

SUBMIT TO:
 The School District of Osceola County,
 Florida
 Purchasing Department, Building 2000
 817 Bill Beck Blvd.
 Kissimmee, FL 34744



INVITATION TO BID

AN EQUAL OPPORTUNITY EMPLOYER
www.osceola.k12.fl.us/depts/Purchasing/Index.asp

CONTACT PERSON:
Cheryl M. Jessee

Telephone #: 407.870.4627
 Fax #: 407.870.4618

Date issued: May 26, 2010

TITLE: <i>Covered Play Structure for Osceola High School</i>	NUMBER: <i>SDOC 10-B-098 CJ</i>	SUBMITTAL DEADLINE: <i>June 15, 2010</i>
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PRE PROPOSAL CONFERENCE - DATE, TIME AND LOCATION: <i>None</i>	<i>SUBMITTALS RECEIVED AFTER ABOVE DATE AND TIME WILL NOT BE CONSIDERED</i>
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FIRM'S NAME:	
MAILING ADDRESS:	
CITY - STATE - ZIP:	
TELEPHONE NO:	
FAX NO:	
FEDERAL ID NO. OR SOCIAL SECURITY NO.	
	<p>X</p> <p>_____ Authorized Signature</p> <p>_____ Name</p> <p>_____ Title</p> <p>_____ Date</p> <p>_____ Email Address</p>

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR RESPONSE
GENERAL CONDITIONS AND INSTRUCTIONS

**** PLEASE READ CAREFULLY ****

Individuals covered by the Americans with Disabilities Act of 1990 in need of accommodations to attend public openings or meetings sponsored by the School District of Osceola County Purchasing Department shall contact the Purchasing Department at 407.870.4630, at least five (5) days prior to the scheduled opening or meeting.

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| <p>1. SUBMISSION OF OFFERS: All offers shall be submitted in a sealed envelope or package. The invitation number, title, and opening date shall be clearly displayed on the outside of the sealed envelope or package. The delivery of responses to the School District of Osceola County Purchasing Department prior to the specified date and time is solely and strictly the responsibility of the offeror. Any submittal received in the Purchasing Department after the specified date and time will not be considered.</p> <p>Responses shall be submitted on forms provided by the School Board. Additional information may be attached to the submittal. Facsimile submissions are NOT acceptable. No offer may be modified after acceptance. No offer may be withdrawn after opening for a period of sixty (60) days unless otherwise specified.</p> <p>2. EXECUTION OF OFFER: Offer shall contain a manual signature in the space(s) provided of a representative authorized to legally bind the offeror to the provisions therein. All spaces requesting information from the offeror shall be completed. Responses shall be typed or printed in ink. Use of erasable ink or pencil is not permitted. Any correction made by the offeror to any entry must be initialed.</p> <p>3. OPENING: Opening shall be public in the School District Purchasing Department immediately following the advertised deadline date and time for receipt of submittals. Pursuant to Section 119.07(3) (b) Florida Statutes (1991) no further information regarding offers submitted will be made public until such time of intended award or ten (10) days, whichever is earlier.</p> <p>4. PUBLIC RECORD: The School District is governed by the Public Record Law, Chapter 119, Florida Statutes. Pursuant to Chapter 119 only trade secrets as defined in Section 812.081, Florida Statute shall be exempt from disclosure.</p> | <p>5. CLARIFICATION/CORRECTION OF ENTRY: The School Board reserves the right to allow for the clarification of questionable entries and the correction of OBVIOUS MISTAKES.</p> <p>6. INTERPRETATION/ADDENDA: Any questions concerning conditions and specifications shall be directed to the designated contact person. Those interpretations which may affect the eventual outcome of the invitation/offer shall be furnished in writing to prospective offerors.</p> <p>No interpretation shall be considered binding unless provided in writing by the School District Purchasing Department in the form of an addendum. Any addenda issued shall be acknowledged by signature and returned with offeror's response.</p> <p>Failure to acknowledge addenda may result in the offer not being considered.</p> <p>7. INCURRED EXPENSES: This invitation does not commit the School Board to make an award nor shall the School Board be responsible for any cost or expense which may be incurred by any respondent in preparing and submitting a reply, or any cost or expense incurred by any respondent prior to the execution of a purchase order or contract agreement.</p> <p>8. PRICING: Unless otherwise specified prices offered shall remain firm for a period of at least sixty (60) days; all pricing of goods shall include FOB DESTINATION, all packing, handling, shipping charges and delivery to any point(s) within the School District to a secure area or inside delivery; all prices of services shall include all expenses necessary to provide the service at the location specified.</p> |
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9. **ADDITIONAL TERMS & CONDITIONS:** The School Board reserves the right to reject offers containing terms or conditions contradictory to those requested in the invitation specifications.
10. **TAXES:** The School District of Osceola County is exempt from Federal and State Tax for Tangible Personal Property. Florida State Exemption Certificate No. 85-8012500806C-9. Vendors or Contractors doing business with the School District of Osceola County shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the District, nor shall any Vendor/Contractor be authorized to use the District's Tax Exemption Number in securing such materials.
11. **DISCOUNTS:** All discounts except those for prompt payment shall be considered in determining the lowest net cost for evaluation purposes.
12. **MEETS SPECIFICATIONS:** The offeror represents that all offers to this invitation shall meet or exceed the minimum requirements specified.
13. **BRAND NAME OR EQUAL:** If items requested by this invitation have been identified in the specifications by a Brand Name "OR EQUAL" description, such identification is intended to be descriptive and not restrictive and is to indicate the quality and characteristics of products that will be acceptable. Offers proposing "equal" products will be considered for award if such products are clearly identified in the offer and are determined by the School Board to meet fully the salient characteristic requirements listed in the specifications.

Unless the offeror clearly indicates in his/her offer that he/she is proposing an "equal" product, the offer shall be considered as offering the same brand name product referenced in the specifications.

If the offeror proposes to furnish an "equal" product, the brand name of the product to be furnished shall be clearly identified. The evaluation of offers and the determination as to equality of the product offered shall be the responsibility of the School Board and will be based on information furnished by the offeror. The Purchasing Department is not responsible for locating or securing any information which is not identified in the response and reasonably available to the Purchasing Department. To insure that sufficient information is available the offeror shall furnish as part of the response all descriptive material necessary for the Purchasing Department to determine whether the product offered meets the salient characteristics required by the specifications and establish exactly what the offeror proposes to furnish and what the School Board would be binding itself to purchase by making an award.

14. **SAMPLES:** When required, samples of products shall be furnished with response to the School Board at no charge. Samples may be tested and will not be returned to the offeror. The result of any and all testing shall be made available upon written request.
15. **SILENCE OF SPECIFICATIONS:** The apparent silence of these specifications or any supplemental specifications as to details or the omission from same of any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship shall be first quality. All interpretations of specifications shall be made upon the basis of this statement.
16. **GOVERNING LAWS AND VENUE:** All legal proceedings brought in connection with this Contract shall only be brought in a state or federal court located in the State of Florida. Venue in state court shall be in Osceola County, Florida. Venue in federal court shall be in the United States District Court, Middle District of Florida, Orlando Division. Each party hereby agrees to submit to the personal jurisdiction of these courts for any lawsuits filed there against such party arising under or in connection with this Contract. In the event that a legal proceeding is brought for the enforcement of any term of the contract, or any right arising there from, the parties expressly waive their respective rights to have such action tried by jury trial and hereby consent to the use of non-jury trial for the adjudication of such suit.
All questions concerning the validity, operation, interpretation, construction and enforcement of any terms, covenants or conditions of this Contract shall in all respects be governed by and determined in accordance with the laws of the State of Florida without giving effect to the choice of law principles thereof and unless otherwise preempted by federal law.

17. **ASSIGNMENT:** Any agreement to purchase issued pursuant to this invitation and award thereof and the monies which may become due hereunder are not assignable except with the prior written approval of the School Board.
18. **CONTENT OF INVITATION/RESPONSE:** The contents of this invitation, all terms, conditions, specifications, and requirements included herein and the accepted and awarded response thereto may be incorporated into an agreement to purchase and become legally binding. Any terms, conditions, specifications, and/or requirements specific to the item or service requested herein shall supersede the requirements of the "GENERAL CONDITIONS AND INSTRUCTIONS."
19. **INDEMNIFICATION OF SCHOOL BOARD**
The respondent shall indemnify, hold harmless and defend the School Board, its officers, agents, and employees, from or on account of any claims, losses, expenses, injuries, damages, or liability resulting or arising solely from the respondent's performance or nonperformance of services pursuant to this contract, excluding any claims, losses, expenses, injuries, damage, or liability resulting or arising from the actions of School Board, its officers, agents, or employees. The indemnification shall obligate the respondent to defend, at its own expense or to provide for such defense, at School Board's option, any and all claims and suits brought against School Board that may result from the respondent's performance or nonperformance of services pursuant to the contract.
20. **PATENTS, COPYRIGHT, AND ROYALTIES:** The supplier/provider, without exception, shall indemnify and save harmless the School Board, its officers, agents and employees from liability of any nature of kind, including cost and expenses for or on account of any copyrighted, registered, patented, or unpatented invention, process, or article manufactured or used in the provision of goods and/or services, including use by the School Board. If the supplier/provider uses any design, device, or materials covered by letters, patent, copyright, or registration, it is mutually agreed and understood without exception that the quoted price shall include all royalties or costs arising from the use of such design, device, or materials in any way involved.
21. **TRAINING:** Unless otherwise specified suppliers/providers may be required at the convenience of and at no expense to the School Board to provide training to School Board personnel in the operation and maintenance of any item purchased as a result of this invitation.
22. **ACCEPTANCE:** Products purchased as a result of this invitation may be tested for compliance with specifications. Items delivered not conforming to specifications may be rejected and returned at respondent's expense. Those items and items not delivered by the delivery date specified in accepted offer and/or purchase order may be purchased on the open market. Any increase in cost may be charged against the respondent.
23. **SAFETY WARRANTY:** Any awarded supplier/provider including dealers, distributors, and/or manufacturers shall be responsible for having complied with all Federal, State, and local standards, regulations, and laws concerning the product or service specified, and the use thereof, applicable and effective on the date of manufacture or use or date in service including safety and environmental standards as apply to both private industry and governmental agencies.
24. **WARRANTY:** The offeror agrees that, unless otherwise specified, the product and/or service furnished as a result of this invitation and award thereto shall be covered by the most favorable commercial warranty the offeror gives to any customer for comparable quantities of such products and/or services and that the right and remedies provided herein are in addition to and do not limit any rights afforded to the School Board by any other provision of the invitation/offer.
25. **AWARD:** As the best interest of the School Board may require, the School Board reserves the right to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or on a district wide basis with one or more supplier(s) or provider(s); to reject any and all offers or waive any irregularity or technicality in offers received. Offerors are cautioned to make no assumptions unless their offer has been evaluated as being responsive. Any or all award(s) made as a result of this invitation shall conform to applicable School Board Rules, State Board Rules, and State of Florida Statutes.

26. **VIOLATIONS:** Any violation of any of the stipulations, terms, and/or conditions listed and/or included herein may result in the respondent being removed from the School Board Bid list and the /respondent being disqualified from doing business with the School Board for a period of time to be determined on a case-by-case basis.
27. For purposes of this Invitation and evaluation of responses hereto the following shall apply: unit prices shall prevail over extended prices; written matter shall prevail over typed matter; numbers spelled in word form shall prevail over Arabic numerals (“one” over “1”). When not inconsistent with context words used in the present tense include the future, words in the plural number include the singular number, and words in the singular number include the plural number. The word “shall” is always mandatory and not merely directory.
28. **GENERAL INFORMATION ABOUT THE DISTRICT:** The District and its governing board were created pursuant to Section 4, Article IX of the Constitution of the State of Florida. The District is an independent taxing and reporting entity managed, controlled, operated, administered, and supervised by School District Officials in accordance with Chapters 1000-1013, Florida Statutes. The Board consists of five elected officials responsible for the adoption of policies, which govern the operation of the District public schools. The Superintendent of Schools is responsible for the administration and management of the schools and it’s departments within the applicable parameters of state laws, State Board of Education Rules, and School Board policies. The Superintendent is also specifically delegated the responsibility of maintaining a uniform system of records and accounts in the District by Section 1010.01, Florida Statutes as prescribed by the State Board of Education.
29. **UNIFORM COMMERCIAL CODE:** The Uniform Commercial Code (Florida Statutes, Chapter 672) shall prevail as the basis for contractual obligations between the awarded Contractor and the School District of Osceola County for any terms and conditions not specifically stated in this Invitation to bid.
30. **AVAILABILITY OF FUNDS:** The obligations of the School District of Osceola County under this award are subject to the availability of funds lawfully appropriated for its purpose by the State of Florida and the School Board. All purchases are contingent upon available District funding.
31. **NO CONTACT:** Vendors, contractors, consultants, or their representatives shall not meet with, speak individually with, or otherwise communicate with School Board members, the Superintendent, or School District staff, other than the designated purchasing agent, and School Board members, the Superintendent, or School District staff, other than the designated purchasing agent, shall not meet with, speak individually with, or otherwise

communicate with vendors, contractors, consultants, or their representatives, about potential contracts with the School Board once an Invitation to bid, request for quote, invitation to bid, invitation to negotiate, or request for qualifications has been issued.

Any such communication shall disqualify the vendor, contractor, or consultant from responding to the subject Invitation to bid, request for quote, request for proposal, invitation to negotiate, or request for qualifications. (*School Board Rule 7.70.I.G*)

32. **DISTRICT DEMOGRAPHICS:**The District is coterminous with Osceola County. The annual budget for the District for 2009-2010 school year totals \$834,802,487, including an operating budget of \$419,985,284, and a capital budget of \$237,594,737. The District operates forty-three (43) schools, which include twenty-three (23) elementary schools, eight (8) middle schools, eight (8) high schools, and four (4) multi-level schools. The District is also responsible for nine (9) alternative education sites, and eight (8) charter schools. The total full-time K-12 enrollment of public school students as of November 2009 is 51,421.

33. **DEFINITIONS:**

RESPONDENT – The term “respondent” used herein refers to any dealer, manufacturer, representative, distributor, or business organization that will be or has been awarded a contract and/or purchase order pursuant to the terms and conditions of the invitation and accepted offer.

OFFEROR – The term “offeror” used herein refers to any dealer, manufacturer, representative, distributor, or business organization submitting an offer to the County in response to this invitation.

SCHOOL BOARD – The term “School Board” herein refers to the School Board of Osceola County, Florida, and its duly authorized representatives and any school, department, or unit within the School District.

USING AGENCY – The term “using agency” used herein refers to any school, department, committee, authority, or another unit in the School District using supplies or procuring contractual services as provided for in the Purchasing Department of the School District.

**THE SCHOOL BOARD RESERVES THE RIGHT TO REJECT ANY OR ALL OFFERS,
TO WAIVE INFORMALITIES, AND TO ACCEPT ALL OR ANY PART OF ANY OFFER
AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE SCHOOL BOARD**

The purpose of this Invitation To Bid (ITB) is to solicit competitive sealed Bids to furnish a **Covered Play Structure for Osceola High School** for the use of The School District of Osceola County, Florida.

1.0 SCOPE

1.01 This Specification establishes the minimum requirements for this solicitation, listed and described in the body of these specifications, to be used as noted, by The School District of Osceola County.

1.02 AWARD TERM

The School Board's goal is to promote partnership relationships within the policies and procedures of public procurement. Pursuant toward that end, the successful bidder(s) shall be awarded a contract for a one time purchase.

The award term recommendation will be that which is determined to be in the best interest of the School Board. All renewals will be contingent upon mutual written agreement and, when applicable, approval of School Board.

1.03 THE INTENT of this bid is to establish the minimum requirements for the purchase, delivery and installation of a Covered Play Structure for Osceola High School and to establish a firm fixed price per the terms and quantities specified herein.

1.04 PRODUCTS OR SERVICES TO BE PROVIDED, AND APPLICABLE SPECIFICATIONS

The specifications and plans for the Covered Play Structure for Osceola High School are provided by C.T. HSU & Associates, P.A., Architect for Osceola High School Project, see Attachment A – CS-0.0.1 Cover Sheet, Attachment B – A-0.0.1 Site Plan, Attachment C – A-1.0.1 Building Plan & Elevations, Attachment D – IS-0.0.1 Abbreviations Drawing List Symbols, Attachment E – Section 03100-Concrete Formwork, Attachment F – Section 03200-Concrete Reinforcement, Attachment G – Section 13121-Metal Building Systems, & Attachment H – Section 03300-Cast-in-Place Concrete.

1.05 DELIVERY TERMS

A. DELIVERY/INSTALLATION TIME

Delivery/Installation Time is of the essence in the award of this Bid. Bidders must take this into consideration when preparing their bids. The District is in the process of preparing the site to receive the covered play structure. If the site is ready by July 13, 2010 which is the anticipated Board Approval date of this contract, bidders are requested to submit on their bid submittal form the best possible Delivery/Installation time frame after receipt of the purchase order. If the site is not ready by July 13th, then state on the bid submittal form when delivery/installation could be made.

B. DELIVERY/INSTALLATION CHARGES

Bid price must include all delivery/installation charges.

C. NOTIFICATION OF DELIVERY/INSTALLATION

All deliveries and installation schedules will be submitted through Remy Gili, Project Manager at 407-709-6105.

D. F.O.B. POINT

The F.O.B. point for this contract and for all purchases made under it shall be as specified by the using school/department (in accordance with the Bid Submittal Form), in the school district. Delivery will not be complete until the using school/department has accepted each item. Delivery to a common carrier shall not constitute delivery to the ordering agency. All disputes shall be between the seller/bidder and the carrier.

1.06 LABELING

Each carton, package, box and/or container shall be labeled. Each label shall identify each carton as follows:

- A. Name of item.
- B. Quantity of item contained.
- C. Purchase Order Number.
- D. Company.

1.07 DAMAGED ITEMS

In the event an item or items is received and it is later determined there is concealed damage when the item or items is unpacked, the item or items must be replaced by the awarded bidder at no cost to the School Board.

1.08 ADDITIONAL QUANTITIES

The School District of Osceola County reserves the right to purchase any additional quantities of the bid item(s) from the successful bidder at this bid price for a period of one (1) year from the date of the award of the bid, provided the successful bidder is in agreement at time of order.

1.09 QUANTITY CHANGES

The School Board reserves the right to increase or decrease the total quantities necessary.

1.10 METHOD OF ORDERING

Items shall be order via individual purchase orders on an "as needed" basis for the term of the contract. Invoices must be submitted against each individual purchase order.

1.11 ORDERS

The School District of Osceola County will issue purchase orders directly to the successful bidder(s) for the purchase of a covered play structure for Osceola High School. Schools, departments and other centers of the School District may issue purchase orders directly to the successful bidder(s) for additional orders. The successful bidder(s) will be expected to honor these orders according to the discount terms and conditions listed in this bid. Each purchase order will be faxed or mailed to the awarded bidder. The order should be reviewed for correct prices, catalog numbers, extensions, etc.

1.12 EXEMPT FROM THIS BID

Purchases shall not include items available at lower prices on other School District bid awards or on Florida State Contracts. The School District reserves the right to bid separately any item if deemed to be in the best interest of the District.

1.13 SUBSTITUTES

Unapproved substitutes will not be allowed. If items are not available, the school or department noted on the purchase order must be contacted prior to shipment to determine if a substitute is acceptable.

1.14 NO DAMAGES FOR DELAY

Bidder is not entitled to any additional compensation or increase in the contract sum for direct, indirect, impact, or any other damages arising because of any hindrance or delays caused by the owner or any other cause whatsoever. Bidder's only remedy for delay, not caused or exacerbated by the Bidder, shall be an extension of time to complete the Bidder's scope of work. Any extension of time shall be granted at the sole discretion of the School Board, and if granted, shall be in the form of additional days added to the contract.

1.15 PALLETIZE

Shipment(s) must be palletized. Pallets are available for exchange at the time of delivery, if required.

2.0 STANDARD TERMS & CONDITIONS

2.01 CLOSING DATE

Bids must be received by The School District of Osceola County Purchasing Department, Building 2000, 817 Bill Beck Blvd., Kissimmee, FL, 34744-4492, no later than **2:00 p.m., local time, on Thursday, June 15, 2010.** Bids received after this time will not be considered.

2.02 TENTATIVE SCHEDULE

May 26, 2010 Invitation To Bid Available
None..... Pre-bid Conference
June 15, 2010 Bid Closing Date
July 13, 2010..... Planned Award Date

2.03 DELIVERY OF BIDS

All Bids shall be sealed and delivered or mailed to (faxes/e-mails will not be accepted):
The School District of Osceola County, Florida
Purchasing Department, Building 2000
817 Bill Beck Blvd.
Kissimmee, Florida 34744-4492

Mark package(s) "**Bid #SDOC 10-B-098 CJ, Covered Play Structure for Osceola High School**" and insure that bidders return address is listed on the outside of the package.

