SINCLAIR hille architects

Addendum #1

Project Name:	**Sandhills Publishing Project X - Phase II**
	100 W. Grand Dr, Lincoln, NE
Project No.:	14026
Issued:	September 12, 2014
Bid Date:	**2:00 PM, CDT, on the 24th of September, 2014**
Bid Opening:	Sinclair Hille Architects
Location:	700 Q St, Lincoln, NE 68508

This Addendum is issued to all known bidders before receipt of proposals. This Addendum is to authorize the use of the following information in preparing proposals for the above named project. The bidder **must** enter the number of this Addendum on the **Proposal Sheet.**

GENERAL INFORMATION

ADD A1-1. A list of plan holders as of this date is included for reference. A list of Pre-Bid Conference attendees will be issued in a forthcoming Addendum.

ADD A1-2. **LANDSCAPE & ENGINEERING ADDENDUM** items are attached at with General & Architectural Addendum items.

MODIFICATIONS TO THE DRAWINGS

ADD A1-3. Clarification to : A200 & A202 (Extents Adhered & Anchored Veneer Stone)
4" Nominal Thickness 'Anchored' Cavity wall Stone: at exterior walls of Restrooms
1" Nominal Thickness 'Adhered' Stone all other locations shown to receive stone veneer
Detail(s) will be issued in Addendum 2, (i.e. stone at otherwise uninsulated foundation to be adhered to sheathing substrate with 2x4 sleepers & 1.5" rigid insulation, with sill style stone cap & flashing)

ADD A1-4. Refer to Window Schedule (all locations):
Revise Width & Height of Windows A8 & A9 to: 1'-6"W by 13'10"H & 4'-0"H respectively.

ADD A1-5. Refer to D1/A102 & A101 DOOR SCHEDULE
D1/A102: DOOR TYPES: Add Narrow View, (NV) Door type
DOOR SCHEDULE: Revise Door 101 Elev. from F to NV

ADD A1-6. Refer to A800: (Clarifications)

A. STC to be Smooth finish Concrete with clear penetrating sealer, (no Stain)
B. East Stairway is wood framed & to receive CPT-5, (sheet carpet)
C. West Stairway is painted steel & PSL, (no carpet at intermediate & top landings)
D. CPT-3 & CPT-4 are transposed in Specification Section 096813 TILE CARPETING

MODIFICATIONS TO THE SPECIFICATIONS

ADD A1-7. Refer to: Table of Contents & Volume 1
Insert (attached): 000000-B-Proposal Form

ADD A1-8. Refer to Section 087100: Hardware Schedule will be included in forthcoming Addendum

ADD A1-9. Refer to Section 044232: Delete Article 2.1-C

ADD A1-10. Refer to Section 044232:2.2C:

Insert: C.1: Existing stone is a Sandstone identified by various names including but not limited to Cheyenne, Sebastian or Rustic Brown.

ADD A1-11. Refer to: Table of Contents & Volume 2
Insert (attached): 260940 - AUTOMATED WINDOW SHADE CONTROL SYSTEM

ARCHITECTURAL PRIOR APPROVALS / SUBSTITUTIONS

ADD A1-12. The manufacturers listed herein will be considered approved for bidding. However, the proposed substitution must meet the intent of the specifications and will be subject to shop submittal approval during construction. Burden of Proof is on Proposer. Bidders shall bear all responsibility for coordinating and performing related changes in the Work necessitated by such substitution and include such costs in the Bid:

Specification Section		Manufacturer / Proposed Product
a.	072726– Fluid-Applied Membrane Air Barriers	Sierra, Inc: TK Products /AirMax 2104 VP

ATTACHMENTS **Pages**

Pre-Bid Meeting:	
Minutes	1
Planholder List	3
Bid Form	3
Specification Section 260940 - AUTOMATED WINDOW SHADE CONTROL SYSTEM	8
Structural Addendum 1 Items & Attachments	4

End of General & Architectural Addendum #1

SINCLAIR hille architects

Pre-Bid Conference Minutes

Project Name:	**Sandhills Publishing Project X - Phase II**
	100 W. Grand Dr, Lincoln, NE
Project No.:	14026
Issued:	September 12, 2014
Bid Date:	**2:00 PM, CDT, on the 24th of September, 2014**
Bid Opening:	Sinclair Hille Architects
Location:	700 Q St, Lincoln, NE 68508
Attendees:	Per sign-in sheets attached

AGENDA ITEMS DISCUSSED:

1. Plans available at A&D for $150 refundable deposit. Electronic copies of the bid documents available to six General Contractors. Builder's Exchange in Lincoln and Omaha have plans.
2. Addenda to be released Friday, Sept. 12 & Friday, Sept. 19
3. Private Bid Letting: Wednesday, Sept. 24 at 2:00 p.m. at SHA
4. Anticipated Notice to Proceed: Oct. 1, 2014
5. Anticipated Substantial Completion: January 1, 2016
6. Landscape Contract to be bid separate from with this General Construction Contract, documents to be available at A & D with the invited prime Landscape contractors as follows:
   a. Campbell's Nursery, Lincoln. 402-423-4556, Attn. Dennis Theye, dtheye@campbellsnursery.com
   b. Lanoha Nurseries, Omaha. 402-289-4103, Attn. Mike Arp, marp@lanohanurseries.com
   c. Greenlife Gardens, Bellevue. 402-616-6446, Attn. Chad Wehrbein, chad@greenlifegardens.com
   d. Kinghorn Gardens, Omaha. 402-457-6492, Attn. Zack Fergus, zack@dropseedstudio.com
7. Tour of the existing Data Center building and garage today.
8. Proposal Form – To be issued via Addendum 1.
9. Plans have been submitted for Building Permit:
   a. Paid fee breakdown to be determined and identified via forthcoming Addendum
10. This building & site are planned to meet current LEED-NC Gold Certification.

QUESTIONS & CLARIFICATIONS DISCUSSED:

1 Q: *Is there a Bid Bond required?*
1 A: No, only Performance Bond.

2 Q: *Where is Primary Fire Alarm Panel in existing building?*
2 A: At Upper floor East Vestibule.

3 Q: *PE & PEX tubing is in existing building geothermal loop. Will they be allowed in this Contract?*
3 A: TBD, clarification via forthcoming Addendum.

4 Q: *Is subcontractor attendance at Pre-Bid Conference required?*
4 A: General Contractor attendance will be required. Subcontracor attendance is strongly encouraged as the Pre-Bid Conference was the only expected opportunity to tour the site. General Contractors will be responsible for conveying project conditions and expectations to all subcontractors. Subcontractor attendance at the Pre-Bid will not be cause for exclusion, but will be a factor of consideration for successful bid.

