COUNCIL MEETING AGENDA REQUEST FORM

****

COUNCIL MEETING DATE: September 24, 2024

SUBJECT/REASON FOR AGENDA ITEM: _____

Temporarily Alcohol Permit Waiver ☐ | Open Container Law Waiver ☐

Other: _____

Please be specific about the reason to be on the agenda.

A resolution to ratify bids for "The Pavilion" and to award a contract in the amount of $774,900 to the lowest responsible and responsive bidder, Kelly Construction Group.

Requested By: _____

NAME: Tom Pistorius

ADDRESS _____

PHONE # _____ CELL PHONE: _____

EMAIL: _____ FAX: _____

Please note that the Hammond City Council meets the Second and Fourth Tuesday of the Month at 5:30pm, 312 East Charles Street, Hammond, LA 70401,All requests have to be submitted to the City Council Clerk by the Wednesday prior of the meeting no later than 4:30pm, All requests can be submitted electronically to banks_tm@hammond.org or fax (985) 277-5611. If you have any questions please call (985) 277-5610

BELOW TO BE FILLED OUT BY COUNCIL CLERK

****

DATE RECEIVED: _____ TIME RECEIVED: _____

Council Clerk: Lisa Cockerham Agenda Item Number _____

Approved: _____(Yes) _____(No)

Remarks: _____

Kip Andrews
Council President

_____

_____
Date

pistoriusassociates, llc
architecture planning interiors

September 19, 2024

City of Hammond
Pete Pantepinto, Mayor
Charles Borchers, Administrator
310 East Charles Street
Hammond, LA 70401

Re: Award of Contract Recommendation

Dear Mayor:

We received 10 bids for the Hammond Pavilion project on September 6, 2024. Kelly construction is the apparent low with a bid of $774,900. After review, we recommend the Award of Contract to Kelly Construction.

Sincerely,

Tom A. Pistorius, AIA

post office box 673 | **mail** • 109 1/2 west thomas street | **office** • 985.542.4287 | **voice** • hammond, la 70404

BID TABULATION SHEET

Project Name: City of Hammond - THE PAVILION
BID Date: 09.06.2024

Architect: PISTORIUS ASSOCIATES, LLC

Project No. pa2321

BIDDER	Lic.No.	ADD#1	ADD#2	Bond	Base Bid	DEDUCT ALT#1	Total
AB Gallardo LLC	73235	yes	yes	yes	$983,500	$85,794	
C.T. Wainwright	35960		yes	yes	$1,019,000	$46,665	
Nobles Construction, LLC	38956	yes	yes	yes	$1,061,882	$69,350	
Stubbs NK Contractors, LLC	59202	yes	yes	yes	$993,490	$78,460	
Spartan Building Corporation	4805	yes	yes	yes	$824,900	$37,000	
Kent Design Build	35232	yes	yes	yes	$867,000	$51,000	
D & H Quality Construction	42259	yes	yes	yes	$944,500	$72,000	
Hill Construction, LLC	43488	yes	yes	yes	$996,055	$75,139	
Kelly Construction Group	52741	yes	yes	yes	$774,900	$38,000	
McLin Construction	42839	yes	yes	yes	$889,000	$57,500	

Signed: _____ Date:09.06.2024
Tom A. Pistorius, AIA

pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

project manual
for

The Pavilion
for:
City of Hammond

NE Corner of SW Railroad and Edwin Neill Lane
Hammond, LA 70401

Bid/Permit set
job number: pa2341
date: 07.10.2024

pistoriusassociates, llc
mail : post office box 673
hammond, louisiana 70404
studio: 109 1/2 west thomas street
hammond, louisiana 70401

phone(985)542-4287

TABLE OF CONTENTS

NOTICE TO BIDDERS

Notice is hereby given that sealed bids will be received by the City of Hammond, at the City Council Chambers, 312 East Charles Street, Hammond, Louisiana, 70401 until
time: 2:00 p.m.**, day:** Tuesday**, date:** September 3, 2024**,** for

The Pavilion

and then and there be opened and publicly read aloud. Bids received after the specified time will not be opened or recognized.

Specifications and Contract Documents, and Construction Plans may be examined via the City's website at https://hammond.org/departments/purchasing/current-bids, or via Bid Express at https://www.bidexpress.com/businesses/56873/home.

A PreBid Conference is scheduled at the Project Site, Hammond, Louisiana 70401
at **time:** 1:00 p.m.**, day:** Wednesday**, date:** August 14, 2024

The City reserves the right to reject any or all Bids for just cause.

The Pavilion	Estimated Value	Contract Term
The Pavilion (BASE BID)	$775,000	240 calendar days
The Pavilion (DEDUCTIVE ALTERNATE)	$100,000	

Please publish:

Tuesday - August 6, 2024
Tuesday - August 13, 2024
Tuesday - August 20, 2024
Tuesday - August 27, 2024

INFORMATION FOR BIDDERS

BIDS will be received by the City of Hammond, Louisiana, at the City Council Chambers, 312 East Charles Street, Hammond, Louisiana 70401 until

Time: 2:00 pm**, Day:** Tuesday **, Date:** September 3, 2024

and then publicly opened and read aloud. Each bid must be submitted in a sealed envelope addressed to Purchasing Department, 310 East Charles Street, Post Office Box 2788, Hammond, Louisiana 70404. Each sealed envelope containing a bid must be marked

"BID for

The Pavilion"

and the envelope should bear the name of the BIDDER and his license number.

All bids must be made on the required Louisiana Uniform Public Work Bid Form. All blank spaces for bid prices must be filled, IN INK OR TYPED, and the Bid Form must be fully completed and executed when submitted. Only one copy of the Bid Form is required.

The owner may reject any and all Bids. Any Bid may be withdrawn prior to the above-scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. NO BIDDER MAY WITHDRAW A BID WITHIN FORTY-FIVE (45) CALENDAR DAYS AFTER THE DATE OF THE OPENING. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement in writing between the Owner and the Bidder.

Bidders must satisfy themselves of the accuracy of the estimated quantities in the provided schedule by examination of the site and a review of the drawings and specifications including properly issued Addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or of the nature of work to be done.

The Owner shall provide to Bidders prior to Bidding, all information which is pertinent to, and delineates and describes, the land owned as is available.

The Contract Documents contain the provisions required for the construction of the project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

A Bid Bond payable to the Owner must accompany each Bid for five percent (5%) of the total amount Bid. As soon as the Bid prices have been compared and checked, the Owner will return the Bonds of all except the three lowest responsible Bidders. When the Agreement is

executed the bonds of the two remaining unsuccessful bidders will be returned. The Bid Bond of the successful Bidder will be retained until the Payment Bond and Performance Bond have been executed and approved, after which it will be returned. A certified check or cashiers check may be used in lieu of a Bid Bond.

A Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the Contract Price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign Bid Bonds and Payment Bonds and Performance Bonds (or applicable Powers of Attorney), must file with each Bond a certified and effective dated copy of their power of attorney. **Said Attorney-in-fact must be domiciled in the State of Louisiana**.

The party to whom the contract is awarded will be required to execute and obtain the Performance Bond and Payment Bond within **ten (10) calendar days** from the date when the Notice of Award is delivered. The Notice of Award shall be accompanied by the necessary Agreement and Bond forms. In case of failure of the Bidder to execute the Agreement, the Owner may at his option consider the Bidder in default, in which case the Bid Bond accompanying the Bid shall become the property of the Owner.

The Owner within ten (10) days of receipt of acceptable NonCollusion Affidavit, Performance and Payment Bonds, Agreement and Insurance Certificate, signed and attested by the party to whom the construction project was awarded, shall sign and have recorded all applicable documents, and shall return to the Contractor all executed documents.

Should the Owner not execute the Agreement within such period, the Bidder may by WRITTEN NOTICE, withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner, and shall be sufficient evidence that the Contractor relinquishes all rights and responsibilities relative to his BID. In addition, the Owner shall return the BIDDER's BID BOND promptly.

The Notice to Proceed shall be issued within **ten (10) calendar days** of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and the Contractor. If the Notice to Proceed has not been issued within the ten (10) day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either Party.

The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.

A conditional or qualified Bid will not be accepted.

Award will be made to the lowest responsible and responsive BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout.

Each Bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to his Bid.

The low Bidder shall supply the names and addresses of all materials suppliers and subcontractors when requested by the Owner (or Engineer) to do so.

A PreBid Conference for prospective Bidders is scheduled at the Project Site, Hammond, Louisiana 70401 at

Time: 1:00 pm**, Day:** Wednesday**, Date:** August 14, 2024

The Architect is **Tom Pistorius of Pistorius Associates, LLC**
His telephone number is (985) 542-4287
His e-mail address is tom@pistoriusarchitects.com

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: City of Hammond
312 East Charles Street
Hammond, LA 70401

(Owner to provide name and address of owner)

BID FOR: The Pavilion

(Owner to provide name of project and other identifying information)

The undersigned bidder hereby declares and represents that she/he: a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Pistorius Associates, LLC and dated: 07.10.2024

(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following ADDENDA: (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____ .

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____ Dollars ($ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

Provide DEDUCT price to remove 21 '-8 1/2" from the length for a total length of 138 '-3 1/2" Dollars ($ _____)

Alternate No. 2 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

None ---------- Dollars ($ _____)

Alternate No. 3 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

None ---------- Dollars ($ _____)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

_____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

City of Hammond **Project No. pa_2341**
"The Pavilion"

STATE OF LOUISIANA

PARISH OF WASHINGTON

ATTESTATIONS AFFIDAVIT

Before me, the undersigned notary public, duly commissioned and qualified in and for the parish and state aforesaid, personally came and appeared Affiant, who after being duly sworn, attested as follows:

LA. R.S. 38:2227 PAST CRIMINAL CONVICTIONS OF BIDDERS

A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:

(a) Public bribery (R.S. 14:118)
(b) Corrupt influencing (R.S. 14:120)
(c) Extortion (R.S. 14:66)
(d) Money laundering (R.S. 14:230)

B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:

(a) Theft (R.S. 14:67)
(b) Identity Theft (R.S. 14:67.16)
(c) Theft of a business record (R.S.14:67.20)
(d) False accounting (R.S. 14:70)
(e) Issuing worthless checks (R.S. 14:71)
(f) Bank fraud (R.S. 14:71.1)
(g) Forgery (R.S. 14:72)
(h) Contractors; misapplication of payments (R.S. 14:202)
(i) Malfeasance in office (R.S. 14:134)

LA. R.S. 38:2212.10 Verification of Employees

A. At the time of bidding, Appearer is registered and participates in a status verification system to verify that all new hires in the state of Louisiana are legal citizens of the United States or are legal aliens.

B. If awarded the contract, Appearer shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

C. If awarded the contract, Appearer shall require all subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

City of Hammond **Project No. pa_2341**
"The Pavilion"

LA. R.S. 23:1726(B) Certification Regarding Unpaid Workers Compensation Insurance

A. R.S. 23:1726 prohibits any entity against whom an assessment under Part X of Chapter 11 of Title 23 of the Louisiana Revised Statutes of 1950 (Alternative Collection Procedures & Assessments) is in effect, and whose right to appeal that assessment is exhausted, from submitting a bid or proposal for or obtaining any contract pursuant to Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950 and Chapters 16 and 17 of Title 39 of the Louisiana Revised Statutes of 1950.

B. By signing this bid /proposal, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

_____ _____

NAME OF BIDDER **NAME OF AUTHORIZED SIGNATORY OF BIDDER**

_____ _____

DATE **TITLE OF AUTHORIZED SIGNATORY OF BIDDER**

_____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER/AFFIANT

Sworn to and subscribed before me by Affiant on the _____ day of _____ , 20___ .

_____
Notary Public

GENERAL CONDITIONS

1. *DEFINITIONS*

1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

2. **ADDENDA** – Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret and/or clarify the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.

3. **BID** – The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.

4. **BIDDER** – Any person, firm, corporation, or limited liability company submitting a BID for the WORK.

5. **BONDS** – Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.

6. **CHANGE ORDER** – A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME. A CHANGE ORDER becomes valid and enforceable after execution by the OWNER and the ENGINEER.

7. **CONSTRUCTION PLANS** – The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed, and which have been prepared, approved, certified, and issued by the ENGINEER.

8. **CONTRACT DOCUMENTS** – The contract, including Notice to Bidders, Information for Bidders, BID PROPOSAL, Bid Bond, Agreement, Performance Bond, Payment Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER(s), Construction Plans and Drawings, SPECIFICATIONS, and ADDENDA.

9. **CONTRACT PRICE** – The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.

10. **CONTRACT TIME/CONTRACT TERM** – The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

11. **CONTRACTOR** – The person, firm, corporation, or limited liability company with whom the OWNER has executed the Agreement.

12. **DRAWINGS** – Synonymous with "CONSTRUCTION PLANS".

13. **ENGINEER** – The person, firm, corporation, or limited liability company named as such in the CONTRACT DOCUMENTS.

14. **FIELD ORDER** – A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE, nor an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.

15. **NOTICE OF AWARD** — The written notice of the acceptance of the BID PROPOSAL from the OWNER to the successful BIDDER.

16. **NOTICE TO PROCEED** — Written communication issued by the OWNER to the CONTRACTOR authorizing and directing the CONTRACTOR to proceed with the WORK, and establishing the date of commencement of the WORK.

17. **OWNER** — A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.

18. **PROJECT** — The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

19. **RESIDENT PROJECT REPRESENTATIVE** — The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.

20. **SHOP DRAWINGS** — All drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the work shall be fabricated or installed.

21. **SPECIAL CONDITIONS** — Modifications, additions, and clarifications to the General Conditions detailing specific requirements and conditions pertinent to the PROJECT, and superseding conflicting provisions of the General Conditions.

22. **SPECIFICATIONS** — A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship.

23. **SUBCONTRACTOR** — An individual, firm, corporation, or limited liability company having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the work at the site.

24. **SUBSTANTIAL COMPLETION** — That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it was intended.

25. **SUPPLEMENTAL GENERAL CONDITIONS** — Modifications to the General Conditions required by a Federal Agency for participation in the PROJECT and approved by the Agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.

26. **SUPPLIER** — Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

27. **TECHNICAL SPECIFICATIONS** — Detailed description of the nature and scope of the individual portions of WORK, including technical requirements data, WORK requirements methods, materials requirements, measurement and payment methods, and other information relative to a specific portion of the WORK.

28. **WORK** — All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.

29. **WRITTEN NOTICE** — Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posed by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

2. ***ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS***

1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. *SCHEDULES, REPORTS AND RECORDS*

1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the ENGINEER or the CONTRACT DOCUMENTS for the WORK to be performed.
2. Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, estimated date of completion of each part, and, as applicable:
    1. The dates at which special detail drawings will be required; and
    2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacturer, the testing and the installation of materials, supplies and equipment.
3. The CONTRACTOR shall also submit a schedule of payments that he anticipates he will earn during the course of the WORK, if requested in writing by the ENGINEER.

4. DRAWINGS AND SPECIFICATIONS

1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work Necessary to complete the PROJECT in an acceptable manner, read for use, occupancy or operation by the OWNER.

2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions or DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.

3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR's risk. Submittal of a BID by the CONTRACTOR shall indicate to the OWNER that the intent of the DRAWINGS or SPECIFICATIONS is clear.

5. SHOP DRAWINGS

1. The CONTRACTOR shall submit to the ENGINEER SHOP DRAWINGS necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWINGS which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER. Such deviation shall be called to the attention of the ENGINEER concurrent with SHOP DRAWING submittal.

2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S notation that he (the Contractor) has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.

3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP and each sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES

1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.

2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to

be incorporated in the WORK shall be located so as to facilitate prompt inspection.

3. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

4. Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.

5. Materials supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing and in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.

2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.

3. The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS.

4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

5. Inspections, tests or approvals by the engineer or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.

6. The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.

7. If any WORK is covered contrary to the specifications or written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and if judged deficient, replaced at the CONTRACTOR'S expense.

8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

8.1. Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENT by reference to brand name or catalog number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to

that specified, the ENGINEER may approve its substitution and use by the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and then CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

1. The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SPECIFICATIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY AND PERSONS

1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damages, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.

3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR

12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the Site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK, including those periods during which SUBCONTRACTORS are performing their WORK.

13. CHANGES IN THE WORK

13.1. The OWNER may at all times, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.

13.2. The ENGINEER, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30) days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

13.3. A CONTRACT CHANGE ORDER shall be considered final and binding when such CHANGE ORDER has been delivered to the CONTRACTOR, recommended by the ENGINEER, and approved by the OWNER. The WORK as Modified by the CHANGE ORDER shall proceed promptly. The CONTRACTOR shall sign as accepted the CHANGE ORDER if the adjustments to CONTRACT PRICE and CONTRACT TIME are acceptable. Should either the adjustment to CONTRACT TIME or CONTRACT TIME be unacceptable to the CONTRACTOR for any reason, then such an exception shall be made by the CONTRACTOR to the ENGINEER in writing. The CHANGE ORDER shall remain valid, except that the CONTRACTOR may request, based on the CONTRACTOR'S written exception, further change(s) to the CONTRACT PRICE and/or CONTRACT TIME. The CONTRACTOR'S written exception to a validly issued CHANGE ORDER shall be delivered to the ENGINEER within seven (7) calendar days of the CONTRACTOR'S receipt of the CHANGE ORDER.

14. CHANGES IN CONTRACT PRICE

14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

(a) Unit prices previously approved.
(b) An agreed lump sum.
(c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

15. ***TIME FOR COMPLETION & LIQUIDATED DAMAGES***

15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified at the NOTICE TO PROCEED.

15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the SPECIAL CONDITIONS for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess costs when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER:

1. To any preference, priority, or allocation order duly issued by the OWNER.
2. To unforeseeable causes beyond the control and without the fault of negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and
3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected work within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS

1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:
   - 1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or
   - 1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.
2. The OWNER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless he has given the required WRITTEN NOTICE; provided that the OWNER may, if he determines the facts so justify, consider

and adjust any such claims asserted before the date of final payment.

18. SUPERVISION OF WORK, TERMINATION AND DELAY

1. The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

2. If the CONTRACTOR is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any right or remedy and after giving the CONTRACTOR and his surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he deems expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balances, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.

3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.

4. After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the Contract. In such case, the CONTRACTOR shall be paid for all work executed and any expense sustained plus reasonable profit.

5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days of its approval and presentation, then the CONTRACTOR, may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until he has been paid all the amounts due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.

6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by

CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENTS TO CONTRACTOR

19.1. At least five (5) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of the payment and present the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within thirty (30) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty (50) percent of the WORK has been completed, if he finds that satisfactory progress is being made, may reduce retainage to five (5%) percent on the current and remaining estimates. When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5%) percent to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored at the site or a site acceptable to the OWNER.

19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER, and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK in toto.

19.4. The OWNER, and agents, representatives, and/or employees duly authorized by the OWNER, shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of OWNER.

19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK. Retained amounts may include 10% of the total contract amount (or 5% if the contract amount exceeds $500,000), plus any amounts necessary to adequately remedy defective work, plus any amounts necessary to cover taxes and dues due.

19.6. The CONTRACTOR will indemnify and save the OWNER and the OWNER's agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR's unpaid compensation a sum of money deemed reasonably

sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligation upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR, and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

19.7. If the OWNER fails to make payments thirty (30) days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of 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 this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BOND.

21. INSURANCE

21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR's execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

21.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

21.1.2. Claims under worker's compensation, disability benefit and other similar employee benefits acts;

21.1.3. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

21.1.4. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

21.1.5. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and

21.1.6. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be cancelled unless fifteen (15) days prior WRITTEN NOTICE has been given directly to the OWNER. Failure by the OWNER to require the production of these certificates of insurance shall not constitute a waiver or release of any duty or obligation of the CONTRACTOR to the OWNER.

21.3. The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR's General Public Liability and Property Damage Insurance including vehicle coverages issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than $500,000 aggregate for any such

damages sustained by two or more persons in any one accident; and a limit of liability of not less than $500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than $200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than $200,000 aggregate for any such damage sustained by two persons in any one accident. Said insurance policy shall also name as the insured the OWNER.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and the SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the work is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

21.5. The CONTRACTOR shall provide insurance coverages as recommended below, unless specific coverage is otherwise required (e.g., Railroad Protective Coverage):

Type of Insurance	Limits (minimum)	
General Liability	Each occurrence	$ 1,000,000
Comml. Genl.Liab.	Damage–rented premises	100,000
	Med. Exp.(any 1 person)	5,000
	Personal & adv. Injury	1,000,000
	General Aggregate	2,000,000
	Products	2,000,000
Automobile Liability	Comb. Single limit	1,000,000
Umbrella Liability	Each occurrence	3,000,000
	Aggregate	3,000,000
Workers Compensation	Statutory	
	Each accident	1,000,000
	Disease–ea. employee	1,000,000
	Disease policy limit	1,000,000

22. CONTRACT SECURITY

22.1. The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a Performance Bond and a Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If any time a surety on any such BOND is declared a bankrupt or loses it rights to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal BONDS, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an

acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactorily to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS

23.1. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION

24.1. The CONTRACTOR will indemnify, defend, and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the project site and/or the performance of the WORK, including but not limited to claims for bodily injury, sickness, disease or death, damages resulting therefrom, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the obligation to defend and to indemnification shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS

25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRCTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

25.2. The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.

25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CON TRACT, written notice thereof shall be give to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believe that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim thereof as provided in Sections 14 and 15.

26. SUBCONTRACTORS

26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.

26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of fifty (50%) percent of the CONTRACT PRICE, without prior written approval of the OWNER.

26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed; by them, as he is for the acts and omissions of persons directly employed by him.

26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.

26.5. Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY

1. The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and Work performed. He shall interpret the intent of the Contract Documents in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the Contract Documents.
2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY

1. Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
3. The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTY

1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that completed system is free from the defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance BOND shall remain in full force and effect through the guarantee period.

30. ***ARBITRATION***

1. All claims, disputes and other matters in question arising out of , or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by the making and acceptance of final payment as provided by Section 20, may be decided by arbitration in accordance with the Construction Industry Arbitration Association. This agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.
2. Notice of the demand for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and with the American Arbitration Association, and a copy shall be filed with the ENGINEER. Demand for arbitration shall in no event be made on any claim, dispute or other matter in question which would be barred by the applicable statute of limitations.
3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. ***TAXES***

31.1. The CONTRACTOR shall promptly pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

SPECIAL CONDITIONS

1 INTRODUCTION

The work covered by these specifications shall include furnishing all plant, labor, supervision, materials, equipment and incidentals that may be required to complete the construction of

The Pavilion

for the **City of Hammond, Louisiana.**

2 SCOPE OF WORK

This project includes, but is not limited to, the following:

a. Mobilization.
b. Removing portions of paving for construction of covered parking canopy.
c. Concrete Footing for Steel columns, painted.
d. Steel Trusses and Steel Purlins erection and installation, painted.
e. Power to the structure, lighting, fans, outlets.
f. Metal Roofing
g. Concrete Sidewalks, Metal Fencing with Metal Mesh infill.
h. Asphalt patching and new topping.

3 PLANS

The work shall conform to the contract drawings titled

"The Pavilion"

4 PAYMENTS TO CONTRACTOR

All payments to the Contractor(s) as obligations to the City of Hammond shall be made from funds on hand. The Contractor shall submit partial payment requests on or before the 25th of each month, covering the work completed at the time of submission of the estimate, in order to process payment by the 15th of the next month. Estimates which do not conform to the Architect's records or in the judgment of the Architect are not consistent with actual work completed, may be held by the Architect for an additional period until the estimate has been revised by the Architect, or the Contractor has submitted a revised estimate, or the Architect has been satisfied that the estimate is properly documented. The Architect will endeavor to expedite payments in the shortest practicable time, considering the availability of City funds, accuracy of estimates, and accompanying documentation of quantities.

5 WORK ORDER

No work shall commence until the owner has issued a work order directing the contractor to proceed and stating that sufficient funds have been provided for payment according to the contract documents. The date of the work order shall be the date on which the contract time shall start.

6 COMMENCEMENT, PROSECUTION AND COMPLETION

The Contractor will be required to commence work under this contract within TEN (10) calendar

days after the dated written Notice to Proceed, and he shall be required to complete all work within the number of calendar days stated in Article 7 below.

7 TIME OF COMPLETION

The project shall be completed, including testing, written certification, and fully operational to the satisfaction of the Architect within the number of days shown below:

The Pavilion	Two Hundred Forty (240) calendar days

of the date prescribed to commence work within the "Notice to Proceed".

Delays due to fixture and/or materials shipments shall be fully documented and that information provided to the Architect prior to permitting such delay to be considered as justifiable. A delay due to inclement weather will be determined by the judgment of the Architect. If, in the opinion of the Architect, 60% of the work force can work for a period of six working hours or greater, a delay day will not be granted.

If the Contractor fails to complete the WORK within the specified period, he will be subject to liquidated damages for each day thereafter until work is complete to the satisfaction of the Architect.

8 LIQUIDATED DAMAGES

In case of failure on the part of the Contractor to complete all phases of the work as designated herein, and in as much as time is of the essence to the owner, it is mutually agreed that the owner shall suffer liquidated damages for each calendar day of delay beyond the scheduled date of completion and the damages shall be **ONE HUNDRED DOLLARS ($100.00) PER DAY**.

9 PRE-CONSTRUCTION CONFERENCE

Prior to beginning construction, a preconstruction conference shall be held between the Contractor, the Owner, and the Architect, to reach agreements relating to responsibilities and procedures of each interested party, to insure that the project is installed according to the construction plans and specifications, and to review the conditions for submitting and receiving partial payments and final payments. This meeting will be prearranged by the Architect.

10 PLANS AND SPECIFICATIONS

Any item or instruction shown on the Plans or Specifications will be as if it were shown on both.

11 CONFORMITY WITH PLANS AND SPECIFICATIONS

If, due to the Contractor's negligence in performing the work, the Architect deems it necessary to make design changes, the Contractor will be liable for the additional design cost to the owner. Amount of such design cost will be the salary cost of design personnel plus 125% and said amount will be deducted from any monies that are due, or may become due, the Contractor under this Contract.

12 POWER OF ATTORNEY

The power of attorney of the Surety Company signing the Performance Bond shall be attached to the bond. One copy shall be attached to each of the executed copies of the Contract Documents. The empowered attorney must be domiciled in the State of Louisiana.

13 INSURANCE REQUIREMENTS

The Contractor shall present to the Architect for his review and approval an insurance binder, certifying that coverages meet or exceed those outlined below, in favor of the City of Hammond, LA, including General Liability, Automobile Liability, Excess Liability, and Workers Compensation. Specific coverages shall be as stated in the "General Conditions".

The CONTRACTOR shall provide insurance coverages as recommended below, unless specific coverage is otherwise required:

Type of Insurance	Limits (minimum)	
General Liability	Each Occurrence	$ 1,000,000
Commercial Genl. Liability	Damage-rented premises	100,000
	Medical Expense (any 1 person)	5,000
	Personal & adv. Injury	1,000,000
	General Aggregate	2,000,000
	Products	2,000,000
Automobile Liability	Combined Single Limit	1,000,000
Umbrella Liability	Each occurrence	3,000,000
	Aggregate	3,000,000

14 HAZARDOUS CONDITIONS

If within twentyfour (24) hours after written notice, the Contractor has not corrected or remedied a hazardous condition or defect, the owner shall take the necessary steps to correct same. All costs shall be charged to the Contractor, and, if not paid, shall be withheld from remaining monies due him.

15 EQUIPMENT DAMAGE TO ROADS AND PARKING LOTS

The Contractor shall provide on his equipment such devices necessary to prevent damage to surfaced roads, etc. The Contractor shall be responsible for repairing to the satisfaction of the Architect any breaks or damage to the street surface at no additional cost to the Owner.

16 STORAGE OF MATERIALS

It shall be required that all stockpiled material be located in such a manner as not to damage the material or interfere with the work of any other Contractor(s).

17 COOPERATION BETWEEN CONTRACTORS

Since there is a possibility of having other contractors within the project area, each contractor shall conduct his work so as not to interfere with or hinder the progress or completion of the work being

performed by the other contractor.

Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delay or loss experienced by him because of the presence and operations of another Contractor working within the limits of the same project.

The Contractor shall arrange his work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractor within the limits of the same project. He shall join his work with that of others in an acceptable manner and shall perform it in proper sequence to that of the other.

18 LAYOUT OF THE WORK

The Contractor shall layout his work from existing base lines and bench mark elevations previously established by the Architect and shall be responsible for all measurements in connection therewith. Contractor is to notify Architect immediately if he finds or suspects that control points are in error. The Contractor shall, at his own expense, furnish a competent survey party and furnish all stakes, templates, platforms, equipment and labor that may be required in setting and cutting, or laying out of any part of the work. The Contractor will be held responsible for the proper execution of the work to such lines and grades as may be established or indicated by the Architect and all stakes or other marks thus established and shall be preserved by him until their removal as authorized by the Engineer.

NOTE: THE RESIDENT INSPECTOR IS NOT RESPONSIBLE FOR LAYING OUT THE WORK UNLESS SPECIFICALLY DIRECTED BY THE ARCHITECT TO DO SO.

19 MISCELLANEOUS WORK

There shall be no specific payment for any items to be removed, replaced, adjusted or cleaned as required or reasonably implied on the plans or in these documents or for other necessary work unless specifically included as a bid item. Payment for bid items shall be considered to include payment for all work, necessary for the completion of the project.

20 PRIVATE AND PUBLIC PROPERTY

The Contractor shall carry on his work in a manner to protect public and private property. The Contractor shall be responsible for any and all damages to private or public property which may result from his operations. All land that has been disturbed in any manner by construction operations shall be accurately graded for drainage, cleared of all debris and extraneous materials and left in a neat and presentable condition.

21 FILL MATERIAL

All material hauled or used in fill will be periodically checked to see that it meets specifications. All material found violating specifications will be removed and replaced at full Contractor's expense. No extra construction time will be allowed for this work.

22 MATERIALS AND WORK

All work & materials shall meet or exceed the requirements specified herein, unless in the Architect's judgment, a change in the specifications will pose no sacrifice in the quality of work.

23 OBSERVATION AND SAFE PLACE

The undertaking of OBSERVATION by the ARCHITECT shall not be construed as supervision of actual construction since the Architect or his authorized representative will, in no case, act as superintendent or foreman, nor will they interfere with the management of the work.

It further shall not be construed to make the Architect or his authorized representative responsible for providing a safe place or safe conditions for the performance of work under the contract by: the Contractor's employees; SubContractors; employees of any supplier; or by a person for access, visits, work travel, or passage.

The continuous safety of the project site is explicitly the sole responsibility of the Contractor, and the acceptance of award this contract to a contractor shall represent the Contractor's acceptance of responsibility for project site safety.

25 ACCIDENTS

The Contractor shall provide at the site, such equipment and medical facilities necessary to supply firstaid service to anyone who may be injured in connection with the work.

Contractor shall promptly report in writing to the Architect all accidents whatsoever arising out of, or in connection with, the performance of the work whether on or adjacent to the site, which caused death, personal injury or property damages, giving full details and statements of witnesses. In addition if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both Owner and the Architect.

26 REMOVAL OF OBSTRUCTIONS

The cost of removal and replacement of existing obstructions shall be the Contractor's responsibility, unless indicated otherwise.

Such items as street signs, traffic signs, mailboxes, landscape trees/shrubs, and other obstructions to the work shall be carefully removed, stored in a safe place and manner, and reinstalled (or replaced “in kind”) in a location approved by the Architect (unless reinstallation in the same original location is feasible).

27 MEASUREMENTS

The Contractor shall verify all measurements and be responsible for the correctness of same before ordering any materials or doing any work. Should the quantity of materials ordered vary from the fieldstaked quantities, the contractor shall not seek, nor shall the Owner consider, any additional freight or restocking charges due to inaccurate quantities ordering by the Contractor. The CONTRACTOR shall also be responsible for documenting and providing to the Architect complete documentation for all quantity measurements requested for payment.

28 INTERPRETATION OF PLANS AND SPECIFICATIONS

Any requests for interpretations as to plans and specifications shall be submitted in writing to the Architect ten (10) days prior to the receipt of bids. Qualified bidders only shall submit this request.

In the event that a portion or description of the work as specified appears ambiguous or contradictory or is otherwise unclear as to the actual specific intent of the Owner and the Architect, then the Contractor is responsible for contacting the Architect for a definitive interpretation sufficiently in

advance of the scheduled receipt of bids for the Architect to issue an Addendum, if one is necessary in the judgment of the Architect. Failure to request interpretation of the plans and specifications by the Contractor to the Architect, which request shall be received and acknowledged by the Architect at least five (5) working days prior to the scheduled receipt of bids, shall be interpreted as de facto acceptance of the ultimate interpretation of the Architect and no request for increase in costs, extension of contract time, or deviation from the intended specified work, will be considered by the Owner, if that request results from a misinterpretation of these specifications or the plans by the Contractor.

After the awarding of a Contract, if there have been no requests for interpretations on the part of the low bidder within the abovespecified deadline, it is assumed by the Architect and Owner that the intent of the plans and specifications is clear. Should any controversy arise, the Architect shall instruct the Contractor as to the manner of procedure and this decision shall be final and binding.

29 INSPECTIONS AND FINAL ACCEPTANCE

The Contractor shall inform the Architect in writing when the project is complete, specifically requesting inspection and Final Acceptance. The Architect shall coordinate and schedule the prefinal inspection within seven (7) working days of the date of receipt of the Contractor's written request. (This period of time is not eligible as delay time). Upon completion of the PreFinal Inspection, if the Architect considers the overall project substantially complete, he shall compile a deficiency list and recommend acceptance to the Owner. The Contractor shall completely correct the deficiency list within fourteen (14) calendar days of the date of Final Acceptance by the Owner. Request for delays in correction of the deficiency list shall be documented and submitted in writing to the Architect when they are anticipated or discovered, whichever occurs first.

Within fourteen (14) days of Final Acceptance by the Owner, the Architect may conduct a Final Inspection of the project without notice to the Contractor, unless a delay in correction of the deficiency list has been submitted to and approved by the Architect. If a delay has been approved, the Architect may conduct a Final Inspection immediately after a period of time equal to fourteen days after Final Acceptance plus approved delay days. The purpose of the Final Inspection shall be to ensure that all deficiencies have been corrected to the satisfaction of the Architect, and to ensure that no newly discovered deficiencies exist uncorrected. It is incumbent on the General Contractor to ensure that all deficiencies are corrected to the satisfaction of the Architect, whether explicitly called out on the deficiency list or not.

30 ALTERNATE BIDS

Submit alternate bids per plans.

31. COMPLETION OF BID PROPOSAL FORM

Each Bid item as briefly described on the Bid Proposal Form shall be completely filled out in ink or typewritten, with the unit price in numerals (dollars and cents), followed by the extended price as calculated by multiplying the unit price by the contract quantity, in numerals (dollars and cents).

Each individual bid item shall be assigned a unit price dollar value (greater than "$0.00") by the BIDDER on the BID PROPOSAL FORM. A BID COMPLETED WITHOUT A DOLLAR VALUE ASSIGNED TO EACH BID ITEM SHALL BE CONSIDERED NON-RESPONSIVE AND REJECTED BY THE OWNER.

32. PAYMENT OF TAXES AND FEES

It is incumbent on the General Contractor that all taxes, licenses, and fees to be remitted promptly to the appropriate taxing authorities.

If, upon expiration of the 45 day Lien Period, all taxes have been satisfactorily collected by the City and a Clear Lien Certificate has been obtained by the Contractor and delivered to the Architect, the Architect shall request disbursal of retainage at the soonest meeting of the City Council of the City of Hammond (2nd and 4th Tuesday of each month).

The Contractor is solely liable and responsible to the City for complete and full remittance of taxes, and for the filing of the "Notice by Owner of Acceptance of Work", and for the obtaining and submission of the "Clear Lien Certificate" to the ARCHITECT, duly certified by the Tangipahoa Parish Clerk of Court. The Contractor is urged to communicate and consult with the City Tax Collector to monitor tax payments due the City to avoid delays in release of retainage. In the event that the amount of taxes due the City exceeds 5% of the final contract amount, the City reserves the right and authority to retain in excess of the normal 10% retainage until such time as all taxes have been remitted to the City. The decision of the City Tax Collector concerning taxes owed to the City shall dictate the disposition of withheld monies. That decision may be appealed to the Hammond city council.

NOTICE OF AWARD

Construction of : **The Pavilion**

For the **City of Hammond, Louisiana**

To: _____

_____

_____

The Owner represented by the undersigned has considered the Proposal submitted by you for the above described work in response to its Notice and Instructions to Bidders dated _____.

It appears that it is to the best interest of said Owner to accept your Proposal in the amount of

_____

And you are hereby notified that your proposal has been accepted for the Base Bid.

You are required by the Notice and Instructions to Bidders to execute the formal Agreement with the undersigned Owner and to furnish the required Performance and Payment Bonds, Certificates of Insurance, and NonCollusion Affidavit as required by the Specifications within ten (10) days from the date of delivery of this Notice to you.

If you fail to execute said contract and to furnish said documents within ten (10) days from the date of delivery of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned and to award the work covered by your Proposal to another, or to readvertise the work or otherwise dispose thereof as the Owner may see fit.

You are required to return an acknowledged copy of this Notice to the Owner and the Engineer.

Dated this ____day of _____.

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged this _____ day of _____

BY: _____

NAME: _____

TITLE: _____

OWNER: **CITY OF HAMMOND, LA.**

BY: _____

Pete Panepinto, MAYOR

AGREEMENT

THIS AGREEMENT, made this Day_____Date_____, by and between

the **MAYOR AND CITY COUNCIL OF THE CITY OF HAMMOND, Louisiana**,

hereinafter called "**OWNER**", and

_____, hereinafter called "**CONTRACTOR** ".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of

The Pavilion

for the **City of Hammond, Louisiana.**

2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within ten (10) calendar days after the date of the NOTICE TO PROCEED and will complete the same within **two hundred and forty (240) consecutive calendar days**, unless the period for completion is extended otherwise by the OWNER.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of

_____

_____ as shown on the BID PROPOSAL for Base Bid

5. The term "CONTRACT DOCUMENTS" means and includes the following:
   (A) NOTICE TO BIDDERS
   (B) Information for BIDDERS
   (C) Addendum No. dated.
   (D) Addendum No. dated
   (E) BID PROPOSAL
   (F) BID BOND
   (G) Agreement
   (H) Certificate of Insurance
   (I) Performance BOND
   (J) Payment BOND
   (K) General Conditions
   (L) Special Conditions

(M) TECHNICAL SPECIFICATIONS
(N) NOTICE OF AWARD
(O) NOTICE TO PROCEED
(P) CHANGE ORDER(s)
(Q) CONSTRUCTION PLANS AND SPECIFICATIONS prepared or issued by **Pistorius Associates, LLC**, dated _____.

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in quadruplicate, each of which shall be deemed an original on the date first above written.

OWNER: **CITY OF HAMMOND, LOUISIANA**

BY: _____

NAME: Pete Panepinto

(SEAL) TITLE: Mayor

ATTEST:

_____

NAME: _____

TITLE:

CONTRACTOR: _____

BY: _____

NAME: _____

TITLE: _____

(SEAL) ADDRESS: _____

_____

ATTEST:

_____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

-
(Name of Contractor)

-
(Address of Contractor)

a _____-_____, hereinafter called PRINCIPAL, and
(Corporation, limited liability company, partnership, or individual)

(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held firmly bound unto the

MAYOR AND CITY COUNCIL OF THE CITY OF HAMMOND, LOUISIANA
P. O. BOX 2788, HAMMOND, LOUISIANA 70404

hereinafter called OWNER, in the penal sum of

_____ in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the ___day of _____, a copy of which hereto attached and made a part hereof for the construction of:

The Pavilion
for the **City of Hammond, Louisiana**

NOW, THEREFORE, if the PRINCIPAL shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without written notice to the SURETY and during the one (1) year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless to the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay to the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the ____day of _____.

ATTEST:

_____
Principal Secretary

(SEAL)

_____
Witness as to Principal

_____
Address

_____

ATTEST:

_____
Surety Secretary

(SEAL)

_____
Witness as to Surety

_____
Address

_____

_____
Principal

By:_____

_____
Address

_____

_____
Surety

BY:_____
Attorneyinfact

_____
Address

_____

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners shall execute BOND.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

-
_____
(Name of Contractor)

-
_____
(Address of Contractor)

a _____-_____, hereinafter called PRINCIPAL, and
(Corporation, limited liability company, partnership, or individual)

_____
(Name of Surety)

_____
(Address of Surety)

hereinafter called SURETY, are held firmly bound unto the

MAYOR AND CITY COUNCIL OF THE CITY OF HAMMOND, LOUISIANA
P. O. BOX 2788, HAMMOND, LOUISIANA 70404

hereinafter called OWNER, in the penal sum of

_____

_____ in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the ___day of _____, a copy of which hereto attached and made a part hereof for the construction of:

The Pavilion
for the **City of Hammond, Louisiana**

NOW, THEREFORE, if the PRINCIPAL shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without written notice to the SURETY and during the one (1) year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless to the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay to the OWNER all outlay and expense which the

OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the _____ day of _____.

ATTEST:

_____
Principal Secretary

(SEAL)

_____
Witness as to Principal

_____
Address

_____

ATTEST:

_____
Surety Secretary

(SEAL)

_____
Witness as to Surety

_____
Address

_____

_____
Principal

By:_____

_____
Address

_____

_____
Surety

BY:_____
Attorneyinfact

_____
Address

_____

NOTICE TO PROCEED

Project: **The Pavilion**
for the **City of Hammond, Louisiana**

Date: _____

To: _____

_____

_____

You are hereby notified to commence WORK in accordance with the Agreement dated _____, on or before _____, and you are to complete the WORK within

two hundred forty (240) consecutive calendar days

thereafter. The date of completion of all work is therefore _____.

OWNER: **CITY OF HAMMOND, LA**

By:_____
Pete Panepinto, Mayor

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged by

_____

this the _____day of_____.

BY: _____

NAME: _____

TITLE: _____

NOTICE BY OWNER OF ACCEPTANCE OF WORK

TO WHOM IT MAY CONCERN: and especially all subcontractors, workmen, laborers, mechanics, and furnishers of materials.

Public notice is hereby given, according to law that the undersigned Owner has accepted the work done by _____ Contractor, under his contract with him of_____, and recorded in MOB _____, Page ____, of the Mortgage Records of the Parish of Tangipahoa.

All subcontractors, workmen, laborers, mechanics, and furnishers of materials must assert whatever claims they may have against the said contractor, growing out of execution of said contract, according to law, within fortyfive (45) days from the registration hereof.

DATE: _____ _____

PROJECT: **The Pavilion**
for the **City of Hammond, Louisiana**

OWNER: **CITY OF HAMMOND, LOUISIANA**

BY: _____

Pete Panepinto, MAYOR

SECTION 01 1100

SUMMARY OF WORK

PART 1 GENERAL

1. WORK COVERED BY CONTRACT DOCUMENTS

A. Project: The Pavilion for City of Hammond

B. Base Bid: Construction of a 8,805 SF metal truss pavilion/covered parking structure per the plans and specifications. The bid shall include labor, material, equipment, services and transportation necessary to construct the entire project within the timeframe of two hundred and forty (240) calendar days. The work shall include utility connections and other work indicated, or reasonably implied, unless specifically indicated "Not in Contract."

1. The Contractor shall include the cost of required fees including development or participation fees and permits, including Building Permit, in the Base Bid.

C. The Contractor shall be responsible for any and all existing structures and/or improvements, both above and underground, including the finishes thereof (both interior an exterior) within the adjoining working areas, and shall provide adequate protection therefore, either by barricades, or coverings, or by temporary removal. Any existing structures and/or improvements damaged during construction shall be repaired and/or replaced with materials, workmanship, fixtures or equipment of the same kind, quality and size as required by the Drawings or specifications. Any materials or equipment temporarily removed and damaged shall be repaired or replaced and re-erected or installed in an approved manner.

D. Scaffold, Staging, Protection, etc.: The Work under each Section of these Specification shall include providing, installing, and maintaining all scaffold, staging, trestles, and planking necessary for the work under each Section in strict conformity with all applicable laws and ordinances, and maintenance of same so as not to interfere with or obstruct the work of other trades. Additionally, the work under each section of these Specifications shall include providing all forms of protection necessary to preserve the work of other trades free from damage. These provisions shall be considered as though repeated under each separate Section of the Specifications.

E. Asbestos: It is the intent and requirement of these Contract Documents that no asbestos is to be used or incorporated into this Project in any form. If asbestos in any form is incorporated into the construction and is subsequently found during the construction period or after occupancy, it shall be the Contractor's responsibility to remove it immediately and replace it with materials approved by the Architect, including repair of all damage to adjacent materials caused by the asbestos removal, at the Contractor's expense. The period for discovery of materials containing asbestos shall not be limited by warranty period contained within this Contract or otherwise provided with the materials or construction. At close-out, the Contractor shall complete the affidavit in Section 01 7800, Closeout Submittals, on behalf of himself, his subcontractors and his suppliers, certifying that materials used or installed in the project are asbestos free.

F. Time for Completion: The Contractor shall complete the Work within the limits of the Contract.

1. Utilities, services, etc., cut or damaged by the Work shall be the Contractor's responsibility for repair and/or replacement in accordance with governing authority's requirements.
2. Contractor shall obtain written approval from the Owner a minimum of 72 hours prior to disconnection or shutting off service or utility.

G. Construction Staking: Unless noted otherwise, the Contractor shall be responsible for employing the services of a licensed surveyor to provide all necessary surveying and staking required for construction of the Work.

2. CONTRACTOR USE OF PREMISES

A. Contractor's parking, access, yards, etc., shall be limited to those areas on the site or as specifically indicated at the Pre-Construction Conferences.

B. Contractor and other persons connected to this Project shall only use parking areas designated on site plan or as approved by the Owner.

C. Contractor and workmen shall not trespass into area beyond the "Limit of Work" area.

D. Contractor shall use and maintain in clean condition site access route as shown on site or site access plan. No other access shall be used for vehicles or personnel.

END OF SECTION

SECTION 01 2976

PROGRESS PAYMENT PROCEDURES

PART 1 GENERAL

GENERAL

This Section outlines, in general, as a convenience to the Contractor, submittals required for, and to be used with, the first pay request and the procedure to be used for all pay requests. This Section is complementary to the General Conditions and Supplemental General Conditions and nothing within this Section shall be considered to waive any requirements of the General Conditions or Supplemental General Conditions.

EXPANDED SCHEDULE OF VALUES

In addition to the Schedule of Values required by the General Conditions, the Contractor shall submit, prior to the first pay request, an additional breakdown of the dollar amounts in the Schedule. Larger value amounts shall be broken down into major subcontracts and categories including, but not limited to:

Sitework:	earthwork, final grading, drainage
Concrete:	Paving, sidewalks, building slabs and foundations
Masonry:	Brick veneer
Structural Steel:	Trusses, Purlins and Accessories
Roofing:	Metal Roofing
Painting:	Interior and exterior paint
Plumbing:	Water to Drinking Fountains and Hose Bibs
Electrical:	Site, underground, rough-in, fixtures, trim, switchgear, equipment, special A/V systems and Cameras
Others:	As the Architect may require, to fairly and fully judge the value of the work in place.

These figures are to be used only to evaluate construction in place for each pay request and need not appear on the monthly pay application.

Contractor shall submit copies of the Contractor's schedule in accordance with Section 01 3216. Updated schedules shall be submitted at the time of each pay application meeting in accordance with section 01 3216. **This will be required as a condition of approving the Pay Request**.

PAY REQUEST

The form of Application for Payment shall be a notarized AIA Document G702, Application and Certification for Payment, supported by AIA Document G703, Continuation Sheet, or equivalent submitted for Architect's approval prior to submitting for payment. A minimum of three (3) original copies of these forms shall be submitted for each application. Submit additional copies if requested by the Owner or Architect.

The Contractor shall on or before the first day of each month make an estimate of the work performed during the preceding month and submit same to the Architect for checking and approval. Within thirty (30) days after Owner approval of Pay Request, the Owner shall pay to the Contractor ninety (90%)

percent of the value of said work in place, as checked and approved by the Architect. The balance of ten percent (10%) of the estimate shall be retained by the Owner until final acceptance of the Work, as defined in the General Conditions and Supplementary General Conditions. Reduction in the amount retained or held in substitute securities will only be made as provided for in applicable statute or ordinance. Contractor request for reduction in retainage shall be accompanied by AIA Document G707A, "Consent of Surety to Reduction in or Partial Release of Retainage".

Prior to the first pay request, the Architect, Owner and Contractor will establish a schedule for pay requests. For each pay request, a Pay Request Meeting shall be held at the project site where the Architect and Owner, if he requests, will meet with the Contractor prior to the submittal of the pay request and "pencil through" the previous pay application request. Proposed values will be for work in place and stored materials (if allowed) projected not more than two (2) days past the date of the pay request. The values accepted at this walk through will then be typed on the AIA Application for Payment as called for elsewhere in these specifications. The Application for Payment shall be delivered, complete, to the Architect not less than three (3) days prior to the Application being due to the Owner. Requests due to Owners or lenders located outside of the area may need to be submitted earlier when determined by the Architect.

The Contractor shall submit a financial breakdown of the work, itemized by crafts or sections as designated by the Architect. Payment will be based upon the monthly percentage of completion of these items.

Lien Waivers: General Contractor shall submit, along with the progress payment request, notarized lien waiverthe sum of which shall be the amount of the progress payment issued to the General Contractor.

The Contractor shall continually update Record Drawings per the requirements in Section 01 7800 Closeout Submittals. Review these updated drawings with the Architect at each pay request meeting or more often as directed. Up to date Record Drawings are required before a pay request will be approved.

The Application for Payment shall be accompanied by substantiation for stored materials, monthly progress reports and updates, and any other pertinent items required by the Owner or Architect and identified during the Pre-Construction Conference.

AIA Documents G706, Contractor's Affidavit of Payment of Debts and Claims, G706-A, Contractor's Affidavit of Release of Liens, Documents G707, Consent of Surety Company to Final Payment shall be used. These documents shall be submitted bound into the front of the Owner and Maintenance manuals. If appropriate, G707-A, Consent of Surety to Reduction in or Partial Release of Retainage shall be used.

At any time the actual progress falls 5% or more behind the scheduled progress, the Contractor shall submit a written plan to the Architect outlining his plan for placing the project back on schedule. Failure to provide this information shall be cause to withhold payment.

STORED MATERIALS

When acceptable to the Owner, the Contractor may submit for payment on properly stored materials not yet incorporated into the work. Materials must be stored on the site in a secured area and be protected from damage, weather, theft or vandalism. The Contractor shall be responsible for replacing any damaged or missing materials.

At the time of the Pay Request Meeting, stored materials for which payment is requested will be examined, counted and verified against actual bills of sale legibly listing all items, quantities and dollar values, including freight. Mark-ups are not allowed. All invoices shall clearly indicate invoice numbers, purchase order numbers or tag numbers associated with the materials so that the materials can be quickly and clearly located in the storage areas. Copies of these invoices shall be provided to the

Architect for his use and record and shall be attached to the submitted pay application and the totals shall equal or exceed amounts requested for the stored materials. Stored Materials shall be listed in the appropriate column of the Pay Application.

END OF SECTION
01 2976.

SECTION 01 3113

PROJECT COORDINATION

PART 1 GENERAL

NOT USED

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

1. SUMMARY

A.Requirements

1. Review requirements and clearances of all building utilities and structural components above ceiling and coordinate the installation of all components to provide proper access and clearances to valves, access doors, ports, etc.
2. Provide project interface and coordination as required to properly and accurately bring together the several parts, components, systems, and assemblies and as required to complete the Work and the Project, pursuant to the General Conditions.
3. Provide interface and coordination of all trades, crafts, and subcontracts as required to provide correct and accurate connection of abutting, adjoining, overlapping, and related Work, and provide all anchors, fasteners, accessories, appurtenances, and incidental items as required to complete the Work properly, fully, and correctly in accordance with the Contract Documents.
4. Provide additional structural components, miscellaneous metal, bracing, blocking, backing, clips, anchors, fasteners, and installation accessories as required to properly anchor, fasten, or attach materials, equipment, appliances, hardware, systems, assemblies, cabinets, and architectural features to the structure required to adequately support or back building components.
5. Provide excavation and backfill, trenching and drilling for all trades as required for the installation of their Work.
6. Provide concrete foundations, pads, supports, bases, and grouting for all trades as required for the installation of their Work.
7. Provide caulking, sealing, and flashings as required to weatherproof the building complete and as required to insulate the building thermally and acoustically. Include caulking, sealing, flashings, and related work as required to prevent moisture intrusion, air infiltration, and light leakage.
8. Provide equipment, appliances, fixtures, and systems requiring plumbing and mechanical services, rough-in, and connections, or other utilities and services, with such services, rough-in, and final connections.
9. Terminations, connections, circuiting and conductors for appliances, fixtures, and indicated equipment required to complete the Work which are not provided by Subcontractors shall be provided by the Contractor.

10. Materials, equipment, component parts, accessories, incidental items, connections, and services required to complete the Work which are not provided by Subcontractors shall be provided by the Contractor.

B.Field Measurements and Templates:

1. Obtain all field measurements required for the accurate fabrication and installation of the Work. Exact measurements are the Contractor's responsibility.
2. Furnish or obtain templates, patterns, and setting instructions as required for the installation of all Work. Verify all dimensions in the field.

C.Responsibility

1. The Contractor shall be in charge of this Contract and the site, as well as the directing and scheduling and coordination of all Work.
2. Final responsibility for the performance, interface, and completion of the Work and the Project in accordance with the Contract Documents shall be with the Contractor.

END OF SECTION

SECTION 01 3119

PROJECT MEETINGS

PART 1 GENERAL

1. PRE- CONSTRUCTION CONFERENCE: The Contractor shall attend a pre-construction conference to discuss and clarify contract administration procedures, and requirements under which the construction operation is to proceed. The Owner and the Architect-Engineer will also attend.

2. PROGRESS MEETINGS: Construction progress meetings shall be held regularly while construction is in progress once a month. Contractor shall attend personally, or be represented at such meetings. Should the Contractor elect to be represented, it shall be understood and agreed that the Owner and the Architect, in dealing with the Contractor's representative, do so with full assurance that such representative's actions and commitments may be accepted the same as though the Contractor were present and personally made such agreements or commitments.

