Project No: 14-007 July 27, 2015

Galveston County, Texas

Commissioners Court

The Honorable Mark Henry	County Judge
The Honorable Ryan Dennard	•
The Honorable Joe Giusti	
The Honorable Stephen D. Holmes	
The Honorable Ken Clark	

Bid Number Bid Date Bid Time B151023 August 18, 2015 2:00 p.m.



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Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

Invitation to Bid

Galveston County is requesting bids for general construction to renovate the site and building at 823 Grand Bacliff, Texas.

Sealed Bids in sets of six (6), one (1) original and five (5) copies will be received in the office of the County Purchasing Agent, until 2:00 P.M. on August 18, 2015 and publically opened as soon as practical after Bid time in that office in the presence of the County Auditor and the Purchasing Agent. Bidders are specifically advised that any Bid delivered after this time will be returned unopened.

Proposer must seal all Bids in an opaque envelope with the following information on the face of the envelope and deliver to

Bid #B151023 Renovation to 823 Grand Bacliff, Texas

To:

Galveston County Purchasing Agent 722 Moody (21st Street) - 5th Floor Galveston, Texas 77550

From:

Name of Bidder

Each Bid must be accompanied by a Certified or Cashier's Check or acceptable Bid Bond in the amount of 5% of Bid as a guarantee that, if awarded the contract the Bidder will enter into a contract and execute required Performance and Payment Bonds.

No Bid shall be withdrawn within sixty (60) days after Bid date without the specific consent of Galveston County.

Design Professional: Galveston County Architect

J. Dudley Anderson

722 Moody

Galveston, Texas 77550

(409) 770-5330

Galveston County may reject any Bid not prepared and submitted in accordance with the provisions hereof and may waive any and all informalities, reject any and all Bids and accept any Bid deemed in its best interest or otherwise advantageous to it.

Upon satisfaction of contractual terms (e.g., goods delivered in promised condition, services rendered as agreed, etc.), vendor is to be paid after certification by the Construction Manager agent and Architect via Galveston County's normal accounts payable process.

Rufus Crowder, CPPO CPPB Purchasing Agent Galveston County

Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

BID DOCUMENTS

Bidder may obtain an electronic copy of the plans and specifications in pdf format at the Galveston County Purchasing Agent's office.

Bid Documents will be available prior to Bid date and may be obtained at the following address:

Bids Documents available at:

The Office of the County Purchasing Agent 722 Moody (21st Street) - 5th Floor Galveston, Texas 77550

Office Hours are 8:00 AM to 5:00 PM

PAYMENT BOND AND PERFORMANCE BOND: A Payment Bond and Performance Bond, each in an amount equal to or greater than 100% of the Contract Sum conditioned upon the faithful performance of the Contract will be required. Please note that all bonding companies presented must be acceptable to Galveston County.

PRE-BID MEETING: No pre-Bid meeting is scheduled, however all Bidders are required to have visited the site and become familiar with the existing conditions.

QUALIFICATION: Bidder is required to comply with certain procedures as enumerated in the General Provisions regarding qualification of Bidder.

Any Bidder submitting a Bid is required to visit the site.

Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

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County of Galveston

ACKNOWLEDGMENT AND CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER INELGIBILITY

Executive Orders 12549 & 12689 Certification, Debarment and Suspension

Solicitation Number: Bid #B151023

Solicitation Title: Renovation to o 823 Grand Bacliff, Texas
Contractor hereby CERTIFIES that:
Contractor, and all of its principals, is not presently debarred, suspended, proposed for debarment, proposed for suspension, or declared ineligible under Executive Order 12549 or Executive Order 12689, Debarment and Suspension, and is not in any other way ineligible for participation in Federal or State assistance programs;
Contractor, and all of its principals, were not and have not been debarred, suspended, proposed for debarment, proposed for suspension, or declared ineligible under Executive Order 12549 or Executive Order 12689, Debarment and Suspension, and were not and have not been in any other way ineligible for participation in Federal or State assistance programs at the time its' proposal was submitted in the procurement identified herein and at any time since submission of its' proposal;
Contractor has included, and shall continue to include, this certification in all contracts between itself and any sub-contractors in connection with services performed under this contract; and
Contractor shall notify Galveston County in writing immediately, through written notification to the Galveston County Purchasing Agent, if Contractor is not in compliance with Executive Order 12549 or 12689 during the term of its contract with Galveston County.
Contractor Represents and Warrants that the individual
Contractor Represents and Warrants that the individual executing this Acknowledgment and Certification on its behalf has the full power and authority to do so and can legally bind the Contractor hereto.
Name of Business Date
By:
Signature Printed Name & Title



County of Galveston **Purchasing Department Vendor Qualification Packet**

(rev. 1.2, March 29, 2010)

All interested parties seeking consideration for qualified vendor status with the County of Galveston should complete and return only the following attached forms to:

> **Galveston County Purchasing Department** 722 Moody Avenue, (21st Street), 5th Floor Galveston, Texas 77550 (409) 770-5371 office (409) 621-7987 fax

Form PEID: Person /Entity Information Data

Form W-9: Request for Taxpayer Identification Number and Certification

> (please note that the included form <u>may not</u> be the latest revised form issued by the Internal Revenue Service. Please check the IRS website at http://www.irs.gov/pub/irs-pdf/fw9.pdf for the latest revision of this form.)

Form CIQ: Conflict of Interest Questionnaire

> (please note that the included form may not be the latest revised form issued by the State of Texas Ethics Commission. Please check the Texas Ethics Commission website at for the latest revision of this form. Please note that Galveston County Purchasing Agent is not responsible for the filing of this form with the

Galveston County Clerk per instructions of the State of Texas Ethics Commission).

Certificate(s) of Insurance: If the person or entity seeking qualified vendor status with the County will be performing work at or on any County owned facility and/or property, Certificate(s) of Insurance are required to be submitted prior to performing any work.

Insurance requirements are as follows:

Public Liability and Property Damage Insurance:

Successful vendor agrees to keep in full force and effect, a policy of public liability and property damage insurance issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public from any loss or damage that may arise to any person or property by reason of services rendered by vendor. Vendor shall at its own expense be required to carry the following minimum insurance coverages:

- For damages arising out of bodily injury to or death of one person in any one occurrence - one hundred thousand and no/100 dollars (\$100,000.00);
- For damages arising out of bodily injury to or death of two or more persons in any one occurrence – three hundred thousand and no/100 dollars (\$300,000.00); and
- For injury to or destruction of property in any one occurrence one hundred thousand and no/100 dollars (\$100,000.00).

This insurance shall be either on an occurrence basis or on a claims made basis. Provided however, that if the coverage is on a claims made basis, then the vendor shall be required to purchase, at the termination of this agreement, tail coverage for the County for the period of the County's relationship with the vendor under this agreement. Such coverage shall be in the amounts set forth in subparagraphs (1), (2), and (3) above.

Worker's Compensation Insurance:

Successful vendor shall also carry in full force Workers' Compensation Insurance policy(ies), if there is more than one employee, for all employees, including but not limited to full time, part time, and emergency employees employed by the vendor. Current insurance certificates certifying that such policies as specified above are in full force and effect shall be furnished by the vendor to the County.

The County of Galveston shall be named as additional insured on policies listed in subparagraphs above and shall be notified of any changes to the policy(ies) during the contractual period.

Insurance is to be placed with insurers having a Best rating of no less than A. The vendor shall furnish the County with certificates of insurance and original endorsements affecting coverage required by these insurance clauses. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The vendor shall be required to submit annual renewals for the term of any contractual agreement, purchase order or term contract, with Galveston County prior to expiration of any policy.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in equity.

The County agrees to provide vendor with reasonable and timely notice of any claim, demand, or cause of action made or brought against the County arising out of or related to utilization of the property. Vendor shall have the right to defend any such claim, demand, or cause of action at its sole cost and expense and within its sole and exclusive discretion. The County agrees not to compromise or settle any claim or cause of action arising out of or related to the utilization of the property without the prior written consent of the vendor.

In no event shall the County be liable for any damage to or destruction of any property belonging to the vendor unless specified in writing and agreed upon by both parties.

Procurement Policy - Special Note:

Understand that it is, according to Texas Local Government Code, Section 262.011, Purchasing Agents, subsections (d), (e), and (f), the sole responsibility of the Purchasing Agent to supervise all procurement transactions.

Therefore, be advised that all procurement transactions require proper authorization in the form of a Galveston County purchase order from the Purchasing Agent's office prior to commitment to deliver supplies, materials, equipment, including contracts for repair, service, and maintenance agreements. Any commitments made without proper authorization from the Purchasing Agent's office, pending Commissioners' Court approval, may become the sole responsibility of the individual making the commitment including the obligation of payment.

Code of Ethics - Statement of Purchasing Policy:

Public employment is a public trust. It is the policy of Galveston County to promote and balance the objective of protecting the County's integrity and the objective of facilitating the recruitment and

retention of personnel needed by Galveston County. Such policy is implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public office.

Public employees must discharge their duties impartially so as to assure fair competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the Galveston County procurement organization.

To achieve the purpose of these instructions, it is essential that those doing business with Galveston County also observe the ethical standards prescribed here.

General Ethical Standards: It shall be a breach of ethics to attempt to realize personal gain through public employment with Galveston County by any conduct inconsistent with the proper discharge of the employee's duties.

It shall be a breach of ethics to attempt to influence any public employee of Galveston County to breach the standards of ethical conduct set forth in this code.

It shall be a breach of ethics for any employee of Galveston County to participate directly or indirectly in procurement when the employee knows that:

- The employee or any member of the employee's immediate family has a financial interest pertaining to the procurement.
- A business or organization in which the employee, or any member of the employee's immediate family, has a financial interest pertaining to the procurement.
- Any other person, business or organization with which the employee or any member of the
 employee's immediate family is negotiating or has an arrangement concerning prospective
 employment is involved in the procurement.

Gratuities: It shall be a breach of ethics to offer, give or agree to give any employee of Galveston County, or for any employee or former employee of Galveston County to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before this government.

Kickbacks: It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for Galveston County, or any person associated therewith, as an inducement for the award of a subcontract or order.

Contract Clause: The prohibition against gratuities and kickbacks prescribed above shall be conspicuously set forth in every contract and solicitation by Galveston County.

Confidential Information: It shall be a breach of ethics for any employee or former employee of Galveston County to knowingly use confidential information for actual or anticipated personal gain, or for the actual or anticipated gain of any person.

Questions/Concerns:

If you have any questions or concerns regarding the information or instructions contained within this packet, please contact any member of the Purchasing Department staff at (409) 770-5371.

CONFLICT OF INTEREST DISCLOSURE REPORTING

Proposer may be required under Chapter 176 of the Texas Local Government Code to complete and file a conflict of interest questionnaire (CIQ Form). If so, the completed CIQ Form must be filed with the County Clerk of Galveston County, Texas.

If Proposer has an employment or other business relationship with an officer of Galveston County or with a family member of an officer of Galveston County that results in the officer or family member of the officer receiving taxable income that exceeds \$2,500.00 during the preceding 12-month period, then Proposer MUST complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

If Proposer has given an officer of Galveston County or a family member of an officer of Galveston County one or more gifts with an aggregate value of more than \$250.00 during the preceding 12-months, then Proposer MUST complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

The Galveston County Clerk has offices at the following locations:

Galveston County Clerk
Galveston County Justice Center, Suite 2001
600 59th Street
Galveston, Texas 77551

Galveston County Clerk North County Annex, 1st Floor 174 Calder Road League City, Texas 77573

Again, if Proposer is required to file a CIQ Form, the original completed form is filed with the Galveston County Clerk (not the Purchasing Agent).

For Proposer's convenience, a blank CIQ Form is enclosed with this proposal. Blank CIQ Forms may also be obtained by visiting the Galveston County Clerk's website and/or the Purchasing Agent's website – both of these web sites are linked to the Galveston County homepage, at http://www.co.galveston.tx.us.

As well, blank CIQ Forms may be obtained by visiting the Texas Ethics Commission website, specifically at http://www.ethics.state.tx.us/whatsnew/conflict_forms.htm.

Chapter 176 specifies deadlines for the filing of CIQ Forms (both initial filings and updated filings).

It is Proposer's sole responsibility to file a true and complete CIQ Form with the Galveston County Clerk if Proposer is required to file by the requirements of Chapter 176. Proposer is advised that it is an offense to fail to comply with the disclosure reporting requirements dictated under Chapter 176 of the Texas Local Government Code.

If you have questions about compliance with Chapter 176, please consult your own legal counsel. Compliance is the individual responsibility of each person, business, and agent who is subject to Chapter 176 of the Texas Local Government Code.



COUNTY of GALVESTON

Purchasing Department

rev. 1.3, March 29, 2010

FORM PEID:	Request for Person-Entity Identification Data	
Instructions: Please type or p	rint clearly when completing sections 1 thru 4 and return completed form to:	

Galveston County Purchasing Agent 722 Moody Avenue (21st. Street), 5th Floor Galveston, Texas 77550 (409) 770-5371 office

	9) 621-7987 fax		
Business Name:			
Attention Line:			
Physical Address:			
City:		State:	Zip+4:
Billing / Remit Address:			
City:		State:	Zip+4
Main Contact Person:			
Main Phone Number:			
Fax Number:			
E-mail Address:			
	Areas below are for Cour	nty use only.	
Requested By:		Phone / Ext.	#
Department:		Date:	
Action Requested - Check One	: IFAS PEID Vendo	or Number:	
() Add New	() Change Data) Re-activate
() Inactivate	() Employee	() Attorney
() Landlord	() Foster Parent	() Refund

Form (Rev. October 2007) Department of the Treasury Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

2.	Name (as shown on your income tax return)			
Print or type Specific Instructions on page	Business name, if different from above			
	Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership ☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=part ☐ Other (see instructions) ▶	nership) ►		Exempt payee
Print Inst	Address (number, street, and apt. or suite no.)	Requester's	name and a	ddress (optional)
pecific	City, state, and ZIP code			
See	List account number(s) here (optional)			
Par	Taxpayer Identification Number (TIN)			
back	r your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to up withholding. For individuals, this is your social security number (SSN). However, for a resi	dent	Social secu	rity number
	, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entitie employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on			or
	s. If the account is in more than one name, see the chart on page 4 for guidelines on whose per to enter.		Employer id	lentification number
Par	t II Certification			
Unde	er penalties of perjury, I certify that:			
1. T	he number shown on this form is my correct taxpayer identification number (or I am waiting	for a num	ber to be is	sued to me), and
R	am not subject to backup withholding because: (a) I am exempt from backup withholding, or Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to repo- notified me that I am no longer subject to backup withholding, and			
3. 1	am a U.S. citizen or other U.S. person (defined below).			
	ification instructions. You must cross out item 2 above if you have been notified by the IRS nolding because you have failed to report all interest and dividends on your tax return. For re			

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Signature of U.S. person ▶ Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- · An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

• The U.S. owner of a disregarded entity and not the entity,

- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

- The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
 - 2. The treaty article addressing the income.
- The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
- The type and amount of income that qualifies for the exemption from tax.
- 5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

- 1. You do not furnish your TIN to the requester,
- 2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
- The IRS tells the requester that you furnished an incorrect TIN,

- 4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
- 5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see Special rules for partnerships on page 1.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name" line.