End of Minutes

Structural Addendum #1

GENERAL STRUCTURAL QUESTIONS & CLARIFICATIONS

ADD S1-1. Structural foundations

Q: *What are the required foundations for the windmills?*

A: The contractor shall provide a 16" diameter X 4'-0" drilled pier at each corner. A steel angle matching the existing shall be embedded into the drilled pier 12" minimum.

Q: *What are the required foundations for the solar panels?*

A: The contractor shall provide a 36" diameter X 8'-0" drilled pier at each post.

Q: *Are there any provisions for leaving out a portion of the north foundation wall for means and methods?*

A: The contractor will be permitted to leave out a portion of the cast in place foundation wall on the north end for access into the garage. The width and details will be coordinated with the selected contractor. The contractor, if the option is selected, shall include all costs in their bid. Mechanical splices of the reinforcing may be required.

Q: *Can more information be provided about the perched water?*

A: On the previous project, perched water was encountered when excavating on the east slope. This water ran out of the side of the excavation for approximately 5 to 7 days. The water was collected in the elevator pit and pumped out.

Per the note on the structural foundation plan (S200) perched water has been observed at elevation 1221 and 1224 in borings B101 and B102 respectively. It has also been observed in boring B106 at elevation 1200. The geology on site is such that glacial tills are overlain by alluvial and sandy soils. Glacial till is very dense making it almost impervious to water. Therefore, the water being observed in the monitoring wells exists in the sandy layer above where it flows relatively unimpeded. The water flows through the wells, collects, then sits, because it cannot drain through the glacial tills. It is our estimation that perched water will not be encountered until the excavation reaches the transition between sandy soils and glacial tills. The transition between layers of soils, slopes east to west as indicated in the soil the soil borings.

It is our opinion perched water will be encountered during excavation. As a result, a few steps, during the design process, have been taken to address this and facilitate construction progressing. First, a dewatering allowance has been included for equipment and time to dewater the excavation resulting from pockets of perched water. Second, a drain tile solution has been designed to collect this water and drain it after the walls are up and backfilled. Third, per the soils report, a conservative estimate of the necessary excavation slope has been made to allow construction to progress even if the perched water is encountered. It is conceivable that a contractor could slope the sandy soils at a 1V:1.5H and then a 1V:1H when the glacial tills are encountered. Construction can still progress if the water is encountered assuming the excavation slopes in the soils report are followed. Please note the perched water can be recharged after a rain event.

ADD S1-2. Lower Level Structural Plans

Q: W*hat is the correct floor system for Copy/Print Room 205.*

A: The structural details shown in N10/S300 are correct.

Q: *Can the insulation for the berms shown on sheet L101 and in detail 05/L200 be replaced with the growth media specified in the specifications.*

A: Not the details shall remain as shown.

ADD S1-3. Main Level Structural Plan

Q: *What is the cedar roof joist size shown in A1/S303.*

A: The joists are 2x6 Cedar #2 spaced at 24" o.c.

ADD S1-4. Structural Details
Q: *Is there a Simpson connector that is acceptable for the connections shown in A1/S303.*
A: The connections are custom fabrications and are shown in A1/S303. They are to match the existing.

MODIFICATIONS TO THE DRAWINGS

ADD S1-5. Please find the structural companion drawing to architectural section A4/A400.

ADD S1-6. East of Grid line 5, no control joints in the concrete topping are required.

ADD S1-7. The east stair construction shall be wood. The lower level framing plan does not have the stair member callouts. The members shall be match the upper level. The headers at the landings shall be (2) 1 ½"x9 ¼"

ADD S1-8. Slab on grade construction joints and control joints are shown.

MODIFICATIONS TO THE SPECIFICATIONS

ADD S1-9. Section 012100 Paragraph 3.3. Add line E. Line E to read: Allowance No. 5: Lump Sum Allowance: Include a lump sum allowance of $25,320.00 for soils observation and testing for the duration of the project. This allowance assumes the following number of trips and or tests: (5 trips) for stripping and overexcavation observation prior to fill placement, (5 trips) for intermittent fill compaction testing and observation as requested during general grading operations, (10 trips) for footing observation services when requested by Contractor, to verify conformance with the project specification and needs, (35 trips) provide intermittent compaction testing and observation services during backfill operations of utility trenches, geothermal lateral trenches, footing excavations and retaining walls, (15 trips) for subgrade observation services immediately prior to the placement of floor and paving components when requested by the Contractor or client and finally project planning, coordination and report preparation. The actual costs for the testing and trips will be computed for the actual services requested and completed using Benesch's unit rates.

ATTACHMENTS

AD1-7 Structural section at lower level exposed concrete slab.
AD1-10 Slab on grade construction and control joints.

End of Structural Addendum #1

Plan Holder List for 'Sandhills Publishing Project X - Phase II'

