



ADDENDUM NUMBER 1

August 31, 2009

to

CONTRACT DOCUMENTS

for

ASOS Relocation at Runway 36L

HCAA Project Number: 5195 06

TAMPA INTERNATIONAL AIRPORT
Tampa, Florida

THE FOLLOWING ITEMS ARE MADE AND HEREBY BECOME A PART OF THE CONTRACT DOCUMENTS DATED AUGUST 3, 2009, FOR THE ASOS RELOCATION AT TAMPA INTERNATIONAL AIRPORT, TAMPA, FLORIDA, AS PREPARED BY RW ARMSTRONG.

BIDDERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN PAGE 00300-4 OF THE BID FORMS.

CONTRACT SPECIFICATIONS

Make the following changes or replace the following pages:

PAGE NUMBER	DESCRIPTION
P-219	REMOVE Section P-219 and REPLACE with Section P-219 (attached).

CONTRACT DRAWINGS

Make the following changes or replace the following sheets:

DRAWING NUMBER	DESCRIPTION
G-001	REMOVE Sheet G-001 and REPLACE with Sheet G-001 (Attached).

QUESTIONS & ANSWERS

The following questions have been asked concerning the project.

Q: Do I need a Florida Contractors License to bid this job?

A: Yes

Q: Can the crushed concrete driveway be spread the conventional way?

A: Yes

Q: Is the minimum limit of insurance of \$10,000,000 required to be carried by the prime contractor as well as any subcontractors?

A: No, There are no requirements or limits on insurance coverage by subcontractors. The prime contractor will require this insurance limit and is the party that would be held responsible in the event of any occurrence.

ATTACHMENTS

Project Manual

P-219- Crushed Concrete

Drawings

G-001- Cover Sheet

HCAA PLANNING AND DEVELOPMENT

ITEM P-219 CRUSHED CONCRETE**DESCRIPTION**

219 -1.1 This item consists of hauling and placing owner supplied crushed concrete aggregate in conformity to the dimensions and typical cross sections shown on the plans.

MATERIALS

219-3.1 HAULING EQUIPMENT. All crushed concrete will be hauled by the contractor from a location as designated on the plans. The contractor's use of this haul route may in no way hinder the safe and unobstructed flow of airport traffic. The crushed concrete haul route will be cleaned continuously throughout the project and at the end of the project. Refer to plans for haul route safety notes and limitations.

219-3.2 PLACING EQUIPMENT. Crushed concrete shall be placed using a *conventional methods*. ~~mechanical spreader or machine capable of receiving, spreading, and shaping the material without segregation into uniform layer or lift. The placing equipment shall be equipped with a strike off plate that can be adjusted to the layer thickness. The placing equipment shall have two end gates or cut off plates, so that the crushed concrete aggregate may be spread up to a lane width.~~

219-3.3 COMPACTION EQUIPMENT. Crushed concrete compaction shall be accomplished using one or a combination of the following pieces of equipment:

- Steel-wheeled roller,
- Vibratory roller,
- Pneumatic-tire roller,
- Hand-operated power tampers (for areas inaccessible to rollers)
- Water truck as needed to achieve densities.

219-3.4 FINISHING EQUIPMENT. Trimming of the crushed concrete to meet surface requirements shall be accomplished using a ~~self-propelled~~ grader, ~~or~~ trimming machine, ~~or other approved methods~~. ~~with a mold board cutting edge of 12 ft minimum width automatically controlled by sensors in conjunction with an independent grade control from a taut string line. String line will be required on both sides of the sensor controls for all lanes.~~

CONSTRUCTION METHODS

219-4.1 WEATHER LIMITATIONS. Construction is allowed only when the atmospheric temperature is at or above 35 °F. When the temperature falls below 35°F, the contractor shall protect all completed areas against detrimental effects of freezing. Areas damaged by freezing, rainfall, or other weather conditions shall be corrected.

219-4.2 GRADE CONTROL. Grade control between the edges of the crushed concrete shall be accomplished by grade stakes, steel pins, or forms placed in lanes parallel to the centerline and at intervals of 50 ft (15 m) or less on the longitudinal grade and 25 ft or less on the transverse grade.

219-4.3 PLACING. The crushed concrete shall be placed in *a layer layers* of uniform thickness. ~~with an approved mechanical spreader.~~

The depth of the compacted layer shall be 6 inches.