Limited liability company (LLC). Check the "Limited liability company" box only and enter the appropriate code for the tax classification ("D" for disregarded entity, "C" for corporation, "P" for partnership) in the space provided.

For a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Regulations section 301.7701-3, enter the owner's name on the "Name" line. Enter the LLC's name on the "Business name" line.

For an LLC classified as a partnership or a corporation, enter the LLC's name on the "Name" line and any business, trade, or DBA name on the "Business name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name" line.

Note. You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

- 1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
- The United States or any of its agencies or instrumentalities,
- 3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
- 4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
- 5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

- 6. A corporation,
- 7. A foreign central bank of issue,
- 8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
- 9. A futures commission merchant registered with the Commodity Futures Trading Commission,
 - A real estate investment trust.
- 11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
- 12. A common trust fund operated by a bank under section 584(a),
 - 13. A financial institution,
- 14. A middleman known in the investment community as a nominee or custodian, or
- A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 '	Generally, exempt payees 1 through 7

¹See Form 1099-MISC, Miscellaneous Income, and its instructions.

²However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting www.irs.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon. **Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt payees, see *Exempt Payee* on page 2.

Signature requirements. Complete the certification as indicated in 1 through 5 below.

- Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.
- 2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

- Real estate transactions. You must sign the certification.You may cross out item 2 of the certification.
- 4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
- 5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

_	For this type of account:	Give name and SSN of:
1.	Individual	The individual
2.	Two or more individuals (joint account)	The actual owner of the account or if combined funds, the first individual on the account '
3.	Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4.	The usual revocable savings trust (grantor is also trustee)	The grantor-trustee '
	b. So-called trust account that is not a legal or valid trust under state law	The actual owner '
5.	Sole proprietorship or disregarded entity owned by an individual	The owner ^a
	For this type of account:	Give name and EIN of:
6.	Disregarded entity not owned by an individual	The owner
7.	A valid trust, estate, or pension trust	Legal entity *
8.	Corporate or LLC electing corporate status on Form 8832	The corporation
9.	Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
10.	Partnership or multi-member LLC	The partnership
11.	A broker or registered nominee	The broker or nominee
12.	Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- · Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

Call the IRS at 1-800-829-1040 if you think your identity has been used inappropriately for tax purposes.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to <code>phishing@irs.gov</code>. You may also report misuse of the IRS name, logo, or other IRS personal property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: <code>spam@uce.gov</code> or contact them at <code>www.consumer.gov/idtheft</code> or 1-877-IDTHEFT(438-4338).

Visit the IRS website at www.irs.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

²Circle the minor's name and furnish the minor's SSN.

³You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see Special rules for partnerships on page 1.

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

is questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.	OFFICE USE ONLY
is questionnaire is being filed in accordance with Chapter 176, Local Government Code a person who has a business relationship as defined by Section 176.001(1-a) with a local vernmental entity and the person meets requirements under Section 176.006(a).	Date Received
law this questionnaire must be filed with the records administrator of the local governmental tity not later than the 7th business day after the date the person becomes aware of facts at require the statement to be filed. See Section 176.006, Local Government Code.	
person commits an offense if the person knowingly violates Section 176.006, Local overnment Code. An offense under this section is a Class C misdemeanor.	
Name of person who has a business relationship with local governmental entity.	
Check this have to	
Check this box if you are filing an update to a previously filed questionnaire.	
(The law requires that you file an updated completed questionnaire with the applater than the 7th business day after the date the critically file to	roprioto (III
later than the 7th business day after the date the originally filed questionnaire become	s incomplete or inaccurate)
Name of local government officer with whom filer has employment or business relationship	
Name of Officer	
This section (item 3 including subparts A, B, C & D) must be completed for each officer employment or other business relationship as defined by Section 176.001(1-a), Local Governreages to this Form CIQ as necessary.	with whom the filer has ar nent Code. Attach additional
A. Is the local government officer named in this section receiving or likely to receive taxable in income, from the filer of the questionnaire?	come, other than investment
Yes No	0.0
Yes No	
B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than inves direction of the local government officer named in this section AND the taxable income is governmental entity?	tment income, from or at the not received from the local
Yes No	
 Is the filer of this questionnaire employed by a corporation or other business entity with government officer serves as an officer or director, or holds an ownership of 10 percent or mor 	respect to which the local
Yes No	
D. Describe each employment or business relationship with the local government officer name	
wat the local government officer name	ed in this section.

Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

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SPECIAL PROVISIONS......1-13

TIME: 2:00 PM

GENERAL PROVISIONS 823 Grand Renovation Galveston County, Texas

1. BID PACKAGE:

The request for Bid, general and special provisions, drawings, specifications/line item details, contract documents and the Bid sheet are all part of the Bid package. Bids must be submitted in sets of five (5), one (1) original and four (4) copies on the forms provided by the County, including the Bid sheets completed in their entirety and signed by an authorized representative by original signature. Failure to complete and sign the Bid sheets/contract page(s) may disqualify the Bid from being considered by the Commissioners' Court. Any individual signing on behalf of the Bidder expressly affirms that he or she is duly authorized to tender this Bid and to sign the Bid sheet/contract under the terms and conditions in this Bid. Bidder further understands that the signing of the contract shall be of no effect unless subsequently awarded and the contract properly executed by the Commissioners' Court. All figures must be written in ink or typed. Figures written in pencil or with erasures are not acceptable. However, mistakes may be crossed out, corrections inserted, and initialed in ink by the individual signing the Bid. If there are discrepancies between unit prices quoted and extensions, the unit price will prevail. Each Bidder is required to thoroughly review this entire Bid packet to familiarize themselves with the Bid procedures, the plans and specifications for the requested work as well as the terms, and conditions of the contract the successful Bidder will execute with the County.

BIDDER'S RESPONSIBILITY

The Bidder must affirmatively demonstrate its responsibility. The Bidder must also meet the following minimum requirements:

- A. have adequate financial resources or the ability to obtain such resources as required;
- B. be able to comply with all federal, state, and local laws, rules, regulations, ordinances and orders regarding this Request for Bid;
- C. have a satisfactory record of performance;
- D. have a satisfactory record of integrity and ethics;
- E. and be otherwise qualified and eligible to receive an award.

TIME FOR RECEIVING BIDS:

Bids received prior to the submission deadline will be maintained unopened until the specified time for opening. If the Bidder fails to identify the Bid Number on the outside of the envelope as required, the Purchasing Agent will open the envelope for the sole purpose of identifying the Bid number for which the submission was made. The envelope will then be resealed. No liability will attach to a County office or employee for the premature opening of a Bid. If you do not submit a Bid, return this Request for Bid and state reason, otherwise your name may be removed from the Purchasing Agent's mailing list.

4. BID OPENING:

Only the names of Bidders will be read at the opening. The Purchasing Agent will examine Bids promptly and thoroughly. No Bid may be withdrawn for a period of sixty (60) calendar days of the Bid opening date.

5. COMMISSIONERS' COURT:

No contract is binding on the County until it is properly placed on the Commissioners' Court agenda, approved in open Court, authorized to be executed by the County Judge, and fully executed by both parties. Department heads and elected officials are not authorized to enter into any type of agreement or contract on behalf of the County. Only the Commissioners' Court acting as a body may enter into a contract on behalf of and contractually bind the County. Additionally, department heads and elected officials are not authorized to agree to any type of supplemental agreements or contracts for goods or services. Supplemental agreements are subject to review by the County Legal Department prior to being accepted and signed by the County's authorized representative.

RFP #B151023 OPEN: August 18, 2105 TIME: 2:00 PM

GENERAL PROVISIONS 823 Grand Renovation Galveston County, Texas

6. REJECTION OF BIDS/DISQUALIFICATION:

Galveston County, acting through its Commissioners' Court, reserves the right to: reject any and all Bids in whole or in part received by reason of this request for Bid, to waive any informality in the Bids received, to disregard the Bid of any Bidder determined to be not responsible, and/or to discontinue its efforts for any reason under this Bid package at any time prior to actual execution of contract by the County. Bidders may be disqualified and rejection of Bids may be recommended to the Commissioners' Court for any of (but not limited to) the following causes:

Failure to use the Bid form(s) furnished by the County;

- A. Lack of signature by an authorized representative on the Bid form(s);
- B. Failure to properly complete the Bid;
- C. Bids that do not meet the mandatory requirements; and/or;
- D. Evidence of collusion among Bidders.

7. RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS:

It is the responsibility of the prospective Bidder to review the entire invitation to Bid packet and to notify the Purchasing Department if the specifications are formulated in a manner that would restrict competition or appear ambiguous. Any protest or question(s) regarding the specifications or Bid procedures must be received in the Purchasing Department not less than seventy-two (72) hours prior to the time set for Bid opening. Vendors are to submit Bid as specified herein or propose an approved equal.

8. SUBSTITUTES/DESCRIPTION OF MATERIALS AND EQUIPMENT:

Any brand name or manufacturer reference used herein is intended to be descriptive and not restrictive, unless otherwise noted, and is used to indicate the type and quality of material. The term "or equal" if used, identifies commercially produced items that have the essential performance and salient characteristics of the brand name stated in the item description. All supplies, material, or equipment shall be new and of the most suitable grade for the purpose intended. It is not the County's intent to discriminate against any materials or equipment of equal merit to those specified. However, if Bidder desires to use any substitutions, prior written approval must be obtained from the County Purchasing Agent and sufficiently in advance such that an addendum may be issued. All material supplied must be one hundred percent (100%) asbestos free. Bidder/Bidder, by submission of its bid/Bid, certifies that if awarded any portion of this procurement, the bidder/Bidder will supply only material and equipment that is 100% asbestos free.

9. EXCEPTIONS TO BID:

The Bidder will list on a separate sheet of paper any exceptions to the conditions of the Bid. This sheet will be labeled, "Exceptions to Bid Conditions", and will be attached to the Bid. If no exceptions are stated, it will be understood that all general and specific conditions will be complied with, without exception.

The Bidder must specify in its Bid any alternatives it wishes to propose for consideration by the County. Each alternative should be sufficiently described and labeled within the Bid and should indicate its possible or actual advantage to the program being offered.

The County reserves the right to offer these alternatives to other Bidders.

The remainder of this page intentionally left blank

TIME: 2:00 PM

GENERAL PROVISIONS 823 Grand Renovation **Galveston County, Texas**

10. PRICING:

Bids will be either lump sum or unit prices as shown on the Bid sheet. The net price will be delivered to Galveston County, including all freight or shipping charges. Cash discount must be shown on Bid, otherwise prices will be considered net. Unless prices and all information requested are complete, Bid may be disregarded and given no consideration. In case of default by the contractor, the County of Galveston may procure the articles or services from other sources and may deduct from any monies due, or that may thereafter become due to the contractor, the difference between the price named in the contract of purchase order and the actual cost thereof to the County of Galveston. Prices paid by the County of Galveston shall be considered the prevailing market price at the time such purchase is made. Periods of performance may be extended if the facts as to the cause of delay justify such extension in the opinion of the Purchasing Agent and the Commissioners' Court.

11. PROCUREMENT CARD PROGRAM:

The County of Galveston participates in a Procurement Card (P-Card) program that allows payments made to a vendor by credit card. This method normally results in substantially faster bill payments, sometimes within three (3) to five (5) days of the actual transaction date. If your company will accept payment via credit card (Visa, MasterCard), please notate this in your Bid submittal.

12. PASS THROUGH COST ADJUSTMENTS:

Except in instances of extreme extenuating circumstances Contractor prices shall remain firm throughout the Contract period and any renewals. Examples of extreme extenuating circumstances include such situations as a nationwide rail strike, oil shortage or oil embargo.

In extreme extenuating circumstances, Contractors may be allowed to temporarily "pass through" additional costs they are forced to incur through no fault of their own. A request for a pass through cost increase will not be considered unless a Contractor's cost for his product exceeds 10% over the original cost for the product. Also, the increase in cost must be nationwide and consistent for a minimum period of sixty (60) days. Costs that historically are anticipated to rise over a period of time (for example only, such as wages or insurance costs) do not qualify for pass through. If a Contractor thinks he will be asking for a pass through cost adjustment during the term of the contract, then the original cost of the product to Contractor must be stated in Contractor's original Bid.

A request for a pass through cost does not guarantee that one will be granted. Contractors must submit such information on each request as is required by the County Purchasing Agent. The County Purchasing Agent will review each request on a case-by-case basis and determine the appropriateness of each request as well as amount and duration of increase. Contractors will not be permitted any additional compensation for mark-ups or profits based on the increase in price. Rather, such additional compensation will be limited to the actual increase in original cost to the Contractor as such increase is reflected by the original cost stated in the Bid. But in no event will the amount of additional compensation exceed 25% increase in Contractor's original cost for his product as such cost is reflected in Contractor's original Bid or the duration exceed a period of sixty (60) days. In addition, should, during the period of the pass through, cost return to normal or decrease to below pre pass through prices, appropriate downward adjustments will be made. No more than one pass through adjustment will be permitted per year.

13. MODIFICATION OF BIDS:

A Bidder may modify a Bid by letter at any time prior to the submission deadline for receipt of Bids. Modification requests must be received prior to the submission deadline. Modifications made before opening time must be initialed by Bidder guaranteeing authenticity. Bids may not be amended or altered after the official opening with the single exception that any product literature and/or supporting data required by the actual specifications, if any, will be accepted at any time prior to the Commissioners' Court considering of same.

TIME: 2:00 PM

GENERAL PROVISIONS 823 Grand Renovation **Galveston County, Texas**

14. SIGNATURE OF BIDS:

Each Bid shall give the complete mailing address of the Bidder and be signed by an authorized representative by original signature with the authorized representative's name and legal title typed below the signature line. Each Bid shall include the Bidder's Federal Employer Identification Number (FEIN). Failure to sign the Contract page(s) and Bid response sheets may disqualify the Bid from being considered by the County. The person signing on behalf of the Bidder expressly affirms that the person is duly authorized to tender the Bid and to sign the Bid sheets and contract under the terms and conditions of this RFP and to bind the Bidder thereto and further understands that the signing of the contract shall be of no effect until it is properly placed on the Commissioners' Court agenda, approved in open Court, authorized to be executed by the County Judge, and fully executed by both parties.

15. AWARD OF BIDS - EVALUATION CRITERIA AND FACTORS:

The award will be made to the responsible Bidder whose Bid is determined to be the best evaluated offer demonstrating the best ability to fulfill the requirements set forth in this Request for Bid. The proposed cost to the County will be considered firm and cannot be altered after the submission deadline, unless the County invokes its right to request a best and final offer.

Each Bidder, by submitting a Bid, agrees that if their Bid is accepted by the Commissioners' Court, such Bidder will furnish all items and services upon which prices have been tendered and upon the terms and conditions in this Bid and contract.

The contractor shall commence work only after the transmittal of a fully executed contract and after receiving written notification to proceed from the County Purchasing Agent. The contractor will perform all services indicated in the Bid in compliance with this contract.