END OF SECTION

SECTION 01 3216

CONSTRUCTION SCHEDULE

PART 1 GENERAL

1. SUMMARY

   A. Related Documents
      1. Drawings and General Provisions of the Contract, including Supplemental and General Conditions and other Division 01 Requirements apply to work of this section.

2. CPM SCHEDULE REQUIRED

   A. All schedule and report work under this Contract shall be performed using a computer-based critical path method, hereinafter referred to as CPM. Requirements for CPM are included to ensure adequate planning and execution of the work and to assist the Architect in evaluating progress of the work, both economically and chronologically.

3. TIME OF COMPLETION

   A. Contractor's time of completion shall adhere to the time specified in the Contract unless an earlier (advanced) time of completion is agreed to by the Owner. Any such agreement shall be formalized by a Change Order. All days or time referenced in this section are work days unless otherwise noted.

4. CONTRACT SCHEDULE

   A. Within twenty-one (21) days after the Contract start date the Contractor shall present the construction approach and explain the schedule logic, duration and sequencing. The schedule shall cover the entire contract time and incorporate, in detail, the first ninety (90) calendar days of the preliminary schedule.
      1. The above generated schedule shall include:
         a. Working activities and General Conditions activities shall be identified separately.
         b. Milestone activities identifying completion of each stage of work.
         c. Owner furnished materials or equipment identified as separate activities for delivery and installation.
         d. Activities for review of shop drawings/samples shall not be less than fifteen (15) work days for specified product submittals or products required by performance specifications. For submittals involving material or equipment substitutions, the activity shall be not less than thirty (30) work days.
         e. Activities for procurement of major equipment or long lead items.
         f. An activity with not less than twenty (20) work days shall be designated for generating and correcting punch list items for each identifiable phase.
         g. Activities shall be included for start-up and testing of equipment.
         h. Activities shall be included for Owner training.
         i. A responsibility code assigned to each activity corresponding to the subcontractor responsible for performing the work.
         j. A CSI code for each activity.

k. The assigned dollar value (cost loading) and quantities of each activity of the schedule shall cumulatively equal the contract amount.

2. Upon acceptance of the CPM schedule, it will be incorporated into the Contract as the Contract Schedule. All monthly payment requests will be generated from the updated Contract Schedule. Acceptance of the Contract Schedule will be a condition precedent to the making of any progress payments under the Contract.

5. CONTRACTOR'S RESPONSIBILITY

Contractors Responsibility for Completion:

A. The Contractor shall furnish sufficient forces, offices, facilities and equipment, and shall work such hours including night shift and overtime operations, as necessary to ensure the prosecution of the Work in accordance with the current monthly Contract Schedule. If the Contractor falls behind in meeting the Contract Schedule as noted by negative float, the Contractor shall take such steps as may be necessary to improve the progress of work without additional cost to the Owner.

B. Failure of the Contractor to comply with the requirements of the above paragraph shall be a basis for determination by the Owner's Representative that the Contractor is not prosecuting the work with such diligence as will ensure completion within the contract time. Upon such determination, the Owner's Representative may terminate the Contractor's right to proceed with the work or any separable part thereof, in accordance with the provisions of the Contract, or may take such other actions as may be deemed appropriate.

6. FLOAT TIME

A. Float Time is the amount of time between the earliest start date and latest start date, or between the earliest finish date and the latest finish date of an activity in the Contract Schedule. This time is not for exclusive use by either the Owner/Architect or the Contractor. No time extensions or associated delay or impact costs will be allowed for delays caused by the Owner/Architect, on paths of activities containing float time, providing such delay does not exceed the float time, per the latest updated version of the Contract Schedule in effect at the time of the delay or impact.

7. CONTRACTOR'S SCHEDULING REPRESENTATIVE

A. The Contractor shall designate a scheduler who is trained and experienced in compiling construction scheduling data and in analyzing scheduling data by the use of computer-based CPM, and in preparation and issuance of periodic reports as required herein. The Contractor's Scheduling Representative shall have direct control and complete authority to act on behalf of the Contractor in fulfilling all project schedule requirements.

8. ACCEPTANCE OF CONTRACT SCHEDULE

A. Upon acceptance of the Contract Schedule by the Architect, the Contract Schedule will be used as a basis for determining progress payments. Monthly progress payments shall be based upon information developed at the monthly Schedule Update. Acceptance by the Architect of the Contractor's Contract Schedule does not relieve the Contractor of any responsibility whatsoever for the accuracy of feasibility of the Contract Schedule, or of the Contractor's ability to meet the contract completion date. Nor does such acceptance create a warranty, expressed or implied, or acknowledge or admit the reasonableness of the activities, logic, duration manpower, cost or equipment loading of the Contractor's schedule.

B. In the event the Contractor fails to define any element of work, activity or logic and the Architect review does not detect this omission or error, such omission or error, when discovered by the Contractor or Architect, shall be corrected by the Contractor at the next schedule update and shall not affect the Contract time.

9. MONTHLY SCHEDULE UPDATE

A. The Contract Schedule shall be updated on a monthly basis throughout the entire Contract time and until Substantial Completion. The Contractor shall meet with the Architect each month to review actual progress preceding the progress payment submittal deadline. Estimates of the percent completion of each Schedule activity and the necessary supporting data shall be submitted for review and shall include the following information:

1. One (1) original and three (3) reproduced marked-up copies of the previous month's Schedule Update computer produced reports coordinated with the requirements of the above paragraphs and indicating actual activity start and/or complete dates, revised (current) remaining duration, and percent complete with regard to activity cost/progress.
2. The Contractor shall indicate in writing those activities he plans to work on during the following month and current or anticipated conditions that may delay the work.
3. Any additional written information necessary to support the above.

B. In the case of disagreements, concerning actual progress to date, the Architect's determination shall govern.

C. The Contractor shall revise the Contract Schedule to reflect actual progress and any revisions to the Contract Schedule. The Contractor shall forward the revised Contract Schedule and Pay Application to the Architect.

D. Each Contract Schedule update will be forwarded to the Architect and will include three (3) copies of the following information:

1. A list of all activities completed during the preceding month.
2. A list of all activities started but not completed during the preceding month, including percent complete.
3. A list of any revisions to the Schedule logic, initial activity duration, or activity costs.
4. Time-scaled network diagram showing all activities and their relationships.
5. A narrative report with the updated progress analysis, which shall include, but not be limited to, a description of problem areas, current and anticipated delaying factors and their impact, and explanation of corrective action taken, and any proposed revisions for recovery.

E. The monthly updating of the Contract Schedule shall be an integral part and basic element of the estimate upon which progress payments will be made. If, in the judgment of the Architect, the Contractor fails or refuses to provide information required to accomplish a complete Contract Schedule Update or revision as specified hereafter, the Contract shall be deemed to have not provided the required estimate upon which progress payments may be made, and shall not be entitled to progress payments until it has furnished the information necessary for a complete Schedule Update in accordance with the provisions of this Section.

10. SHORT INTERVALS SCHEDULES

A. Two Week Projection:

1. The interval shall be a two week projection and include the week submitted and the week thereafter.
2. It shall contain sufficient detail to evaluate daily milestones and shall identify and tie into existing activities in the approved Contract Schedule.

11. CONTRACT SCHEDULE REVISIONS

A. Revised Schedules:

1. If there are significant changes, as determined by the Owner, in the plan of construction from that shown in the Accepted Contract Schedule, Contractor shall submit within fifteen (15) days a revised schedule to the Owner for approval.

B. Proposed Change Orders:

1. When a Change Order is proposed or a proposal Request is issued that has the potential to impact specified completion dates, a schedule update shall be prepared by the Contractor to reflect the impact of such changes. After the schedule update has been mutually agreed upon, and a Change Order executed, the additional time shall be incorporated into the Contract Schedule. Time extensions will be considered only to the extent that there is insufficient remaining float to accommodate these changes without affecting the critical path.

C. Additional Costs:

1. No additional cost beyond that provided in the Contract will be allowed for the incorporation of approved Proposed Change Orders into the Contract Schedule.

12. PARTIAL PAYMENT

A. Partial payment where allowed by contract will be based on the update of the Contract Schedule.

B. Partial payments for the mobilization costs shall not exceed the following (exclusive of bonds and insurance):

1. When 5 percent of the original contract amount is earned, 50 percent of the amount bid for mobilization, or 5 percent of the original contract amount, whichever is lesser, may be paid.
2. When 10 percent of the original contract amount is earned, 75 percent of the amount bid for mobilization or 7.5 percent of the original contract amount, whichever is lesser, may be paid.
3. When 20 percent of the original contract amount is earned, 95 percent of the amount bid for mobilization, or 9.5 percent of the original contract amount, whichever is lesser, may be paid.
4. When 50 percent of the original contract amount is earned, 100 percent of the amount bid for mobilization, or 10 percent of the original contract amount, whichever is lesser, may be paid.
5. Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount will be paid.

C. “Mobilization" includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidental to the project site, for the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work and operations which must be

performed or costs incurred prior to beginning work on the various items on the project site.

END OF SECTION

SECTION 01 3300

SUBMITTAL PROCEDURES

PART 1 GENERAL

1. SUBMITTALS REQUIRED OF THE CONTRACTOR

The listing of required submittals that follows is compiled for convenience. Absence from the list of a submittal required elsewhere in these specifications does not relieve the Contractor of his responsibility to make all required submittals. In case of an inconsistency between this list and other sections, the requirements of the other sections shall govern.

Time Due:	Submittal:
At time of contract execution	Document supporting Power of Attorney Certificates of Insurance
Within 21 days of execution of contract	Construction Schedule Schedule of Values
Within 28 days of execution of contract	Shop Drawing Submittal Schedule All samples requiring color and/or finish selection
Each month	Updated Construction Schedule Partial Payment Application Lien Waivers
At time of request for Substantial Completion	Contractor's written Punch List Copy of Record Drawings Copy of Maintenance Manual and Operating Instructions Copy of Owner's Manual
At time of request for Final Completion	Complete Record Drawings Complete Maintenance Manuals and Operating Instructions Certificate of Occupancy from AHJ
At Final Completion	Final Payment Application AIA G706, Contractor's Affidavit of Payment of Debts and Claims AIA G706-A, Contractor's Affidavit of Release of Liens AIA G707, Consent of Surety Company to Final Payment

2. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. Shop Drawings: The term "Shop Drawings" includes but is not limited to fabrication, erection, layout and setting drawings, manufacturer's standard drawings, descriptive literature, catalogs, brochures, performance and test data pertaining to materials, equipment, piping, duct and conduit systems and methods of construction as may be required to show that the materials, equipment or systems and the positions and layout of each conform to the Contract requirements. As used herein the term "manufactured" applies to standard units usually mass-produced and 'fabricated' means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall establish the actual detail of manufactured or

fabricated items; indicate proper relation to adjoining Work; amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure; and incorporate minor changes of design or construction to suit actual conditions.

Following Contractor's review and approval, Contractor shall deliver to the Architect the number of copies and originals agreed upon at the pre-construction conference. The Architect will review the drawings and affix a stamp indicating the findings of the review, and will return same to the Contractor, retaining one (1) set for the Architect's records. Comments, if any, will be noted directly on the submittal or attached. The Contractor shall then print and distribute the appropriate number of copies to the various trades and to Contractor's job personnel as required. If a submittal is rejected, one copy submittal, noted so, will be returned to the Contractor. If a submittal is marked "Revise and Resubmit", one (1) copy, will be returned. Corrected samples shall be resubmitted for approval as per the original submittal.

B. Submittal Log: Within twenty-eight (28) days of execution of construction contract, Contractor shall provide a Shop Drawing submittal schedule indicating the date each required submittal is to be received by the Architect and the date required for return of same. Unless other arrangements are made in advance, Contractor's schedule shall allow for a review period of fifteen (15) calendar days. Submission of Shop Drawings and Samples to the Architect is required for only those items specifically mentioned in the Specification Sections. If Contractor submits Shop Drawings for items other than the above, the Architect will not be obliged to review them. Contractor shall be responsible for the procuring of Shop Drawings for his own use as he may require for the progress of the work, even though the Shop Drawings may not require the Architect's review.

C. Samples: Within twenty-eight (28) days of execution of the construction contract, submit to the Architect for review and/or selection all samples and appropriate information for the Architect to select all colors, textures, fabric and finishes for the entire project. Final selection of color, textures, fabrics or finishes will not be made until all applicable and related submittals have been provided to the Architect. Following Contractor's review and approval, Contractor shall submit to the Architect samples of materials in quantities and sizes as specified herein. Samples required other than for selection of color, texture, fabric or finish shall be delivered to the Architect at a time determined by the Contractor, that allows for any necessary re-submittal and that will not cause any delay in the Work.

D. Fire Alarm System (if applicable) Shop Drawings shall be submitted to the authorities having jurisdiction (AHJ) by the Contractor and approval obtained prior to installation. Inspection, testing and approval of completed installations shall be obtained prior to acceptance of the systems and shall be a condition of Substantial Completion of the Project.

END OF SECTION

SECTION 01 3301

SUBSTITUTION OF MATERIALS OR PRODUCTS DURING CONSTRUCTION

PART 1 GENERAL

1. To be considered, substitutions must be made in accordance with these instructions.

2. When a specific product is specified for use in the project, it is to establish a standard of quality and shall not be construed as limiting competition. It is the Architect's and Engineers' intent that "Substitutions during Construction" match the specified product, system, equipment or material criteria including, but not limited to, color, texture, size, weight, utility requirements, working clearances, capacity, volume, speeds, power, BTU's, etc.

3. This project is to include only the products, materials, equipment and systems that are indicated on the Drawings, and are specified or approved through the "Substitution Prior to Bid" process. In order for "Substitutions During Construction" to be considered by the Owner, Architect and Engineers, the Contractor shall demonstrate that the specified or Prior Approved product, material, equipment or system is not available after award of the Contract. Requests for "Substitution During Construction" shall contain sufficient information, descriptive brochures, drawings, samples or other data as is necessary to provide direct comparison to the specified materials.

4. Products proposed as "Substitutions" must be fully compared to the product, material, equipment or system specified. Contractor shall thoroughly review and compare the Specifications for both the specified item and proposed "Substitution During Construction", and clearly identify in writing to the Architect and Engineer, any differences between the items. Differences that are to be identified shall include, but not be limited to, size, weight, utility requirements, working clearances volume, capacity, speeds, power, BTU's, etc. Should the Architect and Engineer deem any differences to be unacceptable, the "Request for Substitution During Construction" shall be rejected.

5. All requests for "Substitution During Construction" will be accompanied by a "Substitution of Materials During Construction" Request Form, that is a part of this Specification section. Requests not accompanied by the Form will not be reviewed. Requests for "Substitution During Construction" shall be in the hands of the Architect no later than twenty-eight (28) calendar days prior to date Contractor is required to place an order for the product of material.

6. Each submittal shall be well marked and identified as to types and kind of the items being submitted for approval. It is the sole responsibility of the Contractor to submit complete descriptive and technical information to the Architect so the Architect can make proper appraisal. Lack of proper information will be sufficient cause for rejection. Reference to catalogs will not be acceptable unless catalog is submitted with Substitution Request Form. All pertinent information shall be clearly marked by the Contractor and shall be specific to the product in question.

7. It is the Contractor's responsibility to confirm and correlate quantities and dimensions and coordinate with trades whose work may be affected by the requested substitution.

8. In submitting a Request for Substitution During Construction, the Manufacturer and Contractor shall make the following representations:

   A. The specified or prior approved product, material, equipment or system is not available, does not comply with current or local codes or is not approved by the AHJ.

   B. The proposed product is equal or superior in all respects to that specified.

C. The Substitution carries the same or better Warranty as the specified product, materials, equipment or system.

D. Installation of the accepted Substitution shall be incorporated into the Work, making such changes as may be required for the Work to be completed in every respect and at no additional cost to the Owner.

E. Claims for additional costs related to the Substitution that subsequently become apparent, shall be waived by the Contractor.

F. Cost data is complete and includes related costs under the Contract but excludes costs under separate construction contracts and design consultant's redesign.

9. If, at any time, any differences in the performance or physical characteristics of the proposed "Substitutions During Construction" and are determined to be a liability to the performance, operation or design intent of the building, the Contractor shall be required to replace said product, material, equipment or system with the originally specified product at Contractor's expense, as well as compensate the Owner for any costs associated with the substituted product, material, equipment or system.

SUBSTITUTION OF MATERIALS DURING CONSTRUCTION REQUEST FORM

TO:_____

PROJECT:_____BID DATE:_____

We submit for your consideration the following product instead of the specified item for the above project:

Section	Page/Sheet No.	Paragraph/Line	Specified Item
_____	_____	_____	_____

Proposed Substitution:_____

_____

Reason for substitution:_____

_____

Attach complete product description, drawings, photographs, performance and test data, available colors/ finishes, and other information necessary for evaluation. Identify specific model numbers, finishes, options, etc.

A. Will changes be required to building design or any components or assemblies in order to properly install and operate proposed substitution? Yes _____ No _____.
If yes, explain:
_____

_____

B. List description of the difference proposed for each substitution and specified item.

Specified Item	Proposed Substitution
_____	_____
_____	_____
_____	_____
_____	_____

C. Does substitution affect Drawing clearances and/or dimensions? Yes _____ No _____

If yes, explain: _____

D. What effect does substitution have on other trades? List affected trades._____

_____

E. Does manufacturer's warranty of proposed substitution differ from that specified?
Yes _____ No _____ If yes, explain:_____

_____

F. Will substitution affect progress schedule? Yes _____ No _____ If yes, explain:

_____

G. Will substitution require more license fees or royalties than specified product?
Yes _____ No _____ If yes, explain:_____

_____

H. Will maintenance and service parts be locally available for substitution?
Yes _____ No _____ If no, explain:_____

_____

I. Will substitution require additional testing, inspection, certification or approvals?
Yes _____ No _____ If yes, explain:_____

_____

In submitting this “REQUEST FOR SUBSTITUTION OF MATERIALS DURING CONSTRUCTION” Contractor represents the following:

1. The proposed product is equal or superior in all respects to that specified

2. The Substitution carries the same or better Warranty as the specified product, materials, equipment or system.

3. Installation of the accepted Substitution shall be incorporated into the Work, making such changes as may be required for the Work to be completed in every respect, at no additional cost to the Owner.

4. Claims for additional costs related to the Substitution, that subsequently become apparent, will be waived by the Contractor.

5. Cost data is complete and includes related costs under the Contract but excludes costs under separate contracts and design consultant's redesign.

6. If, at any time, any differences in the performance or physical characteristics of the proposed “Substitutions During Construction” and are determined to be a liability to the performance, operation or design intent of the building, the Contractor shall be required to replace said product, material, equipment or system with the originally specified product at Contractor’s expense, as well as compensate the Owner for any costs associated with the substituted product, material, equipment or system.

7. The Contractor understands that he will pay for changes to the building design, including engineering and drawing costs, caused by requested substitution.

Submitted by:

_____

Signature

_____

Firm

_____

Address

_____

Date _____

Telephone _____

Fax _____

For Architect's Use Only:

____ Accepted ____ Accepted as Noted

____ Not Accepted

By _____

Date _____

Remarks _____

For Engineer's Use Only:

____ Accepted ____ Accepted as Noted

____ Not Accepted

By _____

Date _____

Remarks _____

END OF SECTION

SECTION 01 4200

REFERENCES

PART 1 GENERAL

1. REFERENCE STANDARDS

A. Reference in the specifications to known standards, such as codes, specifications, etc., promulgated by professional or technical Associations, Institutes and Societies, are intended to mean the latest edition of each such standard adopted and published as of the date of the invitation to bid on this Project except where otherwise specifically indicated. Each such standard referred to shall be considered a part of the Specifications to the same extent as if reproduced therein in full. The following is a representative list of such Associations, Institutes and Societies, together with the abbreviation by which each is identified.

ACI	American Concrete Institute
DOTD	Department of Transportation and Development
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
API	American Petroleum Institute
ASA	American Standards Association
ASHRAE	American Society for Heating, Refrigeration and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWI	Architectural Woodwork Institute
AWSC	American Welding Society Code
AWWA	American Water Works Association
CSI	Construction Specifications Institute
F.M.	Factory Mutual
GA	Gypsum Association
NEC	National Electrical Code
NFPA	National Fire Protection Association
UL	Underwriter's Laboratories, Inc.

B. Every reference in the Specifications text to codes, standard specifications or manufacturer's instructions shall mean the latest printed edition of each in effect under the applicable jurisdiction at the Contract date.

C. Reference to known standards shall mean and intend the latest edition or amendment published prior to date of these Specifications, unless specifically indicated otherwise, and to such portions of it that relate and apply directly to the material or installation called for on the Project.

D. Where material is specified solely by reference to standard Specifications, the Contractor shall, if requested by the Architect, submit to the Architect for his approval, data on all such material proposed to be incorporated into the Work of the Contract listing the name and address of the vendor, the manufacturer or producer, and the trade or brand names of such materials.

END OF SECTION

SECTION 01 4500

QUALITY CONTROL

PART 1 GENERAL

1. TESTING LABORATORY SERVICES

A. The Contractor shall retain and pay the expenses of a Testing Laboratory acceptable to the Architect to perform their work called for in the Contract Documents.

1. Distribution of Test, Inspection and Mill Reports: The Testing Agency shall distribute copies of all reports to the offices of the parties concerned as follows:

1 copy to the Architect
1 copy to the Structural Engineer
1 copy to the Owner
1 copy to the Contractor
1 copy to the Supplier being tested

Requirements for additional copies will be determined upon commencement of the Contract.

2. CONTRACTOR'S QUALITY CONTROL

A. Where specific instruction in these Specifications require that a particular product and/or material be installed and/or applied by an "approved applicator" of the manufacturer, it is the Contractor's responsibility to insure that subcontractor employed for such work be an approved applicator. Such subcontractor(s) shall provide evidence of being an approved applicator when requested by the Architect.

B. Where not more specifically described in the Specifications, workmanship shall conform to the methods and operations of best standards and accepted practices of the trade or trades involved, and shall include all items of fabrication, construction or installation regularly furnished or required for completion (including any finish), and for successful operation as intended.

C. Work shall be executed by mechanics skilled in their respective lines of work.

D. If a product or material is indicated or shown for an application other than that intended by the manufacturer, the supplier, installer or manufacturer shall notify Architect prior to bidding.

E. UL Label: Where applicable, materials and equipment for which Underwriter's Laboratories, Inc. standards have been established, and their label services available, shall bear the appropriate UL label.

3. WATERTIGHT-WEATHERTIGHT

A. Anything in the Contract Drawings notwithstanding, the Contractor accepts the responsibility of construction of a watertight, weathertight project.

END OF SECTION

SECTION 01 5000

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1. GENERAL

A. Lawns, shrubs, trees, walks, structures, etc., to remain shall be protected during Construction.

B. The Contractor shall be responsible for and comply with codes and regulations regarding potable drinking water, sanitation, dust control, fire protection, and other temporary controls.

C. Removal of Temporary Construction: Temporary office facilities, toilets, storage sheds and other construction of temporary nature shall be removed from the site as soon as, in the opinion of the Architect, the progress of the work will permit; and the portions of the site occupied by same shall be properly reconditioned and restored to a condition acceptable to the Architect.

D. Contractor shall obtain written approval from the Owner a minimum of 72 hours prior to disconnection or shutting off service or utility.

2. TEMPORARY UTILITIES

A. Temporary Electricity:

1. Power required for Construction Work may be used by the Contractor from existing available on-site sources, except high-draw uses such as welding, etc.

B. Temporary Lighting: Adequate lighting and convenience outlets shall be furnished and installed in the temporary structures and elsewhere as may be necessary for proper performance and inspection of the Work. If operations are carried on during hours of darkness, adequate floodlights, clusters and spot illumination shall be furnished and maintained during hours that natural illumination is deemed by the Architect as being insufficient for the Work being performed. Artificial lighting shall be so placed and distributed that these Specifications may be easily read at all times, and in all places where Work under the Contract is in progress. Lighting level shall be an average of 25 f.c., 20 f.c. minimum.

C. Temporary Water:

1. Water required in the performance of the Contract shall be provided and paid for by the Contractor. Water used for human consumption shall conform to requirements of State and local authorities for potable water.
2. The Contractor shall furnish and install mains, laterals, branch lines, and service pipings and fittings to supply temporary water in sufficient quantity at required locations of the building, and shall bear costs of making the service connections and piping shall be removed and openings closed in an acceptable manner at the end of the Work.

D. Temporary Sanitary Facilities: The Contractor shall provide temporary chemical toilet structures with urinals, in numbers as required, located as approved, and maintained in a clean and sanitary condition acceptable to the Architect and legally constituted authorities.

E. Temporary Fire Protection: The Contractor shall provide and maintain fire extinguishers, fire hoses and other equipment as necessary for proper fire protection during construction. Such equipment is to be used for fire protection only.

3. BARRIERS AND ENCLOSURES

A. Temporary Closures: The Contractor shall erect temporary closures over openings when weather conditions render such action necessary for proper installation of portion of the Work.

B. Temporary Fence:
   1. Provide a fence to secure the construction and staging areas from surrounding activity.
   2. Work, storage, staging, etc., areas shall be fenced. Carefully control and supervise traffic to and from the Area of Work.

4. ACCESS ROADS AND PARKING

A. Temporary emergency vehicle access route(s) shall be constructed where required and in accordance with the local jurisdiction. This temporary access route may be located along the same route as the designed vehicle access and may be incorporated into the final construction where acceptable to local authorities.

B. Contractor shall use, and maintain in clean condition site access route as shown on site or site access plan. No other access shall be used for vehicles or men.

C. Contractor and other persons connected to this Project will only use parking areas designated on site plan or as approved by the Owner.

D. Contractor and workmen shall not trespass into area beyond the "limit of Work" area.

5. TEMPORARY CONTROLS

A. Construction Cleaning:
   1. Clean up daily refuse, rubbish, scrap materials and debris caused by operations, such that at all times the site of the work shall present a neat, orderly and workmanlike appearance.
   2. Remove surplus material, false-work, temporary structures, including their foundations, plant of any description and debris of every nature resulting from operations and put the site in a neat, orderly condition.
   3. Use only cleaning materials recommended by manufacturer of surface to be cleaned. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.
   4. Provide for the disposal of waste products, trash, debris, etc., and make necessary arrangements for legal disposal of same off the site. Never throw rubbish from windows or other parts of building. Lower waste materials in a controlled manner with as few handlings as possible.
   5. Vacuum clean interior building areas when ready to receive finish painting and continue vacuum cleaning on an as-needed basis until building is ready for acceptance.

6. Schedule cleaning operations such that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

B. Noise Control:

1. The noise generated by construction of this Work may at times create a problem for the Owner.
2. The Owner recognizes and can tolerate the normal level of noise created by a majority of construction activity and, therefore, does not feel a need to set certain hours of the day when noise will be restricted.
3. However, the Owner recognizes that, during certain construction work such as connecting to the existing building, the noise level may be unusually higher than normal. These higher levels of noise generation may conflict with a specific activity being simultaneously conducted by the Owner.
4. The Contractor shall secure agreement from the Owner prior to scheduling unusually noisy activity, and Contractor shall cooperate if an on-going activity becomes objectionable by its longevity or overlapping into a program started later by the Owner. It is understood and agreed that both parties will cooperate to the end that neither will be unduly inconvenienced by this requirement.

C. Surface Water Control:

1. Pumping and Drainage: Surface or subsurface water or other fluids shall not be permitted to accumulate in excavations nor in or about the premises and vicinity thereof. Should such conditions be encountered or develop the water or other fluid shall be controlled and suitably disposed of by means of temporary pumps, piping drainage lines, troughs, ditches, dams, or other methods as approved by the Architect.

END OF SECTION

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 GENERAL

1. DELIVERY AND STORAGE OF MATERIALS

   A. Deliver manufactured materials in the original packages, containers or bundles (with the seals unbroken) bearing the name or identification mark of the manufacturer.

   B. Deliver fabrications in as large assemblies as practicable and where specified to be shop-primed or shop-finished, they shall be packaged or crated as required to preserve such priming or finish intact and free from abrasion.

   C. Store materials in such manner as necessary to properly protect same from damage, as materials or equipment damage by handling, weather, dirt or from any other cause will not be acceptable.

   D. Store materials so as to cause no obstructions, stored off sidewalks, roadways, and underground services. The Contractor shall be responsible for protecting materials and equipment furnished under the Contract.

2. WORKMANSHIP STANDARDS

   A. Where not more specifically described in the various Sections of these Specifications, workmanship shall conform to the methods and operations of best published standards and accepted practices of the trade or trades involved, and shall include items of fabrication, construction or installation regularly furnished or required for completion (including finishes), and for successful operation as intended.

   B. Work shall be executed by mechanics skilled in their respective lines of work.

   C. When completed, parts shall have been durably and substantially built and shall present a neat, workmanlike appearance.

3. PRODUCT SUBSTITUTIONS SEE SECTION 01 3301-SUBSTITUTION OF MATERIALS OR PRODUCTS DURING CONSTRUCTION

4. MANUFACTURER'S TRADE MARKS AND NAMES

   A. The Architect reserves the right to review and request and removal of manufacturer's trade marks and names on items or materials and equipment which will be in plain view of the occupants of the building when placed in their final position. Such removal shall be at no expense to the Owner. A decision on the necessity to remove may be obtained from the Architect, in writing. Failure to obtain such approval shall constitute agreement to comply with this requirement.

END OF SECTION

SECTION 01 7329

CUTTING AND PATCHING

PART 1 GENERAL

1. CUTTING AND PATCHING

A. Structural Work: Do not cut-and-patch structural work in a manner resulting in a reduction of load-carrying capacity of load/deflection ratio. Submit proposal and request and obtain Engineer's approval before proceeding with any cut-and-patch of structural work.

B. Visual/Quality Limitations: Do not cut-and-patch work exposed to view (exterior and interior) in a manner resulting in noticeable reduction of visual qualities and similar qualities, as judged by Architect.

1. Engage the original installer/fabricator, or (if not available) an acceptable equivalent entity, to perform cutting and patching.
2. Refinish entire surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection. For an assembly, refinish the entire unit.

C. Limitation on Approvals: Architect's approval to proceed with cutting and patching does not waive right to later require removal/replacement of work found to be cut-and-patched in an unsatisfactory manner, as judged by the Architect.

D. Where not more specifically described in any of the various Sections of these Specifications, workmanship shall conform to all of the methods and operations of best standards and accepted practices of the trade or trades involved, and shall include all items of fabrication, construction, or installation regularly furnished or required for completion, (including any finish), and for successful operation as intended.

E. Work shall be executed by mechanics skilled and experienced in their respective trade, and shall have proper certification or other credentials where appropriate.

F. In every case, exercise extreme care in cutting operations, and perform such operations under adequate supervision. Openings shall be neatly cut and shall be kept as small as possible to avoid unnecessary damage. Careless and/or avoidable cutting damage, etc., will not be tolerated, and the Contractor will be held responsible for such avoidable or willful damage.

G. Replacing, patching and repairing of materials and surfaces cut or damaged in the execution of the Work shall be performed by experienced mechanics of the applicable trades involved. Such replacing, repairing or patching shall be done with the applicable materials, in such manner that surfaces so replaced, etc., will, upon completion of the Work, match the surrounding similar surfaces.

H. When completed, all parts shall have been durably and substantially built and shall present a neat, workmanlike appearance.

END OF SECTION

SECTION 01 7800

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1. GENERAL REQUIREMENTS

A. Requirements and procedures for submittal of pertinent data relating to closing out the Project, upon completion of the Project Work. Detailed instructions elsewhere in these Specifications may require that certain items listed herein be submitted prior to Substantial Completion of the Project.

B. Receipt and approval of items specified in this Section is a prerequisite for Final Payment and/or release of Retention.

2. FINAL CLEANING

A. Perform the following special cleaning for trades at completion of Work; employing only experienced workmen or professional cleaners for the final cleaning:

1. Remove marks, stains, fingerprints, soil and dirt from painted areas.
2. Remove spots, soil, paint and mastic from tile work and wash same.
3. Clean fixtures, equipment and piping; remove stains, paint, dirt and dust.
4. Clean concrete walks and slabs of plaster or cement droppings, paint and other objectionable materials to present a neat, clean appearance.
5. Clean exterior and interior metal surfaces, including doors and windows and their frames.
6. Clean items required to have a polished finish free of oil, stains, dust, dirt, paint and the like; polish and leave without fingermarks or other blemishes.

B. Existing improvements, inside or outside the property which are disturbed, damaged or destroyed by the Work under the Contract shall be restored to the condition in which they originally were, or to the satisfaction of the Architect.

3. PROJECT RECORD DOCUMENTS

A. Record Drawings: The Contractor will provide the Architect with a complete record set of the original Bidding Documents for review Construction Change Directive and Change Order items included and clearly indicated. Seals and signatures of Registrants shall be completely removed and/or permanently obscured. The following shall be provided on the Drawings, as follows:

1. Any changes from the Contract Documents, secured with prior approval of the Architect, for any phase of the Work, including all Addenda, Construction Change Directives and Change Orders shall be recorded in a neat readable manner, on the record drawings. All changes from the documents originally bid shall be made by a competent drafter and “clouded”. All deletions shall be made by strike-through and clouded.
2. For electrical; Record Drawings shall be maintained by the Contractor as the Work progresses and as follows:
   a. Deviations from the sizes, locations, and from other features of installations shown in the Contract Documents shall be recorded.
   b. In addition, it shall be possible, using these drawings, to correctly and easily locate, identify and establish sizes of all piping, directions and the

like, as well as other features of the Work which will be concealed underground and/or in the finished building.

3. Locations of underground Work shall be established by dimensions to column lines or walls, locating all turns, etc., and by properly referenced centerline or invert elevations and rates of fall.
   a. For Work concealed in the building, sufficient information shall be given so it can be located with reasonable accuracy and ease. In some cases this may be by dimension. In others it may be sufficient to illustrate the Work on the drawings in relation to the spaces in the building near which it was actually installed. Architect's decision in this matter shall be final.
4. Additional drawings shall be provided as necessary for clarification.
5. Drawings shall be kept up-to-date during the entire course of the Work and shall be available upon request for examination by the Architect and, when necessary, to establish clearances for other parts of the Work.
6. Upon substantial completion of the Work, submit one (1) copy of the Record Drawings to the Architect for review. The Architect may request additional information be included as part of the record drawing set prior to approval. File names shall match sheet index and drawing scale shall be such that they will fit an industry standard sheet size. The Architect shall review the Record Drawings and shall be the sole judge of the acceptability of these drawings.

B. Owner's Manual: Upon Substantial Completion of the Project Work, submit one (1) copy of the Owner's Manual suitably typed, indexed and labeled for ready reference to the Architect for review. Revise the Owner's Manuals in accordance with the Architects comments. Deliver two (2) copies of the corrected Owner's Manuals to the Architect who will transmit them to the Owner. Owner's Manuals shall contain the following information:
   1. Subcontractors, major suppliers list with company's names, addresses and telephone numbers.
   2. Guarantees/warranties, certifications.
   3. Affidavit from General Contractor on use of asbestos free materials, included in this Section.
   4. Materials Receipt, included in this Section
   5. Maintenance/operation instructions (other than Divisions 21 to 28).
   6. Special certifications, inspections documented, if any.
   7. Certification of building pad and finish floor elevations by a licensed surveyor.
   8. Other items required by the Specifications.

4. OPERATION AND MAINTENANCE DATA

A. Upon Substantial Completion of the Project Work, submit one (1) copy of the Operation and Maintenance Manual and Operating Instructions including parts lists for materials, equipment and systems, electrical and control items, to the Architect for review and possible approval. Division 21 to 28 shall be contained in separate binders for each division. Unless approved, revise the Operation and Maintenance Manuals in strict accordance with the Architect's comments. Resubmit one (1) copy of the Operation and Maintenance Manual to the Architect for final review. Upon receipt of Notice of Approval, deliver two (2) copies of the Operation and Maintenance Manuals to the Architect who will transmit them to the Owner. **NOTE: Failure to properly complete and submit Maintenance and Operation Manuals in a timely manner shall place responsibility for detrimental maintenance and operating procedures on the Contractor.**

B. Operating instructions shall include complete operating sequence, control diagrams, description of method of operating machinery, machine serial numbers, factory order

numbers, parts, tests, instruction books, suppliers phone numbers and addresses and individual equipment guarantees. Parts lists shall be complete in every respect, showing parts and part numbers for ready reference.

C. Maintenance instructions shall include a written list of required and suggested maintenance for mechanical, plumbing, electrical or other equipment or features in the project. Each item shall contain a brief description of the maintenance required as well as the recommended time frame or period for the maintenance. Include lists of filter sizes for air handling equipment, indicated "washable" or "disposable" and for which unit the filter is for. Shut off valves, etc., must be clearly marked on as-constructed drawings.

D. Assemble maintenance manual and operating instructions in hard back loose leaf binders. Suitably label and index material for ready reference.

5. WARRANTIES

A. Provide written warranties required by the Specifications to the Architect.

6. CERTIFICATES AND AFFIDAVIT

A. Certificates: Submit certificates from governing authorities, manufacturers and subcontractors not previously submitted at the time of Substantial Completion.

B. Affidavit: Submit the completed "Non-Use of Asbestos Containing Building Materials"; this form is bound into these specifications as the last page of this section.

END OF SECTION

SECTION 02200

EARTHWORK

PART 1 – GENERAL

1.01 SCOPE

A. This Section includes earthwork and related operations, including, but not limited to, clearing and grubbing the construction site, dewatering, excavating all classes of material encountered, pumping, draining and handling of water encountered in the excavations, handling, storage, transportation and disposal of all excavated and unsuitable material, construction of fills and embankments, backfilling around structures and pipe, backfilling all trenches and pits, compacting, preparation of subgrades, surfacing and grading, and any other similar, incidental, or appurtenant earthwork operation which may be necessary to properly complete the work.

B. The Contactor shall provide all services, labor, materials and equipment required for all earthwork and related operations necessary for furnishing complete work as shown on the Drawings or specified herein.

1.02 GENERAL

A. The elevations shown on the Drawings as existing are taken from the best existing data and are intended to give reasonably accurate information about the existing elevations. They are not precise and the Contractor shall field verify all elevations to determine amount of excavation and fill required.

B. Earthwork operations shall be performed in a safe and proper manner with appropriate precautions being taken against all hazards.

C. All excavated and filled areas for structures, trenches, fills, topsoil areas, embankments and channels shall be maintained by the Contractor in good condition at all times until final acceptance by the Owner. All damage caused by erosion or other construction operations shall be repaired by the Contractor using material of the same type as the damaged material.

D. Earthwork within the rights-of-way of State, Parish, and City agencies as well as privately owned railroads shall be done in accordance with requirements and provisions of the permits issued by those agencies or entities for the construction within their respective rights-of-way. Such requirements and provisions, where applicable, shall take precedence and supersede the provisions of these Specifications.

E. The Contractor shall control grading in a manner to prevent surface water from running into excavations. Obstruction of surface drainage shall be avoided and means shall be provided whereby storm water can be uninterrupted in existing gutters, other surface drains or temporary drains. Free access must be provided to all fire hydrants, water valves, and meters.

F. Excavation works shall include the removal and subsequent handling of all materials excavated or otherwise removed in performance of the work, regardless of the type, character, composition or condition thereof.

G. Tests for compaction and density will be conducted by an independent testing laboratory selected by the Owner. Costs of compaction tests performed by an independent testing laboratory will be paid for directly by the Owner. The Contractor shall make all necessary excavations and shall supply any samples of materials necessary for conducting compaction and density tests. The cost of all retests made necessary by the failure of materials to conform to the requirements of these Contract Documents shall be borne by the Contractor.

H. The Contractor shall comply with local regulations and with the provisions of the “Manual of Accident Prevention in Construction” of the Associated General Contractors of American Inc., Occupational Safety and Health Act, and all other applicable safety regulations.

I. It is understood and agreed that the Contractor has made a thorough investigation of the surface and subsurface conditions of the site and any special construction problems which might arise as a result of nearby watercourses and floodplains, particularly in areas where construction activities may encounter water-bearing sands and gravels or limestone solution channels. The Contractor shall be responsible for providing all services, labor, equipment and materials necessary or convenient to the Contractor for completing the work within the time specified in these Contract Documents.

PART 2 – PRODUCTS

2.01 MATERIALS AND CONSTRUCTION

A. Earthwork Materials

1. Fill Material, General

a. Approval Required: All fill material shall be subject to the approval of the Engineer.

b. Notification: For approval of imported fill material, notify the Engineer at least one week in advance of intention to import material, designate the proposed borrow area and permit the Engineer to sample as necessary from the borrow area for the purpose of making acceptance tests to prove the quality of the material .

2. On-site Fill Material: All on-site fill material shall be soil exclusive of organic matter, frozen lumps or other deleterious substances. On-site fill material shall contain no rocks or lumps over 3-inches maximum in dimension.

3. Imported Fill Materials: All imported fill material shall meet the requirements of on-site fill material.

4. Sand Cushions and Sand Fill: Sand cushions and sand fill shall consist of a sand-gravel fill of such gradation that 100 percent will pass a 3/8-inch sieve and not more than 10 percent by weight is lost by washing.

5. Coarse Aggregate: Coarse aggregate shall conform to the Louisiana Department of Transportation Standard Specifications for Roads and Bridges, Section 1003.02(b).

6. Fine Aggregate: All fine aggregate shall conform to the Louisiana Department of Transportation Standard Specifications for Roads and Bridges, Section 1003.02(a).

7. Pea Gravel: Pea gravel shall be clean, naturally rounded aggregate, 1/8 to 3/4-inch in diameter per ASTM C 33.

8. Top Soil: Dark organic weed free loam, free of muck.

B. Other Materials: All other materials not specifically described but required for proper completion of the work of this Section shall be as selected by the Contractor subject to the approval of the Engineer.

PART 3 – EXECUTION

3.01 GENERAL

A. Topsoil

1. Remove all topsoil to a depth at which subsoil is encountered, from all areas under buildings, pavements, and from all areas which are to be cut to lower grades or filled.

2. With the Engineer's approval, topsoil to be used for finish grading may be stored on the site.

3. Other topsoil may be used for fill in non-critical areas with approval of the Engineer.

4. Properly dispose of all excess topsoil off site.

B. Obstructions

1. Remove and dispose of all trees, stumps, roots, boulders, sidewalks, driveways, pavement, pipes and the like, as required for the performance of the work.

2. Exercise care in excavating around catch basins, inlets and manholes so as not to disturb or damage these structures.

3. Avoid removing or loosening castings or pushing dirt into catch basins, inlets, and manholes.

4. Damaged or displaced structures or casting shall be repaired, replaced and dirt entering the structures during the performance of the work shall be removed at no additional cost to the Owner.

C. Utilities to be Abandoned

1. When pipes, conduits, sewers or other structures are removed from the trench leaving dead ends in the ground, such ends shall be fully plugged or sealed with brick and non-shrink grout.

2. Abandoned structures such as manholes or chambers shall be entirely removed unless otherwise specified or indicated on the Drawings.

3. All materials from abandoned utilities which can be readily salvaged shall be removed from the excavation and stored on the site at a location as directed by the Owner.

4. All salvageable materials will remain the property of the Owner unless otherwise indicated by the Owner.

D. Extra Earth Excavation: In case soft or excessively wet material which, in the opinion of the Engineer, is not suitable, is encountered below the final subgrade elevation of an excavation or underneath a structure, the Engineer may order the removal of this material and its replacement with crushed stone or other suitable material in order to make a suitable foundation for the construction of the structure.

E. Cutting Paved Surfaces and Similar Improvements

1. Remove existing pavement as necessary for installing pipe utilities and appurtenances or as otherwise shown on the Drawings.

2. Before removing any pavement, mark the pavement neatly, paralleling pipe lines and existing street lines. Space the marks at least the width of the trench.

3. Break pavement along the marks by scoring with a rotary saw and breaking below the score by the use of jack hammers or other suitable tools.

4. Do not pull pavement with machines until completely broken and separated from pavement to remain.

5. Do not disturb or damage the adjacent pavement. If the adjacent pavement is disturbed or damaged, remove and replace the damaged pavement. No additional payment will be made for removing and replacing damaged adjacent pavement.

6. Remove and replace sidewalks disturbed by construction for their full width and to the nearest undisturbed joint.

7. The Contractor may tunnel under curbs that are encountered. Remove and replace any curb disturbed by construction to the nearest undisturbed joint.

3.02 EXCAVATION

A. Method

1. All excavation shall be open cut from the surface except as indicated on the Drawings.

2. All excavations for pipe appurtenances and structures shall be made in such manner and to such depth and width as will give ample room for building the structures and for bracing, sheeting and supporting the sides of the excavation, for pumping and draining groundwater and wastewater which may be encountered, and for the removal from the excavation of all materials excavated.

3. Take special care so that soil below the bottom of the structure to be built is left undisturbed.

B. Grades

1. Excavate to grades indicated on the Drawings

2. Where excavation grades are not indicated on the Drawings, excavate as required to accommodate installation.

C. Disposal of Excavated Material

1. Remove and properly dispose of all excavated material not needed to complete filling, backfilling and grading.

2. Dispose of excavated material off site at locations secured by the Contractor and in accordance with all requirements of federal, state, county and municipal regulations. No debris of any kind shall be deposited in any stream or body of water, or on any street or alley. No debris shall be deposited on any private property except by written consent of the property owner. In no case shall any material be left on the Project, shoved onto abutting private properties, or be buried in embankments or trenches on the Project.

3.03 BACKFILLING

A. Backfill carefully to restore the ground surface to its original condition. Dispose of surplus material.

B. Compact backfill underlying roadways, parking areas, sidewalks, structures, and buildings to 95 percent of the maximum dry density.

C. Backfill for Pipe

1. Initial: Place initial backfill material carefully around the pipe above bedding in uniform 6-inch layers to a depth as indicated on the Drawings. Compact each layer thoroughly with suitable hand tools. Do not disturb or damage the pipe. Backfill on both sides of the pipe simultaneously to prevent side pressures. Initial backfill material is earth material excavated from the trench which is clean and free of rock, organics, and other unsuitable material. If materials excavated from the trench are not suitable for use as initial backfill material, provide suitable materials imported from elsewhere.

2. Final: After initial backfill material has been placed and compacted, backfill with general excavated material. Place backfill material in uniform layers and thoroughly compact with heavy power tamping tools.

3. Settlement: If trenches settle, re-fill and grade the surface to conform to the adjacent surfaces.

D. Backfilling Around Structures

1. General

a. Remove debris from excavations before backfilling.

b. Do not backfill against foundation walls until so directed by the Engineer, nor until all indicated perimeter insulation and/or waterproofing is in place.

c. Protect such insulation and/or waterproofing during filling operations.

d. Wherever possible, backfilling shall be simultaneous on both sides of walls to equalize lateral pressures.

e. Do not backfill against walls until all permanent construction is in place to furnish lateral support on both top and bottom of wall.

f. Backfilling against walls is to take place after all the concrete in the affected members has attained the specified strengths.

2. Materials: Backfill material placed against structures built or encountered during the work of this Section shall be suitable fill material. No broken concrete, bricks or similar materials will be permitted as backfill.

3.04 GRADING

A. General: Perform all rough and finish grading required to attain the elevations indicated on the Drawings. Perform finish grading to an accuracy of 0.10 foot.

B. Compact backfill underlying roadways, parking areas, sidewalks, structures and buildings to 95 percent of the maximum dry density. The top 12-inches of backfill shall be compacted to 98 percent of the maximum dry density.

C. Treatment After Completion of Grading

1. Use all means necessary to prevent the erosion of freshly graded areas during construction and until such time as permanent drainage and erosion control measures have been installed.

3.05 SURFACE WATER CONTROL

A. Regulations and Permits: Obtain all necessary soil erosion control permits and all pertinent rules, laws, and regulations of all applicable federal, state, county and municipal regulatory agencies.

B. Unfavorable Weather

1. Do not place, spread or roll any fill material during unfavorable weather conditions.

2. Do not resume operations until moisture content and fill density are satisfactory to the Engineer.

C. Provide berms or channels to prevent flooding of subgrade. Promptly remove all water collected in depressions.

D. Pumping and Drainage

1. Provide, maintain and use at all times during construction adequate means and devices to promptly remove and dispose of all water from every source entering the excavations or other parts of the work.

2. Dewater by means which will insure dry excavations, preserve final lines and grades, do not disturb or displace adjacent soil.

3. All pumping and drainage shall be done with no damage to property or structures and without interference with the rights of the public, owners of private property, pedestrians, vehicular traffic or the work of other contractors, and in accordance with all pertinent laws, ordinances and regulations.

4. Do not overload or obstruct existing drainage facilities.

3.06 SETTLEMENT

A. The Contractor shall be responsible for all settlement of backfill, fills and embankments which may occur within one year after final acceptance of the Work by the Owner.

B. The Contractor shall make, or cause to be made, all repairs or replacements made necessary by settlement within 30 days after receipt of written notice from the Engineer or Owner.

3.07 CLEANING

Upon completion of the work of this Section, remove all rubbish, trash and debris resulting from construction operations. Remove surplus equipment and tools. Leave the site in a neat and orderly condition acceptable to the Engineer.

END OF SECTION 02200

SECTION 03 2000

CONCRETE REINFORCING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Furnish and Install Reinforcing Steel as shown on the Drawings and as specified herein.

1.2 REFERENCES

A. Comply with requirements set forth in ACI-301, Chapter 5, "Specifications for Structural Concrete for Buildings," published by the American Concrete Institute, except where more exacting requirements are specified in the Contract Documents.

B. Comply with requirements in AWS-D12.1 "Recommended Practice for Welding Reinforcing Steel, Metal Inserts and Connections in Reinforced Concrete Construction", published by the American Welding Society, except where more exacting requirements are specified in the Contract Documents.

1.3 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.

B. Shop Drawings: Submit Shop Drawings showing bending and placing of reinforcing. Drawings shall include diagrammatic elevations of walls at a scale sufficiently large to show clearly the position and erection marks of bars and their dowels and splices and bar arrangement for more than one layer of reinforcing steel in concrete sections, and in general essential data.

1.4 DELIVERY, STORAGE AND HANDLING

A. Storage: Store reinforcement to avoid excessive rusting or coating with grease, oil, dirt or other objectionable materials.

PART 2 PRODUCTS

2.1 MATERIALS

A. All reinforcing steel, shall be new billet-steel, deformed bars conforming to ASTM A615, Grade 60, with a minimum yield of 60,000 p.s.i.

B. Welded Wire Fabric shall conform to requirements of ASTM A185 using bright steel wire meeting the requirements of ASTM A82. Gauges and dimensions shall be as noted on the Drawings.

C. Chairs shall be galvanized steel or plastic. Concrete block may be used for slabs-on-grade.

D. Tie wire shall be No. 16 American wire gauge or heavier, black annealed.

2.2 FABRICATION

A. Shop fabricated bars as much as is practical. Bend bars cold. Make bends for stirrups and ties around pins having diameters at least 2 times the thickness of the bars; for other bars 1 inch diameter and smaller, 6 times the thickness; for larger bars 8 times the thickness.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Examine subsurfaces to receive Work and report in writing, with a copy to Architect, detrimental conditions. Failure to observe this requirement constitutes a waiver to subsequent claims to the contrary and holds Contractor responsible for correction(s) Architect may require. Commencement of Work will be construed as acceptance of subsurfaces.
   1. Verify, before proceeding with this Work, that required inspections of existing conditions have been completed.

B. Coordination with other Work: Coordinate with other work that affects, connects with, or will be concealed by this Work.

3.2 PLACING REINFORCEMENT

A. Reinforcement shall be accurately placed and securely tied at intersections with 16 gauge black annealed wire. It shall be maintained in proper position by chairs, bar supports or other approved devices. Bars in footings shall be supported on plastic or precast concrete.

B. Bars shall lap with “Class B” tension splice in concrete per ACI 318 or a minimum of 20 inches, except as otherwise indicated. Splices in adjoining horizontal bars shall be staggered at least one lap length. Where this is not feasible, submit suggestions for the Architect's consideration. Horizontal bars shall be hooked around corners per typical details.

C. Concrete protection of reinforcing shall be not less than the following:
   1. 3 inches where concrete is poured against and permanently exposed to ground.
   2. 1-1/2 inches where concrete is poured against forms but may be in contact with ground, #5 and under; 2 inches for #6 and larger.
   3. 1-1/2 inches minimum in exterior face of exterior walls (exposed to weather but not in contact with ground).
   4. 3/4 inch minimum in interior walls and interior face of exterior walls.
   5. 1-1/2 inches in beams, girders and columns.
   6. 3/4 inch in interior slabs.

D. Clear distance between bars shall be not less than 1-1/2 inches, 2 bar diameters, not less than 1-1/3 times the maximum size of coarse aggregate, see details. Reinforcing steel in beams and slabs shall not be placed until after concrete in walls and columns has been poured. Wherever conduits, piping, inserts, sleeves, etc. interfere with the placing of reinforcing steel as shown or called for, the Contractor must consult with Architect and secure from him the method of procedure before pouring concrete.

E. Bars with kinks or bends not indicated shall not be used nor shall the reinforcement be bent or be straightened in a manner that will weaken the material. Reinforcement shall

not be bent after being partially embedded in hardened concrete unless procedure is submitted for review and approval.

F. Lap welded wire fabric at least 1 mesh plus 2 inches plus end extension of wires but not less than 12 inches in structural slabs. Extend mesh across supporting beams and walls. In lieu of adequate support for mesh, lift mesh during placing of concrete so that it is completely surrounded by concrete and not less than 2 inches above the bottom of slabs on ground or 1/2 inch above formwork or as indicated.

3.3 FIELD QUALITY CONTROL

A. Inspection: When requested by Architect, welding required for normal installation of reinforcing shall be inspected by a qualified Testing Agency acceptable to Architect, the cost of which shall be paid for by the Contractor.

3.4 CLEANING

A. During the course of the Work and on completion of the Work, remove excess materials, equipment and debris and dispose of away from premises. Leave Work in clean condition in accordance with Section 01 5000, Temporary Facilities and Controls.

