

PROJECT MANUAL FOR:



ITB BID No.: 17-021

BAYVIEW PARK BOYS AND GIRLS CLUB RENOVATION

AUGUST 23, 2017

MAYOR: CRAIG CATES

COMMISSIONERS:

SAM KAUFMAN

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PREPARED BY:
City of Key West
Engineering Services

CITY OF KEY WEST

KEY WEST, FLORIDA

CONTRACT DOCUMENTS

for

BAYVIEW PARK
BOYS AND GIRLS CLUB RENOVATION

KEY WEST, FLORIDA

AUGUST 23, 2017

ITB BID No.: 17-021

INFORMATION TO BIDDERS

SUBJECT: INVITATION TO BID No. 17-021
BAYVIEW PARK BOYS AND GIRLS CLUB
RENOVATION

ISSUE DATE: JULY 23, 2017

MAIL OR SPECIAL
DELIVERY REPOSSES TO: CITY CLERK'S OFFICE
CITY OF KEY WEST
1300 WHITE ST
KEY WEST, FL 33040

DELIVER BIDS TO: SAME AS ABOVE

BIDS MUST BE
RECEIVED: AUGUST 23, 2017

NOT LATER THAN: 3:00 P.M. LOCAL TIME

DEADLINE FOR INQUIRIES: AUGUST 14, 2017
FINAL ADDENDA SUBMITTED: AUGUST 16, 2017

SUE SNIDER
PURCHASING AGENT
CITY OF KEY WEST

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PART 1

BIDDING REQUIREMENTS

INVITATION TO BID

Sealed bids for the City of Key West ITB No. 17-021 BAYVIEW PARK BOYS AND GIRLS CLUB RENOVATION, addressed to the City of Key West, will be received at the Office of the City Clerk, 1300 White St., Key West Florida, 33040 until 3:00 pm on August 23, 2017 and then will be publicly opened and read. Any bids received after the time and date specified will not be considered.

Please submit one (1) one original and (2) two flash drives with one single PDF file of the entire bid package. Bid package is to be enclosed in a sealed envelope, clearly marked on the outside “BAYVIEW PARK BOYS AND GIRLS CLUB RENOVATION ITB No. 17-021” addressed and delivered to the City Clerk at the address noted above.

The project includes, but is not limited to, the renovation of an existing 4,912 GSF building. Existing building structure and envelope is constructed with CMU block exterior walls with stucco finish, metal louvers and an aluminum roof system. The proposed building is a non-separated mixed use building primarily Assembly A-3 use with accessory areas of Business and Storage S-2. The project renovation scope involves interior remodel to provide a space meeting current City Code and needs of the Boys and Girls Club of Key West. Exterior renovation work includes new accessible pathways to entrance doors and replacement of the existing louver system with a glazing system to facilitate air conditioning.

Drawings and Specifications may be obtained from Demand Star by Onvia or City of Key West website www.cityofkeywest-fl.gov. For bid package access on Demand Star, please contact Onvia at www.demandstar.com or call 1-800-711-1712.

A **MANDATORY pre-bid meeting** will be held in the City Manager’s Conference Room, located on the second floor of Key West City Hall, 1300 White Street, Key West Florida 33040 at 2:00 on August 9, 2017.

The successful Bidder may be required to furnish the necessary additional bond(s) for the faithful performance of the Contract, as prescribed in the Bidding Documents. The Bidder will be required to furnish documentation showing that he is in compliance with the licensing requirements of the State and the provisions of Chapter 66 section 87 of the Code of Ordinances of the City of Key West. Compliance with these provisions is required before the Contractor can enter into the agreement contained in the Contract Documents. Specifically, Bidder shall demonstrate that he holds, as a minimum, the following licenses and certificates required by State Statute and local codes.

EACH BID MUST BE SUBMITTED ON THE PRESCRIBED FORM AND ACCOMPANIED BY BID SECURITY AS PRESCRIBED IN THE INSTRUCTIONS TO BIDDERS, PAYABLE TO THE CITY OF KEY WEST, FLORIDA, IN AN AMOUNT NOT LESS THAN FIVE (5) PERCENT OF THE AMOUNT BID.

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

The Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of the provisions of Chapter 66 Section 87 of the Code of Ordinances of the City of Key West; within 10 days following the Notice of Award and must demonstrate that he holds at a minimum, the following licenses & certificates;

- A. City of Key West Business Tax License Receipt
- B. A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida.

All bid bonds, contract bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or Insurance Company having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida.

Before a Contract will be awarded for the work contemplated herein, the CITY will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the CITY to evaluate the Bidder's qualifications.

For information concerning the proposed work or for appointment to visit the site of the proposed work, contact Kreed Howell, Engineering Services Department for the City of Key West at lhowell@cityofkeywest-fl.gov . All questions/information requests must be in writing.

As stated above at the time of the bid submittal the Bidder must provide satisfactory documentation of State Licenses. The Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of County, and City licenses as would be required within ten days of the award. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the Bid in question. The City may reject bids for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bid does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the bid is conditional, (5) if a change of circumstances occurs making the purpose of the bid unnecessary to the City, or (6) if such rejection is in the best interest of the City. The City may also waive any minor formalities or irregularities in any bid.

* * * * *

1. CONTRACT DOCUMENTS

A. FORMAT

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the sections into work performed by the various building trades, work by separate subcontractors, or work required for separate facilities in the project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of Kreed Howell (lhowell@cityofkeywest-fl.gov) in writing (at least 10 working days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing in the form of Addenda to the documents which will be furnished to all registered holders of Contract Documents. Bidders shall submit with their Proposals, or indicate receipt of, all Addenda. The CITY will not be responsible for any other explanation or interpretations of said Documents.

2. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is specified in applicable parts of these Contract Documents.

3. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements before award of Contract by the CITY. Bidders must hold or obtain all licenses and/or certificates as required by the State and Local Statutes in order to bid and perform the work specified herein.

4. BIDDER'S UNDERSTANDING

Each Bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions.

The CITY will make available to prospective Bidders upon request and at the office of the CITY Engineer, prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with, federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.

5. TYPE OF PROPOSAL

A. LUMP SUM

The Proposal for the work is to be submitted on a lump sum basis. All items required to complete the work specified but not included in the Proposal shall be considered incidental to those set forth in the Proposal.

The Bidder shall submit a Schedule of Values with the Proposal. Schedule of Values shall be broken down by bid items listed in the draft AIA 702 Continuation Sheet in PART 8 of the PROJECT MANUAL and will be used as a basis for payment. Contractor is responsible for providing a dollar amount for each item listed on the Schedule of Values and that total shall match the amount on the Proposal Lump Sum. The Bidder will be considered non-responsive if Schedule of Values is not complete and or not included in Bid Package.

6. PREPARATION OF BIDS

A. GENERAL

All blank spaces in the BID form must be filled in, as required, preferably in BLACK ink. All price information shall be shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between individual lump sum prices and extended totals,

unit prices shall prevail.

Any BID shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid. Only one BID from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the CITY that any Bidder is interested in more than one Proposal for work contemplated; all Proposals in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his BID in the blank space provided therefore. If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the CITY prior to opening of Proposals or submitted with the Proposal, otherwise the Proposal will be regarded as not properly authorized.

C. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West. These are defined in the addition to Article 39, ORDINANCES, PERMITS, AND LICENSES, as set forth in the Supplementary Conditions.

The Bidder shall submit with an experience record with the Bid showing his experience and expertise in general Contracting. Such experience record shall provide at least five current or recent projects of similar work within the State Florida and preferably Monroe County. For each project the following information shall be provided:

1. Description and location of work.
2. Contract amount.
3. Dates work was performed.
4. Owner.
5. Name of Owner's contact person and phone number.
6. Engineer.
7. Name of Engineer's contact person and phone number.

The bidder shall submit with his bid a list of items to be performed by his own labor and that performed by subcontractors or others.

D. ATTACHMENTS

Bidder shall complete and submit the following forms with his bid:

Anti-Kickback Affidavit
Public Entity Crimes Form
Indemnification Form
Local Vendor Certification
City of Key West Business License Tax Receipt
Domestic Partnership Affidavit
Cone of Silence Affidavit
Bidder's Checklist

E. PUBLIC ENTITY CRIMES FORM

Pursuant to the requirements of Chapter 287.133, Laws of Florida, pertaining to the sworn statement on Public Entity Crimes and the Convicted Vendor List, all Bidders shall submit a signed and notarized statement with their Bid on the form provided herein.

7. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the CITY is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this Contract, the Contractor, as required by the laws and statutes of the state and its political subdivisions, shall pay all state and local sales and use taxes. Prices quoted in the Proposal shall include all nonexempt sales and use taxes, unless provision is made in the Proposal form to separately itemize the tax.

8. SUBMISSION OF BIDS

All BIDS must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. BIDS must be made on the BID forms provided herewith, **submit one (1) ORIGINAL bid package and two (2) FLASH DRIVES containing a single PDF file of the entire bid package.**

Each BID must be submitted in a sealed envelope, so marked as to indicate the Bidder's name and its contents (project name and number) without being opened, and addressed in conformance with the instructions in the Invitation to Bid.

9. MODIFICATION OR WITHDRAWAL OF BIDS

Prior to the time and date designated for receipt of BIDS, any BID submitted may be withdrawn by notice to the party receiving BIDS at the place designated for receipt of BIDS. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of BID. No BID may be withdrawn after the time scheduled for opening of BIDS, unless the time specified in paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

10. BID SECURITY

BIDS must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing, or a bid bond issued by a Surety authorized to issue such bonds in the state where the work is located, in the amount of five (5) percent of the total amount of the Proposal submitted.

This bid security shall be given as a guarantee that the Bidder will not withdraw his BID for a period of ninety (90) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified. Agent and Surety phone numbers must be provided.

The Attorney-in-Fact who executes this bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

If the Bidder elects to furnish a Bid Bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

11. RETURN OF BID SECURITY

Within 15 days after the award of the Contract, the CITY will return the bid securities to all Bidders who's BIDS are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and any guarantees, which have been forfeited, will be returned to the respective Bidders whose Proposals they accompanied.

12. AWARD OF CONTRACT

Within sixty (60) calendar days after the opening of Proposals, the CITY will accept one of the Proposals or will act in accordance with the following paragraphs. The acceptance of the Proposal will be by written notice of award, mailed to the office designated in the Proposal, or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable Performance Bond, Payment Bond, insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within ninety (90) days after the opening of Proposals.

The awarded Contractor shall agree to hold the bid lump sum fee for a minimum of one (1) year from the date of Notice of Award.

The CITY reserves the right to accept or reject any or all Proposals, and to waive any informalities and irregularities in said Proposals.

13. BASIS OF AWARD

The award will be made by the Owner on the basis of the Total BID (Lump Sum Base Bid plus Owner Selected Additive or Deductive Bid Alternates, if any) from the lowest, responsive, responsible BIDDER which, in the Owner's sole and absolute judgment will best serve the interest of the Owner. .

14. EXECUTION OF CONTRACT

The successful Bidder shall, within ten (10) working days after receiving Notice of Award, sign and deliver to the CITY an original Contract and two (2) copies in the form hereto attached, together with the insurance certificate examples of the bonds as required in the Contract Documents and evidence of holding required licenses and certificates. Within 10 working days after receiving the signed Contract from the successful Bidder, the City's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

The contract shall be executed on the basis on available funding and respective lump sum fee.

15. CONTRACT BONDS

A. PERFORMANCE AND PAYMENT BONDS

The successful Bidder shall file with the CITY, at the time of delivery of the signed Contract, a Performance Bond and Payment Bond on the form bound herewith, each in the full amount of the Contract price in accordance with the requirements of Florida Statutes Section 255.05 or 713.23, as applicable, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the construction of the work, and to cover all guarantees against defective workmanship or materials, or both, during the warranty period following the date of final acceptance of the work by the CITY. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the CITY, shall be authorized to do business in the State of Florida, and shall be listed on the current U.S. Department of Treasury Circular Number 570, or amendments thereto in the Federal Register, of acceptable Sureties for federal projects. The CONTRACTOR shall supply the OWNER with phone numbers, addresses, and contacts for the Surety and their agents. Pursuant to Section 255.05(7), Florida Statutes, in lieu of the bond required by law, the contractor may file with the city an alternative form of security in the form of cash, a money order, a certified check, a cashier's check or an irrevocable letter of credit.

B. POWER-OF-ATTORNEY

The Attorney-in-Fact (Resident Agent) who executes this Performance and Payment Bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. All Contracts, Performance and Payment Bonds, and respective powers-of-attorney will have the same date.

16. FAILURE TO EXECUTE CONTRACT AND FURNISH BOND

The Bidder who has a Contract awarded to him and who fails to promptly and properly execute the Contract or furnish the required Bonds shall forfeit the bid security that accompanied his bid, and the bid security shall be retained as liquidated damages by the CITY, and it is agreed that this said sum is a fair estimate of the amount of damages the CITY will sustain in case the Bidder fails to enter into a Contract or furnish the required Bonds. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a Bid Bond.

17. PERFORMANCE OF WORK BY CONTRACTOR

Each Bidder must furnish with his Proposal a list of the items that he will perform with his own forces and the estimated total cost of these items.

18. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions stated in the General Conditions.

When the Contractor receives a Notice to Proceed, he shall commence work as soon as possible and shall complete all work within the number of calendar days stipulated in this Proposal.

The term of this contract will not exceed **180 calendar** days

* * * * *

PROPOSAL

NOTE TO BIDDER: Use preferably BLACK ink for completing this Proposal form.

To: The City of Key West
Address: 1300 White St, Key West, Florida 33040
Project Title: BAYVIEW PARK BOYS AND GIRLS CLUB RENOVATION

Bidder's contact person for additional information on this Proposal:

Company Name: _____

Contact Name & Telephone #: _____

Email Address: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Proposal is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Proposal, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

PROPOSAL (continued)

LUMP SUM ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum amounts. The Bidder agrees that the lump sum represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents. Bidders shall include in their lump sum bid the cost to provide Builder’s Risk insurance in accordance with 34.E. of the General Conditions including payment of any deductible.

1. BASE BID

1 LS \$ _____(1)

Utility Fee Allowance (for FKAA and Keys Energy service fees)

1 LS \$ _____(3)

TOTAL LUMP SUM BASE BID (1) + (2) : \$ _____(4)

TOTAL LUMP SUM BASE BID:

\$ _____ Dollars & _____ Cents
(4) amount written in words

BASE BID ADD OR DEDUCT ALTERNATES

NOTE: OWNER HAS THE RIGHT TO ACCEPT OR REJECT ANY, ALL, OR NO BID ALTERNATE ITEMS. THE TOTAL OF BASE BID PLUS THE SUM OF OWNER SELECTED BID ALTERNATES WILL A BASIS OF EVALUATING LOW BIDDER AND BASIS OF AWARD.

Base Bid: Pavilion A (Front pavilion facing Virginia Street), Entrance, and minor utility work to Pavilion B shall be included within the base bid of this project. Work shall include exterior of Pavilion A, interior build out of Pavilion A, Entrance build out, and all utilities throughout Pavilion A. Pavilion B utilities shall be stubbed in for future development along with window/wall infill to fully enclose Pavilion B.

- 1. An Additive Alternate for the work in Phase II of the drawings – see G0.0.1 for more information: build out of toilet rooms, kitchen area and all associated utility work with this phase.

1 LS \$ _____

2. An Additive Alternate for the work in Phase III of the drawings– see G0.0.1 for more information: multipurpose room, exterior finishes not included in the base bid for Pavilion ‘B’ and all associated utility work with this phase.

1 LS \$ _____

3. A Deductive Alternate for de-scoping the majority of the renovation included in this project. These changes will effectively bring the buildings back to usable structures “White Box”. A detailed scope of work will be provided in a subsequent Addendum.

1 LS \$ _____

PROPOSAL (continued)

The Bidder shall submit a Schedule of Values with the Proposal. Schedule of Values shall be broken down by bid items listed in the draft AIA 702 Continuation Sheet in PART 8 of the PROJECT MANUAL and will be used as a basis for payment.

Contractor is responsible for providing a dollar amount for each item listed on the Schedule of Values and that total shall match the amount on the Proposal Lump Sum. The Bidder will be considered non-responsive if Schedule of Values is not complete and or not included in Bid Package.

Payment for materials and equipment authorized by the Owner in a written Change Order but not listed in the above Proposal will be provided at the suppliers invoice plus 10 %.

List items to be performed by CONTRACTOR's own forces and the estimated percent of the Total Lump Sum Base Bid.

PROPOSAL (continued)

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work in the event that the Bidder is awarded the Contract:

Name			
Trade		Percent of Total Base Bid	
Street	City	State	Zip

Name			
Trade		Percent of Total Base Bid	
Street	City	State	Zip

Name			
Trade		Percent of Total Base Bid	
Street	City	State	Zip

Name			
Trade		Percent of Total Base Bid	
Street	City	State	Zip

Name			
Trade		Percent of Total Base Bid	
Street	City	State	Zip

PROPOSAL (continued)

SURETY

_____ whose address is

_____, _____, _____, _____
Street City State Zip

BIDDER

The name of the Bidder submitting this Proposal is

_____ doing business at

_____, _____, _____, _____
Street City State Zip

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

PROPOSAL (continued)

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____ day of _____ 2017.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this _____ day of _____ 2017.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____

EXPERIENCE OF BIDDER

The Bidder states that he is an experienced CONTRACTOR and has completed similar projects within the last 5 years. List similar projects, with types, names of OWNERS, construction costs, ENGINEERS, and references with phone numbers on attached sheet.

FLORIDA BID BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that _____

_____ hereinafter called the PRINCIPAL, and _____

_____ a corporation duly organized under the laws of the State of _____

having its principal place of business at _____

_____ in the State of _____,

and authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto

_____ hereinafter CITY OF KEY WEST called the OBLIGEE, in the sum of _____
_____ DOLLARS (\$ _____)

for the payment for which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid Proposal for BAYVIEW PARK BOYS AND GIRLS CLUB RENNOVATION, said Bid Proposal, by reference thereto, being hereby made a part hereof.

FLORIDA BID BOND (continued)

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the CITY), equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Proposal and the detailed Specifications, entitled:

BAYVIEW PARK BOYS AND GIRLS CLUB RENNOVATION

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of 5 percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the CITY for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the PRINCIPAL within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the OBLIGEE and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the base bid, satisfactory to the CITY, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the OBLIGEE and the Surety herein agrees to pay said sum immediately upon demand of the OBLIGEE in good and lawful money of the United States of America, as liquidated damages for failure thereof of said PRINCIPAL.

Signed and sealed this _____ day of _____, 2017.

PRINCIPAL

By _____

SURETY

By _____
Attorney-In-Fact

STATE OF _____)
) : SS
COUNTY OF _____)

FLORIDA BID BOND (continued)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____

Sworn and subscribed before me this _____ day of _____, 2017.

NOTARY PUBLIC, State of _____ at Large

My Commission Expires:

* * * * *

ANTI-KICKBACK AFFIDAVIT

STATE OF _____)
 : SS
COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____

Sworn and subscribed before me this _____ day of _____, 2017.

NOTARY PUBLIC, State of _____ at Large

My Commission Expires:

* * * * *

SWORN STATEMENT UNDER SECTION 287.133(3)(A)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

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

1. This sworn statement is submitted with Bid or Proposal for _____

2. This sworn statement is submitted by _____
(name of entity submitting sworn statement)

whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____

(If the entity has no FEIN, include the Social Security Number of the individual
signing this sworn statement _____

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

and my relationship to the entity named above is _____

4. I understand that a “public entity crime” as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

PUBLIC ENTITY CRIMES (continued)

6. I understand that an “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means
- a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a “person” as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

____Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

____There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

____The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of

Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

PUBLIC ENTITY CRIMES (continued)

_____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(signature)

(date)

STATE OF _____

COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

_____who, after first being sworn by me, affixed his/her
(name of individual signing)

signature in the space provided above on this _____day of _____, 2017.

My commission expires:

NOTARY PUBLIC

* * * * *

INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the “indemnitees”) from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney’s fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR’s insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers’ compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

CONTRACTOR: _____

SEAL:

Address

Signature

Print Name

Title

Date

* * * * *

LOCAL VENDOR CERTIFICATION PURSUANT TO CKW ORDINANCE 09-22 SECTION 2-798

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- a. Principle address as registered with the FL Department of State located within 30 miles of the boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation.
- b. Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.
- c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for proposals.
 - Not a local vendor pursuant to Ordinance 09-22 Section 2-798
 - Qualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self-certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name _____ Phone: _____

Current Local Address: _____ Fax: _____
(P.O Box numbers may not be used to establish status)

Length of time at this address: _____

_____ Date: _____

Signature of Authorized Representative

STATE OF _____ COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2017.

By _____, of _____
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)

or has produced identification _____ as identification
(Type of identification)

Signature of Notary

Print, Type or Stamp Name of Notary

Title or Rank

Return Completed form with
Supporting documents to: City
of Key West Purchasing

* * * * *

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF _____)
: SS
COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that the firm of _____ provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: _____

Sworn and subscribed before me this

_____ day of _____, 2017.

NOTARY PUBLIC, State of _____ at Large

My Commission Expires: _____

* * * * *

CONE OF SILENCE AFFIDAVIT

STATE OF _____)
: SS
COUNTY OF _____)

I the undersigned hereby duly sworn depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of _____ have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence (attached).

(signature)

(date)

Sworn and subscribed before me this

_____ Day of _____, 2017.

NOTARY PUBLIC, State of _____ at Large

My Commission Expires: _____

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and proper completion and submission of his bid.)

1. All Contract Documents thoroughly read and understood. []
2. All blank spaces in Proposal filled in, using black ink. []
3. Total and unit prices added correctly and attached Schedule of Values []
4. Addenda acknowledged. []
5. Subcontractors are named as indicated in the Proposal. []
6. Experience record included. []
7. Proposal signed by authorized officer. []
8. Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond. []
9. Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work. []
10. Bidder, if successful, able to obtain and/or demonstrate possession of required licenses and certificates within (10) ten calendar days after receiving a Notice of Award. []
11. BID submitted intact with the volume entitled "Bidding Requirements" and "Contract Forms", 1 original and 1 flash drive as stated in the invitation to bid. []
12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid. []

* * * * *

PART 2

CONTRACT FORMS

CONTRACT

This Contract, made and entered into this _____ day of _____
20____,

by and between the City of Key West, hereinafter called the "Owner", and _____

hereinafter called the "Contractor";

WITNESSETH:

The Contractor, in consideration of the sum to be paid him by the Owner and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery, and appurtenances for ITB No. 17-021 BAYVIEW PARK BOYS AND GIRLS CLUB, Key West, Florida to the extent of the Bid made by the Contractor, dated the _____ day of _____ 2017, all in full compliance with the Contract Documents referred to herein.

The CONTRACT DOCUMENTS, including the signed copy of the BID, CONTRACT FORMS, PERFORMANCE & PAYMENT BONDS AND SCOPE OF WORK.

In consideration of the performance of the work as set forth in these Contract Documents, the Owner agrees to pay to the Contractor the amount bid in the Bid as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents.

The Contractor agrees to complete the work within 180 calendar days with ALL work complete and final invoice submitted to the CITY no later than April 30, 2018.

The Contractor agrees to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said BID.

The Contractor agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the Owner, and further agrees to indemnify and save the Owner harmless from any costs encountered in remedying such defects.

It is agreed that the Contract, based upon the BID, shall be fully complete within the stated number of consecutive calendar days from the date the Notice to Proceed is issued.

In the event the Contractor fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages for BASE BID shall be paid at a rate of \$500.00 per day. Sundays and legal holidays shall be included in determining days in default.

This contract will automatically expire upon completion of the project. Contractors warranty obligations remain in effect.

IN WITNESS WHEREOF, we, the parties hereto, each herewith subscribe the same this

_____ day of _____, A.D., 20__.

CITY OF KEY WEST

By_____

Title_____

CONTRACTOR

By_____

Title_____

* * * *

FLORIDA PERFORMANCE BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05 _____

with offices at _____ hereinafter called the CONTRACTOR (Principal), and

_____ with offices at _____

a corporation duly organized and existing under and by virtue of the laws of the State of Florida, hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound unto the **CITY OF KEY WEST**, hereinafter called the CITY (Obligee), in the sum of:

_____ DOLLARS (\$ _____), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the CITY, dated _____, 20__, to furnish at his own cost, charges, and expense all the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the Contract Documents as defined therein, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein;

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR:

- 1. Shall in all respects comply with the terms and conditions of said Contract and his obligation there under, including the Contract Documents (which include the scope of work and conditions as prepared by the CITY, invitation to bid, instructions to bidders, the CONTRACTOR’S bid as accepted by the above CITY, the bid and contract performance and payment bonds, and all addenda, if any, issued prior to the opening of bids), being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and

2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying PRINCIPAL with labor, materials, or supplies, used directly or indirectly by PRINCIPAL in the prosecution of the work provided for in the contract; and

3. Pays CITY all losses, costs, expenses, damages, attorney's fees, including appellate proceedings, injury or loss of whatever kind and however arising including, without limitation, delay damages to which said CITY may be subject by reason of any wrongdoing, misconduct, want of care or skill, negligence, failure of performance, breach, failure to petition within the prescribed time, or default, including patent infringements, on the part of said CONTRACTOR, his agents or employees, in the execution or performance of said Contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this obligation shall be void; otherwise, to remain in full force and effect for the term of said Contract.

AND, the said Surety for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract Documents, or to the work to be performed, or materials to be furnished there under shall affect said obligation of said Surety on this Bond, and the said Surety does hereby waive notice of any such changes, extension of time, alterations, or additions of the terms of the Contract Documents, or to the work.

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

IN WITNESS WHEREOF, the above parties bonded together have executed this instrument

this _____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____

(SEAL)

ATTEST

SURETY

By: _____

(SEAL)

ATTEST

FLORIDA PAYMENT BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05, _____

with offices at _____ hereinafter called the CONTRACTOR, (Principal), and _____

with offices at _____

a corporation duly organized and existing under and by virtue of the laws of the State of _____

_____, hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound unto CITY OF KEY WEST, hereinafter called the City (Obligee), in the sum of:

_____ DOLLARS(_____), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, and the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract for

ITB No. 17-021 BAYVIEW PARK BOYS AND GIRLS CLUB attached hereto, with the CITY, dated

_____, 20____, to furnish at his own cost, charges, and expense the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the plans, drawings (if any), and specifications prepared by the CITY, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents specifically mentioned herein and relative hereto, is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein.

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR shall in all respects comply with the terms and conditions of said Contract and his obligation thereunder, including the Contract Documents ,which include Scope of work and conditions prepared by the CITY, invitation to bid, instructions to bidders, the

CONTRACTOR’S bid as accepted by the CITY, the bid and contract and payment bonds, and all addenda, if any, issued prior to the opening of bids), and further that if said CONTRACTOR shall promptly make payments to all persons supplying materials, equipment, and/or labor, used directly or indirectly by said CONTRACTOR or subcontractors in the prosecution of the work for said contract is accordance with Florida Statutes, Section 255.05 or Section 713.23, then this obligation shall be void; otherwise to remain in full force and effect for the term of said contract, including and all guarantee periods as specifically mentioned in said Contract Documents.

AND, the said SURETY for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract or to the work to be performed, or materials to be furnished thereunder, or in the Contract Documents and specifications accompanying the said contract shall affect said obligation of said SURETY on this Bond, and the said SURETY does hereby waive notice of any such changes, extension of time, alternations, or additions of the terms of the Contract, or to the work, to the Contract Documents, or to the specifications.

Claimant shall give written notice to the CONTRACTOR and the SURETY as required by Section 255.05 or Section 713.23, Florida Statutes. Any action instituted against the CONTRACTOR or SURETY under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2) or Section 713.23, Florida Statutes.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument

this _____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By:_____

(SEAL)

ATTEST

SURETY

By:_____

(SEAL)

ATTEST

PART 3

CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS CONTENTS

ARTICLE

DEFINITIONS

1. AS APPROVED
2. AS SHOWN, AND AS INDICATED
3. BIDDER
4. CONTRACT DOCUMENTS
5. CONTRACTOR
6. CONTRACT COMPLETION
7. DAYS
8. DRAWINGS
9. ENGINEER
10. NOTICE
11. OR EQUAL
12. OWNER
13. PLANS
14. SPECIFICATIONS
15. NOTICE TO PROCEED
16. SUBSTANTIAL COMPLETION
17. WORK

CONTRACT DOCUMENTS

18. INTENT OF CONTRACT DOCUMENTS
19. DISCREPANCIES AND OMISSIONS
20. CHANGES IN THE WORK
21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS
22. DOCUMENTS TO BE KEPT ON THE JOBSITE
23. ADDITIONAL CONTRACT DOCUMENTS
24. OWNERSHIP OF CONTRACT DOCUMENTS

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25. AUTHORITY OF THE ENGINEER
26. DUTIES AND RESPONSIBILITIES OF THE ENGINEER
27. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES
28. REJECTED WORK
29. LINES AND GRADES
30. SUBMITTALS
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THE CONTRACTOR AND HIS EMPLOYEES

32. CONTRACTOR, AN INDEPENDENT AGENT
32. (a) ASSIGNMENT OF CONTRACT

33. SUBCONTRACTING
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 - B. CONTRACTOR AND SUB-CONTRACTOR INSURANCE
 - C. COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE
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PROGRESS OF THE WORK

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DEFINITIONS

Whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

1. AS APPROVED

The words “as approved”, unless otherwise qualified, shall be understood to be followed by the words “by the ENGINEER for conformance with the Contract Document”.

2. AS SHOWN, AND AS INDICATED

The words “as shown” and “as Indicated” shall be understood to be followed by the words “on the Drawings”.

3. BIDDER

The person or persons, partnership, firm, or corporation submitting a Proposal for the work contemplated.

4. CONTRACT DOCUMENTS

The “Contract Documents” consist of the Bidding Requirements, Contract Forms, Conditions of the Contract, Specifications, Drawings, all modifications thereof incorporated into the Documents before their execution, Change Orders, and all other requirements incorporated by specific reference thereto. These form the Contract.

5. CONTRACTOR

The person or persons, partnership, firm, or corporation who enters into the Contract awarded him by the OWNER.

6. CONTRACT COMPLETION

The “Contract Completion” is the date the OWNER accepts the entire work as being in compliance with the Contract Documents, or formally waives nonconforming work to extent of nonconformity, and issues the final payment in accordance with the requirements set forth in Article, “Final Payment” of these General Conditions.

7. DAYS

Unless otherwise specifically stated, the term “days” will be understood to mean calendar days. Business day or working day means any day other than Saturday, Sunday, or legal holiday.

8. DRAWINGS

The term “Drawings” refers to the official Drawings, Profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the ENGINEER, which shows the location, character, dimensions, and details of the work to be performed. Drawings may either be bound in the same book as the balance of the Contract Documents, or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

9. ENGINEER

The person or organization identified as such in the Contract Documents. The Term “ENGINEER” means ENGINEER or his authorized representative.

10. NOTICE

The term “notice” or the requirement to notify, as used in the Contract Documents or applicable state or federal statutes, shall signify a written communication delivered in person or by registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Certified or registered mail shall be addressed to the last business address known to him who gives the notice.

11. OR EQUAL

The term “or equal” shall be understood to indicate that the “equal” Product is equivalent to or better than the Product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the Project design requirements will be made by the ENGINEER. Such equal Products shall not be purchased or installed by the CONTRACTOR without written authorization.

12. OWNER

The person, organization, or public body identified as such in the Contract Documents.

13. PLANS (See Drawings)

14. SPECIFICATIONS

The term “Specifications” refers to those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the work and certain administrative details applicable thereto. Where standard specifications, such as those of ASTM, AASHTO, etc., have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents. If referenced specifications conflict with specifications contained herein, the requirements contained herein shall prevail.

15. NOTICE TO PROCEED

A written notice given by the OWNER to the CONTRACTOR (with a copy to the ENGINEER) fixing the date on which the Contract time will commence to run and on which the CONTRACTOR shall start to perform his obligation under the Contract Documents. The Notice to Proceed will be given within 30 days following the execution of the Contract by the OWNER.

16. SUBSTANTIAL COMPLETION

“Substantial Completion” shall be that degree of completion of the Project or a defined portion of the Project, as evidenced by the ENGINEER’s written notice of Substantial Completion, sufficient to Provide the OWNER, at his discretion, the full-time use of the Project or defined portion of the Project for the purposes for which it was intended. “Substantial Completion” of an operating facility shall be that degree of completion that has Provided a minimum of 7 continuous days of successful, trouble-free, operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the ENGINEER. All equipment contained in the work, plus all other components necessary to enable the OWNER to operate the facility in a manner that was intended, shall be complete on the substantial completion date.

17. WORK

The word “work” within these Contract Documents shall include all material, labor, tools, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good Practice to Provide a complete and satisfactory system or structure. As used herein, “Provide” shall be understood to mean “furnish and install, complete in-place”.

18. INTENT OF CONTRACT DOCUMENTS

The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all. The intent of the Documents is to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning.

Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect on the first published date of the Invitation to Bid, except as may be otherwise specifically stated. However, no Provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any ENGINEER’s consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of Article LIMITATIONS ON ENGINEER’S RESPONSIBILITIES.

19. DISCREPANCIES AND OMISSIONS

Any discrepancies or omissions found in the Contract Documents shall be reported to the ENGINEER immediately. The ENGINEER will clarify discrepancies or omissions, in writing, within a reasonable time.

In resolving inconsistencies among two or more sections of the Contract Documents, Precedence shall be given in the following order:

- A. CONTRACT
- B. PROPOSAL
- C. SUPPLEMENTARY CONDITIONS
- D. INVITATION TO BID
- E. INSTRUCTIONS TO BIDDERS
- F. GENERAL CONDITIONS
- G. SPECIFICATIONS
- H. DRAWINGS

CONTRACT DOCUMENTS

Addenda shall take Precedence over all sections referenced

therein. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

20. CHANGES IN THE WORK

The OWNER, without notice to the Sureties and without invalidating the Contract, may order changes in the work within the general scope of the Contract by altering, adding to, or deducting from the work, the Contract being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except as specifically adjusted at the time of ordering such change.

In giving instructions, the ENGINEER may order minor changes in the work not involving extra cost and not inconsistent with the purposes of the Project, but otherwise, except in an emergency endangering life and Property, additions or deductions from the work shall be performed only in pursuance of an approved Change Order from the OWNER, countersigned by the ENGINEER.

If the work is reduced by alterations, such action shall not constitute a claim for damages based on loss of anticipated Profits.

21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS

The CONTRACTOR shall thoroughly examine and become familiar with all of the various parts of these Contract Documents and determine the nature and location of the work, the general and local conditions, and all other matters, which can in any way affect the work under this Contract. Failure to make an examination necessary for this determination shall not release the CONTRACTOR from the obligations of this Contract. No verbal agreement or conversation with any officer, agent, or employee of the OWNER or with the ENGINEER either before or after the execution of this Contract shall affect or modify any of the terms or obligations herein contained.

22. DOCUMENTS TO BE KEPT ON THE JOBSITE

The CONTRACTOR shall keep one copy of the Contract Documents on the job- site, in good order, available to the ENGINEER and to his representatives.

The CONTRACTOR shall maintain on a daily basis at the jobsite, and make available to the ENGINEER on request, one current record set of the Drawings which have been accurately marked to indicate all modifications in the completed work that differ from the design information shown on the Drawings. Upon Substantial completion of the work, the CONTRACTOR shall give the ENGINEER one complete set of these marked up record Drawings.

23. ADDITIONAL CONTRACT DOCUMENTS

Copies of Contract Documents or Drawings may be obtained on request from the ENGINEER and by paying the actual cost of reproducing the Contract Documents or Drawings.

24. OWNERSHIP OF CONTRACT DOCUMENTS

All portions of the Contract Documents, and copies thereof furnished by the ENGINEER are instruments of service for this Project. They are not to be used on other work and are to be returned to the ENGINEER on request at the completion of the work. Any reuse of these materials without specific written verification or adaptation by the ENGINEER will be at the risk of the user and without liability or legal expense to the ENGINEER. Such user shall hold the ENGINEER harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adaptation shall entitle the ENGINEER to further compensation at rates to be agreed upon by the user and the ENGINEER.

THE ENGINEER

25. AUTHORITY OF THE ENGINEER

The ENGINEER will be the OWNER's representative during the construction period. His authority and responsibility will be limited to the Provisions set forth in these Contract Documents. The ENGINEER will have the Authority to reject work that does not conform to the Contract Documents. However, neither the ENGINEER's authority to act under this Provision, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any SUBCONTRACTOR, their respective Sureties, any of their agents or employees, or any other person performing any of the work.

26. DUTIES AND RESPONSIBILITIES OF THE ENGINEER

The ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the Progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He will not make comprehensive or continuous review or observation to check quality or quantity of the work, and he will not be responsible for construction means, methods, techniques, sequences, or Procedures, or for safety Precautions and Programs in connection with the work. Visits and observations made by the ENGINEER shall not relieve the CONTRACTOR of his obligation to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

The ENGINEER will make recommendations to the OWNER, in writing, on all claims of the OWNER or the CONTRACTOR arising from interpretation or execution of the Contract Documents. Such recommendations will be of factual and/or technical nature, and will not include the legal interpretation of the Contract Documents. Any necessary legal interpretation of the Contract Document will be made by the OWNER. Such recommendation shall be necessary before the CONTRACTOR can receive additional money under the terms of the Contract. Changes in work ordered by the ENGINEER shall be made in compliance with Article CHANGES IN THE WORK.

One or more Project representatives may be assigned to observe the work. It is understood that such Project representatives shall have the authority to issue notice of nonconformance and make decisions within the limitations of the authority of the ENGINEER. The CONTRACTOR shall furnish all reasonable assistance required by the ENGINEER or Project representatives for Proper observation of the work. The above-mentioned Project representatives shall not relieve the CONTRACTOR of his obligations to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

27. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences, or Procedures of construction, or the safety Precautions and Programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the work in accordance with the Contract Documents.

ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any SUBCONTRACTOR, any supplier, or of any other person or organization performing or furnishing

any of the work.

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "Proper", or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of this Article.

28. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to expiration of the warranty period shall be removed and replaced by work which shall conform to the Provisions of the Contract Documents. Any material condemned or rejected shall be removed at once from the Project site.

Failure on the part of the ENGINEER to condemn or reject bad or inferior work or to note nonconforming materials or equipment on CONTRACTOR submittals shall not be construed to imply acceptance of such work. The OWNER shall reserve and retain all of its rights and remedies at law against the CONTRACTOR and its Surety for correction of any and all latent defects discovered after the guarantee period.

29. LINES AND GRADES

Lines and grades shall be established as provided in the supplementary conditions. All stakes, marks, and other reference information shall be carefully preserved by the CONTRACTOR, and in case of their careless or unnecessary destruction or removal by him or his employees, such stakes, marks, and other information shall be replaced at the CONTRACTOR's expense.

30. SUBMITTALS

After checking and verifying all field measurements and after complying with applicable Procedures specified in Division I, GENERAL REQUIREMENTS, CONTRACTOR shall submit to ENGINEER, in accordance with the schedule for submittals for review, shop drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment), which shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submittal. All submittals shall be identified as ENGINEER may require. The data shown shall be complete with respect to quantities, dimensions specified, performance and design criteria, materials, and similar data to enable ENGINEER to review the information. CONTRACTOR shall also submit to ENGINEER for review, with such Promptness as to cause no delay in work, all samples required by the Contract Documents. All samples shall have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which intended.

Before submission of each submittal, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each submittal with other submittals and with the requirements of the work and the Contract Documents.

At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the submittal may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each shop drawing submitted to ENGINEER for review and approval of each variation.

ENGINEER will review submittals with reasonable Promptness, but ENGINEER's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences, or Procedures of construction (except where a specific means, method, technique, sequence, or Procedure of construction is indicated in or required by the Contract Documents) or to safety Precautions or Programs incident thereto. The review of a separate item as such will not indicate review of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of shop drawings and submit as required new samples for review. CONTRACTOR shall direct specific attention in

writing to revisions other than the corrections called for by ENGINEER on Previous submittals.

ENGINEER's review of submittals shall not relieve CONTRACTOR from the responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated therein or accompanying the shop drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the shop drawings or from responsibility for having complied with the Provisions herein.

Where a shop drawing or sample is required by the specifications, any related work performed Prior to ENGINEER's review and approval of the pertinent submission shall be at the sole expense and responsibility of the CONTRACTOR.

31. DETAIL DRAWINGS AND INSTRUCTIONS

The ENGINEER will furnish, with reasonable Promptness, additional instructions by means of Drawings or otherwise, if, in the ENGINEER's opinion, such are required for the Proper execution of the work. All such Drawings and instructions will be consistent with the Contract Documents, true developments thereof, and reasonably inferable there from.

THE CONTRACTOR AND HIS EMPLOYEES

32. CONTRACTOR, AN INDEPENDENT AGENT

The CONTRACTOR shall independently perform all work under this Contract and shall not be considered as an agent of the OWNER or of the ENGINEER, nor shall the CONTRACTOR's SUBCONTRACTORS or employees be subagents of the OWNER or of the ENGINEER.

32. (a) ASSIGNMENT OF CONTRACT

Assignment of any part or the whole of this Contract shall be subject to review and approval of the City Commission.

33. SUBCONTRACTING

Unless modified in the Supplementary Conditions, within 10 days after the execution of the Contract, the CONTRACTOR shall submit to the ENGINEER the names of all SUBCONTRACTORS Proposed for the work, including the names of any SUBCONTRACTORS that were submitted with the Proposal. The CONTRACTOR shall not employ any SUBCONTRACTORS to which the OWNER may object to as lacking capability to properly perform work of the type and scope anticipated.

The CONTRACTOR is as 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.

Nothing contained in the Contract Documents shall create any contractual relationship between any SUBCONTRACTOR and the OWNER or ENGINEER.

34. INSURANCE AND LIABILITY

A. GENERAL

The CONTRACTOR shall provide (from insurance companies acceptable to the OWNER) the insurance coverage designated hereinafter and pay all costs before commencing work under this Contract. The CONTRACTOR shall furnish the OWNER with certificates of insurance specified herein showing the type, amount class of operations covered, effective dates, and date of expiration of policies, and containing substantially the following statement:

“The insurance covered by this certificate shall not be canceled or materially altered, except after 30 days’ written notice has been received by the OWNER.”

In case of the breach of any Provision of this Article, the OWNER, at his option, may take out and maintain, at the expense of the CONTRACTOR, such insurance as the OWNER may deem Proper and may deduct the cost of such insurance from any monies which may be due or become due the CONTRACTOR under this Contract.

B. CONTRACTOR AND SUBCONTRACTOR INSURANCE

The CONTRACTOR shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been reviewed by the OWNER, nor shall the CONTRACTOR allow any SUBCONTRACTOR to commence work on his subcontract until insurance specified below has been obtained. Review of the insurance by the OWNER shall not relieve or decrease the liability of the CONTRACTOR hereunder.

C. COMPENSATION AND EMPLOYER’S LIABILITY INSURANCE

The CONTRACTOR shall maintain during the life of this Contract the statutory amount of Workmen’s Compensation Insurance, in addition, Employer’s Liability Insurance in an amount as specified in the Supplementary Conditions, for each occurrence, for all of his employees to be engaged in work on the Project under this Contract. In case any such work is subcontracted, the CONTRACTOR shall require the SUBCONTRACTOR to provide similar Workmen’s Compensation and Employer’s Liability Insurance for all of the SUBCONTRACTOR’s employees to be engaged in such work.

D. GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)

The CONTRACTOR shall maintain during the life of this Contract such general liability, completed operations and Products liability, and automobile liability insurance as will Provide coverage for claims for damages for personal injury, including accidental death, as well as for claims for Property damage, which may arise directly or indirectly from performance of the work under this Contract. The general liability policy shall include contractual liability assumed by the CONTRACTOR under Article **INDEMNITY**. Coverage for Property damage shall be on a “broad form” basis with no exclusions for “X, C & U”. The amount of insurance to be provided shall be as specified in the Supplementary Conditions.

In the event any work under this Contract is performed by a SUBCONTRACTOR, the CONTRACTOR shall be responsible for any liability directly or indirectly arising out of the work performed by the SUBCONTRACTOR; to the extent such liability is not covered by the SUBCONTRACTOR’s insurance.

The OWNER and ENGINEER, their officers, agents, and employees shall be named as Additional Insured’s on the CONTRACTOR’s and any SUBCONTRACTOR’s general liability and automobile liability insurance policies for any claims arising out of work performed under this Contract.

E. BUILDERS RISK ALL RISK INSURANCE

Unless otherwise modified in the Supplementary Conditions, the CONTRACTOR shall secure and maintain during the life of this Contract, Builders Risk All Risk Insurance coverage in an amount equal to the full value of the facilities under construction. Such insurance shall include coverage for earthquake, landslide, flood, collapse, loss due to the results of faulty workmanship or design, and all other normally covered risks, and shall provide for losses to be paid to the CONTRACTOR, OWNER, and ENGINEER as their interests may appear.

The OWNER and ENGINEER, their officers, agents, and employees shall be named as additional insured's on the CONTRACTOR's and any SUBCONTRACTOR's Builders Risk All Risk insurance policies for any claims arising out of work performed under this Contract.

This insurance shall include a waiver of subrogation as to the ENGINEER, the OWNER, the CONTRACTOR, and their respective officers, agents, employees and SUBCONTRACTORS.

F. NO PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the Provisions hereof in exercising any authority granted by the Contract, there will be no personal liability upon any public official.

35. INDEMNITY

To the maximum extent permitted by law, the CONTRACTOR shall indemnify and defend the OWNER and the ENGINEER, and their officers, employees, agents, and sub-consultants, from all claims and losses, including attorney's fees and litigation costs arising out of Property losses or health, safety, personal injury, or death claims by the CONTRACTOR, its SUBCONTRACTORS of any tier, and their employees, agents, or invitees regardless of the fault, breach of Contract, or negligence of the OWNER or ENGINEER, excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the OWNER or the ENGINEER and regardless of whether or not the CONTRACTOR is or can be named a party in a litigation.

36. EXCLUSION OF CONTRACTOR CLAIMS

In performing its obligations, the ENGINEER and its consultants may cause expense for the CONTRACTOR or its SUBCONTRACTORS and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the ENGINEER, its officers, employees, agents, and consultants for any claim arising out of, in

connection with, or resulting from the engineering services performed or required to be performed.

37. TAXES AND CHARGES

The CONTRACTOR shall withhold and pay any and all sales and use taxes and all withholding taxes, whether State or Federal, and pay all Social Security charges and also all State Unemployment Compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws.

38. REQUIREMENTS OF STATE LAW FOR PUBLIC WORKS PROJECTS

When the Contract Documents concern public works of the state or any county, municipality, or political subdivision created by its laws, the applicable statutes shall apply. All parties to this Contract shall determine the contents of all applicable statutes and comply with their Provisions throughout the performance of the Contract.

39. CODES, ORDINANCES, PERMITS AND LICENSES

The CONTRACTOR shall keep himself fully informed of all local codes and ordinances, as well as state and federal laws, which in any manner affect the work herein specified. The CONTRACTOR shall at all times comply with said codes and ordinances, laws, and regulations, and Protect and indemnify the OWNER, the ENGINEER and their respective employees, and its officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses and inspection fees necessary for Prosecution and completion of the work shall be secured and paid for by the CONTRACTOR, unless otherwise specified.

40. SUPERINTENDENCE

The CONTRACTOR shall keep at the project site, competent supervisory personnel. The CONTRACTOR shall designate, in writing, before starting work, a Project superintendent who shall be an employee of the CONTRACTOR and shall have complete authority to represent and to act for the CONTRACTOR. ENGINEER shall be notified in writing prior to any change in superintendent assignment. The CONTRACTOR shall give efficient supervision to the work, using his best skill and attention. The CONTRACTOR shall be solely responsible for all construction means, methods, techniques, and Procedures, and for providing adequate safety Precautions and coordinating all portions of the work under the Contract. It is specifically understood and agreed that the ENGINEER, its employees and agents, shall not have control or charge of and shall not be responsible for the construction means, methods, techniques, Procedures, or for providing adequate safety Precautions in connection with the work under Contract.

41. RECEPTION OF ENGINEER'S COMMUNICATIONS

The superintendent shall receive for the CONTRACTOR all communications from the ENGINEER. Communications of major importance will be confirmed in writing upon request from the CONTRACTOR.

The ENGINEER may schedule Project meetings for the purposes of discussing and resolving matters concerning the various elements of the work. Time and place for these meetings and the names of persons required to be Present shall be as determined by the ENGINEER. CONTRACTOR shall comply with these attendance requirements and shall also require his SUBCONTRACTORS to comply.

42. SAFETY

The CONTRACTOR shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and Property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety Provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The CONTRACTOR's failure to thoroughly familiarize himself with the aforementioned safety Provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

The CONTRACTOR shall develop and maintain for the duration of this Contract, a safety Program that will effectively incorporate and implement all required safety Provisions. The CONTRACTOR shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the

safety Program. The duty of the ENGINEER to conduct construction review of the work does not include review or approval of the adequacy of the CONTRACTOR's safety Program, safety supervisor, or any safety measures taken in, on, or near the construction site. The CONTRACTOR, as a part of his safety Program, shall maintain at his office or other well-known place at the jobsite, safety equipment applicable to the work as Prescribed by the aforementioned authorities, all articles necessary for giving first-aid to the injured, and shall establish the Procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the jobsite.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the ENGINEER and the OWNER. In addition, the CONTRACTOR must promptly report in writing to the ENGINEER all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

If a claim is made by anyone against the CONTRACTOR or any SUBCONTRACTOR on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the ENGINEER, giving full details of the claim.

43. PROTECTION OF WORK AND PROPERTY

The CONTRACTOR shall at all times safely guard and Protect from damage the OWNER's Property, adjacent Property, and his own work from injury or loss in connection with this Contract. All facilities required for Protection by federal, state, or municipal laws and regulations and local conditions must be provided and maintained.

