mechanical and fixed bicycle racks as shown and as specified.

1.2 SUBMITTALS

- A. Manufacturer's Data: Submit copies of manufacturer's specifications and installation instructions for all equipment and accessories required.
- B. Samples: Submit samples of all exposed materials with required finish.
- C. Shop Drawings: Prior to ordering materials, submit shop drawings for the fabrication and installation of equipment and accessories. Include large scale details of anchorage, jointing, support systems and other accessories.
- D. Contract Closeout Submittals:
 - 1. Maintenance Data: Include copies of manufacturer's maintenance manual describing the materials, devices and procedures to be followed in the operation, maintenance and cleaning of the mechanical bicycle racks.

1.3 QUALITY ASSURANCE

- A. Qualifications: Contractors and their personnel engaged in the work shall be able to demonstrate successful experience with work of comparable extent, complexity and quality to that shown and specified.
- B. Pre-Installation Conference: Prior to the installation of swimming pools and equipment, and at the Contractor's direction, meet at the project site to review the installation procedures and methods. Refer to Section 01300 ADMINISTRATIVE REQUIREMENTS.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Internal double deck racks: Josta Bike Parking System (or approved equal).
- B. External racks: Dero brand, or approved equal. Inverted-U, galvanized steel, 1.9 inch outside diameter, schedule 40 pipe, PVC rubber coated, black, surface mount.

See Plan Sheet A32. Attach to concrete surface with tamper-proof bolt (not concrete spike as depicted in Plan Sheet 32).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine the substrates and the conditions under which the work is to be performed. Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. During concrete work, review layout of inserts to assure a complete and coordinated anchorage system for bicycle racks.

3.3 INSTALLATION

- A. Erect bicycle racks, equipment and accessories accurately as measured from established structure lines and levels, plumb and in true alignment with previously completed work.
- B. Anchor securely as required by all regulatory agencies and as approved on the final shop drawings using concealed anchors wherever possible.
- C. Fit exposed connections accurately together to form tight hairline joints and uniform reveals and spaces for joint fillers and sealants. Weld connections which are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Grind welds smooth.

END OF SECTION 11141

PAY ITEM SCHEDULE

1R

Bidder shall type or neatly print numeral figures in the PAY ITEM SCHEDULE. See Article 10 of the INSTRUCTIONS TO BIDDERS, in the STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES. For complete information concerning each pay item, see the STANDARD SPECIFICATIONS and SPECIAL PROVISIONS.

Item No.	Description	Unit	Quantity	Unit Price	Total
<u>SITWORK</u>					
02200-1	Clear area	LS	1		
02200-2	Demolish Asphalt paving	SF	3461		
02370-1	Erosion Control	LS	1		
02750-1	12" thick scored concrete paving on 6" base	SF	12000		
02750-2	Concrete resurfacing	SF	10151		
02750-3	Brush swept concrete resurfacing	SF	448		
02770-1	DC Granite Curb/ brick gutter	LF	496		
02770-2	DC Granite Curb/ brick gutter around bicycle center	LF	400		
02750-4	Pedestrian Crosswalk	SF	500		
02780-1	Handicap ramp	EA	5		
01510-1	Maintain and temporary support utilities	LS	1		
02200-3	Demolish curb	LF	482		
02200-4	Demolish handicap ramp	EA	2		
02200-5	Demolish concrete walk	SF	1200		
02740-1	Asphalt resurfacing	SF	1983		
02600-1	Adjust and reset basin tops and MH Frames	LS	1		
02890-1	Markings & Signage	LS	1		
02945-1	In-situ cast finished reinforced concrete planter including foundations, excavations, backfill and reinforcement	EA	4		
02930-1	Tree including planting soil and drainage bed	EA	4		
02600-2	Abandon basin and connect pipe	EA	1		
15160-1	Trench Drain - Neenah R-4996	LF	48		
15120-1	Water Meter Box	EA	1		
02600-4	Meet 6" cap on 6" Ductile Pipe	EA	1		
02600-5	Pipe Junction	EA	1		
02600-6	Abandon trench drain and connect pipe	EA	1		
15160-2	Reset trench drain	EA	1		
02600-8	6" Dia. ductile iron pipe	LF	140		
02600-9	4" Dia. ductile iron pipe	LF	252		
15140-1	Cleanouts	Ea	4		
15150-1	Floor Drains	Ea	6		

