ADDENDUM NO. 2

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

REBID OF
Install Nature Park
Missouri School for the Blind
St. Louis, Missouri
PROJECT NO. E1703-01

Bid Opening Date: 1:30 PM, Tuesday, May 12, 2020 (Not Changed)

Bidders are hereby informed that the Construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. SECTION 051200 – STRUCTURAL STEEL FRAMING
   a. REVISE Paragraphs 1.5-A and 1.5-B as follows:
      
      A. Fabricator Qualification: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD or may utilize 3rd party inspection firms to qualify that all fabrications comply with AISC standards.
      
      B. Installer Qualification: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category CSE or may utilize 3rd party inspection firms to qualify that all erections comply with AISC standards.

2. SECTION 116801 – PLAY FIELD EQUIPMENT AND STRUCTURES - ROPES COURSE AND CLIMBING WALL
   a. REVISE Paragraph 2.3-A as follows:
      
      A. Ropes Course: Contemporary style with varied play surfaces. User to be tethered into overhead harness assembly before interaction with play equipment and shall remain so until they have returned to the entry point of the course to be removed from harness.
      
      b. ADD Paragraphs 2.3-A.8 and 2.3-A.9 as follows:
      
      8. Overhead Zip Track: Tube steel (HSS) for rigid zip track to allow connection to tethered harness assembly. Tethered harness assembly and belay unit require no free fall design considerations.
      
      9. Belay Unit: Hot dip galvanized or per manufacturer’s recommendations.
      
      c. REVISE Paragraph 2.3-B.6 as follows:
6. Overhead Zip Track: Tube steel (HSS) for rigid zip track to allow connection to tethered harness assembly. Tethered harness assembly and belay unit require no free fall design considerations.

d. ADD Paragraph 2.3-B.7 as follows:

7. Belay Unit: Hot dip galvanized or per manufacturer's recommendations.

e. ADD Paragraphs 2.3-C.8 and 2.3-C.9 as follows:

8. Overhead Zip Track: Tube steel (HSS) for rigid zip track to allow connection to tethered harness assembly. Tethered harness assembly and belay unit require no free fall design considerations.

9. Belay Unit: Hot dip galvanized or per manufacturer's recommendations.

f. REVISE Paragraph 2.3-D.6 as follows:

6. Belay Unit: Hot dip galvanized or per manufacturer's recommendations. Tethered harness assembly and belay unit require no free fall design considerations.

3. SECTION 281000 – ACCESS CONTROL SYSTEM (ACS)

a. ADD the following sentence to Paragraph 1.3-A:

All information regarding the existing security system components shall be coordinated with C&C group. Contact Eric Eckert at 314.373.5945.

b. ADD Paragraph 2.1-A.2.e as follows:

e. All information regarding the existing security system components shall be coordinated with C&C group. Contact Eric Eckert at 314.373.5945.

c. ADD the following sentence to Paragraph 2.2-K:

All information regarding the existing security system components shall be coordinated with C&C group. Contact Eric Eckert at 314.373.5945.

d. ADD the following sentence to Paragraph 2.3-B.1:

The new video/intercom system does not need to be compatible with the existing units.

4. SECTION 282000 – VIDEO SURVEILLANCE SYSTEM

a. REVISE Paragraphs 1.3-A.1.c and 1.3-A.1.d as follows:

c. Modifications to existing NVR include only those modifications required due to the addition of new video surveillance cameras. Modifications may include but not be limited to recording requirements of each new camera and video/intercom system, modification of preprogrammed backups, etc. as required to provide a fully functioning system.

d. Modifications to existing video management software include only those modifications required due to the addition of new video surveillance cameras. Modifications may include but not be limited to inclusion of new cameras, pre-
programmed views to accommodate new cameras, modification of preprogrammed backups, etc. as required to provide a fully functioning system.

b. REVISE Paragraph 2.1-A as follows:

A. Expand existing video surveillance system. Owner’s existing system is Genetec as the video management system and compatible cameras. Expand existing NVR as required. NVR shall be sized to accommodate camera record as specified herein. All equipment, components, etc. shall be compatible with existing Owner’s Genetec VMS. All equipment, components, etc. shall be compatible with existing Owner’s Genetec VMS. All information regarding the existing security system components shall be coordinated with C&C group. Contact Eric Eckert at 314.373.5945.

c. ADD Paragraph 3.9-B.2 as follows:

2. Provide a minimum of 8 hours on-site training to the Owner. Training shall be coordinated with the Owner’s Director of Security. Training shall include modifications made to video management system to accommodate new video surveillance cameras. Intent is so Owner understands how the additional modifications have been incorporated into the existing system.

d. REVISE Paragraph 3.9-C as follows:

C. Provide system administration that is factory trained with the expertise on installing, configuring, and commissioning the systems to the customer’s specific requirements. System administration shall include those items as it pertains to new video surveillance cameras.

e. DELETE Paragraph 3.9-D.

f. ADD Paragraph 3.11-B as follows:

B. On-site assistance and adjustment of the video system shall pertain to only the modifications made to NVR and video management software due to the addition of video surveillance cameras and audio/video intercom as part of this scope of work completed by Contactor. Assistance and adjustments to other portions of the existing system shall not be included.

**DRAWING CHANGES:**

1. **Drawing C-403**
   a. REMOVE AND REPLACE Detail 2/C-403 (see attached).
   b. REMOVE AND REPLACE Detail 3/C-403 (see attached).

2. **Drawing C-604**
   a. ADD Detail 2/C-604 (see attached).
   b. ADD Detail 3/C-604 (see attached).

**GENERAL COMMENTS:**

1. The Pre-Bid Meeting was held April 27, 2020 followed by a walk-thru of the project site.
The Pre-Bid Meeting sign-in sheet is attached.

2. Bidders needing additional site inspection should contact Kevin Dalton at (314) 633-1563 to schedule a time.

3. Please contact Kelly Copeland, Contract Specialist, at 573-522-2283 or kelly.copeland@oa.mo.gov for questions regarding bidding procedures and MBE/WBE/SDVE goals and submittal requirements.

4. The deadline for technical questions was Friday, May 1, 2020 at noon. All technical questions have been answered by Travis Helmkamp, Oates Associates and are issued in this addendum.

5. Changes to, or clarification of, the Bid Documents are only made as issued in the Addenda.

6. Current Planholders list is available at:
   https://www.adsplanroom.net/jobs/456/details/e1703-01-rebid-install-nature-park-missouri-school-for-the-blind

7. Prospective bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.

8. See Specification Section 044313.13 – Anchored Stone Masonry Veneer for information regarding the letters on the seal wall.

9. The Controls Contractor for the facility is C&C Group. The contact for C&C group is Eric Eckert and he can be reached at 314-373-5945.

**ATTACHMENTS:**

1. REPLACED Detail 2/C-403 Synthetic Turf Base Construction
2. REPLACED Detail 3/C-403 Synthetic Field Collection Drain Detail
3. ADD Detail 2/C-604 Amended Soil Disconnection Detail
4. ADD Detail 3/C-604 Amended Soil Notes
5. Pre-Bid Meeting Sign-In Sheet

May 5, 2020

**END OF ADDENDUM NO. 2**
NEW SYNTHETIC TURF FIELD (1/12" FLEA AND 1" SAND/RUBBER INFILL)

AGGREGATE SUBBASE CONSISTING OF 2" THICK GRAVEL (ASTM C-33 NO. 8) OVER 1/4" MIN. THICK 2" CLEAN CRUSHED STONE (TOLERANCE ± IN 1/2 AND 1/2 OF DESIGN GRADE)

FLAT DRAIN TIE WITH GEOTEXTILE SOCK (1" X 12"), 8 MIN OFF BOTTOM OF EXCAVATION

MSD TYPE 4 FILTER FABRIC AT SUBGRADE ELEVATION

EXISTING OR NEW SUBGRADE SOIL (EXCAVATE OR FILL TO SUBGRADE ELEVATION).