The CONTRACTOR shall Protect his work and materials from damage due to the nature of the work, the elements, carelessness of other CONTRACTORS, or from any cause whatever until the completion and acceptance of the work. All loss or damages arising out of the nature of the work to be done under these Contract Documents, or from any unforeseen obstruction or defects which may be encountered in the Prosecution of the work, or from the action of the elements, shall be sustained by the CONTRACTOR.

44. RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury of Property, and/or safety of life, the CONTRACTOR shall act, without previous instructions from the OWNER or ENGINEER, as the situation may warrant. The CONTRACTOR shall notify the ENGINEER thereof immediately thereafter. Any claim for compensation by the CONTRACTOR, together with substantiating documents in regard to expense, shall be submitted to the OWNER through the ENGINEER and the amount of compensation shall be determined by agreement.

45. MATERIALS AND APPLIANCES

Unless otherwise stipulated, the CONTRACTOR shall Provide and pay for all materials, labor, water, tools, equipment, heat, light, fuel, power, transportation, construction equipment and machinery, appliances, telephone, sanitary facilities, temporary facilities and other facilities and incidentals necessary for the execution and completion of the work.

Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

In selecting and/or approving equipment for installation in the Project, the OWNER and ENGINEER assume no responsibility for injury or claims resulting from failure of the equipment to comply with applicable federal, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials.

46. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA, AND OTHER CODE REQUIREMENTS

The completed work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items required by the state and federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the work subject to such safety regulations shall be fabricated, furnished, and installed (including OWNER-furnished equipment) in compliance with these requirements. CONTRACTORS and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. CONTRACTORS shall notify all equipment suppliers and SUBCONTRACTORS of the Provisions of this Article.

47. SUBSTITUTION OF MATERIALS

Except for OWNER-selected equipment items, and items where no substitution is clearly specified, whenever any material,

article, device, Product, fixture, form, type of construction, or Process is indicated or specified by patent or Proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating the description of the material or Process desired. This Procedure is not to be construed as eliminating from competition other Products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "or equal". The CONTRACTOR may, in such cases, submit complete data to the ENGINEER for consideration of another material, type, or Process that shall be substantially equal in every respect to that so indicated or specified. Substitute materials shall not be used unless approved in writing. The ENGINEER will be the sole judge of the substituted article or material.

48. TESTS, SAMPLES, AND OBSERVATIONS

The CONTRACTOR shall furnish, without extra charge, the necessary test pieces and samples, including facilities and labor for obtaining the same, as requested by the ENGINEER. When required, the CONTRACTOR shall furnish certificates of tests of materials and equipment made at the point of manufacture by a recognized testing laboratory.

The OWNER, ENGINEER, and authorized government agents, and their representatives shall at all times be Provided safe access to the work wherever it is in Preparation or Progress, and the CONTRACTOR shall Provide facilities for such access and for observations, including maintenance of temporary and permanent access.

If the Specifications, laws, ordinances, or any public authority require any work, to be specially tested or approved, the CONTRACTOR shall give timely notice of its readiness for observations. If any work should be covered up without approval or consent of the ENGINEER, it shall, if required by the ENGINEER, be uncovered for examination at the CONTRACTOR's expense.

Reexamination of questioned work may be ordered by the ENGINEER, and, if so ordered, the work shall be uncovered by the CONTRACTOR. If such work is found to be in accordance with the Contract Documents, the OWNER will pay the cost of uncovering, exposure, observation, inspection, testing and reconstruction. If such work is found to be not in accordance with the Contract Documents, the CONTRACTOR shall correct the defective work, and the cost of reexamination and correction of the defective work shall be paid by the CONTRACTOR.

49. ROYALTIES AND PATENTS

The CONTRACTOR shall pay all royalty and licenses fees, unless otherwise specified. The CONTRACTOR shall defend all suits or claims for infringement of any patent rights and shall save the OWNER and the ENGINEER harmless from any and all loss, including reasonable attorneys' fees, on account thereof.

50. CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of more than 3 months, through no act or fault of the CONTRACTOR, its SUBCONTRACTORS, or respective employees or if the ENGINEER should fail to make recommendation for payment to the OWNER or return payment request to CONTRACTOR for revision within 30 days after it is due, or if the OWNER should fail to pay the CONTRACTOR within 30 days after time specified in Article PARTIAL PAYMENTS, any sum recommended by the ENGINEER, then the CONTRACTOR may, upon 15 days' written notice to the OWNER and the ENGINEER, stop work or terminate this Contract and recover from the OWNER payment for all acceptable work performed and reasonable termination expenses, unless said default has been remedied.

51. CORRECTION OF DEFECTIVE WORK DURING WARRANTY PERIOD

The CONTRACTOR hereby agrees to make, at his own expense, all repairs or replacements necessitated by defects in materials or workmanship, Provided under terms of this Contract, and pay for any damage to other works resulting from such defects, which become evident within 2 years after the date of final acceptance of the work or within 2 years after the date of substantial completion established by the ENGINEER for specified items of equipment, or within such longer period as may be Prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. Unremedied defects identified for correction during the warranty period but remaining after its expiration shall be considered as part of the obligations of the warranty. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the warranty shall subject the remedied portion of the work to an extended warranty period of 2 years after the defect has been remedied.

The CONTRACTOR further assumes responsibility for a similar guarantee for all work and materials provided by SUBCONTRACTORS or manufacturers of packaged equipment components. The effective date for the start of the guarantee or warranty period for equipment qualifying as substantially complete is defined in Article SUBSTANTIAL COMPLETION, AND Article SUBSTANTIAL

COMPLETION DATE, in these General Conditions.

The CONTRACTOR also agrees to hold the OWNER and the ENGINEER harmless from liability of any kind arising from damage due to said defects. The CONTRACTOR shall make all repairs and replacements promptly upon receipt of written order for same from the OWNER. If the CONTRACTOR fails to make the repairs and replacements promptly, or in an emergency where delay would cause serious risk, or loss, or damage, the OWNER may have the defective work corrected or the rejected work removed and replaced, and the CONTRACTOR and his Surety shall be liable for the cost thereof.

PROGRESS OF THE WORK

52. BEGINNING OF THE WORK

Following execution of the Contract, the CONTRACTOR shall meet with the OWNER and ENGINEER relative to his arrangements for prosecuting the work.

53. SCHEDULES AND PROGRESS REPORTS

Prior to starting the construction, the CONTRACTOR shall Prepare and submit to the ENGINEER, a Progress schedule showing the dates on which each part or division of the work is expected to be started and finished, and a Preliminary schedule for submittals. The Progress schedule for submittals shall be brought up to date and submitted to the ENGINEER at the end of each month or at such other times the ENGINEER may request.

The CONTRACTOR shall forward to the ENGINEER, at the end of each month, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work. These Progress reports shall indicate the date of the purchase order, the current percentage of completion, estimated delivery, and cause of delay, if any.

If the completion of any part of the work or the delivery of materials is behind the submitted Progress schedule, the CONTRACTOR shall submit in writing a plan acceptable to the OWNER and ENGINEER for bringing the work up to schedule.

The OWNER shall have the right to withhold Progress payments for the work if the CONTRACTOR fails to update and submit the Progress schedule and reports as specified.

54. PROSECUTION OF THE WORK

It is expressly understood and agreed that the time of beginning, rate of Progress, and time of completion of the work are the essence of this Contract. The work shall be prosecuted at such time, and in or on such part or parts of the Project as may be required, to complete the Project as contemplated in the Contract Documents and the Progress schedule.

If the CONTRACTOR desires to carry on work at night or outside the regular hours, he shall give timely notice to the ENGINEER to allow satisfactory arrangements to be made for observing the work in Progress.

55. OWNER'S RIGHT TO RETAIN IMPERFECT WORK

If any part or portion of the work completed under this Contract shall Prove defective and not in accordance with the Drawings and Specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of such work will create conditions which are dangerous or undesirable, the OWNER shall have the right and authority to retain such work but will make such deductions in the final payment therefore as may be just and reasonable.

56. OWNER'S RIGHT TO DO WORK

Should the CONTRACTOR neglect to Prosecute the work in conformance with the Contract Documents or neglect or refuse at his own cost to remove and replace work rejected by the ENGINEER, then the OWNER may notify the Surety of the condition, and after 10 days' written notice to the CONTRACTOR and the Surety, or without notice if an emergency or danger to the work or public exists, and without Prejudice to any other right which the OWNER may have under Contract, or otherwise, take over that portion of the work which has been improperly or non timely executed, and make good the deficiencies and deduct the cost thereof from the payments then or thereafter due the CONTRACTOR.

57. OWNER'S RIGHT TO TRANSFER EMPLOYMENT

If the CONTRACTOR should abandon the work or if he should persistently or repeatedly refuse or should fail to make prompt payment to SUBCONTRACTORS for material or labor, or to persistently disregard laws, ordinances, or to prosecute the work in conformance with the Contract Documents, or otherwise be guilty of a substantial violation of any Provision of the Contract or any laws or ordinance, then the OWNER may, without Prejudice to any other right or remedy, and after giving the CONTRACTOR and Surety 10 days' written notice, transfer the employment for said work from the CONTRACTOR to the

Surety. Upon receipt of such notice, such Surety shall enter upon the Premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this contract and employ by Contract or otherwise, any qualified person or persons to finish the work and Provide the materials therefore, in accordance with the Contract Documents, without termination of the continuing full force and effect of this contract. In case of such transfer of employment to such Surety, the Surety shall be paid in its own name on estimates according to the terms hereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.

If, after the furnishing of said written notice to the Surety, the CONTRACTOR and the Surety still fail to make reasonable Progress on the performance of the work, the OWNER may terminate the employment of the CONTRACTOR and take possession of the Premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient and charge the cost thereof to the CONTRACTOR and the Surety. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the expense of completing the Contract, including compensation for additional managerial and administrative services, shall exceed such unpaid balance, the CONTRACTOR and the Surety shall pay the difference to the OWNER.

58. DELAYS AND EXTENSION OF TIME

If the CONTRACTOR is delayed in the Progress of the work by any act or neglect of the OWNER or the ENGINEER, or by any separate CONTRACTOR employed by the OWNER, or by strikes, lockouts, fire, adverse weather conditions not reasonably anticipated, or acts of Nature, and if the CONTRACTOR, within 48 hours of the start of the occurrence, gives written notice to the OWNER of the cause of the potential delay and estimate of the possible time extension involved, and within 10 days after the cause of the delay has been remedied, the CONTRACTOR gives written notice to the OWNER of any actual time extension requested as a result of the aforementioned occurrence, then the Contract time may be extended by change order for such reasonable time as the ENGINEER determines. It is agreed that no claim shall be made or allowed for any damages, loss, or expense which may arise out of any delay caused by the above referenced acts or occurrences other than claims for the appropriate extension of time. No extension of time will be granted to the CONTRACTOR for delays occurring to parts of the work that have no measurable impact on the completion of the total work under this Contract. No extension of time will be considered for weather conditions reasonably anticipated for the area in which the work is being performed. Reasonably anticipated weather conditions will be based on official records of monthly Precipitation and other historical data. Adverse weather conditions, if determined to be of a severity that would impact

Progress of the work, may be considered as cause for an extension of Contract completion time.

Delays in delivery of equipment or material purchased by the CONTRACTOR or his SUBCONTRACTORS, including OWNER-selected equipment shall not be considered as a just cause for delay, unless the OWNER determines that for good cause the delay is beyond the control of the CONTRACTOR. The CONTRACTOR shall be fully responsible for the timely ordering, scheduling, complete the work is the per-diem rate, as stipulated in the Proposal. The said amount is hereby agreed upon as a reasonable estimate of the costs, which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due, or that may become due the CONTRACTOR, or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

59. DIFFERING SITE CONDITIONS

The CONTRACTOR shall promptly, and before the conditions are disturbed, give a written notice to the OWNER and ENGINEER of:

- A. subsurface or latent physical conditions at the site which differ materially from those indicated in this contract,
- B. unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The ENGINEER will investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or the time required for, performing any part of the work under this Contract, whether or not changed as a result of the conditions, and equitable adjustment shall be made under this Article and the Contract modified in writing accordingly.

No request by the CONTRACTOR for an equitable adjustment to the Contract under this Article will be allowed, unless the CONTRACTOR has given the written notice required; Provided that the time prescribed above for giving written notice may be extended by the OWNER.

No request by the CONTRACTOR for an equitable adjustment to the Contract for differing site conditions will be allowed if made after final payment under this Contract.

60. LIQUIDATED DAMAGES

Should the CONTRACTOR fail to complete the work, or any part thereof, in the time agreed upon in the Contract or within such extra time as may have been allowed for delays by extensions granted as Provided in the Contract, the CONTRACTOR shall reimburse the OWNER for the additional expense and damage for each calendar day, Sundays and legal holidays included, that the Contract remains uncompleted after the Contract completion date. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per-diem rate, as stipulated in the Proposal. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due, or that may become due the CONTRACTOR, or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

61. OTHER CONTRACTS

The OWNER reserves the right to let other Contracts in connection with the work. 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 any part of the work under this Contract depends for Proper execution or results upon the work of any other CONTRACTOR, utility service company or OWNER, the CONTRACTOR shall inspect and Promptly report to the ENGINEER in writing any patent or apparent defects to deficiencies in such work that render it unsuitable for such Proper execution and results. The CONTRACTOR's failure to so report shall constitute and acceptance of the work by others as being fit and Proper for integration with work under this Contract, except for latent or non-apparent defects and deficiencies in the work.

62. USE OF PREMISES

The CONTRACTOR shall confine his equipment, the storage of materials and the operation of his workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of the ENGINEER, and shall not unreasonably encumber the Premises with his materials. The CONTRACTOR shall provide, at his own expense, the necessary rights-of-way and access to the work, which may be required outside the limits of the OWNER's Property and shall furnish the ENGINEER copies of permits and agreements for use of the Property outside that provided by the OWNER.

The CONTRACTOR shall not load nor permit any part of the structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the work or adjacent Property to stresses or Pressures that will endanger it.

63. SUBSTANTIAL COMPLETION DATE

The ENGINEER may issue a written notice of substantial completion for the purpose of establishing the starting date for specific equipment guarantees, and to establish the date that the OWNER will assume the responsibility for the cost of operating such equipment. Said notice shall not be considered as final acceptance of any portion of the work or relieve the CONTRACTOR from completing the remaining work within the specified time and in full compliance with the Contract Documents. See SUBSTANTIAL COMPLETION under DEFINITIONS of these General Conditions.

64. PERFORMANCE TESTING

Operating equipment and systems shall be performance tested in the Presence of the ENGINEER to demonstrate compliance with the specified requirements. Performance testing shall be conducted under the specified design operating conditions or under such simulated operating conditions as recommended or approved by the ENGINEER. Schedule such testing with the ENGINEER at least one week in advance of the planned date for testing.

65. OWNER'S USE OF PORTIONS OF THE WORK

Following issuance of the written notice of Substantial Completion, the OWNER may initiate operation of the facility. Such use shall not be considered as final acceptance of any portion of the work, nor shall such use be considered as cause for an extension of the Contract completion time, unless authorized by a Change Order issued by the OWNER.

66. CUTTING AND PATCHING

The CONTRACTOR shall do all cutting, fitting, or patching of his work that may be required to make its several parts come together Properly and fit it to receive or be received by work of other CONTRACTORS shown upon or reasonably implied by the Drawings.

67. CLEANING UP

The CONTRACTOR shall, at all times, keep Property on which work is in Progress and the adjacent Property free from accumulations of waste material or rubbish caused by employees or by the work. Upon completion of the construction, the CONTRACTOR shall remove all temporary structures, rubbish, and waste materials resulting from his operations.

PAYMENT

68. PAYMENT FOR CHANGE ORDERS

The OWNER's request for quotations on alterations to the work shall not be considered authorization to proceed with the work expediting, delivery, and installation of all equipment and materials. Within a reasonable period after the CONTRACTOR submits to the OWNER a written request for an extension of time, the ENGINEER will Present his written opinion to the OWNER as to whether an extension of time is justified, and, if so, his recommendation as to the number of days for time extension. The OWNER will make the final decision on all requests for extension of time.

Prior to the issuance of a formal Change Order, nor shall such request justify any delay in existing work. Quotations for alterations to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and profit. OWNER may require detailed cost data in order to substantiate the reasonableness of the proposed costs.

Any compensation paid in conjunction with the terms of a Change Order shall comprise total compensation due the CONTRACTOR for the work or alteration defined in the Change Order. By signing the Change Order, the CONTRACTOR acknowledges that the stipulated compensation includes payment for the work or alteration plus all payment for the interruption of schedules, extended overhead, delay, or any other impact claim or ripple effect, and by such signing specifically waives any reservation or claim for additional compensation in respect to the subject Change Order.

At the OWNER's option, payment or credit for any alterations covered by a Change Order shall be determined by one or a combination of the methods set forth in A, B, or C below, as applicable:

A. UNIT PRICES

Those unit Prices stipulated in the Proposal shall be utilized where they are applicable. In the event the Change Order results in a change in the original quantity that is materially and significantly different from the original bid quantity, a new unit Price shall be negotiated upon demand of either party. Unit Prices for new items included in the Change Order shall be negotiated and mutually agreed upon.

B. LUMP SUM

A total lump sum for the work negotiated and mutually acceptable to the CONTRACTOR and the OWNER. Lump sum quotations for modifications to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and Profit, all calculated as specified under "C" below.

C. COST REIMBURSEMENT WORK

The term "cost reimbursement" shall be understood to mean that payment for the work will be made on a time and expense basis, that is, on an accounting of the CONTRACTOR's forces, materials, equipment, and other items of cost as required and used to do the work.

If the method of payment cannot be agreed upon Prior to the beginning of the work, and the OWNER directs by written Change Order that the work be done on a cost reimbursement basis, then the CONTRACTOR shall furnish labor, and furnish and install equipment and materials necessary to complete the work in a satisfactory manner and within a reasonable period of time. For the work performed, payment will be made for the documented actual cost of the following:

1. Labor including foremen for those hours they are assigned and participating in the cost reimbursement work (actual payroll cost, including wages, fringe benefits as established by negotiated labor agreements, labor insurance, and labor taxes as established by law). No other fixed labor burdens will be considered, unless approved in writing by the OWNER.
2. Material delivered and used on the designated work, including sales tax, if paid by the CONTRACTOR or his SUBCONTRACTOR.
3. Rental or equivalent rental cost of equipment, including necessary transportation for items having a value in excess of \$100. Rental or equivalent rental cost will be allowed for only those days or

hours during which the equipment is in actual use. Rental and transportation allowances shall not exceed the current rental rates prevailing in the locality. The rentals allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, and renewals, and no further allowances will be made for those items, unless specific agreement to that effect is made.

4. Additional bond, as required and approved by the OWNER.
5. Additional insurance (other than labor insurance) as required and approved by the OWNER.

In addition to items 1 through 5 above, an added fixed fee for general overhead and Profit shall be negotiated and allowed for the CONTRACTOR (or approved SUBCONTRACTOR) actually executing the Cost Reimbursement work.

An additional fixed fee shall be negotiated and allowed the CONTRACTOR for the administrative handling of portions of the work that are executed by an approved SUBCONTRACTOR. No additional fixed fee will be allowed for the administrative handling of work executed by a SUBCONTRACTOR of a SUBCONTRACTOR, unless by written permission from the OWNER.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, Profit, and any other general expense. The CONTRACTOR's records shall make clear distinction between the direct costs of work paid for on a cost reimbursement basis and the costs of other work. The CONTRACTOR shall furnish the ENGINEER report sheets in duplicate of each day's cost reimbursement work no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the CONTRACTOR, SUBCONTRACTOR or other forces. The daily report sheets shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated.

Material charges shall be substantiated by valid copies of vendors' invoices. Such invoices shall be submitted with the daily report sheets, or, if not available, they shall be submitted with subsequent daily report sheets. Said daily report sheets shall be signed by the CONTRACTOR or his authorized agent.

The OWNER reserves the right to furnish such materials and equipment as he deems expedient and the CONTRACTOR shall have no claim for profit or added fees on the cost of such materials and equipment. To receive partial payments and final payment for cost reimbursement work, the CONTRACTOR shall submit to the ENGINEER, detailed and complete documented verification of the CONTRACTOR's and any of his SUBCONTRACTORS' actual costs involved in the cost reimbursement work. Such costs shall be submitted within 30 days after said work has been performed.

69. PARTIAL PAYMENTS

A. GENERAL

Nothing in this Article shall be construed to affect the right, hereby reserved, to reject the whole or any part of the aforesaid work, should such work be later found not to comply with the Provisions of the Contract Documents. All estimated quantities of work for which partial payments have been made are subject to review and correction on the final estimate. Payment by the OWNER and acceptance by the CONTRACTOR of partial payments based on periodic estimates of quantities of work performed shall not, in any way, constitute acceptance of the estimated quantities used as a basis for computing the amounts of the partial payments.

B. ESTIMATE

At least 30 days before each Progress payment falls due, as specified in the Supplementary Conditions, the CONTRACTOR shall submit to the ENGINEER a detailed estimate of the amount earned during the Preceding month for the separate portions of the work, and request payment. As used in this Article, the words "amount earned" means the value, on the date of the estimate for partial payment, of the work completed in accordance with the Contract Documents, and the value of approved materials delivered to the Project site suitable stored and Protected Prior to incorporation into the work.

ENGINEER will, within 7 days after receipt of each request for payment, either indicate in writing a recommendation of payment and present the request to OWNER, or return the request to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may, within 7 days, make the necessary corrections and resubmit the request.

ENGINEER may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such an extent as may be necessary in ENGINEER's opinion to protect the OWNER from loss because:

1. The work is defective, or completed work has been damaged requiring correction or replacement;
2. Written claims have been made against OWNER or Liens have been filed in connection with the work;
3. The Contract Price has been reduced because of Change Orders;
4. OWNER has been required to correct defective work or complete the work in accordance with Article OWNER'S RIGHT TO DO WORK;
5. Of CONTRACTOR's unsatisfactory Prosecution of the work in accordance with the Contract Documents; or
6. CONTRACTOR's failure to make payment to SUBCONTRACTORS or for labor, materials, or equipment.

C. DEDUCTION FROM ESTIMATE

Unless modified in the Supplementary Conditions, deductions from the estimate will be as described below:

1. The OWNER will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly stored at the jobsite but not incorporated into the work. When the work is 50 percent complete, the OWNER may reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date provided the CONTRACTOR is making satisfactory progress and there is no specific cause for a greater retainage. The OWNER may reinstate the retainage up to 10 percent if the OWNER determines, at his discretion, that the CONTRACTOR is not making satisfactory progress or where there is other specific cause for such withholding.

D. QUALIFICATION FOR PARTIAL PAYMENT FOR MATERIALS DELIVERED

Unless modified in the Supplementary Conditions, qualification for partial payment for materials delivered but not yet incorporated into the work shall be as described below:

1. Materials, as used herein, shall be considered to be those items which are fabricated and manufactured material and equipment. No consideration shall be given to individual purchases of less than \$200 for any one item.
2. To receive partial payment for materials delivered to the site, but not incorporated in the work, it shall be necessary for the CONTRACTOR to include a list of such materials on the Partial Payment Request. At his sole discretion, the ENGINEER may approve items for which partial payment is to be made. Partial payment shall be based on the CONTRACTOR's actual cost for the materials as evidenced by invoices from the supplier. Proper storage and Protection shall be provided by the CONTRACTOR, and as approved by the ENGINEER. Final payment shall be made only for materials actually incorporated in the work and, upon acceptance of the work, all materials remaining for which advance payments had been made shall revert to the CONTRACTOR, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the work.
3. CONTRACTOR warrants and guarantees that title to all work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER at the time of payment free and clear of all liens, claims, security interests, and encumbrances.
4. If requested by the ENGINEER, the CONTRACTOR shall provide, with subsequent pay requests, invoices receipted by the supplier showing payment in full has been made.

E. PAYMENT

After deducting the retainage and the amount of all previous partial payments made to the CONTRACTOR from the amount earned, the amount due will be made payable to the CONTRACTOR. Recommendations for payment received by the OWNER less than 9 days Prior to the scheduled day for payment will not be Processed or paid until the following month.

70. CLAIMS FOR EXTRA WORK

In any case where the CONTRACTOR deems additional time or compensation will become due him under this Contract for circumstances other than those defined in Article DELAYS AND EXTENSION OF TIME, the CONTRACTOR shall notify the ENGINEER, in writing, of his intention to make claim for such time or compensation before he begins the work on which he bases the claim, in order that such matters may be settled, if possible, or other appropriate action taken. The notice of claim shall be in duplicate, in writing, and shall state the circumstances and the reasons for the claim, but need not state the amount. If such notification is not given or if the ENGINEER is not afforded proper facilities by the CONTRACTOR for keeping strict account of actual cost, then the CONTRACTOR hereby agrees to waive the claim for such additional time or compensation. Such notice by the CONTRACTOR, and fact that the ENGINEER has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

No extension of time will be granted to the CONTRACTOR for delays resulting from extra work that have no measurable impact on the completion of the total work under this Contract. Claims for additional time or compensation shall be made in itemized detail and submitted, in writing, to the OWNER and ENGINEER within 10 days following completion of that portion of the work for which the CONTRACTOR bases his claim. Failure to make the claim for additional compensation in the manner and within the time specified above shall constitute waiver of that claim. In case the claim is found to be just, it shall be allowed and paid for as provided in Article PAYMENT FOR CHANGE ORDERS.

71. RELEASE OF LIENS OR CLAIMS

The CONTRACTOR shall indemnify and hold harmless the OWNER from all claims for labor and materials furnished under this Contract. Prior to the final payment, the CONTRACTOR shall furnish to the OWNER, as part of his final payment request, a certification that all of the CONTRACTOR's obligations on the project have been satisfied and that all monetary claims and indebtedness have been paid. The CONTRACTOR shall furnish complete and legal effective releases or waivers, satisfactory to the OWNER, of all liens arising out of or filed in connection with the work.

72. FINAL PAYMENT

Upon completion of all the work under this Contract, the CONTRACTOR shall notify the ENGINEER, in writing, that he has completed his part of the Contract and shall request final payment. Upon receipt of such notice the ENGINEER will inspect and, if acceptable, submit to the OWNER his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the CONTRACTOR. Upon approval of this final estimate by the OWNER and compliance by the CONTRACTOR with Provisions in Article **RELEASE OF LIENS OR CLAIMS**, and other Provisions as may be applicable, the OWNER shall pay to the CONTRACTOR all monies due him under the Provisions of these Contract Documents.

73. NO WAIVER OF RIGHTS

Neither the inspection by the OWNER, through the ENGINEER or any of his employees, nor any order by the OWNER for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the OWNER or ENGINEER, nor any extension of time, nor any possession taken by the OWNER or its employees, shall operate as a waiver of any Provision of this Contract, or any power herein reserved to the OWNER, or any right to damages herein Provided, nor shall any waiver of any breach in this Contract be held to be a waiver of any other or subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the OWNER's rights under the warranty.

74. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the CONTRACTOR of the final payment shall release the OWNER and the ENGINEER, as representatives of the OWNER, from all claims and all liability to the CONTRACTOR for all things done or furnished in connection with the work, and every act of the OWNER and others relating to or arising out of the work except claims Previously made in writing and still unsettled. No payment, however, final or otherwise, shall operate to release the CONTRACTOR or his Sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds and warranties, as herein provided.

SUPPLEMENTARY CONDITIONS

The General Conditions are hereby revised as follows:

ARTICLE 9 "ENGINEER"

Delete Article "ENGINEER" in its entirety and substitute the following:

The person or organization identified as such in the Contract Documents. The Term "ENGINEER" means ENGINEER, ARCHITECT or his authorized representative.

ARTICLE 34 "INSURANCE & LIABILITY"

Delete Article 34 "INSURANCE & LIABILITY" (A), (B), (C), (D) and (E) in their entirety and substitute the following:

Contractor shall maintain limits no less than those stated below:

CONTRACTOR is to secure, pay for, and file with the City of Key West, prior to commencing any work under the Contract, all certificates for workers' compensation, public liability, and property damage liability insurance, and such other insurance coverages as may be required by specifications and addenda thereto, in at least the following minimum amounts with specification amounts to prevail if greater than minimum amounts indicated. Notwithstanding any other provision of the Contract, the CONTRACTOR shall provide the minimum limits of liability insurance coverage as follows:

Auto Liability	\$1,000,000	Combined Single Limit
General Liability	\$2,000,000	Aggregate (Per Project)
	\$2,000,000	Products Aggregate
	\$1,000,000	Any One Occurrence
	\$1,000,000	Personal Injury
	\$ 300,000	Fire Damage/Legal
Additional Umbrella Liability	\$2,000,000	Occurrence / Aggregate

CONTRACTOR shall furnish an original Certificate of Insurance indicating, and such policy providing coverage to, City of Key West named as an additional insured on a PRIMARY and NON CONTRIBUTORY basis utilizing an ISO standard endorsement at least as broad as CG 2010 (11/85) or its equivalent, (combination of CG 20 10 07 04 and CG 20 37 07 04, providing coverage for completed operations, is acceptable) including a waiver of subrogation clause in favor of City of Key West on all policies. CONTRACTOR will maintain the General Liability and Umbrella Liability insurance coverages summarized above with coverage continuing in full force including the additional insured endorsement until at least 3 years beyond completion and delivery of the work contracted herein.

Notwithstanding any other provision of the Contract, the CONTRACTOR shall maintain complete workers' compensation coverage for each and every employee, principal, officer, representative, or agent of the CONTRACTOR who is performing any labor, services, or material under the Contract. Further, CONTRACTOR shall additionally maintain the following minimum limits of coverage:

Bodily Injury Each Accident	\$1,000,000
Bodily Injury by Disease Each Employee	\$1,000,000
Bodily Injury by Disease Policy Limit	\$1,000,000

CONTRACTOR's insurance policies shall be endorsed to give 30 days' written notice to the City of Key West in the event of cancellation or material change, using form CG 02 24, or its equivalent.

Certificates of Insurance submitted to the City of Key West will not be accepted without copies of the endorsements being requested. This includes additional insured endorsements, cancellation/material change notice endorsements, and waivers of subrogation. PLEASE ADVISE YOUR INSURANCE AGENT ACCORDINGLY.

CONTRACTOR will comply with any and all safety regulations required by any agency or regulatory body including but not limited to OSHA. CONTRACTOR will notify City of Key West immediately by telephone at (305) 809-3811 any accident or injury to anyone that occurs on the jobsite and is related to any of the work being performed by the CONTRACTOR.

Add the following Article:

G. SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida. If requested, Contractor shall Provide Proof of Florida Licensure for all insurance companies. The City of Key West shall be named as Additional Insured on the insurance certificates.

See sample insurance forms on next seven (7) pages

ARTICLE 35 "INDEMNITY"

Delete Article 35 "INDEMNITY" in its entirety and substitute the following:

INDEMNITY

To the fullest extent permitted by law, the CONTRACTOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnitees") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

ARTICLE 39 "CODES, ORDINANCES, PERMITS, AND LICENSES"

Add the following:

A. PERMIT FOR WORK WITHIN LOCAL RIGHTS-OF-WAY

The Contractor shall obtain from the City of Key West the necessary permits for work within the rights-of-way. The Contractor shall abide by all regulations and conditions, including maintenance of traffic.

B. NOISE ORDINANCE

City of Key West has a noise ordinance that allows working hours between 8:00 AM to 7:00 PM, Monday through Friday and 9:00 AM to 5:00 PM on Saturday. No work shall be performed during Sunday or City Holidays, State Holidays and National Holidays. Construction operations outside these hours and these days will require approval of the Engineer and may require a variance from the City of Key West Commission.

D. "LICENSES"

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

1. Within 10 days of Notice of Award, the successful Bidder must represent that he holds all applicable, county, and City of Key West licenses and permits required to do business as a contractor with respect to the work described in the Contract Documents.
2. Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he has complied with the provisions of Chapter 18 of the Code of Ordinances of the City of Key West in order to enter into the Agreement contained in the Contract Documents.
3. Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:
 - a.) City of Key West Tax License Receipt;
 - b.) A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida
 - c.) A valid occupational license issued by the City of Key West, Florida.

ARTICLE 42 "SAFETY"

Add the following sub article:

OCCUPATIONAL SAFETY AND HEALTH

The Contractor shall observe and comply with all applicable local, state, and federal occupational safety and health regulations during the prosecution of work under this Contract. In addition, full compliance by the Contractor with the U.S. Department of Labor's Occupational Safety and Health Standards, as established in Public Law 91-596, will be required under the terms of this Contract.

ARTICLE 43 "PROTECTION OF WORK AND PROPERTY"

Add the following Article:

HISTORIC PRESERVATION

The Contractor shall comply with Florida's Archives and Historic Act (Florida Statutes, Chapter 267) and the regulations of the local historic preservation board as applicable and protect against the potential loss or

destruction of significant historical or archaeological data, sites, and properties in connection with the project.

ARTICLE 57 "OWNERS RIGHT TO TRANSFER EMPLOYMENT"

Add the following Article:

TERMINATION FOR CONVENIENCE AND RIGHT OF SUSPENSION

- A. Owner shall have the right to terminate this Contract without cause by written notice of Termination to the Contractor. In the event of such termination for convenience, the Contractor's recovery against the Owner shall be limited to that portion of the Contract amount earned through the date of termination, together with any retainage withheld and reasonable termination expenses incurred. Contractor shall not be entitled to any other or further recovery against the Owner, including, but not limited to, damages or any anticipated profit on portions of the Work not performed.
- B. The Owner shall have the right to suspend all or any portions of the Work upon giving the Contractor prior written notice of such suspension. If all or any portion of the Work is so suspended, the Contractor shall be entitled to reasonable costs, expenses and time extension associated with the suspension.

ARTICLE 60 "LIQUIDATED DAMAGES"

Delete Article "LIQUIDATED DAMAGES" in its entirety and substitute the following:
LIQUIDATED DAMAGES

Should the Contractor fail to complete the work or any part thereof in the time agreed upon in the Contract Documents or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the Contractor shall reimburse the Owner for the additional expense and damage for each calendar day, Sundays and legal holidays included, that project outlined in Contract Documents remains uncompleted after the completion date. Liquidated damages shall be assessed. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per diem rate as stipulated in the Proposal. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the Owner after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty but as liquidated damages, which have accrued against the Contractor. The Owner shall have the right to deduct such damages from any amount due or that may become due the Contractor or the amount of such damages shall be due and collectible from the Contractor or Surety.

ARTICLE 68 “PAYMENT FOR CHANGE ORDERS”

Add the following paragraphs

If not initially included in the original construction agreement, Change Orders will be implemented subject to approval by the City Commission.

Payment of utility fees to Keys Energy Services and Florida Keys Aqueduct Authority (FKAA) shall be made by the Contractor as directed by Owner issuance of a written Work Directive. The utility fee allowance will be allocated based on direct reimbursement of utility fees without addition of any markup, overhead, or profit by the Contractor. The Contractor shall make application for full reimbursement on the next scheduled application for payment. Retainage shall not be withheld on such reimbursement.

ARTICLE 69 "PARTIAL PAYMENTS"

Delete the first paragraph of Article "PARTIAL PAYMENTS" and substitute the following:

No more than once each month the Contractor shall submit to the Engineer a detailed estimate of the amount earned during the preceding month for the separate portions of the work and request payment. As used in this Article the words "amount earned" means the value, on the date of the estimate, for partial payment of the work completed in accordance with the Contract Documents and the value of approved materials delivered to the project site suitably stored and protected prior to incorporation into the work. Separate Application and Certification for Payment forms will be submitted for each Notice to Proceed.

ARTICLE 69 "PARTIAL PAYMENTS"

Add the following:

Payment will be made by the Owner to the Contractor within 40 days receipt of the written recommendation of payment from the Engineer.

ARTICLE 69 “PARTIAL PAYMENTS”

Delete Sub-article C “DEDUCTION FROM ESTIMATE” in its entirety and substitute the following:

DEDUCTION FROM ESTIMATE

The OWNER will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of

material delivered to and properly stored at the jobsite but not incorporated into the work. When the work for an individual Notice to Proceed is 90 percent complete, the OWNER may reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date associated with that Notice to Proceed, provided the CONTRACTOR is making satisfactory progress and there is no specific cause for a greater retainage. The OWNER may reinstate the retainage up to 10 percent if the OWNER determines, at his discretion, that the CONTRACTOR is not making satisfactory progress or where there is other specific cause for such withholding. The remaining 5 percent will be held until final completion of the entire project.

ARTICLE 69 "PARTIAL PAYMENTS"

Delete Subarticle E "PAYMENT" in its entirety and substitute the following:

PAYMENT

After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 40 days prior to the scheduled day for payment will not be processed or paid until the following month.

The OWNER will withhold progress payments until the Contractor has satisfied the above conditions.

ARTICLE 72 "FINAL PAYMENT"

Delete Article "FINAL PAYMENT" in its entirety and substitute the following:

FINAL PAYMENT

Upon completion of the work the Contractor shall notify the Engineer, in writing, that he has completed it and shall request final payment. The Contractor shall be responsible for keeping an accurate and detailed record of his actual construction. Upon completion of construction and before final acceptance and payment the Contractor shall furnish the Engineer as-built drawings of his construction. Upon receipt of a request for final payment and the as-built drawings the Engineer will inspect and, if acceptable, submit to the Owner his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the Contractor. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Article RELEASE OF LIENS OR CLAIMS, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due him under the provisions of these Contract Documents.

ARTICLE 72 "FINAL PAYMENT"

Add the following;

A. Acceptance and Final Payment.

Whenever the Contractor has completely performed the work provided for under the Contract and the Engineer has performed a final inspection and made final acceptance and subject to the terms of the Engineer will prepare a final estimate showing the value of the work as soon as the Engineer makes the necessary measurements and computations. The Engineer will correct all prior estimates and payments in the final estimate and payment. The OWNER will pay the estimate, less any sums that the OWNER may have deducted or retained under the provisions of the Contract, as soon as practicable after final acceptance of the work, provided the Contractor has met the requirements of (1) through (8) below.

The Contractor has agreed in writing to accept the balance due or refund the overpayment, as determined by the OWNER, as full settlement of his account under the Contract and of all claims in connection therewith, or the Contractor, accepted the balance due or refunded the overpayment, as determined by the OWNER, with the stipulation that his acceptance of such payment or the making of such refund does not constitute any bar, admission, or estoppel, or have any effect as to those payments in dispute or the subject of a pending claim between the Contractor and the OWNER. To receive payment based on a FINAL PAYMENT CERTIFICATE, The Contractor further agrees, by submitting a FINAL PAYMENT CERTIFICATE that any pending or future arbitration claim or suit is limited to those particulars, including the itemized amounts, defined in the original FINAL PAYMENT CERTIFICATE , and that he will commence with any such arbitration claim or suit within 15 calendar days from and after the time of final PAYMENT of the work and that his failure to file a formal claim within this period constitutes his full acceptance of the Engineer's final estimate and payment. The overpayment refund check from the Contractor, if required, will be considered a part of any Acceptance Letter executed.

- 1 The Contractor has properly maintained the project, as specified hereinbefore.
- 2 The Contractor has furnished a sworn affidavit to the effect that the Contractor has paid all bills and no suits are pending (other than those exceptions listed, if any) in connection with work performed under the Contract and that the Contractor has not offered or made any gift or gratuity to, or made any financial transaction of any nature with, any employee of the OWNER in the performance of the Contract.
- 3 The surety on the contract bond consents, by completion of their portion of the affidavit and surety release subsequent to the Contractor's completion of his portion, to final payment to the Contractor and agrees that the making of such payment does not relieve the surety of any of its obligations under the bond.

- 4 The Contractor has furnished all required mill tests and analysis reports to the Engineer.
- 5 The Contractor has furnished as-built drawings in AutoCAD and Adobe PDF, in accordance with all supplied data collections and files to be compatible with Esri ArcGIS 10.2.2 Software. The current computing environment consists of:
 - Microsoft SQL Server
 - Windows 7/Server 2008
 - ESRI GIS Platform

Interfaces and Integrations

The City of Key West uses a number of software applications critical to its core operation and mission. The proposed mobile asset data collection solution will need to interface or integrate with these existing platforms.

- Arc Collector
- ArcGIS Online
- ArcMap 10.2

ADD ARTICLE 75 RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

- A. The city shall pay no additional compensation for hurricane and or any other acts of nature.
- B. **CLEANUP PROCEDURES FOR HURRICANE WARNINGS AND HURRICANE WATCH.** In the event the owner or National Oceanographic and Atmospheric Administration (NOAA) issues a Tropical Storm Watch or a Hurricane Watch for the Keys, the Engineer will contact the Contractor informing him that the Watch has been established. Within four (4) hours of the notice the Contractor shall provide the Engineer with a written plan and schedule describing how and when the Contractor will remove all unnecessary items from the work area and tie down all necessary supplies and barricades in the event a Tropical Storm Warning or a Hurricane Warning is issued. The Contractor shall remove all unnecessary items from work areas and shall tie down all movable objects (under 200 lbs.) The Engineer will determine "necessary" items. The Owner shall not be liable for any financial hardship or delays caused as a result of demobilization or remobilization of work due to the above.

ADD ARTICLE 76 CITY OF KEY WEST LICENSES, PERMITS AND FEES

- A. Pursuant to the Public Proposal Disclosure Act, there are a number of licenses, permits, and/or fees a Contractor **REQUIRED BY THE CITY OF KEY WEST** before or during construction by virtue of this construction as part of the Contract. **Payment of these licenses, permits and/or fees is the responsibility of the Contractor unless**

specifically excluded. The Contractor shall verify each required license, permit, or fee before submitting the Proposal.

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PART 4

Technical Specifications

BOYS AND GIRLS CLUB
BAYVIEW PARK RENOVATION SPECIFICATIONS

DIVISION 1 - GENERAL SITE CONSTRUCTION

SECTION 01100 - GENERAL CONDITIONS

PART 1 - GENERAL

1.1 THE CONTRACT

- A. The contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The contract may be amended or modified only by a written modification. The contract documents include, but are not limited to, the bidding documents, the drawings, the specifications, the schedule and the addenda. The contract shall be executed no less than in duplicate.

1.2 THE WORK

- A. The term "work" means the construction and services required by the contract documents, and includes all other labor, materials, equipment and services provided by the contractor to fulfill the contractor's obligations.

1.3 INTENT

- A. The intent of the contract documents is to include all items necessary for the proper execution and completion of the work by the contractor. The contract documents are complementary, and what is required by one shall be as binding as if required by all.
- B. Owner reserves the right to withhold award of the contract for a period of 90 days from bid date, at their sole discretion. Contractor's price is to remain firm and unchanged for this 90 day period.
- C. Contractor is to submit a proposed subcontractor list within 10 days of bid award. No subcontractors will be allowed who are not approved by local mall management locations. If requested by the local mall that specific contractors for any portion of work be used, contractor shall comply.

PART 2 - OWNER

1.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- A. Except for permits and fees that are the responsibility of the contractor under the contract documents, owner shall obtain and pay for other necessary approvals, easements, assessments and charges.
- B. The term "project manager" means the employee or representative of the owner designated by the owner to provide management and supervisory services for the project. All communications to the contractor shall be through the pm. The pm is not responsible for the acts or omissions of the contractor, nor is the project manager responsible for construction means, methods, techniques, sequences procedures or safety precautions at the site. The project manager shall render interpretations of the contract documents and shall, in the first instance, be the judge of the performance thereunder by the contractor. No oral interpretation shall be binding on the owner. At any stage in the construction of the project the pm may conduct inspections in the work.
- C. Owner shall provide to the contractor the drawings free of charge. Said drawings are diagrammatic, and shall be followed as closely as actual construction and work of individual trades will permit. Where, because of a minor error or omission in the drawings, something manifestly necessary to the completion of the work is not shown on the drawings, it is agreed that the intent of the owner and the contractor is such that such omitted material or work shall be supplied by the contractor as part of the work and without additional compensations.
- D. Owner reserves the right to search all personnel, packages, toolboxes, material shipments, etc, on anyone entering or leaving the site/store at any time. Contractor shall coordinate its working hours with the store operation schedule and will cooperate with owner to meet security requirements (on a remodel project). Owner will provide security service for work which reasonably must be performed during off store hours, provided contractor shall use all reasonable efforts to minimize the number of occasions requiring off hours work.
- E. Owner shall make available for contractors use the existing loading dock and freight elevator within the store.
- F. Contractor is to contact owner pm for the release of all owner supplied items. All tenant supplied construction material must be counted and checked for damage and/or shortages upon delivery. Any damage and/or shortage must be noted on the packing slip at the time of delivery and tenant must be notified. Any damages or shortages not duly noted and reported will be replaced at the contractors' expense. In the event that property, materials, or articles of any type are furnished by the owner to the contractor, the contractor assumes complete liability therefore, including responsibility for on site or off site storage.

- G. Do not demolish any existing fire alarm panels, wiring or devices, without first contacting the owner project manager. Do not demolish any existing hvac or energy management controls, wiring, or devices, without first contacting the owner project manager. Do not demolish any telephone d-mark or incoming phone lines without first contacting the owner project manager.
- H. An owner rep will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the work. At the owner's sole option, it may accept defective or non-conforming work. The owner may do so instead of requiring the removal and correction of such work, in which case a change order will be issued to reflect an appropriate reduction in the contract sum. Owner has the authority to reject work that does not conform to the contract documents. If the contractors fail to correct defective or non-conforming work, the owner may correct it at the expense of the contractor.
- I. Owner will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work, since these are solely the contractor's responsibility. Owner will not be responsible for the contractor's failure to carry out the work in accordance with the contract documents. Observation or inspections, including reexamination, by owner shall not be construed as a waiver of any portion of owners' rights under the contract or as acceptance of any portion of the work, nor shall such observations or inspections diminish to any extent contractor's duty to perform the work in accordance with the contract documents and code.
- J. Based on his observations and evaluations of the contractor applications for payment, owner will review and certify the amounts due the contractor.
- K. Owner is to receive copies of all test reports. Owner will have authority to require special inspection or testing of the work.

PART 3 - OWNER'S RIGHTS

1.1 OWNER'S RIGHT TO STOP THE WORK

- A. Correction of work: The Contractor shall promptly correct work rejected by the owner Project Manager as failing to conform to the requirements of the contract Documents. The Contractor shall bear the cost of correcting such rejected work.
- B. If the Contractor fails to correct Work that is not in accordance with the Contract Documents, owner may direct the Contractor in writing to stop the Work until the correction is made. In no event shall the Owners right to stop the Work obligate the Owner to do so for the benefit of the Contractor or any other entity or person and the Contractor shall have no claim for damage by reason thereof.

1.2 OWNER'S RIGHT TO CARRY OUT THE WORK

- A. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, including the failure to man the job due to labor disputes of any type, or fail to perform any provision of the Contract Documents, including unauthorized Schedule Delay, and fails within a seven day period after receipt of written notice from owner to correct such default or neglect with diligence and promptness, owner may, without prejudice to other remedies, correct such deficiencies. In such case, a Change Order shall be issued deducting the cost of correction from payments then or thereafter due the Contractor.

1.3 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

- A. Owner reserves the right to perform construction or operations related to the project with Owner's own forces, and to award separate contracts in connection with other portions of the project. Any such performance by the Owner or a separate contractor contracted with by the Owner shall not, in and of itself, be grounds for a claim for delay or additional cost by the Contractor.
- B. The Contractor shall coordinate and cooperate with separate contractors employed by Owner, including the work of utility companies. The Owner, the Contractor, and each of the Owners Separate contractors shall cooperate with one another in the use of the site, storage of their materials and equipment and the execution of their work and shall connect and coordinate their work as required by the Contract Documents. The Contractor, the Owner, and all separate contractors shall diligently endeavor not to damage the work of others. If any such damage takes place it shall be promptly corrected at the expense of the party causing the damage.
- C. Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefore. If the contractor damages the work of a separate contractor, then the Contractor shall promptly settle the matter directly with the other contractor and shall hold the Owner harmless from any and all effects of such damage. Contractor shall notify Owner immediately of lack of progress or defective workmanship on the part of other

contractors performing separate work, including utility companies, where the same will interfere with Contractors Own operations.

PART 4 - CONTRACTOR

1.1 EXECUTION OF THE CONTRACT

- A. Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents. Before submitting its proposal, contractor shall make all field surveys and examinations to determine existing conditions at the site and ascertain any conditions and problems that will affect the work. Contractor shall also investigate requirements of the community with respect to required licenses, operating conditions, trucking, disposal of refuse, available materials and employment, etc. All costs necessary to overcome existing conditions and to conform to such requirements shall be reflected in Contractors proposal.
- B. Quality Assurance: Contractor to provide quality control services, from an independent qualified inspection firm, for, at a minimum, the following work: Soil Compaction, Concrete strength, air entrainment, slump, Masonry inspection, steel inspection, special inspections required by AHJ. Owner is to be on the distribution of these reports. The agency to be used must have the experience and capability to conduct testing and inspection required, as documented by ASTM e548, and that specializes in types of tests and inspections to be performed. Costs for testing and re-testing, if necessary, are to be borne by the Contractor. Testing agency is to promptly notify Owner if any irregularities or deficiencies are observed in the work.

1.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

- A. The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Tenant. Before commencing activities, the Contractor shall:
 - 1. Take field measurements and verify field conditions; Contractor shall be responsible for the correctness of verification of all conditions and dimensions at the site. No extra charge or adjustment to the Contract Sum shall be made on account of differences or discrepancies between actual dimensions and measurements indicated on the Drawings.
 - 2. Carefully compare this and other information known to the Contractor with the Contract Documents.
 - 3. Promptly report errors, inconsistencies or omissions discovered to Tenant Performance of any portion of the work without having reviewed all of the contract documents, without reporting errors, inconsistencies, omissions, etc, or without having, where required, approved shop drawings, product data, or samples, shall be done at the Contractors sole risk.
 - 4. The Contractor is to establish control lines on the floor, two feet from center of column, every column, each way. These lines must be protected by cutting into the concrete and painting, snapping chalk lines, and spraying clear lacquer or another means that will ensure control lines remain until project is completed or floor covering is in place. The contractor is to transfer the established control lines to each floor to maintain a uniform control line on each floor to ensure all ceiling grids correspond and escalators and elevators are square and true on each floor.