Neither department heads nor elected officials are authorized to sign any binding contracts or agreements prior to being properly placed on the Commissioners' Court agenda and approved in open court. Department heads and other elected officials are not authorized to enter into any type of agreement or contract on behalf of Galveston County. Only the Commissioners' Court, acting as a body, may enter into a contract on behalf of the County. Additionally, department heads and other elected officials are not authorized to agree to any type of supplemental agreements or contracts for goods or services. Supplemental agreements are subject to review by the County Legal Department prior to being signed by the County's authorized representatives.

The County of Galveston reserves the right to accept Bids on individual items listed, or group items, or on the Bid as a whole; to reject any and all Bids; to waive any informality in the Bids; and to accept the Bid that appears to be in the best interest of the County. The selection process may, however, include a request for additional information or an oral presentation to support the written Bid.

In determining and evaluating the best Bid, the pricing may not necessarily be controlling, but quality, equality, efficiency, utility, general terms, delivery, suitability of the service offered, and the reputation of the service in general use will also be considered with any other relevant items. The Commissioners' Court shall be the sole judge in the determination of these matters.

The County reserves the right to reject any or all Bids in whole or in part received by reason of this RFP and may discontinue its efforts under this RFP for any reason or no reason or solely for the County's convenience at any time prior to actual execution of the contract by the County.

A Bidder whose Bid does not meet the mandatory requirements set forth in this RFP will be considered noncompliant.

TIME: 2:00 PM

GENERAL PROVISIONS 823 Grand Renovation Galveston County, Texas

The invitation to submit a Bid which appears in the newspaper, or other authorized advertising mediums, these general provisions, the specifications which follow, the Bid sheets, and any addenda issued are all considered part of the Bid.

Each Bidder, by submitting a Bid, agrees that if its Bid is accepted by the Commissioners' Court, such Bidder will furnish all items and services upon the terms and conditions in this RFP and the resultant contract.

Notice of contract award will be made within ninety (90) days of opening of Bids to the lowest responsive and responsible contractor, whose Bid complies with all the requirements in the Request for Bids.

Contractor shall submit to the County, for approval, within ten (10) days from notice of contract award, all Certificates of Insurance evidencing the required coverage as described under Insurance in the schedule of the Requests for Bids.

The contractor shall not commence work under these terms and conditions of the contract until all applicable Certificates of Insurance, Performance and Payment Bonds, and Irrevocable Letter of Credit (if required) have been approved by the County of Galveston and the Contractor has received notice to proceed in writing and an executed copy of the contract from the County Purchasing Agent.

16. DISPUTE AFTER AWARD/PROTEST:

Any actual or prospective Bidder who is allegedly aggrieved in connection with the solicitation of this RFP or award of a contract resulting therefrom may protest. The protest will be submitted in writing to the Purchasing Agent within seven (7) calendar days after such aggrieved person knows of or should have known of the facts giving rise thereto. If the protest is not resolved by mutual agreement, the Purchasing Agent will promptly issue a decision in writing to the protestant. If the protestant wishes to appeal the decision rendered by the Purchasing Agent, such appeal must be made to the Commissioners' Court through the Purchasing Agent. The decision of the Commissioners' Court will be final. The Commissioners' Court need not consider protests unless this procedure is followed.

17. PUBLIC INFORMATION ACT:

The parties agree that the County is a governmental body for purposes of the Public Information Act, codified as Chapter 552 of the Texas Government Code and as such is required to release information in accordance with the Public Information Act. Bidder agrees that it has **clearly and conspicuously** marked any information that it considers to be confidential, proprietary, and/or trade secret in its Bid. County agrees to provide notice to Bidder in accordance with the Public Information Act in the event the County receives a request for information under the Public Information Act for information that the Bidder has marked as confidential, proprietary, and/or trade secret.

18. BIDDER'S EMAIL ADDRESSES:

Notwithstanding the foregoing Section 17, Bidder acknowledges and agrees that the confidentiality of any and all email addresses it uses or discloses in communicating with the County are open to the public in accordance with Section 552.137 of the Government Code and consents to the release of its email addresses.

19. RESULTANT CONTRACT:

Bidder shall correctly and fully execute the resultant contract first. After this, the contract shall be set for consideration by the Commissioners' Court. If the Commissioners' Court authorizes the execution of the contract, then the resultant contract shall become effective upon the Commissioners' Court execution of same. Contract documents shall consist of the contract, the general and special provisions, the drawings, Bid package (including best and final offer(s) if such is utilized), any addenda issued, and any change orders issued during the work.

If applicable to the attached bid/Bid, bidder/Bidder must sign three (3) original contracts and return with their bid/Bid submittal.

Bidder should submit a proposed contract with its Bid or its sample material terms and conditions.

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The criteria utilized for determining responsibility of Bidder(s) includes, but is not limited to, the Bidder's experience, skill, ability, business judgment, financial capacity, integrity, honesty, possession of the necessary facilities or equipment, previous performance, reputation, promptness, and any other factor deemed relevant by the County. The Bidders shall furnish any information requested by the County in order for the County to determine whether a Bidder is responsible.

20. CONTRACT TERM:

The term of the resultant contract will begin on the date of execution by the Commissioners' Court and will terminate on the date specified in the resultant contract unless terminated earlier as herein set forth.

21. TERMINATION FOR DEFAULT:

Failure of either party in the performance of any of the provisions of this contract shall constitute a breach of contract, in which case either party may require corrective action within ten (10) days from date of receipt of written notice citing the exact nature of such breach. Failure of the party being notified to take corrective action within the prescribed ten (10) days, or failure to provide written reply of why no breach has occurred, shall constitute a Default of Contract.

All notices relating to default by Bidder of the provisions of the contract shall be issued by County by its Legal Department, and all replies shall be made in writing to the County Legal Department. Notices issued by or issued to anyone other than the County Legal Department shall be null and void and shall be considered as not having been issued or received.

Galveston County reserves the right to enforce the performance of this contract in any manner prescribed by law in the event of breach or default of this contract, and may contract with another party, with or without solicitation of bids or Bids or further negotiations. At a minimum, Bidder shall be required to pay any difference in service or materials, should it become necessary to contract with another source, plus reasonable administrative costs and attorney fees.

In the event of Termination for Default, Galveston County, its agents or representatives shall not be liable for loss of any profits anticipated to be made by Bidder.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in eauity.

No waiver by either party of any event of default under this agreement shall operate as a waiver of any subsequent default under the terms of this agreement.

County reserves the right to terminate this contract immediately in the event Bidder:

- A. Fails to meet delivery or completion schedules; and/or
- B. Fails to otherwise perform in accordance with the accepted Bid and the contract.

22. TERMINATION FOR CONVENIENCE:

County may terminate this contract upon at least thirty (30) calendar days prior written notice for its convenience or for any reason deemed by the County to serve the public interest. County may terminate this contract upon thirty (30) calendar days prior written notice for any reason resulting from any governmental law, order, ordinance, regulations, or court order. In no event shall County be liable for loss of any profits anticipated to be made hereunder by Bidder should this contract be terminated early.

23. FORCE MAJEURE:

If by reason of Force Majeure either Party shall be rendered unable, wholly or in part, to carry out its responsibilities under this contract by any occurrence by reason of Force Majeure, then the Party unable to carry out its responsibility shall give the other Party notice and full particulars of such Force Majeure in writing within a reasonable time after the occurrence of the event, and such notice shall suspend the Party's responsibility for the continuance of the Force Majeure claimed, but for no longer period.

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Force Majeure means acts of God, floods, hurricanes, tropical storms, tornadoes, earthquakes, or other natural disasters, acts of a public enemy, acts of terrorism, sovereign conduct, riots, civil commotion, strikes or lockouts, and other causes that are not occasioned by either Party's conduct which by the exercise of due diligence the Party is unable to overcome and which substantially interferes with operations.

24. ESTIMATED QUANTITIES:

Any reference to quantities shown in the Request for Bids is an estimate only. Since the exact quantities cannot be predetermined, the County reserves the right to adjust quantities as deemed necessary to meet its requirements.

25. CONTRACTOR INVESTIGATION:

Before submitting a Bid, each Bidder shall make all investigations and examinations necessary to ascertain all site conditions and requirements affecting the full performance of the contract and to verify any representations made by the County upon which the contractor will rely. If the contractor receives an award as a result of its Bid submission, failure to have made such investigations and examinations will in no way relieve the contractor from its obligation to comply in every detail with all provisions and requirements of the contract, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim whatsoever by the contractor for additional compensation.

26. NO COMMITMENT BY COUNTY OF GALVESTON:

This Request for Bid does not commit the County of Galveston to award any costs or pay any costs, or to award any contract, or to pay any costs associated with or incurred in the preparation of a Bid in response to this Request for Bid, and does not commit the County of Galveston to procure or contract for services or supplies.

27. BID COSTS BORNE BY BIDDER/BIDDER:

Galveston County shall not be liable for any costs incurred by Bidder/Bidder in preparation, production, or submission of a bid/Bid and shall not be liable for any work performed by Bidder/Bidder prior to issuance of fully executed contract and properly issued notice to proceed. Galveston County shall not be liable for any costs incurred by Bidder/Bidder by reason of attending a pre-Bid conference. Galveston County shall not be liable for any costs incurred by Bidder/Bidder by reason of the County invoking use of best and final offers.

28. BEST AND FINAL OFFERS (BAFO):

In acceptance of Bids, the County of Galveston reserves the right to negotiate further with one or more of the Bidders as to any features of their Bids and to accept modifications of the work and price when such action will be in the best interest of the County. This includes solicitation of a Best and Final Offer from one or more of the Bidders. If invoked, this allows acceptable Bidders the opportunity to amend, change or supplement their original Bid. Bidders may be contacted in writing requesting that they submit their Best and Final Offer. Any such Best and Final Offer must include discussed and negotiated changes.

29. SINGLE BID RESPONSE:

If only one Bid is received in response to the Request for Bid, a detailed cost Bid may be requested of the single contractor. A cost/price analysis and evaluation and/or audit may be performed of the cost Bid in order to determine if the price is fair and reasonable.

30. CHANGES IN SPECIFICATIONS:

If it becomes necessary to revise any part of this Bid, a written notice of such revision will be provided to all Bidders in the form of addenda. The County is not bound by any oral representations, clarifications, or changes made in the written specifications by the County's employees, unless such clarification or change is provided to Bidders in a written addendum from the Purchasing Agent.

The County of Galveston reserves the right to revise or amend the specifications up to the time set for opening of Bids. Such revisions and amendments, if any, shall be announced by amendments to the solicitation. Copies of such amendments shall be furnished to all prospective contractors. Prospective contractors are defined as those contractors

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listed on the County's Request for Bid list for this material/service or those who have obtained documents subsequent to the advertisement. If revisions and amendments require changes in quantities or prices proposed, or both, the date set for opening of Bids may be postponed by such number of days as in the opinion of the County shall enable contractors to revise their Bids. In any case, the Bid opening shall be at least five working days after the last amendment, and the amendment shall include an announcement of the new date if applicable, for the opening or Bids.

31. BID IDEAS AND CONCEPTS:

The County reserves to itself the right to adopt or use for its benefit, any concept, plan, or idea contained in any Bid.

32. BID DISCLOSURES:

The names of those who submitted Bids will not be made public information unless in conformity with the County Purchasing Act. No pricing or staffing information will be released. Bidders are requested to withhold all inquiries regarding their Bid or other submissions until after an award is made. No communication is to be had with any County employee or official, other than the County Purchasing Agent, regarding whether a Bid was received. Violations of this provision may result in the rejection of a Bid.

33. WITHDRAWAL OF BID:

Bidders may request withdrawal of a sealed Bid prior to the scheduled Bid opening time provided the request for withdrawal is submitted to the Purchasing Agent in writing. No Bids may be withdrawn for a period of sixty (60) calendar days after opening of the Bids.

34. INDEMNIFICATION:

The contractor shall agree to assume all risks and responsibility for, and agrees to indemnify, defend, and save harmless, the County of Galveston, its elected and appointed officials and department heads, and its agents and employees from and against all claims, demands, suits, actions, recoveries, judgments, and costs and expenses including reasonable attorney's fees for the defense thereof in connection therewith on account of the loss of life,

property or injury or damage to the person which shall arise from contractor's operations under this contract, its use of County facilities and/or equipment or from any other breach on the part of the contractor, its employees, agents or any person(s), in or about the County's facilities with the expressed or implied consent of the County. Contractor shall pay any judgment with cost which may be obtained against Galveston County resulting from contractor's operations under this contract.

Contractor agrees to indemnify and hold the County harmless from all claims of subcontractors, laborers incurred in the performance of this contract. Contractor shall furnish satisfactory evidence that all obligations of this nature herein above designated have been paid, discharged or waived. If Contractor fails to do so, then the County reserves the right to pay unpaid bills of which County has written notice direct and withhold from Contractor's unpaid compensation a sum of money reasonably sufficient to liquidate any and all such lawful claims.

35. REQUIREMENT OF AND PROOF OF INSURANCE:

The successful Bidder shall furnish evidence of insurance to the County Purchasing Agent and shall maintain such insurance as required hereunder or as may be required in the Special Provisions or resultant contract, if different. Contractor shall obtain and thereafter continuously maintain in full force and effect, commercial general liability insurance, including but not limited to bodily injury, property damage, and contractual liability, with combined single limits as listed below or as may be required by State or Federal law, whichever is greater.

A. For damages arising out of bodily injury to or death of one person in any one accident: ONE HUNDRED THOUSAND AND NO/100 (\$100,000.00) DOLLARS.

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- B. For damages arising out of bodily injury to or death of two or more persons in any one accident: THREE HUNDRED THOUSAND AND NO/100 (\$300,000.00) DOLLARS.
- C. For any injury to or destruction of property in any one accident : ONE HUNDRED THOUSAND AND NO/100 (\$100,000.00) DOLLARS.

Insurance shall be placed with insurers having an A.M. Best's rating of no less than A. Such insurance must be issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public from loss or damage that may arise to any person or property by reason of services rendered by Contractor.

Galveston County shall be listed as the additional insured on policy certificates and shall be provided with no less than thirty (30) calendar days prior notice of any changes to the policy during the contractual period.

Certificates of Insurance, fully executed by a licensed representative of the insurance company written or countersigned by an authorized Texas state agency, shall be filed with the County Purchasing Agent within ten (10) business days of issuance of notification from the County Purchasing Agent to Bidder that the contract is being activated as written proof of such insurance and further provided that Bidder shall not commence work under this contract until it has obtained all insurance required herein, provided written proof as required herein, and received written notice to proceed issued from the County Purchasing Agent.

Proof of renewal/replacement coverage shall be provided upon expiration, termination, or cancellation of any policy. Said insurance shall not be cancelled, permitted to expire, or changed without thirty (30) days prior written notice to the County.

Insurance required herein shall be maintained in full force and effect during the life of this contract and shall be issued on an occurrence basis. Contractor shall require that any and all subcontractors that are not protected under the Contractor's own insurance policies take and maintain insurance of the same nature and in the same amounts as required of Contractor and provide written proof of such insurance to Contractor. Proof of renewed/replacement coverage shall be provided upon expiration, termination, or cancellation of any policy. Contractor shall not allow any subcontractor to commence work on the subcontract until such insurance required for the subcontractor has been obtained and approved.