ARTIFICIAL TURF FIELD TYPICAL NOTES:

NO SOIL COMPACTON IS ALLOWED OR DETENTION AND/OR WATER QUALITY BMPS WILL BE REQUIRED.

NO LIME STABILIZATION IS ALLOWED OR DETENTION AND/OR WATER QUALITY BMPS WILL BE REQUIRED.

IF UNSUITABLE SOIL IS REMOVED THEN A CLEAN, UNIFORM GRADATION OF ROCK SHALL BE USED AS FILL.

NOTE TO CONTRACTOR AND DESIGN ENGINEER:

AN AS-BUILT CERTIFICATION, SIGNED BY THE DESIGN ENGINEER, STATING THAT NO LIME STABILIZATION WAS USED, NO SOIL COMPACTON WAS DONE, AND CLEAN ROCK WAS USED TO REPLACE UNSUITABLE SOIL IN THE TURF FIELD.

ENGINEER APPROVED SHOP DRAWINGS MUST BE SUBMITTED TO MSD PRIOR TO CONSTRUCTION.

MSD CONTRACT: BRIAN DUNN AT (314) 355-2072

THE ARTIFICIAL TURF FIELD AS-BUILT CERTIFICATION MUST BE COMPLETED AND SUBMITTED TO MSD PRIOR TO FINAL APPROVAL.

SYNTHETIC TURF BASE CONSTRUCTION

SCALE: NO SCALE
AMENDED SOILS DISCONNECTION NOTES:
1) ENGINEER APPROVED SHOP DRAWINGS MUST BE SUBMITTED TO MSD PRIOR TO CONSTRUCTION. MSD CONTACT: BRIAN DUNN AT (314) 335-2072.

AMENDED SOILS DISCONNECTION NOTES SPECIFICATION & INSTALLATION PROCEDURES:
DESCRIPTION: THIS WORK SHALL CONSIST OF INCORPORATING COMPOST WITHIN THE ROOF ZONE OF THE PLANT VEGETATION COVER TO IMPROVE SOIL QUALITY AND EVAPOTRANSPIRATION.

COMPOST APPLICATION PROCEDURE:
1) CLEAR SURFACE OF OBSTRUCTIONS AND PROPERLY DISPOSE OF THE SOIL SURFACE SHALL BE REASONABLY FREE OF ALL OBJECTS INCLUDING STONE AND RUBBLE, GREATER THAN 2 INCHES, AND OTHER MATERIAL WHICH WILL INTERFERE WITH PLANTING AND SUBSEQUENT SITE MAINTENANCE.
2) ROTOTILL TO A DEPTH OF 6"-8" FOR TURF COVER AND A MINIMUM OF 12" FOR DEEP PLANTED VEGETATION. IF THE SOIL IS TOO DENSE FOR A ROTOTILLER, THE SOIL SHOULD FIRST BE BROKEN UP INTO LARGE AGGREGATES USING A SOIL RIPPER.
3) IF OBSTRUCTIONS ARE UNERASED DURING TILLING, CLEAR OBSTRUCTIONS AND PROPERLY DISPOSE OF. THE SOIL SURFACE SHALL BE REASONABLY FREE OF ALL OBJECTS, INCLUDING STONE AND RUBBLE, GREATER THAN 2 INCHES, AND OTHER MATERIAL WHICH WILL INTERFERE WITH PLANTING AND SUBSEQUENT SITE MAINTENANCE.
4) DISTRIBUTE COMPOST EVENLY TO A MINIMUM DEPTH OF 2 INCHES OVER THE SOIL SURFACE.
5) ROTOTILL SEVERAL TIMES IN PERPENDICULAR DIRECTIONS TO INCORPORATE COMPOST AND OTHER SOIL AMENDMENTS.
6) COMPLETE WITH FINE GRADING AND SODDING.
7) WATER THOROUGHLY: ALLOW SOIL TO SETTLE FOR ONE WEEK.