219-4.4 COMPACTION. Immediately upon completion of the spreading operations, the crushed concrete shall be compacted. The number, type, and weight of rollers shall be sufficient to compact the material to the required density.

The crushed concrete shall be compacted to the required density using the compaction equipment. The moisture content of the material during placing operations shall not be below, nor more than 1-1/2 percentage points above, the optimum moisture content as determined by ASTM D 1557.

The compaction shall continue until the layer has a degree of compaction that is at least 100 percent of the laboratory maximum density through the full depth of the layer. The contractor shall make adjustments in compacting or finishing techniques to obtain true grades, to minimize segregation and degradation, to reduce or increase water content and to ensure a satisfactory base course. Any materials found to be unsatisfactory shall be removed and replaced with satisfactory material or reworked, so that the requirements of this specification are met.

219-4.5 ACCEPTANCE SAMPLING AND TESTING FOR DENSITY. Crushed concrete shall be accepted for density on a lot basis. A lot will consist of one day's production where it is not expected to exceed 2,400 square yards (2,000 square meters) per lift. A lot will consist of one-half day's production, where a day's production is expected to consist of between 2,400 and 4,800 square yards (2,000 and 4,000 square meters) per lift.

Each lot shall be divided into two equal sublots. One density test shall be made for each subplot. Sampling locations will be determined on a random basis in accordance with statistical procedures contained in ASTM D 3665.

Each lot will be accepted for density when the field density is at least 100 percent of the maximum density of laboratory specimens prepared from samples of the base course material delivered to the job site. The specimens shall be compacted and tested in accordance with ASTM D 1557. The in-place field density shall be determined in accordance with ASTM D 2167. If the specified density is not attained, the entire lot shall be reworked and two additional random tests made. This procedure shall be followed until the specified density is reached.

In lieu of ASTM D 1556 or D 2167 method of field density determination, acceptance testing may be accomplished using a nuclear gage in accordance with ASTM D 2922. The gage should be field calibrated in accordance with paragraph 4 of ASTM D 2922. Calibration tests shall be conducted on the first lot of material placed that meets the density requirements.

Use of ASTM D 2922 results in a wet unit weight, and when using this method, ASTM D 3017 shall be used to determine the moisture content of the material. The calibration curve furnished with the moisture gages shall be checked as described in paragraph 7 of ASTM D 3017. The calibration checks of both the density and moisture gages shall be made at the beginning of a job and at regular intervals.

If a nuclear gage is used for density determination, two random measurements shall be made for each subplot. This requirement may be waived by the Construction Manager if an accepted installation is made.

219-4.6 FINISHING. The surface of the crushed concrete shall be finished by equipment designed for this purpose.

If the elevation of the layer is 1/2 inch or more below grade, the layer shall be scarified to a depth of at least 3 inches, new material added, and the layer shall be re-compacted. If the finished surface is above plan grade, it shall be cut back to grade and rerolled.

Should the surface become rough, corrugated, uneven in texture, or traffic marked prior to completion, the unsatisfactory portion shall be scarified, and re-compacted or replaced at Contractor's expense.

219-4.7 SURFACE TOLERANCES. The finished surface shall not vary more than 3/8 inch when tested with a Contractor's supplied 16-ft straightedge applied parallel with or at right angles to the centerline. The Contractor shall also supply two (2) workers acceptable to the Construction Manager, to handle the straightedge under the direct supervision of the Construction Manager. The Contractor shall correct any deviation in excess of this amount, at the Contractor's expense.

219-4.8 THICKNESS CONTROL. The completed thickness of the crushed concrete shall be within 0.5 inch of the design thickness. Four determinations of thickness shall be made for each lot of material placed. Each lot shall be divided into four (4) equal sublots. One (1) test shall be made for each subplot. Sampling locations will be determined on a random basis in accordance with procedures contained in ASTM D 3665. Where the thickness is deficient by more than 0.5 inch, the Contractor shall correct such areas at no additional cost by excavating to the required depth and replacing with new material. Additional test holes may be required to identify the limits of deficient areas.

219-4.9 TRAFFIC. Equipment used in construction may be routed over completed portions of the crushed concrete, provided no damage results and provided that the equipment is distributed evenly over the full width of the base course to avoid rutting or uneven compaction.

