CONTRACT DOCUMENTS AND
SPECIFICATIONS
FOR

HOBART PARK BASEBALL FIELD IMPROVEMENTS

BID NO. 2024048

PREPARED FOR
THE BOARD OF COUNTY COMMISSIONERS
INDIAN RIVER COUNTY, FLORIDA

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WILLIAM K. DEBRAAL, COUNTY ATTORNEY

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SECTION – 00100 Advertisement for Bids

BOARD OF COUNTY COMMISSIONERS

1801 27th Street
Vero Beach, Florida 32960

ADVERTISEMENT FOR BIDS
INDIAN RIVER COUNTY

Sealed bids will be received by Indian River County until **2:00 P.M. on Wednesday, July 17, 2024.** Each bid shall be submitted in a sealed envelope and shall bear the name and address of the bidder on the outside and the words "**HOBART PARK BASEBALL FIELD IMPROVEMENTS**" and **Bid No. 2024048**. Bids should be addressed to Purchasing Division, Room B1-301, 1800 27th Street, Vero Beach, Florida 32960. All bids will be opened publicly and read aloud at 2:00 P.M. All bids received after 2:00 P.M., on the day specified above, will not be accepted or considered.

The proposed project includes furnishing all materials, labor and equipment (unless otherwise specified) necessary for the construction of a baseball field complex at 58th Avenue and 77th Street.

All material and equipment furnished and all work performed shall be in strict accordance with the plans, specifications, and contract documents pertaining thereto. Detailed specifications are available at: www.demandstar.com or at https://indianriver.gov/services/management___budget/purchasing/index.php under "Current Solicitations".

All bidders shall submit one (1) original and one (1) copy of the Bid Proposal forms provided within the specifications. Please note that the questionnaire must be filled out completely including the financial statement. BID SECURITY must accompany each Bid, and must be in the form of an AIA Document A310 Bid Bond, properly executed by the Bidder and by a qualified surety, or a certified check or a cashier's check, drawn on any bank authorized to do business in the State of Florida. Bid Security must be in the sum of not less than **Five Percent (5%)** of the total amount of the bid, made payable to Indian River County Board of County Commissioners. In the event the Contract is awarded to the Bidder, Bidder will enter in a Contract with the County and furnish the required 100% Public Construction Bond and certificates of insurance within the timeframe set by the County. If Bidder fails to do so, the Bid Security shall be retained by the County as liquidated damages and not as penalty.

The County reserves the right to delay awarding of the Contract for a period of **ninety (90)**

days after the bid opening, to waive informalities in any bid, or reject any or all bids in whole or in part with or without cause/or to accept the bid that, in its judgement, will serve the best interest of Indian River County, Florida. The County will not reimburse any Bidder for bid preparation costs.

A NON-MANDATORY Pre-Bid Conference will be held on Thursday, June 27th, 2024 at 9 a.m. at the existing fields, located on the corner of 58th Avenue and 77th Street. ATTENDANCE AT THIS CONFERENCE BY ALL BIDDERS IS HIGHLY ENCOURAGED.

INDIAN RIVER COUNTY

By: Jennifer Hyde
Purchasing Manager

For Publication in the Indian River Press Journal
Date: June 16, 2024

For: Indian River Press Journal

Please furnish tear sheet and Affidavit of Publication to:

INDIAN RIVER COUNTY
PURCHASING DIVISION
1800 27th Street
Building "B"
Vero Beach, FL 32960
Account 1125968

*** * END OF SECTION * ***

SECTION 00200 – Instructions to Bidders

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SECTION 00200 – Instructions to Bidders

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SECTION 00200 – Instructions to Bidders

ARTICLE 1 - DEFINED TERMS

1.01 Terms used in these Instructions to Bidders will have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof:

A. Bidder--The individual or entity who submits a Bid directly to OWNER.

B. Issuing Office--The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

C. Successful Bidder--The lowest responsible Bidder submitting a responsive Bid to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.

D. ENGINEER – References OWNER's Consultant, Masteller & Moler, Inc.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement for Bids or Invitation to Bid may be obtained from the Issuing Office.

2.02 Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

ARTICLE 3 - QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of OWNER's request Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.

A. Bidder must have at least five years' experience in the construction of similar projects of this size and larger.
B. Bidder must have successfully constructed, as prime CONTRACTOR, at least three projects similar in scope to this project.
C. Bidder must have good recommendations from at least three clients similar to the OWNER.
D. The Bidder's superintendent and assistants must be qualified and experienced in similar projects in all categories.
E. Bidder must be able to provide evidence of authority to conduct business in the jurisdiction in which the project is located.

3.02 Each bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

3.03 The OWNER reserves the right to reject bids from Bidders that are unable to meet the listed required qualifications.

3.04 Bidder must be registered with and use, at their sole expense, the Department of Homeland Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees, as required by Section 448.095, F.S.. Owner, contractor, and subcontractors may not enter into a contract unless each party to the contract registers with and uses the E-Verify system. Contractor is also responsible for obtaining an affidavit from all subcontractors, as required in Section 448.095(5)(b), F.S., stating the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. This requirement applies to any provider of services or goods.

3.05 Bidder must hold a current registration as a General Contractor in the State of Florida.

3.06 **Conflict of Interest:** Any entity submitting a bid or proposal or entering into a contract with the County shall disclose any relationship that may exist between the contracting entity and a County Commissioner or a County Employee. The relationship with a County Commissioner or a County Employee that must be disclosed is as follows*: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half-brother, half-sister, grandparent, or grandchild.* The term "*affiliate*" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity. The disclosure of relationships shall be a sworn statement made on a County approved form. Failure to submit the form may be cause for rejection of the bid or proposal.

3.07 Public Entity Crimes: Pursuant to Florida Statutes Section 287.133(2)(a), all Bidders are hereby notified that 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 (defined as the State of Florida, any of its departments or agencies, or any political subdivision); 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 Florida Statutes Section 287.017 for CATEGORY TWO [currently $35,000] for a period of 36 months from the date of being placed on the convicted vendor list. A "public entity crime" means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3.08 **Records/Audit:** The Bidder shall maintain books, records and documents pertinent to performance under this Invitation and any resulting Agreement in accordance with generally accepted accounting principles consistently applied. The County and the Florida Office of the Inspector General shall have inspection and audit rights to such records for audit purposes during the term of the contract and for three years following the termination of obligations hereunder. Records which relate to any litigation, appeals or settlements of

claims arising from performance under this work or purchase shall be made available until a final disposition has been made of such litigation, appeals, or claims.

ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

4.01 Subsurface and Physical Conditions

A. The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.

2. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Bidding Documents.

B. Copies of reports and drawings referenced in paragraph 4.01.A will be made available by OWNER to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.02 of the General Conditions has been identified and established in paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings.

4.02 Underground Facilities

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to OWNER and ENGINEER by OWNERs of such Underground Facilities, including OWNER, or others.

4.03 Hazardous Environmental Condition

A. The Supplementary Conditions identify those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that ENGINEER has used in preparing the Bidding Documents.

B. Copies of reports and drawings referenced in paragraph 4.03.A will be made available by OWNER to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.06 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which

was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in paragraph 4.06 of the General Conditions.

4.05 Upon a request directed to the Purchasing Division (purchasing@indianriver.gov or (772) 226-1416), OWNER will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.06 "This paragraph has been deleted intentionally"

4.07 It is the responsibility of each Bidder before submitting a Bid to:

A. examine and carefully study the Bidding Documents, including any Addenda and the other related data identified in the Bidding Documents;

B. VISIT THE SITE AND BECOME FAMILIAR WITH AND SATISFY BIDDER AS TO THE GENERAL, LOCAL, AND SITE CONDITIONS THAT MAY AFFECT COST, PROGRESS, AND PERFORMANCE OF THE WORK;

C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, or performance of the Work;

D. carefully study all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and carefully study all reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions;

E. obtain and carefully study (or assume responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (overhead, surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;

F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;

G. become aware of the general nature of the work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents;

H. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;

I. promptly give ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by ENGINEER is acceptable to Bidder; and

J. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by ENGINEER are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 - PRE-BID CONFERENCE

5.01 The date, time, and location for the **NON-MANDATORY** Pre-Bid conference, if any, is specified in the Advertisement for Bids. Representatives of OWNER and ENGINEER will be present to discuss the Project. Bidders are *HIGHLY ENCOURAGED* to attend and participate in the conference. OWNER will transmit to all prospective Bidders of record such Addenda as OWNER and ENGINEER consider necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 6 - SITE AND OTHER AREAS

6.01 The Site is identified in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by OWNER unless otherwise provided in the Bidding Documents.

ARTICLE 7 - INTERPRETATIONS AND ADDENDA

7.01 CONE OF SILENCE. Potential bidders and their agents shall not communicate in any way with the Board of County Commissioners, County Administrator or any County staff other than Purchasing personnel in reference or relation to this solicitation. This restriction shall be effective from the time of bid advertisement until the Board of County Commissioners meets to authorize award. Such communication may result in disqualification.

7.02 All questions about the meaning or intent of the Bidding Documents are to be submitted to PURCHASING (purchasing@indianriver.gov) in writing. Interpretations or clarifications considered necessary by ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties through the Issuing Office as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.03 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or ENGINEER.

ARTICLE 8 - BID SECURITY

8.01 Each Bid must be accompanied by Bid Security made payable to OWNER in the amount of five percent of the Bidder's maximum base bid price and in the form of a certified check; cashier's check; or an AIA Document A310 Bid Bond issued by a surety meeting the requirements of Paragraph 5.01 of the General Conditions. The Bid Bond shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. The Surety must be authorized to issue surety bonds in Florida. The Bidder shall require the attorney-in-fact who executes any Bond, to affix to each a current certified copy of their Power of Attorney, reflecting such person's authority as Power of Attorney in the State of Florida. Further, at the time of execution of the Contract, the Successful Bidder shall for all Bonds, provide a copy of the Surety's current valid Certificate of Authority issued by the United States Department of the Treasury under 31 United States Code sections 9304-9308. The Surety shall also meet the requirements of paragraphs 5.01 and 5.02 of the General Conditions.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that Bidder will be retained by the owner. The Bid Security of other Bidders whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of seven days after the Effective Date of the Agreement or 91 days after the Bid opening, whereupon Bid Security furnished by such Bidders will be returned.

8.03 Bid Security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of calendar days within which, or the dates by which, the Work is to be (a) Substantially Completed and (b) also completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to ENGINEER, application for such acceptance will not be considered by ENGINEER until after the Effective Date of the Agreement. The procedure for submission of any such application by CONTRACTOR and consideration by ENGINEER is set forth in the General Conditions and may be supplemented in the General Requirements.

ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to OWNER in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to OWNER a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by OWNER. If OWNER or ENGINEER, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, OWNER may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, OWNER may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which OWNER or ENGINEER makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER and ENGINEER subject to revocation of such acceptance after the Effective Date of the Agreement as provided in paragraph 6.06 of the General Conditions.

12.03 CONTRACTOR shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom CONTRACTOR has reasonable objection.

12.04 CONTRACTOR shall not purchase equipment for State or Local ownership under a Florida Department of Transportation LAP project.

ARTICLE 13 - PREPARATION OF BID

13.01 The Bid form is included with the Bidding Documents. Only the bid form provided by OWNER is acceptable (Bidders are not to recreate or modify the bid form). ***Bids not submitted on the bid form(s) shall be rejected, as will bids submitted on rewritten, recreated or modified bid forms.***

13.02 All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.

13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.

13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown below the signature.

13.06 A Bid by an individual shall show the Bidder's name and official address.

13.07 A Bid by a joint venture shall be executed by each joint venturor in the manner indicated on the Bid form. The official address of the joint venture must be shown below the signature.

13.08 All names shall be typed or printed in ink below the signatures.

13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form.

13.10 The address and telephone number for communications regarding the Bid shall be shown.

13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number or county registration number for the state or county of the Project, if any, shall also be shown on the Bid form.

13.12 All supporting information requested in the Bid Form must be furnished. Do not leave any questions or requests unanswered.

13.13 In accordance with Florida Statutes Section 218.80, the "Public Bid Disclosure Act", Indian River County as OWNER is obligated to disclose all license, permit, impact, or inspection fees that are payable to Indian River County in connection with the construction of the Work by the accepted bidder. All permit, impact, or inspection fees payable to Indian River County in connection with the work on this County project will be paid by Indian River County, with the exception of re-inspection fees. The Bidder shall not include ANY PERMIT, IMPACT, NOR INSPECTION FEES payable to **Indian River County** in the bid.

13.14 CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to perform additional work not covered on the Contract Drawings. The **FORCE ACCOUNT** is intended as a contingency for unforeseen work. Lump sum amount for **FORCE ACCOUNT** work is included in the bid schedule. The value of force account work will be determined in accordance with Article 12 of the General Conditions.

ARTICLE 14 - BASIS OF BID; EVALUATION OF BIDS

14.01 Unit Price

A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule. Omission of unit prices where required will result in disqualification of the bid.

B. The total of all estimated prices will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid for the item. The final quantities and Contract Price will be determined in accordance with paragraph 11.03 of the General Conditions.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

14.02 The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 11.02 of the General Conditions.

14.03 The Bidder's attention is called to the fact that any estimate of quantities of work to be done and materials to be furnished under the Specifications as shown on the Bid Schedule, or elsewhere, is approximate only and not guaranteed. The OWNER does not assume any responsibility that the final quantities shall remain in strict accordance with the estimated quantities, nor shall the Bidder plead misunderstanding or deception because of such estimate of quantities or of the character, location of the work, or other conditions pertaining thereto.

14.04 Per section 287.05701, Florida Statutes, as amended, OWNER may not request documentation of, or consider a Bidder's social, political, or ideological interests when determining if the Bidder is responsible, and may not give preference to a Bidder based on the Bidder's social, political, or ideological interests.

ARTICLE 15 - SUBMITTAL OF BID

15.01 The Bid form is to be completed and submitted with the Bid security and the following data:

A. Sworn Statement under Section 105.08, Indian River County Code, on Disclosure of Relationships.

B. Sworn Statement under the Florida Trench Safety Act.

C. Qualifications Questionnaire.

D. List of Subcontractors.

E. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project Title and Bid Number (and, if applicable, the designated portion of the Project for which the Bid is submitted), Bid Number, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If mail or other delivery system sends a Bid, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Indian River County, Purchasing Division, 1800 27th Street, Vero Beach, Florida, 32960.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

16.02 If within 48 hours after Bids are opened any Bidder files a duly signed written notice with OWNER and promptly thereafter demonstrates to the reasonable satisfaction of OWNER that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 - OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but OWNER may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 - AWARD OF CONTRACT

19.01 OWNER reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. OWNER further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to be non-responsible. OWNER may also reject the Bid of any Bidder if OWNER believes that it would not be in the best interest of the Project to make an award to that Bidder. OWNER also reserves the right to waive all technicalities and informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder. The County will not reimburse any Bidder for bid preparation costs. Owner reserves the right to cancel the award of any Contract at any time before the execution of such Contract by all parties without any liability to the Owner. For and in consideration of the Owner considering Bids submitted, the Bidder, by submitting its Bid, expressly waives any claim to damages, of any kind whatsoever, in the event the Owner exercises its right to cancel the award in accordance herewith.

19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

19.03 In evaluating Bids, OWNER will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating Bidders, OWNER will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.

19.05 OWNER may conduct such investigations as OWNER deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.

19.06 If the Contract is to be awarded, OWNER will award the Contract to the Bidder whose Bid is in the best interests of the Project.

19.07 OWNER has no local ordinance or preferences, as set forth in FS 255.0991 (2) in place, therefore no preference prohibited by that section will be considered in the acceptance, review or award of this bid.

19.08 Bidders are hereby notified of the provisions of Section 287.05701, Florida Statutes, as amended, that the County will not request documentation of or consider a Bidder's social, political, or ideological interests when determining if the Bidder is responsible. Bidders are further notified that the County's governing body may not give preference to a Bidder based on the Bidder's social, political, or Ideological interests.

19.09 Any actual or prospective bidder or proposer who is aggrieved in connection with the bidding and/or selection process may protest to the OWNER's Purchasing Manager. The protest shall be submitted in writing to the Purchasing Manager within five (5) calendar days after the bidder or proposer knows or should have known of the facts giving rise to the protest.

19.10 The County will reject any bid that is unbalanced, if it is in the best interest of the County to do so. A bid will be considered unbalanced when, in the opinion of the Purchasing Manager, the bid allocates a disproportionate share of costs to the price of one or more bid items in order to reduce the costs to the price of another bid item or items, and if there is a reasonable possibility that the bid will not result in the lowest overall cost to the County.

19.11 CONTRACTOR certifies that it and its related entities as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, CONTRACTOR certifies that it and its related entities as defined above by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria.

OWNER may terminate this Contract if CONTRACTOR is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes.

OWNER may terminate this Contract if CONTRACTOR, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies, that exist for the purpose of making profit, is

found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.

Accordingly, firms responding to this solicitation shall return with their response an executed copy of the attached "Certification Regarding Prohibition Against Contracting With Scrutinized Companies." Failure to return this executed form with submitted bid/proposal/statement of qualifications will result in the response being deemed non-responsive and eliminated from consideration.

ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth OWNER's requirements as to Public Construction Bond and insurance. When the Successful Bidder delivers the executed Agreement to OWNER, it must be accompanied by the required insurance certificate(s) and Bond, unless the Bond has been waived due to the total contract being less than $100,000.

ARTICLE 21 - SIGNING OF AGREEMENT

21.01 When OWNER gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within fifteen (15) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to OWNER**.**

21.02 OWNER shall return one fully signed counterpart to Successful Bidder.

21.03 Should Bidder to whom the Contract has been awarded refuse or fail to complete the requirements of Article 21.01 above, the additional time in calendar days, required to correctly complete the documents will be deducted, in equal amount, from the Contract time. Or, the OWNER may elect to revoke the Award and the OWNER shall hold the Bid Bond for consequential damages incurred, and the Contract may be awarded as the OWNER desires.

*** * END OF SECTION * ***

SECTION 00300 – Bid Package Contents

THIS PACKAGE CONTAINS:

SECTION TITLE	SECTION NUMBER
Bid Form	00310
Bid Bond	00430
Sworn Statement on Disclosure of Relationships	00452
Sworn Statement Under the Florida Trench Safety Act	00454
Qualifications Questionnaire	00456
List of Subcontractors	00458
Certification Regarding Prohibition Against Contracting with Scrutinized Companies	00460

SUBMIT ONE (1) ORIGINAL AND ONE (1) COPY OF THIS COMPLETE PACKAGE WITH YOUR BID

*** * END OF SECTION * ***

SECTION 00310 – Bid Form

PROJECT IDENTIFICATION:

Project Name:	**HOBART PARK BASEBALL FIELD IMPROVEMENTS**
Bid Number:	**2024048**
Project Address:	**5150 77th Street**
	Vero Beach, FL 32967
Project Description:	***The proposed project includes furnishing all materials, labor and equipment (unless otherwise specified) necessary for the construction of a baseball field complex at 58th Avenue and 77th Street***
Project Name:	**HOBART PARK BASEBALL FIELD IMPROVEMENTS**

THIS BID IS SUBMITTED TO: INDIAN RIVER COUNTY
1800 27th Street
VERO BEACH, FLORIDA 32960

1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

2.01 Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of OWNER.

3.01 In submitting this Bid, Bidder represents, as set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum Date	Addendum Number

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities)

which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and (2) reports and drawings of a Hazardous Environmental Condition, if any, which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions.

E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.

I. Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by ENGINEER is acceptable to Bidder.

J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

4.01 Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

[The remainder of page intentionally left blank]

ITEMIZED BID SCHEDULE

PROJECT NAME: Hobart Park Baseball Field Improvements

BID NO. 2024048

BIDDER'S Name:

Item No.	Description	Unit	Quantity	Unit Price	Amount
	EROSION & SEDIMENT CONTROL				
1	Prevention, Control & Abatement of Erosion & Water Pollution	1	LS	$	$
	GENERAL CONDITIONS				
2	Mobilization / General Conditions	1	LS	$	$
3	Demolish Ex. Structure / Septic System	1	LS	$	$
	SITE WORK				
4	Clearing & Stripping	8.00	AC	$	$
5	Excavation	6,280	CY	$	$
6	Import Fill (In-Place)	13,000	CY	$	$
7	Grading	55,000	SY	$	$
8	Inline Drain (15")	6	EA	$	$
9	Type "C" Inlet	5	EA	$	$
10	New Stormwater Control Structure	1	LS	$	$
11	HDPE - 12" Dia.	733	LF	$	$
12	CAP - 18"	105	LF	$	$
13	RCP - 18" Dia.	894	LF	$	$
14	MES - 18" Dia. RCP	3	EA	$	$
15	Parking Area - Asphalt 1.5" SP12.5	2,640	SY	$	$
16	Parking Area - Cemented Coquina Rock 6" Thick (Surface)	2,700	SY	$	$
17	Parking Area - 8" Stabilized Subgrade	2,750	SY	$	$
18	Maintenance Drive - 8" Stabilized Subgrade	1,250	SY	$	$
19	Sidewalks (6' wide 4" Thick)	1,111	SY	$	$
20	Fencing (Remove)	1,380	LF	$	$
21	Fencing (24' height)	190	LF	$	$
22	Fencing (10' Height w/ Cap)	1,165	LF	$	$
23	Fencing 8'-10' Height (Dugouts)	232	LF	$	$
24	Fencing 6' Height w/ Cap	1,525	LF	$	$
25	Fencing (Single gate)	8	EA	$	$
26	Fencing (Double Gate)	4	EA	$	$

Item No.	Description	Unit	Quantity	Unit Price	Amount
27	2" x 12" Wood Back Stop	186	LF	$	$
28	Thermoplastic Parking Striping /Signs	1	LS	$	$
	UTILITIES				
29	Sewer Wet Tap w/ Valve (12" x 4")	1	LS	$	$
30	Gate Valve (4")	1	EA	$	$
31	Sewer Lateral (4" PVC w/cleanout)	120	LF	$	$
32	Sewer Lift Station	1	LS	$	$
33	Sewer Force Main (2" PVC)	140	LF	$	$
34	Sewer Force Main (4" PVC)	50	LF	$	$
35	Potable Water Wet Tap Connection (24" x 6")	1	LS	$	$
36	Potable Water Fire Hydrant Assembly w/ Valve	1	LS	$	$
37	3/4" Potable Water Service w/ RPZ	180	LF	$	$
38	4" x 16" Wet Tap w/2" Threaded Nipple	1	EA	$	$
39	2" Potable Water w/ RPZ	580	LF	$	$
	IRRIGATION				
40	Irrigation / Well Installation	1	LS	$	$
	TURF				
41	College Field - Root Zone Soil Mix (In Place)	1,420	CY	$	$
40	College Field - Warning Track	210	CY	$	$
41	College Field - Infield Clay Mix	140	CY	$	$
42	College Field - Bullpens - Clay Mix	70	SY	$	$
43	College Field - Bullpens - Warning Track Material	100	SY	$	$
44	College Field - Field Grading (Root Zone Mix / Clay)	13,000	SY	$	$
45	College Field - Grassing - Performance Turf (Sprigged)	12,900	SY	$	$
46	Hybrid Field - Root Zone Soil Mix (In Place)	815	CY	$	$
47	Hybrid Field - Warning Track	110	CY	$	$
48	Hybrid Field - Infield Clay Mix	160	CY	$	$
49	Hybrid Field - Bullpens - Clay Mix	70	SY	$	$
50	Hybrid Field - Bullpens - Warning Track Material	100	SY	$	$
51	Hybrid Field - Field Grading (Root Zone Mix / Clay)	7,500	SY	$	$
52	Hybrid Field - Grassing - Performance Turf (Sprigged)	7,405	SY	$	$
	SOD				
53	Grassing - Seed & Mulch (Bahia)	27,700	SY	$	$

Item No.	Description	Unit	Quantity	Unit Price	Amount
	CONCRETE / MASONRY				
54	Reinforced Concrete Bleacher Slabs (College Field)	20	CY	$	$
55	Reinforced Concrete Dugout Slabs (College Field)	29	CY	$	$
56	Reinforced Concrete Bleacher Slabs (Hybrid Field)	14	CY	$	$
57	Reinforced Concrete Dugout Slabs (Hybrid Field)	29	CY	$	$
	CONCESSION BUILDING				
58	Concession Building	1	LS	$	$
	EQUIPMENT / SPECIAL				
59	Dugouts	4	LS	$	$
60	Flagpole with Flag	1	LS	$	$
61	Scoreboard	1	LS	$	$
	PLUMBING				
62	Plumbing	1	LS	$	$
	ELECTRICAL				
63	Electrical	1	LS	$	$
	SURVEYING				
64	Stake-Out	1	LS	$	$
	LANDSCAPING				
65	Landscaping	1	LS	$	$
	TREE MITIGATION FEE ASSESSMENT				
66	Tree Mitigation Fee Assessment	1	LS	$	$
	REMOVE / RELOCATE CABBAGE PALMS				
67	Remove / Relocate Cabbage Palms	1	LS	$	$
	MISCELLANEOUS				
68	Coordination w/ Site Lighting Contractor	1	LS	$	$
69	As-built Surveying and Final Record Drawing Preparation (by FL Registered Surveyor on Surveyor generated drawings)	1	LS	$	$
	SUBTOTAL =				$
999-25A	**FORCE ACCOUNT =**				**$400,000.00**
	TOTAL PROJECT BID AMOUNT (INCLUDING FORCE ACCOUNT) =				$

LS=Lump Sum AC=Acre EA=Each CY=Cubic Yard SY=Square Yard TN=Ton LF=Linear Foot AS=Assembly

NOTE: IF THERE IS A DISCREPANCY BETWEEN THE PLANS (SUMMARY OF PAY ITEMS) AND THE ITEMIZED BID SCHEDULE, THE BID SCHEDULE WILL BE UTILIZED FOR BIDDING PURPOSES.

TOTAL PROJECT BID AMOUNT IN WORDS _____

_____

5.01 Bidder shall complete the Work in accordance with the Contract Documents for the price(s) contained in the Bid Schedule:

A. The Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

B. The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans. Furthermore, the Owner reserves the right to omit in its entirety any one or more items of the Contract without forfeiture of Contract or claims for loss of anticipated profits or any claims by the Contractor on account of such omissions.

C. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided. The quantities actually required to complete the contract and work may be less or more than so estimated, and, if so, no action for damages or for loss of profits shall accrue to the Contractor by reason thereof.

D. Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.

6.01 Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified, which shall be stated in the Agreement.

7.01 The following documents are attached to and made a condition of this Bid:

A. Itemized Bid Schedule;

B. Required Bid security in the form of _____;

C. Sworn Statement under Section 105.08, Indian River Code, on Disclosure of Relationships;

D. Sworn Statement Under the Florida Trench Safety Act;

E. Qualifications Questionnaire;

F. List of Subcontractors;

G. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

8.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

SUBMITTED on _____, 20___.

State Contractor License No. _____

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)
Doing business as: _____
Business address: _____
_____
Phone No.: _____ FAX No.: _____
Email: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Business address: _____
_____
Phone No.: _____ FAX No.: _____
Email: _____

A Corporation

Corporation Name: _____ (SEAL)
State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability):_____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: _____
_____
Phone No.: _____ FAX No.: _____
Email: _____

Date of Qualification to do business is _____.

A Joint Venture

Joint Venture Name: _____ (SEAL)

By: _____
(Signature of joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____
_____
Phone No.: _____ FAX No.: _____
Email: _____

Joint Venture Name: _____ (SEAL)

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____
Title: _____
Business address: _____
_____
Phone No.: _____ FAX No.: _____
Email: _____

Phone and FAX Number, and Address for receipt of official communications:

_____

_____

(Each joint venturor must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

*** * END OF SECTION * ***

SECTION 00430 – Bid Bond

AIA DOCUMENT A310 BID BOND

The Contractor shall use the document form entitled “AIA Document A310 Bid Bond.”

END OF SECTION

SECTION 00452 – Sworn Statement on Disclosure of Relationships

SWORN STATEMENT UNDER SECTION 105.08, INDIAN RIVER COUNTY CODE, ON DISCLOSURE OF RELATIONSHIPS

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement MUST be submitted with Bid, Proposal or Contract No. 2024048

   for Hobart Park Baseball Field Improvements

2. This sworn statement is submitted by: _____

   _____

   (Name of entity submitting Statement)

   whose business address is:

   _____

3. My name is _____
   (Please print name of individual signing)

   and my relationship to the entity named above is _____

4. I understand that an "affiliate" as defined in Section 105.08, Indian River County Code, means:

   The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity.

5. I understand that the relationship with a County Commissioner or County employee that must be disclosed as follows:

   Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, or grandchild.

6. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies.]

_____Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, have any relationships as defined in section 105.08, Indian River County Code, with any County Commissioner or County employee.

_____The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents, who are active in management of the entity have the following relationships with a County Commissioner or County employee:

Name of Affiliate or entity	Name of County Commissioner or employee	Relationship

_____
(Signature)

_____
(Date)

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this _____day of _____ 20_____, by _____ (name of person making statement).

_____
(Signature of Notary Public - State of Florida)
(Print, Type, or Stamp Commissioned Name of Notary Public)

☐ who is personally known to me or ☐ who has produced _____ as identification.

*** * END OF SECTION * ***

SECTION 00454 – Sworn Statement Under the Florida Trench Safety Act

THIS FORM MUST BE SIGNED BY THE BIDDER WHO WILL BE RESPONSIBLE FOR THE EXCAVATION WORK ("BIDDER"), OR ITS AUTHORIZED REPRESENTATIVE, IN THE PRESENCE OF A NOTARY PUBLIC AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with Bid No. **2024048** for Hobart Park Baseball Field Improvements

2. This Sworn Statement is submitted by _____
(Legal Name of Entity Submitting Sworn Statement)
_____, hereinafter "BIDDER". The BIDDER's address is
_____.
BIDDER's Federal Employer Identification Number (FEIN) is _____.

3. My name is _____ and my relationship to the BIDDER
(Print Name of Individual Signing)
is _____.
(Position or Title)
I certify, through my signature at the end of this Sworn Statement, that I am an authorized representative of the BIDDER.

4. The Trench Safety Standards that will be in effect during the construction of this Project are contained within the Trench Safety Act, Section 553.60 et.seq. Florida Statutes and refer to the applicable Florida Statue(s) and/or OSHA Regulation(s) and include the "effective date" in the citation(s). Reference to and compliance with the applicable Florida Statute(s) and OSHA Regulation(s) is the complete and sole responsibility of the BIDDER. Such reference will not be checked by OWNER or ENGINEER and they shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

5. The BIDDER assures the OWNER that it will comply with the applicable Trench Safety Standards.

6. The BIDDER has allocated and included in its bid the total amount of $_____, based on the linear feet of trench to be excavated over five (5) feet deep, for compliance with the applicable Trench Safety Standards, and intends to comply with said standards by instituting the following specific method(s) of compliance on this Project: _____
_____
_____
_____
_____.
The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness, or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

7. The BIDDER has allocated and included in its bid the total amount of $_____ based on the square feet of shoring to be used for compliance with shoring safety requirements and intends to comply with said shoring requirements by instituting the following specific method(s) of compliance on this Project: _____
_____
_____
_____
_____.

The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

8. The BIDDER, in submitting this bid, represents that it has obtained and considered all available geotechnical information, has utilized said geotechnical information and that, based on such information and the BIDDER's own information, the BIDDER has sufficient knowledge of the Project's surface and subsurface site conditions and characteristics to assure BIDDER's compliance with the applicable Trench Safety Standards in designing the trench safety system(s) for the Project.

BIDDER: _____

By: _____

Position or Title: _____
Date: _____

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this _____day of _____, 20_____, by _____
_____
(name of person making statement).

_____
(Signature of Notary Public - State of Florida)
(Print, Type, or Stamp Commissioned Name of Notary Public)

☐ who is personally known to me or ☐ who has produced
_____ as identification.

*** * END OF SECTION * ***

SECTION 00456 – Qualifications Questionnaire

NOTICE: THE OWNER RETAINS THE DISCRETION TO REJECT THE BIDS OF NON-RESPONSIBLE BIDDERS.

Documentation Submitted with Bid No: 2024048

Project Name: Hobart Park Baseball Field Improvements

1. Bidder's Name / Address: _____
_____

2. Bidder's Telephone & FAX Numbers: _____
_____

3. Licensing and Corporate Status:
   a. Is Contractor License current? _____
   b. Bidder's Contractor License No: _____
   [Attach a copy of Contractor's License to the bid]
   c. Attach documentation from the State of Florida Division of Corporations that indicates the business entity's status is active and that lists the names and titles of all officers.

4. Number of years the firm has performed business as a Contractor in construction work of the type involved in this contract: _____

5. What is the last project OF THIS NATURE that the firm has completed?
_____
_____

6. Has the firm ever failed to complete work awarded to you? _____

   [If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which the firm failed to complete the work.]

7. Has the firm ever been assessed liquidated damages? _____

   [If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which liquidated damages have been assessed.]

8. Has the firm ever been charged by OSHA for violating any OSHA regulations? _____

   [If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which OSHA violations were alleged.]

9. Has the firm implemented a drug-free workplace program in compliance with Florida Statute 287.087? _____

   (In the case of a tie, preference will be given to businesses with drug-free workplace programs)

10. Has the firm ever been charged with noncompliance of any public policy or rules? _____

    [If your answer is “yes”, then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner’s telephone number for each project.]

11. Attach to this questionnaire, a notarized financial statement and other information that documents the firm’s financial strength and history.

12. Has the firm ever defaulted on any of its projects? _____

    [If your answer is “yes”, then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner’s telephone number for each project in which a default occurred.]

13. Attach a separate page to this questionnaire that summarizes the firm’s current workload and that demonstrates its ability to meet the project schedule.

14. Name of person who inspected the site of the proposed work for the firm:

    Name: _____ Date of Inspections: _____

15. Name of on-site Project Foreman: _____

    Number of years of experience with similar projects as a Project Foreman: _____

16. Name of Project Manager: _____

    Number of years of experience with similar projects as a Project Manager: _____

17. State your total bonding capacity: _____

18. State your bonding capacity per job: _____

19. Please provide name, address, telephone number, and contact person of your bonding company:

    _____

    _____

[The remainder of this page was left blank intentionally]

19. Complete the following table for SIMILAR projects:

Name of Project	Date Completed	Owner	Contact Person: Name/ Email Address/Phone	Original Contract Amount	Final Contract Amount

SECTION 00458 – List of Subcontractors

The Bidder **MUST** list below the name and address of each Subcontractor who will perform work under this Contract in excess of one-half percent of the total bid price, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Bids, additions, changes or substitutions will not be allowed unless approved by Indian River County after a request for such a change has been submitted in writing by the Contractor, which shall include reasons for such request. Subcontractors must be properly licensed and hold a valid Certificate of Competency.

Documentation Submitted with Bid No. **2024048** for **Hobart Baseball Field Improvements**

	Work to be Performed	Subcontractor's Name/Address	Portion of Work (%)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			

Note: Attach additional sheets if required.

*** * END OF SECTION * ***

SECTION 00460 – CERTIFICATION REGARDING PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES

I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit have been placed on the Scrutinized Companies that Boycott Israel List created pursuant to s. 215.4725 of the Florida Statutes, or are engaged in a boycott of Israel.

In addition, if this solicitation is for a contract for goods or services of one million dollars or more, I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit are on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473 of the Florida Statutes, or are engaged in business operations in Cuba or Syria as defined in said statute.

I understand and agree that the County may immediately terminate any contract resulting from this solicitation upon written notice if the undersigned entity (or any of those related entities of respondent as defined above by Florida law) are found to have submitted a false certification or any of the following occur with respect to the company or a related entity: (i) it has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, or (ii) for any contract for goods or services of one million dollars or more, it has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or it is found to have been engaged in business operations in Cuba or Syria.

Name of Respondent: _____

By: _____
(Authorized Signature)

Title: _____

Date: _____

BOARD OF COUNTY COMMISSIONERS

Month xx, 2024 via Email

Company
Attn:
Address
Address
Email address

NOTICE OF AWARD

Reference: ***Indian River County Bid No. 2024048***
Project Name: ***Hobart Park Baseball Field Improvements***

Dear Mr./Ms. :
It is my pleasure to inform you that on [DATE] the Board of County Commissioners awarded the above-referenced project to your company. The following documents are required before the applicable County department can issue a "Notice to Proceed" letter.

1. Public Construction Bond (unrecorded) in the amount of **100%** of the award amount **($.....)**.
2. Two Signed Copies of Enclosed Agreement.
3. Certificate of Insurance indicating coverage required by Article 5 of the General Conditions (section 00700 of the bid documents) and Supplemental Conditions (Section 00800 of the bid documents). Certificate(s) **must name Indian River County as additional insured** and must provide for a 30-day Notice of Cancellation.
4. W-9.

The Public Construction Bond must be executed in accordance with section 255.05(1)(a), Florida Statutes. Please submit the Bond, W-9, the Certificate(s) of Insurance and two fully-executed copies of the enclosed agreement to this office at the address provided below no later than [Due **DATE (15 days from award)**]. Failure to comply with the established deadline for submittal of required documents may be grounds for cancellation of award.

Thank you for your prompt attention and if you have any questions, please do not hesitate to contact our office.

Sincerely,

Jennifer Hyde, NIGP-CPP, CPPO
Purchasing Manager

cc: Recreation Division

Office of Management and Budget • Purchasing Division
1800 27th Street, Vero Beach, Florida 32960•(772) 226-1416•Fax: (772) 770-5140
E-mail: purchasing@ircgov.com

SECTION 00520 Agreement (Public Works)

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[The Remainder of THIS Page WAS LEFT BLANK INTENTIONALLY]

SECTION 00520 Agreement (Public Works)

THIS AGREEMENT is by and between INDIAN RIVER COUNTY, a Political Subdivision of the State of Florida organized and existing under the Laws of the State of Florida, (hereinafter called OWNER)

and _____
(hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

1.01 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The proposed project includes furnishing all materials, labor and equipment (unless otherwise specified) necessary for the construction of a baseball field complex at 58th Avenue and 77th Street

ARTICLE 2 - THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

Project Name:	Hobart Park Baseball Field Improvements
Bid Number:	2024048
Project Address:	5150 77th Street, Vero Beach, FL 32967

ARTICLE 3 - ENGINEER

3.01 The Indian River County Public Works Department is hereinafter called the ENGINEER and will act as OWNER's representative, assume all duties and responsibilities, and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Days to Achieve Substantial Completion, Final Completion and Final Payment*

A. The Work will be substantially completed on or before the **240th** calendar day after the date when the Contract Times commence to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions on or before the **270th** calendar day after the date when the Contract Times commence to run.

****

4.03 *Liquidated Damages*

A. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Liquidated damages will commence for this portion of work. The parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER **$2,592.00** for each calendar day that expires after the time specified in paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER **$2,592.00** for each calendar day that expires after the time specified in paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

5.01 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents, an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 5.01.A and summarized in paragraph 5.01.B, below:

A. For all Work, at the prices stated in CONTRACTOR's Bid, attached hereto as an exhibit.

B. THE CONTRACT SUM subject to additions and deductions provided in the Contract:

Numerical Amount: $_____

Written Amount: _____

_____

ARTICLE 6 - PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions and the Contract Documents.

6.02 *Progress Payments.*

A. The OWNER shall make progress payments to the CONTRACTOR on the basis of the approved partial payment request as recommended by ENGINEER in accordance with the provisions of the Local Government Prompt Payment Act, Florida Statutes section 218.70 et. seq. The OWNER shall retain five percent (5%) of the payment amounts due to the CONTRACTOR until substantial completion of all work to be performed by CONTRACTOR under the Contract Documents.

B. For construction projects less than $10 million, at the time the OWNER is in receipt of the Certificate of Substantial Completion, the OWNER shall have 30 calendar days to provide a list to the CONTRACTOR of items to be completed and the estimated cost to complete each item on the list. OWNER and CONTRACTOR agree that the CONTRACTOR'S itemized bid shall serve as the basis for determining the cost of each item on the list. For projects in excess of $10 million, OWNER shall have up to 45 calendar days following receipt of Certificate of Substantial Completion of the project to provide CONTRACTOR with said list.

C. Payment of Retainage - Within 20 business days following the creation of the list, OWNER shall pay CONTRACTOR the remaining contract balance including all retainage previously withheld by OWNER except for an amount equal to 150% of the estimated cost to complete all of the items on the list. Upon completion of all items on the list, the CONTRACTOR may submit a payment request for the amount of the 150% retainage held by the OWNER. If a good faith dispute exists as to whether one or more of the items have been finished, the OWNER may continue to withhold the 150% of the total cost to complete such items. The OWNER shall provide CONTRACTOR written reasons for disputing completion of the list.

6.03 *Pay Requests.*

A. Each request for a progress payment shall be submitted on the application provided by OWNER and the application for payment shall contain the CONTRACTOR'S certification. All progress payments will be on the basis of progress of the work measured by the schedule of values established, or in the case of unit price work based on the number of units completed.

6.04 Paragraphs 6.02 and 6.03

do not apply to construction services work purchased by the County as OWNER which are paid for, in whole or in part, with federal funds and are subject to federal grantor laws and regulations or requirements that are contrary to any provision of the Local Government Prompt Payment Act. In such event, payment and retainage provisions shall be governed by the applicable grant requirements and guidelines.

6.05 *Acceptance of Final Payment as Release*.

A. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER from all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with the work under this Contract and for every act and neglect of the OWNER and others relating to or arising out of the work. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the Contract Documents or the Public Construction Bond.

ARTICLE 7 - INDEMNIFICATION

7.01 CONTRACTOR shall indemnify OWNER, ENGINEER, and others in accordance with paragraph 6.20 (*Indemnification*) of the General Conditions to the Construction Contract.

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

A. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
B. CONTRACTOR has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. CONTRACTOR has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions.

E. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto

F. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.

H. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

I. CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents, and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

K. CONTRACTOR is registered with and will use the Department of un Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees

for the duration of this agreement, as required by Section 448.095, F.S. CONTRACTOR is also responsible for obtaining an affidavit from all subcontractors, as required in Section 448.095(5)(b), F.S., stating the subcontractor does not employ, contract with, or subcontract with an unauthorized alien.

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 *Contents*

A. The Contract Documents consist of the following:

1. This Agreement (pages 00520-1 to 00520-9, inclusive);
2. Notice to Proceed (page 00550-1);
3. Public Construction Bond (pages 00610-1 to 00610-3, inclusive);
4. Sample Certificate of Liability Insurance (page 00620-1);
5. Contractor's Application for Payment (pages 00622-1 to 00622-6 inclusive);
6. Certificate of Substantial Completion (pages 00630-1 to 00630-2, inclusive);
7. Contractor's Final Certification of the Work (pages 00632-1 to 00632-2, inclusive);
8. Professional Surveyor & Mapper's Certification as to Elevations and Locations of the Work (page 00634-1);
9. General Conditions (pages 00700-1 to 00700-38, inclusive);
10. Supplementary Conditions (pages 00800-1 to 00800-13, inclusive);
11. Specifications as listed in Division 1 (General Requirements).
12. Drawings consisting of: a cover sheet, Civil Engineering Plans numbered 1 through 15, inclusive, landscape plans numbered LC-1 through LC-3, inclusive, irrigation plans numbered 1 through 10, inclusive, with each sheet bearing the general title,: Hobart Park Baseball Field Improvements; Site Electrical Plans numbered E0.1 and E0.2, and architectural plans including title sheet, and sheets A1.10, A2.10, A2.20, A2.30, A3.10, A4.10, A6.10, S-1,S-2, M1.1, E1.1, E1.2, E1.3 and P1.1, with each sheet bearing the following general title bearing the general title Hobart Park Concession & Restroom Building;
13. Addenda (if applicable _____);
14. Appendices to this Agreement (enumerated as follows):

    Appendix A – Permits
    Appendix B – Indian River County Fertilizer Ordinances
    Appendix C – Indian River County Traffic Engineering Special Conditions for Right of Way Construction
    Appendix D – Subsurface Soil Exploration and Geotechnical Engineering Evaluation

15. CONTRACTOR'S BID (pages 00310-1 to 00310-8, inclusive);

16. Bid Bond (page 00430-1);

17. Sworn Statement Under Section 105.08, Indian River County Code, on Disclosure of Relationships (pages 00452-1 to 00452-2, inclusive);

18. Sworn Statement Under the Florida Trench Safety Act (pages 00454-1 to 00454-2, inclusive);

19. Qualifications Questionnaire (page 00456-1 to 00456-2, inclusive);

20. List of Subcontractors (page 00458-1);

21. Certification Regarding Prohibition Against Contracting with Scrutinized Companies (page 00460-1);

22. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:

a) Written Amendments;

b) Work Change Directives;

c) Change Order(s);

ARTICLE 10 - MISCELLANEOUS

10.01 *Terms*

A. Terms used in this Agreement will have the meanings indicated in the General Conditions.

10.02 *Assignment of Contract*

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

A. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 *Severability*

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid

and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Venue*

A. This Contract shall be governed by the laws of the State of Florida. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this Contract shall be in Indian River County, Florida, or, in the event of a federal jurisdiction, in the United States District Court for the Southern District of Florida.

10.06 *Public Records Compliance*

A. Indian River County is a public agency subject to Chapter 119, Florida Statutes. The CONTRACTOR shall comply with Florida's Public Records Law. Specifically, the CONTRACTOR shall:

(1) Keep and maintain public records required by the County to perform the service.

(2) Upon request from the County's Custodian of Public Records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law.

(3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the County.

(4) Upon completion of the contract, transfer, at no cost, to the County all public records in possession of the CONTRACTOR or keep and maintain public records required by the County to perform the service. If the CONTRACTOR transfers all public records to the County upon completion of the contract, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the contract, the CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the Custodian of Public Records, in a format that is compatible with the information technology systems of the County.

B. **IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:**

(772) 226-1424
publicrecords@indianriver.gov
Indian River County Office of the County Attorney
1801 27th Street

Vero Beach, FL 32960

C. Failure of the Contractor to comply with these requirements shall be a material breach of this Agreement.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or on their behalf.

This Agreement will be effective on _____day_____ of 20_____(the date the Contract is approved by the Indian River County Board of County Commissioners, which is the Effective Date of the Agreement).

OWNER:

INDIAN RIVER COUNTY

By: _____
Susan Adams, Chairman

By: _____
John A. Titkanich, Jr., County Administrator

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

By: _____
William K. DeBraal, County Attorney

Ryan L. Butler, Clerk of Court and Comptroller

Attest: _____
Deputy Clerk
(SEAL)

Designated Representative:
Joe Tilton, CPRP, Recreation Manager
1590 9th St SW, Vero Beach, FL 32962
jtilton@indianriver.gov
(772) 226-1780

CONTRACTOR:

_____

By: _____
(Contractor)

(CORPORATE SEAL)

Attest _____

Address for giving notices:
_____
_____
_____

License No. _____
(Where applicable)

Agent for service of process: _____

Designated Representative:
Name: _____
Title: _____
Address:
_____
_____
Phone: _____
Facsimile: _____
(If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

*** * END OF SECTION * ***

SECTION 00550 – Notice to Proceed

Dated

TO:

_____
(BIDDER)

ADDRESS:

_____

_____

_____

Contract For:

Hobart Park Baseball Field Improvements
(Insert name of Contract as it appears in the Contract Documents)

IRC Bid No. **20240248**

You are notified that the Contract Times under the above contract will commence to run on _____. By that date, you are to start performing your obligations under the Contract Documents. The contract has allocated **240** calendar days for Substantial Completion of this project and **270** calendar days for Final Completion. In accordance with Article 4 of the Agreement the date of Substantial Completion is _____ and the date of readiness for final payment is _____.

CONTRACTOR shall not commence work under this Contract until he has obtained all insurance required under Article 5 and such insurance has been delivered to the OWNER and approved by the OWNER, nor shall the CONTRACTOR allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing *defective* Work in accordance with Article 13.

Also, before you may start any Work at the Site, you must:
(add other requirements, if applicable)

_____

_____

_____

INDIAN RIVER COUNTY
(OWNER)

By:_____
(AUTHORIZED SIGNATURE)

_____
(TITLE)

SECTION 00610 - Public Construction Bond

INSTRUCTION FOR PUBLIC CONSTRUCTION BOND

The front or cover page to the required public construction payment and performance bond shall contain the information required by Fla. Stat. 255.05(1)(a), and be substantially in the format shown on the first page following this instruction.

The Public Construction Bond shall be in the form suggested by Fla. Stat. 255.05(3) as shown on the second page following this instruction.

A Power of Attorney from a surety insurer authorized to do business in Florida, authorizing the signature of the Attorney in Fact who executes the Public Construction Bond shall accompany that Bond.

Public Work
F.S. Chapter 255.05 (1)(a)
Cover Page

THIS BOND IS GIVEN TO COMPLY WITH SECTION 255.05 OR SECTION 713.23 FLORIDA STATUTES, AND ANY ACTION INSTITUTED BY A CLAIMANT UNDER THIS BOND FOR PAYMENT MUST BE IN ACCORDANCE WITH THE NOTICE AND TIME LIMITATION PROVISIONS IN SECTION 255.05(2) OR SECTION 713.23 FLORIDA STATUTES.

BOND NO: _____

CONTRACTOR NAME: _____

CONTRACTOR ADDRESS: _____

_____

CONTRACTOR PHONE NO: _____

SURETY COMPANY NAME: _____

SURETY PRINCIPAL BUSINESS ADDRESS: _____

_____

SURETY PHONE NO: _____

OWNER NAME: _____

OWNER ADDRESS: _____

_____

OWNER PHONE NO: _____

OBLIGEE NAME: _____
(If contracting entity is different from the owner, the contracting public entity)

OBLIGEE ADDRESS: _____

_____

OBLIGEE PHONE NO: _____

BOND AMOUNT: _____

CONTRACT NO: _____
(If applicable)

DESCRIPTION OF WORK: _____

_____

PROJECT LOCATION: _____

_____

LEGAL DESCRIPTION: _____
(If applicable)

<u>FRONT PAGE</u>
All other bond page(s) are deemed subsequent to this page regardless of any page number(s) that may be printed thereon.

PUBLIC CONSTRUCTION BOND

Bond No._____
(enter bond number)

BY THIS BOND, We _____ , as Principal and _____, a corporation, as Surety, are bound to _____, herein called Owner, in the sum of $_____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _____, _____, between Principal and Owner for construction of _____, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____,

_____
(Name of Principal)

By _____
(As Attorney in Fact)

_____
(Name of Surety)

SECTION 620 – Sample Certificate of Liability Insurance

CERTIFICATE OF LIABILITY INSURANCE

PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
	COMPANIES AFFORDING COVERAGE
INSURED	COMPANY A -
	COMPANY B -
	COMPANY C -
	COMPANY D -
	COMPANY E -

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED NOTWITHSTANDING ANY REQUIREMENT TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN THE INSURANCE ACCORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/D/YY)	LIMITS	
A	GENERAL LIABILITY				EACH OCCURRENCE	$ 1,000,000
	☐ COMMERCIAL GENERAL LIABILITY				FIRE DAMAGE (Any One Fire)	$ 50,000
	☐ CLAIMS MADE - ☐OCCUR				MED. EXP. (Any One Person)	$ 5,000
	☐				PERSONAL & ADV INJURY	$ 1,000,000
	☐				GENERAL AGGREGATE	$ 1,000,000
	☐				PRODUCTS – COMP/OP AGG.	$ 1,000,000
	☐					$
A	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea. Occurrence)	$ 1,000,000
	☐ ANY AUTO				BODILY INJURY (Per Person)	$
	☐ ALL OWNED AUTOS					
	☐ SCHEDULED AUTOS					
	☐ HIRED AUTOS				BODILY INJURY (Per Accident)	$
	☐ NON-OWNED AUTOS					
	☐				PROPERTY DAMAGE	$
	☐					
	GARAGE LIABILITY				AUTO ONLY – EA ACCIDENT	$
	☐				OTHER THAN EA ACC	$
	☐				AUTO ONLY AGG	$
A	EXCESS LIABILITY				EACH OCCURRENCE	
	☐ ☐ CLAIMS MADE					
	☐ DEDUCTIBLE				AGGREGATE	$
	☐ RETENTION $					$
						$
A	WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY				☐WC STATUTORY LIMITS	
					E.L. EACH ACCIDENT	$ 100,000
	THE PROPRIETOR/PARTNERS/ EXECUTIVE OFFICERS ARE: ☐ INCL ☐ EXCL				E.L. DISEASE – EA	$ 500,000
					E.L. DISEASE-POLICY LIMIT	$ 100,000
	OTHER: BUILDER'S RISK				FULL REPLACEMENT COST OF THE WORK	

DESCRIPTION OF OPERATIONS/LOCATIONS VEHICLES/SPECIAL ITEMS

CERTIFICATE HOLDER	ADDITIONAL INSURED; INSURER LETTER:	CANCELLATION
		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT. FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.
ADDITIONAL INSURED: INDIAN RIVER COUNTY 1801 27TH STREET, VERO BEACH, FL 32960-3388		AUTHORIZED REPRESENTATIVE

SECTION 00622 – Contractor's Application for Payment
HOBART PARK BASEBALL FIELD IMPROVEMENTS

Application for Payment No. _____.
For Work Accomplished through the period of _____ through _____.

To: Indian River County (OWNER)
From: _____ (CONTRACTOR)

Bid No.: **2024048**

1) Attach detailed schedule and copies of all paid invoices.

1.	Original Contract Price:	$_____
2.	Net change by Change Orders and Written Amendments (+ or -):	$_____
3.	Current Contract Price (1 plus 2):	$_____
4.	Total completed and stored to date:	$_____
5.	Retainage (per Agreement):	
	5% of completed Work:	
	_____% of retainage: $_____	
	Total Retainage:	$_____
6.	Total completed and stored to date less retainage (4 minus 5):	$_____
7.	Less previous Application for Payments:	$_____
8.	**DUE THIS APPLICATION (6 MINUS 7):**	$_____

CONTRACTOR'S CERTIFICATION:

UNDER PENALTY OF PERJURY, the undersigned CONTRACTOR certifies that (1) the labor and materials listed on this request for payment have been used in the construction of this Work; (2) payment received from the last pay request has been used to make payments to all subcontractors, laborers, materialmen and suppliers except as listed on Attachment A, below; (3) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to OWNER indemnifying OWNER against any such Lien, security interest or encumbrance); (4) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective; and (5) If this Periodic Estimate is for a Final Payment to project or improvement, I further certify that all persons doing work upon or furnishing materials or supplies for this project or improvement under this foregoing contract have been paid in full, and that all taxes imposed by
Chapter 212 Florida Statutes, (Sales and Use Tax Act, as Amended) have been paid and discharged, and that I have no claims against the OWNER.

Attached to or submitted with this form are:

1. Signed release of lien forms (partial or final as applicable) from all subcontractors, laborers, materialmen and suppliers except as listed on Attachment A, together with an explanation as to why any release of lien form is not included;

2. Updated Construction Schedule per Specification Section 01310.

Dated _____ By: _____
(CONTRACTOR – must be signed by an Officer of the Corporation)

_____
Print Name and Title

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this _____day of _____ 20__, by _____ (name of person making statement).

_____
(Signature of Notary Public - State of Florida)
(Print, Type, or Stamp Commissioned Name of Notary Public)

☐ who is personally known to me or ☐ who has produced _____ as identification.

Please remit payment to:

Contractor's Name: _____

Address: _____

_____

****

[The remainder of this page was left blank intentionally]

SURETY'S CONSENT OF PAYMENT TO CONTRACTOR:

The Surety, _____
_____
_____, a corporation, in accordance with Public Construction Bond Number _____, hereby consents to payment by the OWNER to the CONTRACTOR, for the amounts specified in this CONTRACTOR's APPLICATION FOR PAYMENT.

TO BE EXECUTED BY CORPORATE SURETY:

Attest:

_____ _____

Secretary Corporate Surety

_____

_____

_____

Business Address

BY: _____

Print Name: _____

Title: _____

(Affix Corporate SEAL)

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this _____ day of _____ 20____, by _____ (name of person making statement).

_____

(Signature of Notary Public - State of Florida)

(Print, Type, or Stamp Commissioned Name of Notary Public)

☐ who is personally known to me or ☐ who has produced _____ as identification.

****

[The remainder of this page was left blank intentionally]

CERTIFICATION OF INDIAN RIVER COUNTY PROJECT MANAGER:

I certify that I have reviewed the above and foregoing Periodic Estimate for Partial Payment; that to the best of my knowledge and belief it appears to be a reasonably accurate statement of the work performed and/or material supplied by the Contractor. I am not certifying as to whether or not the Contractor has paid all subcontractors, laborers, materialmen and suppliers because I am not in a position to accurately determine that issue.

Dated _____ _____

SIGNATURE

CERTIFICATION OF INDIAN RIVER COUNTY INSPECTOR:

I have checked the estimate against the Contractor's Schedule of Amounts for Contract Payments and the notes and reports of my inspections of the project. To the best of my knowledge, this statement of work performed and/or materials supplied appears to be reasonably accurate, that the Contractor appears to be observing the requirements of the Contract with respect to construction, and that the Contractor should be paid the amount requested above, unless otherwise noted by me. I am not certifying as to whether or not the Contractor has paid all subcontractors, laborers, materialmen and suppliers because I am not in a position to accurately determine that issue.

Dated _____ _____

SIGNATURE

****

[The Remainder of This Page Was Left Blank Intentionally]

ATTACHMENT A

1. **List of all subcontractors, laborers, materialmen and suppliers who have not been paid from the payment received from the last Pay Request and the reason why they were not paid (attach additional pages as necessary):**

_____

_____

_____

_____

_____

_____

_____

_____

2. **List of all subcontractors, laborers, materialmen and suppliers for which a signed release of lien form (partial or final as applicable) is not included with this Pay Request, together with an explanation as to why the release of lien form is not included (attach additional pages as necessary):**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

PROJECT NAME: **HOBART PARK BASEBALL FIELD IMPROVEMENTS**
Bid No 2024048
Payment Application No. _____

						WORK COMPLETED									
				SCHEDULED VALUE		PREVIOUS APPLICATION		THIS PERIOD		TOTAL COMPLETED		%	MATERIALS	BALANCE TO FINISH	
Item No.	Description	Unit	Quantity	Unit Price	Amount	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL		STORED	QUANTITY	TOTAL
SUBTOTAL				SUBTOTAL	0.00		0.00		0.00		0.00		0.00		0.00
	FORCE ACCOUNT	1	LS												
GRAND TOTAL				TOTAL	0.00										

AMOUNT COMPLETED TO DATE	$0.00
MATERIALS STORED TO DATE	$0.00
SUB-TOTAL MATERIALS STORED AND COMPLETED TO DATE	$0.00
RETAINAGE AT 5%	$0.00
TOTAL COMPLETED AND STORED LESS RETAINAGE	$0.00
LESS PREVIOUS PAYMENT	$0.00
AMOUNT DUE CONTRACTOR	$0.00

SECTION 00630 – Certificate of Substantial Completion

Date of Issuance: _____, 20__

OWNER: Indian River County
CONTRACTOR: _____
CONTRACT FOR: HOBART PARK BASEBALL FIELD IMPROVEMENTS
Project Description: ***The proposed project includes furnishing all materials, labor and equipment (unless otherwise specified) necessary for the construction of a baseball field complex at 58th Avenue and 77th Street***

OWNER's Bid No. 2024048

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

_____
_____
_____

To: _____
OWNER

And To: _____
CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

_____
DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within 30 calendar days of the above date of Substantial Completion.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees shall be as follows:

OWNER: _____

_____

_____

CONTRACTOR: _____

_____

_____

The following documents are attached to and made a part of this Certificate:

[For items to be attached see definition of Substantial Completion as supplemented and other specifically noted conditions precedent to achieving Substantial Completion as required by Contract Documents.]

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.

Executed by ENGINEER on: _____ (Date).

ENGINEER: _____

By: _____
(Authorized Signature)

CONTRACTOR accepts this Certificate of Substantial Completion on _____ (date).

CONTRACTOR: _____

By: _____
(Authorized Signature)

OWNER accepts this Certificate of Substantial Completion on _____ (date).

OWNER: INDIAN RIVER COUNTY _____

By: _____
(Authorized Signature)

* * **END OF SECTION * ***

SECTION 00632 - CONTRACTOR'S FINAL CERTIFICATION OF THE WORK
(TO ACCOMPANY CONTRACTOR'S FINAL APPLICATION FOR PAYMENT)

PROJECT NAME: **HOBART PARK BASEBALL FIELD IMPROVEMENTS**
BID NO: **2024048**

STATE OF _____
COUNTY OF _____

Personally before me the undersigned officer, authorized by the laws of said state to administer oaths, comes _____ , who on oath says: That he is the CONTRACTOR with whom Indian River County, Florida, a political subdivision of said state, did on the _____ day of _____ ,20____, enter into a contract for the performance of certain work, more particularly described as follows:

The proposed project includes furnishing all materials, labor and equipment (unless otherwise specified) necessary for the construction of a baseball field complex at 58th Avenue and 77th Street

UNDER PENALTY OF PERJURY, affiant further says that said construction has been completed and the Contract therefore fully performed and final payment is now due and that all liens of all firms and individuals contracting directly with or directly employed by such CONTRACTOR have been paid in full EXCEPT:

Name	Description/Amount
_____	_____
_____	_____

who have not been paid and who are due the amount set forth.

Affiant further says that:

1. CONTRACTOR has reviewed the Contract Documents.
2. CONTRACTOR has reviewed the Work for compliance with the Contract Documents.
3. CONTRACTOR has completed the Work in accordance with the Contract Documents.
4. All equipment and systems have been tested in the presence of the ENGINEER or his representative and are fully operational with no defects or deficiencies except as listed below.

_____

_____

_____

5. The Work is complete and ready for final acceptance by the OWNER.

6. CONTRACTOR hereby certifies that it has no claims against the OWNER.

(Corporate Seal)

_____
(Contractor)

By: _____

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this _____day of _____ 20__, by _____ _____
(name of person making statement).

_____
(Signature of Notary Public - State of Florida)
(Print, Type, or Stamp Commissioned Name of Notary Public)

☐ who is personally known to me or ☐ who has produced
_____ as identification.

+ + END OF SECTION + +

SECTION 00634 - PROFESSIONAL SURVEYOR AND MAPPER'S CERTIFICATION AS TO ELEVATIONS AND LOCATIONS OF THE WORK

(TO BE COMPLETED BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER RETAINED BY THE CONTRACTOR AND TO ACCOMPANY CONTRACTOR'S FINAL APPLICATION FOR PAYMENT)

I CERTIFY that I am a Florida Professional Surveyor and Mapper retained by:

_____

_____

(Insert name of CONTRACTOR)

Who is the CONTRACTOR for the following Project:

PROJECT NAME: HOBART PARK BASEBALL FIELD IMPROVEMENTS

BID# 2024048

I FURTHER CERTIFY that I have personally performed the survey work for the preparation of Record Drawings for the CONTRACTOR for this project or that such work was performed under my direct control and supervision.

I FURTHER CERTIFY that all constructed elevations and locations of the Work are in conformance with the Contract Documents, except for discrepancies listed below.

_____

_____

_____

[Attach additional sheets as necessary]

(SURVEYOR'S SEAL)

CERTIFIED BY:_____

Printed Name: _____

Florida Professional Surveyor and Mapper Registration Number:_____

Date Signed and Sealed by Professional Surveyor and Mapper:_____

Company Name: _____

Company Address:_____

Telephone Number: _____

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.

3. *Application for Payment*--The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

7. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.

8. *Bonds*--Performance and payment bonds and other instruments of security.

9. *Change Order*--A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

13. *Contract Price*--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

16. *Cost of the Work*--See paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *ENGINEER*--The individual or entity named as such in the Agreement.

~~20. *ENGINEER's Consultant*--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.~~

~~21. *Field Order*--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times~~.

22. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

23. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

24. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

25. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

27. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

28. *Notice of Award*--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

29. *Notice to Proceed*--A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.

30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

31. *Partial Utilization*--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

32. *PCBs*--Polychlorinated biphenyls.

33. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

35. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

36. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

37. *Resident Project Representative*--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

40. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

41. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

42. *Subcontractor*--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.

43. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.

44. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

45. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

46. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

47. *Unit Price Work*--Work to be paid for on the basis of unit prices.

48. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

49. *Work Change Directive*--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

50. *Written Amendment*--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 *Terminology*

A. *Intent of Certain Terms or Adjectives*

1. Whenever in the Contract Documents the terms “as allowed,” “as approved,” or terms of like effect or import are used, or the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or

indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. *Day*

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. *Defective*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. *Furnish, Install, Perform, Provide*

1. ~~The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.~~

~~2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.~~

~~3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.~~

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.

E. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds*

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 *Copies of Documents*

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the ninetieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *CONTRACTOR's Review of Contract Documents:* Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements.

CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

~~C. *Evidence of Insurance:* Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.~~

2.06 *Preconstruction Conference*

~~A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.~~

2.07 *Initial Acceptance of Schedules*

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents

or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 *Reference Standards*

A. *Standards, Specifications, Codes, Laws, and Regulations*

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: ~~(i) a Field Order~~; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 *Reuse of Documents*

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of

ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as

inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. *Possible Price and Times Adjustments*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 *Reference Points*

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or

anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.

F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

~~A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents~~.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as

Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. ~~OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.~~

5.04 *CONTRACTOR's Liability Insurance*

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary

Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 *OWNER's Liability Insurance*

~~A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.~~

5.06 *Property Insurance*

~~A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:~~

~~1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured;~~

~~2. be written on a Builder's Risk "all-risk" or open-peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;~~

~~3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);~~

~~4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;~~

~~5. allow for partial utilization of the Work by OWNER;~~

~~6. include testing and startup; and~~

~~7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.~~

~~B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary~~

~~Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.~~

~~C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.~~

D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

~~E. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.~~

5.07 *Waiver of Rights*

~~A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and thei r respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.~~

~~B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:~~

~~1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and~~

~~2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.~~

~~C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors,~~

~~partners, employees, agents, and other consultants and subcontractors of each and any of them.~~

5.08 *Receipt and Application of Insurance Proceeds*

~~A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.~~

~~B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.~~

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

~~A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.~~

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 *Labor; Working Hours*

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.

1. *"Or-Equal" Items:* If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER;

and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. *Engineer's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

D. *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. *ENGINEER's Cost Reimbursement:* ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges

of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.

F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 *Patent Fees and Royalties*

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention,

design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 *Laws and Regulations*

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 *Taxes*

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

B. OWNER qualifies for state and local sales tax exemption in the purchase of all material and equipment.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall

indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 *Safety and Protection*

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. *Submittal Procedures*

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample sub-

mitted to ENGINEER for review and approval of each such variation.

E. *ENGINEER's Review*

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. *Resubmittal Procedures*

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 *Continuing the Work*

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 *CONTRACTOR's General Warranty and Guarantee*

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or

2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by ENGINEER;

2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;

4. use or occupancy of the Work or any part thereof by OWNER;

5. any acceptance by OWNER or any failure to do so;

6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;

7. any inspection, test, or approval by others; or

8. any correction of defective Work by OWNER.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and

2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 *Related Work at Site*

A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work

with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 *Replacement of ENGINEER*

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 *Furnish Data*

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 *Pay Promptly When Due*

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 *Insurance*

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 *Limitations on OWNER's Responsibilities*

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and

Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *OWNER'S Representative*

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 *Visits to Site*

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 *Authorized Variations in Work*

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract

Documents. ~~These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.~~

9.06 *Rejecting Defective Work*

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 *Shop Drawings, Change Orders and Payments*

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 *Determinations for Unit Price Work*

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 *Limitations on ENGINEER's Authority and Responsibilities*

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

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10.01 *Authorized Changes in the Work*

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 *Claims and Disputes*

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement

that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. *ENGINEER's Decision:* ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or

2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

~~1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.~~

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR

shall make provisions so that they may be obtained.

3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.

i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.

j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors,

accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.

C. *CONTRACTOR's Fee:* When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 *Cash Allowances*

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated

quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).

C. *CONTRACTOR's Fee:* The CONTRACTOR's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim

to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 *Delays Beyond CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. ~~OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:~~

~~1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;~~

~~2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and~~

~~3. as otherwise specifically provided in the Contract Documents.~~

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

~~A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.~~

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. ~~If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.~~ If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. ~~In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.~~

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 *OWNER May Correct Defective Work*

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. *Applications for Payments*

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by

ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and

c. The conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.

3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Written Amendment or Change Orders;

c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or

~~d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.~~

C. *Payment Becomes Due*

~~1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.~~

D. *Reduction in Payment*

1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;

c. there are other items entitling OWNER to a set-off against the amount recommended; or

d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.

2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 *CONTRACTOR's Warranty of Title*

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. ~~If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.~~

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment*

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. *Review of Application and Acceptance*

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to

OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due*

~~1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.~~

14.08 *Final Completion Delayed*

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. ~~CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.~~

15.02 *OWNER May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);

2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

3. CONTRACTOR's disregard of the authority of ENGINEER; or

4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR

for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 *OWNER May Terminate For Convenience*

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *CONTRACTOR May Stop Work or Terminate*

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, ~~or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due~~, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, ~~or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due~~, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09

and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

SECTION 00800 - SUPPLEMENTARY CONDITIONS TO THE GENERAL CONDITIONS

Article Title	Article Number
Introduction	SC – 1.00
Defined Terms	SC – 1.01
Terminology	SC – 1.02
Before Starting Construction	SC – 2.05
Preconstruction Conference	SC – 2.06
Coordination of Plans, Specifications, and Special Provisions	SC – 3.06
Subsurface and Physical Conditions	SC – 4.02
Performance, Payment and Other Bonds	SC – 5.01
Certificates of Insurance	SC – 5.03
CONTRACTOR's Liability Insurance	SC – 5.04
OWNER's Liability Insurance	SC – 5.05
Property Insurance	SC – 5.06
Waiver of Rights	SC – 5.07
Receipt and Application of Insurance Proceeds	SC – 5.08
Acceptance of Bonds and Insurance; Option to Replace	SC – 5.09
Labor; Working Hours	SC – 6.02
Concerning Subcontractors, Suppliers and Others	SC – 6.06
Permits	SC – 6.08
Authorized Variations in Work	SC – 9.05
Cost of the Work	SC – 11.01
Test and Inspections	SC – 13.03
OWNER May Stop the Work	SC – 13.05
Correction Period	SC – 13.07
Progress Payments	SC – 14.02

Substantial Completion	SC – 14.04
Final Payment	SC – 14.07
OWNER May Suspend Work	SC – 15.01
OWNER May Terminate for Cause	SC – 15.02
CONTRACTOR May Stop Work or Terminate	SC – 15.04
Mediation	SC –16.02
Liens	SC – 17.06

+++ END OF THIS SUPPLEMENTARY CONDITIONS INDEX +++

SECTION 00800 - SUPPLEMENTARY CONDITIONS TO THE GENERAL CONDITIONS

SC-1.00 Introduction

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) and other provisions of the Contract Documents as indicated below. All provisions, which are not so amended or supplemented, remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions.

SC-1.01 Defined Terms

SC-1.01.A.20. *Delete paragraph GC 1.01.A.20 in its entirety.*
SC-1.01.A.21 *Delete paragraph GC 1.01.A.21 in its entirety.*

SC-1.02 Terminology

SC-1.02.D.1, 2, and 3 *Delete paragraphs GC-1.02.D.1, 2, and 3 in their entirety and insert the following paragraphs in their place:*

D. *Furnish, Install, Perform, Provide*

1. The word "furnish" shall mean to supply and deliver services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
2. The word "install" shall mean to put into use or place in final position services, materials, or equipment complete and ready for intended use.
3. The words "perform" or "provide" shall mean to furnish and install services, materials, or equipment complete and ready for intended use.

SC-2.05 Before Starting Construction

SC-2.05.C. *Delete paragraph GC 2.05.C in its entirety and insert the following paragraph in its place:*

C. *Evidence of Insurance:* CONTRACTOR shall not commence work under this Contract until he has obtained all insurance required under Article 5 and such insurance has been delivered to the OWNER and approved by the OWNER, nor shall the CONTRACTOR allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing *defective* Work in accordance with Article 13.

SC-2.06 Preconstruction Conference

SC-2.06 *Delete paragraph GC-2.06.A in its entirety and insert the following paragraph in its place:*

A. Immediately after awarding the contract, but before the CONTRACTOR begins work, the Project Manager will call a preconstruction conference at a place the ENGINEER designates to establish an understanding among the parties as to

the work and to discuss schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, and maintaining required records. Utility companies and others as appropriate will be requested to attend to discuss and coordinate work.

B. Per the FDOT Standard Specifications for Road and Bridge Construction, the Contractor will certify to the Engineer the following:

C.

1. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the contract,
2. Actual Rate for items listed in Table 4-3.2.1 (see below),
3. Existence of employee benefit plan for Holiday, Sick and Vacation benefits and a Retirement Plan, and,
4. Payment of Per Diem is a company practice for instances when compensation for Per Diem is requested.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Engineer as part of the cost proposal or seven calendar days in advance of performing such extra work.

FDOT Table 4-3.2.1	
Item	Rate
FICA	Rate established by Law
FUTA/SUTA	Rate established by Law
Medical Insurance	Actual
Holidays, Sick & Vacation Benefits	Actual
Retirement Benefits	Actual
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rates tables adjusted by Contractor's actual experience modification factor in effect at the time of the additional work or unforeseen work
Per Diem	Actual but not to exceed State of Florida's rate
Insurance*	Actual
*Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).	

SC-3.06 Coordination of Plans, Specifications, and Special Provisions

SC-3.06 *Add the following new paragraphs immediately after paragraph GC-3.05:*

SC-3.06 *Coordination of Plans, Specifications, and Special Provisions*

A. In case of discrepancy, the governing order of the documents shall be as follows:

1. Written Interpretations
2. Addenda
3. Specifications
4. Supplementary Conditions to the General Conditions
5. General Conditions
6. Approved Shop Drawings
7. Drawings

8. Referenced Standards.

B. Written/computed dimensions shall govern over scaled dimensions.

SC-4.02 Subsurface and Physical Conditions

SC-4.02 *Add the following new paragraphs immediately after paragraph GC-4.02.B:*

C. In the preparation of Drawings and Specifications, ENGINEER or ENGINEER's Consultants relied upon the following reports of explorations and tests of subsurface conditions at the Site:
Subsurface Investigation performed by KSM Engineering & Testing, Inc. dated 09/04/2020

SC-5.01 Performance, Payment and Other Bonds

SC-5.01.A. *Delete paragraph GC-5.01.A in its entirety and insert the following paragraphs in its place:*

A. Within fifteen (15) days of receipt of the Contract Documents for execution, the CONTRACTOR shall furnish a Public Construction Bond in an amount equal to 100% of the Contract Price.

1. In lieu of the Public Construction Bond, the CONTRACTOR may furnish an alternative form of security in the form of cash, money order, certified check, cashier's check, irrevocable letter of credit or a security as listed in Part II of F.S. Chapter 625. Any such alternative form of security shall be for the same purpose, and be for the same amount and subject to the same conditions as those applicable to the bond otherwise required. The determination of the value of an alternative form of security shall be made by the OWNER.
2. Such Bond shall continue in effect for one (1) year after acceptance of the Work by the OWNER.
3. The OWNER shall record the Public Construction Bond with the Public Record Section of the Indian River County Courthouse located at 2000 16th Avenue, Vero Beach, Florida 32960.

SC-5.03 Certificates of Insurance

SC-5.03 *Delete the second sentence of paragraph GC-5.03 in its entirety.*

SC-5.04 CONTRACTOR's Liability Insurance

SC-5.04 *Add the following new paragraphs immediately after paragraph GC-5.04.B:*

D. The limits of liability for the insurance required by paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Worker's Compensation: To meet statutory limits in compliance with the Worker's Compensation Law of Florida. This policy must include Employer Liability with a limit $100,000 for each accident, $500,000 disease (policy limit) and $100,000 disease (each employee). Such policy shall include a waiver of subrogation as against OWNER and ENGINEER on account of injury sustained by an employee(s) of the CONTRACTOR.

2. Commercial General Liability: Coverage shall provide minimum limits of liability of $1,000,000 per occurrence Combined Single Limit for Bodily Injury and Property Damage. This shall include coverage for:
   a. Premises/Operations
   b. Products/Completed Operations
   c. Contractual Liability
   d. Independent Contractors
   e. Explosion
   f. Collapse
   g. Underground.

3. Business Auto Liability: Coverage shall provide minimum limits of liability of $1,000,000 per occurrence Combined Single Limit for Bodily Injury and Property Damage. This shall include coverage for:
   a. Owned Autos
   b. Hired Autos
   c. Non-Owned Autos.

4. CONTRACTOR's "All Risk" Insurance: CONTRACTOR shall secure Builders' Risk "All Risk" insurance at his expense and provide properly completed and executed "Certificates of Insurance and Insurance Endorsement" forms *in the exact wording and format presented in these Contract Documents* before starting work.

5. Special Requirements:
   a. Ten (10) days prior to the commencement of any work under this Contract, certificates of insurance and endorsement forms in the exact wording and format as presented in these Contract Documents will be provided to the OWNER's Risk Manager for review and approval.
   b. "Indian River County Florida" will be named as "Additional Insured" on both the General Liability and Auto Liability.
   c. The OWNER will be given thirty (30) days notice prior to cancellation or modification of any stipulated insurance. Such notification will be in writing by registered mail, return receipt requested and addressed to the OWNER's Risk Manager.
   d. An appropriate "Indemnification" clause shall be made a provision of the Contract (see paragraph 6.20 of the General Conditions).
   e. It is the responsibility of the CONTRACTOR to insure that all subcontractors comply with all insurance requirements.
   f. It should be remembered that these are minimum requirements, which are subject to modification in response to high hazard operation.
   g. Insured must be authorized to do business and have an agent for service of process in Florida and have Best's Rating of A-VII or better.

E. Additional Insureds:
   1. In addition to "Indian River County, Florida," the following individuals or entities shall be listed as "additional insureds" on the CONTRACTOR's liability insurance policies:
      a. ___NONE_____
      b. _____
      c. _____

SC-5.05 OWNER's Liability Insurance

SC-5.05 *Delete paragraph GC-5.05.A in its entirety.*

SC-5.06 Property Insurance

SC-5.06 *Delete paragraphs GC-5.06.A, B, and C in their entirety and insert the following paragraphs in their place:*

A. CONTRACTOR shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof. This insurance shall:

1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "All Risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER; and

5. allow for partial utilization of the Work by OWNER;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. CONTRACTOR shall be responsible for any deductible or self-insured retention.

C. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph SC-5.06 shall comply with the requirements of paragraph 5.06.C of the General Conditions.