COMPOST:
COMPOST SHALL BE MATURE, STABLE, WET, FREE, AND PRODUCED BY AERobic DECOMPOSITION OR ORGANIC MATTER. COMPOST FEEDSTOCK MAY INCLUDE, BUT IS NOT LIMITED TO: AGRICULTURE, FOOD OR INDUSTRIAL RESIDUAls, CLASS A BIOSOLIDS AS DEFINED IN THE 6 PA CFR TITLE 40, PART 503, YARD TRIMMINGS, OR SOURCE-GENERATED MUNICIPAL SOLID WASTE. THE PRODUCT MUST NOT CONTAIN ANY VISIBLY REFUSE OR OTHER PHYSICAL CONTAMINANTS, SUBSTANCES TOXIC TO PLANTS, OR OVER 5% SAND, SILT, CLAY OR ROCCY MATERIAL BY DRY WEIGHT. THE PRODUCT SHALL POSSESS NO OBJECTIONABLE ODORS. THE PROJECT MUST MEET ALL APPLICABLE US EPA CFR, TITLE 40, PART 503 AND 503 STANDARDS FOR CLASS A BIOSOLIDS. THE MOISTURE LEVEL SHALL BE SUCH THAT NO VISIBLE WATER OR DUST IS PRODUCED WHEN HANDLING THE MATERIAL.

TESTING:
PRIOR TO DELIVERY OF ANY COMPOST TO THE SITE AS PART OF SHOP DRAWING REVIEW, THE FOLLOWING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR TO THE DISTRICT INSPECTOR:
- FEEDSTOCK PERCENTAGE IN THE FINAL COMPOST PRODUCT
- A STATEMENT THAT THE COMPOST MEETS FEDERAL AND STATE HEALTH AND SAFETY REGULATIONS
- A STATEMENT THAT THE COMPOSTING PROCESS HAS MET TIME AND TEMPERATURE REQUIREMENTS
- A COPY OF THE LAB ANALYSIS, LESS THAN FOUR MONTHS OLD, PERFORMED BY A SEAL OF TESTING ASSURANCE CERTIFIED LABORATORY VERIFYING THAT THE COMPOST MEETS THE PHYSICAL REQUIREMENTS AS DESCRIBED IN TABLE 1.

SOD:
FERTILIZING, SODDING AND WATERING TO BE IN ACCORDANCE WITH MSD STANDARD CONSTRUCTION SPECIFICATIONS PART 8 SECTION F.