Company Information	CSI Codes	Contact Information	Status Date Filled Date Returned	Delivery Method Tracking Number
ABC Electric - Lincoln 1012 N 25th St Lincoln, NE 68503	ELECTRICAL	John Whitmer Phone: (402) 435-3514 Fax: (402) 435-6091	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
B and B Enterprises 13917 E. Pickrell Road Adams, NE 68301	Steel	Greg Bursovsky Phone: (402) 662-3676 Fax: (402) 662-3677	Filled 09/09/2014	Pickup - Customer Pick Up / Lincoln
Binswanger Glass Lincoln 2740 North 27th Street Lincoln, NE 68521	Glass Company	Mark Dreeszen Phone: (402) 467-2596 Fax: (402) 467-2598	Filled 09/10/2014	Pickup - Customer Pick Up / Lincoln
Brester Construction Inc 1200 Infinity Court Lincoln, NE 68512	GENERAL	Chris Brester Phone: (402) 423-2337 Fax: (402) 423-2430	Filled 09/04/2014	Pickup - Customer Pick Up / Lincoln
Carpenter Masonry Inc. 7644 Kennelley Dr Lincoln, NE 68516	Masonry	Doug Carpenter Phone: (402) 430-9265 Fax: (402) 489-3317	Filled 09/12/2014	Pickup - Customer Pick Up / Lincoln
Cheever Construction Co 3425 N 44th Lincoln, NE 68504	GENERAL	Brian Clinton Phone: (402) 477-6745 Fax: (402) 477-2063	Filled 09/05/2014	Pickup - Customer Pick Up / Lincoln
Chris High Painting 1615 W Manor Dr Lincoln, NE 68506	Painting	Chris High Phone: (402) 489-4896 Fax: (402) 489-3801	Filled 09/12/2014	Pickup - Customer Pick Up / Lincoln
Civil Design Group 8535 Executive Woods Dr Ste. 200 Lincoln, NE 68512	ENGINEER	Darrick Rademacher Phone: (402) 434-8494 Fax: (866) 215-8747	Filled 09/03/2014	Delivery - A & D Deliver Lincoln
Commonwealth Electric-Lincoln 1901 Y Street Suite 100 Lincoln, NE 68501	ELECTRICAL	Melissa Brown Phone: (402) 474-1341 Fax: (402) 474-0114	Filled 09/05/2014	Pickup - Customer Pick Up / Lincoln
Cornhusker Heating & A/C 2959 Cornhusker Hwy Lincoln, NE 68504	Metal Ducts / Duct Accessories / Air Duct Cleaning / Sheet Metal	Troy Foster Phone: (402) 464-3159 Fax: (402) 464-8723	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Cornhusker Insulation 2201 River Rd Dr Waterloo, NE 68069	Insulation	Don Alongi Phone: (402)289-4373 Fax: (402)289-3886	Filled 09/11/2014	Pickup - Customer Pick Up / Omaha
Cornhusker Tile Marble 220 W Industrial Lake Drive Lincoln, NE 68528	Tile, Laminate & Cabinet Wholesale	John Morehouse Phone: (402) 476-2105 Fax: (402) 476-3761	Filled 09/09/2014	Pickup - Customer Pick Up / Lincoln
Davis Erection - Topping Out Inc. - Lincoln 100 P St. Lincoln, Nebraska 68508	Steel Erection	Cory Lyons Phone: (402) 438-5059 Fax: (402) 438-8002	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Designer Woods 9314 North 45th Street Omaha, NE 68152	Cabinetry	John Matousek Phone: (402) 592-5868 Fax: (402) 592-2576	Filled 09/05/2014	Pickup - Customer Pick Up / Omaha
Duffy Brothers Construction Inc. 13239 Portal Dr. # 101 Omaha, NE 68138	Masonry	Shelly Crawford Phone: (402) 553-8687 Fax: (402) 553-1924	Filled 09/08/2014	Delivery - A & D Deliver Omaha
Falcon Heating Air 4520 N. 48th St. Lincoln, NE 68504	HVAC	Laura Gyhra Phone: (402) 466-7437 Fax: (402) 466-8724	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Galaska & Son 9710 Cornhusker Rd. LaVista, NE 68128	Painting & Flooring	Darrell Karr Phone: (402) 334-7233 Fax: (402) 334-7253	Filled 09/10/2014	Pickup - Customer Pick Up / Omaha
General Concrete 17625 Welch Street Omaha, NE 68135	CONCRETE	Terry Washinek Phone: (402) 659-7820 Fax: (402) 592-7651	Filled 09/05/2014	Pickup - Customer Pick Up / Omaha
Greens Waterproofing 2638 Garfield St Lincoln, NE 68502	Waterproofing	Jennifer Nobbman Phone: (402) 450-4054 Fax: (402) 423-7887	Filled 09/12/2014	Pickup - Customer Pick Up / Lincoln
Gregg Electric Company 3521 N. 22nd Street Lincoln, NE 68521	ELECTRICAL Drywall	Doug Cratsenberg Phone: (402) 476-6463 Fax: (402) 476-6491	Filled 09/09/2014	Pickup - Customer Pick Up / Lincoln

H & H Drywall 2900 N. 14th ST Ste. B Lincoln, Nebraska 68502		Michael B Phone: (402) 474-6202 Fax: (402) 474-6202	Filled 09/12/2014	Pickup - Customer Pick Up / Lincoln
H. Kehm Construction of Lincoln INC 6201 Fulton Ave Lincoln, NE 68507	CONCRETE	Janet Kehm Phone: (402) 464-4919 Fax: (402) 464-4963	Filled 09/10/2014	Pickup - Customer Pick Up / Lincoln
Hampton Commercial Construction 3701 Union Dr Lincoln, NE 68516	GENERAL	Chris Foged Phone: (402) 489-8858 Fax: (402) 489-9287	Filled 09/09/2014	Pickup - Customer Pick Up / Lincoln
Hausmann Construction 8545 Executive Woods Dr Suite1 Lincoln, NE 68512	GENERAL	Melissa Reeves Phone: (402) 438-3230 Fax: (402) 438-3235	Filled 09/04/2014	Pickup - Customer Pick Up / Lincoln
HEP Inc 5831 S 58 Street Suite C Lincoln, NE 68516	PLUMBING	Andy Monson Phone: (402) 423-4800 Fax: (402) 423-9438	Filled 09/09/2014	Pickup - Customer Pick Up / Lincoln
IES Electric Inc 1240 Beechcraft Road Lincoln, NE 68527	ELECTRICAL	Cori Wemhoff Phone: (402) 890-4763 Fax: (866) 892-6364	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
JK Electric Inc Lincoln P.O. Box 5723 1944 SW 6th St (68522) Lincoln, NE 68505	ELECTRICAL	Jason Knapp Phone: (402)477-6833 Fax: (402) 000-0000	Filled 09/05/2014	Pickup - Customer Pick Up / Lincoln
Kay Dee Company of Omaha 6827 L Street Omaha, NE 68117	Cabinetry	Rich Iliff Phone: (402) 593-9663 Fax: (402) 593-9228	Filled 09/11/2014	Pickup - Customer Pick Up / Omaha
Kehm Contractors, Inc. 1446 S. 13th Street Omaha, Nebraska 68108	Masonry	Kris Campbell Phone: (402) 341-6177 Fax: (402) 341-1768	Filled 09/05/2014	Pickup - Customer Pick Up / Omaha
Kingery Construction Co. 201 North 46th Street Lincoln, NE 68503	GENERAL	Steve Hiemer Phone: (402) 465-4400 Fax: (402) 465-4529	Filled 09/04/2014	Pickup - Customer Pick Up / Lincoln
Lincoln Builders Bureau 5910 S. 58 St Suite C Lincoln, NE 68516	PLAN ROOM	Rhonda Gutknecht Phone: (402) 421-8332 Fax: (402) 421-8334	Filled 09/10/2014	Delivery - A & D Deliver Lincoln
Lincoln Painting and Decor 1110 13th Corso Nebraska City, Nebraska 68410	GENERAL	Randy Walford Phone: (402) 873-9132 Fax: (402) 873-9132	Filled 09/10/2014	Pickup - Customer Pick Up / Lincoln
M.E. Group Inc. 2820 N. 48th Street Lincoln, NE 68504	ENGINEER	Andrew Thompson Phone: (402) 464-3833 Fax: (402) 464-3919	Filled 09/03/2014	Delivery - A & D Deliver Lincoln
Manzitto Construction 3341 Pioneers Blvd Lincoln, Nebraska 68506	GENERAL	Blake Pittack Phone: (402) 483-2302 Fax: (402) 483-6040	Filled 09/04/2014	Pickup - Customer Pick Up / Lincoln
Marsh Creek Concrete 10602 South 144th Street Omaha, NE 68138	CONCRETE	Ted Schroeder Phone: (402) 253-2092 Fax: (402) 253-2084	Filled 09/05/2014	Pickup - Customer Pick Up / Omaha
Nebraska Door and Window LLC 1714 Culbera St. Lincoln, NE 68521	Door & Window	Zack Adamson Phone: (402) 435-3840 Fax: (402) 476-4926	Filled 09/11/2014	Pickup - Customer Pick Up / Lincoln
Omaha Builders Exchange 4255 S. 94th St Omaha, NE 68127	PLAN ROOM	Jill Nyffeler Phone: (402) 593-6908 Fax: (402) 593-6912	Filled 09/10/2014	Delivery - A & D Deliver Omaha
Progressive Electric 3420 N. 35th Circle Lincoln, NE 68504	ELECTRICAL	Mike Klockenga Phone: (402) 466-4222 x2 Fax: (402) 466-4244	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Purbaugh Masonry 9500 S 56th St Lincoln, NE 68516	Masonry	Steve Purbaugh Phone: (402) 423-0870 Fax: (402) 000-0000	Filled 09/12/2014	Pickup - Customer Pick Up / Lincoln
Sampson Construction Lincoln 3730 South 14th Street Lincoln, NE 68502	GENERAL	Pat Clough Phone: (402) 434-5420 Fax: (402) 434-7425	Filled 09/04/2014	Delivery - A & D Deliver Lincoln
Sinclair Hille & Architects 700 Q st Lincoln, NE 68508	Architect	Choan Liewer Phone: (402) 476-7331 Fax: (402) 476-8341	Filled 09/03/2014	Delivery - A & D Deliver Lincoln
	Steel			