1.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- A. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work. The contractor is solely responsible to the Owner for the acts, omissions, and defaults of its employees, subcontractors, sub-subcontractors, material men and any other person or entity involved in or performing any of the Work. Inspection of the Work by the Project Manager or other representatives of the Owner, approval of the Work by the PM or other reps of the Owner, and payment for the Work by the Owner shall not relieve the Contractor of any of its obligations to perform the work strictly in accordance with the Contract Documents. The superintendent shall be available for the project and at the premises at all times during regular working hours and all other hours that work is being performed at the premises.
- B. The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to Tenant the names of subcontractors or suppliers for each portion of the Work. If requested, contractor shall furnish information with respect to past performance and financial status of the subcontractors. Tenant will promptly reply to the Contractor in writing if Tenant, after due investigation, has reasonable objection to the subcontractors or suppliers listed. Unskilled workers shall not be permitted on the site. All work shall be performed under the supervision of an experienced and competent Project Superintendent. The contractor's Project Superintendent in charge of the Work shall represent the Contractor and all directions given to him, or its authorized representatives, by the Owner.

- C. Contractor shall incorporate in all of its contracts with subcontractors the following provisions: Each sub shall be bound to contractor by the terms of the contract documents between owner and contractor, and shall assume toward contractor all obligations and responsibilities which contractor by those documents assumes toward Owner, and shall have the benefit of all rights, remedies and redress against contractor.
- D. Full performance: Contractor is liable to Owner for the full, complete and prompt performance of all contracts between contractor and any subcontractor and any contracts assigned to contractor, and nothing in the contract documents shall infer or cause in any way a waiver by owner of any right against contractor because of breach, default, delay, defect or other acts or omissions for which a subcontractor may also be liable.

1.4 LABOR AND MATERIALS

- A. Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work. The contractor warrants that all materials and equipment furnished will be new, and that all Work not done in accordance with this warranty shall be considered grounds for default.
- B. The Contractor shall deliver, handle, store and install materials in accordance with manufacturers' instructions.
- C. Tenant Supplied Material is enumerated on the drawings. It is the responsibility of the contractor to:
 - 1. Contact the project manager by fax or email to arrange for release of the Tenant supplied materials at the appropriate time for the orderly sequence of the work.
 - 2. Receive all BCF supplied material.
 - 3. Count and check for damage all received materials. Damages or shortages must be noted on the packing slip at the time of delivery and Tenant is to be notified by fax or email. Any damages or shortages will be the responsibility of the Contractor if Tenant is not notified immediately.

1.5 QUALITY CONTROL

- A. Before the work begins, standards of workmanship quality shall be established to the satisfaction of the Project Manager. All equipment, materials, and articles incorporated in the Work are to be new, unless specifically addressed otherwise, and of the best grade of their respective kind for the purpose.

1.6 WARRANTY

- A. The Contractor warrants to Tenant that: (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents. Contractor shall furnish to Owner a minimum of 3 copies of all warranty certificates and guarantees, and all related maintenance manuals, operating instructions, maintenance stocks/and or replacement parts list. Contractor shall promptly enforce at its expense and such warranty or guarantee for owners benefit, if Owner shall request contractor to do so, and reimburse Owner for any costs paid or incurred by Owner in replacing defective, unsound, or improper work, due to the failure of the maker of any such warranty or guarantee to fulfill its obligations thereunder.

1.7 TAXES

- A. The Contractor shall pay sales, consumer, use and similar taxes that are legally required when the Contract is executed. Except for the general building permit, Contractor shall secure and pay for all permits, licenses, taxes, levies, fees, tests and inspections required or imposed by any governmental authority having jurisdiction for or in connection with the execution and completion of the work, and contractor shall comply with all applicable laws, codes, ordinances, rules and regulations of any governmental authority in performing the work.

1.8 PERMITS, FEES AND NOTICES

- A. The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work.
- B. The Contractor shall comply with and give notices required by agencies having jurisdiction over the Work. If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without notice to Tenant, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs. The Contractor shall promptly notify Tenant in writing of any known inconsistencies in the Contract Documents with such governmental laws, rules and regulations. It is contractor's responsibility to assure that the Work as drawn and specified complies with all applicable laws, codes, ordinances, rules and regulations. If Contractor

observes or is informed by any governmental authority having jurisdictions, that the Drawings and specs are at variances therewith, contract shall promptly notify Owner in writing, and any necessary changes shall be adjusted. If contractor performs any work knowing it to be contrary to such laws, codes, ordinances, rules, or regulations, and without such notice to Owner, Contractor shall bear all responsibility and costs arising there from.

1.9 SUBMITTALS

- A. The Contractor shall promptly review, approve in writing and submit to Tenant Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Contractor shall make all such submittals within reasonable promptness and in such sequence as to cause no delay in the work. In no event shall Owners review and acceptance of submittals relieve Contractor from responsibility for errors of any sort, nor shall it in any way diminish Contractors obligation to perform the work in accordance with the Contract Documents. Tenant Requires that submittals be made on all major mechanical and electrical equipment; roofing system; escalator and elevator, fire sprinkler shop drawings, fire alarm shop drawings. As long as contractor is using specified suppliers/vendors for other divisions of work, no submittals will be necessary.
- B. Contractor shall maintain a submittal register, which lists all the submittal requirements for the project, with a tracking of dates of approval and reasons for disapproval or re-submittal. The register (attached in previous section of this) shall be updated weekly.
- C. Any deviations or substitutions made in the submittal process must be clearly and legibly addressed, and a comparison of the proposed product against the specified product must be presented.
- D. Contractor shall also submit a 2 week look ahead schedule, accompanied by job photographs, on a weekly basis.

PART 5 - USE OF SITE

- A. The contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the contract documents and owner open store construction: Contractor shall develop and present to owner an appropriate written plan of action for those instances where construction is undertaken in an operating store. Such plan of action shall include, without limitation, the method of identifying superintendents who can manage open store projects, options for partial closure, complete closure, off peak construction and other steps designed to mitigate the impact of construction on the operating store and its customers.
- B. Temporary services and facilities: the contractor shall, at its expense, provide and maintain (including necessary repairs and replacements) temporary water facilities for its use and the use of all subcontractors and any other contractor performing separate work for the projects. Contractor's facilities shall include a service line and all necessary fittings to bring the water to one or more convenient terminal points.
- C. The contractor shall, at its expense, provide and maintain (including necessary repairs and replacements) temporary electric service adequate for the lighting and power requirements of contractor, all subcontractors, and owners contractors. Stairs & other enclosed areas shall have adequate lighting. All such facilities shall conform to all requirements of the NEC, the local utility, & any AHJ.
- D. Contractor shall be responsible for methods of operation and the loads imposed by all users of the freight elevator. Contractor shall not permit any method of operation or load which would damage or endanger the equipment or create any safety hazard.
- E. The general contractor shall be responsible for protecting all porcelain ceramic tile, ceramic tile and lvt during construction and maintaining the protection until substantial completion, as noted in section 09310.
- F. The contractor (fixture installer) shall be responsible for maintaining the protection of all porcelain ceramic tile, ceramic tile and lvt during the fixture delivery and installation. The contractor will be fined \$1,000 for every tile area damaged due to the transportation of pallets and fixtures across the tile aisles and/or due to the installation of the fixtures.

PART 6 - CUTTING AND PATCHING

- A. The contractor shall be responsible for cutting, fitting or patching required to complete the work or to make its parts fit together properly. The contractor shall endeavor not to damage or endanger any portion of the work or the work of the owner or any separate contractor or any existing structure by cutting, patching, fitting, or otherwise altering any work or by excavation. If the contractor shall damage any such work, the contractor shall promptly and completely restore the same to its original condition. Special care and precaution shall be taken with respect to all exposed final finish surfaces, whether new or existing. Do not cut and patch structural elements in a manner that could change their load carrying capacity or load deflection ratio.

PART 7 - CLEANING UP

- A. The contractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the work daily basis. Overall jobsite cleaning shall be conducted on a weekly basis. Contractor shall maintain orderly housekeeping during the progress of construction, and upon completion shall thoroughly clean all areas, both indoors and outdoors. In addition to clean up operations, final clean up shall include the following operations wherever they can be adapted to the project:
1. All floors shall be dry swept, followed by another sweeping with damp sawdust.
 2. Dust, dirt, mortar drops, paint drippings, oil, grease and other blemishes shall be removed from all surfaces, including pipe and equipment.
 3. Windows, glass lights, and glass doors shall be washed on both sides. Paint overruns and putty smears shall be removed.
 4. Hardware shall be rubbed clean with flannel cloths.
 5. Exterior paving's shall be swept and hosed down.
 6. Contractor shall remove all construction rubbish, scaffolding, equipment, temp protection, temp field structures, and anything else that was required in connection with the construction of the work, but not a permanent part thereof. (Optional)
 7. Contractor shall, at its expense, provide and maintain temporary heating and ventilating as required for maintaining the work schedule and proper placing, protection, and drying of work, including the work and all work of other contractors performing separate work for the projects. In all enclosed work areas, there shall be sufficient temporary heating facilities to maintain a minimum temperate of 65 degrees.
- A. Heaters shall be located a safe distance from combustible materials, and they shall have guards to protect against accidental contact. Contractor shall provide, at its expense, all necessary accessories, including tarpaulins, or other temporary enclosures necessary to retain heat and provide protection from the effects of inclement weather.

PART 8 - INDEMNIFICATION

- A. To the fullest extent permitted by law, the contractor shall indemnify and hold harmless tenant, the architect, the engineer, the architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. If any legal action is threatened or brought against owner or contractor or both of them because of any of the foregoing matters, contractor shall, at contractor's expense, settle or defend such action, paying all costs, expenses, and attorney's fees incurred by owners, and shall pay any amount agreed to in settlement and any judgment which may be rendered therein.
- B. Contractor agrees not to suffer any mechanic's, materialman's or other lien, charge or lien to be filed against tenant, the project or premises or any portion thereof or any part of the shopping center by reason of any work, labor, services or materials performed at or furnished to the project or premises through or under the contractor. If any such mechanic's lien shall at any time be filed, contractor within twenty (20) days after contractor shall have received notice of the filing thereof shall cause the same to be canceled and discharged of record by payment, bond, or order of a court of competent jurisdiction.

PART 9 - ADMINISTRATION OF THE CONTRACT

- A. Project meetings are to be held weekly at the jobsite, for the purpose of discussing schedule, deliveries, coordination, and rfi's. They shall be attended by the major subcontractors on the project. The tenant manager will, if unable to attend, be tele-conferenced in to this meeting, and will receive meeting notes published by the GC.
- B. Contractor shall provide and maintain his own suitable office on the jobsite, for use by owner, architect and subcontractors, in which he will keep the latest editions of all drawings, specs, addenda, change orders, approved shop drawings, product data, and other construction documents.
- C. Contractor shall be responsible for developing implementing, maintaining and supervising all safety programs in connection with the work and the project site. The contractor is responsible for taking all safety precautions to prevent injury or death to persons or damage to property.

- D. Landlords rules and regulations: Contractor shall familiarize itself with, and shall at all times abide by, all rules and regulations of the landlord governing the work and the project, including, but not limited to, landlord's security and emergency procedures.
- E. Contractor agrees to pay wages and benefits in total for all work performed on this project, which will be sufficient to ensure that the project will be free from business disruptions, labor disruptions or work stoppages, including, but not limited to, area standards picketing and/or hand billing of the general public.
- F. Contractor is responsible for complying with any local labor regulations covering the work. Should any dispute arise, the contractor will be required to settle same without claim or additional cost to the owner. This applies to all subcontractors, material men, suppliers and all others employed by the contractor. Shop labels shall be affixed to all components if required by local regulations.

PART 10 - CHANGES IN THE WORK

- A. After execution of the contract, changes in the work may be accomplished by change order or by order for a minor change in the work. tenant, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and contract time being adjusted accordingly. Any and all claims for extra compensation or changed work/scope must be submitted within 30 days of their occurrence to tenant, or they will not be honored for review or compensation. Extra work that has been performed without authorization from tenant will not be considered for payment.
- B. Change order shall be a written order to the contractor signed by tenant to change the work, contract sum or contract time. Change order pricing is to include quantities, unit costs, labor costs, taxes, equipment rent, and be in sufficient detail. Change orders must be accompanied by appropriate back up information: including, but not limited to: labor costs, material breakdown, quantities, taxes, equipment rates, and any other information that may be requested by tenant.
- C. All changes must be submitted timely for consideration. Any and all claims for extra compensation must be submitted within 30 days of their occurrence, or they will not be honored for review or compensation. Extra work that has been performed without authorization from tenant will not be considered for payment.
- D. The tenant project manager will have authority to order minor changes in the work not involving changes in the contract sum or the contract time and not inconsistent with the intent of the contract documents. Such changes shall be written orders and shall be binding on the contractor. The contractor shall carry out such written orders promptly.
- E. If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the contract documents or from those conditions ordinarily found to exist, the contract sum and contract time shall be subject to equitable adjustment.
- F. If the owner and the contractor cannot resolve the cost of the change by a lump sum agreement or a cost plus mutually acceptable fixed fee; the contractor, upon receiving a written order signed by the owner, shall promptly proceed with the work involved (the "change" work). Thereafter, the PM shall determine the cost of the change work on the basis of the reasonable expenditures and savings of those performing the change work and attributable to the change. The contractor shall keep an itemized accounting together with appropriate supporting data for inclusion in a change order. Cost of the change work is limited to: Cost of materials, including sales tax and cost of delivery, cost of labor, workers comp insurance, bond premiums, rental value of equipment and machinery, and the additional cost of supervision directly attributable to the change.
- G. In the event a dispute between the owner and the contractor arises, the matter shall be resolved by negotiation between the owner's project manager and the project superintendent. If these people are unable to resolve the matter, it shall be referred to negotiation between the director of construction of the owner and the chief exec. Officer of the contractor. **THERE WILL BE NO ARBITRATION ALLOWED.**

PART 11 - TIME

- A. Time limits stated in the contract documents are of the essence of the contract.
- B. If the contractor is delayed at any time in progress of the work by changes ordered in the work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the contractor's control, the contract time shall be extended by change order for such reasonable time as Tenant may determine. the contractors claims, if any, for extension of time must be made in writing to the project manager not more than five working days after the contractor has notice of the delay.
- C. In the event that the contractor has not completed the work timely, liquidated damages in the amount of \$500.00 per day will accrue.

PART 12 - PAYMENTS AND COMPLETION

1.1 CONTRACT SUM

- A. The contract sum stated in the agreement, including authorized adjustments, is the total amount payable by Tenant to the contractor for performance of the work under the contract documents.

1.2 APPLICATIONS FOR PAYMENT

- A. At least ten days before the date established for each progress payment, the contractor shall submit to tenant an itemized application for payment, use attached form, for operations completed in accordance with the values stated in the agreement. Such application shall be supported by such data substantiating the contractor's right to payment as tenant may reasonably require and reflecting retainage if provided for elsewhere in the contract documents. Application and payment must be accompanied by lien waivers from all material men, supplier, and subcontractors for materials, supplies, and work performed on the project through the date of which all prior application for permit have been made.
- B. The contractor warrants that title to all work covered by an application for payment will pass to tenant no later than the time of payment. The contractor further warrants that upon submittal of an application for payment, all work for which certificates for payment have been previously issued and payments received from tenant shall, to the best of the contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or other encumbrances adverse to Tenant's interests.

1.3 PROGRESS PAYMENTS

- A. Payments shall not be made unless progress on project and percentage of completion is in accordance with tenant approved schedule.
- B. The contractor shall promptly pay each subcontractor and material supplier, upon receipt of payment from tenant, out of the amount paid to the contractor on account of such entities' portion of the work.
- C. Tenant shall not have responsibility for the payment of money to a subcontractor or material supplier.
- D. A certificate for payment, a progress payment, or partial or entire use or occupancy of the project by tenant shall not constitute acceptance of work not in accordance with the requirements of the contract documents.
- E. At any time tenant, may make payment directly to subcontractors, material men, and suppliers of contractor whenever in tenant's sole discretion, tenant determines there is any danger or likelihood that contractor is unable to pay such subcontractors, material men, and suppliers and such payment shall be credited against payment due under this agreement and/or the contract documents.

1.4 SUBSTANTIAL COMPLETION

- A. Substantial completion is the stage in the progress of the work when the work or designated portion thereof is sufficiently complete in accordance with the contract documents so tenant can occupy or utilize the work for its intended use.
- B. When the work or designated portion thereof is substantially complete, tenant will prepare a certificate of substantial completion which shall establish the date of substantial completion, shall establish the responsibilities of tenant and contractor, and shall fix the time within which the contractor shall finish all items on the list accompanying the certificate. Warranties required by the contract documents shall commence on the date of substantial completion of the work or designated portion thereof unless otherwise provided in the certificate of substantial completion.
- C. If any governmental authority having jurisdiction requires a "certificate of occupancy" (including any temporary or partial certificate of occupancy required due to the project schedule) in connection with the work, the same shall be secured by contractor as agent for owner. Contractor shall file all necessary applications, arrange any required inspections, and advance any required fee. It shall be the contractors duty and obligation, at its sole cost and expense and without effect on the contract sum, to meet whatever conditions and prerequisites are required in order to secure the issuance of the certificate of occupancy (including any temporary or partial certificate of occupancy) except that, upon issuance of the final certificate of occupancy, owner shall reimburse contractor for the fee required by the governmental authority issuing the same.
- D. The following items are to be complete in order for tenant direct contractors to start their work:
 - 1. Entire sprinkler system shall be complete, tested, and operational.
 - 2. Walls, partitions, and gyp drywall work shall be completed
 - 3. Ceiling shall be completed.
 - 4. Lighting fixtures shall be installed, wired, lamped, and operating.
 - 5. Electrical outlets shall be installed, wired, and energized, ready for store fixture electrical connections.
- E. The area shall be clean.

1.5 FINAL COMPLETION AN FINAL PAYMENT

- A. Upon receipt of a final application for payment, tenant will inspect the work. When tenant finds the work acceptable and the contract fully performed, tenant will promptly process a final application of payment.
- B. Final payment shall not become due until the contractor submits to tenant releases and waivers of liens, and data establishing payment or satisfaction of obligations, such as receipts, claims, security interests or encumbrances arising out of the contract.
- C. Acceptance of final payment by the contractor, a subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.
- D. Before final payment:
 - 1. Submit final, unconditional lien waivers from yourself and each subcontractor and supplier. The contractor shall refund to the owner all monies that the owner may be compelled to pay in discharging a lien, including all costs and reasonable attorney's fees.
 - 2. Verify that all punch list items have been completed to tenant's satisfaction. The failure to include any items on the punch list does not alter the responsibility of the contractor to complete all work in accordance with the contract documents. The contractor's project superintendent shall remain at the job site until punch list work is completed.
 - 3. Provide a one-year warranty document from yourself and each subcontractor.
 - 4. Contractor warrants good title to all material, supplies and equipment installed or incorporated in the work, free and clear of all liens, claims, security, interest, or encumbrances.
 - 5. Provide warranty documentation on any new materials or equipment installed, i.e., hvac units, roofing, etc.
 - 6. Provide complete set of as-built drawings (hardcopy and pdf set on cd). All indications on as-built drawing shall be executed in a legible manner by a competent draftsman. If variations and details cannot be shown clearly thereon, then contractor shall prepare supplemental drawings adequate to impart the information.
 - 7. Project close out manual, including, but not limited to, guarantees, warranty certificates, maintenance manuals, operating instructions, diagrams, maintenance stocks and/or replacement parts list (hardcopies and pdf's on cd).

PART 13 - PROTECTION OF PERSONS AND PROPERTY

1.1 SAFETY PRECAUTIONS AND PROGRAMS

- A. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable. Contractor shall be solely responsible for maintaining and supervising all safety precautions and programs in connection with the work. Contractor shall comply with all Federal and State OSHA requirements pertaining to the work.
- B. Workmen shall be confined to areas of construction, and shall be required to maintain normal good discipline. Contractor shall discharge or require the discharge of those who violate Owners discipline rules or otherwise disturb a peaceful environment.
- C. Contractor shall not load or permit any part of any building or other structure to be loaded with a weight which will endanger its safety.
- D. Contractor shall support and maintain in operation all pipes, conduits, lines, hydrants and other facilities of all utilities serving all or any portion of existing buildings of Owner or other property owners which may be encountered during the progress of the Work, and shall promptly repair and restore any such facilities damaged or disrupted by Contractor or any of its subcontractors.
- E. Contractor shall be responsible to guard against fire at all times prior to completion of the work. Contractor acknowledges that the local Fire Marshall's office may exercise its rights to impose and monitor the procedures used for the Project.
- F. Off hours work: If the contract includes work at or in an existing store building of Owner or adjacent to an existing mall building, portions of the Work which would be disruptive or normal business operations of Owners store or the mall, or which would be dangerous to the store or mall building occupants, shall be performed during hours when the Owners building and any attached buildings are closed for business and not occupied. Examples of such work include, without limitations, saw cutting of concrete, jack hammering, welding, metal cutting, and pouring concrete, erecting steel or hoisting equipment. The requirement for such work to be performed off hours shall not operate to cause a change in the Contract Sum.

PART 14 - CORRECTION OF WORK

- A. The Contractor shall promptly correct Work rejected by the Tenant Project Manager as failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work.
- B. In addition to the Contractor's other obligations including warranties under the Contract, the Contractor shall, for a period of one year after Substantial Completion, correct work not conforming to the requirements of the Contract Documents.
- C. If the Contractor fails to correct nonconforming Work within a reasonable time, Tenant may correct it and the Contractor shall reimburse Tenant for the cost of correction.

PART 15 - MISCELLANEOUS PROVISIONS

1.1 ASSIGNMENT OF CONTRACT

- A. Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

1.2 TESTS AND INSPECTIONS

- A. Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time.
- B. If the Architect requires additional testing, the Contractor shall perform these tests.
- C. Landlord / General Contractor shall pay for tests.

1.3 GOVERNING LAW

- A. The Contract shall be governed by the law of the place where the project is located, and to the latest published editions of all building codes and references. All local energy and seismic code necessitated by the area the project is in are to be included in the contractor's proposal.

PART 16 - TERMINATION OF THE CONTRACT

1.1 TERMINATION BY THE CONTRACTOR

- A. If Tenant fails to make payment when due or substantially breaches any other obligation of this Contract, following seven days' written notice to Tenant, the Contractor may terminate the Contract and recover from Tenant payment for Work executed and for proven loss with respect to materials, equipment, tools, construction equipment and machinery, including reasonable overhead, profit and damages.

1.2 TERMINATION BY THE OWNER

- A. Tenant may terminate the Contract if the Contractor:
 - 1. Refuses or fails to supply enough properly skilled workers or proper materials;
 - 2. Fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
 - 3. Disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or is otherwise guilty of substantial breach of a provision of the Contract Documents.
- B. When any of the above reasons exist, Tenant, may without prejudice to any other rights or remedies of Tenant and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may:
 - 1. Take possession of the site and of all materials thereon owned by the Contractor;
 - 2. Finish the Work by whatever reasonable method Tenant may deem expedient.
- C. When Tenant terminates the Contract for one of the reasons stated in Section the Contractor shall not be entitled to receive further payment until the Work is completed in accordance with the contract. Tenant may deduct the costs of completion, any additional cost incurred due to Contractors, failure or omission and any damages resulting from Contractors, breach, from any amount owed to Contractor under this agreement and/or the Contract Documents and hold Contractor liable for any deficiency.
- D. If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to Tenant. This obligation for payment shall survive termination of the Contract.

END OF SECTION 01100

SECTION 01330 - SUBMITTAL PROCEDURES

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

1.3 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
- C. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- E. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Concurrent Review: Where concurrent review of submittals by Architect's consultants, Owner, or other parties is required, allow 14 days for initial review of each submittal.
 - 3. If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 4. Allow 14 days for processing each resubmittal.
 - 5. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- F. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Unique identifier, including revision number.
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Other necessary identification.
- G. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.

- H. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions of the Contract Documents, initial submittal may serve as final submittal.
 - 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
 - 2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- I. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will discard submittals received from sources other than Contractor.
 - 3. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements of the Contract Documents, including minor variations and limitations. Include the same label information as the related submittal.
 - 4. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
 - 5. Transmittal Form: Provide locations on form for the following information:
 - a. Project name.
 - b. Date.
 - c. Destination (To:).
 - d. Source (From:).
 - e. Names of subcontractor, manufacturer, and supplier.
 - f. Category and type of submittal.
 - g. Submittal purpose and description.
 - h. Submittal and transmittal distribution record.
 - i. Remarks.
 - j. Signature of transmitter.
- J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. Use for Construction: Use only final submittals with mark indicating action taken by Architect in connection with construction.

1.4 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
 - 1. Number of Copies: Submit three copies of each submittal, unless otherwise indicated. Architect will return two copies. Mark up and retain one returned copy as a Project Record Document.
 - 2. Number of Copies: Submit copies of each submittal, as follows, unless otherwise indicated:
 - a. Initial Submittal: Submit two single copies of each submittal where selection of options, color, pattern, texture, or similar characteristics is required. Architect, will return submittal with options selected.
 - b. Final Submittal: Submit a minimum of three copies, unless copies are required for operation and maintenance manuals. Submit five copies where copies are required for operation and maintenance manuals. Architect will retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Document.
 - 3. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 4. Mark each copy of each submittal to show which products and options are applicable.
 - 5. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Standard color charts.
 - e. Manufacturer's catalog cuts.
 - f. Printed performance curves.
 - g. Operational range diagrams.
 - h. Mill reports.
 - i. Standard product operating and maintenance manuals.
 - j. Compliance with recognized trade association standards.
 - k. Compliance with recognized testing agency standards.
 - l. Application of testing agency labels and seals.
 - m. Notation of coordination requirements.

- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Shop work manufacturing instructions.
 - f. Templates and patterns.
 - g. Schedules.
 - h. Design calculations.
 - i. Compliance with specified standards.
 - j. Notation of coordination requirements.
 - k. Notation of dimensions established by field measurement.
 2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches.
 4. Number of Copies: Submit copies of each submittal, as follows:
 - a. Initial Submittal: Submit two blue- or black-line prints. Architect will return one print.
 - b. Final Submittal: Submit three blue- or black-line prints, unless prints are required for operation and maintenance manuals. Submit prints where prints are required for operation and maintenance manuals. Architect will retain two prints; remainder will be returned. Mark up and retain one returned print as a Project Record Drawing.
 5. Coordination Drawings: Comply with requirements in Division 1 Section "Project Management and Coordination."
 6. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for Construction Manager's action.
 7. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
 8. Application for Payment: Comply with requirements in Division 1 Section "Payment Procedures."
 9. Schedule of Values: Comply with requirements in Division 1 Section "Payment Procedures."
 10. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use CSI Form 1.5A. Include the following information in tabular form:
 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 2. Number and title of related specification section(s) covered by subcontract.
 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.5 INFORMATIONAL SUBMITTALS

- A. GENERAL: prepare and submit informational submittals required by other specification sections.
 1. Number of copies: submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
 2. Certificates and certifications: provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 3. Test and inspection reports: comply with requirements in division 1 section "quality requirements."
- B. Contractor's construction schedule: Comply with requirements in division 1 section "construction progress documentation."
- C. Qualification data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Product certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- E. Installer certificates: Prepare written statements on manufacturer's letterhead certifying that installer complies with requirements and, where required, is authorized for this specific project.
- F. Manufacturer certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- G. Material certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.

- H. Material test reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- I. Pre-construction test reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
- J. Compatibility test reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- K. Field test reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
- L. Product test reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- M. Maintenance data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in division 1 section "operation and maintenance data."
- N. Manufacturer's instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates.
 - 2. Required substrate tolerances.
 - 3. Sequence of installation or erection.
 - 4. Required installation tolerances.
 - 5. Required adjustments.
 - 6. Recommendations for cleaning and protection.
- O. Insurance certificates and bonds: prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- P. Material safety data sheets: Submit information directly to owner. If submitted to architect, architect will not review this information but will return it with no action taken.

1.6 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the contract documents. Note corrections and field dimensions. Mark with approval stamp before submitting to architect.
- B. Approval stamp: Stamp each submittal with a uniform, approval stamp. Include project name and location, submittal number, specification section title and number, name of reviewer, date of contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the contract documents.

1.7 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear contractor's approval stamp and will return them without action.
- B. Action submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
 - 1. Approved (without comment).
 - 2. Approved as noted (re-submission not required)
 - 3. Not approved, re-submit with corrections
 - 4. Not approved
- C. Informational submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Submittals not required by the contract documents will not be reviewed and may be discarded.

END OF SECTION 01330

SECTION 01400 - QUALITY REQUIREMENTS

This Section uses the term "Architect." Change this term to match that used to identify the design professional as defined in the General and Supplementary Conditions. Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.3 SUBMITTALS

- A. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.

1.5 QUALITY CONTROL

- A. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.

1.6 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01400

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

1.1 SUMMARY

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.
- B. Support facilities include, but are not limited to, the following:
 - 1. Waste disposal facilities.
 - 2. Field offices.
 - 3. Storage and fabrication sheds.
- C. Security and protection facilities include, but are not limited to, the following:
 - 1. Barricades, warning signs, and lights.
 - 2. Temporary enclosures.

1.2 QUALITY ASSURANCE

- A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
 - 2. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Obtain required certifications and permits.

1.3 PROJECT CONDITIONS

- A. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
 - 1. Keep temporary services and facilities clean and neat.
 - 2. Relocate temporary services and facilities as required by progress of the Work.

1.4 MATERIALS

- A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by Architect. Provide materials suitable for use intended.
- B. Water: Potable.
- C. Lumber and Plywood:
 - 1. For barriers, sidewalk/track protection and similar uses provide minimum 3/4" thick exterior grade plywood.
- D. Portable Chain-link Fencing: Minimum 2-inch, 9 gage, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2 3/8" OD line posts and 2 7/8" OD corner and pull posts, with 1 5/8" OD top and bottom rails. Provide galvanized steel bases for supporting posts.

1.5 EQUIPMENT

- A. General: Provide equipment suitable for use intended.
- B. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.

1.6 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

1.7 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Arrange storage sheds, sanitary facilities, and other temporary construction and support facilities for easy access.

1.8 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- B. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.

END OF SECTION 01500

SECTION 01731 - CUTTING AND PATCHING

1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Division 1 Section "Selective Demolition" for demolition of selected portions of the building for alterations.
 - 2. Divisions 2 through 16 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
 - a. Requirements in this Section apply to electrical installations. Refer to Division 16 Sections for other requirements and limitations applicable to cutting and patching electrical installations.

1.2 DEFINITIONS

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
 - 1. Stair Stringers
 - 2. Structural Framing in areas related to the Work without approval of Architect.
 - 3. Exterior Masonry Walls without approval of Architect.
- B. Operational Elements: Do not cut, patch, or disturb the following operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 1. Primary operational systems and equipment.
 - 2. Fire-protection systems.
 - 3. Control systems.
 - 4. Communication systems.
 - 5. Computer systems.
 - 6. Electrical wiring systems.

- C. Miscellaneous Elements: Do not cut, patch, or disturb the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 1. Water, moisture, or vapor barriers.
 - 2. Exterior wall construction.
 - 3. Equipment supports.
 - 4. Piping, ductwork, conduit, vessels, and equipment.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

1.4 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

1.5 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

1.6 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

1.7 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid interruption of services to occupied areas.

1.8 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

END OF SECTION 01731

SECTION 01732 - SELECTIVE DEMOLITION

1.1 SUMMARY

- A. This Section includes demolition and removal of the following:
 1. Selected portions of a building or structure.

1.2 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.3 SUBMITTALS

- A. Proposed Control Measures: Submit statement that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate. Include measures for the following:
 1. Dust control.
 2. Noise control.

1.4 QUALITY ASSURANCE

- A. Contractor Qualifications: An experienced contractor that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.

1.5 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
 1. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from authorities having jurisdiction.
- C. Owner assumes no responsibility for condition of areas to be selectively demolished.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 1. If materials suspected of containing hazardous materials are encountered, do not disturb. Immediately notify Architect and Owner.
- E. Storage or sale of removed items or materials on-site will not be permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 1. Maintain fire-protection facilities in service during selective demolition operations.

1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

1.7 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equals or surpasses that of existing materials.

1.8 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

1.9 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
 - 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.

1.10 PREPARATION

- A. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- B. Temporary Partitions: Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
- C. Temporary Shoring: Provide and maintain interior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of construction to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

1.11 POLLUTION CONTROLS

- A. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations.
 - 1. Wet mop floors to eliminate trackable dirt and wipe down walls and doors of demolition enclosure. Vacuum carpeted areas.
- B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- C. Cleaning: Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

1.12 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations.
 - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
 - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- B. Existing Facilities: Comply with building manager's requirements for using and protecting elevators, stairs, walkways, loading docks, building entries, and other building facilities during selective demolition operations.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during

selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

1.13 PATCHING AND REPAIRS

- A. General: Promptly repair damage to adjacent construction caused by selective demolition operations.
- B. Patching: Comply with Division 1 Section "Cutting and Patching."
- C. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
 - 1. Completely fill holes and depressions in existing masonry walls that are to remain with an approved masonry patching material applied according to manufacturer's written recommendations.
- D. Finishes: Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing.
- E. Floors and Walls: Where walls or partitions that are demolished extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
- F. Ceilings: Patch, repair, or re-hang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

1.14 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 01732

SECTION 01770 - CLOSEOUT PROCEDURES

1.1 SUMMARY

- A. Inspection procedures.
- B. Warranties.
- C. Final cleaning.

1.2 PROCEDURES

- A. Substantial Completion: Before inspection by Architect:
 - 1. List of incomplete items (punch list) prepared.
 - 2. Owner advised of insurance changeover.
 - 3. Warranties submitted.
 - 4. Releases, occupancy permits, and operating certificates obtained.
 - 5. Project Record Documents submitted.
 - 6. Spare parts and extra materials delivered.
 - 7. Final changeover of locks performed.
 - 8. Startup testing completed.
 - 9. Test/adjust/balance records submitted.
 - 10. Temporary facilities removed.
 - 11. Owner advised of utility changeover.
 - 12. Final cleaning performed.
 - 13. Touch-up performed.
 - 14. Turnover assessment survey submitted.
- B. Final Completion: Before final inspection by Architect:
 - 1. Final Application for Payment submitted.
 - 2. List of incomplete items (punch list) endorsed by Architect as completed.
 - 3. Evidence of continuing insurance coverage submitted.
 - 4. Final pest-control inspection report and warranty submitted.
 - 5. Owner's personnel instructed in operation, adjustment, and maintenance of equipment and systems.
- C. Warranties: Submitted within 15 days for areas of partial occupancy.

1. Organized and bound in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, with paper dividers. Binder front and spine identified with title, Project name, and name of Contractor.
- D. Final Cleaning: Each surface or unit cleaned to condition expected in an average commercial building cleaning and maintenance program.
 1. Clean ducts, blowers, and coils for units operated without filters during construction.

END OF SECTION 01770

SECTION 01781 - PROJECT RECORD DOCUMENTS

1.1 SUMMARY

- A. Record drawings and record specifications.

1.2 SUBMITTALS

- A. Record drawings:
 1. 3 sets of marked-up record prints.
- B. Record specifications: 3 copies.

1.3 PRODUCTS

- A. Record prints: blue- or black-line white prints of contract documents and shop drawings, marked to show actual installation.

END OF SECTION 01781

SECTION 01782 - OPERATION AND MAINTENANCE DATA

1.1 SUMMARY

- A. Emergency operation and maintenance manuals.

1.2 PRODUCTS

- A. Manuals: heavy-duty, three-ring, vinyl-covered, loose-leaf binders, 3 copies.
- B. emergency manuals: types of emergencies, emergency instructions, and emergency procedures.
- C. Operation manuals: system and equipment descriptions, operating procedures, wiring diagrams, control diagrams and sequence of operation, and piped system diagrams.
- D. Product maintenance manuals: source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds.
- E. System and equipment maintenance manuals: source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds.

END OF SECTION 01782

DIVISION 3 - CONCRETE

SECTION 03300 - CONCRETE WORK

1.01 Summary

- A. Section Includes:
 1. Formwork, complete with required shoring, bracing, and anchorage.
 2. Concrete reinforcing, complete with required supports, spacers and related accessories.
 3. Cast-in-place concrete, including finishing and curing.

1.02 REFERENCES

- A. American Concrete Institute (ACI):
- B. ASTM International:
- C. Concrete Reinforcing Steel Institute (CRSI):

1.03 SUBMITTALS

- A. Product Data:
 - 1. General -Submit Product Data for proprietary materials and items, including - but not limited to - the following:
 - a. Reinforcement and Forming Accessories.
 - b. Admixtures.
 - c. Aggregate Sizes and Usage (for each class of concrete).
 - d. Curing Compounds.
- B. Quality Control Submittals:
 - 1. Design Data: Submit concrete mix design for each type of concrete.

1.04 QUALITY ASSURANCE

- A. General:
 - 1. Unless specified otherwise in this Section, furnish and install cast-in-place concrete per:
 - a. ACI 301: Passages from ACI 301 cited in this Section are hereby incorporated into the requirements of this Section. Where differences occur between the requirements of ACI 301 and this Section, the latter shall govern.
 - 2. Evaluation and Acceptance Criteria: Evaluation and acceptance of the Work of this Section will be per the provisions of ACI 117 and ACI 301.

1.05 CEMENT (ACI 301: 4.2.1.1)

- A. Cement: Conform to ASTM C-150, Type I.
 - 1. Use one brand and type of cement throughout the Project.
- B. Aggregates:
 - 1. Fine: Sand aggregate conforming to ASTM C-33, consisting of clean, sharp uncoated grains of strong material.
 - 2. Coarse: Gravel or crushed stone conforming to ASTM C-33, consisting of clean, sharp uncoated grains of strong material. In general, provide coarse aggregates with the following maximum sizes:
 - a. No larger than one fifth of the narrowest dimension between the sides of the forms in which concrete is to be placed, and
 - b. No larger than three quarters of the minimum clear spacing between reinforcing bars.
 - 3. Slightly larger aggregate may be used where it is apparent that placing can be accomplished without hazard to the finish.
 - 4. Combined aggregate gradation for slabs and other designated concrete shall be between eight and 18 percent for large top size aggregates (1 1/2 inch) or between eight and 22 percent for smaller top size aggregates (1 inch or 3/4 inch) retained on each sieve below the top size and above the No. 100.
- C. Water: Potable and clean, free from oils, acids, organic materials, or other deleterious substances.

1.06 ADMIXTURES (ACI 301: 4.2.1.4) [(ACI 302.1R: 5.6)]

- A. General: Use of concrete admixtures shall have prior approval of the Architect/Engineer and shall be used in strict conformance with the Admixture Manufacturer's Instructions and recommendations.
- B. Water Reducing Admixtures: All concrete shall contain a high-range water-reducing admixture / superplasticizer, a mid-range water reducing admixture, or water-reducing admixture. Water reducing admixtures shall contain no more chloride ions than are present in municipal drinking water.
 - 1. High-Range Water-Reducing Admixture / Superplasticizer:
 - a. Conforming to ASTM C-494 / C-494M, Type F or G:

- 1) EUCON 37 or 537 by EUCO.
 - 2) Rheobuild 1000 by DeGussa Admixtures.
 - 3) Sikament 300 by Sika.
- b. Use "flowing" concrete containing the specified high-range water-reducing admixture where:
- 1) Conditions make consolidation difficult.
 - 2) Reinforcement is congested.
2. Other concrete with a water/cement ratio between 0.45 and 0.50, shall contain either a high-range water-reducing admixture/superplasticizer (specified above) - or a mid-range water-reducing admixture conforming to ASTM C-494 / C-494M, Type A:
- a. EUCON MR by EUCO.
 - b. Sikament HP by Sika.
3. Remaining concrete shall contain the specified water-reducing admixture conforming to ASTM C-494 / C-494M, Type A:
- a. EUCON WR-75 or WR-91 by EUCO.
 - b. Plastocrete 160 by Sika.
- C. Non-Corrosive, Non-Chloride Accelerator: Concrete slabs placed at air temperatures below 50-degrees Fahrenheit shall contain a non-corrosive, non-chloride accelerator conforming to ASTM C-494 / C-494M, Type C or E, and containing no more chloride ions than are present in municipal drinking water.
1. Accelguard 80 by EUCO.
 2. Rapid-1 by Sika.
- D. Water Reducing, Retarding Admixture: Conforming to ASTM C-494 / C-494M, Type D and containing no more chloride ions than are present in municipal drinking water.
1. EUCON Retarder-75 by EUCO.
 2. Plastiment by Sika.
- E. Air Entraining Admixture: Concrete required to be air entrained shall contain an air-entraining admixture approved by the Architect/Engineer and conforming to ASTM C-260.
- F. Prohibited Admixtures: When used at the Admixture Manufacturer's recommended dosage, thiocyanate ions contributed by the proposed admixture shall not exceed 0.30 percent by weight of cement. Proposed admixture shall not cause an increase in shrinkage when tested per ASTM C-494 / C-494M and ASTM C-157.

1.07 CONCRETE MIX

- A. Proportion concrete to be homogeneous, readily place-able, uniformly workable, conforming to required setting time, and designed to attain the specified properties of strength, slump, entrained air, and water/cement ratio.
- B. Establish, based on mix designs from independent testing laboratories, minimum standards of proportions for all types of concrete to be used on the Project prior to concreting operations.
- C. If, at any time, tests indicate failure to meet strength, slump, or water/cement ratio, change the standard proportions to meet the requirements.
- D. Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods per ACI 301. Minimum requirements for each class of concrete are listed in the Concrete Schedule.
- E. Concrete may be mixed to a moderate slump to enable the proper placing and finishing of slab areas but added care shall be taken in the placing.
- F. The Contractor, at no additional cost to the Owner, shall arrange for an approved independent testing laboratory to prepare the mix designs for the classes of concrete scheduled to be used.
 1. Design concrete mixes per ACI 211.1 to produce the strength for each class of concrete required on the Drawings or specified herein.
 2. Design the concrete so that the concrete materials do not segregate.
- G. Laboratory Test Reports: For concrete materials and mix designs, test as follows:
 1. Mix designs shall be accompanied by complete standard deviation analysis or trial mixture test reports. If trial batches are used, the mix designs shall be prepared by an independent testing laboratory and shall achieve an average compressive strength that is 1200 PSI higher than the strength specified.

- a. Increase this over-design to 1400 PSI when concrete strengths over 5000 PSI are used.
2. Prepare trial mixes and cylinders in sufficient time to demonstrate the reliability of the mix designs prior to the placing of any concrete.

1.08 STRENGTH (ACI 301: 4.2.2.8.C)

- A. Compressive strength at 28 days: 4000 PSI.

1.09 AIR-ENTRAINMENT (ACI 301: 4.2.2.4) (ACI 302.1R: 5.6.1)

- A. Add five percent plus or minus 1.0 percent air-entrainment to concrete.

1.10 SLUMP (ACI 301: 4.2.2.2)

- A. Upon arrival at the Site, maximum slump for conventional concrete shall be 4 inches.
- B. In concrete containing the high-range water-reducing admixture (superplasticizer) conforming to ASTM C-1017 / C-1017M - or when a Type F or G high-range water-reducing admixture conforming to ASTM C-494 / C-494M is permitted - provide concrete with:
 1. A water slump of between 2 and 3 inches before the admixture is added. This initial slump is increased to between 3 and 4 inches for concrete receiving a dry-shake hardener or for lightweight concrete.
 2. A maximum slump of 9 inches at the point of delivery after the admixture is added.
- C. Concrete containing the mid-range water-reducing admixture shall have a maximum slump of 5 to 6 inches.

1.11 REINFORCING STEEL (ACI 301: 3)

- A. Reinforcing Steel: ASTM A-615 / 615M, 60 KSI yield grade, deformed billet steel bars. Provide the following finish: Plain.
- B. Include spacers, chairs, bolsters, ties, and other devices necessary for proper placing, spacing, supporting, and fastening reinforcement in place. Hooking of wire mesh will be grounds for rejection of the installation.

1.12 CURING COMPOUNDS

- A. Liquid Membrane-Forming Non-Wax Curing Compound: Dissipating resin type conforming to ASTM C-309, Types S-1 and D-1, Class B. Minimum coverage shall be 300 square feet per gallon per coat. Subject to compatibility with selected fluid-applied flooring material, provide products by one of the following:
 1. KUREZ DR VOX by EUCO.
 2. (Or approved equal).

1.13 BONDING AGENTS

- A. Epoxy Bonding Agent: ASTM C 881/C 881M, Type II.
 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ChemCo Systems; CCS Bonder Liquid, LWL or SWL.
 - b. Euclid Chemical Company (The); Euco #352 Epoxy System, Euco #452 Epoxy System, Euco #620 Epoxy System.
 - c. Sika Corporation; Sikadur 31, Hi-Mod Gel Sikadur 32, Hi-Mod Sikadur 32, Hi-Mod LPL Sikadur 35, Hi-Mod LV or Sikadur 35, Hi-Mod LV LPL.
 - d. Sonneborn, Div. of ChemRex; Epogel or Epogrip.
 2. Thin Film Open Time: Not less than two hours.

1.14 CONCRETE DYE

- A. PROSOCO, Inc., Consolideck Gemstone Stain

1.15 GENERAL

- A. Excessive honeycombing or the presence of embedded debris will be grounds for rejection of the installation. Notify the Architect/Engineer upon discovery.
- B. During hot weather, conform to ACI 305R.
- C. During cold weather, conform to ACI 306.1 and ACI 306R.
- D. Adding water to the concrete mix, while at the Site, is prohibited. Only make field adjustments to the design mix using pre-approved admixture materials.

1.16 FORMWORK (ACI 301: 2)

- A. Obtain the Architect/Engineer's review for use of earth forms. When using earth forms, hand-trim sides and bottoms, and remove loose dirt prior to placing concrete.

1.17 REINFORCEMENT PLACEMENT

- A. Handle and place reinforcing steel per the recommendations of ACI 318 unless otherwise indicated by the requirements of this Section.
- B. Before placing concrete, verify that reinforcing steel is free from rust and scale, or other detrimental materials that could destroy or reduce the bond placement.

1.18 PLACING CONCRETE (ACI 301: 5.3.2.6)

- A. Deposit concrete into the final position at the specified slumps without segregation by re-handling or flowing. Deposit concrete at a rate that concrete remains plastic and flow-able into the spaces between the reinforcing bars. Do not deposit partially hardened concrete or concrete that has been contaminated by foreign materials. Do not re-temper concrete.
- B. Schedule concreting that once started, remains a continuous operation until the particular section or panel has been completed. Do not deposit fresh concrete on concrete that has hardened sufficiently to cause formation of seams or planes of weakness within the section or panel. Provide construction joints as specified.
- C. Thoroughly compact concrete by means of mechanical vibrators supervised by experienced personnel. Provide sufficient vibration intensity to cause flow or settlement around reinforcement, embedded items, and corners of the forms; but not long enough to cause segregation of the mix. Follow ACI 309R for use of vibrators and type of vibrators. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than visible effectiveness of the machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into receding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing segregation of mix.
- D. Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures. Comply with provisions of ACI 306.1 and ACI 306R and as follows:
 1. When air temperature has fallen to or is expected to fall below 40-degrees Fahrenheit (4-degrees Celsius), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50-degrees Fahrenheit (10-degrees Celsius) and not more than 80-degrees Fahrenheit (27-degrees Celsius) at point of placement.
 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 3. Use only the specified non-chloride, non-corrosive accelerator. Calcium chloride or thiocyanates are not permitted.

- E. Hot-Weather Placement: When hot weather conditions exist that would impair quality or strength of concrete, place concrete complying with ACI 305R and as specified:
 - 1. Cool ingredients before mixing to maintain concrete temperature at time of placement to below 90-degrees Fahrenheit (32-degrees Celsius). Mixing water may be chilled - or chopped ice may be used to control temperature - provided water equivalent of ice is calculated to equal total amount of mixing water.
 - 2. Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, as acceptable to the Architect/Engineer.

1.19 MONOLITHIC SLAB FINISHES

- A. Float Finish: Apply float finish to monolithic slab surfaces.
 - 1. After screening, consolidating, and leveling concrete slabs, do not work surface until ready for floating. Begin floating, using float blades or float shoes only, when surface water has disappeared, or when concrete has stiffened sufficiently to permit operation of power-driven floats, or both. Consolidate surface with power-driven floats, or by hand-floating if area is small or inaccessible to power units. Cut down high spots and fill low spots. Uniformly slope surfaces to drains. Immediately after leveling, re-float surface to a uniform, smooth, granular texture.
- B. Trowel Finish: Apply a trowel finish to monolithic slab surfaces exposed to view.
 - 1. After floating, begin first trowel-finish operation using a trowel of the Contractor's choice. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance. Grind smooth surface defects that would telegraph through applied floor covering system.
- C. Slip-Resistant Broom Finish: Apply a slip-resistant broom finish to exterior concrete platforms, slabs, walks, steps, and ramps, and elsewhere as indicated.
 - 1. Immediately after float finishing, slightly roughen concrete surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with the Architect/Engineer before application.

1.20 CURING AND PROTECTION (ACI 301: 5.3.6) (ACI 302.1R: 9) (ACI 308.1)

- A. Protect freshly deposited concrete from premature drying and excessively hot or cold temperatures - and maintain with minimal moisture loss at a relatively constant temperature - for the period of time necessary for early hydration of the cement and the proper hardening of the concrete.
- B. Cure exposed surfaces of concrete directly after finishing operations. Accomplish curing by one of the following approved methods.
 - 1. Water curing consisting of ponding, fogging, or absorptive mat.
 - 2. Sheet materials consisting of placing an approved waterproof cover on the exposed surfaces. Provide sheet materials meeting the requirements of ASTM C-171.
 - 3. Curing Compounds.
- C. Cure concrete continuously for a minimum duration of seven days when the ambient temperature exceeds 50-degrees Fahrenheit. Do not permit concrete to dry out prematurely. Reapply water as required to maintain a wet mat or sheet.

1.21 CLEANING

- A. General:
 - 1. Upon completion of the Work, remove:
 - a. Debris resulting from the Work of this Section.
 - b. Excess materials, tools, and equipment.
 - 2. Leave the Site in a clean and neat condition acceptable to the Architect/Engineer.