Note: Please ensure that if a third party carrier (Federal Express, Airborne, UPS, USPS, etc.) is used, that the third party is properly instructed to deliver the Bid Submittal **only** to the Purchasing Department, Building 2000 at the above address. To be considered, **a Bid must be received and accepted in the Purchasing Department before the Bid closing date and time.**

2.04 PUBLIC BID OPENING

- A. The Bids will be available for inspection during normal business hours in the Purchasing Department within ten (10) days of the closing date, by appointment (Florida Statute 119.071 (1) (b)).
- B. A copy of the completed bid tabulation will be available on the Purchasing Department web page at www.osceola.k12.fl.us/depts/Purchasing/SolicitatinsStaffPublications.asp within ten (10) days.
- C. Individuals covered by the Americans with Disabilities Act of 1990 in need of accommodations to attend public Bid openings or meetings should contact the Purchasing Department at 407.870.4625 at least five (5) days prior to the meeting date.

2.05 BID SUBMITTAL FORM

- A. See **Submittal Requirements** for complete details.
- B. Note: **It is not necessary to return every page of this document with the bid proposal; return only the pages that require signatures or information.**
- C. Each bidder shall submit three (3) complete sets of the Bid Submittal:
 - **One (1) hard copy marked "ORIGINAL"**
 - **One (1) hard copies marked "COPY"**
 - **One (1) COMPLETE electronic copy on a CD in PDF format**
Note the solicitation number and name of company on the disk.

If a Non-Disclosure Agreement is signed and confidential materials are submitted, such confidential materials shall not be included on the master CD. Confidential

materials shall be segregated on a separate CD, plainly labeled “Confidential Materials”.

- D. The Invitation To Bid page and other required documents must be signed by an official authorized to legally bind the bidder to all bid provisions.
- E. Terms and conditions differing from those in this Bid shall be cause for disqualification of the Bid Submittal.

2.06 QUESTIONS CONCERNING BID

- A. Questions concerning any portion of this Bid shall be directed in writing or by e-mail to the Purchasing Representative named below, who shall be the official point of contact for this Bid. Questions should be submitted at least **seven (7) days** prior to the closing date.
- B. Mark cover page or envelope(s) "**Questions on Bid # SDOC 10-B-098 CJ, Covered Play Structure for Osceola High School**".
- C. Submit questions to:
Cheryl M. Jessee, Senior Buyer
Telephone:407.870.4627
Fax:407.870.4618
E-mail:jesseec@osceola.k12.fl.us

2.07 CLARIFICATION AND ADDENDA

- A. It is incumbent upon each bidder to carefully examine all specifications, terms, and conditions contained herein. Any inquiries, suggestions, or requests concerning interpretation, clarification or additional information shall be made in writing, (facsimile transmissions acceptable, 407.870.4616) through the Purchasing Representative named above. The School Board will not be responsible for any oral representation(s) given by any employee, representative or others. The issuance of a written addendum is the **only** official method by which interpretation, clarification or additional information can be given.
- B. If it becomes necessary to revise or amend any part of this Bid, notice may be obtained by accessing our web site. The bidder in the Bid Submittal must acknowledge receipts of amendments. **Each bidder should ensure that all addenda and amendments to this Bid have been received BEFORE submitting the Bid. Check the Purchasing Department web site at www.osceola.k12.fl.us/depts/Purchasing/Index.asp for any addenda. The Purchasing Department will not manually distribute any addendum.**

2.08 AWARD

The School Board reserves the right to award the contract to the bidder(s) that the Board deems to offer the lowest responsive and responsible bid(s), as defined elsewhere in this solicitation. The Board is therefore not bound to accept a bid on the basis of lowest price. In addition, the Board has the sole discretion and reserves the right to cancel this Bid, to reject any and all bids, to waive any and all informalities and/or irregularities, or to re-advertise with either the identical or revised specifications, if it is deemed to be in the best interest of the Board to do so. The Board also reserves the right to make multiple awards based on experience and qualifications or to award only a portion of the items and/or services specified, if it is deemed to be in the Board's best interest.

2.09 PAYMENT DISCOUNTS

A bid price submitted indicating a discount if an invoice is paid within a certain number of days from the date of the invoice can not be considered as a basis for the bid evaluation. All bid prices must be net and not contingent on terms.

2.10 DEFINITION OF RESPONSIVE AND RESPONSIBLE FOR THIS BID

Each bid submittal shall be evaluated for conformance as responsive and responsible using the following criteria:

- A. Proper submittal of ALL documentation as required by this bid. (Responsive)

- B. The greatest benefits to the School District as it pertains to: (Responsible)
 - 1. Total Cost.
 - 2. Delivery.
 - 3. Past Performance. In order to evaluate past performance, all bidders are required to submit:
 - a. A list of references with the bid and;
 - b. A list of relevant projects completed within the last 3 years that are the same or similar to the magnitude of this ITB.
 - 4. All technical specifications associated with this bid.
 - 5. Financial Stability: Demonstrated ability, capacity and/or resources to acquire and maintain required staffing.

Bidders are reminded that award may not necessarily be made to the lowest bid. Rather, award will be made to the lowest responsive, responsible, bidder whose bid represents the best overall value to the School District when considering all evaluation factors.

2.11 OTHER AGENCIES

- A. All bidders awarded contracts from this Bid may, upon mutual agreement with the other agency, permit any school district/board, municipality or other governmental agency, to include Public Charter Schools, to participate in the contract under the same prices, terms and conditions, if agreed to by both parties.

- B. Further, it is understood that each school district/board or agency will issue its own purchase order to the awarded bidder(s).

2.12 ASSIGNMENT

The Bidder shall not sell, assign or transfer any of its rights, duties or obligations under the Contract, or under any purchase order issued pursuant to the Contract, without the prior written consent of the School Board. In the event of any assignment, the Bidder remains secondarily liable for the performance of the Contract, unless the School Board expressly waives such secondary liability. The School Board may assign the Contract with prior written notice to Bidder of its intent to do so. For the purpose of this Contract, "assignment" means any voluntary, involuntary, direct or indirect assignment, sale, or other transfer by Bidder or its owner(s), of any interest in this Agreement, more than ten percent (10%) of the ownership interest in Bidder, or one of a series of transfers that in the aggregate constitute the transfer of more than ten percent (10%) of the ownership interest in Bidder. The term includes, without limitation: (1) transfer of ownership of capital stock or any partnership interest; (2) merger, consolidation, or issuance of additional securities representing more than ten percent (10%) of the ownership interest in Bidder; (3) sale of common stock of Bidder pursuant to a private placement or registered public offering, which transfers more than ten percent (10%) of the ownership interest in Bidder; (4) transfer of any interest in Bidder in a divorce proceeding or otherwise by operation of law; or (5) transfer of more than ten percent (10%) of the ownership interest in Bidder in the event of the death of an owner, by will, declaration of or transfer in trust, or under the laws of intestate succession.

2.13 CONTRACT

- A. The contents of this Bid and all provisions of the successful bidder's Submittal Form shall be considered a contract and become legally binding. A separate contract document, other than the purchase order, will not be issued.

- B. The Director of Purchasing and Warehouse, Superintendent, and Board Chair are the sole Contracting Officers for the School Board, and only they or their designee are authorized to make changes to any contract.
- C. The School Board shall be responsible for only those orders placed by the schools/departments on an authorized signed Purchase Order. The School Board shall not be responsible for any order, change substitution or any other discrepancy on the Purchase Order. If there is any question about the authenticity of a Purchase Order or change order, the bidder should promptly contact the Purchasing Department.

2.14 DISCLOSURE OF BID CONTENT

- A. All material submitted becomes the property of the School Board and may be returned only at the School Board's option. The School Board has the right to use any or all ideas presented in any reply to this Bid. Selection or rejection of any Bid Submittal does not affect this right.
- B. The School Board is governed by the Public Record Law, Chapter 119, Florida Statutes (F.S.). Only trade secrets as defined in Section 812.081(1)(c), F.S. or financial statements required by the School Board as defined in 119.071(1)(c), F.S. (hereinafter "Confidential Materials"), may be exempt from disclosure. If a respondent submits Confidential Materials, the information **must be segregated**, accompanied by an executed Non-disclosure Agreement for Confidential Materials and each pertinent page must be clearly labeled "confidential" or "trade secret." The School Board will not disclose such Confidential Materials, subject to the conditions detailed within the Agreement, which is attached to this solicitation. When such segregated and labeled materials are received with an executed Agreement, the School Board shall execute the Agreement and send the respondent a "Receipt for Trade Secret Information."

RETURN THIS FORM *ONLY* IF CONFIDENTIAL MATERIALS ARE BEING INCLUDED IN THE SUBMITTAL. PLEASE READ THE SECTION IN THE BID DOCUMENT TO DETERMINE IF THIS APPLIES.

2.15 BIDDER'S RESPONSIBILITY

The bidder, by submitting a Bid represents that:

- A. The bidder has read and understands the Invitation To Bid in its entirety and that the Bid is made in accordance therewith, and;
- B. The bidder possesses the capabilities, resources, and personnel necessary to provide efficient and successful service to the School Board, and;
- C. Before submitting a Bid, each bidder shall make all investigations and examinations necessary to ascertain site and/or local conditions and requirements affecting the full performance of the contract and to verify any representations made by the School Board, upon which the bidder will rely. If the bidder receives an award because of its Bid Submittal, failure to have made such investigations and examinations will in no way relieve the bidder from its obligations to comply in every detail with all provisions and requirements of the contract, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim by the bidder for additional compensation or relief.
- D. The bidder will be held responsible for any and all discrepancies, errors, etc., in discounts or rebates which are discovered during the contract term or up to and including five (5) fiscal years following the School Board's annual audit.

2.16 PAYMENT TERMS

A. INVOICING

The successful bidder will be required to submit invoices and reference purchase order numbers on all requests for payment. All statements must reference valid SDOC purchase order numbers. Invoices shall be mailed directly to: Accounts Payable, School District of Osceola County, 817 Bill Beck Blvd., Kissimmee, Florida 34744-4495. A separate invoice must be received for each purchase order number. Payment for partial shipments shall not be made unless specified. Invoices, which do not reference valid SDOC, purchase order numbers or which are erroneous (incorrect contract prices, minimum order charges, etc.) shall be returned to the vendor for resolution of the discrepancies. It is the sole responsibility of the vendor to reconcile the purchase order and the vendor's invoice and to notify the purchasing representative of any discrepancies prior to billing. The school board will only pay the dollar amounts authorized on the purchase order.

B. The School Board will remit full payment on all undisputed invoices within 45 (forty-five) days from receipt by the appropriate person(s) (to be designated at time of contract) of the invoice(s) or receipt of all products or services ordered.

C. Pursuant to Chapter 218, Florida Statutes, the School Board will pay interest, not to exceed one percent (1%) per month, on all undisputed invoices not paid within 45 (forty-five) days after receipt of the entire order of the commodity or service, AND a properly completed invoice, whichever is later.

D. The School Board has the capabilities of Electronic Fund Transfer (EFT). List any additional discounts for payment using Electronic Funds Transfer (EFT) and/or any additional discounts to be applied to such payments.

E. ***By submitting a Bid (offer) to the School Board, the bidder expressly agrees that if awarded a contract, the School Board may withhold from any payment, monies owed by the bidder to the School Board for any legal obligation between the bidder and the School Board.***

F. PARTIAL PAYMENT

Partial payments in the full amount of the value of items received and accepted may be requested by the submission of a properly executed invoice with support documents if required.

2.17 CERTIFICATES

The School Board reserves the right to require proof that the bidder is an established business and is abiding by the ordinances, regulations, and laws of their community, the county, and the State of Florida, such as but not limited to: Business Tax Receipts, Business Licenses, Florida Sales Tax Registration, Federal Employers Identification Number.

2.18 INSURANCE, LICENSES AND CERTIFICATES

The bidder agrees to provide and maintain at all times during the term of this agreement, without cost or expense to the School Board, policies of insurance insuring the bidder against any and all claims, demands or causes of action whatsoever, for injuries received or damage to property relating to the performance of duties, services and/or obligations of the bidder under the terms and provisions of this agreement. The bidder will provide the School Board with copies of current appropriate business licenses.

2.19 INSURANCE

The bidder shall secure and maintain, at its sole cost and expense during the contract term, the following insurance:

- Commercial General Liability – in the amount of \$2 million aggregate / \$1 million per occurrence.
- Liability – Auto, in the amount of \$100,000/300,000 / Any Auto
- Workers Compensation – As required by Florida law.

Requirements for bidders that qualify for an exemption under the Florida Worker's Compensation law in Chapter 440 Florida Statutes are detailed below:

Incorporated or unincorporated firms with fewer than four employees shall be required to sign a Hold Harmless Agreement relieving the School Board of liability in the event they and/or their employees are injured while providing goods and/or services to the School Board.

Incorporated or unincorporated firms with four or more employees shall be required to provide a copy of their "Notice of Election to be Exempt", along with valid proof of coverage for non-exempt employees.

The Hold Harmless Agreement mentioned above is included as an attachment to this bid. Said Agreements shall be returned with the bid proposal as detailed in the Submittal Requirements.

The School Board reserves the right to request a copy of the complete insurance policy(ies) and any endorsements for the insurance referenced above. A certificate of insurance indicating that the bidder has coverage in accordance with the requirements herein set forth shall be furnished by the bidder to the School Board Representative prior to the execution of the contract and annually upon renewal thereafter. **The Bidder shall either cover any subcontractors on its policy or require the subcontractors to obtain coverage to meet all requirements for insurance contained herein.**

Bidder agrees that School Board will make no payments pursuant to the terms of the contract until all required proof or evidence of insurance has been provided to the School Board Representative. Bidder agrees that the insurer shall waive its rights of subrogation, if any, against the School Board on Commercial General Liability and Workers Compensation insurance coverage. The ACORD certificate of Liability Insurance, with endorsements shall be completed by the authorized Resident Agent and returned to the Purchasing Department. This certificate shall be dated and show:

- A. The name of the insured bidder, the specified job by name, name of the insurer, the number of the policy, its effective date and its termination date.
- B. Statement that the Insurer will mail notice to the School Board at least thirty (30) days prior to any material changes in provisions or cancellation of the policy.
- C. **School Board shall be named as an additional insured on Commercial General Liability Insurance.**

Loss Deductible Clause: The School Board shall be exempt from, and in no way liable for, any sums of money that may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the bidder and/or sub-consultant providing such insurance.

2.20 PERFORMANCE BOND

A performance and payment bond shall be required for this project. The awarded Bidder shall furnish within ten (10) days of notification of award a Performance Bond and a Payment Bond in the amount of 100% of the contracted price, payable to the School District as security for the faithful performance of the Contract. The Performance Bond may be in the form of a bond,

cashier's check or Irrevocable Letter of Credit (ILOC). The bond shall be issued by an agency authorized to do business in the State of Florida with a rating of "A" or higher, as listed in the A.M. Best & Company latest published rating. An attorney in fact who signs a Performance Bond must file with the bond a certified copy of his/her power of attorney to assign said bond. It is the bidder's responsibility to have the Performance & Payment Bonds recorded with the Osceola County Clerk of Courts and a copy returned to the Purchasing Representative with a receipt showing the bonds have been recorded. The awarded Bidder, upon failure or refusal to furnish within ten (10) days of notification the required Performance Bond, shall pay to the School District, as liquidated damages for such failure or refusal, an amount in cash equal to the Bid Bond.

Should the awarded Bidder not enter into a Contract or upon cancellation of the Contract, the School Board reserves the right to obtain services on the open market as required without competition and for such time until a new Bid can be advertised, received, evaluated, and a Contract awarded.

2.21 SAFETY

The bidder shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the work. The bidder shall at all times comply with the regulations set forth by federal, state, and local laws, rules, and regulations concerning "OSHA" and all applicable state labor laws, regulations, and standards. Bidder shall take all necessary precautions to ensure all materials provided do not include Asbestos. The bidder shall indemnify and hold harmless the School Board from and against all liabilities, suits, damages, costs, and expenses (including attorney's fees and court costs) which may be imposed on the School Board because of the bidder, sub-contractor, or supplier's failure to comply with the regulations.

2.22 DEVIATIONS

All Bid Submittals must clearly and with specific detail, note all deviations to the exact requirements imposed upon the bidder by the specifications. Such deviations must be stated upon the Bid Submittal Form; otherwise the School Board will consider the subject Bid Submittals as being made in strict compliance with said Specifications to bidders, the bidder being held therefore accountable and responsible. Bidders are hereby advised that School Board will only consider Bid Submittals that meet the exact requirements imposed by the specifications; except, however, said Bid Submittals may not be subject to such rejection where, **at the sole discretion of The School Board**, the stated deviation is considered to be equal or better than the imposed requirement and where said deviation does not destroy the competitive character of the Bid process by affecting the amount of the Bid Submittal such that an advantage or benefit is gained to the detriment of the other bidders.

2.23 WAIVER OF CLAIMS

Once this contract expires, or final payment has been requested and made, the awarded bidder shall have no more than thirty (30) calendar days to present or file any claims against the School Board concerning this contract. After that period, the School Board will consider the bidder to have waived any right to claims against the School Board concerning this agreement.

2.24 TERMINATION / CANCELLATION OF CONTRACT

The School Board reserves the right to cancel the contract without cause with a minimum thirty (30) days written notice.

Termination or cancellation of the contract will not relieve the bidder of any obligations for any deliverables entered into prior to the termination of the contract (i.e., reports, statements of accounts, etc., required and not received).

Termination or cancellation of the contract will not relieve the bidder of any obligations or liabilities resulting from any acts committed by the bidder prior to the termination of the contract.

The bidder may cancel the resulting contract with sixty (60) days **written** notice to the Director of Purchasing and Warehouse. Failure to provide proper notice may result in the bidder being barred from future business with the School District.

2.25 TERMINATION FOR DEFAULT

The School District's Contract Administrator shall notify, in writing, the bidder of deficiencies or default in the performance of its duties under the Contract. Three separate documented instances of deficiency or failure to perform in accordance with the specifications contained herein shall constitute cause for termination for default, unless specifically specified to the contrary elsewhere within this solicitation. It shall be at the School Board's discretion whether to exercise the right to terminate. Bidder shall not be found in default for events arising due to acts of God.

2.26 TERMINATION FOR SCHOOL BOARD'S CONVENIENCE

The performance of work under this contract may be terminated in accordance with this clause in whole, or from the time in part, whenever the School Board representative shall determine that such termination is in the best interest of the School Board. Any such termination shall be effected by the delivery to the bidder of a Notice of Termination specifying the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective. Upon such termination for convenience, bidder shall be entitled to payment, in accordance with the payment provisions, for services rendered up to the termination date and the School Board shall have no other obligations to bidder. Bidder shall be obligated to continue performance of contract services, in accordance with this contract, until the termination date and shall have no further obligation to perform services after the termination date.

2.27 INCURRED EXPENSES

This ITB does not commit the School Board to award a contract, nor shall the School Board be responsible for any cost or expense which may be incurred by the bidder in preparing and submitting the Submittal called for in this ITB, or any cost or expense incurred by the bidder prior to the execution of a contract agreement.

2.28 MINIMUM SPECIFICATIONS

The specifications listed herein are the minimum required specifications for this ITB. They are not intended to limit competition nor specify any particular bidder, but to ensure that the School District receives quality products and services.

2.29 COMPLIANCE WITH LAWS AND REGULATIONS

The bidder shall be responsible to know and to apply all applicable federal and state laws, all local laws, ordinances, rules, regulations, and all orders and decrees of bodies or tribunals having jurisdiction or authority which in any manner affect the work, or which in any way affect the conduct of the work. Bidder shall always observe and comply with all such laws, ordinances, rules, regulations, orders, and decrees. The bidder shall protect and indemnify School Board and all its officers, agents, servants, or employees against any claim or liability arising from or based on the violation of any such law, ordinance, rule, regulation, order, or decree caused or committed by bidder, its representatives, sub-contractors, sub-consultants, professional associates, agents, servants, or employees. Additionally, bidder shall obtain and maintain at its own expense all licenses and permits to conduct business pursuant to this contract from the federal government, State of Florida, Osceola County, or municipalities when legally required, and maintain same in full force and effect during the term of the contract.

2.30 RECORDS & RIGHT TO AUDIT

The bidder shall maintain such financial records and other records as may be prescribed by the School Board or by applicable federal and state laws, rules, and regulations. The bidder shall retain these records for a period of three (3) years after final payment, or until the School Board audits them, whichever event occurs first. These records shall be made available during the term

of the contract and the subsequent three-year period for examination, transcription, and audit by the School Board, its designees, or other entities authorized by law.

2.31 CHANGES IN SCOPE OF WORK/SERVICE

- A. The School Board may order changes in the work/service consisting of additions, deletions, or other revisions within the general scope of the contract. No claims may be made by the bidder that the scope of the project or of the bidder's services has been changed, requiring changes to the amount of compensation to the bidder or other adjustments to the contract, unless such changes or adjustments have been made by written amendment to the contract signed by the School Board Chair and the bidder.
- B. If the bidder believes that any particular work/service is not within the scope of work/service of the contract, is a material change, or will otherwise require more compensation to the bidder, the bidder must immediately notify the School Board's Representative in writing of this belief. If the School Board's Representative believes that the particular work/service is within the scope of the contract as written, the bidder will be ordered to and shall continue with the work/service as changed and at the cost stated for the work/service within the scope. The bidder must assert its right to an adjustment under this clause within thirty (30) days from the date of receipt of the written order.
- C. The School Board reserves the right to negotiate with the awarded bidder(s) without completing the competitive bidding process for materials, products, and/or services similar in nature to those specified within this ITB for which requirements were not known when the ITB was released.