219-4.10 MAINTENANCE. The crushed concrete shall be maintained until it is completed and accepted. Maintenance will include immediate repairs to any defects and shall be repeated as often as necessary to keep the completed work intact. Any area of the crushed concrete that is damaged shall be reworked as necessary.

METHOD OF MEASUREMENT

219-5.1 There will be no separate measurement for this item.

BASIS OF PAYMENT

219-6.1 No separate payment for Crushed Concrete will be made. Payment for all work under this section shall be made under the contract lump sum price for ASOS Relocation.

TESTING REQUIREMENTS

ASTM C 29	Unit Weight of Aggregate
ASTM C 117	Materials Finer than 75µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 131	Resistance to Abrasion of Small Size Coarse Aggregate by Use of the Los Angeles Machine
ASTM C 136	Sieve or Screen Analysis of Fine and Coarse Aggregate ASTM D 75 Sampling Aggregate
ASTM D 693	Crushed Stone, Crushed Slag, and Crushed Gravel for Dry-or Water- Bound Macadam Base Courses and Bituminous Macadam Base and Surface Courses of Pavements
ASTM D 698	Moisture-Density Relations of Soils and Soil -Aggregate Mixtures Using 5.5-lb (2.49-kg) Rammer and 12-in (305-mm) Drop
ASTM D 1556	Density of Soil in Place by the Sand -Cone Method
ASTM D 1557	Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.5-kg) Rammer and 18-in (457-mm) Drop

ASTM D 2167 Density of Soil in Place by the Rubber-Balloon Method ASTM D 2419 Sand Equivalent Value of Soils and Fine Aggregate