SC-5.06.E *Delete paragraph GC-5.06.E in its entirety and insert the following in its place:*

E. Additional Insureds:

1. The following individuals or entities shall be listed as "additional insureds" on the CONTRACTOR's property insurance policies:
   a. Indian River County, Florida
   b. _NONE_____
   c. _____

SC-5.07 Waiver of Rights

SC-5.07 *Delete GC-5.07 (paragraphs A, B, and C) in its entirety.*

SC-5.08 Receipt and Application of Insurance Proceeds

SC-5.08 *Delete GC-5.08 (paragraphs A and B) in its entirety.*

SC-5.09 Acceptance of Bonds and Insurance; Option to Replace

SC-5.09 *Delete GC-5.09(paragraph A)in its entirety.*

SC-6.02 Labor; Working Hours

SC-6.02.B. *Add the following paragraphs immediately after paragraph GC-6.02.B:*

1. Regular working hours are defined as Monday through Friday, excluding Indian River County Holidays, from 7 a.m. to 5 p.m.
2. Indian River County Holidays are: New Year's Day, Martin Luther King, Jr. Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, Christmas Eve and Christmas Day. Working on these days will not be permitted without prior written permission and approval from the Construction Coordination Manager.
3. The CONTRACTOR shall receive no additional compensation for overtime work, i.e., work in excess of eight hours in any one calendar day or 40 hours in any one calendar week, even though such overtime work may be required under emergency conditions and may be ordered by the ENGINEER in writing.
4. All costs of inspection and testing performed during overtime work by the CONTRACTOR, which is allowed solely for the convenience of the CONTRACTOR, shall be borne by the CONTRACTOR, and a credit given to the OWNER to deduct the costs of all such inspection and testing from any payments otherwise due the CONTRACTOR.
5. All costs of OWNER's employees and costs of ENGINEER's Consultant resulting from overtime work by the CONTRACTOR, which is allowed solely for the convenience of the CONTRACTOR, shall be borne by the CONTRACTOR, and a credit given to OWNER to deduct all such costs from any payments otherwise due the CONTRACTOR.
6. No work shall commence before 7 a.m. or continue after 5 p.m. except in case of emergency upon specific permission of the ENGINEER.

SC-6.06 Concerning Subcontractors, Suppliers, and Others

SC-6.06.C. *Add the following sentence at the end of paragraph GC-6.06.C:*

OWNER or ENGINEER may furnish to any such Subcontractor, Supplier, or other individual or entity, to the extent practicable, information about amounts paid to CONTRACTOR on account of Work performed for CONTRACTOR by a particular Subcontractor, Supplier, or other individual or entity.

SC-6.08 Permits

SC-6.08 *Add the following paragraphs immediately after paragraph GC-6.08.A:*

1. The OWNER has obtained the following permits (copies of these permits are contained in Appendix A):

   A. <u>Florida Department of Environmental Protection Individual Wastewater Permit – 0039002-149-DWC-CM</u>

B. IRC Major Site Plan & Administrative Approval – SP-MA-18-08-25 & AA-20-10-107
C. Indian River County Land Clearing Permit – 81900
D. Indian River County Tree Removal Permit – 81901
E. Indian River County Type B Stormwater Management System Permit – 82338
F. Indian River County Right-of-way Utilities Permit – ROWUTL 2018080918
G. Indian River County Utility Construction Permit – UCP #3452
H. St. Johns River Water Management District Individual SWERP – 114983-3
I. Indian River Farms Water Control District Culvert Connection Permit – 18-29

2. The CONTRACTOR shall obtain and pay for all other required permits and licenses. The CONTRACTOR shall provide copies of the permits to the OWNER and ENGINEER and shall comply with all conditions contained in the permits at no extra cost to the OWNER.

3. The CONTRACTOR shall be familiar with all permit requirements during construction and shall be responsible for complying with these requirements. The cost of this effort shall be included in the pay item in which the work is most closely associated with.

SC-9.05 Authorized Variations in Work

SC-9.05.A. *Delete the second sentence in paragraph GC-9.05.A in its entirety.*

SC-11.01 Cost of the Work

SC-11.01.A.1. *Delete paragraph GC-11.01.A.1 in its entirety, and insert the following sentences in its place:*

1. CONTRACTOR will receive payment for actual costs of direct labor and burden (see SC-2.06.B) for the additional or unforeseen work. Labor includes foremen actually engaged in the work; and will not include project supervisory personnel nor necessary on-site clerical staff, except when the additional or unforeseen work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. Compensation for project supervisory personnel, but in no case higher than a Project Manager's position, shall only be for the pro-rata time such supervisory personnel spent on the contract. In no case shall an officer or director of the Company, nor those persons who own more than 1% of the Company, be considered as project supervisory personnel, direct labor or foremen hereunder. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

SC-13.03 Test and Inspections

SC-13.03.B. *Delete paragraph GC-13.03.B in its entirety, and insert the following sentences in its place:*

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all initial inspections, tests, or approvals required by the Contract Documents except those inspections, tests, or approvals listed immediately below. Subsequent inspections, tests, or approvals required after initial failing inspections, tests, or approvals shall be paid for by the

CONTRACTOR by back charge to subsequent applications for payment. The CONTRACTOR shall arrange, obtain, and pay for the following inspections, tests, or approvals:

1. inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
2. costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B;
3. tests otherwise specifically provided in the Contract Documents.

SC-13.05 OWNER May Stop the Work

SC-13.05.A. *Delete paragraph GC-13.05.A in its entirety and insert the following paragraph in its place:*

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to comply with permit requirements, or fails to comply with the technical specifications, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

SC-13.07 Correction Period

SC-13.07 A. *Delete the first sentence of paragraph GC-13.07.A in its entirety and insert the following sentence in its place*

A. If within one year after the date of Final Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

SC-13.07 B. *Delete paragraph GC-13.07.B in its entirety and insert the following sentence in its place*

B. In special circumstances where a particular item of equipment is placed in continuous service before Final Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

SC-14.02 Progress Payments

SC-14.02.B.5. *Delete paragraph GC-14.02.B.5.d in its entirety and insert the following paragraph in its place:*

d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A; or

SC-14.02.B.5. *Add the following sentences at the end of paragraph GC-14.02.B.5:*

e. OWNER has been required to pay ENGINEER additional compensation because of CONTRACTOR delays or rejection of defective Work; or

f. OWNER has been required to pay an independent testing laboratory for subsequent inspections, tests, or approvals taken after initial failing inspections, tests, or approvals.

SC-14.02.C.1. *Delete paragraph GC-14.02.C.1 in its entirety and insert the following paragraph in its place:*

C. Payment Becomes Due

1. Payment shall be made by OWNER to CONTRACTOR according to the Local Government Prompt Payment Act. F.S. 218.70 et. seq.

SC-14.04 Substantial Completion

SC-14.04A. *After the third sentence in paragraph GC-14.04A of the General Conditions, delete the remainder of paragraph 14.04A in its entirety and replace with the following:*

"If Engineer considers the Work substantially complete, Engineer will prepare and deliver to Owner a tentative certificate of Substantial Completion that shall fix the date of Substantial Completion. In accordance with the provisions of Florida Statutes section 208.735(7)(a)(2005), upon receipt of the tentative certificate of Substantial Completion from Engineer, the Owner, the Engineer, and the Contractor shall conduct a walk-through inspection of the Project to document a list of any items required to render the Work on the Project complete, satisfactory, and acceptable under this Agreement (herein the "Statutory List"). The Statutory List shall be reduced to writing and circulated among the Owner, the Engineer, and the Contractor by the Owner or the Engineer within 30 calendar days after substantial completion. The Owner and Contractor acknowledge and agree that: 1) the failure to include any corrective work, or pending items that are not yet completed, on the Statutory List does not alter the responsibility of the Contractor to complete all of the Work under this Agreement; 2) upon completion of all items on the Statutory List, the Contractor may submit a pay request for all remaining retainage except as otherwise set forth in this Agreement; and 3) any and all items that require correction under this Agreement and that are identified after the preparation of the Statutory List remain the obligation of the Contractor to complete to the Owner's satisfaction under this Agreement. After receipt of the Statutory List by the Contractor, the Contractor acknowledges and agrees that it will diligently proceed to complete all items on the Statutory List and schedule a final walk-through in anticipation of final completion on the Project."

SC-14.04B *Add the following new paragraph immediately after paragraph GC 14.04B:*

C. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor

with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees

SC-14.07 Final Payment

SC-14.07.C.1. *Delete paragraph GC-14.07.C.1 in its entirety and insert the following paragraph in its place:*

C. Payment Becomes Due

1. Payment shall be made by OWNER to CONTRACTOR according to the "Local Government Prompt Payment Act", Florida Statutes section 218.70, et. seq.

SC-15.01 OWNER May Suspend Work

SC-15.01.A *Delete the last sentence in paragraph GC-15.01.A and insert the following in its place:*

CONTRACTOR shall be allowed an extension of the Contract Times, directly attributable to any such suspension if CONTRACTOR makes a Claim for an extension as provided in paragraph 10.05. CONTRACTOR shall not be allowed an adjustment of the Contract Price and CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such Work suspension.

SC-15.02 OWNER May Terminate For Cause

SC-15.02.A.5 and SC-15.02.A.6 *Add the following new paragraphs immediately after paragraph GC-15.02.A.4:*

5. CONTRACTOR's violation of Section 02225 – "Erosion Control and Treatment of Dewatering Water From the Construction Site."

6. CONTRACTOR's failure to make payment to Subcontractors or Suppliers for materials or labor in accordance with the respective agreements between the CONTRACTOR and the Subcontractors or Suppliers.

7. CONTRACTOR certifies that it and its related entities as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, CONTRACTOR certifies that it and its related entities as defined above by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria.

   OWNER may terminate this Contract if CONTRACTOR is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes.

OWNER may terminate this Contract if CONTRACTOR, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies, that exist for the purpose of making profit, is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.

SC-15.04 CONTRACTOR May Stop Work or Terminate

SC-15.04 *Delete the following text from the first sentence of paragraph GC-15.04.A:*

~~or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due,~~

SC-15.04 *Delete the following text from the second sentence of paragraph GC-15.04.A:*

~~or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due,~~

SC-16 DISPUTE RESOLUTION

SC-16.02 Mediation

SC-16 *Add the following new paragraph immediately after paragraph GC-16.01.*

SC-16.02 Mediation

A. OWNER and CONTRACTOR agree that they shall submit any and all unsettled Claims or counterclaims, disputes, or other matters in question between them arising out of or relating to the Contract Documents or the breach thereof, to mediation by a certified mediator of the 19th Judicial Circuit in Indian River County unless delay in initiating mediation would irrevocably prejudice one of the parties. The mediator of any dispute submitted to mediation under this agreement shall not serve as arbitrator of such dispute unless otherwise agreed.

SC-17 MISCELLANEOUS

SC-17.06 Liens

Add the following new paragraphs immediately after paragraph GC17.05:

SC-17.06 Liens

A. This project is a "Public Works" under Chapter 255, Florida Statutes. No merchant's liens may be filed against the OWNER. Any claimant may apply to the OWNER for a copy of this Contract. The claimant shall have a right of action against the CONTRACTOR for the amount due him. Such action shall not involve the OWNER in any expense. Claims against the CONTRACTOR are subject to timely prior notice to the CONTRACTOR as specified in Florida Statutes Section 255.05. The CONTRACTOR shall insert the following paragraph in all subcontracts hereunder:

"Notice: <u>Claims for labor, materials and supplies are not assessable against Indian River County and are subject to proper prior notice to (CONTRACTOR'S Name) and to (CONTRACTOR Surety Company Name), pursuant to Chapter 255 of the Florida Statutes. This paragraph shall be inserted in every sub-</u>

subcontract hereunder." The payment due under the Contract shall be paid by the OWNER to the CONTRACTOR only after the CONTRACTOR has furnished the OWNER with an affidavit stating that all persons, firms or corporations who are defined in Section 713.01, Florida Statutes, who have furnished labor or materials, employed directly or indirectly in the Work, have been paid in full. The OWNER may rely on said affidavit at face value. The CONTRACTOR does hereby release, remiss and quit-claim any and all rights he may enjoy perfecting any lien or any other type of statutory common law or equitable lien against the job.

**** END OF SUPPLEMENTARY CONDITIONS ****

SECTION 00942 – Change Order Form

No. ___

DATE OF ISSUANCE: _____ EFFECTIVE DATE:_____

OWNER: Indian River County
CONTRACTOR _____
Project: **HOBART PARK BASEBALL FIELD IMPROVEMENTS**
OWNER'S Bid No. 2024048

You are directed to make the following changes in the Contract Documents:
Description:

Reason for Change Order:

Attachments: (List documents supporting change)

CHANGE IN CONTRACT PRICE:	
Description	Amount
Original Contract Price	$
Net Increase (Decrease) from previous Change Orders No. __to :	$
Contract Price prior to this Change Order:	$
Net increase (decrease) of this Change Order:	$
Contract Price with all approved Change Orders:	$

CHANGE IN CONTRACT TIMES	
Description	Time
Original Contract Time: Substantial Completion: Final Completion:	(days or dates)
Net change from previous Change Orders No. _____to Substantial Completion: Final Completion:	(days)
Contract Time prior to this Change Order: Substantial Completion: Final Completion:	(days or dates)
Net increase (decrease) this Change Order: Substantial Completion: Final Completion:	(days or dates)
Contract Time with all approved Change Orders: Substantial Completion: Final Completion:	(days or dates)

ACCEPTED:	RECOMMENDED:	APPROVED:
By:	By:	By:
CONTRACTOR (Signature)	ENGINEER (Signature)	OWNER (Signature)
Date:	Date:	Date:

**** END OF SECTION****

SECTION 00948 – Work Change Directive

No. ___

DATE OF ISSUANCE: _____ EFFECTIVE DATE:_____

OWNER: Indian River County
CONTRACTOR _____
Project: **HOBART PARK BASEBALL FIELD IMPROVEMENTS**
OWNER'S Bid No. 2024048

You are directed to proceed promptly with the following changes:

Description:

Reason for Change Order:

Attachments: (List documents supporting change)

If OWNER or CONTRACTOR believe that the above change has affected Contract Price any Claim for a Change Order based thereon will involve one or more of the following methods as defined in the Contract Documents.

Method of determining change in Contract Prices

☐ Unit Prices
☐ Lump Sum
☐ Other: _____
☐ By Change Order:

Estimated increase (decrease) of this Work Change Directive
$ _____

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Times

☐ Contractor's Records
☐ Engineer's Records
☐ Other: _____
☐ By Change Order:

Estimated increase (decrease) in Contract Times:

Substantial Completion: _____days;
Ready for Final Completion: _____days.
If the change involves an increase, the estimated time is not to be exceeded without further authorization.

ACCEPTED:	RECOMMENDED:	APPROVED:
By:	By:	By:
CONTRACTOR (Signature)	ENGINEER (Signature)	OWNER (Signature)
Date:	Date:	Date:

**** END OF SECTION****

DIVISION 1 – GENERAL REQUIREMENTS

The following permits have been obtained for the project and are included in "Appendix A – Permits": IRC Site Plan, Type B Stormwater, Land Clearing, Tree Removal, Utility Construction, Right-of-way (Utility); SJRWMD Environmental Resource Permit; FDEP Sewer Individual Permit; Indian River Farms Water Control District Culvert Connection Permit.

The Contractor shall be required to obtain all other permits including any needed building department issued permit(s), demolition permit, right-of-way if applicable, and onsite sewage disposal system abandonment permit. All permit fees are to be paid for directly by the County.

Project construction must follow county construction regulations under 974.04(2).

(2) *Construction equipment and activity.* It shall be unlawful to operate any equipment or perform any outside construction or repair work on buildings, structures, roads, or projects within the county between the hours of 8:00 p.m. and 6:00 a.m. unless an administrative approval as set forth in section 974.07 for such construction or repair work between such hours has been obtained from Indian River County on basis of good cause shown.

All demolished materials are to be disposed at an approved disposal site at the Contractor's expense.

Contractors are to include Florida sales tax in submitted bid.

Ceiling fan called out on the plans will be provided by the County.

TESTING

Testing is to be provided by the Contractor at his/her expense. County reserves the right to perform its own testing through an independent testing firm. A Subsurface Investigation was performed 06/05/2018 and an Asbestos Identification Survey 07/31/2020 was performed at the site. Copies may be examined at Indian River County Administration Building, Public Works, 1801 27th Street, Vero Beach, FL 32960 during regular business hours. These reports and drawings are not part of the Contract Documents.

FOUNDATION – DUGOUT

Polygon will supply complete signed and sealed structural plans for the pre-engineered dugout structure foundations with their package at the time of purchase. After award and execution of the agreement, the County will formally consider substitutes of the dugouts.

BASEBALL BACKSTOP & FENCING

The Contractor shall furnish and install the back stop fencing with appropriate foundations, the designs for which are to be provided by the Contractor's fence vendor's Florida licensed professional structural engineer for use in acquiring the backstop fence building permit.

All fencing shall meet a minimum of 150 mph Ultimate Risk Use Factor 1 for wind loads.

FLAG POLE

Contractor is to supply a flag with the flag pole.

Flag pole shall meet a minimum of 150 mph Ultimate Risk Use Factor 1 for wind loads

LIGHTING

The foundation designs are to be provided by the Contractor via the lighting sub-contractor, Musco.

CONCRETE FINISH

Sealed concrete finish is to be a standard clear penetrating commercial silane siloxane concrete sealer.

WELL

No test well has been performed. All well related design information should be supplied by the selected contractor based on flow and pressure specifications on the Irrigation Plans.

BULL PENS

Contractor is responsible for bull pen installation. Bullpens will be 10' tall galvanized chain link fence.

APPENDIX A

PERMITS

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

STATE OF FLORIDA
DOMESTIC WASTEWATER COLLECTION/TRANSMISSION INDIVIDUAL PERMIT

PERMITTEE:
Michael Zito, Assistant County Administrator
Indian River County
1801 27th Street
Vero Beach, FL 32960
Email: mzito@indianriver.gov

PERMIT NUMBER: 0039002-149-DWC-CM
ISSUANCE DATE: November 27, 2023
EXPIRATION DATE: November 26, 2028
COUNTY: Indian River
PROJECT NAME: Hobart Baseball Field Improvements
WASTEWATER TREATMENT:
IRCUD Central WWTF
FACILITY ID: FLA01043

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4 and 62-604, Florida Administrative Code (F.A.C.).

The above-named permittee is hereby authorized to construct the facilities shown on the application and other documents on file with the Department and made a part hereof and specifically described as follows:

DESCRIPTION OF PROJECT:

- **140 linear feet of 2-inch PVC sewer force main**
- **50 linear feet of 4-inch PVC sewer force main**
- **Duplex Grinder Lift Station 39gpm@41FT[TDH]**
- **One service lateral**

DESCRIPTION OF THE FACILITIES TO BE CONSTRUCTED:

Institutional facility, generating wastewater at the amount of 660 GPD

LOCATION OF PROJECT: 5790 77th Street Vero Beach, FL 32967
Indian River County

IN ACCORDANCE WITH: The limitations, requirements and other conditions set forth in pages 1 through 3 of this permit.

PROJECT NAME: Hobart Baseball Field Improvements

PERMIT NUMBER: 0039002-149-DWC-CM

PERMIT CONDITIONS:

1. This permit is subject to the general conditions of Rule 62-4.160, F.A.C., as applicable. [62-4.160]

2. Upon completion of construction of the collection/transmission system project, and before placing the facilities into operation for any purpose other than testing for leaks or testing equipment operation, the permittee shall submit Form 62-604.300(3)(b), Notification of Completion of Construction for a Domestic Wastewater Collection/Transmission System. The form shall be submitted electronically by using the Department's Business Portal at https://www.fldepportal.com/go/ (via "Submit" then "Registration/Notification" and "Submit Notifications to DEP." The submission is "Division of Water Resource Management Domestic/Industrial Wastewater" and the submittal type is "Notification of Completion of Construction for a Domestic Wastewater Collection/Transmission System."). This form is available at the Department's Internet site at: https://floridadep.gov/water/domestic-wastewater/content/domestic-wastewater-forms. [62-604.700(2)]

3. Permit revisions shall only be made in accordance with Rule 62-4.050(4)(s), F.A.C. Request for revisions shall be made to the Department in writing and shall include the appropriate fee. Revisions not covered under Rule 62-4.050(4)(s), F.A.C., shall require a new permit. [62-604.600(8)]

4. Abnormal events shall be reported to the Department's *Southeast* District Office in accordance with Rule 62-604.550, F.A.C. For unauthorized spills of wastewater in excess of 1000 gallons per incident, or where information indicates that public health or the environment may be endangered, oral reports shall be provided to the STATE WATCH OFFICE TOLL FREE NUMBER, (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee or other designee becomes aware of the circumstances. Unauthorized releases or spills less than 1000 gallons per incident are to be reported orally to the Department's *Southeast* District Office within 24 hours from the time the permittee, or other designee becomes aware of the circumstances.

   The oral notification shall be followed by a written submission, which shall be provided within five days of the time that the owner/operator becomes aware of the circumstances. The written submission shall contain: a description of the spill, release or abnormal event and its cause; the period and duration of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; clean-up actions taken and status; steps taken or planned to reduce, eliminate, and prevent recurrence; the type of sanitary sewer overflow structure (e.g., manhole); the discharge location address and latitude/longitude; type of water discharged; discharge volumes and volumes recovered; volume discharged to surface waters and receiving waterbody name; types of human health and environmental impacts of the sanitary sewer overflow (e.g., beach closure); whether the noncompliance was caused by a third party (e.g., contractor); and, whether the sanitary sewer overflow was related to wet weather. The written submission shall be provided electronically. Electronic submission is available using the Department's Business Portal at https://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification").

   In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office shall also require a public notice of pollution report. Reporting may be made or by

reporting electronically using the Department's Business Portal at https://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification") and selecting the option to also submit the public notice of pollution report, or reporting may be made to the Department's Public Notice of Pollution web page at https://floridadep.gov/pollutionnotice. [62-604.550]

5. This permit is for CONSTRUCTION ONLY of the collection/transmission system project. This permit does not authorize the connection of this collection/transmission system project to the designated receiving collection/transmission system until the receiving system has been constructed and cleared for use by the Department. This permit shall not be construed to infer that the clearance necessary for connection shall be allowed. Any such clearance shall be allowed only when reasonable assurance is given that adequate treatment and disposal is available in accordance with Department rules, regulations, and permits. Partial clearance may be allowed, if required.

ADDITIONAL INFORMATION:

Once a collection/transmission system is cleared for operation, the provisions below shall be met by the owner/operator of the system in accordance with Rule 62-604.500, F.A.C.

1. All collection/transmission systems shall be operated and maintained to provide uninterrupted service. All pump stations shall be operated and maintained to provide the emergency pumping capability requirements in paragraph 62-604.400(2)(a), F.A.C., the lightning and transient voltage surge protections in paragraph 62-604.400(2)(b), F.A.C., and the design and signage requirements in paragraph 62-604.400(2)(d), F.A.C. Also, all equipment, pipes, manholes, pump stations, and other appurtenances necessary for the collection/transmission of domestic wastewater, including equipment provided pursuant to subsection 62-604.400(2), F.A.C., shall be maintained to function as intended. [62-604.500(2) and (3)]

2. The owner/operator of a collection/transmission system shall evaluate and update the emergency response plan portion of the operation and maintenance manual annually. The emergency response plan shall assess system security including cybersecurity; water quality monitoring for sanitary sewer overflows affecting surface waters; and, hurricane and severe storm preparedness and response. [62-604.500(4)]

3. Collection/transmission systems shall be maintained to minimize excessive infiltration and inflow into the collection/transmission system, as well as excessive leakage from the collection/transmission system. The owner/operator of a collection/transmission system shall take corrective actions when infiltration, inflow, or leakage is excessive. Infiltration and inflow are considered excessive if one or both cause or contribute to sanitary sewer overflows. Leakage, or exfiltration, is considered excessive if it causes or contributes to a violation of surface water quality standards or ground water quality standards. [62-604.500(5)]

4. All collection/transmission systems shall be operated and maintained to prevent sanitary sewer overflows. Owners/operators shall evaluate the cause of all sanitary sewer overflows and evaluate potential corrective measures to avoid future sanitary sewer overflows. Corrective actions shall be taken by the owner/operator of the collection/transmission system if excessive inflow and infiltration

causes or contributes to a sanitary sewer overflow. The owner/operator of a satellite collection system shall take corrective actions for a sanitary sewer overflow in the receiving collection system caused by excessive inflow and infiltration in the satellite collection system. [62-604.500(6)]

5. The approved Operation and Maintenance Manual and emergency response plan pursuant to Rule 62-604.500(4), F.A.C., shall be kept available at a site convenient for use by operation and maintenance personnel and for inspection by the Florida Department of Environmental Protection personnel. [62-604.500(4)]

Executed in West Palm Beach, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

11.27.2023

Norva Blandin, MSEM Date
Permitting Program Administrator
Southeast District

BOARD OF COUNTY COMMISSIONERS

January 8, 2024

Mr. Brandon Creagan, Chief, Current Development
Indian River County Planning & Development Services
1801 27th Street
Vero Beach, Florida 32960

Via bcreagan@IndianRiver.gov

Project Name:	**HOBART PARK BASEBALL FIELD – IRC-1759**
Project Number:	92100016 / 81899 & 87565
File Number:	SP-MA-18-08-25 & AA-20-10-107
Description:	Major Site Plan & Administrative Approval Extension
Tax ID#:	31-39-33-00000-5000-00003.0
Site address/Location:	5790 77TH ST VERO BEACH

Dear Brandon:

This is a request to exercise the tolling and extension granted under F.S. 252.363 for the Hobart Park Baseball Field project's site plan and AA approvals (SP-MA-18-08-25 & & AA-20-10-107) for the maximum allowed new expiration date. Due to Tropical Depression 9 (Hurricane Ian); Order Numbers: 22-218, 22-219, 22-268, 23-21, 23-60, 23-104, 23-139, 23-176 and 23-214 / SJRWMD Applicable Counties: Entire State / CURRENT Order Expiring on January 5, 2024; extension request valid until April 4, 2024 (90-day Notice period ends).

It is understood with the approval of this extension request, the following permits will obtain permit expiration dates to coincide with the Major Site Plan & AA Approval expiration date:

IRC Land Clearing Permit # 81900
IRC Tree Removal Permit # 81901
IRC SWMS Type B Permit # 82338

By copy of this letter to Public Works Department (IRCPWLDP@IndianRiver.gov), we are also requesting the Type B Stormwater Permit #82338 be extended to a new expiration date equivalent to the expiration date established by the Planning & Development Department for the Site Plan and AA approvals.

Sincerely,

Michael C. Zito
Deputy County Administrator
Indian River County

cc: Ryan Sweeney (rsweeney@indianriver.gov)
Beth Powell (bpowell@indianriver.gov)
Joe Tilton (jtilton@indianriver.gov)
Stephen E. Moler, PE – Masteller & Moler, Inc. [MMFile#1756]

(IRC_HobartPark_SPMAExtRequest_24-0108.docx)

INDIAN RIVER COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
1801 27th Street, Vero Beach FL 32960
772-226-1237 / 772-978-1806 fax
www.ircgov.com

February 23, 2022

RECEIVED
02/23/2022

Stephen E. Moler, P.E.
Masteller & Moler, Inc.
1655 27th Street
Suite 2
Vero Beach, Florida 32960

RE: **Hobart Park Baseball Field Major Site Plan and Administrative Approval Extension [SP-MA-18-08-25 & AA-20-10-107 / 92100016 / 81899 & 87565]**

Dear Mr. Moler:

Be advised the above-referenced major site plan was approved by staff on October 10, 2018, and was scheduled to expire on October 10, 2020 (see attachment 1). In July of 2020 staff received and approved an administrative approval request to phase the project and extended the major site plan approval one year to October 10, 2021.

Per Florida Statute 252.363(1)(a), the declaration of a state of emergency issued by the Governor for a natural emergency tolls the period remaining to exercise rights under a permit or other authorization for the duration of the emergency declaration. Further, the emergency declaration extends the period remaining to exercise the rights under a permit or other authorization for 6 months in addition to the tolled period. On March 9, 2020, Florida Governor Ron DeSantis issued Executive Order 20-52, declaring a state of emergency related to the novel Coronavirus disease (COVID-19). Subsequently, Governor DeSantis issued multiple Executive Orders extending EO 20-52, and ultimately EO 21-94 expired on June 26, 2021. The total extension timeframe is 654 days. **Therefore, the new major site plan and administrative approval expiration date for Hobart Park Baseball Field is April 11, 2023.**

Be advised that any corresponding County permits (e.g. land clearing permit, tree removal permit, etc.) that were issued in conjunction with the above-referenced major site plan approval are also automatically extended. However, if a County permit application was submitted, but the permit was not issued, then a new permit application and fee may be required.

Any additional extensions not automatically granted per FS 252.363(1)(a), must be granted under the appropriate extension process outlined in the County land development regulations (LDRs).

If you have any questions, please contact me at rsweeney@ircgov.com or (772) 226-1239.

Sincerely,

Ryan Sweeney
Chief, Current Development

Attachment:

1. Copy of Major Site Plan & AA Approval Letters

cc: Phil Matson, AICP (via e-mail)
Andy Sobczak (via e-mail)
Thomas "Tad" Stone (via e-mail)
David Johnson (via e-mail)
Rich Marini (via e-mail)
Richard B. Szpyrka, P.E. (via e-mail)
James Ennis, P.E. (via e-mail)
Daniel Hiden (via e-mail)
Erik Ferguson (via e-mail)
David W. Schryver, PSM (via e-mail)
Adam Heltemes, P.E. (via e-mail)
Steven Hitt (via e-mail)
Health Department (via e-mail)
Jesse Roland (via e-mail)
Todd Dingee (via e-mail)
Kevin Guenther (via e-mail)
Kevin Kirwin (via e-mail)
Mike Zito (via e-mail)
Scott Harmody (via e-mail)

INDIAN RIVER COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
1801 27th Street, Vero Beach FL 32960
772-226-1237 / 772-978-1806 fax
www.ircgov.com

October 10, 2018

Stephen E. Moler, P.E.
Masteller & Moler, Inc.
1655 27th Street, Suite 2
Vero Beach FL 32960

RE: **Hobart Park Baseball Field Major Site Plan**
[SP-MA-18-08-25 / 92100016-81899]

Dear Mr. Moler:

The above-referenced major site plan application has been approved by staff. This action approves improvements/additions to the existing ball fields, new concessions building with expanded restroom facilities, parking, and related infrastructure for the Hobart Park Baseball Field located at 5790 77th Street, with the following conditions:

1. Prior to site plan release, the $7,800 mitigation fee for the removal of existing oak trees shall be remitted [927.11(1)(d)3.].

2. Prior to site plan release, the applicant shall submit all required jurisdictional permits to Planning staff as follows:

   a. Indian River County Initial/Final Concurrency
   b. Indian River County Stormwater Type "B" Permit Modification
   c. Indian River County Land Clearing Permit
   d. Indian River County Tree Removal Permit
   e. Indian River County Right-of-way (Utilities) Permit
   f. Indian River County Utility Construction Permit
   g. SJRWMD Environmental Resource Permit
   h. FDEP Sewer Main Extension General Permit
   i. IRFWCD Culvert Connection Permit

3. Project construction must follow county construction regulations under 974.04(2).

   (2) *Construction equipment and activity.* It shall be unlawful to operate any equipment or perform any outside construction or repair work on buildings, structures, roads, or projects within the county between the hours of 8:00 p.m. and 6:00 a.m. unless an

ATTACHMENT

administrative approval as set forth in section 974.07 for such construction or repair work between such hours has been obtained from Indian River County on the basis of good cause shown.

Upon completion of the listed requirements, the applicant shall provide, in writing, the intent to begin construction and arrange an appointment with a current development division staff member to release the approved plan.

Please be advised that site plan approval shall terminate and become null and void without notice if construction has not commenced within 24 months from the date of approval. Site plan approval may be extended one time only for good cause by the Board of County Commissioners for a period not to exceed 12 months. Construction shall be considered abandoned and site plan approval may be terminated if a good faith effort to proceed with the completion of the project has not occurred for a continuous period of 6 months.

Be advised that the Code Enforcement Department may conduct periodic inspections to ensure the project is completed in accordance with the approved site plan. Upon completion of construction the applicant shall submit a formal request for certificate of occupancy inspections through the planning division, see attached checklist for submittal instructions.

If you have any questions please contact this office at 772-226-1715 or pmurphy@ircgov.com.

Sincerely,

Patrick J. Murphy, Senior Planner
Current Development

Attachment: Site CO Inspection Checklist

cc: Stan Boling, AICP (via e-mail)
Vincent Burke (via e-mail)
Tad Stone (via e-mail)
Joseph "Dave" Johnson (via e-mail)
James Ennis, P.E. (via e-mail)
David W. Schryver, PSM (via e-mail)
Steven Hitt (via e-mail)
Jesse Roland (via e-mail)
Lt. Peggy Parmenter (via e-mail)
Mike Redstone (via e-mail)
John W. McCoy, AICP (via e-mail)
Arjuna Weragoda (via e-mail)
Kevin Yelvington (via e-mail)
Richard B. Szpyrka, P.E. (via e-mail)
Laura Yonkers (via e-mail)
Todd Tardif (via e-mail)
Lori Hoffman (via e-mail)
Veronica Figueroa-Chanza (via e-mail)
Michael Zito (via e-mail)
David Fleetwood (via e-mail)

ATTACHMENT

INDIAN RIVER COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
1801 27th Street, Vero Beach FL 32960
772-226-1237 / 772-978-1806 fax
www.ircgov.com

November 2, 2020

Stephen E. Moler, P.E.
Masteller & Moler, Inc.
1655 27th Street, Suite 2
Vero Beach FL 32960

RE: **Hobart Park Baseball Fields Administrative Approval** [AA-20-10-107 / 92100016-87565]

Dear Mr. Moler:

County staff has approved the above-referenced administrative approval application. This action approves the phasing of improvements of the previous site plan approval (SP-MA-18-08-25) into two phases for the Hobart Park Baseball Fields located at 5790 77th Street, with the following condition:

1. All applicable conditions of the previous site plan approval (SP-MA-18-08-25 / 87565) still apply (see attached).

Please be advised that plan approval shall run consecutively with the approved major site plan and shall terminate on October 10, 2021, if construction has not commenced. Construction shall be considered abandoned and plan approval may be terminated if a good faith effort to proceed with the completion of the project has not occurred for a continuous period of 6 months.

Be advised that the Code Enforcement Department may conduct periodic inspections to ensure the project is completed in accordance with the approved site plan. Upon completion of construction the applicant shall submit a formal request for certificate of occupancy inspections through the Planning Division, see attached checklist for submittal instructions.

Please find attached three copies of the approved plans. If you have any questions, please contact me at 772-226-1239 or rsweeney@ircgov.com.

Sincerely,

Ryan Sweeney
Chief of Current Development

Attachment: Copy of SP-MA-18-08-25 Conditional Approval Letter

cc: Phillip J. Matson, AICP (via e-mail)
Todd Dingee (via e-mail)
Steven Hitt (via e-mail)
Kevin Kirwin (via e-mail)
Scott Harmody (via e-mail)
Matt Soyka, P.E. (via e-mail)
Jesse Roland (via e-mail)
Lori Hoffman (via e-mail)
Mike Zito (via e-mail)

ATTACHMENT

Community Development Department
County Administration Building
1801 27th Street, Building "A"
Vero Beach FL 32960

This Covers Project Site Work NOT Included in Building Dept's Final Inspection

SITE PLAN PROJECTS CERTIFICATE OF OCCUPANCY CHECKLIST

I. To request site work inspections for Certificate of Occupancy, applicant must submit original/hard copies the following items to the ***Planning Division***:

(a) Certification Letter sealed by Architect or Engineer of Record stating site has been completed in conformance with approved plan. ***MUST INCLUDE: Address, Project #, Site Plan # and all applicable Building Permit #'s.***

(b) Landscape Certification Letter from landscape provider or landscape architect certifying that landscape material is Florida #1 or better quality and when last inspected. **If mitigation trees are required, the certification letter must include the number and location of the mitigation trees**.

II. Applicant must submit original/hard copies of the following items to the ***Engineering Department*** 772-226-1283 (an inspection fee will be required):

(a) Certification Letter sealed by Architect or Engineer of Record stating site has been completed in conformance with approved site plan.

(b) One as-built site plan.

III. Applicant must contact the ***Solid Waste Disposal District*** at swddfees@ircgov.com or 772-226-3212 to determine required solid waste fees due prior to CO.

IV. Other departments involved that you may need to contact **after** inspections are started include:

(a) ***Environmental Health Department:*** 772-794-7440.

(b) ***Utilities:*** 772-226-1636. Note: F.D.E.P. water/sewer line certifications may be needed before Utilities will clear the project for Certificate of Occupancy.

(c) ***Traffic Engineering***: 772-226-1637.

(d) ***Fire Prevention Bureau***: 772-226-1880

(e) ***[If Needed] - St. Johns River Water Management District***, Palm Bay Office 800-295-3264

ATTACHMENT

INDIAN RIVER COUNTY
Environmental Planning & Code Enforcement Section
1801 27th Street, Vero Beach FL 32960
772-226-1249 / 772-978-1806 fax
www.ircgov.com

11/1/2018

RECEIVED
11/02/2018

APPLICANT:

MIKE ZITO
C/o STEPHEN E. MOLER, P.E.
MASTELLER & MOLER, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FL 32960

INDIAN RIVER COUNTY LAND CLEARING PERMIT

PROJECT NO./PERMIT NO.	***92100016 / 81900***
PROJECT NAME:	***HOBART PARK BASEBALL FIELD***
PROJECT DESCRIPTION:	***LAND CLEARING FOR CONSTRUCTION***
PROPERTY OWNER'S NAME:	***MIKE ZITO***
LOCATION OF ACTIVITY:	***5790 77TH ST***
PARCEL NUMBER:	***31-39-33-00000-5000-00003.0***

THIS LAND CLEARING PERMIT is issued in accordance with Chapter 927 of the Indian River County Land Development Code. The above named applicant is hereby authorized to perform the herein described activity in accordance with the specifications stated herein and provided for in Chapter 927. *This permit does not absolve the applicant and/or property owner from the responsibility to satisfy state or federal regulations that may apply to the activity.*

1. **LAND CLEARING IS NOT ALLOWED TO COMMENCE UNTIL APPROVAL (OR EXEMPTION VERIFICATION) IS OBTAINED FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) OR THE FLORIDA DEPARTMENT OF ENVIROMENTAL PROTECTION (FDEP), AS APPLICABLE.** If you are not sure as to the status of SJRWMD or FDEP approval or exemption, contact the Palm Bay office of the SJRWMD at phone number (321) 984-4940 or the Southeast District office of the FDEP at (561) 681-6600.

2. **LAND CLEARING ASSOCIATED WITH SITE PLAN DEVELOPMENT** (per County Code Chapter 914) **OR SUBDIVISION PLATTING** (per County Code Chapter 913) **IS NOT ALLOWED TO COMMENCE UNTIL THE SITE PLAN OR PRELIMINARY PLAT IS FORMALLY APPROVED AND, IF A LAND DEVELOPMENT PERMIT IS REQUIRED, UNTIL A LAND DEVELOPMENT PERMIT IS ISSUED BY THE COUNTY ENGINEERING DIVISION, UNLESS OTHERWISE AUTHORIZED HEREIN.**

3. A copy of the permit shall be kept on-site during the land clearing activity.

4. The applicant shall notify county environmental planning staff upon completion of the activity, who shall inspect the property to confirm compliance with applicable county regulations.

5. Debris resulting from the land clearing activity shall be disposed of at an approved disposal facility within 60 days of clearing completion, or burned with an air curtain incinerator burn permit from the County Fire Division (or Florida Forest Service, as applicable), in accordance with County Code Chapter 925. Mulched land clearing material may be integrated with clean fill to augment berms and stormwater retention areas. Mulched material is not acceptable under roadways and at building site locations. Any mulched material deposited or buried must have at least 5 foot vertical separation from the natural groundwater table. If the applicant proposes to integrate mulched material with clean fill on-site, the applicant is advised to contact the County Environmental Health Department at (772) 794-7440 to ensure compliance with state and local requirements.

6. This land clearing permit requires that the subject property's pre-development stormwater run-off discharge rate not be exceeded after the clearing operation is completed. This may require construction of temporary detention ponds or berms, and installation of erosion control devices, such as silt screens, in order to maintain pre-development drainage flow characteristics and to protect against sedimentation and turbidity in discharge waters. All drainage and erosion control measures required on the approved project site plan, as applicable, are in effect for this permit. For Best Management Practices (BMPs), refer to the Florida Stormwater Erosion and Sediment Control Manual.

7. The person or company conducting the land clearing must be a licensed contractor registered in Indian River County to perform such work. The applicant is advised to contact the County Building Division at (772) 226-1260 to ensure that the land clearer has required licensing.

8. This permit does not authorize the demolition of structures, as applicable. Demolition of structure(s) requires a separate demolition permit through the County Building Division. For more information, contact the County Building Division at (772) 226-1260.

OTHER INFORMATION:

1. This permit authorizes land clearing for construction of the Hobart Park Baseball Field project at 5790 77th Street, in accordance with conditions and specifications of the approved site plan (SP-MA-18-08-25 / 92100016-81899).

2. Land clearing activities may not commence until a Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permit has been issued for the relocation of tortoises within the limits of disturbance.

3. Best management practices must be used to eliminate or reduce soil erosion. This includes, but is not limited to, the use of silt screens, berms, and soil tracking prevention devices. These devices need to be properly installed prior to commencement of construction activities on the property, need to be maintained, and shall remain in place until the soil surface has stabilized. Refer to the Florida Stormwater Erosion and Sediment Control Manual for additional information on BMPs.

4. This permit does not authorize any soil erosion or turbidity to wetlands, surface waters, or drainage systems, either on-site or off-site. This permit does not authorize any land clearing activities within wetlands, surface waters, or drainage systems unless authorized by appropriate federal, state or county permits.

5. This permit does not authorize any earth moving, excavation or filling. Such activities may not commence until a County stormwater management permit has been issued. Failure to properly obtain the appropriate County permits prior to development/construction activities on the project site can result in enforcement action being taken.

6. The following nuisance exotic vegetation shall be removed from development project site property, as applicable: (a) Australian pine (Casuarina spp.); (b) Brazilian pepper (Schinus terebinthifolius); (c) Melaleuca (Melaleuca quinquenervia); (d) Ear-pod tree (Enterolobium cyclocarpum); (e) Chinaberry (Melia azedarach).

7. The area to be cleared is the minimum necessary for proposed scope of work.

8. All work is to be conducted in accordance with County Code Sections 927.07 and 929.08.

DATE OF PERMIT ISSUANCE: 11/1/2018
DATE OF PERMIT EXPIRATION: Expiration concurrent with approved site plan/L.D.P., as applicable.

SIGNATURE OF AUTHORIZATION:

STEVEN S. HITT, M.S.
Senior Environmental Planner
Indian River County

cc: County Engineer
Current Development Staff
(site plan/plat related permits only)

Project No./Permit No.: 92100016/81900
lclr.letter

INDIAN RIVER COUNTY
Environmental Planning & Code Enforcement Section
1801 27th Street, Vero Beach FL 32960
772-226-1249 / 772-978-1806 fax
www.ircgov.com

11/1/2018

RECEIVED
11/02/2018

APPLICANT:

MIKE ZITO
C/o STEPHEN E. MOLER, P.E.
MASTELLER & MOLER, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FL 32960

INDIAN RIVER COUNTY TREE REMOVAL PERMIT

PROJECT/ APPLIC. NO.:	***92100016 / 81901***
PROJECT NAME:	***HOBART PARK BASEBALL FIELD***
PROJECT DESCRIPTION:	***TREE REMOVAL PERMIT FOR CONSTRUCTION***
PROPERTY OWNER'S NAME:	***MIKE ZITO***
LOCATION OF ACTIVITY:	***5790 77TH ST***
PARCEL NUMBER:	***31-39-33-00000-5000-00003.0***

THIS TREE REMOVAL PERMIT is issued in accordance with Chapter 927 of the Indian River County Land Development Code. The above named applicant is hereby authorized to perform the herein described activity in accordance with the specifications stated herein and provided for in Chapter 927. This permit does not absolve the applicant and/or property owner from the responsibility to satisfy state or federal regulations that may apply to the activity.

GENERAL SPECIFICATIONS:

1. The applicant shall conduct the activity in strict accordance with the criteria set forth in Section 927.07 of the Indian River County Land Development Code; a copy of the permit shall be kept on-site while the activity is taking place.

2. The applicant shall notify county environmental planning staff upon completion of the activity, who shall inspect the property to confirm compliance with applicable county regulations.

OTHER INFORMATION:

1. This permit authorizes the removal of protected trees (diameter at breast height (DBH) of 4 inches or greater) and/or specimen trees (DBH of 12 inches or greater) for construction of the Hobart Park Baseball Field project at 5790 77th Street, in accordance with the conditions and specifications of the approved site plan and tree protection plan (SP-MA-18-08-25 / 92100016-81899).

2. This permit does not authorize the removal of any protected or specimen tree within any wetland, surface water, or drainage system unless authorized by appropriate federal, state, and/or county permits.

3. Tree protection barriers shall be installed around trees to be preserved prior to initiation of land clearing and tree removal activities.

DATE OF PERMIT ISSUANCE: **11/1/2018**
DATE OF PERMIT EXPIRATION: **Expiration concurrent with the approved site plan/L.D.P., as applicable.**

SIGNATURE OF AUTHORIZATION:

STEVEN S. HITT, M.S.
Senior Environmental Planner
Indian River County

tree.letter
Proj./Appl. # 92100016/81901

Board of County Commissioners
Engineering Division
1801 27th Street
Vero Beach, Florida 32960-3388
Telephone: (772) 226-1283
Fax: (772) 778-9391

November 29, 2018

Indian River County
1801 27th Street
Vero Beach, FL 32960

Attention: Mr. Michael C. Zito, Assistant County Administrator

Subject: Approval of Type B Stormwater Management System
Permit No.92100016 App 82338 for Hobart Park Baseball Complex Improvements

Reference: SWMS Type B Permit No. 82338

This letter shall serve as the Type B Stormwater Management System (SWMS) Permit for the subject project. All activities shall be implemented as set forth in the plans, specifications, and performance criteria as provided by the conditions of this permit or any other permit issued by the County or other agencies. It is the applicant's responsibility to obtain all other required local, state or federal permits prior to commencement of work. In the event of a conflict between these permit conditions and the conditions of any other permit, the most stringent condition shall govern.

The following drawings signed and sealed 8/29/18 and Drainage Report signed and sealed 8/1/18. Here are approved for the construction of the stormwater management system:

1. Sheet 1 — Title Sheet
2. Sheet 2 — Construction Notes
3. Sheet 5-6 — Site Plan A-B
4. Sheet 7-8 — Site Grading and Signage Plan A-B
5. Sheet 9-10 — Baseball field Detail and Grading Plan
6. Sheet 14 — Construction Details

I. General Conditions:

1. Any proposed changes to the approved plans **must** be approved prior to initiating any change in construction. This includes material changes such as type of drainage pipe, size, etc.
2. This permit approval does not relieve the engineer or contractor of responsibilities or conditions expressed or otherwise intended by any other local, State or Federal Agency. Permittee agrees to hold Indian River County harmless for any construction activities authorized by this permit.
3. By acceptance of this permit, Indian River County is granted the right to enter onto the project site to make inspections, and perform tests or other duties related to the permitted construction activities. Permittee shall employ inspection services necessary for certification of construction conformance with this permit.

4. The permittee is responsible for administering the construction contract in accordance with this permit. If the permittee fails to comply with any part of this permit or any other permit issued for this project by any regulatory authority, Indian River County may at its sole discretion, shut down the project site until said permit condition is complied with. A *Cease and Desist Order* will be issued by the County Administrator or his designee, and served in an appropriate manner to the permittee or the permittee's agent. Under no circumstances shall work proceed when a *Cease and Desist Order* has been issued until said Order has been withdrawn in writing by Indian River County. If a Cease and Desist Order is issued, Indian River County, at its sole discretion, may take other action against the permittee and the permittee's agent(s) for the project.
5. A copy of the approved plans and this permit must be on site during construction.
6. The Developer/Contractor shall provide a copy of an active FDEP NOI at the pre-construction meeting.

II. Inspections:

1. A pre-construction meeting with Engineering Division staff is **required**. The Engineer of Record (EOR) shall coordinate and contact the Engineering Division at dwittenberg@ircgov.com, (772) 226-1622 or (772) 226-1283 to schedule the pre-construction meeting. Failure to conduct such meeting may result in the issuance of a *Cease and Desist Order* by the County. It may be necessary to have other County representatives or agency personnel at the meeting.
2. The respective Indian River County departments shall be notified** in writing, or by telephone, of the commencement and completion of the following items of construction so that an immediate inspection can be performed to ensure construction in conformance with said approved construction plans and specifications and the requirements of Chapter 914. If the County notifies the developer that no County inspector is available to inspect within forty-eight (48) hours of an inspection request, and if a delay in inspection would cause a delay in the project, then this requirement may be met by submission of a certificate from the EOR that all construction was completed, in accordance with this permit along with field inspection reports. Prior to requesting an inspection by County personnel, the EOR shall have inspected and approved the construction of each item. Backfilling of the storm sewer system or covering any unapproved item of inspection is prohibited and may result in requiring the contractor to uncover the item for inspection and approval.
   A) Stabilized subgrade (Public Works Department);
   B) Base (Public Works Department);
   C) Surface course (Public Works Department);
   D) Storm sewer (Public Works Department);

   ****The failure to notify the respective departments of the commencement and completion of the construction of such items shall be good cause to refuse to issue a Certificate of Occupancy (CO) or equivalent. The CO may not be issued until further investigation is conducted to verify compliance with the permit and a certification letter is provided by a testing laboratory stating that the improvements have been constructed in accordance with the approved plans and specifications.**
3. To request an inspection, email Dan Wittenberg at dwittenberg@ircgov.com or call (772) 226-1622 or (772) 226-1283, state the location of the inspection, the type and the time requested. Leave a contact number for confirmation or any further coordination.

4. The County shall be notified to inspect all storm sewer pipes on site **prior** to installation. Failure to call for such inspection may result in the contractor/permittee unearthing any covered pipe for inspection.
5. Prior to requesting final inspection from the County, the EOR shall inspect the project and insure all punch list items have been completed. The following items shall be provided; inspection reports, testing reports, certification letter, Record Drawings (***the stormwater management tract(s) shall be cross-sectioned and certified by the Engineer of Record***) and other pertinent closeout information. Prior to Engineering release, all items must be completed along with certification of construction in accordance with the approved Stormwater Management System permit drawings.

III. Erosion Control:

1. Activities approved by this permit shall be conducted in a manner which does not cause pollution as defined below:
   A) "Pollution" is the presence in the outdoor atmosphere or waters of the state of any substances, contaminants, noise, or manmade or human induced impairment of air or waters or alteration of the chemical, physical, biological, or radiological integrity or air or water in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation unless authorized by applicable law. Florida Statutes Ch. 403.031(7). Pollutants to be removed include but are not limited to: excessive dust, sediment and suspended solids, solid and sanitary wastes, phosphorus, nitrogen, pesticides, oil and grease, concrete truck washout, construction chemicals, and construction debris.
   B) Pollution with Respect to Sediment and Suspended Solids – A water body (including ditches and canals) is defined to be polluted with respect to sediment and suspended solids when at any time, the turbidity of the water immediately downstream of the permittee's discharge point(s) is at least 29 nephelometric turbidity units (NTU's) higher than the turbidity of the background water upstream of the discharge point(s). [See Fla. Administrative Code 62-302.530] Exception: When the discharge is directly into or through an outfall discharging into "Outstanding Florida Waters," designated by Florida Statute 403.061(27), the turbidity of discharged water cannot exceed the turbidity of the immediate receiving water. Indian River County reserves the right to measure the turbidity of the receiving water prior to construction and to use that value at its sole discretion, as the background turbidity value for the receiving water.
   C) Uncontestable Pollution Event – The discharge from a construction site or work area is defined to be polluted whenever any of the following is present in the discharge water:
      i. Hazardous waste or hazardous materials in any quantity,
      ii. Any petroleum product or by-product in any quantity,
      iii. Any chemical in any quantity, or
      iv. Concentrated pollutants.

   Paragraphs (B) and (C) above do not in any way, limit the types of conditions in which pollution may be determined to occur.
2. The permittee is solely responsible for preventing pollution caused by dewatering water and stormwater runoff from the construction site or work area (see attached Permittee's Affidavit Regarding Pollution dated PARP 5/15/18) [930.08(1)(e)]. In addition to taking its own actions and remedies against the permittee for a permit violation, Indian River County will report each violation to St. Johns River Water Management District, Florida Department of Environmental Protection, Indian River Farms Water Control District (or other Florida Statute Chapter 298 Drainage District, as appropriate), Indian River County Code Enforcement, and

other pertinent regulatory or enforcement agencies. No construction work shall begin until the pollution control and treatment system have been constructed in accordance with approved permits and plans.

3. A copy of the Stormwater Pollution Prevention Plan (SWPPP) must be available on site during construction. Any necessary change to the SWPPP shall be agreed upon with the County prior to implementing such change.
4. An 'Illicit Discharge Sign' shall be installed and remain posted continuously during construction activities. The sign may be obtained from the Indian River County Public Works Department or Stormwater Division.

Permit Expiration: The expiration date shall be concurrent with the Site Plan expiration date of 10/10/2020 at 5:00 p.m. as conditioned by such approval. Any permit extension must be requested and approved in writing by the IRC Engineering Division.

Please do not hesitate to contact me at (772) 226-1221 or Laura Yonkers at (772) 226-1891, if you have any questions.

Sincerely,
Indian River County Engineering

James W. Ennis, P.E., PMP
County Engineer

JWE/ly/sem

cc: Richard B. Szpyrka, P.E., Public Works Director
Laura Yonkers, P.E., Senior Engineer
Daniel Wittenberg, Engineering Inspection Supervisor
Keith McCully, P.E., Stormwater Engineer
Patrick J. Murphy, Senior Engineer
Maria Bowdren, Planning Staff Assistant III
Todd Tardif, Senior Stormwater Inspector
Steven Moler, PE – Masteller & Moler, Inc.

INDIAN RIVER COUNTY ENGINEERING DIVISION

1801 27TH STREET
VERO BEACH, FL 32960-3365
772-226-1597

RECEIVED 09/17/2018

PERMIT

Confirm. #: 278

ROWUTL ROW UTILITIES

PERMIT #: 2018080918 **PERMIT TYPE:** ROWUTL **ISSUED DATE:** 09/13/2018 **BY:** PWCS

JOB DESCRIPTION: 7751 58TH AV, FIRE HYDRANT INSTALL ON W SIDE, 4" FORCE MAIN CONNECTION TO EXISTING

JOB ADDRESS 7751 58TH AV NORTH COUNTY REVERSE OSMOSIS WATER PLANT

BLOCK 7000 **LOT:** 00003.0 **SUBDIVISION #:** -

ADDR NBR: 23138 **FOLIO NBR:** 31-39-32-00000-7000-00003.0 **WWP (2X fee):** N

OWNER NAME: INDIAN RIVER COUNTY **JURISDICTION:** IRC

PROJECT

APPLICANT: IRC - MIKE ZITO - ASST CO ADMIN **TYPE:** OWNER **JOB PHONE:** 772-226-1410

DBA: **CERT NBR** **JOB FAX:**

FLOOD ZONE X **FLOOD ELEV:** U **FLOOD MAP** 87E

OPEN CUT: **LANES:** **BOND AMOUNT:**

ADDITIONAL INFO:

PERMIT EXPIRES ON 3/13/2019

72 HOUR NOTIFICATION REQUIRED PRIOR TO BEGINNING WORK IN INDIAN RIVER COUNTY RIGHT-OF-WAY. MAINTENANCE OF TRAFFIC PER ATTACHED PLAN. SPECIAL CONDITIONS AND ADDITIONAL ITEMS ATTACHED.

INSPECTION	CODE	DATE	INITIALS	APPR	DISAPPR	COMMENTS
(As Applicable)						
STAKE & GRADE	801	__/__/__	_____	_____	_____	_____
PRE-POUR DRIVE/SIDE	802	__/__/__	_____	_____	_____	_____
OTHER	803	__/__/__	_____	_____	_____	_____
ROW FINAL	899	__/__/__	_____	_____	_____	_____

DISPLAY ON JOB SITE

This permit is subject to attached conditions. For information regarding this permit, contact the Indian River County Engineering Division at (772) 226-1283.

Schedule Inspections Online at:

www.ircgov.com and select the **Building Division Online Services** link

This permit is based upon information supplied on the application. Insufficient or erroneous information does not relieve the applicant of any future requirements that may be imposed to comply with Indian River County Ordinances. Engineering reserves the right to modify the original permitted conditions as needed at any time prior to final acceptance in order to comply with Indian River County Ordinances.

INDIAN RIVER COUNTY BUILDING DEPARTMENT

1801 27TH STREET
VERO BEACH, FL 32960

INSPECTION CARD

PERMIT #: **PERMIT TYPE:** **ISSUED DATE:** **BY:**

JOB DESCRIPTION:

PROJECT **JURISDICTION:**
JOB ADDRESS

BLOCK **LOT:** **SUBDIVISION #:** -
FOLIO NBR: **OWNER NAME:**

APPLICANT: **TYPE:** **CONTACT PHONE**
DBA: **CERT NBR:**

THIS CARD MUST BE POSTED IN A CONSPICUOUS PLACE AND PROTECTED UNTIL THE PERMIT HAS BEEN FINALED. *THIS BUILDING CANNOT BE OCCUPIED UNITL A "CERTIFICATE OF OCCUPANCY" HAS BEEN OBTAINED FROM THE BUILDING OFFICIAL.
Schedule Inspections Online at:
www.ircgov.com and select the **Building Division Online Services** link
or call 772-226-1260.
A permit expires if work has not commenced within six(6) months of being issued or if there is no "Passed" inspection activity for a period of six(6) months per Florida Building Code requirements. Exception: ALL DEMOLITION PERMITS WILL EXPIRE 60 DAYS FROM ISSUE DATE.

REQ DESCRIPTION REQ DESCRIPTION

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

CDPR2022

23138

INDIAN RIVER COUNTY
RIGHT-OF-WAY REVIEW/PERMIT APPLICATION

DATE_____ R.O.W. PERMIT NO. 20180809 18

APPLICANT Indian River County, Michael C. Zito, Asst Co. Administrator (772) 226-1410
NAME PHONE

1801 27th Street Vero Beach, FL 32960
ADDRESS

CONTRACTOR Unknown
NAME EMERGENCY PHONE NO. (REQUIRED)

ADDRESS OFFICE PHONE NO.

LOCATION OF WORK 7751 58th Avenue Vero Beach, FL 32967 (530' north of 77th Street and 58th Avenue Intersection)
STREET ADDRESS

LOT BLOCK SUBDIVISION UNIT

DESCRIPTION OF WORK Fire Hydrant installation on the west side and 4" force main connection to existing force main on east side of 58th Avenue

TYPE OF REVIEW/PERMIT: (CIRCLE ONE) ***RESIDENTIAL*** ***COMMERCIAL*** ***LAND DEVELOPMENT*** ***SITE PLAN*** ***UTILITY***

RECEIVED
AUG 16 2018
INDIAN RIVER COUNTY
ENGINEERING DIVISION

RIGHT-OF-WAY JURISDICTION: (CIRCLE ONE) ***PUBLIC*** ***PRIVATE***

TYPE C STORMWATER REVIEW: (CIRCLE ONE) ***YES*** ***NO***

CONSTRUCTION TYPE:

____ DRIVEWAY*	____ CABLE TV	____ UNDERGROUND
____ STREET PAVING	____ ELECTRICITY	____ OVERHEAD
____ SIDEWALKS/CURBS	____ TELEPHONE	____ STORM DRAINAGE
____ RIGHT-OF-WAY	X WATER SYSTEMS	____ CLEARING
X SANITARY SEWER	____ OTHER____	

NOTE:
1. Detailed drawings shall be submitted with each application.
2. This permit is issued subject to all conditions on reverse side of this application.
3. A signature by the contractor shall be construed as making the contractor personally liable for all permit conditions unless contractor attached written proof of authorization to act on behalf of the applicant.
4. All work is subject to final inspection by Engineering Division. Call 772-226-1283 to schedule inspections for any permit issued after January 1, 2003.

Michael Zito Digitally signed by Michael Zito Date: 2018.08.16 09:43:43 -04'00'
APPLICANT / CONTRACTOR SIGNATURE

Michael C. Zito, Assistant County Administrator
NAME (PLEASE PRINT)

OFFICE USE ONLY

PERMIT FEE $ NA

ISSUING OFFICER

DATE ISSUED 9/13/18

EXPIRATION DATE 3/13/19

NOTES:

INDIAN RIVER COUNTY
DEPARTMENT OF UTILITY SERVICES
1801 27th Street, Vero Beach, Florida 32960

RECEIVED
JAN 30 2024
BY:_____

UTILITY CONSTRUCTION PERMIT

Permit Issuance Date: *January 29, 2024*
UCP #: *3452*
IRC Project #: *92100016-81899*
Project Name: *Hobart Park Baseball Field Improvements*
Project Location: *NE Corner of 58th Ave. and 77th St.*
Owner/Developer: *Indian River County*
Engineer-of-Record: *Masteller and Moler Inc. Stephen E. Moler, P.E.*
IRCUD Inspector: *William "Ed" Gore, wgore@indianriver.gov*
Project Description: **Concession and Bathroom Building Replacement, Parking Lot and Ball Field Addition**

Services:
- ☒ County Water
- ☐ County Gravity Sewer
- ☐ County Force Main
- ☐ County Lift Station
- ☒ Private Lift Station
- ☒ Private Force Main

General:

This Utility construction permit authorizes the above-named Owner/Developer to construct a Water Distribution System and a Wastewater Collection System for the project as shown on the construction plans prepared by ***Masteller and Moler Inc.*** and signed & sealed on ***October 2, 2023***. Permit Issuance is contingent upon construction being performed by personnel currently licensed in the State of Florida to perform such work. All work shall be performed in accordance with Indian River County Utilities Standards, latest edition and applicable regulatory agency. Utility work shall not commence until all necessary easements and/or permits are acquired, including an Indian River County R-o-W Permit if working within its limits. The limits of construction are delineated by these plans. This permit is valid for a period of twelve consecutive months from the date of issuance and is subject to the special provisions and completion of associated checklist items as provided in Attachment A; this permit does not constitute a permit for operation.

Special Conditions: Not Applicable.

If you have any questions, please do not hesitate to contact me at (772) 226-1636.

Sincerely,

Jesse R. Roland, Sr. Plans Reviewer

Enclosure: Attachment A + 1 set of Construction Plans

cc:	Sean Lieske, Director of Utility Services	(via email)
	Howard Richards, P.E., Utilities Capital Projects Manager	(via email)
	Sean Lieske, Interim Director of Public Works	(via email)
	Andrew Sobczak, AICP, Director Community Development Planning Division	(via email)
	Ed Gore, Utilities Inspector	(w/ Enclosure)
	Utility Project File UCP # 3452	(w/ Enclosure)

ATTACHMENT A

UTILITY CONSTRUCTION PERMIT – SPECIAL PROVISIONS

1. The Owner/Developer or his duly authorized representative, the Engineer-of-Record, property owner and construction contractor shall hold Indian River County harmless in any suits, claims, and/or liabilities arising from subject construction.

2. The Owner/Developer or his duly authorized representative, the Engineer-of-Record and the construction contractor shall have a pre-construction meeting with Indian River County Department of Utility Services (IRCDUS) a minimum of five working days before beginning construction.

3. The contractor shall notify Customer Service, IRCDUS, at (772) 567-8000 a minimum of 48 hours prior to beginning construction or performing any system tests.

4. All water and sewer utility locations are to be coordinated with other utilities such as, but not limited to electric, cable, telephone, irrigation, etc. Minimum setback requirements from water and sewer utilities, as outlined below, must be adhered to prior to acceptance of the water and sewer utilities.

Type of Object	Min. Horizontal Separation between Utility Water/Sanitary Lines and other Utilities & Objects
a) Aboveground permanent objects (i.e. walls, trees, transformer pads, etc.).	Pressure Pipes = Depth of the pipe plus diameter of the pipe Gravity Sewer – ten (10) feet
b) Underground utility lines (i.e., telephone, power, drainage, etc.)	Four (4) feet
c) Surface water body top of bank (i.e. lakes, ponds, canals, etc.).	Two times the depth of the pipe plus the diameter of the pipe

FINAL ACCEPTANCE OF WATER AND SEWER IS CONTINGENT UPON A FINAL INSPECTION BY THE UTILITIES DEPARTMENT AFTER ALL OTHER ON-SITE UTILITIES HAVE BEEN INSTALLED SO THAT MINIMUM SEPARATION REQUIREMENTS, AS OUTLINED ABOVE, CAN BE VERIFIED.

5. This Utility Construction Permit does not eliminate the necessity to obtain a right-of-way permit from Indian River County Public Works Department or other permits that are required by the Florida Department of Environmental Protection (FDEP) or any other county, state, or federal agencies.

6. No construction shall begin until all required easements have been acquired.

7. All applicable permits allowing utilities construction inside any right-of-way shall be submitted prior to commencement of construction. The Land Development Permit must be obtained, if applicable, prior to commencement of any utility construction.

8. Capacity Charges must be paid in full prior to commitment of capacity or issuance of building permit whichever comes first. THERE IS NO GUARANTEE THAT CAPACITY WILL BE AVAILABLE AT TIME OF REQUEST.

9. County Inspection Services: The County's hours of peration for this project is limited to between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding holidays. The DEVELOPER shall coordinate needed inspection services between these hours of operation. Should the DEVELOPER require County inspection services beyond the designated hours then the DEVELOPER shall pay the inspectors' hourly prevailing rate times an overtime direct multiplier of 1.5 times the hourly rate. The DEVELOPER shall not have the right to declare this Agreement in default because it disagrees with the fees and charges imposed for the extended use of the County Inspectors.

10. All equipment, materials, and workmanship shall meet or exceed current Indian River County Water and Wastewater Utility Standards and shall be subject to the unconditional inspection and approval of the Indian River County Department of Utility Services.

11. Only IRCDUS approved appurtenances shall be used in construction.

12. Shop drawings shall be provided and reviewed by IRCDUS prior to construction.

13. The Engineer-of-Record (EOR) shall have an on-site representative (inspector) whom shall witness and document <u>all</u> materials used, installation procedures, problems encountered and all tests specified by the Utility Construction Permit Checklist. Daily construction reports shall be submitted not less than monthly to IRCDUS. The daily reports shall be signed and sealed by the EOR. The daily construction reports shall be submitted to IRCDUS no later than seven days after completion of that portion of construction requiring clearance. Indian River County has unconditional rights to inspect the construction and materials at any time.

14. All connections to the IRCDUS system and operation of utility system valves and equipment shall be made under the direct observation of personnel from IRCDUS. Where loss of utility service will occur, a minimum of a 48-hour notice to IRCDUS and the public is required. A 48-hour notice is required for access to private property.

15. No testing of potable water or sanitary sewer system shall commence until Record Drawings have been submitted, approved, and accepted by the Department of Utility Services.

16. Upon completion of construction, utility system shall be flushed, disinfected, and tested in accordance with the current IRCDUS Specifications.

17. Project Closeout: At the time of final completion, an inspection shall be held by IRCDUS in the presence of the property owner, DEVELOPER, Contractor and Engineer-of-Record. At this time, the DEVELOPER shall provide all necessary documentation as required by the Utility Construction Permit and regulatory agencies, such as the FDEP. At the time of completion of all utility work, a final inspection shall be held. The DEVELOPER shall make arrangements with the Owner, Contractor, Engineer-of-Record and IRCDUS for a joint follow-up inspection and shall send a written notice to said parties to inform them of the date and time of the inspection. After the inspection, IRCDUS, through the Engineer-of-Record, shall inform the DEVELOPER of any corrections required.

18. The one-year maintenance period shall not commence until a final Certification-of-Construction – Completion and Request for Clearance to Place Permitted Components Into Operation (FDEP Form 62-555.900) has been prepared and approved by FDEP, and a Memo of Acceptance has been issued by IRCDUS.

19. Partial Utilization: IRCDUS shall have the right to utilize or place into service any utility equipment pursuant to FDEP Certificate-of-Construction Completion (FDEP Form 62-555.900) or other usable portion of the work prior to completion of the work. In such case, IRCDUS, identifying the specific portion or portions of the work to be so utilized or otherwise placed into service, will notify the DEVELOPER in writing. The DEVELOPER shall understand that until such written notification is issued, all responsibility for ownership, care and maintenance of the work shall be borne by the DEVELOPER. Upon issuance of said written notice of partial utilization, the DEVELOPER accept full responsibility for the protection and maintenance of all such items or portions of the work described in the written notice until final acceptance by IRCDUS. The DEVELOPER shall retain full responsibility for satisfactory completion of the work, regardless of whether a portion thereof has been partially utilized by IRCDUS and the DEVELOPER'S one-year correction period shall commence only after the date of Substantial Completion for the work. DEVELOPER shall be further responsible for submitting a final Certification-of-Construction Completion to FDEP for any outstanding portion of the work.

20. ALL IRCDUS REQUIRED DOCUMENTS / SUBMISSIONS MUST BE PROVIDED BY THE DEVELOPER PRIOR TO IRCDUS'S RELEASE OF THE PROJECT. Upon completion of construction and prior to placing the utility system into service, the requirements of IRCDUS's water and wastewater system Utility Construction Permit Checklist shall be satisfied. This shall include but is not limited to record drawings, easement dedications, bill-of-sales, etc.

INDIAN RIVER COUNTY
DEPARTMENT OF UTILITY SERVICES

UTILITY CONSTRUCTION PERMIT CHECKLIST

WATER CHECKLIST

Received	Description
	1. One (1) signed and dated, approved or red-lined set of as-built construction drawings by the project's County Inspector for approval by Utilities Engineering, prior to the submittal of the Final Record Drawings. Submittal of Final Record Drawings should consist of one (1) set of reproducible mylars, one (1) electronic disc and three (3) sets of blue/black line prints signed and sealed by the Engineer-of-Record or Licensed Surveyor. The Engineer-of-Record must be registered to practice in the State of Florida.
	2. Copy of a satisfactory hydrostatic pressure test signed by the Engineer-of-Record.
	3. One complete set of daily field inspection records prepared by the on-site inspector certified by the Engineer-of-Record to be submitted seven (7) days after completion of that portion requiring clearance.
	4. Copy of a satisfactory bacteriological main clearance certified by the Engineer-of-Record.
	5. Copy of a satisfactory trench backfill and compaction density test reports signed by the Engineer-of-Record.
	6. Certification by the Engineer-of-Record that the water line was sanitized in accordance with County specifications.
	7. Certification by the Engineer-of-Record that the construction of the water distribution system is complete and in accordance with County construction and material specifications. Any deviation from the approved construction drawings or County specifications must be specifically identified and justified by the Engineer.
	8. Copy of the Notice of Acceptance of Completion from the Florida Department of Environmental Protection (FDEP) authorizing the water distribution system to be placed into service.
	9. Backflow Preventer Certification(s), which includes domestic and fire lines and proof that the certification has been filed in accordance with the County Cross Connection Control Program's Backflow Management and Inspection Database. See http://www.ircutilities.com/CCCP.htm for further information.
	10. <u>Bill of Sale & Easement</u> - Dedication of the water distribution system and accompanying easements. The dedication is to include an itemized list of all

Received	Description
	materials along with total materials, construction and engineering costs. ***This will be coordinated through the IRC Attorney's Office once authorized by IRCDUS.***
	11. Bill of Sale - Where the water distribution system is located in established easements or road rights-of-way, the attached bill of sale is to be executed along with an itemized list of all materials to include materials and construction costs. ***This will be coordinated through the IRC Attorney's Office once authorized by IRCDUS.***
	12. Complete on-site inspection by a County utility inspector with confirmation that the water distribution system appears acceptable.
	13. Arrangements for payment of all capacity charges and other costs of connections.
	14. Release of lien(s) from each Contractor, Subcontractor and Vendor.
	15. A one-year maintenance bond in an amount equaling 25% of the total cost for construction of the system if construction costs exceed $10,000. If total construction costs are less than $10,000, then a one-year warranty letter is required. The warranty letter can be issued by the developer or contractor.

INDIAN RIVER COUNTY
DEPARTMENT OF UTILITY SERVICES

UTILITY CONSTRUCTION PERMIT CHECKLIST

WASTEWATER CHECKLIST

Received	Description
	1. One (1) signed and dated, approved or red-lined set of as-built construction drawings by the project's County Inspector for approval by Utilities Engineering, prior to the submittal of the Final Record Drawings. Final Record Drawings submittal should consist of one (1) set of reproducible mylars, one (1) electronic disc and three (3) sets of blue/black line prints signed and sealed by the Engineer-of-Record or Licensed Surveyor. The Engineer-of-Record must be registered to practice in the State of Florida.
	2. Copy of a satisfactory hydrostatic pressure test or infiltration/exfiltration test signed by the Engineer-of-Record.
	3. One complete set of daily field inspection records prepared by the on-site inspector certified by the Engineer-of-Record to be submitted seven (7) days after completion of construction of that portion requiring clearance.
	4. Copy of a satisfactory television test and a certified report by the Engineer-of-Record.
	5. Copy of a satisfactory trench backfill and compaction density test reports signed by the Engineer-of-Record.
	6. Certification by the Engineer-of-Record that the construction of the wastewater collection/transmission system is complete and in accordance with County construction and material specifications. Any deviation from the approved construction drawings or County specifications must be specifically identified and justified by the Engineer.
	7. Copy of the Notice of Acceptance of Completion from the Florida Department of Environmental Protection (FDEP) authorizing the wastewater collection/transmission system to be placed into service.
	8. Bill of Sale & Easement - Dedication of the wastewater collection/transmission system and accompanying easements. The dedication is to include an itemized list of all materials along with total materials, construction and engineering costs. ***This will be coordinated through the IRC Attorney's Office once authorized by IRCDUS.***
	9. Bill of Sale - Where the wastewater collection/transmission system is located in established easements or road rights-of-way, the attached bill of sale is to be executed along with an itemized list of all materials to include materials and

Received	Description
	construction costs. ***This will be coordinated through the IRC Attorney's Office once authorized by IRCDUS.***
	10. Complete on-site inspection by a County utility inspector with confirmation that the wastewater collection/transmission system appears acceptable.
	11. Arrangements for payment of all capacity charges and other costs of connections.
	12. Release of lien(s) from each Contractor, Subcontractor and Vendor.
	13. A one-year maintenance bond in an amount equaling 25% of the total cost for construction of the system if construction costs exceed $10,000. If total construction costs are less than $10,000, then a one-year warranty letter is required. The warranty letter can be issued by the developer or contractor.
	14. A set of lift station specifications (if applicable), two sets of operations and maintenance manuals, warranty, and all spare parts as required by IRCDUS standards.
	15. Transfer of lift station's electric account from Developer to County.
	16. If a PRIVATE Lift Station, an acknowledgment letter from Engineer/Owner, and copy of 24/7 lift station maintenance agreement with a qualified service and repair company having lift station maintenance experience.

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
Post Office Box 1429
Palatka, Florida 32178-1429

RECEIVED 09/05/2018

PERMIT NO: 114983-3 **DATE ISSUED:** September 05, 2018

PROJECT NAME: Hobart Park Baseball Field Project

A PERMIT AUTHORIZING:
Authorization of a Stormwater Management System for Hobart Park Baseball Field Project, a 27.73 - acre project to be constructed and operated as per plans received by the District on August 27, 2018.

LOCATION:
Section(s): 33 Township(s): 31S Range(s): 39E
Indian River County

Receiving Water Body:

Name	Class
Indian River Lagoon	III Marine, OFW, AP, IW

ISSUED TO:
Indian River County
1801 27th St
Vero Beach, FL 32960-3388

The permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to the permittee any property rights nor any rights or privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes.

PERMIT IS CONDITIONED UPON:

See conditions on attached “Exhibit A”, dated September 05, 2018

AUTHORIZED BY: St. Johns River Water Management District
Division of Regulatory Services

By: _____
David Miracle
Regulatory Coordinator

"EXHIBIT A"
CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 114983-3
Hobart Park Baseball Field Project
DATED: September 05, 2018

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the District staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5, F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the District a fully executed Form 62-330.350(1), "Construction Commencement Notice," (October 1, 2013) (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505), incorporated by reference herein, indicating the expected start and completion dates. A copy of this form may be obtained from the District, as described in subsection 62-330.010(5), F.A.C., and shall be submitted electronically or by mail to the Agency. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.300(4)(b), shall also serve as notice of commencement of construction under this chapter and, in such a case, submittal of Form 62-330.350(1) is not required.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:

   a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex — "Construction Completion and Inspection Certification for Activities Associated with a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or

   b. For all other activities — "As-Built Certification and Request for Conversion to

Operation Phase" [Form 62-330.310(1)].

c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:

   a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.4 of Volume I) as filed with the Florida Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.

   b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation and Maintenance Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the District in writing of changes required by any other regulatory District that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:

   a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;

   b. Convey to the permittee or create in the permittee any interest in real property;

   c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or

   d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the District in writing:

    a. Immediately if any previously submitted information is discovered to be inaccurate; and

b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, District staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850) 245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, F.S. For project activities subject to prior consultation with the DHR and as an alternative to the above requirements, the permittee may follow procedures for unanticipated discoveries as set forth within a cultural resources assessment survey determined complete and sufficient by DHR and included as a specific permit condition herein.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant’s submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the District will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

19. This permit for construction will expire five years from the date of issuance.

20. At a minimum, all retention and detention storage areas must be excavated to rough grade prior to building construction or placement of impervious surface within the area to be served by those facilities. To prevent reduction in storage volume and percolation rates, all accumulated sediment must be removed from the storage area prior to final grading and stabilization.

21. All wetland areas or water bodies that are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity, and dewatering.

22. The operation and maintenance entity shall inspect the stormwater or surface water management system once within two years after the completion of construction and every two years thereafter to determine if the system is functioning as designed and permitted. The operation and maintenance entity must maintain a record of each required inspection, including the date of the inspection, the name and contact information of the inspector, and whether the system was functioning as designed and permitted, and make such record available for inspection upon request by the District during normal business hours. If at any time the system is not functioning as designed and permitted, then within 30 days the entity shall submit a report electronically or in writing to the District using Form 62-330.311(1), “Operation and Maintenance Inspection Certification,” describing the remedial actions taken to resolve the failure or deviation.

23. The proposed project must be constructed and operated as per plans and calculations received by the District on August 27, 2018.

INDIAN RIVER FARMS WATER CONTROL DISTRICT
7305 4th Street
Vero Beach, Florida 32968
(772) 562-2141

RECEIVED
SEP 20 2018
BY: .....

APPLICATION FOR CONNECTION TO OR USE OF DISTRICT FACILITIES

Date: 8/16/18 No. 18-29

A. Applicant Information:

Name: Indian River County
Address: 1801 27th Street
Vero Beach, FL 32960

Authorized Agent and Title: Michael C. Zito, Assistant County Administrator
Telephone Number: 772-226-1410

B. Proposed Connection or Use: (check appropriate box or boxes) **NON-REFUNDABLE**

- [x] Culvert connection to District canal for irrigation or drainage $100.00
- [ ] Pump connection to District canal for irrigation or drainage $300.00
- [ ] Culvert and/or control structure in District canal for crossing and/or water storage $200.00
- [ ] Other (specify) _____ $100.00

C. Location: Tract SW 1/4 of SW 1/4, Section 33, Township 31, Range 39, Canal No. Lat G
Other appropriate description: Hobart Baseball Park
Property I.D. Parcel No.: 31393300000500000003.0
Attach drawing to show details (include acreage to be served).