2.32 MODIFICATIONS DUE TO PUBLIC WELFARE OR CHANGE IN LAW

The School Board shall have the power to make changes in the contract as the result of changes in Florida law and/or ordinances of Osceola County to impose new rules and regulations on the bidder under the contract relative to the scope and methods of providing services as shall from time-to-time be necessary and desirable for the public welfare. The School Board shall give the bidder notice of any proposed change and an opportunity to be heard concerning those matters. The scope and method of providing services as referenced herein shall also be liberally construed to include, but is not limited to, the manner, procedures, operations and obligations, financial or otherwise, of the bidder. In the event any future change in Federal, State or County law or the ordinances of Osceola County materially alters the obligations of the bidder, or the benefits to the School Board, then the contract shall be amended consistent therewith. Should these amendments materially alter the obligations of the bidder, then the bidder or the School Board shall be entitled to an adjustment in the rates and charges established under the contract. Nothing contained in the contract shall require any party to perform any act or function contrary to law. The School Board and bidder agree to enter into good faith negotiations regarding modifications to the contract, which may be required in order to implement changes in the interest of the public welfare or due to change in law. When such modifications are made to the contract, the School Board and the bidder shall negotiate in good faith, a reasonable and appropriate adjustment for any changes in services or other obligations required of the bidder directly and demonstrably due to any modification in the contract under this clause.

2.33 RIGHT TO REQUIRE PERFORMANCE

- A. The failure of the School Board at any time to require performance by the bidder of any provision hereof shall in no way affect the right of the School Board thereafter to enforce same, nor shall waiver by the School Board of any breach of any provision hereof be taken or held to be a waiver of any succeeding breach of such provision or as a waiver of any provision itself.
- B. In the event of failure of the bidder to deliver services in accordance with the contract terms and conditions, the School Board, after due written notice, may procure the services from other sources and hold the bidder responsible for any resulting additional

purchase and administrative costs. This remedy shall be in addition to any other remedies that the School Board may have.

2.34 FORCE MAJEURE

The School Board and the bidder will exercise every reasonable effort to meet their respective obligations as outlined in this ITB and the ensuing contract, but shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any government law or regulation, acts of God, acts or omissions of the other party, government acts or omissions, fires, strikes, national disasters, wars, riots, transportation problems and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred.

2.35 BIDDER'S PERSONNEL

During the performance of the contract, the bidder agrees to the following:

- A. The bidder shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap or national origin, except when such condition is a bona fide occupational qualification reasonably necessary for the normal operations of the bidder. The bidder agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- B. The bidder, in all solicitations or advertisements for employees placed by or on behalf of the bidder, shall state that such bidder is an Equal Opportunity Employer.
- C. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- D. The bidder shall include the provisions of the foregoing paragraphs A, B, and C, above, in every subcontract or purchase order so that the provisions will be binding upon each bidder.
- E. The bidder and any sub-contractor shall pay all employees working on this contract not less than minimum wage specified in the Fair Labor Standards Act (29 CFR 510-794) as amended.
- F. Any information concerning the School Board, its products, services, personnel, policies or any other aspect of its business learned by the bidder or personnel furnished by the bidder in the course of providing services pursuant to the Agreement, shall be held in confidence and shall not be disclosed by the bidder or any employee or agents of the bidder or personnel furnished by the bidder, without the prior written consent of the School Board.
- G. All employees assigned by the Bidder to the performance of work under this contract shall be physically able to do their assigned work. It shall be the Bidder's responsibility to insure that all employees meet the physical standards to perform the work assigned and are free from communicable diseases. This requirement also includes acceptable hygiene habits of Bidder's employees.
- H. The personnel employed by the Bidder shall be capable employees, age 18 years or above, qualified in this type of work.
- I. It is the Bidder's responsibility to ensure that all employees are legally allowed to work in the United States in accordance with Immigration Policies.

- J. The Bidder's employees shall be required to dress neatly, commensurate with the tasks being performed.
- K. All District facilities are smoke free. Smoking on District grounds is prohibited.
- L. It is the Bidders responsibility to see that every employee on the Bidder's work force is provided and wears an Identification Badge or company shirt/uniform in order to maintain security at the school's facility. It shall be Bidder's responsibility to inform the School District Representative(s) of all new employees promptly at time of employment.
- M. The Bidder shall require employees to be dressed in their appropriate work attire when reporting for duty.
- N. The Bidder shall prohibit their employees from disturbing papers on desks, opening desk drawers or cabinets, or using telephone or office equipment provided for official use.
- O. The Bidder shall require their employees to comply with the instructions pertaining to conduct and building regulations, issued by duly appointed officials, such as the building managers, guards, inspectors, etc.
- P. The School District's Representative(s) will determine how the Bidder will receive access to the facility.
- Q. If keys are provided and lost, the Bidder will be responsible for any and all costs associated with replacement keys and re-keying of the facility.
- R. When requested, the Bidder shall cooperate with any ongoing SCHOOL BOARD investigation involving economic loss or damage to SCHOOL BOARD buildings, or SCHOOL BOARD or personal property therein. The SCHOOL BOARD reserves the right to require any employee of the Bidder to submit to a polygraph test if the SCHOOL BOARD has a reasonable suspicion that the employee is or was involved in the incident or activity under investigation. The Bidder shall obtain a waiver from the employee authorizing the release to the SCHOOL BOARD of information acquired by the Bidder from the polygraph test. The SCHOOL BOARD, at its discretion, may require that the Bidder immediately remove the employee under investigation from working within SCHOOL BOARD buildings for the following reasons: 1) The employee's refusal to submit to a polygraph test in the above circumstances, or 2) an employee's refusal to sign the waiver referenced above or 3) an analysis of the polygraph test indicates that the employee is or was involved in the incident under investigation. If the test results show involvement on the part of the Bidder's employee, the Bidder will be obligated to cover the cost of the examination. If the test results indicate that the Bidder's employee was not involved in the incident, when the SCHOOL BOARD will pay for the cost of the examination.
- S. CONTROLLED SUBSTANCE OR ALCOHOL ABUSE ON SCHOOL BOARD PROPERTY: The successful Bidder(s) is hereby notified that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance or alcohol is prohibited on any school district property, or at any school board activities. Violations may subject the Bidder and/or the Bidder's employee(s) to prosecution, fines, imprisonment and/or cancellation of this or any other contract(s) that this Bidder presently holds. The Bidder(s) are required by this school board to take appropriate disciplinary action in such cases and/or require that the employee(s) satisfactory participation in a rehabilitation program.
- T. Any Bidder's employee convicted of violating a criminal drug statute in the workplace must report the conviction to the employer within five (5) workdays. Bidders (Employers)

are required to report such convictions to the school board within ten (10) workdays of receiving this information.

- U. The School District of Osceola County, Florida, is committed to the education and safety of its students and employees. To that end, any bidder awarded a contract will be required to assure that the personnel assigned to the project, do not possess criminal records that would violate the School Board's standards for employment as set forth by the Florida Department of Education. Each bidder must certify that the company and its employees are or will be in compliance with those standards for the project awarded.
- V. The Bidder shall strictly prohibit interaction between their employees and the student(s).
- W. Bidder's employees may not solicit, distribute or sell products while on School District property.
- X. Friends, visitors or family members of the Bidder's employees are not permitted in the work area.
- Y. The Bidder shall adhere to all of the District's security standards.

2.36 COMPLIANCE WITH THE JESSICA LUNSFORD ACT

Recent changes to the Florida Statutes require that all persons or entities entering into contracts with the School Boards/School Districts/Charter Schools who may have personnel who will be on school grounds when students may be present, or who will have contact with students shall comply with the level 2 screening requirements of the Statute and School District Standards. The required level 2 screening includes fingerprinting that must be conducted by the District. Any individual who fails to meet the screening requirements shall not be allowed on school grounds. Failure to comply with the screening requirements will be considered a material default of this contract/agreement.

2.37 CLAIM NOTICE

The bidder shall immediately report in writing to the School Board's designated representative or agent any incident that might reasonably be expected to result in any claim under any of the coverage mentioned herein. The bidder agrees to cooperate with the School Board in promptly releasing reasonable information periodically as to the disposition of any claims, including a resume' of claims experience relating to all bidder operations at the School Board project site.

2.38 BANKRUPTCY / INSOLVENCY

At the time of bid submittal, vendor/firm shall not be in the process of or engaged in any type of proceedings in insolvency or bankruptcy, either voluntary or involuntary, or receivership proceedings. If the vendor/firm is awarded a contract for six (6) months or longer, and files for bankruptcy, insolvency or receivership, the District may, at its option, terminate and cancel said contract, in which event all rights hereunder shall immediately cease and terminate.

2.39 CONTRACT/BIDDER RELATIONSHIP

The School Board reserves the right to award one or more contracts to provide the required services as deemed to be in the best interest of the School Board.

Any awarded bidder shall provide the services required herein strictly under a contractual relationship with the School Board and is not, nor shall be, construed to be an agent or employee of the School Board. As an independent bidder the awarded bidder shall pay any and all applicable taxes required by law; shall comply with all pertinent Federal, State, and local statutes including, but not limited to, the Fair Labor Standards Act, The Americans with Disabilities Act, the Federal Civil Rights Act, and any and all relevant employment laws. The bidder shall be responsible for all income tax, FICA, and any other withholdings from its employees' or sub-bidder's wages or salaries. Benefits for same shall be the responsibility of the bidder including,

but not limited to, health and life insurance, mandatory Social Security, retirement, liability/risk coverage, and workers' and unemployment compensation.

The independent bidder shall hire, compensate, supervise, and terminate members of its work force; shall direct and control the manner in which work is performed including conditions under which individuals will be assigned duties, how individuals will report, and the hours individuals will perform.

The independent bidder shall not be exclusively bound to the School Board and may provide professional services to other private and public entities as long as it is not in direct conflict and does not provide a conflict of interest with the services to be performed for the School Board.

2.40 NEW MATERIAL

Unless otherwise provided for in this specification, the bidder represents and warrants that the goods, materials, supplies, or components offered to the School District under this Bid solicitation are new, not used or reconditioned, and are not of such age or so deteriorated as to impair their usefulness or safety and that the goods, materials, supplies, or components offered are current production models of the respective manufacturer. If the bidder believes that furnishing used or reconditioned goods, materials, supplies, or components will be in the School Board's interest, the bidder shall so notify the School District Buyer in writing no later than ten (10) working days prior to the date set for opening of Bids. The notice shall include the reasons for the request and any benefits that may accrue to the School District if the Buyer authorizes the Bidding of used or reconditioned goods, materials, supplies, or components.

2.41 DAMAGES

Due to the nature of the services to be provided and the potential impact to the School District for loss of *District property*, the bidder cannot disclaim consequential or inconsequential damages related to the performance of this contract. The bidder shall be responsible and accountable for any and all damages, directly or indirectly, caused by the actions or inaction of its employees, staff, or sub-consultants. There are no limitations to this liability.

2.42 CONFLICT OF INTEREST FORM

All bidders shall complete and have notarized the attached disclosure form of any potential conflict of interest that the bidder may have due to ownership, other clients, contracts, or interest associated with this project.

2.43 LITIGATION

Bidders shall submit details of all litigation, arbitration or other claims, whether pending or resolved in the last five years, with the exception of immaterial claims which are defined herein as claims with a possible value of less than \$25,000.00 or which have been resolved for less than \$25,000.00. Notwithstanding the foregoing, all litigation, arbitration or other claims, of any amount, asserted by or against a state, city, county, town, school district, political subdivision of a state, special district or any other governmental entity shall be disclosed. Please indicate for each case the year, name of parties, cause of litigation, matter in dispute, disputed amount, and whether the award was for or against the Bidder.

2.44 DIVISION OF CORPORATIONS REGISTRATION REQUIREMENTS

Respondents who are required to be registered with the Division of Corporations or who are incorporated within the State of Florida must furnish their Florida document number. All registered respondents must have an active status in order to be eligible to do business with the School Board. The specific requirements for registration are found in Chapter 607, of the Florida Statutes. To register with the State of Florida, visit: www.Sunbiz.org.

2.45 RESOLUTION OF BID PROTESTS

The School Board Rule 7.70.V shall be followed as outlined below for the resolution of any bid protests:

- A. The School Board shall follow the procedure specified in Florida Statutes, Section 120.57(3) and as the same may be amended from time to time for the resolution of bid protests.
- B. The Purchasing Department shall provide notice of a decision or intended decision concerning a solicitation, contract award, or exceptional purchase by electronic posting.

The notice shall contain the following statement:

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

- C. Any person who is adversely affected by the intended award of a solicitation or contract by the School Board or the recommendation of the Director of Purchasing or other responsible employee of the School Board shall file with the Director of Purchasing as agent for the School Board a notice of protest in writing within 72 hours after the electronic posting of the award or intended decision, and shall file a formal written protest within ten (10) days after the date he or she has filed the notice of protest. With respect to a protest of the specifications contained in a solicitation, the notice of protest shall be filed in writing within 72 hours after the electronic posting of the solicitation, and the formal written protest shall be filed within ten (10) days after the date the notice of protest is filed. All formal written protests must be filed with a bond payable to the School District equal to 1% of the estimated contract amount (Florida Statute 287.042(2)©). Failure to file a notice of protest or failure to file a formal written protest and bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes. The School Board may, in its discretion, waive any procedural irregularity or defect in procedures so long as any opposing party is not materially prejudiced by such waiver. Saturdays, Sundays, and state holidays shall be excluded in the computation of the 72-hour time periods provided by this paragraph. The notice of protest and formal written protest shall be filed in the Purchasing Department between the hours of 8:00 a.m. and 4:30 p.m. upon any day the office is open for business.

The provisions specified herein constitute the exclusive remedy for any adversely affected party with respect to a bid protest. The formal written protest shall state with particularity the facts and law upon which the protest is based.

- D. Upon receipt of the formal written protest which has been timely filed, the Purchasing Director shall stop the bid solicitation process or the contract award process until the subject of the protest is resolved by final agency action, unless the School Board, by duly enacted resolution sets forth in writing the particular facts and circumstances which require the continuance of the bid solicitation process or the contract award process without delay in order to avoid an immediate and serious danger to the public health, safety or welfare.

The School Board finds that a substantial interest in the public welfare is the timely award of contracts when required as a condition of receiving grants or funds from outside sources which will be in addition to the regular school budget.

- E. The Purchasing Director shall schedule a meeting to provide an opportunity to resolve the protest by mutual agreement between the parties within seven (7) days, excluding Saturdays, Sundays, and state holidays, after receipt of a formal written protest and bond.

- F. If the Purchasing Director cannot resolve the protest by mutual agreement within the seven (7) day period referred to in Paragraph E in this Section, the School Board shall conduct an informal administrative hearing, under Section 120.57(2), Florida Statutes, acting as the agency head, where there are no disputed issues of material fact. The informal hearing shall be held with notice of no less than 72 hours, excluding Saturdays, Sundays, and legal holidays within thirty (30) days of receipt of the formal written protest and bond, unless the parties, with the consent of the School Board, agree to extend the time for the hearing. The School Board shall have the right to schedule the hearing subject to these provisions.

2.46 DEFINITIONS

As used in this Bid, the following terms shall have the meanings set forth below:

Bidder: That person or entity, including employees, servants, partners, principals, agents and assignees of the person or entity that has submitted a bid proposal for the purpose of obtaining business with the School District to provide the product and/or services set forth herein.

Contract Administrator: The School District's Director of Purchasing and Warehouse or designee shall serve as Contract Administrator. The Contract Administrator shall be responsible for addressing any concerns within the scope of the contract. Any changes to the resulting contract shall be done in writing and authorized by the Director of Purchasing and Warehouse and/or the School Board Chair.

Contract: The document resulting from this solicitation between the School District and the Bidder, including this bid, along with any written addenda and other written documents, which are expressly incorporated by reference.

Contractor's Project Manager: The Project Manager has responsibility for administering this contract for the successful Bidder(s) and will be designated prior to the issue of the resulting Price Agreement or Purchase Order.

Day: The word "day" means each calendar day or accumulation of calendar days.

Director: The Director is the Director of Purchasing and Warehouse for the School District.

Exceptions to Bid: An exception is defined as the Bidder's inability or unwillingness to meet a term, condition, specification, or requirement in the manner specified in the bid.

Person or Persons: An individual, firm, partnership, corporation, association, executor, administrator, trustee, or other legal entity, whether singular or plural, masculine or feminine, as the context may require.

School Board: The word School Board refers to the elected officials of the School Board of Osceola County, Florida.

School Board's Project Manager(s): The Project Manager(s) have responsibility for the day-to-day administration of the resulting contract for the School District and will be designated prior to award of the resulting Purchase Order.

School District: The word School District refers to the entity, The School District of Osceola County, Florida.

**3.0 SUBMITTAL REQUIREMENTS
(Submit in the following order)**

- A. Completed Invitation To Bid cover page.
- B. Complete and attached **Certified Business Program Reciprocity Affidavit** – If Applicable.
- C. Completed Bid Submittal Form (use attached form).
- D. Any addenda issued subsequent to the release of this solicitation must be signed and returned with the firm's bid. **Failure to return signed addenda may be cause for the bid to be considered non-responsive.**
- E. Drug free workplace Certification.
- F. Debarment Certification.
- G. Emergency/Storm related catastrophe-Contractor agreement form
- H. Conflict of Interest- All bidders shall properly complete, have notarized and attach with their Bid Submittal the attached notarized disclosure statement of any potential conflict of interest that the bidder may have due to ownership, other clients, contracts or interests associated with this project.
- I. List at least three (3) recent references where the proposed product has been used within the past year. Use of the attached form will aid in evaluation.
- J. Those firms located within the Osceola County, Florida, must include a copy of their County Business Tax Receipt (formerly known as an occupational license). **If a bidder is located within Osceola County, failure to have or obtain an Osceola County Business Tax Receipt prior to the bid closing date and time shall automatically render a bidder non-responsive.** Note: Charitable organizations that qualify under Florida Statute No. 205.192 are exempt from this requirement.
- K. Attach evidence of required insurance coverage or proof of insurability in the amounts indicated. If available, a properly completed ACORD Form is preferable. **Final forms must contain the correct solicitation and/or project number and School Board contact person.**

Firms that have owner/operators that have filed a "Notice of Election to be Exempt" shall submit a copy with their submittal.

Incorporated and unincorporated firms that qualify for an exemption under the Florida Worker's Compensation law in Chapter 440 Florida Statutes shall submit an executed Hold Harmless Agreement relieving the School Board of liability in the event they and/or their employees are injured while providing goods and/or services to the School Board.

- L. Hold Harmless Agreement.
- M. Confidential materials – any materials that qualify as "trade secrets" shall be segregated, clearly labeled and accompanied by an executed Non-Disclosure Agreement for Confidential Materials shall be submitted in this section.
- N. All bidders shall be prepared to supply a financial statement upon request, preferably a certified audit, but a third party prepared financial statement and the latest D & B report will be accepted.

- O.** All vendors, including predecessors or related vendor or entity, shall identify any litigation in which they have been involved in, including arbitration and administrative proceedings, during the past five (5) years involving claims for excess of ten (10) percent of the contact value. Include a brief legal description of the dispute and its current status. Where the action or lawsuit involved a similar project as herein discussed, bidder shall describe the particular circumstances giving rise to the dispute.
- P.** The bidder must submit with his bid proposal the name, address, and phone number of the person(s) to be contacted for the placement of an order and the coordination of service. A contact for both regular work-hours and after-hours, weekends, and holidays must be identified.
- Q.** If a vendor must subcontract any portion of a contract for any reason, he must state the name and address of the subcontractor and the name of the person to be contacted. The School District of Osceola County also reserves the right to reject a bid or any bidder if the bid names a subcontractor who has previously failed to deliver on time contracts of similar nature, or who is not in a position to perform properly this award. The School District of Osceola County reserves the right to inspect all facilities of any subcontractors in order to make a determination as to the foregoing.

BID SUBMITTAL FORM

TO: The School District of Osceola County, Florida
Purchasing Department, Building 2000
817 Bill Beck Blvd.
Kissimmee, Florida 34744-4492

The undersigned hereby declare that [firm name] has carefully examined the specifications to furnish:

COVERED PLAY STRUCTURE FOR OSCEOLA HIGH SCHOOL

for which Bid Submittals were advertised to be received **no later than 2:00 p.m., local time, on Thursday, June 15, 2010**, and further declare that will furnish the Covered Play Structure for Osceola High School according to specifications.

1. Total Turnkey price for the purchase, delivery and installation of the Covered Play Structure for Osceola High School in accordance with the bid specifications and plans provided by C.T. HSU & Associates, P.A., Architect for Osceola High School Project.

\$ _____

2. If the site is ready by July 13, 2010 how many days after receipt of a Purchase Order can the delivery/installation be complete?
_____/days.

If the site is not ready by July 13, 2010 how many days after notification that the site is ready can delivery/installation be complete?
_____/days.

Have you supplied all the Submittal Requirements outlined below?