END OF SECTION 03300

DIVISION 4 – MASONRY SECTION 04810 - UNIT MASONRY ASSEMBLIES

1.1 SUMMARY

- A. Masonry Construction:

1. Single-wythe masonry.
2. Composite masonry.
3. Cavity walls.

1.2 PERFORMANCE REQUIREMENTS

- A. Net-Area Compressive Strengths (f'm) of Structural Unit Masonry: As indicated.
- B. Determine net-area compressive strength (f'm) of masonry by unit-strength method.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Concrete Masonry Units (CMUs):
 1. Units made with integral water repellent for exposed units.
 2. Concrete Masonry Units: Normal weight.
- B. Reinforcing Steel: Uncoated steel bars.
- C. Masonry Joint Reinforcement:
 1. Interior Walls: Hot-dip galvanized, carbon steel.
 2. Exterior Walls: Hot-dip galvanized, carbon steel.
- D. Ties and Anchors: Galvanized steel. Mill galvanized in interior walls.
 1. Corrugated metal ties.
 2. Individual wire ties.
 3. Adjustable anchors for connecting to structure.
 4. Partition top anchors.
 5. Rigid anchors.
 6. Stone Anchors: Stainless steel.
 7. Adjustable Masonry-Veneer Anchors: slip-in and seismic.
- E. Embedded Flashing:
 1. All Flashing: Copper.
 2. Partially Exposed Flashing: Copper.
 3. Concealed (Flexible) Flashing: elastomeric thermoplastic or EPDM (used with copper).
 4. Single-Wythe CMU Flashing System: High-density polyethylene cell flashing pans and interlocking CMU web covers.
- F. Weep/Vent Holes: round plastic tubing.
- G. Cavity drainage material.
- H. Reinforcing bar positioners.
- I. Masonry-Cell Insulation: Loose-granular perlite or molded-polystyrene units.
- J. Cavity-Wall Insulation: Extruded-polystyrene board.
- K. Mortar: Natural color.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Use full-size units without cutting if possible. If cutting is required, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- B. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures.
- C. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested per ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.
- D. Comply with tolerances in ACI 530.1/ASCE 6/TMS 602 and with the following:
 1. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
 2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.

3.2 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- C. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- D. Fill space between steel frames and masonry solidly with mortar, unless otherwise indicated.
- E. Fill cores in hollow concrete masonry units with grout 24 inches under bearing plates, beams, lintels, posts, and similar items, unless otherwise indicated.

3.3 MORTAR BEDDING AND JOINTING

- A. Lay hollow concrete masonry units as follows:
 - 1. With face shells fully bedded in mortar and with head joints of depth equal to bed joints.
 - 2. With webs fully bedded in mortar in all courses of piers, columns, and pilasters.
 - 3. With webs fully bedded in mortar in grouted masonry, including starting course on footings.
 - 4. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted.
- B. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.
- C. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint), unless otherwise indicated.

3.4 MASONRY JOINT REINFORCEMENT

- A. General: Install in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
- B. Interrupt joint reinforcement at control and expansion joints, unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.

3.5 ANCHORING MASONRY TO STRUCTURAL MEMBERS

- A. Anchor masonry to structural members where masonry abuts or faces structural members to comply with the following:
 - 1. Provide an open space not less than 1/2 inch in width between masonry and structural member, unless otherwise indicated.
 - 2. Anchor masonry to structural members with anchors embedded in masonry joints and attached to structure.
 - 3. Space anchors as indicated, but not more than 24 inches o.c. vertically and 36 inches o.c. horizontally.

3.6 FLASHING, WEEP HOLES, CAVITY DRAINAGE, AND VENTS

- A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated. Install vents at shelf angles, ledges, and other obstructions to upward flow of air in cavities, and where indicated.
- B. Install flashing as follows, unless otherwise indicated:
 - 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing as recommended by flashing manufacturer.
 - 2. At lintels and shelf angles, extend flashing a minimum of 6 inches into masonry at each end. At heads and sills, extend flashing 6 inches at ends and turn up not less than 2 inches to form end dams.
 - 3. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall and adhere flexible flashing to top of metal drip edge.
- C. Install weep holes in head joints in exterior wythes of first course of masonry immediately above embedded flashing and as follows:
 - 1. Use open head joints to form weep holes.
 - 2. Space weep holes 24 inches o.c., unless otherwise indicated.
 - 3. Cover cavity side of weep holes with plastic insect screening at cavities insulated with loose-fill insulation.

3.7 CLEANING

- A. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes.
 - 2. Protect adjacent surfaces from contact with cleaner.
 - 3. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
 - 4. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
 - 5. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.
 - 6. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2A applicable to type of stain on exposed surfaces.

3.8 MASONRY WASTE DISPOSAL

- A. Remove all excess masonry waste, and legally dispose of off Owner's property.

3.9 INSTALLATION

- A. Match existing masonry coursing, bonding, color, and texture.
- B. Bond Pattern: As indicated.
- C. Cavity face of backup wythe parged.
- D. Clean masonry waste recycled as fill material.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Owner engaged, with payment by Owner.

END OF SECTION 04810

DIVISION 5 - METALS

SECTION 05400 - COLD-FORMED METAL FRAMING

1.1 SUMMARY

- A. Exterior and interior load-bearing wall framing.

1.2 PERFORMANCE REQUIREMENTS

- A. Engineering design of cold-formed metal framing by Contractor.

1.3 QUALITY ASSURANCE

- A. Design Standard: AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" and its "Standard for Cold-Formed Steel Framing - General Provisions."

1.4 MATERIALS

- A. Studs for exterior walls shall be 16 gauge (unless otherwise noted), sized in accordance with the drawings. Provide top and bottom runners of the same gauge.
- B. Studs for interior walls shall be 20 gauge (unless otherwise noted), sized in accordance with the drawings. Provide top and bottom runners of the same gauge.
- C. Channels for bridging of studs shall be 18 gauge.
- D. Furring channels on exterior walls, where shown on the Drawings, shall be 1" deep, "Z" shaped and at 2'-0" o.c. to allow for installation of rigid insulation.
- E. Furring channels for interior work shall be hat-type design 25 gauge minimum by 7/8" high.

- F. Screws for installation of the various systems shall be the type recommended by the manufacturer, sized as required.
- G. Materials and Finishes:
 - 1. For 18 gauge and lighter units, fabricate metal framing components of commercial quality steel sheet with a minimum yield point of 33,000 psi. For 16 gauge and heavier use 50,000 psi sheet steel.
 - 2. Provide galvanized finish on metal framing components complying with ASTM A 653, G-60.
 - a. Finish of installation accessories to match that of main framing components, unless otherwise indicated.
 - 3. Electrodes for Welding: Comply with AWS Code and as recommended by stud manufacturer.
 - 4. Galvanizing Repair: Where galvanized surfaces are damaged, prepare surfaces and repair in accordance with procedures specified in ASTM A 780.
- H. Accessories:
 - 1. Bracing, Furring Bridging: Formed sheet steel, thickness determined for conditions encountered.
 - 2. Plates, Gussets, Clips: Formed sheet steel, thickness determined for conditions encountered.
 - 3. Touch-up Primer for Galvanized Surfaces: SSPC - Paint 20 Type 1 Inorganic zinc rich.
- I. Fasteners:
 - 1. Self-drilling, self-tapping screws, bolts, nuts and washers: ASTM A123, hot-dipped galvanized to 1.25 oz/sq.ft.
 - 2. Anchorage devices: Powder actuated, drilled expansion bolts, screws and sleeves.
 - 3. Welding: In conformance with AWS D1.3.

1.5 INSTALLATION

- A. General: Install metal framing systems in accordance with manufacturers printed or written instructions and recommendations.
- B. Runner Tracks: Install continuous tracks sized to match studs. Align tracks accurately to layout at base and tops of studs. Secure tracks as recommended by stud manufacturer for type of construction involved, except do not exceed 24 inches o.c. spacing for nail or power driven fasteners or 16 inches o.c. for other types of attachment. Provide fasteners at corners and ends of tracks.
- C. Installation of Wall Studs: Secure studs to top and bottom runner tracks by either welding or screw fastening at both inside and outside flanges.
- D. Set studs plumb, except as needed for diagonal bracing or required for non-plumb walls or warped surfaces and similar requirements.
- E. Where stud system abuts structural columns or walls, including masonry walls, anchor ends of stiffeners to supporting structure.
- F. Install supplementary framing, blocking, and bracing in metal framing system wherever walls or partitions are indicated to support fixtures, equipment, services, heavy trim and furnishings, and similar work requiring attachment to the wall or partition. Where type of supplementary support is not otherwise indicated, comply with stud manufacturer's recommendations and industry standards in each case, considering weight or loading resulting from item supported.
- G. Frame wall openings larger than 2 feet square with double stud at each jamb of frame except where more than two are either shown or indicated in manufacturer's instructions. Install runner tracks and jack studs above and below wall openings. Anchor tracks to jamb studs with stud shoes or by welding, and space jack studs same as full height studs of wall. Secure stud system wall opening frame in manner indicated.
- H. Frame both sides of expansion and control joints with separate studs; do not bridge the joint with components of stud system.
- I. Install horizontal stiffeners in stud system, spaced (vertical distance) at not more than 54 inches o.c. Weld at each intersection.
- J. Erection Tolerances: Bolt or weld wall panels (at both horizontal and vertical junctures) to produce flush, even, true _ to _ line joints.
 - 1. Maximum variation in plane and true position between prefabricated assemblies should not exceed 1/16 inch.
- K. Field Painting: Touchup damaged shop applied protective coatings. Use compatible primer for prime coated surfaces; use galvanizing repair system for galvanized surfaces. All welds shall be cleaned and coated with galvanizing repair system.
- L. Construct corners using a minimum of three studs. Double studs at wall openings, i.e. door and window jambs.
- M. Erect load bearing studs one piece full length. Splicing of studs is not permitted.
- N. Erect load bearing studs, brace and reinforce to develop full strength, to achieve design requirements.
- O. Provide deflection allowance in stud track, directly below horizontal building framing at non-load bearing framing.
- P. Attach cross studs to studs for attachment of fixtures anchored to walls.
- Q. Install framing between studs for attachment of mechanical and electrical items, and to prevent stud rotation.

1.6 FIELD QUALITY CONTROL

- A. Testing: By Owner-engaged agency.

END OF SECTION 05400

SECTION 05500 – METAL FABRICATIONS

1.1 SUMMARY

- A. Miscellaneous metal framing and supports.
- B. Loose metal plates and shapes.
- C. Miscellaneous fabricated metal items.

1.2 PRODUCTS

- A. Materials: Steel plates, shapes, and bars, Steel tubing and Steel pipe.
- B. Miscellaneous Framing and Supports:
 - 1. Steel framing and supports for overhead doors, mechanical and electrical equipment and applications where framing and supports are not specified in other Sections.
 - 2. Steel framing and supports (outriggers) for window-washing equipment.
 - 3. Galvanize where indicated.
 - 4. Prime with zinc-rich primer where indicated.
- C. Loose steel lintels, primed with zinc-rich primer at exterior walls.
- D. Shelf angles, primed with zinc-rich primer.
- E. Loose bearing and leveling plates, primed with zinc-rich primer.
- F. Steel weld plates and angles not specified in other Sections, for casting into concrete.
- G. Miscellaneous Steel Trim: Steel angle corner guards, steel edgings and loading-dock edge angles.
 - 1. Prime exterior locations with zinc-rich primer.
- H. Metal Bollards: Schedule 40 steel pipe, Steel shapes, as indicated.

END OF SECTION 05500

SECTION 05521 - PIPE AND TUBE RAILINGS

1.1 SUMMARY

- A. Aluminum pipe and tube railings.
- B. Steel pipe and tube railings.

1.2 QUALITY ASSURANCE

- A. Fabricator to engineer and fabricate railings to withstand design loads.

1.3 FABRICATION

- A. Changes in Direction of Members: By bending or by inserting prefabricated fittings.
- B. Connections: Welded.

1.4 FINISHES

- A. Aluminum: Mill.
- B. Steel and Iron: Ungalvanized, primed with universal shop primer.

END OF SECTION 05521

DIVISION 6 - WOOD & PLASTICS

SECTION 06100 - ROUGH CARPENTRY

1.1 SUMMARY

- A. Wood blocking and nailers.
- B. Wood furring.
- C. Plywood backing panels.

1.2 MATERIALS

- A. Fire-Retardant-Treated Materials:
 - 1. Exterior type for exterior locations and where indicated.
 - 2. Interior Type A, unless otherwise indicated.
 - 3. Application: All rough carpentry.
 - a. Framing for raised platforms.
 - b. Concealed blocking.
 - c. Framing for non-load-bearing partitions.
 - d. Framing for non-load-bearing exterior walls.
 - e. Roof construction.
 - f. Plywood backing panels.
- B. Dimension Lumber Framing:
 - 1. Maximum Moisture Content: 19 percent.
 - 2. Framing Other Than Non-Load-Bearing Interior Partitions: Construction, Stud, or No. 3 grade, any species.
 - 3. Structural Lumber: No. 2 or better grade Douglas fir or yellow-pine.
- C. Plywood backing panels for telephone and electrical equipment.
- D. Fasteners: Hot-dip galvanized steel where exposed to weather, in ground contact, in contact w/ treated wood, or in area of high relative humidity.
- E. Metal Framing Anchors:
 - 1. Metal: Hot-dip galvanized steel.

1.3 INSTALLATION

- A. Furring to Receive Gypsum Board: 1-by-2-inch nominal- size furring at 16 inches o.c.

END OF SECTION 06100

SECTION 06160 - SHEATHING

1.1 SUMMARY

- A. Wall sheathing.

1.2 MATERIALS

- A. Wall Sheathing:
 - 1. Paper-Surfaced Gypsum: Regular, 5/8 inch thick.
 - 2. Glass-Mat Gypsum: Regular, 5/8 inch thick.
 - 3. Cellulose Fiber-Reinforced Gypsum: Regular, 5/8 inch thick.
 - 4. Extruded Polystyrene Foam: Thickness indicated.
- B. Fasteners: Hot-dip galvanized steel where exposed to weather, in ground contact, in contact with treated wood, or in area of high relative humidity.

1.3 INSTALLATION

- A. Gypsum Sheathing:
 - 1. Screw to cold-formed metal framing.

END OF SECTION 06100

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

1.1 SUMMARY

- A. Interior standing and running trim.
- B. Flush wood paneling.
- C. Wood and plastic-laminate cabinets.
- D. Plastic-laminate countertops.
- E. Solid-surface countertops.

1.2 QUALITY ASSURANCE

- A. Quality Standard: AWI, including installation.

1.3 MATERIALS

- A. Wood Species for Opaque Finish: Any closed-grain hardwood.
- B. Composite Wood Products: Made without urea formaldehyde.
- C. Interior Woodwork Grade: Custom.
- D. Interior Standing and Running Trim for Opaque Finish:
 - 1. Grade: Custom.
 - 2. Wood Species: Any closed-grain hardwood.
- E. Flush Wood Paneling:
 - 1. Type: Plastic-laminate slat wall as indicated on drawings.
- F. Plastic-Laminate Countertops:
 - 1. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades indicated for construction, installation, and other requirements.
 - 2. Grade: Custom.
 - 3. Edge Treatment: As indicated.
 - 4. High-Pressure Decorative Laminate: NEMA LD 3, Grade HGS.
 - a. Subject to compliance with requirements, provide products by the following:
 - b. Pionite
 - c. Formica
- G. Solid-Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.
 - 1. Countertops: Samsung QB244 Quarry Bluff
 - 2. Integral Sink Bowls: Samsung SP011 Pearl

1.4 INSTALLATION

- A. Install woodwork plumb, level, true, and straight with no distortions. Install to a tolerance of 1/8 inch in 8'-0" for plumb and level and with no variations in flushness of adjoining surfaces.
- B. Scribe and cut woodwork to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.
- C. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where pre-finished matching fastener heads are required, use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork and matching final finish where transparent finish is indicated.
- D. Standing and Running Trim and Rails: Install with minimum number of joints possible, use full-length pieces (from maximum length of lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns and miter at corners.

1.5 ADJUSTMENTS AND CLEANING

- A. Repair damaged and defective woodwork where possible to eliminate defects functionally and visually; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean woodwork on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

1.6 PROTECTION

- A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, which ensures that woodwork is being without damage or deterioration at time of Substantial Completion.

END OF SECTION 06402

SECTION 06640 - THERMOPLASTIC PANELING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes glass-fiber reinforced plastic (FRP) wall paneling and trim accessories.

1.2 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

PART 2 - PRODUCTS

2.1 PLASTIC SHEET PANELING

- A. General: Gelcoat-finished, glass-fiber reinforced plastic panels complying with ASTM D 5319.
- B. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1. Koroguard Wall Protection Systems; a division of RJF International Corporation
 - 2. Koroseal "Korogard" Protective Wallcovering: Rigid high-impact Korogard substrate sheet.
 - a. Nominal Thickness: Not less than 0.040 inch.
 - b. Texture: As noted in Finish Schedule.
 - c. Color: As noted in Finish Schedule.

2.2 ACCESSORIES

- A. Trim Accessories: Manufacturer's standard one-piece vinyl extrusions designed to retain and cover edges of panels. Provide division bars, inside corners, outside corners, and caps as needed to conceal edges.
 - 1. Color: Match panels.
- B. Adhesive: As recommended by plastic paneling manufacturer.
- C. Sealant: Single-component, mildew-resistant, neutral-curing silicone sealant recommended by plastic paneling manufacturer and complying with requirements in Section 07920 "Joint Sealants."

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of substances that could impair bond of adhesive, including oil, grease, dirt, and dust.
- B. Condition panels by unpacking and placing in installation space before installation according to manufacturer's written recommendations.
- C. Lay out paneling before installing. Locate panel joints so that trimmed panels at corners are not less than 12 inches wide.

3.2 INSTALLATION

- A. Install plastic paneling according to manufacturer's written instructions.
- B. Install panels in a full spread of adhesive.
- C. Install trim accessories with adhesive or staples. Do not fasten through panels.
- D. Fill grooves in trim accessories with sealant before installing panels and bed inside corner trim in a bead of sealant.
- E. Maintain uniform space between panels and wall fixtures. Fill space with sealant.
- F. Remove excess sealant and smears as paneling is installed. Clean with solvent recommended by sealant manufacturer and then wipe with clean dry cloths until no residue remains.

END OF SECTION 06640

DIVISION 7 - THERMAL & MOISTURE CONTROL

SECTION 07600 - SHEET METAL FLASHING AND TRIM

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Coping.

1.2 SHEET METAL FLASHING AND TRIM MATERIALS AND MISCELLANEOUS ITEMS

- A. Coping: Provide aluminum coping similar to AP Snap-tight coping system as manufactured by RAC/Aural Products Company. The coping shall be .050", smooth 5005H-34 alloy aluminum. Complete with all accessories including a baked enamel finish.

1.3 SHEET METAL FINISH

- A. High-Performance Organic Coating Finish: Apply the following system by coil coating process on galvanized steel sheet as recommended by coating manufacturers and applicator.
 - 1. Fluoropolymer 2-Coat Coating System: Manufacturer's standard 2-coat, thermocured system composed of specially formulated inhibitive primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 605.2.
 - a. Color: As indicated on the drawings.
 - b. Resin Manufacturer: Subject to compliance with requirements, provide fluoropolymer coating systems containing resins produced by one of the following manufacturers:
 - 1) Elf Atochem North America, Inc. (Kynar 500)
 - 2. Sheet Metal Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
 - a. Atas Aluminum Corporation; Rapid Lock Coping.
 - b. Metal Era Roof Edge Systems; EconoMe Coping
 - c. WP Hickman; Universal Coping System.

1.4 INSTALLATION REQUIREMENTS

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations and with SMACNA "RAC/Aural Sheet Metal Manual." Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.

1.5 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.
- B. Protection: Advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Substantial Completion.

END OF SECTION 07600

SECTION 07920 - JOINT SEALANTS

1.1 PRECONSTRUCTION TESTING

- A. Preconstruction compatibility and adhesion testing.
- B. Preconstruction field-adhesion testing.

1.2 WARRANTY

- A. Installer Warranty: Two years.

1.3 MATERIALS

- A. VOC Content of Interior Sealants:
 - 1. Architectural Sealants: 250 g/L.
 - 2. Sealant Primers for Nonporous Substrates: 250 g/L.
 - 3. Sealant Primers for Porous Substrates: 775 g/L.
- B. Stain Test: ASTM C 1248.

1.4 JOINT SEALANTS

- A. Single-Component Neutral-Curing Silicone Sealant [ES- 1]:
 - 1. Available Products:
 - a. Dow Corning Corporation; 795.
 - b. Dow Corning Corporation; CWS.
 - c. GE Silicones; UltraGlaze SSG4000.
 - d. GE Silicones; UltraGlaze SSG4000AC.
 - e. Polymeric Systems Inc.; PSI-631.
 - f. Schnee-Morehead, Inc.; SM5731 Poly-Glaze Plus.
 - g. Tremco; Proglaze SG.
 - h. Tremco; Spectrem 2.
 - i. Tremco; Tremsil 600.
 - 2. Type and Grade: S (single component) and NS (nonsag).
 - 3. Class: 25.
 - 4. Use Related to Exposure: NT (nontraffic).
 - 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.
- B. Single-Component Nonsag Urethane Sealant (ES-2):
 - 1. Available Products:
 - j. Sika Corporation, Inc.; Sikaflex - 1a.
 - k. Sonneborn, Division of ChemRex Inc.; Ultra.
 - l. Sonneborn, Division of ChemRex Inc.; NP 1.
 - m. Tremco; Vulkem 116.
 - n. Sherwin Williams
 - 2. Type and Grade: S (single component) and NS (nonsag).
 - 3. Class: 25.
 - 4. Uses Related to Exposure: T (traffic) and NT (nontraffic).
 - 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.
- C. Joint-Sealant Backing: Cylindrical.

1.5 FIELD QUALITY CONTROL

- A. Field-adhesion testing.

1.6 SCHEDULE

- A. Joint-Sealant Application ES-1: For exterior joints, unless noted otherwise.
 - 1. Joint Sealant: Single-Component Neutral-Curing Silicone Sealant (ES- 1)
 - 2. Joint-Sealant Color: From manufacturer's standards.
- B. Joint-Sealant Application ES-2: For all interior joints unless noted otherwise.
 - 1. Joint Sealant: Single-Component Nonsag Urethane Sealant (ES-2)
 - 2. Joint-Sealant Color: From manufacturer's standards.

END OF SECTION 07920

DIVISION 8 - DOORS & WINDOWS

SECTION 08110 - STEEL DOORS AND FRAME

1.1 SUMMARY

- A. Standard hollow metal doors and frames.

1.2 QUALITY ASSURANCE

- A. Standard Hollow Metal Quality Standard: ANSI/SDI A250.8.
- B. Custom Hollow Metal Quality Standard: ANSI/NAAMM-HMMA 861.
- C. Fire-Rated Doors and Frames: Positive-pressure testing.

1.3 PRODUCTS

- A. Standard Hollow Metal Doors:
 - 1. Design: Flush panel.
 - 2. Thermal-Rated Doors: Exterior and interior where indicated.
 - 3. Exterior Doors: Metallic-coated steel sheet faces.
 - a. Level 1 and Physical Performance Level C (Standard Duty).
 - 4. Interior Doors: Cold-rolled steel sheet faces.
 - a. Level 1 and Physical Performance Level C (Standard Duty).
- B. Standard Hollow Metal Frames:
 - 1. Exterior Frames: Metallic-coated steel sheet; full profile welded.
 - a. Frames for Level 1 Steel Doors: 0.042-inch- thick steel sheet.
 - 2. Interior Frames: Cold-rolled steel sheet; full profile welded.
 - a. Frames for Level 1 Steel Doors: 0.042-inch- thick steel sheet.
 - b. Frames for Wood Doors: 0.042-inch- thick steel sheet.
- C. Accessories:
 - 1. Louvers: Sightproof, steel.
- D. Finishes: Factory priming for field painting.
- E. Vision Glass: Safety Glass
 - 1. Section 08800 "Glazing."

1.4 INSTALLATION

- A. Metal-Stud Partitions: Frames filled with insulation.
- B. Concrete and Masonry Walls: Frames filled with grout.

END OF SECTION 08110

SECTION 08211 - FLUSH WOOD DOORS

1.1 QUALITY ASSURANCE

- A. Quality Standard: AWI.
 - 1. AWI Quality Certification Labels or an AWI letter of licensing for doors.
- B. Fire-Rated Wood Doors: Positive pressure testing.

1.2 DOOR CONSTRUCTION, GENERAL

- A. Low-Emitting Materials: Made with adhesives and composite wood products that do not contain urea formaldehyde.
- B. WDMA I.S.1-A Performance Grade:
 - 1. Heavy Duty unless otherwise indicated.

1.3 VENEERED-FACED DOORS FOR TRANSPARENT FINISH

- A. Interior Solid-Core Doors:
 - 1. Grade: Premium, with Grade A faces.
 - 2. Species: Select white birch.

3. Cut: Rotary cut.
4. Match between Veneer Leaves: Pleasing match.
5. Assembly of Veneer Leaves on Door Faces: Running match.
6. Core: Particleboard.
7. Construction: Five or seven plies, bonded.
8. WDMA I.S.1-A Performance Grade: Heavy Duty.

1.4 DOORS FOR OPAQUE FINISH

- A. Interior Solid-Core Doors:
 1. Grade: Premium.
 2. Faces: Any closed-grain hardwood of mill option.
 3. Core: Particleboard.
 4. Construction: Five or seven plies, bonded.
 5. WDMA I.S.1-A Performance Grade: Heavy Duty.

1.5 LOUVERS AND LIGHT FRAMES

- A. Louvers: Extruded aluminum with clear anodic finish.
- B. Light-Opening Frames:
 1. Wood beads.

1.6 PRIMING / FINISHING

- A. Shop Priming:
 1. Doors for Opaque Finish: One coat of wood primer.
 2. Doors for Transparent Finish: Stain and first coat of finish.
- B. Factory Finishing: Contractor's option.
- C. Transparent Factory Finishes:
 1. Grade: Premium.
 2. Finish: Catalyzed polyurethane.
 3. Effect: Open-grain finish.
- D. Opaque Factory Finishes:
 1. Grade: Premium.

END OF SECTION 08211

SECTION 08710 - DOOR HARDWARE

0.1 SUMMARY

- A. This Section includes items known commercially as finish or door hardware that are required for swing doors and frames.

1.2 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products as shown on construction drawings.

1.3 SCHEDULED HARDWARE

- A. Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of finish hardware are indicated in the "Hardware Group" on the drawings.

1.4 INSTALLATION

- A. Mount hardware units at heights indicated in following applicable publications, except as specifically indicated or required to comply with governing regulations and except as otherwise directed by Owner.

1.5 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. Adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.
 - 1. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- B. Clean adjacent surfaces soiled by hardware installation.

END OF SECTION 08710

SECTION 08800 - GLAZING

1.01 SUMMARY

- A. Glazing for the Following Products:
 - 1. Entrances and other doors.

1.02 WARRANTY

- A. Warranty Period: Manufacturer's standard but not less than 10 years after date of Project completion.

1.03 FLAT GLASS MATERIALS

- A. Float Glass (Type FG-A): ASTM C1036, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select; 1/4 inch (6 mm) minimum thick.
- B. Safety Glass (Type FG-B): ASTM C1048, fully tempered, Condition A uncoated, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select; conforming to ANSI Z97.1; 1/4 inch (6 mm) minimum thick.
- C. Wired Glass (Type FG-H): ASTM C1036, Type II patterned and wired flat, Class 1 translucent, Quality q8 glazing; 1/2" square mesh, 1/4 inch (6 mm) minimum thick.
- D. Mirrors: Clear tempered float glass; 1/4 inch (6 mm) minimum thick, size as indicated; Coat second surface of glass with successive layers of chemically deposited silver and manufacturer's standard protective organic coating; 10 year warranty against silver spoilage; Flat polished edge; Continuous channel bottom support designed to withstand mirror weight and top support to prevent mirror from coming away from wall along top edges; setting blocks at quarter points. Include clear anodized aluminum frames where shown on drawings.

1.04 INSULATING GLASS PRODUCTS

- A. Sealed Insulating Glass Units: Preassembled units consisting of organically sealed lites of glass separated by dehydrated air spaces complying with ASTM E 774 and with other requirements indicated, including those in Insulating Glass Product Data Sheet at the end of this Section.
 - 1. For properties of individual glass lites making up units, refer to requirements specified elsewhere in this Section applicable to types, classes, kinds, and conditions of glass products comprising lites of insulating glass units.
 - 2. Provide heat-treated, where recommended by manufacturer to comply with system performance requirements specified and Kind FT (fully tempered) where safety glass is designated or required.
 - 3. Performance characteristics designated for insulating glass are nominal values based on manufacturer's published test data for units with lites 6.0 mm (0.23 inch) thick and nominal 1/2_inch dehydrated space between lites, unless otherwise indicated.
 - 4. U valued are expressed as Btu/hour x sq. ft. x F.
- B. Insulated Glass Units: ASTM E774 and E773; double pane with glass elastomer edge seal; outer pane of 1/4 inch clear glass, inner pane of 1/4 inch clear low-e glass, purge interpane space and fill with argon; total unit thickness of 1 inch (25 mm).
Edge Seal Material: Black color.

1.05 ELASTOMERIC GLAZING SEALANTS

- A. General: Provide products of type indicated, complying with the following requirements:
 - 1. Compatibility: Select glazing sealants and tapes of proven compatibility with other materials they will contact, including glass products, seals of insulating glass units, and glazing channel substrates, under conditions of installation and service, as demonstrated by testing and field experience.
 - 2. Suitability: Comply with sealant and glass manufacturer's recommendations for selecting glazing sealants and tapes that are suitable for applications indicated and conditions existing at time of installation.
 - 3. Colors: Provide color of exposed joint sealants to comply with the following:
 - a. Provide selections made by Construction Representative from manufacturer's full range of standard colors for products of type indicated.
- B. Elastomeric Glazing Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealants.
- C. Glazing Sealant for Fire-resistant Glazing Products: Identical to product used in test assembly to obtain fire resistive rating.

1.06 GLAZING TAPES

- A. Back Bedding Mastic Glazing Tape: Preformed, butyl based elastomeric tape with a solids content of 100 percent, nonstaining and nonmigrating in contact with nonporous surfaces, with or without spacer rod as recommended by tape and glass manufacturers for application indicated, packaged on rolls with a release paper backing, and complying with AAMA 800 for products indicated below:
 - 1. AAMA 804.1.

1.07 MISCELLANEOUS GLAZING MATERIALS

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials involved for glazing application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore A durometer hardness of 85 plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions with a Shore A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

1.08 PREPARATION

- A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings that are not firmly bonded to substrates.

1.09 GLAZING, GENERAL

- A. Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, except where more stringent requirements are indicated, including those in referenced glazing publications.
- B. Protect glass from edge damage during handling and installation as follows:
 - 1. Use a rolling block in rotating glass units to prevent damage to glass corners. Do not impact glass with metal framing. Use suction cups to shift glass units within openings; do not raise or drift glass with a pry bar. Rotate glass lites with flares or bevels on bottom horizontal edges so edges are located at top of opening, unless otherwise indicated by manufacturer's label.
 - 2. Remove damaged glass from Project Site and legally dispose of off site. Damaged glass is glass with edge damage or other imperfections that, when installed, weaken glass and impair performance and appearance.
- C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant_substrate testing.
- D. Install elastomeric setting blocks in sill rabbets, sized and located to comply with referenced glazing standard, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- F. Provide Spacers for Glass Sizes Larger than 50 United Inches (Length plus Height) as Follows:
 - 1. Locate spacers inside, outside, and directly opposite each other. Install correct size and spacing to preserve required face clearances, except where gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and comply with system performance requirements.
 - 2. Provide 1/8_inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.

- G. Provide edge blocking to comply with requirements of referenced glazing publications, unless otherwise required by glass manufacturer.
- H. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

1.10 PROTECTION AND CLEANING

- A. Protect exterior glass from breakage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove them immediately as recommended by glass manufacturer.
- C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for build_up of dirt, scum, alkali deposits, or stains, and remove as recommended by glass manufacturer.
- D. Remove and replace glass that is broken, chipped, cracked, abraded, or damaged in any way, including natural causes, accidents and vandalism, during construction period.
- E. Wash glass on both faces in each area of Project not more than 4 days prior to date scheduled for inspections that establish date of Project completion. Wash glass as recommended by glass manufacturer.

END OF SECTION 08800

DIVISION 9 - FINISHES

SECTION 09111 - NON-LOAD-BEARING STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Non-load-bearing steel framing systems for interior gypsum board assemblies.
 - 2. Suspension systems for interior gypsum ceilings and soffits.
 - 3. Recessed slotted wall standards.

1.2 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: For fire-resistance-rated assemblies that incorporate non-load-bearing steel framing, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

PART 2 - PRODUCTS

2.1 NON-LOAD-BEARING STEEL FRAMING, GENERAL

- A. Framing Members, General: Comply with ASTM C 754 for conditions indicated.
 - 1. Steel Sheet Components: Comply with ASTM C 645 requirements for metal, unless otherwise indicated.
 - 2. Protective Coating: ASTM A 653/A 653M, G40, hot-dip galvanized zinc coating, unless otherwise indicated.

2.2 SUSPENSION SYSTEM COMPONENTS

- A. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- diameter wire, or double strand of 0.0475-inch- diameter wire.
- B. Hanger Attachments to Concrete:
 - 1. Powder-Actuated Fasteners: Suitable for application indicated, fabricated from corrosion-resistant materials with clips or other devices for attaching hangers of type indicated, and capable of sustaining, without failure, a load equal to 10 times that imposed by construction as determined by testing according to ASTM E 1190 by an independent testing agency.
- C. Wire Hangers: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.162-inch diameter.

- D. Carrying Channels: Cold-rolled, commercial-steel sheet with a base-metal thickness of 0.0538 inch and minimum 1/2-inch- wide flanges.
 - 1. Depth: As indicated on Drawings.
- E. Furring Channels (Furring Members):
 - 1. Cold-Rolled Channels: 0.0538-inch bare-steel thickness, with minimum 1/2-inch- wide flanges, 3/4 inch deep.
 - 2. Steel Studs: ASTM C 645.
 - a. Minimum Base-Metal Thickness: 0.0179 inch.
 - b. Depth: As indicated on Drawings.
 - 3. Hat-Shaped, Rigid Furring Channels: ASTM C 645, 7/8 inch deep.
 - a. Minimum Base Metal Thickness: 0.0179 inch.
 - 4. Resilient Furring Channels: 1/2-inch- deep members designed to reduce sound transmission.
 - a. Configuration: Asymmetrical or hat shaped.
- F. Grid Suspension System for Ceilings: ASTM C 645, direct-hung system composed of main beams and cross-furring members that interlock.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Armstrong World Industries, Inc.; Drywall Grid Systems.
 - b. Chicago Metallic Corporation; 640-C Drywall Furring System.
 - a. USG Corporation; Drywall Suspension System.

2.3 STEEL FRAMING FOR FRAMED ASSEMBLIES

- A. Steel Studs and Runners: ASTM C 645.
 - 1. Minimum Base-Metal Thickness: 0.027 inch, unless otherwise indicated.
 - 2. Minimum Base-Metal Thickness: 0.0329 inch, for the following locations, unless otherwise indicated.
 - a. For 6 inch framing.
- B. Slip-Type Head Joints: Where indicated, provide one of the following:
 - 1. Single Long-Leg Runner System: ASTM C 645 top runner with 2-inch- deep flanges in thickness not less than indicated for studs, installed with studs friction fit into top runner and with continuous bridging located within 12 inches of the top of studs to provide lateral bracing.
 - 2. Double-Runner System: ASTM C 645 top runners, inside runner with 2-inch- deep flanges in thickness not less than indicated for studs and fastened to studs, and outer runner sized to friction fit inside runner.
 - 3. Deflection Track: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above; in thickness not less than indicated for studs and in width to accommodate depth of studs.
 - a. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) Steel Network Inc. (The); VertiClip SLD or VertiTrack VTD Series.
 - 2) Superior Metal Trim; Superior Flex Track System (SFT).
 - 3) Or equal system by USG.
- C. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.
 - 1. Minimum Base-Metal Thickness: 0.0179 inch.
- D. Cold-Rolled Channel Bridging: 0.0538-inch bare-steel thickness, with minimum 1/2-inch- wide flanges.
 - 1. Depth: As indicated on Drawings.
 - 2. Clip Angle: Not less than 1-1/2 by 1-1/2 inches, 0.068-inch- thick, galvanized steel.
- E. Hat-Shaped, Rigid Furring Channels: ASTM C 645.
 - 1. Minimum Base Metal Thickness: 0.0179 inch.
 - 2. Depth: As indicated on Drawings.
- F. Resilient Furring Channels: 1/2-inch- deep, steel sheet members designed to reduce sound transmission.
 - 1. Configuration: Asymmetrical or hat shaped.
- G. Cold-Rolled Furring Channels: 0.0538-inch bare-steel thickness, with minimum 1/2-inch- wide flanges.
 - 1. Depth: As indicated on Drawings.
 - 2. Furring Brackets: Adjustable, corrugated-edge type of steel sheet with minimum bare-steel thickness of 0.0312 inch.
 - 3. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- diameter wire, or double strand of 0.0475-inch- diameter wire.

2.4 RECESSED SLOTTED WALL STANDARDS

- A. Recessed slotted wall standard embedded in a 3-5/8" stud.

1. 25 ga. Galvanized steel.
 2. I-beam shape of 2 1/2" and 3 5/8" studs as indicated on drawings.
- B. Products: Subject to compliance with requirements, provide one of the following:
1. Clemco Elite Standard Systems, (909) 483-0141
- C. Finish
1. Drywall and slotted standard must have flush finish with one another.

2.5 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards.
1. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance.
1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Coordination with Sprayed Fire-Resistive Materials:
1. Before sprayed fire-resistive materials are applied, attach offset anchor plates or ceiling runners (tracks) to surfaces indicated to receive sprayed fire-resistive materials. Where offset anchor plates are required, provide continuous plates fastened to building structure not more than 24 inches o.c.
 2. After sprayed fire-resistive materials are applied, remove them only to extent necessary for installation of non-load-bearing steel framing. Do not reduce thickness of fire-resistive materials below that required for fire-resistance ratings indicated. Protect adjacent fire-resistive materials from damage.

3.3 INSTALLATION, GENERAL

- A. Installation Standard: ASTM C 754.
1. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.
- B. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.
- C. Install bracing at terminations in assemblies.
- D. Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

3.4 INSTALLING SUSPENSION SYSTEMS

- A. Install suspension system components in sizes and spacings indicated on Drawings, but not less than those required by referenced installation standards for assembly types and other assembly components indicated.
- B. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.
- C. Suspend hangers from building structure as follows:
1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.
 - a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing, counter-splaying, or other equally effective means.
 2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers required to support standard suspension system members, install supplemental suspension members and hangers in the form of trapezes or equivalent devices.
 - a. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced installation standards.

3. Wire Hangers: Secure by looping and wire tying, either directly to structures or to inserts, eye screws, or other devices and fasteners that are secure and appropriate for substrate, and in a manner that will not cause hangers to deteriorate or otherwise fail.
 4. Flat Hangers: Secure to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices and fasteners that are secure and appropriate for structure and hanger, and in a manner that will not cause hangers to deteriorate or otherwise fail.
 5. Do not attach hangers to permanent metal forms. Furnish cast-in-place hanger inserts that extend through forms.
 6. Do not attach hangers to rolled-in hanger tabs of composite steel floor deck.
 7. Do not connect or suspend steel framing from ducts, pipes, or conduit.
- D. Fire-Resistance-Rated Assemblies: Wire tie furring channels to supports.
 - E. Seismic Bracing: Sway-brace suspension systems with hangers used for support.
 - F. Grid Suspension Systems: Attach perimeter wall track or angle where grid suspension systems meet vertical surfaces. Mechanically join main beam and cross-furring members to each other and butt-cut to fit into wall track.
 - G. Installation Tolerances: Install suspension systems that are level to within 1/8 inch in 12 feet measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

3.5 INSTALLING FRAMED ASSEMBLIES

- A. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.
- B. Install studs so flanges within framing system point in same direction.
- C. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.
 1. Slip-Type Head Joints: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
 2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
 - a. Install two studs at each jamb, unless otherwise indicated.
 - b. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
 3. Other Framed Openings: Frame openings other than door openings the same as required for door openings, unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
 4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
 - a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.
 5. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.
- D. Direct Furring:
 1. Attach to concrete or masonry with stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches o.c.
- E. Z-Furring Members:
 1. Erect insulation (specified in Division 7 Section "Building Insulation") vertically and hold in place with Z-furring members spaced 24 inches o.c.
 2. Except at exterior corners, securely attach narrow flanges of furring members to wall with concrete stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches o.c.
 3. At exterior corners, attach wide flange of furring members to wall with short flange extending beyond corner; on adjacent wall surface, screw-attach short flange of furring channel to web of attached channel. At interior corners, space second member no more than 12 inches from corner and cut insulation to fit.
- F. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch from the plane formed by faces of adjacent framing.

END OF SECTION 09111

SECTION 09250 - GYPSUM BOARD

1.1 SUMMARY

- A. Interior gypsum board.
- B. Exterior gypsum board for ceilings and soffits.
- C. Tile backing panels.

1.2 QUALITY ASSURANCE

- A. Mockups for the following:
 - 1. Levels of gypsum board finish for use in exposed locations.
 - 2. Texture finishes.

1.3 MATERIALS

- A. Interior Gypsum Board:
 - 1. Regular type.
 - 2. Type X.
 - 3. Special Type X: Having improved fire resistance over standard Type X.
 - 4. Flexible Type: Manufactured to bend to fit radii.
 - 5. Ceiling Type: Manufactured to have more sag resistance than regular-type gypsum board.
 - 6. Foil-backed type.
 - 7. Abuse-resistant type.
 - 8. Moisture- and mold-resistant type.
- B. Exterior Gypsum Board for Ceilings and Soffits:
 - 1. Exterior gypsum soffit board.
 - 2. Glass-mat gypsum sheathing board.
- C. Tile-Backing Panels:
 - 1. Water-resistant gypsum backing board.
 - 2. Glass-mat, water-resistant backing board.
 - 3. Cementitious backer units.
- D. Trim Accessories:
 - 1. Interior.
 - 2. Exterior.
 - 3. Aluminum: Extruded profiles.
- E. Texture finishes.

END OF SECTION 09250

SECTION 09511 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes acoustical panels and exposed suspension systems for ceilings.

1.2 QUALITY ASSURANCE

- A. Acoustical Testing Agency Qualifications: An independent testing laboratory or an NVLAP-accredited laboratory.
- B. Fire-Test-Response Characteristics:
 - 1. Fire-Resistance Characteristics: Where indicated, provide acoustical panel ceilings identical to those of assemblies tested for fire resistance per ASTM E 119 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - 2. Surface-Burning Characteristics: Acoustical panels complying with ASTM E 1264 for Class A materials, when tested per ASTM E 84.
 - a. Smoke-Developed Index: 450 or less.
- C. Seismic Standard: Comply with the following:
 - 1. Standard for Ceiling Suspension Systems Requiring Seismic Restraint: Comply with ASTM E 580.
 - 2. CISCA's Recommendations for Acoustical Ceilings: Comply with CISCA's "Recommendations for Direct-Hung Acoustical Tile and Lay-in Panel Ceilings--Seismic Zones 0-2."
 - 3. CISCA's Guidelines for Systems Requiring Seismic Restraint: Comply with CISCA's "Guidelines for Seismic Restraint of Direct-Hung Suspended Ceiling Assemblies--Seismic Zones 3 & 4."
 - 4. UBC Standard 25-2, "Metal Suspension Systems for Acoustical Tile and for Lay-in Panel Ceilings."
 - 5. ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 9, "Earthquake Loads."

1.3 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Acoustical Ceiling Panels: Full-size panels equal to 2.0 percent of quantity installed.
 - 2. Suspension System Components: Quantity of each exposed component equal to 2.0 percent of quantity installed

PART 2 - PRODUCTS

2.1 ACOUSTICAL PANEL CEILINGS, GENERAL

- A. Acoustical Panel Standard: Comply with ASTM E 1264.
- B. Metal Suspension System Standard: Comply with ASTM C 635.
- C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.
- D. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
 - 1. Size: Select wire diameter so its stress at 3 times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- diameter wire.
- E. Seismic perimeter stabilizer bars, seismic struts, and seismic clips.
- F. Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.

2.2 ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING (ACT-1)

- A. Products: Subject to compliance with requirements, provide the following:
 - 1. Armstrong World Industries, Inc.; Tectum.
- B. Classification: Provide fire-resistance-rated panels complying with ASTM E 1264 for type and form as follows:
 - 1. Type and Form: Type III, mineral base with painted finish; Form 2, water felted.
- C. Color: White.
- D. LR: Not less than 0.82.
- E. NRC: Not less than 0.55, Type E-400 mounting per ASTM E 795.
- F. CAC: Not less than 35.
- G. Edge/Joint Detail: Square.
- H. Thickness: 5/8 inch.
- I. Modular Size: 24 by 48 inches.

3.1 INSTALLATION

- A. Comply with ASTM C 636 and seismic design requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders.
- C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required and, if permitted with fire-resistance-rated ceilings, to miss obstructions; offset resulting horizontal forces by bracing, counter-splaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
 - 1. Do not support ceilings directly from permanent metal forms or floor deck; anchor into concrete slabs.
 - 2. Do not attach hangers to steel deck tabs or to steel roof deck.
- D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
- E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

- F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 09511

SECTION 09653 - RESILIENT WALL BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Resilient base.
 - 2. Resilient molding accessories.
 - 3. Subfloor Leveler System

1.2 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
 - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

1.3 PROJECT CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer in spaces to receive resilient products.
- B. Until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer.
- C. Install resilient products after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 RESILIENT BASE (B-1)

- A. Resilient Base:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Armstrong.
- B. Resilient Base Standard: ASTM F 1861.
 - 1. Material Requirement: Type TV (vinyl, thermoplastic).
 - 2. Manufacturing Method: Group I (solid, homogeneous).
 - 3. Style: Cove (base with toe).
- C. Minimum Thickness: 0.125 inch.
- D. Height: 4 inches.
- E. Lengths: Cut lengths 48 inches long or coils in manufacturer's standard length.
- F. Outside Corners: Preformed.
- G. Inside Corners: Preformed.
- H. Finish: Matte.
- I. Colors and Patterns: As indicated on drawings.

2.2 RESILIENT MOLDING ACCESSORY (TR-1)

- A. Resilient Molding Accessory:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Mats Inc.
- B. Description: Transition strip for carpet to vinyl tile.
- C. Material: Vinyl.
- D. Profile and Dimensions: As indicated.
- E. Colors and Patterns: As indicated.

2.3 SUBFLOOR LEVELER SYSTEM

- A. Resilient Molding Accessory:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Johnsonite - Strip & Leveler Strip Extensions
- B. Description: Uniform ramping support transition.
- C. Material: PVC
- D. Profile and Dimensions: #LS-40
 - 1. Reduces from 1/4" to 0.
- E. Colors and Patterns: Black

2.4 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, Portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.2 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- C. Install resilient base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.

3.3 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of resilient floor covering that would otherwise be exposed.

3.4 SUBFLOOR LEVELER INSTALLATION

- A. Comply with manufacturer's written instructions for installing leveler strips.

3.5 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Cover resilient products until Substantial Completion.

END OF SECTION 09653

SECTION 09911 - EXTERIOR PAINTING

1.1 SUMMARY

- A. Surface preparation and the application of paint systems on exterior substrates.

1.2 QUALITY ASSURANCE

- A. Quality Standards: "MPI Approved Products List" and "MPI Architectural Painting Specification Manual."

1.3 FIELD QUALITY CONTROL

- A. Testing: By Owner-engaged agency.

1.4 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Sherwin-Williams Company (The).
 - 2. Acceptable substitutions include:
 - a. Frazee
 - b. Benjamin Moore

1.5 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. Colors: Match colors as indicated on drawings.

1.6 PRIMERS/SEALERS

- A. Bonding Primer (Water Based): MPI #17.
- B. Wood-Knot Sealer: Sealer recommended in writing by topcoat manufacturer for use in paint system indicated.

1.7 METAL PRIMERS

- A. Alkyd Ant-Corrosive Metal Primer: MPI #79
- B. Rust Inhibitive Primer (water-based): MPI #107.
- C. Waterborne Galvanized-Metal Primer: MPI #134.
- D. Quick-Drying Primer for Aluminum: MPI #95.

1.8 EXTERIOR LATEX PAINTS

- A. Colors: Match colors as indicated on drawings.

1.9 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Wood: 15 percent.
 - 3. Plaster: 12 percent.
 - 4. Gypsum Board: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

1.10 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulates.
1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Concrete Masonry Unit Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- G. Aluminum Substrates: Remove surface oxidation.
- H. Wood Substrates:
1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
 2. Sand surfaces that will be exposed to view, and dust off.
 3. Prime edges, ends, faces, undersides, and backsides of wood.
 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- I. Plaster Substrates: Do not begin paint application until plaster is fully cured and dry.
- J. Exterior Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.

1.11 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
1. Use applicators and techniques suited for paint and substrate indicated.
 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

1.12 FIELD QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:
1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
 2. Testing agency will perform tests for compliance of paint materials with product requirements.
 3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

1.13 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 09911

SECTION 09912 - INTERIOR PAINTING

1.1 SUMMARY

- A. Surface preparation and the application of paint systems on interior substrates.

1.2 QUALITY ASSURANCE

- A. Quality Standards: "MPI Approved Products List" and "MPI Architectural Painting Specification Manual."

1.3 FIELD QUALITY CONTROL

- A. Testing: By Landlord / General Contractor-engaged agency.

1.4 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Sherwin-Williams Company (The).
- B. Acceptable substitutions include:
 - 1. Frazee
 - 2. Benjamin Moore

1.5 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
 - a. Chemical Components of Field-Applied Interior Paints and Coatings: Provide products that comply with local requirements for VOC content.
- B. Colors: Match Colors as indicated on drawings.