Steel Fabricators Inc. 617 North Timberline Road Fort Collins, CO 80524		Paul Scherrer Phone: (970) 484-2752 Fax: (970) 484-2753	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Stephens and Smith Construction 1542 S 1st St Lincoln, NE 68502	Sub Contractor	Melissa Anderson Phone: (402) 475-8087 Fax: (402) 475-0119	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln
Structural Design Group 410 South 7th St Lincoln, NE 68508	ENGINEER	Jared Wagner Phone: (402) 438-7788 Fax: (402) 438-7790	Filled 09/03/2014	Delivery - A & D Deliver Lincoln
Stutzman Sealants PO Box 82001 1745 Superior Rd Pleasant Dale, NE 68423	Waterproofing	Arnold Stutzman Phone: (402) 467-4144 Fax: (402) 467-1351	Filled 09/05/2014	Pickup - Customer Pick Up / Lincoln
VIREO 1111 N. 13th St Ste 116 Omaha, Nebraska 68102	Landscape Architect	Matt Schoell-Shafer Phone: (402) 553-5485 Fax: (999) 999-9988	Filled 09/03/2014	Delivery - A & D Deliver Omaha
Vision Mechanical 4700 Douglas Cir. Lincoln, NE 68504	HVAC / Mechanical	Chad Francisco Phone: (402) 466-0087 Fax: (402) 466-7593	Filled 09/11/2014	Pickup - Customer Pick Up / Lincoln
Weathercraft Company of Lincoln 5410 N.W. 44th Street Lincoln, NE 68524-2365	Roofing & Sheet Metal	Ken Hain Phone: (402) 435-3567 Fax: (402) 435-8130	Filled 09/10/2014	Pickup - Customer Pick Up / Lincoln
Williams Restoration Co. 725 N. Frontier Rd. Papillion, NE 68046	Caulking & Waterproofing	Roger Wendland Phone: (402) 597-1200 Fax: (402) 597-1296	Filled 09/05/2014	Pickup - Customer Pick Up / Omaha
Willmar Electric Lincoln 1441 Adams St Lincoln, NE 68521	ELECTRICAL	Tyler G. Brown Phone: (402) 464-1877 Fax: (402) 464-1887	Filled 09/08/2014	Pickup - Customer Pick Up / Lincoln

PROPOSAL FORM

The following proposal shall be filled out by each bidder:

Date:

_____

Proposal of:

_____

Name

(A Corporation organized and existing under the laws of the State of

_____)

or

(an Individual trading as:

_____)

TO: Par 5 Partners

PROJECT: Sandhills Publishing Project X, Phase II

The undersigned in compliance with your Invitation for Bids for construction of Project X, Phase II, having examined the plans and specifications with related documents and the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies and to construct the project in accordance with the Contract Documents, at the prices stated below. The prices are to cover all expenses incurred in performing the work required under the contract documents of which this proposal is a part.

I (or We) acknowledge receipt of the following addendum or addenda:

_____

The Contractor shall indicate herein the number of consecutive calendar days anticipated to complete the project after commencing work.

_____ Calendar days

BASE BID PROPOSAL

For all work described in the specifications and shown on the plans for the project, I (or we) agree to perform all work for the sum of

_____Dollars

($_____)

(Bid & Unit Price Amounts shall be shown in both written form and figures. In case of discrepancy between the written amount and the figures, the written amount will govern.)

ALTERNATE BID PROPOSAL

For all work described in the specifications and shown on the plans for the project, I (or we) agree to perform all work for the sum of

ALTERNATE BID 1: Geothermal Bore Hole Field. (12 Alternate Bid Bore Holes)

_____Dollars, ($_____)

SCHEDULE OF UNIT PRICES:

UNIT PRICE 1: Rework of existing soil below the new footing lines

_____Dollars / Cubic Yard, ($_____/CY)

UNIT PRICE 2: Soils below the Parking Slab

_____Dollars / Cubic Yard, ($_____/CY)

UNIT PRICE 3: Base Bid Bore Holes

_____Dollars / Foot, ($_____/Ft)

UNIT PRICE 4: Add Alternate Bid Bore Holes

_____Dollars / Foot, ($_____/Ft)

LEED Certified Project List

A. The following are LEED certified projects were completed by our company:

Project Name & Location: LEED Certification Level

_____

_____

_____

_____

Upon receipt of notice of the acceptance of the bids, we will execute the formal contract within five (5) days.