- Invitation To Bid cover page
- Certified Business Program Reciprocity Affidavit** – If Applicable
- Completed and executed Bid Submittal form
- Any addenda pertaining to this ITB
- Drug Free Certification
- Debarment Certification
- Emergency/Storm related catastrophe-Contractor agreement form
- Conflict of Interest form
- References, in accordance with Section 2.11, *Definition of Responsive and Responsible*
- Licenses / Occupational
- Proof of Insurance
- Hold Harmless Agreement and/or Notice of Election to be Exempt, if required
- Did you include a CD, as required in the section entitled **Bid Submittal Form?**
- Division of Corporations Registration Number

DRUG FREE WORKPLACE
CERTIFICATION FORM

In accordance with Florida Statute 287.087, preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids are equal with respect to price, quality and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs and penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1) notify employees that as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo-contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Vendor's Signature

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION
INELIGIBILITY AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTIONS**

This certification is required by the regulations implementing *Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510 Participants responsibilities*. The regulations were published as ***Part IV of the January 30, 1989, Federal Register (pages 4722-4733)***.

***** BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON NEXT PAGE *****

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department of agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attached an explanation to this proposal.

Organization Name

Covered Play Structure for OHS
SDOC 10-B-098 CJ

Bid Name & Number

Names and Titles of Authorized Representative(s)

Signature(s)

Date

INSTRUCTIONS FOR DEBARMENT CERTIFICATION

1. By signing and submitting this form, the prospective lower tier participant is providing the certification set out herein in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department of agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", "voluntarily exclude", as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of these regulations.
5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions", without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a perspective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-procurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction may pursue available remedies, including suspension and/or debarment.

**EMERGENCY / STORM RELATED CATASTROPHE
AGREEMENT**

Due to Acts of God, Acts of Terrorism or War, any vendors working with the School District shall acknowledge and agree to the following terms and conditions. This will allow the District to obtain Federal funding if available.

CONDITIONS FOR EMERGENCY / HURRICANE OR DISASTER

It is hereby made a part of this Invitation To Bid that before, during and after a public emergency, disaster, hurricane, flood or acts of God that the municipal government, through the School District of Osceola County, shall require a "first priority" basis for goods and services. It is vital and imperative that the majority of citizens are protected from any emergency situation, which threatens public health and safety, as, determined by the School District of Osceola County. Vendor/Contractor agrees to rent/sell/lease all goods and services to the School Board of Osceola County or other government entity as opposed to a private citizen, on a first priority basis. The District expects to pay a fair and reasonable price for all products in the event of a disaster, emergency or hurricane. Vendor/Contractor shall furnish a "24-hour" phone number in the event of such an emergency.

I hereby understand and agree to the above statement:

(Signature)	(Print Name)	(Title)
-------------	--------------	---------

Emergency Telephone Number: _____

Home Telephone Number: _____

Beeper or Cellular Phone Number: _____

CONFLICT OF INTEREST FORM

I HEREBY CERTIFY that

1. I, (*printed name*) _____, am the (*Title*) _____ and the duly authorized representative of the firm of (*Firm Name*) _____ whose address is _____, and that I possess the Legal authority to make this affidavit on behalf of myself and the firm for which I am acting; and,
2. Except as listed below, no employee, officer, or agent of the firm have any conflicts of interest, real or apparent, due to ownership, other clients, contracts, or interests associated with this project; and,
3. This Bid Submittal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same services, and is in all respects fair and without collusion or fraud.

EXCEPTIONS to items above (List): _____

Signature: _____
 Printed Name: _____
 Firm Name: _____
 Date: _____

STATE OF _____
 COUNTY OF _____

Sworn to and subscribed before me this _____ day of _____, 20____, by _____, who is personally known to me or who has produced _____ as identification.

 NOTARY PUBLIC – STATE OF _____
 Type or print name:

 Commission No.: _____
 Commission Expires _____

(Seal)

**LIST OF THREE
REFERENCES**

#1	Agency	
	Address	
	City, State, ZIP	
	Contact Person	
	Telephone	
	Date(s) of Service	
	Type of Service	
	Comments:	
<hr/>		
#2	Agency	
	Address	
	City, State, ZIP	
	Contact Person	
	Telephone	
	Date(s) of Service	
	Type of Service	
	Comments:	
<hr/>		
#3	Agency	
	Address	
	City, State, ZIP	
	Contact Person	
	Telephone	
	Date(s) of Service	
	Type of Service	
	Comments:	

HOLD HARMLESS AGREEMENT

**Return this page ONLY if claiming exemption from the
Worker's Compensation Insurance Requirement**

I _____ am the owner of _____, an incorporated/unincorporated business operating in the State of Florida. As such, I am bound by all laws of the state of Florida, including but not limited to those regarding the workers' compensation law.

I hereby affirm that the above named business employs fewer than four employees, including myself, and therefore, the business is exempt from the statutory requirement for workers' compensation insurance for its employees.

On behalf of the business, and its employees, I hereby agree to indemnify, keep and hold harmless the School Board, Florida, its agents, officials and employees, against all injuries, deaths, losses, damages, claims, liabilities, judgments, costs and expenses, direct, indirect or consequential (including, but not limited to, fees and charges of attorneys and other professionals) arising out of our contract with the School Board, whether or not it shall be alleged or determined that the act was caused by intention or through negligence or omission of School Board or their employees, or of their subcontractors or their employees. The named business shall pay all charges of attorneys and all costs and other expenses incurred in connection with the indemnity provided herein, and if any judgment shall be rendered against the School Board in any action indemnified hereby, the named business shall, at its own expense, satisfy and discharge the same. The foregoing is not intended nor should it be construed as, a waiver of sovereign immunity of the SCHOOL BOARD under Section 768.28, Florida Statutes.

Signature

Printed Name

Firm Name

Date

STATE OF _____

COUNTY OF _____

Sworn to and subscribed before me this _____ day of _____, 20____, by _____, who is personally known to me or who has produced _____ as identification.

NOTARY PUBLIC – STATE OF _____

Type or print name:

Commission No.: _____

(Seal)Commission Expires _____



NON-DISCLOSURE AGREEMENT
For
CONFIDENTIAL MATERIALS

Reference # _____

RETURN THIS FORM *ONLY* IF CONFIDENTIAL MATERIALS ARE BEING INCLUDED IN THE SUBMITTAL. PLEASE READ THE SECTION IN THE BID DOCUMENT TO DETERMINE IF THIS APPLIES. *THE CONFIDENTIAL MATERIALS WILL ONLY BE HANDED OUT TO THE SELECTION COMMITTEE ON THE DAY OF THE EVALUATION*, THEREFORE, THE EVALUATION OF THIS MATERIAL WILL BE LIMITED TO THAT TIME ONLY.

Respondent:

Address:

This Agreement is entered into as of the date of the last signature set forth below between the School District of Osceola County, a political subdivision of the State of Florida (the "District"), and the above named Respondent (hereinafter the "Respondent"). The School District of Osceola County and the Respondent are collectively referred to as the "Parties" and may be referred to individually as a Party.

RECITALS

WHEREAS, the Respondent possesses certain confidential trade secret materials that it wishes to disclose to the School District of Osceola County for the purpose of responding to a invitation to bid or otherwise conducting business with the School District; and

WHEREAS, the School District desires to review such materials in order to evaluate the District's interest in negotiating and concluding an agreement for the purchase of certain products and services, or otherwise conducting business with the Respondent.

NOW THEREFORE, in consideration of the mutual promises and premises contained herein, the receipt and sufficiency of which are hereby acknowledged, the School District and the Respondent agree as follows:

1. Confidential Materials. The Respondent warrants and represents to the School District that the materials described in the attached Exhibit A (the "Confidential Materials") constitute trade secrets as defined by Section 812.081(1)(c), Florida Statutes, or financial statements required by the School District for projects as defined in 119.071(1)(c), Florida Statutes. Subject to the terms and conditions of this Agreement, the School District agrees not to disclose such Confidential Materials to third parties.

2. Additional Materials. During the course of the negotiations or the business relationship with the School District, the Respondent may disclose additional confidential or trade secret information to the District in which case the restrictions and obligations on the use and disclosure of the Confidential Materials imposed by this Agreement shall also apply to such additional information to the extent permitted by Florida law. Any such additional confidential or trade secret information shall be duly marked and stamped "confidential" or "trade secret" prior to delivery to the School District, and shall be subject to this Agreement and Section 812.081(2), Florida Statutes, only if written receipt is provided by the School District acknowledging receipt of such materials.
3. Exclusions. For purposes of this Agreement, the term "Confidential Materials" does not include the following:
 - (a) Information already known or independently developed by the School District;
 - (b) Information in the public domain through no wrongful act of the School District;
 - (c) Information received by the School District from a third party who was legally free to disclose it;
 - (d) Information disclosed by the Respondent to a third party without restriction on disclosure;
 - (e) Information disclosed by requirement of law or judicial order, including without limitation Chapter 119 Florida Statutes; or
 - (f) Information that is disclosed with the prior written consent of the Respondent, but only to the extent permitted by such consent.
4. Non Disclosure by Respondent. In the event that the School District discloses confidential or trade secret information to Respondent, the Respondent agrees to not disclose such information to any third party or copy such information or use it for any purpose not explicitly set forth herein without the School District's prior written consent. Further, upon conclusion of discussions or business transactions between the School District and the Respondent, or at any time upon request of the School District, Respondent agrees to return such information (including any copies) to the School District.
5. Duty of Care. Each Party agrees to treat the other Party's confidential or trade secret information with the same degree of care, but not less than reasonable care, as the receiving Party normally takes to preserve and protect its own similar confidential information and to inform its employees of

- the confidential nature of the disclosing Party's information and of the requirement of nondisclosure. In the event either Party has actual knowledge of a breach of the nondisclosure requirements set forth in this Agreement, the Party acquiring such knowledge shall promptly inform the other Party and assist that Party in curing the disclosure, where possible, and preventing future disclosures.
6. Limitations of Florida Law. Respondent understands and agrees that its assertion that any item is confidential or a trade secret does not, in and of itself, render such material exempt from the Florida Public Records Law, Chapter 119 of the Florida Statutes, and that the School District's ability to prevent disclosure of confidential and trade secret information may be subject to determination by a Florida court that such materials qualify for trade secret protection under Florida law. In the event a third party makes a public records request for the Confidential Materials or other materials deemed by Respondent to be confidential or a trade secret, the School District may submit the materials to the court for inspection in camera as set forth in Section 119.07(1)(e) Florida Statutes. Respondent further understands that the School District may be required to disclose such information if directed by a court of competent jurisdiction.
 7. Indemnification by Respondent. In the event of any litigation instituted by a third party to compel the School District to disclose such materials, Respondent shall, at its sole cost and expense, provide assistance to the School District in defending the denial of the records request, and shall hold the School District harmless from any claim for statutory costs and attorneys fees arising from the School District's refusal to disclose such materials.
 8. No Additional Obligations. This Agreement shall not be construed in any manner to be an obligation for either Party to enter into any subsequent contract or agreement.
 9. Sovereign Immunity. Nothing in this Agreement shall be deemed as a waiver of immunity or limits of liability of the School District beyond any statutory limited waiver of immunity or limits of liability, which has been or which may be adopted by the Florida Legislature, regardless of the nature of any claim which may arise, including but not limited to a claim sounding in tort, equity or contract. In no event shall the School District be liable for any claim or claims for breach of contract, including without limitation the wrongful disclosure of confidential or trade secret information for an amount which exceeds, individually and collectively, the then current statutory limits of liability for tort claims. Nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim against the School District, which would otherwise be barred under the Doctrine of Sovereign Immunity or by operation of law.
 10. Notice. Whenever either Party desires to give notice unto the other, it must be given by written

notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended, at the place last specified, and the place for giving of notice in compliance with the provisions of this paragraph. For the present, the Respondent designates the address set forth above as its place for receiving notice, and the School District designates the following address for such notice:

The School District of Osceola County, Florida
Director of Purchasing and Warehouse
817 Bill Beck Blvd., Building 2000
Kissimmee, Florida 34744

- 11. Governing Law. This Agreement shall be governed by the laws of the State of Florida, and venue for any action arising out of or relating to the subject matter of this Agreement shall be exclusively in Osceola County, Florida, or the Federal District Court for the Middle District of Florida, Orlando Division.

- 12. Respondent and the School District hereby expressly waive any rights either may have to a trial by jury of any civil litigation related to this Agreement for any litigation limited solely to the parties of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized officers the day and year as set forth below.

The School District of Osceola County, Florida

Respondent

BY: _____
 NAME: Dr. Michael A. Grego
 TITLE: Superintendent
 DATE: _____

BY: _____
 NAME: _____
 TITLE: _____
 DATE: _____
 ATTEST:
 BY: _____
 NAME: _____
 TITLE: _____
 DATE: _____

EXHIBIT A
DESCRIPTION OF CONFIDENTIAL MATERIALS

**Notification Regarding Public Entity Crime and Discriminatory Vendor List Requirements
And Disqualification Provision**

- A. Pursuant to Florida Statutory requirements, potential Respondents are notified:
- 287.133(2)(a)* A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.
- 287.133(2)(b)* A public entity may not accept any bid, proposal, or reply from, award any contract to, or transact any business in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO with any person or affiliate on the convicted vendor list for a period of 36 months following the date that person or affiliate was placed on the convicted vendor list unless that person or affiliate has been removed from the list pursuant to paragraph (3)(f). A public entity that was transacting business with a person at the time of the commission of a public entity crime resulting in that person being placed on the convicted vendor list may not accept any bid, proposal, or reply from, award any contract to, or transact any business with any other person who is under the same, or substantially the same, control as the person whose name appears on the convicted vendor list so long as that person's name appears on the convicted vendor list.
- 287.134(2)(a)* An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.
- 287.134(2)(b)* A public entity may not accept any bid, proposals, or replies from, award any contract to, or transact any business with any entity or affiliate on the discriminatory vendor list for a period of 36 months following the date that entity or affiliate was placed on the discriminatory vendor list unless that entity or affiliate has been removed from the list pursuant to paragraph (3)(f). A public entity that was transacting business with an entity at the time of the discrimination resulting in that entity being placed on the discriminatory vendor list may not accept any bid, proposal, or reply from, award any contract to, or transact any business with any other entity who is under the same, or substantially the same, control as the entity whose name appears on the discriminatory vendor list so long as that entity's name appears on the discriminatory vendor list.
- B. By submitting a proposal, the Respondent represents and warrants that the submission of its proposal does not violate Section 287.133, Florida Statutes (2005), nor Section 287.134, Florida Statutes (2005).
- C. In addition to the foregoing, the Respondent represents and warrants that Respondent, Respondent's subcontractors and Respondent's implementer, if any, is not under investigation for violation of such statutes.

Respondent should read carefully all provisions of 287.133 and 287.134, Florida Statutes (2005).

PERFORMANCE BOND

STATE OF FLORIDA
THE SCHOOL DISTRICT OF OSCEOLA COUNTY

KNOW ALL MEN BY THESE PRESENTS that _____ as
Principal, hereinafter called Contractor, and
_____ as Surety, hereinafter called Surety, are held
and firmly bound unto the School Board of Osceola County, Florida, as obligee, hereinafter called School
Board, in the amount of _____ Dollars (\$_____) for the payment whereof
Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns,
jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____, 20____, entered into a Contract with
School Board for:

PROJECT CONSISTS OF:

in accordance with all specifications contained within this BID #SDOC 10-B-098 CJ, which is by
reference made a part hereof and is hereinafter referred to as the Bid and/or resulting contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that, if the Principal shall in
all respects promptly and faithfully perform and comply with the terms and conditions of said BID and/or
resulting contract and its obligations there under and shall indemnify the School Board and save it
harmless against and from all costs, expenses and damages arising from the performance of said BID
and/or resulting contract or the repair of any work there under, then this obligation shall be void;
otherwise, this Bond shall remain in full force and effect, in accordance with the following terms and
conditions:

1. The Principal and Surety jointly and severally agree to pay the School Board any difference
between the sum to which the said Principal would be entitled on the completion of the Contract,
and that sum which the School Board may be obliged to pay for the completion of said work by
BID and/or resulting contract or otherwise, and any damages, direct or indirect or consequential,
including without limitation those for delay, expenses, costs, and attorney's fees including
appellate proceedings, which the said School Board may sustain on account of such work, or on
account of the failure of said Contractor to properly and in all things, keep and execute all of the
provisions of said Contract.

2. And this Bond shall remain in full force and effect for a period of one (1) year from the date of
acceptance of the project by the School Board and shall provide that the Contractor guarantees
to repair or replace for said period of one (1) year all work performed and materials and
equipment furnished that were not performed or furnished according to the terms of the BID
and/or resulting contract, and shall make good, defects thereof which have become apparent
before the expiration of said period of one (1) year. If any part of the project, in the judgment of
the School Board, for the reasons above stated needs to be replaced, repaired or made good
during that time, the School Board shall so notify the Contractor in writing. If the Contractor
refuses or neglects to do such work within five (5) days from the date of service of such Notice,
the School Board shall have the work done by others, and the cost thereof shall be paid by the
Contractor or its Surety.

- 3. And the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the BID and/or resulting contract or to the work to be performed there under or the specifications accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive Notice of any change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.
- 4. The surety presents and warrants to the School Board that they have a Best's Key Rating Guide General Policyholder's Rating of "___X___" and Financial Category of "Class ___B___".

IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this _____ day of _____ 20____, A.D., the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS:
(If Sole Ownership or Partnership, two (2) Witnesses required).

(If Corporation, Secretary Only will attest and affix seal).

WITNESSES:

WITNESS:

_____ [Affix Attorney-in-Fact Seal]

PRINCIPAL:

Authorized Officer [Affix Seal]

Title

Business Address

City State

SURETY:

Corporate Surety

Business Address

City State

Name of Local Insurance Agency

Phone () _____

CERTIFICATES AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the within bond; that _____ who signed the said bond on behalf of the Principal, was then _____ of said Corporation; that I know the signature, and that the signature hereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

Secretary Corporate Seal

STATE OF FLORIDA
THE SCHOOL DISTRICT OF OSCEOLA COUNTY

Before me, a Notary Public, duly commissioned, qualified and acting, personally appeared _____ to me well known, who being by me first duly sworn upon oath, says that this person is the Attorney-in-Fact, for the _____ and that this person has been authorized by _____ to execute the foregoing bond on behalf of the Contractor named therein in favor of the School Board, Florida.

Subscribed and sworn to before me this ____ day of _____, 20____, A.D.

[Attach Power of Attorney to
Original Bid Bond and Financial
Statement from Surety Company]

Notary Public
State of Florida-at-Large

My Commission Expires:_____

* * * * *

END OF PERFORMANCE BOND

limitations shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

- c. Other than in a state court of competent jurisdiction in and for the School Board or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
- 4. The Principal and the Surety jointly and severally, shall repay the School Board any sum which the School Board may be compelled to pay because of any lien for labor or materials furnished for any work included in or provided by said Contract.
- 5. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration of or addition to the terms of the Contract or to the work to be performed there under or the Specifications applicable thereto shall in any way affect its obligations on this Bond, and the Surety hereby waives notice of any such change, extension of time, alterations of or addition to the terms of the Contract, or to the work or to the Specifications.
- 6. The Surety represents and warrants to the School Board that they have a Best's Key Rating Guide General Policyholder's rating of " X " and Financial Category of "Class A ".

IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this _____ day of _____ 20____, A.D., the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS:
(If Sole Ownership or Partnership, two (2) Witnesses required).

(If Corporation, Secretary Only will attest and affix seal).

PRINCIPAL:

Authorized Officer [Affix Seal]

Title

Business Address

City
State

WITNESSES:

SURETY:

WITNESS:

Corporate Surety

Attorney in Fact [Affix Seal]

Business Address

City State

Name of Local Insurance Agency
Phone (____) _____

CERTIFICATES AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the within bond; that _____ who signed the said bond on behalf of the Principal, was then _____ of said Corporation; that I know the signature, and that the signature hereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

Secretary Corporate Seal

STATE OF FLORIDA
THE SCHOOL DISTRICT OF OSCEOLA COUNTY

Before me, a Notary Public, duly commissioned, qualified and acting, personally appeared _____ to me well known, who being by me first duly sworn upon oath that this person is the Attorney-in-Fact, for the _____ and that this person has been authorized by _____ to execute the foregoing bond on behalf of the Contractor named therein in favor of the School Board, Florida.

Subscribed and sworn to before me this ____ day of _____, 20____, A.D.

[Attach Power of Attorney to
Original Bid Bond and Financial
Statement from Surety Company]

Notary Public
State of Florida-at-Large

My Commission Expires: _____

- END PAYMENT BOND -

STATEMENT OF NO BID

The School District of Osceola County, Florida
Purchasing Department
817 Bill Beck Boulevard, Building 2000
Kissimmee, Florida 34744-4492

Attn: Cheryl Jessee, Senior Buyer

Bid # _____

We, the undersigned, have decided not to bid for the following reasons.

- _____ We do not handle products/services in this classification
- _____ Opening date does not allow sufficient time to complete bid
- _____ Cannot supply at this time
- _____ Suitable but engaged in other work
- _____ Quantity too small
- _____ Cannot meet required delivery
- _____ Equivalent not presently available
- _____ Unable to meet specifications
- _____ Unable to meet insurance/bond requirements
- _____ Please remove our name from the vendor file only for the commodity listed above
- _____ Please remove our name from the School Board's entire vendor files
- _____ Other reasons or remarks

We understand that if the "No Bid" letter is not returned by the bid due date, our name may be deleted from the School District of Osceola County's vendor list for this commodity.