1.6 PRIMERS/SEALERS

- A. Interior Latex Primer/Sealer:

1.7 METAL PRIMERS (if not shop primed)

- A. Alkyd Anticorrosive Metal Primer:

1.8 WOOD PRIMERS

- A. Interior Latex-Based Wood Primer:

1.9 LATEX PAINTS

- A. Interior Latex (Flat): MPI #53 (Gloss Level 1) - ProMar 200
 - 1. See schedule for colors.
- B. Interior Latex (Eggshell): ProMar 200
 - 1. See schedule for colors.

1.10 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.

- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 1. Concrete: 12 percent.
 2. Masonry (Clay and CMU): 12 percent.
 3. Wood: 15 percent.
 4. Gypsum Board: 12 percent.
 5. Plaster: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

1.11 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.
 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Concrete Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.
- G. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- H. Wood Substrates:
 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
 2. Sand surfaces that will be exposed to view, and dust off.
 3. Prime edges, ends, faces, undersides, and backsides of wood.
 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- I. Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.

1.12 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
 1. Use applicators and techniques suited for paint and substrate indicated.
 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks. Paragraph and subparagraphs below are examples of painting requirements for mechanical and electrical work. Revise to suit Project.

1.13 FIELD QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:

1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
2. Testing agency will perform tests for compliance with product requirements.
3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

1.14 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

1.15 INTERIOR PAINTING SCHEDULE: As indicated in drawings.

END OF SECTION 09912

SECTION 09985 - PREFINISHED PANELS (FRP)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 1. Fiberglass Reinforced Polyester (FRP) resin panels as shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
 2. All fasteners, adhesives, trim and moldings required for a complete installation.
- B. Related Sections include the following:
 1. Rough Carpentry: Section 06100
 2. Gypsum Wallboard: Section 09250

1.3 QUALITY ASSURANCE

- A. Installer Qualification: Engage an experienced Installer who has previously installed wall surface protection systems similar in material, design, and extent to the systems indicated for this project.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original factory wrappings and containers, clearly labeled with identification of manufacturer, brand name, quality or grade, and fire hazard classification.
- B. Store wall surface protection materials in original undamaged packages and containers inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.
 1. Maintain room temperature within the storage area at not less than 70 degrees F (21 degrees C) during the period plastic materials are stored. Keep sheet material out of direct sunlight to avoid surface distortion.
 2. Store rigid plastic and rigid plastic wall guard in a horizontal position for a minimum of 72 hours, or until the plastic material attains the minimum room temperature of 70 degrees F (21 degrees C).

1.5 PROJECT CONDITIONS

- A. Environmental Conditions: Do not install wall surface protection system components until the space is enclosed and weather proof and until the ambient temperature within the building is maintained at not less than 70 degrees F (21 degrees C) for not less than 72 hours prior to beginning of the protection systems until that temperature has been attained and is stabilized.

1.6 EXTRA MATERIALS

- A. Replacement Materials: After completion of work, deliver not less than two (2) percent of each type, color and pattern of wall surface protection materials and components. Include accessory components as required. Replacement materials shall be from the same production run as materials installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include the following:
 - 1. StructoGlass

2.2 MATERIALS

- A. Fiberglass Reinforced Panels:
 - 1. Thickness: 0.090"
 - 2. Size: 4 X 8', 9', 10', or 12 (refer to drawings)
 - 3. Installation will be single piece by height required. All joints will be vertical. Horizontal joints will not be accepted.
 - 4. Color: As noted in Finish Schedule.
 - 5. Weight: .07 pounds per square foot
 - 6. Performance
 - a. Abrasion Resistance .038%
 - b. Flame Spread: U.L. Class "A" and "C"
 - 7. Moldings/Trim: All exposed panel edges shall be finished with appropriate one- piece or two-piece non-staining vinyl extruded moldings.
 - 8. Caulks and Adhesives: Use only high quality construction grade adhesives and clear silicone sealant in accordance with manufacturers recommended installation procedures.
 - 9. Fasteners: Fully adhered with adhesive as recommended by manufacturer. Mechanical fasteners shall not be permitted.

2.3 FABRICATION

- A. General: Fabricate wall systems to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of components.
- B. Fabricate components with tight seams and joints with exposed edges rolled. Provide surface free of evidence of wrinkling, chipping, uneven coloration, dents, and other imperfections. Fabricate members and fittings to produce flush, smooth, and rigid hairline joints.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Coordinate requirements specified in other Sections for subfloor construction and tolerances to ensure that they are appropriate for resilient products selected.
- B. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 COORDINATION

- A. Examine the drawings and Specifications to determine the nature and extent of the proposed construction. Perform work to conform to the construction called for in such a manner as not to interfere with or delay work of other trades.

3.3 INSTALLATION

- A. All work shall be properly aligned, be plumb and true, and installed in accordance with the manufacturer's recommended procedures and by approved installers. Spans shall not exceed limitations set by the manufacturer.
- B. All fastenings, mechanical or otherwise, shall conform to the manufacturer's standards.
- C. Moldings, division bars, cap finish strips, bar angles, etc., shall be sealed with a silicone type sealant.

3.4 CLEANING AND DAMAGED MATERIALS

- A. Upon completion of installation, clean soiled or discolored surfaces and/or remove if unacceptable to the Architect.
- B. Remove and replace any and all units, which are damaged or improperly installed.
- C. Remove all packing materials and excess materials from the site.

END OF SECTION 09985

DIVISION 10 – SPECIALTIES

SECTION 10155 - TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Stainless-steel toilet compartments configured as toilet enclosures and urinal screens.

1.2 SUBMITTALS

- A. Shop Drawings: For toilet compartments. Include plans, elevations, sections, details, and attachments to other work.

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities" for toilet compartments designated as accessible.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel Sheet: Commercial steel sheet for exposed applications; mill phosphatized and selected for smoothness.
- B. Zamac: ASTM B 86, commercial zinc-alloy die castings.
- C. Particleboard: ANSI A208.1, Grade M-2 with 45-lb density.

2.2 STAINLESS-STEEL UNITS

- A. Manufacturers: Subject to compliance with requirements, provide the following:
 - 1. General Partitions - Diamond Pattern
- B. Toilet-Enclosure Style: Floor mounted.
- C. Urinal-Screen Style: Wall hung with integral flanges.
- D. Door, Panel, and Pilaster Construction: Seamless, metal facing sheets pressure laminated to core material; with continuous, interlocking molding strip or lapped-and-formed edge closures; corners secured by welding or clips and exposed welds ground smooth. Exposed surfaces shall be free of pitting, seam marks, roller marks, stains, discolorations, telegraphing of core material, or other imperfections.
 - 1. Core Material: Manufacturer's standard sound-deadening honeycomb of resin-impregnated kraft paper in thickness required to provide finished thickness of 1 inch for doors and panels and 1-1/4 inches for pilasters.
 - 2. Grab-Bar Reinforcement: Provide concealed internal reinforcement for grab bars mounted on units.

3. Tapping Reinforcement: Provide concealed reinforcement for tapping (threading) at locations where machine screws are used for attaching items to units.
- E. Urinal-Screen Construction:
 1. Integral-Flange, Wall-Hung Urinal Screen: Similar to panel construction, with integral full-height flanges for wall attachment, and maximum 1-1/4 inches thick.
- F. Facing Sheets and Closures: Stainless-steel sheet of nominal thicknesses standard with manufacturer:
- G. Pilaster Shoes and Sleeves (Caps): Stainless-steel sheet, not less than 3 inches high, finished to match hardware.
- H. Brackets (Fittings):
 1. Full-Height (Continuous) Type: Manufacturer's standard design; stainless steel.
- I. Stainless-Steel Finish: No. 4 satin with dimpled texture on exposed faces. Protect exposed surfaces from damage by application of strippable, temporary protective covering before shipment.

2.3 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.
 1. Material: Chrome-plated zamac.
 2. Hinges: Manufacturer's standard paired, self-closing type that can be adjusted to hold doors open at any angle up to 90 degrees.
 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.
 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

2.4 FABRICATION

- A. Floor-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.
- B. Door Size and Swings: Unless otherwise indicated, provide 24-inch- wide, in-swinging doors for standard toilet compartments and 36-inch- wide, out-swinging doors with a minimum 32-inch- wide, clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
- B. Clearances: Maximum 1/2 inch between pilasters and panels; 1 inch between panels and walls.

3.2 ADJUSTING

- C. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

END OF SECTION 10155

SECTION 10265 - IMPACT-RESISTANT WALL PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Corner guards.

1.2 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.
- B. Surface-Burning Characteristics: As determined by testing identical products per ASTM E 84, NFPA 255, or UL 723 by UL or another qualified testing agency.
- C. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines.

1.3 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of impact-resistant wall protection units that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Deterioration of plastic and other materials beyond normal use.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 CORNER GUARDS

- A. Surface-Mounted, Acrovyn Corner Guards:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Construction Specialties, Inc., Model VA-200
 - 2. Vinyl/Acrylic: Extruded material should be high impact Acrovyn with shadow grain texture. Chemical and stain resistance per ASTM D-1308 standards as established by the manufacturer.
 - a. Color and Texture: As selected by Architect from manufacturer's full range.
 - 3. Guards: 90° surface mounted corner guard with 1-1/2" legs self-adhesive tape backing.
 - 4. Fabricate wall protection systems to comply with requirements indicated for design, dimensions, detail, finish and member sizes.
- B. Surface-Mounted, Stainless Steel Corner Guards:

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
 - 1. Do not proceed until unsatisfactory conditions have been corrected.
- B. Surface preparation: Prior to installation, clean substrate to remove dirt, debris and loose particles. Perform additional preparation procedures as required by manufacturer's instructions.
- C. Protection: Take all necessary steps to prevent damage to material during installation as required in manufacturer's installation instructions.

3.2 INSTALLATION

- A. Install the work of this section in strict accordance with the manufacturer's recommendations, using only approved mounting hardware, and locating all components firmly into position, level and plumb.
- B. Temperature at the time of installation must be between 65°-75°F and be maintained for at least 48 hours after the installation.
- C. Install impact-resistant wall protection units level, plumb, and true to line without distortions. Do not use materials with chips, cracks, voids, stains, or other defects that might be visible in the finished Work.
 - 1. Install impact-resistant wall protection units in locations and at mounting heights indicated on Drawings.
 - 2. Provide splices, mounting hardware, anchors, and other accessories required for a complete installation.

- a. Provide anchoring devices to withstand imposed loads.
 - b. Adjust end caps as required to ensure tight seams.
- D. Immediately after completion of installation, clean plastic covers and accessories using a standard, ammonia-based, household cleaning agent.
- E. Remove excess adhesive using methods and materials recommended in writing by manufacturer.

3.3 CLEANING

- A. General: Immediately upon completion of installation, clean vinyl covers and accessories in accordance with manufacturer's recommended cleaning method.
- B. Remove surplus materials, rubbish and debris resulting from installation as work progresses and upon completion of work.

3.4 PROTECTION

- A. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.

END OF SECTION 10265

SECTION 10523 - FIRE EXTINGUISHERS

1.1 SUMMARY

- A. Landlord / General Contractor Furnished Material: Hand-carried fire extinguishers.

1.2 QUALITY ASSURANCE

- A. Fire Extinguishers: NFPA 10.

1.3 WARRANTY

- A. Materials and Workmanship: Six years.

1.4 PRODUCTS

- A. Fire Extinguishers: Type, size, and capacity for each mounting bracket indicated.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Buckeye Fire Equipment Company.
 - b. J. L. Industries, Inc.; a division of Activar Construction Products Group.
 - c. Kidde Residential and Commercial Division; Subsidiary of Kidde plc.
 - d. Larsen's Manufacturing Company.
 - e. Pyro-Chem; Tyco Safety Products.
 - 2. Instruction Labels: Include pictorial marking system complying with NFPA 10, Appendix B and bar coding for documenting fire extinguisher location, inspections, maintenance, and recharging.
- B. Multipurpose Dry-Chemical Type: UL-rated nominal capacity, with monoammonium phosphate-based dry chemical in manufacturer's standard enameled container.
- C. Mounting Brackets: Manufacturer's standard steel, designed to secure fire extinguisher to wall or structure, of sizes required for types and capacities of fire extinguishers indicated, with plated or red baked-enamel finish.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Buckeye Fire Equipment Company.
 - b. J. L. Industries, Inc.; a division of Activar Construction Products Group.
 - c. Larsen's Manufacturing Company.
- D. Identification: Lettering complying with authorities having jurisdiction for letter style, size, spacing, and location. Locate as indicated by Architect.
 - 1. Identify bracket-mounted fire extinguishers with the words "FIRE EXTINGUISHER" in red letter decals applied to mounting surface.

- a. Orientation: Vertical.

1.5 INSTALLATION

- A. Examine fire extinguishers for proper charging and tagging.
 - 1. Remove and replace damaged, defective, or undercharged fire extinguishers.
- B. Install fire extinguishers and mounting brackets in locations indicated and in compliance with requirements of authorities having jurisdiction.
 - 1. Mounting Brackets: 54 inches above finished floor to top of fire extinguisher.
 - 2. Provide fire extinguishers as indicated on drawings.
- C. Mounting Brackets: Fasten mounting brackets to surfaces, square and plumb, at locations indicated.

END OF SECTION 10523

SECTION 10801 - TOILET AND BATH ACCESSORIES

1.1 SUMMARY

- A. Furnish and install all toilet accessories.

1.2 WARRANTY

- A. Silver Spoilage for Mirrors: 15 years.

1.3 MATERIALS

- A. Grab bars: 18-gauge heavy-duty tested to withstand pressures of 500 pounds. Bars shall be Type 304 stainless steel, 1 1/4" diameter, .064" minimum wall thickness with 3/16" thick flanges. Bar shall pass through flanges and be brazed thereto. Bars shall be peened grips with polished ends.
- B. Waste Receptacle: Surface mounted stainless steel unit. Removable leakproof, rigid molded plastic waste container
- C. Toilet Paper Holder: Double 5-1/4 inch diameter roll capacity; Type 304 stainless steel with keyed door, surface mounted.
- D. Liquid Soap Dispenser: Container body and back Type 304 stainless steel, satin finish. Shall dispense soaps, lotions and detergents, 40 fl. oz. capacity, unbreakable refill window, concealed wall fastening, locked hinged stainless steel filler top, vandal resistant.
- E. Napkin and Tampon Vendor: 18 gauge door; Type 304 satin finish stainless steel, welded construction; double coin operation.
- F. Surface Mounted Napkin Disposal: Type 304 stainless steel.
- G. Mirror Unit:
 - 1. Frame: Stainless-steel angle, 0.05 inch thick.
 - 2. Corners: Welded and ground smooth.
 - 3. Hangers: Produce rigid, tamper- and theft-resistant installation, using manufacturer's standard method.
 - 4. Size: As indicated on Drawings.
- H. Aerosol Dispenser
 - 1. Air Delights, Microburst 3000 Aerosol Dispenser #401219
 - a. Manufacturer: Air Delights, (1-800-440-5556), www.airdelights.com
 - b. Proactive Display (LCD)
 - c. Color: White
 - d. Keyless Lock
 - e. Provide 2 case packs (12 cans) of aerosol with each dispenser installed.

1.4 FABRICATION

- A. General: Materials shall be free from defects impairing strength, durability or appearance.
- B. Sections and shapes shall be rolled, formed, drawn or extruded as required for respective functions.
- C. Moulded work shall have sharply defined profile and shall be clean and straight. Plain work shall be leveled, straight and surfaces true and smooth. Edges, angles, and corners shall be square, clean and sharp, unless otherwise detailed.

- D. Fastenings, exposed metal fastenings, and accessories, unless Underwriters' prohibit for safety, shall be of same materials, texture, color and finish as the base metal to which applied.
- E. Molds, trim, frames and other metalwork shall be proper dimensions to receive masonry block and tile, plaster, ceramic tile, etc.

1.5 INSTALLATION

- A. All items specified under this Section shall be installed in strict accordance with manufacturer's recommendations and details on Plan.
- B. Grab bars shall be screwed to solid blocking in stud partitions.
- C. Toilet Accessories:
 - 1. See drawings for manufacturer, quantity and location.

END OF SECTION 10801

DIVISION 11 - EQUIPMENT

SECTION 11022 - LOCK BOXES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes fire-rated, high security industrial/governmental key boxes.

1.2 QUALITY ASSURANCE

- A. Standard: UL Listed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide the following:
 - 1. Knox Company, 1601 W. Deer Valley Road, Phoenix, AZ 85027, 800-552-5669
 - a. Knox-Box 3200 Series, Hinged Door Model

2.2 MATERIALS

- A. Exterior Dimensions:
 - 1. Recessed mount flange: 7"H x 7"W
- B. Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.
- C. Finish: Knox-Coat® proprietary finishing process
- D. Colors: Black, Dark Bronze or Aluminum, as indicated.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install key box assemblies complete with doors, frames, and accessories and according to requirements of fire-rated vault door assemblies' UL listing.
- B. Set key box frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.
- C. Adjust door hardware and operating mechanism to function smoothly, and lubricate as recommended by manufacturer.

END OF SECTION 11022

REQUIRED SUBMITTAL SUMMARY

03300 - Concrete:

- A. Product Data:
 - 1. Reinforcement and Forming Accessories.
 - 2. Admixtures.
 - 3. Aggregate Sizes and Usage (for each class of concrete).
 - 4. Curing Compounds.
 - 5. Quality Control Submittals:
- B. Design Data: Submit concrete mix design for each type of concrete.

10155 - Toilet Compartments

- A. Shop Drawings: For toilet compartments. Include plans, elevations, sections, details, and attachments to other work.



THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

ADDENDUM NO. 1

BOYS AND GIRLS CLUB BAYVIEW PARK RENOVATION: ITB 17-021

This addendum is issued as supplemental information to the bid package for clarification of certain matters of both a general and a technical nature. The referenced Invitation to Bid (ITB) package is hereby amended in accordance with the following items:

Attached with this Addendum is Plan Set Revision 1 and a revised bidder's check list. See number 11 below for details on the Plan Set Revision.

- 1) *Page 3 of the ITB states "Deadline for inquiries August 14, 2017." Page 7 states "...Bidder should request...in writing (at least 10 working days prior to bid opening)", which would make the deadline August 09, 2017. Please clarify the deadline for RFI's.*
 - a. **Response: The updated deadline for inquiries will remain August 14, 2017, five (5) days after the Mandatory Pre-Bid Meeting. The final addenda publishing will remain August 16, 2017.**

- 2) *Page 6 of the ITB States "Please submit one (1) original and (2) two flash drives...". Bidder's Checklist (Page 31, Item 11) states "...1 original and 1 flash drive. How many flash drives need to be submitted?"*
 - a. **Response: Submit (1) original and (2) flash drives. Refer to attached BIDDER'S CHECKLIST – REVISED.**

- 3) *Bidder's Checklist, Page 31, Item Number 11 states: "Bid submitted intact with the volume entitled " Bidding Requirement" and " Contract Forms"..." If we are required to submit Part 2, Contract Forms Conditions of the Contract...What is the contractor required to complete and execute in Part 2, Contract Forms?"*
 - a. **Response: Delete Item Number 11 in its entirety and replace with attached BIDDER'S CHECKLIST - REVISED:**

- 4) *Technical Specifications provided in Part 4 of the Project Manual (see Section 01100 Part 1, 1.3 C, and Part 2, 1.1 D & E) makes reference to "local mall management", "stores", and "existing loading dock and freight elevator". Please clarify.*
 - a. **Response: Delete Specification Section 01100 in its entirety.**

- 5) *Although the Drawings Index shows Sheets A0.1.1, 1.2, 1.3, 1.4, and 1.5 to be Specifications, those Sheets are missing from the Bid Set of Drawings. Can these Drawings be provided?*
 - a. **Response: Delete reference to Sheets A0.1.1, 1.2, 1.3, 1.4, and 1.5 on G.0.01. Refer to Part 4 (Technical Specifications) of the Contract Documents.**

- 6) *Sheet A2.1.1 Keynote Legend, Key Value #5 states "New concrete by County. Finish elevation at 7'-0" typical throughout entire space of building." Is this accurate or not? Either way, please clarify to provide additional information.*
- a. **Response: Delete Key Note #5 Plan Page A2.1.1. Contractor shall provide labor, materials and equipment as necessary to construct new concrete floor at specified finished elevation.**
- 7) *Related to Question 14 above: Sheet A3.2.2, detail 2 shows "New Concrete Floor by Others". Please clarify.*
- a. **See response for number 6**
- 8) *Sheet A3.2.2, Detail 5 states " Hot Water Tank to be relocated". Sheet P3.1.1 specifies a new water heater. Is an existing hot water heater to be relocated, or is a new one to be installed?*
- a. **Response: Contractor shall remove and dispose of existing hot water heater and install new per Sheet 3.1.1.**
- 9) *Lighting Fixture Schedule at Sheet E2.2.1 shows Type B (Decorative Pendant) as "Furnished by Owner". Sheet A2.2.1 Lighting Fixture Schedule shows the same fixture as "Owner Choice". Is Light Fixture Type B to be provided by Owner and installed by Contractor?*
- a. **Response: Yes**
- 10) *Is there a budget for this project?*
- a. **Response: The Architect of Record provided a construction cost estimate of \$475,000 - \$525,000.**
- 11) *Drawing Revisions: Replace all of the following drawings with the new drawing of the same number*
- a. **Replace Drawing Cover Sheet G0.0.1**
 - i. **Added Phase Plan**
 - b. **Replace First Floor Demolition Plan AD2.1.1**
 - i. **Added Key Note 11**
 - c. **Replace Existing Site Plan AE1.1.1**
 - i. **Added clouded landscape preservation area**
 - d. **Replace First Floor Plan A2.1.1**
 - i. **Added Key Notes 12-14 and replace Key Note 5**
 - e. **Replace Second Floor Plan A2.1.2**
 - i. **Added Key Note 9**
 - f. **Replace First Floor Reflected Ceiling Plan A2.2.1**
 - i. **See clouded area for various RCP changes**
 - g. **Replace Building Section Page A3.2.2**
 - i. **See clouded area for additions to the Contractor's responsibilities**
 - h. **Replace Door and Finish Schedule Page A6.2.1**
 - i. **See change to the door schedule**
 - i. **Replace Mechanical Plan M2.1.1**
 - i. **See clouded area for miscellaneous Mechanical changes**
 - j. **Replace Mechanical Schedule Page M4.1.1**
 - i. **See changes in exhaust fan schedule**

- k. Replace Plumbing Plans and Risers Page P2.1.1**
 - i. See clouded area for miscellaneous Plumbing changes**
- l. Replace Power Plans Page E2.1.1**
 - i. See clouded area for miscellaneous Power Plan changes**
- m. Replace Lighting Plans Page E2.2.1**
 - i. See clouded area for additions to the Contractor's responsibilities**

12) Specification Revisions: The following are specification clarifications as part of the Addendum 1

- a. Specification Section 09911**
 - i. 1.8 Exterior Latex Paints**
 - 1. A. Per Drawings**

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 with Attachment by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

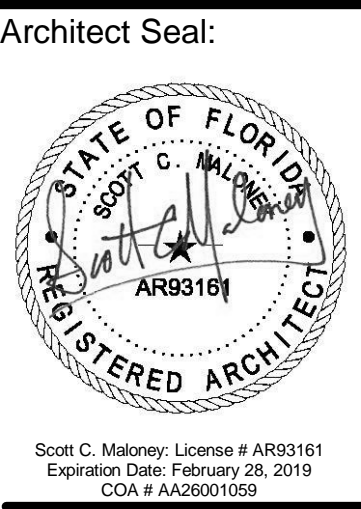
Name of Business

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and proper completion and submission of his bid.)

- 1. All Contract Documents thoroughly read and understood. []
- 2. All blank spaces in Proposal filled in, using black ink. []
- 3. Total and unit prices added correctly and attached Schedule of Values []
- 4. Addenda acknowledged. []
- 5. Subcontractors are named as indicated in the Proposal. []
- 6. Experience record included. []
- 7. Proposal signed by authorized officer. []
- 8. Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond. []
- 9. Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work. []
- 10. Bidder, if successful, able to obtain and/or demonstrate possession of required licenses and certificates within (10) ten calendar days after receiving a Notice of Award. []
- 11. BID submitted intact with the volume entitled "Bidding Requirements", 1 original and 2 flash drive as stated in the invitation to bid. []
- 12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid. []

* * * * *



Submissions:
 45517 - PERMIT SET
 RFI # & CITY COMMENTS | 2017.07.31

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Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

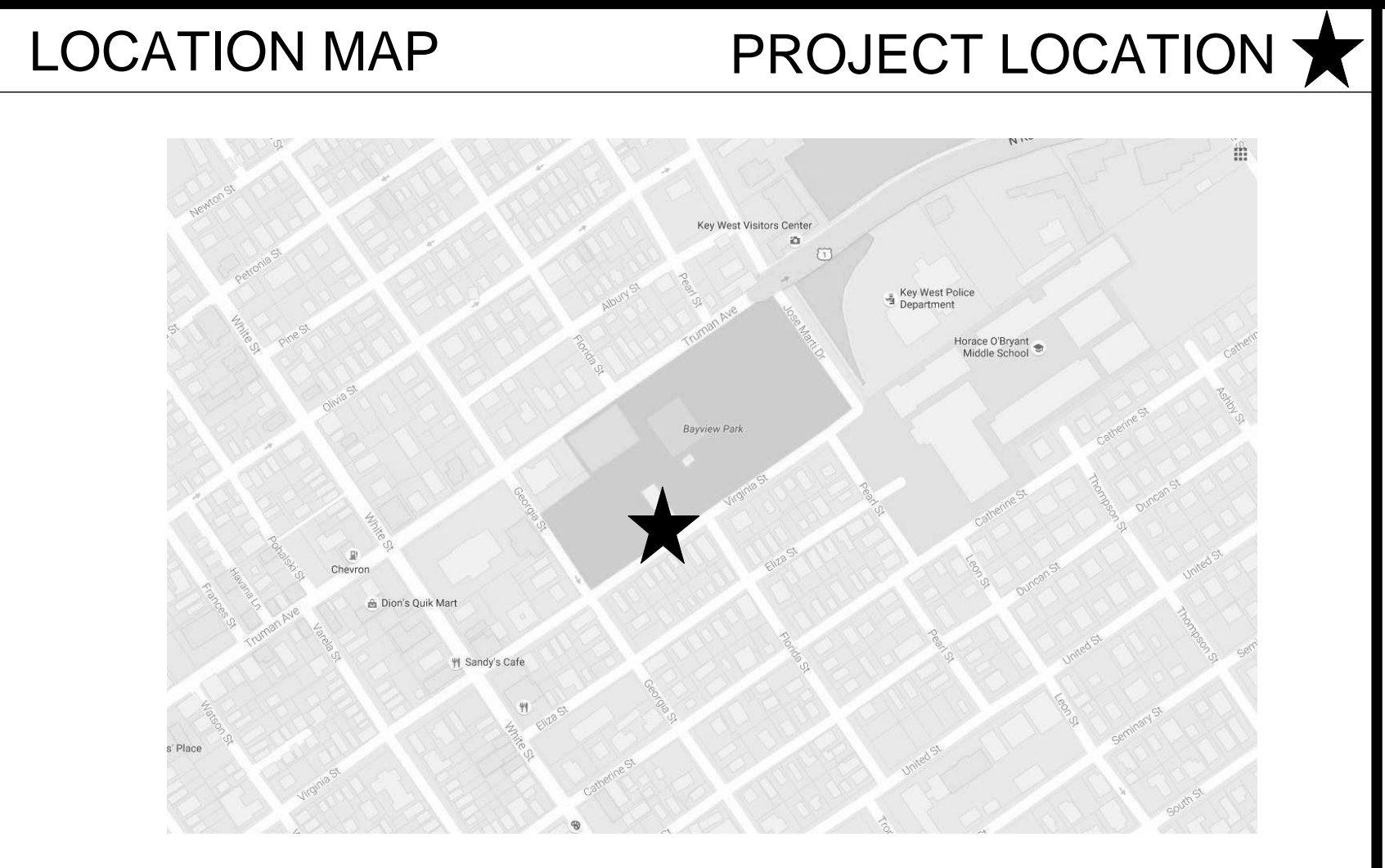
Drawing Size Project #: 24 x 36 16110
 Drawn By: DA Checked By: PB
 Title: COVER SHEET

Sheet Number: **G0.0.1**

Date: 4/25/17 - PERMIT SET
 ©2017 by K2M Design, Inc.

Boys and Girls Club Renovation

Bayview Park Vacant Building Key West, FL 33040



CODE SUMMARY

CRITERIA	BUILDING COMPLIANCE		FBC 2014 REFERENCE
	PER CODE	PER BUILDING	
USE GROUP CLASSIFICATION		ASSEMBLY: A-3	FBC CH. 3
CONSTRUCTION CLASSIFICATION		TYPE IIIIB	FBC CH 6
FIRE PROTECTION SYSTEMS	NOT REQUIRED	BUILDING NOT SPRINKLED	FBC CH 9
GENERAL BUILDING HEIGHTS AND AREAS	ALLOWABLE 2 STORIES	2 STORIES	FBC T503
	ALLOWABLE 9,500 SQ FT	4,912 GSF	FBC T503
FIRE RETARDANT TREATED WOOD FRAMING COMPLYING WITH SECTION 2302.2 SHALL BE PERMITTED WITHIN EXTERIOR WALL ASSEMBLIES OF A 2-HR RATING OR LESS.			
TOTAL GROSS BUILDING AREA		4,912 GSF	
NUMBER OF EXITS	2 EXITS REQUIRED	5 PROVIDED	FBC 1015
NUMBER OF ACCESSIBLE EXITS	2 EXITS REQUIRED	3 PROVIDED	FBC 1007
EGRESS WIDTH	20" PER OCCUPANT = 34.8" REQUIRED	324" PROVIDED	FBC 1005.3.2
TRAVEL DISTANCE	200' MAX	SEE LIFE SAFETY SHEETS	FBC 1016.2

NO ELEVATOR REQUIRED PER FBC ACCESSIBILITY 201.1.1 EXCEPTION 2 AND 3.

AREA CALCULATIONS FOR OCCUPANCY PER TABLE 1004.1.2					
LOCATION	USE	TOTAL SQ FT	SF/OCCUPANT	# OCCUPANTS	
FIRST FLOOR:	ASSEMBLY: CONCENTRATED	678 NET	7 NET	97	
	ASSEMBLY: UNCONCENTRATED	131 NET	15 NET	9	
	CLASSROOM	1083 NET	20 NET	54	
	BUSINESS	564 GROSS	100 GROSS	6	
	KITCHEN (WARMING/ SERVE ONLY)	290 GROSS	200 GROSS	2	
	ACCESSORY (STORAGE/MECH)	288 GROSS	300 GROSS	1	
SECOND FLOOR:	BUSINESS	209 GROSS	100 GROSS	3	
	ACCESSORY (STORAGE/MECH)	752 GROSS	300 GROSS	3	
				TOTAL:	174

OCCUPANT LOAD SHALL BE POSTED PER FBC 1004.1.2

TOILET FACILITIES PER FBC PLUMBING TABLE 403.1			
TYPE	CODE	# REQUIRED	# PROVIDED
WATER CLOSET	WOMEN: 1/65	2	2
	MEN: 1/125	1	1
LAVATORY	MEN & WOMEN: 1/200	1 PER EACH	2 PER EACH
URINAL			2
DRINKING FOUNTAIN	1/500	1	1
SERVICE SINK	1 SS	1	1

G.C. TO INSTALL FIRE EXTINGUISHERS PER FIRE MARSHAL DIRECTION

DESIGN TEAM

ARCHITECT:
 K2M Design, Inc.
 Scott Maloney, NCARB, LEED AP
 3000 Overseas Highway
 Marathon, Florida 33050
 305.292.7722

STRUCTURAL, CIVIL, MEP ENGINEER:
 K2M Design
 Steven Grasley, P.E.
 3000 Overseas Highway
 Marathon, FL 33050
 305.289.7980

CONTRACTOR GENERAL NOTES:

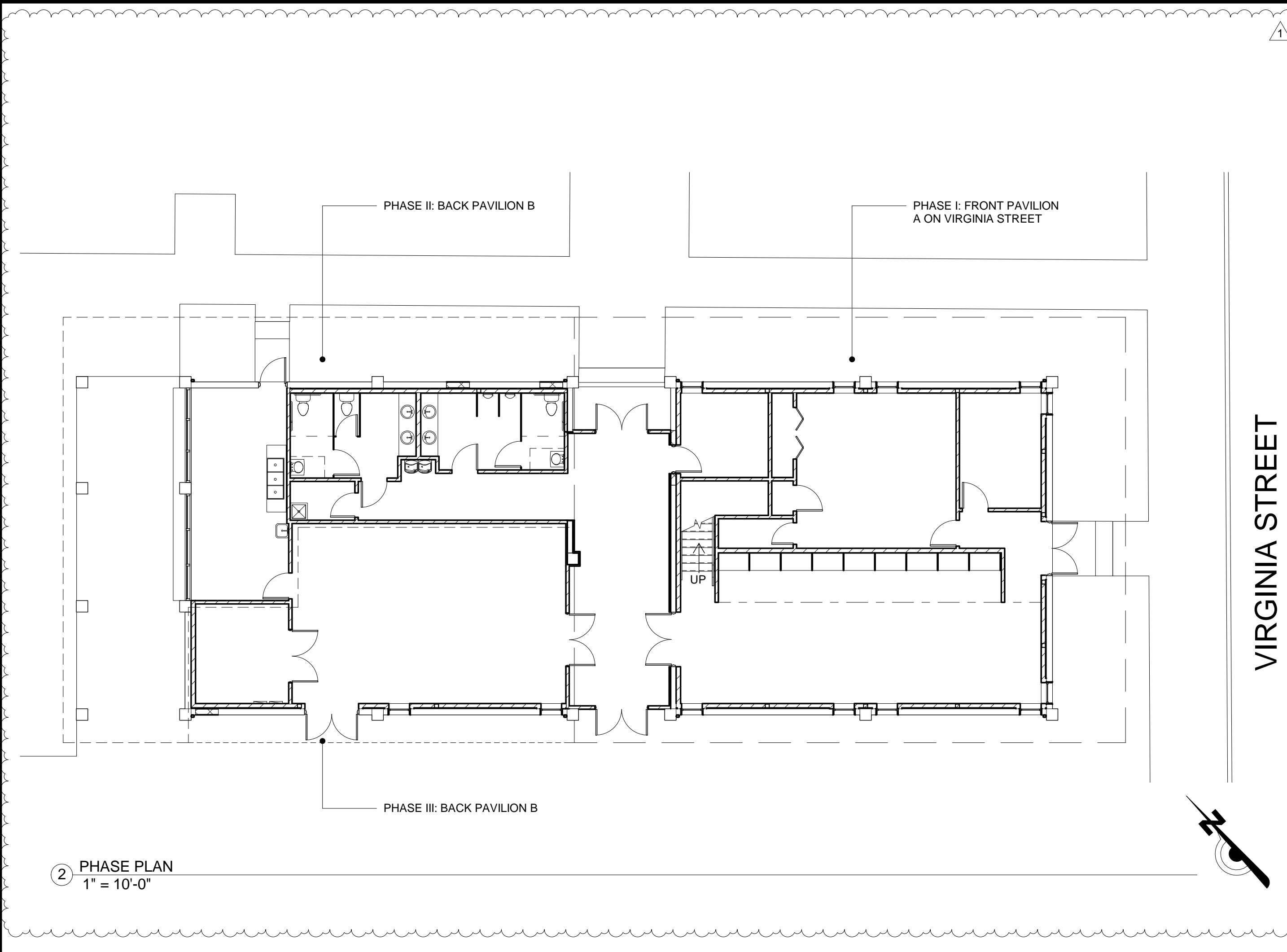
- ALL WORK TO BE IN ACCORDANCE WITH APPLICABLE CODES.
- WORKMANSHIP TO MEET OR EXCEED ACCEPTED STANDARDS OF RESPECTIVE TRADES.
- VERIFY ALL DIMENSIONS, ELEVATIONS, AND FIELD CONDITIONS BEFORE START OF CONSTRUCTION.
- NOTIFY ARCHITECT IF ANY CONFLICTS EXIST PRIOR TO COMMENCEMENT OF WORK.
- FOR ANY TYPE I OR TYPE II CONSTRUCTION PROJECTS, FIRE RETARDANT TREATED WOOD (EXTERIOR OR INTERIOR GRADE) MUST BE USED IN ALL WOOD CONSTRUCTION MATERIALS.
- FOR ALL WALL SYSTEMS WITH EIFS USE EXTERIOR GRADE GLASS MATT SHEATHING OR CEMENTITIOUS BOARD ONLY.

DRAWING INDEX

SHEET NUMBER	SHEET NAME	ISSUED	CURRENT REVISION		
			#	NAME	DATE
GENERAL					
G0.0.1	COVER SHEET	04.25.2017	1	RFI RESPONSE	2017.07.31
G0.0.2	ACCESSIBILITY GUIDELINES	04.25.2017			
G0.0.3	ACCESSIBILITY GUIDELINES	04.25.2017			
A0.1.1	SPECIFICATIONS	04.25.2017			
A0.1.2	SPECIFICATIONS	04.25.2017			
A0.1.3	SPECIFICATIONS	04.25.2017			
A0.1.4	SPECIFICATIONS	04.25.2017	1	RFI RESPONSE	2017.07.31
A0.1.5	SPECIFICATIONS	04.25.2017			
A0.3.1	LIFE SAFETY PLAN	04.25.2017			
ARCHITECTURAL					
AE1.1.1	EXISTING SITE PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31
AD2.1.1	FIRST FLOOR DEMOLITION PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31
A2.1.1	FIRST FLOOR PLAN AND NOTES	04.25.2017	1	RFI RESPONSE	2017.07.31
A2.1.2	SECOND FLOOR PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31
A2.2.1	FIRST FLOOR CEILING PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31
A2.2.2	SECOND FLOOR CEILING PLAN	04.25.2017			
A3.1.1	ELEVATIONS	04.25.2017			
A3.1.2	ELEVATIONS	04.25.2017			
A3.2.2	BUILDING & WALL SECTIONS	04.25.2017	1	RFI RESPONSE	2017.07.31
A4.1.1	ENLARGED FLOOR PLANS AND DETAILS	04.25.2017			
A6.2.1	SCHEDULES & DETAILS	04.25.2017	1	RFI RESPONSE	2017.07.31
A6.2.2	SCHEDULES & DETAILS	04.25.2017			
STRUCTURAL					
S0.1.0	GENERAL NOTES	04.25.2017			
S1.1.1	FIRST FLOOR SLAB PLAN & DETAILS	04.25.2017			
S2.1.1	SECOND FLOOR FRAMING PLAN	04.25.2017			
MECHANICAL					
M0.1.1	MECHANICAL SPECIFICATIONS & NOTES	04.25.2017			
M2.1.1	MECHANICAL PLANS	04.25.2017	1	RFI RESPONSE	2017.07.31
M3.1.1	MECHANICAL DETAILS	04.25.2017			
M4.1.1	MECHANICAL SCHEDULES	04.25.2017	1	RFI RESPONSE	2017.07.31
PLUMBING					
P0.1.1	PLUMBING SPECIFICATIONS AND NOTES	04.25.2017			
P2.1.1	PLUMBING PLAN AND RISER DIAGRAMS	04.25.2017	1	RFI RESPONSE	2017.07.31
P3.1.1	PLUMBING SCHEDULES AND DETAILS	04.25.2017			
ELECTRICAL					
E0.1.1	ELECTRICAL NOTES & SPECIFICATIONS	04.25.2017			
E2.1.1	FIRST AND SECOND FLOOR POWER PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31
E2.2.1	FIRST & SECOND FLOOR LIGHTING PLAN	04.25.2017	1	RFI RESPONSE	2017.07.31

SYMBOLS

101	WINDOW NUMBER	±	PLUS OR MINUS LAST INDICATED UNIT
A	WALL TYPES	☉	CENTER LINE
101	DOOR NUMBER	∅	DIAMETER OR ROUND
1	REVISION NUMBER	L	ANGLE
ROOM NAME #	ROOM/SPACE NUMBER]	CHANNEL
S.F.	SQUARE FOOTAGE		
AA	COLUMN LINE		
xxx xxx	EXTERIOR ELEVATION NO. DWG. REF. NO.		
X AXX	WALL SECTION NO. DWG. REF. NO.		
xxx xxxx	DETAIL NO. DWG. REF. NO.		
xxx xxxx	INTERIOR ELEVATION NO. DWG. REF. NO.		



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Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

Drawing Size 24 x 36
 Project # 16110
 Drawn By: DA
 Checked By: PB
 Title:
FIRST FLOOR DEMOLITION PLAN

Sheet Number:
AD2.1.1
 Date: 4/25/17 - PERMIT SET
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GENERAL DEMOLITION NOTES
 NOTE: ALL DEMOLITION WORK THIS SHEET BY OTHERS. DEMOLITION IS NOT IN CONTRACT AND ONLY PROVIDED FOR REFERENCE.

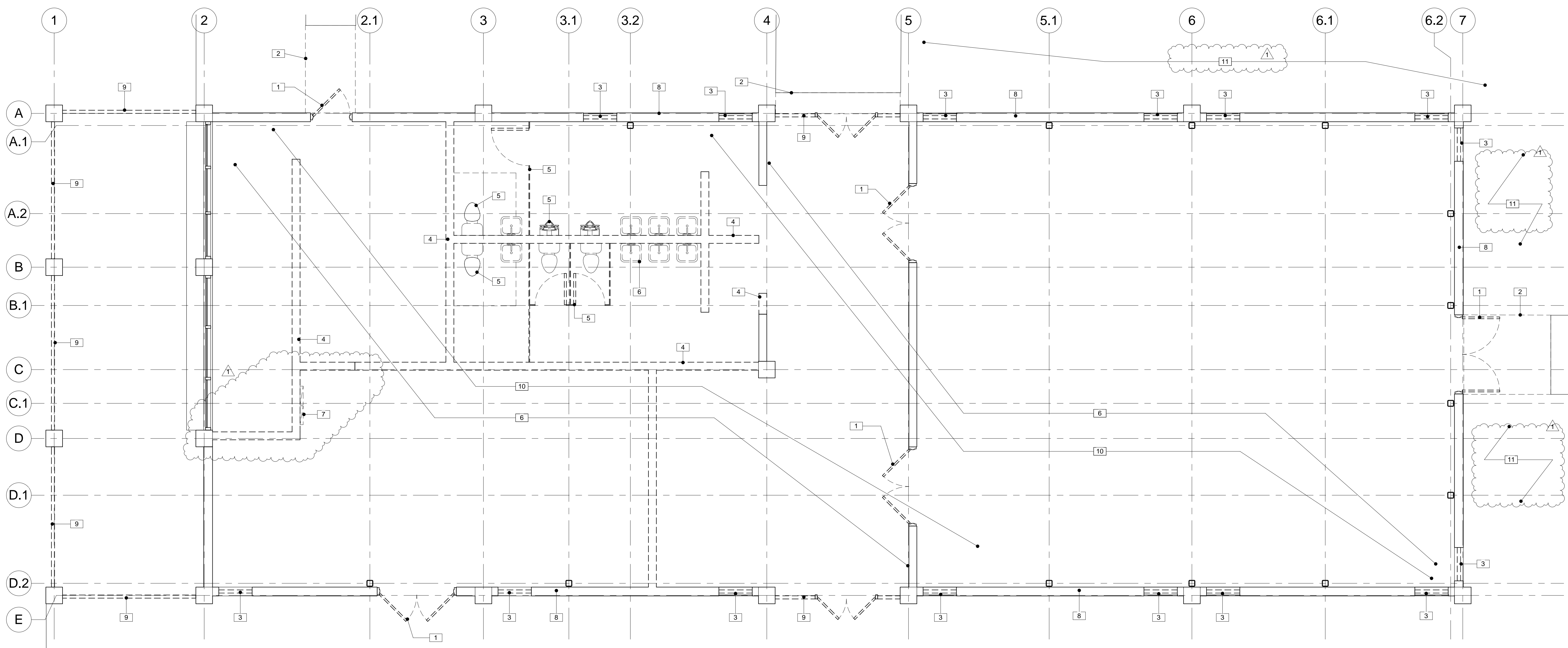
SCOPE OF DEMOLITION:
 1. THE EXISTING CONDITION/DEMOLITION DRAWINGS ARE INTENDED AS A GENERAL GUIDE TO THE DEMOLITION REQUIRED FOR THIS PROJECT. DEMOLITION IS NOT SHOWN IN COMPLETE DETAIL AND IT SHALL BE THE RESPONSIBILITY OF THE DEMOLITION CONTRACTORS TO REMOVE EXISTING CONSTRUCTION AS REQUIRED TO ACCOMPLISH THE NEW DESIGN INTENT AND/OR WORK SHOWN OR REASONABLY IMPLIED FOR CONSTRUCTION OF THE FLOOR PLAN. THE CONTRACTOR SHALL REFER TO THE WORK SHOWN ON ALL OTHER DRAWINGS IN THE SET FOR THE EXTENT OF DEMOLITION REQUIRED TO PERFORM WORK INTENT.

GENERAL CONDITIONS:
 1. ALL CONTRACTORS ARE REQUIRED TO VISIT THE JOB SITE TO VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING ANY WORK. NOTIFY ARCHITECT AS SOON AS POSSIBLE OF ANY DISCREPANCIES FOR RESOLUTION OF THE ISSUE(S) PRIOR TO THE BEGINNING OF ANY WORK.
 2. TYPICAL DEMOLITION CONTRACTOR AND/OR GENERAL CONTRACTOR ARE TO REMOVE ALL EXISTING ITEMS SHOWN ON PLANS, AND ALL NOTED ITEMS INCLUDING ALL ITEMS SHOWN ON MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DEMOLITION DRAWINGS IN THE SET UNLESS OTHERWISE NOTED TO REMAIN OR TO BE REUSED (SEE MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DEMOLITION DRAWINGS AND NOTES).
 A. FOR QUESTIONABLE ITEMS INCLUDING, BUT NOT LIMITED TO FOUND/UNKNOWN CONDITIONS AND ITEMS NOT SHOWN/LISTED ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS THE CONTRACTOR WILL COORDINATE WITH THE ARCHITECT BEFORE REMOVING THE ABOVE MENTIONED ITEM.
 B. CONTRACTOR TO REMOVE ALL ABANDONED CONDUIT, DUCTWORK, HANGERS, CEILING TILE, GRID, FRAMING, PIPING, ETC. THROUGHOUT WORK AREA.
 C. GENERAL CONTRACTOR SHALL RELOCATE ANY EXISTING J-BOXES, SWITCHES, ETC. THAT ARE BEING REUSED AND REQUIRED TO BE MOVED TO ACCOMMODATE NEW WALL CONSTRUCTION OR NEW FURRING.
 3. GENERAL CONTRACTOR SHALL COORDINATE ALL DEMOLITION WITH OTHER TRADES AND AS NOTED IN THE MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DEMOLITION DRAWINGS AND NOTES.

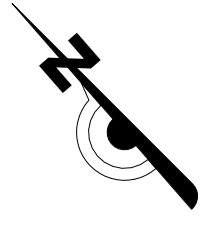
BUILDING CONDITIONS:
 1. ALL CONTRACTORS ARE TO PATCH ALL SURFACES OF EXISTING INTERIOR PARTITIONS THAT ARE NOT BEING DEMOLISHED OR WERE DAMAGED DUE TO DEMOLITION PROCEEDINGS.
 2. REMOVE ALL EXISTING FLOOR FINISHES, ADHESIVE, ETC. AS SHOWN ON THE DRAWINGS (PATCH AND REPAIR) TO ACCOMMODATE NEW FLOOR FINISHES. PREPARE FLOOR SURFACE PER MANUFACTURER'S RECOMMENDATIONS. LEVEL AREAS AND FEATHER TO NEW AND DIFFERENT FINISHED TO AVOID TRIP HAZARDS > 1/2" (FEATHER SLOPE 1:12).
 3. REMOVE ALL INDICATED WALLS, WALL FURRING, DOOR, FRAMES, ETC. THROUGHOUT THE AREA TO FACILITATE NEW CONSTRUCTION AS SHOWN IN THE CONSTRUCTION DOCUMENTS.
 4. THE DEMOLITION CONTRACTOR SHALL EXERCISE CARE SO THAT ONLY THE CONSTRUCTION INDICATED OR REASONABLY IMPLIED TO BE REMOVED SHALL BE DEMOLISHED. THE EXISTING CONSTRUCTION TO REMAIN SHALL BE LEFT INTACT AND UNDAMAGED, TYPICAL. ANY DAMAGE(S) WILL BE REQUIRED TO BE REPAIRED BY THE CONTRACTOR(S) AT NOT COST TO THE PROJECT INCLUDING AREAS OUTSIDE OF THE EXTENTS OF WORK.

HEALTH, SAFETY, AND WELFARE:
 1. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS DURING DEMOLITION AND CONSTRUCTION TO PROTECT AND MAINTAIN THE INTEGRITY AND OPERATION OF EXISTING OR TEMPORARY LIFE SAFETY AND EMERGENCY EGRESS AREAS AND SYSTEMS AS REQUIRED BY LOCAL BUILDING CODES.
 2. THE GENERAL CONTRACTOR WILL VERIFY WITH THE ARCHITECT ANY EXISTING SECURITY ITEMS TO BE REMOVED AND REUSED. THE GENERAL CONTRACTOR WILL REINSTALL AS DIRECTED.
 3. THE CONTRACTORS ARE RESPONSIBLE FOR THE REMOVAL OF ALL DEMOLITION AND CONSTRUCTION DEBRIS GENERATED FROM WORK, TAKING CARE TO PREVENT OVERLOADING OF FLOOR ASSEMBLY AND PROTECTION OF ADJACENT EXISTING CONSTRUCTION.
 4. DURING DEMOLITION, THE CONTRACTOR(S) SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT STRUCTURAL AND OTHER DAMAGE TO THE BUILDINGS EXISTING WALLS AND FINISHES.
 5. ALL ITEMS INDICATED TO BE REMOVED AND ITEMS NOT INDICATED TO BE REUSED SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTORS AS AGREED UPON AND DIRECTED BY THE OWNER OR THEIR AGENT.