END OF SECTION

SECTION 03 3300

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Furnish and install Cast-In-Place Concrete Work as shown on the Drawings and as specified herein.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 301- Structural Concrete for Buildings
2. ACI 305 – Hot Weather Concreting
3. ACI 306 – Cold Weather Concreting
4. ACI 302 – Guide for Concrete Floor and Slab Construction

B. American Society for Testing and Materials:
1. ASTM C309 – Liquid Membrane – forming compounds for Curing Concrete
2. ASTM C979 – Pigments for Integrally Colored Concrete
3. ASTM E1155 – Determining Floor Flatness and Floor Levelness Numbers
4. ASTM C94 - Standard Specifications for Ready-Mixed Concrete
5. ASTM 1745 – Standard Specification for Plastic Water Vapor Retarders
6. ASTM D2240 – Standard Test Method for Rubber Property

1.3 SYSTEM DESCRIPTION

A. Mix Design: The mix designs of the concrete for each portion of the work shall be as indicated on the Structural Drawings, but not less than those indicated below. If conflicts exist between these requirements and the Structural Drawings, the higher strength requirement shall govern.
1. The mix design for interior floor slabs on grade shall have a water/cement ratio of 0.48 maximum and a minimum strength of 3000 p.s.i. in twenty eight (28) days.
2. Sidewalks and other exterior flatwork shall have a minimum strength of 2500 p.s.i. in twenty eight (28) days.
3. All other portions of the Work not specifically indicated shall have a minimum strength of 3,000 p.s.i. in twenty eight (28) days .

B. In no case shall the slump exceed 5 inches, as determined by ASTM C143, unless a new design showing compliance with other provisions of the specifications is submitted to and accepted by the Architect/Engineer.

C. Design of mixes shall be as per ACI Standard 301 "Specifications for Structural Concrete for Buildings" except as otherwise shown on the Drawings and specified herein.

1.4 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.

B. Mix Design: Submit proposed concrete mix design for each class of concrete to be supplied for the project for review by the Architect/Engineer.

1. The proportioning of ingredients shall be such as to produce the necessary placability, durability, strength and other required properties.
2. A mix design used successfully on a previous project under conditions as anticipated and with the same ingredients proposed for use in this project may be used when approved by the Architect or Engineer.
3. When the proposed mix designs are not established by other allowed methods, they shall be based on the results obtained from tests of trial mixes made with the same materials as will be used in the concrete supplied for the project by testing laboratory or agency approved by the Architect and Engineer, and in accordance with the procedures given in ACI 211 "Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete".

1.5 PROJECT CONDITIONS

A. Environmental Requirements:
1. Cold Weather: Concreting shall conform to ACI 306 Standard entitled "Recommended Practice for Cold Weather Concreting".
a) The temperature of the concrete when discharged shall be not less than 55 degrees F. when the mean air temperature is below 40 degrees F.
b) Concrete placing shall cease when the descending air temperature in the shade falls below 40 degrees F. At any other time when the air temperature may be expected to reach the freezing point during the day or night, protection material so provided shall be spread over the concrete. Concrete injured by frost action shall be removed and replaced at the Contractor's expense.
2. Hot Weather: Hot weather concreting, except as otherwise specified herein, shall conform to ACI 305, "Recommended Practice for Hot Weather Concreting".
a) The temperature of the concrete when discharged shall not exceed 90 degrees F.

PART 2 PRODUCTS

2.1 MATERIALS

A. Water shall be potable.

B. Cement shall be gray Portland cement as per ASTM C150, Type II. Provide cement from a single source.

C. Calcium Chloride compounds are not allowed.

D. Aggregates:
1. Aggregates shall be clean, free from foreign matter and shall conform to ASTM C33. Provide aggregate from a single source for exposed concrete work.
2. Fine aggregate shall be clean, sharp, natural sand, free from loam, clay, lumps or other deleterious substances.
3. Coarse aggregate shall be clean, uncoated, processed aggregate containing no clay, mud, loam or foreign matter.
4. Maximum aggregate size shall be not larger than one-fifth of the most narrow dimension between sides of forms, one-third of the depth of slabs, nor three-fourths of the minimum clear spacing between individual reinforcing bars or bundles of bars.
5. Aggregate shall be smooth, rounded gravel.

E. Waterstops: Shall be flat, dumbbell type at construction joints and other joints as shown. Size to suit joints. Provide either rubber or PVC waterstops.

F. Metal construction/cold joints: Galvanized tongue and groove key, equal to "Burke Keyed Kold Joint Form".

G. Expansion strip material: 1/2 inch thick, asphalt composite, expansion material conforming to ASTM D994.

H. Joint sealant:
1. For slabs on grade that are to receive finish floor materials install a one or two component self-leveling, polyurethane elastomeric sealant equal to “Sikaflex-2C” with a minimum Shore Hardness of 40 durometers (+/-5).
2. For slabs on grade that are to be exposed and sealed (or polished) install a flexible epoxy control joint resin equal to “Sikadur 51” with a minimum Shore Hardness of 50-55. Provide in color as approved by Architect.

I. Sealer: Shall be an acrylic sealer such as "W.R. Meadows Vo-Comp 25" at locations indicated on the Drawings and the Room Finish Schedule unless otherwise indicated.

J. Curing Compound: “VC5” by Sinak Corporation. Curing compound shall be applied in strict accordance with manufacturer’s requirements to comply with all warranty requirements against moisture vapor transmission.

K. Vapor Retarder: Virgin polyolefin film and all required accessories (tape, boots, etc.) shall be provided by a single source.
1. Acceptable manufacturers/products (subject to “Performance criteria”.)
   a) Fortifiber – “Moistop”
   b) Griffolyn – “Vapor Guard”
   c) Stego Industries – “Stego Wrap Vapor Barrier”
   d) Vaporflex – “Layfield”
   e) W.R. Meadows – “Perminator”
2. Performance criteria

a)	Water Vapor retarder	ASTM E-1745 Meets or exceeds Class A
b)	Permeance rating	ASTM 1745 (Sec. 7) 0.01 perms (gr/sf/hr/in=Hg) or less
c)	Minimum thickness	ACI 302.2R-06 15 mils
d)	Puncture Resistance	ASTM D-1709 minimum 2200 grams
e)	Tensile Strength	ASTM D-882 minimum 50.0 lbf/in

2.2 BATCHING AND MIXING

A. Ready Mix:
1. Ready mix concrete shall be batched, mixed and transported in accordance with the applicable provisions of ASTM C94.
2. Batch plants used in the production of ready mixed concrete shall comply with the standards set forth by the Plant Manufacturers Bureau of the National Ready Mix Concrete Association.

2.3 QUALITY CONTROL

A. Testing Laboratory Services: Material testing shall be performed in accordance with the requirements of this section and Section 01 4500, Quality Control.

B. Concrete Sampling: In accordance with ASTM C172. Three (3) concrete test cylinders will be taken for every 50 (or less) cubic yards of each class of concrete placed.

C. Concrete Specimens: Laboratory specimens shall be prepared and cured in accordance with ASTM C31.

D. Compressive Strength Test Method: ASTM C39. The Testing Agency shall distribute copies of reports as specified in Section 01 4500, Quality Control.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Examine subsurfaces to receive Work and report in writing, with a copy to Architect, any detrimental conditions. Failure to observe this requirement constitutes a waiver to subsequent claims to the contrary and holds Contractor responsible for correction(s) Architect may require. Commencement of Work will be construed as acceptance of subsurfaces.

B. Verify all slab recesses, slopes, etc. are provided as indicated on drawings and that slopes and depths are coordinated to provide the desired intent. All areas indicated to slope to drain shall be sloped at 1/8"/ft. unless noted otherwise.

3.2 PREINSTALLATION MEETING

A. Prior to concrete placement at areas that are to be exposed with a ground/polished finish conduct a meeting with concrete installer/ finishing (polishing) contractor, Architect, owner to review procedures for pouring and finishing to ensure a high quality uniform texture. Verify all transitions and joint locations.

3.3 PREPARATION

A. Vapor retarder film shall be installed over properly compacted base course directly below the concrete slab in strict accordance with manufacturer's instructions and ASTM E1643 "Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular fill Under Concrete Slabs". Overlap all joints a minimum of 6 inches and seal per manufacturer's recommendations. Seal all pipes, conduits, and other penetrations in manner approved by vapor barrier manufacturer. Protect vapor barrier from construction damage. Promptly repair membrane where damaged.

B. Provide smooth, monolithic surfaces for proper membrane adhesion.
1. Surfaces must be free of voids, spalled areas, loose aggregate and sharp protrusions, with no coarse aggregate visible.
2. Concrete must be acceptably dry per manufacturer's recommendations before application of primer and membrane.

C. Surfaces directly beneath concrete pour shall be wetted just prior to concrete placement unless a vapor barrier is included in floor slab design.

D. Build in items of miscellaneous iron and steel as indicated in proper position, properly embedded in concrete.

E. Unless noted otherwise on the Drawings, the embedment of conduits, pipes, sleeves, etc. of any material shall not be permitted within any concrete structural element (i.e.,

columns, beams elevated slabs, etc.) or structural concrete toppings without the expressed approval of the Structural Engineer.

3.4 CONCRETE PLACEMENT

A. Ready mixed concrete shall be mixed and delivered in accordance with the requirements of the Standard Specifications for Ready-Mixed Concrete, ASTM C94. Not more than 90 minutes shall elapse from time water is introduced into the concrete mixture until it is discharged. When the air temperature is above 90 degrees F., reduce maximum mixing and delivery time to 60 minutes. No water shall be added to a mix in the field. At no time will concrete mix exceed a bulb thermometer reading of 90 degrees F. or over. Ice or other method, as approved by the Structural engineer, shall be used to keep concrete below 90 degrees F. temperature.

B. Concrete shall be deposited as near to its final position as possible to prevent segregation. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.

C. Vibrators shall be used under experienced supervision and the forms designed to withstand their action. Vibrators shall not be used to move concrete within formwork. Vibrators are not to be used at floor slabs.

D. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete that has hardened sufficiently to cause the formation of seams or planes of weakness within the section. If a section cannot be placed continuously, provide construction joints as herein specified.

E. Where concrete is to receive a polished finish, place concrete by continuous delivery via chute or pumping. Wheelbarrows, buckets or other means are not acceptable. Do not “walk” in freshly placed concrete or “tamp” concrete to place.

F. Waterstops: Install at construction joints and other joints as shown.

G. Cold Joints/Construction Joints: Form keyed joints at all pour terminations. Joints shall be firmly and accurately positioned so that no movement occurs during the concrete placement.

1. At Contractor’s option, interior slabs on grade may be poured in a continuous manner, without cold joints, under the following conditions:
   a) The slab shall be saw cut to a depth of ¼ the depth of the slab, along the joints as indicated on the Drawings, the same day the slab is poured.
   b) Saw cuts shall be filled with a pourable, polyurethane sealant with a minimum shore hardness of 40 durometers. Saw cuts shall be filled as soon as practical and before cuts have become full of sand or dirt, etc. Clean thoroughly prior to filing.

H. Expansion joints: Full depth of the concrete section. Expansion joint material shall be placed at all exterior concrete flatwork, including all sidewalks, curbs, ramps and steps at a maximum spacing of 20 feet intervals. Expansion joints shall be placed at the edges of flatwork abutting walls, stems, columns, or existing concrete slabs in addition to locations indicated on the Drawings.

I. Where drains are located in floor slab, feather concrete as required from perimeter of affected areas to drains at a minimum of 2% slope unless otherwise indicated on drawings.

3.5 CONCRETE FINISHING

A. All interior slabs to receive floor covering or to be left exposed shall have a smooth, dense, steel trowel finish.

B. Sidewalks, service yards and gutters shall receive a fine broom finish unless otherwise noted on Drawings.

C. Scoring tool shall be used to mark off exterior walks and other areas as indicated on the Drawings. Tool shall provide 3/8 inch radius and depth of cut shall be 1 inch or 1/4 depth of slab, whichever is greater.

D. All exposed vertical concrete surfaces shall have a smooth, surface unless noted otherwise. Concrete that is out of alignment or flatness beyond specified tolerances or shows a defective surface that cannot be properly repaired or patched, shall be removed.

E. Finish exposed aggregate surfaces by applying retarder to the surface at the rate recommended by the manufacturer.

3.6 CURING

A. Protect freshly deposited concrete from premature drying and maintain without drying at a relatively constant temperature for the period of time necessary for the hydration of the cement and proper hardening of the concrete.

1. Apply curing compound at the rate specified by manufacturer. Apply evenly to surface of concrete with no puddles or “holidays” in coverage.
2. Water curing shall immediately follow the finishing operation. Concrete shall be kept continuously moist for at least seven (7) days using water, and curing covers or other method as approved by the Architect.
   a) Water for curing shall be applied to damp concrete surfaces as soon as water film has disappeared. Apply uniformly. Maintain continuity and repair damage to curing cover(s) during curing period. Prevent rapid drying of the concrete at the end of the curing period.
3. During the curing period, protect the concrete from damaging mechanical disturbances, particularly load stresses, heavy shock and excessive vibration. Protect finished concrete surfaces from damage caused by construction equipment, materials or methods.

B. Joint Sealant: Saw cut joints, keyed control joints, expansion joints, etc., shall receive joint sealant. Install joint sealant after concrete curing period or as recommended by sealant manufacturer. Joints shall be thoroughly cleaned prior to installation of sealant. Type of sealant shall be as specified herein or as recommended by finish flooring manufacturer.

3.7 FIELD QUALITY CONTROL

A. Tests:

1. Slump Tests: Shall be in accordance with ASTM C143 and shall be taken whenever a strength test sample is taken and at other times as directed by the Architect or Structural Engineer.
2. Temperature Tests: The temperature of the concrete mix shall be determined as delivered with a thermometer accurate to plus or minus 2 degrees F. The thermometer shall be inserted into the sample immediately after it is obtained and allowed to remain until the reading becomes stable.

B. Inspection: Notify Architect in advance before any reinforced concrete is poured on the project. Reinforcing steel will be checked and approved by Architect. Correct any errors or discrepancies before concrete is placed. Such checking and approval shall not relieve Contractor from his responsibility to comply with the Contract requirements.

C. It is the responsibility of the Contractor to take all appropriate measures to avoid slab curl that affects the appearance, fitness or function of the finish floor. Slab curl deemed unacceptable shall be corrected by the Contractor.

D. All interior concrete flatwork shall comply with ASTM E1155 for flatness and level criteria.

E. All exterior concrete flatwork shall not vary more than ¼ inch in 10 feet (for flatness) and shall be sloped to drain with no “birdbaths” or standing water allowed.

F. Contractor shall repair cracks and up to 1/16 inch during the project’s warranty period. Contractor shall replace any concrete that exhibits cracks greater than 1/16 inch or concrete that is displaced vertically or horizontally from the adjacent concrete surface by 1/16 inch or more.

3.8 CLEANING

A. During the course of the Work and on completion of the Work, remove excess materials, equipment and debris and dispose of away from premises. Leave Work in clean condition in accordance with Section 01 5000, Temporary Facilities and Controls.

3.9 PROTECTION

A. Protective coatings shall remain until floors have completely cured or until interior partitions are to be installed.

B. Floors that are to remain exposed (with no floor coverings installed) are to be protected from staining, chipping, and other incidental damage by covering with a non-staining material that will remain in place throughout the duration of construction.

END OF SECTION

SECTION 04 2100

CLAY UNIT MASONRY

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Furnish and install Clay Unit Masonry as shown on the Drawings and as specified herein.

1.2 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.
   1. Clay Unit Masonry Samples: Provide two (2) samples of clay unit masonry, (stretcher units), to be used on the Project showing range of texture and/or color variations of the exposed surfaces for units. Units provided to the Project shall match these samples.
   2. Mortar Color Samples: Provide two (2) samples of mortar “sticks” in specified color.

B. Mortar and Grout Mix Designs
   1. Submit mix designs and samples to the Architect for review prior to delivering materials to the site or commencing the work in this section in accordance with Section 01 3300, Submittal Procedures.
      a. Mortar Mix Design: Furnish in accordance with ASTM C270.
      b. Grout Mix design: Furnished by either the supplier of grout or an independent testing laboratory. Submit comprehensive strength data with mix design submittals when pozzolans are used.
   2. Submit requirements for hot weather protection procedures.

1.3 QUALITY ASSURANCE

A. Unit Masonry Standard: Comply with ACI 530.1/ASCE 6, "Specifications for Masonry Structures", except as otherwise indicated.
   1. Revise ACI 530.1/ASCE 6 to exclude Sections 1.5; Parts 1.6-A.1.b and 1.6-A.1.c and Part 3.3-E.

B. Regulatory Requirements: Clay unit masonry materials and workmanship shall meet the requirements of the building codes that are applicable to the jurisdiction in which the Project is located.

C. Mock-Ups: Prior to start of work, construct a sample panel from the approved materials, containing each different kind or color of clay unit masonry, approximately 4 feet high x 6 feet long (or as required to illustrate wall design) under the direction of the Architect. The sample wall shall provide a standard of workmanship, bond, thickness and tooling of joints, range of color and texture of the masonry and mortar. Request Architect's review only after sample wall mortar is dry. Construct successive sample panels until the standard is approved. When accepted, sample wall shall be the standard of comparison for the remainder of the masonry work. Upon completion of the Project, remove the sample wall from the site and dispose in a legal manner.

D. Single Source Responsibility for Masonry Units: Obtain exposed masonry units of uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each different product required for each continuous surface or visually related surfaces.

E. Single Source Responsibility for Mortar Materials: Obtain mortar ingredients of uniform quality, including color for exposed masonry, from one manufacturer for each cementitious component and from one source and producer for each aggregate.

F. Sample Panels: Before installing unit masonry, build sample panels, using materials indicated for the completed Work, to verify selection and to demonstrate aesthetic effects. Build sample panels for each type of exposed unit masonry assembly in sizes approximately [48 inches] long by [48 inches] high by full thickness.
   1. Locate panels in the locations indicated or, if not indicated, as directed by General Contractor.
   2. Clean exposed faces of panels with masonry cleaner indicated.
   3. Maintain sample panels during construction in an undisturbed condition as a standard for judging the completed Work.
   4. Approval of sample panels is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; aesthetic qualities of workmanship; and other material and construction qualities specifically Accepted by the Owner's Representative in writing.

1.4 DELIVERY, STORAGE AND HANDLING

A. Transport and handle masonry units in such a manner as to prevent chipping and breakage.

B. Deliver and store materials in dry, protected areas.

C. Keep free of stain or other damage.

D. Locate storage piles, pallets, stacks or bins to avoid or protect material from heavy or unnecessary traffic.

E. Replace any damaged material at no cost to Owner.

1.5 PROJECT/SITE CONDITIONS

A. Cold Weather Requirements:
   1. Fully protect clay unit masonry against freezing by a weather-tight covering that shall also prevent accumulation of ice.
   2. Do not lay clay unit masonry when the temperature of the surrounding atmosphere is below 40 degrees F or is likely to fall below 40 degrees F in the 24 hour period after laying, unless adequate protection is provided.

B. Hot Weather Requirements:
   1. When the ambient air temperature exceeds 100 degrees F., or when the ambient air temperature exceeds 90 degrees and the wind velocity is greater than 8 mph, the masonry contractor shall implement hot weather protection procedures as submitted to the Architect.
   2. Do not spread mortar beds more than 4 feet ahead of placing block units.
   3. Place block units within one minute of spreading mortar.

1.6 SCHEDULING AND SEQUENCING

A. Coordination: Coordinate with other work relating to clay masonry installation for placing required blocking, backing, furring, conduits and other items.

PART 2 PRODUCTS

2.1 CLAY UNIT MASONRY

A. General Requirements for Clay Unit Masonry:
1. Structural Clay Unit Masonry shall conform to the following: ASTM C216 , Grade SW, Type FBS.
2. Units shall have a maximum linear shrinkage not to exceed 0.065 of 1% from a saturated oven dry condition by N.B.S. 3079 method of testing.
3. Wetting of Units:
   a. Brick having initial rate of absorption, (I.R.A. or suction), as determined in accordance with ASTM C 67 in excess of 30 grams per minute over and area of 30 square inches shall be wetted sufficiently so that the rate of absorption when laid does not exceed this amount.
4. Unit sizes shall be as shown on Drawings.
5. Surface of units shall be clean and free from dirt when laid in walls.
6. Provide special sizes and shapes as required or as shown on Drawings for proper windows, doors, bond beams, lintels, pilasters, caps and other shapes. Provide shapes requiring a minimum of cutting. Where masonry cutting is necessary, all cuts shall be made with a masonry saw and shall be neat and regular. These special sizes and shapes shall match the standard units in color and texture as to be indistinguishable.
7. Units not complying with the appropriate ASTM Standards, shall not be laid in the wall where exposed to view and will be rejected and shall be removed and replaced with materials in compliance with the Standards.
8. Color shall be as selected by the Architect from manufacturer's standard range.

2.2 MORTAR:

A. TYPE: ASTM C270, Type S.

B. Cement: Type II Portland cement conforming to ASTM C150.

C. Aggregate: Conforming to ASTM C144, except that no less than 3 percent nor more than 10 percent shall pass a No. 100 sieve.

D. Hydrated Lime: ASTM C207, Type S.
1. Color: to be as selected by Architect.
2. Provide limeproof, inorganic compounds that shall not exceed 15% by weight of the cement, unless otherwise directed by manufacturer.
3. Carbon black shall not exceed 3% by weight of the cement.
4. Color to be factory blended for full color saturation of mortar joint and to be factory packaged for unitized jobsite mixing at a ratio of one unit of color per sack of cementitious material, (Portland cement, lime, or masonry cement).

E. Water: Clean and potable.

F. Mortar used for historic, rehabilitation, and/or remodel projects shall be verified with Architect prior to proceeding with the Work.

2.3 GROUT:

A. Cement: Type II Portland cement conforming to ASTM C150.

B. Aggregate: ASTM C404 and as follows:
1. Sand: Size No. 1 for fine aggregate.
2. Pea Gravel: Size No. 8 for coarse aggregate.

C. Water: Clean and potable.

D. Mix design: Minimum compressive strength of 2000 p.s.i. in twenty-eight (28) days, unless higher strength is required by the structural drawings and notes.

E. Slump: 10 to 11 inches, unless otherwise noted on Drawings.

F. Use within 1-1/2 hours of initial mixing and use no grout after it has begun to set or after it has become harsh or non-plastic.

G. Coarse grout may be used in cavity walls with a horizontal dimension of 2 inches or more, and in hollow cell construction 4 inches or more in both horizontal directions.

2.4 ACCESSORIES

A. Joint Reinforcing: Ladder type, galvanized steel rods with width 2 inches less than wall thickness conforming to UBC Standard 24-15, Part 1.

B. Dovetail Anchor: 16 gauge flat sheet steel, 7/8 inch wide, turned up 1/4 inch at the end, designed for use with embedded slot or inserts. Zinc coating shall conform to ASTM A153.

C. Reinforcing Steel: As specified.

D. Rubber Control Joints: Rapid Control Joint, regular type as manufactured by Dur-O-Wall, or approved equal.

E. Nailing Strips: As specified.

F. Sheet Metal Flashings: As specified.

G. Steel Lintels: As indicated or scheduled on Structural Drawings.

H. Chemical Cleaner: Cleaner shall be a solution of blended liquid acids, heavily inhibited and emulsified and in combination with special wetting systems; acceptable to the brick unit manufacturer.
1. Specific product selection shall be dependent upon substrate as recommended by the chemical cleaner manufacturer.
2. Muriatic acid shall not be acceptable as a chemical cleaner for new masonry.

PART 3 EXECUTION

3.1 EXAMINATION

A. Field Measurements:
1. Verify all measurements shown on Drawings by taking field measurements.

2. Proper fit and attachment of all clay masonry is required.

3.2 PREPARATION

A. Protection: Protect sills, ledges, offsets and other projections from dropping of mortar and grout.

3.3 ERECTION, INSTALLATION, APPLICATION

A. General Requirements for Clay Masonry Walls:
1. Lay units in uniform and true courses, level and plumb to height indicated on Drawings.
2. Lay clay unit masonry in such a way that cracks are not formed at the time the unit is placed in the wall.
3. Method of wetting shall be to insure that each unit is nearly saturated, surface dry when laid.
   a. During freezing weather, units that require wetting shall be sprinkled with warm water just before laying.
4. Adjusting Units:
   a. Units shall be adjusted to be level, plumb and straightened into final position in the wall while the mortar is still soft and plastic enough to ensure a good bond.
   b. Avoid over-plumbing and pounding of the corners and jambs to fit stretcher units after they are set in position.
   c. If the position of the unit is shifted after the mortar has stiffened, or bond is broken or cracks are formed, re-lay unit in new mortar.
5. Do not lay chipped, cracked or otherwise defective units in the wall where exposed to view.
   a. Remove and replace clay units that are chipped, cracked, broken, or otherwise defective whether before of after setting.
6. Openings: Provide openings in masonry walls where required or indicated. Steel lintels shall be provided unless otherwise noted.
7. Cutting of Masonry: When required, exposed clay unit masonry shall be cut with a power driven carborundum or diamond disc blade saw. When using "wet" cutting methods, clean water shall be used on exposed units.
8. Anchor clay unit masonry to concrete by the use of dovetailed flat bar anchors inserted in slots built into the concrete.
   a. Space anchors not more than 16 inches vertically and 24 inches horizontally.
   b. Maintain a space not less than 1/2 inch width between masonry and concrete members, keeping space free of mortar or other rigid materials so as to permit differential movement.
9. Where fresh masonry joins masonry that is partially or totally set, the exposed surface of the set masonry shall be cleaned and lightly wetted so as to obtain the best possible bond with the new Work. All loose brick and mortar shall be removed.
10. If it becomes necessary for construction purposes to "stop-off" a horizontal run of masonry, this shall be done by racking back on half a unit length in each course and, if grout is used, stopping the grout 4 inches back of the rack. Toothing will not be permitted, except upon written approval of the Architect.

B. Bonding:
1. Bond pattern shall be as indicated on the Drawings. Where no bond pattern is shown, the wall shall be laid up in straight uniform course with regular running bond.

2. Bond shall be plumb throughout face of wall.

C. Non-Bearing Wall Intersections:
1. Tie non-bearing wall together with strips of metal lath or galvanized 1/4 inch mesh hardware cloth placed across the joint between the 2 walls placed in alternate horizontal block courses.
2. Rake out the vertical joint between the intersecting walls to a depth of 3/4 inch after the mortar has stiffened.
3. Provide sealing of control joint as specified.

D. Mortar Joints:
1. Joints shall be straight, clean and a uniform 1/3 inch thickness on exposed wall face, for horizontal and vertical joints, unless otherwise indicated.
2. Exposed vertical and horizontal joints shall be tooled to produce a dense, slightly concave surface that is well bonded to the brick at edges, or as indicated.
3. Full bedding to be provided for the first course on the foundation and wherever maximum strength is required.
4. Butter vertical head joints well and shove these joints tight so that the mortar bonds well to both units.
5. Bee-holes or other open joints shall be filled and tooled with mortar while mortar is still fresh.

E. Control Joints:
1. Provide control joints at all vertical masonry walls where such walls exceed 24 feet in length or as otherwise indicated on Drawings.
2. Control joints shall be continuous full height of walls.
3. Horizontal wire reinforcing shall not run through control joint.
4. Control joints shall not occur at wall corners, intersections, ends, within 24 inches of concentrated points of bearing or jambs or over openings unless specifically indicated on the Structural Drawings.
5. Control joint materials shall be held back from finished surface as required to allow for sealant and back-up materials.

F. Provisions for Other Trades and Built-in Items:
1. Build in items required and indicated including, but not limited to, reinforcing steel, bolts and anchors, flashings, sleeves, frames, structural steel, loose lintels, anchor bolts, nailing blocks, door and window frames and miscellaneous iron.
2. Enclosures for pipes, stacks, ducts and conduits:
   a. Construct slots, chases, cavities, and similar spaces as required.
   b. Where masonry is to enclose conduit or piping, bring it to proper level indicated and as directed.
   c. Cover no pipe, conduit chases or enclosures until advised that Work has been inspected and approved.

3.4 ADJUSTING

A. Pointing of Mortar Joints:
1. Point and fill holes and cracks in exposed mortar joints.
2. Cut out defective mortar joints to a depth of at least 1/4 inch, refill solidly with mortar and tool as specified.
3. When cutting is complete, remove dust and loose material by brushing or vacuuming.
4. Prehydrate mortar for pointing by mixing the dry ingredients with only sufficient water to produce a damp mass of such consistency that it will retain its form when it is pressed into a ball with the hands, but will not flow under the trowel.

5. Allow mortar to stand for a period of not less than one hour nor more than 2 hours, after which remix with the addition of sufficient water to produce satisfactory workability.
6. Pointing mortars shall be identical to adjacent mortar in similar joints and finish results shall match and be indistinguishable from original mortar used.
7. Premoisten joint and apply mortar tightly.
8. Tool to match adjacent joints.
9. Moist cure for 72 hours.

B. Patching: If approved by the Architect, patching of exposed masonry walls shall be done at the conclusion of the general work and shall conform as closely as possible to similar surrounding or adjoining work.

3.5 FIELD QUALITY CONTROL

A. General: Architect will require tests and inspections as necessary to verify quality and strength of grout and mortar. Laboratory tests shall conform to applicable ASTM standards and test.

B. Testing Laboratory: Material testing shall be provided in accordance with Section 01 4500 Quality Control.

C. Frequency: As determined by the Architect based upon total time for construction of masonry with not less than two tests per each level of masonry construction, foundation to roof or floors.

D. Mortar:
1. Testing per ASTM C780.
2. For determining hardened mortar properties, prepare 3 test specimens for each test age and property. A strength test shall be the average of the strengths of the specimens tested at the age specified.
3. Specimens shall be tested at 7 and 28 days.
4. In case of dispute, the mortar proportions must be tested in accordance with the property specification of ASTM C270.

E. Test Reports: The Testing Laboratory shall distribute copies of reports as specified in Section 01 4500, Quality Control.

3.6 CLEANING

A. Daily Cleaning: Keep walls clean. Soiled masonry from mortar and grout spills which will be exposed to view at the completion of the Project shall be cleaned immediately with stiff fiber brushes until the wall is free of dropped or spattered mortar.

B. Surface Preparation for Chemical Cleaner:
1. In strict accordance with manufacturer's printed instructions.
    a. Masonry walls shall be allowed to cure at least 30 days before chemical cleaner is applied.
    b. Walls shall be free of excess mortar.
    c. Cracks, other than hairline cracks, shall be pointed up.
    d. Defective mortar joints shall be routed out, pointed with mortar and tooled.
2. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.

3. Commencement of system application constitutes acceptance of surfaces by applicator.

C. Chemical cleaner application to be in strict accordance with manufacturer's printed instructions and as follows:
   1. Surfaces shall be thoroughly pre-soaked with clean water to prevent the absorption of the cleaning solution within the pores of the masonry.
   2. Cleaning solution shall be diluted with clear water and applied to pre-soaked wall areas with a long handled stiff fibered masonry wall washing brush, or other brush as recommended by the cleaning compound manufacturer. The cleaning solution may also be applied with a garden-type low pressure sprayer having a maximum nozzle pressure of 50 p.s.i. Allow the solution to remain on the wall 5 to 10 minutes, or as recommended by the cleaning solution manufacturer. Wooden paddles or other non-metallic tools may be used to remove stubborn particles. Cleaning shall be restricted to small areas of up to 20 square feet at a time.
   3. After washing a given area, the wall shall be flushed with a copious amount of clear water, working from top to bottom, before the solution dries on the wall surface. All of the cleaning solution shall be completely rinsed off of the wall.
   4. Rinsing water may be applied with a high-pressure hose system with a maximum nozzle pressure of 700 p.s.i. The high-pressure nozzle tips shall have a fan spray angle of from 15 to 45 degrees. The high-pressure system shall have a water flow rate of 3 to 8 gallons per minute. Care shall be taken to avoid damaging the brick unit or the mortar joints with the high-pressure water spray.
   5. Repeat the procedure on spots that require additional cleaning.
   6. Clean roof side and top of parapet walls.

D. Remove all scaffolding and equipment used in the Work.

E. Clean up all debris, refuse and surplus material and remove from premises in accordance with Section 01 5000, Temporary Facilities and Controls.

3.7 PROTECTION

A. Furnish temporary protection for exposed brick masonry corners subject to injury.

B. Carefully cover tops of walls left incomplete at the conclusion of the day's work with tarpaulins or other approved covering, securely held in place.

C. In hot and dry weather, protect masonry against too rapid drying.
   1. Protect masonry by hosing down thoroughly at least twice each consecutive day, more frequently if necessary, for five (5) days including Saturday and Sunday following the laying of the brick units.

D. Protect all finished work against freezing for a period of not less than 48 hours by means of enclosures, artificial heat, or such other protective methods as may be required.

END OF SECTION

SECTION 05 1200

STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.1 SUMMARY

A. Furnish and install Structural Steel Framing and related items as shown on the Drawings and as specified herein.

1.2 REFERENCES

A. Except where provisions of these Specifications are more exacting, comply with applicable provisions of the following standards:
   1. Standard Specifications for the Design and Fabrication of Structural Steel for Buildings, of the American Institute of Steel Construction (AISC).
   2. Code of Standard Practice for Steel Buildings and Bridges, of AISC.
   3. Code for Welding in Building Construction, D1.0, of the American Welding Society (AWS).
   4. Specifications for Structural Joints by the Research Council on Riveted and Bolted Structural Joints.

1.3 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.

B. Shop Drawings: Submit shop and erection Drawings clearly showing each piece required for fabrication and erection.

C. Certifications: Furnish certification that material furnished meets or exceeds the requirements of the ASTM Specifications specified herein or on the Drawings, for each type of material.

1.4 DELIVERY, STORAGE AND HANDLING

A. Exercise care during unloading, storage and erection to avoid damage. Dumping on the ground is not permitted.

B. Material stored at the site shall be supported completely free of the ground and covered to avoid damage from the elements.

PART 2 PRODUCTS

2.1 MATERIALS

A. Structural Steel: Structural Steel for Work except as otherwise indicated or specified shall conform to ASTM A36 for miscellaneous steel items and ASTM A992 for wide flange sections. Structural Steel pipe shall conform to ASTM A501 or ASTM A53, Type E or S, Grade B. Tubular steel shall be ASTM A500, Grade 42.

B. Bolts: Bolts used in connection with structural steel shall conform to ASTM A325 and shall be regular hexagon-bolt type. Bolts and nuts other than those with self-locking screw

threads, shall be the American National Coarse-Thread series, conforming to the "National Bureau of Standards" publication H-28. Where self-locking nuts are not furnished, bolt threads shall be upset to prevent the nuts from backing off. Self-locking threads shall be manufacturer's approved standard type and may be used in lieu of upsetting bolt threads. Expansion bolts to have ICBO rating applicable for material into which installation takes place.

C. Welding Electrodes: Arc-welding electrodes shall conform to ASTM A233 for Steel Arc-Welding Electrodes. Electrodes shall be as recommended by their manufacturers for the positions and other conditions of actual use.

D. Metal Primer: Prime all members with shop applied primer. Touch up all damaged primer with compatible primer.

E. Primer: Tnemec 10-1099 (gray) metal primer as manufactured by Tnemec Co.

2.2 FABRICATION

A. Workmanship and details of construction (except as otherwise indicated or specified) shall be in conformity with applicable articles of the AISC "Specifications for Design, Fabrication and Erection of Structural Steel for Buildings," AISC "Code of Standard Practice" and the applicable building codes.
   1. Sections shall be of dimensions, weight and design as indicated, assembled complete at the shop, with base plates and other detailed materials attached.
   2. Furnish 1/4 inch thick leveling plates at columns where base plates are shop fabricated to columns.
   3. Make connections as indicated or detailed on the Drawings and the approved shop and erection drawings.
   4. Exposed steel shall have smooth, clean surfaces with no identifying trade marks, names, etc. exposed to view.
   5. Leave in condition for finish painting.

2.3 SHOP PAINTING

A. Thoroughly clean steel of loose mill scale, rust splatter, slag or flux deposit, oil, dirt and other foreign matter. Apply one coat of protective paint to steel surfaces, except machined surfaces, surfaces that are to be encased in concrete, and edges and surface areas adjacent to field welds. Parts inaccessible after assembly or erection shall be given two coats of different colors.

B. Structural steel that is to receive direct applied fireproofing shall not be primed or painted. Contractor is to ensure compliance with adhesion of all fireproofing materials and any steel finishes.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions:
   1. Verify anchor bolt locations, grouting and elevation of base and setting plates and other material set by other trades, etc., before commencing work.
   2. Notify the Architect of work set by others that is out of tolerances specified, and do not erect material upon such work until it has been corrected.

3.2 ERECTION

A. Report errors in shop fabrication or deformation that prevent proper assembly immediately to Architect, and obtain approval of method of correction. Approved corrections shall be made at no additional cost to the Owner. No field cuts or modifications shall be made to members or connections without prior review and approval by the structural engineer.

B. Locate anchor bolts and anchors and build into connection Work. Pre-set by use of templates or other methods as required to locate accurately.

C. Provide temporary shoring and additional bracing of steel framing necessary to adequately and safely support all loads imposed on structure during construction.

D. Welding: Conform to requirements of the AISC specifications, and the AWS welding code. Welds left exposed shall be ground smooth and flush with adjacent surfaces.

E. Cutting Holes: Shall be cut, drilled or punched at right angles to the surface of the metal and shall not be made or enlarged by burning with a gas-cutting torch except where specific approval is given for each hole by the Architect and Structural Engineer. Holes in base or bearing plates shall be drilled.

F. Templates: The Contractor shall furnish templates and instructions for the setting of anchors, anchor bolts and bearing plates and shall ascertain that the items are properly set during the progress of the Work.

G. Framing: The framing shall be carried up true and plumb and temporary bracing shall be introduced where necessary to take care of loads to which the structure may be subjected, including erection of equipment and its operation. Such bracing shall be left in place as long as may be required for safety. It shall be finally removed by the Contractor as part of his equipment. As erection progresses, the Work shall be securely connected to take care of dead load, wind and erection stresses.

3.3 FIELD PAINTING

A. Field Painting: After erection, touch-up field connections including welds, bolts and abraded places with the same type of paint as used for shop coat. Steel surfaces, except those required to be in concrete, shall be given a field coat of protective paint. Field bolts in Work that will be left exposed to the weather shall be dipped in protective paint as noted in "materials" above, just before bolts are put in place. For work that is to be exposed, all surface finish blemishes are to be removed by sandblasting or other approved method and reprimed prior to finish coat application.

3.4 CLEANING

A. During the course of the Work and on completion of the Work, remove excess materials, equipment and debris and dispose of away from premises. Leave Work in clean condition in accordance with Section 01 5000, Temporary Facilities and Controls.

END OF SECTION

McElroy Metal, Inc.
1500 Hamilton Rd.
Bossier City, LA 71111
Phone: (800) 562-3576
Phone: (318) 747-8097
Fax: (318) 747-8099
E-mail: info@mcelroymetal.com
www.mcelroymetal.com

SECTION 07 41 13
Metal Roof Panels
Medallion-Lok

Part 1 GENERAL

1.1 SUMMARY

A. Section Includes: Factory-formed sheet metal roofing, including flashings and trim.

B. Related Sections: Section(s) related to this section include:

1. 076200 Sheet Metal Flashing

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A653/A653M Standard Specification for Steel Sheets, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
2. ASTM A792/A792M Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy Coated by the Hot Dip Process.
3. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
4. ASTM D2247 Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
5. ASTM G90 Standard Practice for Performing Accelerated Outdoor Weathering of Non-Metallic Materials Using Concentrated Natural Sunlight.
6. ASTM D 2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.
7. ASTM D 4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
8. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials

9. ASTM E 1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
10. ASTM E 2140 - Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head.

B. Underwriters Laboratories (UL):

1. UL 263 - Fire Tests of Building Construction and Materials.
2. 580 - Tests for Uplift Resistance of Roof Assemblies.
3. UL 790 - Standard Test Methods for Fire Tests of Roof Coverings.
4. UL 2218 - Impact Resistance of Prepared Roof Covering Materials.

C. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA); "Architectural Sheet Metal Manual"

1.3 ADMINISTRATIVE REQUIREMENTS

A. Pre-installation Meetings:

1. Schedule meeting to discuss roof project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements before start of work onsite. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

2. Required attendees: Contractor, metal deck & roof installer, and any other subcontractors who have equipment penetrating the roof or work that requires roof access or traffic.

1.4 SYSTEM DESCRIPTION

A. Performance Requirements: Provide sheet metal roofing which has been manufactured, fabricated and installed to withstand structural and thermal movement, wind loading and weather exposure to maintain manufacturer's performance criteria without defects, damage, failure or infiltration of water.

1. Air infiltration: Maximum 0.06 cfm per lineal foot (0.33 m3/hr per linear meter) of seam at static pressure of 6.24 psf (3.0 kPa) when tested per ASTM E1680.
2. Water penetration:
   a. No uncontrolled water penetration through the joints at a static pressure of 6.24 psf (3.0 kPa) when tested in accordance with ASTM E1646.
3. Fire rating: Class A
4. Uplift Tests:
   a. UL 580 Class 90
   b. ASTM E 1592 (1.5", 2" & 3")

5. Class 4 Impact Resistance: UL 2218
6. Fire Resistance: UL 263
7. ICC-ES: ESL 1082

B. Finish Performance Requirements:

1. Two coat coil applied, baked on full strength (70% resin, PVDF) fluorocarbon coating consisting of a nominal 0.25 mil dry film thickness primer, and a nominal dry film thickness of 0.7 -0.8 mil color coat for a total 0.9 to 1.1 mil total system dry film thickness.
2. Color change and fade resistance: No cracking, peeling, blistering or loss of adhesion when tested in accordance with ASTM G23; color change, after removal of surface deposits such as dirt or chalk, maximum 5 NBS units.
3. Humidity resistance: No blistering, peeling or loss of adhesion after 1000 hours testing, in accordance with ASTM D2247.

1.5 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data for specified products.

C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors and textures.

1. Indicate layout of roofing panels and roof panel sizes, including custom-fabricated roofing panels if indicated; indicate each item of trim and accessories.
2. Indicate in detailed drawings profile and gauge of interior and exterior sheets, and locations and types of fasteners; indicate locations, gauges, shapes and methods of attachment of roofing panels, trim and accessory items.
3. Include Sealant location and denote those that are factory and field applied.
4. Indicate products/materials required for construction activities and field worked conditions of this section not supplied by manufacturer of products of this section.

E. Samples: Submit selection and verification samples for finishes, colors and textures.

1. Selection Samples: For each product requiring color selection, 2 sets of manufacturer's sample chips representing full range of colors and finishes available.
2. Verification Samples: For each color and finish selected, 2 chips indicating match to selected color and finish.

F. Warranties:

1. Substrate Warranty
2. Finish Warranty
3. Weather Tightness Warranty (if applicable)

G. Test and Evaluation Reports: Showing compliance with specified performance characteristics and physical properties.

H. Quality Assurance Submittals: Submit the following:

1. Contractor Certificates: Contractor's certification that:
   a. Manufacturer of products of this section meets specified qualifications.
   b. Installer of products of this section meets specified qualifications.
2. Manufacturer Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and physical requirements.
3. Manufacturer's Instructions: Manufacturer's installation instructions.
4. Manufacturer's Field Reports: Manufacturer's field reports if required.

I. Closeout Submittals: Submit the following:

1. Warranty: Warranty documents specified herein.

J. Buy American Certification: Manufacturer's letters of compliance indicating supplied products comply with requirements.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Provider of "hands on" installer training at manufacturer or customer facility.
2. Minimum of ten years' experience in manufacturing metal roof systems.
3. Provider of product produced in a permanent factory environment with fixed roll-forming equipment and also possesses the capability to roll form continuous panels on jobsites with a factory technician for jobs with panel lengths in excess of 50'

B. Installer Qualifications:

1. At least five years' experience in the installation of structural standing seam metal roof panels.
2. Experience on at least five projects of similar size, type and complexity as this project that have been in service for a minimum of two years with satisfactory performance of the roof system.
3. Employer of workers for this project who are competent in techniques required by manufacturer for installation indicated and who shall be supervised at all times when material is being installed.

4. Certificate: When requested, submit certificate indicating qualification.

C. Buy American Compliance: Materials provided under Work of this Section shall comply with the following requirements:

1. Buy American Act of 1933 BAA-41 U.S.C §§ 10a – 10d.
2. Buy American provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA).

1.7 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirements Sections.

1. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact. Identify fabricated components with UL 90 label where appropriate.

C. Delivery and Acceptance Requirements: Ensure all panels are received in good condition. In cases where damage is visible, note all paperwork; inform architect and project superintendent.

D. Packing, Shipping, Handling and Unloading:

1. Roofing panels to be crated to protect panels from shipping damage.
2. Package trim and accessories in waterproof wrapping paper.

E. Storage and Protection: Store materials protected from exposure to harmful conditions. Store material in dry, above-ground location.

1. Stack prefinished material to prevent twisting, bending, abrasion, scratching and denting. Elevate one end of each skid to allow for moisture runoff.
2. Store products of this section in manufacturer's unopened packaging until installation of products
3. Maintain dry, heated storage area for products of this section until installation of products.
4. Remove strippable plastic film before storage under high-heat conditions.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

B. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed in accordance with manufacturers' written instructions and warranty requirements.

1.9 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

1. Panel Material: Furnish manufacturers 45 year warranty covering the panel against rupture, structural failure, or perforation.
2. Panel Coating: Furnish manufacturer's 40-year warranty covering cracking, checking, and peeling, and 30 year warranty covering fade and chalk on the Two coat coil applied, baked on full strength (70% resin, PVF2) fluorocarbon coating.
   a. Manufacturer's warranty may exclude surface deterioration due to physical damage and corrosive environments.

B. Weather Tightness Warranty

1. Weathertightness Warranty: Manufacturers [Joint][Single Source] weathertightness warranty.
2. Warranty Term: [5][10][15][20][25] commencing on Date of Substantial Completion.
3. Total Manufacturers Liability: [$0.20 (Joint Only)] [$7.00] [$14.00][NRL (No Repair Limit)] /sq. ft.
4. Warranty must cover (choose all that apply) [pipe and curb penetrations][winds up to [75] [80] [90] [100] [105] [110] [120] mph
   a. (If Penetrations are chosen) Pipes must be centered in the panel or a pipe curb must be used, Curbs must be all welded (0.0630 minimum) aluminum or 18ga. Stainless Steel.
   b. (If Wind Rider is chosen) Manufacturer must supply engineered installation shop drawings, signed and sealed by an Engineer registered in the state in which the project is located.

C. Special Warranty: Installer's standard form in which installer agrees to repair or replace panels that fail due to poor workmanship or faulty installation within the specified warranty period.

1. Warranty Period: 2 years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 Metal Roof Panels

A. Manufacturer: McElroy Metal, Inc.

1. Contact: 1500 Hamilton Rd., Bossier City, LA 71111; Telephone: (800) 950-6531; Fax: (318) 747-8099; E-mail: info@mcelroymetal.com; website: www.mcelroymetal.com.
2. Proprietary Products: McElroy Metal Preformed Sheet Metal Roofing Panels.

B. Substitutions:

1. Basis of Design Product: Subject to compliance with requirements provide McElroy Metal Medallion Lok
2. Substitution Limitations
   a. Requests for approval must be submitted in writing at least ten (10) days prior to bid date, and are accompanied by all related test reports and design calculations listed in section 1.4 and Design and Performance criteria Section 2.2.
   b. Substitute manufacturers will be approved by written addendum to all bidders. Voluntary alternates will not be considered. Substitutions will not be permitted after the bid date of this project.
   c. Roof panels proposed for substitution shall fully comply with specified requirements in appearance, assembly, and performance.

C. Forming: Use continuous end rolling method. No end laps are permitted on panels without architect approval. No portable rollforming machines will be permitted on this project, no installer—owner or installer-rented machines will be permitted. It is the intent of the Architect to provide factory-manufactured panel systems only for this project.

2.2 MANUFACTURED UNITS

A. McElroy Metal Medallion-Lok Panels:

1. Profile: Vertical leg standing seam panel with male/female seams that are interlocked via snapping during installation.
2. Size: 1.75” high seam by 12” width (51 x 304 mm); Length as indicated on drawings.
3. Panel Surface: Striated
4. Material: Galvalume steel sheet conforming to ASTM A792, AZ55 coating for bare; AZ50 coating for painted; [24 standard; 22 Optional-minimum quantities may apply] gauge sheet thickness.

2.3 METAL ROOF PANEL ACCESSORIES

A. General: Provide complete metal roof panel assembly incorporating trim, copings, fasciae, gutters and downspouts, and miscellaneous flashings, in **[**manufacturer's standard profiles**] [**profiles as indicated**]**. Provide required fasteners, closure strips, support plates, and sealants as indicated in manufacturer's written instructions.

B. Flashing and Trim: Match material, thickness, and finish of metal panel face sheet.

C. Panel Clips: ASTM A 653/A 653M, G90 (Z180) hot-dip galvanized zinc coating, configured for concealment in panel joints, and identical to clips utilized in tests demonstrating compliance with performance requirements.

D. Panel Fasteners: Self-tapping screws and other acceptable corrosion-resistant fasteners recommended by roof panel manufacturer. Where exposed fasteners cannot be avoided,

supply fasteners with EPDM or neoprene gaskets, with heads matching color of metal panels by means of factory-applied coating.

E. Joint Sealers: Manufacturer's standard or recommended liquid and preformed sealers and tapes, and as follows:

1. Factory-Applied Seam Sealant: Manufacturer's standard hot-melt type.
2. Tape Sealers: Manufacturer's standard non-curing butyl tape, AAMA 809.2.
3. Concealed Joint Sealant: Non-curing butyl, AAMA 809.2.

F. Steel Sheet Miscellaneous Framing Components: ASTM C 645, with ASTM A 653/A 653M, G60 (Z180) hot-dip galvanized zinc coating.

2.4 FABRICATION

A. General: Provide factory fabricated and finished metal panels and accessories meeting performance requirements, indicated profiles, and structural requirements.

B. Fabricate metal panel joints configured to accept factory-applied sealant providing weathertight seal and preventing metal-to-metal contact and minimizing noise resulting from thermal movement.

C. Form panels in continuous lengths for full length of detailed runs, except where otherwise indicated on approved shop drawings.

D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's written instructions, approved shop drawings, and project drawings. Form from materials matching metal panel substrate.

2.5 FINISHES

A. Two coat coil applied, baked on full strength (70% resin, PVF2) fluorocarbon coating consisting of a nominal 0.25 mil dry film thickness primer, and a nominal dry film thickness of 0.7 -0.8 mil color coat for a total 0.9 to 1.1 mil total system dry film thickness. Finish to be selected from manufacturer’s standard color selection. The back side of the material should be 0.25 mil primer and a 0.25 mil polyester wash coat.

1. Roof Panel Color:
   a. Selected from full range of manufacturer’s standard colors.

2. Roof Related Trim/Accessories Color:
   b. Selected from full range of manufacturer’s standard colors.

2.6 RELATED MATERIALS

A. General: Coordinate use of related materials:

2.7 SOURCE QUALITY

A. Source Quality: Obtain metal panel products from a single manufacturer.

B. Quality Control: Obtain standing seam metal roof panels, trim and other accessories from a manufacturer capable of providing on-site technical support and installation assistance.

PART 3 EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, recommendations and installation instructions for substrate verification, preparation requirements and installation.

1. Strippable Film: Remove manufacturer's protective film, if any, from surfaces of roofing panels.

B. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

1. Verification of Conditions:
   a. Panel support systems are ready for construction activities of this section and within specified tolerances.
   b. Rough-in utilities are in correct locations.
2. Installer's Examination:
   a. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
   b. Transmit 2 copies of installer's report to Architect within 24 hours of receipt.
   c. Delay construction activities of this section until unacceptable conditions have been corrected.
   d. Beginning construction activities of this section indicates installer's acceptance of conditions.

3.2 PREPARATION

A. Coordination: Coordinate metal roofing with other work to provide a noncorrosive and leak-proof installation.

1. Install substrate boards, hat channels, purlins, or furring channels in accordance with manufacturer's recommendations.

2. Coordinate work, with installation of other associated work, to ensure quality application.
3. Coordinate work with installation of associated metal flashings and building walls.
4. Coordinate work to minimize foot traffic and construction activity on installed finished surfaces.
5. Coordinate location of pipe penetrations to allow centering of pipe in panel.
6. Coordinate location of roof curbs, to allow proper integration with roof panel.
7. Coordinate work to minimize foot traffic and construction activity on installed finished. surfaces.
8. Dissimilar Metals: Prevent galvanic action of dissimilar metals.

3.3 INSTALLATION

A. General: Install metal roofing panels to profiles, patterns and drainage indicated and required for leak-proof installation. Provide for structural and thermal movement of work. Seal joints for leak-proof installation.

1. Shim or otherwise plumb substrates receiving metal panels.
2. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws.
3. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal panels are installed.
4. Install screw fasteners in predrilled holes for clip installation.
5. Locate and space fasteners in uniform vertical and horizontal alignment.
6. Install flashing and trim as metal panel work proceeds.
7. Install continuous length panels.
8. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws.
9. Fasten flashings and trim around openings and similar elements with self-tapping screws.
10. Provide weathertight EPDM Flashing for pipe- and conduit-penetrating panels.
11. Seams: Provide uniform, neat seams.
12. Fix panels at location depicted on reviewed shop drawings.
13. Allow for required panel clearance at penetrations for thermal movement.
14. Align pipe penetrations to occur at center of roof panel. Report and have corrected improperly placed penetrations before proceeding with panel installation. Remove and replace roof panels which have improperly placed penetration flashings.
15. Allow for required panel clearance at penetrations for thermal movement.
16. Fasteners: Conceal fasteners where possible in exposed work. Cover and seal fasteners and anchors for watertight and leak-proof installation.

B. Roofing Installation:

1. Install roofing plumb, true and in correct alignment with structural framing, in accordance with shop drawings and manufacturer's printed installation instructions.
2. Install roofing using manufacturer's concealed fastening system or non-corroding fasteners color-matched to panel.

3. Install trim using concealed fasteners where possible; sight-exposed non-corroding fasteners color-matched to trim are permitted on vertical surfaces only.

C. Installation Tolerances:

1. Variation from Plumb: Maximum 1/8" (3.2 mm) in 20 feet (6.096 m).
2. Variation from Level: Maximum 1/8" (3.2 mm) in 20 feet (6.096 m).
3. Variation from True Plane: Maximum 1/4" (3.2 mm) in 20 feet (6.096 m).

D. Accessory Installation: Install accessories using techniques recommended by manufacturer and which will assure positive anchorage to building and weathertight mounting. Provide for thermal movement. Coordinate installation with flashings and other components

1. Metal Framing
   a. General: Structural Steel, Steel Purlins
   b. Material: [ASTM A 1011 Steel, Grade 55, Class 2, 55 ksi minimum yield strength, with red oxide finish] [ASTM A 653 Steel, Grade 55, Class 2, 55 ksi minimum yield strength, with G90 hot-dipped galvanized finish].