Company Name _____

Authorized Signature _____

Print Name of Authorized Person _____

Email Address for Authorized Person _____

Telephone Number _____

Fax Number _____

Certified Business Program Reciprocity Affidavit

The School District has implemented a process to track specific categories of certified businesses (minority, women and/or service disabled veterans) as listed below and will accept certifications from the State of Florida Office of Supplier Diversity as well as certifications from other government agencies.

<u>CERTIFIED BUSINESS CATEGORIES (Check One)</u>			
<input type="checkbox"/> Asian American (A)	<input type="checkbox"/> African American (B)	<input type="checkbox"/> Hispanic American (C)	<input type="checkbox"/> Native American (D)
<input type="checkbox"/> American Woman (E)	<input type="checkbox"/> Service Disabled Veteran (V)		
Certifying Agency Name: _____		*Certification Number: _____	*Expiration Date: _____
Attach copy of Certification from Certifying Agency		*Required Information	

By signing and submitting this affidavit and business certification copy, I acknowledge individually and on behalf of the applicant business that the applicant and I understand that:

- The attached business certification is a copy of an official business certification as issued by the State of Florida Office of Supplier Diversity or other government agency, and said business certification has not been modified,
- All information and documents submitted to the School District of Osceola County, Florida becomes an official public record. As such, the District bears no obligation to return to the applicant any items of original production or any copies of file documents,
- The applicant consents to examinations of its books, records and premises and to interviews of its principals, employees, business contacts, creditors, and bonding companies by the District as necessary for the purpose of verifying the applicant's proof of certification,
- The District may request additional documentation not requested on this vendor application, and
- Pursuant to Section 287.094, Florida Statutes, the false representation of any entity as a minority business enterprise for the purpose of claiming certification as such under this reciprocity program may be punishable as a felony of a second degree. The certifying entity may initiate such disciplinary actions it deems appropriate including, but not limited to, forwarding pertinent information to the Department of Legal Affairs and/or certifying entity's legal counsel for investigation and possible prosecution.

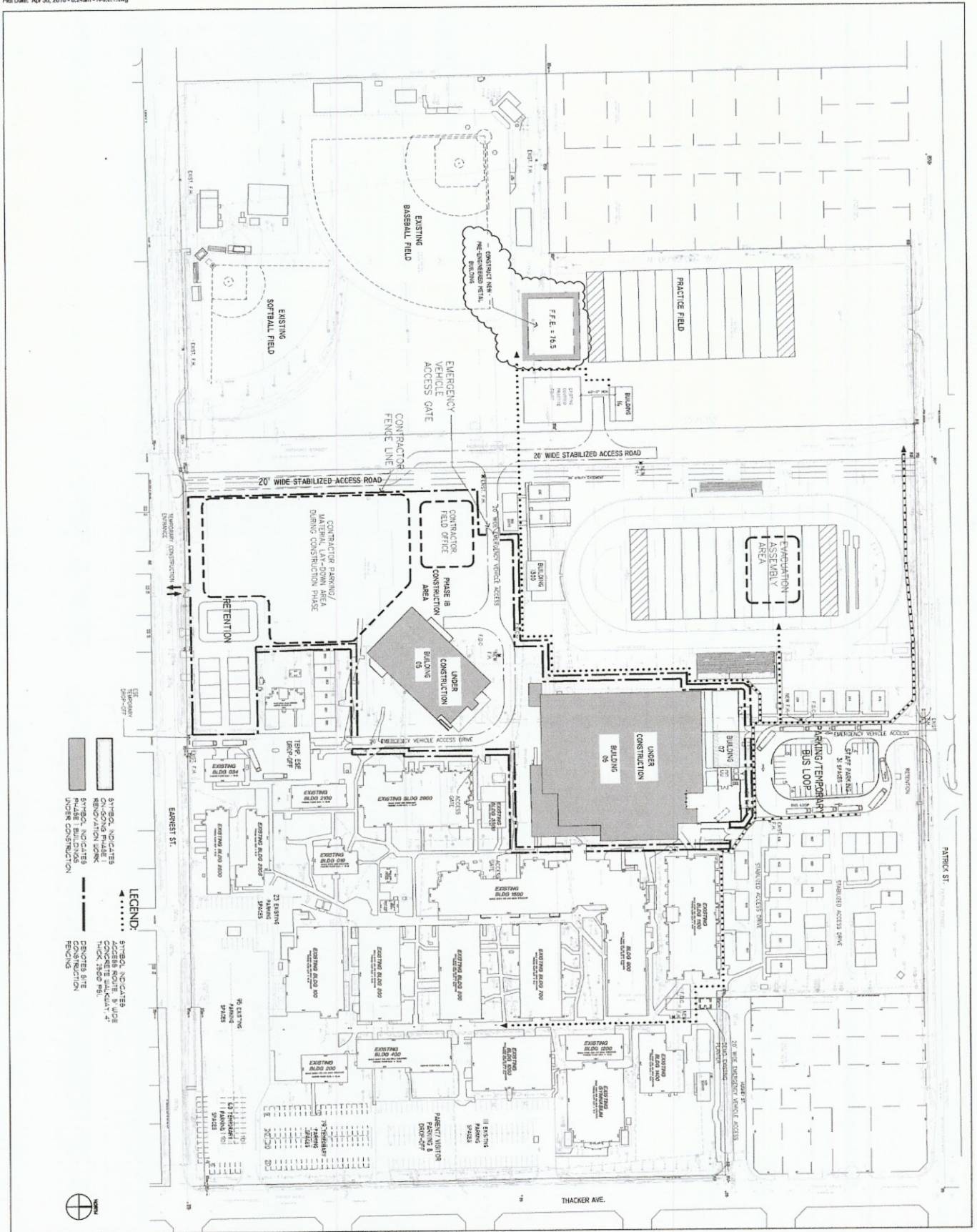
Further, applicant declares and affirms that ownership and management of this firm has not changed, except as indicated in the application/affidavit, during the past year since certification status was granted:

Authorized Officer Name: _____
 Title: _____
 Company Name: _____
 Signature: _____

On this _____ day of _____, 20_____ personally appeared before me, the undersigned officer authorized to administer oaths, known to me the persons described in the foregoing affidavit who acknowledged that he/she execute the same in the capacity stated for the purpose therein contained.

In witness whereof, I have hereunto set my hand and official seal;

Notary Public: _____
 Form of Identification Presented: _____
 My Commission expires: _____



Attachment B



OSCEOLA HIGH SCHOOL
NEW COVERED PLAY STRUCTURE

Osceola School District
 600 S.W. 1st St.
 Ocala, FL 32101
 Phone: 352.237.8100
 Fax: 352.237.8100

O.T.H.U. + ASSOCIATES, P.A.
 1000 N.W. 13th St., Suite 100
 Ocala, FL 32101
 Phone: 352.237.1779
 Fax: 352.237.1779
 Website: www.othu.com

NOTICE
 The Board of Education hereby certifies that this plan is a true and correct copy of the original plan as filed with the County Clerk of Osceola County, Florida, and that the same is a true and correct copy of the original plan as filed with the County Clerk of Osceola County, Florida, and that the same is a true and correct copy of the original plan as filed with the County Clerk of Osceola County, Florida.

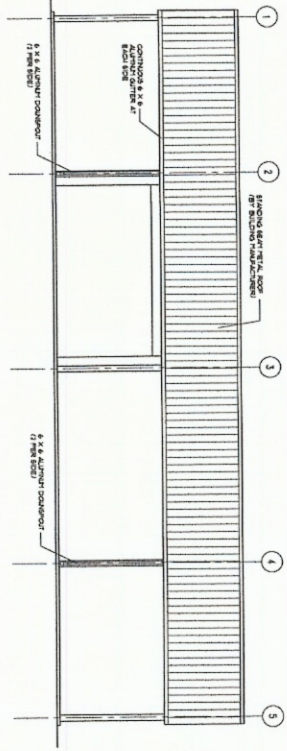
REVISIONS

No.	By	Date	Revised

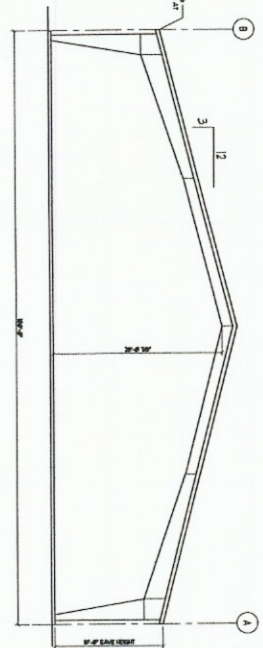
DATE 04/30/10
DESIGNER [Name]
CHECKED [Name]
SCALE 1" = 60'-0"

A-0.0.1

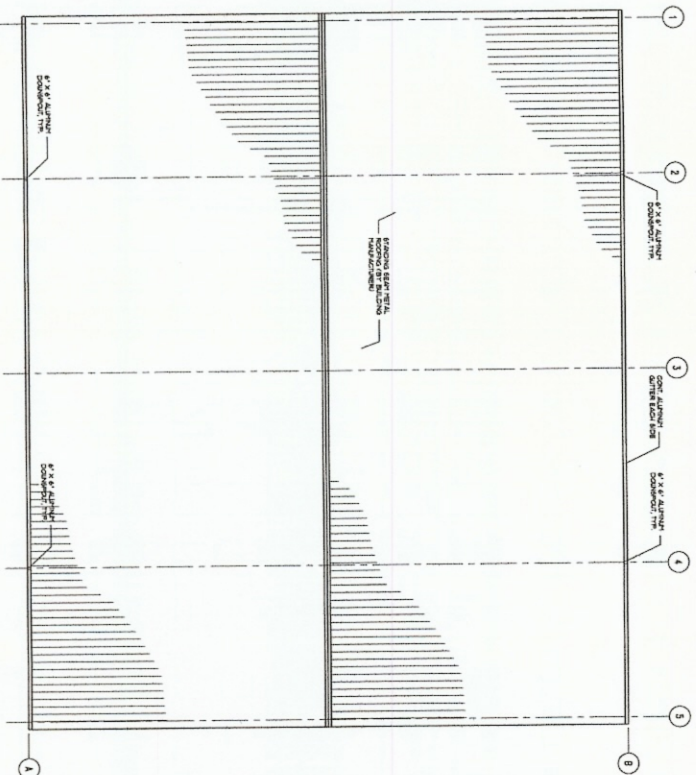
Attachment 2



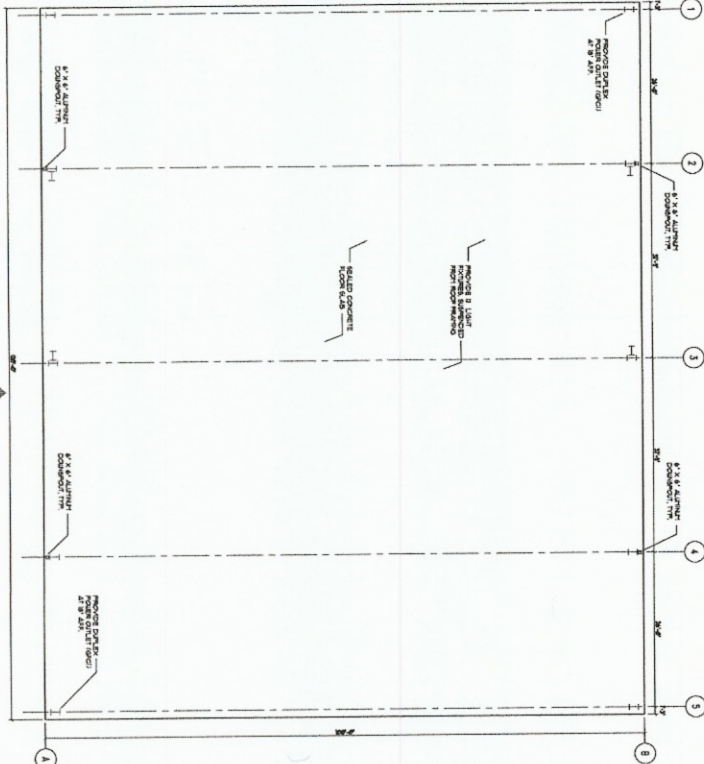
3 ELEVATION - LONG SIDE
1/8" = 1'-0"



2 ELEVATION - SHORT SIDE
1/8" = 1'-0"



4 ROOF PLAN
1/8" = 1'-0"



1 FLOOR PLAN
1/8" = 1'-0"



OSCEOLA HIGH SCHOOL
NEW COVERED PLAY STRUCTURE

The School District of Osceola County
Madison, Florida 32114



O.T. HSU + ASSOCIATES, P.A.
2015 West Avenue, Suite 100, Ocala, FL 32061
Tel: 352-237-2200 Fax: 352-237-2200
www.othsu.com

NO TITLE
The State of Florida is hereby certifying that this document is a true and correct copy of the original as submitted to the State of Florida. This document is subject to the provisions of the Florida Statutes, Chapter 409, Section 409.01, Florida Statutes, and the rules of the State Board of Education, Chapter 6A, Section 6A.02, Florida Administrative Code.

Drawn By	_____
Checked By	_____
Designed By	_____
Project Manager	_____
Scale	AS SHOWN
Sheet No.	0805136
Date	APRIL 26, 2010
Client	OSCEOLA COUNTY SCHOOL DISTRICT
Project	NEW COVERED PLAY STRUCTURE
Scale	AS SHOWN

A-10.1

SECTION 03100 - CONCRETE FORMWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The extent of formwork is indicated by the cast-in-place concrete structures shown on the Drawings.
- B. The Work includes providing formwork, and shoring, for cast-in-place concrete and installation into formwork of items furnished by others, such as anchor bolts, setting plates, bearing plates, anchorages, inserts, frames, nosings, and other items to be embedded in concrete (but not including reinforcing steel).

1.2 SUBMITTALS

- A. Product Data: Manufacturer's data and installation instructions for proprietary materials including form coatings, manufactured form systems, ties, accessories, and other items specified herein.
- B. Concrete Shoring Formwork: Provide shop drawings, catalog cuts, and calculations signed and sealed by a Professional engineer registered in the State of Florida.

1.3 QUALITY ASSURANCE

- A. Examine the substrate and the conditions under which concrete formwork is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.
- B. Codes and Standards: Unless otherwise shown or specified, design, construct, erect, maintain, and remove forms and related structures for cast-in-place concrete work in compliance with the American Concrete Institute Standard ACI 347, "Recommended Practice for Concrete Formwork."
- C. Allowable Tolerances
 - 1. Construct formwork to provide completed cast-in-place concrete surfaces complying with the tolerances specified in ACI 347 and as follows:
 - a. Variation from plumb in lines and surfaces of columns, piers, walls, and arrises; 1/4 inch per 10 feet, but not more than one inch. For exposed corner columns, control joint grooves, and other conspicuous lines, 1/4 inch in a bay or 20 feet maximum; 1/2" maximum in 40 ft. or more.
 - b. Variation in sizes and locations of sleeves, floor openings, and wall openings, 1/4 inch.
 - c. Variations in footings plan dimensions, minus 1/2 inch and plus 2 inches; misplacement or eccentricity, 2 percent of the footing width in direction of misplacement but not more than 2 inches; thickness reduction, minus 5 percent.

2. Before concrete placement, check the lines and levels of erected formwork. Make corrections and adjustments to ensure proper size and locations of concrete members and stability of forming systems.
3. During concrete placement, check formwork and related supports to ensure that forms are not displaced and that completed work will be within specified tolerances.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

A. Forms for Exposed Finish Concrete

1. Unless otherwise shown or specified, construct formwork for exposed concrete surfaces metal, metal-framed plywood-faced, to provide continuous, straight, smooth as-cast surfaces. Furnish in largest practicable sizes to minimize number of joints to conform to joint system shown on Drawings. Provide form material with sufficient thickness to withstand pressure of newly placed concrete without bow or deflection.
 - a. Plywood: APA grade-trademarked "B-B Plyform Exterior," mill oiled.
2. Provide form coatings on forms for all exposed finished concrete. Plywood grain indentations or patterns left in the concrete as a result of the forms are not acceptable.

B. Forms for Unexposed Finish Concrete: Form with plywood, lumber, metal, or other acceptable material. Provide lumber that is dressed on at least 2 edges and one side for tight fit.

C. Cylindrical Forms

1. Form round-section members of heavy glass-fiber reinforced plastic or galvanized steel sheets. Butt sections together with bolted or keyed joints. Finish interior joints of forms smooth so there is no visible seam on finished concrete surfaces.

D. Form Units

1. Provide factory-fabricated, adjustable-length, removable, or snap-off metal form ties; design to prevent form deflection and to prevent spalling concrete surfaces upon removal.
2. Unless otherwise shown, provide ties so that portion remaining within concrete after removal of exterior parts is at least one inch from outer concrete surface. Unless otherwise indicated, provide form ties which will leave a hole not larger than one inch diameter in concrete surfaces.
3. Form ties fabricated on the project site and wire ties are not acceptable.

E. Form Coatings: Provide commercial formulation form-coating compounds that will not

bond with, stain, nor adversely affect concrete surfaces and will not impair subsequent treatment of concrete surfaces bond or adhesion, nor impede the wetting of surfaces to be cured with water or curing compounds.

F. Inserts

1. Provide metal inserts for anchorage of materials or equipment to concrete construction not supplied by other trades and as required for the Work.
2. Provide Fry original reglet as manufactured by Fry Reglet Corporation, Alhambra, California. Reglet shall be made of .050 polyvinylchloride, meeting ASTM Spec. D-1874. Provide steel spacer channel for positive alignment and barrier to grout.
3. Vinyl Chamfer Strips: Shall be Vinylex CSN-1/2 as manufactured by Vinylex Corporation, Knoxville, Tennessee.

2.2 DESIGN OF FORMWORK

- A. Design, erect, support, brace, and maintain formwork so that it will safely support vertical and lateral loads that might be applied, until such loads can be supported by the concrete structure. Carry vertical and lateral loads to ground by formwork system and in-place construction that has attained adequate strength for that purpose. Construct formwork so that concrete members and structures are of correct size, shape, alignment, elevation, and position. Maintain formwork and construction tolerances and surface irregularities complying with the following ACI 347 limits:
1. Provide Class A tolerances for concrete surfaces exposed to view.
 2. Provide Class C tolerances for other concrete surfaces.
- B. Design forms and falsework to include assumed values of live load, dead load, weight of moving equipment operated on formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of structure during construction.
- C. Construct forms to sizes, shapes, and lines, and dimensions shown to obtain accurate alignment, location, grades, level, and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required in the Work. Use selected materials to obtain required finishes. Solidly butt joints and provide backup at joints to prevent cement paste from leaking.
- D. Design formwork to be readily removable without impact, shock, or damage to cast-in-place concrete surfaces and adjacent materials. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses and the like for easy removal.
- E. Provide formwork sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joint and provide backup material at joints as required to prevent leakage and fins.
- F. Side forms of footings may be omitted and concrete placed directly against excavation

only when requested by Contractor and accepted by Architect. When omission of forms is accepted, provide additional concrete beyond the minimum design profiles and dimensions of the footings as detailed.

- G. Provide temporary openings for cleanouts and inspections where interior area of formwork is inaccessible before and during concrete placement. Securely brace temporary openings and set tightly to forms to prevent losing concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exposed corners and edges as indicated using chamfer strips fabricated to produce uniform smooth lines and tight edge joints.
- I. Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before placing concrete. Re-tighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- J. Provisions for other Trades: Coordinate openings in concrete formwork to accommodate work of other trades. Determine size and location of openings, recesses, and chases from trades providing such items. Accurately place and securely support items built into forms.

PART 3 - EXECUTION

3.1 FORM CONSTRUCTION

- A. Construct forms to the exact sizes, shapes, lines, and plumb work in finish structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required. Use selected materials to obtain required finishes.
- B. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where the slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses, and the like, to prevent swelling and assure ease of removal.
- C. Provide temporary openings where interior area of formwork is inaccessible for cleanout, for inspection before concrete placement, and for placement of concrete. Brace temporary closures and set tightly to forms to prevent loss of concrete mortar. Locate temporary openings on forms in as inconspicuous location as possible, consistent with project requirements.
 - 1. Form intersecting planes to provide true, clean-cut corners, with edge grain of plywood not exposed as form for concrete.
- D. Provide formwork sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joints and provide backup material at joints as required to prevent leakage and fins.
- E. Falsework

1. Erect falsework and support, brace and maintain it to safely support vertical, lateral, and asymmetrical loads applied until such loads can be supported by in-place concrete structures. Construct falsework so that adjustments can be made for take-up and settlement.
2. Provide wedges, jacks, or camber strips to facilitate vertical adjustments. Carefully inspect falsework and formwork during and after concrete placement operations to determine abnormal deflection or signs of failure; make necessary adjustments to produce work of required dimensions.
3. Support form facing materials by members spaced sufficiently close to prevent deflection. Fit forms placed in successive units for continuous surfaces to accurate alignment, free from irregularities and within allowable tolerances.
4. Provide camber in formwork as required for anticipated deflections due to weight and pressures of fresh concrete and construction loads for long span members without intermediate supports.
5. Carefully inspect falsework and formwork during and after concrete placement operations to determine abnormal deflection or signs of failure; make necessary adjustments to produce work of required dimension.