D. Details of proposed Construction: (Give diameter and length of culvert; diameter and rated capacity of pump; height and width of riser or other details on water control structure.)

25 LF of 18" diameter CAP

E. Special Conditions: (for District use only)

SEE ATTACHED LIST OF SPECIAL CONDITIONS

F. Estimated Date of Construction Commencement: September 2018
Estimated Date of Construction Completion: December 2018

G. As the Applicant for permit, I do understand and agree that:

1. The use of, or construction within, the right-of-way of the Indian River Farms Water Control District will be in accordance with the details of the approved sketch and/or permit conditions shown hereon, supporting this application; and if any changes are required, same will be cleared with the District.

(Continued on Reverse hereof)

Signed: _____ Date 8/16/18
Applicant

(For District Use Only)

Application approved by: _____
for the Indian River Farms Water Control District

Application approved by: _____
for Carter Associates, Inc., Engineer for District

Date of approval: 9-17-18
Expiration Date of this approved application: 9-17-19

PERMISSION, WHEN GRANTED, WILL BE SUBJECT TO THE STANDARD PROVISOS SET FORTH ON THE REVERSE HEREOF.

G. (continued)

2. I accept full responsibility for any erosion to or shoaling in the District's canal or levee due to my work and I shall remove or repair same promptly and at no expense to the District; and I will prevent the discharge of any hyacinths or aquatic growth into the District's canal through my connection.

3. I will neither plant trees or shrubs or erect any structure that will prohibit or limit the existing access of District equipment or vehicles without securing proper authorization thereof.

4. It is further understood and agreed that any other requirements of the District are binding upon me, the application, and I do hereby indicate acceptance of this notice thereof.

5. It is further understood and agreed that the lands to be benefited by this request are, or may be, subject to flooding during periods of high water due to heavy rains or other acts of God, and that the permit will be accepted subject to this possibility which is recognized not to be within the control of the District.

STANDARD PROVISOS

1. Permittee assumes full responsibility for any construction, operation or maintenance of District property or right-of-way subject to this Permit and shall save and hold harmless District from any expense, loss, damage or claim in regard thereto, and the District assumes and shall have no liability in connection therewith.

2. This Permit may not be assigned or subletted to a third party and any transfer of Permittee's property abutting District's property or right-of-way shall ipsofacto and without move, cancel, nullify and revoke this Permit.

3. This Permit is subject always to the paramount right of the District to keep and maintain its drainage district functions and operations, and is subject to revocation and cancellation upon thirty days' notice from District to Permittee.

4. In no event shall the District be liable for any damages done or caused by the District to the Public, to Permittee or any other person using the right-of-way or property subject to this Permit, and Permittee shall save the District, its officers, agents, supervisors and employees harmless from any costs, charge or expense of claim or demand of any person against the District arising from or pertaining to any use made of the property or right-of-way subject to this permit. Permittee shall, at any time upon request of District, provide to District evidence, satisfactory to District, of liability insurance coverage, in amounts and with companies as may be required by District, protecting the interests of District and naming District as an additional insured.

5. The District may, on thirty days' written notice to Permittee, require removal and/or alteration of any installation or construction on District right-of-way.

6. Any construction on District right-of-way or property and clean up shall be completed promptly by Permittee and in a workmanlike manner with minimum disturbance to existing berm, channel slopes and grade with proper restoration and planting of any disturbed areas to prevent erosion within ten days after completion of construction or installation.

7. Permittee shall advise District's office prior to commencement and upon completion of all construction. (562-2141)

8. Permittee shall not discharge any pollutants, contaminants or deleterious materials into water or structures owned or maintained by, or subject to the jurisdiction of District, nor permit anything to obstruct the flow of water, and shall save and hold District harmless from any expense, loss or damage to District or others by any such discharge or obstruction, remedying or removing the same immediately upon request of District.

9. Permittee, as a condition to the continuance of this Permit, shall reimburse District immediately upon demand, for any testing or other costs or expenses to District associated with or arising from Permittee's use of District facilities.

10. Applicant is cautioned that electrical, water and sewer, or other installations or utilities may be located within the construction area, and applicant shall use diligent efforts to first detect and locate all such installations and shall coordinate construction with all other lawful users of said right-of-way. Applicant shall be liable for all damages proximately resulting from its interference with or interruption of services provided by other lawful right-of-way users.

11. This permit shall be considered to be a license only, for the limited purpose of installation, placement and maintenance of the improvements specified on the face hereof, and does not convey any other right, title or interest of the District in the subject right-of-way property.

12. An as-built/location certification of all culvert/structure installations within the District's canals/right-of-way shall be performed by a Florida Registered Professional Surveyor and Mapper on form provided by the District, and submitted to the District within thirty (30) days following completion of installation. If as-built certification is not received **within thirty days of installation**, the District will **either** have certification completed at owner/applicants expense **or order removal of the installation.**

SPECIAL CONDITIONS FOR PERMIT NO. 18-29
FOR
PROPOSED HOBART PARK BASEBALL FIELD IMPROVEMENTS
LOCATED IN SW ¼ OF SW ¼ OF SECTION 33-31-39

(1) This permit is issued based on plans prepared by Mastellar & Moler, Inc., signed and sealed by Stephan E. Moler, P.E., dated August 16, 2018.

(2) This project shall meet and provide the required 2"/24 hour discharge limitation for the site.

APPENDIX B

INDIAN RIVER COUNTY FERTILIZER ORDINANCES

ORDINANCE NO. 2013 - 012

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY, FLORIDA, AMENDING THE CODE OF INDIAN RIVER COUNTY TO ESTABLISH A NEW CHAPTER 316, ENTITLED "FERTILIZER AND LANDSCAPE MANAGEMENT;" ADOPTING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S MODEL ORDINANCE FOR FLORIDA-FRIENDLY USE OF FERTILIZER ON URBAN LANDSCAPES, WITH MODIFICATIONS; MAKING FINDINGS AND PROVIDING FOR SEVERABILITY, CODIFICATION; DIRECTING COUNTY ATTORNEY'S OFFICE TO POST SUMMARY ON COUNTY WEBSITE, AND AN EFFECTIVE DATE.

WHEREAS, as a result of impairment to Indian River County's surface waters caused by excessive nutrients, or, as a result of increasing levels of nitrogen in the surface and/or ground water within the aquifers or canals within the boundaries of Indian River County, the Board of County Commissioners has determined that the use of fertilizers on lands within Indian River County creates a risk of contributing to adverse effects on surface and/or ground water; and

WHEREAS, in order to address this risk, the Board of County Commissioners has determined that it is not only critical to adopt the Florida Department of Environmental Protection's Model Ordinance for Florida-Friendly Use of Fertilizer on Urban Landscapes, but that as part of Indian River County's science-based, and economically and technically feasible, comprehensive program to address nonpoint sources of nutrient pollution, additional and more stringent standards are necessary in order to adequately address urban fertilizer contributions to nonpoint source nutrient loading to the surface and/or ground water of Indian River County; and

WHEREAS, this ordinance regulates the proper use of fertilizers by any applicator; requires proper training of Commercial Fertilizer Applicators and Institutional Fertilizer Applicators; establishes training and licensing requirements; establishes a Prohibited Application Period; and specifies allowable fertilizer application rates and methods, fertilizer-free zones, low maintenance zones, and exemptions. The ordinance requires the use of Best Management Practices which provide specific management guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of fertilizers. These secondary and cumulative effects have been observed in and on Indian River County's natural and constructed stormwater conveyances, rivers, creeks, canals, lakes, estuaries and other water bodies. Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of Indian River County residents and the health of the public. Overgrowth of algae and vegetation hinder the effectiveness of flood attenuation provided by natural and constructed stormwater conveyances. Regulation of nutrients, including both phosphorus and nitrogen contained in fertilizer, will help improve and maintain water and habitat quality,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY, FLORIDA, THAT:

Section 1. Enactment Authority.

Article VIII, §1 of the Florida Constitution and Chapter 125, Florida Statutes vest broad home rule powers in counties to enact ordinances, not inconsistent with general or special law, for the purpose of promoting the public health, safety and welfare of the residents of the county. The Board specifically determines that the enactment of this ordinance is consistent with general or special law, and is necessary and appropriate to promote the health, safety and welfare of the residents of Indian River County.

Section 2. Findings.

The Board finds that the above "Whereas" clauses are true and correct, and hereby incorporates such clauses as findings of the Board.

Section 3. Adoption of Chapter 316 of the Code of Indian River County (the "Code").

Chapter 316 of the Code is hereby adopted, as follows (new language is indicated by underline):

Section 316.1. Title.

This chapter shall be known as the "Indian River County Fertilizer and Landscape Management Ordinance."

Section 316.2. Definitions.

For the purposes of this chapter, the following terms shall have the following meanings:

"*Administrator*" shall mean the County Administrator, or an administrative official of the County designated by the County Administrator to administer and enforce the provisions of this chapter.

"*Application*" or "*apply*" shall mean the actual physical deposit of fertilizer to turf or landscape plants.

"*Applicator*" shall mean any Person who applies fertilizer on turf and/or landscape plants in Indian River County.

"*Board*" shall mean the Indian River County Board of County Commissioners.

"*Best Management Practices*" shall mean turf and landscape practices or combination of practices based on research, field-testing, and expert review, determined to be the most effective

and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.

"*Chapter 85-427*" shall mean The Indian River County Environmental Control Act, Chapter 85-427, Special Acts, Laws of Florida.

"*Code Enforcement Officer* shall mean any designated employee or agent of Indian River County whose duty it is to enforce codes and ordinances enacted by Indian River County.

"*Commercial Fertilizer Applicator*," except as provided in §482.1562(9), Florida Statutes, shall mean any person who applies fertilizer for payment or other consideration to property not owned by the person or firm applying the fertilizer or the employer of the applicator.

"*Code*" shall mean The Code of Indian River County.

"*Environmental Control Officer*" shall mean the Indian River County Environmental Control Officer appointed by the Board pursuant to Chapter 85-427, and Chapter 303 (Part I) of this Code, and his or her designees.

"*Fertilize*," "*fertilizing*," or "*fertilization*" shall mean the act of applying fertilizer to turf, specialized turf, or landscape plants.

"*Fertilizer*" shall mean any substance or mixture of substances that contains one or more recognized plant nutrients and promotes plant growth, or controls soil acidity or alkalinity, or provides other soil enrichment, or provides other corrective measures to the soil.

"*Heavy rain*" shall mean rainfall greater than two inches in a 24 hour period.

"*Institutional Fertilizer Applicator*" shall mean any person, other than a private, non-commercial applicator or a Commercial Fertilizer Applicator (unless such definitions also apply under the circumstances), that applies fertilizer for the purpose of maintaining turf and/or landscape plants. Institutional Fertilizer Applicators shall include, but shall not be limited to, owners, managers or employees of public lands, schools, parks, religious institutions, utilities, industrial or business sites and any residential properties maintained in condominium and/or common ownership.

"*Landscape plant*" shall mean any native or exotic tree, shrub, or groundcover (excluding turf).

"*Low maintenance zone*" shall mean an area a minimum of ten feet wide adjacent to water courses which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.

"*Person*" shall mean any natural person, business, corporation, limited liability company, partnership, limited partnership, association, club, organization, and/or any group of people acting as an organized entity.

"*Restricted Season*" shall mean June 1 through September 30.

"*Saturated soil*" shall mean a soil in which the voids are filled with water. Saturation does not require flow. For the purposes of this chapter, soils shall be considered saturated if standing water is present or the pressure of a person standing on the soil causes the release of free water.

"*Slow Release Nitrogen*" shall mean nitrogen in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant longer than a reference rapid or quick release product.

"*Turf*," "*sod*," or "*lawn*" shall mean a piece of grass-covered soil held together by the roots of the grass.

"*Urban landscape*" shall mean pervious areas on residential, commercial, industrial, institutional, highway rights-of-way, or other nonagricultural lands that are planted with turf or horticultural plants. For the purposes of this section, agriculture has the same meaning as in §570.02, Florida Statutes.

Section 316.3. Timing of fertilizer application.

No applicator shall apply fertilizers containing nitrogen and/or phosphorus to turf and/or landscape plants during the Restricted Season, to saturated soils, or during a period in which a Flood Watch or Warning, or a Tropical Storm Watch or Warning, or a Hurricane Watch or Warning is in effect for any portion of Indian River County, issued by the National Weather Service, or if heavy rain is likely.

Section 316.4. Fertilizer-free zones.

Fertilizer shall not be applied within ten feet of any pond, stream, watercourse, lake, canal, or wetland as defined by the Florida Department of Environmental Protection (Chapter 62-340, Florida Administrative Code) or from the top of a seawall. If more stringent Indian River County Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. Newly planted turf and/or landscape plants may be fertilized in this zone only for a 60-day period beginning thirty days after planting if needed to allow the plants to become well established. Caution shall be used to prevent nutrients from being directly deposited into the water.

Section 316.5. Low maintenance zones.

A voluntary ten foot low maintenance zone is strongly recommended, but not mandated, from any pond, stream, water course, lake, wetland or from the top of a seawall. A swale/berm system is recommended for installation at the landward edge of this low maintenance zone to capture and filter runoff. If more stringent Indian River County Code regulations apply, this provision

does not relieve the requirement to adhere to the more stringent regulations. Notwithstanding the voluntary nature of the above sentences, no mowed or cut vegetative material may be deposited or left remaining in this zone or deposited in the water. Care should be taken to prevent the over-spray of aquatic weed products in this zone.

Section 316.6. Fertilizer content and application rates.

(a) No fertilizer containing phosphorous shall be applied to turf or landscape plants in Indian River County unless a soil or plant tissue deficiency is verified by a University of Florida, Institute of Food and Agriculture Sciences, approved testing methodology. In the case that a deficiency has been verified, the application of a fertilizer containing phosphorous shall be in accordance with the rates and directions for the Central Region of Florida as provided by Rule 5E-1.003(2), Florida Administrative Code. Deficiency verification shall be no more than 2 years old. However, recent application of compost, manure, or top soil shall warrant more recent testing to verify current deficiencies.

(b) The nitrogen content of fertilizer applied to turf or landscape plants within Indian River County shall contain at least 50% slow release nitrogen per guaranteed analysis label.

(c) Fertilizers applied to an urban lawn or turf within Indian River County shall be applied in accordance with requirements and directions set forth on the label or tag for packaged fertilizer products, or in the printed information accompanying the delivery of bulk fertilizer products, as provided by Rule 5E-1.003(2), Florida Administrative Code, *Labeling Requirements For Urban Turf Fertilizers.* All packaged and bulk fertilizer products sold in Indian River County shall be sold in packages with labels or tags, or, if sold in bulk, be accompanied by printed information, which complies with the requirements of Rule 5E-1.003(2), Florida Administrative Code.

(d) Fertilizer containing nitrogen or phosphorus shall not be applied before seeding or sodding a site, and shall not be applied for the first 30 days after seeding or sodding, except when hydro-seeding for temporary or permanent erosion control in an emergency situation (wildfire, etc.), or in accordance with the Stormwater Pollution Prevention Plan for that site.

Section 316.7. Application practices.

(a) Spreader deflector shields are required when fertilizing via rotary (broadcast) spreaders. Deflectors must be positioned such that fertilizer granules are deflected away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands.

(b) Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces.

(c) Any fertilizer applied, spilled, or deposited, either intentionally or accidentally, on any impervious surface shall be immediately and completely removed to the greatest extent practicable.

(d) Fertilizer released on an impervious surface must be immediately contained and either legally applied to turf or any other legal site, or returned to the original or other appropriate container.

(e) In no case shall fertilizer be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances, or water bodies.

Section 316.8. Management of grass clippings and vegetative materials.

In no case shall grass clippings, vegetative material, and/or vegetative debris be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, or sidewalks or roadways. Any material that is accidentally so deposited shall be immediately removed to the maximum extent practicable.

Section 316.9. Exemptions.

The provisions set forth above in this chapter shall not apply to:

(a) bona fide farm operations as defined in the Florida Right to Farm Act, § 823.14, Florida Statutes;

(b) other properties not subject to or covered under the Florida Right to Farm Act that have pastures used for grazing livestock;

(c) any lands used for bona fide scientific research, including, but not limited to, research on the effects of fertilizer use on urban stormwater, water quality, agronomics, or horticulture.;

(d) golf courses when landscaping is performed within the provisions of the Florida Department of Environmental Protection document, "Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses", these provisions shall be followed when applying fertilizer to golf course practice and play areas;

(e) athletic fields at public parks and school facilities that apply the concepts and principles embodied in the Florida Green BMPs, while maintaining the health and function of their specialized turf areas;

(f) vegetable gardens owned by individual property owners or a community, and trees grown for their edible fruit.

Section 316.10. Training.

(a) Within the time period set forth in section 316.12 of this Chapter, all Commercial Fertilizer Applicators and Institutional Fertilizer Applicators within Indian River County shall abide by and successfully complete the six-hour training program in the "*Florida-friendly Best*

Management Practices for Protection of Water Resources by the Green Industries" offered by the Florida Department of Environmental Protection through the University of Florida Extension "Florida-Friendly Landscapes" program, or an approved equivalent.

(b) Private, non-commercial applicators are encouraged to follow the recommendations of the University of Florida Institute of Food and Agriculture Sciences *Florida Yards and Neighborhoods* program when applying fertilizers.

Section 316.11. General education program.

The Public Works Department shall have an employee who shall address issues pertaining to this Chapter. This employee shall implement a program to inform the general public of the requirements of this chapter, which program shall include, among other things, informative postings on the County website, printing and distributing informative brochures and other print materials, and speaking engagements at community associations, civic organizations, etc. The program shall also include, to the extent practicable, use of any materials from the Be Floridian program and coordination and collaboration with University of Florida Institute of Food and Agriculture Sciences educational activities. Any claimed or alleged deficiency in the County's general education program shall not constitute a defense to any action brought to enforce the provisions of this chapter.

Section 316.12. Licensing of commercial fertilizer applicators.

(a) No later than December 31, 2013, all Commercial Fertilizer Applicators within Indian River County, shall abide by and successfully complete training and continuing education requirements in the *"Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries,"* offered by the Florida Department of Environmental Protection through the University of Florida Institute of Food and Agriculture Sciences "Florida-friendly Landscapes" program, or an approved equivalent program, prior to obtaining an Indian River County Local Business Tax Certificate for any category of occupation which may apply any fertilizer to turf and/or landscape plants. Commercial Fertilizer Applicators shall provide proof of completion of the program to the Indian River County Tax Collector's Office within 180 days of the effective date of this ordinance.

(b) After December 31, 2013, all Commercial Fertilizer Applicators within Indian River County shall have and carry in their possession at all times when applying fertilizer, evidence of certification by the Florida Department of Agriculture and Consumer Services as a Commercial Fertilizer Applicator per Rule 5E-14.117(18), Florida Administrative Code.

(c) All businesses applying fertilizer to turf and/or landscape plants (including but not limited to residential lawns, golf courses, commercial properties, and multi-family and condominium properties) must ensure that at least one employee has a "Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries" training certificate prior to the business owner obtaining a Local Business Tax Certificate. Owners for any category of

occupation which may apply any fertilizer to turf and/or landscape plants shall provide proof of completion of the program to the Indian River County Tax Collector's Office.

Section 316.13. Enforcement.

This chapter may be enforced by the Code Enforcement Officer in the Public Works Department who is devoted to issues pertaining to this Chapter, pursuant to Chapter 162, Florida Statutes, and §103.07 of this Code. In addition, this chapter may be enforced by the Environmental Control Officer pursuant to Chapter 85-427, Special Acts, Laws of Florida, and §303.14 of this Code. Penalties and remedies for violations shall be as set forth in §100.05 of this Code, and, to the extent applicable, Chapter 85-427, Special Acts, Laws of Florida. Funds generated by penalties imposed under this section shall be used by Indian River County for the administration and enforcement of §403.9337, Florida Statutes, and the corresponding sections of this chapter, and to further water conservation and nonpoint pollution prevention activities.

Section 316.14. References to state law.

Any references in this chapter to Florida Statutes, rules or regulations shall refer to such statutes, rules or regulations, as amended from time to time.

Section 316.15. Applicability.

This chapter shall be applicable to and shall regulate any and all applicators of fertilizer and areas of application of fertilizer within the area of Indian River County, unless such applicator is specifically exempted; provided, however, that this chapter shall not apply within the limits of any municipality which has adopted an ordinance regulating the same subject matter. This chapter shall be prospective only, and shall not impair any existing contracts.

Section 4. Severability.

If any part of this ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, the remainder of this ordinance shall not be affected by such holding and shall remain in full force and effect.

Section 5. Codification.

It is the intention of the Board of County Commissioners that the provisions of this ordinance shall become and be made part of the Indian River County Code, and that the sections of this ordinance may be renumbered or re-lettered and the word ordinance may be changed to section, article or such other appropriate word or phrase in order to accomplish such intention.

ORDINANCE NO. 2013 - 012

Section 6. Directing County Attorney's Office to Post Summary on County Website.

The County Attorney's Office is directed to post a summary of this ordinance on the County's website within 15 days of the filing of this ordinance with the Florida Department of State.

Section 7. Effective Date.

This ordinance shall become effective 45 days after the filing of the ordinance with the Florida Department of State.

This ordinance was advertised in the Vero Beach Press Journal, on the 8th day of July, 2013, for a public hearing to be held on the 18th day of July, 2013, and on the 10th day of August, 2013 for an additional public hearing to be held on the 20th day of August, 2013, at which time it was moved for adoption by Commissioner Solari, seconded by Commissioner O'Bryan, and adopted by the following vote:

Chairman Joseph E. Flescher	AYE
Vice Chairman Wesley S. Davis	AYE
Commissioner Peter D. O'Bryan	AYE
Commissioner Bob Solari	AYE
Commissioner Tim Zorc	AYE

The Chairman thereupon declared the ordinance duly passed and adopted this 20th day of August, 2013.

BOARD OF COUNTY COMMISSIONERS
INDIAN RIVER COUNTY, FLORIDA

By: _____
Joseph E. Flescher, Chairman

ATTEST: Jeffrey R. Smith, Clerk of Court and Comptroller

By: _____
Deputy Clerk

Approved as to form and legal sufficiency:

_____
Dylan Reingold, County Attorney

EFFECTIVE DATE: This ordinance was filed with the Florida Department of State on the ____ day of _____, 2013.

ORDINANCE NO. 2013 - 014

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY, FLORIDA CONCERNING THE FERTILIZER AND LANDSCAPE MANAGEMENT ORDINANCE, AMENDING SECTION 316.6 (FERTILIZER CONTENT AND APPLICATION RATES) AND SECTION 316.15 (APPLICABILITY) OF CHAPTER 316 (INDIAN RIVER COUNTY FERTILIZER AND LANDSCAPE MANAGEMENT ORDINANCE) OF THE CODE OF INDIAN RIVER COUNTY TO ALLOW FOR THE GRADUAL AMORTIZATION OF THE SUPPLY OF CERTAIN NITROGEN CONTAINING FERTILIZER AND APPLYING CHAPTER 316 TO UNINCORPORATED INDIAN RIVER COUNTY, AND MAKING FINDINGS AND PROVIDING FOR SEVERABILITY, CODIFICATION; AND AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners adopted an ordinance regulating the proper use of fertilizers in order to protect the water quality of Indian River County's natural and constructed stormwater conveyances, rivers, creeks, canals, lakes, estuaries and other water bodies; and

WHEREAS, the new fertilizer regulations require that the nitrogen content of fertilizer applied to turf or landscape plants within Indian River County shall contain at least 50% slow release nitrogen per guaranteed analysis label; and

WHEREAS, the new fertilizer regulations go into effect on October 14, 2013; and

WHEREAS, in order to provide adequate time for the supply of fertilizer containing nitrogen that does not comply with these regulations to be eliminated, it is necessary to provide additional time for retailers to eliminate those supplies that meet at least a minimum threshold of slow release nitrogen,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY, FLORIDA, THAT:

Section 1. Enactment Authority.

Article VIII, §1 of the Florida Constitution and Chapter 125, Florida Statutes vest broad home rule powers in counties to enact ordinances, not inconsistent with general or special law, for the purpose of promoting the public health, safety and welfare of the residents of the county. The Board specifically determines that the enactment of this ordinance is consistent with general or special law, and is necessary and appropriate to promote the health, safety and welfare of the residents of Indian River County.

Section 2. Findings.

The Board finds that the above "Whereas" clauses are true and correct, and hereby incorporates such clauses as findings of the Board.

Section 3. Amendment of Section 316.6 (Fertilizer content and application rates) of Chapter 316 (Indian River County Fertilizer and Landscape Management Ordinance) of the Code of Indian River County (the "Code").

Section 316.6 (Fertilizer content and application rates) of Chapter 316 (Indian River County Fertilizer and Landscape Management Ordinance) of the Code is hereby amended as follows:

Section 316.6. Fertilizer content and application rates.

(b) As of the effective date of this chapter, the ~~The~~ nitrogen content of fertilizer applied to turf or landscape plants within Indian River County shall contain at least 25~~50~~% slow release nitrogen per guaranteed analysis label. As of June 1, 2014, the nitrogen content of fertilizer applied to turf or landscape plants within Indian River County shall contain at least 50% slow release nitrogen per guaranteed analysis label.

Section 4. Amendment of Section 316.15 (Applicability) of Chapter 316 (Indian River County Fertilizer and Landscape Management Ordinance) of the Code of Indian River County (the "Code").

Section 316.15 (Applicability) of Chapter 316 (Indian River County Fertilizer and Landscape Management Ordinance) of the Code is hereby amended as follows:

Section 316.15. Applicability.

This chapter shall be applicable to and shall regulate any and all applicators of fertilizer and areas of application of fertilizer within the unincorporated area of Indian River County, unless such applicator is specifically exempted~~; provided, however, that this chapter shall not apply within the limits of any municipality which has adopted an ordinance regulating the same subject matter~~. This chapter shall be prospective only, and shall not impair any existing contracts.

Section 5. Severability.

If any part of this ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, the remainder of this ordinance shall not be affected by such holding and shall remain in full force and effect.

Section 6. Codification.

It is the intention of the Board of County Commissioners that the provisions of this ordinance shall become and be made part of the Indian River County Code, and that the sections of this ordinance may be renumbered or re-lettered and the word ordinance may be changed to section, article or such other appropriate word or phrase in order to accomplish such intention.

ORDINANCE NO. 2013 - 014

Section 7. Effective Date.

This ordinance shall become effective upon filing with the Florida Department of State.

This ordinance was advertised in the Vero Beach Press Journal, on the 16th day of September, 2013, for a public hearing to be held on the 1st day of October, 2013, at which time it was moved for adoption by Commissioner Solari, seconded by Commissioner O'Bryan, and adopted by the following vote:

Chairman Joseph E. Flescher	Aye
Vice Chairman Wesley S. Davis	Aye
Commissioner Peter D. O'Bryan	Aye
Commissioner Bob Solari	Aye
Commissioner Tim Zorc	Aye

The Chairman thereupon declared the ordinance duly passed and adopted this 1st day of October, 2013.

BOARD OF COUNTY COMMISSIONERS
INDIAN RIVER COUNTY, FLORIDA

By: _____
Joseph E. Flescher, Chairman

ATTEST: Jeffrey R. Smith, Clerk of Court and Comptroller

By: _____
Deputy Clerk

Approved as to form and legal sufficiency:

_____
Dylan Reingold, County Attorney

EFFECTIVE DATE: This ordinance was filed with the Florida Department of State on the ____ day of _____, 2013.

APPENDIX C

INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION

SPECIAL CONDITIONS FOR RIGHT-OF-WAY CONSTRUCTION

INDIAN RIVER COUNTY
TRAFFIC ENGINEERING DIVISION SPECIAL CONDITIONS FOR RIGHT-OF-WAY CONSTRUCTION

SPECIAL CONDITIONS:

1. All work performed under this permit shall be in accordance with the Florida Department of Transportation Design Standards (http://www.fdot.gov/roadway/DS/18/STDs.shtm), Indices 600. The Manual on Uniform Traffic Control Devices, and Indian River County Typical Drawings, latest editions.

2. All special conditions listed are in addition to the attached Indian River County Traffic Engineering Regulations for Maintenance of Traffic.

3. It shall be the contractor's responsibility to contact Sunshine State One Call System (1-800-432-4770) at least 72 hours in advance of commencing construction work to coordinate traffic control and obtain locations of underground traffic signal conduit for the County's Computerized Traffic Signal Coordination System.

4. The contractor shall be responsible for using the applicable Traffic Control Plan for the type of work being performed. All job supervisors shall have a copy of the control plan on site at all times and shall be familiar with the correct set-up of the plan.

5. At least one lane of traffic shall be maintained at all times. One-lane traffic shall be controlled with at least two (2) flagmen. Flagmen shall use STOP/SLOW paddles at all times. Flags shall not be used for one-lane traffic control.

6. **After proper notification to Traffic Engineering,** consideration will be given to the contractor to close roadways to through traffic on a daily basis during daylight hours on narrow roadways where maintaining one-lane traffic would be difficult. The roadway shall be open to traffic at the end of each work day and on weekends. It shall be the contractor's responsibility to provide all necessary construction signs and traffic control devices to close the road and provide a detour route in accordance with Indian River County standards. Signing shall be installed that clearly indicates the time periods the road is closed to traffic.

7. There shall be no construction work after dark.

8. All open excavations shall be back filled before the close of each work day.

9. A compacted roadway shall be provided at the end of each work day. Disrupted roadways shall be clearly marked as a construction area.

10. Refer to the attached Traffic Engineering Regulations for construction work on Indian River County roadways for maintenance of traffic inspection policy and procedure. Field inspection for work zone safety and maintenance of traffic will be coordinated by the Traffic Engineering Division.

11. All construction equipment, materials, etc. shall be stored outside of the clear zone. Equipment and construction materials that are stored within the clear zone shall be clearly marked with Type II barricades with flashing yellow lights.

12. All projects and work within Indian River County right-of-way shall have an approved Traffic Control Plan (TCP). All work shall be executed under the established TCP and Indian River County approved procedures. The TCP shall provide the proposed detour route, traffic control devices, and other pertinent information for the proposed project and shall be submitted for review and approval by the Public Works Department.

    The TCP shall be prepared by personnel with a minimum of an Intermediate Maintenance of Traffic current certification in the State of Florida. (Denote on the TCP, certification number and name of the certified personnel that prepared the MOT plan.)

    The FDOT Design Standards, Indices 600, FY 2017-2018 do not include a Traffic Control Plan for a full road closure. For full road closures, a TCP is required to be submitted by the contractor a minimum of two (2) weeks prior to the proposed road closure.

    All traffic control devices shall be in accordance with the Florida Department of Transportation (FDOT) Design Standards, Indices 600, FY 2017-2018, the Manual on Uniform Traffic Control Devices, 2009 Edition, and Indian River County Typical Drawings for Signing, Pavement Markings, and Geometrics, latest edition.

13. For full road closures, Portable Changeable Message Signs are required to pre-advertise the roadway closure, a minimum of seven (7) days in advance of the road closure and during the duration of the road closure. The use of Portable Changeable Message Signs for lane closures on thoroughfare plan roadways will be required. Messages are to be as approved by the Public Works Department and shown on the TCP.

TRAFFIC ENGINEERING REGULATIONS

Maintenance and Protection of Traffic:

It shall be the responsibility of the contractor to provide for the maintenance and protection of traffic in accordance with the applicable indices in the most current edition of the Florida Department of Transportation Roadway and Traffic Design Standards and the Federal Highway Administration Manual on Uniform Traffic Control Devices. The indices shall be considered the minimum standards and a more extensive work zone set-up or modifications may be required by the County Public Work Director or his designee for the protection of personnel in the work area as well as the traveling public.

It shall be the responsibility of the contractor to ensure that all subcontractors are in full compliance with all traffic control regulations.

It shall be the responsibility of the contractor working on County roadways or within Right-of-Ways to establish maintenance of traffic prior to any work being performed. The contractor shall frequently monitor the work zone set-up to ensure that all signing is properly placed and that warning signs remain at the proper advance posting distance from the work area. Any signs that do not apply to the work zone shall be removed or covered. The contractor shall remove the work zone set-up at the conclusion of the work.

Traffic Engineering shall be notified twenty-four (24) hours in advance of any lane closings and ten (10) days in advance of any road closures.

Lane closures are restricted to outside the normal peak hours of traffic, lane closures shall occur during the hours of 9:00 AM to 4:00 PM unless otherwise approved by the Public Works Director or his designee.

Traffic Engineering staff shall inspect the Maintenance of Traffic prior to construction commencement to ensure compliance with the approved Traffic Control Plan.

It is the policy of the Traffic Engineering Division to randomly monitor the contractor's compliance with all regulations while working on County roadways and within right-of-ways. Matters of public safety shall be attended to immediately upon notification by the County Public Work Director or his designee.

If the contractor is found to be negligent in maintaining proper work zone set-up in accordance with the County's Right-of-Way ordinance (Chapter 312), the County Public Work Director or his designee shall impose penalties in the amount of $250.00 for working without the proper traffic control.

Construction at or Near Signalized Intersections:

The contractor shall have full responsibility for any work performed at or near any traffic signals in Indian River County. The contractor shall request that the County locate buried interconnect conduit and cable, loop sensors, and pull boxes prior to commencing construction. Any damage to the interconnect conduit, loop sensors, and pull boxes or any other traffic signal equipment shall be repaired at the contractor's expense. It shall be the responsibility of the contractor to notify Traffic Engineering Division 72 hours prior to any work being performed near a signalized intersection or flashing beacon.

Once the proper notification and locate procedures are satisfied, the contractor working in or near signalized intersections or around traffic signal poles, signal cabinets, or flashing beacons shall be advised of the following regulations:

1. No excavation shall be performed within a 15-foot radius of any traffic signal pole. If excavation is necessary within a 15-foot radius, it will be the contractors responsibility to provide the following:

    a. In a manner approved by the County Public Works Director or his designee, the contractor shall provide constant support of the traffic signal pole to prevent movement during excavation and backfill operations.

    b. Compaction around the excavation site to a 98% density, bringing the backfill up in 1 foot lifts.

    c. Density reports from a licensed testing company provided to the County Public Works Director.

    d. Restore the traffic signal and all support equipment to original condition or better.

2. There shall be no pavement cuts made within 500 feet of a signal or flashing beacon without contacting Indian River County Traffic Engineering Division at (772-226-1547), 72 hours prior to construction.

3. Any traffic signal, loop sensors, conduit, interconnect cable, or any support equipment damaged by a contractor shall be repaired/replaced at the contractor's expense.

4. Any contractor that works at or in the vicinity of a signalized intersection shall have full responsibility for any liability incurred by causing damage to signal equipment that results in the failure of the traffic signal functions. If such a failure occurs, the contractor shall notify the police and the Traffic Engineering Division immediately at (772-226-1547).

APPENDIX D

Subsurface Soil Exploration and Geotechnical Engineering Evaluation

KSM

KELLER, SCHLEICHER & MacWILLIAM ENGINEERING AND TESTING, INC.

MARTIN (772) 337-7755
PALM BEACH (561) 845-7445
FAX (561) 845-8876
C.A.: 5693

P.O. BOX 78-1377, SEBASTIAN, FL 32978-1377
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June 5, 2018

Mike Zito, Assistant County Administrator
Indian River County Parks Division
5500 77th Street
Vero Beach, FL 32967

Re: Hobart Park Baseball Complex – Project #: 18001
58th Avenue and 77th Street
Indian River County, Florida
IRC PO #: 80891-00, Requisition #: 2258
KSM Project #: 181813-b

Dear Mr. Zito:

As requested, KSM Engineering & Testing has performed a subsurface investigation at the referenced site. Presentation of the data gathered during the investigation, together with our geotechnical related opinions, are included in this report.

A. Project Description:

Two (2) new baseball fields including a concession building, dug outs and bleacher slabs are planned to be constructed on the site. Loads from the structures will be transferred to the ground by conventional shallow footings. We estimate the maximum loads for the concession building will be less than 2,000 pounds per linear foot along the wall foundation and the maximum loads for the bleacher slabs will be less than 150 psf.

Some site fill will be required to reach the desired grades.

Parking areas and dry retention areas will also be constructed for the project.

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B. The scope of our study consisted of the following:

1. Performed Standard Penetration Test Borings, and hand-auger borings in the proposed construction area to estimate the subsoil relative density.

2. Measured the groundwater level at each boring.

3. Evaluated the existing soil conditions with respect to the proposed construction and provided recommendations for site preparation and foundation design.

4. Obtain shelby tube samples to determine "K" values in our Laboratory.

5. Prepared this report to document our findings.

C. Site Investigation:

The site investigation program consisted of performing five (5) Standard Penetration Test borings (SPT), and seventeen (17) hand-auger borings in the proposed construction area. The SPT borings were terminated at depths of 15 feet below grade. The hand-auger borings were terminated at 3 to 6 feet below existing grade. The locations of the borings are indicated on the attached boring Location Plan.

The SPT borings were completed in accordance with procedures described in ASTM D-1586. A standard 1.5 inch I.D., 2 inch O.D. split-spoon sampler is driven into the soil by successive blows of a 140 pound hammer freely falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 in., is designated the Penetration Resistance, or "N" value. At regular intervals the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. Also, the groundwater table was allowed to stabilize and the depth of the groundwater elevation recorded from existing grade.

The records of the soils encountered, the penetration resistances and groundwater level are shown on the attached logs.

The hand-auger borings were performed with a 3 inch diameter bucket auger with a cutting head. It is rotated by hand and at regular intervals is extracted from the ground and the sample visually inspected. During the hand augers, a shaft with a conical point is pushed through the soil and the thrust required to push the cone tip is measured on an attached calibrated gauge. The value of the bearing pressure exerted by the cone point allows the operator to estimate the existing soil density. After the thrust was measured, the hole was advanced with a hand-auger in 1-foot increments to permit a continuation of measurement of relative density versus depth.

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D. Engineering Evaluation and Conclusions:

Based on the information obtained from this site investigation, we are pleased to offer the following evaluation:

The boring logs indicate the subsurface soils consist mostly of fine-grained sand and fine-grained sand that is slightly clayed. No "muck" or other unsuitable material was found in the test borings except for the typical surface vegetation. "N" values recorded during the boring operation indicate the soil density is generally firm to medium dense. Please refer to the soil boring logs for specific information relative to the soil description.

Based on the existing soil conditions, the proposed structures can be supported on a shallow foundation system provided that the site is properly prepared.

The following sections provide recommendations for the site preparation and foundation design.

E. Site Preparation:

The proposed construction areas, plus a minimum margin of five feet beyond the proposed construction shall be stripped and grubbed of surface debris, including vegetation, roots and organic matter. Stumps shall be removed entirely. The building area should be graded level and proofrolled. Any soft yielding areas shall be excavated and replaced with clean compacted fill. Sufficient passes should be made during compaction operations to produce a density no less than 95 percent of its modified dry Proctor value (ASTM D 1557) to a depth of two feet.

After the exposed surface has been proofrolled, the building and slab areas may be filled to the desired grades. The fill material shall consist of clean granular sand containing less than 10% material passing the U.S. Standard No. 200 mesh sieve. Place structural fill in loose layers of 12 inches in thickness and compact each lift to at least 95 percent of its modified dry Proctor value.

After excavating for the footings, the disturbed footing subgrade should be recompacted to 95 percent (minimum) of its modified dry Proctor value. This can be best achieved by making several passes with a relatively light-weight walk-behind vibratory sled or roller.

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F. Foundation:

Provided that our recommendations for site preparation are followed, the proposed structures may be supported on conventional concrete steel reinforced footings designed for an allowable soil bearing pressure of 2,000 pounds per square foot, or less.

With the foundation properly designed and the site properly prepared, we anticipate total settlements less than ¾ of an inch and differential settlement of less than ¼ of an inch. The majority of the settlement should occur during construction.

G. Floor Slabs:

A conventional slab-on-grade can be used in the "at grade" portion of the building. We recommend the disturbed subgrade below the floor slab be re-compacted to 95 percent of the modified Proctor maximum dry density (ASTM D 1557) prior to placement of the concrete. An estimated modulus of subgrade reaction of 150 pounds per cubic inch (pci) can be used for design of the slab-on-grade. We recommend that expansion or control joints be incorporated in the slab at frequent intervals to control shrinkage cracks.

A moisture barrier is recommended beneath the floor slab to prevent moisture migration from the underlying soil resulting in dampness of the slab.

H. Drives and Parking Areas (Standard Duty Only):

We also performed two (2) hand-augers in the proposed parking area to evaluate the soils in relation to the proposed pavement. We did not find any "muck" or other unsuitable material in the test borings. Penetrometer readings recorded during the investigation indicates the existing soil density is medium dense.

Although a comprehensive pavement evaluation was not within the scope of this study the site may be prepared to support a flexible pavement or rigid concrete pavement. The pavement should be designed for the anticipated loads and frequencies. The minimum pavement design for standard duty asphalt should include the following:

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Clear the parking area of any surface debris, including vegetation, roots and organic matter. Stumps shall be removed entirely. The cleared areas should be graded level and proofrolled. Any soft yielding areas shall be excavated and replaced with clean compacted fill. Sufficient passes should be made during compaction operations to produce a density no less than 95 percent of its modified dry Proctor value (AASHTO T180) to a depth of two feet.

Additional fill shall consist of clean granular sand containing less than 10% material passing the U.S. Standard No. 200 mesh sieve and placed in loose layers of 12 inches and compacted to the above densities.

Eight inches of suitable stabilized soil having a limerock bearing ratio (LBR of 40) should be used for the stabilized subgrade and compacted to 98 percent of its modified dry Proctor value (AASHTO T180).

The base course shall be six inches of cemented coquina rock (LBR 100) or limerock and compacted to 98 percent of its modified dry Proctor value (AASHTO T180). A minimum of 16 inches separation should be maintained between the bottom of the base and the high seasonal groundwater table.

The asphalt wearing surface should consist of 1 ½" of type S-3 in accordance with the Florida Department of Transportation Standard Specification for Road and Bridge Construction.

Where a concrete pavement section is used, a minimum thickness of 5 inches is recommended within light duty areas. The concrete should be reinforced to withstand the design traffic loads and sawcuts constructed for crack control. The concrete should have a minimum compressive strength of 4,000 psi. Six inches of suitable stabilized soil having a limerock bearing ratio (LBR of 20) and compacted to no less than 98 percent of its modified dry Proctor value (AASHTO T180) should be used as a base.

Standard duty pavement areas are considered car and pickup truck loading conditions and a few medium trucks such as delivery and garbage truck loading conditions.

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I. Dry Retention Areas:

The horizontal and vertical permeability flow rates were determined by excavating a test pit adjacent to the soil profiles (HA-16 and HA-17) and obtaining undisturbed shelby tube samples. We then performed a permeability test on the field samples in our laboratory.

The following table indicates the horizontal and vertical flow rates for each test location:

TEST LOCATION (See Location Plan)	HORIZONTAL FLOW RATE	VERTICAL FLOW RATE
HA-16, P-1	13.3 Ft/Day @ (0"-10") Depth	10.5 Ft/Day @ (0"-10") Depth
HA-16, P-1	21.5 Ft/Day @ (10"-60") Depth	16.2 Ft/Day @ (10"-60") Depth
HA-17, P-2	10.8 Ft/Day @ (0"-8") Depth	9.2 Ft/Day @ (0"-8") Depth
HA-17, P-2	18.4 Ft/Day @ (8"-48") Depth	13.3 Ft/Day @ (8"-48") Depth
HA-17, P-2	7.5 Ft/Day @ (48"-60") Depth	5.3 Ft/Day @ (48"-60") Depth

The following table indicates the measured water table along with our estimated normal wet season water table and normal dry season water table for each test location:

TEST LOCATION (See Location Plan)	MEASURED WATER TABLE	ESTIMATED WET SEASON WATER TABLE	ESTIMATED DRY SEASON WATER TABLE
HA16, P-1	42" Below Grade	18" Below Grade	54" Below Grade
HA-17, P-2	34" Below Grade	14" Below Grade	50" Below Grade

This estimate is based upon our interpretation of existing site conditions and a review of the USDA Soil Survey for Indian River County, Florida. The project soils are mapped as EauGallie fine sand (3), Myakka-Myakka wet fine sands, 0 to 12 percent slopes (5), and Pomello sand, 0 to 5 percent slopes (21), according to the Soil Survey Map of Indian River County, Florida.

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J. Existing Ball Field:

As requested, we performed three (3) hand-auger borings (HA-13, HA-14, and HA-15) in the existing ball field to determine depth of red clay. We found the depth of clay to be 4" to 5" in thickness.

K. Closure:

This report has been prepared in accordance with generally accepted soil and foundation engineering practices based on the results of the test borings and the assumed loading conditions. No warranties, either expressed or implied, are intended or made. This report does not reflect any variations which may occur between the borings. If variations appear evident during the course of construction, it would be necessary to re-evaluate the recommendations of this project.

Environmental conditions, wetland delineation, water quality, and municipal requirements are not a part of this report.

We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please feel free to contact us.

Respectfully,

6/11/18

Julie E. Keller, P.E.
President

JEK/jt

E-mail to: mvito@ircgov.com

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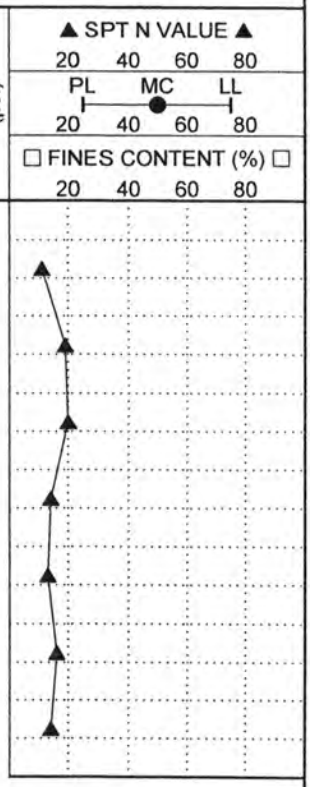
BORING NUMBER B-1

CLIENT Indian River County Parks Division - PO #80891-0
PROJECT NAME Hobart Park Baseball Complex
PROJECT NUMBER 181813-b
PROJECT LOCATION 58th Avenue and 77th Street, Indian River County, FL
DATE STARTED 5/31/18 **COMPLETED** 5/31/18
GROUND ELEVATION ____ **HOLE SIZE** inches
DRILLING CONTRACTOR ____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
∇ **AT TIME OF DRILLING** 3.58 ft
LOGGED BY SF/MS **CHECKED BY** JEK
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Dark Gray Sand with Traces of Roots					
		Gray Sand	SS		4-6-5 (11)		
		Dark Gray Sand with Traces of Hardpan					
		∇	SS		7-8-11 (19)		
5		Light Brown Sand					
			SS		9-10-10 (20)		
		Light Brown Sand, Slightly Clayed	SS		8-7-7 (14)		
10		Light Brown Sand	SS		6-7-6 (13)		
			SS		8-8-8 (16)		
15			SS		6-7-7 (14)		
		Bottom of borehole at 15.0 feet.	SS		8		



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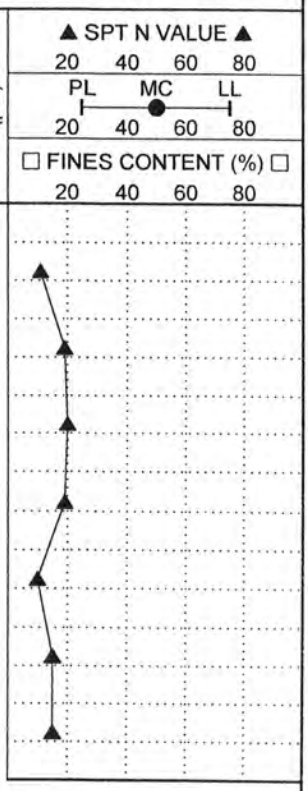
BORING NUMBER B-2

CLIENT Indian River County Parks Division - PO #80891-0
PROJECT NAME Hobart Park Baseball Complex
PROJECT NUMBER 181813-b
PROJECT LOCATION 58th Avenue and 77th Street, Indian River County, FL
DATE STARTED 5/31/18 **COMPLETED** 5/31/18
GROUND ELEVATION ____ **HOLE SIZE** inches
DRILLING CONTRACTOR ____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
AT TIME OF DRILLING 3.50 ft
LOGGED BY SF/MS **CHECKED BY** JEK
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Dark Gray Sand with Traces of Roots					
		Gray Sand	SS		5-5-6 (11)		
		Dark Brown Sand with Traces of Hardpan					
			SS		7-8-11 (19)		
5		Light Brown Sand					
			SS		10-10-10 (20)		
		Light Brown Sand, Slightly Clayed	SS		7-9-10 (19)		
10		Light Brown Sand	SS		6-5-5 (10)		
			SS		5-7-8 (15)		
15			SS		7-7-8 (15)		
		Bottom of borehole at 15.0 feet.	SS		8		



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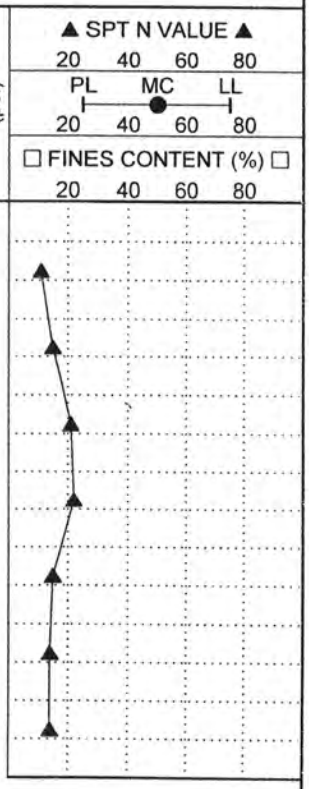
BORING NUMBER B-3

CLIENT Indian River County Parks Division - PO #80891-0
PROJECT NAME Hobart Park Baseball Complex
PROJECT NUMBER 181813-b
PROJECT LOCATION 58th Avenue and 77th Street, Indian River County, FL
DATE STARTED 5/31/18 **COMPLETED** 5/31/18
GROUND ELEVATION **HOLE SIZE** inches
DRILLING CONTRACTOR
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
AT TIME OF DRILLING 3.33 ft
LOGGED BY SF/MS **CHECKED BY** JEK
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Dark Gray Sand with Traces of Roots					
		Gray Sand	SS		5-6-5 (11)		
		Dark Gray and Brown Sand with Traces of Hardpan					
			SS		7-6-9 (15)		
5		Light Brown Sand					
			SS		10-11-10 (21)		
		Brown Sand, Slightly Clayed					
			SS		13-11-11 (22)		
10			SS		8-7-8 (15)		
		Light Brown Sand	SS		6-7-7 (14)		
			SS		7-7-7 (14)		
15		Bottom of borehole at 15.0 feet.	SS		8		



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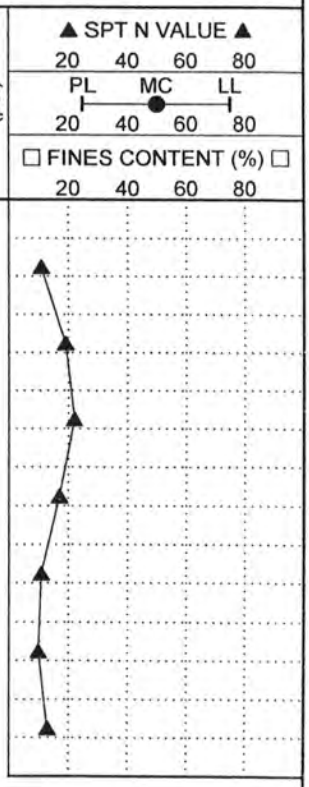
BORING NUMBER B-4

CLIENT Indian River County Parks Division - PO #80891-0
PROJECT NAME Hobart Park Baseball Complex
PROJECT NUMBER 181813-b
PROJECT LOCATION 58th Avenue and 77th Street, Indian River County, FL
DATE STARTED 5/31/18 **COMPLETED** 5/31/18
GROUND ELEVATION ____ **HOLE SIZE** inches
DRILLING CONTRACTOR ____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
∇ **AT TIME OF DRILLING** 3.75 ft
LOGGED BY SF/MS **CHECKED BY** JEK
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Roots					
		Gray Sand	SS		4-6-5 (11)		
		Dark Brown Sand with Some Hardpan					
		∇ Light Brown Sand	SS		6-8-11 (19)		
5			SS		10-11-11 (22)		
		Light Brown Sand, Slightly Clayed	SS		7-8-9 (17)		
10		Brown Sand, Slightly Clayed	SS		6-5-6 (11)		
			SS		5-5-5 (10)		
15			SS		5-7-6 (13)		
		Bottom of borehole at 15.0 feet.	SS		7		



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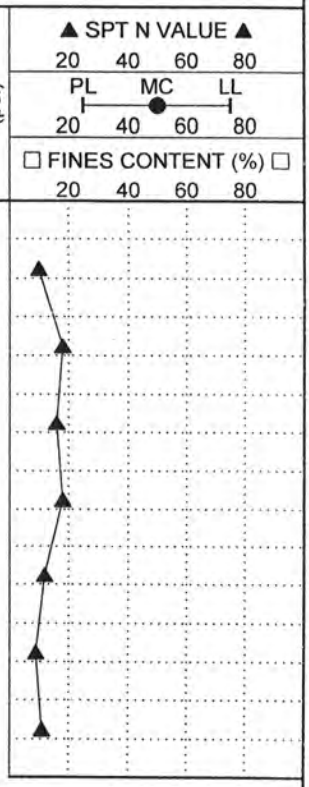
BORING NUMBER B-5

CLIENT Indian River County Parks Division - PO #80891-0
PROJECT NAME Hobart Park Baseball Complex
PROJECT NUMBER 181813-b
PROJECT LOCATION 58th Avenue and 77th Street, Indian River County, FL
DATE STARTED 5/31/18 **COMPLETED** 5/31/18
GROUND ELEVATION ____ **HOLE SIZE** inches
DRILLING CONTRACTOR ____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
AT TIME OF DRILLING 3.92 ft
LOGGED BY SF/MS **CHECKED BY** JEK
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Roots					
		Light Gray Sand	SS		5-5-5 (10)		
		Dark Brown Sand with Traces of Hardpan					
		Light Brown Sand	SS		6-8-10 (18)		
5			SS		8-8-8 (16)		
		Light Brown Sand, Slightly Clayed	SS		7-9-9 (18)		
10		Light Brown Sand	SS		8-7-5 (12)		
			SS		4-4-5 (9)		
15			SS		5-6-5 (11)		
		Bottom of borehole at 15.0 feet.	SS		6		



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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-1, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 10"		Gray Sand with Traces of Roots
-1-	10" - 20"	32	Light Gray Sand
-2-	20" - 28"	56	Dark Grayish Brown Sand with Traces of Hardpan
	28" - 52"		Brown Sand
-3-		48	
-4-		40	
	52" - 72"		Grayish Brown Sand
-5-		36	
-6-		41	

Water Table: 50" Below Existing Grade
Job #: KSM 181813-1ha

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-2, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 14"		Gray Sand with Roots
-1-		33	
	14" - 40"		Dark Brown Sand
-2-		38	
-3-		35	
	40" - 56"		Light Brown Sand
-4-		30	
-5-	56" - 72"	32	Grayish Brown Sand
-6-		35	

Water Table: 38" Below Existing Grade
Job #: KSM 181813-2ha

KSM

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ST. LUCIE (772) 229-9093
FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-3, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0″ - 10″		Dark Gray Sand with Traces of Roots
-1-	10″ - 30″	28	Gray Sand
-2-		37	
-3-	30″ - 48″	52	Dark Gray and Brown Sand with Traces of Hardpan
-4-		50	
	48″ - 64″		Dark Brown Sand
-5-		47	
	64″ - 72″		Light Brown Sand
-6-		51	

Water Table: 44″ Below Existing Grade
Job #: KSM 181813-3ha

KSM

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-4, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0″ - 10″		Dark Gray Sand with Traces of Roots
-1-	10″ - 18″	44	Gray Sand
-2-	18″ - 50″	58	Dark Gray and Brown Sand with Traces of Hardpan
-3-		53	
-4-		56	
	50″ - 62″		Light Brown Sand
-5-		54	
	62″ - 72″		Brown Sand
-6-		59	

Water Table: 50″ Below Existing Grade
Job #: KSM 181813-4ha

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-5, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0″ - 20″		Dark Gray Sand with Traces of Roots
-1-		34	
-2-	20″ - 30″	45	Gray Sand
-3-	30″ - 48″	59	Dark Brown and Gray Sand
-4-		61	
	48″ - 72″		Light Brown Sand
-5-		53	
-6-		50	

Water Table: 50″ Below Existing Grade
Job #: KSM 181813-5ha

KSM

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-6, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 14"		Dark Gray Sand with Roots
-1-		33	
	14" - 24"		Gray Sand
-2-		46	
	24" - 44"		Dark Grayish Brown Sand with Traces of Hardpan
-3-		60	
-4-	44" - 66"	55	Light Brown Sand
-5-		54	
	66" - 72"		Brown Sand
-6-		56	

Water Table: 50" Below Existing Grade
Job #: KSM 181813-6ha

KSM

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-7, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 20"		Dark Gray Sand with Some Roots
-1-		47	
-2-	20" - 52"	58	Dark Gray and Brown Sand with Traces of Hardpan
-3-		57	
-4-		59	
	52" - 72"		Light Brown Sand
-5-		50	
-6-		54	

Water Table: 46" Below Existing Grade
Job #: KSM 181813-7ha

KSM

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-8, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 6"		Dark Gray Sand with Roots
	6" - 20"		Gray Sand
-1-		30	
-2-	20" - 32"	50	Gray Sand with Traces of Hardpan
-3-	32" - 50"	56	Brown Sand
-4-		54	
	50" - 72"		Light Brown Sand
-5-		50	
-6-		50	

Water Table: 44" Below Existing Grade
Job #: KSM 181813-8ha

KSM

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-9, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 20"		Gray Sand with Some Roots
-1-		36	
-2-	20" - 36"	54	Dark Gray Sand with Traces of Hardpan
-3-		50	
	36" - 60"		Light Brown Sand
-4-		48	
-5-		52	
	60" - 72"		Brown Sand
-6-		56	

Water Table: 46" Below Existing Grade
Job #: KSM 181813-9ha

KSM

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-10, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0″ - 6″		Gray Sand with Traces of Roots
	6″ - 20″		Light Gray Sand
-1-		32	
-2-	20″ - 36″	58	Dark Gray and Brown Sand with Traces of Hardpan
-3-		52	
	36″ - 54″		Dark Brown Sand
-4-		48	
	54″ - 72″		Light Brown Sand
-5-		47	
-6-		49	

Water Table: 52″ Below Existing Grade
Job #: KSM 181813-10ha

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-11, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0″ - 8″		Gray Sand with Traces of Roots
-1-	8″ - 20″	45	Light Gray Sand
-2-	20″ - 30″	63	Dark Gray Sand with Traces of Hardpan
-3-	30″ - 54″	56	Light Brown Sand
-4-		55	
-5-	54″ - 72″	59	Brown Sand
-6-		58	

Water Table: 54″ Below Existing Grade
Job #: KSM 181813-11ha

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-12, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 10"		Gray Sand with Traces of Roots
-1-	10" - 24"	47	Light Gray Sand
-2-		60	
	24" - 36"		Dark Gray Sand with Traces of Hardpan
-3-		60	
	36" - 60"		Light Brown Sand
-4-		56	
-5-		60	
	60" - 72"		Brown Sand
-6-		59	

Water Table: 54" Below Existing Grade
Job #: KSM 181813-12ha

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-13, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 5"		Red Clay
-1-	5" - 24"	68	Gray Sand
-2-	24" - 36"	60	Dark Gray Sand
-3-		63	

Water Table: 36"+ Below Existing Grade
Job #: KSM 181813-13ha

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-14, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 4"		Red Clay
	4" - 24"		Light Gray Sand
-1-		70	
-2-		66	
	24" - 36"		Dark Gray Sand
-3-		64	

Water Table: 36"+ Below Existing Grade
Job #: KSM 181813-14ha

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FAX (772) 589-6469

Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-15, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	PEN READINGS	DESCRIPTION OF SOILS
-0-	0" - 5"		Red Clay
	5" - 30"		Light Gray Sand
-1-		70	
-2-		70	
	30" - 36"		Dark Gray Sand
-3-		69	

Water Table: 36"+ Below Existing Grade
Job #: KSM 181813-15ha

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Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-16, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	DESCRIPTION OF SOILS
-0-	0″ - 10″	Gray Sand with Roots
-1-	10″ - 60″	Light Gray Sand
-2-		
-3-		
-4-		
-5-	60″ - 72″	Brown Sand
-6-		

Water Table: 42″ Below Existing Grade
Job #: KSM 181813-16ha

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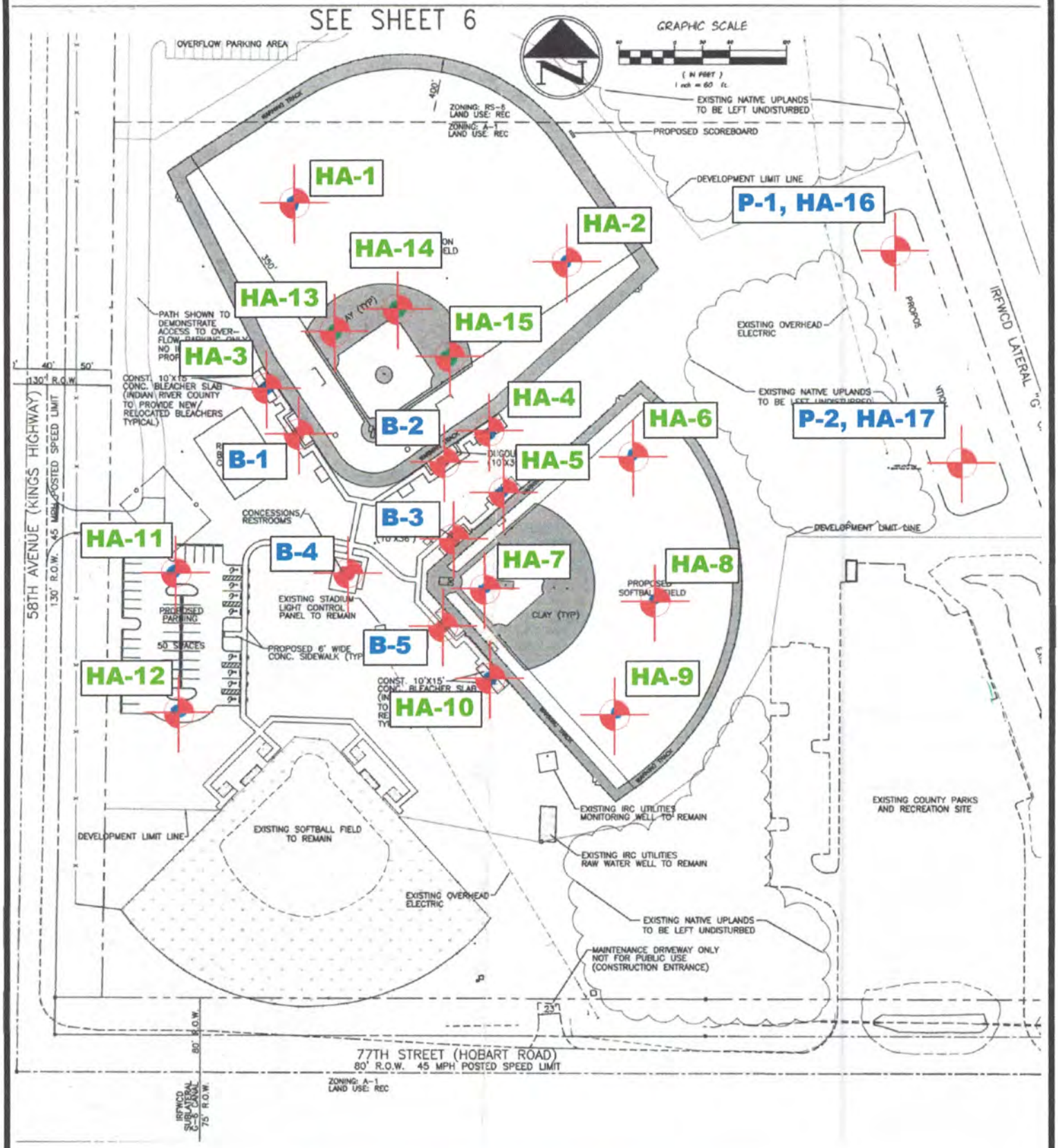
Date : May 29, 2018

Location: Hobart Park Baseball Complex
58th Avenue and 77th Street
Indian River County, Florida
HA-17, See Attached Location Plan

DEPTH IN FEET	Strata FROM-TO	DESCRIPTION OF SOILS
-0-	0″ - 8″	Gray Sand with Roots
-1-	8″ - 48″	Light Brown Sand
-2-		
-3-		
-4-	48″ - 72″	Brown Sand
-5-		
-6-		

Water Table: 42″ Below Existing Grade
Job #: KSM 181813-17ha



LOCATION OF TESTS

PROJECT: Hobart Park Baseball Complex Project, 58th Avenue & 77th Street, Indian River County, Florida

SHEET 1 OF 1 PERMIT #: PROJECT #: 181813-b	KSM ENGINEERING AND TESTING	DRAWN BY: J.L. DESIGNED BY: J.K. DATE: 20180604 SCALE: NONE	

USDA SOILS SURVEY

3-EauGallie fine sand
5-Myakka-Myakka, wet, fine sands, 0 to 2 percent slopes
21-Pomello sand, 0 to 5 percent slopes

PROJECT: Hobart Park Baseball Complex Project, 58th Avenue & 77th Street, Indian River County, Florida

SHEET 2 OF 2 PERMIT #: PROJECT #: 181813-soils	KSM ENGINEERING AND TESTING	DRAWN BY: J.L. DESIGNED BY: J.K. DATE: 20180508 SCALE: NONE	

CONSTRUCTION PLANS

for

HOBART PARK BASEBALL FIELD IMPROVEMENTS

in

INDIAN RIVER COUNTY, FLORIDA

SEPTEMBER 2023

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INDIAN RIVER COUNTY FLORIDA

IRC PROJECT #1759

UTILITIES

LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM INFORMATION FURNISHED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. CONTRACTOR IS TO FAMILIARIZE HIMSELF WITH, AND VERIFY CONDITIONS AT SITE. CONTRACTOR SHALL MAKE DILIGENT INQUIRY AT THE OFFICE OF THE UTILITY COMPANIES AND MUNICIPAL AUTHORITIES TO DETERMINE THE EXACT LOCATION OF UTILITY STRUCTURES. THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE UTILITY COMPANIES, MUNICIPALITY AND OWNERS INVOLVED OF THE NATURE AND SCOPE OF THE PROJECT, AND OF HIS OPERATIONS THAT AFFECT THEIR FACILITIES OF PROPERTY.

DATUM

THE DATUM AND DESIGN GRADES SHOWN WITHIN THESE PLANS REFER TO THE

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

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10.	10/20/23	DEPICT ADDITIONAL WHEELCHAIR VIEWING PADS	SH/SEM
9	7/17/23	REMOVE PHASING; ADD RIP-RAP TO LATERAL G CANAL BANK	SH/SEM
8	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
7.	9/18/18	REVISED PER IRC COMMENTS 9/17/18	SH/SEM
6.	8/28/18	REVISED PER IRC UTIL MARKUPS	SH/SEM
5.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
4.	8/11/18	ADDED DATUM NOTE PER SJRWMD	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

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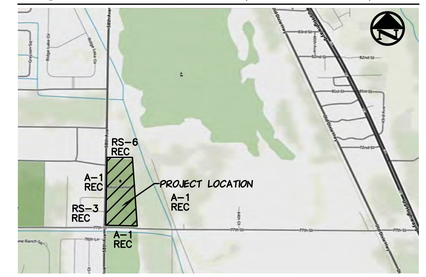
VICINITY MAP (NOT TO SCALE)



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HOBART PARK BASEBALL FIELDS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

LEGEND

DESCRIPTION	EXISTING	PROPOSED
BLOCK NUMBER	(A)	A
BUILDING OR STRUCTURE		
CENTERLINE		
HEAD WALL		
CURB		
CUT AND PATCH		
EASMENT LINE		
FENCE (AS INDICATED)		
LOT LINE		
LOT NUMBER	2	2
PHASE LINE		
PROPERTY LINE		
RAILROAD TRACKS		
RIGHT-OF-WAY LINE		
SIGN (POST MOUNTED)		
TRAFFIC FLOW ARROW		
ASPHALT DRIVE		
GRAVEL DRIVE		
CONCRETE DRIVE		
EDGE OF PAVEMENT		
MAILBOX/NEWSPAPER BOX		
TREE		
BENCH MARK		
CONCRETE FLUME		
CONCRETE MITER END		
CONTOURS	20	20
CURB INLET		
DRAINAGE FLOW ARROW		
FINISH FLOOR	F.F.=20.00	F.F.=20.00
INLET		
SAND CEMENT RIP-RAP		
SOIL BORING LOCATION AND NUMBER	2	2
SPOT ELEVATION		8.65
STORM DRAIN PIPE	----- D-----	
STORM MANHOLE	-----D-----	D
STRUCTURE NUMBER	S-1	S-1
SWALE		
BASIN DIVIDE		
SILT FENCE		
CLEAN OUT		
UNDERDRAIN		
DITCH BLOCK		
PLUG, BLOW-OFF & TERMINAL RESTRAINTS		
REDUCER		
FIRE HYDRANT W/ GATE VALVE VALVE BOX , HYDRANT TEE & RESTRAINTS		
GATE VALVE & BOX		
WATERMAIN W/ 3' COVER TYPICAL	-----WM—(6"ø)---	WM—(6"ø)
1"Ø SERVICE LATERAL W/ METER BOX		
1-1/2"Ø SERVICE LATERAL W/ (2) METER BOXES		
RESTRAINED JOINT TEE		
RESTRAINED BEND		
TELEPHONE JUNCTION BOX		
TELEPHONE LINE	----- TELE -------	
UNDERGROUND ELECTRIC LINE	----- ELEC -------	
OVERHEAD WIRE	----- OH -------	
LIGHT POLE		
WATER WELL		
POWER POLE		
GUY WIRE		
TV CABLE BOX		
GAS MAIN	----- GAS -----	
UNDERGROUND CABLE TV		

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE OWNER (772) 794-7827 AND ENGINEER (772) 567-5300 A MINIMUM OF (48) HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH 62-555.314, F.A.C.: THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" MOST CURRENT EDITION, AND (LOCAL AGENCY) DESIGN STANDARDS, AS APPLICABLE.
3. CONTRACTOR IS ADVISED TO FAMILIARIZE HIMSELF WITH THE OVERALL SCOPE OF WORK TO BE PERFORMED PRIOR TO SUBMITTING A BID.
4. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURE.
5. ALL BACKFILL OVER PIPES UNDER PLANNED PAVEMENT AREAS SHALL BE COMPACTED PER F.D.O.T. STANDARD SPECIFICATIONS, SECTION 125.8.3., TO 98% OF THE MAXIMUM DENSITY PER AASHTO T-180.
6. LOCATION OF EXISTING UTILITIES DEPICTED ON THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION AND VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN, IN ORDER TO PREVENT DAMAGE TO EXISTING UTILITIES, AND THE ADJUSTMENT AND/OR RELOCATION OF SAME IF REQUIRED. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY AND ENGINEER OF ANY DAMAGE DURING HIS CONSTRUCTION EFFORTS, AND REPLACE OR REPAIR DAMAGE TO THE SATISFACTION OF THE UTILITY COMPANY, AT NO ADDITIONAL COST TO THE OWNER.
7. ALL GENERAL CONSTRUCTION, MATERIAL TESTING AND METHODS OF INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, AND ENGINEER OF RECORD.
8. INSPECTION OR FAILURE TO INSPECT ANY MATERIALS OR WORK BY THE OWNER, PERMITTING AGENCIES, OR ENGINEER OF RECORD SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS, SPECIFICATIONS AND LAWS.
9. ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND IF ANY DISCREPANCIES ARE DISCOVERED, THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY.
10. OWNER SHALL PROVIDE SELECTED CONTRACTOR WITH COPIES OF PERMITS RECEIVED FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NOT PROVIDED BY THE OWNER.
11. CONTRACTOR SHALL COORDINATE CONNECTIONS TO EXISTING WATER PLANT PIPING AND SHALL VERIFY LOCATION AND ELEVATION OF SAID FACILITIES PRIOR TO THE START OF CONSTRUCTION. ANY FACILITIES DISTURBED SHALL BE REPAIRED TO EQUAL OR BETTER THAN EXISTING CONDITIONS.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER OR ENGINEER OF ANY CHANGES OR DEVIATIONS FROM THE ORIGINAL PLANS PRIOR TO CONSTRUCTION OF SAID CHANGE OR DEVIATION.
13. POTABLE WATER SOURCE IS INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES (IRCDUS).
14. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC PLAN.
15. CONTRACTOR SHALL NOT REMOVE ANY TREES FROM PROJECT SITE WITHOUT PRIOR AUTHORIZATION FROM PROJECT OWNER OR ENGINEER.
16. THE ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY INSPECTIONS.
17. CONTRACTOR SHALL SOD ALL DISTURBED AREAS. HYDROSEED & MULCH MAY BE APPLIED IF APPROVED BY THE ENGINEER.
18. CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES, TO INCLUDE THE USE OF TEMPORARY PIPING AND/OR SWALES.
19. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER DURING CONSTRUCTION. ALL TRASH AND DEBRIS IS TO BE REMOVED ON A DAILY BASIS, OR IN A REFUSE CONTAINER APPROVED BY THE LOCAL WASTE MANAGEMENT AUTHORITY, AND REGULAR REMOVAL IS TO BE SCHEDULED BY THE CONTRACTOR.
20. ALL PROPOSED MODIFICATIONS TO APPROVED PLANS SHALL BE SUBMITTED TO THE ENGINEER IN WRITING FOR CONSIDERATION. NO FIELD CHANGES OR DEVIATIONS FROM THE APPROVED DESIGN SHALL BE MADE WITHOUT PRIOR CONSULTATION WITH THE ENGINEER.
21. CONTRACTOR SHALL OBTAIN ALL NECESSARY INSURANCE AND BONDS REQUIRED BY THE OWNER FOR THIS PROJECT.
22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY PUBLIC LAND CORNER, GPS CONTROL POINT, OR OTHER SURVEY BENCHMARK WITHIN THE PROJECT LIMITS. ANY SURVEY BENCHMARK DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
23. CONTRACTOR SHALL NOTIFY THE ENGINEER AND GEODETIC INFORMATION CENTER OF ANY NGVD 1929 MONUMENT DISTURBED OR IN DANGER OF BEING DISTURBED IN THE PROJECT LIMITS:

    GEODETIC INFORMATION CENTER
    MARK MAINTENANCE SECTION
    ATTN: N/CG-162
    6001 EXECUTIVE BLVD.
    ROCKVILLE, MD 20852
    TELEPHONE: (301) 443-8319

24. CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF APPROVED CONSTRUCTION PLANS, SPECIFICATIONS, CONSTRUCTION PERMITS, AND ANY SPECIAL PROVISIONS.
25. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION IN ORDER TO PREVENT DAMAGE TO EXISTING UTILITIES AND THE ADJUSTMENT AND/OR RELOCATION OF SAME IF REQUIRED.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL REQUIRED ROAD CROSSING PERMITS.
27. CONTRACTOR SHALL ENSURE THAT ALL DENSITY TESTS ARE PERFORMED PER AASHTO T-180 METHOD.
28. THE DEWATERING OF ANY EXCAVATION AREAS AND THE DISPOSAL OF WATER SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REVISION OF ALL LOCAL AND STATE GOVERNMENT RULES AND REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAIN ANY REQUIRED DE-WATERING PERMIT FROM THE APPROPRIATE AGENCIES PRIOR TO COMMENCING DEWATERING OPERATIONS.

PAVEMENT

1. STRIP THE PROPOSED CONSTRUCTION LIMITS, INCLUDING A MARGIN OF AT LEAST FIVE' BEYOND PAVEMENT EDGES, OF VEGETATION, ROOTS, RUBBLE AND OTHER DELETERIOUS MATERIALS. WE EXPECT AVERAGE CLEARING AND GRUBBING TO DEPTHS OF UP TO 6" TO 12" IN MOST AREAS OF THE ROADWAYS; HOWEVER AT SOME LOCATIONS, GRUBBING DEPTHS OF UP TO SEVERAL FEET MAY BE NECESSARY TO REMOVE LOCALIZED POCKETS OF ROOT MATS AND/OR LARGE STUMPS. THIS STRIPPED AND GRUBBED SURFACE SHOULD BE EXAMINED AND APPROVED BY THE ENGINEER BEFORE PLACEMENT OF SUBSEQUENT FILLS. ANY EXISTING COLLAPSIBLE OR LEAK PRONE UTILITIES SHOULD BE COMPLETELY REMOVED FROM PAVEMENT AREAS.
2. PROOF ROLL THE STRIPPED SURFACE WITH A VIBRATORY ROLLER WEIGHING AT LEAST 6 TONS UNDER THE SUPERVISION OF THE ENGINEER, TO LOCATE ANY UNFORESEEN SOFT AREAS OF UNSUITABLE SOILS, TO INCREASE THE DENSITY OF THE SHALLOW VERY LOOSE TO LOOSE FINE SAND SOILS, AND TO PREPARE THE EXCAVATED SURFACE FOR THE ADDITION OF THE FILL SOILS. EACH PASS SHOULD OVERLAP THE PROCEEDING PASS BY 30% TO INSURE COMPLETE COVERAGE. IF DEEMED NECESSARY, IN AREAS THAT CONTINUE TO YIELD, REMOVE ALL DELETERIOUS MATERIALS AS INDICATED BY ENGINEER PERSONNEL AND REPLACE WITH A CLEAN COMPACTED SAND BACKFILL. THE PROOF- ROLLING SHOULD OCCUR AFTER STRIPPING AND BEFORE FILLING.
3. CONTINUE COMPACTION EFFORTS UNTIL A SOIL DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) IS ACHIEVED TO A DEPTH OF 12" BELOW THE STRIPPED SURFACE, INCLUDING THE FIVE FEET MARGIN. DEPENDING ON WEATHER CONDITIONS OR OTHER FACTORS, THE ADDITION OR DRAINAGE OF WATER MAY BE NECESSARY TO AID COMPACTION EFFORTS. ADDITIONAL PASSES AND/OR OVER-EXCAVATION AND RE-COMPACTION MAY BE NECESSARY IF THESE MINIMUM DENSITY REQUIREMENTS ARE NOT ACHIEVED BY THE REQUIRED PROOF-ROLLING.
4. FILL TO SUBGRADE LEVEL USING CLEAN SANDS WITH LESS THAN 5% SOIL FINES PASSING THE NO. 200 SIEVE. STRUCTURAL FILL SHOULD BE FREE OF ANY ORGANICS OR OTHER DELETERIOUS MATERIAL. THE FILL SHOULD BE PLACED IN UNIFORM 12" LOOSE LIFTS AND COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180, ASTM D 1557).
5. THE OWNER RESERVES THE RIGHT TO REQUEST FROM THE CONTRACTOR ASPHALTIC CONCRETE SURFACE COURSE MIX CERTIFICATIONS TO ASSURE COMPLIANCE WITH F.D.O.T. SPECIFICATIONS.
6. IMPROPER DRAINAGE OF PAVED AREAS AND DRAINAGE SWALES WILL NOT BE ACCEPTED. ANY PONDING OR IMPROPERLY DRAINED AREAS WILL BE COMPLETELY STRIPPED OUT AND RE-GRADED OR RE-PAVED UNTIL ALL DEFECTIVE DRAINAGE IS CORRECTED, AT NO ADDITIONAL COST.
7. TRAFFIC CONTROL SIGNAGE SHALL BE ERECTED AND PAVEMENT MARKINGS SHALL BE PAINTED AS REQUIRED BY ORDINANCE AND THE GOVERNING AUTHORITY SPECIFICATIONS. ALL TRAFFIC PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY SHALL BE EXTRUDED ALKYD BASE THERMOPLASTIC.