E. Flashing and Trim Installation: Comply with performance requirements, manufacturer's written installation instructions, and the SMACNA "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and install units to true level. Install work with laps, joints, and seams that will be permanently watertight.

3.4 FIELD QUALITY REQUIREMENTS

A. Site Tests: (Post-Installation Testing): Owner reserves right to perform post-installation testing of installed metal panel installation.

B. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visit for inspection of product installation in accordance with manufacturer's instructions.

3.5 CLEANING

A. Cleaning: Remove temporary coverings and protection of adjacent work areas.

B. Repair or replace damaged installed products.

C. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance.

D. Remove construction debris from project site and legally dispose of debris.

E. Remove strippable coating and perform dry wipe-down cleaning of panels as erected.

3.6 PROTECTION

A. Protection: Protect installed product's finish surfaces from damage during construction:

1. Protect installed products from damage by subsequent construction activities.
2. Replace products having damage other than minor finish damage.
3. Repair products having minor damage to finish in accordance with panel Manufacturer's recommendation
4. Architect shall be sole judge of acceptability of repair to damaged finishes; replace products having rejected repairs

END OF SECTION

Rev 4/20

SECTION 09 9100

PAINTING AND COATING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Furnish and apply Paint and Coatings as specified herein and as noted on Drawings.

1.2 DEFINITIONS

A. Gloss Level 1 (Flat): Not more than 5 units at 60 degrees and 1 to 2 units at 85 degrees.

B. Gloss Level 2 (Velvet): 5 to 9 units at 60 degrees and 10 to 15 units at 85 degrees.

C. Gloss Level 3 (Eggshell): 10 to 15 units at 60 degrees and 15 to 30 units at 85 degrees.

D. Gloss Level 4 (Satin): 20 to 35 units at 60 degrees and 35 to 50 units at 85 degrees.

E. Gloss Level 5 (Semi-Gloss): 40 to 50 units at 60 degrees.

F. Gloss Level 6 (Gloss): 70 to 80 units at 60 degrees.

G. Gloss Level 7 (High-Gloss): More than 80 units at 60 degrees.

1.3 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.

B. Product Data: Before submitting samples, submit a complete schedule of manufacturers of products required throughout the Work, together with specifications recommended by each manufacturer. General approval of such a schedule shall not constitute a waiver of the specifications and Architect may require specific guarantees from a manufacturer regarding his product.

C. Samples: Submit samples of each type of finish specified herein.
   1. Submit two 8 inch x 10 inch "draw down" samples of each color, indicating the correct sheen. **A sample of Flat and Eggshell to be provided.**

1.4 QUALITY ASSURANCE

A. Preparation, application, and workmanship, shall be in accordance with manufacturer's recommendations and applicable provisions of MPI, by the Painting and Decorating Contractors of America (PDCA) and the "Gypsum Board for Walls and Ceilings" booklet by the Gypsum Association.

B. Materials used shall comply with applicable federal and local regulations, lead content laws, and current V.O.C. requirements.

C. Perform work using only experienced, competent painters under supervision of experienced, capable foremen, per PDCA with the best standards of practice in the trade.

When completed, the painting shall represent a first-class workmanlike appearance. Apply paint materials under adequate illumination.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping: Deliver materials to site in Manufacturer's sealed containers, legends and labels, intact.

B. Storage and Protection: Store paint products in covered, ventilated area at minimum ambient temperature of 45 degrees F. and maximum ambient temperature of 90 degrees F.

1.6 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Do not apply exterior paint in damp or rainy weather or until after the surface has dried thoroughly from the effects of such weather. Do not apply when temperature is below 50 degrees or above F.,100 degrees 24 hours before, during and 24 hours after application. Do not paint surfaces exposed to hot sunlight. During interior application, maintain minimum temperature of 65 degrees F.

1.7 MAINTENANCE

A. Extra Materials: Furnish Owner with one fresh gallon of each type and color of paint and finish used on this Project. Label each gallon with the following information: Manufacturer’s name, type of coating, brand name, lot number, estimated coverage, surface preparation requirements, drying time, cleanup instructions, color designation and instructions for mixing. Mark each container with the location(s) where the paint was used, without obscuring manufacturer’s label.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Except as otherwise specified herein, or specifically approved by the Architect, Paint and Coating Products shall be of the following manufacturers, subject, however, to compliance with specification requirements.
   1. Benjamin Moore Paints
   2. Frazee Paint Company
   3. Dunn-Edwards Corporation
   4. Glidden Professional
   5. PPG Industries, Inc.
   6. Sherwin Williams

B. Materials shall be "top of the line, first quality" products. Alternate materials submitted for prior approval shall have qualities and materials equal to the other listed manufacturer's top of the line, first quality products. Materials selected for coating systems for each type of surface shall be the products of a single manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Verify that site environmental conditions are appropriate and substrates are in proper condition to receive Work and report in writing with a copy to

Architect, conditions detrimental to Work. Commencement of Work will be construed as acceptance of subsurfaces.

B. Verify that shop applied primers are compatible with specified finish coats.

C. Do not begin application of coatings unless moisture content of surfaces is below the following maximum values:
   1. Steel/Metal surfaces: 8 percent.

3.2 PREPARATION

A. Protection: Before painting, remove hardware, accessories, plates, lighting fixtures and similar items or provide ample protection for such items.
   1. Protect adjacent surfaces as required or directed.
   2. Prepare surfaces in strict accordance with manufacturer's written instruction.

B. Surface Preparation:
   1. General: Surfaces requiring painting or finishing shall be thoroughly dry and cured, free of dirt, dust, grease, oil and other foreign matter. Repair voids, cracks, nicks, and other surface defects, with appropriate patching material. Finish flush with surrounding surfaces.
   2. Steel and Iron: Remove grease, rust and scale and touch-up chipped or abraded places on items that have been shop coated. When area will be exposed to view, sandpaper the entire treated area smooth and spot prime in a manner to eliminate evidence or repair.
   3. Galvanized metal or aluminum: Thoroughly clean by wiping surfaces with surface conditioner or solvent. Prime galvanized metal with primer as recommended by paint manufacturer.

C. Claims concerning suitability of material specified (or its inability to satisfactorily produce the work) shall not be accepted unless such claim is made in writing to the Architect prior to beginning the work. Surfaces that cannot be prepared or painted as specified shall be immediately brought to the attention of the Architect in writing.

3.3 APPLICATION

A. Prime coats specified herein will not be required on items delivered with prime or shop coats already applied, unless otherwise specified. Touch up prime coats as required.

B. Paint all exposed Plumbing, mechanical and electrical items: Paint exposed unfinished fixtures, metal ducts, switch boxes, control panels, devices, starters, junction boxes, vents, drains, and other similar items on roof or other exterior locations unless otherwise directed by Architect. Color code and stencil identification when specified.

C. Apply coatings without reduction except as specifically required by label directions.

D. Factory finished items: Architect may require repainting of exposed-to-view factory finished items to coordinate with the colors scheduled for the location in which item occurs. Contractor shall verify with Architect the need to repaint factory finished items.

E. Each coat of paint shall be well applied, worked out evenly and allowed to dry completely before the subsequent coat is applied. Comply with more stringent manufacturer's drying requirement, as applicable.

F. Each coat of paint shall be well applied, worked out evenly and allowed to dry completely before the subsequent coat is applied. Comply with more stringent manufacturer's drying requirement, as applicable.

G. Finished work shall be uniform, smooth and free from runs, sags, clogging or flooding. Make edges of paint adjoining other materials or colors sharp and clean, without overlapping.

H. Edges, tops, and bottoms of wood doors shall be finished and sealed with the same finish as the door faces, to meet door manufacturer's warranty requirements.

I. Do not paint over Underwriters' Laboratory labels, fusible links, sprinkler heads, and other similar items.

J. Paint surface of walls that will be concealed by cabinets, markerboards or other items attached to wall.

3.4 CLEANING AND PROTECTION

A. During the course of the Work and on completion of Work, carefully clean glass, hardware, and other similar items, and remove misplaced paint and stain spots or spills. Leave Work in clean condition acceptable to Architect and in accordance with Section 01 5000, Temporary Facilities and Controls.

B. Protect from damage until acceptance. Repair or repaint damaged Work at no additional cost to Owner.

3.5 SCHEDULES

A. Schedule of Finishes: Refer to the "**Sherwin William Paint Notes on Section/Elevations" for the color to be used and matched.**

1. Items listed are acceptable as “basis of design” products of Glidden Professional. Other manufacturers shall furnish equal types of materials. Responsibility for recommending, scheduling and using the proper paint for the job conditions rests with the manufacturer and Contractor.

B. The number of coats scheduled is the minimum number of coats required. Additional coat(s) shall be applied, at no additional cost to the Owner, to completely hide base material, provide uniform color and to produce satisfactory finish results.

C. Apply products to achieve paint manufacturer's printed specifications for dry mil thickness

D. Exterior Surfaces:

1. Ferrous Metal - Semi-Gloss Acrylic:
   1st Coat: 4020 Devflex Metal Primer
   2nd Coat: 4216 Devflex Waterborne Acrylic (Gloss Level 5), MPI #153
   3rd Coat: 4216 Devflex Waterborne Acrylic (Gloss Level 5), MPI #153

2. Galvanized Metal; including hollow metal frames– Semi-Gloss (Acrylic Enamel):
   1st Coat: 4020 Devflex Metal Primer
   2nd Coat: 4216 Devflex Waterborne Acrylic (Gloss Level 5), MPI #153
   3rd Coat: 4216 Devflex Waterborne Acrylic (Gloss Level 5), MPI #153

END OF SECTION

SECTION 10 4416

FIRE EXTINGUISHERS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Furnish and install Fire Extinguisher Work as shown on Drawings and as specified herein.

1.2 REFERENCES

A. NFPA 10 - Portable Fire Extinguishers.

1.3 SUBMITTALS

A. General: Submittals requirements are specified in Section 01 3300, Submittal Procedures.

B. Product Data: Submit manufacturer's product data and installation instructions for each item.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Except as otherwise specified herein, or specifically prior approved by the Architect, Fire Protection specialties shall be products of one of the following manufacturers, subject, however, to compliance with specifications requirements:
1. Amerex
2. General
3. J.L. Industries
4. Kidde
5. Larsen's Manufacturing Co.
6. Sentry

2.2 EQUIPMENT

A. Fire Extinguishers:
1. Fire Extinguisher: Multi-purpose dry chemical extinguishers with a UL rating of 2A-10B:C. All metal construction, including head and nozzle. Contractor shall be responsible for initial filling and servicing.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Examine subsurfaces to receive Work and report in writing, with a copy to Architect, detrimental conditions. Failure to observe this requirement constitutes a waiver to subsequent claims to the contrary and holds Contractor responsible for

correction(s) Architect may require. Commencement of Work will be construed as acceptance of subsurfaces.

1. Verify, before proceeding with this Work, that required inspections of existing conditions have been completed and rough openings for recessed items are in the correct locations.

B. Coordination with other Work: Coordinate with other work that affects, connects with, or will be concealed by this Work.

3.2 INSTALLATION

5. Install items in accordance with manufacturer's directions. Mount cabinets at 27 inches above floor to bottom.

A. Comply with regulatory requirements and anchor securely.

B. Verify that extinguishers are charged and tagged.

3.3 CLEANING

A. During the course of the Work and on completion of the Work, remove excess materials, equipment and debris and dispose of away from premises. Leave Work in clean condition in accordance with Section 01 5000, Temporary Facilities and Controls.

END OF SECTION

SECTION 26 05 00 – ELECTRICAL GENERAL PROVISIONS

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. The general and special conditions of the contract documents apply to this section. If there is any discrepancy between the specifications, applicable codes, and contract documents, the most stringent requirement applies.

B. Drawings are schematic in nature and may not be drawn exactly to scale. Contractor shall coordinate with existing field conditions and all other trades along with examining all drawings and specifications and visit the site of work prior to bidding. Verify actual dimensions of the equipment proposed to be used. Installation shall be within the limitations imposed by the architectural and structural requirements with adequate space for maintenance.

C. Contractor shall coordinate with the owner prior to any service disruptions to any areas not under construction. Contractor shall be prepared to work in an 'after normal hours' capacity to accommodate any necessary disruptions.

1.2 SCOPE

A. Furnish all labor, materials, equipment, and services necessary for to provide a complete electrical system as shown on the drawings and as specified herein to result in a finished and operating facility.

B. Temporary power and lighting for construction purposes shall be provided under this Division and in accordance with NEC. Provide a minimum 30-space panelboard with required branch circuits breakers as required and all associated temporary wiring, devices, lighting, and equipment. All temporary provisions to be removed prior to substantial completion.

1.3 CODES AND STANDARDS

A. The entire electrical installation shall be made in strict accordance with the requirements of any and all local, state, or federal codes having jurisdiction including by not limited to, Underwriters Laboratories (UL), National Fire Protection Association (NFPA), State Health Department, Local Municipal Building Inspection Department adopted codes with amendments, and the National Electric Code (NEC) with local amendments.

B. Should any work shown on the drawings or herein specified be construed as being contrary to or not conforming to any applicable codes or laws, shall be brought to the attention of the Engineer to be reviewed, approved, and /or corrected prior to final bid date.

C. The Contractor shall obtain all permits and inspections required for the work and shall pay all costs and fees associated.

1.4 MANUFACTURER'S

A. Manufacturers names and catalog number specified in the drawings and under sections of Division 26 are used to establish standards of design, performance, quality, and serviceability and not to limit competition. A request for prior approval of equipment not listed and meets the design, materials, energy efficiency, and performance, must be submitted seven (7) days before bid due date.

B. Equipment selected to operate with minimum noise and vibration. If the Owner, Architect, or Engineer deems the noise and vibration of the selected equipment to be objectible, then the contractor shall rectify conditions at no additional cost to the Owner.

C. Manufacturers shall be regularly engaged in the manufacture of electrical construction products of types required for this project, whose products have been in satisfactory use in similar service for not less than 5 years.

D. Manufacturer shall provide a qualified personnel to observe field conditions, condition of installation, quality of workmanship, start-up to equipment, and all required testing. Qualified personnel shall make a written report of observations and recommendations to Architect/Engineer.

E. Contractor shall comply with all of the manufacturer's instructions in full detail. Any conflict with the Contract Documents shall be brought to the attention of the Architect/Engineer before proceeding with the installation.

F. Contractor shall submit three (3) copies of all warranties and guarantees for the systems, equipment, devices and materials.

1.5 WORKMANSHIP AND QUALIFICATIONS

A. An approved contractor for the work shall be a specialist in this field with minimum three (3) years in experience with systems of comparable size. All work shall be installed in a workman like manner accessible for maintenance and complete with all accessories required.

B. Perform work by persons qualified to produce workmanship of specified quality. It shall present, upon completion, a neat, orderly, finished appearance. All evidence of debris associated with the work shall be removed from the premises. Conform to all OSHA workplace requirements.

C. All materials and equipment to be properly secured in place with positive anchorage designed and sized to withstand stresses, vibration, and racking.

D. Contractor shall consider space limitations in selection and location of equipment and materials.

E. The contractor shall review all the architectural, mechanical, plumbing, civil, structural, and all other disciplines or equipment drawings to determine the electrical rough-ins for all equipment requiring electrical connections, and to include in their proposals the correct and complete electrical rough-ins for all of these items which were inadvertently not indicated on the electrical drawings.

F. All work performed shall be guaranteed for a minimum of one (1) year from the date of substantial completion of the project. The guarantee shall include but not limited to making good on any faults or imperfections that may arise due to defects or omissions in material, equipment, or workmanship. Replacement of failed parts or equipment shall be provided at the Owner's option.

1.6 SUBMITTALS

A. Every submittal document shall be bounded together and bear the related specification section number and the specification section title. Provide individually bound submittals and/or shop drawings for the following:

1. Wiring Devices
2. Panelboards and Enclosures
3. Enclosed Switches and Circuit Breakers
4. Lighting Package, including Lighting Controls

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

A. All materials and equipment provided under this contract shall be new (except where otherwise noted) and shall be listed, labeled or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established.

B. All equipment of the same type and capacity shall be by the same manufacturer.

C. Where any device or part of equipment is referred to in these specifications in the singular number (e.g., "the switch"), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.

D. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounted items.

E. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.

F. Working clearance around equipment shall not be less than that specified in the NEC for all voltages specified.

G. The locations of switches, receptacles, lights, motors, etc. outlets shown are approximate. The contractor shall use good judgment in placing the preceding items to eliminate all interference with ducts, piping, etc. The contractor shall check all door swings so that light switches are not located behind doors. Relocate switches as required, with approval from the Design Professional. The Owner may direct relocation of outlets before installation, up to five (5) feet from the position indicated on the Drawings, without additional cost.

H. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity. Normal maintenance shall not require the removal of protective guards from adjacent equipment. Install equipment as close as practical to the locations shown on the Drawings.

I. Right of Way: Give to piping systems installed at a required slope.

J. Firestopping shall be applied to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of the assembly according to Division 07 and 09 Sections.

K. Owner furnished equipment: Equipment furnished by the Owner shall be received, stored, uncrated, protected, and installed by the Contractor with all appurtenances required to place the equipment in operation, ready for use. The Contractor shall be responsible for the equipment and shall hold the warranty.

L. Earthwork: Excavate trenches for underground raceways to the required depth to ensure minimum coverage. Backfill shall not be placed until the work has been inspected, tested, and approved. Backfill shall be to the surface of the natural ground with methods and materials specified by other Divisions.

M. Identification: Provide warning signs where there is a hazardous exposure with access to or operation of electrical equipment.

N. Cutting and Patching: To accommodate the installation of electrical work, comply with the requirements of Division 1 for the cutting and patching of other work.

O. Housekeeping Pads: Provide concrete equipment housekeeping pads for all floor mounted interior and exterior equipment. Pad to extend a minimum 3-inches beyond the perimeter of the equipment unless noted otherwise.

P. Protection: Protect all electrical equipment, devices, materials, etc. and shall not be subject to weather whether during storage or after installation.

Q. Testing: All electrical systems and subsystems shall be tested and operational with reports and acceptance prior to be considered for substantial completion.

R. As-Builts: The contractor shall supply As-Built drawings to the Owner, Architect, and Engineer for their approval. Project will not be declared substantially complete until the As-Builts are approved.

END OF SECTION 26 05 00

SECTION 26 05 19 – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.

1.2 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.

B. Comply with ASTM B3, ASTM B8, ASTM B496, AND ASTM B787

C. Comply with UL standards and bear its label.

D. Comply with NFPA 70.

E. RoHS Compliant

PART 2 - PRODUCTS

2.1 COPPER CONDUCTORS AND CABLES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Southwire
2. Okonite Company.
3. Or Approved Equal

B. Description: Flexible, insulated and uninsulated, drawn copper current-carrying conductor with an overall insulation layer or jacket, or both, rated 600 v or less.

C. Conductors:

1. Conductors for power and lighting sized #10 or smaller shall be solid.
2. Conductors for power and lighting sized larger than #10 shall be stranded.

D. Conductor Insulation: Comply with NEMA WC 70 and UL 83 for Types THHN, THWN, and THWN-2.

2.2 PROHIBITED

A. Use of NM Cable, MC Cable, BX Cable and AC Cable is not permitted under any circumstances.

B. Aluminum shall not be used under any circumstances.

2.3 CONNECTORS AND SPLICES

A. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

1. Aboveground Circuits (No. 10 AWG and smaller):
   a. Connectors: Solderless, screw-on, reusable pressure cable type, rated 600 V, 90˚ C, with integral insulation, approved for copper conductors.
   b. The integral insulator shall have a skirt to completely cover the stripped wires.
   c. The number, size, and combination of conductors, as listed on the manufacturer's packaging, shall be strictly followed.
2. Aboveground Circuits (No. 8 AWG and larger):
   a. Cable termination lugs shall be made of high conductivity and corrosion-resistant material, electro-tin plated, listed for use with copper conductors only, rated for 600V.
   b. Provide field-installed compression connectors for cable sizes 250 kcmil and larger with not less than two clamping elements or compression indents per wire.
   c. Insulate splices and joints with materials approved for the particular use, location, voltage, and temperature. Splice and joint insulation level shall be not less than the insulation level of the conductors being joined.
   d. Plastic electrical insulating tape: Per ASTM D2304, flame-retardant, cold and weather resistant.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Minimum Wire Size: #12 AWG CU for power and lighting circuits, #14 AWG CU for control circuits. In the case of “homeruns” over 125 feet in length, no conductor smaller than a No. 10 wire shall be used. The tap conductor from the J-box in the ceiling to the receptacle may be No. 12. Each 120-volt phase conductor shall have a neutral conductor of the same size. The sizing of all wire except remote control wire shall be accomplished in the case of both feeder and branch circuits by conforming to the following provisions.

3.2 INSTALLATION OF CONDUCTORS AND CABLES

A. Splices in feeder circuits shall be avoided unless necessitated by the length of the run more than 500 feet. Locations of all splices shall be approved.

B. Conductors may be run parallel from sizes 250 kcmil up to and including 600 kcmil provided all paralleled conductors are of the same size, manufacturer, length and type of insulation.

C. Provide a grounded (neutral) conductor for each branch circuit. Do not share grounded (neutral) conductors.

D. No more than six (6) phase conductors shall be installed in a single raceway. Any combination of phase conductors and grounded (neutral) conductors in any raceway shall not exceed nine (9).

E. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

F. Use pulling means; including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or conduit.

G. Identification:

1. Color-code conductors and cables for secondary service, feeders and branch circuits as required by NEC 210.5. Color coding for phase and voltage shall be as required by local codes and standards.
2. Label each phase conductor in each junction box with corresponding circuit number, using self-adhesive wire markers.

H. Neatly train and lace wiring inside boxes, equipment, and panelboards. Provide tie-straps around conductors with their shared neutral conductor where there are more than two (2) neutral conductors in a conduit.

I. Do not install a pull string in conduits containing conductors.

J. Existing buildings: All unused or damaged cable/wire shall be removed; cable/wire may not be abandoned in place.

3.3 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque- tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

C. Wiring at Outlets: Install conductor at each outlet or junction box with at least 6 inches of slack.

3.4 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Division 07 Sections.

1. Products: Cooper B –Line, 3m, Hilti, Specified Technologies, Inc.

3.5 FIELD QUALITY CONTROL

A. Perform tests and inspections and prepare test reports.

B. Tests and Inspections:

1. After installing conductors and cables and before electrical circuitry has been energized, check cable and conductors for circuit continuity and short circuits. Correct all malfunctions.

END OF SECTION 26 05 19

SECTION 26 05 26 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Grounding systems and equipment.

B. Section includes grounding systems and equipment, plus the following special applications:

1. Underground distribution grounding.
2. Ground bonding common with lightning protection system.

1.2 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with UL 467 for grounding and bonding materials and equipment.

C. Comply with NFPA 70.

D. Comply with FM Global requirements.

E. Comply with all local, state, and federal codes.

1.3 REFERENCE STANDARDS:

A. ANSI/IEEE Standard 3003.1-2019 “Recommended Practice for System Grounding of Industrial and Commercial Power Systems.”

B. NECA – Standard of Installation

C. NETA ATS – Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems

D. Article 250 of NEC

PART 2 - PRODUCTS

2.1 ACCEPTACLE MANUFACTURERS

A. Copperweld

B. Cadweld

C. Burndy

2.2 CONDUCTORS

A. Insulated Conductors: Copper wire or cable insulated for 600 V with green colored insulation, UL 44 or UL 83 listed, unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Tinned Conductors: ASTM B 33.
4. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
5. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.
6. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.

C. Grounding Bus: Predrilled rectangular bars of annealed copper, 1/4 by 4 inches (in cross section, provided with standard NEMA bolt hole sizing and spacing for the type of connectors to be used. Stand-off insulators for mounting shall comply with UL 891 for use in switchboards, 600 V, Lexan or PVC, impulse tested at 5000 V. Provide clear Lexan cover over connections.

2.3 CONNECTORS

A. Listed and labeled by an UL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, pressure type with at least two bolts.

1. Pipe Connectors: Clamp type, sized for pipe.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

D. Bus-bar Connectors: Mechanical type, cast silicon bronze, solder-less compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

2.4 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad steel; 3/4 inch by 10 feet.

B. Metal Frame of Building.

C. Foundation concrete encased rebar.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6

AWG and larger unless otherwise indicated.

B. Underground Grounding Conductors: Install bare tinned-copper conductor, No. 2/0 AWG minimum.

1. Bury at least 24 inches below grade.
2. Duct-Bank Grounding Conductor: Bury 12 inches above duct bank as part of duct-bank installation. Bury detectable warning tape approximately 6 inches above grounding conductors.

C. Isolated Grounding Conductors: Green-colored insulation with continuous yellow stripe. On feeders with isolated ground, identify grounding conductor where visible to normal inspection, with alternating bands of green and yellow tape, with at least three bands of green and two bands of yellow.

D. Grounding Bus: Install in electrical rooms, in rooms housing service equipment, and elsewhere as indicated.

1. Install bus on insulated spacers 2 inches minimum from wall, 12 inches (300 mm) above finished floor unless otherwise indicated.

E. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.

2. Underground Connections: Exothermic welded connectors except at test wells and as otherwise indicated.

3. Connections to Ground Rods at Test Wells: Bolted connectors.

4. Connections to Structural Steel: Exothermic welded connectors.

3.2 UFER GROUND

A. Provide a UFER ground at bottom of building slab per NEC 250.52 (3), bond to building steel.

3.3 UTILITY GROUNDING

A. Provide grounding and bonding at Utility Company's metering equipment in accordance with Utility Company's requirements.

3.4 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

1. Conduit shall not be used as the ground conductor.
2. Where required by Code, metallic conduit may be used as an additional means of grounding where the raceway system qualifies as a grounding conductor in accordance with NEC 250.118.

B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

1. Feeders and branch circuits.
2. Lighting circuits.
3. Receptacle circuits.
4. Single-phase motor and appliance branch circuits.
5. Three-phase motor and appliance branch circuits.
6. Flexible raceway runs.
7. Armored cable runs.
8. Computer and Rack-Mounted Electronic Equipment Circuits: Install insulated equipment grounding conductor in branch-circuit runs from equipment-area power panels and power-distribution units.

C. Air-Duct Equipment Circuits: Install insulated equipment grounding conductor to duct-mounted electrical devices operating at 120 V and more, including air cleaners, heaters, dampers, humidifiers, and other duct electrical equipment. Bond conductor to each unit and to first section of air duct and connected metallic piping.

D. Water Heater, Heat-Tracing, and Anti-frost Heating Cables: Install a separate insulated equipment grounding conductor to each electric water heater and heat-tracing cable. Bond conductor to heater units, piping, connected equipment, and components.

E. Signal, Data, and Communication Equipment: Provide grounding electrode conductor from the communications service equipment to the building grounding system as required. Provide #6 ground conductor from telephone/voice/CATV/data company demarcation point to building electrical service entrance ground electrode connection and as required by all local utility companies.

3.5 INSTALLATION

A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

1. Where ground conductors are subject to physical damage, install in raceway.

B. Ground Rods: Drive rods until tops are 12 inches below finished floor or final grade unless otherwise indicated.

1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.

C. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except were routed through short lengths of conduit.

1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
3. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

D. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit,

from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes; use a bolted clamp connector or bolt a lug-type connector to a pipe flange by using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.

2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

E. Bonding Interior Metal Ducts: Bond metal air ducts to equipment grounding conductors of associated fans, blowers, electric heaters, and air cleaners. Install tinned bonding jumper to bond across flexible duct connections to achieve continuity.

F. Grounding for Steel Building Structure: Install a driven ground rod at base of each corner column and at intermediate exterior columns at distances not more than 60 feet apart.

END OF SECTION 26 05 26

SECTION 26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Hangers and supports for electrical equipment and systems.
2. Construction requirements for concrete bases.

1.3 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M.
2. AWS D1.2/D1.2M.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Cooper B-Line

B. Unistrut

C. Thomas & Betts

D. Or Approved Equal

2.2 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

A. Steel Slotted Support Systems: Comply with MFMA-4 factory-fabricated components for field assembly.

1. Material: Galvanized steel, Plain steel, or Stainless Steel; or as noted on drawings.
2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
3. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.

4. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
5. Protect finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
6. Channel Dimensions: Selected for applicable load criteria.

B. Aluminum Slotted Support Systems: Comply with MFMA-4 factory-fabricated components for field assembly.

1. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.
2. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
3. Protect finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
4. Channel Dimensions: Selected for applicable load criteria.

C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.

D. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for nonarmored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be made of malleable iron.

E. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M steel plates, shapes, and bars; black and galvanized.

F. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:

1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
2. Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel or stainless steel for use in hardened portland cement concrete, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
3. Concrete Inserts: Steel or malleable-iron, slotted support system units are similar to MSS Type 18 units and comply with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58 units are suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: All-steel or stainless-steel springhead type.
7. Hanger Rods: Threaded steel.

2.3 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

B. Materials: Comply with requirements in Section 055000 "Metal Fabrications" for steel shapes and plates.

PART 3 - EXECUTION

3.1 APPLICATION

A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems unless requirements in this Section are stricter.

B. Comply with requirements for raceways and boxes specified in Section 260533 "Raceways and Boxes for Electrical Systems."

C. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMTs, IMCs, and RMCs as scheduled in NECA 1 and required by NFPA 70. Minimum rod size shall be 1/4 inch in diameter.

D. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.

1. Secure raceways and cables to these supports with single-bolt conduit clamps.

3.2 SUPPORT INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this article.

B. Raceway Support Methods: In addition to methods described in NECA 1, EMTs, IMCs, and RMCs may be supported by openings through structure members, according to NFPA 70.

C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lbs.

D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:

1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners.
5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
6. To Steel: Welded threaded studs complying with AWS D1.1/D1.1M, with lock washers and nuts, Beam clamps (MSS SP-58, Type 19, 21, 23, 25, or 27), complying with MSS SP-69, or spring-tension clamps.
7. To Light Steel: Sheet metal screws.
8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.

E. Drill holes for expansion anchors in concrete at locations and to depths that avoid the need for reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

A. Comply with installation requirements in Division 05 Sections for site-fabricated metal supports.

B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.

C. Field Welding: Comply with AWS D1.1/D1.1M.

3.4 CONCRETE BASES

A. Construct concrete bases of dimensions indicated but not less than 4 inches larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.

B. Use 3000-psi, 28-day compressive-strength concrete.

C. Anchor equipment to concrete base according to manufacturer's recommendations.

END OF SECTION 26 05 29

SECTION 26 0533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal conduits, tubing, and fittings.
2. Nonmetallic conduits, tubing, and fittings.
3. Surface raceways.
4. Boxes, floor boxes, enclosures, and cabinets.

1.2 DEFINITIONS

A. GRC: Galvanized Rigid Steel Conduit.

B. IMC: Intermediate Metal Conduit

C. EMT: Electrical Metallic Tubing.

D. PVC: Polyvinyl Chloride

1.3 QUALITY ASSURANCE

A. All products shall be UL labeled for their intended use.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Allied

B. International Metal Hose

C. Calbrite

D. American Conduit/Sapa

E. Gibson

F. Or Approved Equal

2.2 METAL CONDUITS, TUBING, AND FITTINGS

A. Manufacturers: Subject to compliance with requirements, products of all manufacturers are acceptable provided they have a smooth interior, are UL listed and labeled as defined in NFPA 70 for the intended location and application and are electro-galvanized steel (EMT) or hot dipped galvanized steel inside and out (GRC). For PVC coated GRC, conduit and fittings shall be obtained from the same manufacturer:

B. GRC: Comply with ANSI C80.1 and UL 6.

C. IMC: Comply with ANSI C80.5 and UL 6A.

D. PVC coated GRC: Comply with ANSI C80.1, UL 6 and NEMA RN – 1.

E. EMT: Comply with ANSI C80.3 and UL 797.

F. FMC: Comply with UL 1; zinc-coated steel.

G. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.

H. Electrical nonmetallic tubing (ENT or "blue tube") and liquid-tight flexible nonmetallic conduit (LFNC) are not acceptable for use on any Project.

I. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
   1. Conduit Fittings for Hazardous (Classified) Locations:
      a. Comply with UL 886 and NFPA 70.
   2. Fittings for GRC:
      a. Material: Steel.
      b. Type: threaded.
   3. Fittings for PVC coated GRC:
      a. Urethane coating of nominal 2 mil thickness shall be uniformly and consistently applied to the interior of all fittings.
      b. All female threads on fittings and couplings shall be protected by urethane coating.
   4. Fittings for EMT:
      a. Material: Steel.
      b. Type: compression – indoors; compression - outdoors.
      c. Set screw fittings are prohibited.
   5. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.
   6. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions were installed, and including flexible external bonding jumper.

2.3 NONMETALLIC CONDUITS AND FITTINGS

A. Manufacturers: Subject to compliance with requirements, products of all manufacturers are acceptable provided they are sunlight resistant, and UL listed and labeled as defined in NFPA 70 and marked for intended location and application. Conduit and fittings shall be obtained from the same manufacturer.

B. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.

C. Fittings for RNC: Comply with NEMA TC 3; match to conduit or tubing type and material.

D. Solvent cements and adhesive primers shall have a VOC content of 510 and 550 g/L or less, respectively, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.4 SURFACE RACEWAYS

A. Listing and Labeling: Surface raceways shall be UL listed and labeled as defined in NFPA 70 and marked for intended location and application.

B. Surface Metal Raceways: Galvanized steel with snap-on covers complying with UL 5. Manufacturer's standard enamel finishes in color selected by Architect. Provide dividers as required to separate systems of different voltages.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Panduit Corp.
b. Wiremold / Legrand #700 or better.
c. Or Approved Equal

2.5 BOXES, ENCLOSURES, AND CABINETS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cooper
2. Hubbell
3. Thomas & Betts Corporation.
4. Wiremold / Legrand.
5. Or Approved Equal

B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.

C. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.

1. Minimum depth shall be 2-1/8 inches.

D. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.

E. Luminaire Outlet Boxes: Brass or Steel, Nonadjustable, designed for attachment of luminaire weighing 50 lb. Outlet boxes designed for attachment of luminaires weighing more than 50 lb shall be listed and marked for the maximum allowable weight.

F. Sheet Metal Pull and Junction Boxes 100 cu. in. and smaller: NEMA OS 1.

G. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, galvanized, cast iron with gasketed cover.

H. Box extensions used to accommodate new building finishes shall be of same material as recessed box.

I. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, Type 1 with continuous-hinge cover

with flush latch unless otherwise indicated.

1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
2. Nonmetallic Enclosures: Plastic.
3. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.

J. Cabinets:

1. NEMA 250, Type 1 galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
2. Hinged door in front cover with flush latch and concealed hinge.
3. Key latch to match panelboards: Corbin #4T3142. Confirm with NU Electric Shop.
4. Metal barriers to separate wiring of different systems and voltage.
5. Accessory feet where required for freestanding equipment.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

A. Outdoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed Conduit: GRC or IMC
2. Concealed Conduit, Aboveground: GRC or IMC
3. Underground Conduit: RNC, Type EPC-40-PVC, direct buried or concrete encased as indicated.
4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
5. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.

B. Indoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed, Not Subject to Physical Damage: EMT.
2. Exposed, Not Subject to Severe Physical Damage (Mechanical rooms and similar): GRC.
3. Exposed and Subject to Severe Physical Damage (Parking Garages or where indicated): GRC.
4. Concealed in Ceilings and Interior Walls and Partitions: EMT.
5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
6. Feeders over 600 V: GRC.
7. Damp or Wet Locations: GRC.
8. Pools, Corrosive and Similar Locations: PVC coated GRC.
9. Basements, mechanical and electrical rooms: GRC
10. Tunnels: GRC.
11. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4 stainless steel in institutional and commercial kitchens and damp or wet locations.
12. In concrete slabs: Type EPC-40-PVC.
13. PVC conduit shall not be run in wall spaces or building cavities.

C. Minimum Raceway Size: 3/4-inch trade size for branch circuits. Maximum fill for branch circuit conduits: 30%

D. Mixing different types of conduits indiscriminately in the same system is prohibited.

E. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Rigid Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
2. EMT: Use watertight compression type steel fittings with insulated throat. Comply with NEMA FB 2.10.
3. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.

F. Install surface raceways only were indicated on Drawings.

G. Do not install nonmetallic conduit where ambient temperature exceeds 120 deg F (49 deg C).

3.2 INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.

B. Installers of the PVC-coated galvanized rigid conduit system shall be certified by the manufacturer and be able to present a valid, unexpired certified installer card prior to starting installation. All manufacturer's clamping, cutting, threading, bending, and assembly instructions shall be followed

C. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot- water pipes. Install horizontal raceway runs above water and steam piping.

D. Where two or more conduits are run together, they shall be racked. Use minimum ¼"x20 threaded rod to support "'trapeze" type racks.

E. Installation of all new conduits must be minimum 12 inches from ceiling grid except where approved.

F. Complete raceway installation before starting conductor installation.

G. Arrange stub-ups so curved portions of bends are not visible above finished slab.

H. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of changes in direction.

I. Conceal conduit and EMT within finished walls, ceilings, and floors unless otherwise indicated. Install conduits parallel or perpendicular to building lines.

J. Support conduit within 12 inches of enclosures to which attached.

K. All suspension systems must be hung independently from structure; "piggyback" suspension systems for raceways are prohibited.

L. PVC Raceways Below Slabs:

1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support. Secure raceways to reinforcement at maximum10-foot intervals.

2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
3. Arrange raceways to keep a minimum of 3 inches of concrete encasement in all directions.

M. PVC Large Diameter Raceways Bending Radius:

1. Four-inch conduit: 35” minimum.
2. Five-inch: 50” minimum.
3. Six-inch: 61” minimum.

N. Stub-ups to Above Recessed Ceilings:

1. Use EMT for raceways.
2. Use a conduit bushing or insulated fitting to terminate stub-ups not terminated in hubs or in an enclosure.

O. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.

P. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.

Q. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch trade size and insulated throat metal bushings on 1-1/2-inch trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.

R. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.

S. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.

T. Cut conduit perpendicular to the length. For conduits 2-inch trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length. Debur cut ends.

U. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.

V. Surface Raceways:

1. Install surface raceway with a minimum 2-inch radius control at bend points.
2. Secure surface raceway with screws or other anchor-type devices at intervals not exceeding 48 inches and with no less than two supports per straight raceway section. Support surface raceway according to manufacturer's written instructions. Tape and glue are not acceptable support methods.

W. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings according to NFPA 70.

X. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:

1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
2. Where an underground service raceway enters a building or structure.
3. Where otherwise required by NFPA 70.

Y. Comply with manufacturer's written instructions for solvent welding RNC and fittings.

Z. Expansion-Joint Fittings:

1. Install in each run of aboveground RNC that is located where environmental temperature change may exceed 30 deg F and that has straight-run length that exceeds 25 feet. Install in each run of aboveground RMC and EMT conduit that is located where environmental temperature change may exceed 100 deg F and that has straight-run length that exceeds 100 feet.
2. Install type and quantity of fittings that accommodate temperature change listed for each of the following locations:
   a. Outdoor Locations Not Exposed to Direct Sunlight: 125 deg F temperature change.
   b. Outdoor Locations Exposed to Direct Sunlight: 155 deg F temperature change.
   c. Indoor Spaces Connected with Outdoors without Physical Separation: 125 deg F temperature change.
   d. Attics: 135 deg F temperature change.
3. Install fitting(s) that provide expansion and contraction for at least 0.00041 inch per foot of length of straight run per deg F of temperature change for PVC conduits. Install fitting(s) that provide expansion and contraction for at least 0.000078 inch per foot of length of straight run per deg F of temperature change for metal conduits.
4. Install expansion fittings at all locations where conduits cross building or structure expansion joints.
5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at time of installation. Install conduit supports to allow for expansion movement.

AA. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches of flexible conduit for recessed and semi-recessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.

1. Use LFMC in damp or wet locations.
2. Use a maximum of 72 inches of ½" FMC for recessed and semi-recessed luminaires.
3. Final connections to motors or equipment subject to vibration, noise transmission, or movement shall use FMC not exceeding four feet in length.
4. Short lengths of FMC shall be used for final primary and secondary connections to Low Voltage transformers (<600V).

BB. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.

CC. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between boxes and cover plate or supported equipment and box.

DD. Do not install boxes back-to-back in walls. Provide minimum 6-inch separation in non-fire-rated walls. Provide minimum 24-inch horizontal separation in acoustic-rated walls.

EE. Boxes shall be secured between two studs. Boxes connected to one stud are not permitted.

FF. Locate boxes so that cover or plate will not span different building finishes.

GG. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.

HH. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.

II. Set metal floor boxes level and flush with finished floor surface.

3.3 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies.

3.4 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Division 07 Sections and Northwestern Fire Protection Standards.

1. Products: Cooper B –Line, 3M, Hilti, Specified Technologies, Inc.

B. Junction boxes of different systems shall be identified by colors indicated below. Box and cover shall be painted prior to attaching identification labels.

C. Provide permanent nameplates for all pull and junction boxes identifying circuits, voltage, and source.

D. Where conduit is exposed in public or finished areas, the conduits shall be painted to match the adjacent wall or ceiling color. Associated junction boxes and covers shall be painted inside to match Northwestern standard conduit color code below.

E. Raceways and couplers of different systems shall be identified by color. Raceways up to 4” shall have factory applied finish.

1. Raceways up to 4” shall have solid color within electrical rooms and vaults.
2. Raceways larger than 4” shall be identified by permanent snap-on color bands installed within six inches of any pull or junction box, enclosure, fitting, and every twenty feet of run.

F.

Colors:		System:
1.	Red	Fire Alarm.
2.	Yellow	Feeders: 600V and above.
3.	Orange	Feeders: 277V and < 600V.
4.	White	Feeders: 120V to 240V.
5.	Blue	Building Automation.

6.	Green	Grounding and “Hogan” systems
7.	Yellow w/Red stripe	Gas monitoring

3.5 PROTECTION

A. Protect coatings, finishes, and cabinets from damage and deterioration.

1. Repair damage to galvanized finishes with zinc-rich paint recommended by m anufacturer.
2. Repair damage to paint finishes with matching touchup coating recommended by manufacturer.
3. Repair damage to PVC coatings with matching touchup coating recommended by manufacturer

END OF SECTION 26 05 33

DOCUMENT 26 24 00 - ELECTRICAL GEAR

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Panelboards.
2. Load Centers for Dwelling Units
3. Fusible and Non-Fusible Switches.
4. Enclosed Circuit Breakers.
5. Residential Metering System

1.2 ACTION SUBMITTALS

A. Product Data: For each type of equipment, switching and overcurrent protective device, surge protection device, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

B. Shop Drawings:

1. Include dimensioned plans, elevations, sections, and details. Show tabulations of installed devices with nameplates, conductor termination sizes and locations, equipment features, and both current and voltage ratings.
2. Detail enclosure types including mounting and anchorage, environmental protection, knockouts, corner treatments, covers and doors, gaskets, hinges, and locks.
3. Short-circuit current rating of all equipment and overcurrent protective devices.

1.3 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data to include in emergency, operation, and maintenance manuals include the manufacturer's written instructions for testing and adjusting overcurrent protective devices.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain all equipment, overcurrent protective devices, components, and accessories from single manufacturer.
B. UL Standards: All electrical gear shall conform to all applicable UL standards and shall be UL labeled.
C. Comply with NFPA 70 and all applicable NEMA standards.

1.5 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace any equipment that fail in materials or workmanship within one year from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Eaton

B. Siemens

C. Square D

D. Or Approved Equal

2.2 PANELBOARDS

A. General: Panelboards shall be dead-front type equipped with panelboard switching and protective devices in quantities, ratings, types, and with arrangements shown

B. Comply with NEMA PB1 and NFPA 70.

C. Busing Assembly:

1. Panelboard phase, neutral and equipment ground busing shall be copper. Bus structure and mains shall have ratings as shown and scheduled.
2. Furnish a bare uninsulated ground bus adequate for feeder and branch-circuit equipment grounding conductors and boned to the box inside each panelboard enclosure.
3. Two section panelboards shall be connected with copper cable, with an ampacity conforming to the upstream overcurrent device.
4. Panelboards serving non-linear loads and fed with neutrals greater than 100% shall have 200% neutral busing.
5. Full-Sized Neutral Bus: Equipped with full-capacity bonding strap for service entrance applications. Provide suitable lugs for outgoing feeders and circuits requiring neutral connections.

D. Circuit Breakers:

1. Circuit breakers shall be molded case, thermal magnetic type equipped with individually insulated, braced, and protected connectors. The front faces of circuit breakers shall be flush with each other. Tripped indication shall be shown by the breaker handle taking a position between ON and OFF.
2. Make prepared space provisions for additional breakers so that no additional connectors will be required to add breakers.
3. Circuit breakers in panelboards 600 Amps and below shall have bolt-in breakers. Two and three pole breakers shall have internal common trips. External handle ties will not be accepted for line to line connected loads. External handle ties are acceptable only for designated shared neutral loads. Circuit breakers for panelboards rated 601 amps and above shall have plug-on circuit breakers.
   a. Breakers to be replaceable without distrurbing adjacent units.
4. Provide panelboard branch circuit breakers with interrupting capacity as shown, but in no case less than the following:
   a. 10,000 AIC symmetrical amperes RMS for panelboards rated 240V
   b. 14,000 AIC symmetrical amperes RMS for panel boards rated 241V to 600V.
5. Ground fault interrupter (GFI) circuit breakers, where shown, shall be 5 mA ground fault trip and shall include a TEST button.
6. Arc fault circuit breakers shall comply with UL 1699.
7. Circuit breakers with frame size 600A and higher shall have magnetic trip adjustment of 3X to 10X.
8. Main lug interiors up to 400 amperes shall be field convertible to main breaker.

E. Spaces: Where space for future breakers or switches is shown, panelboard enclosure shall include removable blank panels or knockouts to allow installation of future breakers or switches, prepared spaces, and panelboard busing shall be complete, including required connectors.

F. Integrated Equipment Rating:

1. Each panelboard, as a complete unit, shall have a short-circuit rating equal or greater than the available short circuit current. Rating shall have been established by tests on similar panelboards with the circuit breakers or fusible switches installed.
2. Series rated panelboards and their protective upstream devices shall be labeled as required by the NEC.

G. Panelboard Enclosures:

1. Provide sheet steel enclosures. Provide all NEMA 1 panelboard fronts with spring-loaded door pulls, and flush lock and key.
2. All NEMA 1 enclosure panelboards shall be hinged “door-in-door” type with interior hinged door with hand operated latch or latches, as required providing access only to circuit breaker or fusible switch operating handles, not to exposed energized parts. Outer hinged door shall be securely mounted to the panelboard box with factory bolts, screws, clips, or other fasteners, requiring a tool for entry. Hand operated latches are not acceptable. Push inner and outer doors shall open left to right.
3. Equip with interior computer-generated circuit directory frame, card, and clear plastic covering for panelboards.
4. Provide gray powder coat finish over a rust inhibitor.
5. Enclosures at exterior locations shall be NEMA 3R.
6. Enclosure shall be for recessed or surface mounting as shown.
7. Enclosures shall be fabricated by the same manufacturer as panelboards to be enclosed. Multi-section panelboards shall have same physical dimensions.

H. Conductor Connectors: Suitable for us with conductor material and sizes.

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Main and Neutral Lugs: Mechanical type.
3. Ground Lugs and Bus-Configured Terminations: Mechanical type.
4. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.

I. Identification:

1. Panelboard label: Manufacturer’s name and trademark, voltage, amperage, number of phases, and number of poles shall be located on the interior of the panelboard door.
2. Breaker Labels: Faceplate shall list current rating, UL and IEC certificationstandards, and AIC rating.

2.3 FUSIBLE AND NON-FUSIBLE SWITCHES

A. General: Provide commercial duty type, dead-front, sheet steel enclosed, surface-mounted safety switches of the type and size indicated. Safety switches shall be rated for the voltage of the circuit where they are installed. Safety switches used as motor disconnects shall be horsepower rated for the motor served.

B. Switch Mechanism:

1. Safety switches shall be quick-make, quick-break type with permanently attached arc suppressor. Constructed so that switch blades are visible in the OFF position with the door open. The operating handle shall be an integral part of the box, not the cover. Switch shall have provision to padlock in the OFF position. Safety switches shall have a cover interlock to prevent unauthorized opening of

the switch door when the switch mechanism is in the ON position, or closing of the switch mechanism when the switch door is open.

2. Cover interlock shall have an override mechanism to permit switch inspection by authorized personnel. Current-carrying parts shall be constructed of high conductivity copper with silver-plated switch contacts. Lugs shall be suitable for copper conductors and front removable.

C. Fusing: Provide fusible safety switches where required or indicated. Fuse clips shall be positive pressure rejection type fuse clips suitable for use with UL Class R or Class J fuses.

1. Cartridge Fuses shall comply with NEMA FU 1.
2. Coordinate fuse ratings with utilization equipment nameplate limitations of maximum fuse size and with system short-circuit current levels.

D. Neutral: Provide safety switches with number of switched poles indicated. Where a neutral is present in the circuit, provide a solid neutral with the safety switch.

E. Ground: Provide an internally mounted equipment ground kit labeled for copper ground conductors.

F. Lugs: Mechanical type, suitable for number, size, and conductor material.

G. Enclosures in indoor locations shall be NEMA 1 heavy duty enclosures unless shown otherwise. Enclosures in exterior locations shall be NEMA 3R stainless steel, heavy duty

H. Service Entrance Rated Switches shall be labeled for use.

2.4 ENCLOSED CIRCUIT BREAKERS

A. Molded-Case Circuit Breaker (MCCB): NEMA AB 1, comply with UL 489, and with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250A and larger.
2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
3. Electronic Trip Unit Circuit Breakers:
    a. RMS sensing; field-replaceable rating plug.
    b. Digital display of settings with multi-button keypad to access programmable functions.
    c. Ten-event trip-history log. Each trip event shall be record with the type, phase, and magnitude of the fault that caused the trip.
    d. Integral test jack for connection to portable test set or laptop computer.
    e. Field-adjustable settings:
    f. Instantaneous trip
    g. Long-and short-time pickup levels.
    h. Long-and Short-time time adjustments.
    i. Ground-fault pickup level, time delay and I2t response
4. Molded-Case Circuit Breaker Features and Accessories: Standard frame sizes, trip ratings and number of poles.
    1. Lugs: Mechanical style suitable for number, size, trip ratings and material of conductors.
    2. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HACR for heating, air-conditioning, and refrigerating equipment.

B. Enclosures in indoor locations shall be NEMA 1 heavy duty enclosures unless shown otherwise. Enclosures

in exterior locations shall be NEMA 3R stainless steel, heavy duty.

PART 3 - EXECUTION

3.1 INSTALLATION OF PANELBOARDS AND ENCLOSURES

A. Examination: Receive, inspect, handle, and store panelboards according to NEMA PB 1.1.
   1. Examine panelboards before installation. Reject panelboards that are damaged, rusted or have been exposed to water.
   2. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the work.
   3. Proceed with installation only after unsatisfactory conditions have been corrected.

B. General: Install panelboards and enclosures, as shown, including electrical connections, in accordance with the manufacturer's written instructions, the requirements of NFPA 70, NECA Standard of Installation, NEMA PB 1.1, and industry practices. Circuit breakers shall be factory installed except for required field modifications due to actual site conditions. Provide fuse identification label when fused switches are required showing type and size inside door of each switch. Include devices in coordination study to indicate overcurrent devices will selectively coordinate.

C. Coordination: Coordinate installation of panelboards and enclosures with conductor and raceways installation work.

   1. Verify actual field conditions and measurements prior to purchasing panelboards.

D. Anchoring: Anchor enclosures to walls and structural surfaces ensuring that they are permanently and mechanically secured.

E. Directory Card: Create a typed directory to indicated installed circuit loads with final room designations. Handwritten directories are not acceptable.

F. Nameplates: Label each panelboard and enclosure with a self-adhesive, engraved, laminated acrylic or melamine label indicating the panel name, voltage, phase, amperage, and fed from identifier.

G. Fuses: Install fuses, of the ratings and class shown, in each power distribution and motor control panelboard.

H. Circuit Arrangement: Arrange branch circuit connections to 3-phase panelboards so that when two or three circuits are run with a common neutral, each circuit is connected to a different phase unless shown otherwise. Branch circuits shall be connected to the circuit breakers in the panelboard to provide the best possible phase balance, unless shown otherwise.

I. Panelboards not intended to be used as service entrance (SE) rated shall have the factory installed neutral to ground bonding screws and straps removed.

J. Spare Conduits: Provide (3) 1-inch conduits capped to 6-inches above accessible ceiling space for all recessed panelboards.

K. Conductors shall be bent neatly opposite the fuse or circuit breaker to which they are to be attached. Vertically installed conductors shall be neatly tie-wrapped. Conductors shall be connected in a neat and professional manner. Conductors brought in from the top or bottom of the cabinet shall be bent neatly opposite the fuse or circuit breaker to which they are to be attached. Each conductor shall be run along the

full height of the panel and returned to the circuit breaker or fuse location to allow relocation of the conductor to any position along the bus. Neutral and grounding conductors shall be installed similar to the phase conductors. Panelboard shall be cleaned of all construction debris prior to substantial completion review.

L. Circuit breakers and conductors installed for SPD devices shall be located at the top or bottom of the panelboard in respect to the location of the SPD device. Route all conductors to the SPD device using long sweep bends and the shortest conductor length possible.

M. Install copper ground bus for copper ground conductors. Ground conductors size #1 and larger are to be landed to can with mechanical lugs and not to ground bus.

N. Install panels so that breaker number 1 is the top left breaker. Panel interiors shall not be installed where breaker number 1 is the bottom right breaker.

O. In panels that contain multi-layered neutral bus install neutrals beginning with the back neutral bus row and work forward. Do not make up neutrals on front neutral bus row unless all other rows are full.

P. Label breaker mounting space with stick-on number labels.

Q. Mount the fully aligned panelboard such that the maximum height of the top trim above the finished floor shall not exceed 74 inches. Mount panelboards that are too high such that the bottom of the cabinets will not be less than 6 inches above the finished floor.

1. Mount panelboard cabinet plumb and rigid without distortion of box.
2. Mount recessed panelboards with fronts uniformly flush with wall finish and mating with back box.

R. Load centers shall only be installed within the residential dwelling unit it serves including all electrical connections.

3.2 INSTALLATION OF SWITCHES AND ENCLOSED CIRCUIT BREAKERS

A. Examination: Examine switches and enclosed circuit breakers including all fuses and devices. Reject components that are physically damaged.