TABLE 1: PHYSICAL REQUIREMENTS FOR COMPOST

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5.0 - 8.5</td>
<td>TMECC 411A</td>
</tr>
<tr>
<td>Soluble Salt Concentration</td>
<td>&lt; 10 DS/m</td>
<td>TMECC 410-A</td>
</tr>
<tr>
<td>Moisture</td>
<td>30-60%</td>
<td>SMEW 2540-B</td>
</tr>
<tr>
<td>Organic Matter</td>
<td>0-5%</td>
<td>TMECC 507-A</td>
</tr>
<tr>
<td>Total Nitrogen (N)</td>
<td>&gt; 1.20%</td>
<td>TMECC 04-02-D</td>
</tr>
<tr>
<td>Phosphorus (P2O5)</td>
<td>&gt; 0.50%</td>
<td>TMECC 04-03-A</td>
</tr>
<tr>
<td>Potash (K2O)</td>
<td>&gt; 0.10%</td>
<td>TMECC 04-04-A</td>
</tr>
<tr>
<td>Particle Size</td>
<td>95% passes through 60&quot; screen a smaller</td>
<td>TMECC 202-B</td>
</tr>
<tr>
<td>Stability (Carbon Dioxide evolution rate)</td>
<td>&gt; 80% relative to positive control</td>
<td>TMECC 508-B</td>
</tr>
<tr>
<td>Maturity (see emergence and sexing virgin)</td>
<td>&gt; 80% relative to positive control</td>
<td>TMECC 505-A</td>
</tr>
<tr>
<td>Physical contaminants (manmade inputs)</td>
<td>&lt; 1% dry weight basis</td>
<td>TMECC 308-A</td>
</tr>
<tr>
<td>Chemical contaminants</td>
<td>Meet or exceed US EPA Class A standard, 40 CFR 503.13, Tables 1 and 3 levels:</td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>&lt; 4 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Cadmium</td>
<td>&lt; 39 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Copper</td>
<td>&lt; 1500 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Lead</td>
<td>&lt; 390 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Mercury</td>
<td>&lt; 17 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>&lt; 73 ppm</td>
<td>TMECC</td>
</tr>
<tr>
<td>Nickel</td>
<td>&lt; 420 ppm</td>
<td>TMECC 406-NI</td>
</tr>
<tr>
<td>Selenium</td>
<td>&lt; 100 ppm</td>
<td>TMECC 406-SE</td>
</tr>
<tr>
<td>Zinc</td>
<td>&lt; 900 ppm</td>
<td>TMECC 406-ZN</td>
</tr>
<tr>
<td>Biological contaminants (pathogens)</td>
<td>Meet or exceed US EPA Class A standard, 40 CFR 503.32 (a) levels:</td>
<td></td>
</tr>
<tr>
<td>Fecal coliform</td>
<td>&lt; 1,000 MPN per gram dry weight basis</td>
<td>TMECC 701</td>
</tr>
</tbody>
</table>
Pre-Bid Meeting Attendance Sheet
INSTALL NATURE PARK
Missouri School for the Blind
St. Louis, Missouri

Project No. O1703-01
April 27, 2020

Geoffrey Barney – Missouri School for the Blind -314-633-3963
Mike Howard – OA FMDC – 636-524-8503
Sandra Walther – OA FMDC – 573-751-2283
Randy McDonnell – OA FMDC – 573-751-3266
Kevin Dalton – OA FMDC – 314-633-1563
Charles David – OA FMDC – 314-776-4320
Travis Helmkamp – Oates Associates – 314-588-8381
Haley Coons – Oates Associates – 314-588-8381
Tom Cissell – Oates Associates – 314-588-8381
Matt Crook – BriC Partnership – 314-725-5889
Chris Fey – BriC Partnership – 314-725-5889

Shawn Diestelkamp – BG Plumbing – 314-551-9595
Jim Dunn – C&C Group – 314-283-0951
Russ Hoock – Kaiser Electric – 314-707-3111
Steve Roufa – Tri-Co Construction – 314-432-2794
Don Traska – Kiefer Speciality Flooring – 847-245-8450
John Kellett – Byrne and Jones – 314-973-0103
Tom Jones – Interface Construction – 314-522-1011
Don Markus – Interface Construction – 314-522-1011
Bill Steele – KAI Build – 314-609-3395
Austin Doss – Wellington Environmental – 314-644-4930
Jeff Kolkmeier – Hankins Construction Company – 314-426-7030
Eric Eckert – C&C Group – 314-650-7207
Will Milligan – Cardinal Environmental Operations – 314-890-2088
Dikla Roufa – Tri-Co Construction – 314-432-2794
Mark Montford – Gateway Waterproofing – 314-810-2122
Larissa Hallgren – Museum-Corporate-University Brand-based Visitor Experiences – 339-832-7579
Tim Rabbitt – Midwest Service Group – 636-202-1099
Angie Parsons – Raineri Construction – 314-667-5913
Nathan Munie – L. Keeley Construction – 618-975-2514
Mike Dean – Kozeny-Wagner – 618-779-8097
James Kellerman – CMT – 314-220-9227
Will Milligan – Cardinal Environmental – 314-890-2088
Jim Foley – Swanson Masonry – 636-946-1970