F. Forms for Exposed Concrete

1. Drill forms to suit ties used and to prevent leakage of concrete mortar around tie holes. Do not splinter forms by driving ties through improperly prepared holes.
2. Do not use metal cover plates for patching holes or defects in forms.
3. Provide sharp, clean corners at intersecting planes without visible edges or offsets. Back joints with extra studs or girts to maintain true, square intersections.
4. Use extra studs, walers, and bracing to prevent bowing of forms between studs and to avoid bowed appearance in concrete. Do not use narrow strips of form material which will produce bow.
5. Assemble forms so they may be readily removed without damage to exposed concrete surfaces.
6. Form molding shapes, recesses, and projections with smooth-finish materials and install in forms with sealed joints to prevent displacement.

G. Corner Treatment

1. Form chamfers with 3/4 inch x 3/4 inch strips, unless otherwise shown, accurately formed and surfaced to produce uniformly straight lines and tight edge joints. Extend terminal edges to required limit and miter chamfer strips at changes in direction.
2. Unexposed corners may be formed either square or chamfered.

H. Provision for Other Trades: Provide openings in concrete formwork to accommodate work of other trades including those under separate prime contracts. Size and location of openings, recesses, and chases are the responsibility of the trade requiring such items. Accurately place and securely support items to be built into form.

I. Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before concrete is to be placed. Retighten forms immediately after concrete placement as required to eliminate mortar leaks.

- J. Construction Joints: Where footings and walls are divided by construction joints, joints shall have keyways formed. Keyways shall be 1/3 of the dimension of the element in both directions and shall be at least 2 inches thick.

3.2 FORM COATINGS

- A. Coat form contact surfaces with form-coating compound before reinforcement is placed. Do not allow excess form coating material to accumulate in the forms or to come in contact with surfaces which will be bonded to fresh concrete. Apply in compliance with manufacturer's instructions.
- B. Coat steel forms with a non-staining, rust-preventative form oil or otherwise protect against rusting. Rust-stained steel formwork is not acceptable.

3.3 INSTALLATION OF EMBEDDED ITEMS

- A. Set and build into the Work anchorage devices and other embedded items required for other Work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions, and directions provided by suppliers of the items to be attached thereto.
- B. Edge Forms and Screed Strips for Slabs: Set edge form or bulkheads and intermediate screed strips for slabs to obtain required elevations and contours in the finished slab surface. Provide and secure units to support types of screeds required.
 - 1. Forms for concrete curbs and bases shall be rigidly held straight and tight so that finished concrete will be level and even.

3.4 REMOVAL OF FORMS

- A. Formwork not supporting concrete, such as sides of beams, walls, columns, and similar parts of the Work, may be removed after cumulatively curing at not less than 50 degrees F for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form removal operation; and provided that curing and protection operations are maintained.
- B. Formwork supporting weight of concrete, such as beam soffits, joists, slabs, and other structural elements may not be removed in less than 14 days, and not until concrete has attained design minimum 28 day compressive strength.
- C. Form facing material may be removed 4 days after placement, only if shores and other vertical supports have been arranged to permit removal of form facing material without loosening or disturbing shores and supports.

3.5 REUSE OF FORMS

- A. Clean and repair surfaces of forms to be reused in the work. Split, frayed, delaminated, or otherwise damaged form facing material will not be acceptable. Apply new form

Attachment E

The School District of Osceola County
Osceola High School
Covered Play Structure

04/30/10
0850.00

coating compound material to concrete contact surfaces as specified for new formwork.

- B. When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close all joints. Align and secure joints to avoid offsets. Do not use "patched" forms for exposed concrete surfaces, except as acceptable to the Architect.

END OF SECTION 03100

SECTION 03200 - CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. The extent of concrete reinforcement is shown on the Drawings and in schedules.
- B. The Work includes fabrication and placement of reinforcement for cast-in-place concrete including bars, welded wire fabric, ties, and supports.

1.2 SUBMITTALS

- A. Product Data: Manufacturer's specifications and installation instructions for proprietary materials and reinforcement accessories.
- B. Shop Drawings: fabrication, bending, and placement of concrete reinforcement. Comply with the ACI 315 "Manual of Standard Practice for Detailing Reinforced Concrete Structures." Show bar schedules, stirrup spacing, diagrams of bent bars, arrangements, and assemblies as required for the fabrication and placement of concrete reinforcement. Show building plans with bar sizes, spacing, and quantities for all bent and straight reinforcing bars.

1.3 QUALITY ASSURANCE

- A. Codes and Standards: Comply with requirements of the latest edition of the following codes and standards, except as herein modified:
 - 1. American Welding Society, AWS D 1.4-98 - "Structural Welding Code - Reinforcing Steel."
 - 2. Concrete Reinforcing Steel Institute, "Manual of Standard Practice."
 - 3. American Concrete Institute, ACI 318 "Building Code Requirements for Structural Concrete."

1.4 DELIVERY, HANDLING, AND STORAGE

- A. Deliver reinforcement to the project site bundled, tagged, and marked. Use metal tags indicating bar size, lengths, and other information corresponding to markings shown on placement diagrams.
- B. Store concrete reinforcement materials at the site to prevent damage and accumulation of dirt or excessive rust.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. Reinforcing Bars (ReBar): ASTM A615, and as follows.

Attachment F

The School District of Osceola County
Osceola High School
Covered Play Structure

04/30/10
0850.00

1. Provide Grade 60 for bars No. 3 to 11, except as otherwise indicated.
- B. Steel Wire: ASTM A82.
- C. Welded Wire Fabric (WWF): ASTM A185, sheets only, no rolled fabric
- D. Fibrous Reinforcement: Furnish fibrillated polypropylene fibers as allowed by the drawings.
 1. Polypropylene Fibers: 100 percent collated fibrillated polypropylene fibers with a length of 3/4 inch, a minimum specific gravity of 0.09 and a minimum tensile strength of 80 ksi. Polypropylene fibers shall be added to the concrete mix at a rate of one and one-half pounds per cubic yard.
 - a. Subject to compliance with requirements, provide one of the following:
 - 1) "Fibermix Monofilament M.D.," Fibermesh Company, Chattanooga, Tennessee.
 - 2) "Forta Econo-Net": Forta Corporation, Grove City, Pennsylvania.
 2. Fiber reinforcement shall require Architect's approval for sealed concrete finish locations, for horizontal slab on grade, and toppings over structural elevated slabs only.
 - a. Not to be used for structural, elevated structural, or sloping slabs.
- E. Supports for Reinforcement (including welded wire fabric): Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement in place.
 1. Use wire bar type supports complying with CRSI recommendations, unless otherwise indicated. Do not use wood, brick, and other unacceptable materials.
 2. For slabs on grade, use supports with sand plates or horizontal runners where base material will not support chair legs.
 3. Over waterproof membranes, use precast concrete chairs to prevent penetration of the membrane
 4. For footings, trench footings, and grade beams use precast concrete bricks ($f_c = 3000$ psi min. at 28 days). (Concrete masonry bricks not acceptable).
 5. For concrete masonry bond beams use #2 bar laterally, tied to each longitudinal reinforcing bar below to hold bars apart and up from bottom. Space #2 bars at 48 inches o.c.
- F. Grouted Anchor Bolts: HILTI HVA Adhesive Anchors as manufactured by Hilti, Inc., Tulsa, Oklahoma; or approved equal.
- G. Rebar Ties: Nylon or annealed tie wire as recommended by the ACI.

2.2 FABRICATION

- A. Fabricate reinforcing bars to conform to required shapes and dimensions, with fabrication

tolerances complying with CRSI "Manual of Standard Practice." In case of fabricating errors, do not re-bend or straighten reinforcement in a manner that will injure or weaken the material.

- B. Unacceptable Materials: Reinforcement with any of the following defects will not be permitted in the work.
 - 1. Bar lengths, depths, and bends exceeding specified fabrication tolerances.
 - 2. Bends of kinks not indicated on Drawings or final shop drawings.
 - 3. Bars with reduced cross-section due to excessive rusting or other cause.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine the conditions under which concrete reinforcement is to be placed. Do not proceed with the Work until unsatisfactory conditions have been corrected.
- B. Notify Architect when steel placement for a concrete pour is nearing a completion so that the Work may be observed.

3.2 INSTALLATION

- A. Comply with the specified codes and standards and Concrete Reinforcing Steel Institute recommended practice for "Placing Reinforcing Bars," for details and methods of reinforcement placement and supports, and as herein specified.
- B. Clean reinforcement to remove loose rust and mill scale, earth, and other materials which reduce or destroy bond with concrete.
- C. Position, support, and secure reinforcement against displacement by formwork construction, or concrete placement operations. Locate and support reinforcing by precast concrete brick, metal chairs, runners, bolsters, spacers, and hangers as required.
- D. Place reinforcement to obtain the minimum coverages for concrete protection. Arrange, space, and securely tie bars and bar supports together with 16 gauge wire to hold reinforcement accurately in position during concrete placement operations. Set wire ties so that twisted ends are directed away from exposed concrete surfaces.
- E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one full mesh and lace splices with 16 gauge wire. Do not make end laps midway between supporting beams or directly over beams of continuous structures. Offset end laps in adjacent widths to prevent continuous laps.
- F. Provide sufficient numbers of supports and of strengths to carry reinforcement. Do not place reinforcing bars more than 2 inches beyond the last leg of continuous bar support. Do not use supports as bases for runaways for concrete conveying equipment and similar construction loads.

Attachment F

The School District of Osceola County
Osceola High School
Covered Play Structure

04/30/10
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- G. Provide standard reinforcing splices by lapping ends, placing bars in contact, and tightly tying wire. Comply with requirements of ACI 318 for minimum lap of spliced bars.
- H. Reinforcing steel installed in continuous footings shall run continuous. This shall include specially shaped components with proper lap where corner reinforcing and step footings occur.
- I. Provide additional reinforcing around required openings in footings, and slabs having at least a one foot dimension.
- J. Install and mix fiber reinforcement into concrete mix in strict accordance with the manufacturers written installation instructions and in strict accordance with the Structural Engineer's requirements.

END OF SECTION 03200

SECTION 13121
METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract apply to this Section.

1.2 SUMMARY

- A. This Section includes a single-story, single- and multi-span, rigid-frame-type pre-engineered metal building of the nominal length, width, eave height, and roof pitch indicated.

1. Exterior walls are open.
2. Roof system consists of the manufacturer's standard metal roof system.
3. Manufacturer's standard building components and accessories may be used, provided components, accessories, and complete structure conform to design indicated and specified requirements.

- B. Related Sections: The following sections contain requirements that relate to this section:

1. Not used

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. General:

1. The drawings (building elevations, floor plans and design details) and Specifications are an outline of the criteria and performance requirements of the work. The requirements shown by the details are intended to establish basic dimensions of the profiles and sightlines. Within these parameters, the Contractor is responsible for the design and engineering of the system, including whatever modifications or additions may be required to meet the specified requirements and maintain the visual design concept for the entire project. Should the Contractor believe performance criteria cannot be achieved while maintaining sightlines, he shall so advise as part of his proposal and shall indicate what modifications will be required.
2. Engineer, design, fabricate and erect the pre-engineered metal building system to withstand loads from winds, gravity, structural movement including movement thermally induced, and to resist in-service use conditions that the building will experience, including exposure to the weather at the building

envelope, and at locations of penetrations by other building components or systems, without failure.

3. Design each member to withstand stresses resulting from combinations of loads that produce the maximum allowable stresses in that member as prescribed in MBMA's "Design Practices Manual."
- B. Design Loads: Basic design loads, as well as auxiliary and collateral loads, are indicated on the drawings.
1. Basic design loads include live load and wind load, in addition to the dead load.
 2. Collateral loads include additional dead loads over and above the weight of the metal building system.
- C. Structural Framing and Roof Panels: Design primary and secondary structural members and exterior covering materials for applicable loads and combinations of loads in accordance with the Metal Building Manufacturers Association's (MBMA) "Design Practices Manual."
1. Structural Steel: Comply with the American Institute of Steel Construction's (AISC) "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" for design requirements and allowable stresses.
 2. Light Gage Steel: Comply with the American Iron and Steel Institute's (AISI) "Specification for the Design of Cold Formed Steel Structural Members" and "Design of Light Gage Steel Diaphragms" for design requirements and allowable stresses.
 3. Welded Connections: Comply with the American Welding Society's (AWS) "Standard Code for Arc and Gas Welding in Building Construction" for welding procedures.
- D. Building Accessories: Provide metal building system accessories that comply with the Architectural drawings.

1.4 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of the Contract.
- B. Product data consisting of metal building system manufacturer's product information for building components and accessories.
- C. Shop drawings for metal building structural framing system, roofing and panels, and other metal building system components and accessories that are not fully detailed or dimensioned in manufacturer's product data.
1. Structural Framing: Furnish complete erection drawings prepared by or under the supervision of a professional engineer legally authorized to practice in the jurisdiction where the Project is located. Include details showing fabrication and assembly of the metal building system. Show anchor bolts settings and sidewall, endwall, and roof framing. Include transverse cross-sections.

2. Roofing Panels: Provide layouts of panels on roofs, details of edge conditions, joints, corners, custom profiles, supports, anchorages, trim, flashings, closures, penetration enclosures and special details. Include transverse cross-sections.
3. Building Accessory Components: Provide details of metal building accessory components to clearly indicate methods of installation including the following:
 - a. Sheet Metal Accessories: Provide layouts at **1/4 inch per foot (1:50)** scale. Provide details of gutters, downspouts, and other sheet metal accessories at not less than **1-1/2 inch per foot (1:10)** scale showing profiles, methods of joining, and anchorages.
- D. Samples for initial selection purposes in form of manufacturer's color charts or chips showing full range of colors, textures, and patterns available for metal roofing panels with factory-applied finishes.
- E. Samples for verification purposes of roofing panels. Provide sample panels **12 inch (300 mm)** long by actual panel width, in the profile, style, color, and texture indicated. Include clips, battens, fasteners, closures, and other panel accessories.
- F. Installer certificates signed by metal building manufacturer written certification certifying that the installer complies with requirements included under the "Quality Assurance" Article.
- G. Professional engineer's certificate prepared and signed by a Professional Engineer, legally authorized to practice in the jurisdiction where Project is located, verifying that the structural framing and covering panels meet indicated loading requirements and codes of authorities having jurisdiction.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer to erect the pre-engineered metal building who has specialized in the erection and installation of types of metal buildings systems similar to that required for this project and who is certified in writing by the metal building system manufacturer as qualified for erection of the manufacturer's products.
- B. Manufacturer's Qualifications: Provide pre-engineered metal buildings manufactured by a firm experienced in manufacturing metal buildings systems that are similar to those indicated for this project and have a record of successful in-service performance.
- C. Single-Source Responsibility: Obtain the metal building system components, including structural framing, roof covering, and accessory components, from one source from a single manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver prefabricated components, sheets, panels, and other manufactured items so they will not be damaged or deformed. Package roof panels for protection against transportation damage.
- B. Handling: Exercise care in unloading, storing, and erecting wall and roof covering panels to prevent bending, warping, twisting, and surface damage.
- C. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering. Store metal roof panels so that water accumulations will drain freely. Do not store panels in contact with other materials that might cause staining, denting or other surface damage.

1.7 WARRANTY

- A. Roofing Panel Finish Warranty: Furnish the roofing and siding panel manufacturer's written warranty, covering failure of the factory-applied exterior finish on metal wall and roof panels within the warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents.
 - 1. Warranty period for factory-applied exterior finishes on roof panels is 20 years after the date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Maintenance Stock: Furnish at least 5 percent excess over required amount of nuts, bolts, screws, washers, and other required fasteners for each metal building. Pack in cartons labeled to identify the contents and store on the site where directed.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Hot-Rolled Structural Steel Shapes: Comply with [ASTM A 36](#) or [ASTM A 529](#).
- B. Steel Tubing or Pipe: Comply with [ASTM A 500](#) Grade B, [ASTM A 501](#), or [ASTM A 53](#).
- C. Steel Members Fabricated from Plate or Bar Stock: Provide [42,000 psi](#) minimum yield strength. Comply with [ASTM A 529](#), [ASTM A 570](#), or [ASTM A 572](#).

- D. Steel Members Fabricated by Cold Forming: Comply with ASTM A 607 Grade 50.
- E. Cold-Rolled Carbon Steel Sheet: Comply with requirements of ASTM A 366 or ASTM A 568.
- F. Hot-Rolled Carbon Steel Sheet: Comply with requirements of ASTM A 568 (ASTM A 568M) or ASTM A 569.
- G. Structural Quality Zinc-Coated (Galvanized) Steel Sheet: Comply with ASTM A 446 with G90 coating complying with ASTM A 525. Grade to suit manufacturer's standards.
- H. Commercial Quality Zinc-Coated (Galvanized) Steel Sheet: Comply with ASTM A 526 with G60 coating complying with ASTM A 525.
- K. Bolts for Structural Framing: Comply with ASTM A 325 as necessary for design loads and connection details.
- L. Paint and Coating Materials: Comply with performance requirements of the federal specifications indicated. Unless specifically indicated otherwise, compliance with compositional requirements of federal specifications indicated is not required.
 - 1. Shop Primer for Ferrous Metal: Fast-curing, lead-free, universal primer, selected by the manufacturer for resistance to normal atmospheric corrosion, compatibility with finish paint systems, and capability to provide a sound foundation for field-applied topcoats despite prolonged exposure. Comply with FS TT-P-645.

2.2 STRUCTURAL FRAMING

- A. Rigid Frames: Fabricate from hot-rolled structural steel shapes. Provide factory-welded, shop-painted, built-up "I-beam"-shape or open-web-type frames consisting of tapered or parallel flange beams and tapered columns. Furnish frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly.
 - 1. Provide length of span and spacing of frames indicated. Slight variations in length of span and frame spacing may be acceptable if necessary to meet manufacturer's standard.
- B. Primary Endwall Framing: Provide the following primary endwall framing members fabricated for field-bolted assembly:
 - 1. Endwall Columns: Manufacturer's standard shop-painted, built-up factory-welded "I"-shape or cold-formed "C" sections.
 - 2. Endwall Beams: Manufacturer's standard shop-painted "C"-shape roll-formed sections.
- C. Secondary Framing: Provide the following secondary framing members:

1. Roof Purlins, Sidewall and Endwall Girts: "C"-or "Z"-shaped sections shop-painted roll-formed steel. Purlin spacers shall be fabricated from 14 gage cold-formed galvanized steel sections.
 2. Eave Struts: Unequal flange "C"-shaped sections formed to provide adequate backup for both wall and roof panels.
 3. Flange and Sag Bracing: Angles, shop-painted roll-formed steel.
 4. Base or Sill Angles: Fabricate from 14 gage cold-formed galvanized steel sections.
 5. Secondary endwall structural members, except columns and beams, shall be the manufacturer's standard sections fabricated from 14 gage cold-formed galvanized steel.
- D. Wind Bracing: Provide adjustable wind bracing using threaded steel rods; comply with ASTM A 36/A36M or ASTM A 572/A572M, Grade D.
- E. Bolts: Provide shop-painted bolts except when structural framing components are in direct contact with roofing and siding panels. Provide zinc-plated or cadmium-plated bolts when structural framing components are in direct contact with roofing and siding panels.
- F. Shop Painting: Clean surfaces to be primed of loose mill scale, rust, dirt, oil, grease, and other matter precluding paint bond. Follow procedures of SSPC-SP3 for power-tool cleaning, SSPC-SP7 for brush-off blast cleaning, and SSPC-SP1 for solvent cleaning.
1. Prime structural steel primary and secondary framing members with the manufacturer's standard rust-inhibitive primer.
 2. Prime galvanized members, after phosphoric acid pretreatment, with manufacturer's standard zinc dust-zinc oxide primer.

2.3 ROOFING PANELS

- A. Face Sheets: Fabricate wall and roof panel face sheets to the profile or configuration indicated in drawings.
- B. Standing Seam Roof Panels: Manufacturer's standard factory-formed standing-seam roof panel system designed for mechanical attachment of panels to roof purlins using a concealed clip.
1. Clips: Provide 16 gage (1.5 mm) panel clips.
 2. Cleats: Factory-calked, mechanically seamed cleats formed from 24 gage (0.70 mm), Grade C, zinc-coated steel sheets.
- C. Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets, self-locking bolts, end-welded studs, and other suitable fasteners designed to withstand design loads.
1. Provide metal-backed neoprene washers under heads of fasteners bearing on weather side of panels.

2. Use aluminum or stainless steel fasteners for exterior application and galvanized or cadmium-plated fasteners for interior applications.
 3. Locate and space fastenings in true vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of neoprene washer.
 4. Provide fasteners with heads matching color of roofing or siding sheets by means of plastic caps or factory-applied coating.
- D. Accessories: Provide the following sheet metal accessories factory-formed of the same material in the same finish as roof and wall panels:
1. Flashings.
 2. Closers.
 3. Fillers.
 4. Metal expansion joints.
 5. Ridge covers.
 6. Fascias.
- E. Flexible Closure Strips: Closed-cell, expanded cellular rubber, self-extinguishing flexible closure strips. Cut or premold to match configuration of roofing and siding sheets. Provide closure strips where indicated or necessary to ensure weathertight construction.
- F. Sealing Tape: Pressure-sensitive 100 percent solids grey polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape $\frac{1}{2}$ inch (13 mm) wide and $\frac{1}{8}$ inch (3 mm) thick.
- G. Joint Sealant: One-part elastomeric polyurethane, polysulfide, or silicone rubber sealant as recommended by the building manufacturer.
- H. Baked Enamel Finish: Provide the manufacturer's standard shop-applied baked enamel finish to galvanized steel roof and wall panels, and related trim and accessory elements. For roofing and siding, apply finish coat on exterior facings and manufacturer's standard wash coat on reverse face.
1. Clean galvanized steel with an alkaline compound, then treat with a zinc phosphate conversion coating, and seal with a chromic acid rinse.
 2. Apply baked-on thermo-setting modified acrylic enamel to pretreated steel sheets, in one or more coats as standard with the manufacturer to achieve a minimum dry film thickness of 1.5 mils (0.04 mm).
 - a. Color: As selected by the Architect from the manufacturer's standard colors.