Workers' Compensation Insurance: Successful Bidder shall carry in full force Workers' Compensation Insurance Policy(ies), if there is more than one employee, for all employees, including but not limited to full time, part time, and emergency employees employed by the successful Bidder. Current insurance certificates certifying that such policies as specified above are in full force and effect shall be furnished by successful Bidder to the County.

Insurance is to be placed with insurers having a Best rating of no less than A. The Bidder shall furnish the County with certificates of insurance and original endorsements affecting coverage required by these insurance clauses within ten (10) business days of receiving notification from the County Purchasing Agent that the contract is being activated. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The Bidder shall be required to submit annual renewals for the term of this contract prior to expiration of any policy.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in equity.

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The County agrees to provide Bidder with reasonable and timely notice of any claim, demand, or cause of action made or brought against the County arising out of or related to utilization of the property. Bidder shall have the right to defend any such claim, demand, or cause of action at its sole cost and expense and within its sole and exclusive discretion. The County agrees not to compromise or settle any claim or cause of action arising out of or related to the utilization of the property without the prior written consent of the Bidder.

In no event shall the County be liable for any damage to or destruction of any property belonging to the Bidder.

36. BID GUARANTEE:

Unless specified differently within the Special Provisions of this procurement, each Bidder shall be required to submit a bid guarantee with its Bid as required within this Section

Evidencing its firm commitment to engage in contract if Bidder is selected for award of contract, each Bidder is required to furnish with their Bid a Cashier's Check, or an acceptable Bidder's bond (in the event of requests for bids, this is called a Bidder's Bond/Bid Bond), in the amount of five percent (5%) of the total contract price. If Bidder is using a bond, then the Bidder's Bond must be executed with a surety company authorized to do business in the State of Texas. Failure to furnish the bid/Bid guarantee in the proper form and amount, by the time set for opening of bids/Bids may be cause for rejection of the bid/Bid.

The Cashier's Check or Bidder/Bid Bond (as applicable) will be returned to each respective unsuccessful Bidder(s) subsequent to the Commissioners' Court award of contract, and shall be returned to the successful Bidder upon the completion and submission of all contract documents. Provided however, that the Cashier's Check or Bidder Bond will be forfeited to the County as liquidated damages should successful Bidder fail to execute the contract within thirty (30) days after receiving notice of the acceptance of its Bid.

37. PERFORMANCE AND PAYMENT BONDS:

Successful Bidder, before beginning work, shall execute a performance bond and a payment bond, each of which must be in the amount of the contract. The required payment and performance bonds must each be executed by a corporate surety in accordance with Section 1, Chapter 87, Acts of the 56th Legislature, Regular Session, 1959 (Article 7.19-1, Vernon's Texas Insurance Code).

The performance and payment bonds must clearly and prominently display on the bond or on an attachment to the bond:

- A. The name, mailing address, physical address, and telephone number, including the area code, of the surety company to which any notice of claim should be sent; or
- B. The toll-free telephone number maintained by the Texas Department of Insurance under Subchapter B, Chapter 521, Insurance Code, and a statement that the address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the toll freetelephone number.

The performance bond shall be solely for the protection of Galveston County, in the full amount of the contract, and conditioned on the faithful performance of the work in accordance with the plans, specifications, and contract documents. The payment bond is solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the prime contractor or a subcontractor to supply public work labor or material, and in the amount of the contract.

The payment and performance bonds required to be furnished herein must be furnished before the contractor begins work and are a requirement for issuance of a Notice to Proceed. Such bonds must be furnished to the Galveston County Purchasing Agent within thirty (30) days after the date of signing of the contract or receiving notice from the Purchasing Agent that the contract has been fully executed. Failure to provide the required payment and performance bonds within the required business days shall constitute an event of default under this contract. Contractor shall not

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commence work until all applicable certificates of insurance, performance, and payment bonds have been received and approved by the County Purchasing Agent and the Contractor receives notice to proceed in writing that has been issued by the County Purchasing Agent.

Additionally, if this request for Bid is for the award of a public works contract, then compliance with Chapter 2253 of the Texas Government Code, which is known as the McGregor Act, is mandatory. Performance and payment bonds are required to be furnished in accordance with Chapter 2253 of the Texas Government Code. Bidder should familiarize itself with the entire provisions of Chapter 2253 of the Texas Government Code.

38. PATENT AND COPYRIGHT PROTECTION:

The Bidder agrees at its sole expense to protect the County from claims involving infringement of patents or copyrights. Bidder shall indemnify and save harmless the County of Galveston, its officers, employees, and agents, from liability of any nature and kind whatsoever, including without limitation cost and expenses, for or on account of any copyrighted, patented or un-patented invention, process, or article manufactured or used in the performance of the contract, including its use by the County. Bidder also agrees that if Bidder is awarded this contract, that no work performed hereunder shall be subject to patent, copyright, or other intellectual property by Bidder.

39. CONFLICT OF INTEREST DISCLOSURE REPORTING:

Bidder may be required under Chapter 176 of the Texas Local Government Code to complete and file a conflict of interest questionnaire (CIO Form). If so, the completed CIO Form must be filed with the County Clerk of Galveston County, Texas.

If Bidder has an employment or other business relationship with an officer of Galveston County or with a family member of an officer of Galveston County that results in the officer or family member of the officer receiving taxable income that exceeds \$2,500.00 during the preceding 12-month period, then Bidder MUST complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

If Bidder has given an officer of Galveston County or a family member of an officer of Galveston County one or more gifts with an aggregate value of more than \$250.00 during the preceding 12-months, then Bidder MUST complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

The Galveston County Clerk has offices at the following locations:

Galveston County Clerk

Galveston County Justice Center, Suite 2001 600 59th Street Galveston, Texas 77551

Galveston County Clerk

North County Annex, 1st Floor 174 Calder Road League City, Texas 77573

Again, if Bidder is required to file a CIQ Form, the original completed form is filed with the Galveston County Clerk (not the Purchasing Agent).

For Bidder's convenience, a blank CIQ Form is enclosed with this Bid. Blank CIQ Forms may also be obtained by visiting the Galveston County Clerk's website and/or the Purchasing Agent's website - both of these websites are linked from the Galveston County homepage, at http://www.co.galveston.tx.us.

As well, blank CIQ Forms may be obtained by visiting the Texas Ethics Commission website, specifically at http://www.ethics.state.tx.us/whatsnew/conflict forms.htm.

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Chapter 176 specifies deadlines for the filing of CIQ Forms (both initial filings and updated filings).

It is Bidder's sole responsibility to file a true and complete CIQ Form with the Galveston County Clerk if Bidder is required to file by the requirements of Chapter 176 of the Local Government Code. Bidder is advised that it is an offense to fail to comply with the disclosure reporting requirements dictated under Chapter 176 of the Texas Local Government Code.

If you have questions about compliance with Chapter 176, please consult your own legal counsel. Compliance is the individual responsibility of each person, business, and agent who is subject to Chapter 176 of the Texas Local Government Code.

40. COMPETITIVENESS AND INTEGRITY:

To prevent biased evaluations and to preserve the competitiveness and integrity of such acquisition efforts, Bidders are to direct all communications regarding this Bid to the Galveston County Purchasing Agent, unless otherwise specifically noted.

Do not contact the requesting department. Attempts by offering firms to circumvent this requirement will be viewed negatively and may result in rejection of the offer of the firm found to be in non-compliance.

All questions regarding this Request for Bid must be submitted in writing to:

Rufus Crowder, CPPO CPPB, Purchasing Agent 722 Moody, (21st Street) Fifth (5th) Floor, Purchasing Galveston, Texas 77550 Fax: (409) 621-7997

E-mail: rufus.crowder@co.galveston.tx.us

An authorized person from the submitting firm must sign all Bids. This signature acknowledges that the Bidder has read the Bid documents thoroughly before submitting a Bid and will fulfill the obligations in accordance to the terms, conditions, and specifications.

Please carefully review this Request for Bid. It provides specific information necessary to aid participating firms in formulating a thorough response.

41. ENTIRETY OF AGREEMENT AND MODIFICATION:

This contract contains the entire agreement between the parties. Any prior agreement, promise, negotiation or representation not expressly set forth in this contract has no force or effect. Any subsequent modification to this contract must be in writing, signed by both parties. An official representative, employee, or agent of the County does not have the authority to modify or amend this contract except pursuant to specific authority to do so granted by the Galveston County Commissioners' Court.

42. NON-COLLUSION AFFIDAVIT:

Bidder certifies, by signing and submitting a Bid, that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid is genuine and not collusive or sham; that the contractor has not directly or indirectly induced or solicited another contractor to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any contractor or anyone else to put in a sham Bid or that anyone shall refrain from bidding; that the contractor has not in any manner,

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directly or indirectly, sought by agreement, communications, or conference with anyone to fix the Bid price of the contractor of any other bidder, or to fix any overhead, profit or cost element of the Bid price, or that of any other contractor, or to secure any advantage against the public body awarding the contract or anyone interested in the proposed contract; that all statements contained in the Bid are true; and further, that the contractor has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any cooperation, partnership, company association, organization, Bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid.

A blank Non-Collusion Affidavit is included with this Bid packet. Bidder must enclose a truthful and fully executed original Non-Collusion Affidavit with the submission of its Bid. This is a mandatory requirement of this RFP. Failure to include the truthfully and fully executed Non-Collusion Affidavit in the submission of its Bid shall be considered non-compliance with the requirements of this RFP by the Bidder and grounds for the rejection of Bidder's submission.

No negotiations, decisions, or actions shall be initiated by any company as a result of any verbal discussion with any County employee prior to the opening of responses to this Request for Bid.

No officer or employee of the County of Galveston, and no other public or elected official, or employee, who may exercise any function or responsibilities in the review or approval of this undertaking shall have any personal or financial interest, direct or indirect, in any contract or negotiation process thereof. The above compliance request will be part of all County of Galveston contracts for this service.

43. SOVEREIGN IMMUNITY:

The County specifically reserves any claim it may have to sovereign, qualified, or official immunity as a defense to any action arising in conjunction with this contract.

44. CONTROLLING LAW AND VENUE:

Bidder acknowledges and agrees that the contract is and shall be governed and construed by the laws of the State of Texas and that venue shall lie exclusively in Galveston County, Texas.

45. MERGERS, ACOUISITIONS:

The Bidder shall be required to notify the County of any potential for merger or acquisition of which there is knowledge at the time that a Bid is submitted.

If subsequent to the award of any contract resulting from this RFP the Bidder shall merge or be acquired by another firm, the following documents must be submitted to the County:

- A. Corporate resolutions prepared by the awarded Bidder and the new entity ratifying acceptance of the original contract, terms, conditions and prices;
- B. New Bidder's Federal Identification Number (FEIN) and;
- C. New Bidder's proposed operating plans.

Moreover, Bidder is required to provide the County with notice of any anticipated merger or acquisition as soon as Bidder has actual knowledge of the anticipated merger or acquisition. The New Bidder's proposed plan of operation must be submitted prior to merger to allow time for submission of such plan to the Commissioners' Court for its approval.

46. DELAYS:

The County reserves the right to delay the scheduled commencement date of the contract if it is to the advantage of the County. There shall be no additional costs attributed to these delays should any occur. Bidder agrees it will make no claims for damages, for damages for lost revenues, for damages caused by breach of contract with third parties, or any other claim by Bidder attributed to these delays, should any occur. In addition, Bidder agrees that any contract it enters into with any third party in anticipation of the commencement of the contract will contain a statement that the

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third party will similarly make no claim for damages based on delay of the scheduled commencement date of the contract.

47. ACCURACY OF DATA:

Information and data provided through this Request for Bid are believed to be reasonably accurate.

48. SUBCONTRACTING/ASSIGNMENT:

Bidder shall not assign, sell, or otherwise transfer its contract in whole or in part without prior written permission of Commissioners' Court. Such consent, if granted, shall not relieve the Bidder of any of its responsibilities under this contract.

49. INDEPENDENT CONTRACTOR:

Bidder expressly acknowledges that it is an independent contractor. Nothing in this agreement is intended nor shall be construed to create an agency relationship, an employer/employee relationship, a joint venture relationship, or any other relationship allowing County to exercise control or direction over the manner or method by which Bidder or its subcontractors perform in providing the requirements stated in the Request for Bid.

50. MONITORING PERFORMANCE:

The County shall have the unfettered right to monitor and audit the Bidder's work in every respect. In this regard, the Bidder shall provide its full cooperation and insure the cooperation of its employees, agents, assigns, and subcontractors. Further, the Bidder shall make available for inspection and/or copying when requested, original data, records, and accounts relating to the Bidder's work and performance under this contract. In the event any such material is not held by the Bidder in its original form, a true copy shall be provided.

51. PROCUREMENT ETHICS:

Galveston County is committed to the highest ethical standards. Therefore, it is a serious breach of the public trust to subvert the public purchasing process by directing purchases to certain favored vendors, or to tamper with the competitive bidding process, whether it's done for kickbacks, friendship or any other reason. Since misuse of the purchasing power of a local government carries criminal penalties, and many such misuses are from a lack of clear guidelines about what constitutes an abuse of office, the Code of Ethics outlined below must be strictly followed.

Galveston County also requires ethical conduct from those who do business with the County.

CODE OF ETHICS – Statement of Purchasing Policy:

"Public employment is a public trust. It is the policy of Galveston County to promote and balance the objective of protecting the County's integrity and the objective of facilitating the recruitment and retention of personnel needed by Galveston County. Such policy is implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public office.

Public employees must discharge their duties impartially so as to assure fair competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the Galveston County procurement organization.

To achieve the purpose of this Article, it is essential that those doing business with Galveston County also observe the ethical standards prescribed here."

General Ethical Standards:

It shall be a breach of ethics to attempt to realize personal gain through public employment with Galveston County by any conduct inconsistent with the proper discharge of the employee's duties.

It shall be a breach of ethics to attempt to influence any public employee of Galveston County to breach the standards of ethical conduct set forth in this code.

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It shall be a breach of ethics for any employee of Galveston County to participate directly or indirectly in a procurement when the employee knows that:

The employee or any member of the employee's immediate family, has a financial interest pertaining to the procurement;

A business or organization in which the employee or any member of the employee's immediate family, has a financial interest pertaining to the procurement; or

Any other person, business, or organization with which the employee or any member of the employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement.

Gratuities:

It shall be a breach of ethics for any person to offer, give, or agree to give any employee or former employee of Galveston County, or for any employee or former employee of Galveston County to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or Bid therefor.

Kickbacks:

It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or to any person associated therewith as an inducement for the award of a subcontract or order.

Contract Clause:

The prohibition against gratuities and kickbacks prescribed above shall be conspicuously set forth in every contract and solicitation by Galveston County.

Confidential Information:

It shall be a breach of ethics for any employee or former employee of Galveston County to knowingly use confidential information for actual or anticipated personal gain, or for the actual or anticipated gain of any other person.