Respectfully submitted,

By _____

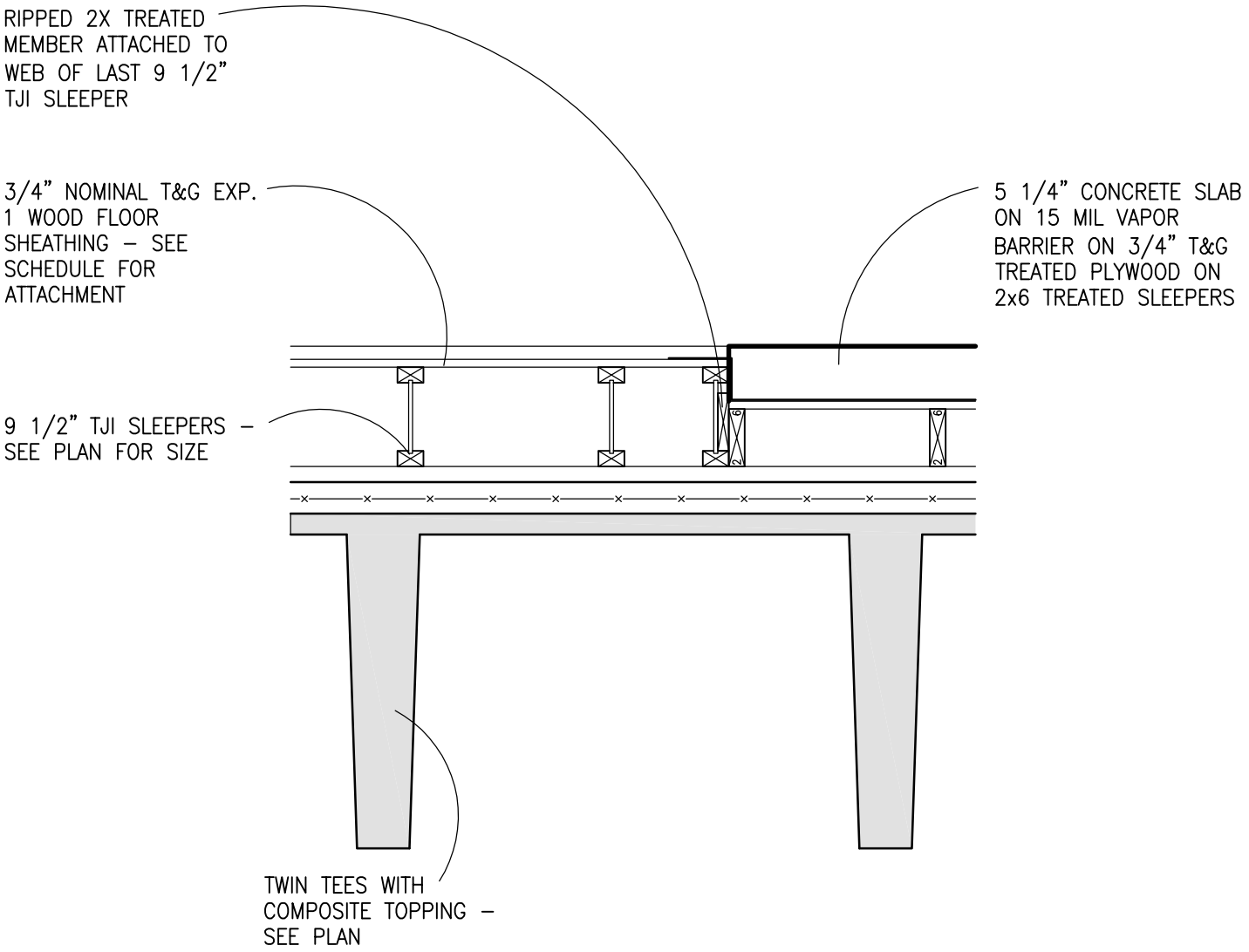
_____

Title

_____

Business Address

SEAL: If bid is by Corporation



AD1-7

DATE:
12 SEPT. 2014
PROJECT:
SDG 14-013

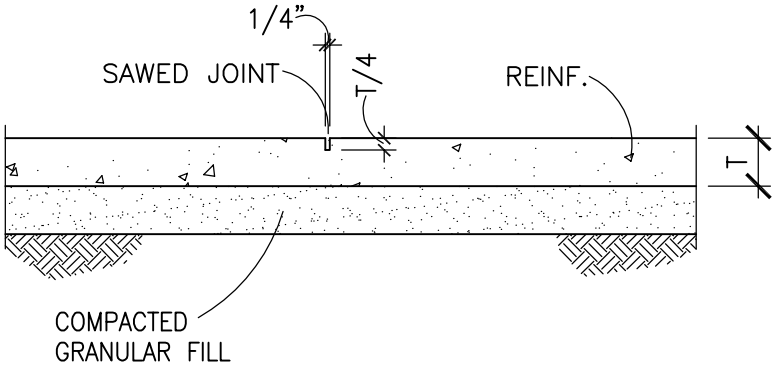
structural [design] group

the grainger building
105 north 8th street, suite 100a
lincoln, nebraska 68508

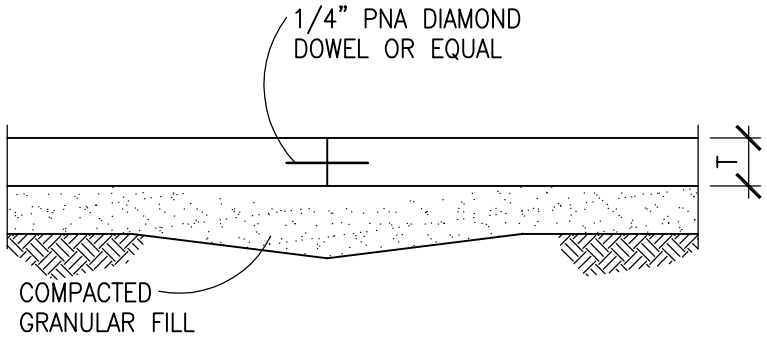
p. 402 438 7788
f. 402 438 7790

SANDHILLS

PROJECT X - PHASE II



TYPICAL SLAB JOINT



TYPICAL CONSTRUCTION JOINT

AD1-10

DATE:
12 SEPT. 2014
PROJECT:
SDG 14-013

structural [design] group

the grainger building
105 north 8th street, suite 100a
lincoln, nebraska 68508

p. 402 438 7788
f. 402 438 7790

SANDHILLS

PROJECT X - PHASE II

SECTION 260940 - AUTOMATED WINDOW SHADE CONTROL SYSTEM

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Provide an automatic window shade control system, including the following:
   1. Energy control unit, which automatically adjust window shades based on solar and weather conditions

B. Basis-of-Design: SolarTrac™ Window Management System by MechoSystems, Inc.

C. Related Sections:
   1. Division 09 - Gypsum Board Assemblies: Coordination with gypsum board assemblies for blocking, installation of shade pockets, closures and related accessories.
   2. Division 12 – Electrically-operated sunscreen roller shades.
   3. Division 26 - Electrical: Electric service for motors, motor controls, internal communication, low voltage wiring and data transfer, and connection to the Internet.