ASTM D 2922 Density of Soil and Soil-Aggregate in Place by Nuclear Methods

ASTM D 3017 Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods

ASTM D 3665 Random Sampling of Paving Materials

ASTM D 4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils

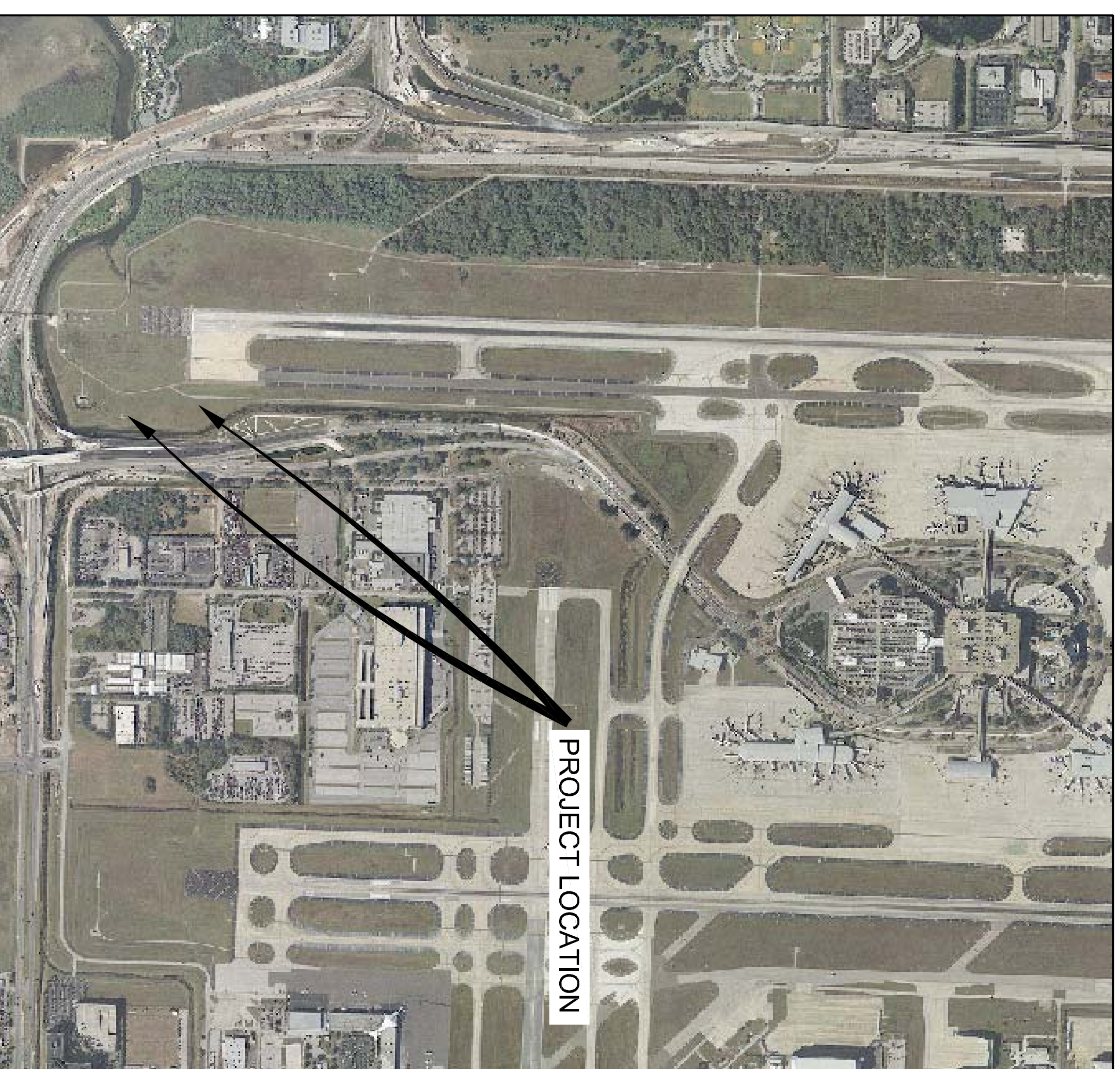
END OF P-219

TAMPA INTERNATIONAL AIRPORT

ASOS RELOCATION AT RUNWAY 36L

HCAA PROJECT No. 5195 06

<u>GENERAL</u>	
G-001	COVER SHEET
G-002	GENERAL NOTES, LEGEND AND ABBREVIATIONS
G-003	SAFETY AND SECURITY NOTES
G-004	PROJECT CONSTRUCTION HAUL ROUTE AND NOTES
G-005	CRUSHED CONCRETE HAUL ROUTE
<u>CIVIL</u>	
C-001	VICINITY AND SURVEY CONTROL POINTS PLAN
C-002	EXISTING ASOS FACILITY DEMOLITION PLAN AND DETAILS
C-003	SITE AND GRADING PLAN
C-004	ASOS SENSOR GROUP PLAN AND ELEVATION
C-005	ASOS SENSOR GROUP BASE SECTIONS
C-006	ASOS SENSOR GROUP ARRANGEMENT
<u>ELECTRICAL</u>	
E-001	ELECTRICAL SITE AND HANDHOLE DETAILS
E-002	LAYOUT AND ELECTRICAL PLAN
E-003	CABLE AND TRENCHING DETAILS
E-004	AWPAG DETAIL



FDOT FM PROJECT No'S: 420592, 420593, 420595

August 03, 2009
BID DOCUMENTS

CONSTRUCTION DATA

PRIME CONTRACTOR _____ WORK COMMENCED _____ COMPLETED _____
 COST: BID \$ _____ FINAL \$ _____
 PROJECT ENGINEER/INSPECTORS: _____
 MAJOR SUBCONTRACTORS AND/OR SUPPLIERS _____
 ALL CONSTRUCTION PERSONNEL UNDER THIS CONTRACT HAS COMPLETED SUBSTANTIAL COMPETENCY WITH THE DRAWINGS, NOTES AND SPECIFICATIONS CONTAINED IN THESE PLANS. ALL CHANGES FROM ORIGINAL SUB CONTRACTORS SHALL BE REFERENCED TO THE BEST OF OUR KNOWLEDGE. (CERTIFIED) PROJECT ENGINEER _____ DATE _____

HILLSBOROUGH COUNTY AVIATION AUTHORITY
TAMPA, FLORIDA

APPROVED _____ DATE _____

HILLSBOROUGH COUNTY AVIATION AUTHORITY

BOARD MEMBERS

ALFRED S. AUSTIN - CHAIRMAN
 STEVEN G. BURTON - VICE CHAIRMAN
 DR. JOSEPH F. DIACO - SECRETARY

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 CITY OF TAMPA MAYOR PAM IORIO - ASST. SECRETARY/TREASURER

EXECUTIVE DIRECTOR
 LOUIS E. MILLER

08/31/2009 REISSUED UNDER ADDENDUM NO. 1



2502 N. Rocky Point Dr., Suite 695
 Tampa, Florida 33607 (Phone: 813.636.9060)
 Certificate of Authorization #8455

SUBMITTED: PAUL P. PIRO _____ DATE June 26, 2009
 P.E. No. 53407