DRAINAGE & STRUCTURES

1. ALL STORM WATER PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III OR CORRUGATED ALUMINUM PIPE (CAP), RESPECTIVELY, AS NOTED ON THE PLANS, AND IN ACCORDANCE WITH THE SPECIFICATIONS OR APPROVED EQUAL.
2. BACKFILL OVER ANY STORM PIPE IS TO BE COMPACTED IN 6" LIFTS MAXIMUM WITH A MECHANICAL TAMPER OR OTHER MEANS ACCEPTABLE TO THE OWNER AND/OR ENGINEER. UNSUITABLY SIZED STONES (REFERENCE AWWA SPECIFICATIONS) SHALL BE REMOVED FROM THE TRENCH FOR A DEPTH OF SIX INCHES BELOW THE BOTTOM OF THE PIPE. COMPACTION SHALL BE TO 95% MODIFIED PROCTOR (98% UNDER EXISTING OR PROPOSED PAVING) IN ACCORDANCE WITH AASHTO T-180. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH COMPACTION TEST RESULTS AT 200' INTERVALS AT HIS EXPENSE.
3. INLETS SHALL BE PRE-CAST IN CONFORMANCE WITH F.D.O.T. STANDARD SPECIFICATIONS WITH 28 DAY 4000 PSI CONCRETE.
4. ADJUSTMENT OF INLET AND MANHOLE TOPS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. NO CLAIM SHALL BE MADE AGAINST THE OWNER AND/OR ENGINEER IN THE EVENT ADJUSTMENTS ARE NECESSARY.
5. ALL CORRUGATED ALUMINUM PIPE (CAP) SHALL BE SPIRAL RIBBED WITH A MANNING'S "n"=0.012.
6. ALL POND & SWALE SLOPES OF 5:1 OR GREATER WILL BE SODDED.

UTILITIES

1. ALL POTABLE & RAW WATER PIPING, JOINTING, AND PACKING MATERIALS, INTERNAL COATING AND LININGS, FITTINGS, AND APPURTENANCES USED IN THIS PROJECT SHALL BE IN CONFORMANCE WITH THE CORRESPONDING AWWA STANDARDS AND NSF REQUIREMENTS AS APPLICABLE.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR ALL SEWER AND WATER APPURTENANCES PRIOR TO FABRICATION.
3. ALL PIPE AND FITTINGS AS WELL AS SOLDER AND FLUX INSTALLED OR USED IN THE CONSTRUCTION OF THIS PROJECT ARE TO COMPLY WITH 62-555.322 F.A.C. WITH REGARD TO LEAD.
4. ALL PVC PIPE 4" - 12" DIAMETER FOR POTABLE WATER MAINS SHALL BE THICKNESS CLASS DR-18 MEETING AWWA C900 AND SHALL BE BLUE OR APPROVED EQUAL. RAW WATER PIPE SHALL BE WHITE WITH BLUE LONGITUDINAL STRIPING AND MARKED "RAW WATER."
5. ALL PVC PIPE 3" OR SMALLER FOR WATER MAINS SHALL BE THICKNESS CLASS SDR-21 MEETING ASTM D2241 AND SHALL BE BLUE OR APPROVED EQUAL.
6. ALL DIP FOR WATER MAINS SHALL BE PRESSURE CLASS 350 MEETING AWWA C150.
7. ALL PVC PIPE FOR GRAVITY SEWER MAINS SHALL BE SDR-35 MEETING ASTM C-76 AND SHALL BE GREEN OR APPROVED EQUAL.
8. ALL PVC PIPE FOR SEWAGE FORCE MAIN SHALL BE AWWA C-900 DR-18 AND SHALL BE GREEN OR APPROVED EQUAL.
9. ALL PE PIPE 4" THROUGH 63" DIAMETER SHALL BE AWWA C906, PE-3408, DR-11 OR APPROVED EQUAL. POTABLE & RAW WATER PE PIPE SHALL CONFORM TO AND BEAR THE MARKINGS OF NSF STANDARD 61. PE PIPE SHALL HAVE A COLOR-CODED LONGITUDINAL STRIPE AS FOLLOWS: BLUE FOR POTABLE WATER; WHITE FOR RAW WATER; PURPLE FOR REUSE WATER, AND GREEN FOR WASTEWATER.
10. BENDS SHALL BE INSTALLED ON WATER MAINS AS NECESSARY TO AVOID CONFLICT WITH PROPOSED OR EXISTING STRUCTURES AT NO ADDITIONAL COST TO OWNER.
11. WATER MAIN AND FORCE MAINS SHALL BE INSTALLED WITH 36" MINIMUM COVER AND SHALL BE CONSTRUCTED SO AS TO AVOID EXISTING AND KNOWN FUTURE UTILITY LOCATIONS.
12. THE BACKFILL OVER ANY WATER MAIN, FORCE MAIN AND SANITARY SEWER IS TO BE COMPACTED IN 6" LIFTS MAXIMUM WITH A MECHANICAL TAMPER OR OTHER MEANS ACCEPTABLE TO THE OWNER AND/OR ENGINEER. UNSUITABLY SIZED STONES (REFERENCE AWWA SPECIFICATIONS) SHALL BE REMOVED FROM THE TRENCH FOR A DEPTH OF SIX INCHES BELOW THE BOTTOM OF THE PIPE. COMPACTION SHALL BE TO 98% MODIFIED PROCTOR IN ACCORDANCE WITH AASHTO T-180. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH COMPACTION TEST RESULTS AT 200' INTERVALS AT HIS EXPENSE.
13. ALL PRESSURE AND BACTERIOLOGICAL TESTING FOR WATER MAINS, TV/INFILTRATION TESTS FOR GRAVITY SEWER AND PRESSURE TEST FOR FORCE MAINS, SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND COORDINATED WITH THE OWNER AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL TEST RESULTS.
14. MAGNETIC IDENTIFICATION TAPE SHALL BE INSTALLED OVER ALL PVC WATER MAINS AND SEWAGE FORCE MAINS.
15. THE OWNER WILL PROVIDE THE CONTRACTOR WITH A BASELINE AND A BENCHMARK FOR THE CONTRACTOR'S USE IN CONSTRUCTING THE SANITARY SEWER AND POTABLE WATER SYSTEM. THE CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY ADDITIONAL SURVEY WORK SUCH AS GRADE STAKES, OFF-SET STAKES AND CUT SHEETS.
16. CONTRACTOR SHALL OBTAIN A COPY OF THE F.D.E.P. WATER PERMITS AND PERFORM SAMPLING & TESTING IN CONFORMANCE WITH THE PERMIT CONDITIONS.
17. WATER MAINS AND FORCE MAIN SHALL BE FLUSHED AT A MINIMUM VELOCITY OF 2.5 FPS PRIOR TO PRESSURE TESTING AND DISINFECTION.
18. THE CONTRACTOR SHALL DISINFECT THE NEW WATER SYSTEM IN CONFORMANCE WITH AWWA C651, C652, AND C653 AS APPLICABLE, EXCEPT THAT BACTERIOLOGICAL EVALUATIONS TO VERIFY PROPER DISINFECTION SHALL BE CONDUCTED IN ACCORDANCE WITH 62-555.340 FAC. THE CONTRACTOR SHALL HAVE WATER SAMPLES TESTED AT HIS EXPENSE, WHICH SAMPLES SHALL BE PROVIDED TO THE ENGINEER TO ASSURE OBTAINMENT OF REQUIRED CHLORINE RESIDUALS. FOLLOWING SATISFACTORY CHLORINATION, THE SYSTEM SHALL BE FLUSHED TO ACHIEVE NORMAL CHLORINE RESIDUALS. BACTERIOLOGICAL SAMPLES SHALL BE TAKEN ON TWO (2) CONSECUTIVE DAYS, AT THE CONTRACTOR'S EXPENSE, AND RESULTS SHALL BE PROVIDED TO THE ENGINEER. IF THE SYSTEM PRESSURE DROPS FOLLOWING (2) SUCCESSFUL DISINFECTIONS, THE WATER SYSTEM SHALL BE SUBJECT TO RE-TESTING. TESTING LOCATIONS SHALL BE PER FDEP PERMIT REQUIREMENTS.
19. WATER SYSTEM PRESSURE TESTS SHALL BE COMPLETED IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE, FOR TWO (2) HOURS IN DURATION OR AS ACCEPTABLE TO THE UTILITY OWNER, AT AN AVERAGE PRESSURE OF 150 PSI. ALLOWABLE LEAKAGE WILL BE COMPUTED BASED ON AWWA C605 FOR PVC PIPE AND AWWA C600 FOR DIP AS FOLLOWS:

$$L = \frac{NDP^{1/2}}{7{,}400}$$

WHERE: L = LEAKAGE ALLOWABLE (GPH)
N = NUMBER OF PIPE JOINTS
D = NOMINAL PIPE DIAMETER (INCHES)
P = AVERAGE TEST PRESSURE (PSI, GAUGE)

20. PRESSURE TESTING OF PE PIPE SHALL COMPLY WITH AWWA MANUAL M55, ASTM F 2164, AND PLASTIC PIPE INSTITUTE (PPI) HANDBOOK OF POLYETHYLENE PIPE. PE PIPE SHALL BE TESTED AFTER INSTALLATION (i.e.: DIRECTIONAL BORE); ZERO LEAKAGE WILL BE ALLOWED.
25. FORCE MAINS (SANITARY SEWER & RECLAIMED) SHALL BE PRESSURE TESTED THE SAME AS WATER MAINS, EXCEPT THAT TEST PRESSURE SHALL AVERAGE NO LESS THAN 100 PSI.
26. USE POTABLE WATER FOR PRESSURE TESTS.
27. ALL POTABLE WATER MAINS SHALL BE CONSTRUCTED OF P.V.C. PIPE UNLESS NOTED OTHERWISE.
28. GRAVITY SEWER AND MANHOLES SHALL BE CLEANED OF ALL DEBRIS, GRIT AND OTHER MATERIALS FOLLOWING COMPLETION OF THE SYSTEM. THE SYSTEM SHALL BE TESTED BY THE CONTRACTOR, AT HIS EXPENSE, IN THE PRESENCE OF THE ENGINEER, FOR INFILTRATION. INFILTRATION SHALL NOT EXCEED 50 GALLONS/DAY/INCH DIAMETER/MILE. TELEVISION TESTING FOR ALL GRAVITY SEWERS SHALL ALSO BE REQUIRED.
29. ADJUSTMENT OF MANHOLE TOPS SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE AND NO CLAIM SHALL BE MADE AGAINST THE ENGINEER AND/OR OWNER FOR THESE ADJUSTMENTS, IF REQUIRED.
30. LATERALS AND CLEANOUTS SHALL BE INSTALLED AS REQUIRED BY APPLICABLE PLUMBING CODES.
31. THE CONTRACTOR SHALL SUPPLY THE OWNER AND ENGINEER WITH TWO COPIES OF AS-CONSTRUCTED INFORMATION SHOWING THE CONSTRUCTED LOCATION OF ALL MAINS, FITTINGS, VALVES, LATERALS (AT THE MAIN AND TERMINAL POINT), MANHOLES AND OTHER WATER AND SEWER APPURTENANCES. THE FORMAT SHALL BE APPROVED BY THE OWNER PRIOR TO SUBMISSION.

FDEP SEPARATION NOTES

FROM 62-555.314, FAC:

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

(B) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:

1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS A THROUGH D BELOW.

A. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
B. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
C. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
D. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(5) IN THE EVENT THAT FDEP AND LOCAL UTILITY STANDARDS CONFLICT, THE MORE STRINGENT STANDARD SHALL APPLY.

Call 48 hours before you dig in Florida

It's the Law!
DIAL 811 BEFORE YOU DIG
Sunshine State One Call of Florida, Inc.

CONSTRUCTION NOTES

NO.	DATE	DESCRIPTION	DR/APP
3.	7/17/23	REMOVE PHASING	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS
INDIAN RIVER COUNTY FLORIDA

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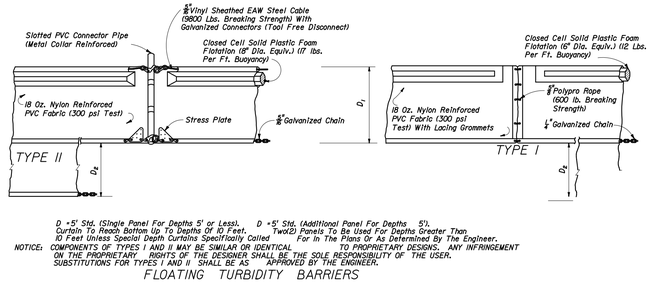
FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

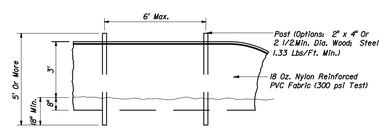
DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	9/23
SCALE	NTS
SHEET	2 OF 15
PROJECT NO.:	1756



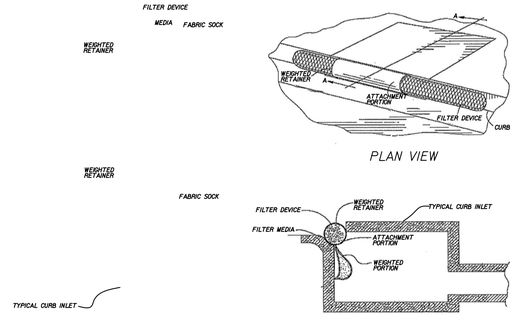
FLOATING TURBIDITY BARRIERS

NOTES:

1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.



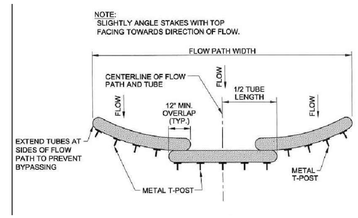
STAKED TURBIDITY BARRIER



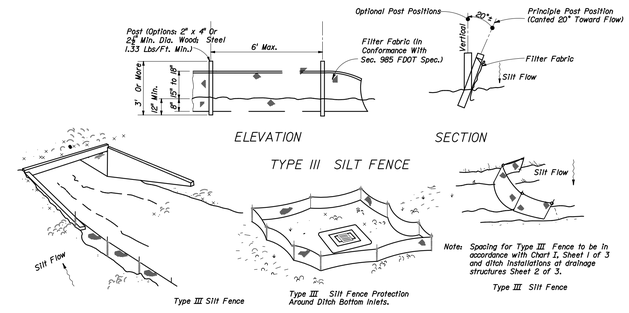
PLAN VIEW

SECTION "A-A"

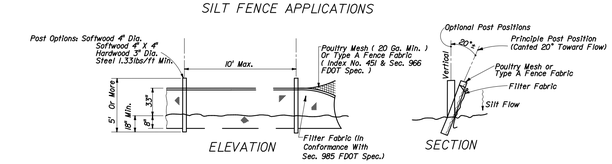
STORM INLET PROTECTION



SWALE PROTECTION



SILT FENCE APPLICATIONS



NPDES NOTES

NOTICE TO CONTRACTORS:
THIS PROJECT IS REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AS ADMINISTERED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP).

THE CONTRACTOR SHALL THEREFORE COMPLY WITH THE REQUIREMENTS OF FDEP'S "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" PER FDEP DOCUMENT NUMBER 62-621.300(4) (A). IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL AND MAINTAIN BMP'S AT THE SITE IN ACCORDANCE WITH THE CONDITIONS OF THE "GENERIC PERMIT". THE CONTRACTOR SHALL BE CONSIDERED TO BE THE "OPERATOR" AS DEFINED HEREIN.

THE OPERATOR IS DEFINED AS: THE LEGAL ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND THAT HAS THE AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR'S RESPONSIBILITIES ARE AS A MINIMUM AS FOLLOWS:

1. PREPARE STORMWATER POLLUTION PREVENTION PLAN AND MAINTAIN THE SITE IN ACCORDANCE WITH THAT PLAN.

2. FILE A "NOTICE OF INTENT", (DEP FORM 62-621.300(4) (D), INCLUDING APPLICABLE PERMIT PROCESSING FEES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A COPY OF THE "NOI" OR A LETTER FROM THE FDEP CONFIRMING COVERAGE UNDER THE PERMIT SHALL BE POSTED ON SITE FOR PUBLIC VIEWING.

3. PROVIDE A "QUALIFIED INSPECTOR" TO PERFORM THE REQUIRED INSPECTIONS IN ACCORDANCE WITH THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, DEP DOC # 62-621(4) (A).

4. BEFORE CONDUCTING ANY PROJECT ACTIVITIES THE OPERATOR AND ALL SUBCONTRACTORS SHALL SIGN AND PROVIDE TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE OWNER/DEVELOPER AND THE ENGINEER A COPY OF THE FOLLOWING:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (FDEP DOC #62-621-.300(4) (A)) AND THE STORM WATER POLLUTION PREVENTION PLAN."

THE CERTIFICATION MUST INCLUDE THE NAME AND TITLE OF THE PERSON PROVIDING THE SIGNATURE; THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CONTACTING FIRM; AND THE DATE THE CERTIFICATION IS MADE.

5. WITH IN 14 DAYS OF A DIFFERENT OPERATOR TAKING RESPONSIBILITY OF THE CONSTRUCTION ACTIVITIES A "NOTICE OF TERMINATION" (DEP FORM 62-621-300(6)) SHALL BE SUBMITTED. IF A "N.O.T." IS SUBMITTED DUE TO A CHANGE OF OPERATOR, WITHIN 48 HOURS BEFORE ASSUMING CONTROL OF THE CONSTRUCTIONS ACTIVITIES, THE NEW OPERATOR SHALL FILE A SIGNED 'N.O.I" IN ACCORDANCE WITH THIS PERMIT.

6. WITHIN 14 DAYS OF THE FINAL STABILIZATION OF THE SITE, OPERATOR SHALL FILE A "NOTICE OF TERMINATION" (DEP FORM 62-621-300(6), TO THE F.D.E.P. WITH COPIES TO THE OWNER AND ENGINEER.

EROSION CONTROL NOTES

1. CONTRACTOR SHALL OBTAIN FDEP NPDES (NOI) PERMIT. PROOF OF NOI SHALL BE PROVIDED TO ENGINEER PRIOR TO PRE-CONSTRUCTION MEETING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL USING BEST MANAGEMENT PRACTICES FOR THE DURATION OF THE PROJECT UNTIL SUCH TIME AS THE PROJECT HAS BEEN CERTIFIED AS COMPLETE.
3. ATTENTION IS DIRECTED TO THE FACT THAT BMP's ARE PERFORMANCE-BASED. IN THE EVENT THAT INSTALLED BMP's FAIL TO CONTROL EROSION AND/OR STORM - WATER POLLUTION ADDITIONAL BMP's MAY BE REQUIRED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR NPDES PERMITTING, INSPECTION, REPORTING, AND COMPLIANCE.
5. THE CONTRACTOR SHALL SOD ALL OPEN SPACE AREAS TO BE GRASSED IMMEDIATELY FOLLOWING FINAL GRADING AND COMPLETION OF ALL UNDERGROUND UTILITIES. HYDROSEED & MULCH MAY BE APPLIED IF APPROVED BY THE ENGINEER.
6. SILT FENCE SHALL BE INSTALLED ALONG LIMITS OF CONSTRUCTION.
7. SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IMMEDIATELY IF DAMAGED.
8. ALL SIDE SLOPES OF STORMWATER MANAGEMENT AREAS SHALL BE SODDED ON COMPLETION OF FINAL GRADING.
9. ALL INLETS SHALL BE PROTECTED FROM COLLECTION OF ERODED MATERIALS BY INSTALLATION OF TEMPORARY FILTER FABRIC AND/OR HAY BALES.
10. FLOATING TURBIDITY BARRIERS SHALL BE INSTALLED WITHIN ALL WATER BODIES DOWNSTREAM OF CONSTRUCTION ACTIVITIES WHERE TURBID WATERS DISCHARGE MAY OCCUR.
11. THE CONTRACTOR SHALL PROVIDE DUST CONTROL, SUCH AS AN ONSITE WATER TRUCK.

LAND CLEARING AND ENVIRONMENTAL NOTES

GRUBBING, TREE REMOVAL AND LAND CLEARING SHALL BE CONDUCTED UNDER THE PROJECT'S ENVIRONMENTAL RESOURCE PERMIT AND IRC LAND CLEARING & TREE REMOVAL PERMIT. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE PERMITS AT THE SITE DURING LAND CLEARING AND TREE REMOVAL OPERATIONS.

PRIOR TO COMMENCING LAND CLEARING OPERATIONS THE ENGINEER, OWNER, AND CONTRACTOR SHALL INSPECT THE SITE TO IDENTIFY PRESERVATION TREES AND OTHER RESOURCES. CONTRACTOR SHALL INSTALL BMP'S PRIOR TO COMMENCEMENT.

PROTECTED/LISTED SPECIES
PRIOR TO COMMENCEMENT OF LAND CLEARING THE OWNER SHALL CONDUCT A LISTED SPECIES SURVEY AND REMOVE ANY LISTED SPECIES FROM THE CONSTRUCTION AREA. THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF ALL ENVIRONMENTAL PERMITS.

IF PROTECTED/LISTED SPECIES ARE ENCOUNTERED IN THE DEVELOPMENT AREA AT ANY TIME DURING CONSTRUCTION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

PRESERVATION TREES
EXISTING NATIVE VEGETATION TO BE SAVED IS INTENDED TO BE INCORPORATED INTO THE LANDSCAPE PLAN. PROTECTIVE BARRIERS SHALL BE INSTALLED PRIOR TO LAND CLEARING TO PREVENT DAMAGE TO VEGETATION TO BE SAVED.

SPECIMEN TREES
SPECIMEN TREES (IE: LARGE OAK TREES, ETC) SHALL NOT BE DISTURBED OR DAMAGED. CONTRACTOR SHALL BE LIABLE FOR FINES, MITIGATION AND OTHER PENALTIES INCURRED BY DAMAGE TO SPECIMEN TREES.

PROHIBITED AND UNDESIRABLE EXOTIC VEGETATION
ALL PROHIBITED AND UNDESIRABLE EXOTIC VEGETATION MUST BE REMOVED AT THE TIME OF CLEARING. PROHIBITED AND UNDESIRABLE EXOTIC VEGETATION SHALL NOT BE USED TO MEET THE TREE OR LANDSCAPING REQUIREMENTS OF THE LAND DEVELOPMENT CODE.

STORMWATER POLLUTION PREVENTION PLAN

Nature of Construction Activity: CONSTRUCT BASEBALL/SOFTBALL FIELDS, CONCESSIONS, DUGOUTS/BLEACHERS, PAVEMENT, UTILITIES, AND DRY RETENTION POND

Sequence of Construction Events:

1. Install silt fence and other erosion control devices.
2. Clear and grub site.
3. Rough grading.
4. Construct stormwater management system.
5. Construct underground utilities.
6. Construct paved areas and structures
7. Final grading/landscaping

Total Area of the Site:	22.73 acres
Area to be Disturbed:	14.21 acres
Soil Description:	Pomello Sand EauGallie Fine Sand Myakka-Myakka Wet, Fine Sands
Drainage Area Size:	14.21 acres

Best Management Practices (BMP's)

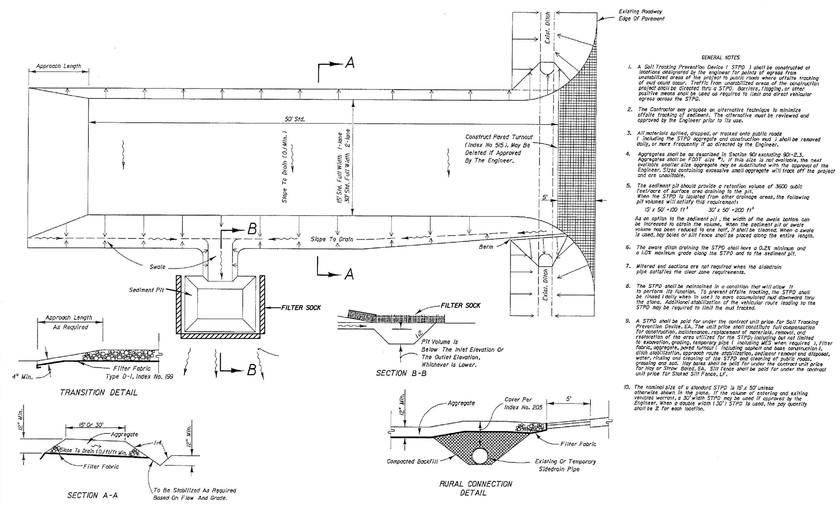
Silt fence, Inlet protection.
Construction sequence minimizes time for potential erosion, gravel entrance limits soil on adjacent paved roadways.

Potential Pollutants: Portable toilet chemicals will be properly handled and disposed.

Inspections: Site will be inspected for erosion problems daily and after each rainfall event greater than 0.5 inches. A rain gage shall be installed on site to monitor rainfall.

Contractor is responsible for installing additional erosion control as necessary to meet State and Local requirements.

Operator/Responsible Authority: CONTRACTOR (T.B.D.)



STORMWATER POLLUTION PREVENTION PLAN

NO.	DATE	DESCRIPTION	DR/APP
2.	7/17/23	REMOVE PHASING	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS
INDIAN RIVER COUNTY FLORIDA

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STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	3/18
SCALE	NTS
SHEET	3 OF 15
PROJECT NO:	1756

EXISTING CONDITIONS, DEMOLITION, & CLEARING PLAN

NO.	DATE	DESCRIPTION	DR/APP
7.	7/17/23	REMOVE PHASING	SH/SEM
6.	9/24/19	ADD NOTES REGARDING EXISTING BATTING CAGES	SH/SEM
5.	9/18/19	ADD NOTES REGARDING EXISTING FIELD LIGHTING	SH/SEM
4.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

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CONSULTING ENGINEERS
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STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	11/17
SCALE	1"=60'
SHEET	4 OF 15
PROJECT NO:	1756

SITE DATA

Owner / Applicant
INDIAN RIVER COUNTY
1801 27TH STREET
VERO BEACH, FL 32960
TEL. (772) 567-8000

Engineer
MASTELLER & MOLER, INC.
1655 27TH STREET- SUITE 2
VERO BEACH, FL 32960
TEL. (772) 567-5300

Surveyor
INDIAN RIVER COUNTY
1801 27TH STREET
VERO BEACH, FL 32960
TEL. (772) 226-1220

Construction Schedule
START DATE: JANUARY 2024 COMPLETION DATE: MAY 2024

Site Information

SITE ADDRESS:	5790 77th STREET VERO BEACH, FL 32967	PROPOSED USE:	PARK
TAX ID #:	31 39 33 00000 5000 00003.0	EXISTING ZONING:	A-1 (22.04 ACRES) RS-6 (5.69 ACRES)
		FUTURE LAND USE:	REC REC
PARCEL AREA:	84.52 AC		
SITE AREA:	27.73 AC	EXISTING SOILS:	EAUGALLIE FINE SAND MYAKKA-MYAKKA, WET, FINE SAND QUARTZIPSAMMENTS EAUGALLIE FINE SAND POMELLO SAND
LESS UNDISTURBED NORTH AREA:	5.49 AC		
LESS UNDISTURBED SOUTH AREA / EXIST. PARKS & REC. SITE:	8.03 AC		
DEVELOPMENT AREA:	=14.21 AC		

FEMA FLOOD ZONE: ZONE X and ZONE "AE 21" Ref. FIRM 12061C0087F DATED 12/4/12 (AREA CURRENTLY IN DISPUTE)
POTABLE WATER: INDIAN RIVER COUNTY UTILITIES
WASTEWATER: INDIAN RIVER COUNTY UTILITIES
LEGAL DESCRIPTION: (See Survey for Full Legal Description of Parcels)

Zoning Criteria (A-1)

	REQUIRED	PROPOSED
DENSITY (MAX):	0.2 D.U./AC	N/A
LOT SIZE (MIN):	200,000 SF	959,932 SF
LOT WIDTH:	150'	463.61'
FRONT YARD SETBACK:	30'	30'
SIDE YARD SETBACK:	30'	30'
REAR YARD SETBACK:	30'	30'
BUILDING HEIGHT:	35' (MAX)	9'-4"
BUILDING COVERAGE:	20% (MAX)	0.06%
OPEN SPACE:	60%	88.0%

Zoning Criteria (RS-6)

	REQUIRED	PROPOSED
DENSITY (MAX):	6 D.U./AC	N/A
LOT SIZE (MIN):	7,000 SF	247,967 SF
LOT WIDTH:	70'	310.67'
FRONT YARD SETBACK:	20'	20'
SIDE YARD SETBACK:	10'	10'
REAR YARD SETBACK:	20'	20'
BUILDING HEIGHT:	35' (MAX)	N/A
BUILDING COVERAGE:	30% (MAX)	0%
OPEN SPACE:	40%	99.6%

Open Space Computations

Required:
A-1 ZONING: 22.04 Acres X 60% = 13.22 Acres
RS-6 ZONING: 5.69 Acres X 25% = 1.42 Acres

Proposed:
A-1 ZONING: 19.31 Acres = 87.6%
RS-6 ZONING: 5.69 Acres = 99.6%

Site Improvements Coverage Summary
(Includes Exist. Parks / Rec Development)

PHASE 1:

SITE AREA:	1,207,899 SF	27.73 AC	(100%)
EXISTING BUILDING AREA:	5,513 SF	0.13 AC	(0.46%)
EXISTING CONCRETE / PAVED AREA:	74,952 SF	1.72 AC	(6.21%)
PROPOSED BUILDING FLOOR AREA:	1,056 SF	0.02 AC	(0.09%)
PROPOSED PAVING & CONCRETE	34,779 SF	0.80 AC	(2.88%)
EXISTING BUILDING/CONCRETE TO BE REMOVED:	1,988 SF	0.05 AC	(0.16%)
TOTAL PHASE 1 IMPERVIOUS:	118,288 SF	2.72 AC	(9.80%)

PHASE 2:

PROPOSED PAVING & CONCRETE	4,693 SF	0.11 AC	(0.39%)
TOTAL SITE IMPERVIOUS:	122,981 SF	2.82 AC	(10.18%)

Development Area Improvements Coverage Summary

DEVELOPMENT AREA:	619,081 SF	14.21 AC
BUILDING FLOOR AREA:	1,056 SF	0.02 AC
PAVING & CONCRETE	39,472 SF	0.91 AC
EXISTING BUILDING/CONCRETE TO BE REMOVED:	1,988 SF	0.05 AC
TOTAL IMPERVIOUS:	38,540 SF	0.88 AC

Parking Calculations

Required:
STADIUMS: ONE (1) SPACE PER THREE (3) SEATS OF THE SEATING CAPACITY =
300 SEATS X 1 SPACE / 3 SEATS = 100 SPACES *

Required:
PUBLIC PARKS: TWO (2) SPACES PER ACRE OF REMAINING AVAILABLE OPEN SPACE =
1.39 AC X 2 SPACES = 3 SPACES
PUBLIC PARKS: ONE (1) SPACE PER 300 SF OF GROSS BUILDING AREA =
1,056 X 1 SPACES / 300 = 4 SPACES

Required Total: 107 SPACES

Proposed:
STANDARD PAVED = 42
HANDICAP PAVED = 8
STANDARD GRASS = 60
TOTAL = 110

* AS NO MORE THAN ONE BALL FIELD WILL BE USED AT ONE TIME, PARKING WAS BASED ON SEATING CAPACITY FOR THE LARGEST STADIUM

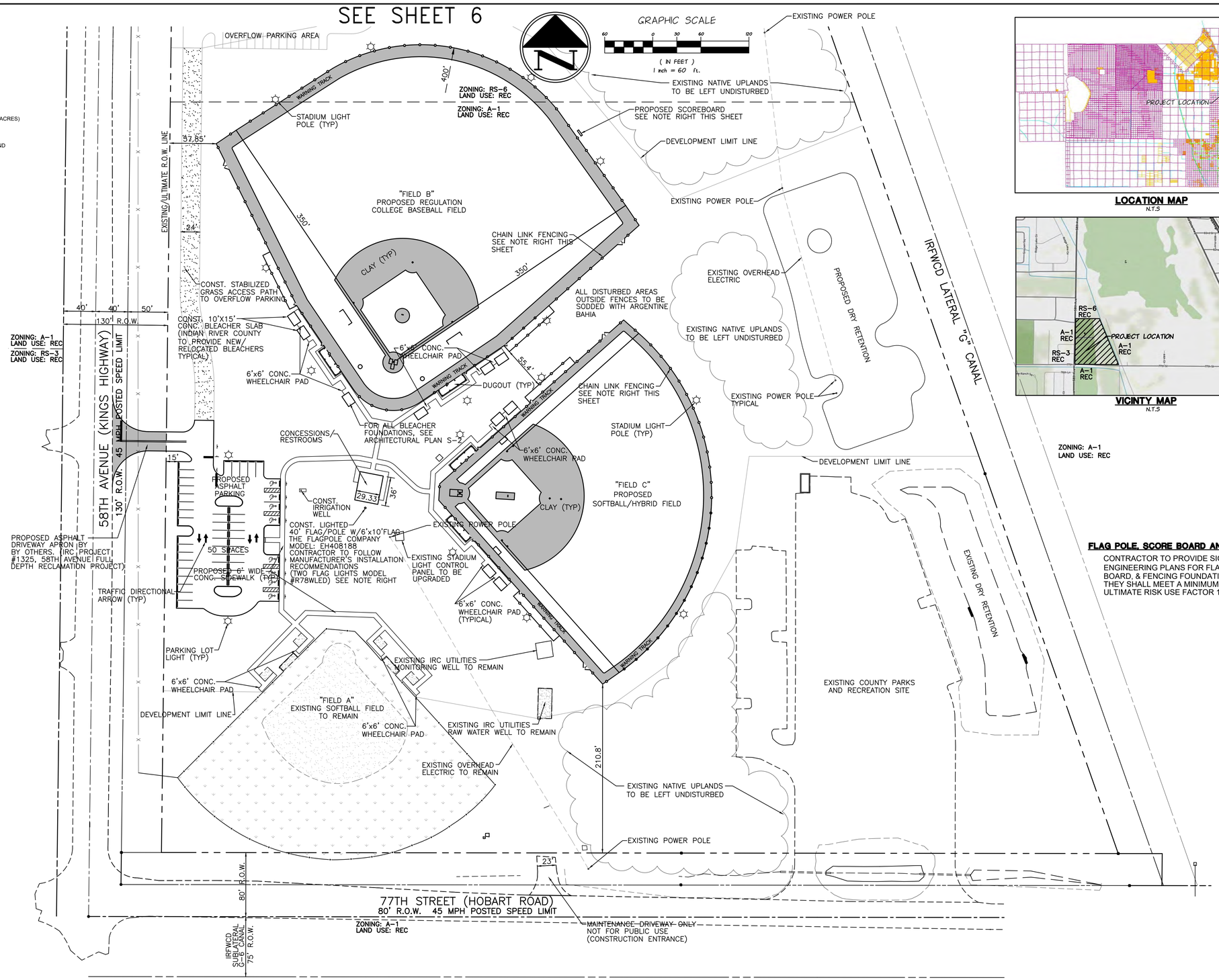
Site Plan Notes:
1. NO WETLANDS EXIST WITHIN DEVELOPMENT AREA.
2. ALL OUTDOOR LIGHTING SHALL BE SHIELDED FROM ADJACENT PROPERTIES AND ROADWAYS.
3. ALL NUISANCE EXOTIC VEGETATION SHALL BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.
4. SURVEY DATA IS PROVIDED BY INDIAN RIVER COUNTY
5. CONTRACTOR SHALL COORDINATE WITH IRC TELECOMMUNICATIONS (772-226-1318) DIVISION TO LOCATE AND MARK EXISTING IRC FIBER-OPTIC CABLE PRIOR TO CONSTRUCTION.
6. STREET DESIGNATION SIGNS SHALL BE 8" IN HEIGHT WITH 6" LETTERS.

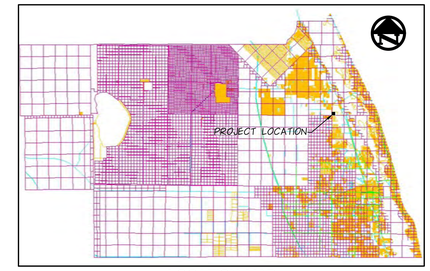
General Notes:
1. ALL SOLID NON BREAKAWAY OBJECTS (RAILINGS,POSTS/COLUMNS, BOLLARDS, LIGHT POLES, ETC.) ALONGSIDE INTERIOR STREETS AND DRIVING AISLES, SHALL BE LOCATED OUTSIDE THE CLEAR ZONE. FOR STREETS/DRIVING AISLES WITH A DESIGN SPEED OF 45 MPH AND AN ADT<1500, THE MINIMUM CLEAR ZONE IS 14 FEET FROM THE EDGE OF THE OUTSIDE MOTOR VEHICULAR TRAVELED WAY. THIS APPLIES TO PUBLIC AND PRIVATE PROPERTY.
2. ALL SOLID NON BREAKAWAY OBJECTS (RAILINGS,POSTS/COLUMNS, BOLLARDS, LIGHT POLES, ETC.) ALONGSIDE INTERIOR STREETS AND DRIVING AISLES, SHALL BE LOCATED OUTSIDE THE CLEAR ZONE. FOR STREETS/DRIVING AISLES WITH A DESIGN SPEED OF 25 MPH OR LESS, THE MINIMUM CLEAR ZONE IS 1.5 FEET FROM THE FACE OF CURB (TYPE D OR F) OR 6 FEET FROM THE EDGE OF THE TRAVEL LANE. THIS APPLIES TO PUBLIC AND PRIVATE PROPERTY.

Specific Land Use Criteria:
1. NO OFF-STREET PARKING OR LOADING AREAS OF BUILDINGS AND STRUCTURES ARE DESIGNED BE LOCATED CLOSER THAN 20' TO ANY PROPERTY LINE ABUTTING A RESIDENTIALLY DESIGNATED DISTRICT. (NOT APPLICABLE TO THIS PROJECT AS ALL PROPERTY LINES ABUT EITHER CANAL OR ROAD RIGHTS OF WAY.)
2. ANY RECREATIONAL USE IS EQUIPPED WITH LIGHTING TO ALLOW THE USE OF THE FACILITY AFTER SUNSET AND IS DESIGNED SUCH THAT:
   a. ALL LIGHTS DEPICTED ARE SHIELDED FROM SHINING INTO RESIDENTIALLY DESIGNATED ADJACENT PROPERTIES; (OUTDOOR LIGHTING FOR THIS PROJECT HAS BEEN DESIGNED SO THAT LIGHTING WILL BE SHIELDED AND DIRECTED AWAY FROM ANY RESIDENTIALLY DESIGNATED AREAS AS DEPICTED ON THE ILLUMINATION GRID SUMMARY PROVIDED BY MUSCO LIGHTING. DETAILS OF THE LIGHT POLES, LAMP STYLES, AND SHIELDS ARE SUBMITTED SEPARATELY).
   b. HOURS OF OPERATION AND/OR SPECIAL DESIGN TECHNIQUES ARE TO BE USED TO MITIGATE NOISE IMPACTS; ESPECIALLY DURING EVENING AND NIGHTTIME HOURS; (THIS IS AN BASEBALL / SOFTBALL PARK WITH AN EXISTING PRESSBOX. THE NEW PRESSBOX SHALL BE OVER 700 FEET AWAY FROM THE NEAREST RESIDENCE AND PRESSBOX SPEAKERS WILL BE DIRECTED AWAY FROM THAT AREA.)
3. BUFFERING OF THE PROJECT SHALL BE SUFFICIENT TO NOT ADVERSELY AFFECT ADJACENT PROPERTY. (THIS IS AN EXISTING BASEBALL / SOFTBALL PARK WITH NO EXISTING SIGNIFICANT LANDSCAPE BUFFERING. THE DESIGN OF THE PROJECT IMPROVEMENTS INCLUDES LANDSCAPE BUFFERING PER IRC CODE WHICH IS EXPECTED TO IMPROVE THE SITE BUFFERING FOR AESTHETICS, LIGHTING, AND NOISE IMPACTS OFFSITE.)

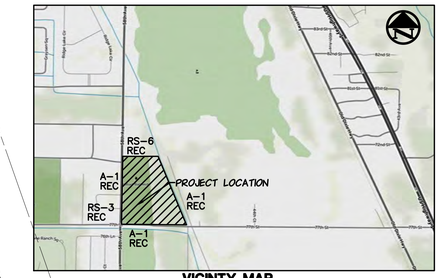
Jurisdictional Permitting Requirements

INDIAN RIVER COUNTY:	SITE PLAN APPROVAL
INDIAN RIVER COUNTY:	TYPE "B" STORMWATER PERMIT
INDIAN RIVER COUNTY:	CONCURRENCY CERTIFICATE
INDIAN RIVER COUNTY:	LAND CLEARING
INDIAN RIVER COUNTY:	TREE REMOVAL
INDIAN RIVER COUNTY:	RIGHT OF WAY (UTILITIES)
INDIAN RIVER COUNTY:	UTILITIES CONSTRUCTION PERMIT
SJRWMD:	ENVIRONMENTAL RESOURCE PERMIT
FDEP:	SEWER MAIN EXTENSION GENERAL PERMIT
IRFWCD:	CULVERT CONNECTION PERMIT





LOCATION MAP
N.T.S



VICINITY MAP
N.T.S

ZONING: A-1
LAND USE: REC

FLAG POLE, SCORE BOARD AND FENCING NOTE:
CONTRACTOR TO PROVIDE SIGNED AND SEALED ENGINEERING PLANS FOR FLAG POLE, SCORE BOARD, & FENCING FOUNDATIONS SUCH THAT THEY SHALL MEET A MINIMUM OF 150 MPH ULTIMATE RISK USE FACTOR 1 FOR WIND LOADS.

Miscellaneous Work: Any work depicted on these construction plans not specifically described in the bid form line items shall be priced under bid form line item "Miscellaneous".

SITE PLAN A

8.	10/20/23	DEPICT ADDITIONAL WHEELCHAIR VIEWING PADS	SH/SEM
7.	7/17/23	REMOVE PHASING	SH/SEM
6.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
5.	8/28/18	REMOVE BATTING CAGES AND ADD SOD NOTE	SH/SEM
4.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY FLORIDA

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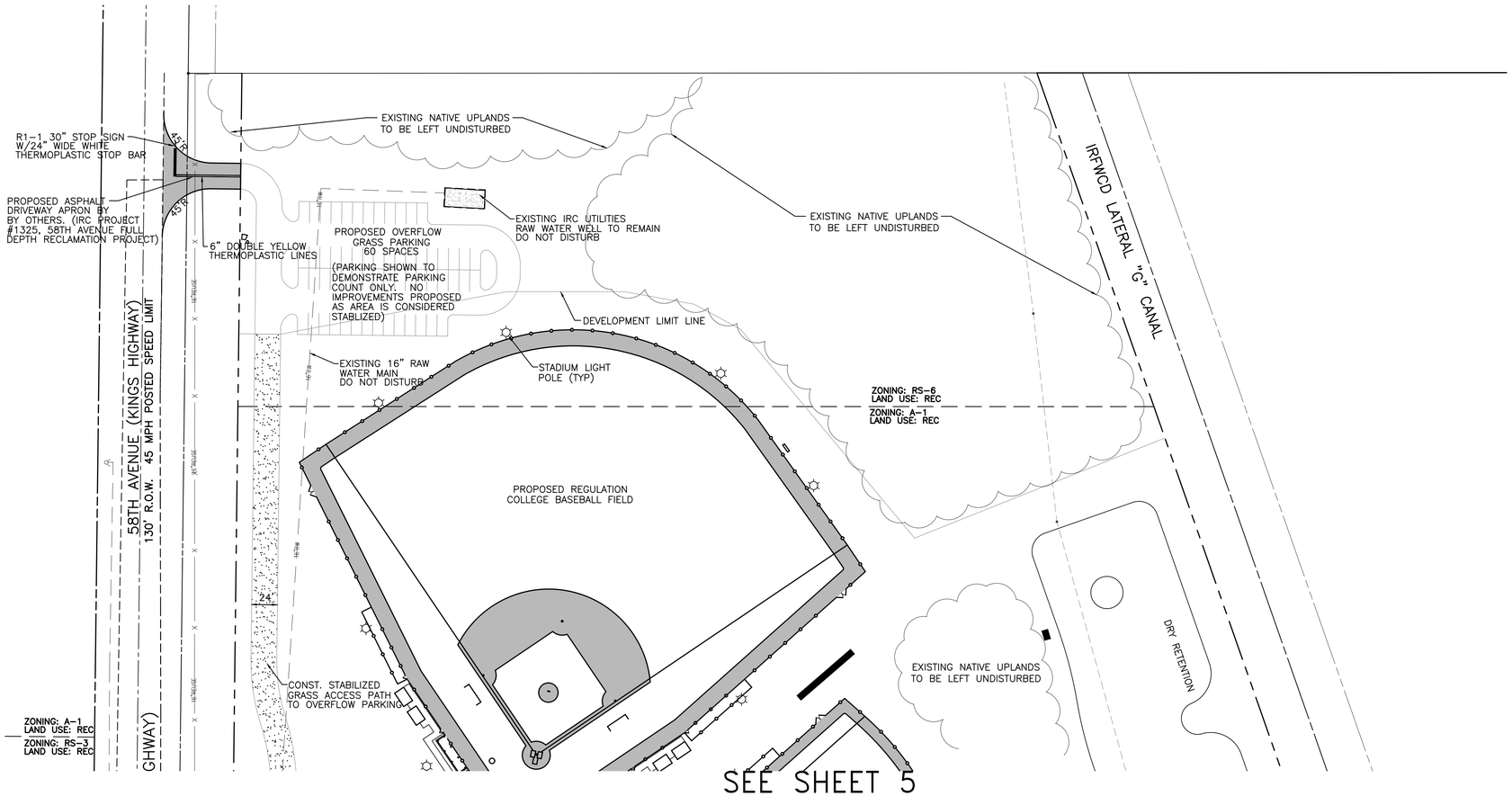
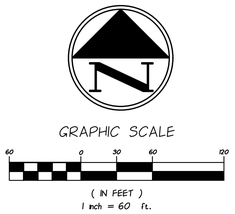
FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	9/23
SCALE	1"=60'
SHEET	5 OF 15
PROJECT NO:	1756





NO.	DATE	DESCRIPTION	DR/APP
7.	10/20/23	DEPICT ADDITIONAL WHEELCHAIR VIEWING PADS	SH/SEM
6.	7/17/23	REMOVE PHASING	SH/SEM
5.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
4.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

SITE PLAN B

MASTELLER & MOLER, INC.
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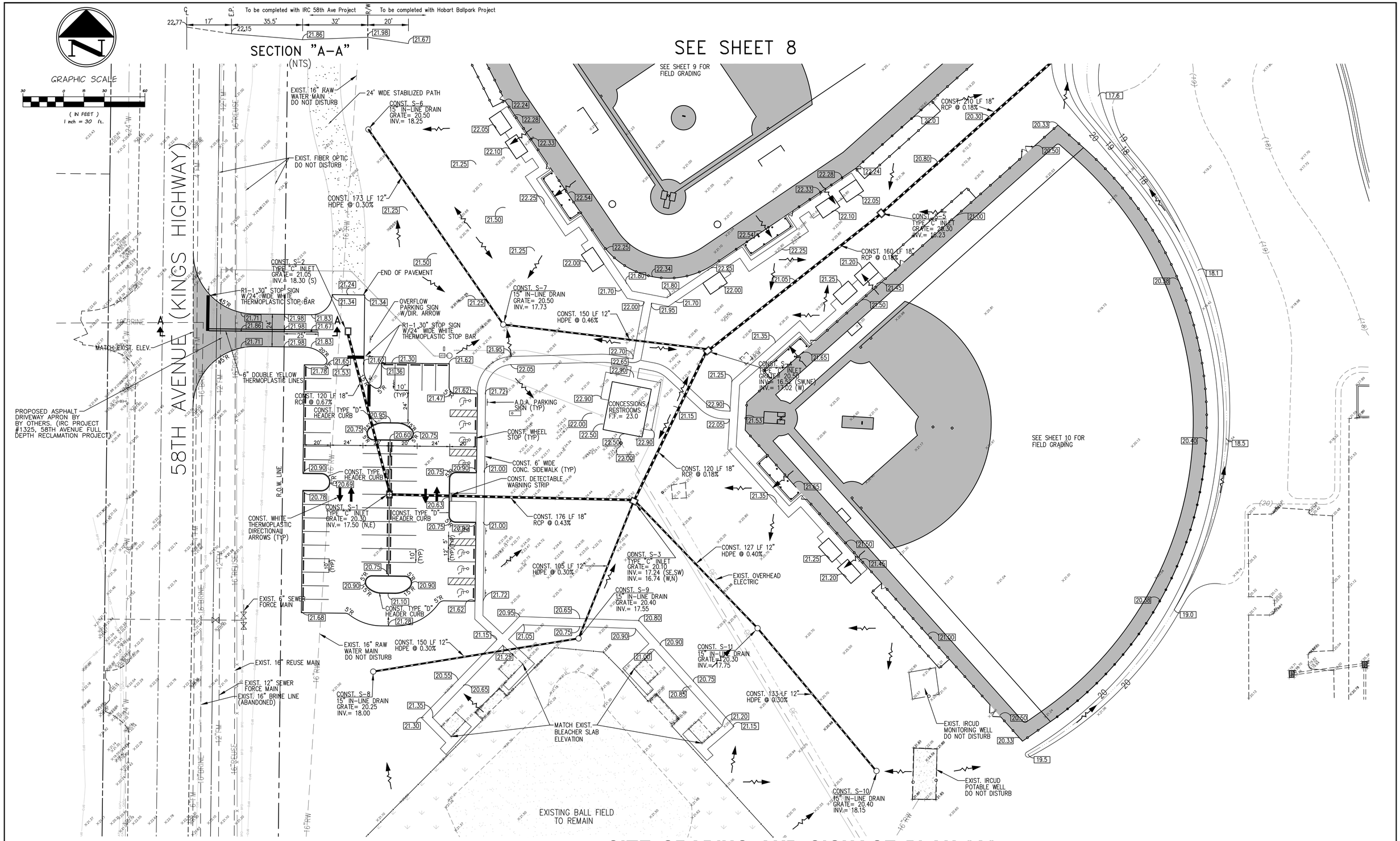
STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	11/17
SCALE	1"=60'
SHEET	6 OF 15
PROJECT NO:	1756



SITE GRADING AND SIGNAGE PLAN "A"

NO.	DATE	DESCRIPTION	DR/APP
6.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
5.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
4.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

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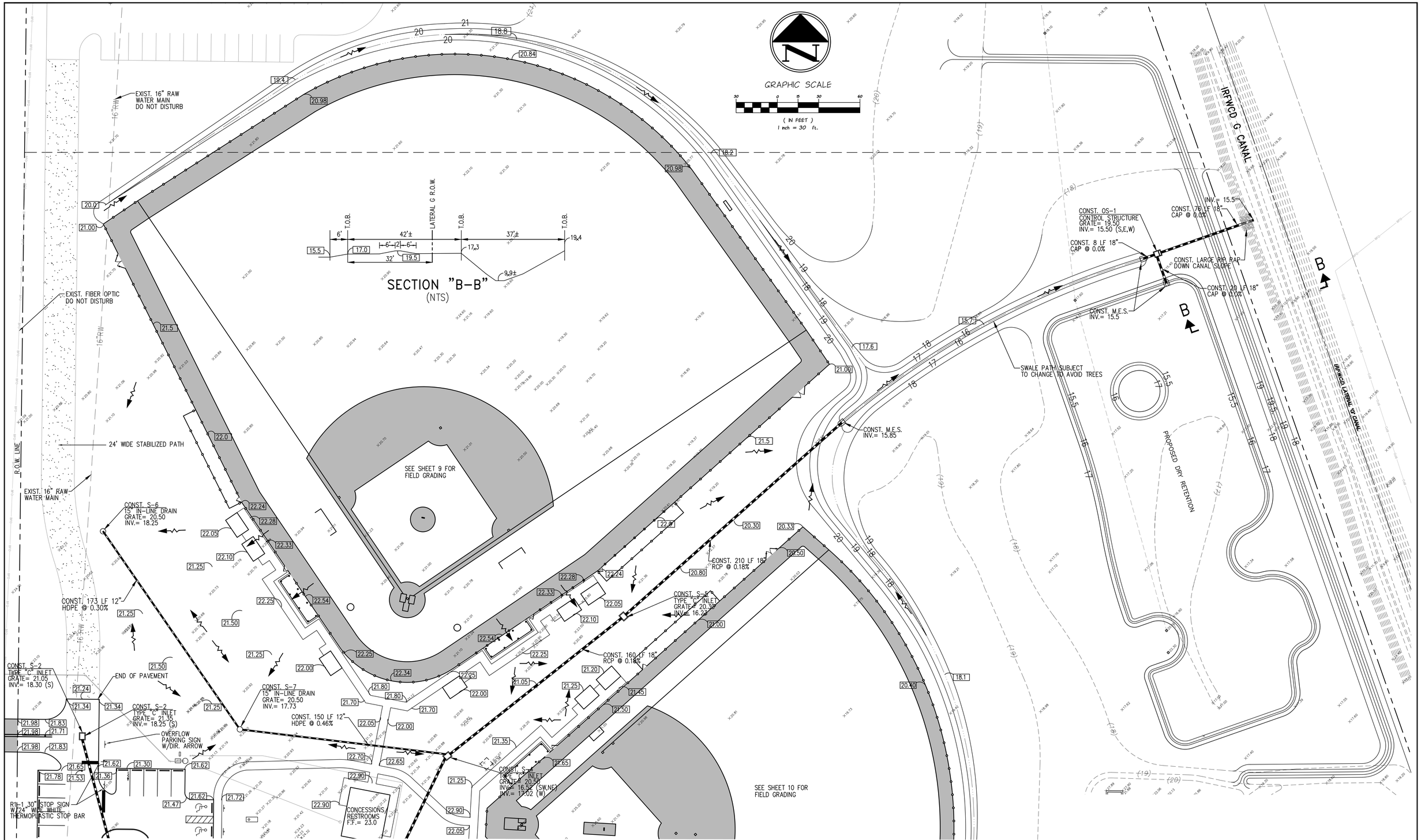
STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	11/17
SCALE	1"=30'
SHEET	7 OF 15
PROJECT NO:	1756



SEE SHEET 7

SITE GRADING PLAN "B"

NO.	DATE	DESCRIPTION	DR/APP
6.	7/17/23	REMOVE PHASING; ADD RIP RAP TO LATERAL G CANAL BANK	SH/SEM
5.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
4.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

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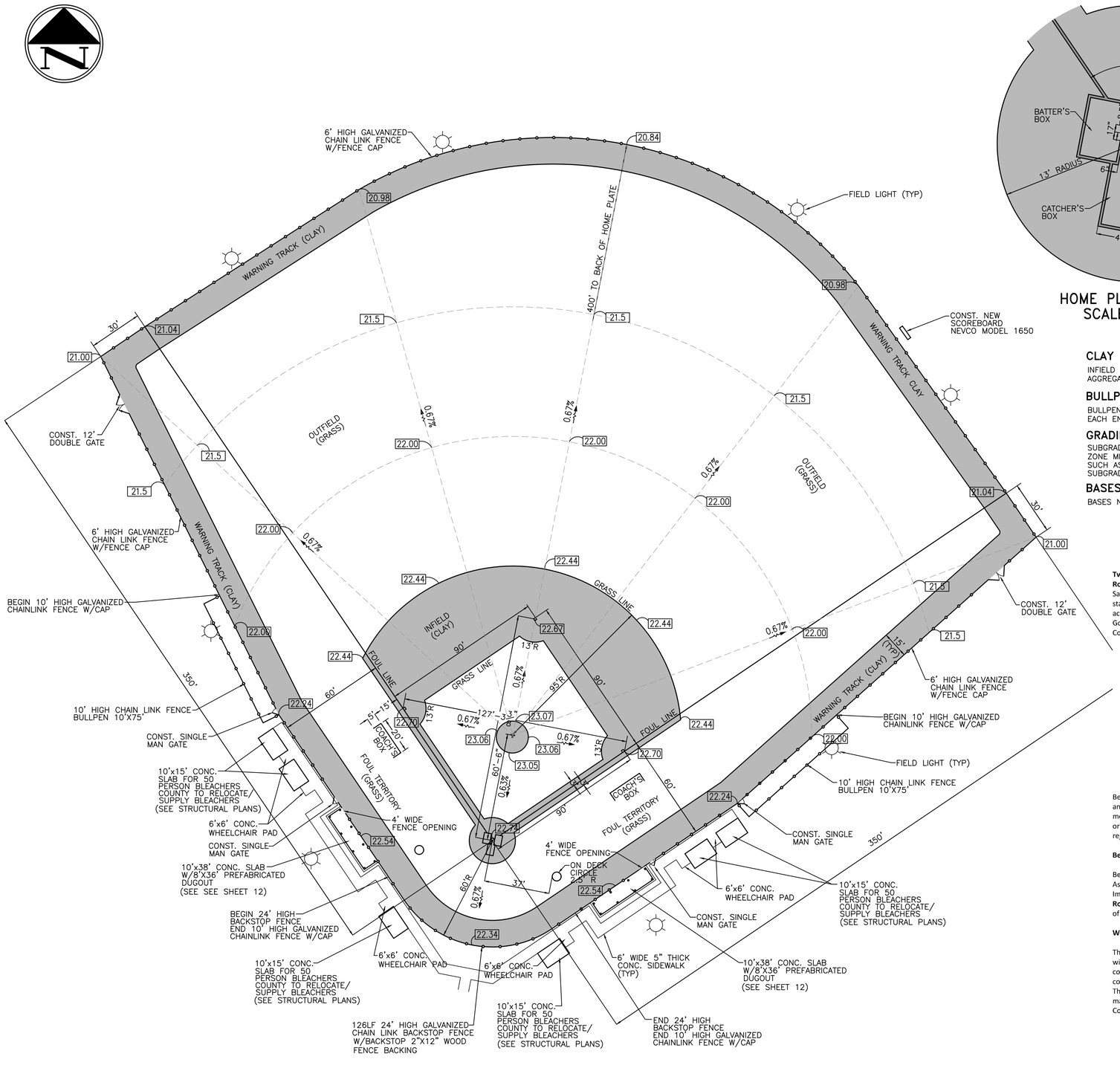
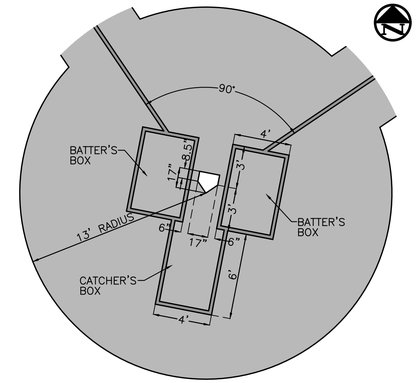
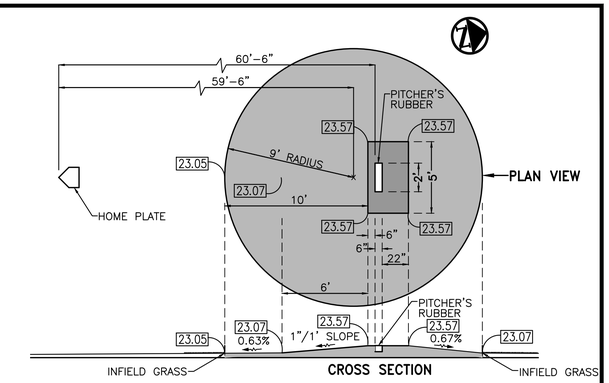
STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	11/17
SCALE	1"=30'
SHEET	8 OF 15
PROJECT NO:	1756





HOME PLATE DETAILS
SCALE: 1"=5'



PITCHER'S MOUND DETAILS
SCALE: 1"=5'

CLAY AREA BOTH FIELDS

INFIELD MIX (70/30 SAND/CLAY) 4" DEEP. WARNING TRACK MATERIAL 3" DEEP CRIMSON AGGREGATE. HILLTOPPER PACKING CLAY FOR BATTER'S BOXES & PITCHING LANDING ZONE

BULLPENS BOTH FIELDS

BULLPEN SURFACE MATERIAL SHALL BE FIFTEEN (15) FEET OF INFIELD CLAY AT EACH END WITH WARNING TRACK MATERIAL IN THE MIDDLE. ALL TO BE 4" DEEP.

GRADING NOTES (BOTH FIELDS)

SUBGRADE SHALL BE LASER GRADED PRIOR TO INSTALLATION OF CLAY OR ROOT ZONE MIX. LASER GRADING SHALL BE DONE USING LASER GRADING MACHINERY SUCH AS A TRACTOR MOUNTED BLADE AND LASER. ENGINEER TO INSPECT SUBGRADE GRADING PRIOR TO INSTALLATION OF CLAY OR ROOT ZONE MIX.

BASES BOTH FIELDS

BASES NOT INCLUDED IN THIS BID.

BACKSTOP WOODEN FENCE BACKING

Two Alternate Pricing for Turf Application

Rootzone Mix

Sand rootzone mix components must be well mixed off-site and measured by weight unless otherwise stated and will have the following characteristics as determined by a Physical Soil Testing Laboratory accredited by the American Association for Laboratory Accreditation (A2LA) as listed by the United States Golf Association for testing materials specified in the USGA's Recommendations for Putting Green Construction:

(a) primarily of mineral components that are silica and not calcareous and have pH less than 7.0;
(b) at least 30% medium sand, particles between 0.25 mm and 0.50 mm in diameter;
(c) at least 80% fine plus medium plus coarse sand, particles between 0.10 and 1.00 mm in diameter;
(d) not more than 10% very fine sand plus silt plus clay, particles less than 0.10 mm in diameter;
(f) not more than 10% fine sand, particles less than 0.25 mm and more than 0.10 mm in diameter;
(g) not more than 10% very coarse sand plus gravel, particles more than 1.00 mm in diameter;
(h) have at least 10% and not more 15% by volume Canadian sphagnum peat moss or other fibrous peat;
(i) have less than 2% organic matter by weight except for added Canadian sphagnum peat moss or other fibrous peat;
(j) have saturated hydraulic conductivity as determined after off-site mixing of at least 6 inches / hour;
(k) have at least 15% by volume large (air-filled) porosity after off-site mixing; and
(l) have no deleterious chemical or physical property.

Before shipping the sand rootzone to the Project site, contractor must provide a copy of the physical analysis from an accredited laboratory using ASTM methods showing that the intended sand rootzone mix meets or exceeds the specifications. Based on the analysis, the County has the right within 7 days to accept or reject the sand rootzone mix. The County again has the right to resample and retest and accept or reject the sand rootzone mix within 14 days after it is delivered on County property.

Bermudagrass Celebration Sprigging

Bermudagrass, cultivar 'Celebration' Sprigs must be certified by either the Southern Seed Certification Association of Auburn, Alabama, or the Georgia Crop Improvement Association or the Georgia Crop Improvement Association of Athens, Georgia. Contractor must follow the specifications above for the **Rootzone Mix (type and certification).** The contractor will present to the County their proposed number of USDA Bushels of Bermudagrass Celebration Sprigs to be applied and the application method.

Warranty

The Warranty conditions for the sprigging shall be as follows: The acceptance period of the sprigging will be 21 days after the last sprigs where planted and the County will within 14 days inform the contractor whether these steps have been completed satisfactorily, and if they have not been completed, what if any deficiency(ies) must be corrected before the 26 week warranty period will begin. The Contractor will be responsible for irrigating, mowing, fertilizing, pest control, and all other turf maintenance practices for the 26 week warranty period or until the Contractor is informed by the County Project Manager in writing that the County will assume maintenance responsibilities for the turf.

Sod Alternate Option

Bermuda grass sod may be proposed by the contractor after the bid award for the County to consider. Bermudagrass sod, cultivar 'Celebration,' must be certified by either the Southern Seed Certification Association of Auburn, Alabama, or the Georgia Crop Improvement Association or the Georgia Crop Improvement Association of Athens, Georgia. Sod must be healthy and free of weeds or other pests and must be produced on sand soil with less than 5% soil organic matter by weight. Contractor must provide the name, address, and block of the farm area where the Celebration bermudagrass sod is intended to be obtained, within 2 weeks before the sod will be cut. The County may reject the proposed sod if it is not certified, if it is not mature enough to hold together when picked up by end, if it appears unhealthy, if it contains weeds or other pests, or is otherwise unsuitable for play.

Sod installation

Big Roll Sod pieces must be placed to completely cover the soil with no gaps or cracks between sod pieces. All portions of the top of each sod piece must be uniformly green and there may be no areas that are brown or yellow. Sod must be rolled after planting to improve the smoothness of the surface. If there is subsidence or dips following rolling, the low areas must be dug up, backfilled with sand rootzone mix, and the sod in those areas replanted.

Warranty

Contractor will be responsible for irrigating, mowing, fertilizing, pest control, and all other turf maintenance practices for 8 weeks after the final completion involving grading, capping, sodding, and replacement of irrigation. Contractor will inform the County on the date of final completion when grading, capping, addition of sand rootzone and sodding have been completed, and the County will within 14 days inform the contractor whether these steps have been completed satisfactorily, and if they have not been completed, what if any deficiency(ies) must be corrected before the 8-week warranty period will begin. If problems arise during the warranty period, the project will be deemed to be incomplete. Problems may include but are not restricted to failure of the sod to root enough to prevent it from being pulled out by hand, noticeable weeds including weeds that were present before sodding, insect or disease damage, conspicuous discoloration, cracks between sod pieces, and irregularities in grade or slope that exceed 1/2 inch elevation within any 100 square foot area or that cause scalping to occur when mowed with a suitably adjusted riding mower.

NO.	DATE	DESCRIPTION	DR/APP
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6.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
5.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
4.	4/6/20	CHANGE WARNING TRACK, BULLPEN, & SOD MATERIAL	SH/SEM
3.	9/11/19	REVISED CHAIN LINK FENCE HEIGHT	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

COLLEGE BASEBALL FIELD DETAILS & GRADING

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY FLORIDA

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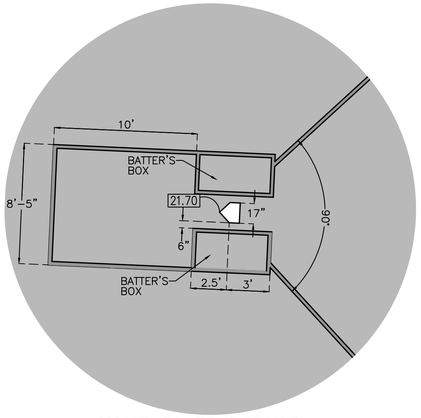
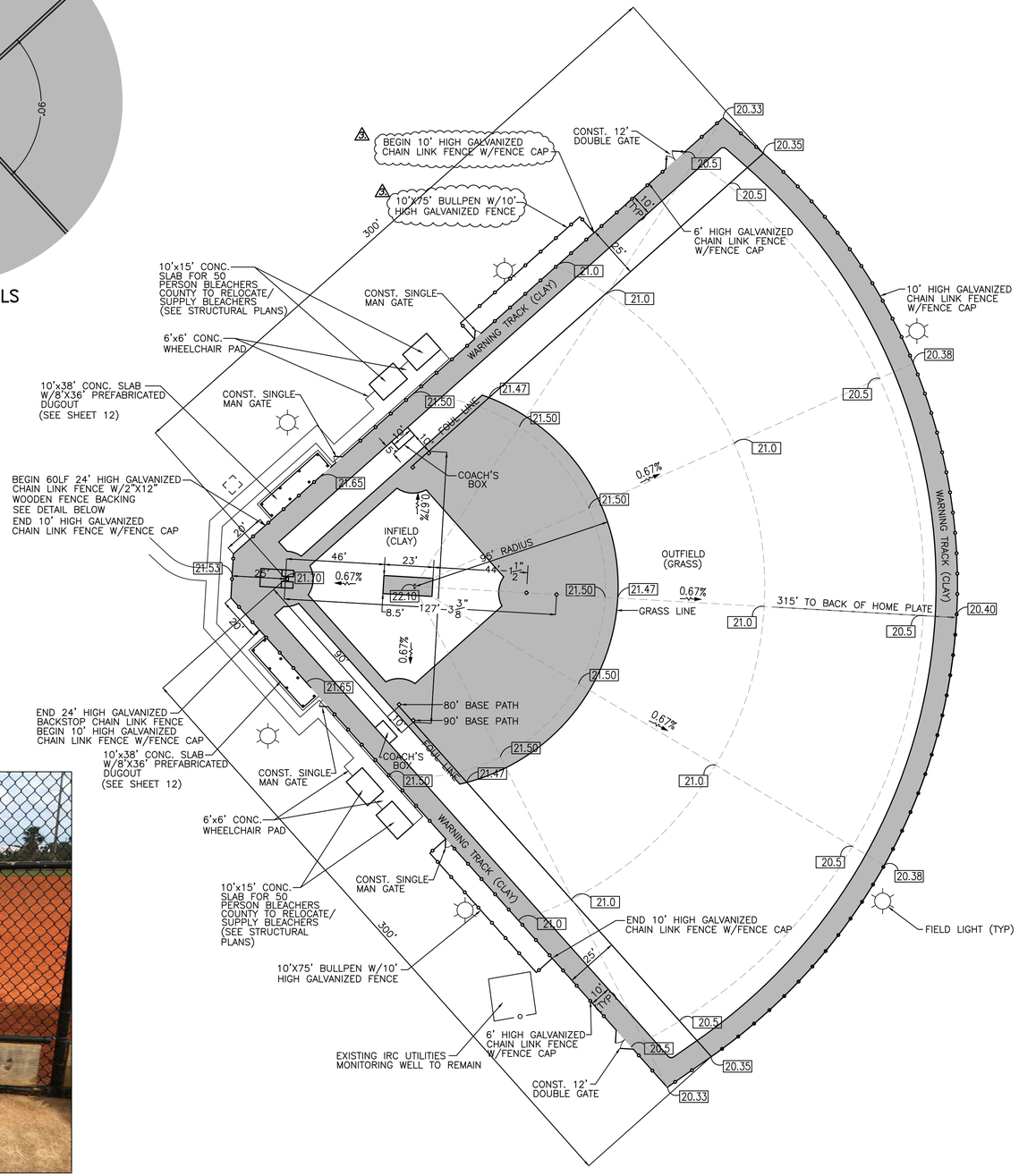
STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	11/17
SCALE	1"=30'
SHEET	9 OF 15
PROJECT NO:	1756



HOME PLATE DETAILS
SCALE: 1"=5'



BACKSTOP WOODEN FENCE BACKING

SOFTBALL/HYBRID FIELD DETAILS & GRADING

NO.	DATE	DESCRIPTION	DR/APP
6.	10/20/23	DEPICT ADDITIONAL WHEELCHAIR VIEWING PADS	SH/SEM
5.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
4.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
3.	9/11/19	REVISED CHAIN LINK FENCE HEIGHT	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

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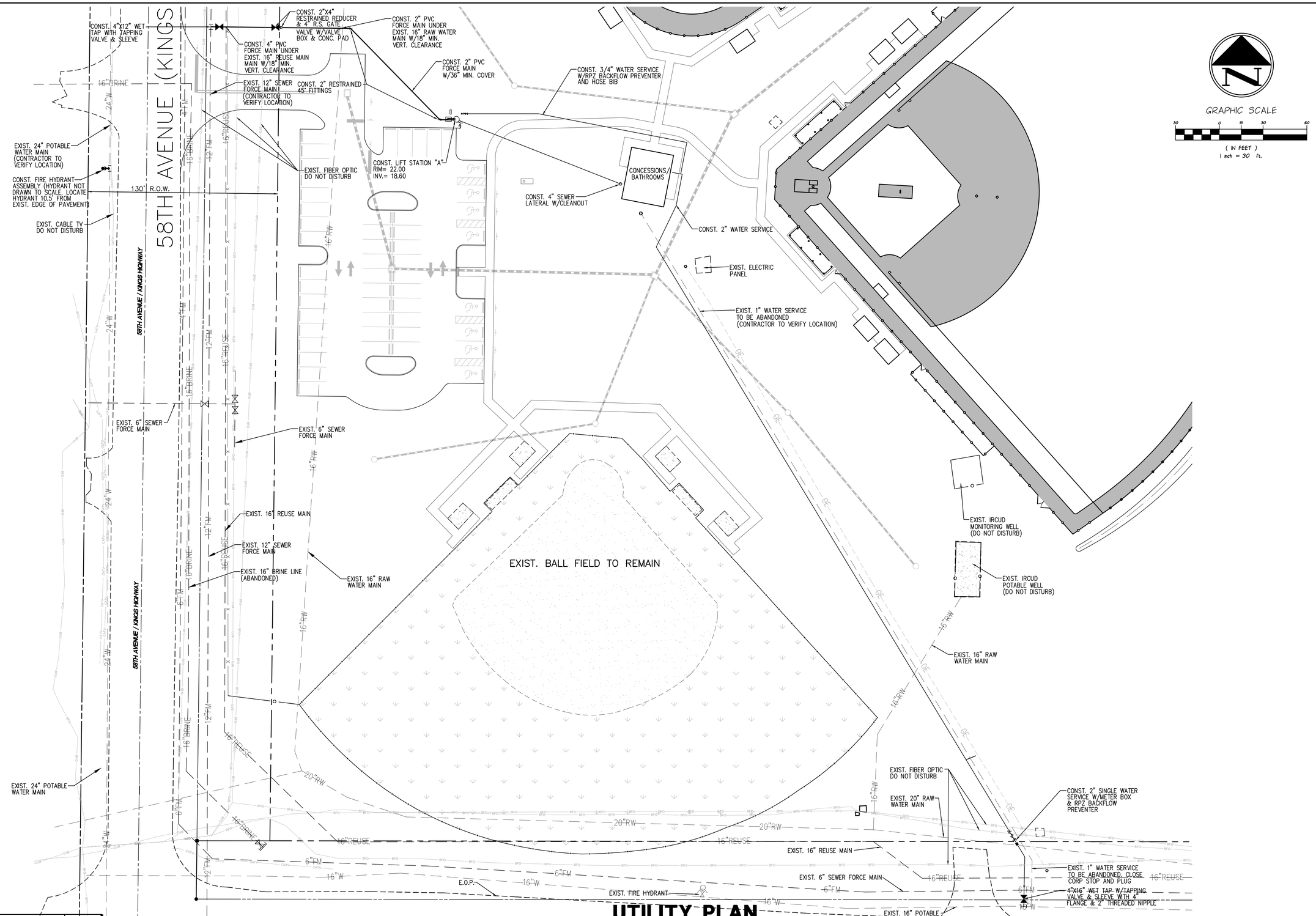
SCALE	1"=30'
SHEET	10 OF 15
PROJECT NO:	1756



UTILITY PLAN

NO.	DATE	DESCRIPTION	DR/APP
6.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
5.	4/6/20	A.A. REQUEST TO PHASE PROJECT	SH/SEM
4.	8/28/18	REVISED PER IRC UTIL MARKUPS	SH/SEM
3.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

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CHECKED	SEM
DATE	9/23
SCALE	1"=30'
SHEET	11 OF 15
PROJECT NO:	1756

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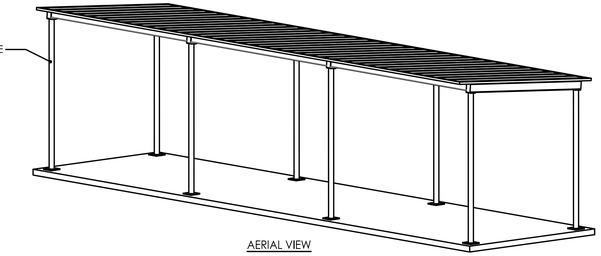
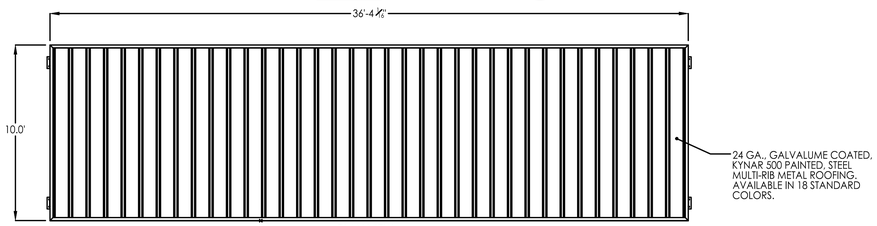
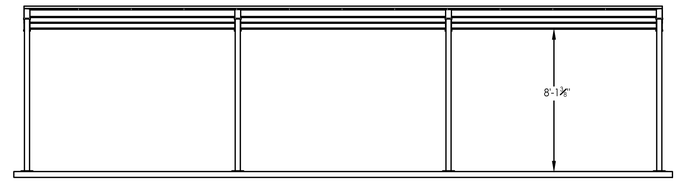


AERIAL VIEW

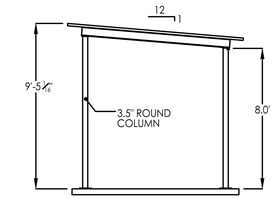
NOTE: THE ROUND COLUMNS OF THIS SHELTER SHALL NOT BE INTEGRATED INTO THE BALL FIELD CHAIN LINK FENCING SYSTEM



PLAN VIEW



FRONT ELEVATION



SIDE ELEVATION

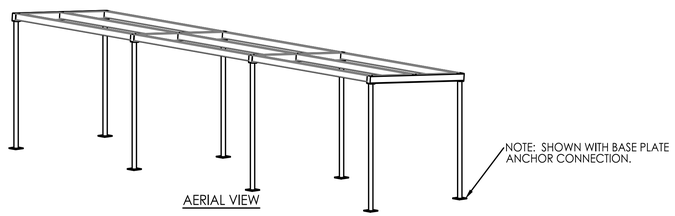
DUGOUT TO BE PRE-FABRICATED STRUCTURE, MODEL DUG-LK-10X36 SUPPLIED/ MANUFACTURED BY POLIGON, PARK ARCHITECTURE.
PORTERCORP, 4240 N. 136th AVE, HOLLAND, MI 49424
www.poligon.com 800-334-7721

THIS PREFABRICATED STRUCTURE SHALL INCLUDE SIGNED & SELAED STRUCTURAL DRAWINGS FOR THE FOUNDATIONS AND STRUCTURES MEETING FLORIDA BUILDING CODES INCLUDING WIND LOADS.