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

Item No.	Description	Unit	Quantity	Unit Price	Total
STRUCTURE					
03310-1	RC End block	EA	2		
05100-1	10" painted steel tubes	LF	238		
05100-2	12" painted steel tubes	LF	119		
03230-1	SS framing in tension rods	LF	541		
02750-5	10" concrete slab floor	SF	1,283		
03310-2	18" RC footing slab 5' wide	LF	200		
03310-3	18" RC end slab	SF	214		
03310-4	RC triangular curb	LF	200		
03310-5	Blockout for uprights	EA	10		
05100-3	Main wall strut	LF	380		
05090-1	Anchors to concrete	EA	38		
03210-2	Pipe hinged bearing (10" & 12")	EA	6		
03210-3	Curb bracket framing	LF	150		
05050-1	Connect strut to concrete	EA	30		
05050-2	Connect strut to pipe	EA	66		
05100-4	Steel Pipe guard Rail	LF	97		
05100-5	3" x 3" tube posts to dressing room	LF	67		
05100-6	3"-16 ga corrugated steel deck to dressing room	SF	70		

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

BROUGHT FORWARD \$ _____

Item No.	Description	Unit	Quantity	Unit Price	Total
	EXTERIOR CLOSURE				
08800-1	Laminated/ tempered/ PV glass butt jointed panels on spider framing	SF	3,500		
05100-8	Security Screen framing rods	SF	460		
08580-1	Operable window premium	SF	385		
08460-1	Sliding glass/ 3 panel entrance door/ breakaway	Set	1		
08580-2	12" rotating operable vent between glass	LF	220		
10426-1	Interior Signage	LS	1		
	INTERIOR				
06160-1	Plywood panel to Electrical closet	SF	21		
06160-2	Aluminum panel	SF	174		
08800-2	Translucent glass privacy screen w/ bolt fittings	SF	50		
08460-2	Glass sliding panel doors/ breakaway	Set	1		
08200-1	Single leaf Changing room door	EA	1		
08200-2	Double leaf door to Electrical closet	PR	1		
10500-1	Metal locker, 12" W x 15" D x 13-5/8" H (single box)	EA	10		
10500-2	Metal locker, 12" W x 15" D x 24" H (3 tier)	EA	12		
10500-3	Metal locker, 12" W x 15" D x 14-2/5" H (5 tier)	EA	30		
02870-1	Dressing room bench, 1'-8" W x 4'-8" long	EA	1		
02880-1	Bicycle Racks - Stand up, double deck, 6 stands (12 bikes) per rack	EA	11		
02880-2	Bicycle Racks – Exterior	EA	30		
08830-1	Dressing room mirror	SF	10		
12500-1	Dressing room hooks	EA	2		

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

BROUGHT FORWARD \$ _____

4R

Item No.	Description	Unit	Quantity	Unit Price	Total
	MECHANICAL				
	<u>Heating, Ventilation & AC Equipment</u>				
15000-1	ACU-1, 2,400CFM W/air cooled condensing unit, 3,500CFM	EA	1		
15000-2	Exhaust Fans, 5,000CFM	EA	6		
	<u>HVAC Piping</u>				
15000-3	HVAC piping including fittings and insulation	LS	1		
	<u>Air Distribution</u>				
15000-4	Manufactured lined Round duct W/K-27 liner	LS	1		
15000-5	Rectangular Galv. Ductwork	LB	90		
15000-6	Ductwork insulation	SF	45		
15000-7	10" Diameter register complete with damper	EA	6		
15000-8	12" Diameter register complete with damper	EA	1		
15000-9	Return air grille	EA	1		
15000-10	6" x 12" grille	EA	1		
15000-11	Controls	LS	1		
15000-12	Check, test & warranty	LS	1		
15000-13	Commissioning	LS	1		