Prohibition against Contingent Fees:

It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a Galveston County contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business. Failure to abide by this section constitutes a breach of ethical standards.

Representation:

Bidder represents and warrants, by signing and submitting its Bid, that it has not retained anyone in violation of this section prohibiting contingent fees.

Contract Clause:

The representation prescribed above shall be conspicuously set forth in every contract and solicitation thereof.

52. SUBJECT TO APPROPRIATION OF FUNDS:

State law prohibits the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved by the Commissioners' Court. Galveston County anticipates this to be an integral part of future budgets to be approved during the periods of this contract, except for unanticipated needs or events which may prevent such payments against this contract. However, Galveston County cannot guarantee the availability of funds, and enters into this contract

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GENERAL PROVISIONS 823 Grand Renovation **Galveston County, Texas**

only to the extent such funds are made available through appropriation (allocation) by the Commissioners' Court. This contract shall not be construed as creating any debt on behalf of the County of Galveston in violation of TEX. CONST. art. XI, § 7, and it is understood that all obligations of Galveston County are subject to the availability of funds.

53. NOTICE:

All notices or other communications required or permitted under this contract shall be in writing and shall be deemed to have been duly given if delivered personally in hand, transmitted by facsimile, or mailed certified mail, return receipt requested with proper postage affixed and addressed to the appropriate party at the following address or at such other address as may have been previously given in writing to the parties (Bidder shall provide its notice information with its Bid submission). If mailed, the notice shall be deemed delivered when actually received, or if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, duly certified, return receipt requested, with proper postage affixed. If delivered in person, notice shall be deemed delivered when receipted for by, or actually received by, the receiving Party.

If transmitted by facsimile, notice shall be deemed delivered when receipt of such transmission is acknowledged.

To the County at:

Hon. Mark Henry, County Judge of Galveston County 722 Moody (21st Street), Second (2nd) Floor Galveston, Texas 77550 Fax: (409) 765-2653

With copies to:

Rufus Crowder, CPPO CPPB, Galveston County Purchasing Agent 722 Moody (21st Street), Fifth (5th) Floor Galveston, Texas 77550 Fax: (409) 621-7997

Robert Boemer, Director, Galveston County Legal Department 722 Moody (21st Street), Fifth (5th) Floor Galveston, Texas 77550 Fax: (409) 770-5560

To the Contractor at:

(Bidder to provide its contact name, address, and facsimile number for notice hereunder.)

54. NON-DISCRIMINATION:

A. Equal Employment Opportunity: Bidder will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, disability, genetic information or veteran status. Bidder will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, sex, disability, genetic information or veteran status. Such action shall include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Bidder agrees to post in conspicuous places, available to employees and applicants for employment, notices of employment.

Bidder will, in all solicitation or advertisements for employees placed by or on behalf of Bidder, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, disability, genetic information, or veteran status.

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Bidder will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

Bidder will include the provisions herein in every subcontract or purchase order unless exempted.

- B. Drug Free Work Place Act: Bidder shall comply with all applicable requirements of the Drug-Free Workplace Act of 1988 and implementing regulations.
- C. Americans with Disabilities Act: Bidder shall comply with all applicable provisions of the Americans with Disabilities Act and implementing regulations.
- D. **OSHA Regulations:** Bidder agrees to maintain and to display any applicable materials for its employees in accordance with OSHA regulations.
- E. Compliance with Immigration Laws and Use of E-Verify: Bidder agrees to comply with all requirements of the U.S. Immigration Reform and Control Act of 1986, as amended, and any implementing regulations thereto. Bidder further agrees to utilize the E-Verify system through the Department of Homeland Security on its employees. Bidder shall not employ unauthorized aliens, and shall not assign services to be performed to any supplier or subcontractor who are unauthorized aliens. If any personnel performing any services hereunder are discovered to be an unauthorized alien, then Bidder will immediately remove such personnel from performing services hereunder and shall replace such personnel with personnel who are not unauthorized alien(s).
- F. State and Federal Law Compliance: Bidder agrees to comply with all other State and Federal laws and regulations applicable to the provision of services under this contract.

55. RECORD RETENTION AND RIGHT TO AUDIT:

Bidder shall keep and maintain all records associated with this contract for a minimum of five (5) years from the close of the contract or as required by Federal or State law or regulation, whichever period is longer. If awarded this contract, Bidder shall allow the County reasonable access to the records in Bidder's possession, custody, or control that the County deems necessary to assist it in auditing the services, costs, and payments provided hereunder. If this contract involves the use of Federal or State

funds, then Bidder shall also allow reasonable access to representatives of the Office of Inspector General, the General Accounting Office, and the other Federal and/or State agencies overseeing the funds that such entities deem necessary to facilitate review by such agencies and Bidder shall maintain fiscal records and supporting documentation for all expenditures in a manner that conforms with OMB Circular A-87 (relocated to 2 C.F.R. Part 225) and this contract.

56. TITLE VI ASSURANCES/TxDOT:

The County is subject to Title VI of the Civil Rights Act of 1964 and the Federal and State laws and regulations of the United States Department of Transportation and Texas Department of Transportation (TxDOT). Pursuant to these requirements, the County must have its contractors provide required assurances on compliance with non-discrimination by itself and its subcontractors. The Title VI Assurances within this Subsection are not exhaustive – whenever any Federal. State, or Local requirement requires additional clauses, this list shall not be construed as limiting. Contractor agrees as follows:

- A. Compliance with Regulations: The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, DOT) Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are incorporated herein by reference and made a part of this contract.
- B. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the basis of race, color, national origin, religion, sex, age, disability or Veteran status in the

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selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

- C. Solicitations for Subcontractors, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, religion, sex, age. disability or Veteran status.
- D. Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Galveston County or the Texas Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of the Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to Galveston County or the Texas Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, Galveston County shall impose such contract sanctions as it or the Texas Department of Transportation may determine to be appropriate, including, but not limited to:
 - 1) withholding of payments to the Contractor under the contract until the Contractor complies, and/or;
 - 2) cancellation, termination, or suspension of the contract, in whole or in part.
- **Incorporation of Provisions.** The Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as Galveston County or the Texas Department of Transportation may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request Galveston County to enter into such litigation to protect the interests of Galveston County, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

57. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER **RESPONSIBILITY MATTERS:**

Bidder certifies that neither it, nor any of its Principals, are presently debarred, suspended, proposed for debarment, disqualified, excluded, or in any way declared ineligible for the award of contracts by any Federal agency. Contractor agrees that it shall refund Galveston County for any payments made to Contractor while ineligible. Contractor acknowledges that Contractor's uncured failure to perform under this Agreement, if such should occur, may result in Contractor being debarred from performing additional work for the County, the GLO, the State, HUD, and other Federal and State entities. Further, Bidder has executed the Certification Regarding Debarment, Suspension. Proposed Debarment, and Other Responsibility Matters and returned the fully completed and executed original certification with the submission of its Bid. The truthful and fully completed and executed original of the Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters must be included with the submission of Bidder's Bid and is a mandatory requirement of this RFP. Bidder's failure to include the fully completed and executed original of this Certification shall be considered non-compliance with the requirements of this RFP and grounds for the rejection of Bidder's Bid. .

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GENERAL PROVISIONS 823 Grand Renovation Galveston County, Texas

58. SECTION 231.006, FAMILY CODE/DELINQUENT CHILD SUPPORT:

Pursuant to Title 5, Section 231.006 of the Texas Family Code, as applicable, Bidder certifies that it, including all of its principals, is/are current in child support payments and therefore, that it is eligible to receive payments from State funds under a contract for property, materials, or services. Bidder acknowledges and agrees that if it is awarded this contract, then the ensuing agreement may be terminated and payment withheld if this certification is inaccurate. Finally, by the submission of its Bid, the Bidder certifies that it has included the names and social security numbers of each person with at least 25% ownership interest in Bidder within its response to the RFP and that all such persons are current in child support payments.

59. LABOR STANDARDS:

Bidder acknowledges that the contract to be awarded pursuant to this RFP is on a grant program funded with Federal funds. Bidder shall comply with the requirements of 29 CFR Part 5 and CFR Part 30 and shall be in conformity with Executive Order 11246, entitled "Equal Employment Opportunity", Copeland, "Anti-Kickback" Act (29 C.F.R. Part 3), the Davis-Bacon and Related Acts (29 C.F.R. Parts 1,3, and 5), the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.), and all other applicable Federal, State, and local laws and regulations pertaining to labor standards, insofar as those acts apply to the performance of this Agreement. Bidder is also responsible for ensuring that all subcontractors comply with the requirements of 29 CFR Part 5 and CFR Part 30 and shall be in conformity with Executive Order 11246, entitled "Equal Employment Opportunity", Copeland "Anti-Kickback" Act, the Davis-Bacon and Related Acts (29 CFR Parts 1, 3 and 5), the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.), and all other applicable Federal, State, and local laws and regulations pertaining to labor standards, insofar as those acts apply to the performance of this Agreement.

End of General Provision Section

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Bid Number Bid Date Bid Time B151023 August 18, 2015 2:00 p.m.

			BID	FORM	
1. 2.	PROJE	ECT:			·
	623 GF	ana	••••••		Kenovation
3.	SUBM	ITTED BY:	Bidder	Nomo	
			Biddel .	ivaine	
			Bidder	Address	
			Bidder	Phone Number	
			Bidder	e-mail or website	
4.	BID:				
	This Bi	d is for gene	ral construction to renovate the	e site and building at 823 Grand Avenue I	Bacliff, Texas.
	В.	inspected perform the In submittin 01. 02. 03. 04. Furnish institute the under convey upundersigned the performance of the under convey upundersigned the under convey upunder convey	the site and examined all conservarious items of work listed to the servarious items of work listed to the Bid, the undersigned, a Hold the Bid open for accept Accept the right of the Own accept the Bid which the Own Accept the right of the Own be contracted with the difficulty Contract. Complete the Work within the urance. It igned acknowledges that being on him any property right to the servarious in the servarious in the servarious acknowledges that being the servarious in the servarious acknowledges that being the servarious acknowledges acknowledges the servarious acknowledges acknowledges acknowl	otance for 60 days from the submission of where to reject any, or all Bids, to waive where considers most advantageous to him here to reject any Subcontractor. A new ference in Bid amount added to, or such estipulated Contract Time. In a notified that he has the best responsito an award of the Contract or anything the given the properties of the contract or anything the sest under the Bid or tentative award.	Bid. formalities, and to . Subcontractor may btracted from, the sible Bid does not ing of value. The
5.	The unc	lersigned ag	ees to perform the complete W	Vork of this Project, for the lump sum price	ce of:
<u></u>	nount wr	itten in word	g governs)	Dollars and no/100 \$ _	(Amount in figures)
(AI	nount wi	itten in word	s governs)		(Amount in rigures)
			NGES IN THE WORK: applied to any change of scope	e of work will be set as follows:	
	_% Ove	rhead	- •		
	_% Prof	it			

Bidders Printed Name:

Rid Number

R151023

Bidders Address:	Bid Date Bid Time	2:00 p.m.
Bidders Phone Number		
Signatory's Printed Name:		
Signatory's Position/Title:		
Signature:	date	
Note that Section 00104 - Bid Evaluation Waiver and other doc	numents must accompany this f	form.
STATE OF TEXAS TAX STATEMENT OF MATERIALS and	d other charges:	
The cost of in-place materials to be incorporated into the project in the Base Bid	\$	
The cost of labor, profit, materials not in-place and all other charges in the Base Bid	\$	
TOTAL: (Must agree with Bid (para. 8) total above)	\$	

A copy of the Bidder's completed CIQ Form that has been filed with the Galveston County Clerk's Office must be included with Bidder's Bid.

A copy of Section 00104 Bid Evaluation Waiver must be included with Bidder's Bid.

END OF SECTION

June 30, 2015 Bid Form page 2 of 2



AIA Document A305

Contractor's Qualification Statement

1986 EDITION

(AIA) and The Associated General Contractors of America (AC ing the qualifications of contractors. No endorsement of the verification of the information is made by the AIA or AGC.		See the lighted choir she are	
The Undersigned certifies under oath that the information provide ciently complete so as not to be misleading.	ed herein is true and suffi-	et let alletter	
SUBMITTED TO:		:	
ADDRESS:	•		
SUBMITTED BY:	Corporation		
NAME:	Partnership		
ADDRESS:	Individual		
PRINCIPAL OFFICE:	Joint Venture		
	Other		
NAME OF PROJECT (if applicable):			
TYPE OF WORK (file separate form for each Classification of Work):			
General Construction	HVAC		
Plumbing	Plumbing Electrical		
Other			

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AIA DOCUMENT A305 • CONTRACTOR'S QUALIFICATION STATEMENT • 1986 EDITION • AIA® • @1986 THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006

A305-1986 1

Assert And Andread

1. ORGANIZATION

- 1.1 How many years has your organization been in business as a Contractor?
- 1.2 How many years has your organization been in business under its present business name?
 - 1.2.1 Under what other or former names has your organization operated?

- 1.3 If your organization is a corporation, answer the following:
 - 1.3.1 Date of incorporation:
 - 1.3.2 State of incorporation:
 - 1.3.3 President's name:
 - 1.3.4 Vice-president's name(s):

- 1.3.5 Secretary's name:
- 1.3.6 Treasurer's name:
- 1.4 If your organization is a partnership, answer the following:
 - 1.4.1 Date of organization:
 - 1.4.2 Type of partnership (if applicable):
 - 1.4.3 Name(s) of general partner(s):

- 1.5 If your organization is individually owned, answer the following:
 - 1.5.1 Date of organization:
 - 1.5.2 Name of owner:

2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable.

2.2 List jurisdictions in which your organization's partnership or trade name is filed.

3.1 List the categories of work that your organization normally performs with its own forces.

- 3.2 Claims and Suits. (If the answer to any of the questions below is yes, please attach details.)
 - 3.2.1 Has your organization ever failed to complete any work awarded to it?
 - 3.2.2 Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?
 - 3.2.3 Has your organization filed any law suits or requested arbitration with regard to construction contracts within the last five years?
- 3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please attach details.)

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- 3.4 On a separate sheet, list major construction projects your organization has in progress, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date.
 - 3.4.1 State total worth of work in progress and under contract:
- On a separate sheet, list the major projects your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, date of completion and percentage of the cost of the work performed with your own forces.
 - 3.5.1 State average annual amount of construction work performed during the past five years:
- 3.6 On a separate sheet, list the construction experience and present commitments of the key individuals of your organization.

4. REFERENCES

4.1 Trade References:

4.2 Bank References:

- 4.3 Surety:
 - 4.3.1 Name of bonding company:
 - 4.3.2 Name and address of agent:

5.1.1 Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:

Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);

Net Fixed Assets;

Other Assets;

Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);

Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

- 5.1.2 Name and address of firm preparing attached financial statement, and date thereof:
- 5.1.3 Is the attached financial statement for the identical organization named on page one?
- 5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary).