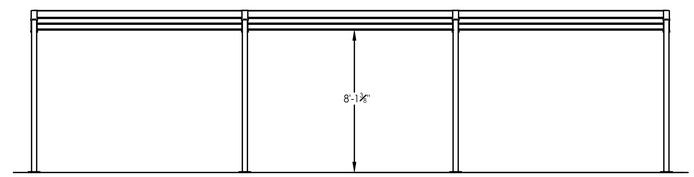
PLAN / ELEVATION VIEWS
DUGOUT DETAILS

(N.T.S.)

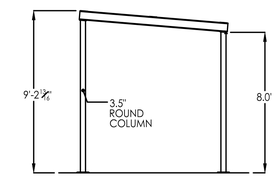
B



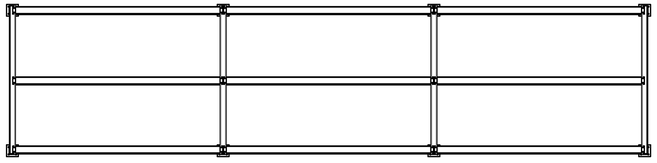
AERIAL VIEW



FRONT ELEVATON



SIDE ELEVATON



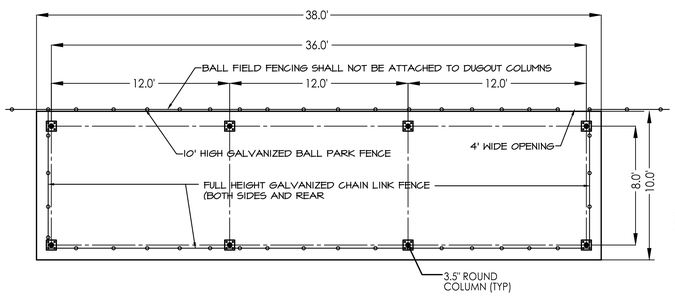
PLAN VIEW

FRAME AND ORNAMENTATION FINISH:
MEMBERS SHOT BLASTED TO NEAR WHITE CONDITION (SSPC SP-10), WASHED AND SEALED IN A PHOSPHATE SPRAY, COATED WITH A SPECIAL EPOXY PRIMER POWDER COAT BASE, COATED WITH A SUPER DURABLE TGIC POLYESTER POWDER AND OVEN CURED.

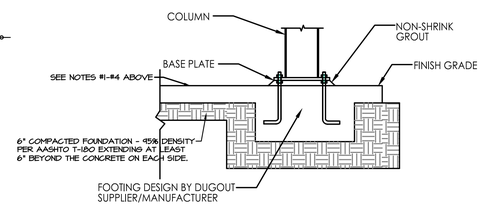
FRAME VIEWS
DUGOUT DETAILS

(N.T.S.)

C

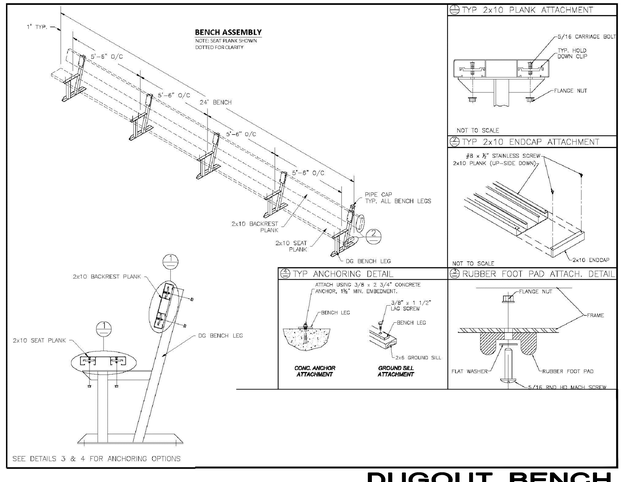


1. CONCRETE SHALL HAVE A REQUIRED MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.
2. FIBER-REINFORCED CONCRETE MUST BE UTILIZED (NO METAL ALLOWED).
3. SLAB TO BE A MINIMUM 6" THICKNESS
4. PROVIDE JOINTS PER MANUFACTURER SPECIFICATIONS



COLUMN LAYOUT
DUGOUT DETAILS

(N.T.S.)



DUGOUT DETAILS

SECTION 13125
PORTABLE BENCH WITH BACK
PART 1 - GENERAL
1.01 SECTION INCLUDES
A. Design and fabrication of all aluminum benches
1.02 QUALITY ASSURANCE
A. Manufacturer: National Recreation Systems, Inc.
P.O. Box 11487 Fort Wayne, In 46858-1487
B. Manufacturer Qualifications: Manufacturer must have a minimum of ten years experience in the design and manufacture of benches.
C. Welders must conform to AWS standards.
D. Source Quality Control: Mill Test Certification

1.03 WARRANTY
A. Warranty shall guarantee benches to be free from defect in materials and workmanship for a period of 1 year under normal use. Warranty period shall begin on date of completion for projects installed by manufacturer, or its subcontractors. **OR** warranty period shall begin on date of final delivery on projects installed by others.
B. Anodized finish of plank extrusions shall be covered by a **5 year** warranty against loss of structural strength or finish deterioration due to exposure to weather conditions or UV rays. Discoloration of mill finish aluminum due to galvanic reaction not covered.

PART 2 – PRODUCTS
2.01 ACCEPTABLE MANUFACTURER
A. National Recreation Systems, Inc. or Approved Equal
2.02 DESIGN
A. Design Loads:
1. Live Loads: Uniform loading - Structure = 100 psf
Uniform loading - Seat = 120 psf
2. Sway Loads: Perpendicular to seats = 10 plf
Parallel to seats = 24 plf
2.03 ALUMINUM FRAME BENCHES
A. Quantity and Size: Shall consist of 1 unit(s) 24' long for each dugout.
B. Framework: Prefabricated 2" square aluminum tube spaced at 6' - 0" intervals with seat and back supports of 2" x 2" x 3/16" aluminum angle and a 1-1/2" x 1-1/2" x 3/16" horizontal angle between each pair of legs. No mechanical fastening of seat supports, legs or footped supports be permitted.
C. Shop Connections: Welded to meet AWS standards.
D. Seats and Backs: Nominal 2" x 10" anodized aluminum with anodized end caps.
2.04 MATERIALS / FINISHES
A. Framework:
1. Aluminum: Structural fabrication with aluminum alloy 6061-T6 mill finish. Each frame shall be unit-welded, using gas metal arc welding (GMAW) according to AWS specifications (D1.1). After fabrication all steel is hot dipped galvanized to ASTM A-123 specifications.
B. Extruded Aluminum:
1. Seat and back planks: Aluminum alloy 6063-T6, clear anodized 204R1, AA-M10C22A31, Class II with a wall thickness nominally .078" for impact and deformation resistance.
C. Accessories:
1. Channel End Caps: Aluminum alloy 6063-T6, clear anodized 204R1,AA-M10C22A31,Class II.
2. Hardware: Bolts and Nuts shall be hot dipped galvanized.
3. Hold Down Clip Assembly: Aluminum alloy 6063-T6 mill finish.

PART 3 – EXECUTION
3.01 INSTALLATION
A. Install bench unit(s) in accordance with manufacturer written instructions and shop drawings.

DUGOUT BENCH DETAILS/SPECS

(N.T.S.)

NO.	DATE	DESCRIPTION	DR/APP
3.	9/11/19	REVISED CHAIN LINK FENCING	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

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CONSULTING ENGINEERS
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(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY — FLORIDA

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FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	
CHECKED	SEM
DATE	3/18
SCALE	NTS
SHEET	12 OF 15
PROJECT NO:	1756

SECTION 26 56 68 – EXTERIOR ATHLETIC LIGHTING

Lighting System with LED Light Source

PART 1 – GENERAL

1.1 SUMMARY

A. Work covered by this section of the specifications shall conform to the contract documents, engineering plans as well as state and local codes.

B. The purpose of these specifications is to define the lighting system performance and design standards for Hobart Baseball Field using an LED Lighting source. The manufacturer / contractor shall supply lighting equipment to meet or exceed the standards set forth in these specifications.

C. The sports lighting will be for the following venues:

1. Baseball

D. The primary goals of this sports lighting project are:

1. Guaranteed Light Levels: Selection of appropriate light levels impact the safety of the players and the enjoyment of spectators. Therefore, light levels are guaranteed to not drop below specified target values for a period of 10 years.
2. Environmental Light Control: It is the primary goal of this project to minimize spill light to adjoining properties and glare to the players, spectators and neighbors.
3. Cost of Ownership: In order to reduce the operating budget, the preferred lighting system shall be energy efficient and cost effective to operate. All maintenance costs shall be eliminated for the duration of the warranty.
4. Control and Monitoring: To allow for optimized use of labor resources and avoid unneeded operation of the facility, customer requires a remote on/off control system for the lighting system. Fields should be proactively monitored to detect luminaire outages over a 10-year life cycle. All communication and monitoring costs for 10-year period shall be included in the bid.

1.2 LIGHTING PERFORMANCE

A. Illumination Levels and Design Factors: Playing surfaces shall be lit to an average target illumination level and uniformity as specified in the chart below. Lighting calculations shall be developed and field measurements taken on the grid spacing with the minimum number of grid points specified below. Appropriate light loss factors shall be applied and submitted for the basis of design. Average illumination level shall be measured in accordance with the IESNA LM-5-04 (IESNA Guide for Photometric Measurements of Area and Sports Lighting Installations). Illumination levels shall not to drop below desired target values in accordance to IES RP-6-15, Page 2, Maintained Average Illuminance and shall be guaranteed for the full warranty period.

Area of Lighting	Average Target Illumination Levels	Maximum to Minimum Uniformity Ratio	Grid Points	Grid Spacing
Infield	50 footcandles	2.0:1.0	25	30' x 30'
Outfield	30 footcandles	2.5:1.0	123	30' x 30'

B. Color: The lighting system shall have a minimum color temperature of <5700K and a CRI of 75.

C. Mounting Heights: To ensure proper aiming angles for reduced glare and to provide better playability, minimum mounting heights shall be as described below. Higher mounting heights may be required based on photometric report and ability to ensure the top of the field angle is a minimum of 10 degrees below horizontal.

# of Poles	Pole Designation	Pole Height
6	A3, A4, C3, C4, D1, D2	70'
2	B3, B4	80'

1.1 ENVIRONMENTAL LIGHT CONTROL

A. Light Control Luminaires: All luminaires shall utilize spill light and glare control devices including, but not limited to, internal shields, louvers and external shields. No symmetrical beam patterns are accepted.

B. Spill Light and Glare Control: To minimize impact on adjacent properties, spill light and candela values must not exceed the following levels taken at 3 feet above grade.

	Average	Maximum
Horizontal Footcandles 150' offset	.0414	.174
Vertical Footcandles 150' offset	.0846	.234
Candela – 150' offset	1721	3289

C. Spill Scans: Spill scans must be submitted indicating the amount of horizontal and vertical footcandles along the specified lines. Light levels shall be taken at 30-foot intervals along the boundary line. Readings shall be taken with the meter orientation at both horizontal and aimed towards the most intense bank of lights. Illumination level shall be measured in accordance with the IESNA LM-5-04 after 1 hour warm up.

D. The first page of a photometric report for all luminaire types proposed showing horizontal and vertical axial candle power shall be provided to demonstrate the capability of achieving the specified performance. Reports shall be certified by a qualified testing laboratory with a minimum of five years experience or by a manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products. A summary of the horizontal and vertical aiming angles for each luminaire shall be included with the photometric report.

1.4 Cost of Ownership

A. Manufacturer shall submit a 10-year Cost of Ownership summary that includes energy consumption, anticipated maintenance costs, and control costs. All costs associated with faulty luminaire replacement - equipment rentals, removal and installation labor, and shipping - are to be included in the maintenance costs.

PART 2 – PRODUCT

2.2 SPORTS LIGHTING SYSTEM CONSTRUCTION

A. Manufacturing Requirements: All components shall be designed and manufactured as a system. All luminaires, wire harnesses, drivers and other enclosures shall be factory assembled, aimed, wired and tested.

B. Durability: All exposed components shall be constructed of corrosion resistant material and/or coated to help prevent corrosion. All exposed carbon steel shall be hot dip galvanized per ASTM A123. All exposed aluminum shall be powder coated with high performance polyester or anodized. All exterior reflective inserts shall be anodized, coated, and protected from direct environmental exposure to prevent reflective degradation or corrosion. All exposed hardware and fasteners shall be stainless steel, passivated and coated with aluminum-based thermosetting epoxy resin for protection against corrosion and stress corrosion cracking. Structural fasteners may be carbon steel and galvanized meeting ASTM A153 and ISO/EN 1461 (for hot dipped galvanizing), or ASTM B695 (for mechanical galvanizing). All wiring shall be enclosed within the cross-arms, pole, or electrical components enclosure.

C. System Description: Lighting system shall consist of the following;

1. Galvanized steel poles and cross-arm assembly.
1. Non-approved pole technology:
   a. Square static cast concrete poles will not be accepted.
   b. Direct bury steel poles which utilize the extended portion of the steel shaft for their foundation will not be accepted due to potential for internal and external corrosive reaction to the soils and long term performance concerns.
2. Lighting systems shall use concrete foundations. See Section 2.4 for details.
   a. For a foundation using a pre-stressed concrete base embedded in concrete backfill the concrete shall be air-entrained and have a minimum compressive design strength at 28 days of 3,000 PSI. 3,000 PSI concrete specified for early pole erection, actual required minimum allowable concrete strength is 1,000 PSI. All piers and concrete backfill must bear on and against firm undisturbed soil.
   b. For anchor bolt foundations or foundations using a pre-stressed concrete base in a suspended pier or re-enforced pier design pole erection may occur after 7 days. Or after a concrete sample from the same batch achieves a certain strength.
3. Manufacturer will supply all drivers and supporting electrical equipment
   a. Remote drivers and supporting electrical equipment shall be mounted approximately 10 feet above grade in aluminum enclosures. The enclosures shall be touch-safe and include drivers and fusing with indicator lights on fuses to notify when a fuse is to be replaced for each luminaire. Disconnect per circuit for each pole structure will be located in the enclosure. Integral drivers are not allowed.
   b. Manufacturer shall provide surge protection at the pole equal to or greater than 40 kA for each line to ground (Common Mode) as recommended by IEEE C62.41.2_2002.
5. Wire harness complete with an abrasion protection sleeve, strain relief and plug-in connections for fast, trouble-free installation.
6. All luminaires, visors, and cross-arm assemblies shall withstand 150 mi/h winds and maintain luminaire aiming alignment.
8. Contactor cabinet to provide on-off control.
9. Manufacturer shall provide lightning grounding as defined by NFPA 780 and be UL Listed per UL 96 and UL 96A.
   a. Integrated grounding via concrete encased electrode grounding system.
   b. If grounding is not integrated into the structure, the manufacturer shall supply grounding electrodes, copper down conductors, and exothermic weld kits. Electrodes and conductors shall be sized as required by NFPA 780.The grounding electrode shall be minimum size of 5/8 inch diameter and 8 feet long, with a minimum of 10 feet embedment. Grounding electrode shall be connected to the structure by a grounding electrode conductor with a minimum size of 2 AWG for poles with 75 feet mounting height or less, and 2/0 AWG for poles with more than 75 feet mounting height.
10. Enhanced corrosion protection package: Due to the potentially corrosive environment for this project, manufacturers must provide documentation that their products meet the following enhanced requirements in addition to the standard durability protection specified above:
    a) Exposed carbon steel horizontal surfaces on the crossarm assembly shall be galvanized to no less than a five (5) mil average thickness.
    b) Exposed die cast aluminum components shall be Type II anodized per MIL-STD-8625 and coated with high performance polyester.
    c) Exposed extruded aluminum components shall be Type II anodized per MIL-STD-8625 and coated with high performance polyester.

D. Safety: All system components shall be UL listed for the appropriate application.

2.1 ELECTRICAL

A. Electric Power Requirements for the Sports Lighting Equipment:
1. Electric power: 480 Volt, 1 Phase
2. Maximum total voltage drop: Voltage drop to the disconnect switch located on the poles shall not exceed three (3) percent of the rated voltage.

B. Energy Consumption: The kW consumption for the field lighting system shall be 57.84.

2.3 CONTROL

A. Instant On/Off Capabilities: System shall provide for instant on/off of luminaires.

B. Lighting contactor cabinet(s) constructed of NEMA Type 4 aluminum, designed for easy installation with contactors, labeled to match field diagrams and electrical design. Manual off-on-auto selector switches shall be provided.

C. Dimming: System shall provide for 3-stage dimming (high-medium-low). Dimming will be set via scheduling options (Website, app, phone, fax, email)

D. Remote Lighting Control System: System shall allow owner and users with a security code to schedule on/off system operation via a web site, phone, fax or email up to ten years in advance. Manufacturer shall provide and maintain a two-way TCP/IP communication link. Trained staff shall be available 24/7 to provide scheduling support and assist with reporting needs.

The owner may assign various security levels to schedulers by function and/or fields. This function must be flexible to allow a range of privileges such as full scheduling capabilities for all fields to only having permission to execute "early off" commands by phone. Scheduling tool shall be capable of setting curfew limits.

Controller shall accept and store 7-day schedules, be protected against memory loss during power outages, and shall reboot once power is regained and execute any commands that would have occurred during outage.

E. Remote Monitoring System: System shall monitor lighting performance and notify manufacturer if individual luminaire outage is detected so that appropriate maintenance can be scheduled. The controller shall determine switch position (manual or auto) and contactor status (open or closed).

F. Management Tools: Manufacturer shall provide a web-based database and dashboard tool of actual field usage and provide reports by facility and user group. Dashboard shall also show current status of luminaire outages, control operation and service. Mobile application will be provided suitable for IOS, Android and Blackberry devices.

Hours of Usage: Manufacturer shall provide a means of tracking actual hours of usage for the field lighting system that is readily accessible to the owner.

1. Cumulative hours: shall be tracked to show the total hours used by the facility
2. Report hours saved by using early off and push buttons by users.

G. Communication Costs: Manufacturer shall include communication costs for operating the control and monitoring system for a period of 10 years.

H. Communication with luminaire drivers: Control system shall interface with drivers in electrical components enclosures by means of powerline communication.

2.4 STRUCTURAL PARAMETERS

A. Wind Loads: Wind loads shall be based on the 2020 Florida Building Code. Wind loads to be calculated using ASCE 7-10, an ultimate design wind speed of 160 (nominal design wind speed of 160).

B. Pole Structural Design: The stress analysis and safety factor of the poles shall conform to AASHTO 2013 Standard Specification for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (LTS-6).

C. Foundation Design: The foundation design shall be based on soil parameters as outlined in the geotechnical report. Keller, Schleicher & MacWilliam Engineering and Testing, dated June 5, 2018.

D. Foundation Drawings: Project specific foundation drawings stamped by a registered engineer in the state where the project is located are required. The foundation drawings must list the moment, shear (horizontal) force, and axial (vertical) force at ground level for each pole. These drawings must be submitted at time of bid to allow for accurate pricing.

PART 3 – EXECUTION

3.1 SOIL QUALITY CONTROL

A. It shall be the Contractor's responsibility to notify the Owner if soil conditions exist other than those on which the foundation design is based, or if the soil cannot be readily excavated. Contractor may issue a change order request / estimate for the Owner's approval / payment for additional costs associated with:

1. Providing engineered foundation embedment design by a registered engineer in the State of Florida for soils other than specified soil conditions;
2. Additional materials required to achieve alternate foundation;
3. Excavation and removal of materials other than normal soils, such as rock, caliche, etc.

3.2 DELIVERY TIMING

A. Delivery Timing Equipment On-Site: The equipment must be on-site 6 – 8 weeks from receipt of approved submittals and receipt of complete order information.

3.3 FIELD QUALITY CONTROL

A. Illumination Measurements: Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, Owner's Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA LM-5-04.

B. Field Light Level Accountability

1. Light levels are guaranteed not to fall below the target maintained light levels for the entire warranty period of 10 years. These levels will be specifically stated as "guaranteed" on the illumination summary provided by the manufacturer.
2. The contractor/manufacturer shall be responsible for conducting initial light level testing and an additional inspection of the system, in the presence of the owner, one year from the date of commissioning of the lighting.
3. The contractor/manufacturer will be held responsible for any and all changes needed to bring these fields back to compliance for light levels and uniformities. Contractor/Manufacturer will be held responsible for any damage to the fields during these repairs.

C. Correcting Non-Conformance: If, in the opinion of the Owner or his appointed Representative, the actual performance levels including footcandles and uniformity ratios are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer shall be required to make adjustments to meet specifications and satisfy Owner.

3.4 WARRANTY AND GUARANTEE

A. 10-Year Warranty: Each manufacturer shall supply a signed warranty covering the entire system for 10 years from the date of shipment. Warranty shall guarantee specified light levels. Manufacturer shall maintain specifically-funded financial reserves to assure fulfillment of the warranty for the full term. Warranty does not cover weather conditions events such as lightning or hail damage, improper installation, vandalism or abuse, unauthorized repairs or alterations, or product made by other manufacturers.

Maintenance: Manufacturer shall monitor the performance of the lighting system, including on/off

A. status, hours of usage and luminaire outage for 10 years from the date of equipment shipment. Parts and labor shall be covered such that individual luminaire outages will be repaired when the usage of any field is materially impacted. Manufacturer is responsible for removal and replacement of failed luminaires, including all parts, labor, shipping, and equipment rental associated with maintenance. Owner agrees to check fuses in the event of a luminaire outage.

NOTE:

THE LIGHTING VENDOR SHALL, TO SUPPORT ISSUANCE OF A BUILDING PERMIT FOR THIS PROJECT, SUBMIT WITH SHOP DRAWINGS, THE DESIGN OF THE LIGHTING SYSTEM INCLUDING STRUCTURAL ENGINEERING SIGNED AND SEALED BY A FLORIDA LICENSED ENGINEER.

COLLEGE FIELD LIGHTING SPECIFICATIONS

NO.	DATE	DESCRIPTION	DR/APP
6.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
5.	4/6/20	REVISED LIGHTING SPECIFICATIONS	SH/SEM
4.	9/18/18	REVISED PER IRC COMMENTS EMAILED 9/17/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

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CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK

BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY FLORIDA

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FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	3/18
SCALE	NTS
SHEET	13A OF 15
PROJECT NO:	1756

PART 1 - GENERAL

1.1 SUMMARY

A. Work covered by this section of the specifications shall conform to the contract documents, engineering plans as well as state and local codes.

B. The purpose of these specifications is to define the performance and design standards for Hobart Park Softball Field. The manufacturer / contractor shall supply lighting equipment to meet or exceed the standards set forth in these specifications.

C. The sports lighting will be for the following fields:
1. Softball Field

D. The primary goals of this sports lighting project are:
1. Guaranteed Light Levels: Selection of appropriate light levels impact the safety of the players and the enjoyment of spectators. Therefore light levels are guaranteed for a period of 10 years.
2. Environmental Light Control: It is the primary goal of this project to minimize spill light and glare.
3. Life-cycle Cost: In order to reduce the operating budget, the preferred lighting system shall be energy efficient and cost effective to operate.
4. Control and Monitoring: To allow for optimized use of labor resources and avoid unneeded operation of the facility, customer requires a remote on/off control system for the lighting system. Field(s) should be proactively monitored to detect fixture outages over a 10 year life-cycle.

1.2 LIGHTING PERFORMANCE

A. Performance Requirements: Playing surfaces shall be lit to an average constant light level and uniformity as specified in the chart below. Light levels shall be held constant for 10 years. Lighting calculations shall be developed and field measurements taken on the grid spacing with the minimum number of grid points specified below. Average illumination level shall be measured in accordance with the IESNA LM-5-04. Light levels shall be guaranteed from the first 100 hours of operation for the maximum warranty period.

Area of Lighting	Average Constant Light Levels	Maximum to Minimum Uniformity Ratio	Grid Points	Grid Spacing
Infield	50 footcandles	2.0:1.0	25	30' x 30''
Outfield	30 footcandles	2.5:1.0	77	30' x 30'
Right Bullpen	23 footcandles	1.27:1.0	8	10' x 10'
Left Bullpen	23 footcandles	1.26:1.0	8	10' x 10'

1. Lumen maintenance control strategy: A constant light system shall use automatic power adjustments to achieve a lumen maintenance control strategy as described in the IESNA Lighting Handbook 10th Edition, Lighting Controls Section, page 16-8: "Lumen maintenance involves adjusting lamp output over time to maintain constant light output as lamps age, and dirt accumulation reduces luminaire output. With lumen maintenance control, either lamps are dimmed when new, or the lamp's current is increased as the system ages."

2. Independent Test Report: Manufacturers bidding any form of a constant light system must provide an independent test report certifying the system meets the lumen maintenance control strategy above and verifying the field performance of the system for the duration of the useful life of the lamp based on lamp replacement hours. Report shall be signed by a licensed professional engineer with outdoor lighting experience. If report is not provided at least 10 days prior to bid opening, the manufacturer shall provide the initial and maintained designs called for in this specification under Alternate Manufacturers, section 1.8.

3. Project References: Manufacturers bidding any form of a constant light system must provide a minimum of five (5) project references within the state of FL that have been completed within the last calendar year utilizing this exact technology. Manufacturer will include project name, project city, and if requested, contact name and contact phone number for each reference.

A. Mounting Heights: To ensure proper aiming angles for reduced glare and to provide better playability, the pole mounting heights from the playing field surface shall be as follows:

# of Poles	Pole Designation	Pole Height
2	A3, A4	60'
4	B3, B4, C3, C4	70'

1.1 ENVIRONMENTAL LIGHT CONTROL

A. Light Control Luminaires: All luminaires shall utilize spill light and glare control devices including, but not limited to, internal shields, louvers, and external shields. No symmetrical beam patterns are accepted.

B. No one Nema type at 19 degrees in the vertical plane, will exceed 3,000 candela. Independent laboratory report must be submitted with the bid to validate the above requirements.

1.2 LIFE-CYCLE COSTS

A. Energy Consumption: The average kW consumption for the field lighting system shall be 59.43 or less.

B. Complete Lamp Replacement: Manufacturer shall include all group lamp replacements required to provide 10 years of operation based upon 500 usage hours per year.

C. Preventative and Spot Maintenance: Manufacturer shall provide all preventative and spot maintenance, including parts and labor for 10 years from the date of equipment shipment. Individual lamp outages shall be repaired when the usage of any field is materially impacted. Owner agrees to check fuses in the event of a luminaire outage.

D. Remote Monitoring System: System shall monitor lighting performance and notify manufacturer if individual luminaire outage is detected so that appropriate maintenance can be scheduled. The manufacturer shall notify the owner of outages within 24 hours, or the next business day. The controller shall determine switch position (Manual or Auto) and contactor status (open or closed).

E. Remote Lighting Control System: System shall allow owner and users with a security code to schedule on/off system operation via a web site, phone, fax or email up to ten years in advance. Manufacturer shall provide and maintain a two-way TCP/IP communication link. Trained staff shall be available 24/7 to provide scheduling support and assist with reporting needs.

The owner may assign various security levels to schedulers by function and/or fields. This function must be flexible to allow a range of privileges such as full scheduling capabilities for all fields, to only having permission to execute "early off" commands by phone.

Controller shall accept and store 7-day schedules, be protected against memory loss during power outages, and shall reboot once power is regained and execute any commands that would have occurred during outage.

F. Management Tools: Manufacturer shall provide a web-based database of actual field usage and provide reports by facility and user group.

a. Hours of Usage: Manufacturer shall provide a means of tracking actual hours of usage for the field lighting system that is readily accessible to the owner.

i. Cumulative hours: shall be tracked to show the total hours used by the facility

ii. Current lamp hours: shall be tracked separately to reflect the amount of hours on the current set of lamps being used, so relamping can be scheduled accurately

G. Communication Costs: Manufacturer shall include communication costs for operating the controls and monitoring system for a period of 10 years.

H. 10-Year Life-cycle Cost: Manufacturer shall submit 10-year life-cycle cost calculations as follows. Equipment price and total life-cycle cost shall be entered separately on bid form.

a.	**Luminaire energy consumption** # luminaires x __kW demand per luminaire x __ kWh rate x 500 annual usage hours x 10 years		
b.	**Demand charges, if applicable**]	+	
c.	**Cost for spot relamping and maintenance over 10 years** Assume _____ repairs at $ _____ each if not included with the bid	+	
d.	**Cost to relamp all luminaires during 10 years** _____ annual usage hours x 10 years / _____ hours x $125 lamp & labor x __ fixtures if not included with the bid	+	
e.	**Extra energy used without base bid automated control system** $ Energy consumption in item a. x _____% if control system not included with the bid	+	
f.	**Extra labor without base bid automated on/off operation** $_____ per hour x _____ hours per on/off cycle x _____cycles over 10 years if control system not included with the bid	+	
	TOTAL 10-Year Life-cycle Operating Cost	=	

1.1 WARRANTY AND GUARANTEE

A. 10-Year Warranty: Each manufacturer shall supply a signed warranty covering the entire system for 10 years OR for the maximum hours of coverage based on the estimated annual usage, whichever occurs first. Warranty shall guarantee light levels; lamp replacements; system energy consumption; monitoring, maintenance and control services, spill light control, and structural integrity. Manufacturer shall maintain specifically-funded financial reserves to assure fulfillment of the warranty for the full term. Warranty may exclude fuses, storm damage, vandalism, abuse and unauthorized repairs or alterations. Group lamp replacements for constant light systems must occur in accordance with the independent test report provided by the manufacturer; alternate systems must relamp every 3,000 hours.

1.2 DELIVERY TIMING

A. Equipment On-Site: The equipment must be on-site 4 – 6 weeks from receipt of approved submittals and receipt of complete order information.

1.3 PRE-BID SUBMITTAL REQUIREMENTS

A. Approved Product: Musco's Green Generation Lighting® sports lighting system is the approved product.

Manufacturer shall provide lightning grounding as defined by NFPA 780 and be UL Listed per UL 96 and UL 96A.

NOTE:

THE LIGHTING VENDOR SHALL, TO SUPPORT ISSUANCE OF A BUILDING PERMIT FOR THIS PROJECT, SUBMIT WITH SHOP DRAWINGS, THE DESIGN OF THE LIGHTING SYSTEM INCLUDING STRUCTURAL ENGINEERING SIGNED AND SEALED BY A FLORIDA LICENSED ENGINEER.

SOFTBALL/HYBRID FIELD LIGHTING SPECIFICATIONS

NO.	DATE	DESCRIPTION	DR/APP
6.	7/17/23	REMOVE PHASING FROM PROJECT	SH/SEM
5.	4/6/20	REVISED LIGHTING SPECIFICATIONS	SH/SEM
4.	9/18/18	REVISED PER IRC COMMENTS EMAILED 9/17/18	SH/SEM
3.	7/31/18	REVISED PER IRC COMMENT LETTERS OF 6/20 & 6/30/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS
INDIAN RIVER COUNTY FLORIDA

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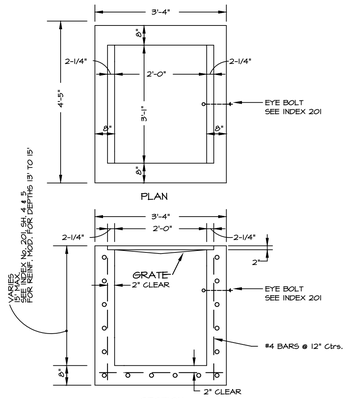
FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

DRAWN SH
DESIGNED SH
CHECKED SEM
DATE 3/18
SCALE NTS
SHEET 13B OF 15
PROJECT NO: 1756

1 | 2 | 3 | 4 | 5 | 6

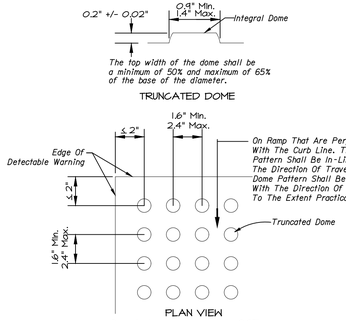
A



RECOMMENDED MAXIMUM PIPE SIZE:
2'-0" WALL- 18" PIPE
3'-1" WALL- 24" PIPE

TYPE "C" INLET

(N.T.S.)



Base-to-base spacing shall be 0.65" minimum between domes.

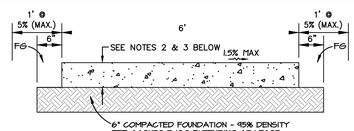
All Sidewalk Curb Ramps Shall Have Detectable Warning Surface That Extend The Full Width Of The Ramp And In The Direction Of Travel 36" From The Back Of Curb.

DETECTABLE WARNING MAT TO BE INSET IN CONCRETE AT TIME OF POUR AND FLUSH WITH CONCRETE SURFACE

TRUNCATED DOME DETECTABLE WARNING STRIP DETAIL

(N.T.S., FDOT INDEX 304, LATEST ED.)

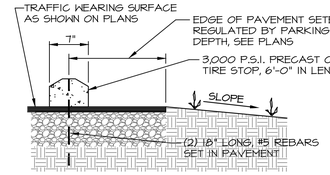
(N.T.S.)



1. CONCRETE SHALL HAVE A REQUIRED MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.
2. FIBER-REINFORCED CONCRETE MUST BE UTILIZED WITHIN COUNTY R.W. (NO METAL ALLOWED).
3. SIDEWALK TO BE A MINIMUM 6" THICKNESS WITHIN COUNTY R.O.W. AND 5" MINIMUM THICKNESS ON-SITE
4. PROVIDE JOINTS EVERY 5' AND AT ALL P.C.'s & P.T.'s AT CURVED SECTIONS

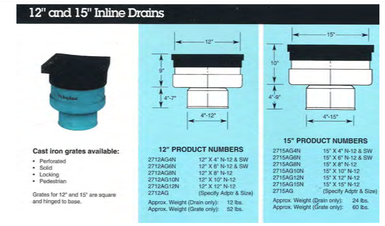
SIDEWALK DETAIL

(N.T.S.)



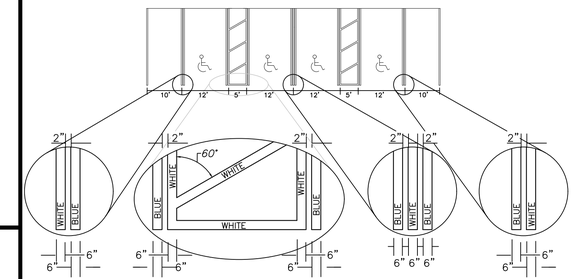
TIRE STOP DETAIL

(N.T.S.)



NYLOPLAST INLINE DRAIN DETAIL

(N.T.S.)



NOTES:

1. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
2. AN ACCESS AISLE IS REQUIRED FOR EACH ACCESSIBLE SPACE WHEN ANGLE PARKING IS USED.
3. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
4. THE FTP-22-06 PANLE SHALL BE MOUNTED BELOW THE FTP-20-06 SIGN.

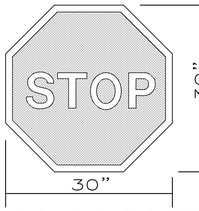
HANDICAP STRIPING DETAIL

N.T.S.

B

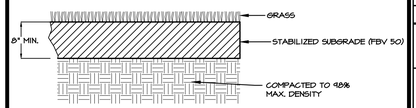
OVERFLOW PARKING SIGN DETAIL

(N.T.S.)



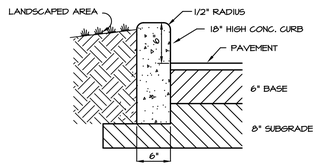
R1-1 (30" x 30") STOP SIGN

(N.T.S.)



TYPICAL STABILIZED GRASS ACCESS PATH SECTION

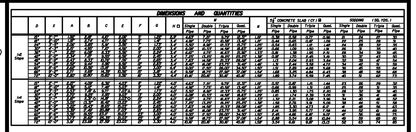
(N.T.S.)



NOTE: 1. SAW CUT CONSTRUCTION JOINT THROUGH CURBING TO FORM INCREMENTS NOT EXCEEDING 25 LINEAL FEET.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS.

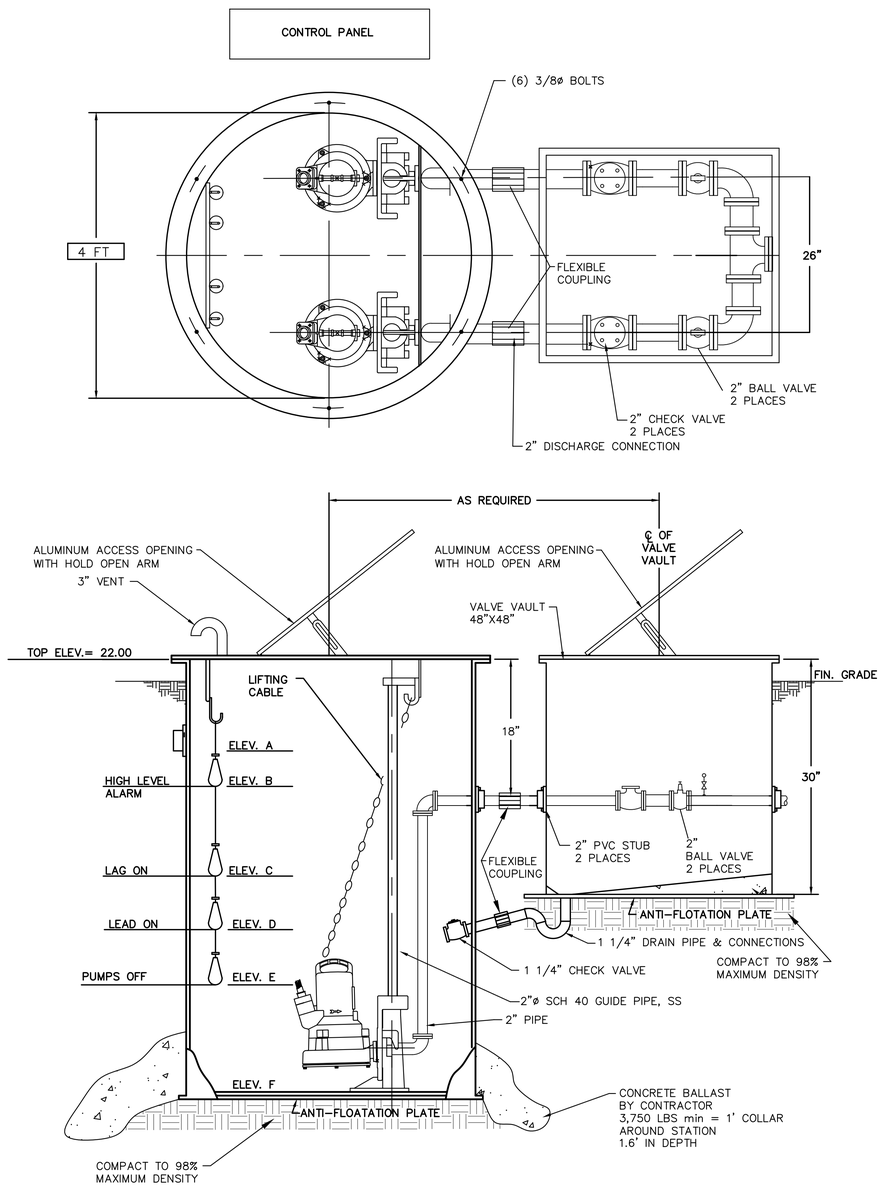
HEADER CURB SECTION

(N.T.S.)



DIMENSIONS AND QUANTITIES

| | | |

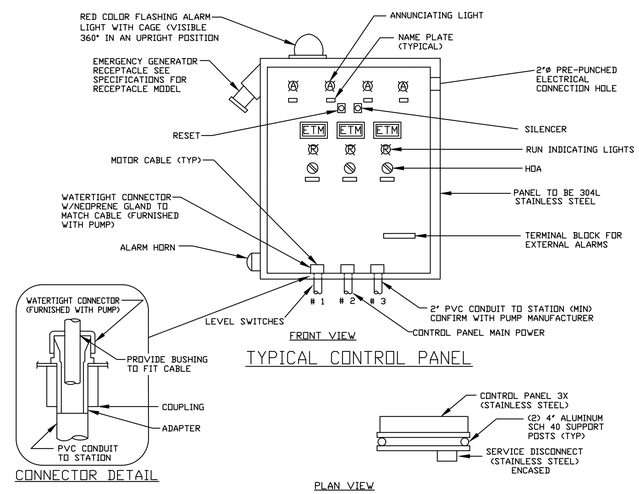


DUPLEX PUMPING STATION DATA TABLE			
LIFT STATION NUMBER- PUMP STATION "A"			
PUMPING ALONE CONDITION	PUMPING CAPACITY G.P.M.	39	
	TOTAL HEAD (*) FEET	41	
MIN. SOLIDS PASS. IMPELLER INCHES		GRINDER	
PUMP MODEL NUMBER:		S20/2	
PUMP IMPELLER	mm	143	
PUMP SPEED (DESIGN)	R.P.M.	3450	
*VOLTAGE:		230 1 PHASE	
MOTOR NAMEPLATE H.P.	H.P.	2.1	
MAX. PUMP BRAKE H.P.	H.P.	-	
MAX. NPSHR @ SECONDARY	FEET	--	
MAX. MOTOR SPEED	R.P.M.	-	
AVG. INFLUENT FLOW	G.P.M.	5	
MIN. PUMP CYCLE TIME	MINS.	10	
INFLUENT PIPE INV. ELEV.	ELEV."A"	18.60	
ALARM SIGNAL ON ELEV.	ELEV."B"	18.50	
LAG PUMP ON ELEV.	ELEV."C"	18.15	
LEAD PUMP ON ELEV.	ELEV."D"	17.80	
PUMPS OFF ELEVATION	ELEV."E"	17.30	
BOTTOM OF WET WELL	ELEV."F"	15.80	
PUMP MANUFACTURER		SULZER	

(*) CONTRACTOR TO VERIFY ELECTRICAL SERVICE

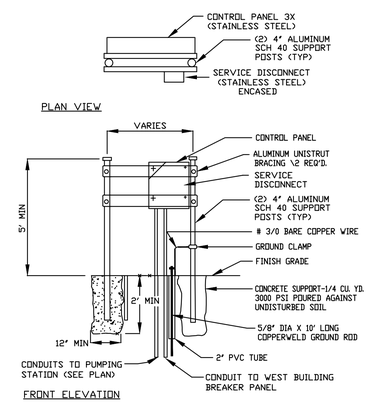
PUMP STATION GENERAL NOTES

1. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS AGAINST FLOATATION OF WET WELL UNTIL ALL BACK FILL IS IN PLACE.
2. ALL BACKFILL AROUND THE PUMP STATION SITE SHALL BE COMPACTED @ 98% DENSITY.
3. WET WELL WALL SHALL CONTAIN A MIN. OF 0.22 SQ.IN./LINEAR FOOT REINFORCEMENT, IN THE VERTICAL AND HORIZONTAL DIRECTIONS.
4. ALL PIPING AT THE PUMP STATION SITE SHALL BE RESTRAINED.
5. PUMPS SHALL BE SULZER, S 20/2 PIRANA GRINDER PUMPS.
6. STAINLESS STEEL CABLE HOLDER SHALL BE LOCATED ON OPPOSITE SIDE OF WET WELL FROM THE INFLUENT PIPE.
7. BUOYANCY CALCULATIONS SHALL BE REQUIRED FOR ALL PUMP STATIONS ALONG WITH THE REQUIRED PUMP STATION CALCULATIONS.
8. NO UNI-FLANGE PIPE CONNECTIONS ALLOWED.
9. MAINTAIN MINIMUM OF 6" BETWEEN ANY PIPING, FITTINGS, ETC. AND PRECAST CONCRETE.
10. PUMP STATION CONTROL PANEL SHALL BE PROVIDED WITH APPROPRIATE LIGHTENING ARRESTOR. VERIFY ALL DRIVER GROUNDS PER N.E.S.C.
11. PUMP STATION AND VALVE BOX HATCHES TO BE PROVIDED WITH LOCKABLE HASPS.
12. CONTROL PANEL TO HAVE DURABLE WEATHER RESISTANT SIGN POSTING EMERGENCY CONTACT NUMBER.



NOTES

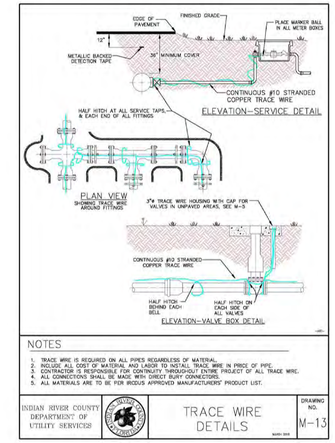
1. ALARM HORN SHALL BE SEALED TO PREVENT LEAKAGE.
2. BOTTOM OF PANEL TO BE 28" TO 34" ABOVE GROUND.
3. DISCONNECT BETWEEN METER AND PANEL TO BE STAINLESS STEEL NON FUSABLE.
4. ALL HARDWARE AND FASTENERS TO BE STAINLESS STEEL.
5. CONTROL PANEL SHALL MEET THE REQUIREMENTS OF SERVICE ENTRANCE BY PROPERLY BONDING OR SHALL BE UL SERVICE ENTRANCE RATED.



PUMP STATION "A" DETAILS

(N.T.S.)

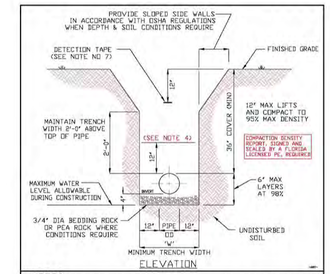
* DISCLAIMER *
THE ENGINEER'S CERTIFICATION BELOW PERTAINS ONLY TO THE INFORMATION PRESENTED IN THE PUMPING STATION DATA TABLE AND THE ELEVATIONS AND PIPE SIZES DETAILED IN THE CROSS SECTION AND PLAN VIEWS. ALL ELECTRICAL DETAILS AND SCHEMATICS HAVE BEEN SHOWN FOR INFORMATIONAL PURPOSES ONLY.



NOTES

1. TRACE WIRE IS REQUIRED ON ALL PIPES REGARDLESS OF MATERIAL.
2. INCLUDE ALL COST OF MATERIAL AND LABOR TO INSTALL TRACE WIRE IN PRICE OF PIPE.
3. CONTRACTOR IS RESPONSIBLE FOR CONTINUITY THROUGHOUT ENTIRE PROJECT OF ALL TRACE WIRE.
4. ALL CONNECTIONS SHALL BE MADE WITH DIRECT BURY CONNECTORS.
5. ALL MATERIALS ARE TO BE FOR IRCDUS APPROVED MANUFACTURERS' PRODUCT LIST.

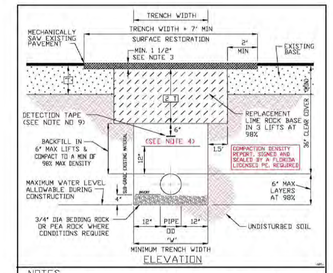
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | TRACE WIRE DETAILS | DRAWING NO. M-13



NOTES

1. WHERE SOIL CONDITIONS CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE METHOD OF CONSTRUCTION TO IRCDUS FOR APPROVAL.
2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD IN ACCORDANCE WITH OSHA REGULATIONS.
3. NEW BUILDING MATERIALS SHALL BE COMPACTED TO 98% WITH EXISTING MATERIALS AND SHALL HAVE NO SIGNIFICANT VOIDS OR SOFT SPOTS. ALL MATERIALS SHALL BE FREE OF ROCK.
4. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL, OTHER THAN HAND VIBRATORY MEANS.
5. COMPACTION PERCENTAGES SHOWN REFER TO AASHTO T-180 MODIFIED PROCTOR METHOD.
6. ALL ROADWAY RESTORATION SHALL COMPLY WITH INDIAN RIVER COUNTY PUBLIC WORKS/FDOT STANDARDS AND SHALL BE PER IRCDUS APPROVED DETAILS AND DRAWINGS.
7. COMPACTION REPORTS REQUIRED (PROCTORS).
8. MINIMUM TRENCH WIDTH "W" = PIPE O.D. PLUS 2'-0".
9. 2" DETECTION TAPE WITH METALLIC BACKING TO BE INSTALLED OVER MAIN 6" BELOW BOTTOM OF BASE COURSE. TAPE TO BE MARKED "CAUTION-WATER LINE BELOW", "CAUTION-FORCE MAIN BELOW", OR "CAUTION-REUSE MAIN BELOW". TRACE WIRE SHALL BE USED CONTINUOUSLY ON ALL PIPE. SEE TRACE WIRE DETAIL M-13.
10. COMPACT SHOULDER TO A MINIMUM OF 98% OF MAXIMUM DENSITY IN RIGHT-OF-WAY.
11. ALL PIPE TO BE LOCATED A MINIMUM OF 5' BLC (TYPICAL) FROM EDGE OF PAVEMENT. ALL RESTORATION (SODDING) SHALL BE PER FDOT INDEX 570.
12. EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNEE.

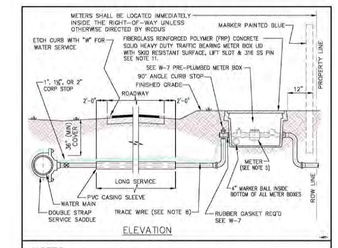
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | TRENCH DETAIL (UNPAVED EASEMENTS) | DRAWING NO. M-1



NOTES

1. WHERE SOIL CONDITIONS CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE METHOD OF CONSTRUCTION TO IRCDUS FOR APPROVAL.
2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD IN ACCORDANCE WITH OSHA REGULATIONS.
3. NEW BUILDING MATERIALS SHALL BE COMPACTED TO 98% WITH EXISTING MATERIALS AND SHALL HAVE NO SIGNIFICANT VOIDS OR SOFT SPOTS. ALL MATERIALS SHALL BE FREE OF ROCK.
4. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL, OTHER THAN HAND VIBRATORY MEANS.
5. COMPACTION PERCENTAGES SHOWN REFER TO AASHTO T-180 MODIFIED PROCTOR METHOD.
6. ALL ROADWAY RESTORATION SHALL COMPLY WITH INDIAN RIVER COUNTY PUBLIC WORKS/FDOT STANDARDS AND SHALL BE PER IRCDUS APPROVED DETAILS AND DRAWINGS.
7. COMPACTION REPORTS REQUIRED (PROCTORS).
8. MINIMUM TRENCH WIDTH "W" = PIPE O.D. PLUS 2'-0".
9. 2" DETECTION TAPE WITH METALLIC BACKING TO BE INSTALLED OVER MAIN 6" BELOW BOTTOM OF BASE COURSE. TAPE TO BE MARKED "CAUTION-WATER LINE BELOW", "CAUTION-FORCE MAIN BELOW", OR "CAUTION-REUSE MAIN BELOW". TRACE WIRE SHALL BE USED CONTINUOUSLY ON ALL PIPE. SEE TRACE WIRE DETAIL M-13.
10. COMPACT SHOULDER TO A MINIMUM OF 98% OF MAXIMUM DENSITY IN RIGHT-OF-WAY.
11. ALL PIPE TO BE LOCATED A MINIMUM OF 5' BLC (TYPICAL) FROM EDGE OF PAVEMENT. ALL RESTORATION (SODDING) SHALL BE PER FDOT INDEX 570.
12. EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNEE.

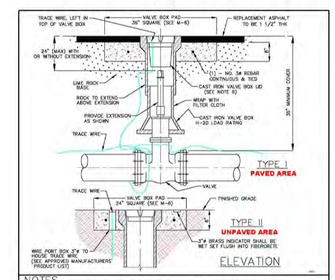
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | TRENCH DETAIL (PAVED AREAS & SHOULDERS) | DRAWING NO. M-2



NOTES

1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE A MINIMUM OF 18" ON CENTER.
2. ALL SERVICES REQUIRE 36" MINIMUM COVER.
3. MINIMUM SERVICE SIZE SHALL NOT BE LESS THAN 1"ø. DUAL SERVICES SHALL BE A MINIMUM 1-1/2"ø, TRIPLE SERVICES SHALL BE A MINIMUM 2"ø AND QUADRUPLE SERVICES SHALL BE APPROVED BY IRCDUS.
4. 1"ø & 1-1/2"ø LONG SERVICES REQUIRE A 3" MINIMUM I.D. SLEEVE. 2"ø LONG SERVICES REQUIRE A 3" MINIMUM I.D. CASING SLEEVE. CASING SLEEVE SHALL BE SCHEDULE 40 PVC.
5. ALL METERS 2"ø OR SMALLER SHALL BE SUPPLIED AND INSTALLED BY IRCDUS. ALL METERS GREATER THAN 2"ø SHALL BE SUPPLIED AND INSTALLED BY THE DEVELOPER/PROPERTY OWNER. REFER TO APPROVED MANUFACTURERS' PRODUCT LIST FOR METERS GREATER THAN 2"ø.
6. PIN LIDS WITH PLASTIC DUST CAPS SHALL BE PURCHASED BY THE DEVELOPER AND/OR CONTRACTOR AND SHALL BE INSTALLED ON ALL LOCKING CURB STOPS INSIDE METER BOX, SAMPLING POINTS, AND WATER SERVICE CONNECTIONS AT THE TIME OF ACTIVATING ALL WATER MAINS OR AT SUCH TIME AS DIRECTED BY IRCDUS.
7. CURB STOPS SHALL BE THE SAME SIZE AS THE METERS THAT ARE INSTALLED.
8. TRACE WIRE TO BE INSTALLED AS PER DETAIL M-13.
9. PLACE A 4" ELECTRONIC MARKER BALL INSIDE BOTTOM OF ALL METER BOXES.
10. ALL RESIDENTIAL AND ONE ERU SERVICES SHALL BE 5/8" METERS.
11. ALL METER BOXES TO BE PER IRCDUS APPROVED MANUFACTURERS' PRODUCT LIST.

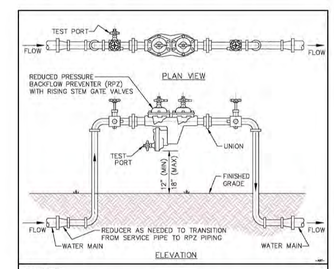
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | WATER SERVICE (INSIDE RIGHT-OF-WAY) | DRAWING NO. W-4



NOTES

1. VALVE BOXES SHALL BE CONSTRUCTED PER MANUFACTURERS' SPECIFICATION.
2. ALL VALVE BOXES SHALL BE 36" MINIMUM COVER.
3. ALL VALVE BOXES SHALL BE SHAFT/SCREW TYPE OR SHAFT/SLIP TYPE AND CANNOT REST ON THE VALVE.
4. ALL VALVE BOLTS SHALL BE STAINLESS STEEL WITH BRASS NUTS.
5. PERMANENT LAND MARKERS ARE TO BE INSTALLED ADJACENT TO ALL VALVES IN UNPAVED AREAS AS DIRECTED BY IRCDUS. (SEE PERMANENT LAND MARKER DETAIL M-6)
6. ALL VALVES REQUIRE STATE PLANE COORDINATES.
7. TRACE WIRE IS REQUIRED. (SEE TRACE WIRE DETAIL M-13)
8. REFLECTIVE MARKERS TO BE LOCATED ON ROADWAY FOR ALL VALVES. (DETAIL W-1)
9. REFLECTIVE MARKERS FOR:
   FIRE HYDRANT - BLUE
   WATER MAIN VALVE - WHITE
   FORCE MAIN VALVE - GREEN
   REUSE MAIN VALVE - PURPLE
   SEWER VALVE - YELLOW
10. REFLECTIVE MARKERS SHALL NOT BE PLACED IN BIKE LANES.
11. VALVE BOX LID LOCATED IN PAVEMENT SHALL BE A MINIMUM 24 LBS. WITH A MINIMUM 6" LONG THROAT.
12. VALVE BOX SHALL COMPLY WITH FDOT STANDARDS AS APPLICABLE.
13. VALVE EXTENSIONS OVER 36" REQUIRE IRCDUS ENGINEERING APPROVAL.
14. VALVE SPACING ON WATER MAINS SHALL NOT EXCEED 1,000' MAXIMUM.

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | VALVE AND BOX | DRAWING NO. M-5



NOTES

1. ALL BUILDINGS WITH FIRE SPRINKLER PROTECTION SYSTEMS INCLUDING COMMERCIAL, SINGLE FAMILY RESIDENTIAL AND MULTI-STORY, MULTI-FAMILY ARE REQUIRED TO INSTALL A DOUBLE CHECK BACKFLOW PREVENTER WITH A REDUCED PRESSURE ZONE (RPZ) FEATURE AS DETERMINED BY IRCDUS.
2. ALL FASTENERS SHALL BE 316 STAINLESS STEEL (OR APPROVED EQUAL).
3. APPROVED EQUALS HAVING FULL UL, NSF, USC, AND AWWA CERTIFICATIONS MAY BE INSTALLED ONLY AFTER SPECIFIC APPROVAL BY IRCDUS.
4. SUPPORT BACKFLOW PREVENTER FROM WALL, IF REQUIRED, WITH APPROVED PIPE SUPPORT SYSTEM. PIPE SUPPORT SYSTEM SHALL BE BRASS, COPPER OR D.I.P., AS APPROVED BY IRCDUS.
5. PIPING 2-1/2" OR GREATER SHALL BE FLANGED DUCTILE IRON PIPE.
6. ALL MATERIALS ARE TO BE PER IRCDUS APPROVED MANUFACTURERS' PRODUCT LIST.
7. RPZ'S SHALL BE INSPECTED, CERTIFIED AND REPORTED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE INDIAN RIVER COUNTY CROSS CONNECTION CONTROL PROGRAM REQUIREMENTS.

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) | DRAWING NO. W-11

UTILITY DETAILS

NO.	DATE	DESCRIPTION	DR/APP
4.	8/28/18	REVISED PER IRC UTIL MARKUPS	SH/SEM
3.	8/28/18	REVISED PER IRC COMMENTS EMAILED ON 7/31/18	SH/SEM
2.	6/11/18	REVISED PER IRC TRC COMMENT LETTER OF 6/14/18	SH/SEM
1.	5/10/18	REVISED PER IRC PRE-APP COMMENTS	SH/SEM

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS
INDIAN RIVER COUNTY FLORIDA

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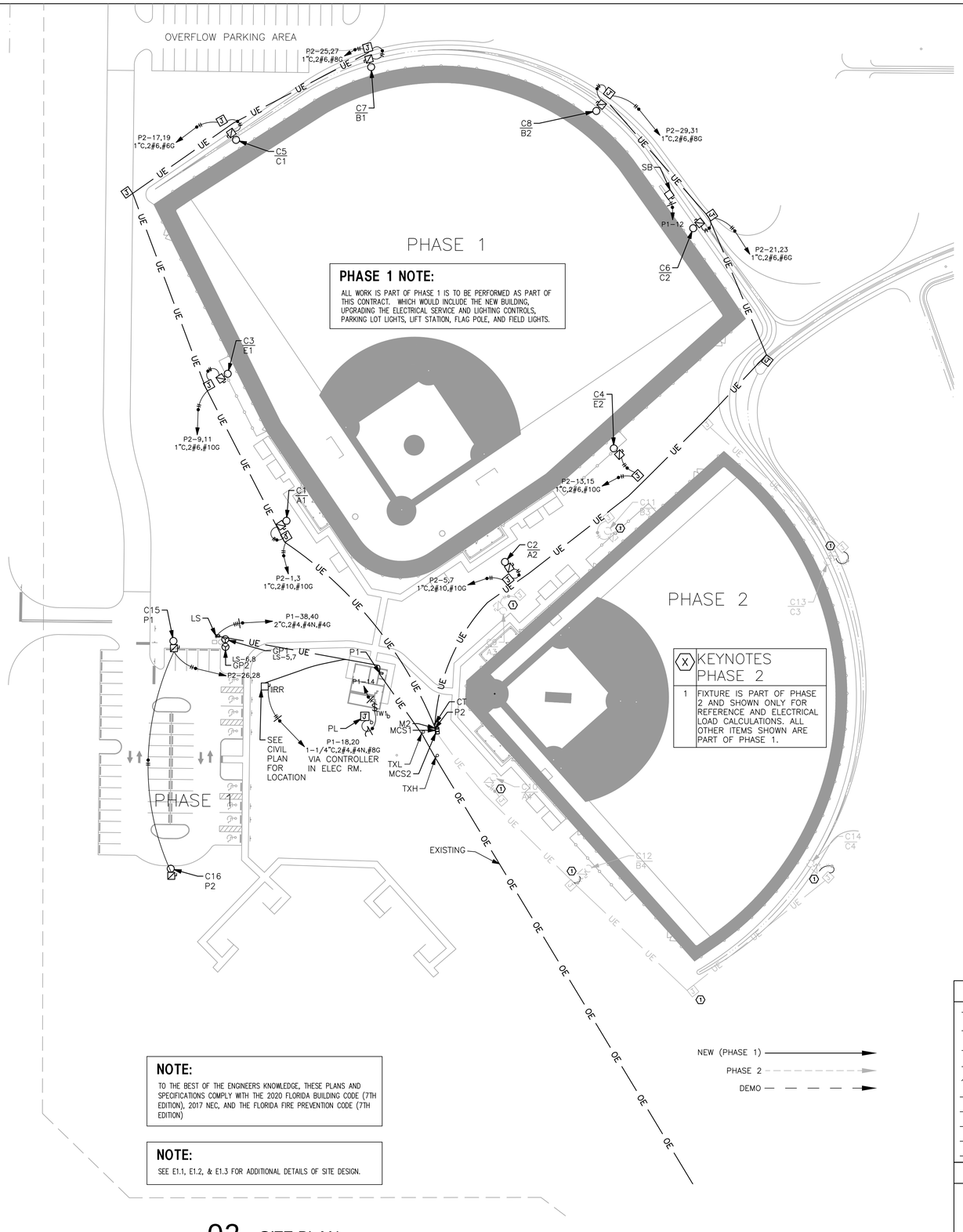
FOR BIDDING PURPOSES ONLY

STEPHEN E. MOLER, P.E. FL#33193

DRAWN	SH
DESIGNED	SH
CHECKED	SEM
DATE	9/23
SCALE	NTS
SHEET	15 OF 15
PROJECT NO:	1756



KEYNOTES PHASE 2

1	FIXTURE IS PART OF PHASE 2 AND SHOWN ONLY FOR REFERENCE AND ELECTRICAL LOAD CALCULATIONS. ALL OTHER ITEMS SHOWN ARE PART OF PHASE 1.

NOTE:

TO THE BEST OF THE ENGINEERS KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH THE 2020 FLORIDA BUILDING CODE (7TH EDITION), 2017 NEC, AND THE FLORIDA FIRE PREVENTION CODE (7TH EDITION)

NOTE:

SEE E1.1, E1.2, & E1.3 FOR ADDITIONAL DETAILS OF SITE DESIGN.

02 SITE PLAN

Scale: 1"=50'

MUSCO LIGHTING EQUIPMENT SCHEDULE

CALLOUT	SYMBOL	DESCRIPTION	VOLTS	AMPS	KVA	CIRCUIT	WIRE CALLOUT	POLE
C1		BASEBALL FIELD LIGHTING	480V 2P 2W	18.5	8.88	P2-1,3	1"C,2#10,#10G	A1
C2		BASEBALL FIELD LIGHTING	480V 2P 2W	18.5	8.88	P2-5,7	1"C,2#10,#10G	A2
C3		BASEBALL FIELD LIGHTING	480V 2P 2W	44.4	21.31	P2-9,11	1"C,2#6,#10G	E1
C4		BASEBALL FIELD LIGHTING	480V 2P 2W	44.4	21.31	P2-13,15	1"C,2#6,#10G	E2
C5		BASEBALL FIELD LIGHTING	480V 2P 2W	18.5	8.88	P2-17,19	1"C,2#6,#6G	C1
C6		BASEBALL FIELD LIGHTING	480V 2P 2W	18.5	8.88	P2-21,23	1"C,2#6,#6G	C2
C7		BASEBALL FIELD LIGHTING	480V 2P 2W	25.9	12.43	P2-25,27	1"C,2#6,#8G	B1
C8		BASEBALL FIELD LIGHTING	480V 2P 2W	25.9	12.43	P2-29,31	1"C,2#6,#8G	D2
C9		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	22.2	10.66	P2-2,4	1"C,2#10,#10G	A3
C10		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	22.2	10.66	P2-6,8	1"C,2#10,#10G	A4
C11		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	29.6	14.21	P2-10,12	1"C,2#8,#10G	B3
C12		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	29.6	14.21	P2-14,16	1"C,2#8,#10G	B4
C13		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	18.5	8.88	P2-18,20	1"C,2#10,#10G	C3
C14		SOFTBALL FIELD LIGHTING (PH 2)	480V 2P 2W	18.5	8.88	P2-22,24	1"C,2#10,#10G	C4
C15		PARKING LOT LIGHTING	480V 2P 2W	2	0.96	P2-26,28	1"C,2#10,#10G	P1
C16		PARKING LOT LIGHTING	480V 2P 2W	2	0.96	P2-26,28	1"C,2#10,#10G	P2

SEE MUSCO LIGHTING SCHEDULE FOR EXACT DESCRIPTION AND REQUIREMENTS. MANY OF THE CIRCUIT CONDUCTORS HAVE BEEN UPSIDED FOR VOLTAGE DROP. BOTH HOT CONDUCTORS FROM THE POLE HAND HOLE TAP TO POLE DISCONNECT CAN BE REDUCED TO BREAKER RATING IF DESIRED. PLANVIEW CALLOUT TOP LABEL IS THE RELAY WHILE THE BOTTOM IS THE POLE.

VOLTAGE DROP SCHEDULE

DEVICE	FEEDER		BRANCH CIRCUIT			FEEDER	TOTAL VOLTAGE DROP
	VOLTAGE DROP	WIRE SIZE	MAX VOLTAGE DROP	WIRE SIZE	LENGTH	VOLTAGE DROP	
TXH	0%		–	–	–	0%	0%
P2	0.28%	(2)#350kcmil	4.28% (CKT 18,20)	#10	531'	0.28%	4.57%
			P2-1,3: 1.89%	#10	234'		
			P2-5,7: 1.24%	#10	154'		
			P2-9,11: 3.09%	#6	377'		
			P2-13,15: 2.46%	#6	300'		
			P2-17,19: 2.29%	#6	670'		
			P2-21,23: 1.99%	#6	582'		
			P2-25,27: 4.01%	#6	848'		
			P2-29,31: 3.4%	#6	720'		
			P2-2,4: 1.21%	#10	125'		
			P2-6,8: 0.69%	#10	71'		
			P2-10,12: 2.12%	#8	249'		
			P2-14,16: 1.59%	#8	187'		
			P2-18,20: 4.28%	#10	531'		
			P2-22,24: 3.93%	#10	487'		
			P2-26,28: 0.74%	#10	538'		
LS	2.64%	#4	0.31% (CKT 6,8)	#10	30'	1.24%	2.94%
			LS-5,7: 0.22%	#10	22'		
			LS-6,8: 0.31%	#10	30'		

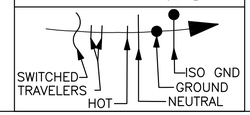
THREE-PHASE % VOLTAGE DROP = CALCULATED CURRENT IN AMPS * EFFECTIVE Z * (FEEDER LENGTH / 1,000) * 100 / LINE-TO-NEUTRAL VOLTAGE.
SINGLE-PHASE % VOLTAGE DROP = CALCULATED CURRENT IN AMPS * EFFECTIVE Z * (FEEDER LENGTH / 1,000) * 100 * 2 / LINE-TO-NEUTRAL VOLTAGE.
CALCULATED CURRENT IN AMPS IS BASED UPON THE TOTAL DEMAND CALCULATED CURRENT ASSUMING A BALANCED LOAD FOR THE FEEDER AND THE ACTUAL CURRENT FOR THE BRANCH CIRCUIT. TOTAL VOLTAGE DROP SHOWN IS THE MAX BETWEEN 2 SOURCES STARTING AT ANY ATS SWITCH.
EFFECTIVE Z = R COS(THETA) + X SIN (THETA), WHERE THETA IS THE POWER FACTOR AND EQUALS 0.85 (NEC TABLE 9 NOTE 2)

TRANSFORMERS VOLTAGE DROP CALCULATIONS ARE INCLUDED USING THE TRANSFORMERS %Z AND X/R RATIO.

CONDUIT LEGEND

- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT STUB
- CONDUIT CONTINUED
- FLEXIBLE CONDUIT
- –UE– UNDERGROUND ELECTRICAL
- –OE– OVERHEAD ELECTRICAL
- –UC– UNDERGROUND CONDUIT
- –T– UNDERGROUND TELEPHONE
- –G– GROUNDING CONDUCTOR

CIRCUITING LEGEND



JUNCTION BOX SCHEDULE

CALLOUT	SYMBOL	NOTE 1
JUNCTION BOX	J	FLUSH IN-GROUND CHRISTY #N16 BOX WITH LABEL "LIGHTING", TO BE LOCATED ADJACENT TO SPORTS LIGHTING POLE ASSEMBLY. FIELD VERIFY EXACT LOCATION FOR BEST SITE COORDINATED LOCATION WITH RESPECT TO SPORTS LIGHTING POLE. BOTH HOT CONDUCTORS FROM TAP TO POLE DISCONNECT CAN BE REDUCED TO BREAKER RATING IF DESIRED.

SUNSHINE STATE ONE CALL OF FLORIDA (SSOCOF)

CALL BEFORE DIGGING: CONTRACTOR MUST CALL 811, (800) 432-4770 OR (386) 575-2025 BEFORE BEGINNING ANY EXCAVATION OR DEMOLITION SO SSOCOF CAN NOTIFY ITS MEMBERS WITH UNDERGROUND FACILITIES NEAR THE JOB SITE TO MARK OFF THE AREA OF WORK.

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	Bid Set

PREPARED FOR

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CONSULTING ENGINEERS
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CERTIFICATE OF AUTHORIZATION NUMBER 4204

Consultant:

TREASURE COAST ENGINEERING
Your MEP Design Consultant
Treasure Coast Engineering, Inc.
CA# 27181
4925 13th Lane, Vero Beach, FL 32966
772-567-1007 www.tce.eng.pro

Drawing Title:

SITE LIGHTING PLAN & LIGHTING SCHEDULES

Reference North

N

ALBERT B. BOLES, JR. LICENSE No. 65050 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Signed:

Drn: ABJ	Dwg. File:
Chd: A.J.D.	XREF File:
Project No.: 2018-04	Plot File:
Sheet No.: E0.1	

SITE EQUIPMENT SCHEDULE

CALLOUT	SYMBOL	DESCRIPTION	VOLTS	AMPS	KVA	HP	CIRCUIT	WIRE CALLOUT	NOTES
GP1		GRINDER PUMP 1	240	12	2.88	2 HP	LS-5,7	1/2"C,2#10,#10G	SEE CIVIL DRAWINGS FOR EXACT DETAILS
GP2		GRINDER PUMP 2	240	12	2.88	2 HP	LS-6,8	1/2"C,2#10,#10G	SEE CIVIL DRAWINGS FOR EXACT DETAILS
IRR		IRRIGATION EQUIPMENT (SEE CIVIL)	240/120	40	9.6	7.5 HP	P1-18,20	1-1/4"C,2#4,#4N,#8G	RAN THROUGH IRRIGATION CONTROLLER IN ELECTRICAL ROOM
PL	J	QUANTITY TWO (2) OF THE FLAG POLE COMPANY R78WLED NEMA BEAM SPREAD OF 3H X 3V NARROW BEAM.	120	0.75	0.09		P1-14	1#12,#12N,#12G	SPACE QUANTITY TWO (2) FIXTURES OPPOSITE OF EACH EQUALLY SPACED FROM THE POLE.
PL	J	QUANTITY TWO (2) OF THE FLAG POLE COMPANY R78WLED NEMA BEAM SPREAD OF 3H X 3V NARROW BEAM.	120	1.48	0.18		P1-14	1#12,#12N,#12G	SPACE QUANTITY TWO (2) FIXTURES OPPOSITE OF EACH EQUALLY SPACED FROM THE POLE.
SB		NEVCO MODEL 1650 (OUTDOOR) BASEBALL/SOFTBALL SCOREBOARD W/ MPCX2 CONTROL	120	0.7	0.08		P1-12	1#10,#10N,#10G	SCOREBOARD IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NEC. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SCOREBOARD.

SEE CIVIL SCHEDULE FOR EXACT DESCRIPTION AND REQUIREMENTS.

ONE-LINE NOTES

REPRESENT A N-G BONDED GROUNDING ELECTRODE CONDUCTOR. TYPICALLY SHOWN AT SERVICE ENTRANCES OR OUTPUT OF A SEPARATELY DERIVED SYSTEM SUCH AS AN ISOLATION TRANSFORMER. SEE GROUNDING DETAIL FOR CONDUCTOR SIZING. IF MORE THAN ONE SYMBOL IS SHOWN THEN THE SYMBOL WILL ALSO SHOW THE GEC SIZED SPECIFICALLY FOR THAT DEVICE.

REPRESENT AN ISOLATED N-G BONDED GROUNDING ELECTRODE CONDUCTOR. TYPICALLY SHOWN AT SEPARATE STRUCTURES. SEE GROUNDING DETAIL FOR CONDUCTOR SIZING.

"X" ---KA — INDICATE THE AVAILABLE SHORT-CIRCUIT CURRENT LEVELS AT THE LOCATION SHOWN. FAULT CALCULATIONS ARE BASED ON "IEEE STD 242-1975 RECOMMENDED PRACTICE FOR PROTECTION AND COORDINATION OF INDUSTRIAL AND COMMERCIAL POWER SYSTEMS". THE SHORT-CIRCUIT CALCULATIONS INCLUDES MOTOR CONTRIBUTIONS EQUAL TO 4 TIMES THE RATED CURRENT OF THE MOTOR AND AN X/R RATIO OF 4.

AIC — AIC RATINGS SHOWN AT THE EQUIPMENT WILL BE BASED ON THE SUPPLY VOLTAGE, AVAILABLE FAULT CURRENT AND THE OVER CURRENT DEVICE PROTECTING THE EQUIPMENT. THE SSCR OF ALL EQUIPMENT SHALL MEET OR EXCEED THE AIC RATING SHOWN. PLEASE NOTE THAT AIC APPLIES ONLY TO OVERCURRENT PROTECTION DEVICES (CIRCUIT BREAKERS, FUSES, ETC.) AND SCCR APPLIES TO A FULLY ASSEMBLED DEVICE (I.E., PANELBOARDS, CONTRACTORS, STARTERS), WHICH MAY USE SPECIFIC AIC-RATED OVERCURRENT PROTECTION DEVICES.

X — SEE FEEDER SCHEDULE TO IDENTIFY NUMBER OF CONDUITS. THE QUANTITY OF PHASE, NEUTRAL, & EGC IS PER CONDUIT. GEC ARE NOT INCLUDED IN FEEDER SCHEDULE.

P2

ROOM SITE ELECTRIC CAGE — **VOLTS** 480/240V 2P 3W — **AIC** 22,000
MOUNTING SURFACE — **BUS AMPS** 600 — **MAIN BKR** 600
FED FROM TXH — **NEUTRAL** 100% — **LUGS** STANDARD
NOTE EATON SP ORDER P23E600BT32CD3R.