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

BROUGHT FORWARD \$ _____

5R

Item No.	Description	Unit	Quantity	Unit Price	Total
	<u>ELECTRICAL</u>				
	<u>Service & Distribution</u>				
16000-1	Panelboard BTC 200a 120/208v 30p	EA	1		
16000-2	200a service switch, fused	EA	1		
16000-3	8x8 wire trough	LF	3		
16000-4	Meter socket	EA	1		
16000-5	Conduit and fittings	EA	1		
	<u>Lighting & Power</u>				
16000-6	Type A fixture, embedded, sealed	EA	9		
16000-7	Type B fixture	EA	2		
16000-8	Type TA track fixture head	EA	24		
16000-9	Type T-1 track	LF	70		
16000-10	duplex receptacles w/box, cover - GFI	EA	2		
16000-11	Toggle switch	EA	2		
16000-12	3/4" LT flex conduit	LF	800		
16000-13	#12 thhn wire	LF	2,800		
16000-14	Connection to 3/4hp fan	EA	6		
16000-15	Connection to 2hp Condensing unit	EA	1		
16000-16	Connection to automatic doors	EA	3		
16000-17	Connection to ACU 26a 3ph	EA	1		
16000-18	Connection to Security panel	EA	1		
16000-19	30/3 disconnect switch	EA	6		
16000-20	3/4" LT flex conduit	LF	180		
16000-21	#12 thhn wire	LF	600		
16000-22	#10 thhn wire	LF	80		
16000-23	Electric control of operable louvers	EA	40		
16000-51	Allowance for electrical service connection and coordination	LS	1	1	20,000
	<u>Telecommunications</u>				
16000-24	Allow for telecom service to retail space	LS	1	1	10,000

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

BROUGHT FORWARD \$ _____

Item No.	Description	Unit	Quantity	Unit Price	Total
	<u>Security</u>				
16000-25	Control panel w/ethernet card	EA	1		
16000-26	Power supply/charger 12c DC	EA	1		
16000-27	plug-in transformer 40VA	EA	1		
16000-28	back-up batteries	EA	2		
16000-29	card reader	EA	1		
16000-30	connection to door lock	EA	1		
16000-31	door release pb	EA	1		
16000-32	security key fob	EA	200		
16000-33	ACS raceway	LF	50		
16000-34	ethernet cable	LF	60		
16000-35	boxes w/cover	EA	3		
16000-36	color bullet cameras WP, fixed, w/lens	EA	4		
16000-37	80GB DVR 4-channel	EA	1		
16000-38	DVR lockbox	EA	1		
16000-39	Alarm control panel w/remote CCTV capability	EA	1		
16000-40	keypad	EA	1		
16000-41	door contact	EA	1		
16000-42	motion detector	EA	1		
16000-43	siren	EA	1		
16000-44	break glass detector	EA	8		
16000-45	IDS raceway	LF	150		
16000-46	coax cable	LF	50		
16000-47	ethernet cable	LF	120		
16000-48	boxes w/cover	EA	16		
16000-49	Connections, testing	LS	1		
	<u>Grounding</u>				
16000-50	Allow for local panelboard grounding	LS	1		

PAY ITEM SCHEDULE

CARRY FORWARD \$ _____

BROUGHT FORWARD \$ _____

Item No.	Description	Unit	Quantity	Unit Price	Total
	<u>Other</u>				
02210 -1	Subsurface Investigation - Tunnel Survey	Day	5		
01320-1	Co-ordination & Monitoring of WMATA	EA	1		
03050-1	Training Provision – Concrete Finisher	HR	1000		

PAY ITEM SCHEDULE

TOTAL \$ _____