5.2 Will the organization whose financial statement is attached act as guarantor of the contract for construction?

	SIGNA	ATURE					
	6.1	Dated at	this		19		day of
		Name of Organization:					
		Ву:					
,		Title:					
	6.2						
	M duly sw mislead	vorn deposes and says that th ling.	ne information provid	led herein is t	rue and suff	ficiently complete sc	as not
	Subscri	bed and sworn before me thi	is	19		day of	
		Notary Public:					
		My Commission Expires:					

6.

Agreement between Galveston County and Contractor

Agreement for: Renovation to 823 Grand

This contract is entered into between Galveston County and the Contractor named below pursuant to Sub chapter B, Chapter 271, Texas Local Government Code, and the referenced Request for Design Build Services

Contract No: CM Bid No: B151023	
Contractor:	
Galveston County Authorized Representative:	J. Dudley Anderson, County Architect

Article I.

The Work

Section 1.01 The Contractor and Galveston County agree that the materials and equipment to be furnished and the work to be done by the Contractor are as follows:

 General construction to renovate the building and site at 823 Grand Avenue Bacliff, Texas

Section 1.02 The Contractor shall be held accountable for the following Project related responsibilities: furnish all labor and supervision; furnish, supply and install all equipment, material, supplies, tools, scaffolding, hoisting, transportation, unloading and handling; do all things required to complete the work described above on the Project all in accordance with the drawings and Project Manual prepared by the Architect or Engineer; and furnish all necessary information, shop drawings, details, samples, brochures, etc. For Owner/Architect or Engineer approval, as may be required.

Article II.

Time of Commencement and Completion

Section 2.01 The Contractor shall start the work upon notice to proceed and shall execute the work with diligence and dispatch so as to maintain such schedules and milestones as established by Galveston County's authorized Representative. The Contractor agrees to complete portions and the whole of the work by the following anticipated dates: September 18, 2015

Section 2.02 The Contractor is cautioned that schedules and milestones are subject to review and revision, and in such event, such revisions will be made available for the Contractor's information at the office of Galveston County's authorized Representative. In the event the Contractor should fail to maintain Galveston County's authorized Representative's progress

schedule or the schedule as established above, Galveston County reserves the right, after 48 hours formal notice, either by letter or telegram to the Contractor, to procure the materials, equipment, and labor necessary to proceed with, or to complete the work, or any portion thereof from other sources and charge the cost thereof to the Contractor.

Section 2.03 Time is of the essence in this Agreement.

Article III.

payments on account thereof as follows:

The Contrac	et Sum			
Section 3.01 Galveston County agrees to pay the Contractor for the satisfactory performance of his work the total sum of:				
	Dollars and xx/100			
(\$subject to add), payments to be made as described herein in current funds itions and deductions for changes, as may be agreed upon in writing, and to make			

Section 3.02 On the established day of each month, the Contractor shall deliver to Galveston County through Galveston County's authorized Representative a detailed, quadruplicate statement acceptable to Galveston County's authorized Representative, and if required, supported by receipts, vouchers, etc. showing values of all materials delivered and work completed up to the established billing date for which payment is requested. Monthly and final payments will be made to the Contractor from Galveston County. It is specifically understood and agreed that prior to submission of the first statement, the Contractor will deliver to Galveston County's authorized Representative, for review and approval, a detailed breakdown of this contract sum showing a schedule of values for the various parts of the work Once accepted by Galveston County's authorized Representative, this schedule of values will be used as a basis for checking the Contractor's monthly statement.

Section 3.03 The Contractor shall, with the second and each succeeding monthly request for payment, submit receipts and/or an affidavit and waiver of bond claim showing all payments made for labor and materials and on account for all work covered in the previous months request for payment. Affidavit and waiver of bond claims may be required to be submitted from Contractors, suppliers, and/or Sub-Contractors (all tier). The Contractor shall be required to execute a general release satisfactory to Owner, prior to receiving final payment.

Section 3.04 Five percent (5%) of each payment shall be retained, unless specific provisions to the contrary are indicated in the contract documents.

Section 3.05 No payment made under this Agreement, including the final payment, shall be conclusive evidence of the performance of the work, either wholly or in part, and no payment shall be construed as an acceptance of defective work or improper materials.

Section 3.06 The Contractor shall save and keep Galveston County's authorized Representative, Galveston County and Galveston County's property free from all claims, including bond claims, legal or equitable, arising out of the Contractor's work hereunder. In the event any such claim is filed by anyone claiming by, through, or under the Contractor, the Contractor shall remove and discharge same, by bonding or otherwise, within five (5) days of the filing thereof.

Article IV.

The Contract Documents

Section 4.01 The contract documents consist of this Agreement and any exhibits attached hereto; Proposal Documents, Proposal Form, General Conditions of the Contract, the Project Manual, the Drawings, and all addenda issued prior to and all modifications issued after execution of the Agreement between Galveston County and Galveston County's authorized Representative and agreed upon by the parties.

Section 4.02 The Contractor agrees to perform the work subject to the final approval of the authorized representative of Galveston County, in accordance with the contract documents.

Section 4.03 Contract documents are available, at reasonable times, at the office of Galveston County's authorized Representative for examination by the Contractor.

Section 4.04 No extra work shall be performed under this Agreement, except upon receipt of a written order from Galveston County's authorized Representative or Galveston County.

The Specifications and Drawings are enumerated as follows:



Article V.

Insurance and Indemnity

Section 5.01 The Contractor agrees to, at the time of execution of this Agreement, furnish Galveston County's authorized Representative with certificates of insurance from an insurance company (or other source) acceptable to Galveston County. These certificates should certify that the Contractor is protected on the work with worker's compensation and employer's liability, public liability and bodily injury, property damage insurance, and any other insurance as required by the contract documents and in accordance with the attachment to this Agreement. The Contractor will not be permitted to start work at the site until these certificates are filed with Galveston County. Compliance by the Contractor with the foregoing requirements, as to carrying insurance and furnishing certificates, shall not relieve the Contractor of its liabilities and obligations.

Section 5.02 For ten (\$10.00) dollars and other good and valuable consideration, the receipt whereof is hereby acknowledged, and to the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless Galveston County, Galveston County's authorized Representative, the Architect or Engineer, and all of their agents and employees from and against claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of June 30, 2105

Agreement between Galveston County and Contractor

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or resulting from the performance or failure in performance of the Contractor's work under this Agreement provided that any such claim, damage, loss, or expense (1) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom, (2) is caused, in whole or in part, by any negligent act or omission of the Contractor or anyone directly or indirectly employed by the Contractor, or anyone for whose acts the Contractor may be liable, regardless of whether caused in part by a party indemnified hereunder. Such obligations shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph. In any and all claims against Galveston County's authorized Representative, or any of its agents or employees, by any employee of the Contractor, or anyone directly or indirectly employed by the Contractor, or anyone for whose acts he may be liable, the indemnification obligation under this paragraph 5.02 shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under worker's compensation acts, disability benefit acts, or other employee benefit acts.

Section 5.03 The obligations of the Contractor, under paragraph 5.02, shall not extend to the liability of the Architect or Engineer, his agents, or employees, arising out of the preparation or approval of maps, drawings, opinions, reports surveys, change orders, designs, or Project Manual and/or the giving of or failure to give directions or instructions by the Architect or Engineer, his agents or employees, providing such giving or failure to give is the primary cause of the injury or damage

Section 5.04 The Contractor agrees to obtain, maintain, and pay for such contractual liability insurance coverage and endorsements as will insure the indemnification obligation of the Contractor pursuant to paragraph 5.02 above.

Article VI.

Performance Bond and Labor and Material Payment Bond

Section 6.01 The Contractor agrees to furnish and pay for a 100% Performance Bond and a 100% Labor and Material Payment Bond on the bond forms issued with this Agreement naming the Galveston County as Obligee. Bonds must be issued by a company acceptable to Galveston County and must be accompanied by a Power of Attorney. The bonds are to be delivered with this executed Agreement.

Article VII.

Warranty

Section 7.01 The Contractor agrees to promptly make good, without cost to Galveston County, any and all defects, due to faulty workmanship and/or materials, which may appear within the guarantee or warranty period so established in the contract documents. If no such period is stipulated in the contract documents, then such guarantee shall be for a period of one (1) year from date of substantial completion and acceptance of the work by Galveston County. The Contractor further agrees to provide any and all guarantees as required by the terms of the contract documents, as a condition precedent to final payment

Article VIII.

Changes in the Work

Section 8.01 The Contractor may be ordered in writing by Galveston County, without invalidating this Agreement, to make changes in the work within the general scope of this Agreement. These changes may consist of additions, deletions, or other revisions, the contract sum and the contract time being adjusted accordingly. The Contractor, prior to the commencement of such changed or revised work, shall submit promptly to Galveston County's authorized Representative written copies of any claim for adjustment to the contract sum and contract time for such revised work in a manner consistent with the contract documents

Section 8.02 Where changes in the work involve both additions and deletions, percentages for overhead and profit shall be applied to the net increase of such values for labor and materials.

Section 8.03 The amount to be paid by Galveston County for changes in the work, as outlined in paragraph 8.01 above, shall be made on the basis of one of the following methods:

- a) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation and agreed upon by Galveston County's authorized Representative and the Contractor, or
- b) by unit prices stated in the contract documents, or
- c) if no such unit prices are set forth and if the parties cannot agree upon a lump sum, then the actual net cost in money to the Contractor of materials and labor (including insurance and applicable taxes) required, plus rental of plant equipment (other than small tools and small equipment) plus compensation for overhead and for profit as noted in Article 12. (Field overhead will not be considered as part of actual net cost), or
- d) by the method provided in subparagraph 8.04.

Section 8.04 If none of the above methods set forth in clauses 8.03 (a), 8.03 (b), 8.03 (c) is agreed upon, the Contractor, provided he receives a written order signed by Galveston County shall promptly proceed with the work involved. The cost of such work shall be determined by Galveston County's authorized Representative on the basis of reasonable expenditures and savings of those performing the work attributable to the change, including, in the case of an increase in the contract sum, a reasonable allowance for overhead and profit. In such case, and also under clauses 8.03 (c) and 8.03 (d) above, the Contractor shall keep and present, in such form as Galveston County's authorized Representative may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a change order. Unless otherwise provided in the contract documents, cost shall be limited to the following: cost of materials including cost of delivery, cost of labor including social security, old age and unemployment insurance and fringe benefits required by Agreement or custom; workers or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost, payments, on account shall be made as determined by Galveston County. The amount of credit to be allowed by the Contractor for any deletion or change which results in a net decrease in the contract sum will be the amount of the actual net cost as confirmed by Galveston County. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any with respect to that change.

Section 8.05 Owner's Audit

a) Owner's duly authorized representative shall have access, at all reasonable times, to all Contractor's personnel, books, records, correspondence, instructions, plans, drawings, receipts, vouchers and memoranda of every description pertaining to any change(s) for the purpose of auditing and verifying Contractor's net cost of change or for any other reasonable purpose. Owner's representative shall have the right to reproduce any of the aforesaid documents. Contractor shall preserve, and shall cause its Contractors to preserve all the aforesaid documents for a period of two years after the completion and acceptance or termination of work.

Section 8.06 For work performed by a Sub-Contractor, the Contractor will be allowed to add 5% only and said Sub-Contractor mark-up shall not exceed the agreed upon percentages noted in Article 12 for overhead and profit

Article IX.

Contractor Responsibilities

Section 9.01 The Contractor shall provide sufficient, safe, and proper facilities at all times for the inspection of the work by Galveston County and Galveston County's authorized Representative, or their authorized representatives. The Contractor shall, within a 24-hour notice from Galveston County's authorized Representative, proceed to take down all portions of the work and remove from the grounds or buildings, all materials, whether worked or un-worked, which Galveston County's authorized Representative, Galveston County, or their authorized representatives shall condemn as unsound or improper, or as in any way failing to conform to the contract documents. The Contractor shall make good at its own expense, all work damaged or destroyed thereby

Section 9.02 The Contractor agrees, in the performance of this Agreement, to comply with all federal, state, municipal, and local laws, ordinances, codes and governing regulations, to pay all costs and expenses required thereby; to pay all fees, charges, assessments, and taxes, and to pay all fringe and other benefits required by Agreement or law.

Section 9.03 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save Galveston County, Galveston County's authorized Representative, and Architect or Engineer harmless from loss on account thereof, except that Galveston County shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to Galveston County.

Section 9.04 Should the Contractor become insolvent, or at any time, refuse or neglect to supply a sufficiency of properly skilled workers, or equipment and materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the Agreements herein contained, Galveston County shall be at liberty, after 48 hours written notice to the Contractor, to provide any such labor, equipment,, and materials and deduct the cost thereof, from any money then due or thereafter to become due to the Contractor, under this Agreement. In the event of such refusal, neglect, or failure Galveston County shall also be at liberty to terminate the employment of the Contractor. Consequently, Galveston County may enter upon the premises to take possession, for the purpose of completing the work included under this Agreement, of all materials, tools, and appliances thereon, and to employ any other person or persons to finish the work and provide the materials therefore. In case of such discontinuance of the employment, the Contractor shall not be entitled to receive any further payment under this Agreement until the said work shall be wholly finished. If the unpaid balance of the amount to be paid under this Agreement shall exceed the expense incurred by Galveston County in finishing the work, such excess shall be paid by Galveston County to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to Galveston County. The expense incurred by Galveston County, as herein provided, either for furnishing materials, or finishing the work, and any damage incurred through such default, shall be chargeable to the Contractor

Section 9.05 Notwithstanding the above paragraph, Galveston County reserves the right to terminate this Agreement for its convenience upon written notice to the Contractor. In such instance the Contractor will be paid its share of the contract amount proportionate to the percentage of its work completed and other reasonable cancellation costs incurred as a result of said termination. No payments shall be made for anticipated overhead and profit. Prior to making any payments under this clause, the Owner shall have the right to audit the records of the Contractor

Section 9.06 The Contractor agrees to adhere to the federal Occupational Safety & Health Act, state and local safety regulations and Galveston County's authorized Representative's safety and health program so as to avoid injury or damage to persons or property, and to be directly responsible for damage to persons and property resulting from failure to do so.

Section 9.07 In the event the Contractor after a 24-hour written notice from Galveston County, Galveston County's authorized Representative, or duly authorized representative, fails to take corrective action to insure compliance with said safety regulations or removal of rubbish and debris resulting from his work, Galveston County shall undertake these obligations and charge the cost of same to the Contractor's account without further notice to the Contractor.

Section 9.08 The Contractor agrees to notify Galveston County's authorized Representative's representative on the jobsite of all accidents which may occur to persons or property and shall provide Galveston County's authorized Representative's representative with a copy of all accident reports on appropriate forms. All reports shall be signed by the Contractor or his authorized representative and submitted within five (5) days of occurrence

Section 9.09 The Contractor shall procure its materials from such sources, and employ such labor subject to contract terms and conditions in order to ensure harmonious labor relations on the site and prevent strikes or labor disputes by its employees or other trade employees. The Contractor, in the event of a labor dispute including strikes, shall take whatever action is required in order to prevent the disruption of work on the Project site.