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	30/2	8.88	C1	a	2	30/2	10.7	C9 (PH 2)
3	|			b	4	|		
5	30/2	8.88	C2	a	6	30/2	10.7	C10 (PH 2)
7	|			b	8	|		
9	60/2	21.3	C3	a	10	40/2	14.2	C11 (PH 2)
11	|			b	12	|		
13	60/2	21.3	C4	a	14	40/2	14.2	C12 (PH 2)
15	|			b	16	|		
17	30/2	8.88	C5	a	18	30/2	8.88	C13 (PH 2)
19	|			b	20	|		
21	30/2	8.88	C6	a	22	30/2	8.88	C14 (PH 2)
23	|			b	24	|		
25	40/2	12.4	C7	a	26	20/2	1.92	C15, C16
27	|			b	28	|		
29	40/2	12.4	C8	a	30	20/2	1	XFMR CT
31	|			b	32	|		

	CONN KVA	CALC KVA			CALC KVA
LIGHTING	172	216	(125%)	TOTAL LOAD	217
CONTINUOUS	1	1.25	(125%)	BALANCED LOAD	452 A
				PHASE A	101%
				PHASE B	99.4%

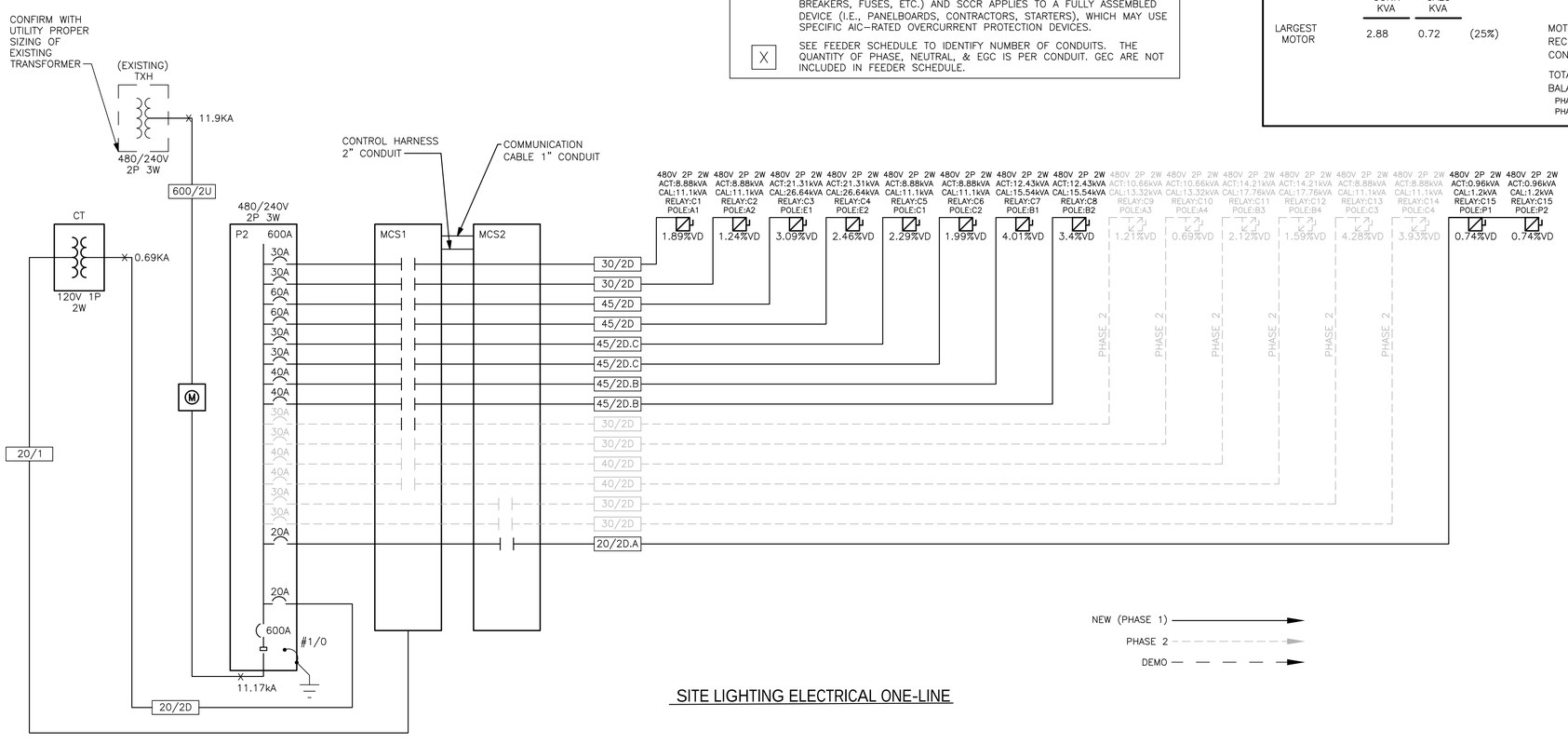
IN 72"H NEMA 3R W/ PDG33G0600 BKR

LS

ROOM — **VOLTS** 240/120V 2P 3W — **AIC** 22,000
MOUNTING SURFACE — **BUS AMPS** 60 — **MAIN BKR** MLO
FED FROM P1 — **NEUTRAL** 100% — **LUGS** STANDARD
NOTE INSTALL GENERATOR BACKFEED BREAKER WITH INTERLOCK

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	50/2	0	BACKFEED	a	2	50/2	0	MAIN
3	|			b	4	|		
5	30/2	2.88	PUMP 1	a	6	30/2	2.88	PUMP 2
7	|			b	8	|		
9	15/1	0.5	CONTROL	a	10	15/1	0.36	GFCI REC

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LARGEST MOTOR	2.88	0.72	(25%)	MOTORS	5.76	5.76	(100%)
				RECEPTACLES	0.36	0.36	(50%>10)
				CONTINUOUS	0.5	0.625	(125%)
				TOTAL LOAD		7.47	
				BALANCED LOAD		31.1 A	
				PHASE A		113%	
				PHASE B		87%	



SITE LIGHTING ELECTRICAL ONE-LINE

FEEDER SCHEDULE

ID	CONDUIT AND FEEDER
20/1	1#12,#12N,#12G
20/2D	2#12,#12G
20/2D.A	1"C,2#12,#12G
30/2D	1"C,2#10,#10G
30/2D.A	1/2"C,2#10,#10G
40/2D	1"C,2#8,#10G
45/2D	1"C,2#6,#10G
45/2D.B	1"C,2#6,#8G
45/2D.C	1"C,2#6,#6G
60/2.D	2"C,2#4,#4N,#4G
200/2U	2"C,2#3/0,#3/0N
600/2U	(2)2-1/2"C,2#350kcmil,#350kcmil N

SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C 1/0 AND ABOVE PVC (EXCEPT WHERE NOTED)

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

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Treasure Coast Engineering, Inc.
CA# 27181
4925 13th Lane, Vero Beach, FL 32966
772-567-1007 www.tce.eng.pro

Drawing Title:

ELECTRICAL ONE-LINES & SITE LIGHTING PANEL SCHEDULE

Reference North

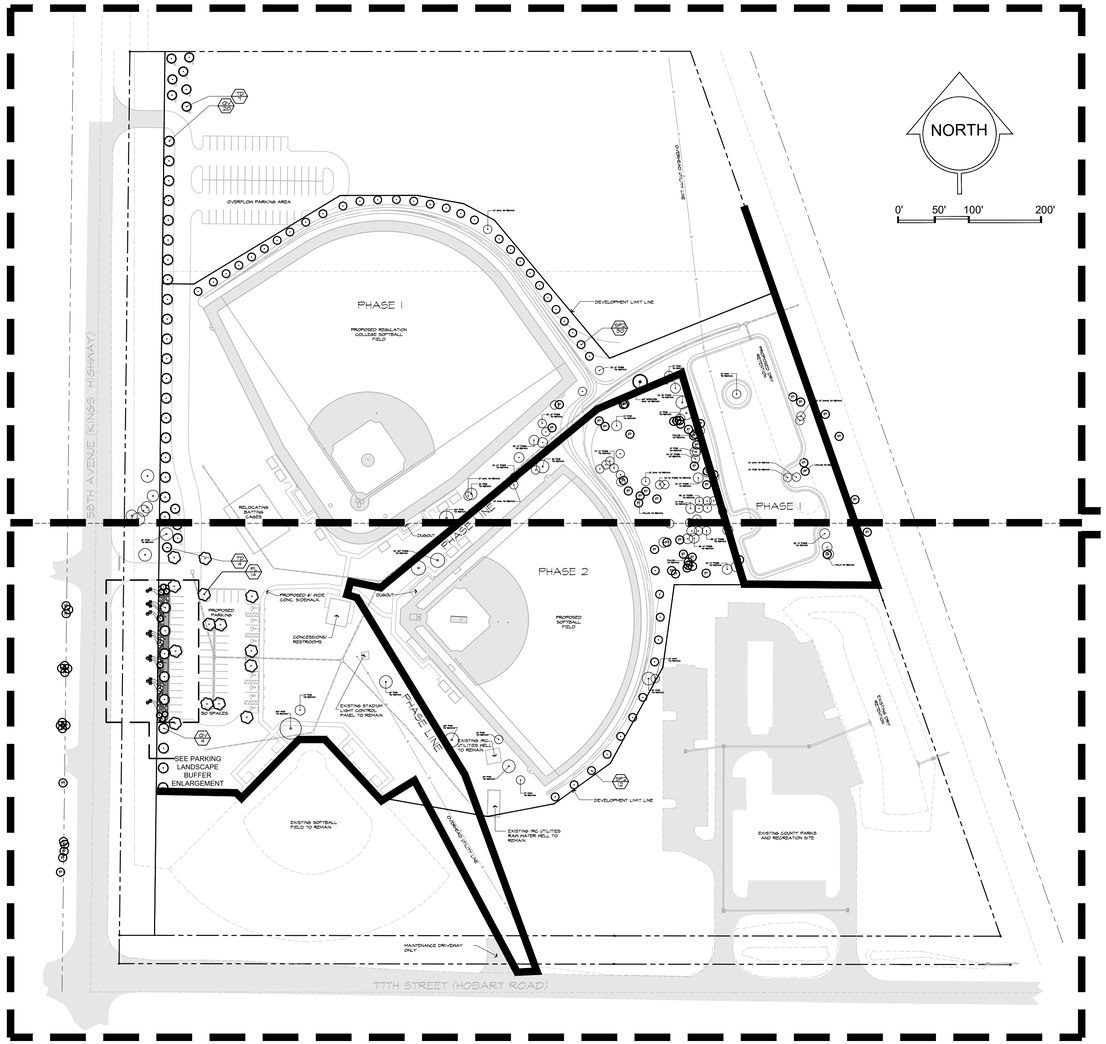
N

ALBERT J. JENKINS JR. LICENSE No. 65050 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Signed:

Drn: ABJ	Dwg. File:
Chd: A.J.D.	XREF File:
Project No.: 2018-04	Plot File:
Sheet No.:	

E0.2



LANDSCAPE NOTES:

1. ALL PROPOSED PLANT MATERIAL USED ON SITE SHALL BE FLORIDA GRADE A NUMBER 1 OR BETTER, IN ACCORDANCE WITH "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE. ALL PLANT MATERIAL ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING AND PERFORMING THE WORK.

2. SOD AREAS PROPOSED FOR THIS SITE SHALL BE STENOTAPHRUM SECUNDATUM / ST. AUGUSTINE 'FLORITAM'. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT QUANTITY.

3. ALL PROPOSED LANDSCAPE PLANTING AREAS SHALL RECEIVE AN APPROVED MIX OF SUPPLEMENTAL PLANTING SOIL.
A MINIMUM OF ¾ CUBIC YARDS ARE REQUIRED FOR EACH TREE, ½ CUBIC YARDS FOR EACH LARGE SHRUB, AND 1 CUBIC YARD PER 50 SMALL SHRUBS OR GROUNDCOVERS.

4. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTINGS RECEIVE ADEQUATE WATER DURING INSTALLATION AND DURING THE WARRANTY PERIOD. DEEP WATERING IS REQUIRED FOR ALL TREES AND PALMS. SUPPLEMENTAL WATERING MAY BE NEEDED IN ADDITION TO IRRIGATION AND RAINFALL TO ENSURE HEALTHY PLANT ESTABLISHMENT.

5. TABLETIZED FERTILIZER EQUAL TO AGRIFORM PLANTING TABLETS (20-10-15) 21 GRAM, SHALL BE PROVIDED FOR ALL PLANT MATERIAL. APPLICATION RATES AND INSTALLATION PROCEDURES SHALL BE IN CONFORMANCE WITH MANUFACTURES MINIMUM RECOMMENDATIONS.

6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OF ALL UTILITIES AND TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.

8. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.

9. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A MINIMUM PERIOD OF 90 DAYS FOLLOWING SUBSTANTIAL COMPLETION. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.

10. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH NATURAL MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER TO A MINIMUM DEPTH OF THREE (3) INCHES.

IRRIGATION NOTES:

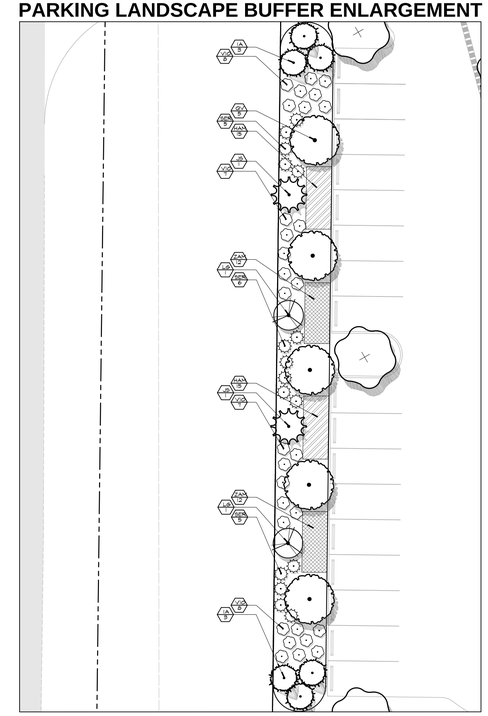
1. ALL LANDSCAPE AREAS ARE TO RECEIVE IRRIGATION FROM AN AUTOMATIC SYSTEM THAT PROVIDES 100% COVERAGE, WITH 20% MINIMUM OVERLAP IN GROUNDCOVER AND SHRUB AREAS. A WIRELESS RAINSWITCH MUST BE INCLUDED WITH THE SYSTEM, INSTALL AT ROOF OF BUILDING (PLACE WITH NO OVERHEAD OBSTRUCTION INCLUDING TREES)

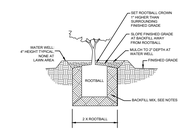
2. THE CONTRACTOR MUST VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO PERFORMING ANY WORK ON THE SYSTEM. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OF ALL UTILITIES AND TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.

3. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION

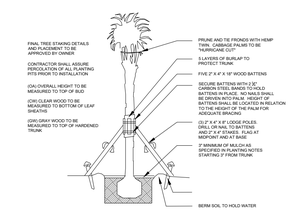
4. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO CONFORM TO THE REQUIREMENTS OF INDIAN RIVER COUNTY AND THE RESTRICTIONS ON IRRIGATION USE AS SPECIFIED BY THE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT.

PARKING LANDSCAPE BUFFER ENLARGEMENT





1 SHRUB PLANTING



2 PALM PLANTING DETAIL

PLANT SCHEDULE

CANOPY TREES	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE
	PL	14	Platanus occidentalis / American Sycamore Straight Trunk, Uniform Branching, Dense Canopy	12' Ht. X 4.5' Spr.	2"Cal
	QV	29	Quercus virginiana / Live Oak Straight Trunk, Uniform Branching, Dense Canopy	18'-20' H X 7'-8' W	2"Cal
	TD	11	Taxodium distichum / Bald Cypress Straight Trunk, Uniform Branching, Dense Canopy	12' Ht. X 4.5' Spr.	2"Cal
PALM TREES	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**	**SIZE**
	SP2	42	Relocated Sabal palmetto / Cabbage Palmetto On-Site Relocation	FG	
UNDERSTORY TREES	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**	**SIZE**
	IA	6	Ilex x attenuata 'East Palatka' / East Palatka Holly Straight Trunk, Uniform Branching, Dense Canopy	6' Ht. Min.	1.5"Cal
	JS	2	Juniperus silicicola / Southern Red Cedar Straight Trunk, Uniform Branching, Dense Canopy	6' Ht. Min.	1.5"Cal
	LG	2	Ligustrum japonicum / Tree Form Ligustrum Multi-Trunk Specimen, Dense Canopy	7' Ht. X 7' Spr.	1.5" Cal. Combined
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE**	**FIELD2**
	SER	16	Serenoa repens / San Palmetto Dense, Full to Base	7 Gal Min.	20" X 20" Min
	VIO	30	Viburnum odoratissimum / Sweet Viburnum	7 Gal Min.	36" Ht
SHRUB AREAS	**CODE**	**QTY**	**BOTANICAL NAME / COMMON NAME**	**CONT**	**FIELD2**
	HAM	30	Hamelia patens / Fire Bush Dense, Full to Base	3 Gal Min.	20" x 20" Min.
	ZAM	24	Zamia pumila / Coontie	3 Gal Min.	20" x 20" Min.

LANDSCAPE REQUIREMENTS

WEST PERIMETER - 58TH AVE - 15' WIDTH - 997' LINEAL FEET *USING 20' WIDTH BUFFER REQUIREMENTS PER IRC
Excludes Driveways and Walkways

REQUIRED	PROPOSED
4 CANOPY TREES PER 100' = 40	^* 29 LIVE OAK ^* 11 BALD CYPRESS

* NATIVE PLANT MATERIAL
^ DROUGHT TOLERANT PLANT MATERIAL

WEST PERIMETER LANDSCAPE BUFFER AT PARKING - 58TH AVE
15' WIDTH - 200' LINEAL FEET *USING 20' WIDTH BUFFER REQUIREMENTS PER IRC

REQUIRED	PROPOSED
5 UNDERSTORY TREES PER 100' = 10 50 SHRUBS PER 100' = 100	^* 6 EAST PALATKA HOLLY ^* 2 SOUTHERN RED CEDAR ^* 2 LIGUSTRUM ^* 16 SAW PALMETTO ^* 30 SWEET VIBURNUM ^* 30 FIRE BUSH ^* 24 COONTIE

* NATIVE PLANT MATERIAL
^ DROUGHT TOLERANT PLANT MATERIAL

NON-VEHICULAR AREA LANDSCAPE
254,750 sf of NVU AREA (Development Area: 618,987 sf - 364,237 sf = 254,750 sf)
Excludes:
RS-6 Zoning - 33,594 sf
Impervious - 38,540 sf
Baseball Fields - 239,017 sf
Landscape Buffer - 19,940 sf (997 LF X 20')
Parking Interior Landscape - 33,146 sf
Total Excluded: 364,237 sf

REQUIRED	PROPOSED
1 CANOPY TREE PER 3000' = 85	422 TREE CREDITS APPLIED TO NVU +

* NATIVE PLANT MATERIAL
^ DROUGHT TOLERANT PLANT MATERIAL

PARKING INTERIOR LANDSCAPE - 33,146 sf
Driving Aisles: 8,193 sf, Driveway: 14,007 sf, Parking Spaces: 10,946 sf)

REQUIRED	PROPOSED
12% X IMPERVIOUS AREA = 3,978 SQ FT LANDSCAPE AREA 1 CANOPY TREE PER 300' = 14	^* 14 AMERICAN SYCAMORE

* NATIVE PLANT MATERIAL
^ DROUGHT TOLERANT PLANT MATERIAL

TREE CREDITS

CANOPY TREES:
(8) 12" DBH OAK TREE PRESERVED X 4 CREDITS = 32 CREDITS
(1) 20" DBH SPECIMEN OAK TREE PRESERVED X 8 CREDITS = 8 CREDITS
(35) 12" DBH PINE TREES PRESERVED X 4 CREDITS = 140 CREDITS
(21) 14" DBH PINE TREES PRESERVED X 6 CREDITS = 126 CREDITS
(1) 16" DBH PINE TREE PRESERVED X 6 CREDITS = 6 CREDITS
(7) 18" DBH PINE TREES PRESERVED X 6 CREDITS = 42 CREDITS
(4) 20" DBH PINE TREES PRESERVED X 8 CREDITS = 32 CREDITS
(1) 30" DBH PINE TREE PRESERVED X 8 CREDITS = 8 CREDITS

(44) PALM TREES PRESERVED (3 PALMS = 1 CREDIT) = 14 CREDITS
(42) RELOCATED PALMS PRESERVED (3 PALMS = 1 CREDIT) = 14 CREDITS

TOTAL CREDITS = 422 CREDITS

TOTAL LANDSCAPE

	REQUIRED	PROPOSED
CANOPY TREES	111	54 + 422 CREDITS
UNDERSTORY TREES	10	10
SHRUBS	100	100

LANDSCAPE POINT SYSTEM OPTION	POINTS
MOISTURE SENSING CONTROLLER	5
WATER USAGE ZONES INDICATED	5
76% to 100% DROUGHT TOLERANT SHRUBS	10
76% to 100% DROUGHT TOLERANT TREES	10

MITIGATION REQUIREMENTS

REMOVED	PROPOSED
(3) 18" DBH OAKS = 54 DBH (1) 24" DBH OAKS = 24 DBH	78" DBH REMOVED FEE ASSESSMENT 78" DBH x $100 PER INCH = $7,800 PAYABLE TO INDIAN RIVER COUNTY
42 PALMS REMOVED	42 PALMS RELOCATED

COMBINED FEE ASSESSMENT = $7,800

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Sunshine811.com

NO.	REVISIONS	DATE:

SARTAIN AND ASSOCIATES LLC
5099 A1A , SUITE 3
VERO BEACH, FL 32963
772-321-3870
REGISTRATION # LC26000475

SARTAIN ASSOCIATES

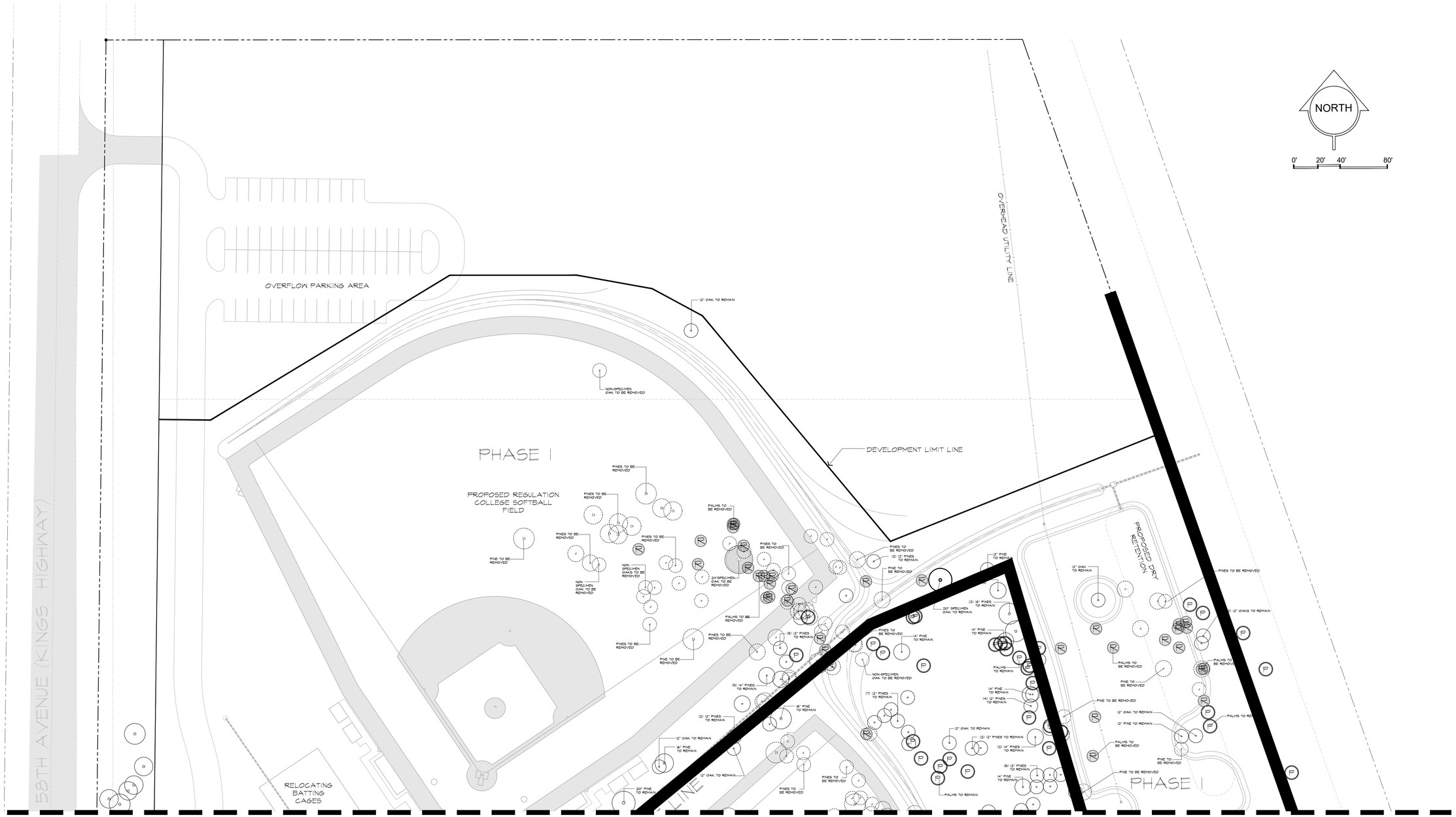
LICENSED LANDSCAPE ARCHITECT
MARK P. SARTAIN
LICENCE NUMBER
6667134
DATE: ——

NUMBER	DATE	DRAWN BY
18_09	06/19/20	MPS

LANDSCAPE PLAN

Hobart Park
Baseball Field Improvements
VERO BEACH
FLORIDA

SHEET NUMBER
LC-1



SEE LC-3

TREE SYMBOL LEGEND

- 20" EXISTING SPECIMEN TREE TO REMAIN
- 20" SPECIMEN TREE TO BE REMOVED
- NON-SPECIMEN TREE TO REMAIN
- NON-SPECIMEN TREE TO BE REMOVED
- EXISTING PALM TREE TO REMAIN
- EXISTING PALM TO BE REMOVED

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772-321-3870
REGISTRATION # LC26000475

SARTAIN ASSOCIATES

LICENSED LANDSCAPE ARCHITECT
MARK P. SARTAIN
LICENCE NUMBER
6667134
DATE:

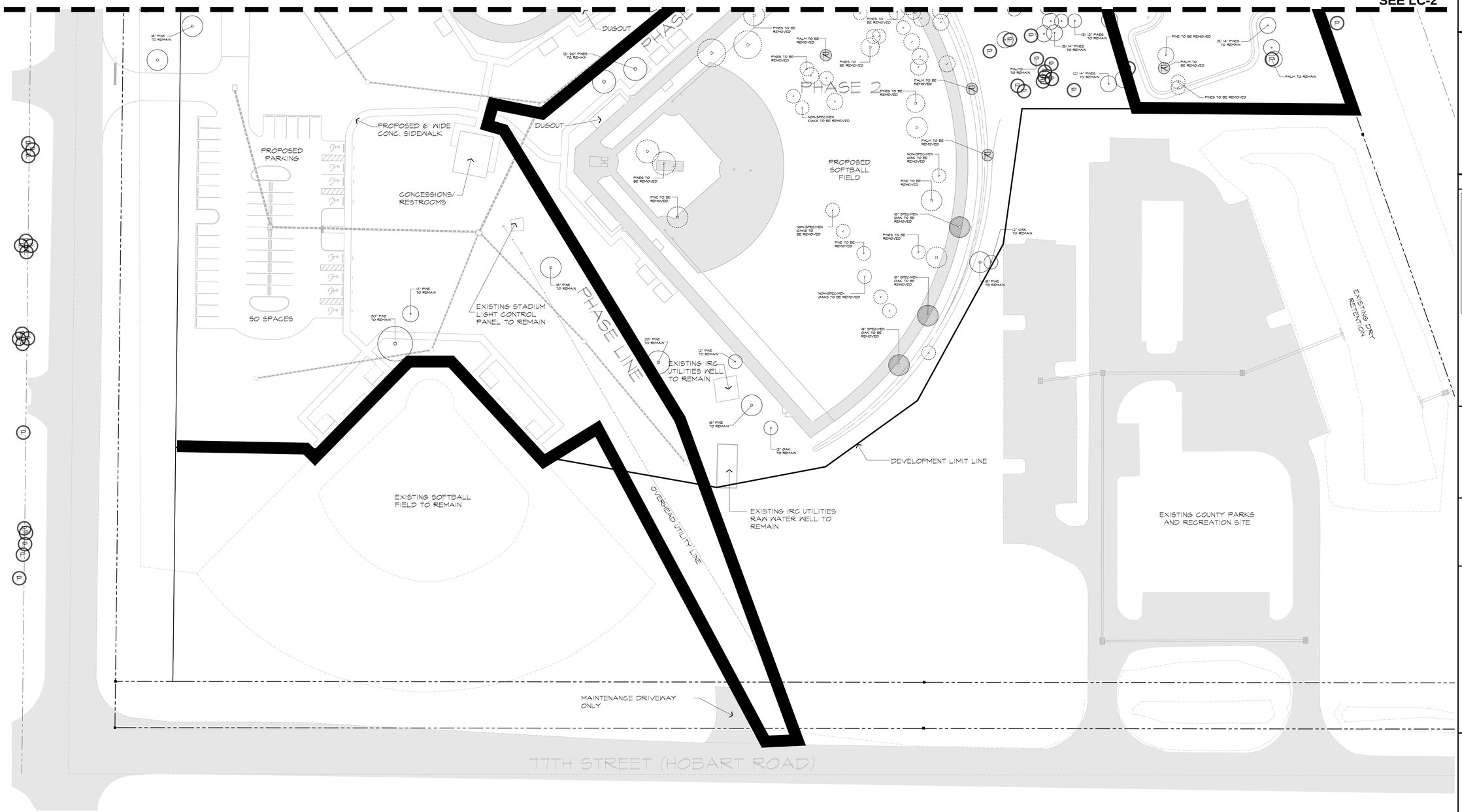
NUMBER	DATE	DRAWN BY
18_09	06/19/20	MPS

TREE PLAN

Hobart Park

Baseball Field Improvements
VERO BEACH
FLORIDA

SHEET NUMBER
LC-2



TREE SYMBOL LEGEND

- EXISTING SPECIMEN TREE TO REMAIN
- SPECIMEN TREE TO BE REMOVED
- NON-SPECIMEN TREE TO REMAIN
- NON-SPECIMEN TREE TO BE REMOVED
- EXISTING PALM TREE TO REMAIN
- EXISTING PALM TO BE REMOVED

NORTH

0' 20' 40' 80'

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VERO BEACH, FL 32963
772-321-3870
REGISTRATION # LC26000475

SARTAIN ASSOCIATES

LICENSED LANDSCAPE ARCHITECT
MARK P. SARTAIN
LICENCE NUMBER 6667134
DATE:

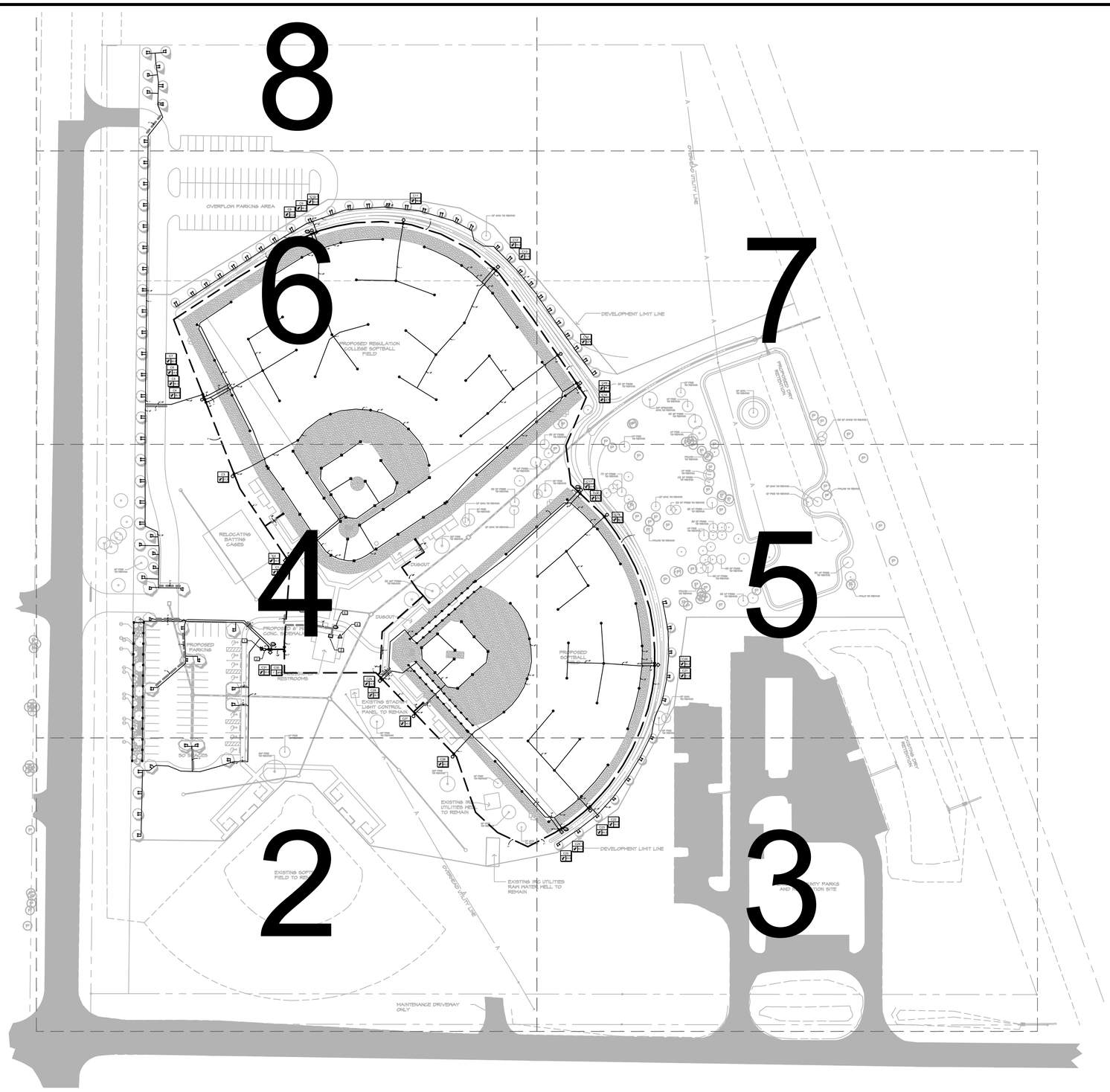
NUMBER 18_09
DATE 08/19/20
DRAWN BY MPS

TREE PLAN

Hobart Park

Baseball Field Improvements
VERO BEACH
FLORIDA

SHEET NUMBER
LC-3



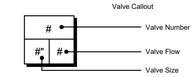
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
Q T H TT TQ F	Hunter PROS-06-PRS30-CV 12' radius Turf Spray, 30 psi regulated 6.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	
Q T H TT TQ F	Hunter PROS-06-PRS30-CV ADJ Turf Spray, 30 psi regulated 6.0" Pop-Up. With factory installed Drain Check Valve. Co-molded wiper seal with UV Resistant Material.	
K G R	Hunter MP2000 PROS-12-PRS40-CV Shrub Rotator, 12" pop-up with check valve, pressure regulated to 40 psi, MP Rotator nozzle. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc.	
25Q 50Q 50H 10H 10F 20F	Hunter PROS-06-CV-MSBN Multi-Stream Bubbler, 6" pop-up, factory installed drain check valve, 25=.25gpm, 50=0.5gpm, 10=1.0gpm, 20=2.0gpm.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
2.0	Hunter I-20-06-SS-PRB Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.
2.5	Hunter I-20-06-SS-PRB Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.
3.0	Hunter I-20-06-SS-PRB Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.
4.0	Hunter I-20-06-SS-PRB Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.
18	Hunter I-25-06-SS Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.
13	Hunter I-25-06-SS Turf Rotor, 6.0" Pop-Up. Adjustable and Full Circle. Stainless Steel Riser. Drain Check Valve. Standard Nozzle.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Hunter ICV-G-FS 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Filter Sentry.
	Hunter HQ-44LRC-AW Quick coupler valve, yellow rubber locking cover, red brass and stainless steel, with 1" NPT inlet, 2-piece body. Acme Key with Anti-Rotation Wings.
C	Hunter ACC-99D 2-Wire Decoder Controller with 99 station capacity, metal cabinet.
1	Hunter ICD-100 Single Station Decoder w/Surge Suppression and Ground Wire
2	Hunter ICD-200 2-Station Decoder with Surge Suppression and Ground Wire
4	Hunter ICD-400 4-Station Decoder with Surge Suppression and Ground Wire
SS	Hunter WSS-SEN Wireless Solar, rain freeze sensor with outdoor interface, connects to Hunter X-Core and ACC Controllers, install as noted. Includes gutter mount bracket. Module not included.
GP	2-Wire Grounding Point Install as per plan detail.
PC	Pump Control System Watertronics Model #WMSTV-5000-2-7.5-230-1-65-80. See plan details and specifications.
Well	Irrigation Well
	Irrigation Lateral Line: PVC Class 200 SDR 21
	Irrigation Mainline: PVC Class 200 SDR 21
	Pipe Sleeve: PVC Schedule 40

Valve Callout



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
1	Irrigation system water source to be a well and submersible pump. Well and pump to provide a minimum of 66 gpm at a discharge pressure of 80 psi.		
2	Pump control system. Install so inlet side of control enclosure is 3' from the well head. Install pump control system as per detail #12. Provide 230v 1 phase power to the pump control system.		
3	Coordinate the exact location of the controller with the owners representative. Provide 120v 10 amp power to the controller. Ground controller as per manufacturers instructions. Install controller as per plan notes, details and manufacturers instructi		
4	Coordinate exact location of the climate sensor with the owners representative. Install and program as per plan detail and manufacturers instructions.		
5	2-Wire cable conduit. Sch 40 PVC electrical conduit from the controller to the mainline.		
6	Install 2-wire Grounding Point as per plan detail.		

GRAPHIC SCALE

70 0 35 70 140

(IN FEET)
1 inch = 70 ft

IRRIGATION SHEET LAYOUT PLAN AND SCHEDULES

NO.	DATE	DESCRIPTION	DR/APP

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CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBAR PARK
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Sustaining Landscapes. Conserving Water.
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STEPHEN E. MOLER, P.E. FL#33193

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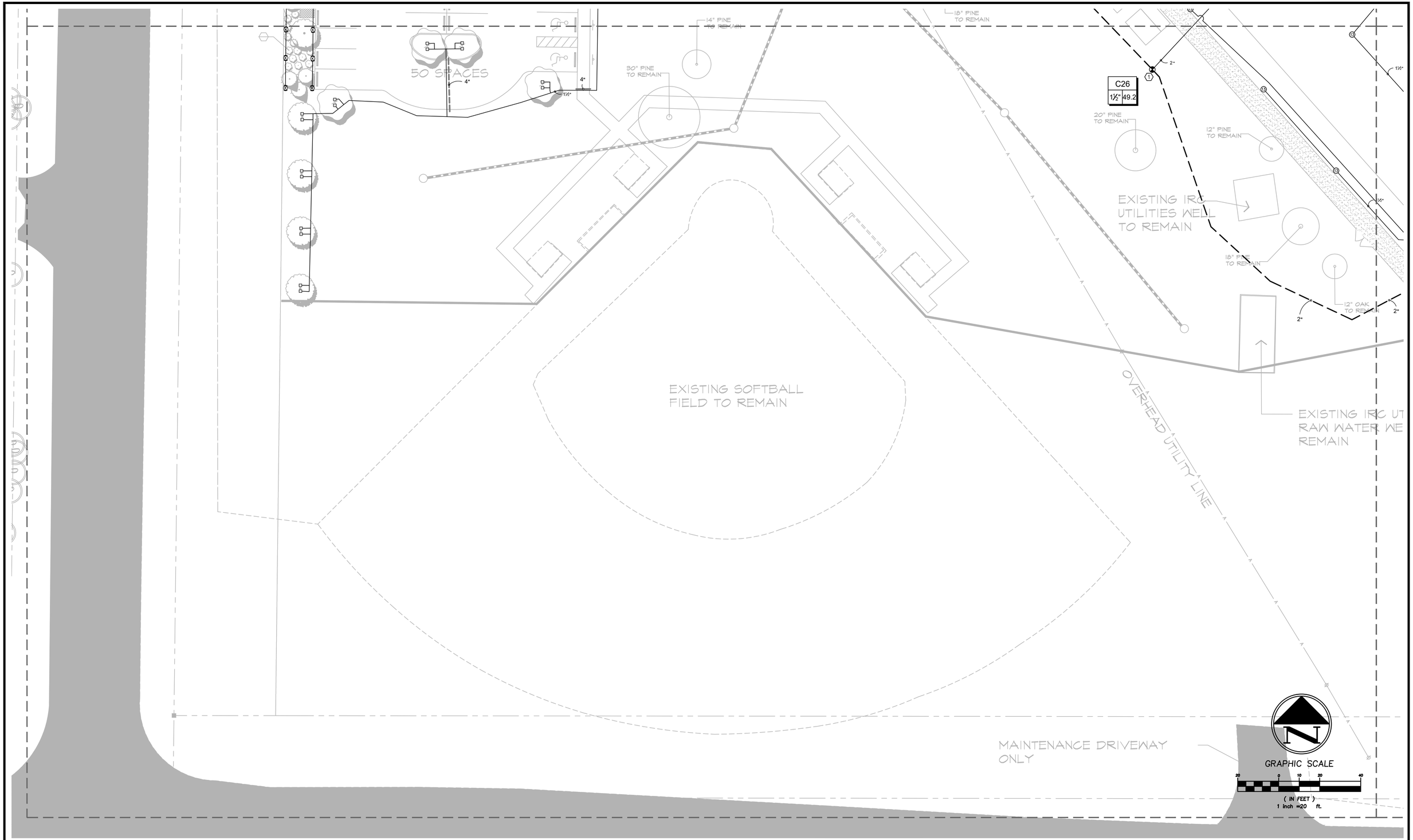
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	1"=70'
SHEET	1 OF 10
PROJECT NO.:	1756



IRRIGATION PLAN

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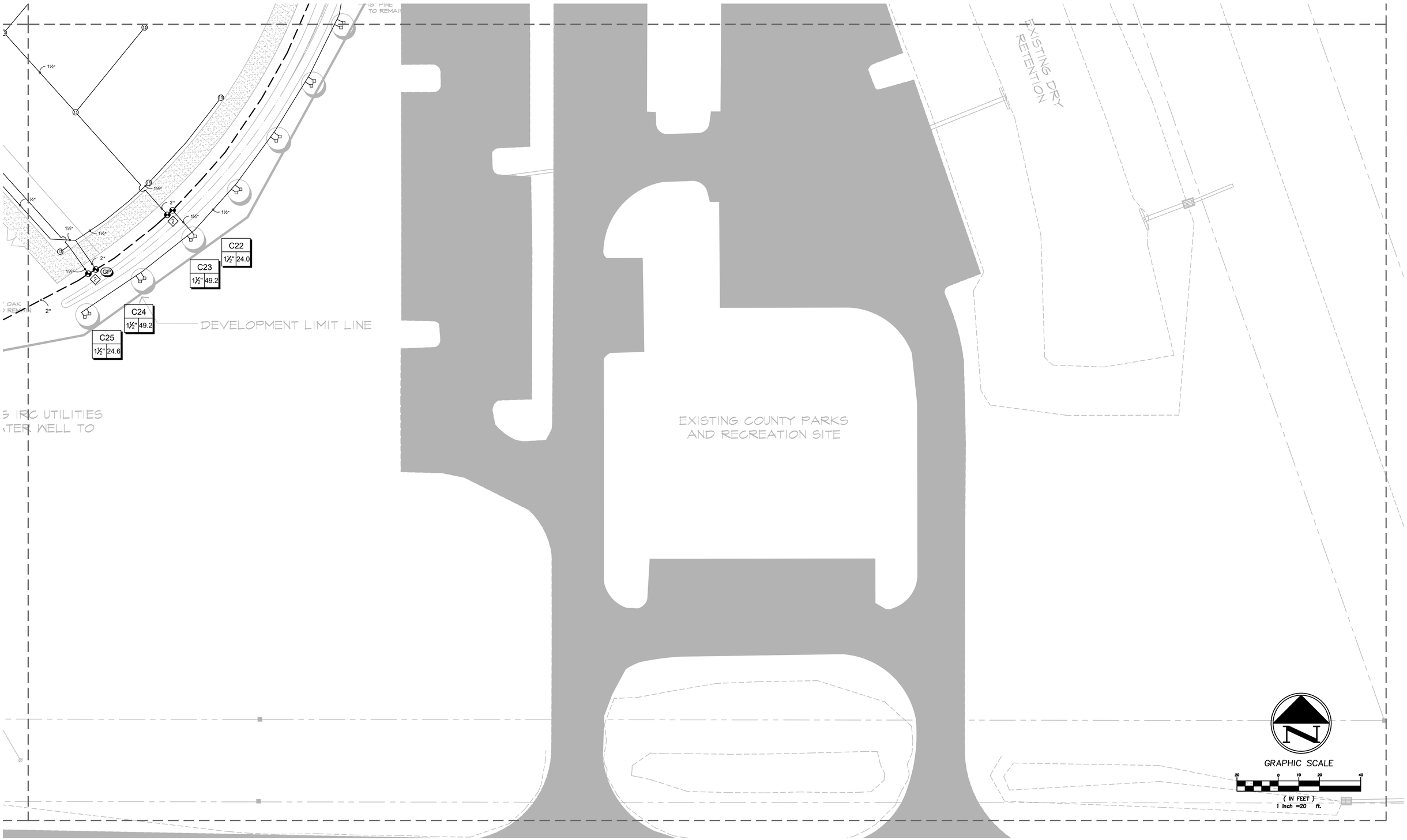
DATE	11/18
SCALE	1"=20'
SHEET	2 OF 10
PROJECT NO.:	1756



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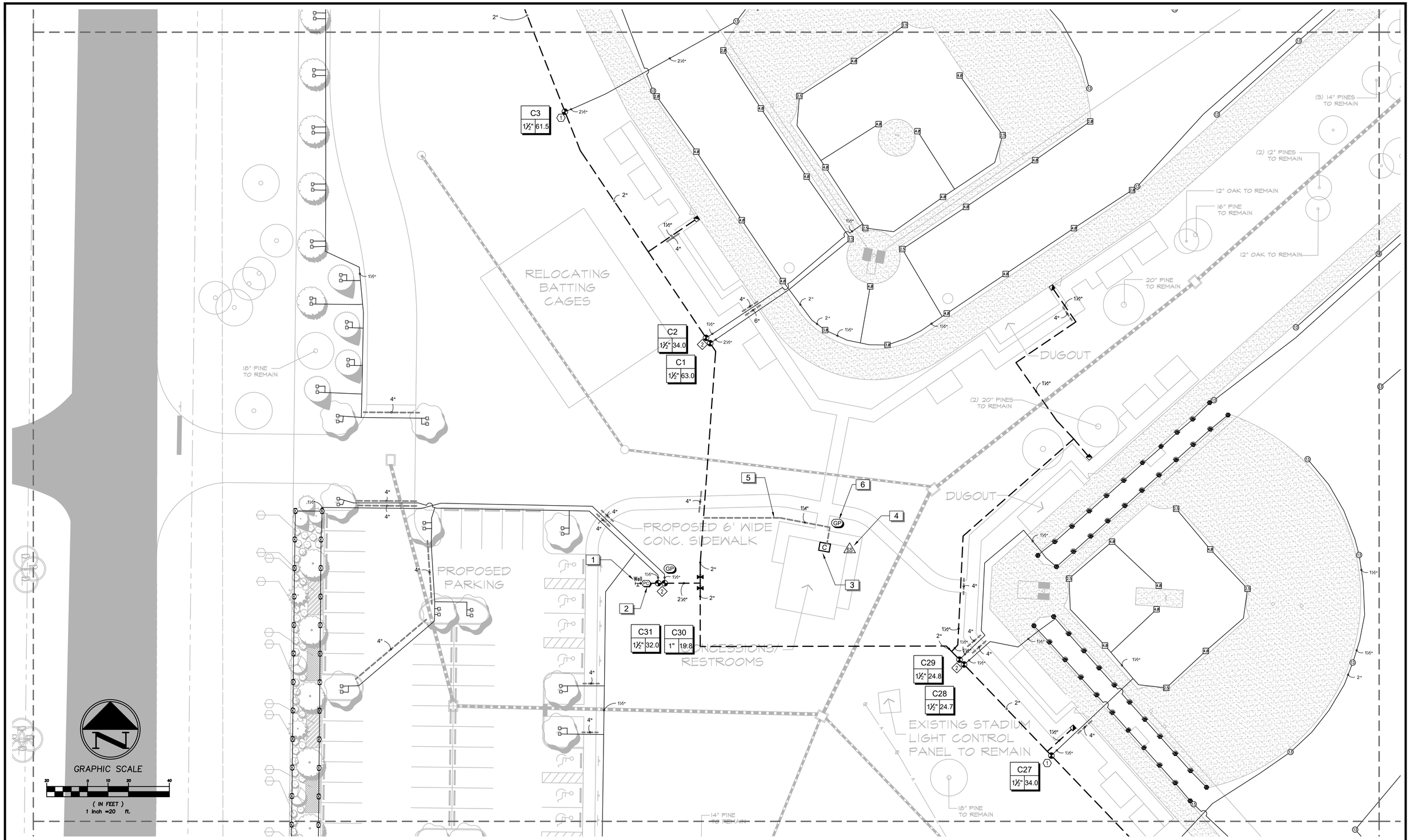
DATE	11/18
SCALE	1"=20'
SHEET	3 OF 10
PROJECT NO.:	1756



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STEPHEN E. MOLER, P.E. FL#33193

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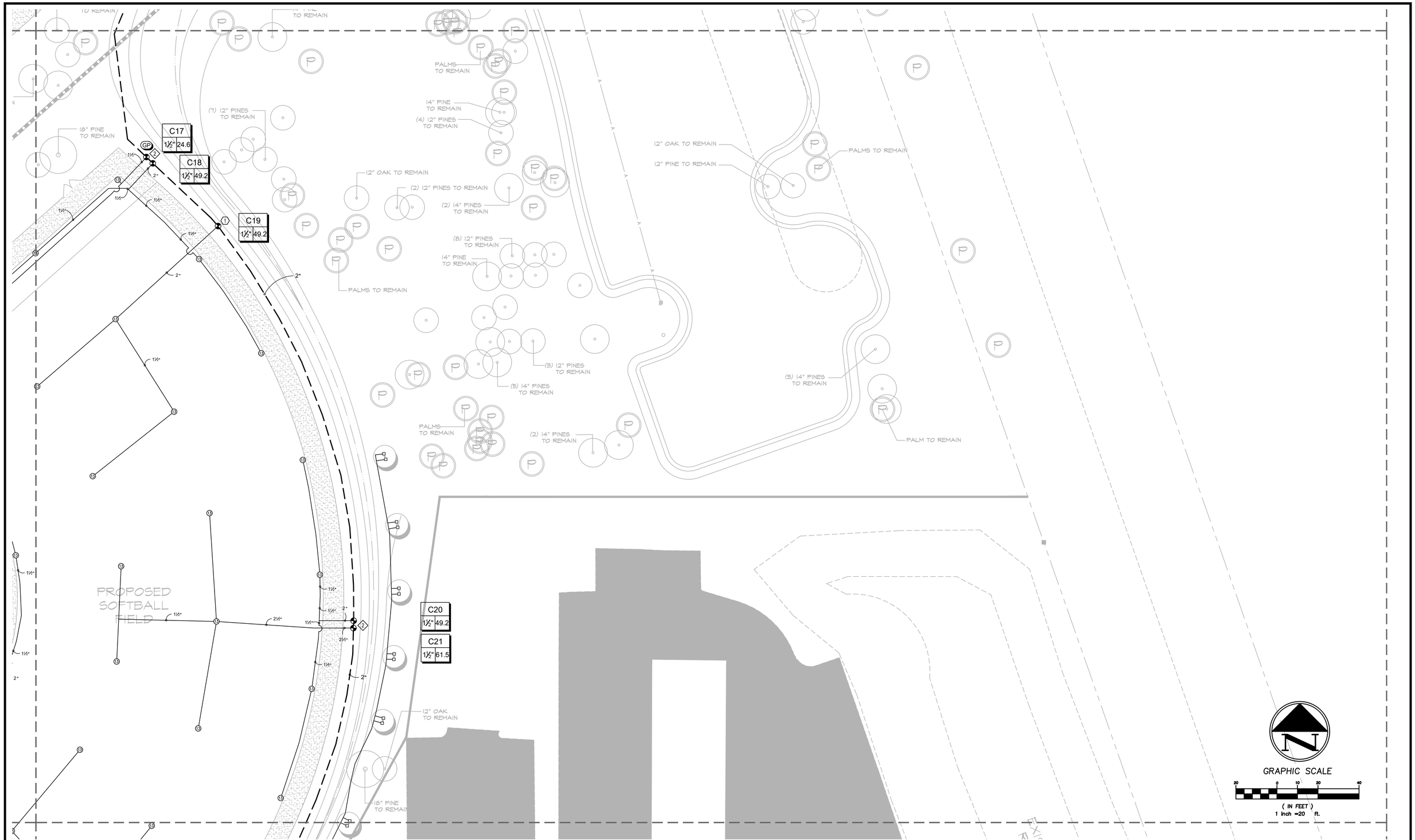
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	1"=20'
SHEET	4 OF 10
PROJECT NO.:	1756



IRRIGATION PLAN

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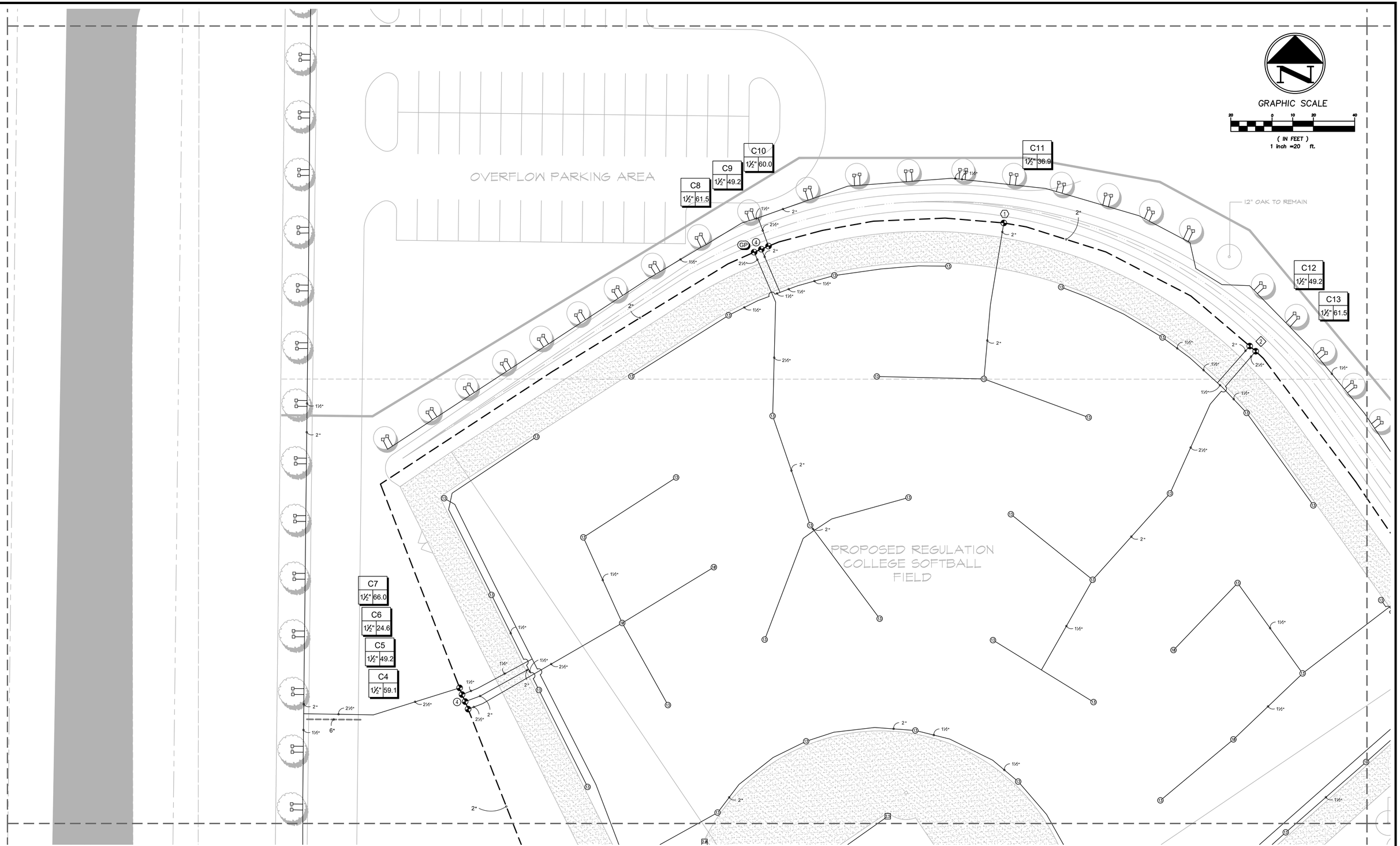
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	1"=20'
SHEET	5 OF 10
PROJECT NO.:	1756



IRRIGATION PLAN

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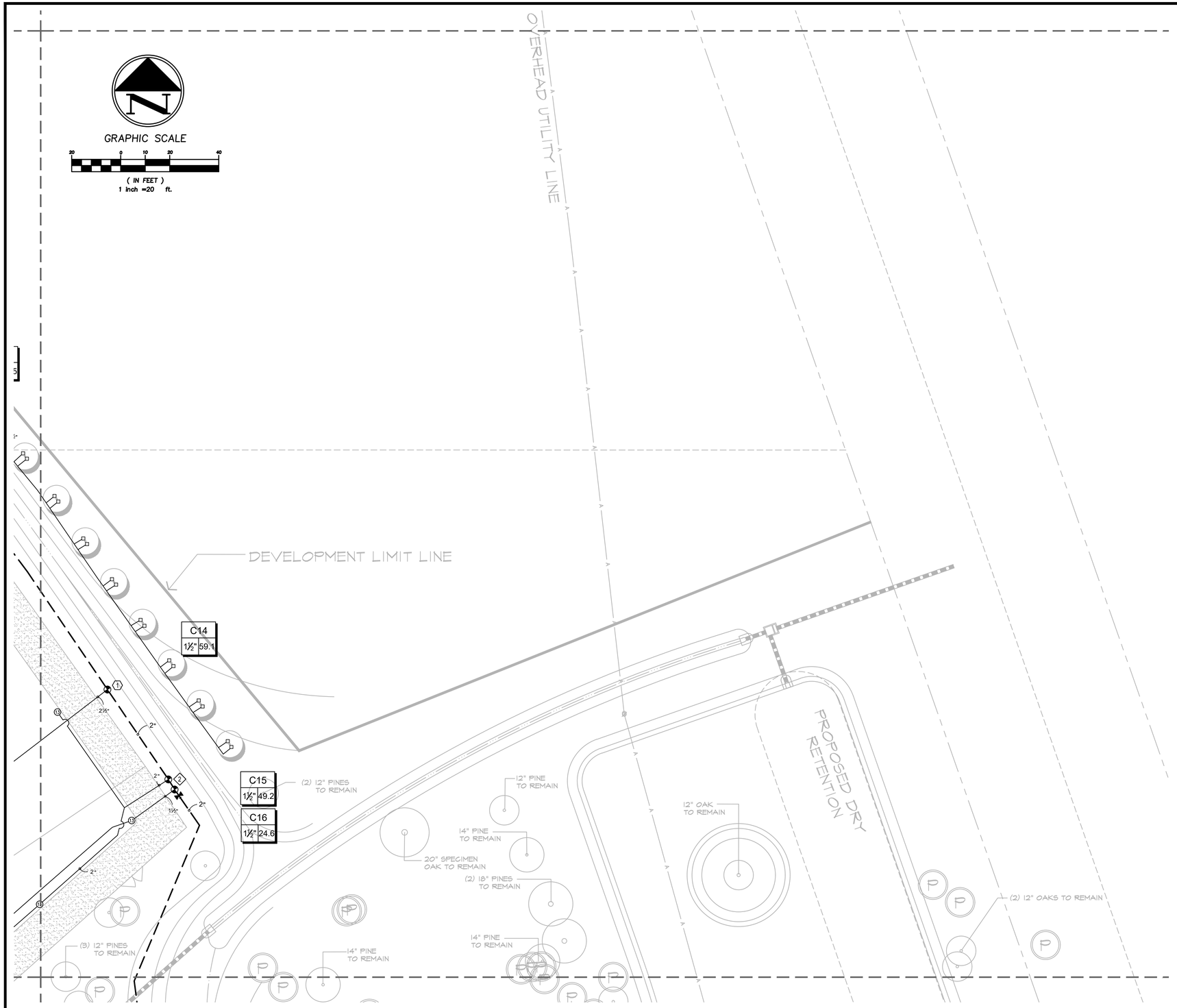
STEPHEN E. MOLER, P.E. FL#33193

DRAWN	MC
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	1"=20'
SHEET	6 OF 10
PROJECT NO.:	1756



CRITICAL ANALYSIS

Generated:	2018-11-15 07:44
P.O.C. NUMBER: 01	
Water Source Information:	Irrigation Well
FLOW AVAILABLE	
Custom Max Flow:	66.00 gpm
Flow Available:	66.00 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Pressure Available:	80.00 psi
DESIGN ANALYSIS	
Maximum Multi-valve Flow:	66.00 gpm
Flow Available at POC:	66.00 gpm
Residual Flow Available:	0.00 gpm
Critical Station:	C13
Design Pressure:	60.00 psi
Friction Loss:	2.61 psi
Fittings Loss:	0.26 psi
Elevation Loss:	0.00 psi
Loss through Valve:	3.09 psi
Pressure Req. at Critical Station:	65.96 psi
Loss for Fittings:	0.88 psi
Loss for Main Line:	8.85 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Critical Station Pressure at POC:	75.69 psi
Pressure Available:	80.00 psi
Residual Pressure Available:	4.31 psi

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PSI	PSI @ POC	PRECIP
C1	Hunter ICV-G-FS	1-1/2"	Turf Rotor	63.00	51.64	54.75	0.60 in/h
C2	Hunter ICV-G-FS	1-1/2"	Turf Rotor	34.00	50.80		0.60 in/h
C3	Hunter ICV-G-FS	1-1/2"	Turf Rotor	61.50	67.21	72.82	0.79 in/h
C4	Hunter ICV-G-FS	1-1/2"	Turf Rotor	59.10	65.36	72.45	0.43 in/h
C5	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	65.38	72.52	0.83 in/h
C6	Hunter ICV-G-FS	1-1/2"	Turf Rotor	24.60	64.51	71.70	2.03 in/h
C7	Hunter ICV-G-FS	1-1/2"	Bubbler	66.00	38.35	45.58	4.31 in/h
C8	Hunter ICV-G-FS	1-1/2"	Turf Rotor	61.50	65.97	75.64	0.42 in/h
C9	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.03	73.72	0.82 in/h
C10	Hunter ICV-G-FS	1-1/2"	Bubbler	60.00	38.56	48.26	4.35 in/h
C11	Hunter ICV-G-FS	1-1/2"	Turf Rotor	36.90	63.46	73.35	0.40 in/h
C12	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.12	73.86	0.82 in/h
C13	Hunter ICV-G-FS	1-1/2"	Turf Rotor	61.50	65.96	75.69	0.41 in/h
C14	Hunter ICV-G-FS	1-1/2"	Turf Rotor	59.10	65.06	74.28	0.43 in/h
C15	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.76	73.75	0.82 in/h
C16	Hunter ICV-G-FS	1-1/2"	Turf Rotor	24.60	66.22	75.19	2.61 in/h
C17	Hunter ICV-G-FS	1-1/2"	Turf Rotor	24.60	65.15	74.61	1.65 in/h
C18	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.29	73.77	0.83 in/h
C19	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.94	74.57	0.45 in/h
C20	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.01	73.88	0.86 in/h
C21	Hunter ICV-G-FS	1-1/2"	Turf Rotor	61.50	64.85	74.71	0.46 in/h
C22	Hunter ICV-G-FS	1-1/2"	Bubbler	24.00	35.82	44.90	4.38 in/h
C23	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.93	73.99	0.44 in/h
C24	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	64.27	73.02	0.85 in/h
C25	Hunter ICV-G-FS	1-1/2"	Turf Rotor	24.60	65.10	73.82	1.64 in/h
C26	Hunter ICV-G-FS	1-1/2"	Turf Rotor	49.20	65.79	72.13	0.71 in/h
C27	Hunter ICV-G-FS	1-1/2"	Turf Rotor	34.00	49.74		0.68 in/h
C28	Hunter ICV-G-FS	1-1/2"	Turf Spray	24.68	33.17	37.20	1.68 in/h
C29	Hunter ICV-G-FS	1-1/2"	Turf Spray	24.77	33.84	37.81	1.70 in/h
C30	Hunter ICV-G-FS	1"	Shrub Rotary	19.83	45.68	45.81	0.63 in/h
C31	Hunter ICV-G-FS	1-1/2"	Bubbler	32.00	35.84	35.94	4.31 in/h

TWO WIRE CONTROL SYSTEM NOTES

1. ALL DECODER WIRE SPLICE CONNECTORS TO BE 3M DBY-6 OR BETTER.
2. ALL DECODER TO VALVE SOLENOID SPLICE CONNECTORS TO BE 3M DBY-6 OR BETTER
3. ALL GROUNDING POINTS TO BE INSTALLED AS PER DETAIL.
4. ALL CONTROL SYSTEM PRODUCTS TO BE INSTALLED AND OPERATED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND OR REQUIREMENTS.
5. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY MANUFACTURER'S INSTALLATION TRAINING PRIOR TO PROJECT START, NOTIFY IRRIGATION CONSULTANT WHEN TRAINING HAS BEEN COMPLETED.
6. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR TRAINING OWNERS STAFF, AS NEEDED, ON THE OPERATION AND MAINTENANCE OF THE CONTROL SYSTEM.
7. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COMPLETE PROGRAMMING AND OPERATION OF THE CONTROL SYSTEM FOR 6 MONTHS FROM THE DAY THE CONTROLLER BECOMES FUNCTIONAL. CONTRACTOR TO PROVIDE THE OWNERS REPRESENTATIVE A COMPUTER SPREAD SHEET THAT SHOWS EACH PROGRAM, OPERATIONAL DAYS AND RUN TIMES PER ZONE.

CONTROLLER INSTALLATION NOTES

1. IRRIGATION CONTRACTOR TO COORDINATE EXACT LOCATION OF CONTROLLER WITH OWNER'S REPRESENTATIVE.
2. PROVIDE 120VAC 10 AMP POWER TO JUNCTION BOX AT CONTROLLER LOCATION.
3. IRRIGATION CONTRACTOR TO HARD WIRE CONTROLLER TO POWER SUPPLY AS PER PREVAILING CODE.
4. CONTROLLER TO BE SECURELY ATTACHED TO THE WALL USING METALLIC FASTENERS MADE FOR WALL TYPE.
5. ALL IRRIGATION CONTROL WIRE ABOVE GRADE TO BE ENCASED IN PVC ELECTRICAL CONDUIT.
6. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL POTENTIAL WALL PENETRATIONS AND THE SEALING OF THOSE PENETRATIONS.
7. CONTROLLER TO BE GROUNDED AS PER MANUFACTURERS RECOMMENDATIONS.

GENERAL NOTES

1. ALL TRENCHING TO BE OUTSIDE OF TREE DRIP LINE
2. MAINLINE TO HAVE MINIMUM OF 24" OF COVER AND A MINIMUM OF 24" OFF OF THE HARDSCAPE
3. LATERALS TO HAVE MINIMUM OF 18" OF COVER IN SPORTS FIELDS AND A MINIMUM OF 12" IN GENERAL LANDSCAPE AREAS. ALL LATERALS ARE TO BE A MINIMUM OF 18" OFF OF THE HARDSCAPE EDGE.
4. NO ROCKS, BOULDERS OR SHARP OBJECTS TO BE IN TRENCH BACKFILL
5. ALL PIPE TO BE INSTALLED AS PER MANUFACTURES SPECIFICATIONS
6. SPRINKLERS AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS
7. TWO WIRE CONTROL WIRE TO BE 14 GA UL 2 CONDUCTOR, JACKETED AND APPROVED BY 2-WIRE CONTROLLER MANUFACTURER
9. WIRE SPLICES TO BE DONE AS PER DETAILS
10. ALL WIRE SPLICES OUTSIDE OF CONTROL VALVE BOX TO BE IN 10" VALVE BOX
11. TWO WIRE CONDUCTORS TO BE COLOR CODED
12. CONTRACTOR SHALL INSTALL MANUFACTURES GROUNDING EQUIPMENT ON BOTH THE POWER AND OUTPUT SIDES OF CONTROLLER, ALL GROUNDING POINTS TO BE INSTALLED AS PER PLANS AND DETAILS
13. AT EACH VALVE AND CHANGE IN MAINLINE DIRECTION CONTRACTOR TO INSTALL A 30" LOOP OF EXTRA WIRE
14. SPRINKLERS ARE TO BE ADJUSTED TO AVOID OVER-SPRAY INTO NON-IRRIGATED AREAS
15. ELECTRIC CONTROL VALVES ARE TO BE INSTALLED IN VALVE BOXES AS FOLLOWS
    14" RECTANGULAR MINIMUM FOR EACH ELECTRIC CONTROL VALVE
16. SPRINKLERS TO BE INSTALLED 12" FROM FOUNDATIONS AND 2" FROM HARDSCAPE
17. CONTRACTOR TO ADD RISER EXTENSIONS TO SPRINKLERS IF REQUIRED TO MAINTAIN PROPER COVERAGE
18. ALL PIPING TO BE FLUSHED PRIOR TO INSTALLATION OF SPRINKLERS
19. ALL VALVES, QUICK COUPLER VALVES, WIRE SPLICES TO BE IN LANDSCAPED BEDS WHEREVER POSSIBLE
20. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PROPER COVERAGE OF AREA TO BE IRRIGATED, MAKE ADJUSTMENTS AS NECESSARY
21. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE EXISTING UTILITIES REPAIRING ANY DAMAGES AT HIS OWN COST
22. PLAN IS DIAGRAMMATIC TO IMPROVE CLARITY ALL IRRIGATION EQUIPMENT TO BE INSTALLED WITHIN PROPERTY LINES AND LANDSCAPED AREAS
23. ANY DISCREPANCIES BETWEEN THE PLAN AND THE SITE TO BE REFERRED TO THE OWNERS REPRESENTATIVE PRIOR TO CONSTRUCTION
24. CONTRACTOR TO PROVIDE 1 YEAR WARRANTEE OF ALL PRODUCTS AND WORKMANSHIP TO INCLUDE WINTERIZATION AND SPRING START-UP
25. CONTRACTOR TO PROVIDE OWNER AND OR LANDSCAPE ARCHITECT RECORD DRAWING PRIOR TO SUBSTANTIAL COMPLETION.
26. INSTALLATION OF IRRIGATION SLEEVES IS THE IRRIGATION CONTRACTORS RESPONSIBILITY IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR SLEEVE INSTALLATION PRIOR TO PAVEMENT INSTALLATION
27. CLEANUP AND DISPOSE OF ALL DEBRIS, WASTE AND EXCESS CONSTRUCTION MATERIALS LEAVE AREA NEAT, CLEAN AND READY FOR OWNERS USE PROVIDE CLEAN PAVEMENT SURFACES INCLUDING AREAS OF PUBLIC R.O.W.

IRRIGATION PLAN AND NOTES

NO.	DATE	DESCRIPTION	DR/APP

REVISIONS

MASTELLER & MOLER, INC.
CONSULTING ENGINEERS
1655 27th STREET, SUITE #2, VERO BEACH, FLORIDA, 32960
(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBAR PARK
BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY FLORIDA

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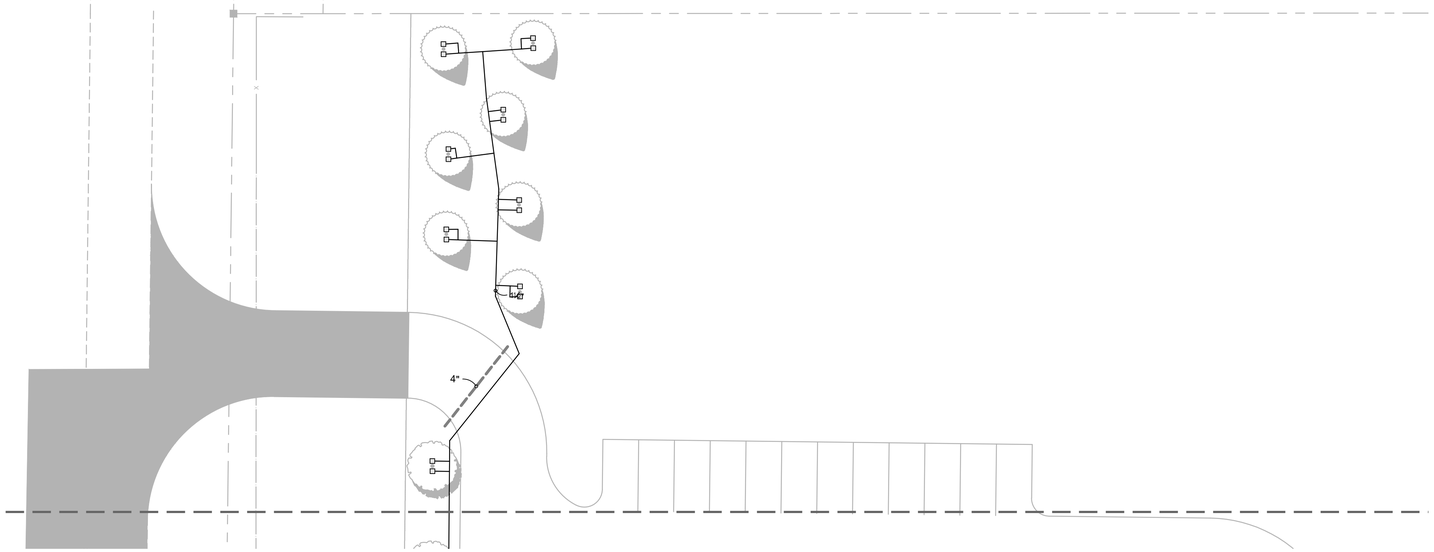
STEPHEN E. MOLER, P.E. FL#33193

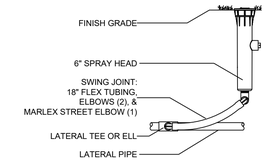
DRAWN	MC
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	1"=20'
SHEET	7 OF 10
PROJECT NO.:	1756

GRAPHIC SCALE

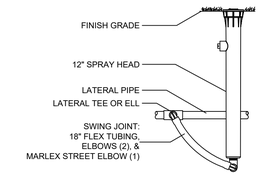
20 0 10 20 40

(IN FEET)
1 inch =20 ft.





1 6" SPRAY BODY
NTS



2 12" SPRAY BODY
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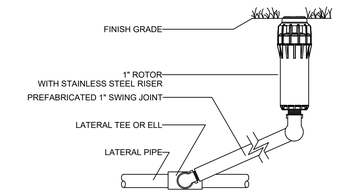

4 1" INLET ROTOR
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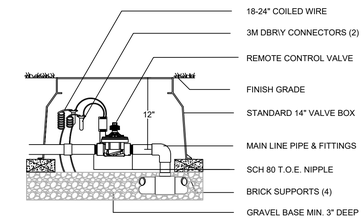

5 ELECTRIC CONTROL VALVE
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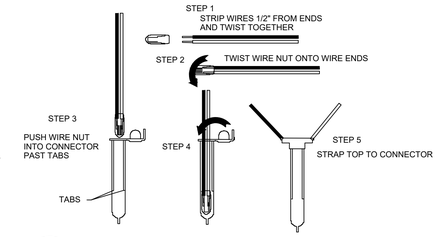

6 WIRE CONNECTION 3M-DBR6-Y
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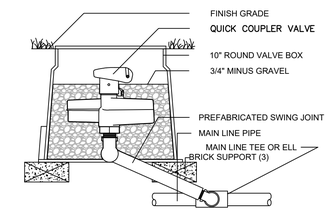

7 QUICK COUPLER VALVE
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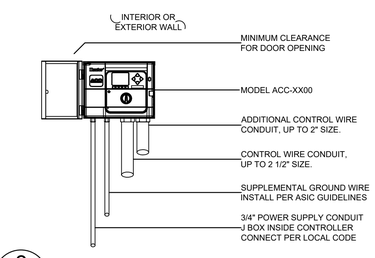

8 ACC WALL MOUNT CONTROLLER
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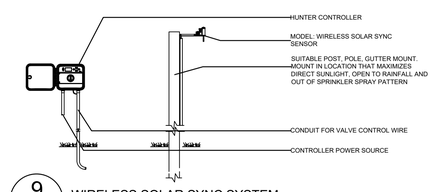

9 WIRELESS SOLAR SYNC SYSTEM
NTS

IRRIGATION PLAN AND DETAILS

NO.	DATE	DESCRIPTION	DR/APP

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HOBART PARK
BASEBALL FIELD IMPROVEMENTS

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STEPHEN E. MOLER, P.E. FL#33193

DRAWN	MC
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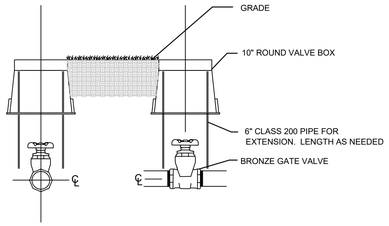
DATE	11/18
SCALE	1"=20'
SHEET	8 OF 10
PROJECT NO.:	1756



10 ISOLATION VALVE DETAIL
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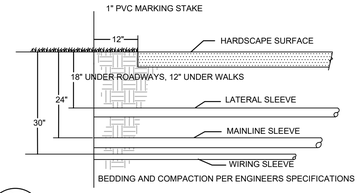
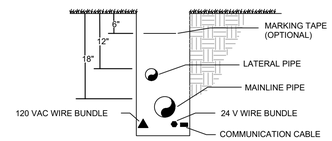
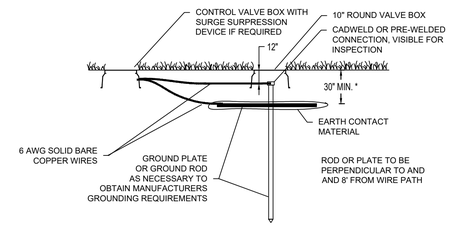


11 SLEEVING
NTS



12 TRENCH, PIPE AND WIRE
NTS

SIDE VIEW

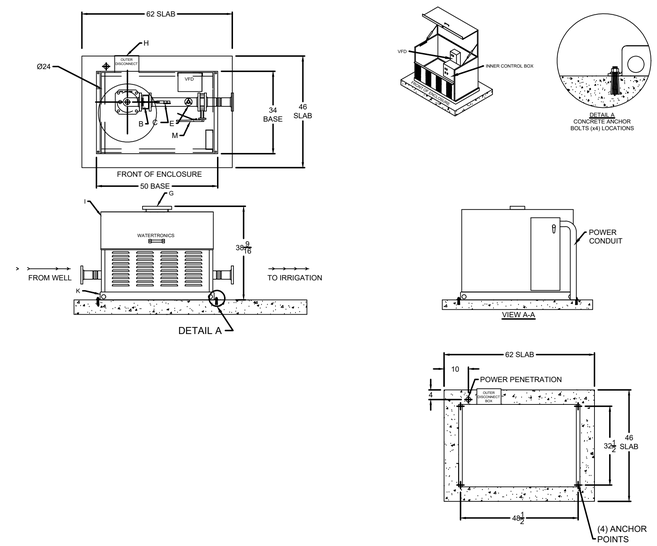


13 TWO WIRE GROUNDING POINT DETAIL
NTS

PUMP STATION SPECIFICATIONS:
NAME: *HOBART PARK*
STATION MODEL: WMSTV-5000-2-7.5-230-1-65-80
STATION TOTAL PERFORMANCE: 65 GPM @ 80 PSI
REGULATE PSI: 80
PUMP HORSEPOWER:
PUMP NO.1 7.5HP
CHECK VALVE SIZES:
PUMP NO.1 2"
ISOLATION VALVE SIZES:
DISCHARGE ISOLATION VALVE SIZE: 2"
DISCHARGE MANIFOLD SIZE: 2"
EXHAUST FAN REQUIREMENTS: 240CFM

POWER REQUIREMENTS: 230 V, 60 HZ, 1 PHZ, 21 FLA

STATION COMPONENTS:
A PUMP AND MOTOR
B CHECK VALVE
C PRESSURE TRANSDUCER WITH GAUGE
D N/A
E FLOW SENSOR
F N/A
G STATION FAN HOOD MOUNTED
H DEAD-FRONT DISCONNECT PANEL
I PAINTED STEEL ENCLOSURE (SANDSTONE)
J PSI/VAC GAUGE LIQUID FILLED
K PAINTED STEEL BASE (SANDSTONE)
L LEVEL TRANSDUCER
M STATION DISCHARGE ISOLATION VALVE



☐ APPROVED AS SUBMITTED	7				
☐ APPROVED AS NOTED	6				
☐ REVISE AND RESUBMIT	5				
SIGNATURE:	4				
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	NO.	DATE	BY	DESCRIPTION	

DRAWN BY: ESP DATE: 11/14/18
CHECKED BY: DATE:

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TITLE: HOBART PARK
IRRIGATION PUMP STATION

WATERTRONICS

SCALE: NTS | SHEET 1 OF 1 SHEETS
JOB NO.: | DRAWING NO. PRSU10627

12 PUMP CONTROL SYSTEM
NTS

IRRIGATION DETAILS

NO.	DATE	DESCRIPTION	DR/APP

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STEPHEN E. MOLER, P.E. FL#33193

DRAWN	MC
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	NO SCALE
SHEET	9 OF 10
PROJECT NO.:	1756

WaterMax

5000-2
SUBMERSIBLE TURBINE
GENERAL SPECIFICATIONS

Project Name: Hobart Park
Project Location:
Pumping System Model #: WMSTV-5000-2-7.5-230-1-65-80
Total Design Criteria: Quantity of Pumps: 1
Station Design Capacity: 65 GPM @ 80 PSI Discharge

SCOPE OF WORK

It is the intention of this specification to describe a self-enclosed, automatic SUBMERSIBLE pump station for a commercial turf irrigation system. This is to be accomplished by using a completely prefabricated pump station conforming to the following specifications.