Keynote Legend	
Key Value	Keynote Text
1	G.C. TO REMOVE EXISTING DOOR, FRAME, AND ANY AMOUNT REQUIRED FOR NEW HEADER OF NEW DOOR. PROVIDE A CLEAN OPENING SURFACE TO RECEIVE NEW DOOR.
2	REMOVE PORTION OF EXISTING SIDEWALK. COORDINATE WITH FLOOR PLAN FOR SMOOTH SLOPE TO NEW SPACE ELEVATION HEIGHT.
3	G.C. TO REMOVE EXISTING WINDOW, FRAME ASSOCIATED MATERIAL AND PROVIDE A SMOOTH CLEAN SURFACE FOR NEW APPLICATION. COORDINATE WITH FLOOR PLAN AND ELEVATIONS.
4	DASHED WALLS INDICATE EXISTING WALL TO BE REMOVED IN THEIR ENTIRETY, INCLUDING BUT NOT LIMITED TO, ANCHORS INTO SLAB AND STRUCTURE ABOVE.
5	REMOVE PLUMBING FIXTURES IN THEIR ENTIRETY. COORDINATE WITH PLUMBING DRAWINGS TO THE EXTENT OF REROUTING SUPPLY AND DRAIN LINES.
6	REMOVE EXISTING LIGHT FIXTURES IN THEIR ENTIRETY INCLUDING CONDUITS AND WIRES BACK TO THE POINT OF CONNECTION AT ELECTRICAL PANEL THROUGHOUT ENTIRE SPACE. TYP.
7	REMOVE EXISTING ELECTRICAL PANEL, COORDINATE WITH ELECTRICAL DRAWINGS.
8	REMOVE EXISTING LOUVER PANELS ABOVE AND PROVIDE A CLEAN SMOOTH SURFACE TO RECEIVE NEW WINDOW UNIT. COORDINATE WITH SECOND FLOOR PLAN AND ELEVATIONS FOR MORE INFORMATION.
9	REMOVE EXISTING FENCE IN ITS ENTIRETY. PATCH AND REPAIR SURFACES AS REQUIRED.
10	REMOVE EXISTING CONCRETE SLAB IN ITS ENTIRETY AND PROVIDE A CLEAN AREA FOR NEW CONCRETE FLOOR AT NEW ELEVATION. COORDINATE WITH FLOOR PLAN AND STRUCTURAL DRAWINGS.
11	COORDINATE WITH SITE PLAN FOR TREE PROTECTION PROCEDURES IN THIS AREA.



1 FIRST FLOOR DEMOLITION PLAN
 AD2.1.1 1/4" = 1'-0"





Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

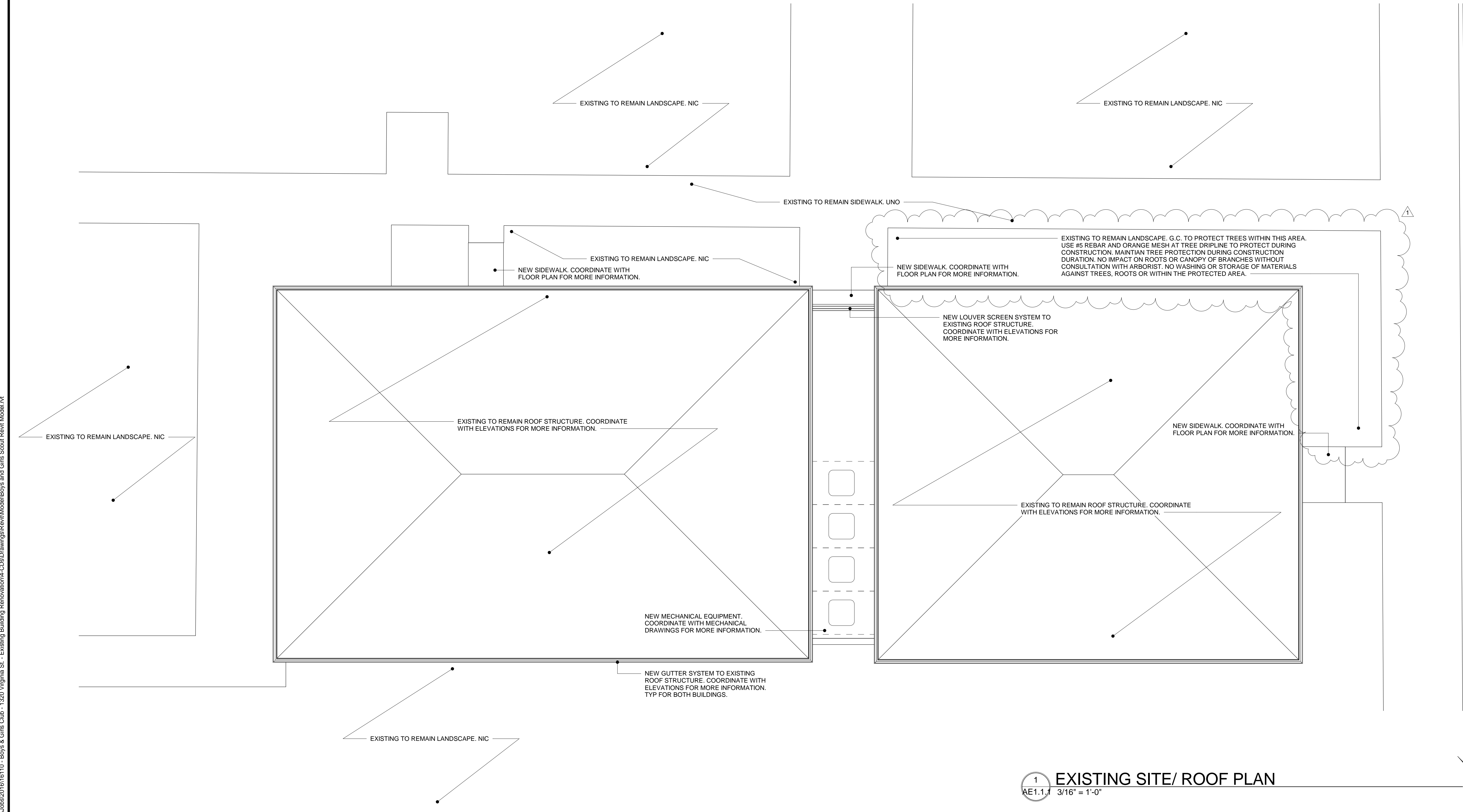
Boys and Girls Club Renovation

Bayview Park Vacant Building
Key West, FL 33040
Boys and Girls Club of Key West

Drawing Size	Project #
24 x 36	16110
Drawn By:	Checked By:
DA	PB
Title:	

EXISTING SITE PLAN

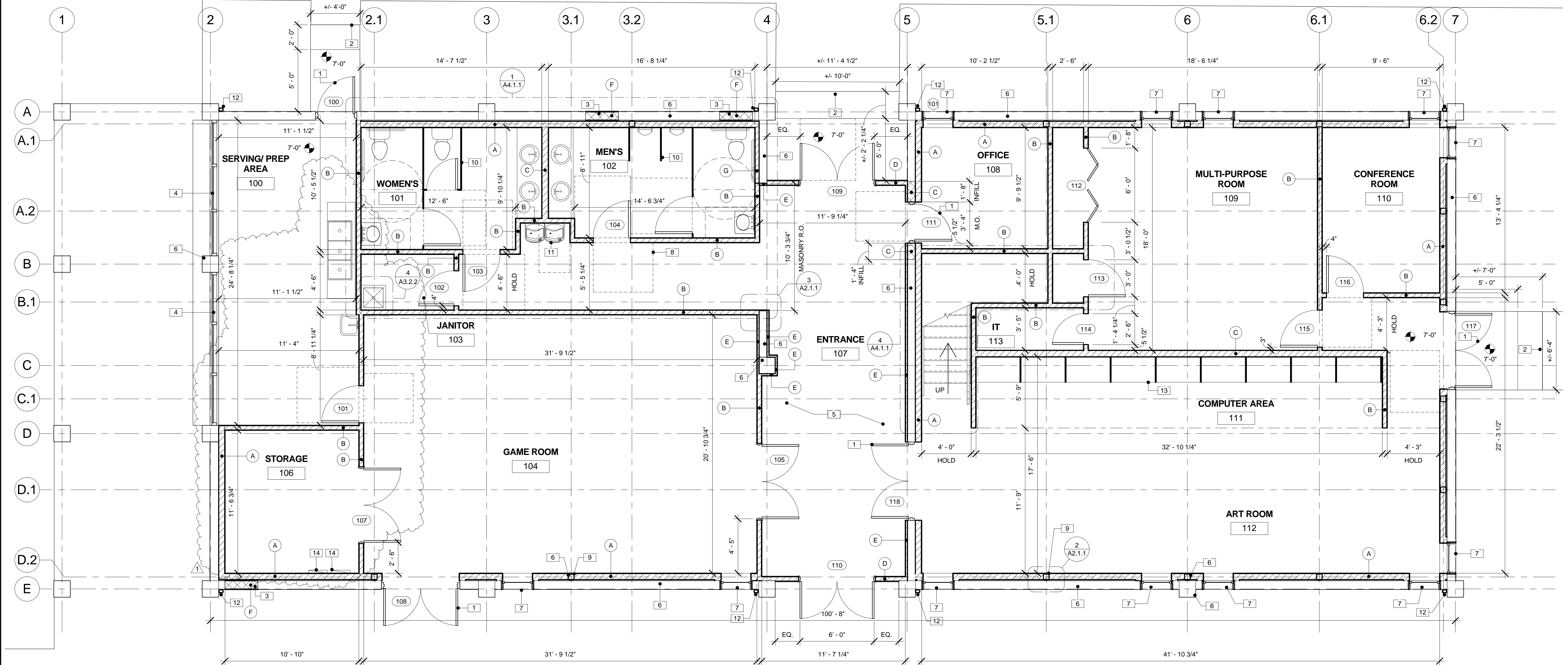
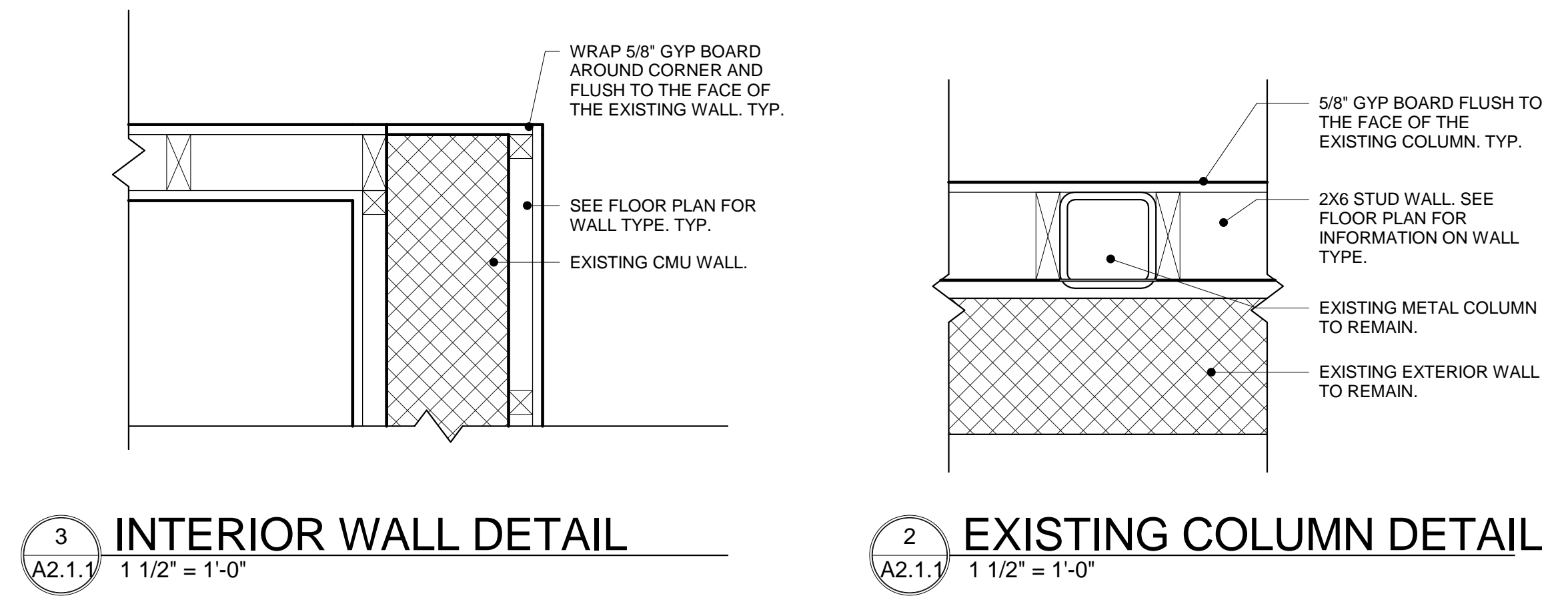
Sheet Number:
AE1.1.1
Date: 4/25/17 - PERMIT SET
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EXISTING SITE/ ROOF PLAN
3/16" = 1'-0"

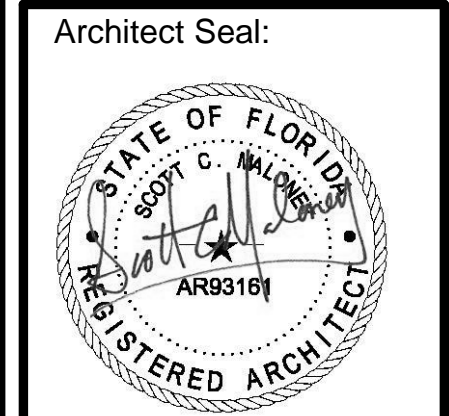
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- ### GENERAL FLOOR PLAN NOTES:
- SEAL ALL HOLES LEADING FROM THE OUTSIDE TO THE INSIDE OF THE SPACE, INCLUDING AROUND ALL PIPES AND WIRE RUNS AND CAP OFF AND SEAL ANY OPEN PIPES.
 - SEE WALL SCHEDULE FOR WALL TYPES.
 - G.C. TO VERIFY ALL FINISH MATERIALS WITH OWNER PRIOR TO ORDERING SUBSTRATE AND DRYWALL.
 - DIMENSIONS SHOWN TO FINISH FACE OF MATERIAL.
 - G.C. TO VERIFY ROUGH OPENINGS OF DOORS AND WINDOWS PRIOR TO ORDERING PRODUCTS FOR INSTALLATION.
 - SET DOORS 4" MIN OFF ADJACENT WALL TO PROVIDE AREA FOR TRIM, UNO.
 - G.C. TO INSTALL SOUND ATTEN. INSULATION WITHIN ALL PLUMBING WALLS INCLUDING BATHROOMS, OFFICES.
 - G.C. TO USE 5/8" GREENBOARD IN LIEU OF 5/8" GYP BOARD AT ALL WET WALL LOCATIONS, TYP.
 - G.C. TO PROVIDE ALTERNATE LINE ITEM TO USE METAL STUDS IN LIEU OF WOOD STUDS. SEE METAL STUD DETAILS ON SHEET A2.1.2 FOR REFERENCE.



Key Value	Keynote Text
1	G.C. TO INSTALL NEW DOOR WITHIN EXISTING DOOR OPENING. INSTALL PER MFR RECOMMENDATIONS, SEE DOOR SCHEDULE FOR MORE INFORMATION.
2	SLOPE SIDEWALK AWAY FROM BUILDING AT A MAXIMUM OF 1:12 TO MATCH FINISH FLOOR HEIGHT WITH EXISTING SIDEWALK.
3	G.C. TO INFILL AREA WITH CMU AND MATCH ADJACENT FINISH MATERIAL STUCCO IN COLOR AND TEXTURE, TYP.
4	CLEAN AND REPAIR AS REQUIRED EXISTING SERVING WINDOWS.
5	NEW CONCRETE BY CONTRACTOR, FINISH ELEVATION AT 7'-0" TYP. THROUGHOUT ENTIRE SPACE OF BUILDING.
6	EXISTING WALL AND STRUCTURAL COLUMNS TO REMAIN, TYP.
7	NEW WINDOW, SEE WINDOW SCHEDULE FOR MORE INFORMATION. INFILL AROUND WINDOW AS REQUIRED TO MATCH ADJACENT STRUCTURE/FINISH MATERIAL. INFILL EXTERIOR FINISH TO MATCH ADJACENT COLOR AND TEXTURE.
8	DASHED LINES INDICATE CLEAR FLOOR SPACE PER ACCESSIBILITY REQUIREMENTS, TYP.
9	ALIGN BACK FACE OF GYP BOARD TO FACE OF EXISTING COLUMN. SEE DETAIL, TYP FOR ALL METAL COLUMNS.
10	TOILET PARTITIONS BY OTHERS, TYP.
11	H-I/O HANDICAP ACCESSIBLE DRINKING FOUNTAIN. COORDINATE WITH PLUMBING DRAWINGS AND INSTALL PER ACCESSIBILITY STANDARDS, TYP.
12	NEW WHITE ALUMINUM DOWNSPOUT TO SPLASH BLOCK. COORDINATE WITH ELEVATIONS FOR MORE INFORMATION.
13	DESKS BY OTHERS. G.C. TO COORDINATE WITH OWNER FOR TYPE AND MFR PRIOR TO ORDERING AND INSTALLING.
14	NEW ELECTRICAL PANELS. COORDINATE WITH ELECTRICAL DRAWINGS, TYP.

WALL SCHEDULE	
Type Mark	Description
A	2x6 WOOD STUD W/ 5/8" GYP BOARD ONE SIDE
B	2x4 WOOD STUD W/ 5/8" GYP BOARD BOTH SIDES
C	2x6 WOOD STUD W/ 5/8" GYP BOARD BOTH SIDES
D	EXTERIOR STUCCO ON 1/2" PLYWOOD SHEATHING ON 2x4 WOOD STUDS W/ 5/8" GYP BOARD ON INTERIOR
E	2x2 WOOD FURRING W/ 5/8" GYP BOARD ONE SIDE
F	8" CMU BLOCK INFILL WITH STUCCO EXTERIOR FINISH
G	2x4 WOOD STUD W/ 5/8" GYP BOARD ONE SIDE



Scott C. Maloney, License # AR93161
 Expiration Date: February 28, 2019
 CCA # AA26001059

Submissions:	
1	RFIs & CITY COMMENTS
2017.07.31	

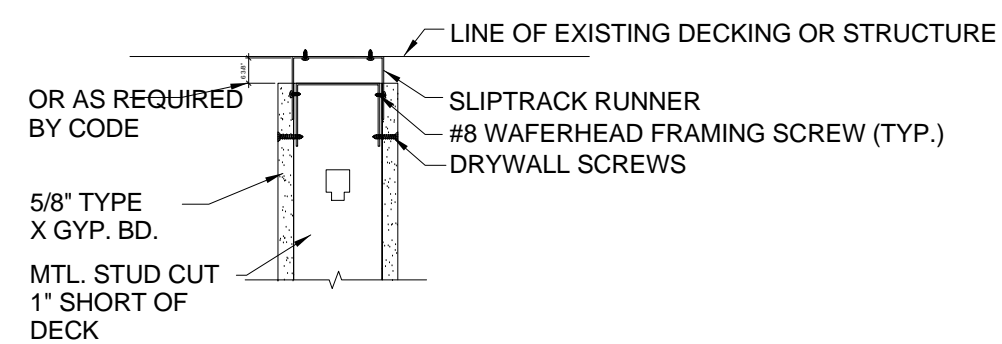
Architect Seal:
Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

Drawing Project #: Size 24 x 36 16110
 Drawn By: Checked By: DA PB
 Title: FIRST FLOOR PLAN

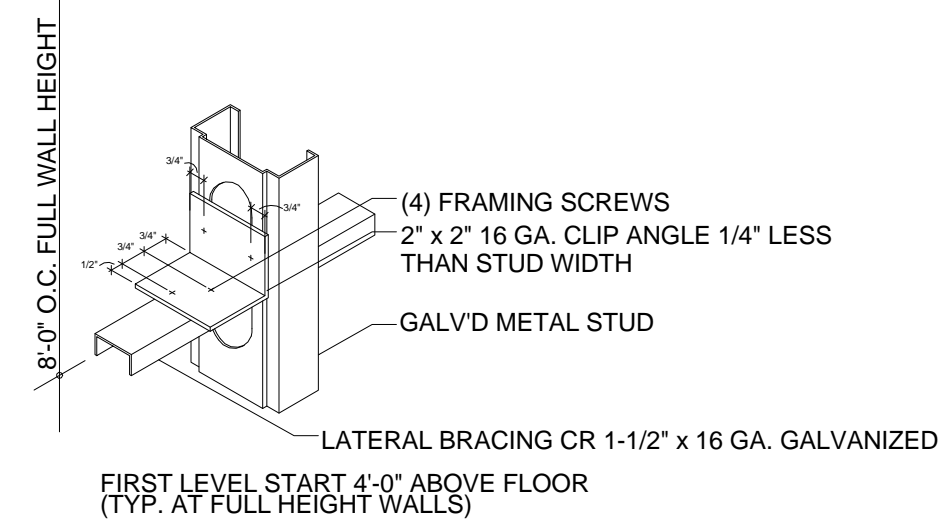
Sheet Number: **A2.1.1**
 Date: 4/25/17 - PERMIT SET
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METAL STUD LIMITING HEIGHT

STUD SIZE	GA (MILS)	STUD SPACING	LIMITING HEIGHT	STUD SIZE	GA (MILS)	STUD SPACING	LIMITING HEIGHT
3-5/8" DRYWALL GRADE	25 (18)	16	12'-5"	6" DRYWALL GRADE	22 (27)	16	22'-4"
	22 (27)	24	10'-10"		22 (27)	24	19'-6"
	20 (30)	24	12'-8"		20 (30)	24	23'-1"
3-5/8" STRUCTURAL GRADE	20 (30)	16	15'-0"	6" STRUCTURAL GRADE	20 (30)	24	20'-2"
	20 (33)	24	13'-6"		20 (33)	24	23'-11"
	18 (43)	16	21'-3"		18 (43)	16	26'-0"
	16 (54)	24	18'-7"		18 (43)	24	22'-9"
	16 (54)	16	22'-9"	16 (54)	16	27'-11"	
		24	19'-11"			24	24'-4"



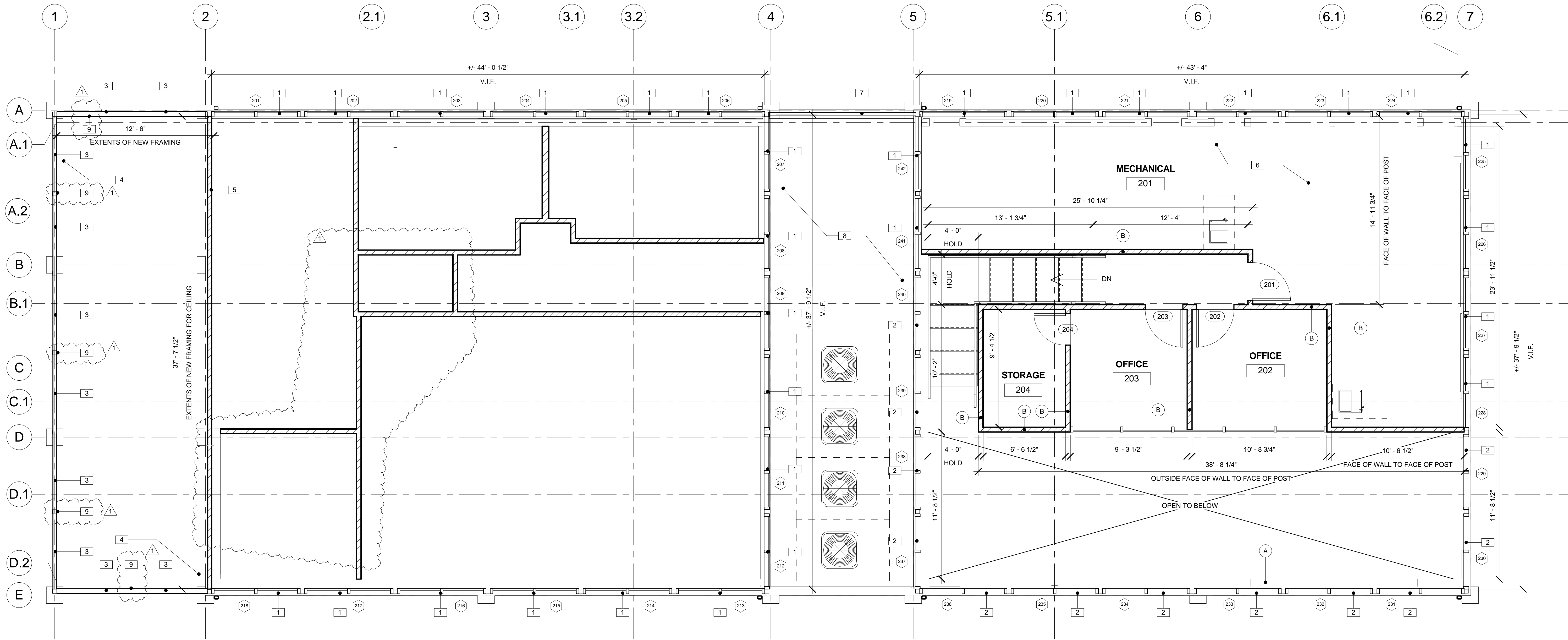
4 SLIP CONNECTION DETAIL
 A2.1.2 1/4" = 1'-0"



2 BRACING DETAIL
 A2.1.2 1/4" = 1'-0"

GENERAL FLOOR PLAN NOTES:

- SEAL ALL HOLES LEADING FROM THE OUTSIDE TO THE INSIDE OF THE SPACE, INCLUDING AROUND ALL PIPES AND WIRE RUNS AND CAP OFF AND SEAL ANY OPEN PIPES.
- SEE WALL SCHEDULE FOR WALL TYPES.
- G.C. TO VERIFY ALL FINISH MATERIAL WITH OWNER PRIOR TO ORDERING SUBSTRATE AND DRYWALL.
- DIMENSIONS SHOWN TO FINISH FACE OF MATERIAL.
- GC TO VERIFY ROUGH OPENINGS OF DOORS AND WINDOWS PRIOR TO ORDERING PRODUCTS FOR INSTALLATION.
- SET DOORS 4" MIN OFF ADJACENT WALL TO PROVIDE AREA FOR TRIM, UNO.
- G.C. TO INSTALL SOUND ATTEN. INSULATION WITHIN ALL PLUMBING WALLS INCLUDING BATHROOMS/ OFFICES.
- G.C. TO USE 5/8" GREENBOARD IN LIEU OF 5/8" GYP BOARD AT ALL WET WALL LOCATIONS, TYP.
- G.C. TO PROVIDE ALTERNATE LINE ITEM TO USE METAL STUDS IN LIEU OF WOOD STUDS. SEE METAL STUD DETAILS ON SHEET A2.1.2 FOR REFERENCE.

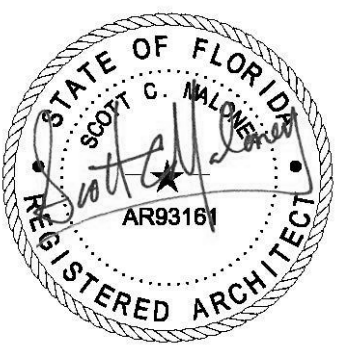


Key Value	Keynote Text
1	NEW CLEAR ANODIZED ALUMINUM WINDOW FRAME WITH 1/2" INSULATION BOARD IN LIEU OF GLASS. COLOR TO BE DETERMINED BY CLIENT PRIOR TO ORDERING AND INSTALLING. SEE WINDOW SCHEDULE FOR MORE INFORMATION. G.C. MUST VERIFY SIZE IN FIELD PRIOR TO ORDERING AND INSTALLING. INSTALL PER MFR RECOMMENDATIONS TYP.
2	NEW CLEAR ANODIZED ALUMINUM FRAMED WINDOW, G.C. MUST VERIFY SIZE IN FIELD PRIOR TO ORDERING AND INSTALLING. COORDINATE WITH WINDOW SCHEDULE FOR MORE INFORMATION. INSTALL PER MFR RECOMMENDATIONS, TYP.
3	G.C. TO CLEAN AND REPAIR AS REQUIRED TO LIKE NEW CONDITION EXISTING LOUVERS, PAINT AS REQUIRED TO ORIGINAL COLOR, TYP.
4	G.C. TO FRAME OUT CEILING AREA FOR NEW T&G FINISH. COORDINATE WITH CEILING PLAN FOR MORE INFORMATION.
5	BUILD WALL TO UNDERSIDE OF STRUCTURE ABOVE, TYP.
6	SEE STRUCTURAL FOR FRAMING OF SECOND FLOOR, TYP.
7	NEW LOUVER SYSTEM TO MATCH EXISTING, COORDINATE WITH ELEVATIONS, TYP.
8	G.C. TO VERIFY EXISTING ROOF IS IN LIKE NEW CONDITION WITH NO LEAKS OR DEFECTS. PATCH AND REPAIR AS REQUIRED MATCHING ADJACENT MATERIAL, TYPE AND COLOR, V.I.F.
9	G.C. TO PROVIDE LINE ITEM FOR CONCEALED MANUAL PULL DOWN SECURITY GATES. INSTALL PER MANUFACTURE RECOMMENDATIONS.

Type Mark	Description
A	2x6 WOOD STUD W/ 5/8" GYP BOARD ONE SIDE
B	2x4 WOOD STUD W/ 5/8" GYP BOARD BOTH SIDES
C	2x6 WOOD STUD W/ 5/8" GYP BOARD BOTH SIDES
D	EXTERIOR STUCCO ON 1/2" PLYWOOD SHEATHING ON 2x4 WOOD STUDS W/ 5/8" GYP BOARD ON INTERIOR
E	2x2 WOOD FURRING W/ 5/8" GYP BOARD ONE SIDE
F	8" CMU BLOCK INFILL WITH STUCCO EXTERIOR FINISH
G	2x4 WOOD STUD W/ 5/8" GYP BOARD ONE SIDE

1 PROPOSED SECOND FLOOR PLAN
 A2.1.2 1/4" = 1'-0"

Architect Seal:



Scott C. Maloney, License # AR93161
 Expiration Date: February 28, 2019
 CCA # AA26001059

Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
 Boys and Girls Club of Key West

Drawing Size 24 x 36
 Project #: 16110
 Drawn By: DA
 Checked By: PB

Title:
 SECOND FLOOR PLAN

Sheet Number:
 A2.1.2

Date: 4/25/17 - PERMIT SET
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GENERAL CEILING NOTES:

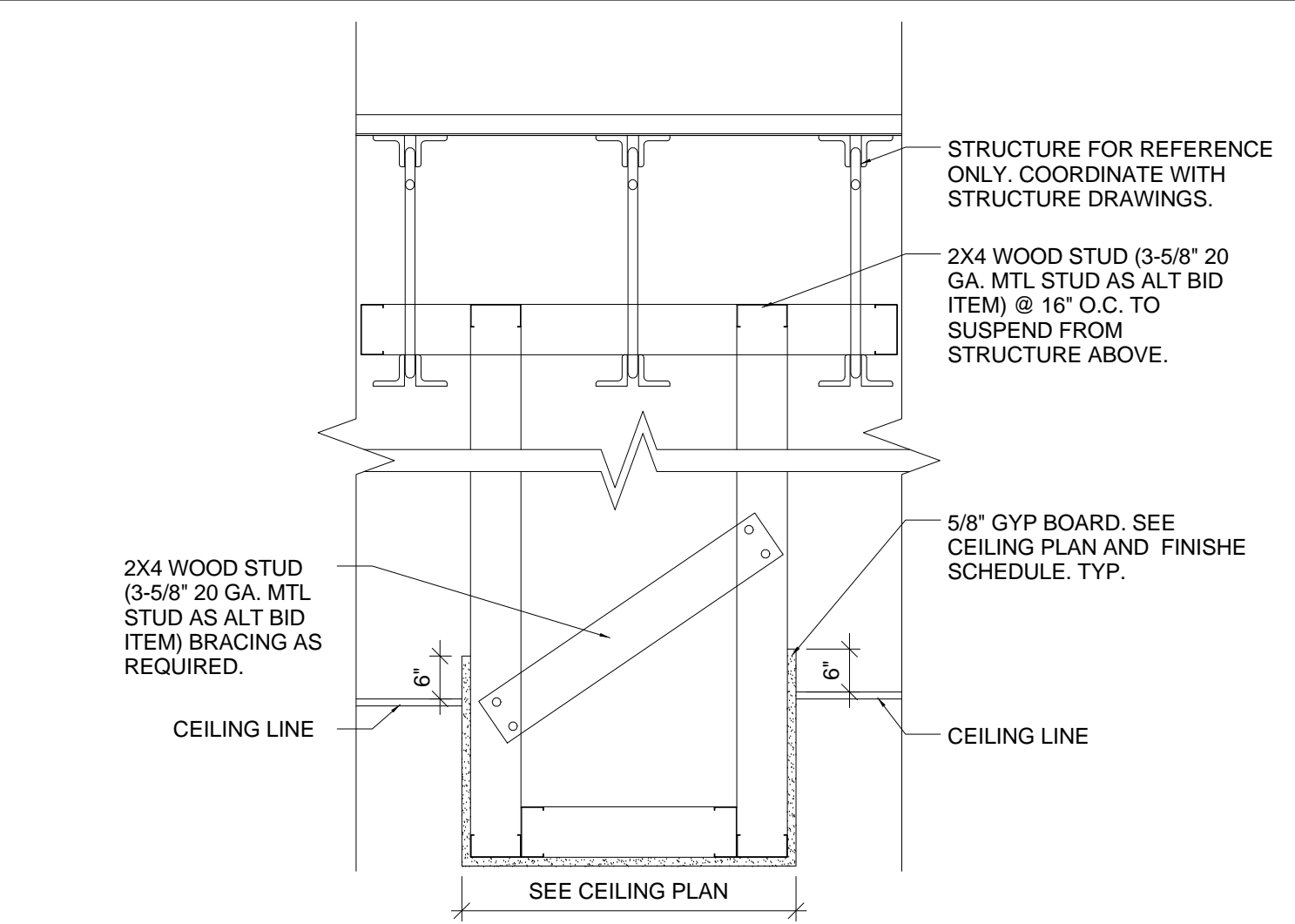
1. SMOKE ALARMS AND CARBON MONOXIDE ALARM TO BE PLACED IN ACCORDANCE WITH FBC AND LOCAL ORDINANCES ON EVERY LEVEL NEAR GAS BURNING APPLIANCES.
2. DIMENSIONS SHOWN TO FINISH FACE OF MATERIAL.
3. ALL FIXTURE AND EQUIPMENT SELECTIONS MUST BE APPROVED WITH CLIENT PRIOR TO ORDERING AND INSTALLING.
4. PROVIDE ALL NEW FIXTURES SHOWN PER LIGHTING LAYOUT. REFER TO ELECTRICAL DRAWINGS FOR ALL FIXTURE TYPES, DETAILS, SPECIFICATIONS AND EMERGENCY EXIT LIGHTING REQUIREMENTS.

Key Value	Keynote Text
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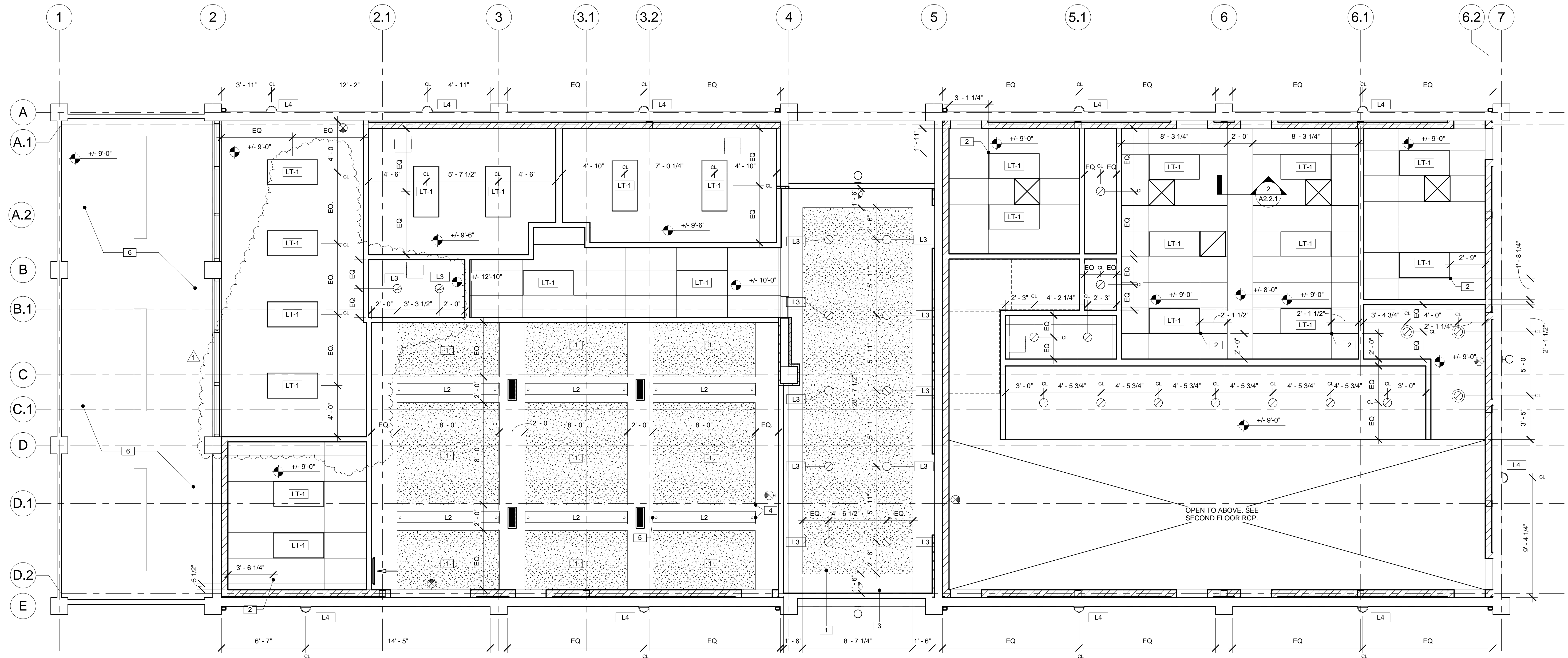
1. INSTALL TECTUM CEILING PANELS TO UNDERSIDE OF THE EXISTING ROOF STRUCTURE. TYP.
2. SUSPENDED CEILING ACT CEILING START POINT.
3. G.C. TO PAINT EXPOSED STRUCTURE WITH PRIMER AND COLOR SELECTED BY BOYS AND GIRLS CLUB. VERIFY COLOR SELECTION WITH BOYS AND GIRLS CLUB PRIOR TO ORDERING AND PAINTING. TYP.
4. ALIGN EDGE OF LIGHT FIXTURE WITH TECTUM CEILING PANEL. TYP THROUGHOUT SPACE.
5. CENTER LIGHT FIXTURE BETWEEN TECTUM CEILING PANELS. TYP THROUGHOUT SPACE.
6. INSTALL T&G HARDIE BOARD SOFFIT TO FRAMING ABOVE. COLOR TBD BY BOYS AND GIRLS CLUB. VERIFY PRIOR TO ORDERING AND INSTALLING. G.C. TO PROVIDE SEPARATE ALTERNATIVE LINE ITEM FOR ALUMINUM PERFORATED SOFFIT MATERIAL.

LIGHTING FIXTURE SCHEDULE COORDINATE WITH ELECTRICAL DRAWINGS, TYP.

MARK	DESCRIPTION	FIXTURE ID	COUNT	NOTES
	2x4 LIGHT FIXTURE	L1	22	LIGHTS WITHIN SERVING AREA NEED TO BE RATED FOR FOOD PREP AREAS.
	96" PENDANT LIGHT FIXTURE	L2	9	
	8" RECESSED DOWNLIGHT	L3	53	
	WALL SCONCE	L4	10	
	PENDANT LIGHT FIXTURE	L5	7	OWNER CHOSEN. G.C. TO ORDER AND INSTALL.
	EMERGENCY LIGHT FIXTURE	-	-	SEE ELECTRICAL SHEETS FOR LOCATION, TYPE AND COUNTS



2 SOFFIT SECTION
A2.2.1 1" = 1'-0"



1 FIRST FLOOR REFLECTED CEILING PLAN
A2.2.1 1/4" = 1'-0"

Architect Seal:

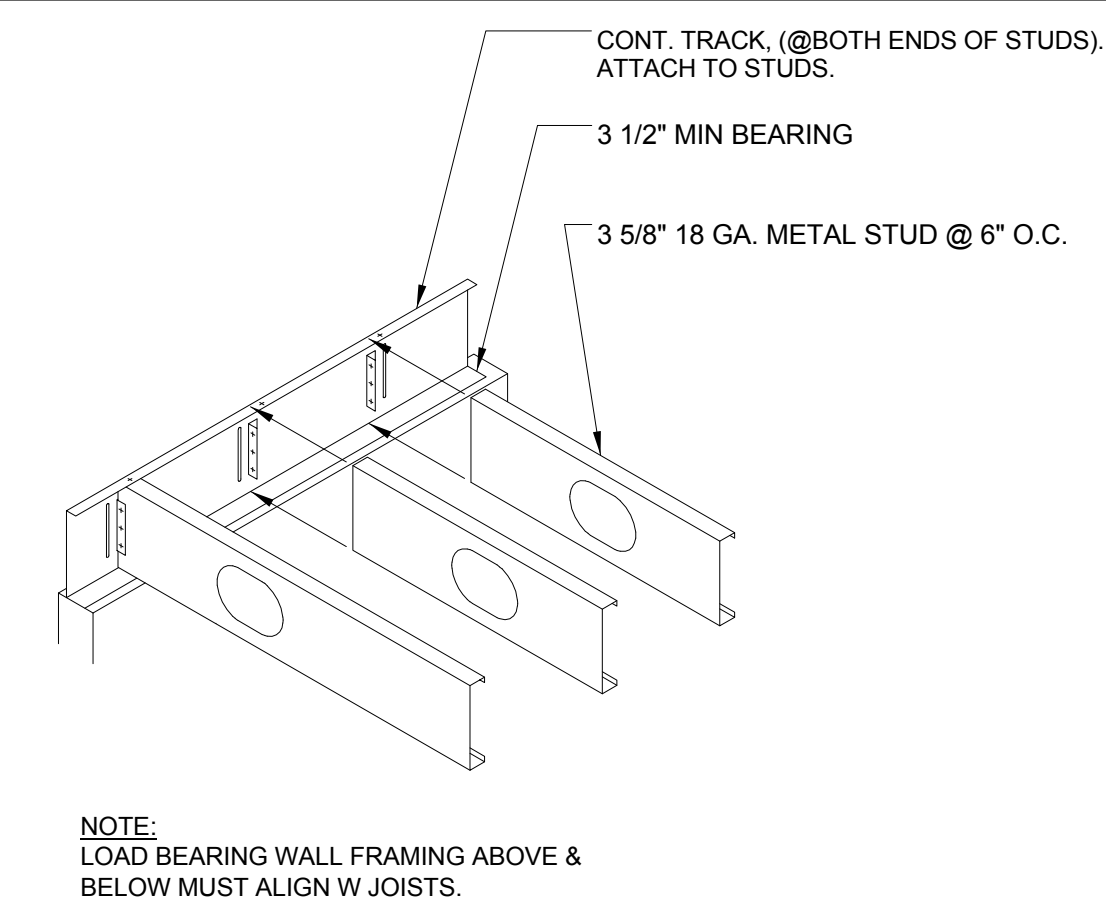
Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

Boys and Girls Club Renovation
Bayview Park Vacant Building
Key West, FL 33040
Boys and Girls Club of Key West

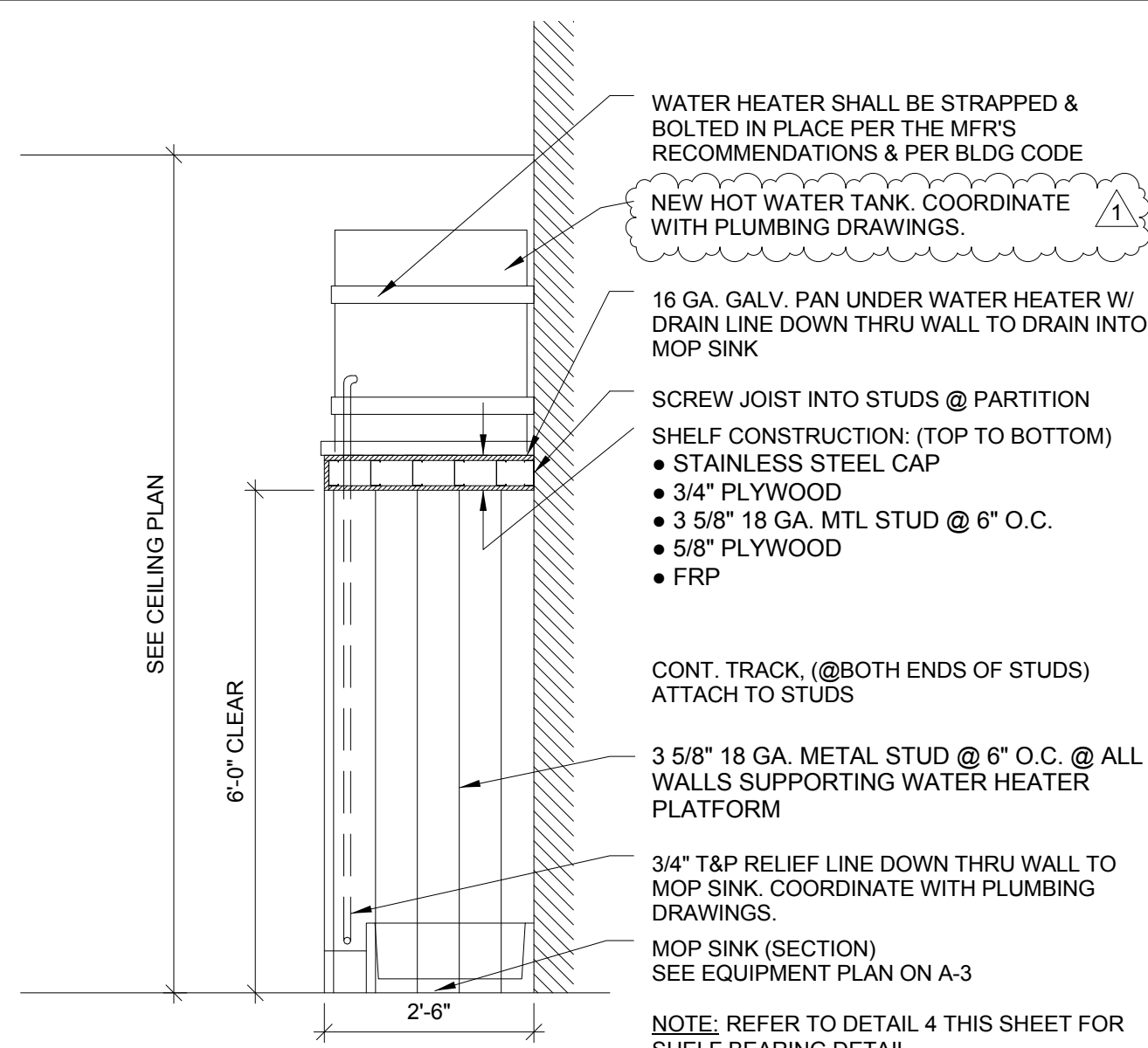
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Drawn By: DA	Checked By: PB
Title: FIRST FLOOR REFLECTED CEILING PLAN	

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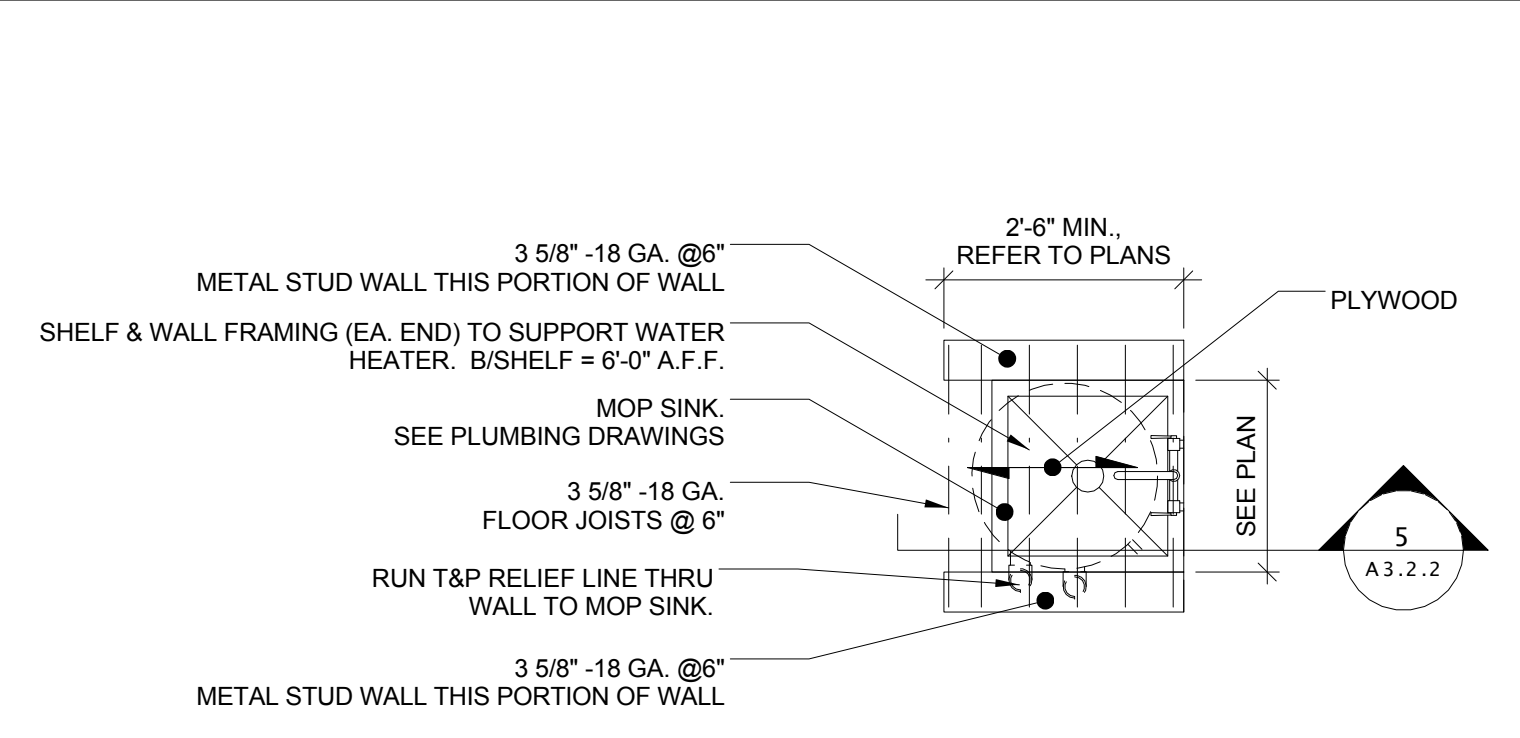


NOTE:
 LOAD BEARING WALL FRAMING ABOVE & BELOW MUST ALIGN W JOISTS.