B. Location: Provide safety switches within 50’ and in sight of motor served. There shall be minimum 3’ clearance in front of safety switch and a clear path in which to access wall mounted switches (ie.: not having to walk and/or stand on obstacles such as drain pans on floor to service).

1. Install fuses as so rating information is readable without removing the fused.

C. Supports: Provide all safety and disconnect switches with galvanized angle or other supports where mounting on wall or other rigid surface is impractical. Switches shall not be supported by conduit alone. Where safety and disconnect switches are mounted on equipment served, the switch shall not inhibit removal of service panels or interfere with access areas. Provide mounting hardware that will allow removal of safety and disconnect switches. Do not utilize drive pin anchors through enclosure.

1. Install individual switches and circuit breakers with tops at uniform height unless indicated otherwise.

D. Safety and Disconnect Switches: Install disconnect switches used with motor-driven appliances, motors and controllers within sight of the controller position unless indicated otherwise.

E. Identify field installed conductors, interconnecting wiring, and components; provide warning signs.

F. Nameplates: Label each switch and enclosure with a self-adhesive, engraved, laminated acrylic or melamine label indicating the switch ID, voltage, phase, amperage, and fed from identifier.

3.3 INSTALLATION OF METERING SYSTEM

A. Metering system shall be installed where shown on the plans and in accordance with the manufacturer's suggestions, with all applicable codes, and according to the local electric utilities recommendations.

3.4 TESTING

A. Before energizing, energization, check for continuity of circuits and short circuits.

B. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.

C. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

D. Equipment will be considered defective if they do not pass tests and inspections.

END OF DOCUMENT

SECTION 26 2726 - WIRING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Receptacles, general purpose.
2. Receptacles with integral GFCI.
3. Weather-resistant receptacles.
4. Wall box dimmers.
5. Wall box dimmer/sensors.
6. Wall box occupancy/vacancy sensors.
7. Toggle Switches.
8. Associated device plates.

1.2 DEFINITIONS

A. GFCI: Ground-Fault Circuit Interrupter.

B. Pigtail: Short lead used to connect a device to a branch-circuit conductor.

C. RFI: Radio-frequency interference.

1.3 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by UL and marked for intended location and application.

B. Comply with NFPA 70.

C. Source Limitations: Obtain each type of wiring device and associated wall plate from single source from single manufacturer.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: List of legends and description of materials and process used for pre-marking wall plates.

1.5 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace devices that fail in materials or workmanship within specified warranty period.

PART 2 - PRODUCTS

2.1 GENERAL WIRING-DEVICE REQUIREMENTS

A. Wiring Devices, Components, and Accessories: UL listed and labeled as defined in NFPA 70 and marked for intended location and application.

B. Devices that are manufactured for use with modular plug-in connectors may be substituted under the following conditions:

1. Connectors shall comply with UL 2459 and shall be made with stranded building wire.

2. Devices shall comply with the requirements in this Section.

C. ACEEPTANCE MANUFACTURERS

1. Cooper
2. Hubbell
3. Leviton
4. Or Approved Equal

2.2 STRAIGHT-BLADE RECEPTACLES

A. Convenience Receptacles, 125V, 20A grounded Commercial grade duplex receptacle, NEMA #5-20R.

2.3 GFCI RECEPTACLES

A. General Description:

1. Straight blade, non-feed through type.
2. 125V, 20A ground fault circuit interruption fault (GFCI) commercial grade duplex receptacle, NEMA #5-20R.
3. Include trip/reset buttons.
4. Include correct wiring/trip indicator LED light.
5. Tamper resistant.
6. Weather resistant for wet and damp locations.

2.4 RECEPTACLES FOR SPECIAL EQUIPMENT

A. Specialized Receptacles: Comply with NEMA WD 1, NEMA WD 6 for standard configurations and UL 498.

2.5 WALL-BOX DIMMERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. Copper

B. Dimmer Switches: Modular, full-wave, solid-state units with integral, quiet on-off switches, with audible frequency and EMI/RFI suppression filters, compatible with 1% LED dimming-drivers.

C. Control: Continuously adjustable slide-to-off with single-pole or three-way switching. Comply with UL 1472.

D. LED Dimmer Switches: Modular; compatible with 1% LED dimming-drivers.

1. Zero to 10 VDC for direct control of 3rd party LED drivers without use of separate power pack.

E. Finish: Color to be coordinated with the Architect from Manufacturer's standard colors.

2.6 WALL-BOX DIMMERS/SENSORS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. Cooper

B. LED Dimmer Switches: Modular; 0 – 10 VDC Dimmer/Sensor compatible with 3rd party LED drivers; dimmer-driver combination capable of consistent dimming with low end not greater than 1% of full brightness, with integral, quiet, continuously adjustable slide-to-off with single-pole or three-way switching. Comply with UL 1472

1. Operating Environment: Operating temperature 32-104 degrees F with a relative humidity (non-condensing) of 0% to 95%.

C. Occupancy Switches:

1. Description: Line Voltage type, 120/230/277 VAC, adjustable time delay 1, 5, 15, or 30 minutes, 180-degree field of view, UL Listed.
2. Sensor: Passive infrared (PIR) with ambient light detection learning mode with a minimum PIR coverage area of 30 ft. x 30 ft.
3. Operating Environment: Operating temperature 32-104 degrees F with a relative humidity (non-condensing) of 0% to 95%.

D. Finish: Color to be coordinated with the Architect from Manufacturer's standard colors.

E. Warranty: 5 Years.

2.7 WALL BOX OCCUPANCY/VACANCY SENSORS

A. Line voltage PIR technology wall-switch sensors

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
   a. Cooper
2. Description: Line Voltage PIR Technology type, 120/230/277 VAC, adjustable time delay 1, 5, 15, or 30 minutes, 180-degree field of view, UL Listed with a minimum PIR coverage area of 30 ft. x 30 ft..
3. Programmable as a Vacancy (manual ON/auto OFF) or Occupancy sensor (auto ON/auto OFF).
4. Operating Environment: Operating temperature 32-104 degrees F with a relative humidity (non-condensing) of 0% to 95%.

B. Finish: Color to be coordinated with the Architect from Manufacturer's standard colors.

C. Warranty: 5 Years.

2.8 TOGGLE SWITCHES

A. Comply with NEMA WD 1, UL 20, and FS W-S-896.

B. Switches, 120/277 V, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Single Pole:
      1) Hubbell; HBL1221.
      2) Leviton; 1221
   b. Two Pole:
      1) Hubbell; HBL1222.
      2) Leviton; 1222
   c. Three Way:
      1) Hubbell; HBL1223.
      2) Leviton; 1223
   d. Four Way:
      1) Hubbell; HBL1224.
      2) Leviton; 1224

2.9 WALL PLATES

A. Single and combination types shall match corresponding wiring devices.

1. Plate-Securing Screws: Metal with head color to match plate finish.
2. Material for Finished Spaces:
   a. Shall be same manufacturer as device
   b. Offices and administrative areas: Painted steel, color selected by Architect from specified selections.
3. Material for Unfinished Spaces: Galvanized steel.
4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet and damp locations.

B. Wet-Location, Weatherproof-in-use Cover Plates: NEMA 250, complying with Type 3R, weather-resistant, die-cast aluminum with lockable cover

2.10 FINISHES

A. Device Color:

1. Wiring Devices Connected to Normal Power System: Ivory, White, Blue, Gray, and Brown as selected by Architect or required by NFPA 70 or device listing.
2. Dedicated outlets: Grey.
3. Wiring Devices Connected to Essential Power System: Red.
4. UPS: Blue.
5. Temporary devices: Black.

B. Wall Plate Color: Match device color.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1, including mounting heights listed in that standard, unless otherwise indicated.

B. Coordination with Other Trades:

1. Protect installed devices and their boxes. Do not place wall finish materials over device boxes and do not cut holes for boxes with routers that are guided by riding against outside of boxes.
2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
4. Install wiring devices after all wall preparation, including painting, is complete.

C. Conductors:

1. Do not strip insulation from conductors until right before they are spliced or terminated on devices.
2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking or cutting strands from stranded wire.
3. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.
4. Existing Conductors:
   a. Cut back and pigtail, or replace all damaged conductors.
   b. Straighten conductors that remain and remove corrosion and foreign matter.
   c. Pig-tailing existing conductors are permitted, provided the outlet box is large enough.

D. Device Installation:

1. Replace devices that have been in temporary use during construction and that were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that extend not less than 6 inches wall.
5. “Daisy-chaining” of receptacles is not permitted.
6. Use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, two-thirds to three-fourths of the way around terminal screw.
7. Use a torque screwdriver when a torque is recommended or required by manufacturer.
8. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
9. Tighten unused terminal screws on the device.
10. When mounting into metal boxes, remove the fiber or plastic washers used to hold device-mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:

1. Install ground pin of vertically mounted receptacles up, and on horizontally mounted receptacles to the left.

F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

G. Arrangement of Devices: mount flush, with long dimension vertical and with grounding terminal of receptacles on top. Group adjacent switches under single, multi-gang wall plates.

H. Adjust locations of floor service outlets to suit arrangement of partitions and furnishings.

3.2 IDENTIFICATION

A. Identify each receptacle with panelboard identification and circuit number. Receptacles rated more than 120V shall have voltage identified. Use hot, stamped or engraved machine printing with black-filled lettering on white field for normal circuits, red-filled lettering on white field for essential circuits , self adhesive nameplate attached to face of plate, and durable wire markers or tags inside outlet boxes.

3.3 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Test Instruments: Use instruments that comply with UL 1436.
2. Test Instrument for Convenience Receptacles: Digital wiring analyzer with digital readout or illuminated digital-display indicators of measurement.

B. Tests for Convenience Receptacles:

1. Line Voltage: Acceptable range is 105 to 132 V.
2. Percent Voltage Drop under 20-A Load: A value of 6 percent or higher is unacceptable.
3. Ground Impedance: Values of up to 2 ohms are acceptable.
4. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
5. Using the test plug, verify that the device and its outlet box are securely mounted.
6. Tests shall be diagnostic, indicating damaged conductors, high resistance at the circuit breaker, poor connections, inadequate fault current path, defective devices, or similar problems. Correct circuit conditions, remove malfunctioning units and replace with new ones, and retest as specified above.

C. Wiring device will be considered defective if it does not pass tests and inspections.

END OF SECTION 26 27 26

The Pavilion
at Hanson Crossing

DEDUCT ALTERNATE

PROVIDE A DEDUCT PRICE TO
REMOVE ONE ENTIRE BAY OF THE
PAVILION FROM 7 EQUAL BAYS TO SIX.

PROJECT INFORMATION:

ARCHITECT:	PISTORIUS ASSOCIATES, LLC 109 1/2 WEST THOMAS STREET HAMMOND, LA 70401 TOM PISTORIUS, AIA 985-542-4287
OWNER:	HOME MORTGAGE AUTHORITY AND CITY OF HAMMOND
OCCUPANCY:	A-3 AND F-1 COVERED PARKING STRUCTURE AND EVENT PAVILION FOR OUTDOOR FARMER MARKET - FULLY OPEN NO WALLS
USABLE AREA:	8805 sf
CONSTRUCTION:	TYPE II-B
ALLOWABLE AREA:	9,500 SF
SPRINKLERS:	NOT REQUIRED
FIRE ALARM:	NOT REQUIRED
EGRESS/EXITS:	OPEN ON ALL SIDES
FIRE EXTINGUISHERS:	3

ARCHITECTURAL

GENERAL INFORMATION:

G-001	GENERAL NOTES

ARCHITECTURAL SITE PLAN:

AS-101	OVERALL SITE PLAN
AS-102	DEMO SITE PLAN
AS-103	SITE PLAN
AS-104	DRAINAGE PLAN

PLANS:

A-101	FLOOR PLAN
A-102	ROOF PLAN/RCP
A-103	ELEVATIONS
A-104	SECTIONS
A-105	ENLARGED BRICK PIERS

STRUCTURAL

S1	STRUCTURAL NOTES
S2	FOUNDATION PLAN
S3	SECTIONS
S4	PAVILION TRUSS DETAILS

ELECTRICAL

E-000	ELECTRICAL LEGENDS AND NOTES
E-001	ELECTRICAL DETAILS
E-101	ELECTRICAL LIGHTING PLAN
E-200	ELECTRICAL POWER PLAN
E-500	ELECTRICAL RISER DIAGRAM
E-600	ELECTRICAL SPECIFICATIONS

pa
pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

revision no. revision date

drawn by
T. Pistorius

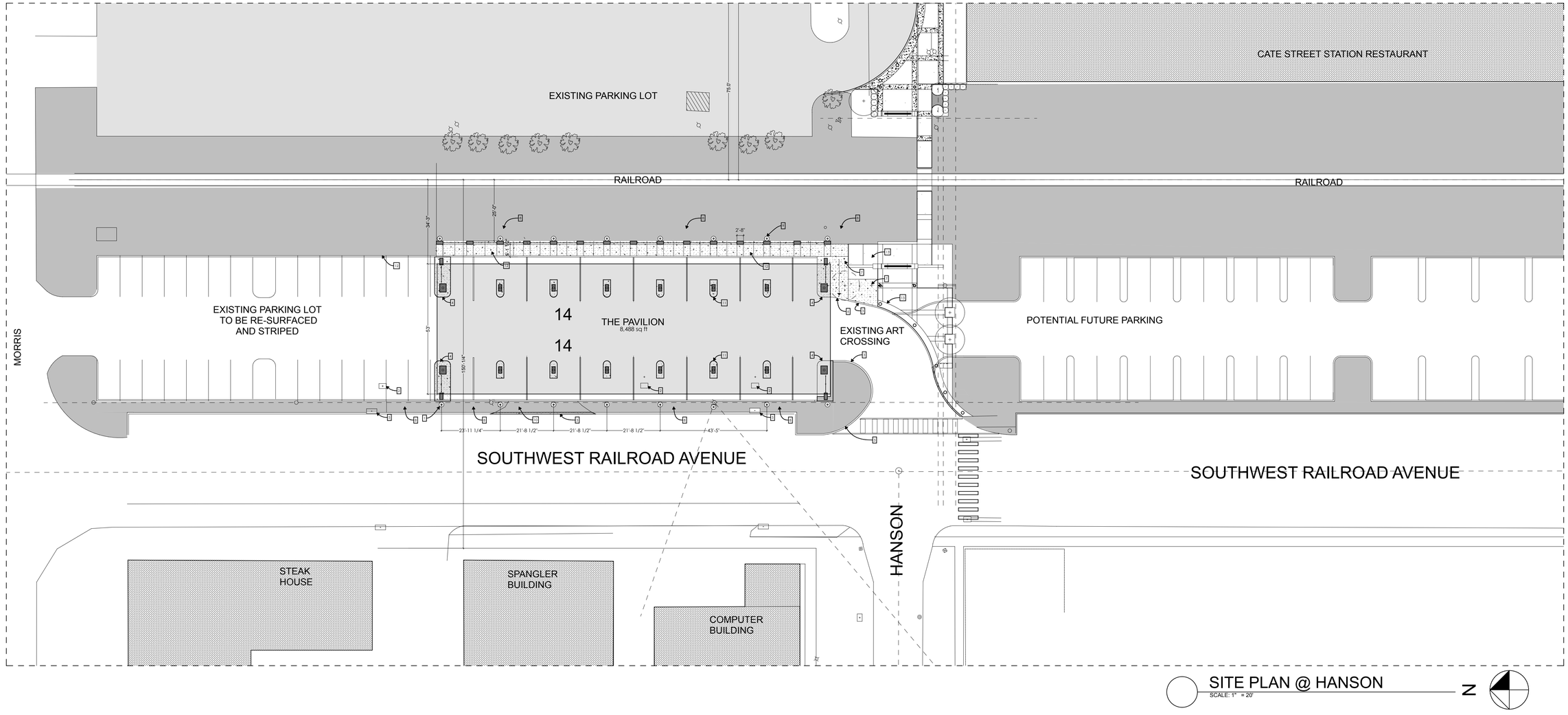
THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
GENERAL NOTES

drawing no.
G-001

PROJECT GENERAL NOTES:

A. DO NOT SCALE DRAWINGS.
B. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.
C. ALL WORK AND MATERIAL SHALL BE REGARDED AS NEW UNLESS SPECIFICALLY INDICATED AS "EXISTING" OR "(E)" ON THE DRAWINGS.
D. CONTRACTOR SHALL COORDINATE ALL TRADES AND METHODS OF CONSTRUCTION AS REQUIRED FOR COMPLETION OF THE PROJECT WITH THE INTENT OF THESE DOCUMENTS.
E. ALL MATERIALS AND UNFINISHED SURFACES EXPOSED TO VIEW SHALL BE PAINTED UNLESS FACTORY PRE-FINISHED, NOTED OTHERWISE OR DIRECTED BY THE ARCHITECT.
F. NO UTILITIES, PLUMBING, PIPING, CONDUIT, ETC. SHALL BE EXPOSED WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
G. SHOULD DIMENSIONS BE MISSING OR CONFLICTING, NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH RELATED WORK.
H. CONTRACTOR SHALL VERIFY LOCATIONS OF UTILITIES PRIOR TO EXCAVATING, TRENCHING, ETC. AND SHALL REPAIR OR REPLACE UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION..
I. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED DURING CONSTRUCTION.
J. SECURITY AND SAFETY ARE THE CONTRACTOR'S RESPONSIBILITY. LIMITS OF CONSTRUCTION SHALL BE COMPLETELY FENCED AND SECURED DURING CONSTRUCTION.
K. NO ASBESTOS SHALL BE USED OR INCORPORATED INTO THE PROJECT IN ANY FORM.
L. SEPARATE DISSIMILAR METALS AS THEY OCCUR AND/OR PER MANUFACTURER'S RECOMMENDATIONS.
M. APPLY SEALANT AT INTERSECTIONS OF ALL DISSIMILAR MATERIALS.



SITE PLAN @ HANSON
SCALE: 1" = 20'

N

SITE PLAN KEY NOTES:

1. PREP EXISTING AREA FOR ELECTRICAL ROUGH-IN TO NEW POLE LIGHTS. TOTAL OF 8 AT STREET.
2. EXISTING CATCH BASIN TO REMAIN.
3. NEW CONCRETE CURB AND GUTTER.
4. NEW CONCRETE WALK 6"-10" ABOVE ADJACENT ASPHALT PAVING DEPENDING ON RELATIVE ELEV.
5. EXISTING CATCH BASIN STORM DRAIN AT STREET TO REMAIN.
6. NEW CONCRETE SIDEWALK AT GRADE WITH ADJACENT SURFACE FOR SMOOTH TRANSITION.
7. NEW CONCRETE SIDEWALK 6" ABOVE ADJACENT PAVING, SLOPE RAMP TO DRIVEWAY.
8. EXISTING LANDSCAPE AREA TO REMAIN IN TACT EXCEPT FOR PREP FOR ELECTRICAL ROUGH-IN.
9. NEW POLE LIGHTS ALONG BACK SIDEWALK.
10. FILL IIN WITH SOIL TO ALIGN WITH EXISTING LANDSCAPE. RE-SEED.
11. NEW CONCRETE ISLAND AT 6"-8" ABOVE ADJACENT ASPHALT TYPICAL OF (12).
12. NEW CONCRETE SIDEWALK TO ALIGN WITH EXISTING CURB.
13. EXISTING SIDEWALK AND PATTERN TO REMAIN.

pa
pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

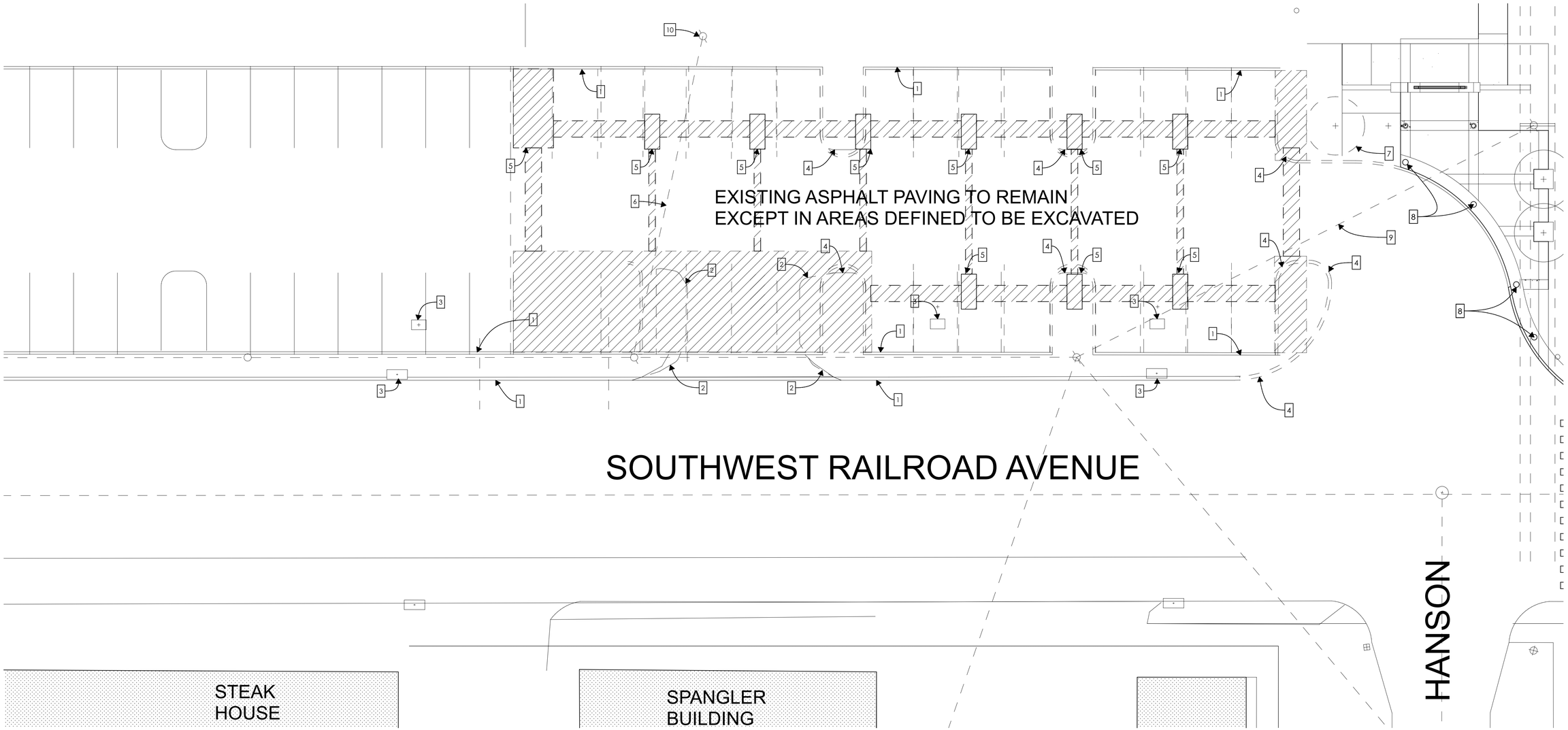
revision no. revision date

drawn by
T. Pistorius

THOMAS A. PISTORIUS
REG. # 6468
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
OVERALL SITE PLAN

drawing no.
AS-101



SITE PLAN @ HANSON
SCALE: 1" = 10'

DEMO SITE PLAN KEY NOTES:

1. EXISTING STREET CURB/LANDSCAPE TO REMAIN.
2. REMOVE EXISTING CURB AND PAVING WITHIN DOTTED AREA.
3. EXISTING CATCH BASINS TO REMAIN ALONG WITH PAVING.
4. REMOVE EXISTING CURB/ISLAND TO PREPARE FOR NEW SURFACING.
5. CUT EXISTING PAVING FOR EXCAVATION OF NEW FOOTINGS AND CONCRETE CURB.
6. EXISTING OVERHEAD LINES TO BE DISCONNECTED AND REMOVED BY ENTERGY.
7. REMOVE EXISTING TREE AND PREP FOR SIDEWALK.
8. REMOVE EXISTING BOLLARDS.
9. ENTERGY TO REMOVE OVERHEAD POWER LINES UNDER SEPARATE CONTRACT.
10. CONTACT ENTERGY TO REMOVE METER AND POLE.

pa
pistoriusassociates, llc
ARCHITECTS
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

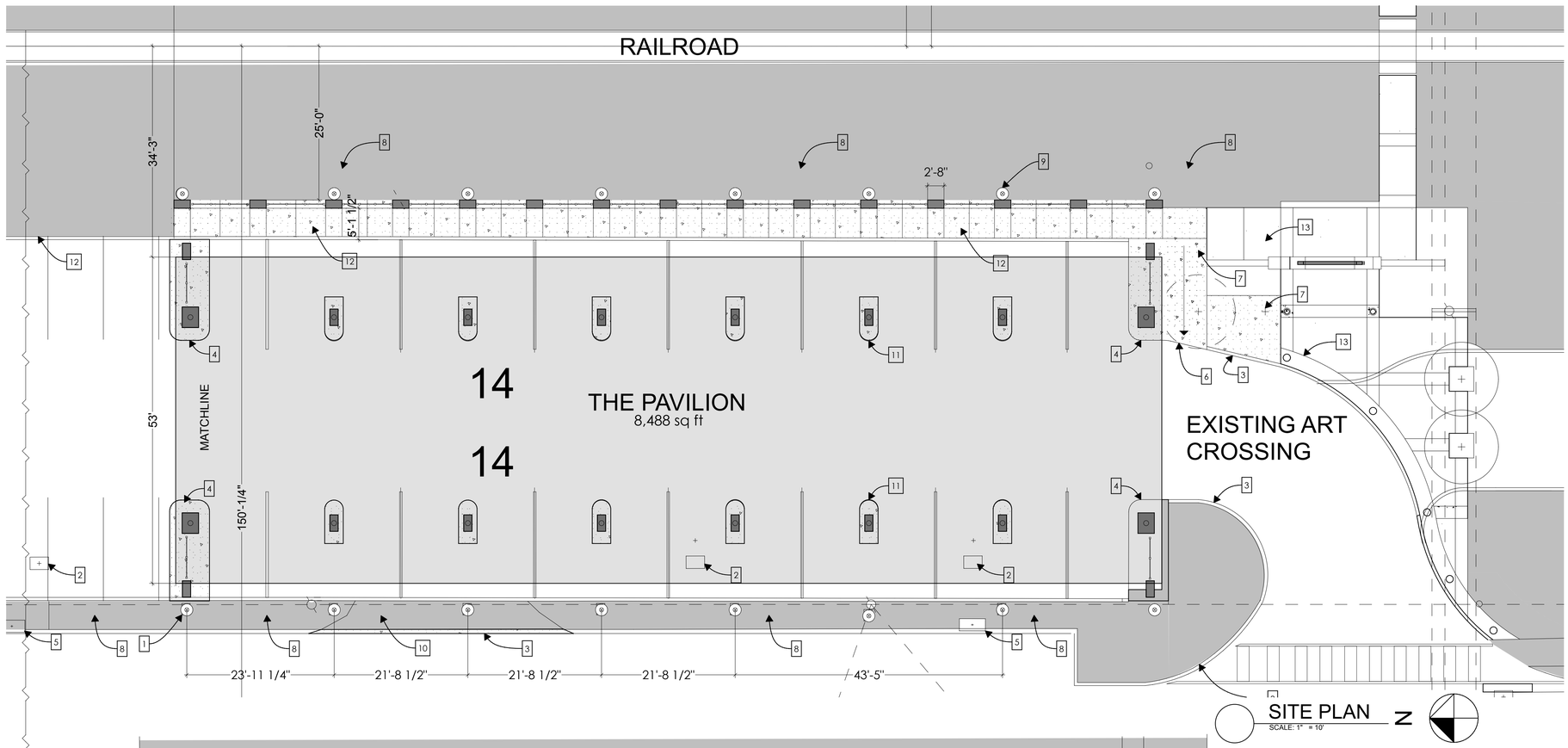
The Pavilion at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341
date of issue
July 10, 2024
project phase
Construction Documents
revision no. revision date

drawn by
T. Pistorius

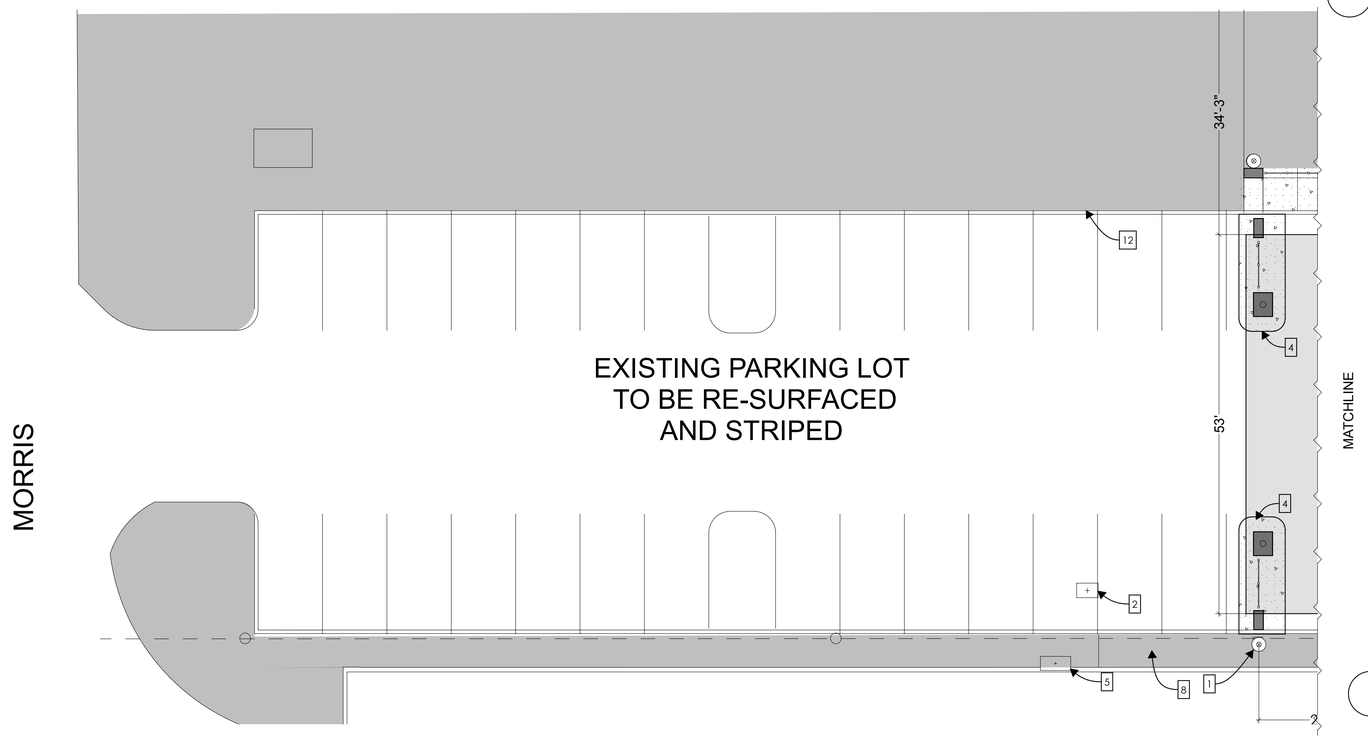
THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
DEMO SITE PLAN
drawing no.
AS-102



SITE PLAN
SCALE: 1" = 10'

N



SITE PLAN
SCALE: 1" = 10'

N

SITE PLAN KEY NOTES:

1. PREP EXISTING AREA FOR ELECTRICAL ROUGH-IN TO NEW POLE LIGHTS. TOTAL OF 8 AT STREET.
2. EXISTING CATCH BASIN TO REMAIN.
3. NEW CONCRETE CURB AND GUTTER.
4. NEW CONCRETE WALK 6"-10" ABOVE ADJACENT ASPHALT PAVING DEPENDING ON RELATIVE ELEV.
5. EXISTING CATCH BASIN STORM DRAIN AT STREET TO REMAIN.
6. NEW CONCRETE SIDEWALK AT GRADE WITH ADJACENT SURFACE FOR SMOOTH TRANSITION.
7. NEW CONCRETE SIDEWALK 6" ABOVE ADJACENT PAVING, SLOPE RAMP TO DRIVEWAY.
8. EXISTING LANDSCAPE AREA TO REMAIN IN TACT EXCEPT FOR PREP FOR ELECTRICAL ROUGH-IN.
9. NEW POLE LIGHTS ALONG BACK SIDEWALK.
10. FILL IIN WITH SOIL TO ALIGN WITH EXISTING LANDSCAPE. RE-SEED.
11. NEW CONCRETE ISLAND AT 6"-8" ABOVE ADJACENT ASPHALT TYPICAL OF (12).
12. NEW CONCRETE SIDEWALK TO ALIGN WITH EXISTING CURB.
13. EXISTING SIDEWALK AND PATTERN TO REMAIN.

pa
pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

revision no. revision date

drawn by
T. Pistorius

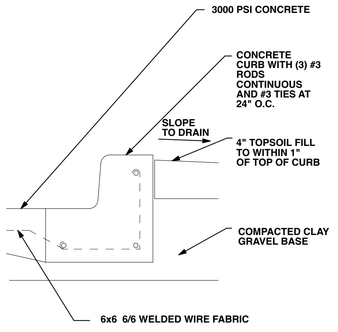
THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
SITE PLAN

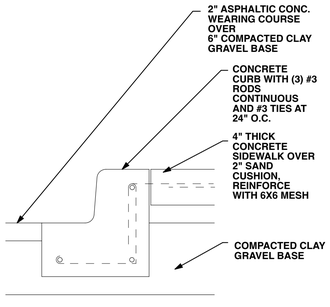
drawing no.
AS-103

pistoriusassociates, llc
ARCHITECTS

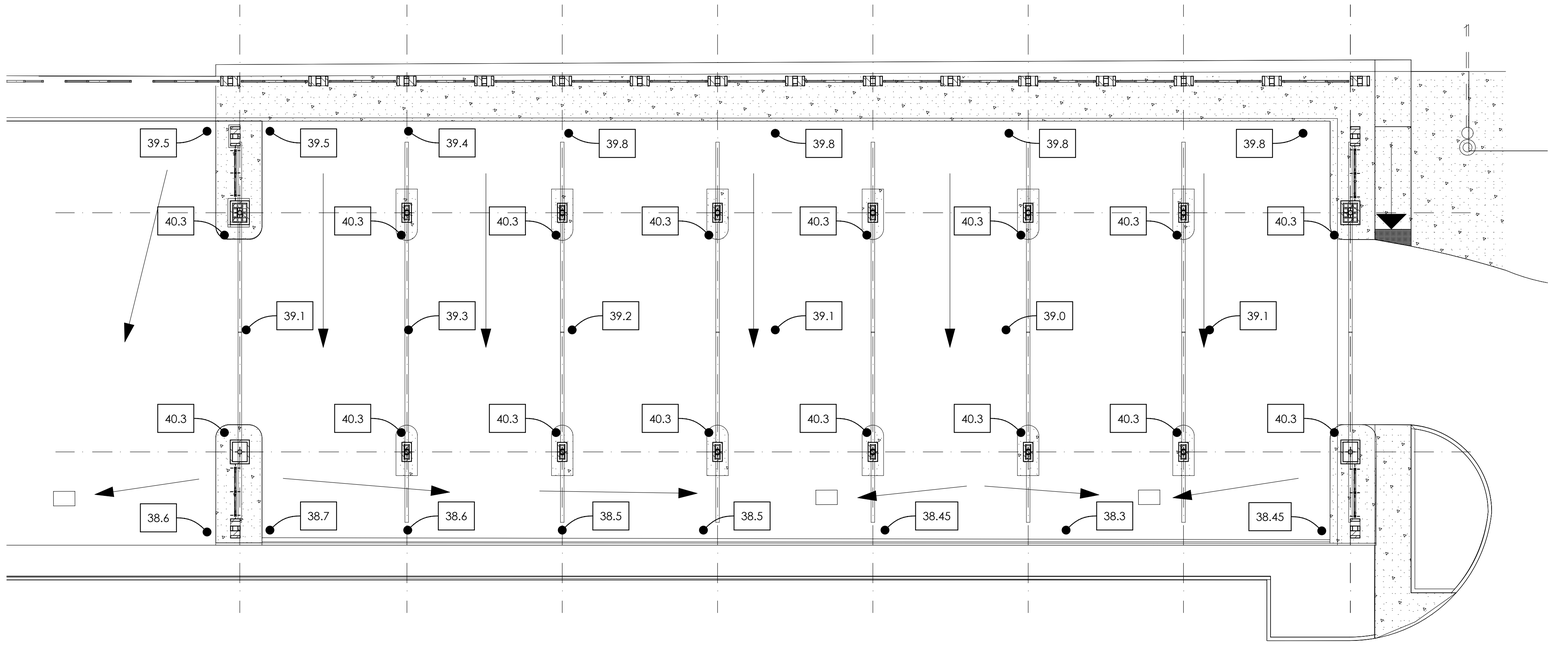
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com



5.3 CONCRETE CURB
AT TOPSOIL EDGE AND ROAD



5.4 CONCRETE CURB AND WALK
AT PARKING AND DRIVE



DRAINAGE SITE PLAN
SCALE: 1" = 10'

The Pavilion at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

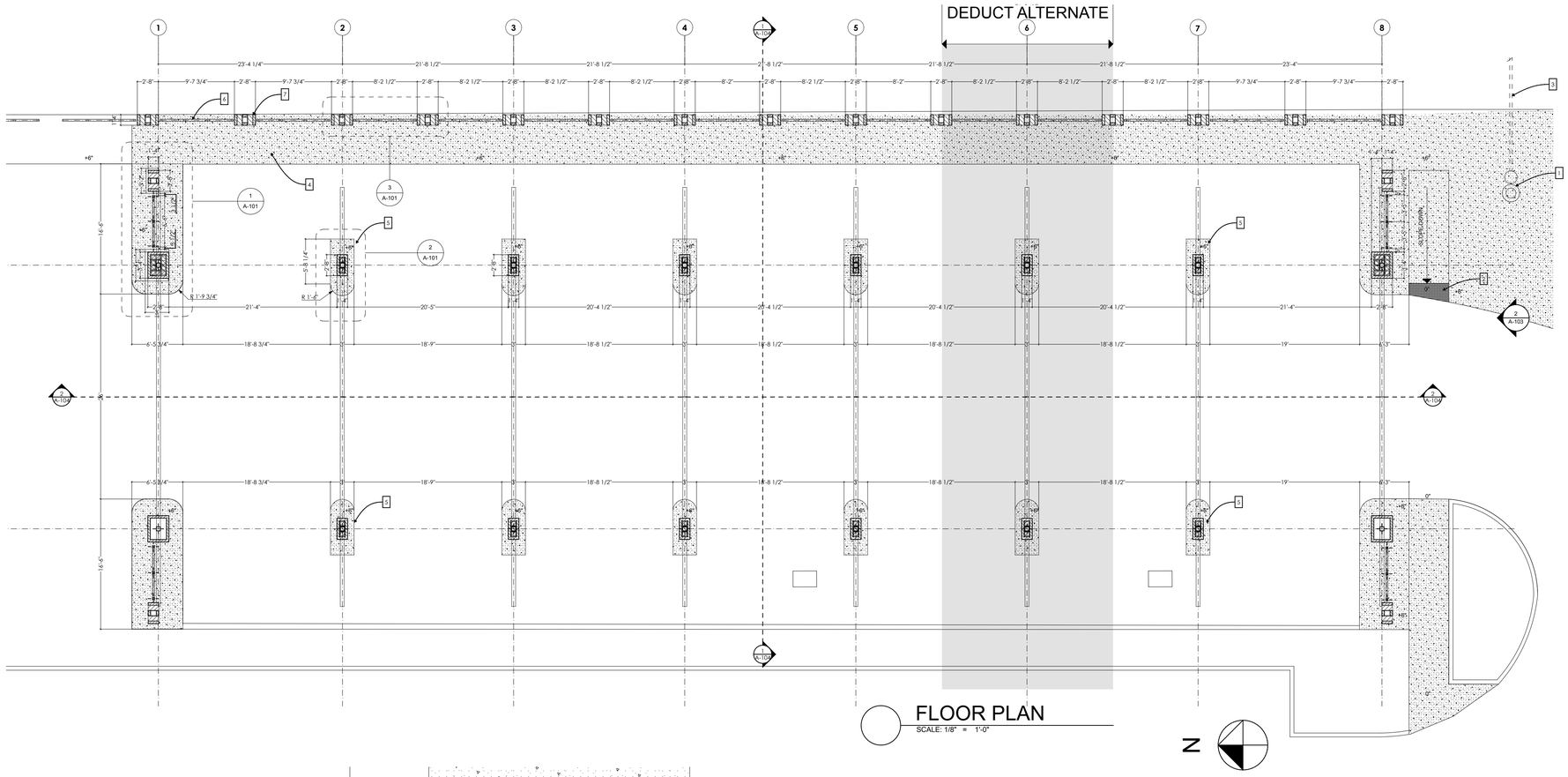
revision no. revision date

drawn by
T. Pistorius

THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
SITE PLAN DRAINAGE

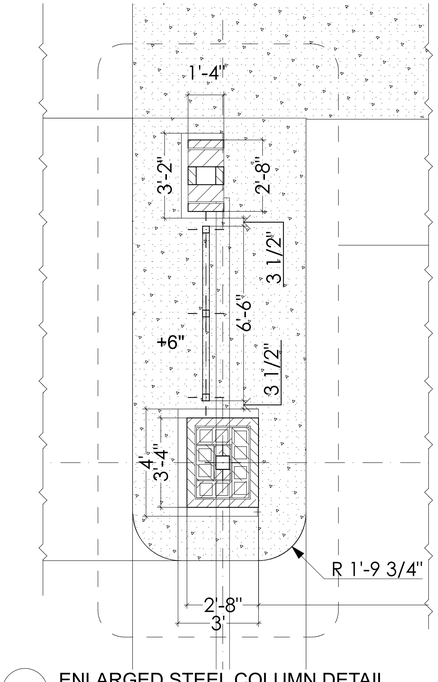
drawing no.
AS-104



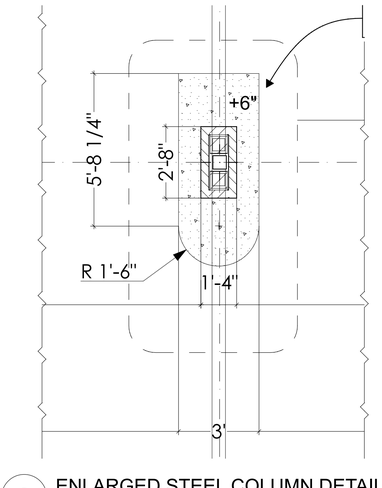
FLOOR PLAN
SCALE: 1/8" = 1'-0"

FLOOR PLAN KEY NOTES:

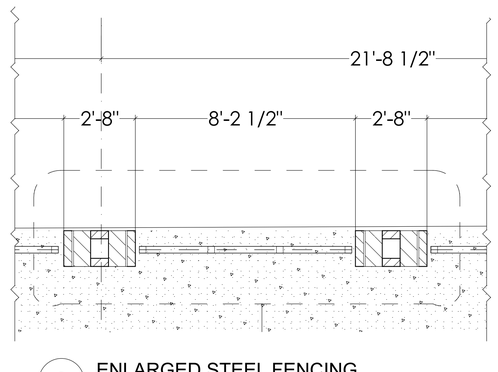
1. DRINKING FOUNTAIN, TYP. OF ONE. ELKAY LK4420DB OUTDOOR DRINKING FOUNTAIN WITH PET FOUNTAIN, BI-LEVEL PEDESTAL, ADA, OR APPROVED EQUAL.
2. TRUNCATED DOME INSERT WITHIN CONCRETE WALK.
3. 2" SCH-40 PVC SUB-GRADE TO DAYLIGHT IN DITCH.
4. ALL SIDEWALKS 3,000 PSI 3 1/2" CONCRETE WITH 4X4 WWF, 8 GA.
5. CURB HEIGHTS IN THE GENERAL AREA UNDER MAY RANGE IN HEIGHTS FROM 4"-8" DEPENDING ON THE EXISTING ASPHALT GRADE ADJACENT.
6. TUBE STEEL FENCING WITH HORSE-PANEL TYPE WIRE GRID (2"x4") HOT DIPPED GALVANIZED, HIGH PERFORMANCE PAINT COATING TO MATCH FRAME.
7. BRICK PIERS BETWEEN EACH FENCE PANEL. SEE EXTERIOR ELEVATIONS.



1 ENLARGED STEEL COLUMN DETAIL
@ CMU/BRICK VENEER



2 ENLARGED STEEL COLUMN DETAIL
@ CMU/BRICK VENEER



3 ENLARGED STEEL FENCING
@ CMU/BRICK VENNER FENCE

pistoriusassociates, llc
ARCHITECTS
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

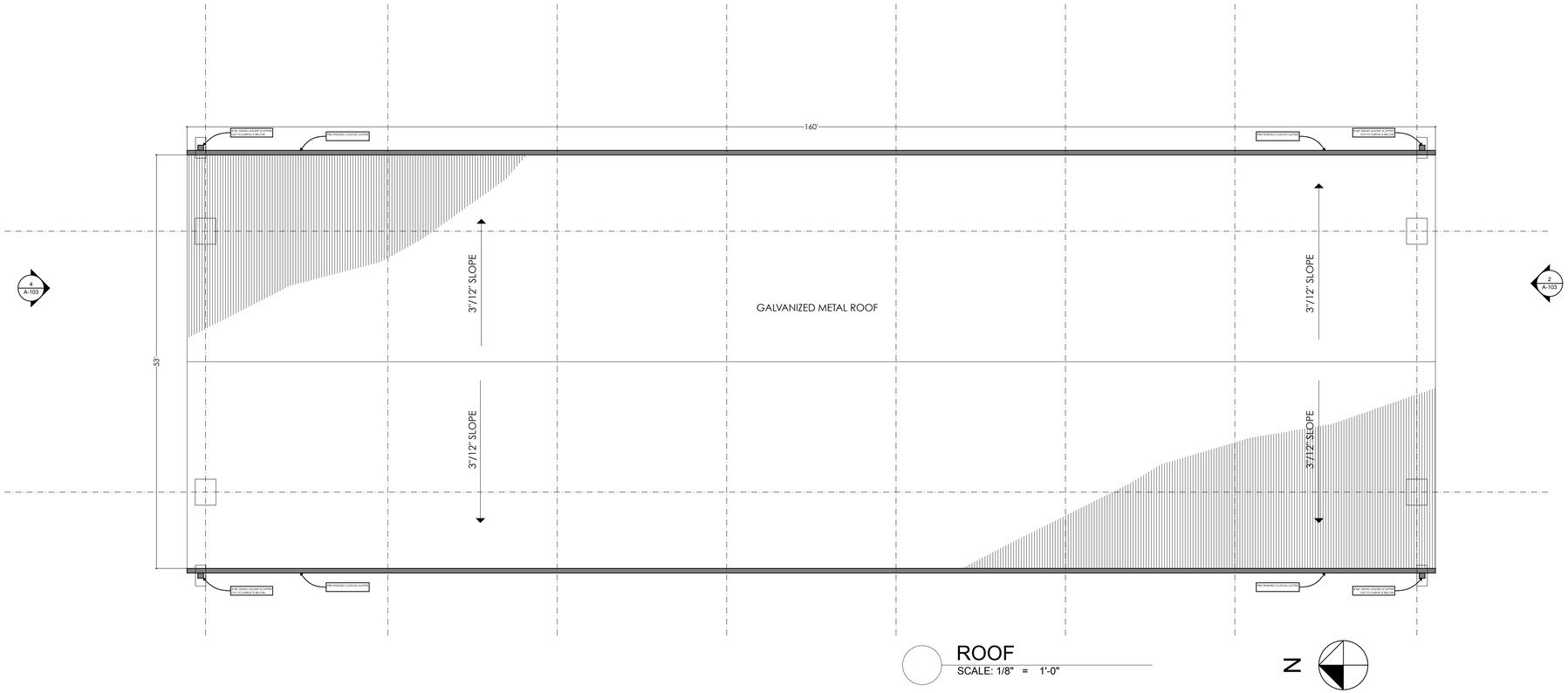
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341
date of issue
July 10, 2024
project phase
Construction Documents
revision no. revision date

drawn by
T. Pistorius

THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
FLOOR PLAN
drawing no.
A-101



ROOF
SCALE: 1/8" = 1'-0"

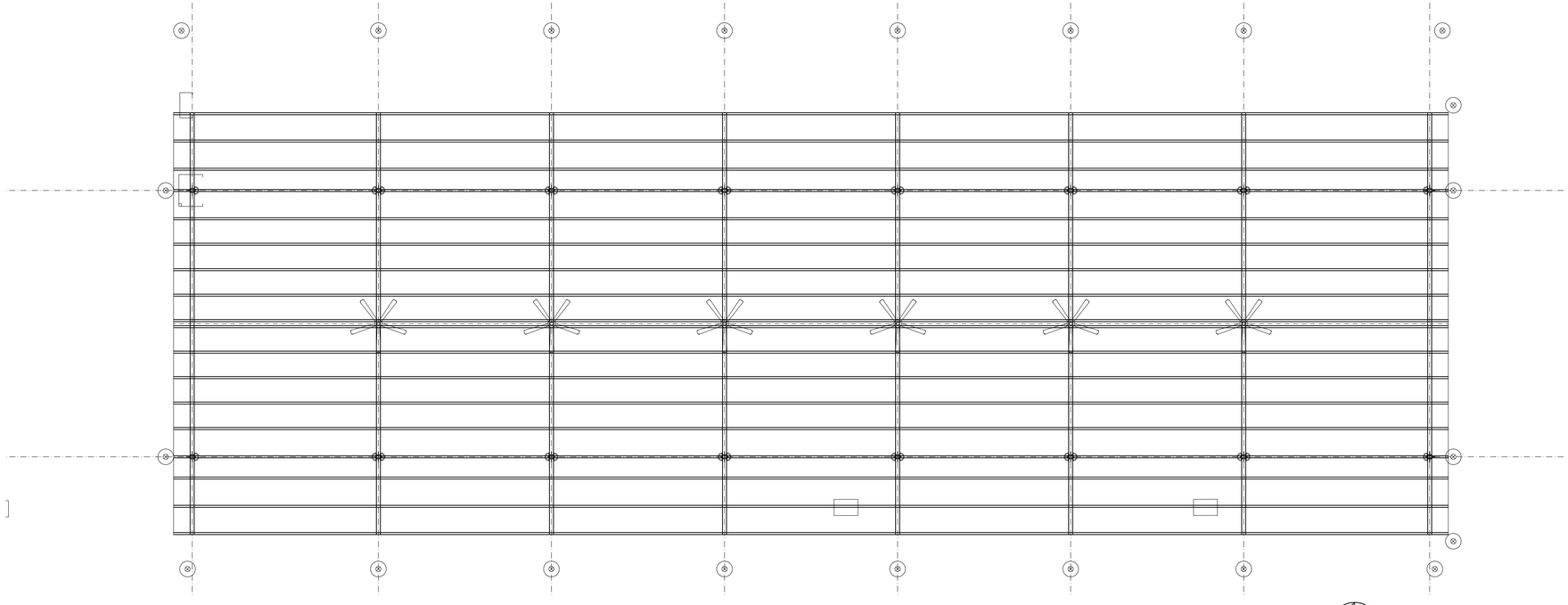
N

ROOF PLAN LEGEND:

ROOF SLOPE DIRECTION

3" : 12" ROOF SLOPE

PRE-FINISHED METAL STANDING SEAM ROOF. MANUFACTURER:MCELROY FASTENED TO METAL PURLINS



REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

N

REFLECTED CEILING PLAN LEGEND:

FAN/LIGHT KIT

WALL SCONCE - EACH SIDE OF STEEL COLUMN

GC6020L DEPOT STYLE LIGHT FIXTURE FROM GLP

pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

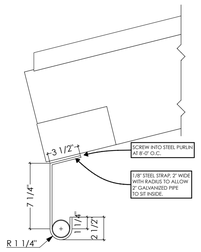
revision no. revision date

drawn by
T. Pistorius

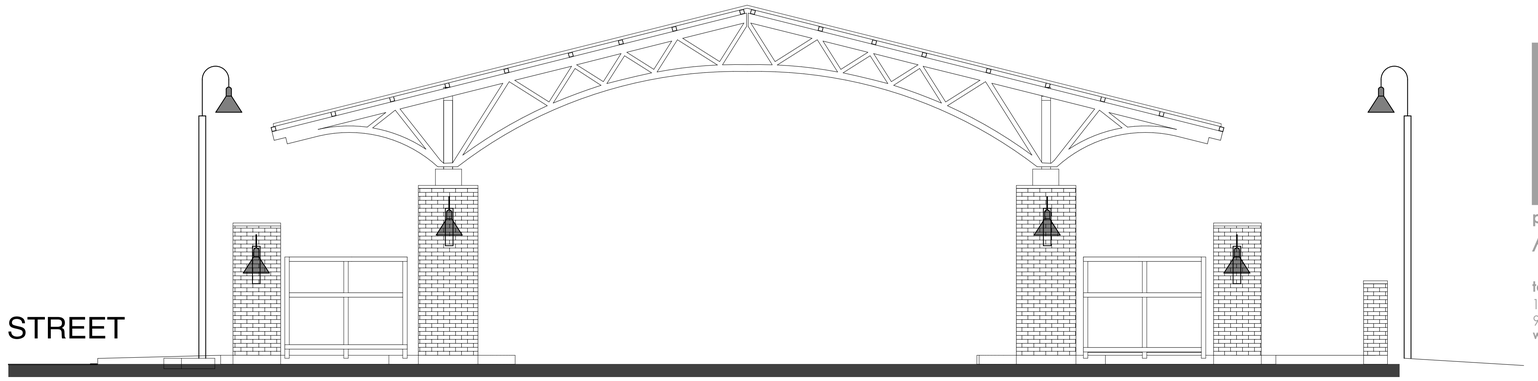
THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
ROOF PLAN/RCP