1.2 SYSTEM DESCRIPTION

A. Automated Shade Control System: Provide control system to control sunscreen roller shades in multiple buildings with an automated, computer-server based, solar tracking control system.
   1. Include automated solar shade system to control shades by tracking the sun and the position of and intensity of the solar rays.
   2. Include system programming for solar data for every window from sunrise to sunset, each day of the year, providing data for establishing the appropriate shade position on the window with aligned intermediate stop positions.
   3. System shall be **ready** to accept a module for predictive Shadow program to keep shades up when in shadow throughout the day / year.
   4. System shall be **ready** to accept a reactive Brightness module for excessive glare due to sky-brightness
   5. System shall be **ready** to accept a predictive Reflection module for first reflections off natural scapes such as a body of water, and nearby fixed structures, vertically or horizontally:
   6. Include interface to communicate with the Building Management system (BMS) over the building RS 232 or RS 485 network.
   7. Include master centralized override capability from server.
   8. Include calendar event scheduling from server.

1.3 SUBMITTALS

A. Information Required with Submittal of Bid: In order to evaluate proposals for automated window shade control systems, the Architect & MEP require the following information be submitted prior to the award of the system.
   1. Bid proposal shall be accompanied with a document that notes all deviations from these specifications on a line-by-line basis.
   2. Bid shall include separate line items listing the control/interface components required for building automation systems and building management systems (BAS/BMS), audiovisual, and/or central integration systems.
   3. Roller shade controls manufacturer shall list all components included in their bid.
   4. Bid shall include a sample solar tracking report. Manufacturer shall provide a complete clear-day solar analysis and report for the 21st day of each month for one

calendar year. The solar report shall be run for each solar orientation and window configuration (defined by glazing, height of glazing, overhang or shade fins) for every hour of the solar day from sunrise to sunset and shall include:
   a. Analysis of solar heat gain factor (SHGF) for each solar orientation by glass type.
   b. Provide solar ray altitude, surface and solar surface azimuth, incidence angles, profile angles, solar heat gain factor on the glass, inside the glass, and inside the shade.
   c. Report shall provide window brightness inside of the glass in foot-candles not including the orb of the sun for every hour of the solar day, for every solar zone.
   d. Report shall provide up to 6 appropriate shade positions, which compliment the angle and intensity of the solar ray; up / down plus 4 intermediate stop positions.
   e. Allowable Solar Penetration: Provide shade positions that shall not allow any solar penetration more than 5 feet into the building.

B. Bid shall include pricing for options listed in Paragraph 2.2D for the following system options:
   1. Option 1: Provide VirtualSwitch™ override.
      a. Locations shall be defined by Architect.

C. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Styles, material descriptions, dimensions of individual components, profiles, features, finishes and operating instructions.
   3. Storage and handling requirements and recommendations.
   4. Mounting details and installation methods.
   5. Typical wiring diagrams including integration of motor controllers with building management system, audiovisual and lighting control systems as applicable.
   6. Manufacturer’s description of the science and logic employed for all automated systems.
   7. Manufacturer’s description of the integration of the solar control system and the human factors required to assure thermal and visual comfort in the environment for the occupants, in conjunction with daylighting as an energy conserving subsystem.

D. Shop Drawings: Plans, elevations, sections, product details, installation details, operational clearances, power and control wiring diagrams, and relationship to adjacent work.
   1. Prepare shop drawings on AutoCAD or Microstation format using base sheets provided electronically by the Architect.
   2. Prepare control wiring diagrams based on zones, switching and operational requirements provided by the Architect in electronic format.
   3. Include one-line diagrams, wire counts, coverage patterns, and physical dimensions of each item.

E. Maintenance Data: Methods for maintaining control equipment and server / pc, precautions regarding cleaning materials and methods, instructions for related controls.

F. Solar and Sky Monitoring Systems: Functionality of the solar monitoring and sky monitoring systems. Provide non-proprietary detailed description of the science and logic employed in the bidders automated solar tracking control system and a schedule of the solar data provided.

G. Warranty: Provide manufacturer’s warranty documents as specified in this Section.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Obtain automated window shade control system from a manufacturer, which will assume responsibility for all system components.

1. Manufacturer of roller shades shall have a minimum of ten years experience and minimum of five projects of similar scope and size in manufacturing products comparable to those specified in this section.
2. Manufacturer of automated solar tracking shall have a minimum of five current operating projects of similar scope, functionality and size in Automated Solar-Ray tracking, motor controls; and microclimatic Sky analysis capability, comparable to those specified in this section.

B. Installer Qualifications: Engage an installer, which will assume responsibility for installation of all system components, with the following qualifications.
1. Installer for automatic solar shade control system shall be a certified electrical engineer or controls specialist to set up the automated control system and coordinate with the commissioning agent, by others, to assure communication continuity and operational functionality between the central control system and the individual operating motors and groups of motors. Installer shall have a minimum of 5 years experience in installing similar systems.

C. Electrical Components: NFPA Article 100 listed and labeled by either UL or ETL or other testing agency acceptable to authorities having jurisdiction, marked for intended use, and tested as a system. Individual testing of components will not be acceptable in lieu of system testing. Where applicable, system components shall be FCC compliant.

D. Internal Communications: The back bone or Communication riser, Fiber optics or Copper and appropriate switches for communication at each floor or defined area shall be included in this bid as a turn-key installed solution, and be responsible for the design of the riser and the communication switches for the automatic solar tracking subcontractor.

E. Internet Connection: A connection to the WWW Internet shall be provided by others, an IP Interface shall be provided by the Automatic Solar Tracking systems subcontractor. Full 24/7 access to the Internet is required for the set up and operation of the system. In the event of non-access to the Internet all onsite costs for engineering staff, travel and per diem will be incurred. Lack of IP access will substantially delay or totally inhibit implementation. Lack of IP access and connection shall negate all service warrantees on the system.