2.4 SHEET METAL ACCESSORIES

- A. General: Provide coated steel sheet metal accessories with coated steel roofing and siding panels.

- B. Gutters: Form in 96 inch (2400 mm) long sections, complete with end pieces, outlet tubes, and other special pieces as required. Size in accordance with SMACNA. Join sections with riveted and soldered or sealed joints. Provide expansion-type slip joint at center of runs. Furnish gutter supports spaced 36 inches (900 mm) on center, constructed of same metal as gutters. Provide bronze, copper, or aluminum wire ball strainers at outlets. Finish to match roof fascia and rake.
- C. Downspouts: Form in 10 feet (3 m) long sections, complete with elbows and offsets. Join sections with 1-1/2 inch (38 mm) telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inch (1500 mm) on center in between. Finish to match wall panels.

2.5 FABRICATION

- A. General: Design prefabricated components and necessary field connections required for erection to permit easy assembly and disassembly.
1. Fabricate components in such a manner that once assembled, they may be disassembled, repackaged, and reassembled with a minimum amount of labor.
 2. Clearly and legibly mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
- B. Structural Framing: Shop-fabricate framing components to indicated size and section with base plates, bearing plates, and other plates required for erection, welded in place. Provide holes for anchoring or connections shop-drilled or punched to template dimensions.
1. Shop Connections: Provide bolted, or welded shop connections.
 2. Field Connections: Provide bolted field connections.

PART 3 - EXECUTION

3.1 ERECTION

- A. Framing: Erect framing true to line, level, plumb, rigid, and secure. Level base plates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use a nonshrinking grout to obtain uniform bearing and to maintain a level base line elevation. Moist cure grout for not less than 7 days after placement.
- B. Purlins and Girts: Provide rake or gable purlins with tight-fitting closure channels and fascias. Secure purlins and girts to structural framing and hold rigidly to a straight line by sag rods.
- C. Bracing: Provide diagonal rod or angle bracing in roof and sidewalls as required.
1. Movement-resisting frames may be used in lieu of sidewall rod bracing, to suit manufacturer's standards.

2. Where diaphragm strength of roof or wall covering is adequate to resist wind forces, rod or angle bracing will not be required.

- D. Framed Openings: Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to building structural frame.

3.2 ROOFING

- A. General: Arrange and nest sidelap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line. Protect factory finishes from damage.
 1. Field cutting of exterior panels by torch is not permitted.
 2. Provide weatherseal under ridge cap. Flash and seal roof panels at eave and rake with rubber, neoprene, or other closures to exclude weather.
- B. Roof Sheets: Provide sealant tape at lapped joints of ribbed or fluted roof sheets and between roof sheets and protruding equipment, vents, and accessories.
 1. Apply a continuous ribbon of sealant tape to clean, dry surface of the weather side of fastenings on end laps, and on side laps of corrugated nesting-type, ribbed, or fluted panels and elsewhere as needed to make roof sheets weatherproof to driving rains.
- C. Standing-Seam Roof Panel System: Fasten roof panels to purlins with concealed clip in accordance with the manufacturer's instructions.
 1. Install clips at each support with self-drilling fasteners.
 2. At end laps of panels, install tape calk between panels.
 3. Install factory-calked cleats at standing-seam joints. Machine-seam cleats to the panels to provide a weathertight joint.
- D. Sheet Metal Accessories: Install gutters, downspouts, ventilators, louvers, and other sheet metal accessories in accordance with manufacturer's recommendations for positive anchorage to building and weathertight mounting. Adjust operating mechanism for precise operation.
- E. Cleaning and Touch-Up: Clean component surfaces of matter that could preclude paint bond. Touch up abrasions, marks, skips, or other defects to shop-primed surfaces with same type material as shop primer.

END OF SECTION

SECTION 03300 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes exterior cast-in-place concrete, mix design, placement procedures, and finishes. Work includes, but is not necessarily limited to:
1. Exterior Concrete:
 - a. Walks, curbs, ramps, steps, and stoops
 - b. Equipment pads and bases
 - c. Floor slabs on grade
 - d. Footings, pads and piers
 2. Other Materials
 - a. Concrete admixtures
 - b. Waterstops
 - c. Expansion joint fillers
 - d. Curing materials
 - e. Self-leveling underlayment
 - f. Bonding agent
 - g. Under-slab vapor barrier
- B. Provide other cast-in-place concrete and related work as shown on the Drawings and specified herein for complete and finished work, except concrete work specifically designated to be provided under the Work of other Sections of these Specifications.
- C. The following is by other Sections, meeting the requirements of this Section (unless indicated otherwise).
1. Posts for chain link fencing
 2. Bases for exterior equipment
 3. Encasement of underground utilities or connections
 4. Specifically excluded items

1.2 SUBMITTALS

- A. Product Data: Proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, waterstops, joint systems, and other specified items.
1. Include concrete curing materials product data and specification sheets
- B. Samples: Include names, sources, and descriptions, as follows:
1. Fiber reinforcement
 2. Reglets

3. Waterstops
 4. Under slab vapor barrier
- C. Laboratory test reports for concrete materials and mix design tests.
- D. Material certificates in lieu of material laboratory test reports when permitted by Architect. Material certificates shall be signed by manufacturer and Contractor, certifying that each material item complies with or exceeds specified requirements. Provide certification from admixture manufacturers that chloride content complies with specification requirements.
- E. Minutes of pre-installation conference.
- F. Proposed mix designs.
- G. Statement from ready-mixed plant verifying conformance to specifications and proposed mix designs.
- H. Written approval/certification of concrete curing materials as specified herein.
- I. ISO 9001/9002 Registration Certificate for companies that are ISO registered.

1.3 QUALITY ASSURANCE

- A. Refer to Division 1 for additional requirements.
- B. Standards: Comply with the provisions of the following in accordance with the 2007 Florida Building Code with the 2009 Supplement, except as otherwise shown or specified.
1. ACI 117 "Standard Tolerances for Concrete Construction and Materials"
 2. ACI 211.1 "Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete"
 3. ACI 301 "Specifications for Structural Concrete for Buildings"
 4. ACI 302.1R "Guide for Concrete Floor and Slab Construction"
 5. ACI 304R "Guide for Measuring, Mixing, Transporting, and Placing Concrete"
 6. ACI 311.4R "Guide for Concrete Inspection"
 7. ACI 318-05 "Building Code Requirements for Reinforced Concrete and Commentary"
 8. Concrete Reinforcing Steel Institute, "Manual of Standard Practice"
 9. Comply with building code requirements which are more stringent than the above.
 10. ACI 305 - "Hot Weather Concreting"
- B. Materials may require testing and re-testing, as directed by the Architect, at any time during the progress of the Work. Allow free access to material stockpiles and facilities. Tests shall be done at the Contractor's expense.
- D. Concrete curing materials shall be approved by the manufacturer of the product for the final finish material on the concrete slabs. Submit written approval/certification if

requested by the Architect.

- E. Material manufacturers shall be ISO 9001/9002 registered or provide proof of documented quality assurance system. Quality system must be registered by an independent registrar who is accredited by the American National Standards Institute (ANSI-RAB) or by another internationally recognized body. ISO 9001/9002 certification or proof of documented quality assurance system shall be included with the material submittals.

1.4 PROJECT CONDITIONS

- A. Coordinate installation of inserts and sleeves for other trades. Time delivery so as not to cause delay in the progress of this Work.
- B. Installation requirements within this Section are not intended to be restrictive and the Contractor is allowed, when reviewed with the Architect's field representative, to adjust the means and methods used to meet required tolerances. Compliance with required tolerances is the responsibility of the Contractor and adjustment required to meet these shall not be unduly restricted by the Architect or his representative.

1.5 FIELD QUALITY CONTROL

- A. Floor Tolerance Measurements: Floor flatness and levelness tests on floor slabs shall be conducted in accordance with the provisions set forth in ASTM E 1155-96 (Reapproved 2001), with the exception of Subparagraphs 7.2.3 and 7.3.2 which may be waived at the Owner's option, also Zi calculation to be used shall be $N \text{ min.} = A/10$. Floor tolerance measurements shall be made by the independent testing laboratory within 24 hours after completion of the final troweling operation, and before forms and shores have been removed, measurement shall be taken using a Dipstick Auto-Read Floor Profiler as manufactured by The Edward W. Face Company, Inc. of Norfolk, VA. Results of floor tolerance tests, including a formal notice of acceptance or rejection of the work, shall be provided to the Contractor within 24 hours after data collection.
- B. Remedy for Out-of-Tolerance Work: Slab sections measuring at or above both of the specified minimum local F-numbers shall be accepted for tolerance compliance as constructed. Floor slab sections measuring below either (or both) of the specified minimum local F-numbers shall be removed and replaced (in the case of slabs-on-grade), or ground or re-topped (in the case of elevated slabs). No remedies for sub-minimum local F-number sections other than replacement of slabs-on-grade, and grinding or re-topping of elevated slabs will be permitted. For the purposes of this paragraph, a floor section shall be a rectangular area bound by column or half-column lines (i.e. minimum sections area - approximately 100 sq. ft.).
- C. Special Conditions (Exceptions): Where room sizes (areas receiving concrete flooring) are restricted to smaller areas due to bearing walls or existing construction making finishing difficult, the Architect's Field Representative will determine acceptable deviations/exceptions in testing requirements.

1. Architect's Field Representative may at his discretion:

- a. Waive entirely testing of small rooms, storage areas, and similar spaces.
- b. Reduce the number and select the location of tests.
- c. Waive penalties between specified and minimum locals.
- d. Require that tolerances exceed minimum locals only.
- e. Waive the requirement for removal of concrete not meeting minimum locals if, in his opinion, repairs can bring floors into acceptable/serviceable tolerances.

1.6 CONCRETE TESTING

- A. The Contractor for the work of 03300, Cast-In-Place Concrete, shall cooperate and coordinate with the testing laboratory to perform field quality control testing during concrete work under Division 3 in accordance with 2007 Florida Building Code with the 2009 Supplement.
- B. Quality Control Testing During Construction: Perform sampling and testing for field quality control during the placement of concrete, as follows:
 1. Sampling Fresh Concrete: ASTM C172, except modified for slump to comply with ASTM C94.
 2. Slump: ASTM C143, one test for each concrete load at point of discharge, and one for each set of compressive strength test specimens.
 3. Air Content: ASTM C231, pressure method; one for every other concrete load at point of discharge or when the indication of change requires.
 4. Compression Test Specimens: ASTM C31, one set of 4 standard cylinders for each compressive strength test, unless otherwise directed.
 - a. Cast 4 cylinders for laboratory cured specimens. One specimen shall be broken at 7 days. Two specimens shall be broken at 28 days. One specimen shall be held as a spare.
 5. Concrete Temperature: Test hourly when air temperature is 40 degrees F. and below and when 80 degrees F. and above; and each time a set of compressive test specimens is made.
 6. Compressive Strength Tests: ASTM C39, one set for each 100 cubic yards or fraction thereof, of each mix design placed in a day or for each 5,000 sq. ft. of surface area for slabs or walls. Make 4 laboratory-cured specimens. One specimen shall be broken at 7 days and two specimens shall be broken at 28 days, and one retained in reserve for later testing if required.
 - a. When the frequency of testing will provide less than 5 strength tests for a given mix design, conduct testing from at least 5 randomly selected batches or from each batch if fewer than 5 are used.
 - b. When the total quantity of a given mix design of concrete is less than 50 cu.yds., the strength tests may be waived by the Architect if, in his judgment, adequate evidence of satisfactory strength is provided.

- C. Report test results in writing to the Architect, Contractor, and ready-mix supplier on the same day that test are made. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of Contractor, name of concrete supplier and truck number, name of concrete testing service, concrete type and class, location of concrete batch in the structure, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength and type and amount of fibrous reinforcement, compressive breaking strength, and type of break for both 7 day tests and 28 day tests.
- D. Additional Tests: The testing service will make additional tests of in-place concrete when test results indicate the specified concrete strengths and other characteristics have not been attained in the structure, as directed by the Architect. The testing service shall conduct tests to determine the strength and other characteristics of the in-place concrete by compression tests on cored cylinders complying with ASTM C42 or by load testing specified in ACI 318 or other acceptable nondestructive testing methods, as directed. The Contractor shall pay for such tests conducted and other additional testing as may be required, when unacceptable concrete is verified.
- E. Evaluation of Quality Control Tests: Do not use concrete delivered to the final point of placement which has slump or total air content outside the specified values.
1. Compressive strength tests for laboratory-cured cylinders will be considered satisfactory if the averages of all sets of 3 consecutive compressive strength tests results equal or exceed the 28 day design compressive strength of the type or class of concrete; and no individual strength test falls below the required compressive strength by more than 500 psi.
 2. Strength tests of specimens cured under field conditions may be required by the Architect to check the adequacy of curing and protecting of the concrete placed. Specimens shall be molded by the field quality control laboratory at the same time and from the same samples as the laboratory cured specimens.
 - a. Provide improved means and procedures for protecting concrete when the 28 day compressive strength of field cured cylinders is less than 85 percent of companion laboratory cured cylinders.
 - b. When laboratory cured cylinder strengths are appreciably higher than the minimum required compressive strength, field cured cylinder strengths need not exceed the minimum required compressive strength by more than 500 psi even though the 85 percent criterion is not met.
 - c. If individual tests of laboratory cured specimen produce strengths more than 500 psi below the required minimum compressive strength or if tests of field cured cylinders indicates deficiencies in protection and curing, provide additional measures to assure that the load-bearing capacity of the structure is not jeopardized. If the likelihood of low-strength concrete is confirmed and computations indicate the load-bearing capacity may have been significantly reduced, tests of cores drilled from the area in question may be required.
 3. If the compressive strength tests fail to meet the minimum requirements specified, the concrete represented by such tests will be considered deficient in strength.

- F. Deficient concrete shall be removed as directed by the Architect and replaced by the Contractor without additional cost to the Owner.

1.7 CONCRETE MATERIALS AND MIX DESIGN

A. Concrete Materials and Mix Design:

1. Ready-mixed concrete shall be mixed and delivered in accordance with ASTM C94.
2. Product Data: Submit 2 copies of manufacturer's specifications with application an installation instructions for proprietary materials and items, including admixtures, bonding agents, waterstops, joint systems, chemical floor hardeners, and dry shake finish materials.
3. Laboratory Test Reports: Submit 2 copies of laboratory test reports for concrete materials and mix design tests. The Architect's review will be for general information only. Production of concrete to comply with specified requirements is the Contractor's responsibility.

B. Tests for Concrete Materials

1. Normal Weight Concrete: Test aggregates by the methods of sampling and testing of ASTM C33.
2. Portland Cement: Sample cement and determine the properties by the methods of test ASTM C33.
3. Submit written reports for each material sampled and tested, prior to the start of Work. Provide the project identification name and number, date of report, name of Contractor, name of concrete testing service, source of concrete aggregates material manufacturer and brand name for manufactured materials, values specified in the referenced specification for each material, and test results. Indicate whether or not material is acceptable for intended use.

- C. Submit signed statement from ready-mix plant that concrete furnished for the Project will exactly conform to the approved design mixes.

1.8 PREINSTALLATION CONFERENCE

- A. At least 35 days prior to the start of the concrete construction schedule, conduct a preinstallation conference at the project site to review the proposed mix designs and to discuss the required methods and procedures to achieve the required concrete construction.
- B. Require representatives of every party who is concerned with the concrete work to attend the conference, including, but not limited to, the following:
1. Contractor's superintendent.
 2. Testing laboratory.
 3. Concrete subcontractor.
 4. Ready-mix concrete producer.
 5. Admixture manufacturer(s).

- 6. Owner.
- 7. Architect.

C. Meeting Minutes: Record, type and distribute within three (3) days of the meeting.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I.
 - 1. Use one brand of cement throughout Project.
- B. Fly Ash: ASTM C 618, Type C, may be substituted for up to 20 percent of the portland cement in all concrete mixes unless noted otherwise.
- C. Normal-Weight Aggregates: ASTM C 33 and as specified. Provide aggregates from a single source for exposed concrete.
 - 1. For exposed exterior surfaces, do not use fine or coarse aggregates that contain substances that cause spalling.
 - 2. Local aggregates not complying with ASTM C 33 that have been shown to produce concrete of adequate strength and durability by special tests or actual service may be used when acceptable to Architect.
 - 3. Fine Aggregate: Clean, sharp, natural sand free from loam, clay lumps, or other deleterious substances.
 - 4. Coarse Aggregate: Clean, un-coated, processed aggregate containing no clay, mud, loam, or foreign matter, as follows:
 - a. Crushed stone, processed from natural rock or stone.
 - b. Washed gravel, either natural or crushed. Use of pit or bankrun gravels not permitted.
 - c. Maximum Aggregate Size: Not larger than one-fifth of narrowest dimension between sides of forms, one-third of depth of slabs, nor three-fourths of minimum clear spacing between individual reinforcing bars or bundles of bars.
 - 5. Aggregate Supply: Provide aggregates from one source of supply to ensure uniformity in color, size, and shape.
- D. Water: Potable.

2.2 CONCRETE ADMIXTURES

- A. Provide admixtures produced by established reputable manufacturers and use in compliance with manufacturer's printed directions. Do not use admixtures which have not been incorporated and tested in accepted mixes, unless otherwise authorized specifically in writing by Architect.

1. Air-Entraining Admixture: ANSI/ASTM C260
 2. Water-Reducing Admixture: ANSI/ASTM C494, Type A.
 3. Set-Control Admixture: ANSI/ASTM C494
 4. Super Plasticizer: ANSI/ASTM C494, Type F.
- B. Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.
1. Subject to compliance with requirements, provide one of the following:
 - a. "AEA-92 and Air Mix 200", Euclid Chemical Co.
 - b. "MB-VR or MB-AE", Master Builders, Inc.
 - c. "Sika AER", Sika Corp.
- C. Water-Reducing Admixture: ASTM C 494, Type A, and containing not more than 0.05 percent chloride ions.
1. Subject to compliance with requirements, provide one of the following:
 - a. "Eucon WR-75 or Eucon WR-91", Euclid Chemical Co.
 - b. "Pozzolith Normal", Master Builders, Inc.
 - c. "Plastocrete 160", Sika Corp.
- D. High-Range Water-Reducing Admixture (Superplasticizer): ASTM C 494, Type F or Type G and containing not more than 0.05 percent chloride ions.
1. Subject to compliance with requirements, provide one of the following:
 - a. "Eucon 37", Euclid Chemical Co.
 - b. "Rheobuild 1000", Master Builders, Inc.
 - c. "Sikament 300", Sika Corp.
- E. Water-Reducing, Accelerating Admixture: Non-chloride, non-corrosive per ASTM C 494, Type C or E, and not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have long-term non-corrosive test data from and independent testing laboratory (of at least a year's duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures.
1. Subject to compliance with requirements, provide one of the following:
 - a. "Accelguard 80", Euclid Chemical Co.
 - b. "Pozzutec 20", Master Builders, Inc.
- F. Water-Reducing, Retarding Admixture: ASTM C 494, Type D and contain not more than 0.05 percent chloride ions.
1. Subject to compliance with requirements, provide one of the following:
 - a. "Eucon Retarder 75", Euclid Chemical Co.
 - b. "Pozzolith Retarder", Master Builders, Inc.

- c. "Plastiment", Sika Corporation.
- G. Certification: Written conformance to the above-mentioned requirements and the chloride ion content of admixtures will be required from the admixture manufacturer prior to mix design review by the Architect.
- H. Prohibited Admixtures: Calcium chloride or admixtures containing more than 0.05 percent chloride ions are not permitted.

2.3 PROPORTIONING AND DESIGN MIXES

- A. Proportion mixes by either laboratory trial batch or field experience methods as specified in ACI 301, using materials to be employed on the project for each class of concrete required.
- B. Submit written reports to Architect of each proposed mix for each type of concrete at least 15 days prior to start of Work. Indicate with each mix design the items or structures for which it is to be used. Do not begin concrete production until mixes have been reviewed by Architect. Submit the following information:
 - 1. Complete identification of aggregate source of supply.
 - 2. Tests of aggregate for compliance with specified requirements.
 - 3. Scale weight of each aggregate.
 - 4. Absorbed water in each aggregate.
 - 5. Brand, type, and composition of cement.
 - 6. Brand, type, and amount of each mixture.
 - 7. Amounts of water used in trial mixes.
 - 8. Proportions of each material per cu. yd. including fibrous secondary reinforcement.
 - 9. Gross weight and yield per cu. yd. of trial mixtures.
 - 10. Measured slump.
 - 11. Measured air content.
 - 12. Compressive strength developed at 7 days and 28 days, from not less than 3 test cylinders cast for each 7 and 28 day test, and for each design mix. These test reports may be from previous projects within the past 6 months.
 - 13. Identification number or name of mix to verify agreement with compression test reports.
- C. Water-Cement Ratio Methods: Concrete proportions may be established by use of Water-Cement Ratio Limits Table 5.4 and limiting restrictions in ACI 301.
- D. Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant, at no additional cost to Owner and as accepted by Architect. Laboratory test data for revised mix designs and strength results must be submitted to and accepted by Architect before using in work.
- E. Maximum Water Cement Ratio: Concrete mixes shall be limited to those shown on the

contract documents. Unless otherwise noted, the below listed water-cement ratios shall be used for Water Cement Ratios not specified elsewhere:

Specified Compressive Strength f'c, psi	Non-air entrained concrete	Air entrained concrete
3000	0.58	0.46
4000	0.50	0.44

Super plasticizers, flyash, and water reducers shall be used to obtain required slump while maintaining maximum water-cement ratio.