Section 9.10 The Contractor will not assign this Agreement, nor any moneys due or to become due under this Agreement, nor sublet the whole or any part of the work to be performed hereunder, without the written consent of the Owner and Galveston County's authorized Representative. In the event of such a consent, a Sub-Contractor must comply with all the requirements of this Agreement.

Section 9.11 The Contractor agrees that all disputes concerning the jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect either nationally or in the locality in which the work is being done. The Contractor shall be bound by, and shall abide by, all such adjustments and settlements of jurisdictional disputes, whether or not the Contractor is signature bound by the Agreement establishing the impartial jurisdictional disputes board and/or its successors. The Contractor agrees not to cause a work stoppage, due to the jurisdictional assignment of work

Section 9.12 The Contractor shall submit to Galveston County's authorized Representative upon request, copies of orders placed for the various materials required for the Project or authentic stock lists if such material is normally a stock item. Order copies need not reflect

prices but should indicate type of material, quantity, vendor name, and address, etc. The Contractor shall be required to submit to Galveston County's authorized Representative a monthly material status report, or more often if required by Galveston County's authorized Representative, as a prerequisite for the monthly progress payment. The Contractor shall notify Galveston County's authorized Representative immediately upon learning of a change of status of any material, equipment, or supplies

Section 9.13 The Contractor shall continuously and adequately protect all his work and will immediately replace all damaged and defective work

Section 9.14 The Contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies, and equipment to meet the requirements of Galveston County's authorized Representative and other trades in order to maintain construction progress schedules, as established by Galveston County's authorized Representative. In the event that his force is, in the judgment of Galveston County's authorized Representative, inadequate to meet the established schedules during the regular working hours, the Contractor agrees to work sufficient overtime hours or increase his work force to meet such schedules at no extra cost to Galveston County. If for reasons not already stated, Galveston County's authorized Representative requires and directs the Contractor to work overtime, including Saturdays, Sundays or Holidays, the Contractor will be reimbursed the net premium rate only. The net premium rate is understood to mean the actual premium labor cost, including applicable taxes and wage additives required by trade Agreement or by law, but without additives for overhead, labor efficiency, or profit.

Section 9.15 The Contractor agrees to employ competent administrative, supervisory, and field personnel to accomplish the work, including layout and engineering and preparation and checking of shop drawings. If required, the Contractor shall substantiate this employment of competent personnel to Galveston County's authorized Representative's satisfaction before initiating any work

Section 9.16 The Contractor shall insure that all construction tools, equipment, temporary facilities, and other items used in accomplishing the work, whether purchased, rented, or otherwise provided by the Contractor or provided by others, are in a safe, sound, and good condition, must be capable of performing the functions for which they are intended and must be maintained in conformance with applicable laws and regulations

Section 9.17 If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner, Galveston County's authorized Representative, or the Architect or Engineer, or by any employee of either, or by any separate contractor employed by the Owner, or by changes ordered in the work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the Owner or Galveston County's authorized Representative, or by any other cause which Galveston County's authorized Representative determines may justify the delay, then the contract time shall be extended by amendment for such reasonable time as Galveston County's authorized Representative and Owner may determine.

Section 9.18 Right-To-Know each Contractor is required to implement the provisions of the right-to-know law, if any, as enacted by the state in which the work is being performed. Before

using on site any material listed in the right-to-know substance list, each Contractor will furnish Galveston County's authorized Representative a copy of the material safety data sheet for that substance

Section 9.19 In the event the Contractor employs independent contractors, as well as payroll labor, to discharge its obligations hereunder, the Contractor acknowledges and understands that it does so at its own risk and that federal, state and/or local agencies may dispute the independent contractor status and assess penalties, fines, and costs should there be a determination to reclassify such workers. In that event, the Contractor agrees that it will defend, indemnify and hold Galveston County harmless from any fines, costs, damages, penalties, attorneys fees, and causes of action, including without limitation, personal injury or property damage, arising out of or relating in any way to such a determination.

Article X.

Galveston County's authorized Representative Responsibilities

Section 10.01 Galveston County's authorized Representative will be the Owner's representative and will administer the contract as described in the contract documents. Galveston County's authorized Representative will advise and consult with the Owner. Galveston County's authorized Representative will have authority to act on behalf of the Owner to the extent provided in the contract documents, as they may be modified by change order in accordance with other provisions of the trade contract

Section 10.02 The Contractor agrees to perform the work under the general direction and coordination of Galveston County's authorized Representative in accordance with the contract documents. Any directive given by Galveston County's authorized Representative shall be binding on the Contractor.

Section 10.03 Galveston County's authorized Representative, acting for the Owner and subject to the Owner's delegation of such authority, may perform all tasks necessary or appropriate to administer and manage the trade contract, and undertake any action with respect to the Contractor, that the Owner is entitled to undertake.

Section 10.04 Galveston County's authorized Representative shall not give instructions or orders directly to employees or workers of the Contractor, except to persons designated as authorized representatives of the Contractor.

Article XI.

Equal Opportunity

Section 11.01 During the performance of this Agreement, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to insure that applicants are employed without regard to their race, color, religion, sex, or national origin. The Contractor will comply with all provisions of Executive Order No. 11246, Section 503 of the Rehabilitation Act of 1973, as Amended, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as Amended, (38 U.S.C. 4212) and their implementing regulations at 41 CFR Chapter 60.

Article XII.

Alterations

Section 12.01 Refer to the Proposal Form for the overhead and profit allowable under Article 8.03. A, 8.03 B, 8.03 C: _____% Overhead, _____% Profit

Article XIII.

Complete Agreement

Section 13.01 This Agreement, together with all documents, Project Manual, drawings, incorporated herein by reference, constitute the entire Agreement between Galveston County and Contractor. There are no terms, conditions, or provisions, either oral or written, between the parties hereto, other than those contained herein. This Agreement supersedes any and all written representations, inducements, or understandings of any kind or nature between the parties hereto, relating to the particular Project involved herein

Section 13.02 The said parties for themselves, their heirs, successors, executors, administrators and assigns, do hereby agree to the full performance of the covenants herein contained.

This Contract is issued pursuant to av	s Contract is issued pursuant to award made by Commissioners' Court on, 20_	
EXECUTED this day of		
	COUNTY OF GALVESTON, TEXAS	
BY:	Mark Henry, County Judge	
ATTEST:		
Dwight Sullivan, County Clerk		
	CONTRACTOR	
BY:	Signature - Tit	tle
	Printed Name	

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SECTION 00200 General Terms and Conditions of the Contract

1. Contract Documents

- A. The Work For the purpose of this document, the term "Work" is the work defined in Article 1 of the Trade Contract
- B. The Project is the total construction to be performed under the Agreement between the Owner and Galveston County's authorized Representative of which the Work is a part.

C. Bid Package

1. The project is to be constructed under a general contract.

D. Abbreviations

- The language of the Project Manual and elsewhere in the Contract Documents is of the abbreviated type in certain instances, and implies words and meanings which will be appropriately interpreted.
- Actual word abbreviations of a self-explanatory nature have been included in the Project Manual
 and Drawings. These are generally defined in the Project Manual Sections at the first instance of
 use of each term so abbreviated.
- 3. Singular words will be interpreted as plural and plural words will be interpreted as singular wherever applicable and the full context of the requirements so indicates.

E. General Definitions

- 1. The word "County" in this contract refers to the County of Galveston.
- 2. The word "Contractor" refers to the person or entity agreeing to perform the work in this contract and is also referred to as the "Contractor"
- "Program Administrator" refers to the person designated by County to act on its behalf in administering this contract.
- 4. "Provide", or "perform": To supply, install and connect up complete and ready for safe and regular operation of particular work referred to unless specifically noted otherwise.
- 5. "Furnish" to supply, deliver to site and transfer to others for installation.
- 6. "Install": To receive, unload, distribute, construct, erect, mount, and connect complete with related accessories.
- 7. "Supply": To purchase, procure, acquire and deliver complete with related accessories.
- 8. "Product": The term "product" shall include materials, equipment and systems.
- "As approved": Where used in conjunction with the Galveston County's authorized Representative's or the Architect or Engineer's response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the meaning of the term "approved" shall not exceed the limitations of the Galveston County's authorized Representative's or the Architect or Engineer's responsibilities and duties as established in the contract documents.
 - a. In no case shall "approval" by Galveston County's authorized Representative or the Architect or Engineer be interpreted as a release of the Contractor from responsibilities to fulfill the requirements of the Contract Documents.
 - b. "Approval", where required for an item, shall be obtained from the Architect or Engineer through Galveston County's authorized Representative in writing.
- 10. The term "Indicated" is a cross reference to details, notes, or schedules on the drawings, other paragraphs or schedules in the Project Manual, and similar means of recording requirements in the Contract Documents.
 - a. Where terms such as "shown", "noted", "scheduled", and "specified" are used instead of "indicated, it is for purpose of helping the reader accomplish the cross reference, and

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no limitation of location is intended except as specifically noted.

- "Directed", "Requested", Etc.: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Architect or Engineer, Galveston County's authorized Representative or Owner's Representative", "requested by the Architect or Engineer, Galveston County's authorized Representative or Owner's Representative", etc. However, no such implied meaning will be interpreted to extend the Architect or Engineer's or Galveston County's authorized Representative's responsibility in the Contractor's area of construction supervision.
- 12. "Installer": The person or entity engaged by the Contractor or his or Sub-Contractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that installers be recognized experts in the work they are engaged to perform.
- 13. "Suitable", "reasonable", "proper", "correct" and "necessary": Such terms shall mean as suitable, reasonable, proper, correct, or necessary for the purpose intended as required by the contract documents, subject to the judgment of the Architect or Engineer or Galveston County's authorized Representative.
- 14. "Including", "Such as": The terms "including" and "such as" shall always be taken in most inclusive sense, namely, "including, but not limited to", and "such as, but not limited to"
- 15. "Option": The term "option" shall mean a choice from the specified products or procedures which shall be made by the Contractor. The choice is not "whether" the work is to be performed, but "which" product or "which" procedure is to be used. The product or procedure chosen by the Contractor shall be provided at no increase in the cost to the Owner and with no lessening of the Contractor's responsibility for its performance.
- 16. "Exposed": The term "exposed" shall mean any item or surface, exterior or interior, which can be seen by a person outside the building, or seen by a person inside any usable space within the building during normal activity.
 - a. Mechanical and electrical rooms, air handling rooms, storage rooms and penthouses shall be considered to have exposed surfaces, as shall the mechanical and electrical construction within them.
 - b. The interiors of closets and alcoves shall be considered exposed surfaces, and shall be finished to match the finish of the adjoining room or space, unless another finish is shown.
 - The interiors of cabinets shall be considered exposed, but a finish different from that of the exterior may be permitted or required.
 - d. Spaces which are not normally occupied or used by occupants or building staff, such as, shafts, hoist ways, tunnels, ceiling plenums, attics, and crew spaces shall be considered "concealed" spaces, unless finishes are shown or specified for their surfaces
- 17. "At no additional cost": The term "at no additional cost" shall mean at no additional cost to the Owner, the Architect or Engineer, or Galveston County's authorized Representative.
- 18. "Testing Laboratory": An independent entity engaged to perform specific inspections or tests of the Work, either at the project site or elsewhere; and to report and interpret the results of those inspections or tests.
- 19. Where the word "similar" appears on the drawings, it shall be interpreted in its general sense and not as meaning identical and all details shall be worked out in relation to their location and connection with other parts of the Work.
 - a. Where on any drawings a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall also apply to parts outlined.

2. Executions, Correlation, and Intent

- A. By executing his Agreement, Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed and correlated his observances with the requirements of the Contract Documents. Claims, as a result of failure to do so, will not be considered.
 - 1. The Contract shall be signed in triplicate by the Owner and Contractor.

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- B. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations in the Contract Documents which have well known technical or trade meanings are used in accordance with such recognized meanings
- C. The organization of the Project Manual into divisions, sections and articles, and the arrangements of Drawings shall not control Galveston County's authorized Representative in dividing the Work among Contractors or in establishing the extent of Work to be performed by any trade
- D. Written interpretations necessary for the proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect or Engineer through Galveston County's authorized Representative and in accordance with any schedule agreed upon. The Contractor shall make written request through Galveston County's authorized Representative to the Architect or Engineer for such interpretations. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents. The Contractor shall execute and complete the Work in accordance with such interpretations.

3. Ownership and Use of Documents

- A. Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, three (3) sets of Working Drawings and Project Manual reasonably necessary for the execution of the Work.
- B. All Drawings, Project Manual and copies thereof furnished by the Architect or Engineer are and shall remain his property. They are to be used only with respect to this Project and are not to be used on any other project. With the exception of one contract set for each party, such documents are to be returned or suitably accounted for to the Architect or Engineer on request at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect or Engineer's common law copyright or other reserved rights.

4. Owner

A. The Owner for this project is:

Galveston County 722 Moody, Suite 200 Galveston, Texas 77550

The Owner is the person or entity identified as such in the Agreement between the Owner and Contractor and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term "Owner" means the Owner or his authorized representative.

- B. Information and Services furnished by the Owner.
 - 1. The Owner will furnish all surveys describing the physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.
 - Except as provided in Article 9.2 of the Trade Contract the Owner will secure and pay for necessary approvals, easements, assessments and charges required for the construction, use, or occupancy of permanent structures or for permanent changes in existing facilities.
 - 3. Information or services under the Owner's control will be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.
 - 4. The Owner shall forward all instructions to the Contractors through Galveston County's authorized Representative.

5. Architect or Engineer

- A. Definition
 - 1. The Architect or Engineer for this project is: J. Dudley Anderson, County Architect
 - 2. The Architect or Engineer is the person lawfully licensed to practice Architecture or Engineering

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or an entity lawfully practicing Architecture or Engineering identified as such in the Agreement between the Owner and Galveston County's authorized Representative and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect or Engineer means the Architect or Engineer or his authorized representative.

 Nothing contained in the Contract Documents shall create any contractual relationship between the Architect or Engineer and any Contractor.

B. Architect or Engineer Duties during Construction

- The Architect or Engineer will be the interpreter of the requirements of the Drawings and Project Manual. The Architect or Engineer will, within a reasonable time, render such interpretations as are necessary for the proper execution of the progress of the work.
- The Architect or Engineer shall interpret the requirements of Changes it the Work, and he shall decide all other questions of design intent in connection with the work.
- The Architect or Engineer will recommend suspension of the Work whenever such suspension
 may be necessary to ensure proper execution of the Work.
- 4. All interpretations of the Architect or Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. All requests for interpretations shall be directed through Galveston County's authorized Representative.
- 5. It shall be the responsibility of the Architect or Engineer to make interpretations and render opinions in regard to all claims of the Owner or Galveston County's authorized Representative involving questions of interpretation of the intent of the drawings and Project Manual.
- 6. Neither the Contractor, Galveston County's authorized Representative, nor the Owner shall be bound by any determination, interpretation or opinion of the Architect or Engineer if it is later determined that such is not in accord with the true intent of the contract documents. The party taking issue with the determination, interpretation or decision of the Architect or Engineer shall give the other party or parties, as the case may be, written notice of such fact within ten (10) days after the determination, interpretation or opinion is rendered by the Architect or Engineer. However, it is the intent of this paragraph that in the actual performance of the Work, the Contractor and/or Galveston County's authorized Representative shall, in the first instance, proceed in accordance with the instruction given by the Architect or Engineer unless the Owner and Galveston County's authorized Representative mutually agree that the Contractor and/or Galveston County's authorized Representative shall proceed otherwise.
- 7. The Architect or Engineer's decision in matters relating to artistic effect will be final if consistent with the Contract Documents.
- 8. The Architect or Engineer will have authority to reject Work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the Contract Documents, he will have authority to require special inspection or testing of the Work in accordance with Subparagraph 19.B whether or not such Work be then fabricated, installed or completed. However, neither the Architect or Engineer's authority to act under this Subparagraph 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 Architect or Engineer to the Contractor, any Sub-Contractor, any of their agents or employees, or any other person performing any of the Work.
- 9. The Architect or Engineer will be the judge of the performance of the Work and will use his powers under the contract to enforce its faithful performance. The Architect or Engineer will determine the amount, quality, acceptability and fitness of all part of the work.
- 10. The Architect or Engineer will review or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Architect or Engineer's review of a specific item shall not indicate approval of an assembly of which the item is a component.