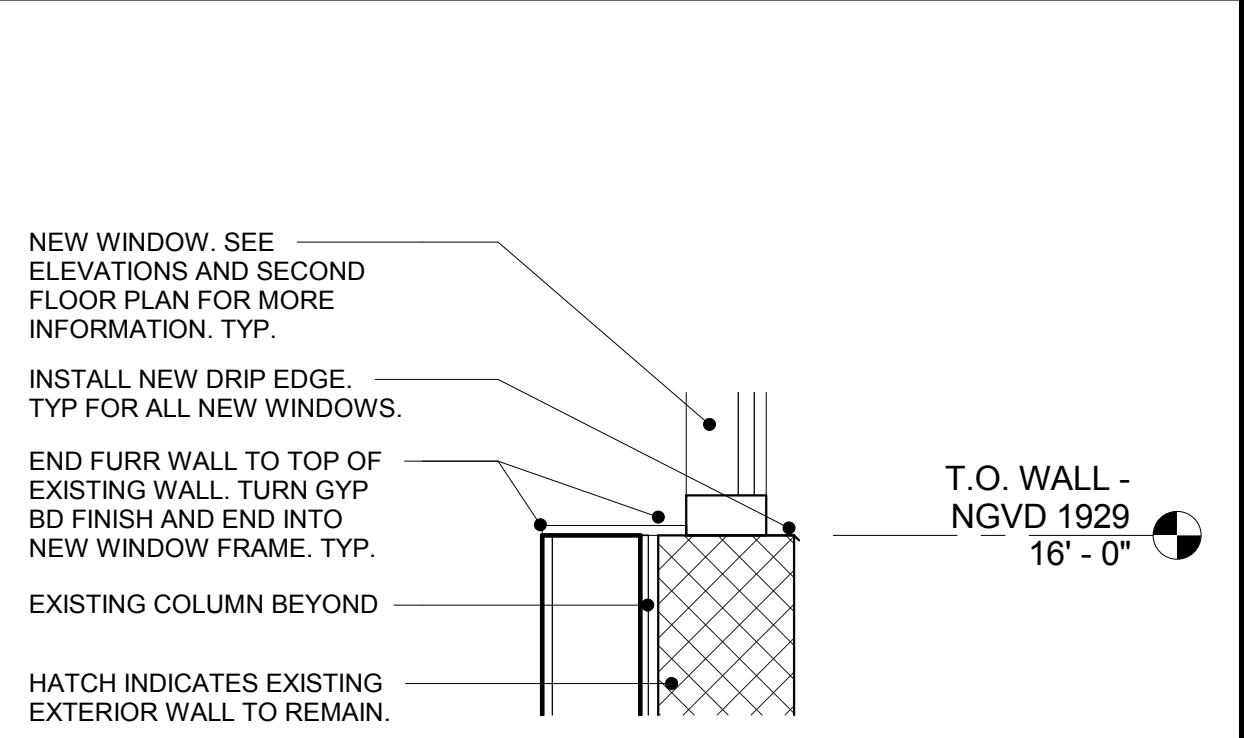
6 HOT WATER TANK SHELF DETAIL
 A3.2.2 1/2" = 1'-0"



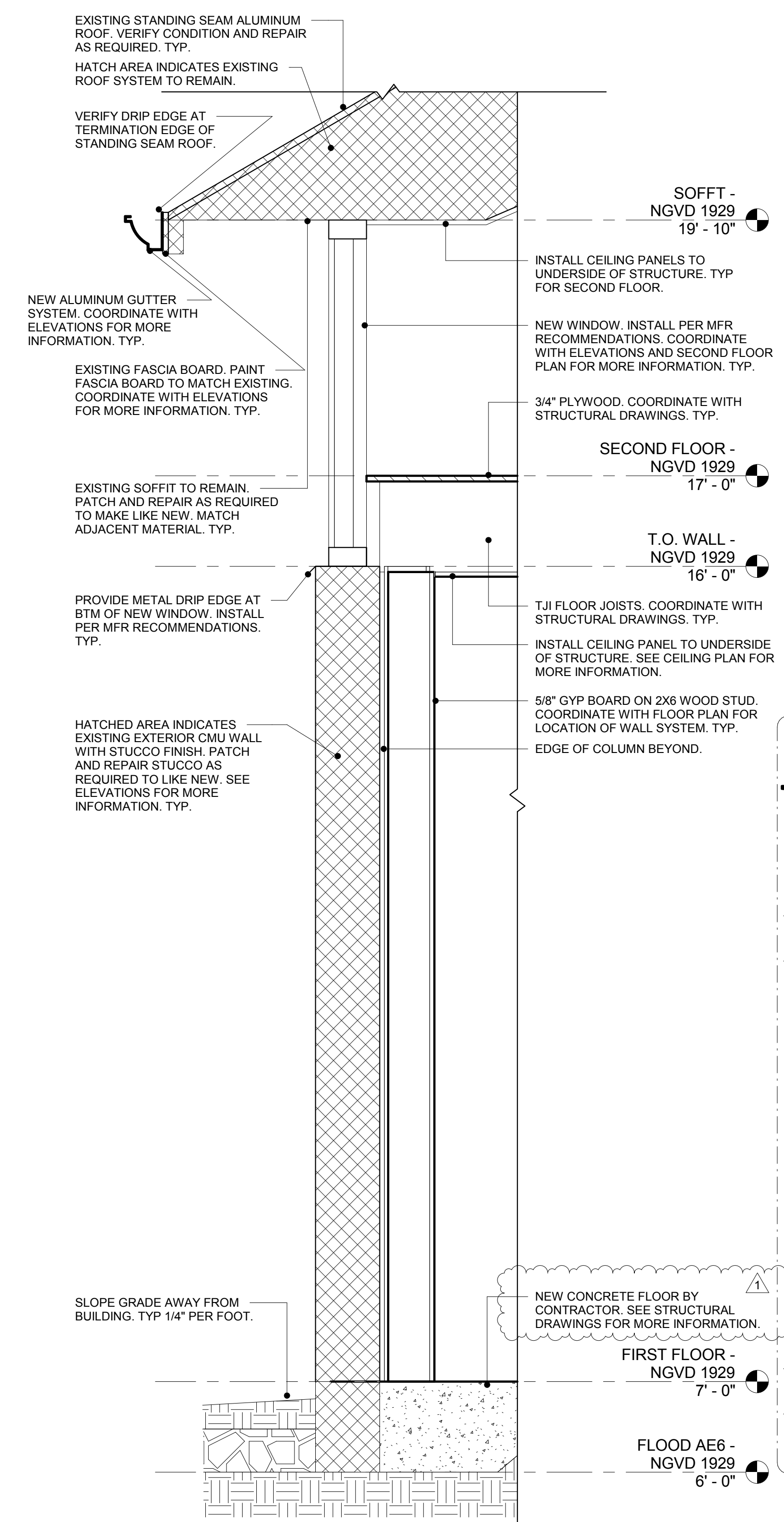
5 HOT WATER TANK SHELF SECTION
 A3.2.2 1/2" = 1'-0"



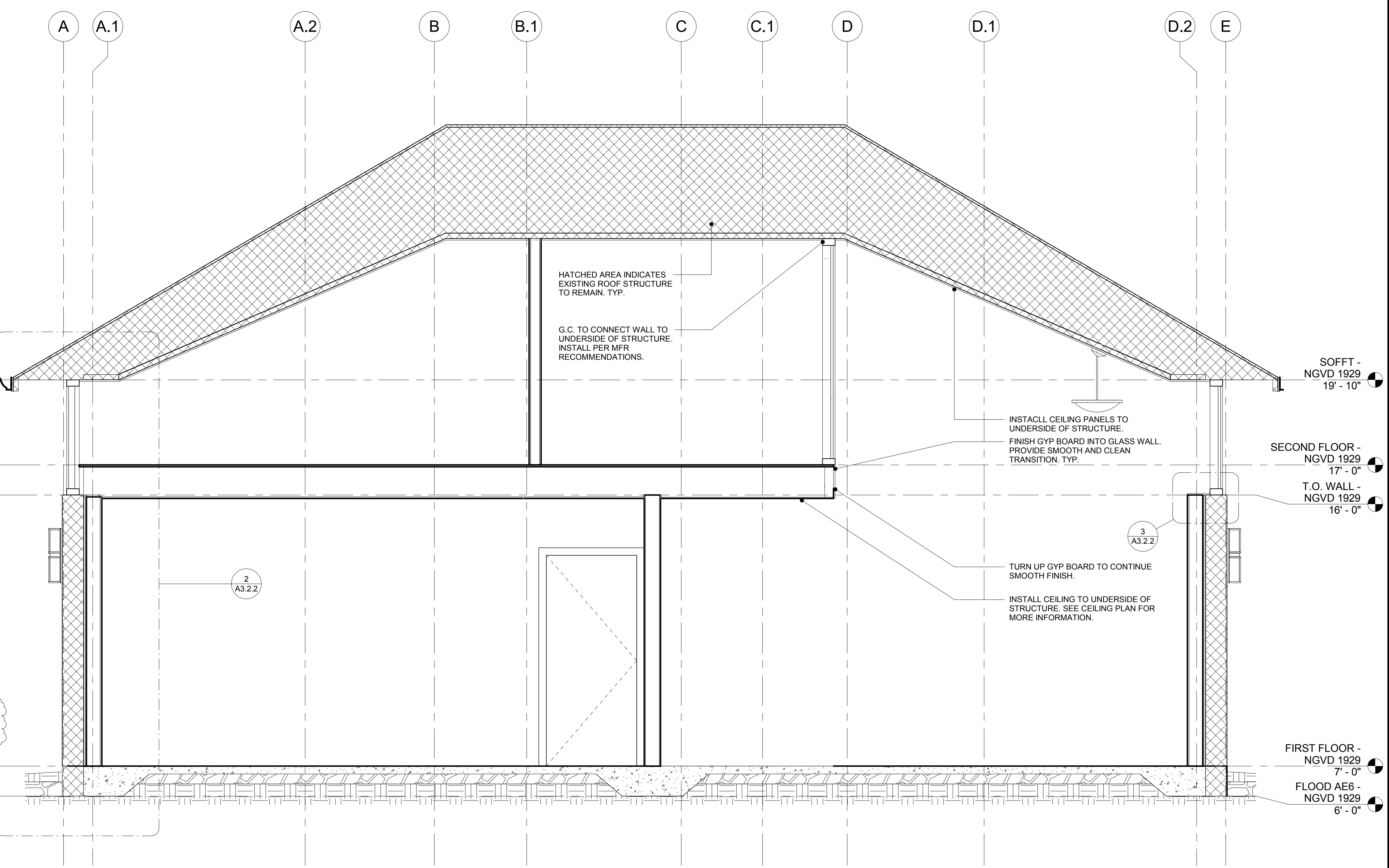
4 HOT WATER TANK SHELF PLAN
 A3.2.2 1/2" = 1'-0"



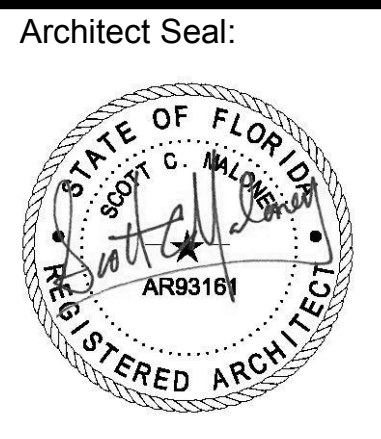
3 SECTION DETAIL
 A3.2.2 1" = 1'-0"



2 WALL SECTION
 A3.2.2 1" = 1'-0"



1 BUILDING SECTION
 A3.2.2 1/2" = 1'-0"



Scott C. Maloney, License # AR93191
 Expiration Date: February 28, 2019
 CCA # AA26001059

Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

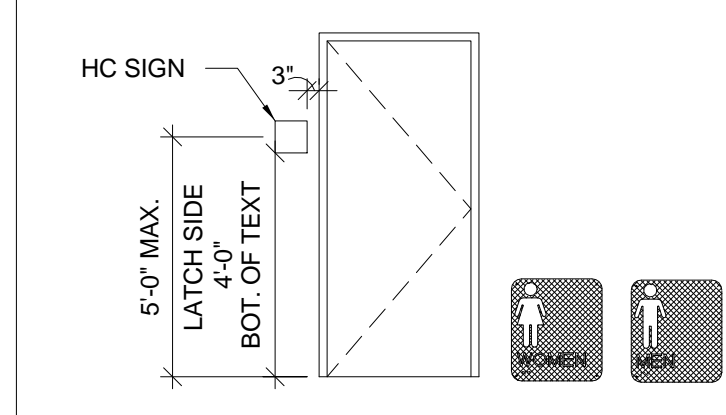
Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

Drawing Project #: A3.2.2 16110
 Size 24 x 36
 Drawn By: DA
 Checked By: PB
 Title:
 BUILDING SECTIONS

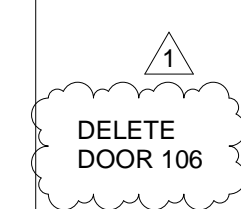
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Date: 4/25/17 - PERMIT SET
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ACCESSIBLE SIGNAGE DETAILS



- ALL SIGNAGE MUST CONFORM TO ANSI 117.1 SECTION 703.10
- 6" MIN. BORDER DIMENSION - MALE / FEMALE FIGURES.
 - USE OF MALE / FEMALE CHARACTERS IS REQUIRED.
 - LETTERS & NUMBERS SHALL BE RAISED $\frac{1}{8}$ " FROM THE BACKGROUND ON WHICH THEY ARE MOUNTED & SHALL BE 1/16" TO 2" MAX. IN HEIGHT. LETTERS SHALL BE CAPITAL LETTERS ONLY. LETTERS & NUMERALS SHALL HAVE SHARPLY DEFINED EDGES & MAY BE EITHER SANS SERIF OR SIMPLE SERIF.
 - ALPHABET / NUMERIC SIGNAGE SHALL BE ACCOMPANIED BY GRADE 2 BRAILLE.
 - LETTERS SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3:5 & 1:1. STROKE-WIDTH-TO-HEIGHT RATIO SHALL BE BETWEEN 1:5 & 1:10.
 - ALL SIGNS SHALL HAVE LETTERS, NUMERALS, CHARACTERS & THE BACKGROUND ON WHICH THEY ARE LOCATED IN AN EGGSHELL (SEMI-MATTE), MATTE (FLAT), OR OTHER NON-GLARE FINISH ONLY. CHARACTERS & SYMBOLS SHALL CONTRAST WITH THE BACKGROUND ON WHICH THEY ARE MOUNTED EITHER BY HAVING LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.



G.C. TO INSTALL TACTILE EXIT SIGNAGE PER OBC 1011.3 AND ICC/ANSI A117.1 TO INTERIOR WALL (EGRESS SIDE) ADJACENT TO ALL EXIT DOORS USED AS AN ACCESSIBLE MEANS OF EGRESS. SEE DETAIL ABOVE FOR MOUNTING HEIGHTS.

GENERAL DOOR NOTES:

- ALL DOOR HARDWARE SHALL ALLOW FREE ACCESS IN THE DIRECTION OF EGRESS TRAVEL AT ALL TIMES WITHOUT THE USE OF SPECIAL FORCE OR KNOWLEDGE.
- ALL DOORS, FRAMES, AND HARDWARE SHALL BE BUILDING STANDARD UNLESS OTHERWISE NOTED.
- ALL DOOR HARDWARE AND ACCESSORIES SHALL MEET THE CURRENT REQUIREMENTS OF ANSI A117.1
- ALL DOOR HARDWARE SHALL BE LEVER TYPE OR PANIC HARDWARE. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34"-48" ABOVE THE FLOOR, UNLESS IT IS A LOCK USED ONLY FOR SECURITY PURPOSES AND NOT USED FOR NORMAL OPERATION. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
- VERIFY ALL HARDWARE TO MATCH BUILDING STANDARD STYLE, COLOR, FINISH TRIM, ETC.
- ALL HARDWARE LISTED TO BE SUPPLIED BY LISTED MANUFACTURER OR EQUAL.
- RATED DOORS SHALL BE A TIGHT-FITTING SMOKE AND DRAFT CONTROL ASSEMBLY.
- ALL INTERIOR/EXTERIOR METAL DOORS SHALL BE 20 GA. MINIMUM.
- EXTERIOR DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT.
- BOTTOM 10" OF ALL DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE FOR OPENING BY WHEELCHAIR FOOT REST.
- MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 LBS. FOR EXTERIOR DOORS. AND 3 LBS. FOR INTERIOR DOORS WITH A PUSH OR PULL EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOOR AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATIONS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS, WHEN FIRE DOORS ARE REQUIRED. THE MAXIMUM EFFORT TO OPERATE DOOR MAY BE INCREASED NOT TO EXCEED 14 LBS. WITH CLOSURE.
- ALL LOCKSETS TO BE KEYED PER CLIENT'S REQUIREMENTS.
- VERIFY KEYING SYSTEM WITH CLIENT PRIOR TO INSTALLATION.
- PROVIDE A SIGN ABOVE MARKED EXITS WITHOUT PANIC HARDWARE STATING THAT "THIS DOOR IS TO REMAIN UNLOCKED DURING BUSINESS HOURS." LETTERS SHALL BE AT LEAST 1" IN HEIGHT AND SHALL BE WHITE ON A CONTRASTING BACKGROUND.
- ALL EXTERIOR DOORS TO RECEIVE ADEQUATE WEATHER STRIPPING AND DOOR SWEEP TO ENSURE A PROPER WEATHER TIGHT SEAL.
- ALL DOORS AND FRAMES ARE TO BE PRIMED & PAINTED (2 COATS) IN FIELD TO MATCH WALL SURFACE ON EACH SIDE PER EXTERIOR AND INTERIOR FINISH SCHEDULES UNLESS NOTED OTHERWISE.

GENERAL FINISH NOTES:

- IBC 903.9 INTERIOR FINISH REQUIREMENTS BASED ON GROUP: INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN THAT SPECIFIED IN TABLE 903.9 FOR THE GROUP AND LOCATION DESIGNATED. INTERIOR WALL AND CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH NFPA 286 AND MEETING THE ACCEPTANCE CRITERIA OF SECTION 903.1.2.1, SHALL BE PERMITTED TO BE USED WHERE A CLASS A CLASSIFICATION IN ACCORDANCE WITH ASTM E 84 OF UL 723 IS REQUIRED.
- USE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS AND MATERIALS FOR ALL FINISHES.
- PROCEEDING WITH THE INSTALLATION OF FINISHES SHALL BE CONSTRUED THAT THE INSTALLER AND/OR FINISHER HAS INSPECTED AND ACCEPTED THE SUBSTRATE TO RECEIVE THE WORK. NO CHANGE ORDER SHALL BE ISSUED TO RECTIFY CONCEALED, UNKNOWN CONDITIONS OR UNSATISFACTORY SUBSTRATE ONCE THE FINISH WORK HAS COMMENCED.
- ALL HOLES ON THE INTERIOR OF THE SPACE TO BE SEALED INCLUDING THE WALLS AND FLOOR. INSTALL A METAL GRILLE OVER OPEN ENDED PIPES.
- PAINTER TO APPLY ONE COAT PRIMER AND TWO COATS FINISH COLOR TO ALL PAINTED WALLS AND NOTED SURFACE MANUFACTURER'S INSTRUCTIONS.
- G.C. TO PROVIDE ONE FULL GALLON OF EACH PAINT COLOR/TYPER USED FOR INTERIOR AND EXTERIOR WORK FOR FUTURE REPAIRS.
- INSTALL FRP (KEMULITE LASCOC BOARD #419 WHITE W/ EMBOSSED FINISH OR APPROVED EQUAL) TO 4'-0" A.F.F. ON ALL WALL SURFACES IN THE TOILET ROOMS. INSTALL FRP TO 4'-0" A.F.F. BEHIND THE MOP SINK AND WATER COOLER A MINIMUM OF 1'-0" TO EACH SIDE. COMPLETE FRP W/ TRIM CAP ON TOP, SIDES, CORNERS AND JOINTS, INCLUDING CAULKING AS REQUIRED BY MFG. VERIFY LOCAL CODE FOR ADDITIONAL APPLICATION IF REQUIRED.

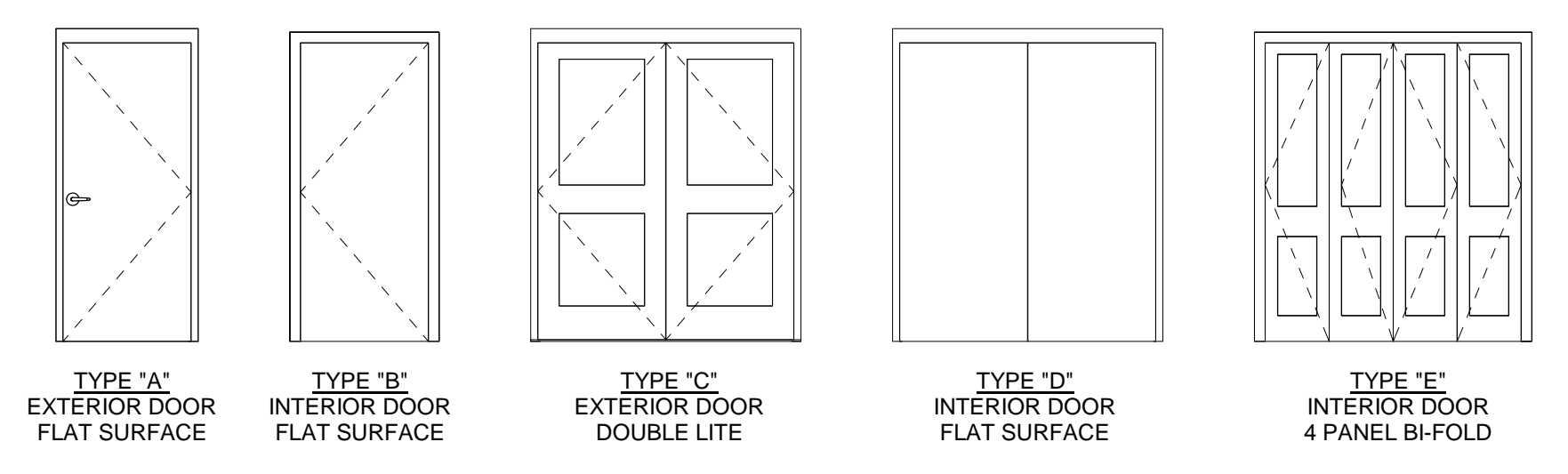
FINISH SPECIFICATIONS

FLOORS			PAINT		
DESCRIPTION	MFR.	SPEC	DESCRIPTION	MFR.	SPEC
SC	BY G.C.	STAINED AND SEALED CONCRETE	PT-1	SHER WILL	PRO-MAR 200 SERIES, S/G B31W02651, SW7006-EXTRA WHITE, SEMI-GLOSS ACRYL ENAMEL
CP-1	TBD	24" X 24" CARPET TILE - COLOR TBD BY OWNER			
BASE			CEILING		
DESCRIPTION	MFR.	SPEC	DESCRIPTION	MFR.	SPEC
B-1	ARMSTRONG	4" VINYL COVE BASE - #60 JET BLACK	ACT-1	TECTUM	2'-0"X4'-0" WHITE LAY-IN CEILING TILE
			GYP	-	GYPSUM BOARD, TAPED AND SANDED SMOOTH READY FOR FINISH PAINT.

Door Schedule

Door Number	Door Type	Description	Door Size	Manufacturer	Frame Type	Details				Comments
						Head	Jamb	Door	Frame	
100	A	IMPACT RATED METAL DOOR	3'-0" x 7'-0"	THERMA-TRU	B	1/A6.2.1	1/A6.2.1	HM/PT	HM/PT	INSTALL PANIC HARDWARE, ANY APPROVED GALV. STEEL PER DOOR SCHEDULE
101	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
102	B	MDF SOLID CORE	2'-10" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
103	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
104	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
105	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	A	2/A6.2.1	2/A6.2.1	HM/PT	HM/PT	
107	D	MDF SOLID CORE DOUBLE DOOR	6'-0" x 7'-0"	TRUSTILE	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
108	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	B	1/A6.2.1	1/A6.2.1	HM/PT	PT	INSTALL PANIC HARDWARE, NOA 16-0329.04 COMMERCIAL SET
109	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	A	2/A6.2.1	2/A6.2.1	HM/PT	PT	INSTALL PANIC HARDWARE, NOA 16-0329.04 COMMERCIAL SET
110	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	A	2/A6.2.1	2/A6.2.1	HM/PT	HM/PT	INSTALL PANIC HARDWARE, NOA 16-0329.04 COMMERCIAL SET
111	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	B	1/A6.2.1	1/A6.2.1	STAIN/SEALER	HM/PT	
112	E	MDF SOLID CORE BIFOLD	6'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
113	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
114	B	MDF SOLID CORE	2'-6" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
115	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
116	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER	PT	
117	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	B	1/A6.2.1	1/A6.2.1	HM/PT	HM/PT	INSTALL PANIC HARDWARE, NOA 16-0329.04 COMMERCIAL SET
118	C	IMPACT RATED METAL DOOR	6'-0" x 7'-0"	CGI WINDOWS AND DOORS, INC	B	1/A6.2.1	1/A6.2.1	HM/PT	HM/PT	
201	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER		
202	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER		
203	B	MDF SOLID CORE	3'-0" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER		
204	B	MDF SOLID CORE	2'-6" x 7'-0"	TRUPINE DOORS	A	2/A6.2.1	2/A6.2.1	STAIN/SEALER		

Room Schedule						
Number	Name	Wall Finish	Floor Finish	Base Finish	Ceiling Finish	Comments
100	SERVING/ PREP AREA	FRP	SC	B-1	GYP	
101	WOMENS	FRP/PT-1	SC	B-1	GYP	
102	MENS	FRP/PT-1	SC	B-1	GYP	
103	JANITOR	FRP	SC	B-1	GYP	
104	GAME ROOM	PT-1	SC	B-1	ACT-1/ OPEN	
106	STORAGE	PT-1	SC	B-1	ACT-1	
107	ENTRANCE	PT-1	SC	B-1	ACT-1/ OPEN	
108	OFFICE	PT-1	SC	B-1	ACT-1	
109	MULTI-PURPOSE ROOM	PT-1	SC	B-1	ACT-1	
110	CONFERENCE ROOM	PT-1	SC	B-1	ACT-1	
111	COMPUTER AREA	PT-1	SC	B-1	GYP	
112	ART ROOM	PT-1	SC	B-1	ACT-1	
113	IT	PT-1	SC	B-1	ACT-1	
201	MECHANICAL	-	-	-	ACT-1	
202	OFFICE	PT-1	CP-1	B-1	ACT-1	
203	OFFICE	PT-1	CP-1	B-1	ACT-1	
204	STORAGE	PT-1	CP-1	B-1	ACT-1	



DOOR TYPES

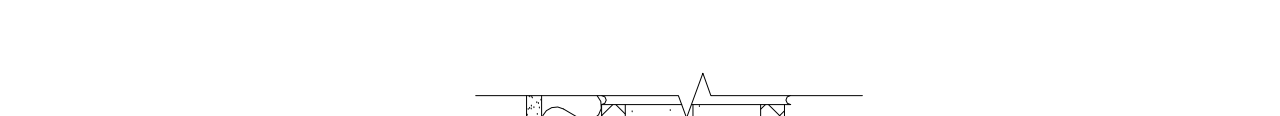


INT. WALL AND CEILING FINISH REQ'S BY OCCUPANCY

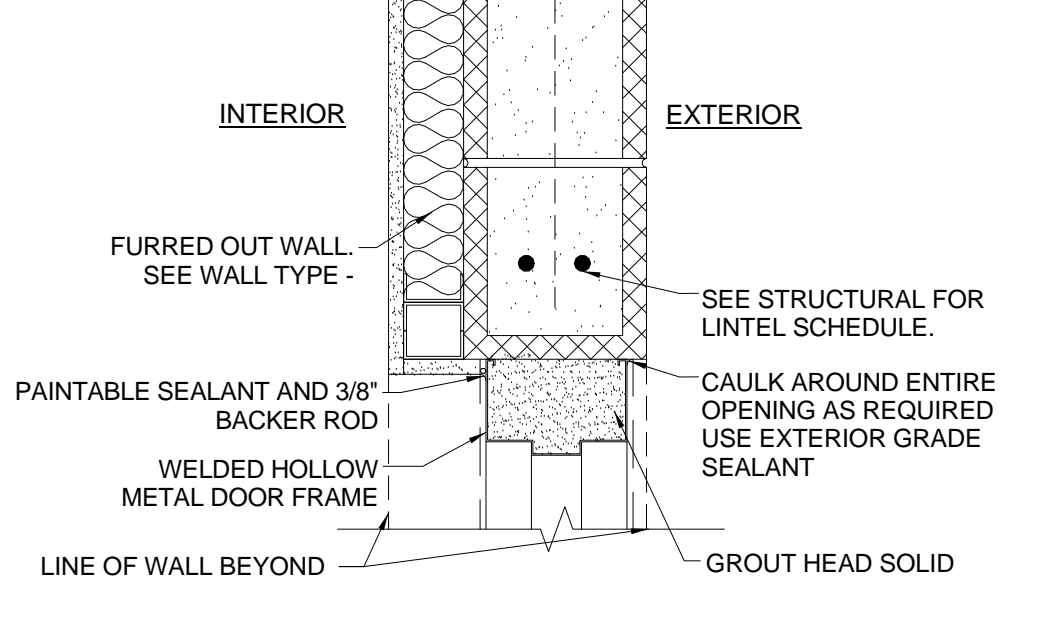
GROUP	SPRINKLERED			NONSPRINKLERED		
	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
A-1 & A-2	B	B	C	A	A ₁₀	B ₁₀
A-3, A-4, A-5	B	B	C	A	A ₁₀	C
B, E, M, R-1	B	C	C	A	B	C

- TABLE 903.9 IBC NOTES:
- CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED FOR WAINSCOTING OR PANELING OF NOT MORE THAN 1,000 SQ. FT. OF APPLIED SURFACE AREA IN THE GRADE LOBBY WHERE APPLIED DIRECTLY TO A NONCOMBUSTIBLE BASE OR OVER FURRING STRIPS APPLIED TO A NONCOMBUSTIBLE BASE AND FIREBLOCKED AS REQUIRED BY SECTION 903.11.1
 - IN OTHER THAN GROUP 1-2 OCCUPANCIES IN BUILDING LESS THAN THREE STORIES ABOVE TRADE PLANE OF OTHER THAN GROUP 1-3, CLASS B INTERIOR FINISH FOR NON SPRINKLERED BUILDINGS AND CLASS C INTERIOR FINISH FOR SPRINKLERED BUILDINGS SHALL BE PERMITTED IN INTERIOR EXIT STAIRWAYS AND RAMPS.
 - REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES SHALL BE BASED UPON SPACES ENCLOSED BY PARTITIONS, WHERE A FIRE-RESISTANCE RATING IS REQUIRED FOR STRUCTURAL ELEMENTS, THE ENCLOSED PARTITIONS SHALL EXTEND FROM THE FLOOR TO THE CEILING. PARTITIONS THAT DO NOT COMPLY WITH THIS SHALL BE CONSIDERED ENCLOSED SPACES AND THE ROOMS OR SPACES ON BOTH SIDES SHALL BE CONSIDERED ONE. IN DETERMINING THE APPLICABLE REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES, THE SPECIFIC OCCUPANCY THEREOF SHALL BE THE GOVERNING FACTOR REGARDLESS OF THE GROUP CLASSIFICATION OF THE BUILDING OR STRUCTURE.
 - LOBBY AREAS IN GROUP A-2, A-2, AND A-3 OCCUPANCIES SHALL NOT BE LESS THAN CLASS B MATERIALS.
 - CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN PLACES OF ASSEMBLY WITH AN OCCUPANT LOAD OF 300 PERSONS OR LESS.
 - FOR PLACES OF RELIGIOUS WORSHIP, WOOD USED FOR ORNAMENTAL PURPOSES, TRUSSES, PANELING OR CHANCEL FURNISHING SHALL BE PERMITTED.
 - G.I. NOT REFERENCED
 - FINISH MATERIALS AS PROVIDED FOR IN OTHER SECTIONS OF THIS CODE.
 - APPLIES WHEN PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2

2 TYP INTERIOR DOOR HEAD/JAMB

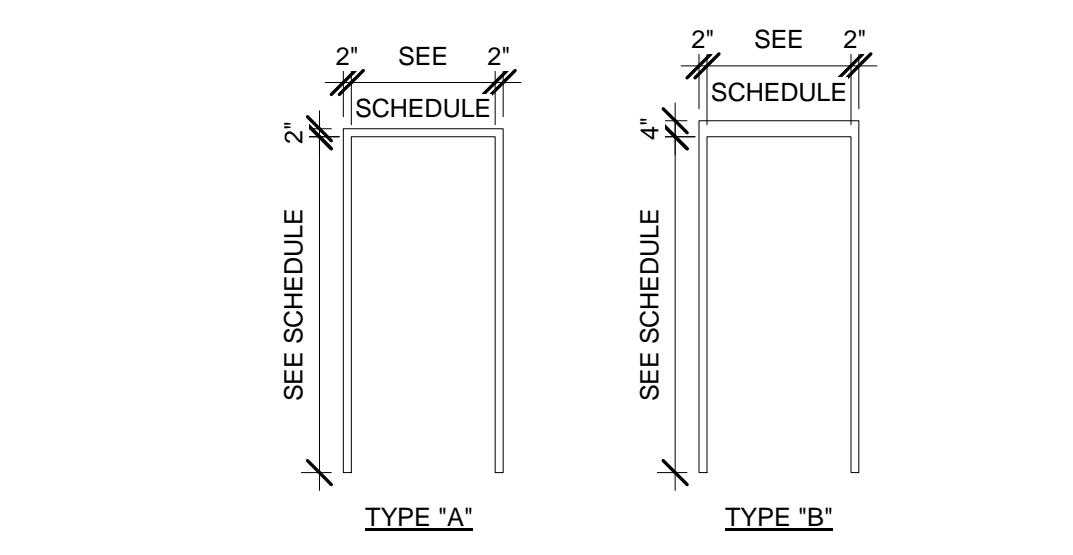


FRAME TYPES



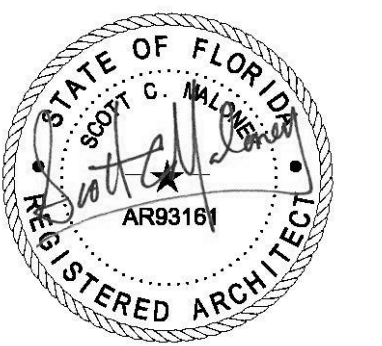
NEW MASONRY HEAD DETAIL

1 Masonry Door Head/Jamb



NEW MASONRY NEW JAMB DETAIL

Architect Seal:



Scott C. Maloney License # AR93161
 Expiration Date: February 28, 2019
 CCA # AA26001059

Submissions:

1	RFIs & CITY COMMENTS	2017.07.31

Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
 Boys and Girls Club of Key West

Drawing Size	24 x 36	Project #:	16110
Drawn By:	DA	Checked By:	PB

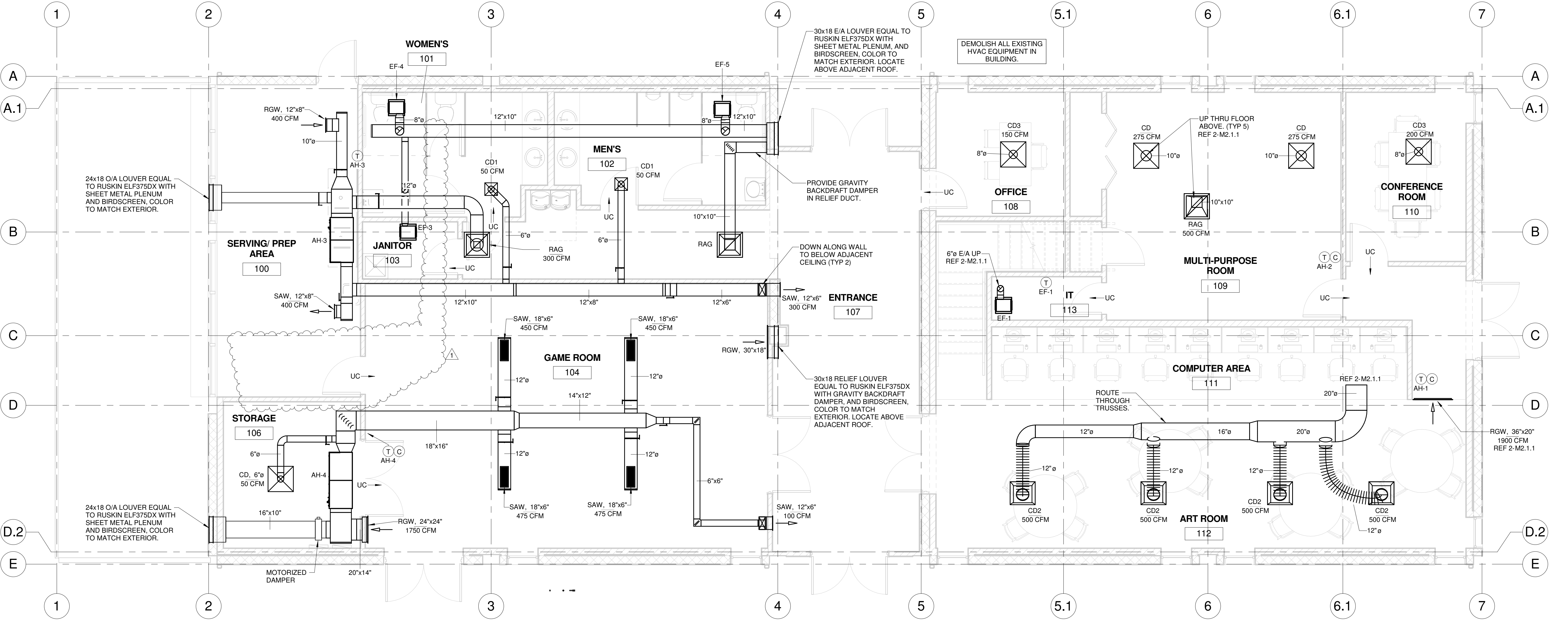
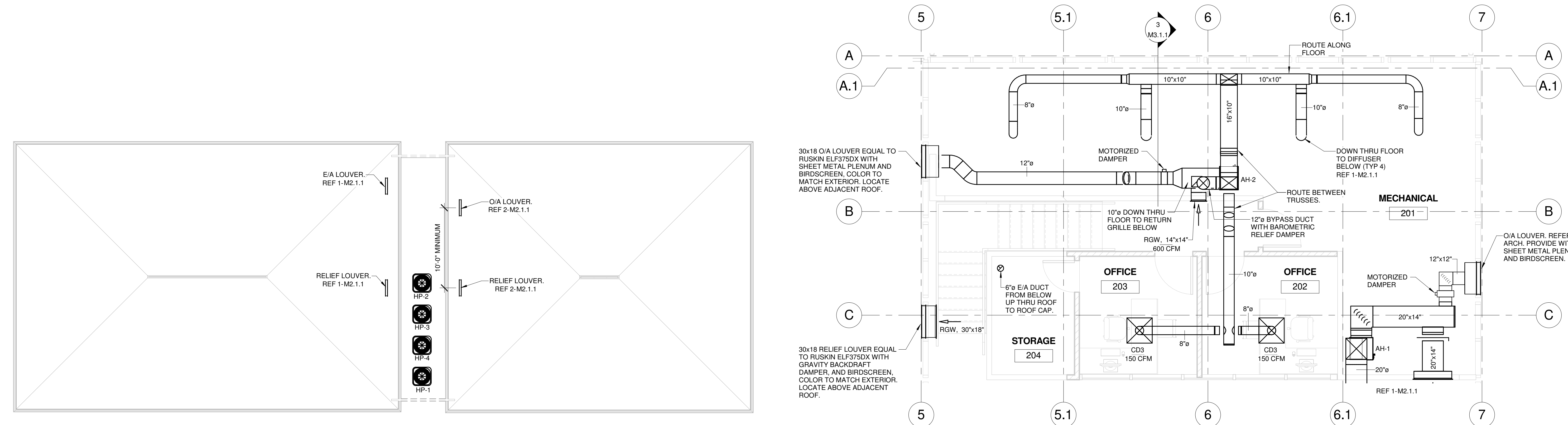
Title:
DOOR & FINISH SCHEDULES AND DETAILS

Sheet Number:
A6.2.1

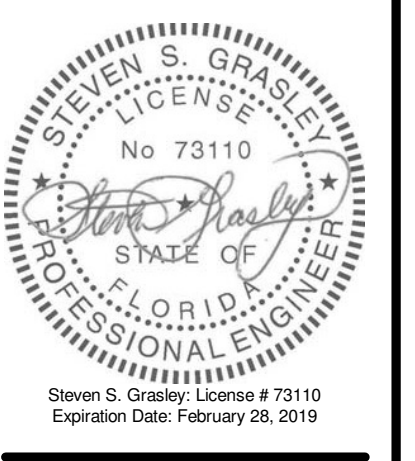
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Submissions:

04/25/17: PERMIT SET
2017.07.31: RFFs & CITY COMMENTS



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Seal:

Submissions:
04/25/17: PERMIT SET
2017.07.31: RFFs & CITY COMMENTS

Boys and Girls Club Renovation

Bayview Park Vacant Building
Key West, FL 33040

Boys and Girls Club of Key West

Drawing Size: 24 x 36
Project #: 16110

Drawn By: JCW
Checked By: ADF

Title:
MECHANICAL SCHEDULES

Sheet Number:
M4.1.1

Date: 04/25/17: PERMIT SET
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EXHAUST FAN SCHEDULE

Mark	AREA SERVED	MANUFACTURER	MODEL	TYPE	CFM	E.S.P. (IN WC)	DRIVE	CONTROL	WATTS	FAN RPM	V/PH/Hz
EF-1	IT	GREENHECK	SP-B110	CEILING	100	0.25"	DIRECT	T-STAT	80	950	120/1/60
EF-3	JANITOR	GREENHECK	SP-B70	CEILING	50	0.25"	DIRECT	LIGHT SWITCH	15	675	120/1/60
EF-4	WOMEN'S RESTROOM	GREENHECK	SP-B150	CEILING	150	0.25"	DIRECT	LIGHT SWITCH	128	1025	120/1/60
EF-5	MEN'S RESTROOM	GREENHECK	SP-B150	CEILING	150	0.25"	DIRECT	LIGHT SWITCH	128	1025	120/1/60

NOTES:
1. CEILING EXHAUST GRILLE FOR CEILING MOUNTED FANS.
2. FACTORY PRE-WIRED FAN SPEED CONTROLLER FOR DIRECT DRIVE FANS.
3. VIBRATION ISOLATION.
4. DISCONNECT SWITCH.
5. BACKDRAFT DAMPER.

HEAT PUMP CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	NOMINAL TONS	TOTAL CAPACITY (MBH)	COOLING		HEATING (@ 17°F)		ELECTRICAL			WEIGHT (LBS)	
					SENSIBLE CAPACITY (MBH)	EER	SEER	CAPACITY (MBH)	COP	V/PH/Hz	MCA		MOCP
HP-1	CARRIER	25VNA860A	5	57.0	40.0	10	17	44.5	2.48	230/1/60	40.8	60	245
HP-2	CARRIER	25VNA836A	3	34.2	24.9	10.5	17.5	23	2.58	230/1/60	24.4	40	164
HP-3	CARRIER	25VNA824A	2	24.2	18.9	11	18	20.4	2.54	230/1/60	23.6	40	164
HP-4	CARRIER	25VNA860A	5	57.0	40.0	10	17	44.5	2.48	230/1/60	40.8	60	245

VARIABLE SPEED AIR HANDLING UNIT SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	NOMINAL TONS	CFM	O/A CFM		E.S.P. (IN. WC)	AUXILIARY HEAT (KW)	ELECTRICAL			WEIGHT (LBS)
						MINIMUM	MAXIMUM			V/PH/Hz	MCA	MOCP	
AH-1	ART ROOM	CARRIER	FE4ANB006L	5	2000	100	600	0.50"	---	230/1/60	8.5	15	207
AH-2	OFFICES	CARRIER	FE4ANF005L	3	1200	100	450	0.50"	---	230/1/60	5.4	15	172
AH-3	PREP AREA	CARRIER	FE4ANF003L	2	800	---	100	0.50"	---	230/1/60	5.4	15	150
AH-4	GAME ROOM	CARRIER	FE4ANB006L	5	2000	250	700	0.50"	---	230/1/60	8.5	15	207

NOTES (ALL UNITS):
1. COOLING DESIGN TEMPERATURES: AMBIENT - 95°F; ENTERING AIR TEMP DB/WB - 80.0 / 67.0°F.
2. 5 YEAR COMPRESSOR WARRANTY.
3. CONDENSER COIL GUARD.
4. DRAIN PAN FLOAT SWITCH FOR FAN COIL UNIT.
5. FILTER SECTION WITH 30% FILTERS.
6. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DISCONNECTS FOR AIR HANDLER AND HEAT PUMP UNITS. REFER TO ELECTRICAL SHEETS.
7. COORDINATE WITH THE MANUFACTURER THE HORIZONTAL AND VERTICAL REFRIGERANT PIPE ROUTING TO DETERMINE PIPE SIZES FOR THE REFRIGERANT PIPING. MANUFACTURER SHALL PROVIDE DETAILED REFRIGERANT PIPING DIAGRAMS INCLUDING DIMENSIONAL DATA FOR ALL REFRIGERANT PIPING DEVICES. THE MANUFACTURER SHALL SIZE AND LOCATE THE ASSOCIATED REFRIGERANT TRAPS BASED ON THE ACTUAL ROUTING AND PROVIDE OTHER APPURTENANCES TO PROVIDE A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM. COORDINATE WITH THE MANUFACTURER LOCATIONS FOR ALL REFRIGERANT PIPING DEVICES TO MAINTAIN SERVICEABILITY AND ACCESSIBILITY.
8. PROVIDE THERMOSTAT.
9. PROVIDE CO2 SENSORS FOR AH-1, 2, & 4. UPON RISE IN CO2 LEVELS ABOVE 1000 PPM (ADJ.), THE OUTSIDE AIR DAMPER SHALL OPEN TO ITS MAXIMUM POSITION. THE OUTSIDE AIR DAMPER SHALL RETURN TO ITS MINIMUM POSITION WHEN CO2 LEVELS DROP BELOW 600 PPM (ADJ.).

AIR DEVICE SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	DESCRIPTION	FACE SIZE	FRAME TYPE	NOTES
CD	SUPPLY	TITUS	TMS-AA	ROUND NECK CEILING DIFFUSER, ALUM	24x24	LAY-IN	A,B,C
CD1	SUPPLY	TITUS	TDC-AA	SQ / RECTANGULAR CEILING DIFFUSER, ALUM	12x12	SURFACE	A,B,C,D
CD2	SUPPLY	TITUS	TMS-AA	ROUND NECK CEILING DIFFUSER, ALUM	24x24	SURFACE	A,B,C
CD3	SUPPLY	ACUTHERM	ST-HC	THERMOSTATIC UNI-DIRECTIONAL SUPPLY DIFFUSER, ALUM	24x24	LAY-IN	A,B,C
RAG	RETURN	TITUS	50F	EGGCRATE CEILING GRILLE, ALUM	24x24	LAY-IN	A,B,C
RGW	RETURN	TITUS	350FL	SIDEWALL RETURN, ALUM	REF PLAN	SURFACE	A,C,D
SAW	SUPPLY	TITUS	300FS	SIDEWALL SUPPLY, ALUM	REF PLAN	SURFACE	A,C,D

NOTES:
A. STANDARD WHITE FINISH.
B. DIFFUSER NECK SIZE SHALL BE SAME AS BRANCH DUCT SIZE UNLESS NOTED OTHERWISE.
C. DAMPER AT TAKEOFF TO DEVICE.
D. PROVIDE NECK FOR DUCT CONNECTION.
E. PROVIDE MANUFACTURER'S OPPOSED BLADE DAMPER IN NECK.