The pumping station shall be model number WaterMax WMSTV-5000-3 as manufactured by WATERTRONICS, INC. 525 Industrial Drive, P.O. Box 530, Hartland, Wisconsin 53029-0530, www.watertronics.com.

For Pricing Contact:
John VanDerCruyssen 262-269-2440
John.VanDerCruyssen@Watertronics.com

MANUFACTURER REQUIREMENTS

The pump station shall be manufactured by **Watertronics, Inc.,** Hartland, Wisconsin. The following information must be furnished by the contractor or manufacturer's representative within 10 days before bid date, to the Consultant/Engineer for consideration as an equal brand.

a. A complete specification and submittal of all major components for the proposed pump station with individual pump performance verification.

b. A detailed pumping station proposal drawing complete with component location, sizes and dimensions specific to the installation.

c. A complete electrical schematic for all high and low voltage circuits showing breaker/ fuse sizing, wire numbering and color.

d. Pump station manufacturers U.L. file number for the electrical controls and pump station.

e. A copy of the manufacturer's certificate of insurance.

f. Product support technicians shall be capable of accessing all information pertaining to the pumping equipment, e.g. electrical schematics, pump curves, program data, bill of materials, etc. The manufacturer shall have no less then two technicians on call seven days a week.

g. The pump station manufacturer shall provide factory authorized or factory direct service personnel for the set, start-up, preventative maintenance and general service of the pump system. A factory authorized or factory direct service technician must be located within one-hundred (100) mile radius of the project site. The pump systems technician must have a minimum of 5 years experience. The pump station manufacturer shall provide technical phone support twenty-four hours a day seven days a week.

SECTION 1: GENERAL

1.1 The pump station performance at enclosure limits shall be as noted in the technical specifications. The capacity, discharge pressure, and discharge pipe dimensions shall be per the technical specifications. The pump shall operate at no more than 3600 RPM. The power supply to the station shall be as noted in the technical specifications.

1.2 The station shall be completely wired, piped, dynamically flow and pressure tested prior to shipment.

1.3 Operational sequence: The pump shall activate automatically upon a drop in manifold pressure to an adjustable set point. Operation shall be maintained at an adjustable minimum flow. The pump shall be automatically retired when system flow drops below the minimum adjustable set point and the pressure set point has been met for an adjustable time delay.

1.4 Construction shall be of modular form utilizing a steel base structurally adequate to support piping, and electrical equipment as a single integral assembly. All nuts, bolts washers, and fasteners shall be stainless steel, zinc or cadmium plated for corrosion resistance.

SECTION 2: PUMP AND MOTOR

2.1 PUMP

Pump shall be submersible type. Bowl assembly including suction case, intermediate bowls and discharge bowls shall be of cast iron. The impellers shall be of bronze, statically balanced. Each pump shaft is to be turned, ground and polished stainless steel having a chromium content of not less than 12%. It shall be supported by bearings above and below each impeller. The size of each shaft shall be appropriate to transmit the horsepower required by the pump.
The pump shall have a corrosive resistant basket type strainer with an area no larger than ¼".

2.2 MOTOR Submersible

Motor shall be submersible type and meet applicable NEMA standards. The motor shall be of corrosion resistant construction, 316 Stainless Steel shell, splined stainless steel shaft, cast iron end bells, hermetically sealed windings, Kingsbury-type thrust bearings, pressure equalizing diaphragm, removable "water-bloc" lead connector and U.L. 778 recognized

SECTION 3: PIPING MANIFOLD, VALVES, GAUGES AND OTHER MECHANICAL EQUIPMENT

3.1 FABRICATED PIPING

All fabricated piping shall conform to ASTM specifications A53 for Grade B welded or seamless schedule 40 pipe. All welded flanges shall be forged steel, slip-on or weld neck type. All welded fittings shall be seamless, ASTM Specification A234, with pressure rating not less than 150 PSI.

3.2 CHECK VALVE

Pump check valve shall be of the silent operating type that begin to close as forward velocity diminishes and be fully closed at zero velocity preventing flow reversal. Valve bodies shall be cast from ASTM-126C cast-iron or better and shall be free from blow holes, sand holes, and other impurities. The valve design shall incorporate a center guided, spring loaded poppet, guided at opposite ends and having a short linear stroke that generates a flow area equal to the pipe diameter. Internals shall be machined bronze disc, seat, and stem guide. Valves shall be sized to permit full pump capacity to discharge through them without exceeding a pressure drop of 2.5 PSI. Valves 4" and smaller to be pressure rated for 250 PSI.

3.3 STATION DISCHARGE ISOLATION VALVE

Isolation valves shall be butterfly type with ten position lever for sizes 4" and smaller and gear operators for sizes above 4". All shall be rated at 200 psi WOG working pressure. Trim shall include stainless steel stem, bronze or nickel coated iron, streamlined disc, and full faced resilient seat designed to eliminate need for flange gaskets.

3.4 DRAIN VALVES

Drains are to be provided from any possible low point in the system and are to consist of 1/4" brass petcocks.

3.5 PRESSURE GAUGES

A compound pressure gauge shall be located on the pump suction and on the discharge manifold for easy reading of the suction vacuum and discharge pressure. Pressure gauges shall be 304 stainless steel case and bezel construction. Gauges shall be 2-1/2" diameter, liquid filled. Pressure sensing connection shall be 1/4" NPT lower gauge connection.

3.6 HYDRAULIC PRESSURE REDUCING VALVE (Must be call for in Technical Specification)

A hydraulic pressure-reducing valve shall provide constant discharge pressure to the irrigation system under varying flow requirements. The valve shall be hydraulically operated, diaphragm actuated, angle pattern. The valve shall be equipped with a strainer for protecting the pilot valve, valve chamber and tubing from debris. The valve shall be equipped with an opening speed adjustment.

3.7 VARIABLE FREQUENCY DRIVE PRESSURE REGULATION (Replaces Pressure Reducing Valve) (Option must be called out in the Technical Specifications)

The variable frequency drive shall be IGBT based with selectable carrier frequency up to 15 KHZ. The VFD shall include terminals for incoming power, motor output power and control terminals.

The VFD shall generate a sine-coded, variable voltage/ frequency, three phase output for optimum speed control. The VFD shall incorporate power loss ride-through for a minimum of 2 seconds. VFD protective features shall include current limit, auto restart, short circuit protection, electronic motor overload protection and ground fault protection. The VFD shall have a push button programming display for easy access to operation parameters. The VFD shall be protected on the primary side by fuses of the appropriate amperage.
Overload capacity: 120% rated output current for one minute. Voltage Fluctuation: +10%, -15%. Sine wave PWM with full range, automatic torque boost. Frequency Control Range: 0.1 to 400Hz. Frequency Accuracy: Digital, 0.01Hz, Analog, .1%. Motor overload protection, Instantaneous Over current of 180% of rated output
current. Over voltage at 820VDC if 460V input. Under voltage: user adjustable. Momentary Power Loss: up to 2 second ride through. Electronic Ground Fault. LED capacitor charge indicator. Input Phase loss alarm. Ambient temperature range of 0 to 50 degrees C. Humidity of 95% non-condensing.

3.8 PRESSURE TRANSDUCER (Required when the VFD option is selected)

A solid state pressure transducer shall provide a noise free, linear output proportional to discharge pressure. Transducer shall be solid-state, strain gauge type with integral voltage regulation and output accuracy not less than 0.25%. Transducer shall be constructed of stainless steel and rated for the pump station discharge pressure called out in the technical specifications.

SECTION 4: ELECTRICAL CONTROLS

4.1 GENERAL PANEL UL FILE NO: **E142155**

The complete control panel assembly shall be built in accordance with the provisions of the National Electrical Code and shall bear the U.L. listing mark for NEMA 1 industrial control panels along with the pump station manufacturers' U.L. panel shop file number.

4.2 MOTOR COMBINATION STARTER-BREAKER

Each motor shall be protected by a MSP combination starter and breaker. Device will be UL 508 Type F. Motor starter protector and contactor are electrically and mechanically linked by means of a link module and adapter plate. All starters are suitable for use in group installation applications according to NEC-430-53(c).

4.3 MAIN STATION DISCONNECT AND FUSING

A three-pole, service rated main station disconnect shall be mounted in a separate NEMA 4 enclosure outside the pump station endosure to completely isolate the pump station electrical system from incoming power. The service disconnect shall not be located inside the pump enclosure.

4.4 PROGRAMMABLE LOGIC CONTROLLER

The pump sequence controller shall be an industrial grade PLC with diagnostic LED for monitoring of discrete inputs and outputs. Not less than two additional analog inputs and outputs shall be standard for monitoring and control purposes. The PLC shall contain two communication ports for monitoring and programming purposes. The PLC shall contain an EEPROM, battery backed RAM and non volatile memory for storage of critical configuration data.

4.5 VARIABLE FREQUENCY DRIVE (VFD)

The variable frequency drive shall be IGBT based with selectable carrier frequency up to 15 KHZ. The VFD shall include terminals for incoming power, motor output power and control terminals. The VFD shall generate a sine-coded, variable voltage/frequency, three-phase output for optimum speed control. The VFD shall incorporate power loss ride-through. VFD protective features shall include current limit, short circuit protection, electronic motor overload protection and ground fault protection. The VFD shall have push button programming display for easy access to operation parameters. VFD must be designed for operation in 50 degree C temperature condition.

4.6 SECONDARY CONTROL CIRCUIT FUSES

Single-pole secondary distribution fuses with appropriate ratings shall supply power to the pump starter coil circuit, the control system and to other circuits as specified.

4.7 FLOW SENSOR

The pump station discharge manifold shall incorporate an insertion type, pulse frequency output flow sensor for continuous output to the pump station controls. The flow sensor output pulse shall be conditioned and fed directly to the PLC interrupt input for conversion and display in Gallons Per Minute and totalize. For accuracy and security considerations, conversion to an analog signal prior to PLC input shall not be accepted. Flow sensor accuracy shall be no less than 2% for flow velocities ranging from 1-30 feet per second.

4.8 NATIONAL ELECTRICAL CODE STANDARDS

Electrical controls shall conform to National Electrical Code Standards and be U.L. listed

4.9 LIGHTNING ARRESTOR

The main power supply to the pump station shall be equipped with a secondary lighting arrestor having a breakdown current rating of not less than 60,000 Amps at 14,000 Volts discharge. Power supplies 300 Volts and less shall use a 300 Volt arrestor with an 800 Volt spark-over Voltage. Power supplies up to 600 Volts shall use a 600 Volt rated arrestor with a 1,000 Volt spark-over Voltage.

4.10 CORROSION INHIBITING MODULES

Corrosion inhibiting modules shall be installed in the main electrical control enclosure in accordance with the manufacture's recommendations.

CONTROL ALARMS:

4.11 LOW DISCHARGE PRESSURE SAFETY SHUTDOWN

Low discharge pressure is to be sensed by the pump starting set point. When the station discharge pressure decreases to this point and maintains a start signal for the time called out in the Technical Specifications, the pumps will be de-energized and remain so until the circuit is manually reset. The operator interface shall illuminate to indicate a low discharge pressure shutdown has occurred.

4.11(a) HIGH DISCHARGE PRESSURE SAFETY SHUTDOWN

High discharge pressure is to be sensed by the pump starting set point. When the station discharge pressure increases to this point and maintains a start signal for the time called out in the Technical Specifications, the pumps will be de-energized and remain so until the circuit is manually reset. The operator interface shall illuminate to indicate a high discharge pressure shutdown has occurred.

4.12 VFD FAULT ALARM (Option required with VFD control system)

The operator interface shall illuminate to indicate a VFD shut off fault. Manual reset required.

SECTION 5: MOUNTING BASE & ENCLOSURE

5.1 MOUNTING BASE

Construction shall include a fabricated steel base assembly to support all components during shipping and to serve as the installed mounting base. Pump station base shall be formed from a single sheet of 1/4" plate resulting in a seamless, one-piece base with rounded edges and corners. The base shall be strategically reinforced beneath as required to provide additional support and strength. Standard base dimensions are 50" long, 34" wide, 3 1/2" high. The base shall be drilled and tapped allowing the pump and manifold to be secured to the base. The exterior of the base will be drilled to accept anchoring bolts. The base shall be shot blasted to bare metal prior to the painting process.

PUMP CONTROL SYSTEM SPECIFICATIONS

NO.	DATE	DESCRIPTION	DR/APP

REVISIONS

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CONSULTING ENGINEERS
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(772) 567-5300 / FAX (772) 794-1106
CERTIFICATE OF AUTHORIZATION NUMBER 4204

HOBART PARK
BASEBALL FIELD IMPROVEMENTS

INDIAN RIVER COUNTY FLORIDA

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STEPHEN E. MOLER, P.E. FL#33193

DRAWN	MC
DESIGNED	MC
CHECKED	SEM
DATE	11/18
SCALE	NO SCALE
SHEET	10 OF 10
PROJECT NO.:	1756

PROPOSED

CONCESSION & RESTROOM BUILDING

HOBART PARK, INDIAN RIVER COUNTY, FLORIDA

March 11, 2024

BID SET

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MECH., ELEC. & PLUMBING ENGINEER

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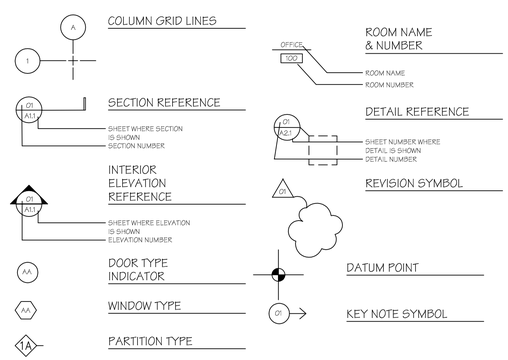
ARCHITECTURAL SYMBOLS



INDEX OF DRAWINGS

I/O	Dwg. No	Drawing Name
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ARCHITECTURAL DRAWINGS

I/O	Dwg. No	Drawing Name
☒	A1.10	LIFE SAFETY PLAN & CODE REVIEW
☒	A2.10	FLOOR PLAN & REFLECTED CEILING PLAN
☒	A2.20	ROOF PLAN & ROOF DETAILS
☒	A2.30	ENLARGED PLANS & INTERIOR ELEVATIONS
☒	A3.10	EXTERIOR ELEVATIONS
☒	A4.10	SECTIONS
☒	A6.10	FINISH & DOOR SCHEDULES AND DOOR & WINDOW DETAILS

STRUCTURAL DRAWINGS

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☒	S-1	FOUNDATION PLAN, ROOF FRAMING PLAN, SECTIONS & DETAILS
☒	S-2	TYPICAL SECTIONS & DETAILS, SCHEDULES & GENERAL NOTES

MECHANICAL DRAWINGS

I/O	Dwg. No	Drawing Name
☒	M1.1	MECHANICAL PLAN

ELECTRICAL DRAWINGS

I/O	Dwg. No	Drawing Name
☒	E1.1	LIGHTING PLAN & ELECTRICAL PLAN
☒	E1.2	ELECTRICAL SCHEDULES & ONE-LINE
☒	E1.3	ELECTRICAL DETAILS

PLUMBING DRAWINGS

I/O	Dwg. No	Drawing Name
☒	P1.1	PLUMBING PLAN

CODE REVIEW FOR HOBART PARK CONCESSION & RESTROOM BUILDING, VERO BEACH, FLORIDA

ARCHITECT'S PROJECT #2018-04/2.0

DATE: March 17, 2021

SCOPE OF WORK

The Project involves construction of a Single Story, 1,056 sq. ft. Building consisting of a Concession Area, Male and Female Toilet Rooms, Janitor's Closet, Storage and Electrical Room. The construction will be Concrete Slab CMU Walls with Stucco Finish, Pre-engineered Wood Trusses, CDX Plywood Sheathing, Peel/Stick Membrane and Standing Seam Metal Roof Panels.

CODE REFERENCES

Florida Building Code 2020 - Building
Florida Building Code 2020 – Accessibility
Florida Building Code 2020 - Plumbing
Florida Fire Prevention Code 7th Edition

CODE REVIEW

1) **USE AND OCCUPANCY CLASSIFICATION**
FBC CH.3; FBC 309 – MERCANTILE GOUP M
NFPA 101; 36.1.2.
1

2) **SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY**
FBC CH.4
N/A

3) **GENERAL BUILDING HEIGHTS AND AREAS**
FBC CH.5

I) **Building Height and Number of Stories**
FBC 504, FBC TABLE 504.3
Maximum Building height permitted = 40'
Actual Building height = 15'

II) **Allowable Number of Stories above Grade Plane**
FBC TABLE 504.4
Maximum number of Stories permitted = 1
Actual number of Stories = 1

III) **Building Area**
FBC TABLE 506.2
Maximum area permitted = 9,000 sq. f
Actual Building area = 999 sq. f

4) **TYPES OF CONSTRUCTION** 1
FBC CH.6; 602.5 -TYPE V (B); NFPA 220; TYPE III (200); NFPA 101; 36.1.6.

I) **Fire-Resistance Rating Requirements for Building Elements (Hours)**
FBC TABLE 601
a) Primary Structural Frame = 0
b) Bearing Walls (Exterior) (Type D-2 Block)
Exterior = 2
Interior = 0
c) Nonbearing Interior Walls/Partitions = 0
d) Roof Construction = 0

II) **Fire Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance (Hours)**
FBC TABLE 602;
North, South, East and West > 30' = 0

5) **FIRE AND SMOKE PROTECTION FEATURES**
FBC CH.7

I) **Exterior Walls**
FBC 705; 705.2
The only Projection from exterior walls is the 2'-0" Eaves overhang.

II) **Maximum Area of Exterior Wall Openings Based on Fire-Separation Distance and Degree of Opening Protection**
FBC TABLE 705.8
North, South, East & West > 30' = No Limit

III) **Concealed Spaces**
FBC 718

I) **Draftstopping in Attics**
FBC 718.4.3
Roof area 1,056 sq. ft. < 3,000 sq. ft. – Draftstopping not required.

6) **INTERIOR FINISHES** 1
FBC CH.8; FBC TABLE 803.11; NFPA 101; 36.3.3.2..
All Room finishes to comply with the Schedule below:

Mercantile Occupancy Group "M"		
Interior Exit Stairways Interior Exist Ramps and Passageways	Corridors and Enclosures for Exit Access Stairways and Ramps	Rooms and Enclosed Spaces
		C

Class C – Flame Spread Index – 76-200;
Smoke Developed Index – 0-450

I) **Interior Floor Finish** 1
FBC 804; 804.4.2; NFPA 101; 36.3.3.3.2
The minimum Critical Flux for all finishes to be Class II.

7) **FIRE PROTECTION SYSTEMS**
FBC CH.9; 903.2.7; NFPA 101; 36.3.5
Not Required
1

I) **Portable Fire Extinguishers** 1
II) **FBC 906; 906.1; NFPA 101; 36.3.5.3**
See Life Safety Plans for locations.

III) **Fire Alarm and Detection Systems**
IV) **FBC 907; 907.2.7; NFPA 101; 36.3.4**
Not Required
1

8) **MEANS OF EGRESS** 1
FBC CH.10; NFPA 101; 36.2

I) **General Means of Egress**
FBC 1003; 1003.2
The Ceiling height in all Means of Egress will be 9'-2" > 7'-6"

II) **Occupant Load** 1
FBC TABLE 1004.5; NFPA 101; 36.1.7

Concession Area Only
13.33' x 14' = 187 sq. ft. ÷ 60 = 4 Occupants
Bleachers
Bleacher Capacity = 300 Occupants
2

III) **Means of Egress Sizing** 1
FBC 1005.3.2; NFPA 101; 36.2.3
Minimum Egress width required (Concessions) 4 x 0.2" = 0.8"
Minimum Egress width provided (Concessions) 1 x 36" = 36"

IV) **Number of Exits and Exit Access Doorways**
FBC 1006
a) **Space with one Exit or Exit Access Doorway**
FBC TABLE 1006.2.1; NFPA 101; 36.2.4.
Occupant Load = 4 < 49; maximum common path of Travel 19' > 75'
Single Exit Permitted.

V) **Means of Egress Illuminations**
FBC 1008; NFPA 101.

a) **Illumination Required**
FBC 1008.2; NFPA 101; 36.2.8
The Means of Egress, including Exit Discharge, will be illuminated at all times during Building Occupancy.

b) **Illumination Level**
FBC 1008.2.1
Means of Egress Illumination Level shall not be less than 1 Footcandle (11 LUX) at the walking surface.

c) **Emergency Power for Illumination**
FBC 1008.3; NFPA 101; 36.2.9
An Emergency Power Supply will be provided to illuminate all Means of Egress components. The Emergency Supply will provide Power for a minimum of 90 minutes and will consist of Storage Batteries, Unit Equipment or an on-site Generator.

VI) **Accessible Means of Egress**
FBC 1009; FBC 2020 – Accessibility.

a) **Toilet Facilities and Bathing Facilities**
FBC 213; 603
The Toilet Rooms meet the ADA required Standards in terms of Fixture Clear Floor Space, Turning Circles and Accessible Route.

b) **Doors, Doorways and Gates**
FBC 404
All Doors meet the required maneuvering clearances for approach.

c) **Drinking Fountains**
FBC 211
Combination "Hi-Lo" Drinking Foundation provided.

VII) **Doors, Gates and Turnstiles** 1
FBC 1010.1.1; NFPA 101; 36.2.2.2
Minimum Clear Width of Doors Allowed = 32"
Minimum Width Provided = 36"
All Doors will be no less than 80" in Height.

a) **Door Swing** 1
FBC 1010.1.2; NFPA 101.
All Egress Doors are side hinged and swing in the Direction of Travel.

b) **Doors, Gates and Turnstiles** 1
FBC 1010.1.3; NFPA 101; 36.2.2.2.
All interior side-swinging doors (without closers) to comply with the following prescribed forces:
1) A maximum 5lb (22N) force shall swing door fully open.
2) A 15lb (67N) force shall release a latch.
3) A 30lb (133N) force shall set door in motion.

VIII) **Exit Signs**
FBC 1013
All exit access doors to be marked with an exit access sign.

IX) **Exit Access** 1
FBC 1016; NFPA 101.
All required Egress points go directly to the Building exterior without having to go through intervening spaces.

X) **Exit Access Travel Distance** 1
FBC Table 1017.2; NFPA 101; 36.2.6.1
Maximum Travel Distance to an Exit Permitted = 150'
Actual Maximum Travel Distance to Exit Door = 25'
1

XI) **Exit Discharge** 1
FBC 1028.1; NFPA 101; 36.2.7
All required Exits are continuous and discharge directly to the Building exterior.

9) **MINIMUM PLUMBING FIXTURE COUNT**
FBC TABLE 403.1 Mercantile Group M
Occupant Count = 304
Male: 152
Female: 152
2
Water Closets: 1 per 500 Male/Female;
Lavatories: 1 per 750 Male/Female;
Drinking Fountains: 1 per 1,000;
Service Sink = 1

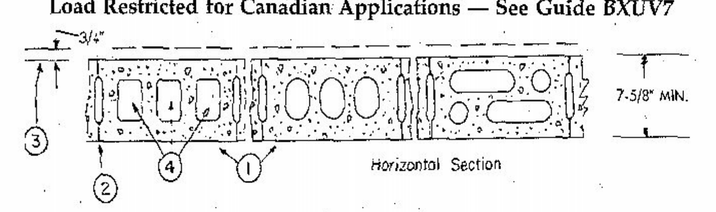
MINIMUM PLUMBING FIXTURES COUNTY	WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS		SERVICE SINKS	
	Required	Provided	Required	Provided	Required	Provided	Required	Provided
Male	1	2 + 2 Urinals	1	3	1	1	1	1
Female	1	4	1	3				

Note: The NUMBER OF Water Closets provided for Male/Female will serve a population of (8 x 500) = 4,000 Occupants.
2

DESIGN PRESSURE / OPENING SCHEDULE

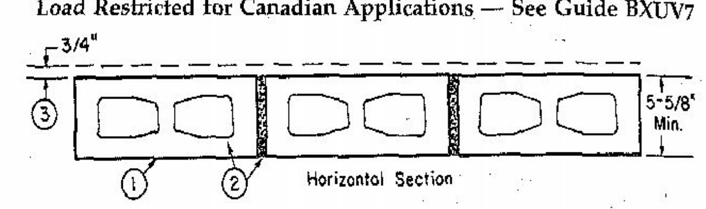
DOOR #		PRESSURES +	PRESSURES -	MANUFACTURER	NOA # OR PRODUCT APPROVAL #
101		49	53.6	STEELCRAFT	01-1203.11
102		49	53.6	STEELCRAFT	01-1203.11
103		49	53.6	STEELCRAFT	01-1203.11
104		49	53.6	STEELCRAFT	01-1203.11
105		49	53.6	STEELCRAFT	01-1203.11
106		49	53.6	STEELCRAFT	01-1203.11
WINDOW#					
A		90	90	YKK	FL 14218.6
B		90	90	CORNELL	FL 17419
ROOFING					
STANDING SEAM		0	70	ENGLERT SERIES 2000	NOA NO. 16-0518.05

Design No. U905
Bearing Wall Rating — 2 HR.
Nonbearing Wall Rating — 2 HR
Load Restricted for Canadian Applications — See Guide BXUV7



1. **Concrete Blocks*** — Various designs. *Classification D-2 (2 hr).* See **Concrete Blocks** category for list of eligible manufacturers.
less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. **Portland Cement Stucco or Gypsum Plaster** — Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).
4. **Loose Masonry Fill** — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.
5. **Foamed Plastic*** — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
THE DOW CHEMICAL CO —Type Thermax
*Bearing the UL Classification Mark

Design No. U906
Bearing Wall Rating — 2 HR.
Nonbearing Wall Rating — 2 HR.
Load Restricted for Canadian Applications — See Guide BXUV7

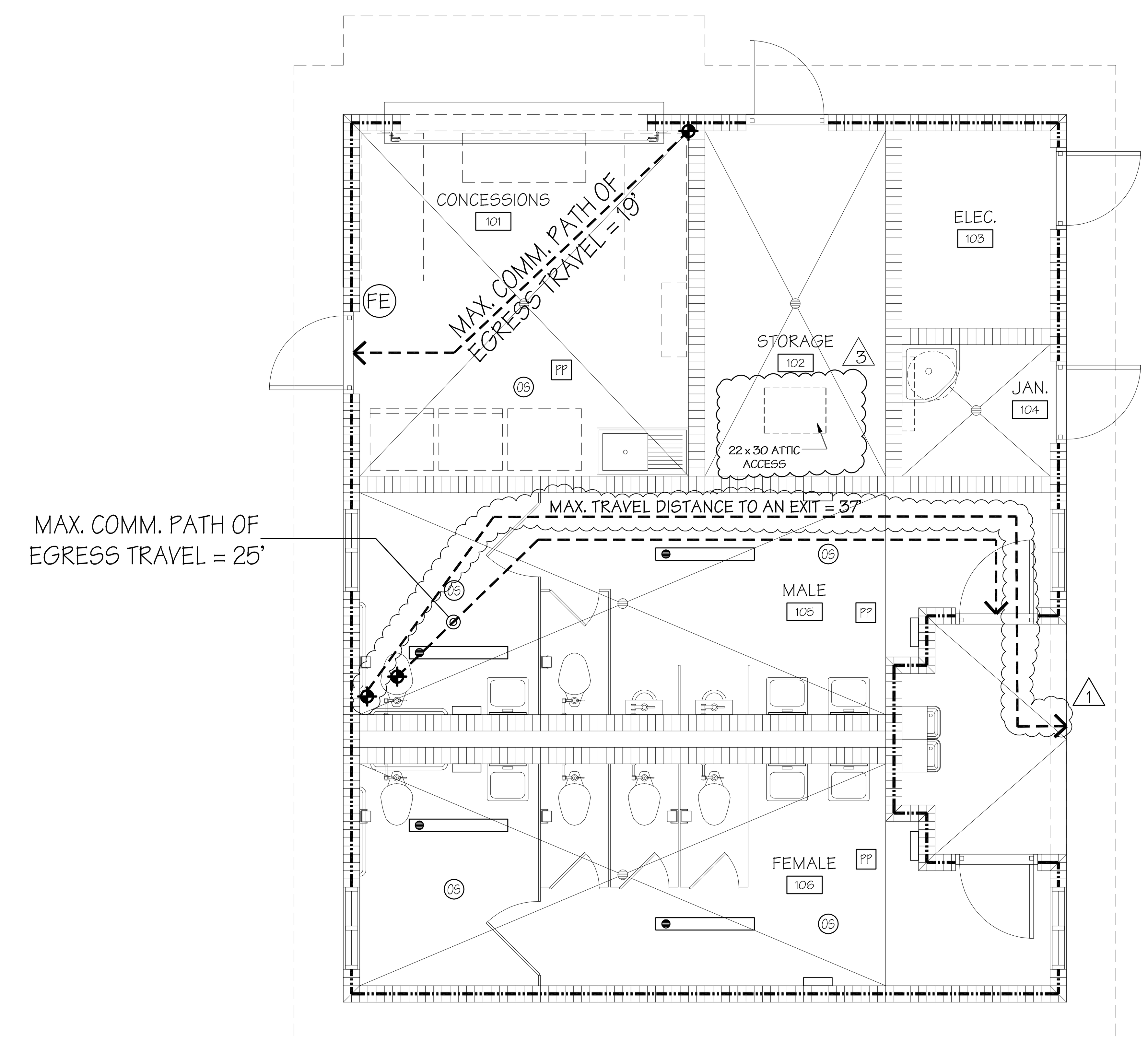


1. **Concrete Blocks*** — Nominal 6 by 8 by 16 in, hollow or solid. *Classification D-2 (2 hr).*
ANCHOR CONCRETE PRODUCTS INC
GAGNE & SON CONCRETE BLOCK INC
Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method.
OLDCASTLE APG NE DBA ARTHUR WHITCOMB
WESTBROOK CONCRETE BLOCK CO INC
Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with the empirical design method.
2. **Mortar** — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. **Portland Cement Stucco or Gypsum Plaster** — Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).
4. **Foamed Plastic*** — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
THE DOW CHEMICAL CO —Type Thermax
*Bearing the UL Classification Mark

UL DESIGN NO. U905 / U906

LIFE SAFETY LEGEND

SURFACE MOUNTED 1 X 4 LED FIXTURE WITH INTEGRAL BATTERY PACK
(FE) FIRE EXTINGUISHER (WALL MOUNTED) (TYPE 2-A-10B:C)
(OS) CEILING MOUNTED SENSOR
[PP] POWER PACK
- - -> MAXIMUM TRAVEL DISTANCE



01 LIFE SAFETY PLAN
Scale: 1/4"=1'-0"

Project:
HOBART PARK
CONCESSION & RESTROOM BUILDING
INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	12.04.18	FINAL DOCUMENTS
B.	3.26.21	PERMIT DRAWINGS
C.	4.15.21	NFPA 101 REVISED 1
D.	6.7.21	PERMIT COMMENTS 2
G.	10.03.23	PERMIT RE-SUBMISSION
H.	10.24.23	B.DEPT. RESPONSE 3
I.	03.11.24	BID SET

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Consultant:

Drawing Title:
LIFE SAFETY PLAN & CODE REVIEW

Reference North
N

Drn: Dwg. File:
Chd: JEL A.J.D. XREF File:
Project No.: 2018-04 Plot File:
Sheet No.:

Cert. No.: 12,456
Date Signed:

A1.10 1 2

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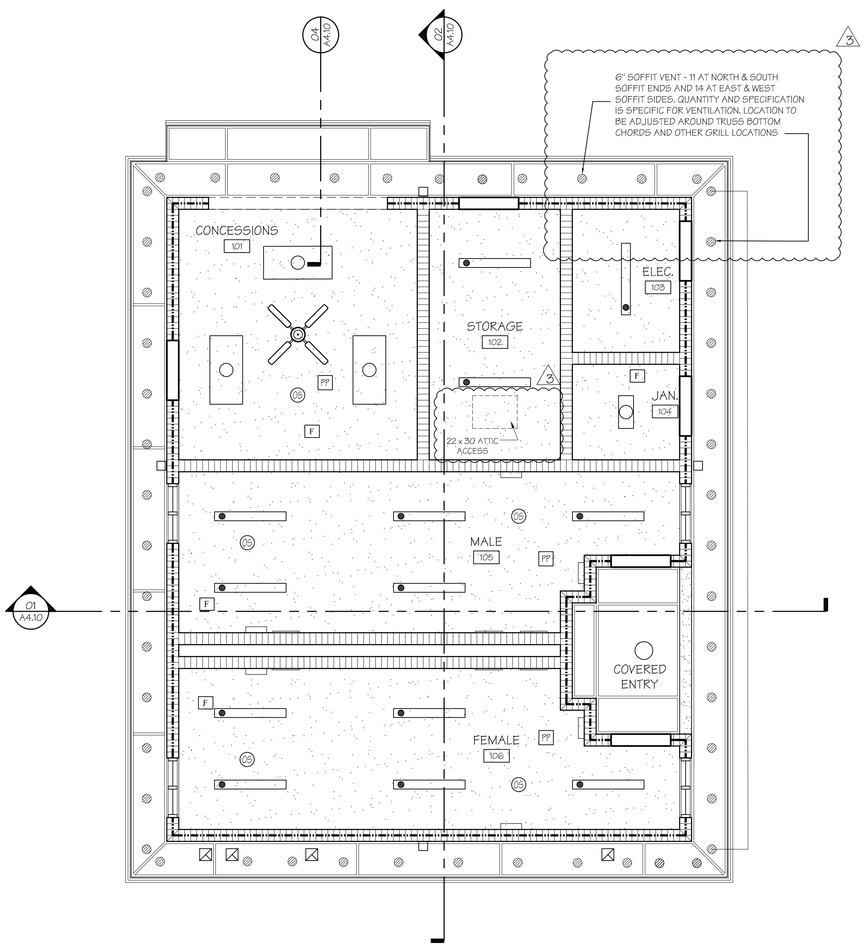
REFLECTED CEILING LEGEND

- GYPSUM WALLBOARD CEILING
- FIBER CEMENT SOFFIT PANELS AND PAINTED WOOD BATTENS
- SURFACE MOUNTED LED FIXTURE
- SURFACE MOUNTED 1 X 4 LED FIXTURE
- SURFACE MOUNTED 1 X 2 LED FIXTURE
- SURFACE MOUNTED 2 X 4 LED FIXTURE
- LED WALL PACK FIXTURE
- CEILING FAN
- OS — CEILING MOUNTED SENSOR
- PP — POWER PACK
- F — EXHAUST FAN
- SOFFIT EXHAUST GRILLE
- SOFFIT VENT (3)

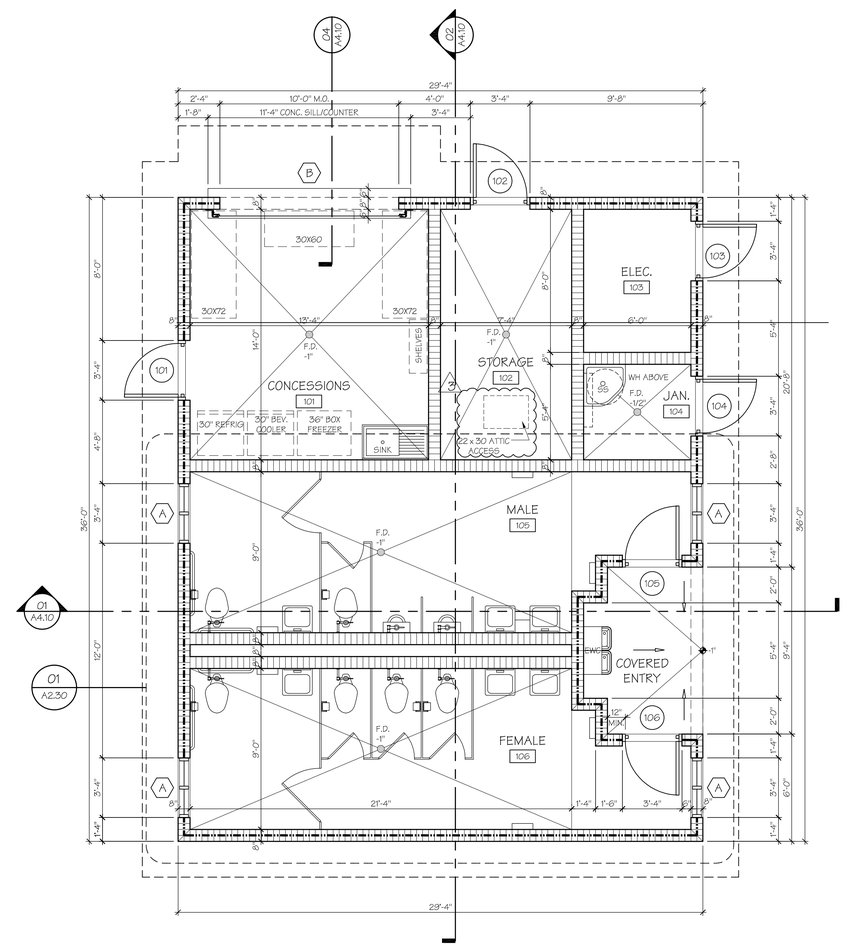


02 REFLECTED CEILING PLAN

Scale: 1/4"=1'-0"

WALL LEGEND

- EXTERIOR 2-HR FIRE-RATED MASONRY WALL
  8" CMU WITH MIN. 5/8" EXTERIOR STUCCO AND FOAM-FILLED CELLS, (USE CMU WITH A D-2 CLASSIFICATION AND CONSTRUCT PER UL DESIGN U905 OR U906) - SEE STRUCT. DWGS. FOR MASONRY WALL REINFORCING & TIE REQUIREMENTS.
- INTERIOR NON-RATED MASONRY WALL
  8" CMU - SEE STRUCT. DWGS. FOR MASONRY WALL REINFORCING & TIE REQUIREMENTS.



01 FLOOR PLAN

GROSS SQUARE FOOTAGE = 999 G.S.F.

Scale: 1/4"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	01.30.18	CLIENT REVIEW
B.	02.20.18	CLIENT REVIEW
C.	02.22.18	CLIENT REVIEW
D.	05.15.18	SPA SUBMISSION
E.	12.04.18	FINAL DOCUMENTS
F.	3.26.21	PERMIT DOCUMENTS
G.	10.04.23	BLDG. PERMIT RESUBMITTAL
H.	10.24.23	B.DEPT. RESPONSE (3)
I.	03.11.24	BID SET

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Consultant:

Drawing Title:

FLOOR PLAN &
REFLECTED CEILING PLAN

Reference North
N

Drn:	Dwg. File:
Chk: JEL	XREF File:
A.J.D.	
Project No.: 2018-04	Plot File:
Sheet No.:	

Cert. No.: 12,456

Date Signed:

A2.10

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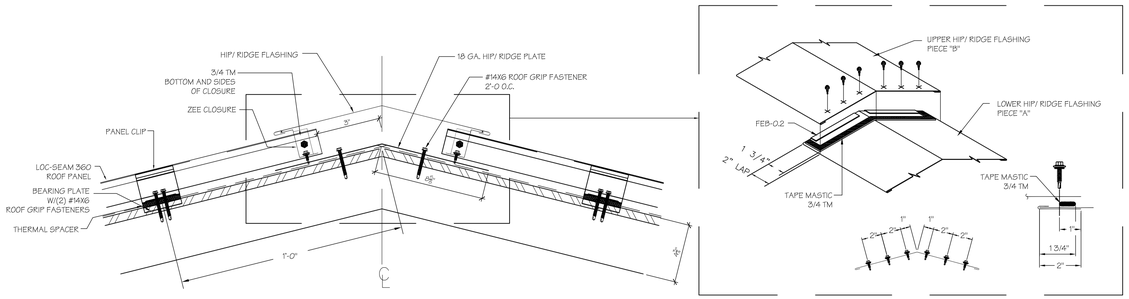
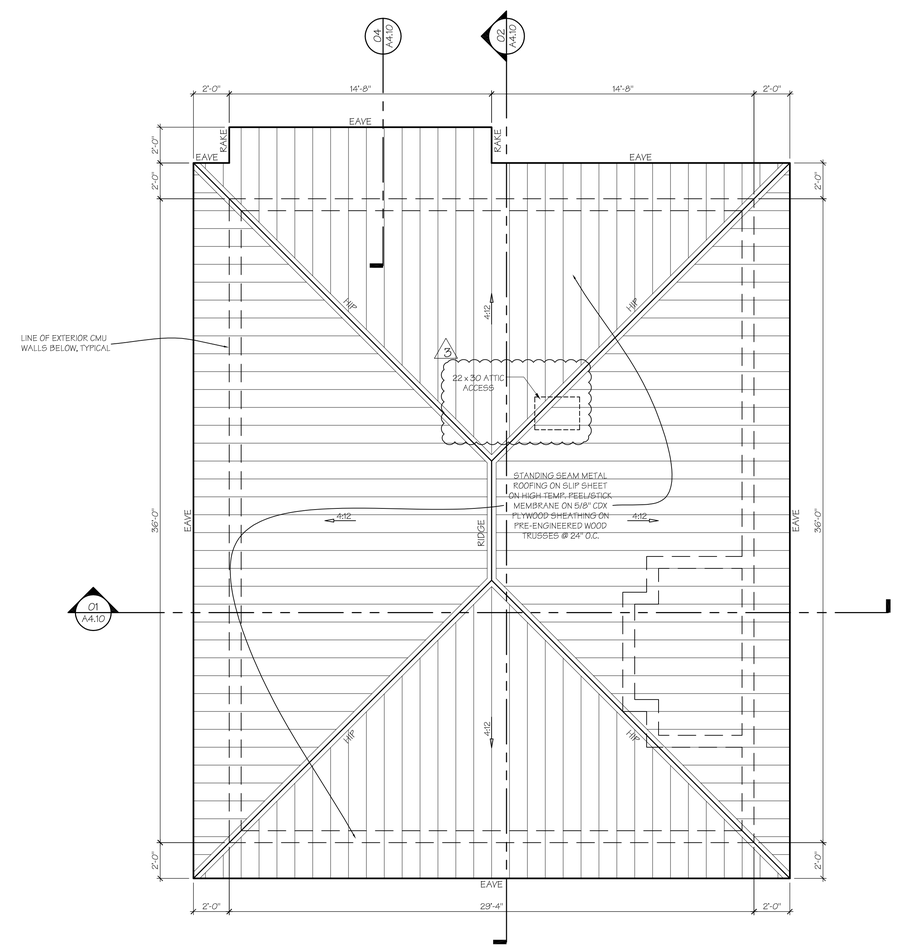


HOLES MUST BE DRILLED PRIOR TO APPLYING MASTIC. TEMPORARILY LAP PIECE "B" OVER PIECE "A". PRE-DRILL THE REQUIRED NUMBER OF 1/4 Ø HOLES THROUGH BOTH PIECES OF RIDGE FLASHING BUT NOT BACKUP FLASHING. SLIDE PIECE "B" BACK AND APPLY TAPE MASTIC AND BACKUP FLASHING ON PIECE "A" AS SHOWN. LAP PIECE "B" OVER PIECE "A" BEING CAREFUL TO ALIGN HOLES. INSTALL ROOF FASTENERS AS SHOWN. CONTINUE PROCESS ALONG HIP.

02 TYPICAL HIP/RIDGE DETAIL

SCALE: N.T.S.



01 ROOF PLAN

Scale: 1/4"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	12.04.18	FINAL DOCUMENTS
B.	3.26.21	PERMIT DOCUMENTS
G.	10.03.23	PERMIT RE-SUBMITTAL
H.	10.24.23	B.DEPT. RESPONSE 3
I.	03.11.24	BID SET

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Consultant:

Drawing Title:

ROOF PLAN &
ROOF DETAILS

Reference North
N

Drn: Dwg. File:
Chd: S.M. A.J.D. XREF File:
Project No.: 2018-04 Plot File:
Sheet No.:

Cert. No.: 12,456

Date Signed:

A2.20

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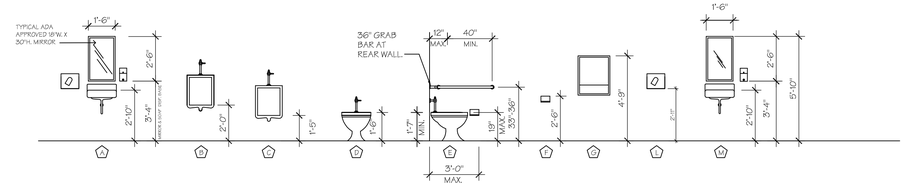
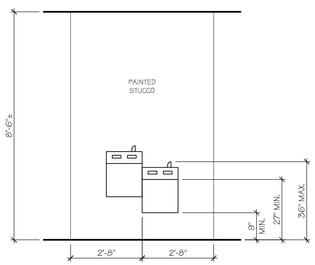


- (A) ADA APPROVED ACCESSIBLE BATHROOM ACCESSORIES: FRAMED MIRROR, LAV., SOAP DISP., ELECTRIC HAND DRYER - AS INDICATED IN DRAWINGS & SPECIFICATIONS
- (B) URINAL
- (C) ACCESSIBLE URINAL
- (D) WATER CLOSET
- (E) ACCESSIBLE WATER CLOSET WITH GRAB BARS AND TOILET TISSUE DISPENSER
- (F) SURFACE MOUNTED TOILET TISSUE DISPENSER, REFER TO SPECIFICATIONS
- (G) SANITARY NAPKIN DISPENSER (NOT USED)
- (H) SURFACE MOUNTED ELECTRIC HAND DRYER
- (I) WALL MOUNTED LAVATORY, FRAMED MIRROR AND SOAP DISPENSER

GENERAL NOTES:

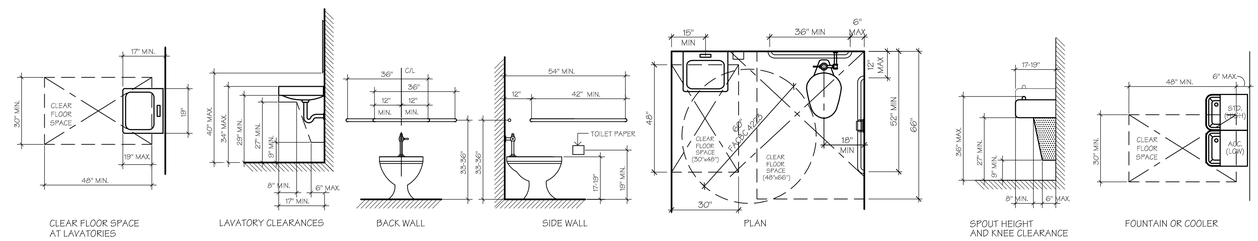
1. REFER TO FIXTURE AND ACCESSORY LEGEND FOR MOUNTING HEIGHTS (THIS SHEET)
2. PROVIDE SURFACE MOUNTED TOILET TISSUE DISPENSER IN ALL TOILET STALLS.
3. GROUT AROUND ALL WALL PENETRATIONS AFTER INSTALLATION OF RESTROOM FIXTURES AND EQUIPMENT, AND PROVIDE CAULKING AS NECESSARY.
4. LOCATE SHUT-OFF VALVES ACCESS PANELS UNDERNEATH LAVATORY COUNTERS. PAINT TO MATCH WALL TILE FINISH AND CAULK PERIMETER OF PANEL (COLOR TO MATCH GROUT.)
9. CONTRACTOR SHALL CAULK PERIMETER OF TOILET ACCESSORIES.
10. HOT WATER AND DRAIN PIPES UNDER LAVATORIES OR SINKS SHALL BE INSULATED OR OTHERWISE PROTECTED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES OR SINKS.
11. THE STRUCTURAL STRENGTH OF GRAB BARS AND SHOWER SEATS SHALL BE DESIGNED AND SUPPORTED AS TO WITHSTAND A LOAD OF NOT LESS THAN 250 POUNDS APPLIED AT ANY POINT, DOWNWARD OR HORIZONTALLY.
12. ALL TOILET PARTITIONS ARE TO BE 6'-10" A.F.F. TO TOP OF HEADRAIL, 5'-10" A.F.F. TO THE TOP OF PANEL AND 1'-0" A.F.F. TO THE BOTTOM OF PANEL.
13. PRIVACY PANELS BETWEEN URINALS TO BE 4'-8" A.F.F. TO THE TOP OF PANEL AND 1'-2" A.F.F. TO THE BOTTOM.

02 TYPICAL TOILET FIXTURE VERTICAL DIMENSIONS AND ACCESSORY LEGEND



03 WATER COOLER ELEVATION

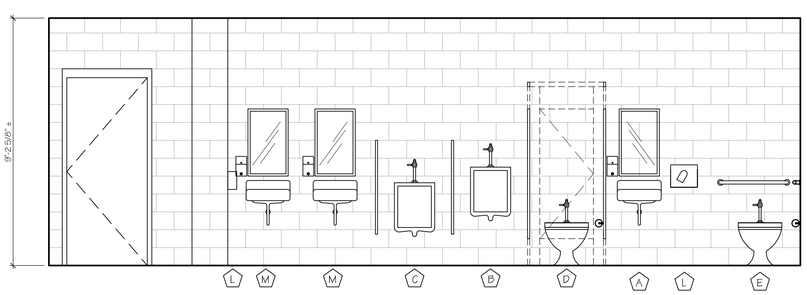
Scale: 3/8"=1'-0"



CLEAR FLOOR SPACE AT LAVATORIES | LAVATORY CLEARANCES | BACK WALL | SIDE WALL | PLAN | SPOUT HEIGHT AND KNEE CLEARANCE | FOUNTAIN OR COOLER

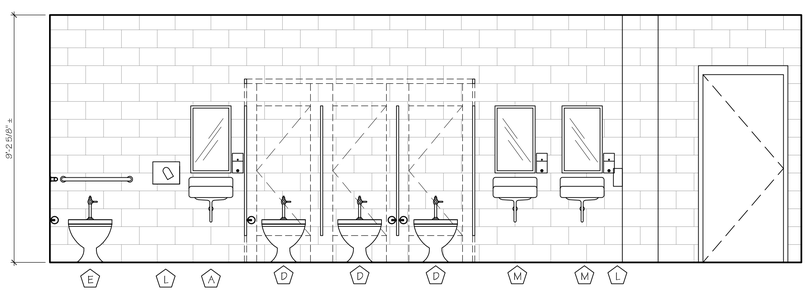
LAVATORIES | GRAB BARS AT WATER CLOSETS | BI-LEVEL DRINKING FOUNTAIN

04 ADA DETAILS



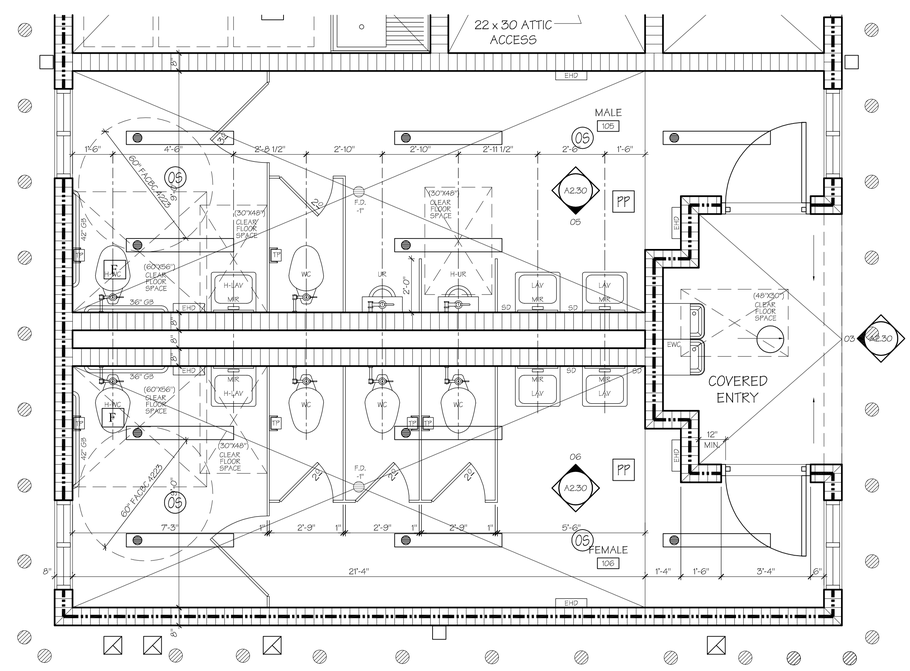
05 MALE #105

Scale: 3/8"=1'-0"



06 FEMALE #106

Scale: 3/8"=1'-0"



01 ENLARGED PLAN - MALE #105 & FEMALE #106

Scale: 3/8"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	12.04.18	FINAL DOCUMENTS
B.	3.26.21	PERMIT DOCUMENTS
C.	03.11.24	BID SET

Architect:

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Consultant:

Drawing Title:

ENLARGED PLAN & INTERIOR ELEVATIONS

Reference North

N

Dm: | Dwg. File:
Chd: S.M. A.J.D. | XREF File:
Project No.: 2018-04 | Plot File:
Sheet No.:

Cert. No.: 12,456

Date Signed:

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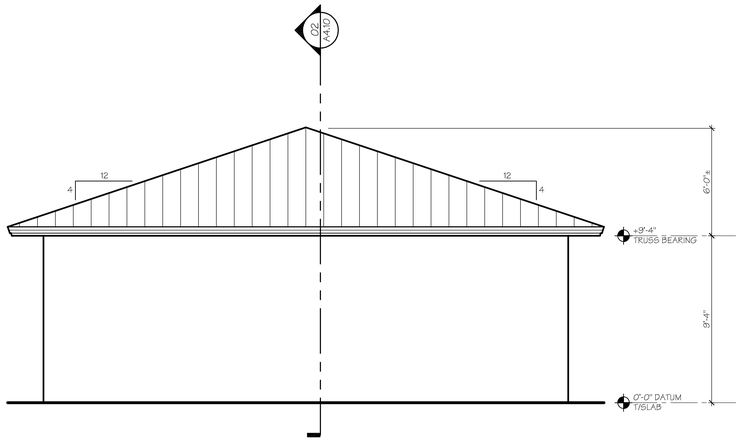
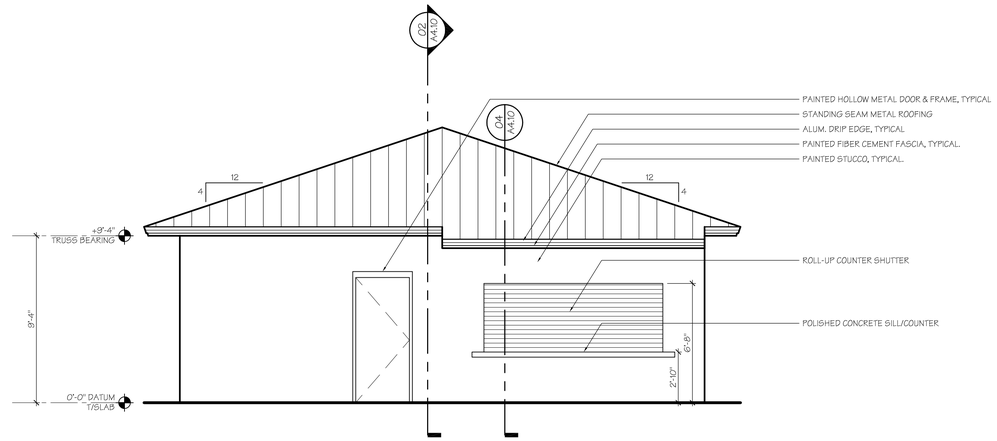


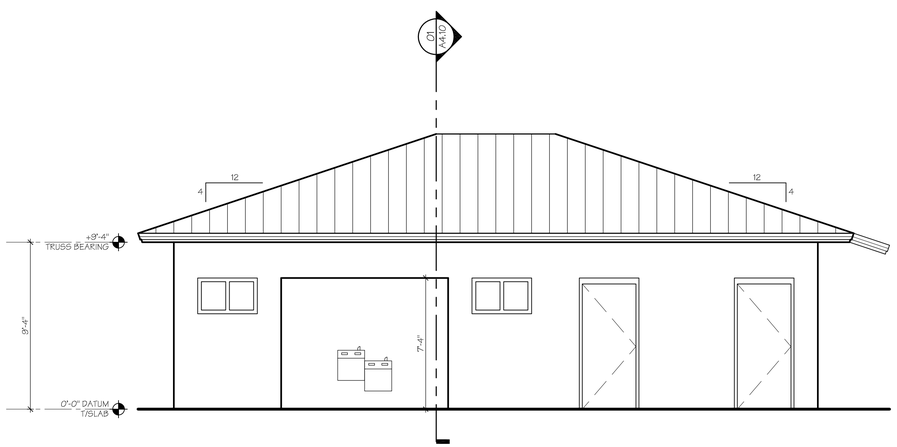
01 SOUTH ELEVATION

1/4" = 1'-0"



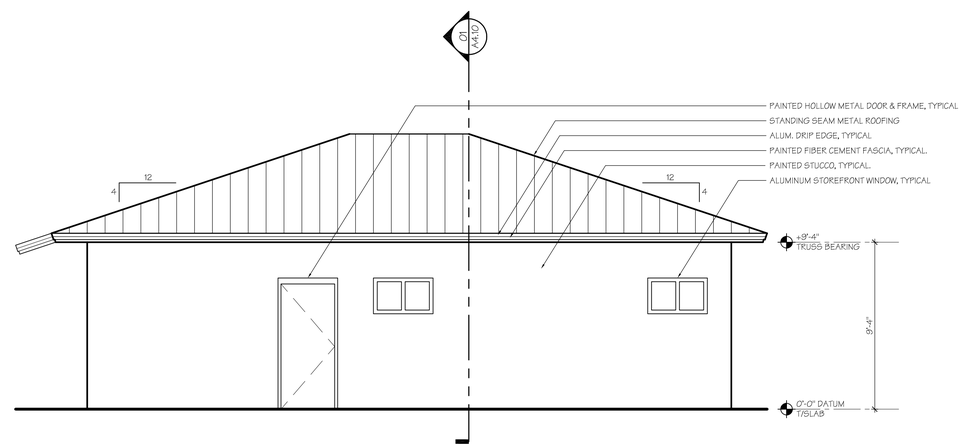
02 NORTH ELEVATION

1/4" = 1'-0"



03 EAST ELEVATION

1/4" = 1'-0"



04 WEST ELEVATION

1/4" = 1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	01.30.18	CLIENT REVIEW
B.	05.15.18	SPA SUBMISSION
C.	12.04.18	FINAL DOCUMENTS
D.	3.26.21	PERMIT DOCUMENTS
E.	03.11.24	BID SET

Architect:

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Consultant:

Drawing Title:

EXTERIOR ELEVATIONS

Reference North
N

Drn:
Dwg. File:
Chd: S.M. A.J.D.
XREF File:
Project No.: 2018-04
Plot File:
Sheet No.:

Cert. No.: 12,456

Date Signed:

A3.10

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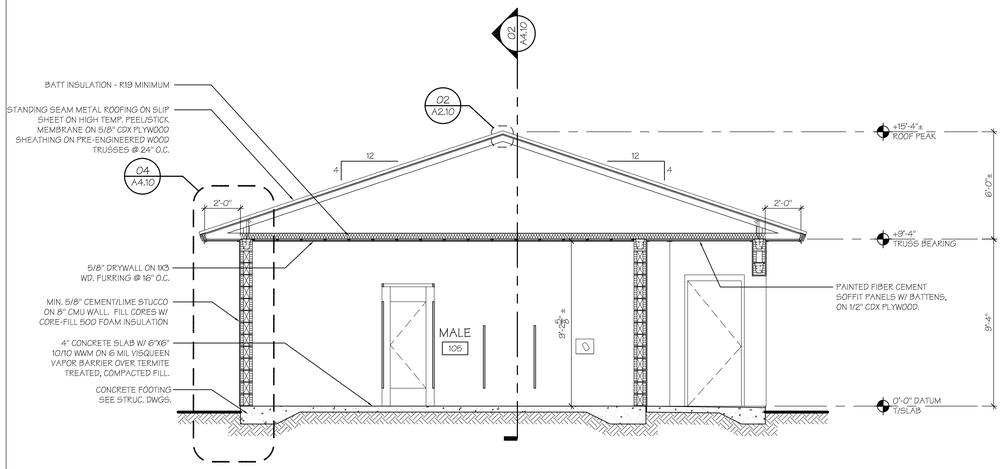
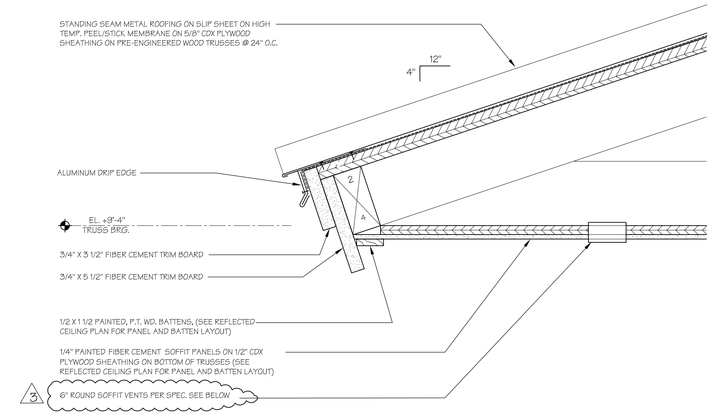


01 BUILDING SECTION

1/4" = 1'-0"

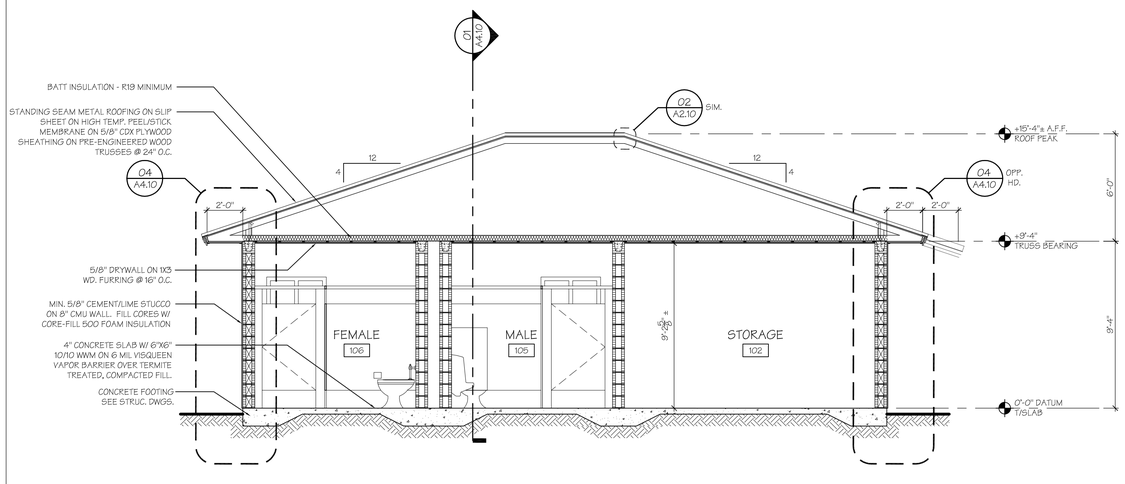


05 EAVE DETAIL

3" = 1'-0"

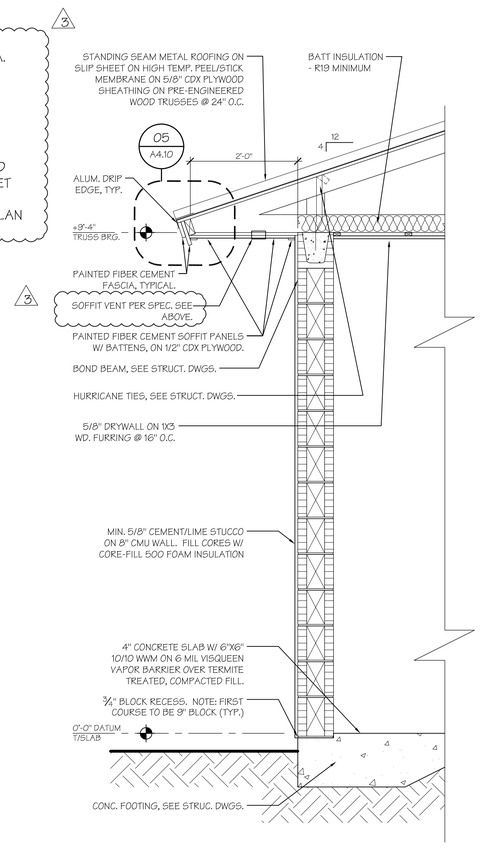
ROOF ATTIC VENTILATION:
1 S.F. VENTILATION PER EA. 150 S.F. OF ATTIC AREA.
ATTIC AREA = 1333 S.F./ 150 S.F = 8.8 S.F.
8.8 X 144 = 1268 SQ.INCHES
6" Ø SOFFIT VENTS = 25.58 SQ. INCHES
1268 / 25.58 = 50 VENTS TOTAL.

SOFFIT SPECS:
'FAMCO' UNDER EAVE VENTS- UEV6 - 6" ROUND POLYPROPYLENE VENT IN WHITE WITH 25.58 NET FREE AREA.
ALSO SEE SHEET A2.10 REFLECTED CEILING PLAN



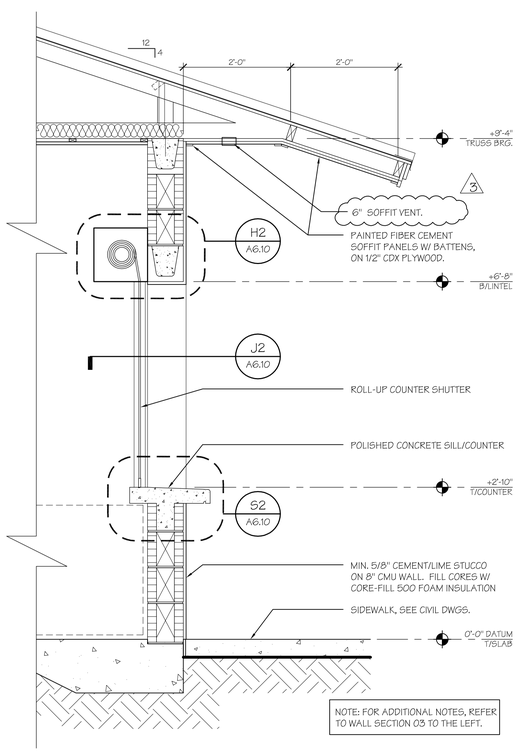
02 BUILDING SECTION

1/4" = 1'-0"



03 WALL SECTION

3/4" = 1'-0"



04 WALL SECTION

3/4" = 1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

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B.	3.26.21	PERMIT DOCUMENTS
G.	10.03.23	PERMIT RE-SUBMITTAL
H.	10.24.23	B.DEPT RESPONSE 3
I.	03.11.24	BID SET

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Consultant:

Drawing Title:

SECTIONS

Reference North
N

Drn:	Dwg. File:
Chd: S.M. A.J.D.	XREF File:
Project No.: 2018-04	Plot File:
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Cert. No.: 12,456

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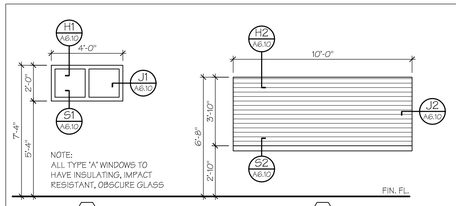
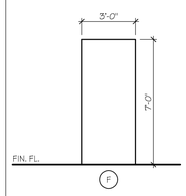


A — YKK YHS 50, 2 1/2" X 5" IMPACT RESISTANT STOREFRONT OR APPROVED EQUAL

B — CORNELLCOOKSON IMPACT RESISTANT STAINLESS STEEL ROLL UP SHUTTER OR APPROVED EQUAL

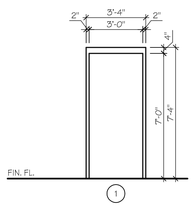
01 WINDOW TYPES

Scale: 1/4"=1'-0"



02 DOOR TYPES

Scale: 1/4"=1'-0"



03 FRAME TYPES

Scale: 1/4"=1'-0"

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR MATERIAL	BASE MATERIAL	WALL NORTH MATERIAL	WALL NORTH FINISH	WALL SOUTH MATERIAL	WALL SOUTH FINISH	WALL EAST MATERIAL	WALL EAST FINISH	WALL WEST MATERIAL	WALL WEST FINISH	CEILING MATERIAL	CEILING FINISH	CEILING HEIGHT	REMARKS	ROOM NUMBER
FIRST FLOOR																
101	CONCESSIONS	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	8'-0"		101
102	STORAGE	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	9'-2 5/8"		102
103	ELECTRICAL ROOM	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	9'-2 5/8"		103
104	JANITOR	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	9'-2 5/8"		104
105	MALE	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	9'-2 5/8"		105
106	FEMALE	EPF	EPB	CMU	EPP	CMU	EPP	CMU	EPP	CMU	EPP	GYP	PNT	9'-2 5/8"		106
			1													

FLOOR
- LIN -LINOLEUM
- CT -CERAMIC TILE
- CMT -CERAMIC MOSAIC TILE
- CPT -CARPET
- SLC -SEALED CONCRETE
- WDF -WOOD FLOOR
- VCT -VINYL COMPOSITION TILE
- EPF -EPOXY FLOORING

BASE
- RB -RUBBER BASE
- WB -WOOD BASE
- CTB -CERAMIC TILE BASE
- EPB -EPOXY BASE

WALL
- GYP -GYPSUM BOARD
- MRB -MOISTURE RESISTANT BOARD
- EPP -EPOXY PAINT
- CMU -CONC. MAS. UNIT
- CB -CEMENT BLOCK
- CTW -CERAMIC TILE WALL
- STW -CEMENT / LIME STUCCO

CEILING
- GYP -GYPSUM BOARD
- ACT -ACOUSTICAL TILE
- VNP -VENEER PLASTER
- EXP -EXPOSED STRUCTURE
- WDC -WOOD CEILING
- STC -CEMENT / LIME STUCCO

FINISH
- PNT -PAINT
- F -FACTORY
- STN -STAIN
- - - - = NO OR NONE

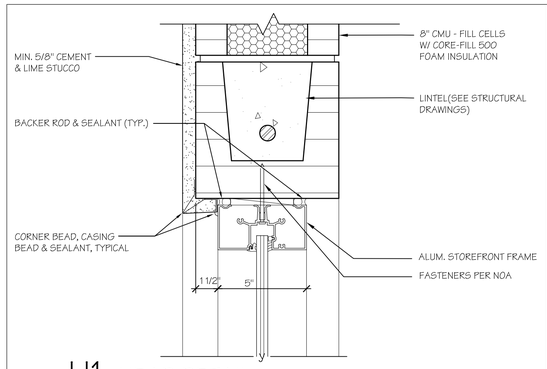
1

DOOR SCHEDULE

DOOR NUMBER	DOOR SIZE WIDTH X HEIGHT	DOOR SIZE THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR GLASS	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	DETAILS SILL	DETAILS JAMB	DETAILS TRANSOM	DETAILS HEAD	THRESHOLD	FIRE RATING (IN MINUTES)	HARDWARE GROUP	REMARKS	DOOR NUMBER
FIRST FLOOR																	
101	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	01	IMPACT RESISTANT	101
102	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	02	IMPACT RESISTANT	102
103	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	02	IMPACT RESISTANT	103
104	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	02	IMPACT RESISTANT	104
105	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	1A	IMPACT RESISTANT	105
106	3'-0" X 7'-0"	1-3/4"	F	IHM	- - -	F	1	HM	- - -	JS/A6.10	- - -	HS/A6.10	ADA	- - -	1A	IMPACT RESISTANT	106

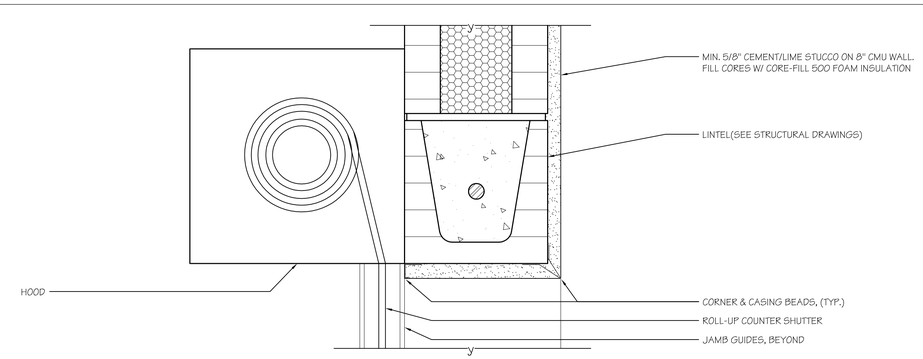
- AL = ALUMINUM
- ALG = ALUMINUM & GLASS
- LVR = FULL LOUVER
- MTL = METAL
- HCW = HOLLOW CORE WOOD
- SCW = SOLID CORE WOOD
- LDF = LOW DENSITY FIBERBOARD
- IRG = IMPACT RESITANT GLASS
- HM = HOLLOW METAL
- IHM = INSULATED HOLLOW METAL
- TP = TEMPERED
- WD = WOOD
- SFG = SAFETY GLASS
- FRE = FRENCH SINGLE LITE
- WR = WIRE GLASS
- AN = ANODIZED
- FL = PLASTIC LAMINATE
- SF = STOREFRONT
- V = VINYL
- VP = VAPOR PROOF
- RG = RATED GLASS (FIRE LIGHT PLUS)
- F = FACTORY FINISH
- - - - = NO OR NONE

NOTE: ALL DOORS TO HAVE INSULATING CORES.