- F. Slump Limits: Proportion and design mixes to result in concrete slump at point of placement as follows:
1. Ramps, slabs, and sloping surfaces: Not more than 3 inches.
 2. Reinforced foundation systems: Not less than 1 inch and not more than 5 inches.
 3. Concrete containing high-range water-reducing admixture (superplasticizer): Not more than 8 inches after adding admixture to site-verified 2-to-3-inch slump concrete.
 4. Other concrete: Not more than 4 inches.
- G. Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant, as accepted by Architect. Laboratory test data for revised mix design and strength results must be submitted to and accepted by Architect before using in Work. Adjustments must be made in writing to the Architect. Only proceed when approval is granted.
- H. Concrete mix for concrete used in metal pan stair treads and platforms shall be as follows:
1. Compressive Strength at 28 days: 4000 psi.
 2. Minimum Cement Content: 517 pounds per cubic yard.
 3. Maximum Water-Cement Ratio: 0.48.
 4. Air Content: 0 to 3 percent.
 5. High range water-reducing admixture is required (high-range not permitted.)
 6. Fiber reinforcement required. Apply at rates as recommended by the fiber manufacturer.
 7. 3/8" maximum aggregate size.
 8. Surface hardener is required for all concrete filled metal pan stairs.
- I. Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. For the trial batch method, use an independent testing agency acceptable to the Architect for preparing and reporting proposed mix designs. Trial batch and field experience tests shall have been performed within 12 months of submittal date.

2.4 RELATED MATERIALS

CAST-IN-PLACE CONCRETE

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- A. Rubber Waterstops: Corps of Engineers CRD-C 513.
 - 1. Manufacturers: Subject to compliance with requirements, provide products of one of the following:
 - a. Progress Unlimited.
 - b. Williams Products, Inc.
- B. Sand Cushion: Clean, manufactured or natural sand.
- C. Preformed Expansion Joint Fillers: Reflex by The JD Russell Company or other expansion joint filler made of Recycled rubber (tires).

2.5 CONCRETE CURING MATERIALS

- A. Moisture-Retaining Cover: One of the following, complying with ANSI-ASTM C171 for concrete floors that are to be exposed or to receive floor sealer. Contractor's option to obtain specified requirements for concrete slabs-on-grade. Coordinate uses with finish material manufacturer's specifications.
 - 1. Waterproof paper
 - 2. Polyethylene film
 - 3. Polyethylene-coated burlap
- B. Water Based Acrylic Liquid Membrane-Forming Curing Compound: Liquid-type membrane-forming curing compound complying with ASTM C 309, Type I, Class B, with 18 to 20 percent minimum solids.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Safe Cure and Seal (J-18), Dayton Superior Corp.
 - b. Aqua-Cure VOX, Euclid Chemical Co.
 - c. Masterseal-W100, Master Builders, Inc.
 - d. Spartan Coate WBII, The Burke Group.
- C. Evaporation Control: Monomolecular film-forming compound applied to exposed concrete slab surfaces for temporary protection from rapid moisture loss.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Eucobar, Euclid Chemical Co.
 - b. E-Con, L&M Construction Chemicals, Inc.
 - c. Confilm, Master Builders, Inc.
 - d. Finishing Aid, The Burke Group.
- D. Concrete curing materials shall be approved by the manufacturer of the product for the final finish on the concrete slabs. Submit written approval/certification.

2.6 SELF-LEVELING UNDERLAYMENT

- A. Free-flowing, self-leveling, pumpable, cement-based compound for applications from 1 inch thick to feathered edges. (If required for patching and repairing).
- B. Compressive strength: 4100 psi minimum at 28 days. Flexural strength: 1300 psi at 28 days. Tensile strength: 750 psi at 28 days. Shrinkage: .025 after 7 days.
- C. Manufacturers:
 - 1. "Thoro Underlayment": Thoro System Products, Centerville, Indiana.
 - 2. "Ardex K-15": Ardex, Inc. Pittsburgh, Pennsylvania.
 - 3. "300 Premium Underlayment": The Burke Group, Converse, Texas.

2.7 CONCRETE UNDERLAYMENT

- A. One-component, cement based trowel grade underlayment. (if required for patching and repairing).
- B. Compressive strength: 4250 psi minimum at 28 days.
Flexural strength: 1000 psi minimum at 28 days.
Tensile strength: 650 psi minimum at 28 days.
- C. Manufacturer:
 - 1. "Thoro Underlayment Trowel Grade": Thoro System Products, Centerville, Indiana.
 - 2. "Burke Feather Patch": The Burke Group, Converse, Texas.

2.8 BONDING AGENT

- A. Chemical Bonding Agent: Film-forming, freeze-thaw resistant compound suitable for brush or spray application complying with MIL-B-19235. Subject to compliance with requirements, provide one of the following:
 - 1. Adbond (J40); Dayton Superior Corp.
 - 2. Euroweld; Euclid Chemical
 - 3. Everbond; L & M Construction Chemicals
 - 4. Sonocrete; Sonneborn Building Products
 - 5. Intralok; W.R. Meadows, Inc.
 - 6. Acrylic Bondcrete, The Burke Group

2.9 CONCRETE PATCHING COMPOUND

- A. Single-component, cement based, polymer modified patching mortar with low slump properties.

1. "Thorite 100" by Thoro System Products, Centerville, Indiana
2. "V/O Patch" by The Burke Group, Converse, Texas.

2.10 ADMIXTURES, GENERAL

- A. Use air-entraining admixture in exterior concrete, unless otherwise indicated. Add air-entraining admixture at the manufacturer's prescribed rate to result in concrete at the point of placement having air content within the following limits:
 1. Concrete structures and slabs exposed to freezing and thawing or subjected to hydraulic pressure:
 - a. 3 to 15 percent for maximum 2 inches aggregate.
 - b. 4-1/2 percent to 6-1/2 percent for maximum 1 inch aggregate.
 - c. 5 to 7 percent for maximum 3/4 inch aggregate.
 - d. 6 to 8 percent for maximum 1/2 inch aggregate.
 2. Other Exterior Concrete: 2 to 4 percent
- B. Use of admixtures for water-reducing and set-control shall be permitted only with prior approval of the Architect for each condition and shall be in strict compliance with the manufacturer's directions.
 1. Design mix submittals shall include these admixtures and shall indicate for which types of concrete structures they are to be used.
- C. Use amount of admixtures as recommended by manufacturer for climatic conditions prevailing at time of placing. Adjust quantities and types of admixtures as required to maintain quality control.
- D. Use of calcium chloride will not be permitted.

2.11 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements of ASTM C 94, and as specified.
 1. When air temperature is between 85 deg F and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes, and when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
 2. Delete the references for allowing additional water to be added to the batch for material with sufficient slump. Addition of water to the batch will not be permitted.
 3. During hot weather or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C94 may be required.

2.12 VAPOR BARRIER

- A. Reinforced polyethylene sheet, 10 mil thick minimum (for interior slabs)

- B. Not required for exterior slabs

PART 3 - EXECUTION

3.1 GENERAL

- A. Coordinate the installation of joint materials, vapor retarder/barrier, and other related materials with placement of forms and reinforcing steel.

3.2 PREPARATION

- A. Pre-placement Inspection: Before placing concrete, inspect and complete the formwork installation, reinforcing steel, and items to be embedded or cast-in. Notify other crafts to permit the installation of their work; cooperate with other trades in setting such work, as required.
 - 1. Inspect soil at bottom of foundation systems which will be subject to testing for soil bearing value by the testing laboratory, as directed by the Architect. Place concrete immediately after approval of foundation excavations.
 - 2. Inspect underslab drainage course areas that were subject to testing for soil bearing value by the testing laboratory as required by Architect. Place concrete immediately after approval of underslab compaction tests.
- B. Material placement for interior slabs on grade and exterior concrete stoops.
 - 1. Under remaining building slabs, place vapor barrier, lapping joints and 6 inches minimum and seal with tape or mastic, lap and fold joints and turn membrane up on walls to top of floor on existing subgrade. Do not puncture membrane.
 - 2. Install and properly anchor the slab reinforcing mesh.
 - 3. Position waterstops and expansion joint fillers where indicated on the Drawings and as recommended by manufacturer. Special precautions shall be taken to avoid collapse during installation.

3.3 JOINTS

- A. Construction Joints: Locate and install construction joints so they do not impair strength or appearance of the structure, as acceptable to Architect.
- B. Provide keyways at least 1-1/2 inches deep in construction joints in walls and slabs and between walls and footings. Bulkheads designed and accepted for this purpose may be used for slabs.
- C. Place construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints except as indicated otherwise. Do not continue reinforcement through sides of strip placements.
- D. Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.

- E. Waterstops: Provide waterstops in construction joints as indicated. Install waterstops to form continuous diaphragm in each joint. Support and protect exposed waterstops during progress of Work. Field-fabricate joints in waterstops according to manufacturer's printed instructions.
- F. Isolation Joints in Slabs-on-Grade: Construct isolation joints in slabs-on-grade at points of contact between slabs-on-grade and vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
 - 1. Joint fillers and sealants are specified in Section 07920.
- G. Contraction (Control) Joints in Slabs-on-Grade: Construct contraction joints in slabs-on-grade to form panels of patterns as shown. Use saw cuts 1/8 inch wide by one-fourth of slab depth or inserts 1/4 inch wide by one-fourth of slab depth, unless otherwise indicated.
 - 1. Form contraction joints by inserting pre-molded plastic, hardboard, or fiberboard strip into fresh concrete until top surface of strip is flush with slab surface. Tool slab edges round on each side of insert. After concrete has cured, remove inserts and clean groove of loose debris.
 - 2. Contraction joints in unexposed floor slabs may be formed by saw cuts as soon as possible after slab finishing as may be safely done without dislodging aggregate but no longer than 6 hours after finishing.
 - 3. If joint pattern is not shown, provide joints not exceeding 12 feet in either direction and located to conform to bay spacing wherever possible (at column centerlines, half bays, third bays).
 - 4. Joint fillers and self-leveling sealants are specified in Section 07920.
- H. Expansion Joints
 - 1. Provide pre-molded joint filler for expansion joints abutting concrete curbs (except in integral walk and curb), catch basins, manholes, inlets, structures, masonry walls, and other fixed objects.
 - 2. Set and secure continuous expansion joint strips where edge of slab abuts vertical surfaces.
 - 3. Locate expansion joints at 30 feet o.c. for walks and curbs, unless otherwise shown.
 - 4. Extend joint fillers full-width and depth of joint, flush with finished surface. Furnish joint fillers in one-piece lengths for the full width being placed, wherever possible. Where more than one length is required, lace or clip joint filler sections together. Form top edge of filler to conform to top profile of concrete.

3.4 INSTALLING EMBEDDED ITEMS

- A. Set and build into formwork anchorage devices and other embedded items required for other work that is attached to or supported by cast-in-place concrete. Use setting drawings, diagrams, instructions, and directions provided by suppliers of items to be attached.

- B. Install reglets to receive top edge of foundation sheet waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, relieving angles, and other conditions.
- C. Install dovetail anchor slots in concrete structures as indicated on drawings.
- D. Forms for Slabs: Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and contours in finished surfaces. Provide and secure units to support screed strips using strike-off templates or compacting-type screeds.

3.5 PREPARING FORM SURFACES

- A. Coat contact surfaces of forms with an approved, non-residual, low-VOC, form-coating compound before placing reinforcement.
- B. Do not allow excess form-coating material to accumulate in forms or come into contact with in-place concrete surfaces against which fresh concrete will be placed. Apply according to manufacturer's instructions.
 - 1. Coat steel forms with a non-staining, rust-preventative material. Rust-stained steel formwork is not acceptable.

3.6 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Comply with ACI 304, "Guide for Measuring, Mixing, Transporting, and Placing Concrete," and as specified.
- C. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened sufficiently to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation at its final location.
 - 1. Concreting shall be carried on at such a rate that at all times the concrete is at all times plastic and flows readily into spaces between reinforcement.
- D. Placing Concrete in Forms: Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints.
 - 1. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete complying with ACI 309.

2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix to segregate.
- E. Placing Concrete Slabs: Deposit and consolidate concrete slabs in a continuous operation, within limits of construction joints, until completing placement of a panel or section.
1. Consolidate concrete during placement operations so that concrete is thoroughly worked around reinforcement, other embedded items and into corners.
 2. Bring slab surfaces to correct level with a straightedge and strike off. Use bull floats or darbies to smooth surface free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.
 3. Maintain reinforcing in proper position on chairs during concrete placement.
- F. Hot-Weather Placement: When hot weather conditions exist that would impair quality and strength of concrete, place concrete complying with ACI 305 and as specified.
1. Cool ingredients before mixing to maintain concrete temperature at time of placement to below 90 deg F (32 deg C). Mixing water may be chilled or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedding in concrete.
 3. Fog spray forms, reinforcing steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without puddles or dry areas.
 4. Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, as acceptable to Architect.

3.7 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: Provide a rough-formed finish on formed concrete surfaces not exposed to view in the finished Work or concealed by other construction. This is the concrete surface having texture imparted by form-facing material used, with tie holes and defective areas repaired and patched, and fins and other projections exceeding 1/4 inch in height rubbed down or chipped off.
- B. Smooth-Formed Finish: Provide a smooth-formed finish on formed concrete surfaces exposed to view or to be covered with a coating material applied directly to concrete, or a covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, painting, or another similar system. This is an as-cast concrete surface obtained with selected form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch defective areas with fins and other projections completely removed and smoothed.

- C. Smooth-Rubbed Finish: Provide smooth-rubbed finish on scheduled concrete surfaces that have received smooth-formed finish treatment not later than 1 day after form removal.
 - 1. Moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
- D. Grout-Cleaned Finish: Provide grout-cleaned finish on scheduled concrete surfaces that have received smooth-formed finish treatment.
 - 1. Combine one part portland cement to one and one-half parts fine sand by volume, and a 50:50 mixture of acrylic or styrene butadiene-based bonding admixture and water to form the consistency of thick paint. Blend standard portland cement and white portland cement in amounts determined by trial patches so that final color of dry grout will match adjacent surfaces.
 - 2. Thoroughly wet concrete surfaces, apply grout to coat surfaces, and fill small holes. Remove excess grout by scraping and rubbing with clean burlap. Keep damp by fog spray for at least 36 hours after rubbing.
- E. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike-off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.8 MONOLITHIC SLAB FINISHES

- A. General Information (Slabs on Grade): The requirements indicated are based upon the latest FF/FL method. Bids for this work shall reflect these requirements and enforcement thereof can be expected.
- B. Nonslip Broom Finish (NsBrm-Fn): Apply nonslip broom finish to exterior concrete with fiber bristle broom, perpendicular to main traffic route. Coordinate required final finish with the Architect before application.

3.9 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures for passage of work by other trades, unless otherwise shown or directed, after work of other trades is in place. Mix, place, and cure concrete as specified to blend with in-place construction. Provide other miscellaneous concrete filling shown or required to complete Work.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- C. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on drawings. Set anchor bolts for machines and equipment to

template at correct elevations, complying with diagrams or templates of manufacturer furnishing machines and equipment.

3.10 CONCRETE CURING AND PROTECTION

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather protect concrete from rapid moisture loss before and during finishing operations with an evaporation-control material. Apply according to manufacturer's instructions after screeding and bull floating, but before power floating and troweling.
- B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 72 hours.
- C. Curing Methods: Cure concrete by curing compound, by moist curing, by moisture-retaining cover curing, or by combining these methods, as specified. Curing methods are contractor's option to obtain finishes as required. Coordinate curing method with floor finish manufacturer. Do not use certain methods as may be required by the floor finish manufacturer.
- D. Provide moisture curing by the following methods:
 - 1. Keep concrete surface continuously wet by covering with water.
 - 2. Use continuous water-fog spray.
 - 3. Cover concrete surface with specified absorptive cover, thoroughly saturate cover with water, and keep continuously wet. Place absorptive cover to provide coverage of concrete surfaces and edges, with a 4-inch lap over adjacent absorptive covers.
- E. Provide moisture-retaining cover curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width with sides and ends lapped at least 3 inches and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
- F. Apply curing compound on exposed interior slabs and on exterior slabs, walks, and curbs as follows:
 - 1. Apply curing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours and after surface water sheen has disappeared). Apply uniformly in continuous operation by power spray or roller according to manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - 2. Use membrane curing compounds that will not affect surfaces to be covered with finish materials applied directly to concrete.
- G. Curing Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces, by moist curing with forms in place for the full curing period or until forms are removed. If forms are removed, continue curing by

methods specified above, as applicable.

- H. Curing Unformed Surfaces: Cure unformed surfaces, including slabs, floor topping, and other flat surfaces, by applying the appropriate curing method.
1. Final cure concrete surfaces to receive finish flooring with a moisture-retaining cover, unless otherwise directed.
 2. Concrete floor surfaces scheduled to receive tile installations shall have been moist cured; curing of these surfaces by sprayed chemical curing compounds is not permitted.

3.11 REMOVING FORMS

- A. Formwork not supporting weight of concrete, such as sides of beams, walls, columns, and similar parts of the work, may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form-removal operations, and provided curing and protection operations are maintained.
- B. Formwork supporting weight of concrete, such as beam soffits, joists, slabs, and other structural elements, may not be removed in less than 14 days or until concrete has attained at least 75 percent of design minimum compressive strength at 28 days. Determine potential compressive strength of in-place concrete by testing field-cured specimens representative of concrete location or members.
- C. Form-facing material may be removed 4 days after placement only if shores and other vertical supports have been arranged to permit removal of form-facing material without loosening or disturbing shores and supports.

3.12 REUSING FORMS

- A. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-coating compound as specified for new formwork.
- B. When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joint to avoid offsets. Do not use patched forms for exposed concrete surfaces except as acceptable to Architect.

3.13 CONCRETE SURFACE REPAIRS

- A. Patching Defective Areas: Repair and patch defective areas with cement mortar immediately after removing forms, when acceptable to Architect.
- B. Mix dry-pack mortar, consisting of one part portland cement to 2-1/2 parts fine aggregate passing a No. 16 mesh sieve, using only enough water as required for handling and placing.

2. Cut out honeycombs, rock pockets, voids over 1/4 inch in any dimension, and holes left by tie rods and bolts down to solid concrete but in no case to a depth less than 1 inch. Make edges of cuts perpendicular to the concrete surface. Thoroughly clean, dampen with water, and brush-coat the area to be patched with bonding agent. Place patching mortar before bonding agent has dried.
 3. For surfaces exposed to view, blend white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Provide test areas at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.
- C. Repairing Formed Surfaces: Remove and replace concrete having defective surfaces if defects cannot be repaired to satisfaction of Architect. Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycomb, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning. Flush out form tie holes and fill with dry-pack mortar or precast cement cone plugs secured in place with bonding agent.
1. Repair concealed formed surfaces, where possible, containing defects that affect the concrete's durability. If defects cannot be repaired, remove and replace the concrete.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as monolithic slabs, for smoothness and verify surface tolerances specified for each surface and finish. Correct low and high areas as specified. Test unformed surfaces sloped to drain for trueness of slope and smoothness by using a template having the required slope.
1. Repair finished unformed surfaces containing defects that affect the concrete's durability. Surface defects include crazing and cracks in excess of 0.01 inch wide or that penetrate to the reinforcement or completely through non-reinforced sections regardless of width, spalling, pop-outs, honeycombs, rock pockets, and other objectionable conditions.
 2. Correct high areas in unformed surfaces by grinding after concrete has cured at least 14 days.
 3. Correct low areas in unformed surfaces during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete. Proprietary underlayment compounds may be used when acceptable to Architect.
 4. Repair defective areas, except random cracks and single holes not exceeding 1 inch in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose reinforcing steel with at least 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials to provide concrete of same type or class as original concrete. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
- E. Repair isolated random cracks and single holes 1 inch or less in diameter by dry-pack method. Groove top of cracks and cut out holes to sound concrete and clean of dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding

Attachment H.

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compound. Place dry-pack before bonding agent has dried. Compact dry-pack mixture in place and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

- F. Perform structural repairs with prior approval of Architect for method and procedure, using specified epoxy adhesive and mortar.
- G. Repair methods not specified above may be used, subject to acceptance of Architect.

3.14 UNDERLAYMENTS

- A. Install in strict accordance with manufacturer's written installation instructions and provide primers as recommended.

END OF SECTION 03300