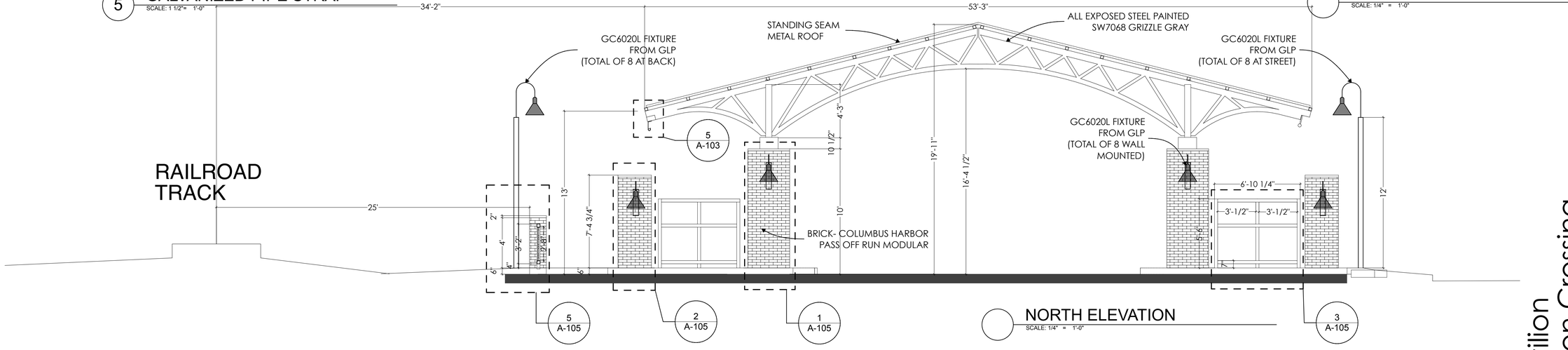
drawing no.
A-102



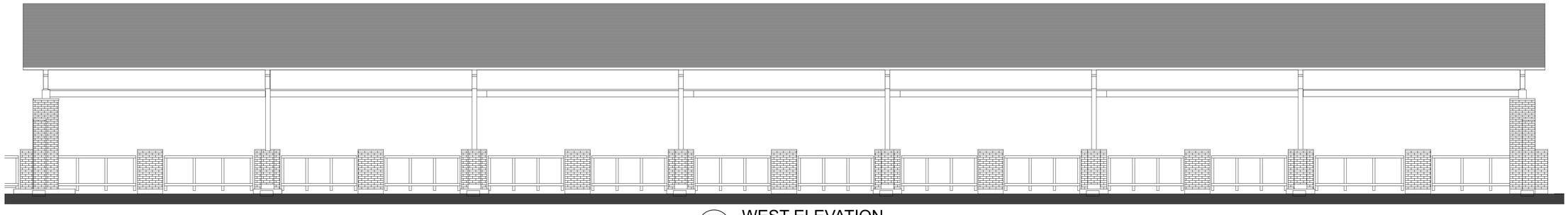
5 GALVANIZED PIPE STRAP
SCALE: 1 1/2"= 1'-0"



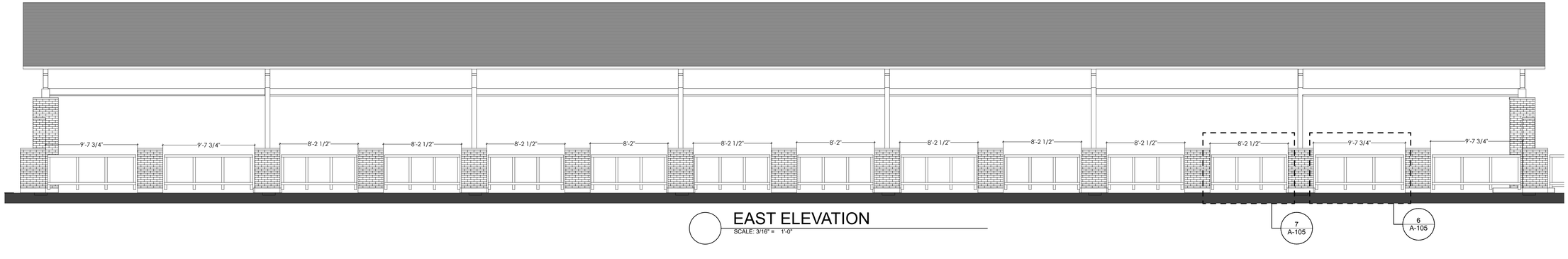
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 3/16" = 1'-0"



EAST ELEVATION
SCALE: 3/16" = 1'-0"

pistoriusassociates, llc
ARCHITECTS
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

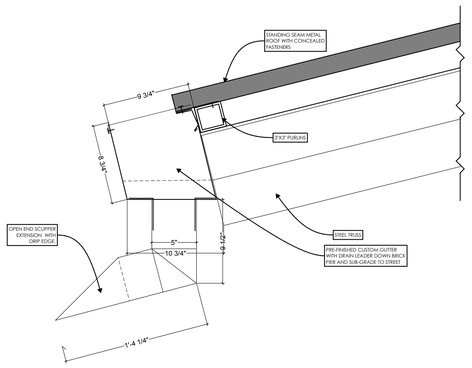
The Pavilion at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341
date of issue
July 10, 2024
project phase
Construction Documents
revision no. revision date

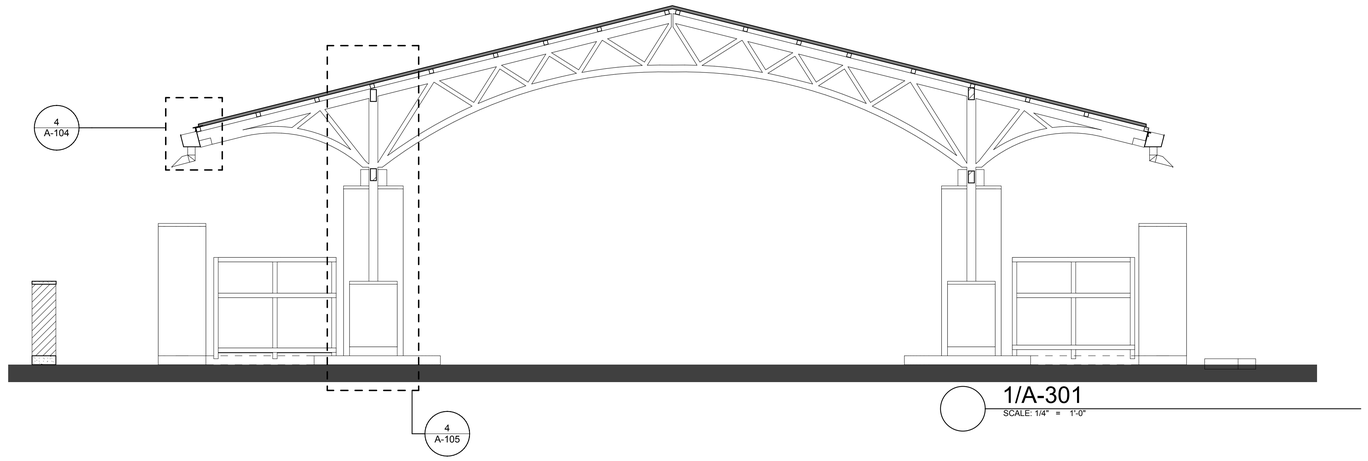
drawn by
T. Pistorius

THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

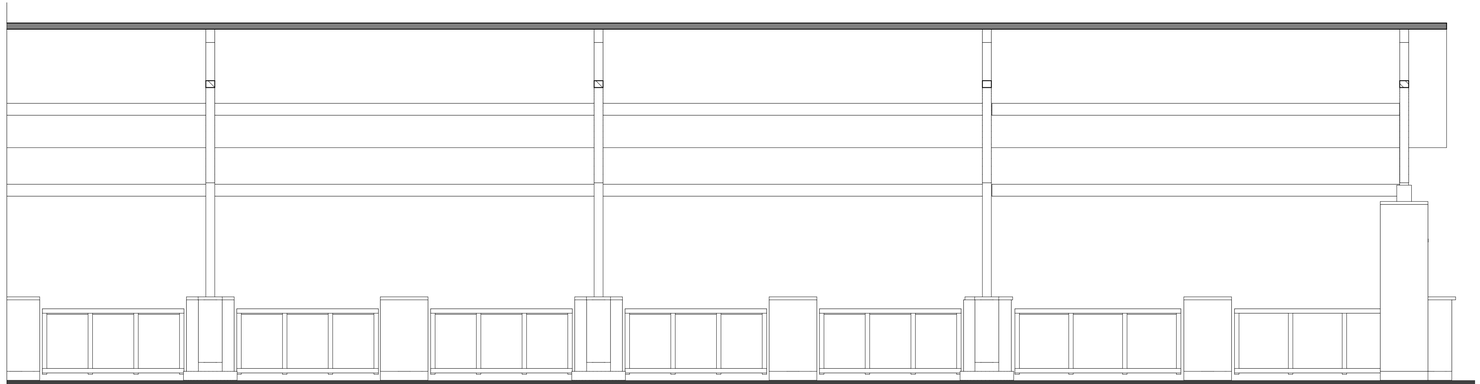
drawing title
ELEVATIONS
drawing no.
A-103



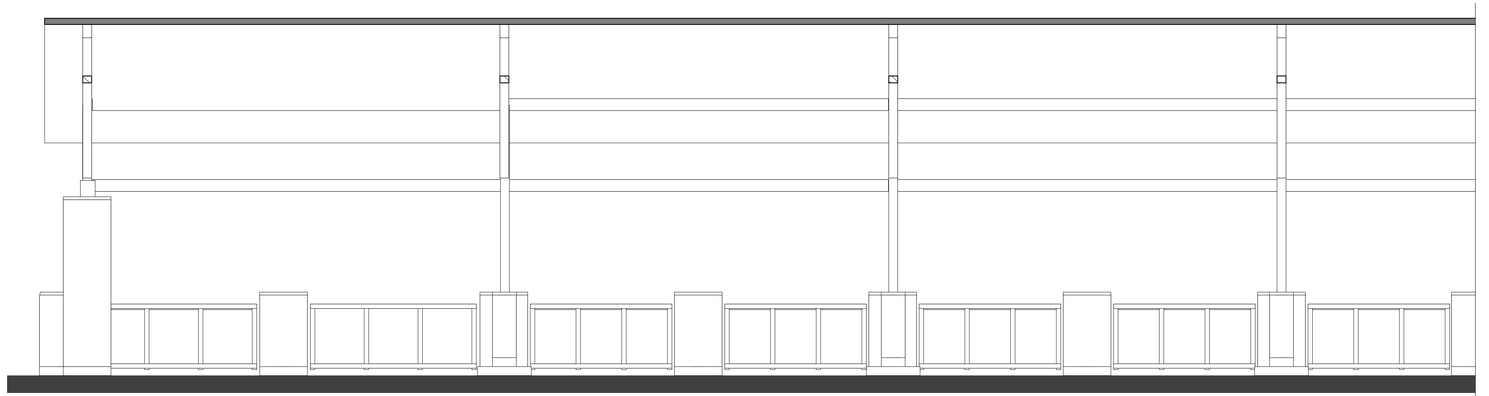
4 GUTTER/ROOF EAVE
SCALE: 1 1/2"= 1'-0"



1/A-301
SCALE: 1/4" = 1'-0"



2/A-301 SOUTH HALF
SCALE: 1/4" = 1'-0"



2/A-301 NORTH HALF
SCALE: 1/4" = 1'-0"

pa
pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

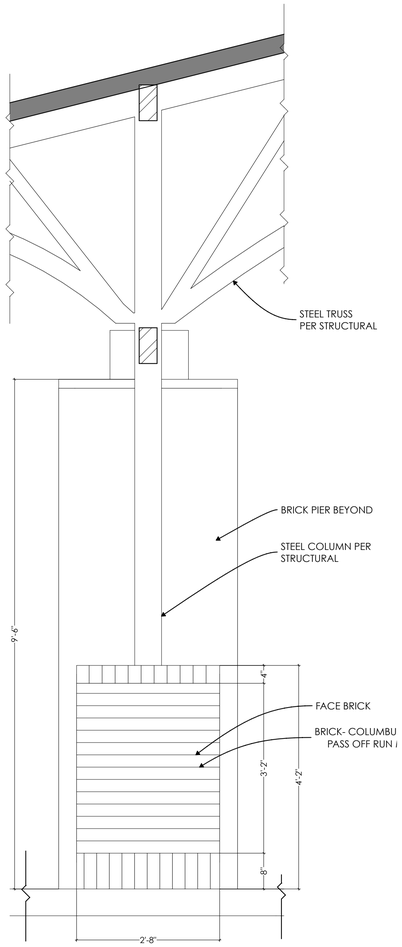
revision no. revision date

drawn by
T. Pistorius

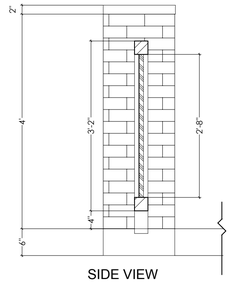
THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
SECTIONS

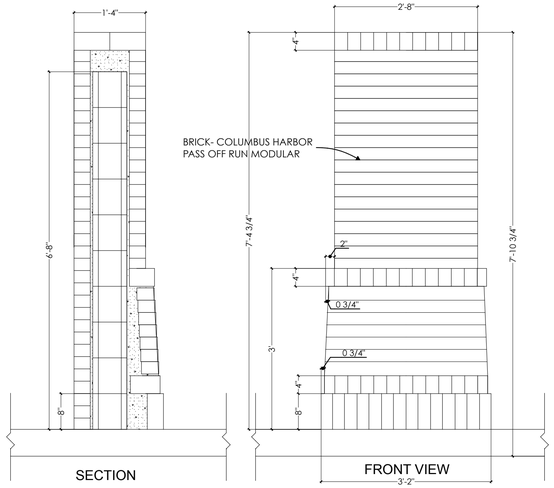
drawing no.
A-104



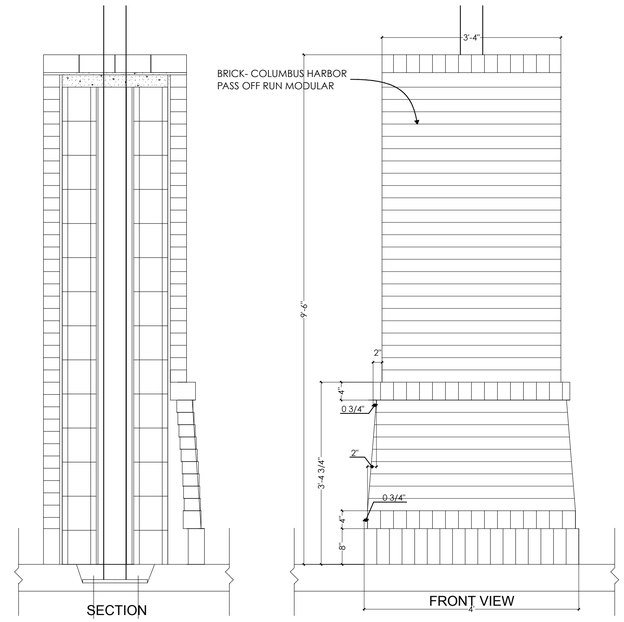
4 CENTER COLUMNS UNDER PAVILION
SCALE: 3/4" = 1'-0"



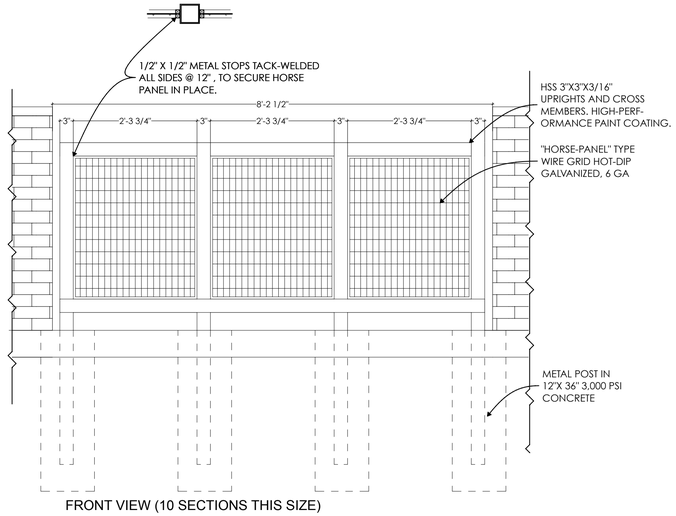
5 REAR BRICK PIER @ FENCE
SCALE: 3/4" = 1'-0"



2 ADJACENT BRICK PIER
SCALE: 3/4" = 1'-0"

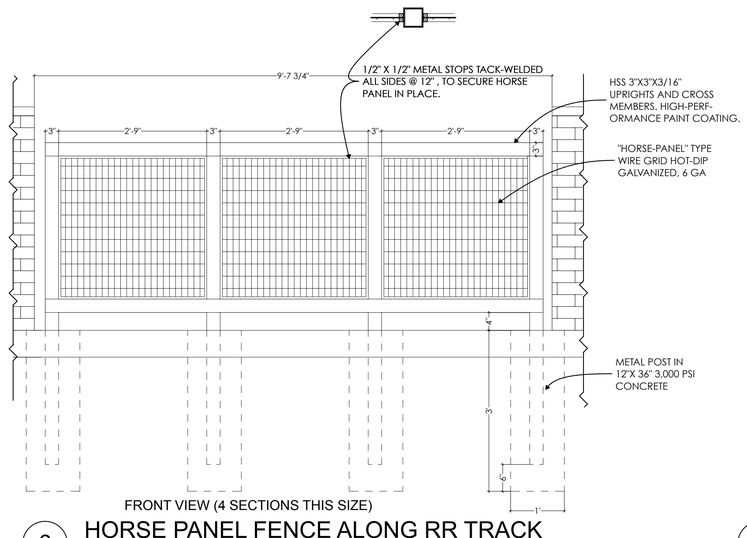


1 MAIN BRICK PIER
SCALE: 3/4" = 1'-0"



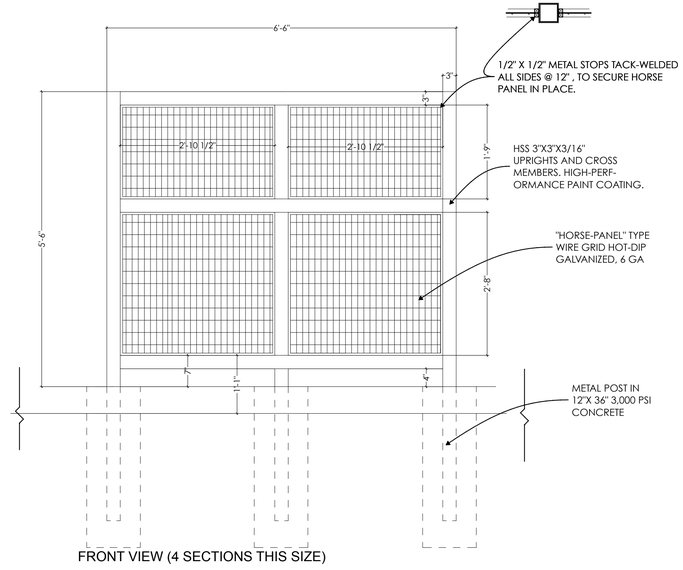
FRONT VIEW (10 SECTIONS THIS SIZE)

7 REAR BRICK PIER @ FENCE
SCALE: 3/4" = 1'-0"



FRONT VIEW (4 SECTIONS THIS SIZE)

6 HORSE PANEL FENCE ALONG RR TRACK
SCALE: 3/4" = 1'-0"



FRONT VIEW (4 SECTIONS THIS SIZE)

3 HORSE PANEL WIRE GRID FENCE
SCALE: 3/4" = 1'-0"

pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

revision no. revision date

drawn by
T. Pistorius

THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
ENLARGED BRICK PIERS

drawing no.
A-105

CITY OF HAMMOND, LOUISIANA

HAMMOND MUNICIPAL EVENT PAVILION
AT HANSON CROSSING
HAMMOND, LOUISIANA

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF:
   AMERICAN CONCRETE INSTITUTE (ACI) LATEST EDITION
   AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) LATEST EDITION
   AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARDS (ASCE) LATEST EDITION
   AMERICAN FOREST AND PAPER ASSOCIATION NDS LATEST EDITION
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING STRUCTURES, UNDERGROUND UTILITIES AND OVERHEAD POWER LINES IN THE AREA OF THE WORK AND NOTIFY THE OWNER OF ANY INTERFERENCES BEFORE PROCEEDING WITH THE WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND CONSTRUCTION.
4. FOR THIS WORK TEMPORARY BENCH MARK LOCATION SEE SURVEY BY XXX-ENG.NAME-XXX DOCUMENT DRAWING DATED MONTH 0, 20XX.
5. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (+) ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS IN THE FIELD.
6. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (N.T.S) ARE NOT SHOWN TO SCALE
7. THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STRUCTURE IS COMPLETE.

DESIGN LOAD CRITERIA:

CONCRETE, STRUCTURAL STEEL MEMBERS AND CONNECTIONS ARE DESIGNED PER IBC 2021 AND ASCE 7-22 BY ALLOWABLE STRESS DESIGN AND LFRD

LIVE LOADS:

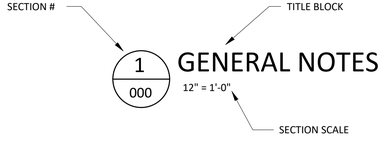
1ST FLOOR = 100 psf
ROOF = 20LBS/SQFT

WIND LOAD DATA:

PER ASCE 7-22 3-SEC PEAK GUST MPH
ENVELOPE
OPEN
RISK CATEGORY II
WIND SPEED = 120 MPH
WIND EXPOSURE B
INTERNAL PRESSURE COEFFICIENT +/- 0.55
COMPONENTS AND CLADDING:
ROOF = + ZONE 1 = +18.66/ -29.64
= + ZONE 2 = +18.66/ -60.37
= + ZONE 3 = +18.66/ -66.98
= + ZONE 2 + 3 WIDTH = 5 FT

SEISMIC LOAD DATA:

SITE CLASS D
SMS = 0.17 g
SM1 = 0.14 g
SDS = 0.11 g
SD1 = 0.095 g
OCCUPANCY CATEGORY B



CONCRETE NOTES:

1. DESIGN, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING STANDARDS:
   a. ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
   b. ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   c. ACI 315 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
2. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
3. CONCRETE ADMIXTURES SHALL NOT BE USED WITHOUT OWNER PRIOR APPROVAL.
4. PROVIDE ANCHOR/RODS BOLTS CONFORMING TO ASTM F1554 GRADE 36, HEAVY HEXAGON NUTS CONFORMING TO ASTM A563 AND WASHERS CONFORMING TO F436. GALVANIZE BOLTS, NUTS, SLEEVES AND WASHERS IN ACCORDANCE ASTM A153. REINFORCING BARS SHALL CONFORM TO ASTM A615 REQUIREMENTS FOR GRADE 60 DEFORMED BARS. DETAILING & FABRICATION SHALL BE IN ACCORDANCE WITH ACI 315.
5. THE CONTRACTOR SHALL POUR (4) CONCRETE TEST CYLINDERS, PER PER 50 CY IN ACCORDANCE WITH ASTM C31 AND TEST THE CYLINDERS IN ACCORDANCE WITH ASTM C39.
6. STRUCTURAL COLUMN BASE PLATES SHALL BE GROUTED USING NON SHRINK CEMENT GROUT BY FIVE STAR PRODUCTS INC. OR APPROVED EQUAL.
7. CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 318 AND 308R.
8. ALL SPLICES AND DEVELOPMENT LENGTHS SHALL BE IN ACCORDANCE WITH ACI 318, SECTION 12, "BUILDING CODE REQUIRED FOR STRUCTURAL CONCRETE" ALL SPLICES SHALL BE CLASS "B", UNLESS APPROVED OTHERWISE.

EARTHWORK NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE IN PERFORMING ALL EARTH WORK IN ACCORDANCE WITH SPECIFICATION 2200 AND BELOW REFERENCED SOILS REPORT.
2. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR MAINTAINING THE STABILITY OF ALL EXCAVATED FACES IN COMPLIANCE WITH OSHA REQUIREMENTS UNTIL FINAL ACCEPTANCE OF THE WORK.
3. ALL LIFTS SHALL BE HEAVILY PROOF-ROLLED WITH A MODERATELY HEAVY LOADED PNEUMATIC ROLLER. SOILS THAT ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOADS SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED FILL.
4. BACK FILL:
   SHALL BE A CLASSIFIED AS CL, SP OR SP-SM. CL SHALL HAVE A LL LESS THAN 40 AND PLASITICITY INDEX BETWEEN 12 AND 22. SAND SP SHALL HAVE LESS THAN 10% PASSING THE 200 SIEVE.
5. ALL FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 9 INCHES AND COMPACTED TO 95% MODIFIED PROCTOR.
6. EXCESS EXCAVATED MATERIAL AND/OR UNUSED BACK FILL MATERIALS SHALL BE REMOVED AND HAULED TO AN AREA DESIGNATED BY OWNER.
7. WASHED SAND SHALL COMPLY WITH ASTM C33 FOR FINE AGGREGATE CONCRETE SAND.
8. SOIL BEARING CAPACITY = 1500 psf

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED AS PER ARCHITECTURAL SPECIFICATIONS
2. ALL STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL BE ASTM A992 (UNLESS STATED OTHERWISE OTHER STEEL SECTIONS, PLATES, AND BARS SHALL CONFORM TO ASTM A36.
3. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL BOLTS SHALL COMPLY WITH ASTM A325 SPECIFICATION AND BE 3/4" DIAMETER TYPE N BOLTS, BEARING TYPE WITH THE BOLT THREADS IN THE SHEAR PLANE. ALL BOLTED CONNECTIONS SHALL HAVE NUTS (PER ASTM A563 DH) AND WASHERS (PER ASTM F436). BOLT HOLES SHALL BE 1/16" DIA. GREATER THAN THE DIAMETER OF THE BOLT UNLESS NOTED OTHERWISE.
4. ALL STRUCTURAL BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS". ALL A325 BOLTS SHALL BE TIGHTENED TO THE "SNUG TIGHT" CONDITION AS DEFINED IN THE SPECIFICATION UNLESS THE DESIGN DRAWINGS INDICATE THAT "FULL PRE-TENSIONING" OF THE BOLTS IS REQUIRED. THE "SNUG TIGHT" CONDITION IS DEFINED PER THE SPECIFICATION AS "THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FULL CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. WHERE "FULL PRE-TENSIONING" OF THE BOLTS FOR A CONNECTION IS SPECIFIED, THE BOLTS SHALL BE TIGHTENED UTILIZING DIRECT TENSION INDICATOR WASHERS CONFORMING TO ASTM F959, PER MANUFACTURER'S INSTRUCTIONS. ALL GALVANIZED NUTS AND BOLTS MUST BE LUBRICATED PRIOR TO FULL PRE-TENSIONING.
5. ALL HOLES IN NEW STEEL SHALL BE DRILLED OR PUNCHED. NO BURNING OF HOLES SHALL BE PERMITTED.
6. GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS, UNLESS NOTED OTHERWISE. ALL PLATES SHALL BE GAS CUT OR SAW CUT (NO SHEARED EDGES).
7. ALL WELDING ELECTRODES SHALL BE E-70XX SERIES IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY SPECIFICATION AWS D1.1-2006.
8. FILLET WELDS SHALL BE ALL AROUND AND CONTINUOUS FULL LENGTH, UNLESS NOTED OTHERWISE. PROVIDE CONTINUOUS SEAL WELDS AND VENT HOLES FOR ALL CONNECTED PARTS TO BE GALVANIZED.

MASONRY NOTES:

1. FURNISH AND INSTALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE MASONRY WORK AS SHOWN ON DRAWINGS AND ELEVATIONS.
2. NO MASONRY WORK SHALL BE DONE WHEN THE TEMPERATURE IS 40 DEG F OR BELOW AND FALLING OR FREEZING TEMPERATURES ARE PREDICTED WITHIN TWENTY FOUR (24) HOURS, UNLESS ADEQUATE PROTECTION IS PROVIDED.
3. SUBMISSIONS: SUBMIT FACE BRICK TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION TO MATCH SAMPLES ON FILE WITH OWNERS CONSTRUCTION REPRESENTATIVE.

MATERIALS:

BRICK:

A. FACE BRICK SHALL CONFORM TO ASTM SPECIFICATION C-216. BRICK SHALL BE NORMAL SIZE (2 1/2" X 7 5/8" X 3 5/8"), UNIFORM IN SIZE, SHAPE, AND COLOR. BRICK TEXTURE AND THRU-BODY COLOR SHALL MATCH SAMPLES ON FILE WITH THE AFC'S FIELD REPRESENTATIVE.

B. BUILDING BRICK SHALL CONFORM TO ASTM SPECIFICATION C62. USE GRADE SW FOR FOUNDATIONS, WORK BELOW GRADE, AND WORK IN CONTACT WITH EARTH. USE GRADE MW FOR WALLS ABOVE GRADE. BRICK SHALL BE NORMAL SIZE (2 1/2" X 7 5/8" X 3 5/8"), UNIFORM IN SIZE AND SHAPE. USE BUILDING BRICK FOR WORK NOT EXPOSED TO VIEW.

4. JOINT REINFORCEMENT AND ANCHORS:

   BEARING WALLS: MASONRY JOINT REINFORCEMENT FOR EXTERIOR WALLS SHALL BE SIZED FOR APPROPRIATE WALL THICKNESS TO PROVIDE 5/8" MINIMUM MORTAR COVERAGE ON THE FACES OF MASONRY CAVITY WALLS AND COMPOSITION OF 3/16" DEFORMED SIDE RODS AND 3/16" CROSS RODS. ALL REINFORCEMENT SHALL BE HOT DIP GALVANIZED. PRODUCTS SHALL BE AS MANUFACTURED BY DUR-O-WALL, AA WIRE PRODUCTS, OR EQUAL.

5. BRICK AND CONCRETE BLOCK MORTAR: TYPE M OR S, CONFORMING TO ASTM-270, COLOR TO MATCH SAMPLES ON FILE WITH OWNER REPRESENTATIVE FOR EXPOSED MASONRY AND UNCOLORED MORTAR FOR CONCEALED BACK-UP MATERIALS.
   A. CEMENT: SHALL BE STANDARD BRAND OF GRAY PORTLAND, CONFORMING TO ASTM C-150, TYPE I OR II.
   B. SAND: SHALL BE CLEAN, SHARP BUILDERS SAND CONFORMING TO ASTM C-144.
   C. LIME: SHALL BE CALCIUM, TYPE S, CONFORMING ASTM C-207.
   D. WATER: SHALL BE POTABLE, FREE FROM INJURIOUS ALKALIES OR ACIDS, CONFORMING TO ASTM C-270.
   E. PLASTICIZING AGENT: SHALL BE OMICRON, OR APPROVED EQUAL, USED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
   F. SUBSTITUTION: PREPARED MIX SHALL CONFORM TO THE LIME-CEMENT MORTAR AND COLORS AS SPECIFIED ABOVE.
6. ALL FILLED VERTICAL CELLS OR CAVITIES IN MASONRY UNITS SHALL BE FILLED CONTINUOUSLY WITH COARSE GROUT IN ACCORDANCE WITH ACI 530 AND ASTM C476. NO VOIDS, HONEYCOMBS, OR GAPS WILL BE ALLOWED.
7. ALL MASONRY HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 530.
8. ALL HORIZONTAL U-BLOCK BOND BEAMS OR LINTELS MAY BE FILLED WITH EITHER GROUT OR PEA GRAVEL CONCRETE.
9. PLACE CONTINUOUS "DUR-O-WALL" JOINT REINFORCING IN EVERY OTHER HORIZONTAL JOINT (16" O.C. VERTICALLY) IN ALL CMU WALLS.

INDEX TO SHEETS

JUNE 12th, 2024

Kyle Associates, LLC
Planning, Engineering, and Landscape Architecture
638 Village Lane N. • Mandeville, LA 70471 • 985.727.9377

KYLE ASSOCIATES PROJECT NO. 24028

PRELIMINARY SUBMITTAL

CADD FILE NAME: 24028 HmdPavl StructSet.dwg

DESIGNED BY:	DRAWN BY:	CHECKED BY:	JOB NO.
TPD	AKV	TPD	24028

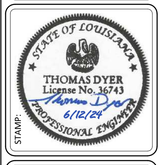
SCALE: (22x34) -
SCALE: (11x17) -
DATE: 6/12/24

CITY OF HAMMOND
HAMMOND EVENT PAVILION
SWRR AVENUE AT HANSON CROSSING
HAMMOND, LA

STRUCTURAL NOTES

NO.	DATE:	REVISIONS	APP'D

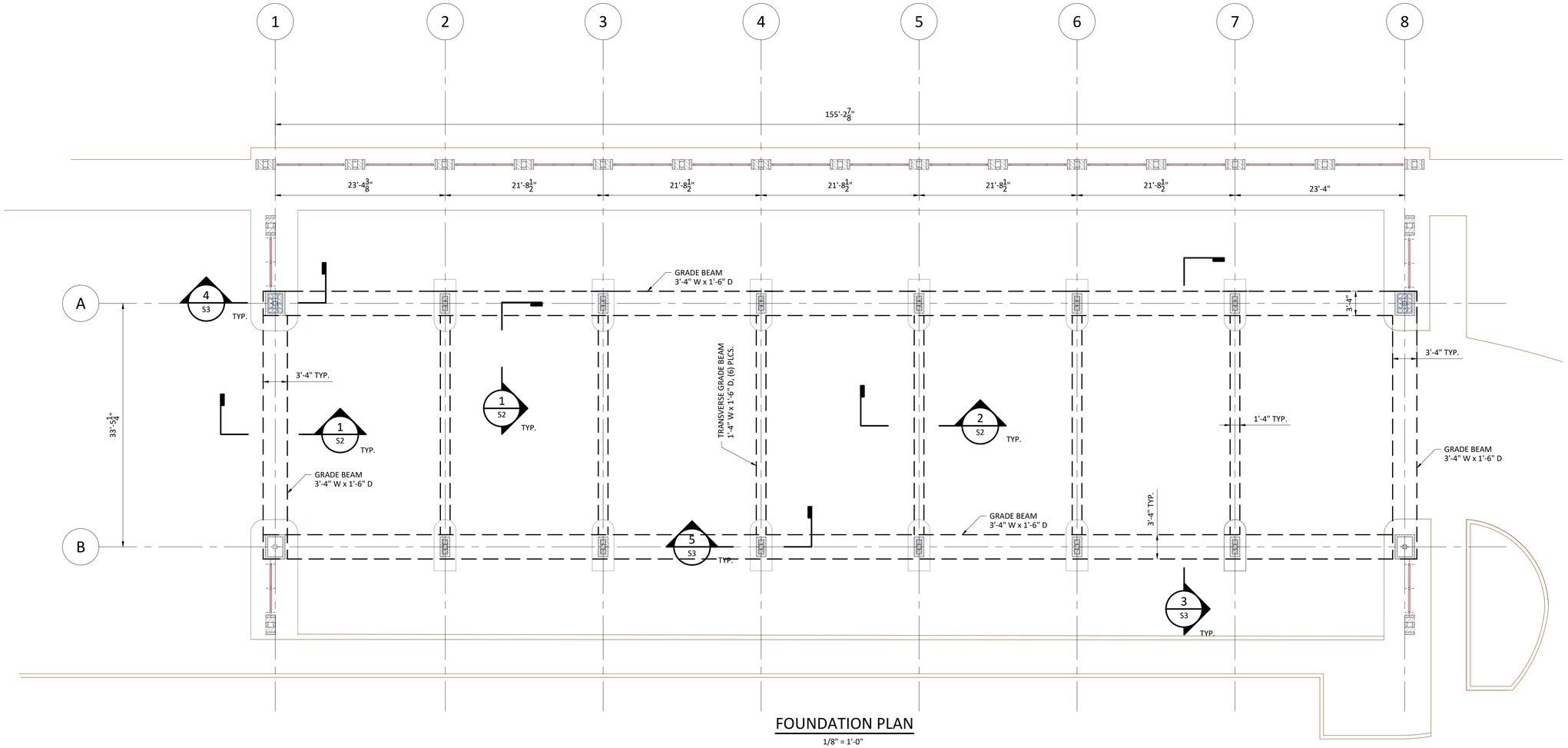
STAMP:



Kyle Associates, LLC
Planning, Engineering, and Landscape Architecture
638 Village Lane N. • Mandeville, LA 70471 • 985.727.9377

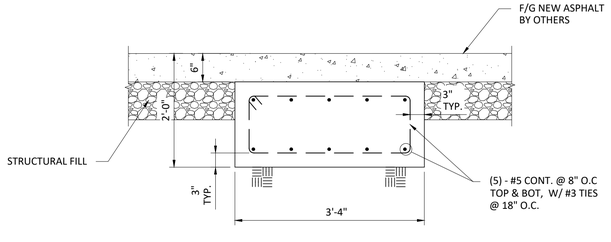
SHEET NO.

S1



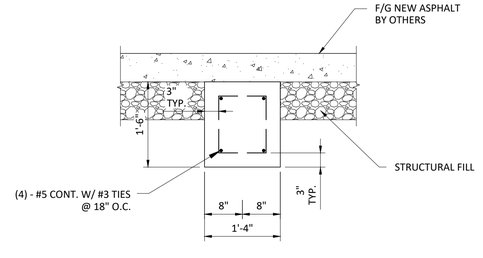
FOUNDATION PLAN

1/8" = 1'-0"



1 S2 SECTION

3/4" = 1'-0"



2 S2 SECTION

3/4" = 1'-0"

CADD FILE NAME:
24028 HmdPavl StructSet.dwg

DESIGNED BY:	DRAWN BY:	CHECKED BY:	JOB NO.
TPD	AKV	TPD	24028

SCALE: (22x34) -
SCALE: (11x17) -
DATE: 6/12/24

CITY OF HAMMOND
HAMMOND EVENT PAVILION
SWRR AVENUE AT HANSON CROSSING
HAMMOND, LA

FOUNDATION PLAN

NO.	DATE:	REVISIONS	APP'D

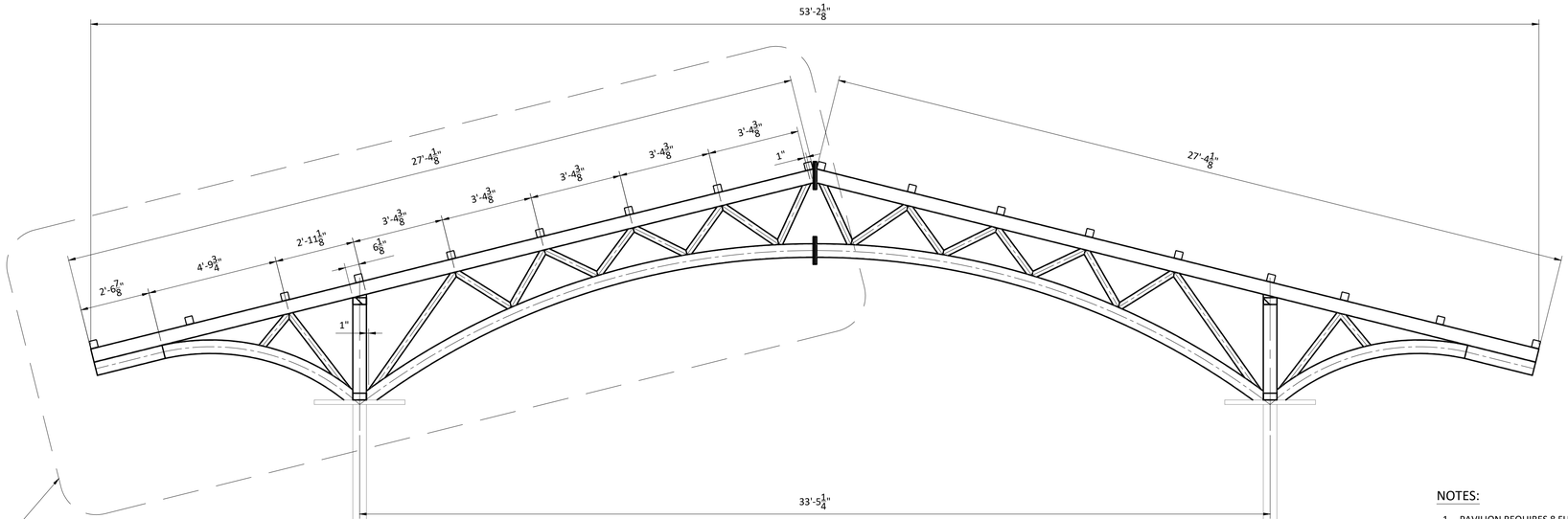
STAMP:

STATE OF LOUISIANA
THOMAS DYER
License No. 36743
6/12/24
PROFESSIONAL ENGINEER

Kyle Associates, LLC
Planning, Engineering, and Landscape Architecture
638 Village Lane N. • Mandeville, LA 70471 • 985.727.5377

SHEET NO.

S2

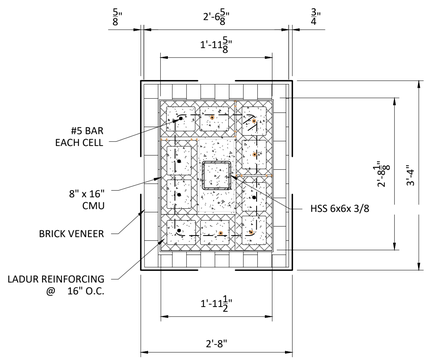


SEE TRUSS STRUCTURAL DETAILS, SHT S3

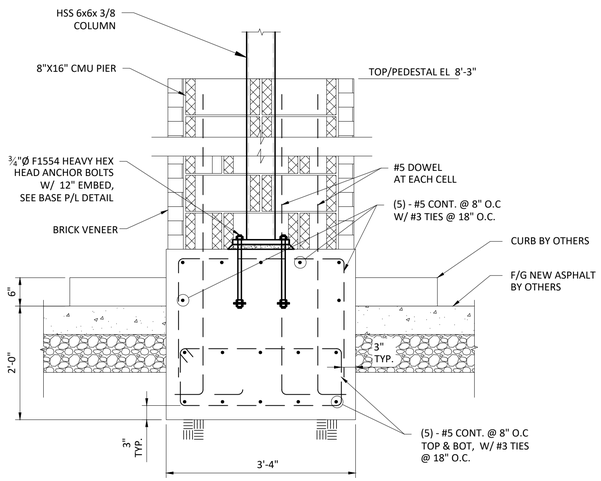
NOTES:

1. PAVILION REQUIRES 8 FULL TRUSSES AS SHOWN IN SECTION 3.

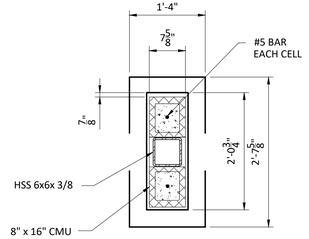
3 / S2 SECTION
3/8" = 1'-0"



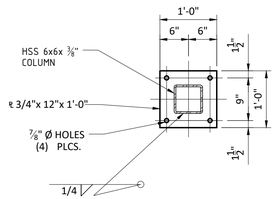
COLUMN PIER SUPPORT
3/4" = 1'-0"



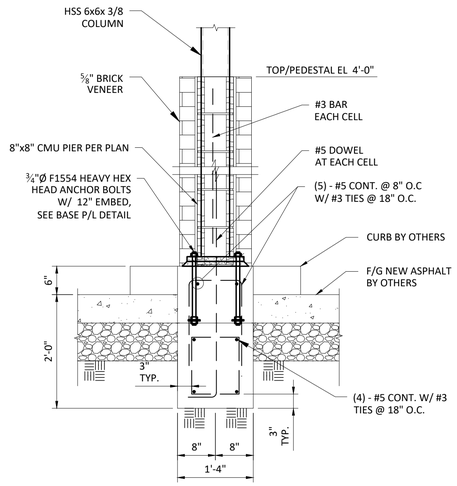
4 / S2 SECTION
3/4" = 1'-0"



COLUMN PIER SUPPORT
3/4" = 1'-0"



BASE PLATE DETAIL
3/4" = 1'-0"



5 / S2 SECTION
3/4" = 1'-0"

CADD FILE NAME:
24028 HmdPavl StructSet.dwg

DESIGNED BY:	DRAWN BY:	CHECKED BY:	JOB NO.
TPD	AKV	TPD	24028

SCALE: (22x34)	SCALE: (11x17)	DATE:
-	-	6/12/24

CITY OF HAMMOND
HAMMOND EVENT PAVILION
SWRR AVENUE AT HANSON CROSSING
HAMMOND, LA

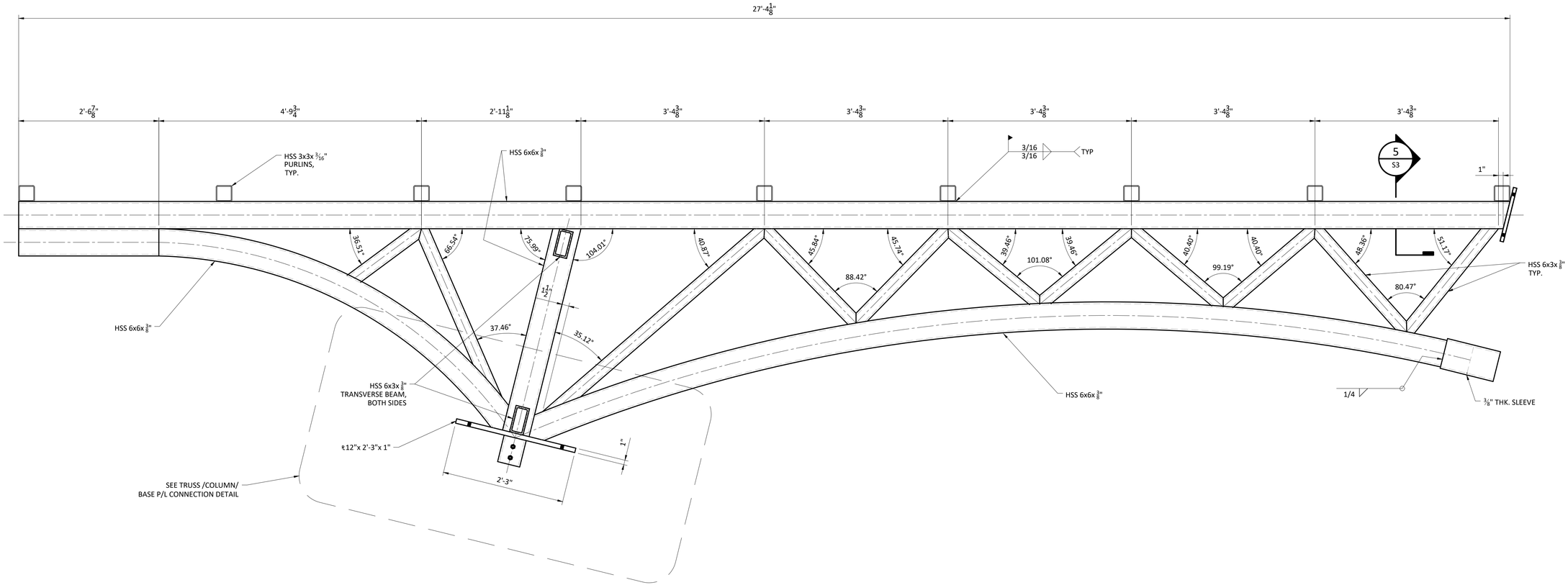
SECTIONS

NO.	DATE:	REVISIONS	APP'D

STAMP: STATE OF LOUISIANA — THOMAS DYER — License No. 36743 — 6/12/24 — PROFESSIONAL ENGINEER

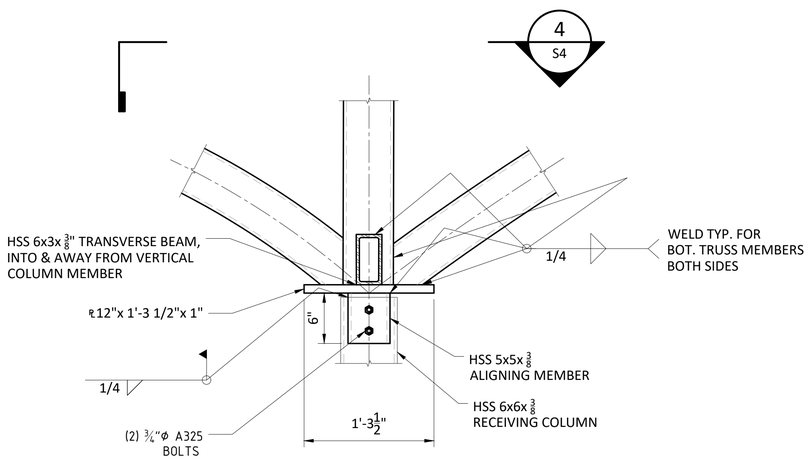
Kyle Associates, LLC
Planning, Engineering, and Landscape Architecture
638 Village Lane N. • Mandeville, LA 70471 • 985.727.9377

SHEET NO.
S3



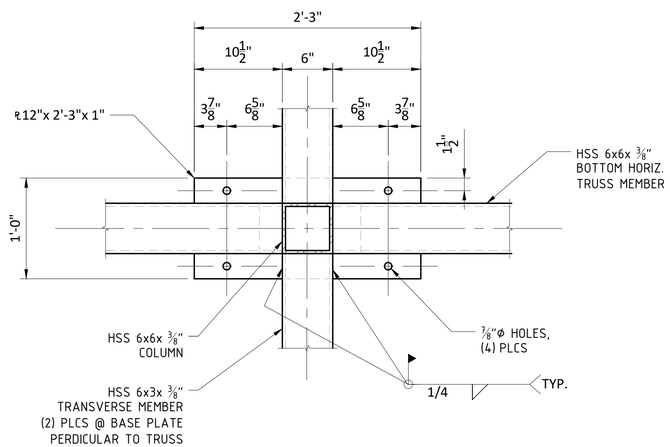
PAVILION TRUSS ASSEMBLY

1" = 1'-0"



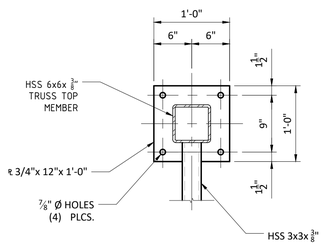
TRUSS /COLUMN/BASE P/L CONNECTION DETAIL

1" = 1'-0"



4 S4 SECTION

1" = 1'-0"



5 S4 SECTION

1" = 1'-0"

CADD FILE NAME: 24028 HmdPavl StructSet.dwg

DESIGNED BY:	DRAWN BY:	CHECKED BY:	JOB NO.
TPD	AKV	TPD	24028

SCALE: (22x34)	SCALE: (11x17)	DATE:
-	-	6/12/24

CITY OF HAMMOND
HAMMOND EVENT PAVILION

SWRR AVENUE AT HANSON CROSSING
HAMMOND, LA

PAVILION TRUSS DETAILS

NO.	DATE:	REVISIONS	APP'D

STAMP: STATE OF LOUISIANA — THOMAS DYER License No. 16743 — 6/12/24 — PROFESSIONAL ENGINEER

Kyle Associates, LLC
Planning, Engineering, and Landscape Architecture
638 Village Lane N. • Mandeville, LA 70471 • 985.727.9377

SHEET NO.

S4

Plot Date: Wednesday, June 12, 2024 11:14:53 AM

User: Alberto Volkmann

File:N:\2024\24028 - Hammond Event Pavilion\Drawings\Structural\24028 HmdPavl StructSet.dwg

ELECTRICAL GENERAL NOTES

1. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, INCLUDING 2020 NEC AND 2021 IECC. IF THERE ARE ANY DISCREPANCIES BETWEEN THE PLANS, SPECIFICATIONS, AND GOVERNING CODES, THEN THE MOST STRINGENT REQUIREMENT APPLIES.
2. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT BE DRAWN EXACTLY TO SCALE. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRICAL WORK TO PROVIDE PROPER CLEARANCES FOR INSTALLATION OF PLUMBING AND MECHANICAL SYSTEMS.
3. THE CONTRACTOR SHALL CONTACT THE ARCHITECT OR ENGINEER PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN THEIR BID ALL COSTS TO MEET THE DESIGN INTENT.
4. ALL ELECTRICAL WIRING AND CABLES TO BE INSTALLED IN A NEAT MANNER PARALLEL/PERPENDICULAR WITH BUILDING LINES, UTILIZING RACEWAYS ON A TRAPEZE SYSTEM. ALL COUPLINGS SHALL LINE UP HORIZONTALLY.
5. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.
6. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES AND DISCIPLINES, INCLUDING CASEWORK CONTRACTOR, PRIOR TO FINAL PLACEMENT OF ANY ELECTRICAL DEVICES.
7. COORDINATE LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN FOR ALL FIXTURE TRIMS AND MOUNTING HARDWARE BASED ON CEILING TYPES, SUSPENDED FIXTURES MOUNTING HEIGHT, AND ALL FIXTURE FINISHES PRIOR TO PURCHASE.
8. INSTALLATION OF LIGHTING FIXTURES SHALL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND CODES REQUIREMENTS.
9. COORDINATE WITH THE ARCHITECT FOR ALL FINAL ELECTRICAL DEVICES MOUNTING HEIGHTS AND LOCATIONS, INCLUDING ALL FURNITURE AND EQUIPMENT CONNECTIONS, PRIOR TO ROUGH-IN.
10. VERIFY ELECTRICAL REQUIREMENTS AND EXACT LOCATIONS OF ALL HVAC AND PLUMBING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS WITH THE MECHANICAL CONTRACTOR PRIOR TO PURCHASING RELATED ELECTRICAL EQUIPMENT.
11. CONTRACTOR TO PROVIDE ALL REQUIRED RACEWAYS AND BACK BOXES FOR THE SPECIAL SYSTEMS, INCLUDING FIRE ALARM, SECURITY, ACCESS CONTROL, DATA/TELECOM, INTERCOM, ETC. COORDINATE WITH ALL SYSTEM VENDORS AND OTHER TRADES PRIOR TO ROUGH-IN.