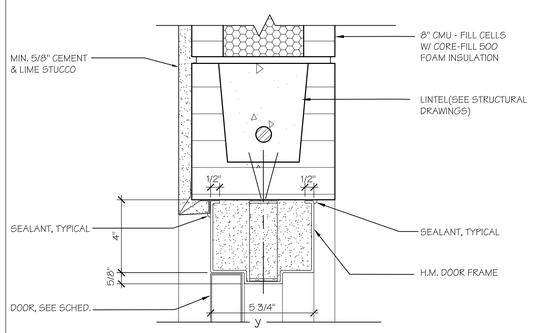
H1 HEAD DETAIL

Scale: 3"=1'-0"



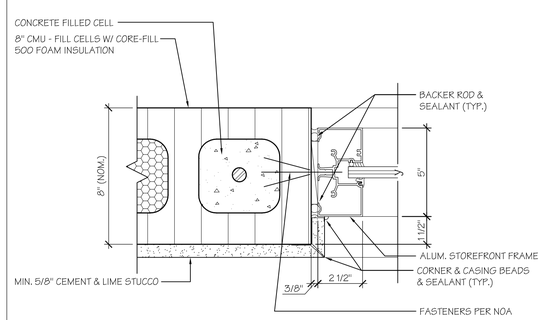
H2 HEAD DETAIL

Scale: 3"=1'-0"



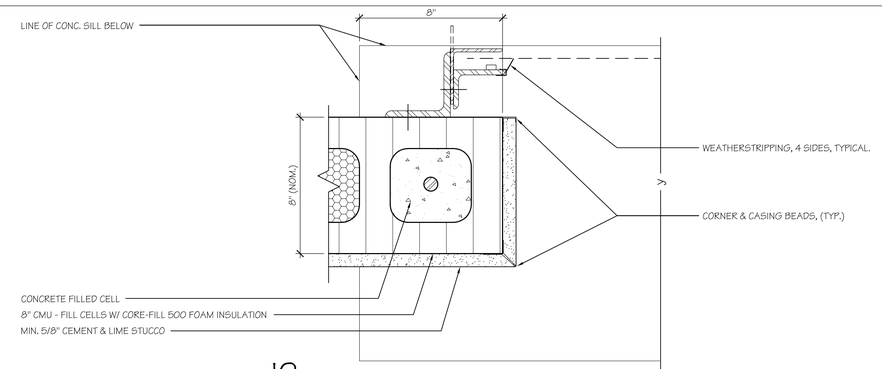
H3 HEAD DETAIL

Scale: 3"=1'-0"



J1 JAMB DETAIL

Scale: 3"=1'-0"



J2 JAMB DETAIL

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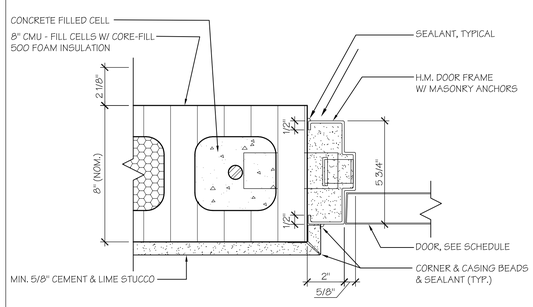
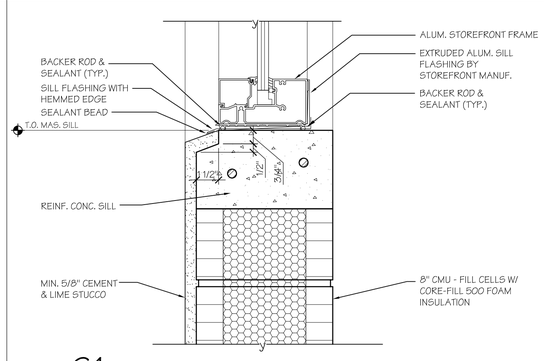


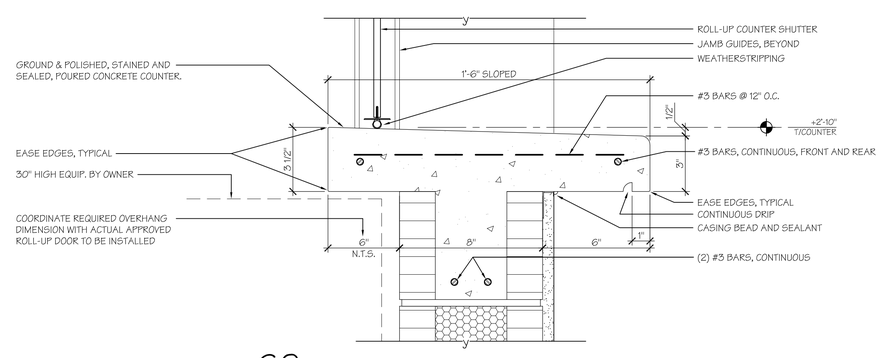
J3 JAMB DETAIL

Scale: 3"=1'-0"



S1 SILL DETAIL

Scale: 3"=1'-0"



S2 SILL DETAIL

Scale: 3"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	07.20.06	CLIENT REVIEW
B.	12.04.18	FINAL DOCUMENTS
C.	09/26/19	REVISIONS 1
D.	3.26.21	PERMIT DOCUMENTS
E.	4-16-21	BID SET
G.	10.04.23	PERMIT SUBMISSION
H.	03.11.24	BID SET

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Consultant:

Drawing Title:

ROOM FINISH & DOOR SCHEDULES
DOOR & WINDOW DETAILS

Reference North
N

Drn: Dwg. File:
Chd: JEL A.J.D. XREF File:
Project No.: 2018-04 Plot File:
Sheet No.:

Cert. No.: 12,456

Date Signed:

A6.10

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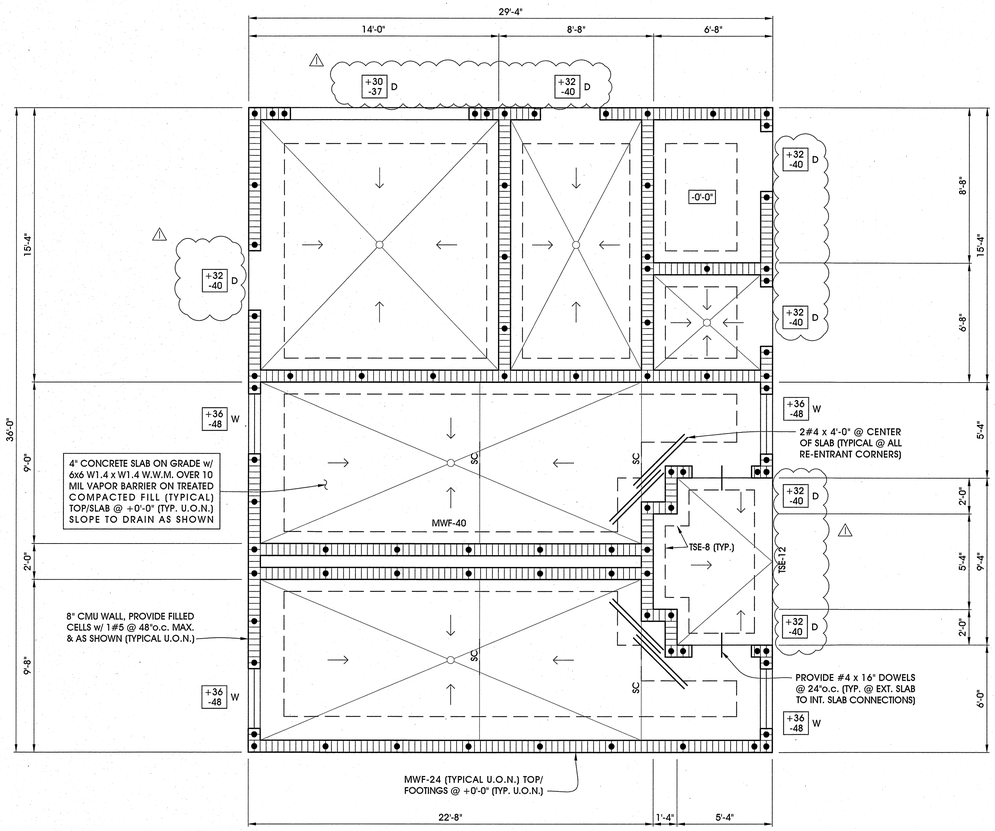


FOUNDATION PLAN

¼" = 1'-0"

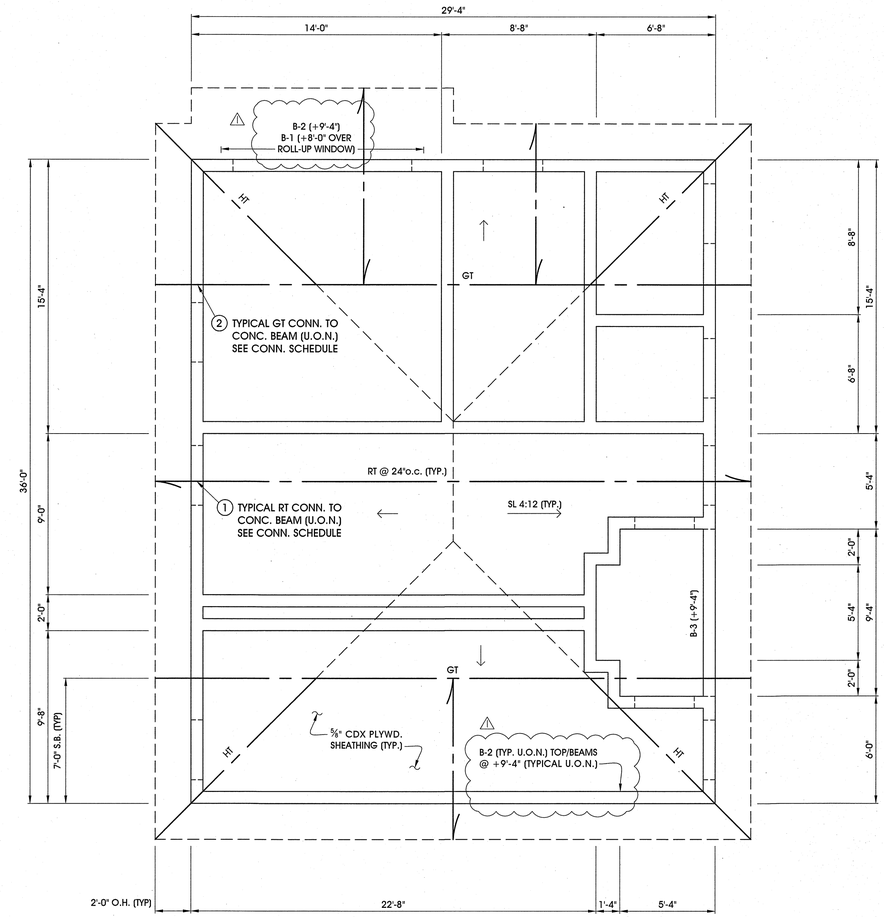
NOTES:

1. ALL ELEVATIONS REFER TO TOP OF MAIN FIRST FLOOR SLAB @ +0'-0" (SEE SITE PLAN FOR ACTUAL ELEVATION).
2. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH ARCHITECTURAL, MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATIONS & DIMENSIONS OF ALL PROJECT REQUIREMENTS. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT OR ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
3. ALL DIMENSIONS ARE TO ROUGH OPENING OR CENTERLINE OF STRUCTURE (TYPICAL, UNLESS OTHERWISE NOTED).
4. SEE ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS NOT SHOWN.
5. S.C.: DENOTES 1/8" WIDE x 1" DEEP SAW CUTS IN SLAB AS SHOWN IN PLAN, TO BE MADE AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY ENOUGH TO PREVENT THE AGGREGATE FROM BEING DISLODGED BY THE SAW BLADE.
6. W.J.: DENOTES 1/2" VERTICAL CMU WALL JOINT AS SHOWN IN PLAN. SEE TYPICAL CMU WALL JOINT DETAIL.

LEGEND

+PSF -PSF WINDOW & DOOR DESIGN PRESSURES (ALLOWABLE STRESS PSF) (TYPICAL AS SHOWN) SEE COMPONENT & CLADDING PRESSURES FOR DISTANCES OF END ZONES FOR EACH BUILDING
D - DOOR
W - WINDOW
RW - ROLL UP WINDOW

C1 CONCRETE OR CMU COLUMN AS SHOWN



ROOF FRAMING PLAN

¼" = 1'-0"

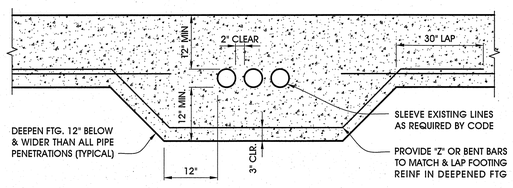
NOTES:

1. ALL ELEVATIONS REFER TO TOP OF MAIN FIRST FLOOR SLAB @ +0'-0" (SEE SITE PLAN FOR ACTUAL ELEVATION).
2. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH ARCHITECTURAL, MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATIONS & DIMENSIONS OF ALL PROJECT REQUIREMENTS. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT OR ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
3. ALL DIMENSIONS ARE TO ROUGH OPENING OR CENTERLINE OF STRUCTURE (TYPICAL, UNLESS OTHERWISE NOTED).
4. SEE ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS NOT SHOWN.

LEGEND

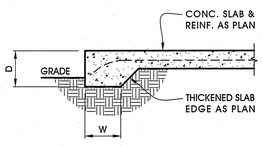
1 CONNECTOR DESIGNATIONS AS SHOWN, SEE SCHEDULE

RT: WOOD ROOF TRUSS
HT: WOOD ROOF HIP TRUSS
GT: WOOD ROOF GIRDER TRUSS



FOOTING DETAIL @ PLUMBING LINES

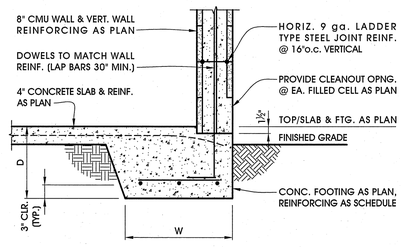
NO SCALE



TYPICAL TSE

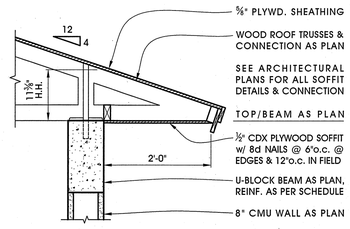
THICKENED SLAB EDGE

¾" = 1'-0"



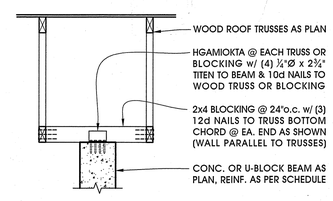
TYPICAL EXTERIOR WALL FOUNDATION

¾" = 1'-0"



TYPICAL ROOF TRUSS TO CONC. BEAM CONNECTION

¾" = 1'-0"



TYPICAL NON-BEARING CMU WALL BRACING DETAIL

¾" = 1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan

Issues:

No.:	Date:	Description:
	12.04.2018	FINAL DOCUMENTS
1	03.19.2021	FBC 7TH EDITION UPDATE
	10.04.2023	PERMIT SUBMISSION
	03.11.2024	BID SET

Architect:

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Drawing Title:

FOUNDATION & ROOF FRAMING PLANS, SECTIONS & DETAILS

Reference North

N

Drn: S.C. Baker	Drawing File:
Chd: Mike Lue	XREF File:
Project No.: 18-137	Plot File:
Sheet No.: S-1	

C.A. License No.: 8662
FL P.E. No.: 47520

Date Signed:

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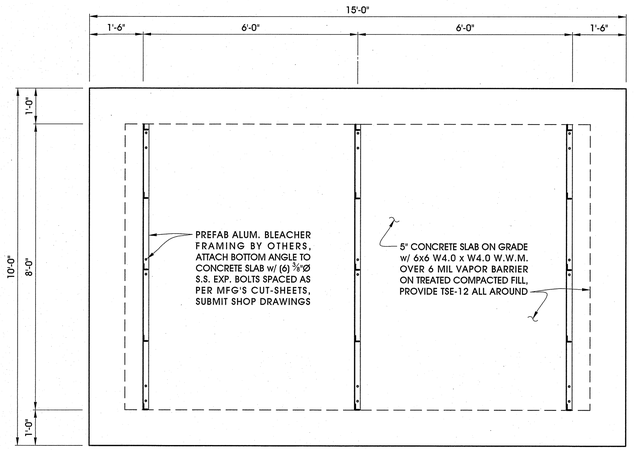
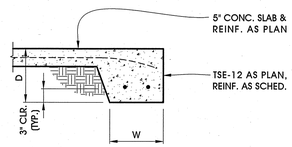


BLEACHER FOUNDATION PLAN - TYPICAL x 10

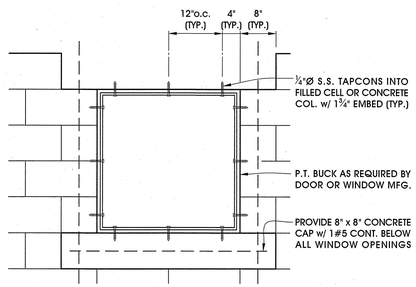
½" = 1'-0"

NOTE: SEE BALL FIELD SITE PLANS FOR LOCATIONS



TYP. SECT. THRU TSE-12

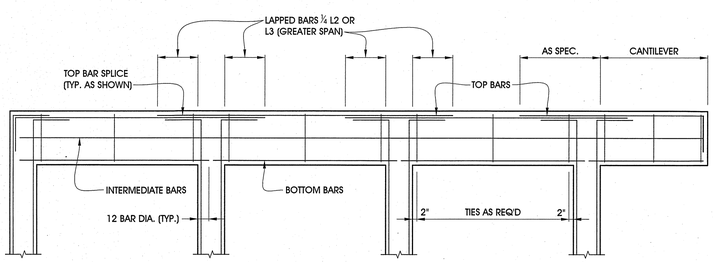
¾" = 1'-0"



TYPICAL WINDOW & DOOR BUCK ATTACHMENT DETAIL

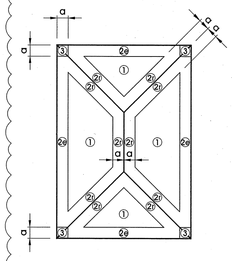
¾" = 1'-0"

NOTES:
1. DOORS & WINDOWS SHALL BE DESIGNED, MANUFACTURED, INSTALLED & CERTIFIED TO WITHSTAND THE MIN. DESIGN WIND PRESSURES AS NOTED IN PLAN & SHALL BE IMPACT RATED.
2. WATERPROOF ALL DOOR & WINDOW PERIMETERS WITH APPLICABLE WATERPROOFING. (1) COAT BEFORE INSTALLING BUCKS & (1) COAT AFTER BUCK INSTALLATION.



TYPICAL CONCRETE BEAM REINFORCING DIAGRAM

NO SCALE


a
a
a

HVAC GENERAL NOTES

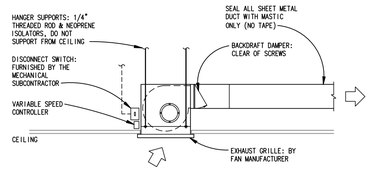
1. ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES. THIS INCLUDES THE 2020 7TH EDITION FLORIDA BUILDING CODE AND FLORIDA MECHANICAL CODE, WITH LOCAL AMENDMENTS, THE APPLICABLE NFPA CODES AND THE FLORIDA ENERGY CODE.
2. ALL ELECTRICAL EQUIPMENT SHALL BE UL CLASSIFIED OR LISTED.
3. DEFINITIONS: "FURNISH" SHALL MEAN TO PURCHASE AND LOCATE AN ITEM ON THE JOBSITE. "INSTALL" SHALL MEAN TO PHYSICALLY INSTALL AN ITEM AND CONNECT IT TO ALL REQUIRED SERVICES TO MAKE THE ITEM FULLY FUNCTIONAL. "PROVIDE" SHALL MEAN TO BOTH FURNISH AND INSTALL THE ITEM.
4. TEST AND BALANCE SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR ON APPROVED FORMS USED BY AABC OR NEBB. THE MECHANICAL CONTRACTOR SHALL HAVE ALL SYSTEMS FULLY INSTALLED AND OPERATIONAL WITH CLEAN FILTERS INSTALLED PRIOR TO TEST AND BALANCE.

DUCTWORK

1. EXHAUST DUCT WORK SHALL BE GALVANIZED SHEET METAL WITH ALL JOINTS SEALED WITH MASTIC. ROUND DUCT WORK SHALL BE "THERMOFIN" OR SINGLE WALL SHEET METAL. DUCTS DO NOT NEED TO BE INSULATED UNLESS REQUIRED BY LOCAL JURISDICTION. ALL DUCT SHALL BE CONSTRUCTED AND INSTALLED PER SMACNA.
2. ALL DUCT SIZES DEPICTED ARE CLEAR INSIDE DIMENSIONS.
3. PROVIDE A FLEXIBLE CONNECTION FROM EACH AIR HANDLER AND FAN TO THE DUCT SYSTEM.
4. PROVIDE ACCESS PANELS IN DUCTS FOR ACCESS TO VOLUME DAMPERS, FIRE DAMPERS, FIRE/SMOKE DAMPERS, DUCT MOUNTED SMOKE DETECTORS AND WHERE REQUIRED TO MAINTAIN EQUIPMENT.

CONTROLS

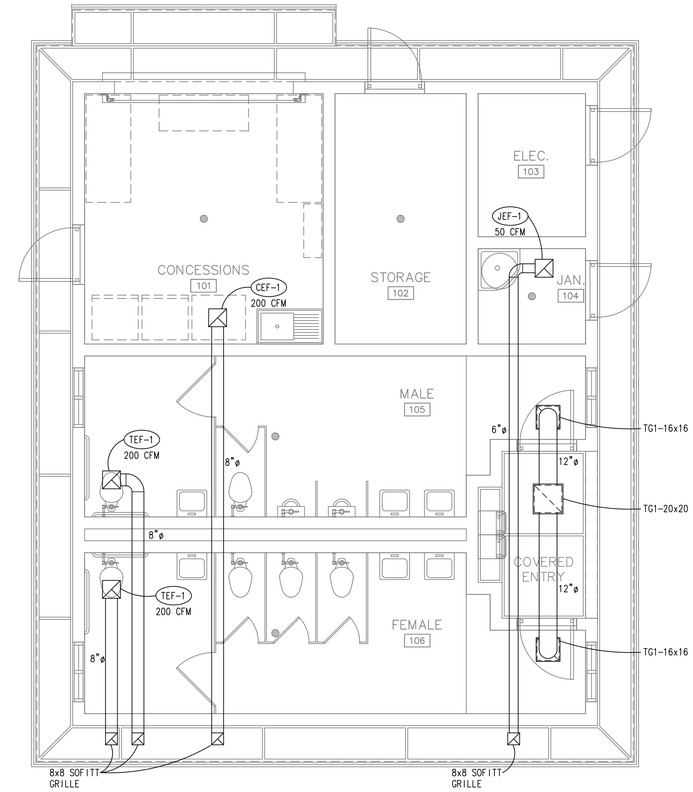
1. LOW VOLTAGE CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FOR ALL CONTROL WIRING AS COORDINATED WITH THE MECHANICAL CONTRACTOR.
2. LINE VOLTAGE (110 VOLT OR HIGHER) POWER AND CONDUIT SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECT SWITCHES. DO NOT MOUNT DISCONNECT SWITCHES OVER NAMEPLATES OR SERVICE PANELS.
4. TEST AND BALANCE SHALL VERIFY THE OPERATION OF ALL CONTROLS AT THE COMPLETION OF THE PROJECT.



CEILING FAN DETAIL

MARK	—	JEF-1	TEF-1, CEF-1
MANUFACTURER	—	GREENHECK	GREENHECK
MODEL	—	SP-B70	SP-A250
SERVICE	—	SEE PLAN	SEE PLAN
AIR QUANTITY	CFM	50	200
EXTERNAL STATIC PRESSURE	IN H_2O	0.3	0.3
FAN TYPE	—	CENTRIFUGAL	CENTRIFUGAL
MAXIMUM FAN SPEED	RPM	643	930
DRIVE	—	DIRECT	DIRECT
MOTOR	HP(W)	45 W	83 W
ELECTRICAL	V/PH/HZ	115/1	115/1
CONTROLS	—	WITH LIGHTS	VIA DIV 16 TIMECLOCK
SONES	—	2.0	2.5
WEIGHT	LBS.	9	9
NOTES	—		

NOTE: CONTROL TEF-1 VIA TIMECLOCK, CONTROL CEF-1 VIA WALL SWITCH



01 MECHANICAL FLOOR PLAN

GROSS SQUARE FOOTAGE = 999 G.S.F.

Scale: 1/4"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	BID SET

Architect:

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Your MEP Design Consultant
Treasure Coast Engineering, Inc.
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4925 13th Lane, Vero Beach, FL 32966
772-567-1007 www.tce.eng.pro

Drawing Title:

MECHANICAL PLAN

Reference North

N

Drn: JGS

Dwg. File:

Chd: EH

XREF File:

Project No.: 2018-04

Plot File:

Sheet No.:

Cert. No.:FL PE 77543

Date Signed:

M1.1

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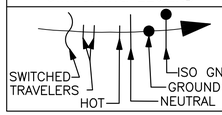
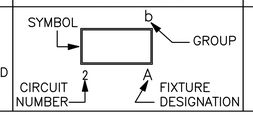
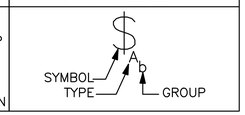
CIRCUITING LEGEND	FIXTURE LEGEND	SWITCH LEGEND
		

P1

ROOM ELECTRIC RM
MOUNTING SURFACE
FED FROM TXL
NOTE SQ D QO140M200

VOLTS 240/120V 2P 3W
BUS AMPS 200
NEUTRAL 100%

AIC 22,000
MAIN BKR 200
LUGS STANDARD

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	20/1	0.96	30" REFRIGERATOR	a	2	30/2	4.5	WATER HEATER
3	20/1	0.96	30" BEVERAGE COOLER	b	4	|		
5	20/1	0.96	30" BOX FREEZER	a	6	20/1	0.532	LIGHTING
7	20/1	0.72	CONCESSION COUNTERS, RECEPTACLE	b	8	20/1	0.595	FAN, LIGHTING
9	20/1	0.72	CONCESSION COUNTERS, RECEPTACLE	a	10	20/1	0.148	EXTERIOR LIGHTING
11	20/1	0.37	WATER COOLER	b	12	20/1	0.084	SCOREBOARD
13	20/1	0.9	RECEPTACLE	a	14	20/1	0.268	FLAG POLE LIGHT
15	20/1	1.45	HAND DRYER	b	16	20/1	0.5	IRRIGATION CONTROLLER
17	20/1	1.45	HAND DRYER	a	18	70/2	9.61	IRRIGATION SYSTEM
19	20/1	1.45	HAND DRYER	b	20	|		
21	20/1	1.45	HAND DRYER	a	22	–/1	0	SPACE
23	20/1	1.45	HAND DRYER	b	24	–/1	0	SPACE
25	20/1	1.45	HAND DRYER	a	26	–/1	0	SPACE
27	–/1	0	SPACE	b	28	–/1	0	SPACE
29	–/1	0	SPACE	a	30	–/1	0	SPACE
31	–/1	0	SPACE	b	32	–/1	0	SPACE
33	–/1	0	SPACE	a	34	–/1	0	SPACE
35	–/1	0	SPACE	b	36	–/1	0	SPACE
37	30/2	0	SURGE PROTECTION DEV.	a	38	50/2	6.62	LIFTSTATION CP
39	|			b	40	|		

	CONN KVA	CALC KVA	
OTHER			
LIGHTING (NONCONTINUOUS)	2	2	(100%)
CLUB	2	1,000 SF	(2 VA/SF)
LIGHTING	0.416	0.52	(125%)
APPLIANCE	7.38	5.54	(75%)

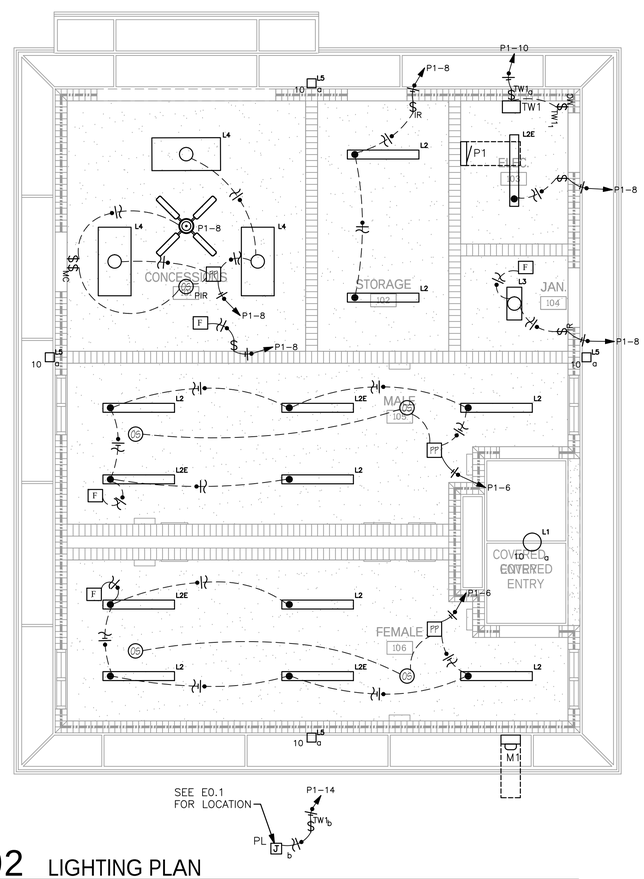
	CONN KVA	CALC KVA	
LARGEST MOTOR	9.6	2.4	(25%)
MOTORS	15.7	15.7	(100%)
RECEPTACLES	2.7	2.7	(50%>10)
CONTINUOUS	1.08	1.36	(125%)
NONCONTINUOUS	8.7	8.7	(100%)
DIVERSE	0.01	0	(0%)
TOTAL LOAD		38.9	
BALANCED LOAD		162 A	
PHASE A		106%	
PHASE B		94.3%	

NOTE:

TO THE BEST OF THE ENGINEERS KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH THE 2020 FLORIDA BUILDING CODE (7TH EDITION), 2017 NEC, AND THE FLORIDA FIRE PREVENTION CODE (7TH EDITION)

NOTE:

SEE E0.2 FOR BUILDING ELECTRICAL ONE-LNE, LIFT STATION SCHEDULE, AND SITE EQUIPMENT SCHEDULE.



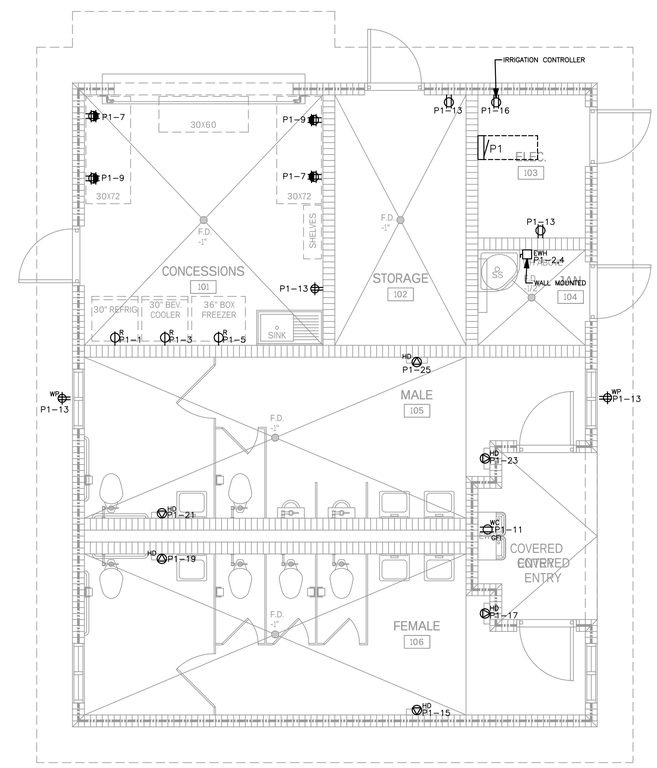
02 LIGHTING PLAN

Scale: 1/4"=1'-0"

SEE E0.1 & CIVIL PLAN FOR LOCATION

IRR P1-18,20 VIA CONTROLLER

SEE CIVIL PLAN FOR LOCATION OF LIFT STATION.



01 ELECTRICAL PLAN

Scale: 1/4"=1'-0"

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	Bid Set

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Drawing Title:

LIGHTING PLAN & ELECTRICAL PLAN

Reference North

N

ALBERT B. SCHMIDT JR. LICENSE No. 65050 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Signed:

Drn: ABJ	Dwg. File:
Chd: A.J.D.	XREF File:
Project No.: 2018-04	Plot File:
Sheet No.:	

E1.1

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RECEPTACLE SCHEDULE

SYMBOL	NEMA	VOLTS	FEATURES	NOTE 1
	5–15–2R	120V 1P 2W	GND	STANDARD WALL RECEPTACLE MOUNTED 15" AFF, AS NOTED (SEE ARCH DRAWINGS)
	5–15–2R	120V 1P 2W	GND	STANDARD WALL RECEPTACLE MOUNTED 15" AFF OR AS NOTED WITH GFCI PROTECTED
WP	5–15–2R	120V 1P 2W	GND	STANDARD WALL RECEPTACLE MOUNTED 18" AFF (WEATHER PROOF PER NEC, GFCI)
	5–15–4R	120V 1P 2W	GND	COUNTER MOUNT 42" AFF, AS NOTED, OR BACKSPLASH WITH GFCI PROTECTED.
		120V 1P 2W	GND	CEILING FAN (SEE ARCHITECTS SPECS)
EWH		240V 2P 2W	GND	ELECTRIC WATER HEATER
HD		120V 1P 2W	GND	EXCEL HAND DRYER WITH HEATER BRUSHED STAINLESS STEEL XLERATOR MODEL XL–SB–120
R	5–15R	120V 1P 2W	GND	REFRIGERATION MOUNTED 42" AFF (GFCI PROTECTED)
F		120V 1P 2W	GND	EXHAUST FAN. SPEC & LOCATE EXACT LOCATION FROM MECHANICAL DRAWINGS
WC	5–20–2R	120V 1P 2W	GFI, GND	WATER COOLER

SEE ARCHITECT SPECIFICATIONS FOR EXACT REQUIREMENTS. WP=WET OR DAMP RATED DEPENDING ON ENVIRONMENT, GFCI= RECEPTACLE MUST BE A GROUND FAULT CIRCUIT INTERRUPTER TYPE OR PROTECTED UPSTREAM BY ONE OR RATED BREAKER TYPE.

SWITCH SCHEDULE

SYMBOL	DESCRIPTION
$	DECORA TYPE, SPECIFICATION GRADE, RATED 20 AMPS.
$ MC	MOMENTARY CONTACT SWITCH, GREENGATE GMDS–W, WHEN TOGGLED, THE SWITCH MOMENTARILY MAKES A CONTACT CLOSURE TO THE LIGHTING CONTROL PANEL OR OCCUPANCY SENSOR, SENDING AN "ON" SIGNAL. WHEN NOT PRESSED, THE SWITCH IS IN THE (OPEN) POSITION.
OS	GREENGATE OAC–DT–1000–R CEILING MOUNTED SENSOR, MULTI–TECHNOLOGY PIR/ULTRASONIC VERSION, SELF–ADJUSTING – ADJ TIME DELAY. CONNECT WITH THREE WIRE TO POWER PACK WITH 120V INPUT/ 10–30 VDC OUTPUT.
OS PIR	GREENGATE OAC–P–1500–MV CEILING MOUNTED SENSOR, PIR VERSION, SELF–ADJUSTING – ADJ TIME DELAY. CONNECT WITH THREE WIRE TO POWER PACK WITH 120V INPUT/ 10–30 VDC OUTPUT.

NOTE DERATING OF GANGED DIMMERS AND LOAD WATTAGE DOES NOT EXCEED RATING BASED ON LAMP TYPE.

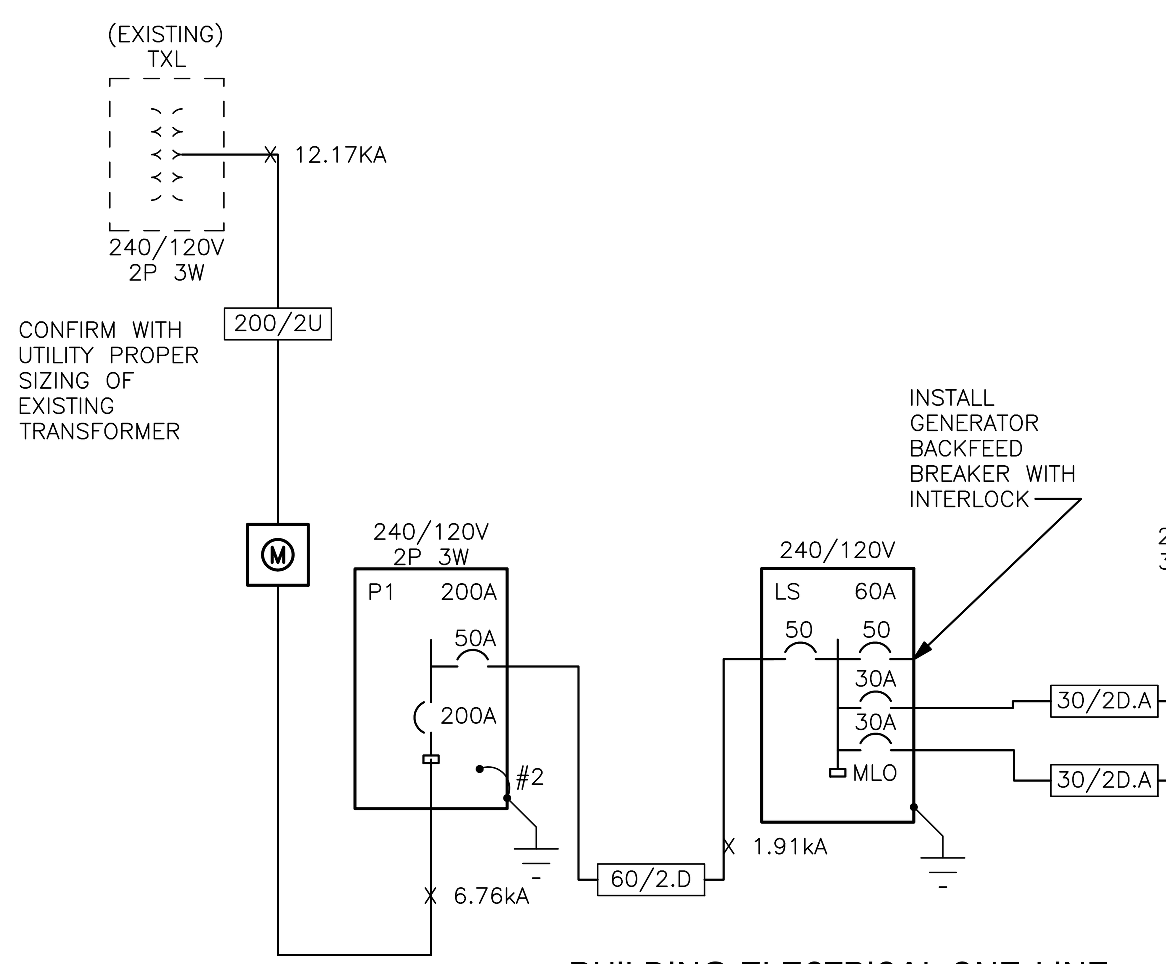
SWITCH SCHEDULE (CONT.)

SYMBOL	DESCRIPTION
$ IR	PASSIVE INFRARED (PIR) VERSION, SELF–ADJUSTING, 1/2 HP MOTOR RATING, ADJ TIME DELAY, SETTABLE TO MANUAL TURN ON AUTO OFF.
PP	GREENGATE SP20–MV POWER PACK. USED TO CONTROL FIXTURE FROM OS. (SEE DETAIL)
$ TWx	WALL MOUNT TIMER SWITCH CIRCUIT (SEE DETAIL). HOME RUN TO IDENTIFIED TIMER AND CHANNEL NUMBER.

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	DESCRIPTION	MANUFACTURE	CATALOG NUMBER	LAMP	TOTAL LUMENS	EGRESS MODE TOTAL LUMENS	VOLTS	WATTS	NOTE 1
L1		LED UNDERCANOPY LUMINAIRE	MCGRAW EDISON	TT–C1–LED–E1–MW–DP	(1) 28W LED	3922	0	120V 1P 2W	28	
L2		LED VANDAL 1X4	FAILSAFE	HVL8–4–LD4–1–STD–40–O–EDC –1–S–VRSD	(1) 34.6W LED	3118	0	120V 1P 2W	34.6	
L2E		LED VANDAL 1X4 W/ INTEGRAL EM BATTERY PACK	FAILSAFE	HVL8–4–LD4–1–STD–40–O–EDC –1–S–VRSD–EL7W	(1) 34.6W LED (1) 5W LED	3118 0	0 624	120V 1P 2W	34.6 5	CONNECT WITH 3 WIRE TO WITH ONE BEFORE AND ANOTHER AFTER LOCAL SWITCH.
L3		LED VANDAL 1X2	FAILSAFE	HVL8–2–LD4–1–LO–40–O–EDC –1–S–VRSD	(1) 24.7W LED	2339	0	120V 1P 2W	24.7	
L4		SURFACE MTD 2X4	METALUX	24FP4740C / FPSURF24	(1) 40.3W LED	4858	0	120V 1P 2W	40.3	
L5		LED WALL PACK	MCGRAW EDISON	GWC–AF–01–LED–E1–SL2–DP	(1) 30W LED	6227	0	120V 1P 2W	30	

WP=WET OR DAMP RATED DEPENDING ON ENVIRONMENT. IF FIXTURES UNAVAILABLE, SUBMIT TO ENGINEER EQUAL FOR APPROVED REPLACEMENT.



BUILDING ELECTRICAL ONE-LINE

FEEDER SCHEDULE

ID	CONDUIT AND FEEDER
20/1	1#12,#12N,#12G
20/2D	2#12,#12G
20/2D.A	1"C,2#12,#12G
30/2D	1"C,2#10,#10G
30/2D.A	1/2"C,2#10,#10G
40/2D	1"C,2#8,#10G
45/2D	1"C,2#6,#10G
45/2D.B	1"C,2#6,#8G
45/2D.C	1"C,2#6,#6G
60/2.D	2"C,2#4,#4N,#4G
200/2U	2"C,2#3/0,#3/0N
600/2U	(2)2–1/2"C,2#350kcmil,#350kcmil N

SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C 1/0 AND ABOVE PVC (EXCEPT WHERE NOTED)

ONE–LINE NOTES

REPRESENT A N–G BONDED GROUNDING ELECTRODE CONDUCTOR. TYPICALLY SHOWN AT SERVICE ENTRANCES OR OUTPUT OF A SEPARATELY DERIVED SYSTEM SUCH AS AN ISOLATION TRANSFORMER. SEE GROUNDING DETAIL FOR CONDUCTOR SIZING. IF MORE THAN ONE SYMBOL IS SHOWN THEN THE SYMBOL WILL ALSO SHOW THE GEC SIZED SPECIFICALLY FOR THAT DEVICE.

REPRESENT AN ISOLATED N–G BONDED GROUNDING ELECTRODE CONDUCTOR. TYPICALLY SHOWN AT SEPARATE STRUCTURES. SEE GROUNDING DETAIL FOR CONDUCTOR SIZING.

"X" ---KA INDICATE THE AVAILABLE SHORT–CIRCUIT CURRENT LEVELS AT THE LOCATION SHOWN. FAULT CALCULATIONS ARE BASED ON "IEEE STD 242–1975 RECOMMENDED PRACTICE FOR PROTECTION AND COORDINATION OF INDUSTRIAL AND COMMERCIAL POWER SYSTEMS". THE SHORT–CIRCUIT CALCULATIONS INCLUDES MOTOR CONTRIBUTIONS EQUAL TO 4 TIMES THE RATED CURRENT OF THE MOTOR AND AN X/R RATIO OF 4.

AIC AIC RATINGS SHOWN AT THE EQUIPMENT WILL BE BASED ON THE SUPPLY VOLTAGE, AVAILABLE FAULT CURRENT AND THE OVER CURRENT DEVICE PROTECTING THE EQUIPMENT. THE SSCR OF ALL EQUIPMENT SHALL MEET OR EXCEED THE AIC RATING SHOWN. PLEASE NOTE THAT AIC APPLIES ONLY TO OVERCURRENT PROTECTION DEVICES (CIRCUIT BREAKERS, FUSES, ETC.) AND SCCR APPLIES TO A FULLY ASSEMBLED DEVICE (I.E., PANELBOARDS, CONTRACTORS, STARTERS), WHICH MAY USE SPECIFIC AIC–RATED OVERCURRENT PROTECTION DEVICES.

X SEE FEEDER SCHEDULE TO IDENTIFY NUMBER OF CONDUITS. THE QUANTITY OF PHASE, NEUTRAL, & EGC IS PER CONDUIT. GEC ARE NOT INCLUDED IN FEEDER SCHEDULE.

WIRING METHODS & MATERIALS

#	NOTE
1	HE NATIONAL AND LOCAL ELECTRIC AND BUILDING CODES, AND THE ELECTRICAL REQUIREMENTS AS ESTABLISHED BY THE STATE AND LOCAL FIRE MARSHAL, AND RULES AND REGULATIONS OF THE POWER COMPANY SERVING THE PROJECT, ARE HEREBY MADE PART OF THIS SPECIFICATION. SHOULD ANY CHANGES BE NECESSARY IN THE DRAWINGS OR SPECIFICATIONS TO MAKE THE WORK COMPLY WITH THESE REQUIREMENTS, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF SHALL BE NEW AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
2	CONTRACTOR TO INSTALL A COMPLETE ELECTRICAL SYSTEM FOR LIGHT AND POWER FROM THE POINT OF SERVICE OF THE POWER COMPANY TO AND THROUGH THE MAIN SERVICE DISCONNECT, DISTRIBUTION PANELS, AND BRANCH PANELS. INCLUDING ALL OUTLETS, DEVICES AND EQUIPMENT FURNISHED BY OTHERS AS MAY BE REQUIRED. UNTIL WORK IS COMPLETE, COST OF ALL POWER CONSUMED DURING CONSTRUCTION SHALL BE PAID BY THE PARTY DESIGNATED BY THE PRIME CONTRACTOR. CONTRACTOR MUST COORDINATE WITH UTILITY FOR INSTALLATION OF METER.
3	THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BID AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE ELECTRICAL INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF.
4	IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE AND OPERATING INSTALLATION INCLUDING ALL OBVIOUSLY NECESSARY ITEMS EVEN THOUGH ITEMS ARE NOT INDICATED ON THE DRAWINGS OR SPECIFICATIONS. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, STATE SALES TAX, FEDERAL EXCISE TAX, ROYALTIES AND OTHER TAXES OR FEES AS REQUIRED FOR INSTALLATION OF A COMPLETE SYSTEM AS OUTLINED HEREIN AND AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SECURE ALL NECESSARY LICENSES AND INSURANCE. WHERE THE MANUFACTURER ONLY IS NAMED, THE BIDS SHALL BE BASED ON FURNISHING EQUIPMENT OR MATERIALS BY THIS MANUFACTURER. PRODUCTS OF OTHER MANUFACTURERS WILL BE CONSIDERED FOR USE IF IN THE ENGINEER'S OPINION THE ITEM REQUESTED FOR SUBSTITUTION IS EQUAL TO THAT SPECIFIED. WHERE NO MANUFACTURERS ARE NAMED, THE CONTRACTOR SHALL SELECT EQUIPMENT OR MATERIAL WHICH MEETS THE SPECIFICATIONS. THE CONTRACT DRAWINGS INDICATE THE EXTENT AND GENERAL ARRANGEMENTS OF EQUIPMENT AND SYSTEMS. IF ANY DEPARTURES FROM THE CONTRACT DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO SUCH DEPARTURES SHALL BE MADE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER. ALL OBVIOUS ERRORS AND/OR OMISSIONS IN THE ABOVE MENTIONED DOCUMENTS SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AT LEAST FOUR DAYS PRIOR TO THE BID DATE. IF NOTIFICATION IS NOT RECEIVED, NO EXTRAS TO THE ORIGINAL DRAWINGS AND SPECIFICATIONS WILL BE AUTHORIZED. THE CONTRACTOR SHALL PROVIDE A GUARANTEE AGAINST DEFECTIVE WORKMANSHIP, MATERIALS OR EQUIPMENT FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. THIS GUARANTEE SHALL INCLUDE ALL COSTS ENCOUNTERED IN THE REPLACING OF DEFECTIVE WORK OR MATERIALS. THE CONTRACTOR SHALL CONVEY TO THE OWNER ANY ADDITIONAL GUARANTIES OR WARRANTIES PROVIDED BY THE MANUFACTURER OF AN INDIVIDUAL ITEM, EQUIPMENT OR MATERIAL.
5	CONTRACTOR SHALL SUBMIT A LINE DRAWING AS–BUILT OF THE CONDUIT LOCATIONS AND PULL BOX LOCATIONS FOR APPROVAL BY ENGINEER/ARCHITECT BEFORE PROCEEDING ANY WORK.
6	PROVIDE CIRCUIT BREAKERS WITH UL LISTED INTERRUPTING RATING (RMS SYMMETRICAL AMPERES) GREATER THAN THE AVAILABLE FAULT CURRENT SHOWN ON THE ELECTRICAL ONE–LINE DIAGRAM. ALL SUB–FEED BREAKERS ALLOWED TO BE SERIES RATED AT 10KA
7	BOND RACEWAYS AND THE FRAMES AND ENCLOSURES OF MOTORS, BREAKERS, SWITCHES, AND OTHER ELECTRICAL EQUIPMENT TO THE BUILDING GROUNDING SYSTEM. INSTALL AN INSULATED EQUIPMENT GROUND CONDUCTOR IN EACH RACEWAY OR CONDUIT.
8	FOR LONG BURIED SERVICE AND FEEDER RUNS INSTALL HANDHOLES EVERY 500 FT AND AT MAJOR TURNS.
9	METAL FRAMING MEMBERS SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR FOR ANY CIRCUIT THAT MAY ENERGIZE THE BUILDING FRAMING AND BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, TABLE 250.122. FOR THE PURPOSE OF THIS REQUIREMENT, A GROUNDED METAL OUTLET BOX ATTACHED TO THE FRAMING SHALL BE PERMITTED.
10	IDENTIFY NEW BRANCH CIRCUITS AT THE PANEL AND AT THE LOAD OUTLET, RECEPTACLE AND SWITCH. IDENTIFY THE PURPOSE OF INDIVIDUAL CIRCUIT BREAKERS, SAFETY SWITCHES AND MOTOR STARTERS BY MEANS OF NAMEPLATES AS INDICATED.
11	ROUTE CONDUITS TO SUIT EQUIPMENT AND BUILDING STRUCTURE. UNLESS OTHERWISE NOTED ON DRAWINGS OR NOT ALLOWED BY THE AHJ THE FOLLOWING SHALL APPLY: CONDUIT FOR ABOVE GRADE SHALL BE INTERMEDIATE METAL CONDUIT (IMC), RIGID METAL CONDUIT (RMC) OR ELECTRICAL METALLIC TUBING (EMT). [OPTIONAL: TYPE NM & NMS CAN BE USED IN THE BUILDING AS LONG AS IT ISN'T USED EXPOSED IN DROPPED OR SUSPENDED CEILINGS WHICH INCLUDES GYPSUM BOARD CEILINGS WITH ACCESS PANELS OR TYPE I & II STRUCTURES WITHOUT CONDUIT.] LIMIT THE USE OF EMT TO AREAS WHERE IT WILL NOT BE SUBJECT TO PHYSICAL DAMAGE, WET ENVIRONMENTS, OR CORROSION. USE IMC, RMC OR RIGID PVC SCH 40 FOR WORK EMBEDDED IN CONCRETE. ALL BURIED CONDUIT SHALL BE RIGID PVC SCH 40. GENERAL POWER AND LIGHTING HOME RUN CIRCUITS IN CONDUIT (IMC, RMC, EMT) WHEN RAN ABOVE CEILINGS (EXPOSED AND CONCEALED) SHALL BE RAN TO A JUNCTION BOX. METAL CLAD CABLE (MC) WILL BE PERMITTED FROM THE JUNCTION BOX DROPPED DOWN TO THE RECEPTACLE OUTLET OR SWITCH AT A MAXIMUM LENGTH OF 30 FEET. FLEXIBLE METAL CONDUIT OR MC CABLE MAY BE USED FOR TAP CONDUCTORS PER CODE FROM THE FIXTURES TERMINATION TO AN OUTLET BOX IN ACCESSIBLE CEILINGS. CONDUIT TERMINATIONS AT ELECTRICAL EQUIPMENT SUCH AS ELECTRIC MOTORS AND HEATERS SHALL BE MADE USING LIQUID–TIGHT, FLEXIBLE METAL CONDUIT. USE MINIMUM 3/4 INCH CONDUIT EXCEPT AS FOLLOWS: 1/2" CONDUIT MAY BE USED FOR 20 AMP GENERAL LIGHT AND POWER CIRCUITS AND FOR CONTROL CIRCUITS. CONDUIT EXPANSION FITTINGS AND GROUND BONDING JUMPERS SHALL BE INSTALLED ON ALL CONDUITS PASSING THROUGH BUILDING EXPANSION JOINTS TO PROVIDE MOVEMENT IN THE CONDUIT SYSTEM. WHERE GROUPS OF CONDUITS TERMINATE TOGETHER OR PASS THROUGH FLOORS, PROVIDE TEMPLATE TO HOLD CONDUITS IN PROPER RELATION TO EACH OTHER AND TO BUILDING.
12	OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS. [OPTIONAL: NON–METALLIC BOXES ARE ALLOWED WERE ONLY TYPE NM & NMS CABLE ENTERS THE BOX.]
13	ALL MEASUREMENTS ARE AFF (ABOVE FLOOR FINISH) AND MEASURED TO CENTER OF OPERABLE DEVICE.
14	MOUNT WALL SWITCHES AND CONTROLS 46" AFF, UNLESS OTHERWISE NOTED ON DRAWING. GANG SWITCHES WHERE EVER POSSIBLE. RECEPTACLES & COMMUNICATION OUTLETS SHALL BE LOCATED 18" AFF, UNLESS OTHERWISE NOTED. ABOVE–COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK SPLASH TO CENTERLINE OF DEVICE.
15	DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK MAKE, QUICK BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.
16	SEAL AROUND CONDUIT PENETRATIONS THROUGH INTERIOR WALLS AND FLOORS SEPARATING AREAS TO RESTORE SEAL PENETRATIONS THROUGH ROOF AND EXTERIOR WALLS TO MAKE WATERPROOF. REQUEST INSPECTION OF FIRE SEALS BY ELECTRICAL INSPECTOR FROM AUTHORITY HAVING JURISDICTION BEFORE AND AFTER PLACEMENT OF FIRE SEAL MATERIALS.
17	USE 12 AWG OR LARGER CONDUCTORS FOR POWER WIRING UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS OR SCHEDULE. USE 14 AWG STRANDED CONDUCTORS FOR CONTROL WIRING UNLESS OTHERWISE SPECIFIED, OR APPROVED BY THE MANUFACTURE, OR SHOWN ON THE DRAWINGS.
18	USE ONLY COPPER CONDUCTORS ON CIRCUITS 600V AND LESS. CONDUCTORS 10 AWG AND SMALLER SHALL BE SOLID AND 8 AWG AND LARGER AWG SHALL BE STRANDED. PROVIDE TYPE THHN/THWN WIRE INSULATION; XHHW INSULATION MAY BE USED FOR 1 AWG AND LARGER.
19	USE THE FOLLOWING CONDUCTOR COLOR CODES: (SEE TABLE BELOW) ISOLATED GROUND SHALL BE GREEN WITH YELLOW TRACER.
20	TEST CONDUCTORS FOR CONTINUITY AND FREEDOM FROM SHORTS AND UNINTENTIONAL GROUNDS.
21	KEEP JOB SITE IN AN ORDERLY CONDITION AND AT PROJECT COMPLETION, REMOVE ALL WASTE.
22	IF DIRECTED BY THE ARCHITECT OR ENGINEER, THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK.
23	ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON DRAWINGS OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
24	WITH SUBMISSION OF BID, THE ELECTRICAL CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT/ENGINEER OF ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES; AND ANY NECESSARY ITEMS OR WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUALLY AGREED THE CONTRACTOR HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL, AND THAT HE WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF THE ENTIRE SYSTEM WITHOUT EXTRA COMPENSATION.
25	DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTAL/CIVIL ENGINEERS PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. ALWAYS CONFIRM WITH OWNER'S REPRESENTATIVE IF IN DOUBT. ANY QUALITIES SHOW IN SCHEDULES ARE FOR REFERENCE ONLY AND SHALL NOT BE USED AS AN EXACT TAKE OFF. CONTRACTOR IS RESPONSIBLE FOR ALL ACTUAL QUANTITY COUNTS.

Color codes (note 19):

	120/240V	120Δ/240V	120Y/208V	277Y/480V
PHASE A	BLACK	BLACK	BROWN	BROWN
PHASE B	RED	ORANGE	RED	ORANGE
PHASE C	–	BLUE	YELLOW	YELLOW
NEUTRAL	WHITE	WHITE	WHITE	GRAY
EQUIP. GROUND	GREEN			

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	Bid Set

Architect:

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Drawing Title:
ELECTRICAL SCHEDULES & ONE-LINE

Reference North
N

ALBERT B. JENKS JR. LICENSE No. 65050 STATE OF FLORIDA PROFESSIONAL ENGINEER

Drn:	ABJ	Dwg. File:	
Chd:	A.J.D.	XREF File:	
Project No.:	2018-04	Plot File:	
Sheet No.:	E1.2		

Date: 10/13/23
Cert. No.: FL PE 65050
Date Signed:

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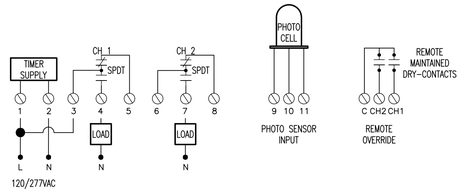


GENERAL DESCRIPTION:

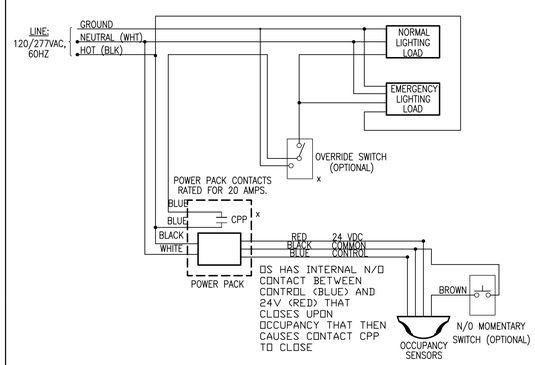
1. FURNISH AND INSTALL A 2 ZONE LIGHTING CONTROLLER W/ PHOTO SENSOR AND REMOTE OVERRIDE INPUT SUCH AS A TORK DGLC200A. 2. EACH ZONE SHALL BE CAPABLE OF INDEPENDENT, USER SETTABLE TURN ON AND TURN OFF LIGHT LEVEL SET POINTS RANGING FROM 1 TO 100 FOOTCANDLES. 3. TWO POSITION SLIDE SWITCHES SHALL BE PROVIDED FOR EACH OF THE 2 ZONES ALLOWING FOR USER SETTINGS BASED ON A) TIME OF DAY OR B) COMBINATION TIME OF DAY AND LIGHT LEVEL. 4. UNIT SHALL BE CAPABLE OF SWITCHING 20 AMP BALLAST LOAD FOR EACH ZONE. 5. EACH ZONE SHALL BE CAPABLE OF ASTRONOMIC FUNCTION. 6. CONTROLLER SHALL PROVIDE AUTOMATIC DAYLIGHT SAVING TIME. 7. CONTROLLER SHALL BE CAPABLE OF 56 SET POINTS WITH SEPARATE SCHEDULING FOR EACH DAY OF THE WEEK. 8. CONTROLLER SHALL HAVE BACK-UP CAPABILITY. 9. UNIT SHALL HAVE A NEMA TYPE 3, METAL INDOOR/OUTDOOR ENCLOSURE.

ELECTRICAL:

CONNECT CLOCK TO SAME CIRCUIT AS CH1 FIXTURE. WIRE FIXTURE TO LOAD CONTACT. MOUNT PHOTO CELL AT LEAST 10 FT UP ON NORTH SIDE OF BUILDING. CIRCUIT ON PLAN VIEW SHOULD SHOW SWITCH SYMBOL THAT REFERENCES TIMER NUMBER AND CHANNEL.

DIGITAL TIME SWITCH 2-CH. (SPDT) DETAIL W/OVERRIDE — 6

SCALE: NONE



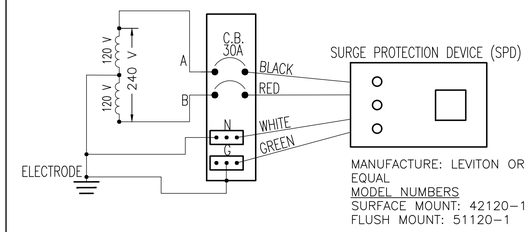
NOTE:

THE NUMBER OF DEVICES POWERED FROM A SINGLE POWER PACK VARIES WITH THE TYPE OF DEVICE. "x" ON POWER PACK, SWITCH, AND OS REPRESENTS THE SWITCH GROUP THE OCCUPANCY SENSOR IS CONTROLLING.

WIRING DIAGRAM-SINGLE POWER PACK APPLICATION WITH NORMAL & EMERGENCY LIGHTS — 4

SCALE: NONE

NOTE: ONLY USE A SPD DESIGNED FOR A 120/240 SINGLE PHASE OTHER VOLTAGE WILL CAUSE SPD TO FAIL AND NOT PROTECT

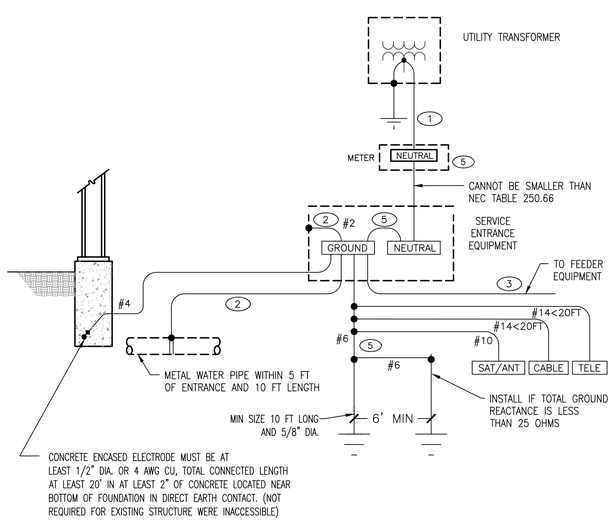


GENERAL SPD INSTALLATION NOTES:

1. LOCATE THE SPD UNIT AS CLOSE AS POSSIBLE TO THE ELECTRICAL PANEL SERVING THE LOADS TO BE PROTECTED TO MINIMIZE THE EFFECTS OF CONNECTION LEAD-LENGTH RESISTANCE AND INDUCTANCE.
2. LEADS FROM THE SPD UNIT MUST BE CONNECTED TO THE POWER MAINS THROUGH A DISCONNECT AND FUSING MEANS. EITHER DEDICATED 30-AMP BRANCH CIRCUIT BREAKERS (INDEPENDENT SINGLE-POLE PREFERRED), OR A FUSED 30-AMP DISCONNECT SWITCH MAY BE USED.
3. THE TOTAL CONNECTION LENGTH BETWEEN THE BRANCH POWER LINES AND SPD DEVICE SHOULD BE AS SHORT AS POSSIBLE (18"MAX). LEADS FROM THE SPD UNITS SHOULD BE BUNDLED TOGETHER AND SECURED WITH CABLE TIES WHEN POSSIBLE.
4. THE SUPPRESSOR'S BLACK WIRES MAY BE CONNECTED TO L1 OR L2 WITHOUT REGARD TO PHASE.
5. DO NOT CONNECT THE GREEN WIRE TO ISOLATED GROUND CONDUCTOR(S).

SPD WIRING DETAIL - 1 PHASE, 3-WIRE — 5

SCALE: NONE



KEYED NOTES

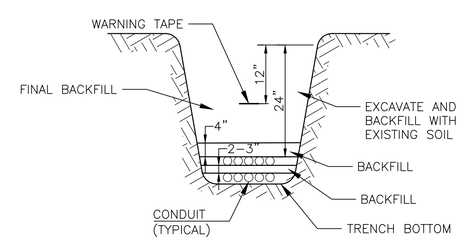
1. INSTALL GROUNDED (NEUTRAL) CONDUCTOR WITHOUT EGC. NEUTRAL CONDUCTOR CANNOT BE SMALLER THAN NEC TABLE 250.66. SEE ELECTRICAL ONE-LINE FOR SIZE.
2. INSTALL BONDING JUMPER THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE CONDUCTOR SIZE.
3. INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER OVER CURRENT DEVICE SIZE. IF THE FEEDER SUPPLIES A SEPARATE STRUCTURE THEN DRIVE AN ADDITIONAL GROUND ROD AT STRUCTURE AND GROUND TO PANEL, BUT ISOLATE NEUTRAL.
4. INSTALL GROUNDING ELECTRODE CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SEPARATELY DERIVED SYSTEM PHASE CONDUCTOR SIZE.
5. GROUND ROD CAN BE CONNECTED TO NEUTRAL OF METER INSTEAD OF SE GROUND. MIN SIZE SHALL BE 5/8" X 10'

GENERAL NOTES

1. EACH GROUNDING ELECTRODE SHOWN SHALL ONLY BE USED IF PRESENT AT EACH STRUCTURE/BUILDING SERVED. IF NONE ARE PART OF THE STRUCTURE/BUILDING THAN AT MINIMUM A GROUND ROD ELECTRODE SHALL BE INSTALLED. A METAL WATER PIPE SHALL NOT BE USED AS THE SOLE GROUNDING ELECTRODE SYSTEM (GES).
2. BOND GAS PIPE ON THE BUILDING SIDE OF THE GAS METER THAT IS SIZED BASED ON THE OCPD SERVING THE STRUCTURE/BUILDING USING NEC TABLE 250.122 WITH A MINIMUM SIZE OF #6 CU.
3. CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.
4. INSTALL GROUNDING TERMINATIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING (EXCEPT IF ENCAPSULATED BY FIREPROOFING MATERIAL).
5. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE PHASE CONDUCTOR SIZE.
6. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER CIRCUIT OVER CURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVER CURRENT DEVICE SIZE.
7. BOND HOT AND COLD WATER PIPING SYSTEMS.
8. INSTALL 5/8" X 10' GROUND ROD.
9. OTHER METAL PIPING OR EXPOSED STRUCTURAL METALS THAT ARE LIKELY TO BE ENERGIZED SHALL BE BONDED TO THE SERVICE EQUIPMENT ENCLOSURE USING THE LARGEST GROUND WIRE.

SERVICE ENTRANCE GROUNDING SYSTEM DETAIL — 3

SCALE: NONE

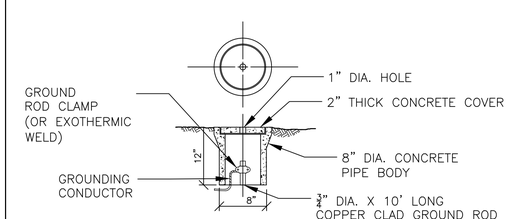


NOTE:

BACKFILL SHALL BE TAMPED TO 95% COMPACTION. 4" OF CONCRETE MAY BE NEEDED TO CREATE SOLID BASE. BACKFILL SHALL BE FINE CLEAN SAND. FINAL BACKFILL WILL CONSIST OF EXISTING SOIL AND CAN CONTAIN SOME STONES IN IT.

DIRECT BURIAL DUCT BANK TRENCHING DETAIL (TYP) — 2

SCALE: NONE



GROUNDING ROD DETAILS (TYPICAL) — 1

SCALE: NONE

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	Bid Set

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Drawing Title:

ELECTRICAL DETAILS

Reference North

N

ALBERT B. JENKINS LICENSE No. 65050 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Signed

Drn: ABJ

Chd:

A.I.D.

Project No.: 2018-04

Sheet No.:

Dwg. File:

XREF File:

Plot File:

E1.3

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PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE, MODEL #, DESCRIPTION	ROUGH-IN WASTE	VENT	CW	HW
WC	WATER CLOSET AMERICAN STANDARD "MADERA" #2234.015 1.6 GALLON FLUSH WITH OLSONITE #95 OPEN FRONT SEAT LESS COVER, SLOAN #111 FLUSH VALVE.	3"	2"	1"	—
WC-HC	WATER CLOSET, HANDICAPPED AMERICAN STANDARD "MADERA" #3043.102 1.6 GALLON FLUSH WITH OLSONITE #95 OPEN FRONT SEAT LESS COVER, SLOAN #111 FLUSH VALVE.	3"	2"	1"	—
LAV	LAVATORY, WALL HUNG AMERICAN STANDARD "LUCERENE" #0355.012 20-1/2"x18-1/4" WALL HUNG LAVATORY WITH #5400.962 FAUCET, 1-1/4" CP P-TRAP, STOP AND SUPPLIES.	1-1/2"	2"	1/2"	1/2"
LAV-HC	LAVATORY, WALL HUNG, HANDICAPPED AMERICAN STANDARD "LUCERENE" #0355.012 WITH #7401.172H 6" GOOSENECK FAUCET AND 4" WRIST BLADE HANDLES, 1-1/4" CP P-TRAP, CP STOPS, SUPPLIES.	1-1/2"	2"	1/2"	1/2"
UR	URINAL AMERICAN STANDARD "ALLBROOK" #6541.132 1.0 GALLON FLUSH WITH SLOAN ROYAL #186-1.0 FLUSH VALVE. MOUNT AT STANDARD HEIGHT.	2"	2"	3/4"	—
UR-HC	URINAL, HANDICAPPED AMERICAN STANDARD "ALLBROOK" #6541.132 1.0 GALLON FLUSH WITH SLOAN ROYAL #186-1.0 FLUSH VALVE. MOUNT AT HANDICAPPED HEIGHT.	2"	2"	3/4"	—
SCS	SINGLE COMPARTMENT SINK BK RESOURCES BKREBKS-1-1824-14-24L SINGLE COMPARTMENT SINK WITH T&S BRASS 5F-8CWX10 FAUCET, 1-1/4" CP P-TRAP, STOP AND SUPPLIES.	1-1/2"	2"	1/2"	1/2"
EWH	ELECTRIC WATER HEATER A.O. SMITH DEL-40 R-16 FOAM INSULATED, GLASS-LINED 40 GALLON TANK, THREE (3) YEAR WARRANTY WATER HEATER. 32" HIGH x 26" DIAMETER, 4.5 kW @ 208 VOLT, 1 PHASE ELECTRIC HEATER. PROVIDE 120 VOLT PLUG IN GRUNDFOS RECIRC PUMP WITH AQUASTAT/TIMER.	—	—	3/4"	3/4"
EWC-SL	ELECTRIC WATER COOLER, DUAL LEVEL, HANDICAPPED ELKAY VRCHDTL8SC COOLER, STANDARD COLOR, 1-1/2" 20 GAUGE CP P-TRAP, LESS CO, STOP AND SUPPLIES. MOUNT LOWER BOWL NOZZLE AT 30" A.F.F FOR ADA.	1-1/2"	2"	1/2"	—
MSB	MOP SERVICE BASIN FIAT MSB2424 24"x24" MOLDED STONE MOP SERVICE BASIN WITH 830-AA FAUCET, 832-AA HOSE BRACKET AND HANGER.	3"	2"	3/4"	3/4"
FD	FLOOR DRAIN ZURN Z415-6B-P 6" FLOOR DRAIN WITH "SURE SEAL" TRAP SEAL AND TYPE "B" STRAINER.	3"	2"	—	—
WCO	WALL CLEANOUT ZURN Z1441 D.C.C.I. BODY WITH STAINLESS STEEL ACCESS COVER AND SECURING SCREW.	SEE PLAN	—	—	—
FCO	FLOOR CLEANOUT ZURN Z1400 D.C.C.I. BODY ADJUSTABLE TO FINISHED FLOOR.	SEE PLAN	—	—	—
COTG	CLEANOUT TO GRADE ZURN Z1400-HD D.C.C.I. BODY ADJUSTABLE TO FINISHED GRADE WITH HEAVY DUTY TOP. SET IN 24"x24"x6" CONCRETE PAD.	SEE PLAN	—	—	—
TMV	THERMOSTATIC MIXING VALVE BRADLEY S59-2007 TWO INLETS, ONE OUTLET, SET TO 105 DEG. F. VALVE SHALL HAVE INTEGRAL CHECK STOPS, PROVIDE WITH WALL MOUNT BELOW SINK.	—	—	1/2"	1/2"
HB	HOSE BIBB JAY R. SMITH 5609QT WITH POSITIVE NON-FREEZE PROTECTION AND VACUUM BREAKER.	—	—	1/2"	—

NOTES:
1. APPROVED MANUFACTURERS OF FIXTURES ARE AMERICAN STANDARD, ELJER AND KOHLER.
2. APPROVED MANUFACTURERS OF DRAINS AND CLEANOUTS ARE J.R. SMITH, ZURN AND WADE.
3. ALL SUPPLIES SHALL BE PROVIDED WITH CP BRASS ANGLE STOPS BY EASTMAN OR BRASSCRAFT.
4. ALL EXPOSED TRAPS AND WASTE ARMS SHALL BE CP BRASS BY MCGUIRE OR EQUAL.

PLUMBING GENERAL NOTES

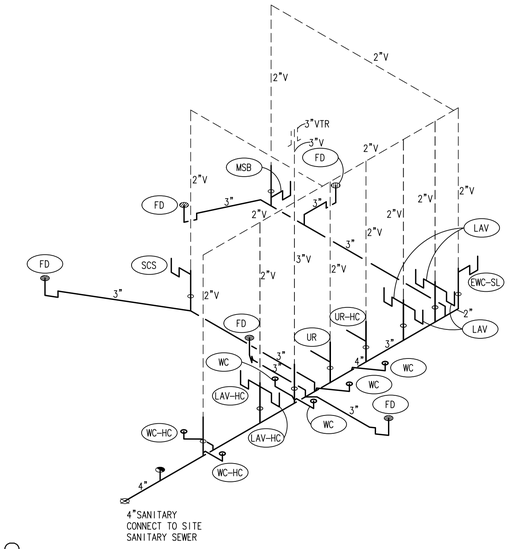
1. ALL WORK SHALL COMPLY WITH NATIONAL, STATE AND LOCAL CODES. THIS SHALL INCLUDE THE 2020 7TH EDITION FLORIDA BUILDING CODE, WITH LOCAL AMENDMENTS.
2. REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING. INSTALLATION TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS DEPICTED ON THE PLANS.
3. COORDINATE WITH OTHER TRADES TO PREVENT CONFLICTS WITH HVAC DUCTS, ELECTRICAL LIGHTING AND STRUCTURAL ELEMENTS.
4. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES SHOWN ON THE PLUMBING FIXTURE SCHEDULE. VERIFY MOUNTING HEIGHT AND CONNECTION SIZES OF ALL PLUMBING FIXTURES PRIOR TO INSTALLATION.
5. ALL WORK, BOTH MATERIAL AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE BY THE OWNER.

WATER PIPING

1. THE WATER PIPING SHALL BE CPVC WITH SOLVENT WELDED JOINTS, WITH MAIN RUNS BELOW SLAB.
2. THE WATER SERVICE TO THE BUILDING IS NEW.
3. THE MAIN BACKFLOW PREVENTER IS NEW.
4. THE SITE WATER METER IS NEW.
5. SUPPORT ALL PIPING WITH PIPE HANGERS EQUAL TO GRINNEL.
6. PROVIDE EACH FIXTURE WITH A SHUT-OFF SUPPLY STOPS. EXPOSED STOPS AND SUPPLY PIPING SHALL BE CHROME PLATED, WITH CHROME ESCUTCHEON PLATE AND SET SCREW. STOPS SHALL BE 16" AFF FOR LAVATORIES.
7. PROVIDE UNIONS FOR ALL CONNECTIONS TO SERVICEABLE EQUIPMENT. UNIONS SHALL BE DIELECTRIC WHERE DISSIMILAR METALS ARE CONNECTED.
8. INSULATE ALL HOT WATER PIPING WITH 1" ARMAFLEX OR 1" FIBERGLASS EQUAL TO MANVILLE MICRO-LOK AP-T. VAPOR SEAL ALL BUTT JOINTS.
9. PROVIDE WATER HAMMER ARRESTORS, EQUAL TO JR SMITH 5000 SERIES, IN ACCORDANCE WITH PDI STANDARD WH-201. FIELD FABRICATED SHOCK ABSORBERS ARE NOT ACCEPTABLE.
10. PROVIDE VACUUM BREAKERS AS REQUIRED BY CODE.
11. STERILIZE ALL WATER PIPING IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS.
12. TEST ALL WATER PIPING AT 100 PSIG FOR SIX HOURS OR AS REQUIRED BY THE JURISDICTION.
13. PROVIDE SHUT OFF VALVES FOR ALL EXTERIOR HOSE BIBS AND WALL HYDRANTS.
14. PROVIDE SERVICE VALVES AT EACH BRANCH SUPPLY LINE, AS DEPICTED ON THE PLAN. ALL VALVES, CHECK STOPS, ETC. SHALL BE RATED FOR 125 LB SERVICE. VALVES SHALL BE BALL OR GATE TYPE, GLOBE VALVES ARE NOT ACCEPTABLE. VALVES SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION FOR SERVICING AND OPERATION.

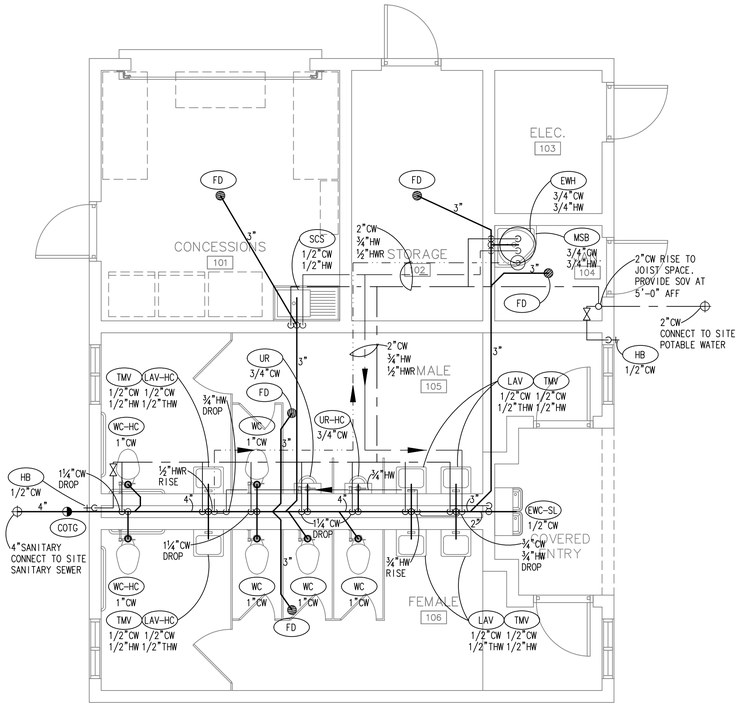
SANITARY, WASTE AND VENT PIPING

1. SANITARY WASTE, CONDENSATE AND VENT PIPING SHALL BE SCHEDULE 40 PVC DWV (ASTM-2665) WITH SOLVENT WELDED JOINTS.
2. SLOPE OF SANITARY, CONDENSATE AND WASTE PIPING SHALL BE UNIFORM, WITH A MINIMUM OF ¼" PER FOOT FOR 2" AND A MINIMUM OF ⅛" PER FOOT FOR LARGER PIPING.
3. EXPOSED WASTE DRAINS IN RESTROOMS SHALL BE CHROME PLATED BRASS TUBING WITH MATCHING CHROME ESCUTCHEON PLATE.
4. PROVIDE INTERIOR AND EXTERIOR CLEANOUTS AS REQUIRED BY CODE.
5. FURNISH 4 LB LEAD OR 8 OZ COPPER VENT FLASHING FOR INSTALLATION BY THE GENERAL CONTRACTOR FOR ALL VENTS THROUGH ROOF. VERIFY TYPE OF ROOFING PRIOR TO INSTALLATION.
6. TEST SANITARY, WASTE AND VENT PIPING USING A 10 FOOT WATER COLUMN FOR 2 HOURS OR AS REQUIRED BY THE JURISDICTION.



02 SANITARY ISOMETRIC

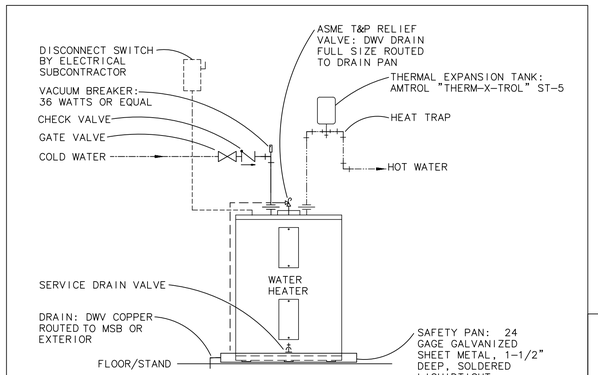
Scale: NOT TO SCALE



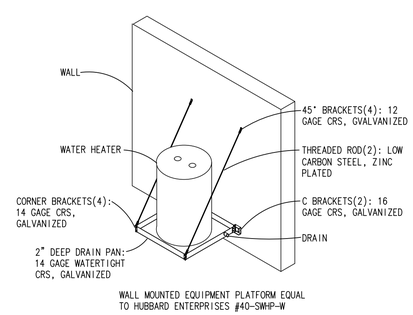
01 PLUMBING FLOOR PLAN

GROSS SQUARE FOOTAGE = 999 G.S.F.

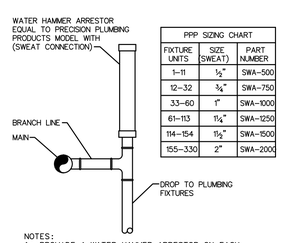
Scale: 1/4"=1'-0"



WATER HEATER DETAIL



WATER HEATER SUPPORT DETAIL



PPP SIZING CHART		
FIXTURE UNITS	SIZE (SWEAT)	PART NUMBER
1-11	½"	SWA-500
12-32	¾"	SWA-750
33-60	1"	SWA-1000
61-113	1¼"	SWA-1250
114-154	1½"	SWA-1500
155-330	2"	SWA-2000

NOTES:
1. PROVIDE A WATER HAMMER ARRESTOR ON EACH HOT WATER AND COLD WATER DROP.
2. ARRESTORS SHOULD ALWAYS BE INSTALLED SO THAT THERE IS AN UNOBSTRUCTED SHOCK PATH TO THE ARRESTOR.
3. ARRESTORS SHOULD ALWAYS BE PLACED AS NEAR TO THE SOURCE OF SHOCK AS POSSIBLE.

WATER HAMMER ARRESTOR DETAIL

WATER DEMAND

		CW EACH	HW EACH	TOTAL EACH	QTY EACH	TOTAL ALL
WC	WATER CLOSET - FLUSH VALVE	10	-	10	6	60
LAV	LAVATORY	1.5	1.5	2	6	12
UR	URINAL	5	-	5	2	10
SINK	SINK	2.0	2.0	3	1	3
MSB	MOP SERVICE BASIN	1.5	1.5	2	1	2
HB	HOSE BIBB	3.0	-	3	2	6
EWC	ELECTRIC WATER COOLER	0.5	-	0.5	1	0.5
TOTAL WSFU						93.5
TOTAL GPM	64				PIPE SIZE =	2"

PLUMBING LEGEND

SANITARY SEWER (SAN)	
GREASE (GR)	
VENT (V)	
COLD WATER (CW)	
HOT WATER (HW)	
TEMPERED HOT WATER (THW)	
HOT WATER RETURN (HWR)	
LP GAS (G)	GAS GAS GAS
SHUT-OFF VALVE	
SITE POINT OF CONNECTION	

Project:

HOBART PARK

CONCESSION & RESTROOM BUILDING

INDIAN RIVER COUNTY, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
A.	03/11/24	BID SET

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Drawing Title:

PLUMBING PLAN

Reference North

N

Drn: JGS
Dwg. File:
Chd: EH
XREF File:
Project No.: 2018-04
Plot File:
Sheet No.: P1.1

Cert. No.:FL PE 77543

Date Signed:

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