F. Requirements for Controls, and Tracking System, Switches:
1. Required in Division 12, Roller Shade Hardware, shade fabric, motor, and all related controls shall be furnished and installed as a complete two-way communicating system and assembly.
2. Electrical and electronic motor controls and accessories required for a complete Automated solar tracking motorized shade control system including a two way appropriate interface to communicate with a stand alone Automated Solar Tracking and sky modeling system; which in turn shall have two way communication with the buildings BMS; and or Day Lighting, AV, systems.
3. Automated solar tracking system shall maintain a historical data base for one complete year, plus 3 months for conversion or a total of 15 months of historical data on each full days solar condition, from sunrise to sunset and shall log all shade moves i.e. Automatic; Manual Switch; Shadow Mode; Reflectance Mode.
4. Local switches shall be wired back to and integrated with the Solar Tracking system. Shade movements by a local switch shall be recorded by the Solar Tracking system and integrated into the database.
5. Automated solar tracking system shall provide standard reports on shade movement, solar condition at the time of each shade movement, and the control or switching system that moved the shades.
6. Roller Shade Automated Controls Contractor shall list all components and systems included in their bid, including but not limited to, the prime manufacturer of the motor control and automated equipment and shall be financially responsible for any change orders and/or back charges required by the BMS, AV, or Lighting Control Systems

contractors to interface with the automatic solar tracking system and the motorized roller shade system.

G. Turn-Key Single-Source Responsibility for Automated Solar Tracking Control System (Riser) to control the Motorized Interior Roller Shades: To control the responsibility for performance of the automated solar tracking control systems, assign the design, engineering, and installation of the solar tracking head end system, the riser and related controls for the shade riser / backbone wiring specified in this Section to a single manufacturer of the automated solar tracking control system (Shade Control System). Coordinate the following with the General Contractor…
   1. The General contractor shall provide IT risers, of sufficient size, with appropriate fire rating necessary at each floor level. Containment provided within the IT risers by the General contractor is for future use by others, including the automated shade control network
   2. The General Contractor shall provide sufficient space within the IT riser for the automated shade control communications cabling.
   3. The General Contractor shall provide an access point to connect the riser shade control cable to the shade control network.
   4. The General Contractor shall be responsible for all related fire proofing from the IT Riser closet to the shade control network.
   5. The Shade Control System supplier (SCS) shall make connections to the floor controllers via a modular connection at each floor riser where floor controllers are located.
   6. The Shade Control System supplier (SCS) shall coordinate and install Icon Communication Gateways, and ICON Bus supply & master override switches (if required) within the same closet as the electrical IT riser.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver components in factory-labeled packages, marked with manufacturer and product name, fire-test-response characteristics, and location of installation using same room designations indicated on Drawings and in the Window Treatment Schedule.

1.6 PROJECT CONDITIONS

A. Power and control wiring shall be complete and certified, fully operational with uninterrupted communication on the lines and minimal noise certified by a commissioning agent (by others).
   1. 485, ICON, Lonmark and Dry Contract Network: Noise on the line not to exceed shade manufacturer’s limits.

1.7 WARRANTY

A. Warranty: Provide manufacturer’s standard warranties, including the following:
   1. Roller Shade Motor Control Systems: Manufacturer's standard non-depreciating five-year warranty.
   2. Roller Shade Control Systems Installation: One year from date of Substantial Completion, not including scaffolding, lifts or other means to reach inaccessible areas, which are deemed owners responsibility.
   3. Automated Systems Warrantee: To meet the environmental, functional and operating requirements as specified herein for one year, fully monitored by the manufacturer / supplier of the system including but not limited to the PC controller, the operating system, and the solar tracking program shall be warranted for one year.
   4. Electronics Warranty: including but not limited to total solar measuring sensors; radiometers; IP interface connections and peripheral electronics to assure full operability and communication to the motor control network for one year.

5. Automated Systems Maintenance Program: Provide an optional agreement for a 5-year Automated Systems Maintenance program to the Architect and Owner's Representative.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Acceptable Manufacturer for Window Shade Control System: SolarTrac™ MechoSystems Inc; 42-03 35th Street, Long Island City, NY 11101. Tel: (718) 729-2020 ext 1901; Andrew Helling. Email: andrew@hartks.com.

2.2 AUTOMATED DAYLIGHTING SOLAR TRACKING SHADE CONTROL SYSTEM

A. Solar Tracking Control System: Automated Computer Shade Control System, SolarTrac™ as manufactured by MechoSystems Systems, Inc., Long Island City, NY.

B. Solar Evaluation and Sky Modeling System shall utilize approved scientific solar algorithms, which shall provide the following for every window under considerations in the building from sunrise to sunset, 365-1/4 days per year, as follows:
   1. Solar heat gain in real time reported in BTU's / (W/M2) multiple times each minute 24/7.
   2. Incident angle on every window.
   3. Profile angle on every window.
   4. Direct radiation on every window.
   5. Diffuse radiation on every window.
   6. Surface azimuth.
   7. Solar surface azimuth.
   8. Window geometry / profile.
   9. Geometry of the solar ray and window geometry to determine solar penetration.
   10. Adjustment by solar penetration.
   11. Geometry of the solar ray, window geometry, and allowable solar penetration calculated to determine incremental shade position.
      a. An algorithm integrated with the Solar Radiometers to provide in real time, a microclimatic sky condition for the project, 7/24/365, which shall be the basis of determining a clear, cloudy or overcast sky condition.
      b. The system will then adjust the shades incrementally on the window to provide protection from direct solar radiation while maximizing view and daylighting for the project.
   12. Adjustment by BTU / W-M 2 solar load on every window in the building 7/24/365.
   13. Sky modeling and evaluation for clear, cloudy, bright, overcast sky condition – utilizing total solar measuring devices.
   14. Sky modeling algorithms utilizing the instantaneous, real time total solar data to determine sky condition.
      a. Control System shall adjust the shade position to maximize energy management, view and personal comfort based on micro-climactic conditions.
      b. The goal is to maximize view without Thermal or Visual discomfort through:
         1) Thermal Comfort as assured by Solar Tracking
         2) Visual Comfort as assured by managing (on the window wall):
            (a) Brightness and glare via a brightness module (Brightness-Override)
            (b) Shadow Module (Shadow-Override)
         3) Control Modules: Control system shall be capable of optimizing the position of the shades (incrementally), to continuously deploy the shades in response to changes in Proactive and Reactive requirements:
         4) Solar Tracking Module – Base Control System, Thermal Comfort:
            (a) Proactive Algorithms (Primary):

(1) Sun angle.
(2) Solar intensity – Total Light Spectrum.
(3) BTU Load.
(b) Reactive Algorithms: Real-time sky conditions via roof mounted radiometers.

c. Incremental Positioning:
1) Shades shall be capable of being aligned at up to 256 Positions.
2) The Control System shall be capable of staggering the operation of shade motors to assure balanced loading of the electrical system.

d. Continuous Operation:
1) 24 hours per day, 7 days per week, 365-1/4 days per year.
2) Shade positioning resolution shall be calculated every 60 seconds.