ELECTRICAL DEMOLITION NOTES

1. ALL INTERRUPTIONS OF ELETRIC SERVICE SHALL BE KEPT TO A MINIMUM. WHERE POWER IS TO BE INTERRUPTED LONGER THEN TWENTY (20) MINUTES TO ANY AREA OF THE BUILDING, THE WORK SHALL BE DONE AFTER NORMAL BUSINESS HOURS. REFER TO ARCHITECTURAL DRAWINGS FOR PHASING OF THIS PROJECT AND TEMPORARY POWER SHALL BE PROVIDED UPON REQUEST AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS IN ADVANCE OF ANY INTERRUPTIONS OF ELETRIC SERVICE TO ANY AREA OF THE BUILDING.
2. DEMOLITION PLANS ARE DIAGRAMMATIC AND DO NOT DEPICT ENTIRE SCOPE OF WORK. ADDITIONAL WORK RELATED TO DEMOLITION MODIFICATIONS SHOULD BE EXPECTED.
3. PRIOR TO BID THE CONTRACTOR SHALL VISIT THE SITE AND IDENTIFY ANY EXISTING CONDITIONS THAT WILL AFFECT THE WORK TO BE PERFORMED.
4. WHERE BOXES REMAIN AFTER REMOVAL OF FIXTURES AND DEVICES FROM EXISTING (TO REMAIN) CONSTRUCTION, PROVIDE BLANK COVER.
5. EXACT LOCATION OF ALL EXISTING TO REMAIN OR TO BE RELOCATED FIXTURES, DEVICES, AND EQUIPMENT SHALL BE ESTABLISHED AND VERIFIED IN THE FIELD.
6. REMOVAL OF ANY ELECTRICAL MATERIAL SHALL INCLUDE THE REMOVAL OF ALL CONTROLS, CONDUCTORS, AND CONDUITS ASSOCIATED WITH THE ELECTRICAL MATERIAL, UNLESS NOTED OTHERWISE. IF COMPLETE CIRCUITRY IS TO BE DEMOLISHED, REMOVE THE RACEWAYS AND CONDUCTORS BACK TO THE PANEL.
7. IN ALL AREAS WHERE REMOVAL OF CEILINGS OR WALLS REVEALS EXPOSED WIRING CONNECTIONS, CONTRACTOR TO PROVIDE JUNCTION BOXES WITH COVERS TO CONCEAL CONNECTIONS.
8. ALL EXISTING RECEPTACLES TO BE RELOCATED OR RECIRCUITED, THE CONTRACTOR SHALL REMOVE PORTIONS OF CONDCUTORS AND CONDUIT AS NECESSARY AND EXTENDED SYSTEMS WHERE APPLICABLE. CONTRACTOR SHALL ALSO REPLACE RECEPTACLE AND COVER PLATE TO MATCH NEW.
9. CONTRACTOR SHALL REMOVE ALL ELETRICAL SYSTEMS FROM WALLS BE DEMOLISHED. WHERE CIRCUITRY IS TO REMAIN FOR DOWNSTREAM DEVICES, THE CONTRACTOR SHALL PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES, COVR PLATES, AND ALL OTHER ELETRICAL APPURTENANCES AS NEEDED.
10. ALL CABLES, CONDUCTORS, AND RACEWAYS FOUND TO BE UNUSED/UNUTILIZED SHALL BE REMOVED.
11. ALL ELETRICAL DEVICES, FIXTURES, AND EQUIPMENT REMOVED SHALL BE MADE AVAILABLE TO THE OWNER PRIOR TO DISPOSAL.
12. CONTRACTOR SHALL COORDINATE ARCHITECTURAL REQUIREMENTS FOR EXISTING CEILING GRIDS TO REMAIN. CONTRACTOR SHALL PROTECT CEILING GRID SYSTEM WHEN REMOVING ELETRICAL DEVICES IN AND ABOVE THE CEILING.

SYMBOL SCHEDULE - ELECTRICAL

SYMBOL	DESCRIPTION
LIGHTING AND SWITCHING	
QTY:# 'F1' PN:CN a	-DESIGNATES QUANTITY OF MATCHING FIXTURE TYPES LOCATED WITHIN A SPACE -DESIGNATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE -DESIGNATES PANEL NAME:CIRCUIT NUMBER -DESIGNATES SWITCH ID
	2'x2', 2'x4', ROUND, LINEAR LIGHT FIXTURE LED, NORMAL BRANCH, CEILING - SURFACE, RECESSED, OR SUSPENDED SEE FIXTURE TYPE AND SCHEDULE FOR MOUNTING; COORDINATE WITH CEILING TYPE
	2'x2', 2'x4', ROUND, LINEAR LIGHT FIXTURE LED, EMERGENCY BRANCH/BATTERY BACK-UP, CEILING - SURFACE, RECESSED, OR SUSPENDED SEE FIXTURE TYPE AND SCHEDULE FOR MOUNTING; COORDINATE WITH CEILING TYPE
	LED, NORMAL BRANCH, SCONCE; SEE FIXTURE TYPE AND SCHEDULE FOR MOUNTING HEIGHTS
	LED, EMERGENCY BRANCH/BATTERY BACK-UP, SCONCE; SEE FIXTURE TYPE AND SCHEDULE FOR MOUNTING HEIGHTS
	LED EXIT FIXTURE; CHEVRONS AS INDICATED
S	SINGLE POLE SWITCH; 20A 120/277V AT 46" AFF (ARCHITECT TO SELECT SWITCH TYPE/FINISH)
	3 - THREE WAY SWITCH D - DIMMER SWITCH OS - OCCUPANCY SENSOR SWITCH M - MOTOR RATED SWITCH WITH THERMAL OVERLOAD
OS	CEILING MOUNTED OCCUPANCY SENSOR
PC	SURFACE MOUNTED PHOTOCELL
RECEPTACLES, DATA, AND OUTLETS	
	DUPLEX RECEPTACLE; 20A, 125V NEMA 5-20R AT 18" AFF
	QUADRUPLEX RECEPTACLE; (2) 20A, 125V NEMA 5-20R IN 2-GANG BOX AT 18" AFF
	NON-FEED THROUGH GFCI DUPLEX RECEPTACLE; 20A, 125V NEMA 5-20R AT 18" AFF
	DUPLEX RECEPTACLE; 20A, 125V NEMA 5-20R; MOUNTING HEIGHT AS NOTED
	QUADRUPLEX RECEPTACLE; (2) 20A, 125V NEMA 5-20R IN 2-GANG BOX; MOUNTING HEIGHT AS NOTED
	NON-FEED THROUGH GFCI DUPLEX RECEPTACLE; 20A, 125V NEMA 5-20R; MOUNTING HEIGHT AS NOTED
	SPECIAL RECEPTACLE; NEMA RATING AS NOTED ON DRAWINGS (MOUNTED 18" AFF, UNO)
	STANDARD TWO PORT OR FOUR PORT DATA OUTLET WITH CAT 6 CABLE DROPS STUBBED UP WITH 1" EMT (TYPICAL 2 DATA DROPS UNLESS DENOTED #); MOUNTED AT 18", UNO
	4 GANG FLOOR BOX; PROVIDE DEVICES AS NOTED ON DRAWINGS (ARCHITECT TO SELECT FINISH)
TV	DOUBLE GANG RECESSED BOX WITH DUPLEX RECEPTACLE, SINGLE DATA PORT, HDMI PORT, AND A COAXIAL PORT. (COORDINATE WITH OWNER/ARCHITECT)
CLG FLR	VERTICALLY STACKED RECEPTACLES; (TYP ALL ELETRICAL DEVICES) - SECOND POSITION; HEIGHT AS NOTED -FIRST POSITION; 18" AFF, UNO
	WIREMOLD - LENGTH AS INDICATED (MOUNTED 18" AFF, UNO)
JB	JUNCTION BOX; SIZED AS REQUIRED (INSTALL IN ACCESSIBLE LOCATION)
CIRCUITING	
PN:CN	DESIGNATES PANEL NAME:CIRCUIT NUMBER
	WIRING IN CONDUIT CONCEALED IN CEILING OR WALL
	WIRING IN CONDUIT EXPOSED
	WIRING IN CONDUIT BELOW FLOOR/GRADE
	WIRING IN CONDUIT EXISTING TO REMAIN
	WIRING IN CONDUIT TO BE REMOVED
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
EQUIPMENT	
	DISCONNECT SWITCH, SIZE (V/A/POLES) NEMA RATING AND FUSED AS NOTED TOP OF ENCLOSURE TO BE MOUNTED NO HIGHER THEN 78" AFF
	PANELBOARD; SEE PANEL SCHEDULES FOR V/A/Ø/KAIC, NEMA RATING, MOUNTING, AND MAIN BREAKER TOP OF ENCLOSURE TO BE MOUNTED NO HIGHER THEN 78" AFF
XFMR	TRANSFORMER; SEE RISER DIAGRAM FOR V/KVA, NEMA RATING, AND MOUNTING
FIRE ALARM AND SPECIAL SYSTEMS	
FACP	FIRE ALARM CONTROL PANEL; TOP OF ENCLOSURE TO BE MOUNTED NO HIGHER THEN 78" AFF
ANN	FIRE ALARM ANNUCIATOR PANEL; TOP OF ENCLOSURE TO BE MOUNTED NO HIGHER THEN 78" AFF
D	FIRE ALARM SMOKE DETECTOR; CEILING MOUNTED
F	FIRE ALARM STROBE (15CD, UNO); CEILING MOUNTED
FS	FIRE ALARM STROBE/SPEAKER COMBINATION (15CD, UNO); CEILING MOUNTED
F	FIRE ALARM STROBE (15CD, UNO); WALL MOUNTED AT 96" AFF
FS	FIRE ALARM STROBE/SPEAKER COMBINATION (15CD, UNO); WALL MOUNTED AT 96" AFF
F	FIRE ALARM MANUAL PULL STATION; WALL MOUNTED 46" AFF
PS	PAGIN SPEAKER; RECESSED UNO
CR	CARD READER; MOUNTED AT 46" AFF
DR	DOOR RELEASE; MOUNTED AT 46" AFF

NOTES:
1. ALL SYMBOLS & MODIFIERS SHOWN MAY NOT APPEAR ON DRAWINGS.
2. COORDINATE ALL MOUNTING HEIGHTS AND FINAL LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.

pa
pistorius associates, llc
ARCHITECTS
tom a. pistorius, architect
109 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

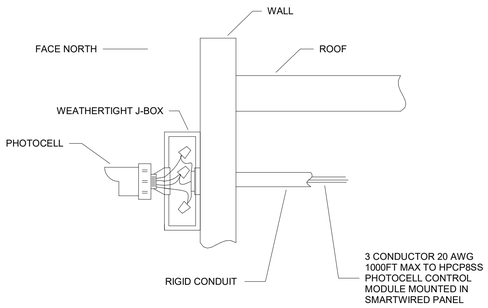
project number
pa_2341
date of issue
07/10/2024
project phase
FOR BID
revision no. revision date

drawn by
RML /PJW

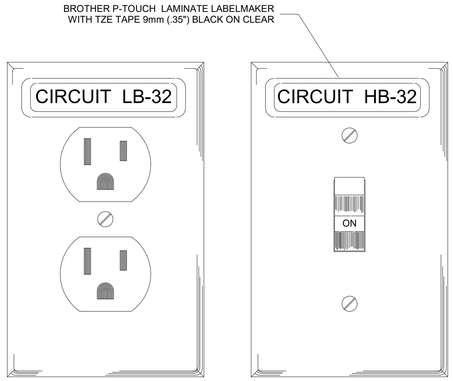
STATE OF LOUISIANA
PATRICK J. WEBRE
License No. 44761
PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING
07/10/24

drawing title
ELECTRICAL LEGEND & NOTES
drawing no.
E-000

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

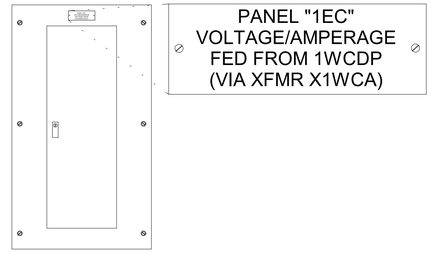


PHOTOCELL INSTALLATION AND WIRING



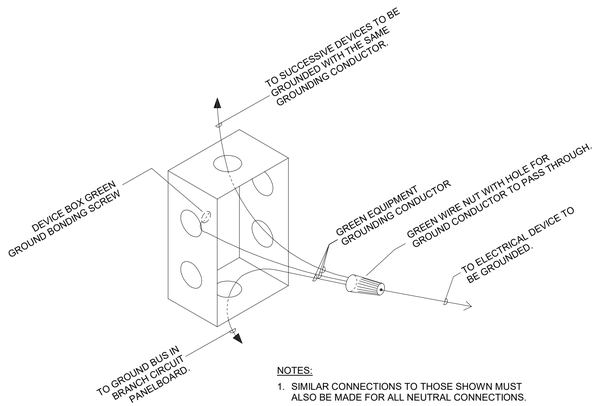
NOTE:
ALL LABELS SHALL BE TYPED. RECEPTACLES SHALL BE INSTALLED WITH GROUND FACING DOWN

RECEPTACLE/SWITCH IDENTIFICATION



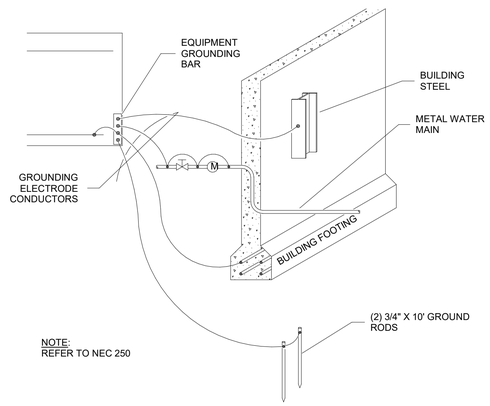
NOTE:
ALL PANELBOARDS INVOLVED IN THIS PROJECT SHALL BE IDENTIFIED BY THE PANEL NAME AND BRANCH OF THE ELECTRICAL SYSTEM. REFER TO THE NEC FOR COLORS AND ADDITIONAL REQUIREMENTS.

PANELBOARD IDENTIFICATION



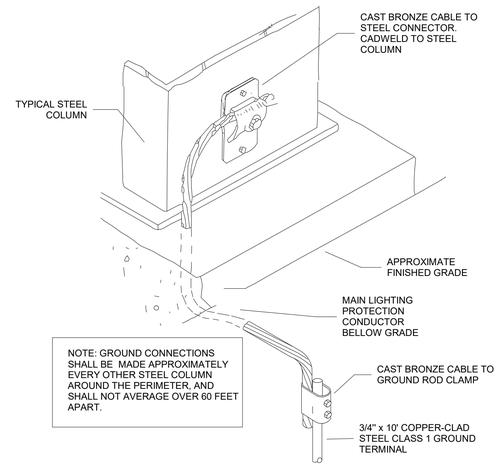
NOTES:
1. SIMILAR CONNECTIONS TO THOSE SHOWN MUST ALSO BE MADE FOR ALL NEUTRAL CONNECTIONS.
2. THIS METHOD OF WIRING PERMITS THE REMOVAL OF EQUIPMENT WITHOUT INTERRUPTING THE INTEGRITY OF THE GROUNDING CIRCIT.

EQUIPMENT GROUND AT RECEPTACLE



NOTE:
REFER TO NEC 250

GROUNDING ELECTRODE



STEEL COLUMN GROUNDING DETAIL

pistorius associates, llc
ARCHITECTS
tom a. pistorius, architect
109 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

project number
pa_2341

date of issue
07/10/2024

project phase
FOR BID

revision no. revision date

drawn by
RML /PJW

STATE OF LOUISIANA
PATRICK J. WEBRE
License No. 44761
PROFESSIONAL ENGINEER
IN
ELECTRICAL ENGINEERING
07/10/24

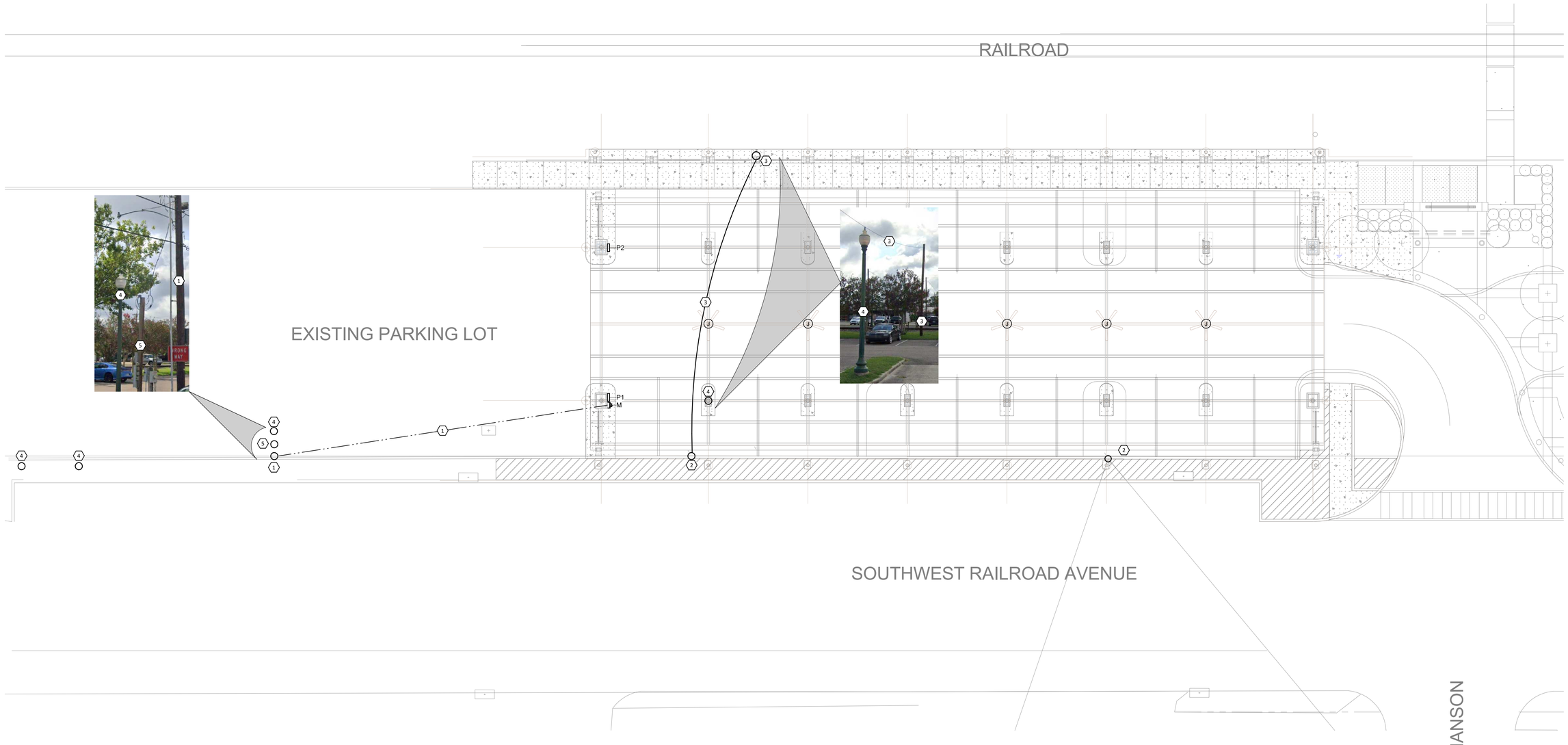
drawing title
ELECTRICAL DETAILS

drawing no.
E-001

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

SPECIFIC NOTES:

1. EXISTING UTILITY POLE TO REMAIN. ROUTE (2) 4" CONDUITS UNGROUND FROM THE NEW SELF-CONTAINED METER TO THE UTILITY POLE WITH PULL STRING. COORDINATE WITH HUNTER (HLAFLEU@ENTERGY.COM) WITH ENTERGY FOR ALL UTILITY REQUIREMENTS, EQUIPMENT, ROUTING, ETC. INCLUDE ALL UTILITY COST IN THE CONTRACT.
2. EXISTING UTILITY POLE TO BE REMOVED BY ENTERGY.
3. EXISTING UTILITY POLE AND ELETRICAL SERVICE INCLUCING ALLEQUIPMENT, DEVICES, CONDUITS, CONDCUTORS, AND APPURTENANCES BY THE CONTRACTOR.
4. EXISTING LIGHT FIXTURE TO BE REMOVED AND TURNED OVER TO THE OWNER. CONTRACTRO TO PROVIDE A TRAFFIC RATED QUAZITE PULL BOX AND ALL OTHER PROVISIONS TO MAINTAIN CIRCUIT CONTINUITY AS REQUIRED FOR ALL EXISTING DOWNSTREAM FIXTURES. CONTRACTOR TO PROVIDE PRICE FOR A TOTAL OF (5) FIXTURES TO BE REMOVED. COORDINATE WITH THE OWNER/ARCHITECT FOR ALL LOCATIONS.
5. EXISTING SERVICE POLE WITH METER AND DEVICES TO REMAIN.



pistorius associates, llc
ARCHITECTS
tom a. pistorius, architect
109 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

project number
pa_2341

date of issue
07/10/2024

project phase
FOR BID

revision no. | revision date

drawn by
RML /PJW

STATE OF LOUISIANA
PATRICK J WEBRE
License No. 44761
PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING
07/10/24

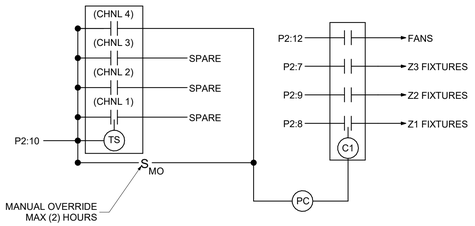
drawing title
ELECTRICAL SITE PLAN

drawing no.
E-100

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

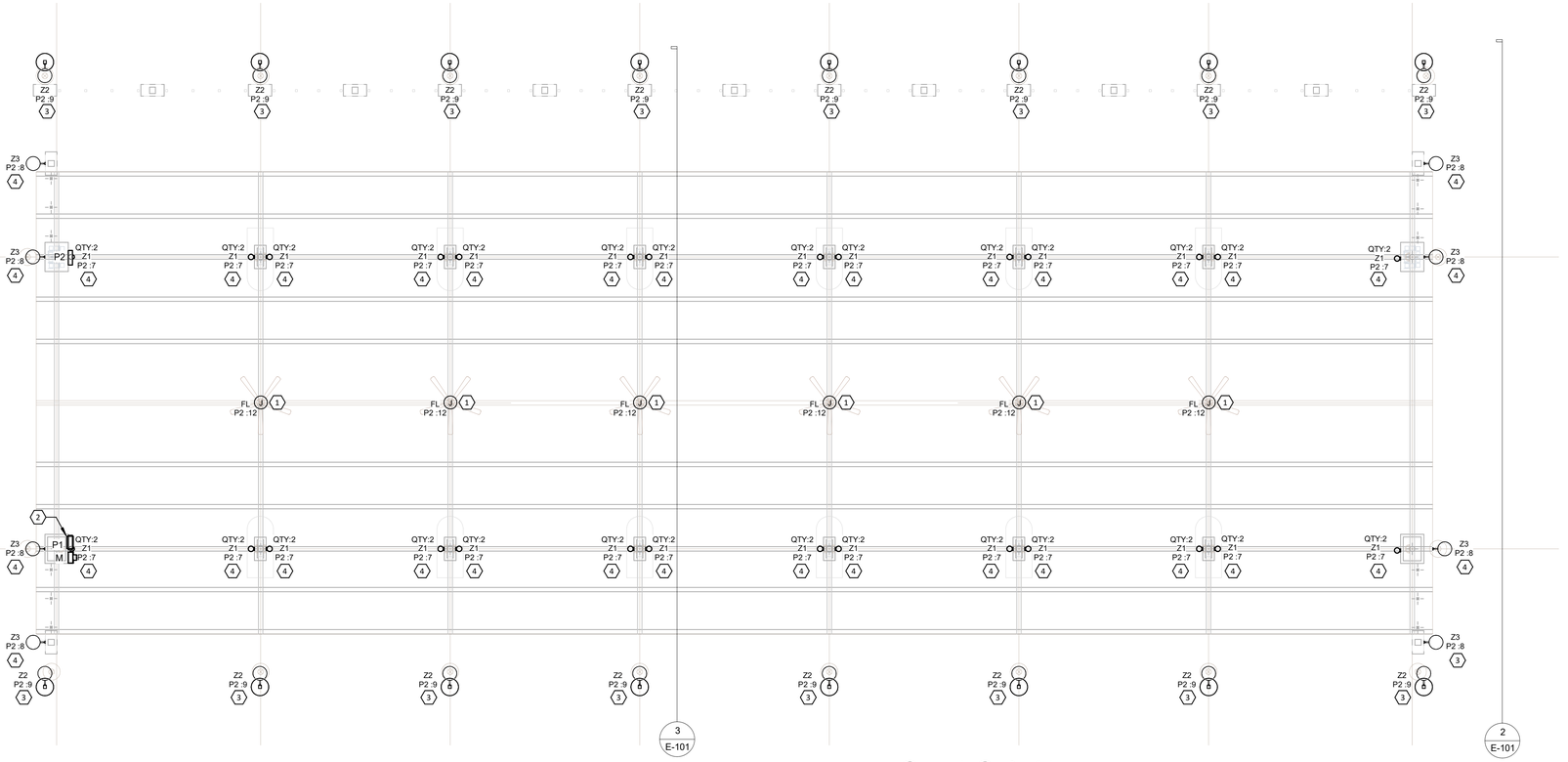
SPECIFIC NOTES:

1. POWER FOR CEILING FAN WITH LIGHT KIT. INSTALL CONTROLLER IN LIGHTING CONTROL BOX. COORDINATION WITH OWNER/ARCHITECT FOR EXACT LOCATION AND DOWNROD LENGTH PRIOR TO ROUGH-IN.
2. LIGHTING CONTROL BOX TO BE MOUNTED JUST ABOVE PANEL P1. CONTROL BOX TO BE A LOCKABLE NEMA 3R ENCLOSURE AND ABLE TO SECURE FAN/LIGHT CONTROLLERS AND THE CONTROLS REQUIRED FOR ALL OTHER LIGHTING. SEE LIGHTING CONTROL DETAIL.
3. COORDINATE WITH THE OWNER/ARCHITECT FOR THE EXACT POLE ORIENTATION PRIOR TO ROUGH-IN.
4. COORIDNATE WITH THE OWNER/ARCHITECT FOR ALL WALL MOUNTED FIXTURES FINAL MOUNTING HEIGHT PRIOR TO ROUGH-IN.



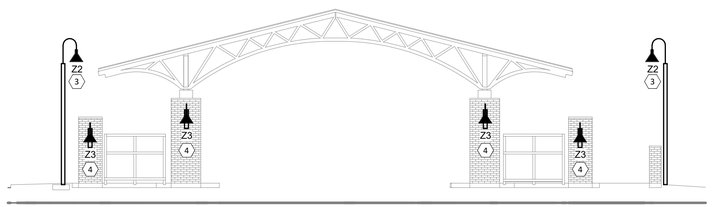
1. FURNISH AND INSTALL 4 CHANNEL TORK MODEL DZS400BP TIME SWITCH. FURNISH AND INSTALL 20A, ELECTRICALLY HELD LIGHTING CONTACTOR WITH 120V COIL IN NEMA 1 ENCLOSURE AND NUMBER OF POLES AS REQUIRED, MINIMUM 5KAIC. EXTERIOR PHOTOCELLS (PC) ON ROOF FACING NORTH.

LIGHTING CONTROL DETAIL

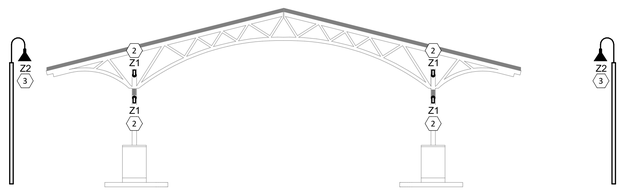


1 LIGHTING PLAN
1/8" = 1'-0"

LIGHTING FIXTURE SCHEDULE					
TYPE	MANUFACTURER	CATALOG NUMBER	LAMP	MOUNTING	DESCRIPTION
FL	KICHLER	300300SBK	LED	SURFACE	60" SZEPLO PATIO CEILING FAN WITH LIGHT KIT
Z1	LUMIERE	9003-W1-RW-LED4080-W-BK-L2-UNIV-RSM	LED	SURFACE	LED WALL MOUNTED CYLINDER
Z2	GLP	GC6020L-TG/CP136/G2LED-40-40K-BK	LED	SURFACE	LED DECORATIVE SCONCE WITH GOOSENECK
Z3	GLP	GC6020L-TG/CWM36/G2LED-40-40K-BK	LED	POLE	LED DECORATIVE POLE FIXTURE WITH GOOSENECK; POLE KW - RAP12-5.0-11-T3-BLK



2 SOUTH ELEVATION
1/8" = 1'-0"



3 INTERIOR ELEVATION
1/8" = 1'-0"

pistorius associates, llc
ARCHITECTS
tom a. pistorius, architect
109 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

project number
pa_2341

date of issue
07/10/2024

project phase
FOR BID

revision no. revision date

drawn by
RML /PJW

STATE OF LOUISIANA
PATRICK J. WEBRE
License No. 44761
PROFESSIONAL ENGINEER
ELECTRICAL ENGINEERING
07/10/24

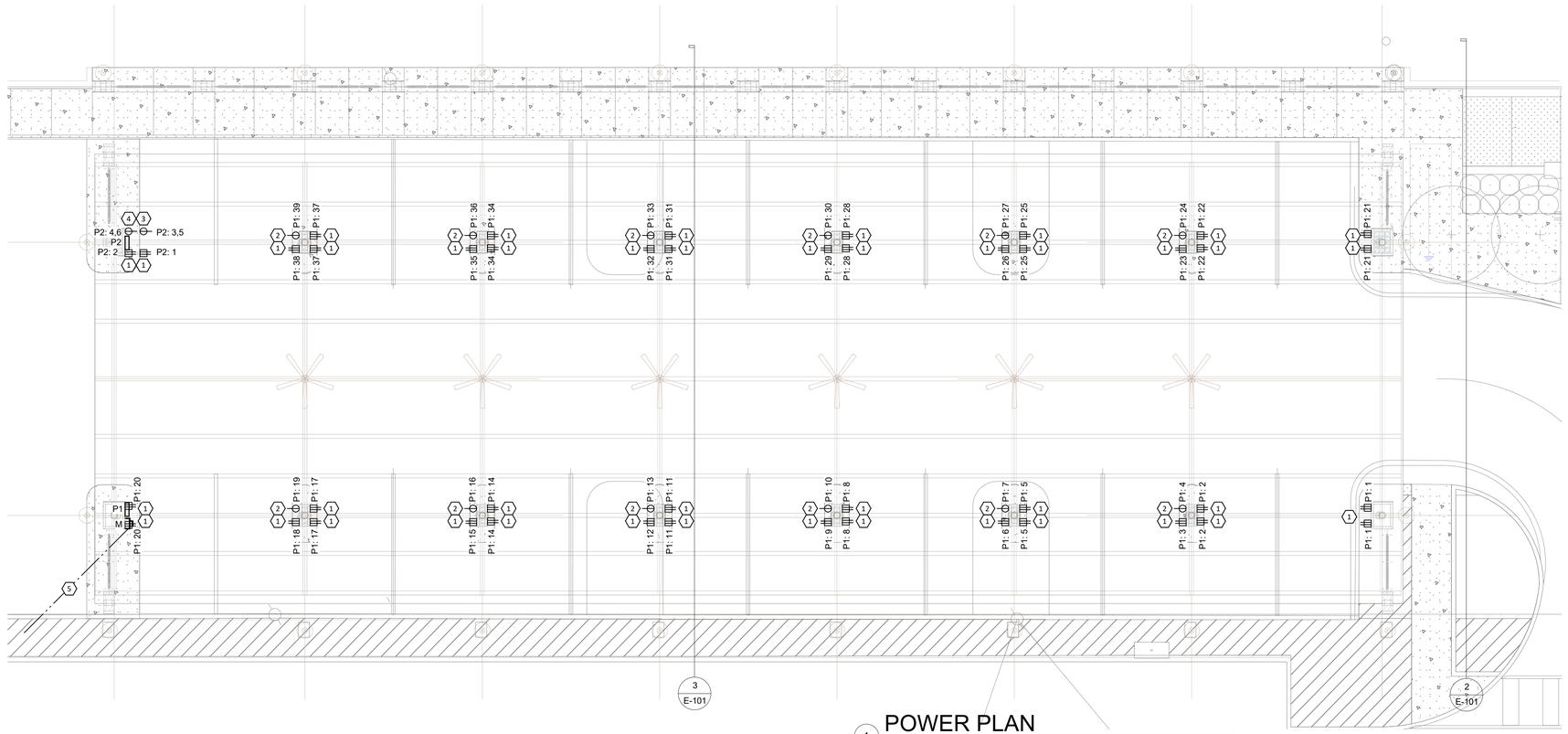
drawing title
ELECTRICAL LIGHTING PLAN

drawing no.
E-101

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

SPECIFIC NOTES:

1. INSTALL A 20A 120V NON-FEED THROUGH WEATHER RESISTANT GFCI RECEPTACLE WITH A CLEAR IN-USE COVER.
2. INSTALL A 30A 120V WEATHER RESISTANT GFCI RECEPTACLE WITH A CLEAR IN-USE COVER.
3. INSTALL A 30A 240V WEATHER RESISTANT GFCI TWIST LOCK RECEPTACLE WITH A CLEAR IN-USE COVER.
4. INSTALL A 50A 240V WEATHER RESISTANT GFCI TWIST LOCK RECEPTACLE WITH A CLEAR IN-USE COVER.
5. ROUTE (2) 4" CONDUITS UNGROUND FROM THE NEW SELF-CONTAINED METER TO THE UTILITY POLE WITH PULL STRING; REF: E100. COORDINATE WITH HUNTER (HLAFLEU@ENTERGY.COM) WITH ENTERGY FOR ALL UTILITY REQUIREMENTS, EQUIPMENT, ROUTING, ETC. INCLUDE ALL UTILITY COST IN THE CONTRACT.



1 POWER PLAN

1/8" = 1'-0"

pistorius associates, llc
ARCHITECTS

tom a. pistorius, architect
1091 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

project number
pa_2341

date of issue
07/10/2024

project phase
FOR BID

revision no. revision date

drawn by
RML /PJW

STATE OF LOUISIANA
PATRICK J WEBRE
License No. 44761
PROFESSIONAL ENGINEER
ELECTRICAL ENGINEERING
07/10/24

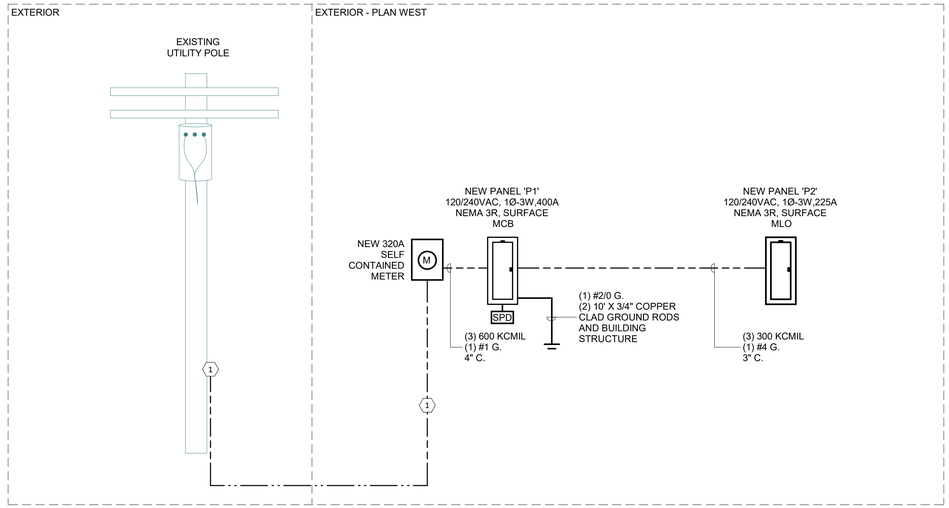
drawing title
ELECTRICAL POWER PLAN

drawing no.
E-200

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

SPECIFIC NOTES:

1. ROUTE (2) 4" CONDUITS UNGROUND FROM THE NEW SELF-CONTAINED METER TO THE UTILITY POLE WITH PULL STRING. COORDINATE WITH HUNTER (HLAFLEU@ENTERGY.COM) WITH ENTERGY FOR ALL UTILITY REQUIREMENTS, EQUIPMENT, ROUTING, ETC. INCLUDE ALL UTILITY COST IN THE CONTRACT.



Branch Panel: P1

Location: PLAN SOUTH WEST COLUMN
Supply From: UTILITY METER
Mounting: SURFACE
Enclosure: NEMA 3R

Volts: 120/240 Single
Phases: 1
Wires: 3

A.I.C. Rating: 22kA
Mains Type: MCB
Mains Rating: 400 A
Interior Rating: 400 A

Circuit...	Load Name	Rating	Poles	A		B		Poles	Rating	Load Name	Circuit...
1	EXT. RECEPT.	20 A	1	360 VA	360 VA			1	20 A	EXT. RECEPT.	2
3	EXT. RECEPT.	20 A	1			180 VA	180 VA	1	30 A	30A EXT. RECEPT.	4
5	EXT. RECEPT.	20 A	1	360 VA	180 VA			1	20 A	EXT. RECEPT.	6
7	30A EXT. RECEPT.	30 A	1			180 VA	360 VA	1	20 A	EXT. RECEPT.	8
9	EXT. RECEPT.	20 A	1	180 VA	180 VA			1	30 A	30A EXT. RECEPT.	10
11	EXT. RECEPT.	20 A	1			360 VA	180 VA	1	20 A	EXT. RECEPT.	12
13	30A EXT. RECEPT.	30 A	1	180 VA	360 VA			1	20 A	EXT. RECEPT.	14
15	EXT. RECEPT.	20 A	1			180 VA	180 VA	1	30 A	30A EXT. RECEPT.	16
17	EXT. RECEPT.	20 A	1	360 VA	180 VA			1	20 A	EXT. RECEPT.	18
19	30A EXT. RECEPT.	30 A	1			180 VA	360 VA	1	20 A	EXT. RECEPT.	20
21	EXT. RECEPT.	20 A	1	360 VA	360 VA			1	20 A	EXT. RECEPT.	22
23	EXT. RECEPT.	20 A	1			180 VA	180 VA	1	30 A	30A EXT. RECEPT.	24
25	EXT. RECEPT.	20 A	1	360 VA	180 VA			1	20 A	EXT. RECEPT.	26
27	30A EXT. RECEPT.	30 A	1			180 VA	360 VA	1	20 A	EXT. RECEPT.	28
29	EXT. RECEPT.	20 A	1	180 VA	180 VA			1	30 A	30A EXT. RECEPT.	30
31	EXT. RECEPT.	20 A	1			360 VA	180 VA	1	20 A	EXT. RECEPT.	32
33	30A EXT. RECEPT.	30 A	1	180 VA	360 VA			1	20 A	EXT. RECEPT.	34
35	EXT. RECEPT.	20 A	1			180 VA	180 VA	1	30 A	30A EXT. RECEPT.	36
37	EXT. RECEPT.	20 A	1	360 VA	180 VA			1	20 A	EXT. RECEPT.	38
39	30A EXT. RECEPT.	30 A	1			180 VA	1392 VA	2	20 A	P2	40
41	SPARE	20 A	1	0 VA	4872 VA						42
				Total Load:	10272 VA		5712 VA				
				Total Amps:	86 A		48 A				

Load Classification	Connected Load (VA)	Demand Factor	Estimated Demand (VA)	Panel Totals:	
Lighting	2184 VA	100.00%	2184 VA	Total Connected Load:	15984 VA
Receptacle	13800 VA	83.48%	11520 VA	Total Estimated Demand Current:	57 A
				Spare Capacity:	85.73%

Notes:

Branch Panel: P2

Location: PLAN NORTH WEST COLUMN
Supply From: P1
Mounting: SURFACE
Enclosure: NEMA 3R

Volts: 120/240 Single
Phases: 1
Wires: 3

A.I.C. Rating: 10kA
Mains Type: MLO
Mains Rating: 225 A
Interior Rating: 225 A

Circuit...	Load Name	Rating	Poles	A		B		Poles	Rating	Load Name	Circuit...
1	EXT. RECEPT.	20 A	1	180 VA	180 VA			1	20 A	EXT. RECEPT.	2
3	30A EXT. RECEPT.	30 A	2			180 VA	180 VA	2	50 A	50A EXT. RECEPT.	4
5				180 VA	180 VA						6
7	WALL MOUNTED CYLINDER LIGHTING	20 A	1			1176 VA	336 VA	1	20 A	WALL DECROTIVE LIGHTING	8
9	DECORATIVE POLE LIGHTING	20 A	1	672 VA	0 VA			1	20 A	LIGHTING CONTROL PANEL	10
11	SPARE	20 A	1			0 VA	3000 VA	1	20 A	CEILING FANS W/LIGHT KIT	12
13	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	14
15	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	16
17	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	18
19	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	20
21	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	28
29	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	30
31	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	32
33	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	34
35	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	36
37	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	38
39	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	40
41	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	42
				Total Load:	1392 VA		4872 VA				
				Total Amps:	12 A		41 A				

Load Classification	Connected Load (VA)	Demand Factor	Estimated Demand (VA)	Panel Totals:	
Lighting	2184 VA	100.00%	2184 VA	Total Connected Load:	6264 VA
Receptacle	4080 VA	100.00%	4080 VA	Total Estimated Demand Current:	26 A
				Spare Capacity:	88.40%

Notes:

pistorius associates, llc
ARCHITECTS
tom a. pistorius, architect
109 west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

Hammond Municipal Event Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
Hammond, Louisiana

project number
pa_2341
date of issue
07/10/2024
project phase
FOR BID
revision no. revision date

drawn by
RML /PJW

STATE OF LOUISIANA
PATRICK J WEBRE
License No. 44761
PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING
07/10/24

drawing title
ELECTRICAL RISER DIAGRAM
drawing no.
E-500

LCG Lagniappe Consulting Group
Mechanical•Electrical•Plumbing
1305 Distributors Row, Suite K, Metairie, LA. 70123
Project No.: 2401601 Registration No.: 7188

pistoriusassociates, llc
pa_2341

City of Hammond
THE PAVILION

ADDENDUM NO. 1
Thursday, August 22, 2024

GENERAL: The following changes, additions or deletions for the above project shall be made to the Contract Documents; all other Conditions shall remain the same. Note: the additions, deletions or changes listed in this Addendum may affect more than the specific instance(s) mentioned. Coordination may be necessary to fully revise cases of duplicate information. The Addendum supersedes current conditions shown. Acknowledge receipt of this Addendum by inserting its number and date in the Form of Proposal'. This addendum forms a part of the Contract Documents and modifies them as follows:

CLARIFICATIONS AND SPECIFICATION INFORMATION:

A1.1 Remove the Home Mortgage Authority as owner on the Project Info, Sheet G-001 and replace with the owner as THE CITY OF HAMMOND.

A1.2 The asphalt thickness of 6 inches called out on structural is accurate only on top of grade beams. The asphalt thickness adjacent to grade beams and wherever patching is required shall be 3 inches over 6 inches of compacted #610 limestone base.

A1.3 All grades indicated on asphalt surface are existing except for the NW corner where existing driveway will be removed and re-graded.

A1.4 All Brick Piers shall be capped with Row Lock brick.

A1.5 New Brick selection for bid is 'Apple Creek' from Glen-Gery. Size is standard 3 1/2" x 2 1/2" x 7 1/2". Contact Lex Cairns for price. 985-966-1940.

A1.6 Paint all sides of "Horse Panel" with high performance paint coat to match exposed steel.

A1.7 The entire parking lot to include an asphalt sealant topcoat in lieu of resurfacing.

A1.8 The new bid date is scheduled at 2:00 pm on Friday, September 6, 2024.

CONTRACT FORMS:

A1.9 ALLOWANCES:

1. Add an allowance of $2,000 for Testing.
2. Add an allowance of $5,000 for unforeseen conditions.

A1.10 BID BOND:
Bid Bond added to the project manual to be used for Bid.

A1.11 Revised Agreement deleting "MAYOR AND CITY COUNCIL OF THE" and now reads "CITY OF HAMMOND".

ATTACHMENTS: PRE-BID AGENDA, PRE-BID SIGN IN SHEET, BID BOND, AGREEMENT

BID BOND

KNOW ALL MEN BY THESE PRESENTS: that

_____

(Name of Contractor)

_____

(Address of Contractor)

a _____, hereinafter called PRINCIPAL, and
(Corporation, partnership, limited liability company, or individual)

_____

(Name of Surety)

_____

(Address of Surety)

hereinafter called SURETY, are held firmly bound unto the

CITY OF HAMMOND, LOUISIANA
P. O. BOX 2788, HAMMOND, LOUISIANA 70404

hereinafter called OWNER, in the penal sum of _____

_____**DOLLARS ($ .00)**

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

Signed this _____ day of _____, 2024.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL has submitted to the CITY OF HAMMOND, LOUISIANA, a certain BID, attached hereto and hereby made a part hereof to enter a contract in writing for the construction of

The Pavilion

for the **City of Hammond, Louisiana**

NOW, THEREFORE,

[a] If said BID shall be rejected, or

[b] If said BID shall be accepted and the PRINCIPAL shall execute and deliver a contract in the form or "Agreement" attached hereto [properly completed in accordance with said BID], and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the SURETY for any and all claims hereunder shall, in no event exceed the penal amount of this obligation as herein stated.

The SURETY, for value received, hereby stipulates and agrees that the obligation of said SURETY and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said SURETY does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the PRINCIPAL and the SURETY have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)
Principal

_____
Surety

By:_____

IMPORTANT—Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Louisiana.

NOTICE OF AWARD

Construction of : **The Pavilion**

For the **City of Hammond, Louisiana**

To: _____

_____

_____

The Owner represented by the undersigned has considered the Proposal submitted by you for the above described work in response to its Notice and Instructions to Bidders dated _____.

It appears that it is to the best interest of said Owner to accept your Proposal in the amount of

_____

And you are hereby notified that your proposal has been accepted for the Base Bid.

You are required by the Notice and Instructions to Bidders to execute the formal Agreement with the undersigned Owner and to furnish the required Performance and Payment Bonds, Certificates of Insurance, and NonCollusion Affidavit as required by the Specifications within ten (10) days from the date of delivery of this Notice to you.

If you fail to execute said contract and to furnish said documents within ten (10) days from the date of delivery of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned and to award the work covered by your Proposal to another, or to readvertise the work or otherwise dispose thereof as the Owner may see fit.

You are required to return an acknowledged copy of this Notice to the Owner and the Engineer.

Dated this ____day of _____.

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged this _____ day of _____

BY: _____

NAME: _____

TITLE: _____

OWNER: **CITY OF HAMMOND, LA.**

BY: _____

Pete Panepinto, MAYOR

AGREEMENT

THIS AGREEMENT, made this Day_____Date_____, by and between

THE CITY OF HAMMOND, Louisiana,

hereinafter called "**OWNER**", and

_____, hereinafter called "**CONTRACTOR** ".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of

The Pavilion

for the **City of Hammond, Louisiana.**

2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within ten (10) calendar days after the date of the NOTICE TO PROCEED and will complete the same within **two hundred and forty (240) consecutive calendar days**, unless the period for completion is extended otherwise by the OWNER.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of

_____

_____ as shown on the BID PROPOSAL for Base Bid

5. The term "CONTRACT DOCUMENTS" means and includes the following:
   (A) NOTICE TO BIDDERS
   (B) Information for BIDDERS
   (C) Addendum No. dated.
   (D) Addendum No. dated
   (E) BID PROPOSAL
   (F) BID BOND
   (G) Agreement
   (H) Certificate of Insurance
   (I) Performance BOND
   (J) Payment BOND
   (K) General Conditions
   (L) Special Conditions

(M) TECHNICAL SPECIFICATIONS
(N) NOTICE OF AWARD
(O) NOTICE TO PROCEED
(P) CHANGE ORDER(s)
(Q) CONSTRUCTION PLANS AND SPECIFICATIONS prepared or issued by **Pistorius Associates, LLC**, dated _____.

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in quadruplicate, each of which shall be deemed an original on the date first above written.

OWNER: **CITY OF HAMMOND, LOUISIANA**

BY: _____

NAME: Pete Panepinto

(SEAL) TITLE: Mayor

ATTEST:

_____

NAME: _____

TITLE:

CONTRACTOR: _____

BY: _____

NAME: _____

TITLE: _____

(SEAL) ADDRESS: _____

_____

ATTEST:

_____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

-
_____
(Name of Contractor)

-
_____
(Address of Contractor)

a _____-_____, hereinafter called PRINCIPAL, and
(Corporation, limited liability company, partnership, or individual)

_____
(Name of Surety)

_____
(Address of Surety)

hereinafter called SURETY, are held firmly bound unto the

CITY OF HAMMOND, LOUISIANA
P. O. BOX 2788, HAMMOND, LOUISIANA 70404

hereinafter called OWNER, in the penal sum of

_____

_____ in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the ___day of _____, a copy of which hereto attached and made a part hereof for the construction of:

The Pavilion
for the **City of Hammond, Louisiana**

NOW, THEREFORE, if the PRINCIPAL shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without written notice to the SURETY and during the one (1) year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless to the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay to the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the ____day of _____.

ATTEST:

_____
Principal Secretary

(SEAL)

_____
Witness as to Principal

_____
Address

_____

ATTEST:

_____
Surety Secretary

(SEAL)

_____
Witness as to Surety

_____
Address

_____

_____
Principal

By:_____

_____
Address

_____

_____
Surety

BY:_____
Attorneyinfact

_____
Address

_____

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners shall execute BOND.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

_____
(Name of Contractor)

_____
(Address of Contractor)

a _____-_____, hereinafter called PRINCIPAL, and
(Corporation, limited liability company, partnership, or individual)

_____
(Name of Surety)

_____
(Address of Surety)

hereinafter called SURETY, are held firmly bound unto the

CITY OF HAMMOND, LOUISIANA
P. O. BOX 2788, HAMMOND, LOUISIANA 70404

hereinafter called OWNER, in the penal sum of

_____

_____ in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the ___day of _____, a copy of which hereto attached and made a part hereof for the construction of:

The Pavilion
for the **City of Hammond, Louisiana**

NOW, THEREFORE, if the PRINCIPAL shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without written notice to the SURETY and during the one (1) year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless to the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay to the OWNER all outlay and expense which the

OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the _____ day of _____.

ATTEST:

_____
Principal Secretary

(SEAL)

_____
Witness as to Principal

_____
Address

_____

ATTEST:

_____
Surety Secretary

(SEAL)

_____
Witness as to Surety

_____
Address

_____

_____
Principal

By:_____

_____
Address

_____

_____
Surety

BY:_____
Attorneyinfact

_____
Address

_____

NOTICE TO PROCEED

Project: **The Pavilion**
for the **City of Hammond, Louisiana**

Date: _____

To: _____

_____

_____

You are hereby notified to commence WORK in accordance with the Agreement dated _____, on or before _____, and you are to complete the WORK within

two hundred forty (240) consecutive calendar days

thereafter. The date of completion of all work is therefore _____.

OWNER: **CITY OF HAMMOND, LA**

By:_____
Pete Panepinto, Mayor

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged by

_____

this the _____day of_____.

BY: _____

NAME: _____

TITLE: _____

NOTICE BY OWNER OF ACCEPTANCE OF WORK

TO WHOM IT MAY CONCERN: and especially all subcontractors, workmen, laborers, mechanics, and furnishers of materials.

Public notice is hereby given, according to law that the undersigned Owner has accepted the work done by _____ Contractor, under his contract with him of_____, and recorded in MOB _____, Page ____, of the Mortgage Records of the Parish of Tangipahoa.

All subcontractors, workmen, laborers, mechanics, and furnishers of materials must assert whatever claims they may have against the said contractor, growing out of execution of said contract, according to law, within fortyfive (45) days from the registration hereof.

DATE: _____ _____

PROJECT: **The Pavilion**
for the **City of Hammond, Louisiana**

OWNER: **CITY OF HAMMOND, LOUISIANA**

BY: _____

Pete Panepinto, MAYOR

pistoriusassociates, llc
pa_2341

City of Hammond
THE PAVILION

ADDENDUM NO. 2
Wednesday, August 28, 2024

GENERAL: The following changes, additions or deletions for the above project shall be made to the Contract Documents; all other Conditions shall remain the same. Note: the additions, deletions or changes listed in this Addendum may affect more than the specific instance(s) mentioned. Coordination may be necessary to fully revise cases of duplicate information. The Addendum supersedes current conditions shown. Acknowledge receipt of this Addendum by inserting its number and date in the Form of Proposal'. This addendum forms a part of the Contract Documents and modifies them as follows:

PRIOR APPROVAL: **METAL ROOFING** **BERRIDGE**

CLARIFICATIONS AND SPECIFICATION INFORMATION:

A2.1 Metal Roofing changed to Berridge: Double Lock - Zee Lock - 2" seam and 16" wide panels. Open framing, no solid sheathing required. Spans up to 40'-0". Color from Standard Colors to be selected later. Cut sheet attached.

A2.2 Additional dimensions for sidewalk and landscape island to be consistent between Site Plans and Floor Plan. See revised sheets AS-101, AS-103, AS-104 and A-101.

A2.3 Asphalt sealant must be a commercial based product such as GEM SEAL Fed Spec with a 2 coat process or equal. Cut sheet attached.

A2.4 Remove the wording "by others" from all footing details on Sheets S2 and S3.

A2.5 Per the Information to Bidders, all bids must be sealed in an envelope and either mailed to the City of Hammond or hand delivered by the designated time. No electronic bids will be accepted. Bids will be read aloud.

A2.6 The brick selection from Addendum No. 1, Item A1.5, shall be removed. Provide an allowance of $700/thousand bricks. A selection will be provided during construction.

A2.7 The radius for the small curve on the steel truss is 7'-4" and the radius on the larger curve is 25'-7".

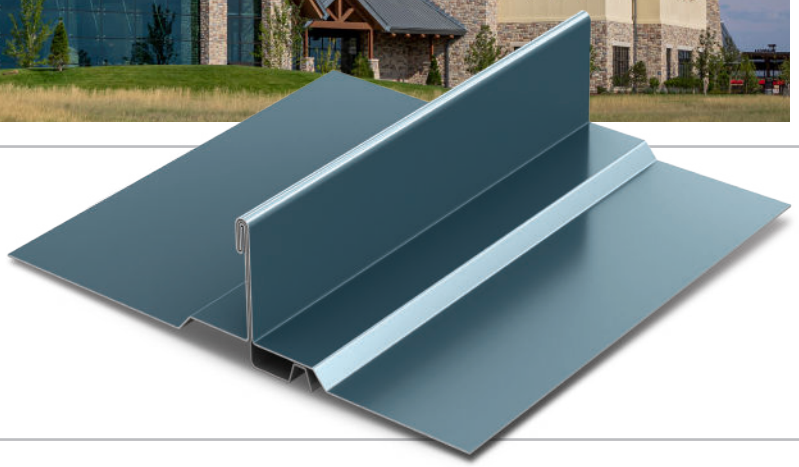
ATTACHMENTS: Berridge Cut Sheet,
Gem Seal Cut Sheet,

AS-101 Overall Site Plan
AS-103 Site Plan
AS-104 Drainage Plan
A-101 Floor Plan

Berridge Double-Lock Zee-Lock Panel

STANDING SEAM SYSTEM

The Berridge Double-Lock Zee-Lock Panel is a structural metal standing seam panel with a 2" high seam that is 180-degree mechanically seamed, making it an ideal roofing choice for any project.