OSA & AIR BALANCE CALCULATIONS

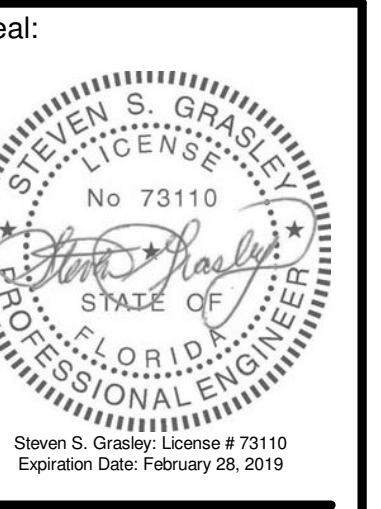
ROOM NAME	AREA (SF)	CLASSIFICATION	ZONE	ZONE DCV	EXHAUST					OUTSIDE AIR								
					MINIMUM REQUIRED (CFM/UNIT)	UNIT OF MEASURE	# UNITS	TOTAL REQUIRED (CFM)	ACTUAL EXHAUST (CFM)	CFM PER PERSON (Rp)	OCCUPANT DENSITY (# / 1000 SF)	PEOPLE PERSONS (Pz)	CFM PER AREA FT2 (Ra)	AREA FT2 (Az)	BREATHING ZONE** (Vbz)	ZONE EFFECTIVENESS (Ez)	REQUIRED ZONE OUTDOOR AIR WITH DCV (Voz)	REQUIRED ZONE OUTDOOR AIR (Voz)
ART ROOM	495	EDUCATION - MULTIUSE ASSEMBLY	1	YES						7.5	100	49.5	0.06	495	29.7	0.8	37.1	501.2
COMPUTER AREA	187	EDUCATION - MEDIA CENTER	1	YES						10	25	4.7	0.12	187	22.4	0.8	28.1	86.5
IT	28	---	2	YES														
CONFERENCE ROOM	131	OFFICE - CONFERENCE ROOM	2	YES						5	50	6.6	0.06	131	7.9	0.8	9.8	50.8
MULTI-PURPOSE ROOM	340	EDUCATION - MULTIUSE ASSEMBLY	2	YES						7.5	100	34.0	0.06	340	20.4	0.8	25.5	344.3
OFFICE 1	100	OFFICE SPACE	2	YES						5	5	0.5	0.06	100	6.0	0.8	7.5	10.6
OFFICE 2	103	OFFICE SPACE	2	YES						5	5	0.5	0.06	103	6.2	0.8	7.7	10.9
OFFICE 3	89	OFFICE SPACE	2	YES						5	5	0.4	0.06	89	5.3	0.8	6.7	9.5
STORAGE	62	OFFICE - OCC. DRY STORAGE	2	YES						5	2	0.1	0.06	62	3.7	0.8	4.7	5.4
MECHANICAL	576	---	2	YES														
CORRIDOR	490	PUBLIC - CORRIDORS	3	NO									0.06	490	29.4	0.8	---	36.8
JANITOR	29	JANITOR	3	NO	-1.00	SF		-29	-50									
MEN'S RESTROOM	137	TOILETS - PUBLIC (INTERM.)	3	NO	-75.00	FIXTURE	2	-150	-150									
WOMEN'S RESTROOM	140	TOILETS - PUBLIC (INTERM.)	3	NO	-75.00	FIXTURE	2	-150	-150									
GAME ROOM	676	EDUCATION - MULTIUSE ASSEMBLY	4	YES						7.5	100	67.6	0.06	676	40.6	0.8	50.7	684.5
STORAGE	120	OFFICE - OCC. DRY STORAGE	4	YES						5	2	0.2	0.06	120	7.2	0.8	9.0	10.5
SERVING / PREP AREA	250	GENERAL - BREAK ROOMS	3	NO						5	25	6.3	0.06	250	46.3	0.8	---	57.8
ELEC	25	---	4	YES														

SUMMARY

ZONE	AREA SERVED	DCV	MINIMUM VENTILATION				MAXIMUM VENTILATION			
			REQUIRED ZONE OUTDOOR AIR (Voz)	SUPPLIED OUTSIDE AIR (CFM)	ACTUAL EXHAUST (CFM)	TOTAL +/- (CFM)	REQUIRED ZONE OUTDOOR AIR (Voz)	SUPPLIED OUTSIDE AIR (CFM)	ACTUAL EXHAUST (CFM)	TOTAL +/- (CFM)
1	ART ROOM	YES	65	100	0	+100	588	600	0	+600
2	OFFICES / MULTI-PURPOSE	YES	62	100	-100	+0	431	450	0	+450
3	RESTROOMS / SERVING	NO	95	100	-350	-250	95	100	0	+100
4	GAME ROOM	YES	60	250	-100	+150	695	700	0	+700
FLOOR TOTALS:			281	550	-550	+0	1809	1850	0	+1850

Vbz = RpPz + RaAz
**(ZONE DCV) Vbz = RaAz
Voz = Vbz / Ez

**BAROMETRIC RELIEF PROVIDED TO PREVENT OVER PRESSURIZATION, NOT INCLUDED IN AIR BALANCE CALCULATIONS.

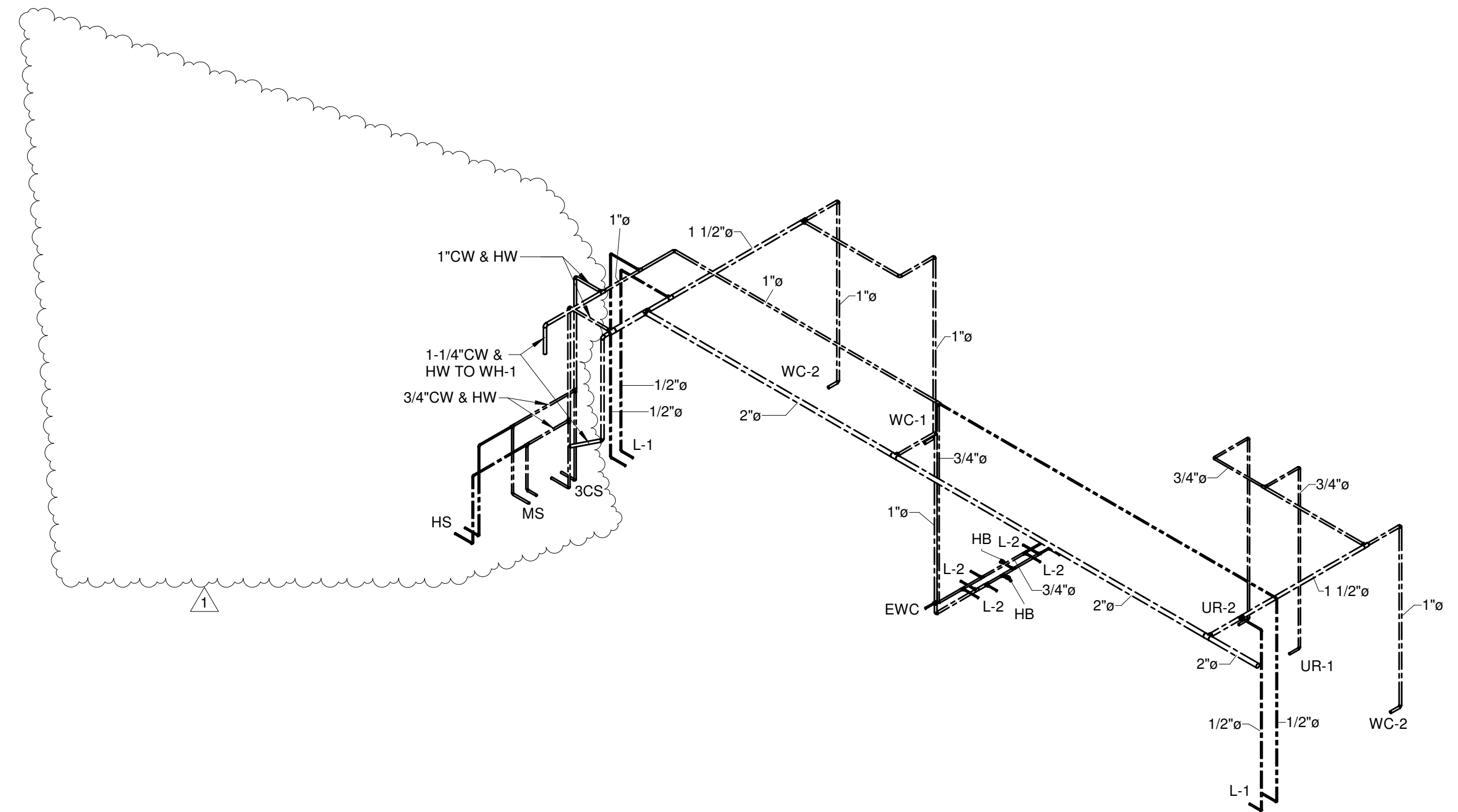


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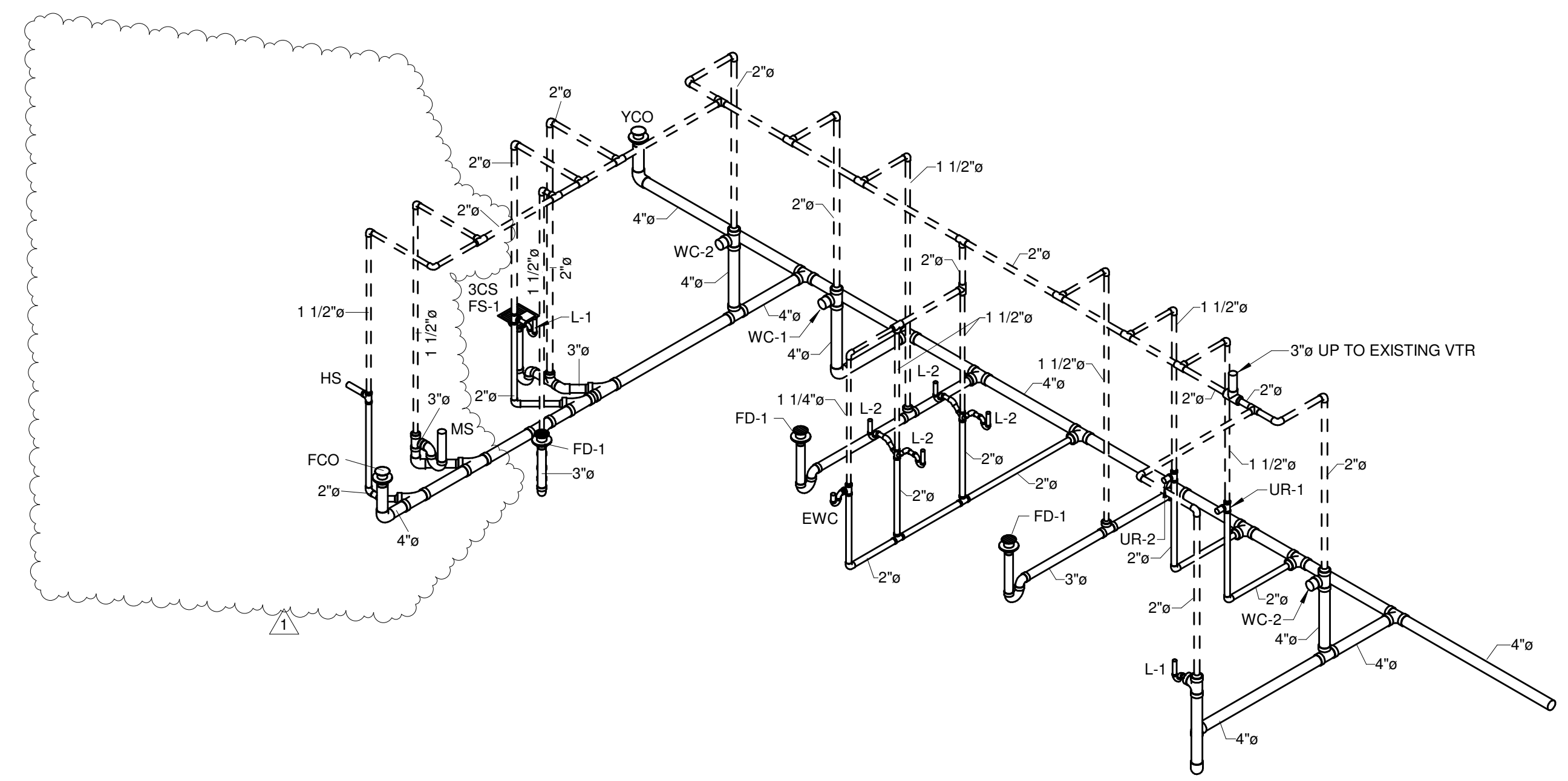
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 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

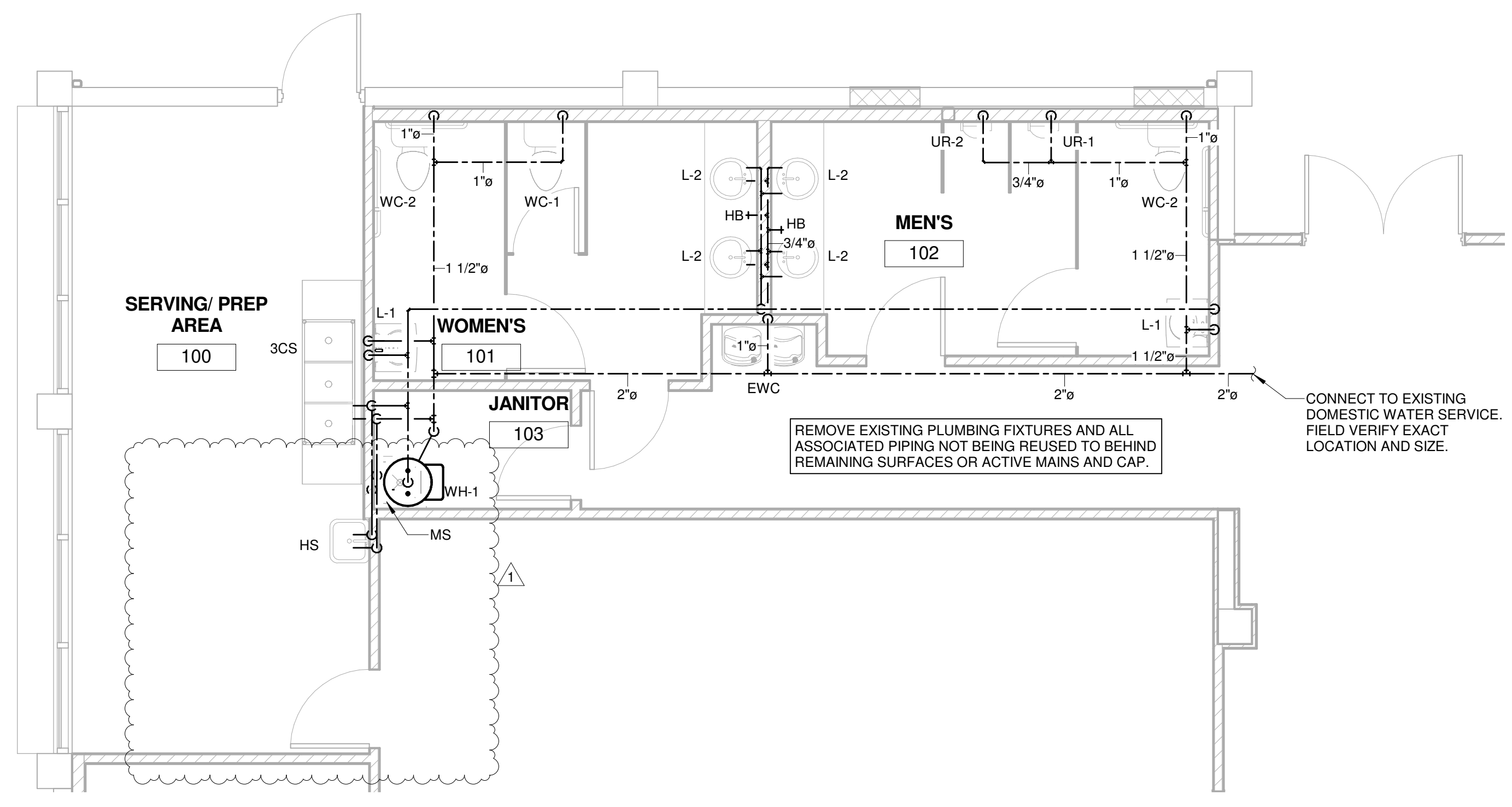
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ADF	JCW
Title:	
PLUMBING PLANS AND RISERS	
Sheet Number:	
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Date: 04/25/17: PERMIT SET	
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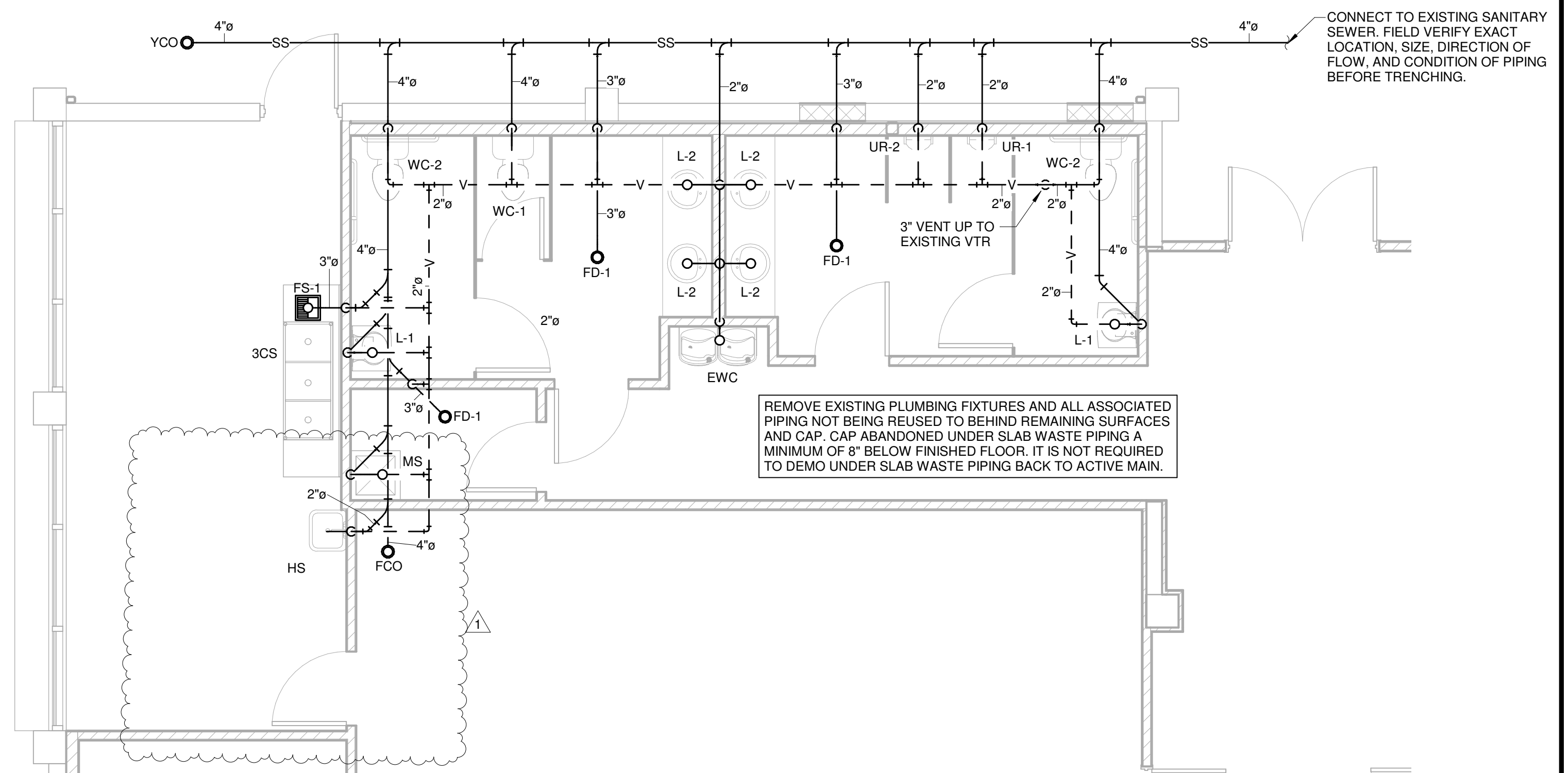
4 WATER RISER



3 DWV RISER



2 WATER PLAN
 1/4" = 1'-0"



1 DWV PLAN
 1/4" = 1'-0"

A
LOCATION: STORAGE 106
SUPPLY FROM: TRANSFORMER
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

240/120V-1PH,3W
400 A MCB
1 PH 3 WIRE
10,000 AIC
GROUND BAR

2 SECTION SUB FEED LUGS

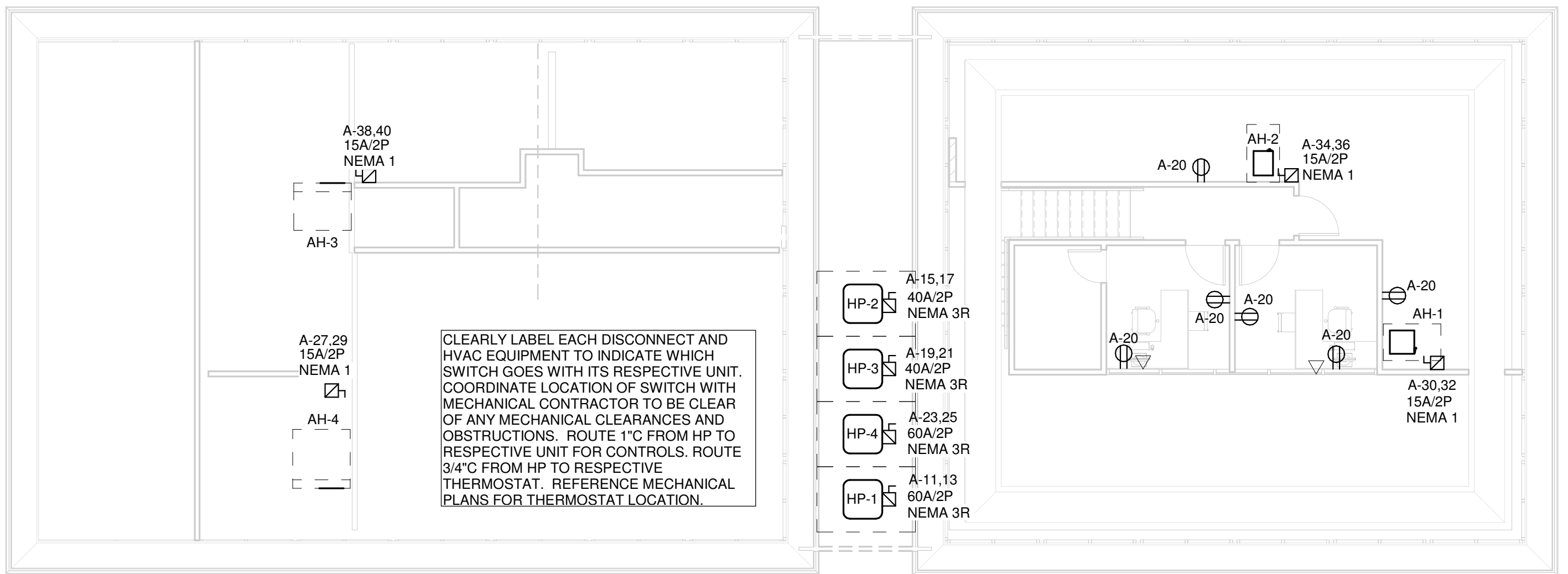
CKT	Circuit Description	Wire	Trip	Poles	A	B	Poles	Trip	Wire	Circuit Description	CKT	
1	CLASSROOM LIGHTS	12	20 A	1	1.00	1.26	1	20 A	12	GAME ROOM RECEP	2	
3	EXTERIOR LIGHTS (10)	12	20 A	1		0.01	0.00	1	20 A	SPARE	4	
5	DECORATIVE LIGHTS	12	20 A	1	0.08	0.90		1	20 A	RESTROOM RECEP	6	
7	LIGHTING	12	20 A	1		1.90	0.72	1	20 A	OFFICE RECEP	8	
9	UPPER LEVEL LIGHTS	12	20 A	1	0.51	1.08		1	20 A	OFFICE RECEP	10	
11	HP-1	6	60 A	2		4.24	0.36	1	20 A	COMPUTER RECEP	12	
13	HP-2	8	40 A	2		4.24	0.36	1	20 A	COMPUTER RECEP	14	
15	HP-3	8	40 A	2		2.54	0.18	1	20 A	COMPUTER RECEP	16	
17	HP-4	8	40 A	2		2.54	1.08	1	20 A	FLOOR OUTLETS	18	
19	HP-5	8	40 A	2		2.45	1.03	1	20 A	OFFICE RECEP	20	
21	HP-6	8	40 A	2		2.45	1.03	1	20 A	EF-5	22	
23	HP-7	6	60 A	2		4.24	0.95	1	20 A	EF-1	24	
25	HP-8	6	60 A	2		4.24	0.00	1	20 A	SPARE	26	
27	HP-9	12	15 A	2		0.88	1.70	1	20 A	EF-3,4	28	
29	HP-10	6	60 A	2		0.88	0.88	2	15 A	AH-1	30	
31	WATER HEATER	3	90 A	2		9.00	0.88			AH-2	32	
33	WATER HEATER	3	90 A	2		9.00	0.56			AH-3	34	
35	SPARE	20 A	1		0.00	0.56				AH-4	36	
37	SPARE	20 A	1		0.00	0.56				SPARE	38	
39	SPARE	20 A	1		0.00	0.56				SPARE	40	
41	SPARE	20 A	1		0.00	0.00				SPARE	42	
43	SPARE	20 A	1		0.00	0.00				SPARE	44	
45	SPARE	20 A	1		0.00	0.00				SPARE	46	
47	SPARE	20 A	1		0.00	0.00				SPARE	48	
49	SPARE	20 A	1		0.00	0.00				SPARE	50	
51	SPARE	20 A	1		0.00	0.00				SPARE	52	
53	SPARE	20 A	1		0.00	0.00				SPARE	54	
55	SPARE	20 A	1		0.00	0.00				SPARE	56	
57	SPARE	20 A	1		0.00	0.00				SPARE	58	
59	SPARE	20 A	1		0.00	0.00				SPARE	60	
61	SPARE	20 A	1		0.00	0.00				SPARE	62	
63	SPARE	20 A	1		0.00	0.00				SPARE	64	
65	SPARE	20 A	1		0.00	0.00				SPARE	66	
67	SPARE	20 A	1		0.00	0.00				SPARE	68	
69	SPARE	20 A	1		0.00	0.00				SPARE	70	
71	SPARE	20 A	1		0.00	0.00				SPARE	72	
73	SPARE	20 A	1		0.00	0.00				SPARE	74	
75	SPARE	20 A	1		0.00	0.00				SPARE	76	
77	SPARE	20 A	1		0.00	0.00				SPARE	78	
79	SPARE	20 A	1		0.00	0.00				SPARE	80	
81	SPARE	20 A	1		0.00	0.00				SPARE	82	
83	SPARE	20 A	1		0.00	0.00				SPARE	84	
TOTAL:					32.30 kVA	32.27 kVA						
					269 A	269 A						
TOTAL LOAD:					64.58 kVA	269.06 A						
FEEDER LOAD:					65.45 kVA	272.71 A						

PER NEC ARTICLE 220

PANELBOARD NOTES

1. TERMINATE GROUND ON ISOLATED GROUND BUS.
2. INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-OFF FOR MAINTENANCE).
3. INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-ON FOR CRITICAL LOAD).
4. GFI BREAKER FOR PERSONNEL PROTECTION (5 mA).
5. GFI BREAKER FOR EQUIPMENT PROTECTION (30 mA).
6. CONDUCTOR SIZE SHOWN IN PANEL SCHEDULE HAS BEEN INCREASED FOR VOLTAGE DROP. EQUIPMENT PROPORTIONALLY PER NEC. REFERENCE GROUND WIRE SIZING CHART.
7. REFER TO ONE-LINE DIAGRAM FOR AVAILABLE FAULT CURRENT FOR INTERRUPT RATINGS.
8. REFER TO ONE-LINE DIAGRAM FOR WIRE SIZES.
9. FACTORY WIRE TO LOAD.
10. THRU CONTACTOR.
11. CIRCUIT ROUTED TO SITE CONNECTION POINT IN FRONT SIDEWALK. REF POWER PLAN FOR CONDUIT SIZES/QUANTITIES TO CONNECTION POINT. REF CIVILS PLANS FOR SITE LIGHTING PLANS.
12. SHUNT TRIP BREAKER

FOLLOW PANEL SCHEDULE CIRCUITING STRICTLY TO ENSURE BALANCED PANEL LOADS.



3 SECOND FLOOR POWER PLAN
 1/8" = 1'-0"

CONDUIT SIZED BASED ON CONDUCTOR PROPERTIES LISTED IN THE CURRENT NEC EDITION, CHAPTER 9, TABLES 5 AND 5A, AND CONDUIT AREAS LISTED CHAPTER 9, TABLE 4 FOR EMT WITH 40% FILL. OTHER CONDITIONS MAY REQUIRE A LARGER CONDUIT, SUCH AS UNDERGROUND PVC, SIZED FOR NEC.

COORDINATE SIZE TYPE AND NUMBER OF LUGS WITH EQUIPMENT MANUFACTURER.

EQUIPMENT LABELS

ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE A LABEL APPLIED TO WARN OF POTENTIAL ARC FLASH HAZARDS, REFER TO ARC FLASH DETAIL.

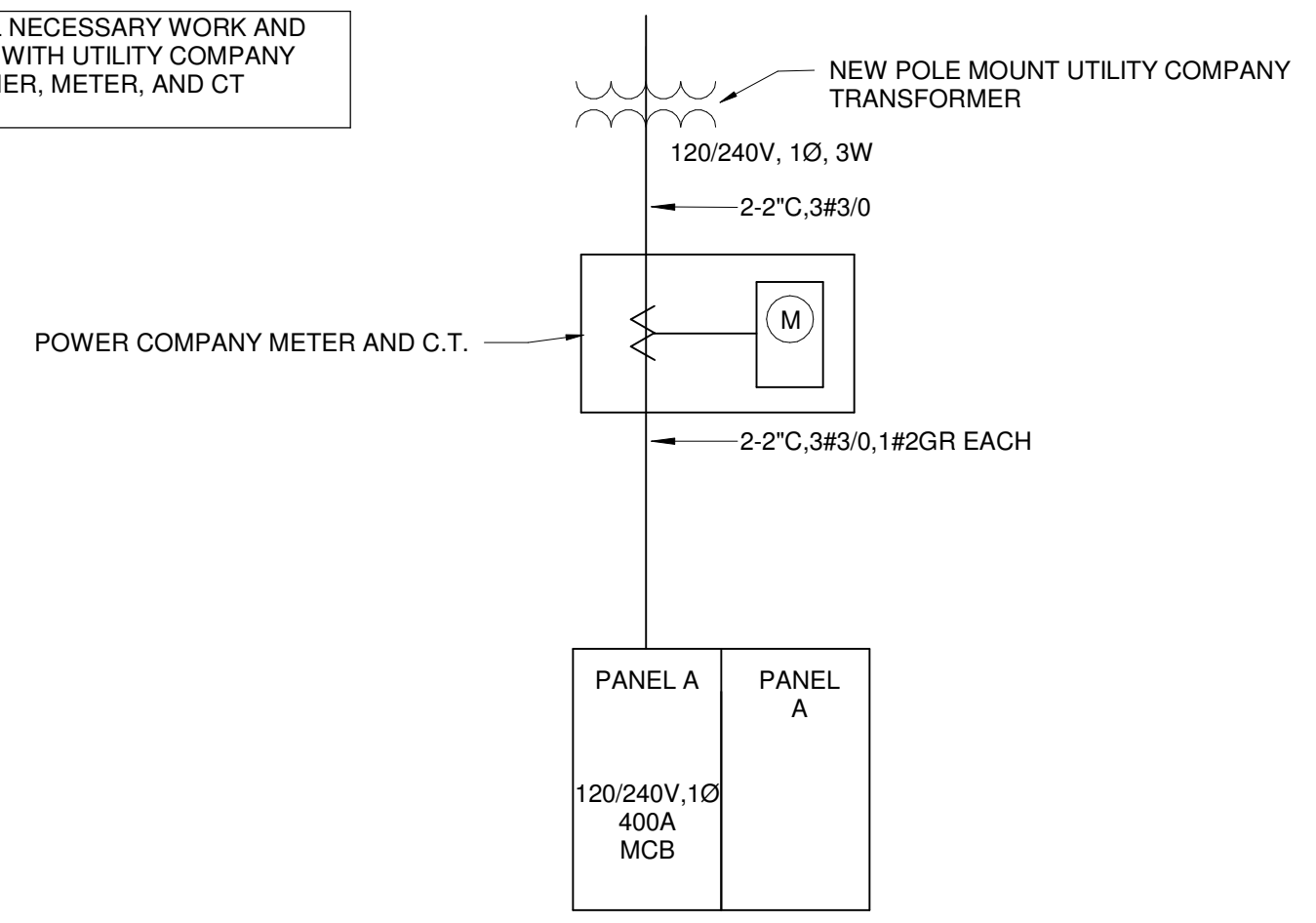
WARNING
ARC FLASH AND SHOCK HAZARD.
APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED

NOTES

A. ALL SWITCHBOARDS AND PANELBOARDS HAVE A COMMERCIALY PRODUCED LABEL APPLIED, SIMILAR TO THE ABOVE, TO OF POTENTIAL ARC FLASH HAZARDS, ACCORDANCE WITH NEC 110.16 AND NFPA 70E.

B. LABELING MAY BE COMPLETED BY MANUFACTURER, EQUIPMENT VENDOR/SUPPLIER, THE CONTRACTOR. THE CONTRACTOR SHALL THAT ALL SWITCHBOARDS AND PANELBOARDS PROPERLY LABELED IN THE FIELD.

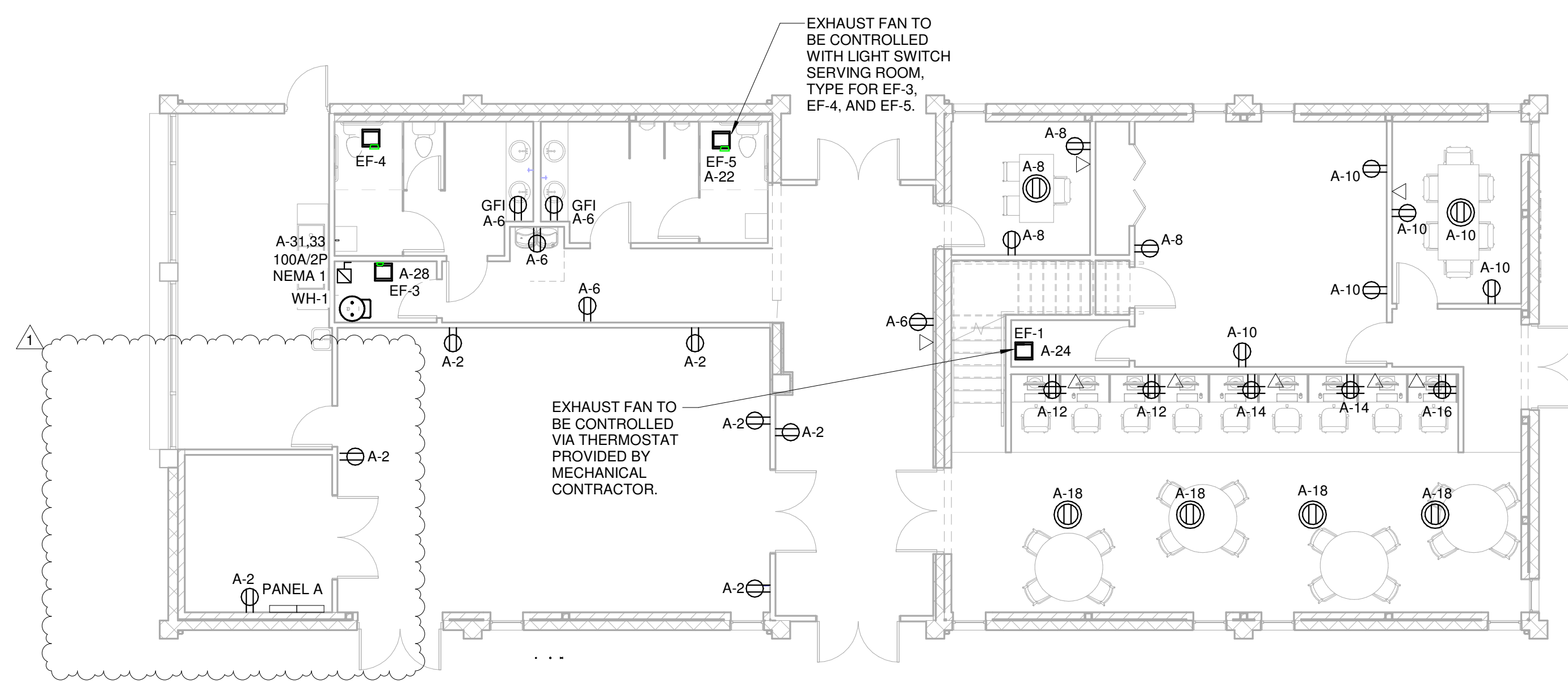
COORDINATE ALL NECESSARY WORK AND RESPONSIBILITY WITH UTILITY COMPANY FOR TRANSFORMER, METER, AND CT INSTALLATION.



2 ELECTRICAL ONE-LINE DIAGRAM
 NTS

EXISTING ELECTRICAL PANELS TO BE REMOVED. NEW 2 SECTION PANELBOARD "A" TO BE FURNISHED AND INSTALLED AT EXISTING PANELS LOCATION. EXISTING CIRCUITS TO REMAIN AND NOT SHOWN ON PLAN TO BE RELOCATED TO NEW PANELBOARD "A". EXTEND/REROUTE EXISTING BRANCH CIRCUITRY AS REQUIRED.

ELECTRICAL CONTRACTOR TO COORDINATE WITH KEYS ENERGY FOR UPGRADING OF ELECTRICAL SERVICE FROM 200A TO 400A.



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

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Boys and Girls Club Renovation
 Bayview Park Vacant Building
 Key West, FL 33040
Boys and Girls Club of Key West

Drawing Size: 24 x 36
 Project #: 16110
 Drawn By: JMC
 Checked By: SSG
 Title: POWER PLANS

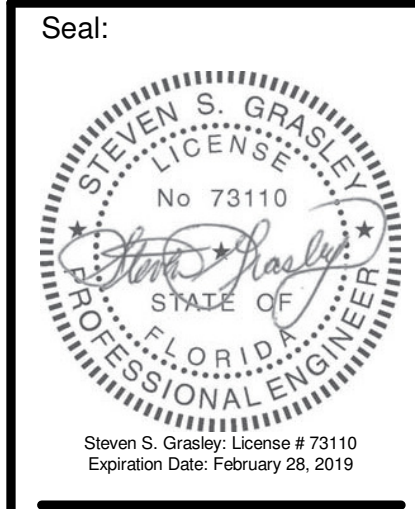
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LIGHTING FIXTURE SCHEDULE

TYPE	VENDOR	FURNISHED BY	CATALOG NUMBER	VOLTS	WATTS	LAMP (PHILIPS)		MOUNTING	DESCRIPTION
						ORDER NUMBER	QTY		
A	ACUITY	CONTRACTOR	2BLT4-72L-ADP-MVOLT-LP835	120/277	67	INTEGRAL LED	-	RECESSED	2' x 4' TROFFER (ACT GRID)
A1	ACUITY	CONTRACTOR	2BLT4-72L-ADP-MVOLT-LP835-DGA24	120/277	67	INTEGRAL LED	-	RECESSED	2' x 4' TROFFER (GYP CEILING)
B	--	OWNER	DECORATIVE PENDANT	120/277	60 MAX	INTEGRAL LED	-	PENDANT	DECORATIVE PENDANT LIGHT
C	ACUITY	CONTRACTOR	LDM4-30/20-L04AR-120-TRW	120	22	INTEGRAL LED	-	RECESSED	4" RECESSED DOWNLIGHT
E4	ACUITY	CONTRACTOR	ZL1N-L48-5000LM-FST-MVOLT-35K-80CRI-WH	120	42	INTEGRAL LED	-	SURFACE	4" SURFACE LED STRIP
E8	ACUITY	CONTRACTOR	TZL1N-L96-10000LM-FST-MVOLT-35K-80CRI-WH	120	83	INTEGRAL LED	-	SURFACE	4" SURFACE LED STRIP
F	ACUITY	CONTRACTOR	ELM2-LED	120	2	INTEGRAL LED	-	SURFACE	LED EMERGENCY LIGHT
G	ACUITY	CONTRACTOR	FEM-L96-12000LM-IMAFI-MD-120-35K-80CRI-DL	120	88	INTEGRAL LED	-	SURFACE	LED CANOPY LIGHT
H	ELK LIGHTING	CONTRACTOR	TREVOT LED 17" GRAPHITE WALL SCONCE	120	13.5	INTEGRAL LED	-	SURFACE	EXTERIOR WALL SCONCE
J	ACUITY	CONTRACTOR	WST LED-P3-30K-VF-120-DOBXD	120	50	INTEGRAL LED	-	SURFACE	EXTERIOR WALL PACK
X1	ACUITY	CONTRACTOR	LHQM-LED-R	120/277	1	INTEGRAL LED	-	WALL	EXIT SIGN (SINGLE FACE)

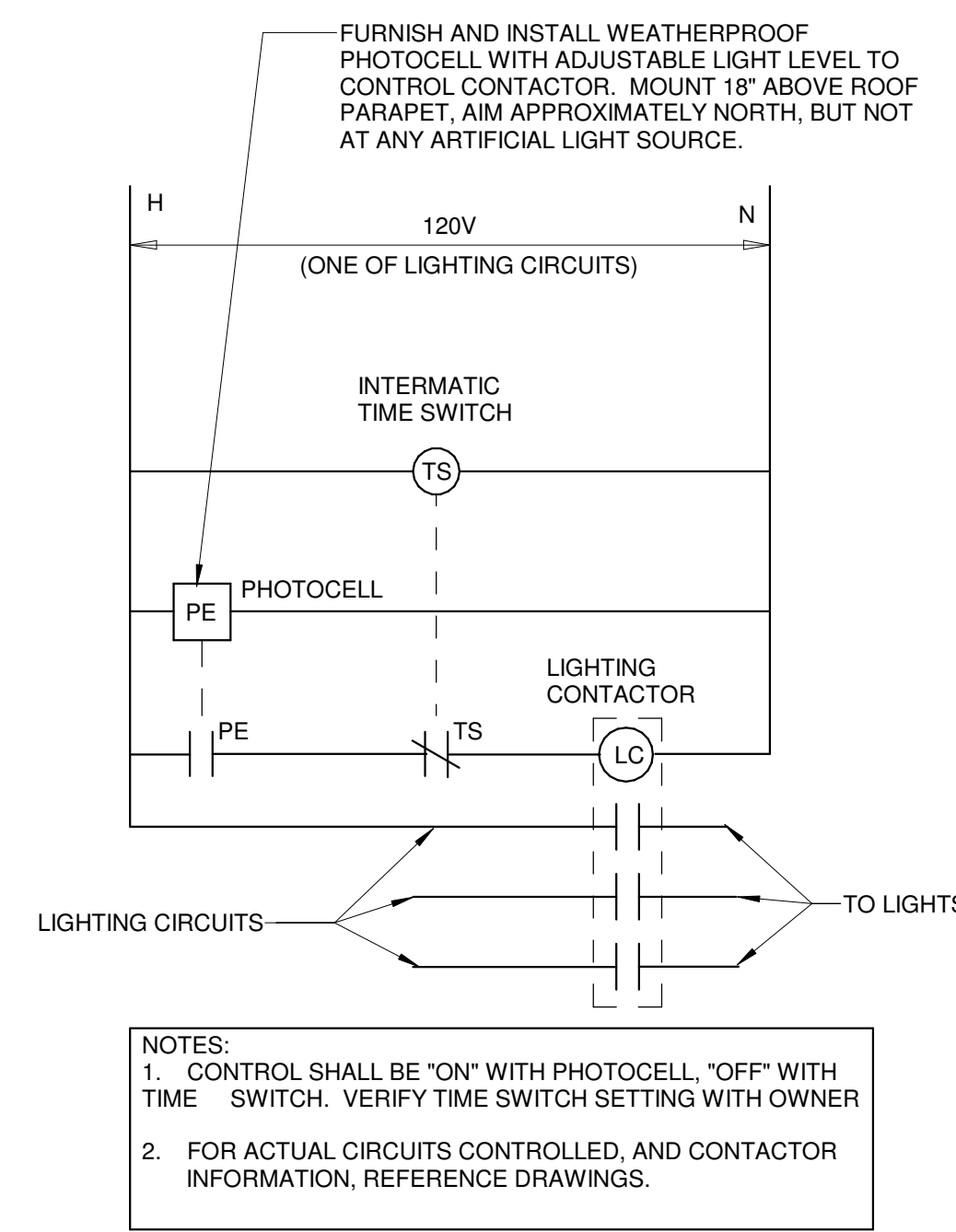


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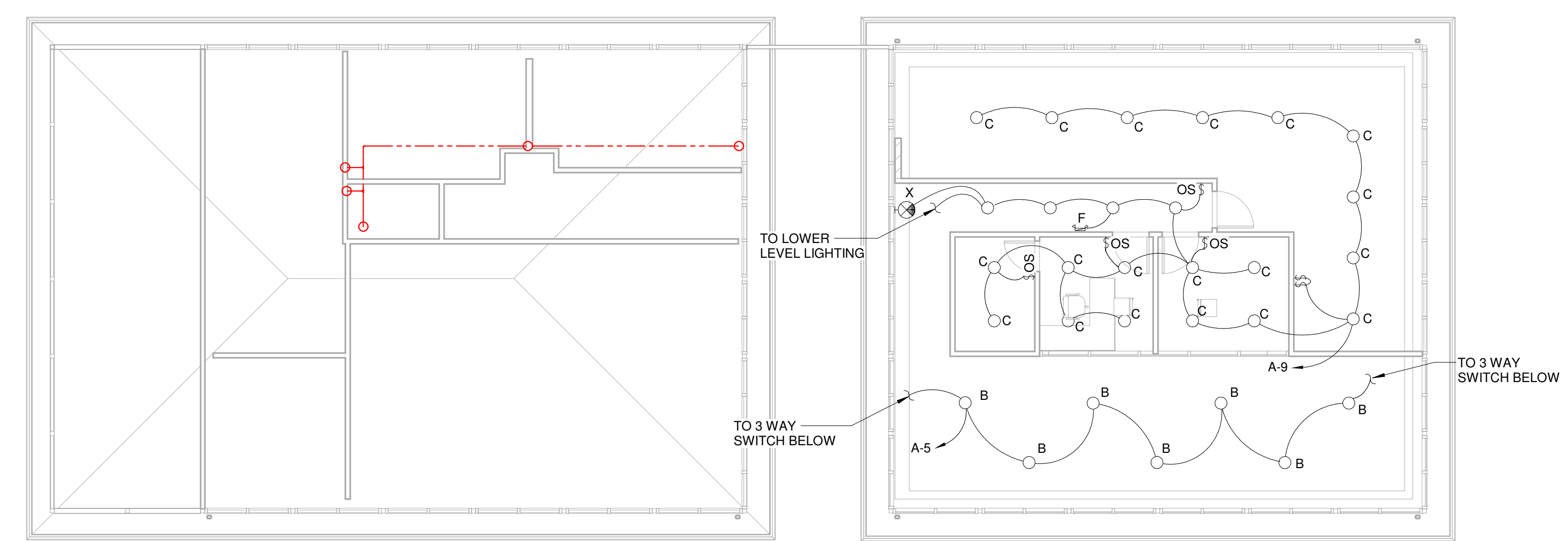
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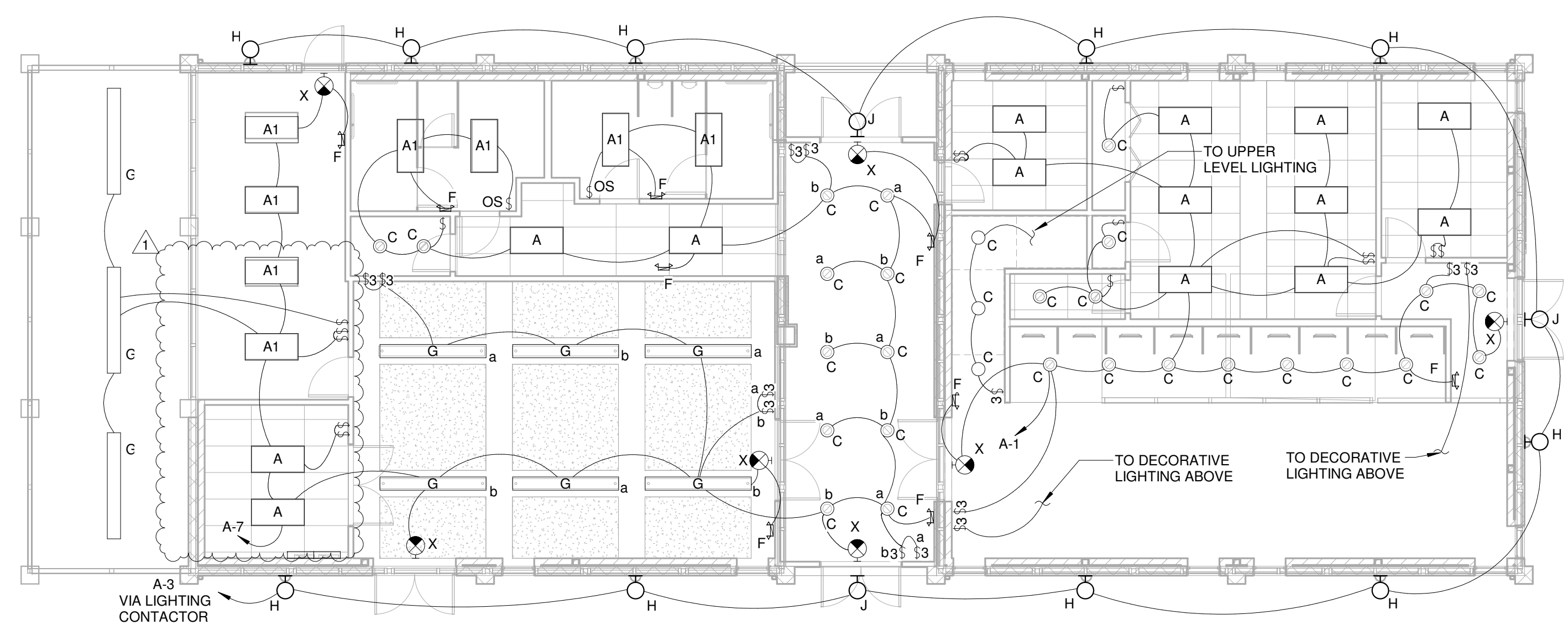
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JMC	SSG
Title:	
LIGHTING PLANS	
Sheet Number:	
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Date: 04/25/17: PERMIT SET	
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3 LIGHTING CONTACTOR
 12" = 1'-0"



2 SECOND FLOOR LIGHTING PLAN
 1/8" = 1'-0"



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