C. Graphic User Interface (GUI): Configure screen as follows:
1. PC-GUI shall provide access to all adjustable parameters displaying current values including but not limited to:
a. Radiation.
b. Shade position.
c. User defined requirements.
2. Displays Real-Time Microclimatic Sky Conditions.
3. Key-Zone / Sensor Monitoring:
a. On main screen: able to display current operation of “Key-Zones” or “Sensors” anywhere in the building
4. Alarms – On Main Screen: able to display overrides due to but not limited to:
a. Touch Screen.
b. Main- SolarTrac-PC Control System.
c. Remote (3rd Party Interface (BMS, AV etc.)).
5. Manual / Master Override:
a. Interactive Floor Plan: PC shall provide a map of each floor showing the shade motor groups, control zones and sensor locations with their real time position of each control zone.
b. Universal Command View: From the main screen the Universal Command View shall provide Whole Floor and Whole Building emergency control.
6. Reports / Analysis:
a. Data Storage / Event Log: Continual record of each day’s activities including shade position and shade mode changes.
1) Stored on a change of state basis.
2) Archived based on user defined file size.
b. Sensor Data: Daily Record of sensor’s data stored into a history file on a 60 second basis, stored on a repetitive basis:
1) Roof mounted radiometers.
2) Interior / exterior photo sensors.
c. Control Zone Timeline Visual Record of Current Day’s Activity by Zone: Reporting by Zone of current day operation by intermediate stop locations.
d. Trending Reports:
1) Daily Report: Sky, Sensors, Event Log, and Timeline.
2) Shade Position Report: Percentage of time shade at each position.
3) Override Report: Reason for override, percentage of day overridden up / down.
e. Interface with Other Report Writers:
1) Event log and sensor data available in native MBD format.
2) Available in SQL format.

D. Override: Control Software shall incorporate an Override Event Scheduler such that the building Owner may customize position of shades by motor, group, zone or whole building for any event, night or weekend requirements
1. Manual Override:

a. Wall Switches.
b. Virtual Shade Control Switch (via IP).

2. Master Override: SolarTrac-PC control system shall have capability of whole building control for master override by zone or by motor.
3. Remote Off-Site-Monitoring:
   a. IP Interface for monitoring, maintenance and software upgrades.
   b. Provide Maintenance, Support and licensing contract with bid.

4. System Options: As specified in Paragraph 1.3A, provide pricing for the following options:

5. Option 1: Provide VirtualSwitch™ override, a virtual shade override control system for the SolarTrac System:
   a. Provide software for IP based optional override switch over tenant network.
   b. Architect shall provide schedule of user permissions for overrides by office and area or zone.
   c. Each manual override in the open plan and in the perimeter offices shall be reported as an override event where data can be trended for future analysis.
   d. Each shade motor, group or zone, when selected shall provide a menu showing preset positions. When a preset is selected, that shade motor, group or zone shall move that shade to the manually selected preset position.
      1) There shall be an administrative capability to set up users for which shades they have access to and shall only see the shades they have access to.

6. Option 2: Provide wall switches:
   a. Conference Center: Shades shall be operated by, 5 and 10-button low voltage standard switches, or programmable intelligent switches [IS]. Standard switch shall be wired to a bus interface and the bus interface will be programmed to transmit an address for the local switch.
   b. Intelligent switches may be installed anywhere on the bus line. Each IS shall be capable of storing one control level address to be broadcast along the bus line.
   c. An address that is transmitted by either a switch or central controller shall be responded to by those motors with the same address in their control table.
   d. IS shall provide for interface with other low voltage input devices via a set of dry contact terminals located on the switch.
   e. Standard switch or IS may control an individual, sub-group or group of motors in accordance with the address in each motor.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 DEMONSTRATION

A. Shade Controls System Supplier shall train Owner's maintenance personnel to adjust, operate and maintain systems. A minimum 20 hours of one-on-one training shall be provided to the System Operator and a separate 20 hours training shall be provided one-on-one to the System Administrator.

B. All building occupants shall receive an electronic-based educational guide in .pdf format on the general workings of the shade control system and specific instructions on how to use the manual override feature.

3.4 COMMISSIONING

A. Automated SolarTrac System: Provide factory-certified field service engineer to ensure proper system installation and operation under following parameters on site or virtually.
1. Minimum experience of 2 years training in the electrical/electronic field.
2. Certified by the equipment manufacturer on the system installed.

B. The automated shade control system will be commissioned on a floor-by-floor basis and then finally as an entire system. Final commissioning shall be successfully completed prior to the first move-in date for client's occupants.
1. Verify programming of user, defined attributes of system to owner.
2. Final Acceptance shall be upon successful demonstration of all commissioning requirements described in section 3.3.C of these specifications.

C. During commissioning the following will be measured to determine system performance:
1. Response of system (demonstrated by deployment of shade) if average illumination of window wall at sensor exceeds 2,000 cd/m2 or other value established by Owner.
2. Sunlight penetration distance shall not exceed the Owner specified distance for each shade control zone.
3. Response to variable external conditions including, but not limited to: partially sunny days; shading from other buildings in the neighboring urban landscape; and, reflections from other buildings in the neighboring urban landscape
4. Proper consistent action of all shade groups on each façade for a 30 day period
5. The shade log shall be plotted for each shade motor group for the 30-day period. The log shall be used to demonstrate to the Owner that the automated shade movement meets the specified criteria in these specifications.
6. Return from manual override to automatic mode shall be demonstrated to be in accordance with these specifications using the log and also through direct observation under partly cloudy conditions.
7. All aspects of rezoning, control monitoring, logging, fault diagnostics and reporting shall be demonstrated to the Owner.

D. Final Acceptance shall be upon successful demonstration of all commissioning requirements described in these specifications.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 260940