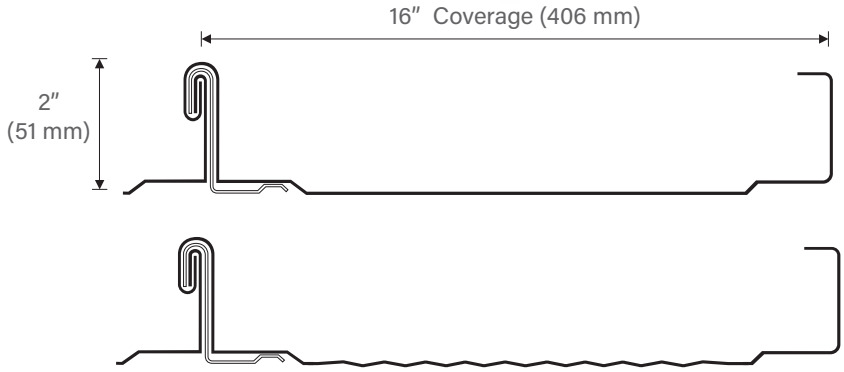


Materials

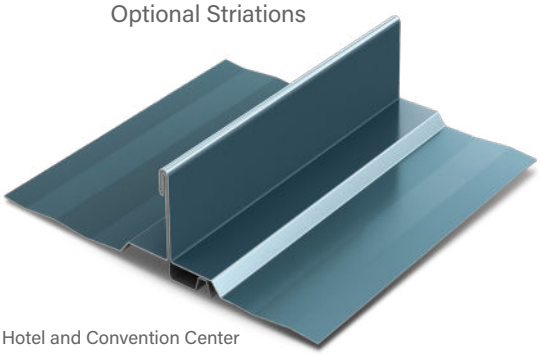
24 and 22 Gauge Steel**
0.032 and 0.040 Aluminum**

Specifications

Uses: Roof, Fascia*
Coverage: 16"
Finishes: Smooth, optional striations
Fasteners: Concealed
Applications: Open framing, solid sheathing
Seam: 2" 180° standing mechanically seamed sidelap



Optional Striations



Installation

- Panel is available from the factory in continuous lengths to a maximum of 40'
- May be site formed in continuous lengths with the Berridge SP-21 Roll Former
- Panel is mechanically seamed in the field using the Berridge Double-Lock Zee-Lock Seamer in a single pass. The double-lock seam is not available with vinyl weatherseal
- Consult BMC for curving availability
- Continuous Zee-Rib without vinyl required for open framing and watertightness warranty
- Stainless steel floating clips are required for aluminum substrate

Note:

* Requires flashing break from roof to fascia

** Consult BMC for 22 Gauge Steel and Aluminum availability

Pictured Above
Project: Gaylord Rockies Hotel and Convention Center
Architect: HKS, Inc.
General Contractor: Mortenson/Welbo JV
Installing Contractor: Flynn BEC, LP
Color: Pre-Weathered Galvalume®

BERRIDGE MANUFACTURING COMPANY

(800) 669-0009
www.Berridge.com

Standard Colors

Shasta White

Parchment

Almond


Sierra Tan


Buckskin


Medium Bronze


Aged Bronze


Copper Brown


Dark Bronze


Terra-Cotta


Deep Red


Colonial Red


Burgundy


Bristol Blue


Royal Blue


Patina Green


Hemlock Green


Teal Green


Forest Green

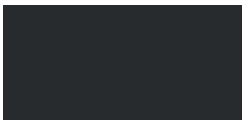

Evergreen


Hartford Green


Cityscape


Zinc Grey


Charcoal Grey


Matte Black

Premium Colors

Premium colors require a nominal surcharge.

Natural White


Award Blue

Metallic Colors

Metallic colors are premium finishes which require a nominal surcharge.


Champagne


Copper-Cote™


Antique Copper-Cote

Natural Metal Finish

Acrylic-Coated Galvalume® is a coated sheet product that combines the corrosion resistance of Galvalume® steel sheet with a clear, organic resin applied to the top side and bottom side of Galvalume® substrate.


Acrylic-Coated Galvalume®


Zinc-Cote™

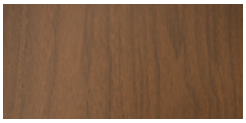

Lead-Cote™

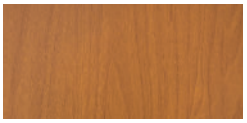

Preweathered Galvalume®

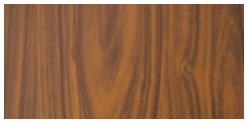
Print Pattern Finishes

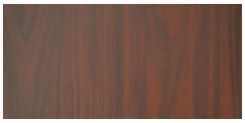
Consult BMC on print pattern pricing and availability.


COR-TEN AZP® Raw


Walnut


Honey Walnut


Rosewood


Boston Cherry

Please consult the BMC Technical department at Technical@Berridge.com for LEED compliance information.
Due to limitations in the printing process, please request actual color chips for accurate color viewing.

Product Overview

GemSeal® FedSpec

GemSeal FedSpec is the proven, industry-leading refined tar sealer for asphalt surfaces. Manufactured using our precision colloid mill system, FedSpec sealer will provide consistent results time after time. Formulated with a high solids concentration, FedSpec gives property owners the deep, rich, black color they desire while providing durable protection of their asphalt investment.

L□N□□L□□T□N□

- Resistant to fuel and oil
- Excellent durability
- Extends the safe usability of asphalt surfaces

□□□□□T□L□

- Ideal for high traffic areas and airports
- Provides excellent protection on parking lots and driveways
- Black color makes striping stand out, enhancing driver safety

□□N□□T□NT

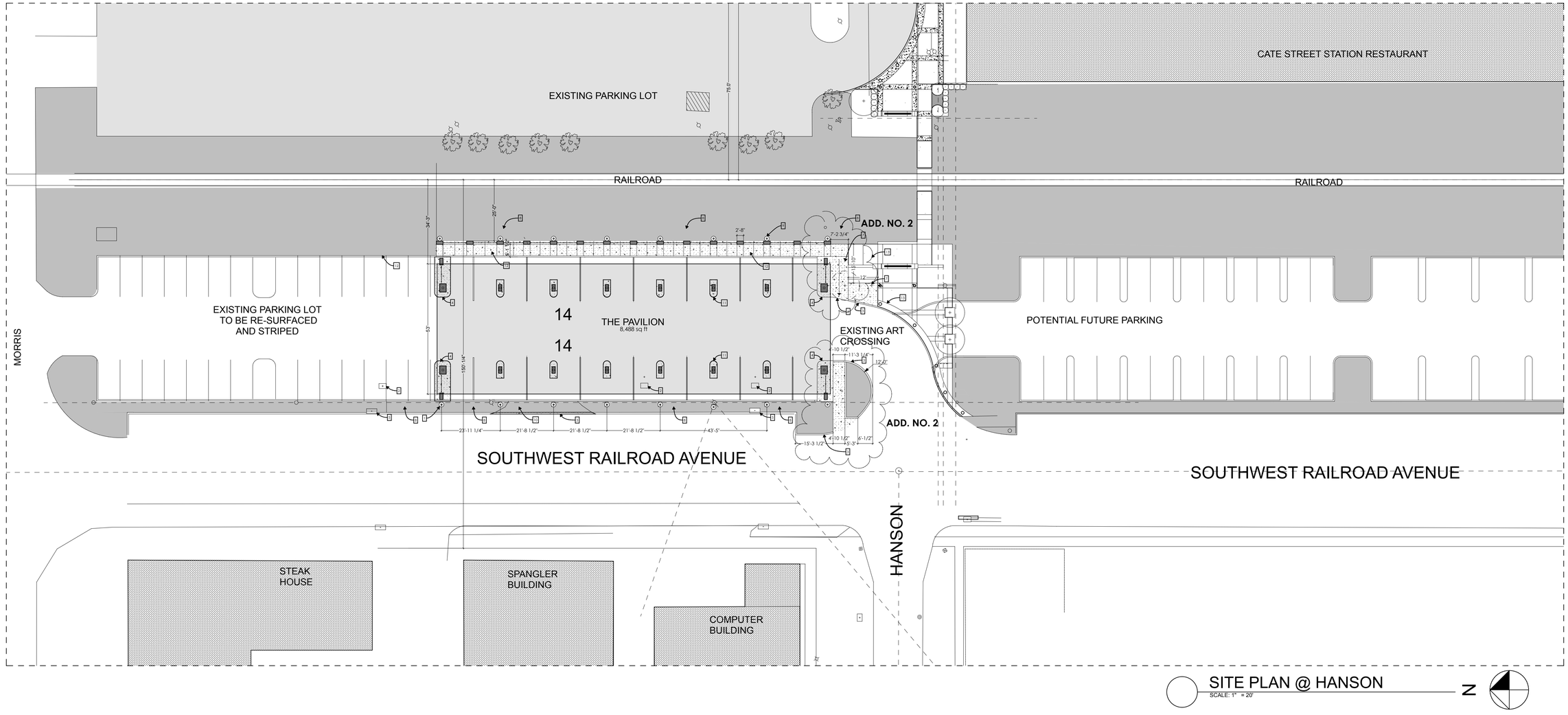
- Dries to a deep, rich black color
- Manufactured using colloid mill process

□□F□ □ □□□□ T□ U□□

- Conforms to industry-leading quality control program
- Meets or exceeds RP355e; ASTM D 3320; ASTM D 3910; ASTM D5727; ASTM D 6945; ASTM D 6946; and FAA P625; P627 (+ additive); P630; P631 (+ additive)
- Can be applied using either spray or squeegee method

GemSeal manufactures, supplies, and specifies pavement preservation products nationwide including sealers and additives, lot marking paints, crack sealants, pothole patches, primers, tools, and equipment. For over 60 years, we have been defined by our products, value, delivery, and customer support. We guarantee exacting quality control and consistent results on every jobsite nationwide.

gemsealproducts.com



SITE PLAN @ HANSON
SCALE: 1" = 20'

N

SITE PLAN KEY NOTES:

1. PREP EXISTING AREA FOR ELECTRICAL ROUGH-IN TO NEW POLE LIGHTS. TOTAL OF 8 AT STREET.
2. EXISTING CATCH BASIN TO REMAIN.
3. NEW CONCRETE CURB AND GUTTER.
4. NEW CONCRETE WALK 6"-10" ABOVE ADJACENT ASPHALT PAVING DEPENDING ON RELATIVE ELEV.
5. EXISTING CATCH BASIN STORM DRAIN AT STREET TO REMAIN.
6. NEW CONCRETE SIDEWALK AT GRADE WITH ADJACENT SURFACE FOR SMOOTH TRANSITION.
7. NEW CONCRETE SIDEWALK 6" ABOVE ADJACENT PAVING, SLOPE RAMP TO DRIVEWAY.
8. EXISTING LANDSCAPE AREA TO REMAIN IN TACT EXCEPT FOR PREP FOR ELECTRICAL ROUGH-IN.
9. NEW POLE LIGHTS ALONG BACK SIDEWALK.
10. FILL IIN WITH SOIL TO ALIGN WITH EXISTING LANDSCAPE. RE-SEED.
11. NEW CONCRETE ISLAND AT 6"-8" ABOVE ADJACENT ASPHALT TYPICAL OF (12).
12. NEW CONCRETE SIDEWALK TO ALIGN WITH EXISTING CURB.
13. EXISTING SIDEWALK AND PATTERN TO REMAIN.

pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

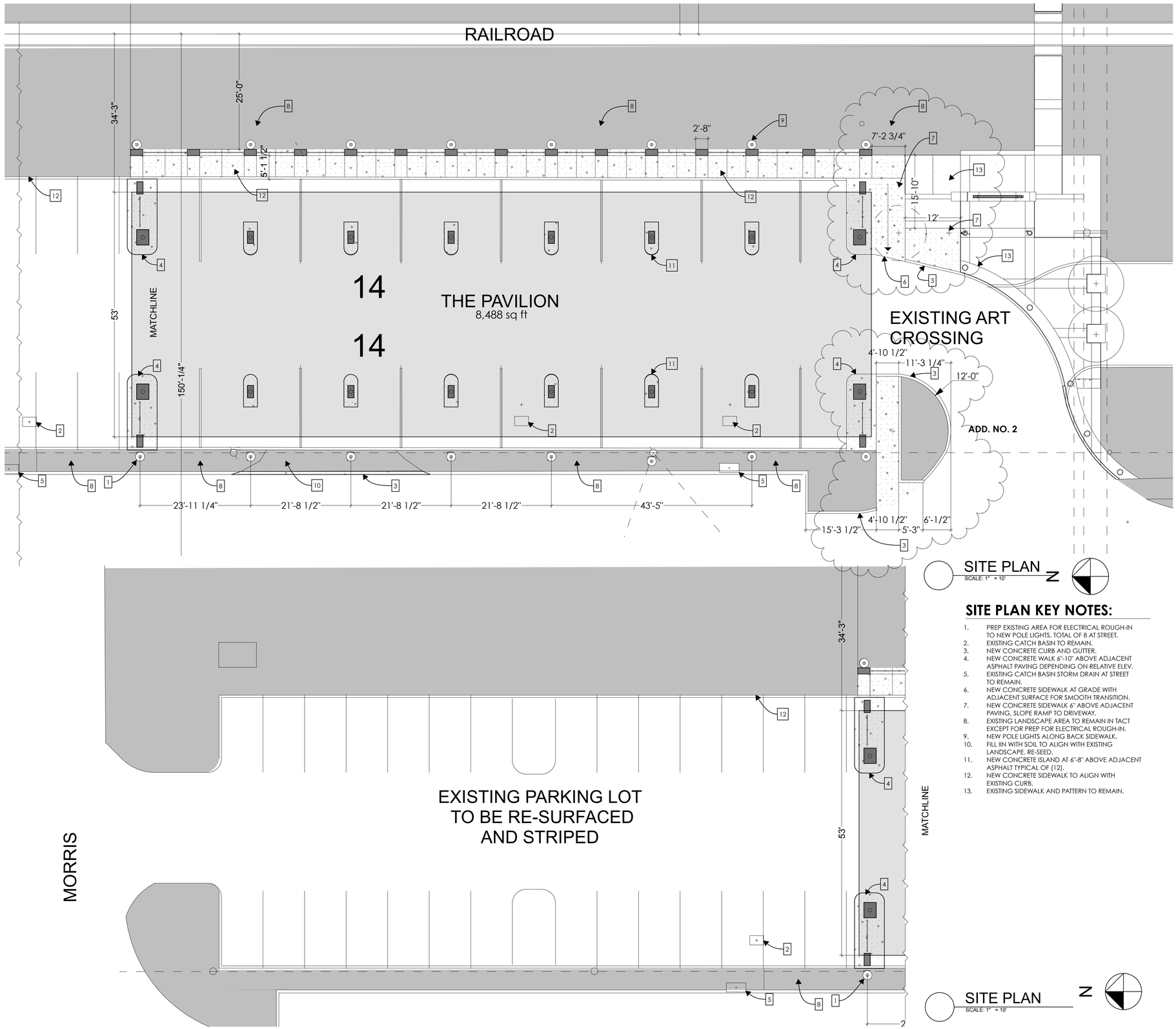
revision no. revision date
ADD. NO. 2

drawn by
T. Pistorius

THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
OVERALL SITE PLAN

drawing no.
AS-101



SITE PLAN
SCALE: 1" = 10'

N

SITE PLAN KEY NOTES:

1. PREP EXISTING AREA FOR ELECTRICAL ROUGH-IN TO NEW POLE LIGHTS. TOTAL OF 8 AT STREET.
2. EXISTING CATCH BASIN TO REMAIN.
3. NEW CONCRETE CURB AND GUTTER.
4. NEW CONCRETE WALK 6"-10" ABOVE ADJACENT ASPHALT PAVING DEPENDING ON RELATIVE ELEV.
5. EXISTING CATCH BASIN STORM DRAIN AT STREET TO REMAIN.
6. NEW CONCRETE SIDEWALK AT GRADE WITH ADJACENT SURFACE FOR SMOOTH TRANSITION.
7. NEW CONCRETE SIDEWALK 6" ABOVE ADJACENT PAVING, SLOPE RAMP TO DRIVEWAY.
8. EXISTING LANDSCAPE AREA TO REMAIN IN TACT EXCEPT FOR PREP FOR ELECTRICAL ROUGH-IN.
9. NEW POLE LIGHTS ALONG BACK SIDEWALK.
10. FILL IIN WITH SOIL TO ALIGN WITH EXISTING LANDSCAPE. RE-SEED.
11. NEW CONCRETE ISLAND AT 6"-8" ABOVE ADJACENT ASPHALT TYPICAL OF (12).
12. NEW CONCRETE SIDEWALK TO ALIGN WITH EXISTING CURB.
13. EXISTING SIDEWALK AND PATTERN TO REMAIN.

SITE PLAN
SCALE: 1" = 10'

N

pistoriusassociates, llc
ARCHITECTS

tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion
at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341

date of issue
July 10, 2024

project phase
Construction Documents

revision no. revision date
ADD. NO. 2

drawn by
T. Pistorius

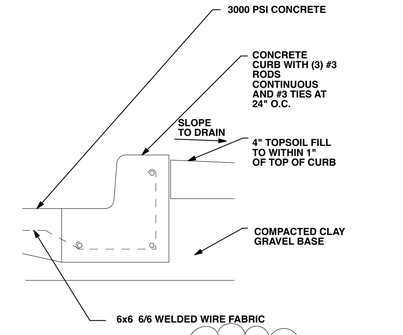
THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

drawing title
SITE PLAN

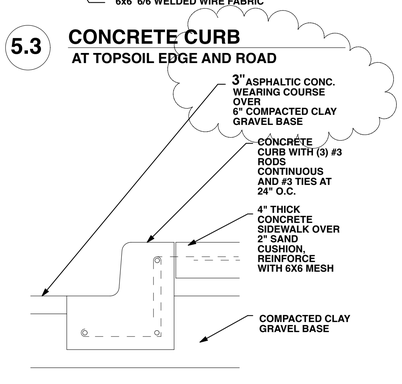
drawing no.
AS-103

pa
pistoriusassociates, llc
ARCHITECTS

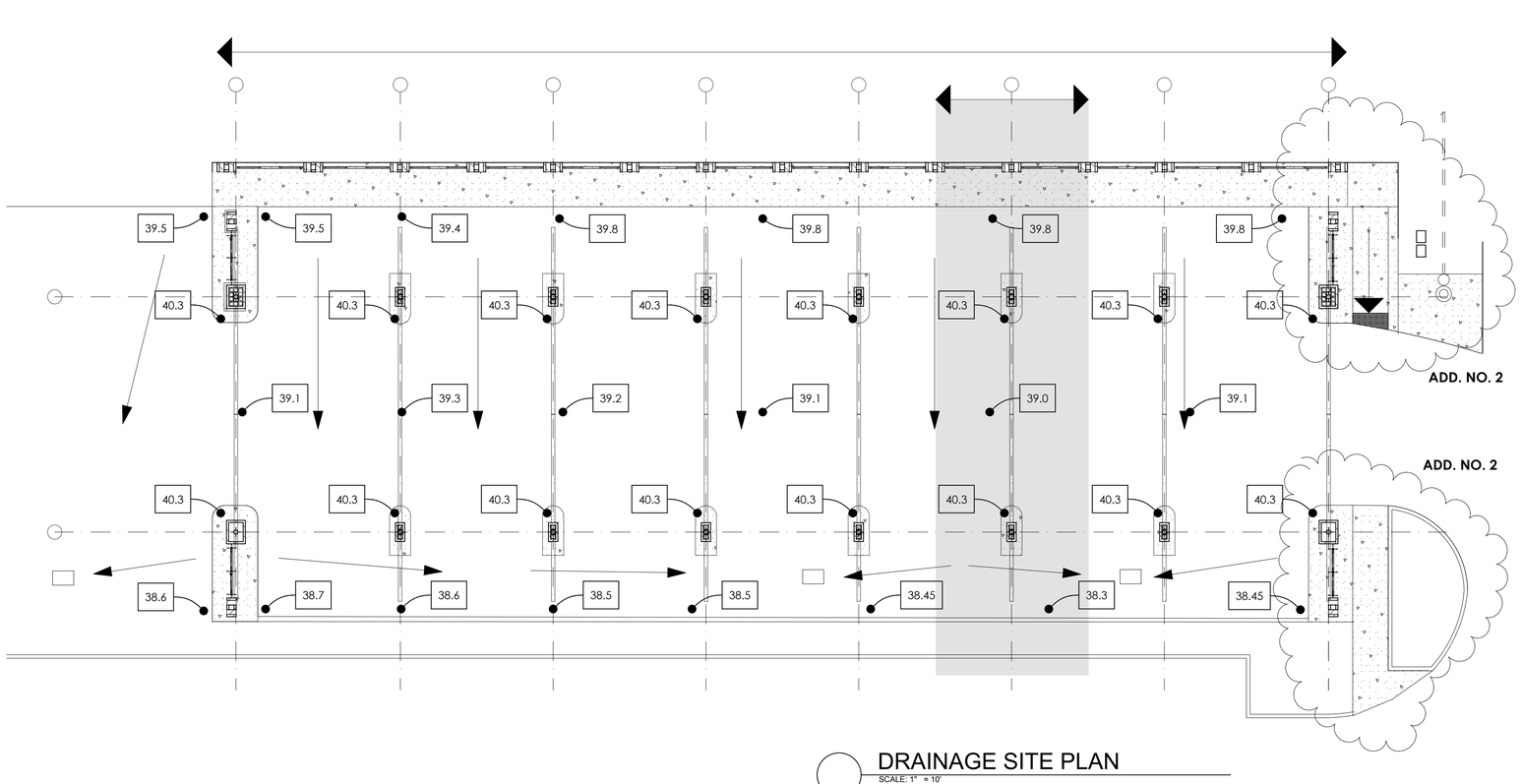
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com



5.3 **CONCRETE CURB**
AT TOPSOIL EDGE AND ROAD



5.4 **CONCRETE CURB AND WALK**
AT PARKING AND DRIVE



DRAINAGE SITE PLAN
SCALE: 1" = 10'

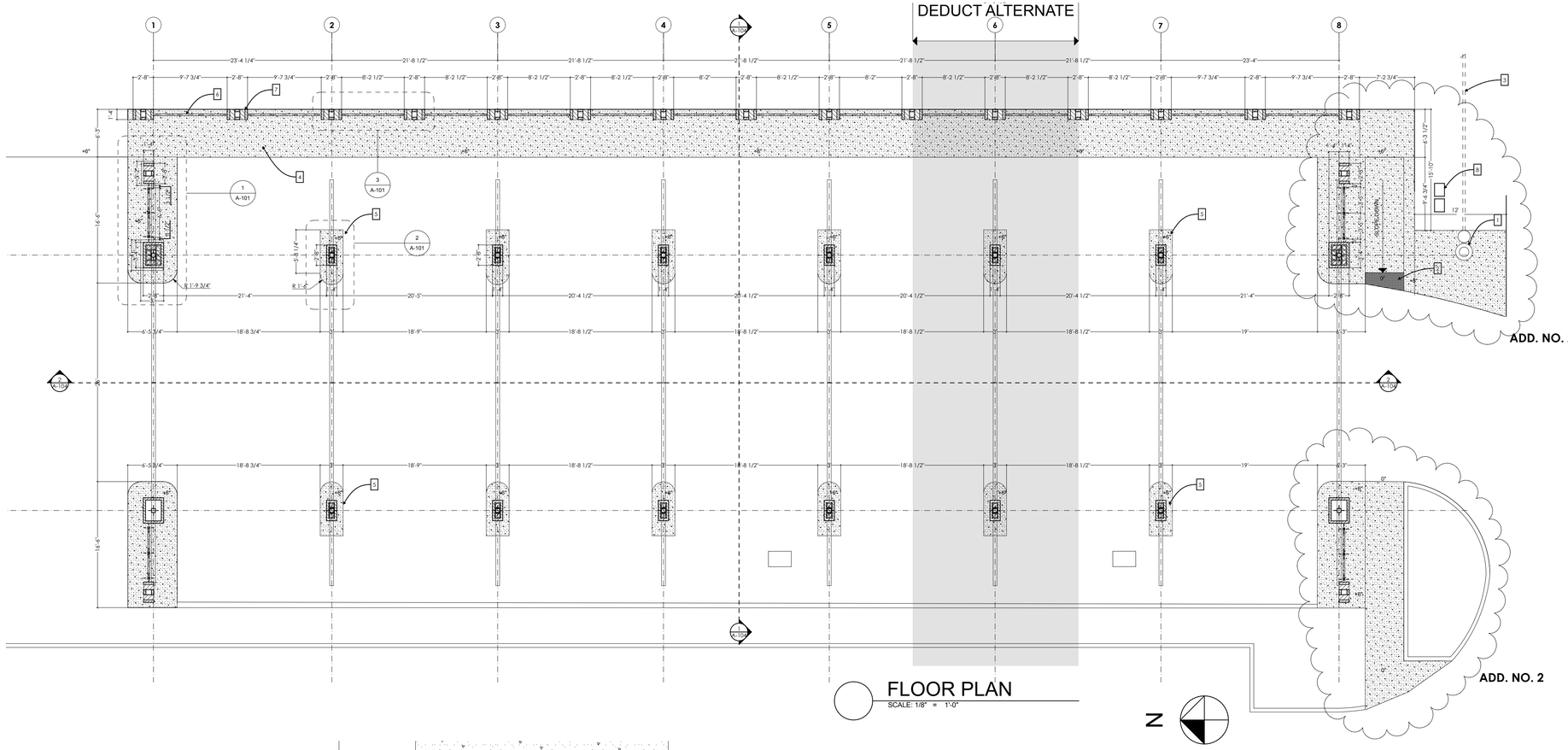
The Pavilion at Hanson Crossing
SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341
date of issue
July 10, 2024
project phase
Construction Documents
revision no. revision date
ADD. NO. 2

drawn by
T. Pistorius

THOMAS A. PISTORIUS
REG. # 6469
STATE OF LOUISIANA
REGISTERED ARCHITECT

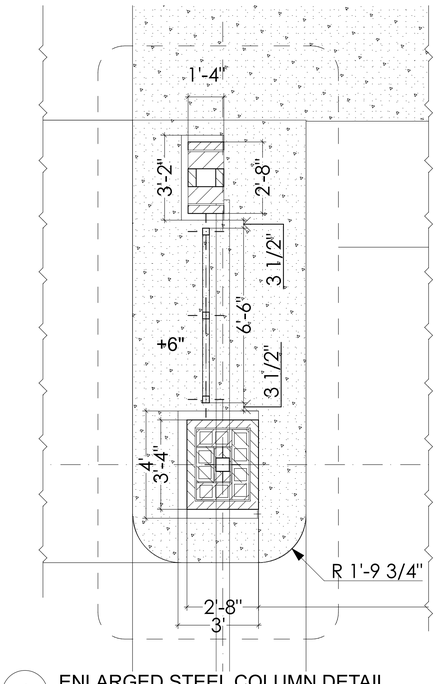
drawing title
SITE PLAN DRAINAGE
drawing no.
AS-104



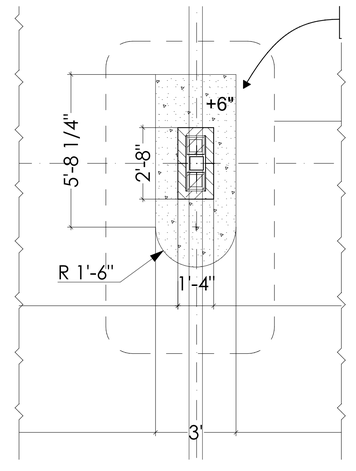
FLOOR PLAN
SCALE: 1/8" = 1'-0"

FLOOR PLAN KEY NOTES:

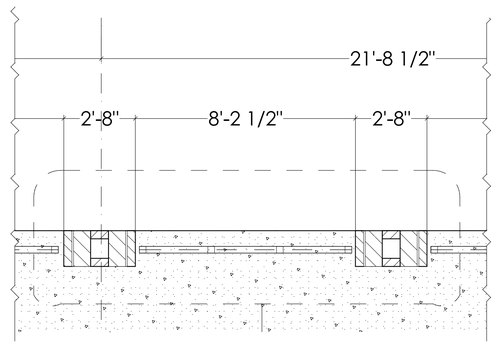
1. DRINKING FOUNTAIN, TYP. OF ONE. ELKAY LK4420DB OUTDOOR DRINKING FOUNTAIN WITH PET FOUNTAIN, BI-LEVEL PEDESTAL, ADA, OR APPROVED EQUAL.
2. TRUNCATED DOME INSERT WITHIN CONCRETE WALK.
3. 2" SCH-40 PVC SUB-GRADE TO DAYLIGHT IN DITCH.
4. ALL SIDEWALKS 3,000 PSI 3 1/2" CONCRETE WITH 4X4 WWF, 8 GA.
5. CURB HEIGHTS IN THE GENERAL AREA UNDER MAY RANGE IN HEIGHTS FROM 4"-8" DEPENDING ON THE EXISTING ASPHALT GRADE ADJACENT.
6. TUBE STEEL FENCING WITH HORSE-PANEL TYPE WIRE GRID (2"x4") HOT DIPPED GALVANIZED, HIGH PERFORMANCE PAINT COATING TO MATCH FRAME.
7. BRICK PIERS BETWEEN EACH FENCE PANEL. SEE EXTERIOR ELEVATIONS.
8. LANDSCAPE IRRIGATION VALVES TO REMAIN IN LANDSCAPE ISLAND.



1 ENLARGED STEEL COLUMN DETAIL
@ CMU/BRICK VENEER



2 ENLARGED STEEL COLUMN DETAIL
@ CMU/BRICK VENEER



3 ENLARGED STEEL FENCING
@ CMU/BRICK VENNER FENCE

pistoriusassociates, llc
ARCHITECTS
tom a. pistorius, architect
109½ west thomas street
985.542.4287 • telephone
www.pistoriusassociates.com

The Pavilion at Hanson Crossing

SWRR Avenue - Hanson Crossing
hammond, louisiana

project number
pa_2341
date of issue
July 10, 2024
project phase
Construction Documents
revision no. revision date
ADD. NO. 2

drawn by
T. Pistorius

THOMAS A. PISTORIUS REG. # 6469 STATE OF LOUISIANA REGISTERED ARCHITECT

drawing title
FLOOR PLAN
drawing no.
A-101

BERRIDGE DOUBLE-LOCK ZEE-LOCK PANEL TESTING AND CERTIFICATION SUMMARY CHART

CATEGORY		CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
PERFORMANCE	❑	Underwriters Laboratories	UL 580/UL 1897	Test method to determine uplift resistance of roof assemblies	See Load Chart on Berridge website
	■	Uplift Resistance	ASTM E-1592	Test method to determine uplift resistance of open framing systems	See Load Chart on Berridge website
FIRE	❑	Room Fire Performance	UL 790	Test methods for fire tests of roof coverings	Class A Rating
	■	Room Fire Performance	UL 263	Fire tests of building construction and materials	Design Numbers: P225, P227, P230, P237, P250, P259, P508, P510, P512, P514, P518, P701, P711, P713, P717, P719, P720, P722, P723, P726, P731, P732, P734, P801, P815, P819, & P824
ENVIRONMENTAL	❑	Impact Resistance	UL 2218	Impact resistance of prepared roof coverings	Class 4 Rating
AIR AND MOISTURE	■	Static Water Penetration	ASTM E-2140	Test method for water penetration of metal roofs by static water pressure head	Pass
	■	Water Penetration	ASTM E-1646 ASTM E-331	Test method for water penetration of metal roofs by uniform static air pressure difference	No Leakage at 20.0 PSF Pressure Differential
	■	Air Leakage	ASTM E-1680 ASTM E-283	Test method for rate of air leakage through exterior metal roofs	1.1 CFM at 6.24 PSF Pressure Differential
ROOF LISTINGS	■	Factory Mutual Global	FMG 4471	Approval Standards for Class 1 Roofs	Roofnav # 521-0-0 (I-60 SH Wind - Purlins) Roofnav # 522-0-0 (I-120 SH Wind - Purlins) Roofnav # 431756-0-0 (I-120 SH Wind - Steel Deck) Roofnav # 431757-0-0 (I-150 SH Wind - Steel Deck)
	❑	Florida Product Approval	TAS 125 FMG 4471	Local and state approval of products and systems for compliance with the structural requirements of the Florida Building Code	FL #11159.1 (24 GA - Plywood) FL #11159.2 (24 GA - Steel Deck) FL #11159.3 (22 GA - Steel Deck) FL #11241.4 HVHZ (24 GA - Steel Deck or Plywood) FL #11241.6 HVHZ (0.032 AL - Steel Deck or Plywood) FL #14210.3 (24 GA - Steel Purlins) FL #14210.4 (22 GA - Purlins) FL #15471.1 (24 GA - Plywood) FL #15471.2 (24 GA - Steel Deck) FL #19999.1 (0.032 AL - Plywood) FL #19999.2 (0.032 AL - Steel Deck)
	■	Underwriters Laboratories	UL 580 Uplift Class 90	Standard for Tests for Uplift Resistance of Roof Assemblies	Construction No. 312 (24 GA - Purlins) Construction No. 335 (24 GA - Metal Deck) Construction No. 403 (24 GA - Plywood) Construction No. 608 (24 GA - Insulated Metal Deck)
	❑	Miami Dade	TAS 125 FMG 4471	Miami Dade County approval of building products directly related to the structural wind resistance	NOA #17-0808.06 (24 GA - Steel Deck or Plywood) NOA #20-0902.06 (0.032 AL - Steel Deck or Plywood)
	❑	TDI Listed	UL 580 ASTM E-1592	Texas Department of Insurance Listing for wind capacities	RC-140 (24 GA - Plywood) RC-202 (24 GA - Purlins) RC-276 (22 GA - Purlins) RC-481 (22 GA & 24 GA - Steel Deck) RC-505 (0.032 AL - Steel Deck) RC-506 (0.032 AL - Plywood)
	■	ICC-ES Report	UL 580	Capacity report by the International Code Counsel	ESR-3486 (24 GA - Plywood)
	■	CEGS 07416	Structural Standing Seam Metal Roof System	Approval for use on military construction projects	Approved

■ - Steel only ❑ - Steel and Aluminum

For further details please visit www.Berridge.com

CORPORATE HEADQUARTERS
2610 Harry Wurzbach Road
San Antonio, TX 78209
(800) 669-0009
www.Berridge.com

BERRIDGE STOCK AVAILABILITY AND COLOR DETAILS

S - Stock Color N - Non-Stocking Color N/A - Not Available

Standard Colors	24 Gauge		22 Gauge*		0.032 Aluminum*		0.040 Aluminum*		SR	EM	SRI
	48"	42"	48"	42"	48"	42"	48"	42"			
Aged Bronze	S	S	S	N	N	N	N	N	0.31	0.85	31
Almond	S	S	S	N	N	N	N	N	0.65	0.86	77
Bristol Blue	S	S	N	N	N	N	N	N	0.33	0.85	33
Buckskin	S	S	S	N	N	N	N	N	0.43	0.83	46
Burgundy	S	S	N	N	N	N	N	N	0.32	0.84	32
Charcoal Grey	S	S	S	S	N	N	N	N	0.29	0.84	28
Cityscape	S	S	S	S	N	N	N	N	0.48	0.85	54
Colonial Red	S	S	N	N	N	N	N	N	0.35	0.83	35
Copper Brown	S	S	N	N	N	N	N	N	0.32	0.85	32
Dark Bronze	S	S	S	S	N	N	N	N	0.28	0.85	27
Deep Red	S	S	N	N	N	N	N	N	0.41	0.84	44
Evergreen	S	S	N	N	N	N	N	N	0.30	0.83	29
Forest Green	S	S	S	N	N	N	N	N	0.30	0.83	29
Hartford Green	S	S	N	N	N	N	N	N	0.27	0.83	25
Hemlock Green	S	S	N	N	N	N	N	N	0.31	0.84	31
Matte Black	S	S	S	S	N	N	N	N	0.26	0.83	24
Medium Bronze	S	S	S	S	N	N	N	N	0.31	0.85	31
Parchment	S	S	S	N	N	N	N	N	0.60	0.85	71
Patina Green	S	S	N	N	N	N	N	N	0.34	0.85	35
Royal Blue	S	S	N	N	N	N	N	N	0.27	0.85	26
Shasta White	S	S	S	N	N	N	N	N	0.61	0.85	73
Sierra Tan	S	S	S	N	N	N	N	N	0.39	0.85	42
Teal Green	S	S	N	N	N	N	N	N	0.26	0.84	25
Terra - Cotta	S	S	N	N	N	N	N	N	0.36	0.84	38
Zinc Grey	S	S	S	S	N	N	N	N	0.39	0.85	42
Acrylic-Coated Galvalume®	S	S	S	S	N/A	N/A	N/A	N/A	0.67	0.20	59
Premium Colors*											
Award Blue	S	S	N	N	N	N	N	N	0.17	0.83	11
Natural White	S	S	N	N	N	N	N	N	0.71	0.85	86
Metallic Colors*											
Antique Copper-Cote	S	S	N	N	N	N	N	N	0.33	0.84	34
Champagne	S	S	N	N	N	N	N	N	0.40	0.85	43
Copper-Cote™	S	S	N	N	N	N	N	N	0.51	0.85	59
Lead-Cote™	S	S	N	N	N	N	N	N	0.36	0.86	38
Preweathered Galvalume®	S	S	N	N	N	N	N	N	0.40	0.85	43
Zinc-Cote™	S	S	N	N	N	N	N	N	0.53	0.83	59
Print Pattern Finishes**											
COR-TEN AZP® Raw	S	N	N	N	N/A	N/A	N/A	N/A	0.32	0.89	34
Walnut	S	N	N	N	N/A	N/A	N/A	N/A	-	-	-
Honey Walnut	S	N	N	N	N/A	N/A	N/A	N/A	-	-	-
Rosewood	S	N	N	N	N/A	N/A	N/A	N/A	-	-	-
Boston Cherry	S	N	N	N	N/A	N/A	N/A	N/A	-	-	-

Testing results for Kynar 500® or Hylar 5000® PVDF Resin-Based Color Finishes coil coating applications:

- Specular Gloss: (ASTM D-523) Low and medium gloss only
- Color Uniformity: (ASTM D-2244) Color controlled both instrumentally and visually
- Dry Film Thickness: (ASTM D-7091, ASTM D-1005, NCCA 11-13, 11-14, 11-15) Primer 0.20 ± 0.05 mil, topcoat 0.75 ± 0.05 mil
- Hardness: (ASTM D-3363, NCCA 11-12, Eagle Turquoise Pencils) HB Minimum
- Adhesion (X-Cut): (ASTM D-3359) No adhesion loss
- Adhesion (Crosshatch): (ASTM D-3359) No adhesion loss
- Abrasion Coefficient: (ASTM D-968) 100 liters/mil topcoat
- Direct Impact Flexibility: (ASTM D-2794, Gardner Impact Tester, 1/10" Distortion) Excellent, no removal
- Reverse Impact Flexibility: (NCCA Spec. 11, ASTM D-2794, Gardner Impact Tester, 5/8" ball Impact force in inch pounds equal to metal thickness) Excellent, no cracking or loss of adhesion
- Formability: (ASTM D-4145, 180° T-Bend on 1/8 Mandrel) No cracks or loss of adhesion
- Erosion: (20 years, 45° South Florida) Maximum 15% loss
- Humidity Resistance: (ASTM D-2247) Passes 2000 hours on Galvalume® and 4000 hours on Aluminum
- Acid Resistance: (ASTM D-1308, Proc. 3.1.1, 10% Sulfuric Acid spot test, 24 hour exposure) Excellent, no effect
- Salt Spray Resistance: (ASTM B-117) Passes 2000 hours on Galvalume® and 4000 hours on Aluminum
- Alkali Resistance: (ASTM D-1308, Proc. 5.2, 10% Sodium Hydroxide, 24 hour exposure) Excellent, no effect
- Detergent Resistance: (ASTM D-2248, 72 hours immersion in 3% solution at 100°F) Excellent, no effect
- Resistance to Acid Pollutants: (ASTM D 1308 Proc. 3.1.1, 24 hour exposure 10% HNO^3 vapors) Excellent, no effect
- Weathering - Color Retention: (ASTM D-2244, 20 years, 45° South Florida) Maximum 5 NBS units color change
- Weathering - Chalk Resistance: (ASTM D-4214, 20 years, 45° South Florida) Not worse than No. 8 rating

Notes:

1. ASTM - American Society for Testing Materials
2. NCCA - National Coil Coating Association
3. Galvalume® is 55% Aluminum-Zinc alloy coated sheet steel and is a registered trademark of BIEC International Inc.
4. Kynar 500® is a registered trademark belonging to Arkema, Inc.
5. Hylar 5000® is a registered trademark belonging to Solvay Solexis, Inc.

S Stock Color; Not subject to a minimum order

N Non-Stock Color; Subject to inventory on hand; 4,500 sf minimum order for 22 Gauge and 0.032 & 0.040 Aluminum

N/A Not Available

* Consult BMC on product availability. Premium and Metallic finishes are subject to a nominal surcharge, contact BMC for additional information.

** Consult Berridge on pricing and availability for Print Pattern Finishes.

BMC SAN ANTONIO
6515 Fratt Rd.
San Antonio, TX 78218
(210) 650-3050
Fax (210) 650-0379

BMC HOUSTON
1720 Maury St.
Houston, TX 77026
(713) 223-4971
Fax (210) 650-0379

BMC DALLAS
2015 California Crossing
Dallas, TX 75220
(972) 506-8496
Fax (210) 650-0379

BMC DENVER
7505 E. 41st Ave.
Denver, CO 80216
(303) 322-3703
Fax (210) 650-0379

BMC CHICAGO
1175 Carolina Dr.
W. Chicago, IL 60185
(630) 231-7495
Fax (210) 650-0379

BERRIDGE FLORIDA SALES CORPORATION***
8802 Venture Cove
Tampa, FL 33637
(813) 335-4505
Fax (210) 650-0379

BMC PHOENIX
5717 W. Washington St.
Phoenix, AZ 85043
(602) 385-1237
Fax (210) 650-0379

BMC ATLANTA
319 Lee Industrial Blvd.
Austell, GA 30168
(770) 941-5141
Fax (210) 650-0379

BMC OKLAHOMA CITY
1400 Exchange Ave.
Oklahoma City, OK 73108
(405) 248-7404
Fax (210) 650-0379

BMC KANSAS CITY
1235 Southwest Blvd.
Kansas City, KS 66103
(913) 227-0855
Fax (210) 650-0379

BERRIDGE CALIFORNIA SALES CORPORATION***
8442 Sultana Ave.
Fontana, CA 92335
(562) 402-2081
Fax (210) 650-0379

*** Berridge California and Florida Sales Corporations are separate entities from Berridge Manufacturing Company.

CORPORATE & SALES HEADQUARTERS
2610 Harry Wurzbach Road
San Antonio, TX 78209
(210) 650-3050
Fax (210) 650-0379

MANUFACTURING FACILITY
2201 Rudeloff Road
Seguin, TX 78155
(830) 401-5200
Fax (210) 650-0379

CRRC COOL ROOF RATING COUNCIL RATED PRODUCT

WWW.BERRIDGE.COM

Berridge Manufacturing Company Color Chart - 2022 | Printed in the U.S.A.
Rev. 08_2022

ATTENDANCE:

NAME	ORGANIZATION	PHONE	LIC No.
Tom	PA: ARCHITECT		
Courtland Foley	ARGallardo LLC	225-271-3388	73235
Chad Alsobrooks	NOKOA	985-516-7558	
Barrett Burget	Stubbs NK	225-270-4351	
Melanie McGuire	Spartan Building Corporation	985-845-2555	4805
Cameron Waimuris	CWaimuris	985 222 5942	
DANNY PLUNKETT (dplunkett@)	KENT DESIGN BUILD	985 662 4880	
DAVID Foster	Mrp Contractors LLC (mrpcontractors1@outlook.com)	985-215-3113	
Jason Dunnington	D+H Quality Const	985 713-3154	
Jason Norris	JW Grand, LLC	225 767-3724	#9569
Terrence Hill	Hill Construction LLC	225.315.2468	43488
Krystal Aragon (krystal.pridevoofing@gmail.com)	Pride Roofing	850-851-3052	
Jose Cano	Kelly Construction Group	225-243-4994	# 52741
Bobby Byrd	(bids@kellyconstructiongroup.com)	"	"
ZACK ZACCARI	GROUNDS GUYS	RZACCARI@GROUNDSGUYS.COM 970.497.6226	

Send agenda

01

PRE-BID MEETING AGENDA

August 14, 2024

Project: City of Hammond Pavilion
Hammond, Louisiana

Project No: pa2341

Location: SWRR Avenue Parking Lot at SW corner of Downtown

Project Representatives: Tom A. Pistorius, Pistorius Associates, LLC

1. **INTRODUCTIONS:**
Owner: City of Hammond
Funded: Home Mortgage Authority
Architect: Pistorius Associates, LLC

2. All contractors must sign-in at Pre-Bid Meeting and provide applicable company information with State of Louisiana contractor numbers.

3. Project scope: New 50x160 covered parking structure/ pavilion over existing parking lot. Existing grades will be maintained with a new established Base Floor Height for top of slab at columns. The existing paving will maintain its slope and receive patching after cutting fr foundation.

4. Building Permit Cost provided by City of Hammond.

5. Bid Date and Time is Tuesday, September 3, 2023 at 2:00 p.m. at which time bids will be opened and read aloud. Location is at the City Council Chambers on East Charles.

6. Project plans and specifications are available with city of hammond.org or bid express.

7. All Addendum shall be acknowledged on the bid form.
An Addendum may not be released within 3 days of the bid opening.
Deductive Alternate - for one full bay between two trusses.

8. Bids shall include a 5% bid security, as stated in the Instructions to Bidders.
Contract Time is 240 (two hundred forty) calendar days.
Liquidated Damages are $150 per day
The deadline for substitutions are 7 (seven) calendar days prior to Bid Opening.
All questions are due 7 (seven) days prior to bid opening.
Use Substitution Form for all substitutions. In the spec.

9. **GENERAL PROJECT INFORMATION:**

a. Access/Parking: To be discussed.
b. Staging and storage or office trailer (if desired): To be discussed.

10. **QUESTIONS, DISCUSSIONS:**

1. Testing was asked about - We will include an allowance of $5,000 to cover.
2. An allowance of $10,000 may be included for unforeseen conditions.
3. Addendum scheduled to go out August 21st.
4. Bid date was requested to extend to Friday September 6th in lieu of the 3rd, due to being after Labor Day.

11. **SITE VISIT:**

We walked the site.

Filter: All notifications

Notification	User	Business	Time
Solicitation Advertised	Wayne Pontiff	Kort's Construction Services, Inc.	08/06/2024 11:00 AM EDT
Solicitation Advertised	David Muller	M & J Civil Construction, LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Rebecca Bergin	Douglas Food Stores Inc	08/06/2024 11:00 AM EDT
Solicitation Advertised	Michael Hackley	Hackley Enterprises LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	steven williams	A Property 4 U,LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Jonathan Love	HMSE	08/06/2024 11:00 AM EDT
Solicitation Advertised	Joshua Cain	Siema Construction	08/06/2024 11:00 AM EDT
Solicitation Advertised	James Madden	Madden Gulf Coast, LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	J. Todd Koniar	Vulcan Inc.	08/06/2024 11:00 AM EDT
Solicitation Advertised	Chad Mizell	Micon Services, Inc.	08/06/2024 11:00 AM EDT
Solicitation Advertised	Joseph Wall	Blue Boy Construction LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Garner Admin	Garner Environmental Services, Inc.	08/06/2024 10:00 AM CDT
Solicitation Advertised	Jon Martin	Aivast Construction LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Jason Bankston	Grady Crawford Construction Co., Inc. of Baton Rouge	08/06/2024 10:00 AM CDT
Solicitation Advertised	Jennifer Casadaban	Casco Contracting, LLC	08/06/2024 11:00 AM EDT
Solicitation Advertised	Harshitha Kethineni	OpenTeQ Technologies LLC	08/06/2024 10:00 AM CDT
Solicitation Advertised	Martin Padial	Workbox	08/06/2024 10:00 AM CDT
Solicitation Advertised	Richard Price	Richard Price Contracting Co., LLC	08/06/2024 10:00 AM CDT

86 Notification Logs

Notification	User	Business	Time
Personalized Notifications	Rob Lucas	Chase Construction Restoration	08/06/2024 11:00 AM EDT
Personalized Notifications	Casey Gooch	Deumite Construction	08/06/2024 10:00 AM CDT
Solicitation Advertised Text	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/06/2024 10:00 AM CDT
Personalized Notifications Text	Harshitha Kethineni	OpenTeQ Technologies LLC	08/06/2024 10:00 AM CDT
Solicitation Addendum	Wayne Pontiff	Kort's Construction Services, Inc.	08/19/2024 03:44 PM EDT
Solicitation Addendum	David Muller	M & J Civil Construction, LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Rebecca Bergin	Douglas Food Stores Inc	08/19/2024 03:44 PM EDT
Solicitation Addendum	Michael Hackley	Hackley Enterprises LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	steven williams	A Property 4 U,LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Jonathan Love	HMSE	08/19/2024 03:44 PM EDT
Solicitation Addendum	Joshua Cain	Siema Construction	08/19/2024 03:44 PM EDT
Solicitation Addendum	James Madden	Madden Gulf Coast, LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	J. Todd Koniar	Vulcan Inc.	08/19/2024 03:44 PM EDT
Solicitation Addendum	Chad Mizell	Micon Services, Inc.	08/19/2024 03:44 PM EDT
Solicitation Addendum	Joseph Wall	Blue Boy Construction LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Garner Admin	Garner Environmental Services, Inc.	08/19/2024 02:44 PM CDT
Solicitation Addendum	Jon Martin	Aivast Construction LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Jason Bankston	Grady Crawford Construction Co., Inc. of Baton Rouge	08/19/2024 02:44 PM CDT
Solicitation Addendum	Jennifer Casadaban	Casco Contracting, LLC	08/19/2024 03:44 PM EDT

86 Notification Logs

Notification	User	Business	Time
Solicitation Addendum	Harshitha Kethineni	OpenTeQ Technologies LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Martin Padial	Workbox	08/19/2024 02:44 PM CDT
Solicitation Addendum	Richard Price	Richard Price Contracting Co., LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Nathan Stubbs	Stubbs NK Contractors LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum Text	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/19/2024 02:44 PM CDT
Solicitation Addendum	Wayne Pontiff	Kort's Construction Services, Inc.	08/22/2024 04:34 PM EDT
Solicitation Addendum	David Muller	M & J Civil Construction, LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Rebecca Bergin	Douglas Food Stores Inc	08/22/2024 04:34 PM EDT
Solicitation Addendum	Michael Hackley	Hackley Enterprises LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	steven williams	A Property 4 U,LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Jonathan Love	HMSE	08/22/2024 04:34 PM EDT
Solicitation Addendum	Joshua Cain	Siema Construction	08/22/2024 04:34 PM EDT
Solicitation Addendum	James Madden	Madden Gulf Coast, LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	J. Todd Koniar	Vulcan Inc.	08/22/2024 04:34 PM EDT
Solicitation Addendum	Chad Mizell	Micon Services, Inc.	08/22/2024 04:34 PM EDT
Solicitation Addendum	Joseph Wall	Blue Boy Construction LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Garner Admin	Garner Environmental Services, Inc.	08/22/2024 03:34 PM CDT
Solicitation Addendum	Jon Martin	Aivast Construction LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Jason Bankston	Grady Crawford Construction Co., Inc. of Baton Rouge	08/22/2024 03:34 PM CDT

86 Notification Logs

Notification	User	Business	Time
Solicitation Addendum	Jennifer Casadaban	Casco Contracting, LLC	08/22/2024 04:34 PM EDT
Solicitation Addendum	Harshitha Kethineni	OpenTeQ Technologies LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Martin Padial	Workbox	08/22/2024 03:34 PM CDT
Solicitation Addendum	Richard Price	Richard Price Contracting Co., LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Nathan Stubbs	Stubbs NK Contractors LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum Text	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/22/2024 03:34 PM CDT
Solicitation Addendum	Wayne Pontiff	Kort's Construction Services, Inc.	08/28/2024 05:26 PM EDT
Solicitation Addendum	David Muller	M & J Civil Construction, LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Rebecca Bergin	Douglas Food Stores Inc	08/28/2024 05:26 PM EDT
Solicitation Addendum	Michael Hackley	Hackley Enterprises LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	steven williams	A Property 4 U,LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Jonathan Love	HMSE	08/28/2024 05:26 PM EDT
Solicitation Addendum	Joshua Cain	Siema Construction	08/28/2024 05:26 PM EDT
Solicitation Addendum	James Madden	Madden Gulf Coast, LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	J. Todd Koniar	Vulcan Inc.	08/28/2024 05:26 PM EDT
Solicitation Addendum	Chad Mizell	Micon Services, Inc.	08/28/2024 05:26 PM EDT
Solicitation Addendum	Joseph Wall	Blue Boy Construction LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Garner Admin	Garner Environmental Services, Inc.	08/28/2024 04:26 PM CDT
Solicitation Addendum	Jon Martin	Aivast Construction LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Jason Bankston	Grady Crawford Construction Co., Inc. of	08/28/2024 04:26 PM CDT

86 Notification Logs

Notification	User	Business	Time
		Baton Rouge	
Solicitation Addendum	Jennifer Casadaban	Casco Contracting, LLC	08/28/2024 05:26 PM EDT
Solicitation Addendum	Harshitha Kethineni	OpenTeQ Technologies LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Martin Padial	Workbox	08/28/2024 04:26 PM CDT
Solicitation Addendum	Richard Price	Richard Price Contracting Co., LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum	Nathan Stubbs	Stubbs NK Contractors LLC	08/28/2024 04:26 PM CDT
Solicitation Addendum Text	Bradley Simmons	B & B CONSTRUCTION SOLUTIONS LLC	08/28/2024 04:26 PM CDT
86 Notification Logs			