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11. The Architect or Engineer along with Galveston County's authorized Representative will conduct site visits to determine the dates of Substantial Completion and final completion, will receive written warranties and related documents required by the Contractor

12. The Architect or Engineer will communicate with the Contractor through Galveston County's authorized Representative.

6. Galveston County's authorized Representative

A. Definition

- Galveston County's authorized Representative or this project is: J. Dudley Anderson, County Architect.
- 2. It is the intent of these General Conditions to allow Galveston County's authorized Representative to direct and schedule the performance of all Work and the Contractors are expected to follow all such directions and schedules.

B. Administration of the Contract

- Galveston County's authorized Representative will provide, as the Owner's authorized representative, the general administration of the Project as described herein and in Article 10 of the Agreement between Galveston County and Contractor.
- Galveston County's authorized Representative will be the Owner's Construction Representative during construction until final payment and shall have the responsibility to manage the work of all Contractors.
- Galveston County's authorized Representative shall have the authority to reject Work, which
 does not conform to the Contract Documents, and to require any Special Inspection and Testing
 in accordance with Subparagraph 20.B.
- 4. Galveston County's authorized Representative will prepare and issue Amendments (Changes in the Work) to the Contractors in accordance with Article 27.
- 5. Galveston County's authorized Representative, along with the Architect or Engineer, will conduct site visits to determine the dates of Substantial Completion and Final Completion, and will receive and review written warranties and related documents required by the Contract and assembled by the Contractor.

7. Contractor

A. Definition

- Contractor is the person or entity identified as such, and is referred to throughout the Contract
 Documents as if singular in number and masculine in gender. The term Contractor means the
 Contractor or his authorized representative.
- 2. In the Project Manual, the word "contractor" shall mean and shall be interpreted as being the "Contractor" whose "scope of work" and Project Manual index includes that portion of the work. In these General Conditions the word "contractor" and/or "Contractor" shall mean and shall be interpreted as being "individually, each and every Contractor".
- 3. The Contractor shall at all times be considered to be an independent contractor, and will not hold itself or its employees out to be employees or agents of the County of Galveston.
- 4. The Contractor will retain full control over this contract and will not assign said contract without the prior written consent of the County.

B. Review of Contract Documents

1. The Contractor shall carefully study and compare the Contract Documents and shall at once report to Galveston County's authorized Representative any error, inconsistency or omission he may discover. If the Contractor performs any work without reporting any such error, inconsistency, or omission to Galveston County's authorized Representative or contrary to any laws, ordinances, rules, or regulations, and without such notice to Galveston County's authorized Representative, he shall assume full responsibility therefore and shall bear all costs attributable thereto

C. Supervision and Construction Procedures

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- All work shall be performed and completed in a thorough, workmanlike manner and in accordance with the latest proven practices of the trade by thoroughly skilled and experienced workers.
- 2. The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.
- 3. Galveston County's authorized Representative may reject any means, methods, techniques, sequences or procedures proposed by the Contractor, which might constitute or create a hazard to the Work, or to persons or property, or which will not provide Work in accordance with the Contract Documents
- 4. The Contractor shall be responsible to the Owner for the acts and omissions of his employees and all his Sub-Contractors and their agents and employees and other persons performing any of the Work under a contract with the Contractor.
- 5. Neither observations nor site visits, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the Work in accordance with the Contract Documents. The Contractor shall do and be responsible for the correct laying out of the Work as per drawings and written instruction of Galveston County's authorized Representative including all necessary leveling and checking. The Contractor shall check the established grades and bench marks, and shall lay out all partition lines and other significant reference lines or points which will enable them to accurately place their boxes, openings, sleeves, conduits, pipe duct, controls, hangers, inserts and other devices. Subcontractors shall be responsible for laying out their Work from these reference points.

D. Labor and Materials

- 1. The Contractor is encouraged to use local labor, but not at the expense of poor workmanship and higher cost.
- 2. The Contractor and all Sub-Contractors shall not discriminate against any employee or applicant for employment because of race, color, sex, or national origin.
- 3. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.
- 4. In the event of Contractor's non-compliance with the non-compliance clause of this Contract, the Contract entered into may be canceled in whole or part.
- 5. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him. Obnoxious behavior, possession, or consumption of alcoholic beverages or drugs on the premises is strictly prohibited. Violators shall be promptly discharged from the site.
- 6. The Contractor shall accept delivery, unload, store, protect, provide security, distribute and install any materials, systems and equipment furnished by others which are a part of the Work. The Contractor shall document receipt of such materials, systems and equipment on forms acceptable to Galveston County's authorized Representative.
- 7. Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of the work of this contract, the Contractor shall immediately give notice thereof to Galveston County's authorized Representative. The Contractor shall then confirm the notice, in writing, within 24 hours of the giving thereof and shall include all relevant information with respect thereto. No claims will be accepted for costs incurred as a result of jurisdictional or labor practices disputes.
 - 8. The County is committed to maintaining an alcohol and drug free workplace. Possession, use or being under the influence of alcohol or controlled substances by the Contractor's employees while in the performance of this Contract is prohibited. Violation of this requirement shall constitute grounds for immediate termination of the Contract.

8. Warranty

A. The Contractor warrants to the Owner that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not so conforming to these requirements,

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including substitutions not properly approved and authorized, may be considered defective. If required by Galveston County's authorized Representative, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Paragraph 28 B

- B. The warranty of materials, equipment and workmanship defined in 8.A is separate from, independent of, and in addition to any other guarantees in this contract or any other warranties required by the Contract Documents.
- C. The Contractor, prior to or at the time of substantial completion for the Work and during administrative closeout of the project, shall submit one copy of all specified warranties and guarantees to Galveston County's authorized Representative for review, approval and subsequent transmittal to the Architect or Engineer and Owner.
- D. Warranties and guarantees, including those specified in excess of the general one year guarantee shall be complete for all specific materials, systems, sub-systems, equipment, appliances and products specified and required by the Contract Documents.
- E. Warranties and guarantees shall clearly define what is to be guaranteed; the extent, terms, conditions, time and effective dates.
- F. Copies of the same warranties and guarantees shall be included in the "Owner's Maintenance Manual" as specified herein.
- G. Owner's Maintenance Manual: The Contractor, during the course of the work, shall maintain, coordinate and collect copies of warranties, guarantees, certificates, test results, installation drawings, manufacturer's maintenance and operations manuals, parts lists, and keying schedules and at the acceptance of the project, shall assemble this material into a manual and forward to Galveston County's authorized Representative for incorporation in the Operations and Maintenance Manual for the project..
- H. Warranties shall not commence to run until the Owner:
 - 1. Accepts the work for beneficial occupancy, and
 - a. is in possession of all the specified guarantee/ warranty documentation, and
 - b. has received the specified training for the operation and maintenance of the system/equipment .
- I. If prior to the acceptance of the Work the Owner occupies or uses any separate unit of the Work, the guarantee period shall, as to the unit so occupied or used, commence on the date of such occupancy or use, with the further provision that the Owner shall have first agreed in writing that the separate unit is complete to such a degree as to permit its use or occupancy and subject to subparagraph 8.H as applicable. No such separate unit shall be occupied or used by the Owner until such certificate has been given. Equipment and facilities, which have seasonal limitations on their operation, shall be guaranteed for one full year from the date of test and acceptance in writing by the Owner.
- J. If within any guarantee period, repairs or changes are required in connection with the guaranteed Work, as the result of the use of materials, equipment or workmanship, which are defective, or inferior, or not in accordance with the terms of the Contract, the Contractor shall, promptly, within 48 hours after receipt of notice from Galveston County's authorized Representative or Owner and without expense to the Owner or Construction Manager, commence and continue to effect such repairs or changes and:
 - Place in satisfactory condition, in every particular, all of such guaranteed work and correct all defects therein.
 - 2. Make good all changes to the structure, site, equipment, or contents thereof, which, in the opinion of the Architect or Engineer, and Galveston County's authorized Representative is the result of the use of materials, equipment or workmanship, which are inferior, defective, or not in accordance with the terms of the Contract.
- K. Notifications by Owner or Galveston County's authorized Representative of defects shall stop the warranty time period. The guarantee or warranty period for that replaced or restored work shall be reinstated for the remaining time period, starting on the date of acceptance of the replaced or restored work.
- L. In any case, where in fulfilling the requirements of the Contract or of any guarantee embraced in or required thereby, the Contractor disturbs any work guaranteed under another contract, he shall restore such work to a condition satisfactory to the Architect or Engineer, and Galveston County's authorized Representative and guarantee such restored work to the same extent as it was guaranteed under such other

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contract.

- M. If the Contractor after notice fails to proceed within 48 hours to commence and continue to comply with the terms of the guarantee, the Owner or Galveston County's authorized Representative may have the defect corrected in which case the Contractor and his surety shall be liable for all expenses incurred.
- N. All special guarantees or warranties applicable to definite parts of the Work that may be stipulated in the Project Manual or other papers forming a part of the Contract shall be subject to the terms of this Article during the first year of the life of such special guarantee.
- O. Nothing contained in this Article shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents.
- P. In the event the Work of the Contractor is to be modified by another Contractor, either before or after inspection, the first Contractor shall remain responsible in all respects under the warranty given in Article 8 and under any other warranties provided in the Company Documents or by law. However, the first Contractor shall not be responsible for any defects in material or workmanship introduced by the Contractor modifying its work. Both the first Contractor and the Contractor making the modifications shall each be responsible solely for the work done by each. The Contractor modifying the earlier work shall be responsible for any damage to or defect introduced into the Work which it is modifying.

9. Taxes

- A. The Contractor shall pay all sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally required at the time Bids are received, whether or not yet effective. Such taxes are included in the contract sum.
- B. Any taxes which are the responsibility of the Contractor, but are not paid by the Contractor, and which are subsequently assessed against and paid by the Owner shall be deducted by the Owner as an offset from the unpaid Contract Sum and any other amounts due to the Contractor. If the amount of such unpaid taxes exceeds the total of the unpaid Contract Sum and other amounts due to the Contractor, the Contractor agrees to pay the amount of such excess to the Owner.

10. Superintendent and key Personnel

- A. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during the progress of the Work. The superintendent shall be satisfactory to Galveston County's authorized Representative, and shall not be changed except with the consent of Galveston County's authorized Representative, unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.
- B. A duly authorized representative of the Contractor shall be available for emergency telephone communication from the Owner or Galveston County's authorized Representative on a 24-hour basis, seven days a week during the performance of the work.
- C. The Contractor shall identify the key personnel he intends to assign to the project, to Galveston County's authorized Representative within 48 hours after the Contractor has been notified to proceed. The Owner, acting through Galveston County's authorized Representative, reserves the right to approve the Contractor's proposed personnel, and anyone not so approved shall be immediately replaced by someone acceptable. If, in the course of construction, Galveston County's authorized Representative feels that it would be in his best interest to request a change in the Contractor's personnel, he may do so; and the Contractor shall immediately assign an acceptable replacement at no additional cost.

11. Drawings and Project manual at the site

A. The Contractor shall maintain at the site for Galveston County's authorized Representative and Architect or Engineer one copy of all Drawings, Project Manual, Addenda, Bulletins, Amendments, and other Modifications, in good order and marked currently to record all changes made during construction. Including any changes in locations, sizing and arrangement of the various components of the Work or any other variations from the Drawings or Shop Drawings. The Contractor shall mark each drawing as the

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Work shown thereon is completed in the field, revising any or adding lines, dimensions, elevations, depths, notes or any other information required to accurately record "As-Built" conditions. These drawings, marked to record all changes during construction, and approved Shop Drawings, Product Data and Samples shall be delivered to Galveston County's authorized Representative, for the Owner, upon completion of the Work.

B. In addition to maintaining and delivering to Galveston County's authorized Representative those record Drawings required by Subparagraph 11.A the Contractor shall also prepare and submit to Galveston County's authorized Representative, upon completion of the Work "As-Built" Reproducible Drawings.

12. Use of Site

- A. The owner does not assume any responsibility for any materials, tools, or equipment stored on or about the site.
- B. The Contractor shall confine operations at the site to areas designated by Galveston County's authorized Representative, permitted by law, ordinances, permits and by the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment. The Contractor shall not use any of the existing Owner's facilities, such as, toilets, cafeteria, parking areas, power hookup, etc., except with the Galveston County's authorized Representative's written approval. The Contractor shall not, at any time, block or restrict access to the site.
- C. The Contractor shall coordinate all of his operations with Galveston County's authorized Representative and obtain his approval before using any portion of the project site and the Contractor shall comply with the Galveston County's authorized Representative's Site Utilization Plan.
- D. The roads, sidings and other transportation facilities at the site, where work under the Contract is being performed, are for the general use and convenience of the Owner. If Contractors are permitted to use them, they must conform to the regulations of the local authorities. If the work of a Contractor requires that such facilities be temporarily discontinued, after obtaining Galveston County's authorized Representative's approval, the work must be done expeditiously and he shall provide and maintain proper warnings and detour signs at all pedestrian and vehicular closures, intersections, and along detours, directing traffic around closed portions of roadways. He shall, at his own expense, wherever necessary or required, provide and maintain fences, temporary roadways, temporary cross signs, watchmen, warning lights and take such other precautions as may be necessary to protect life any way by his act or neglect. All barricades and obstructions shall be illuminated at night, and all lights shall be kept on from one half hour before sunset, until one-half-hour after sunrise.
- E. On-site storage space for Contractor's field office trailer, sheds, materials, tools, equipment, and supplies must be coordinated with and approved by Galveston County's authorized Representative in advance. Contractor's materials, equipment, tools and supplies shall be moved at no cost if their location obstructs or impedes the work of others.
- F. Galveston County's authorized Representative will provide site survey, selected baselines and benchmarks.
- G. The Contractor shall not disturb existing monuments and markers at the site. Should monuments, markers, or both be disturbed by the Contractor, he shall bear the cost of a licensed surveyor engaged by Galveston County's authorized Representative for the purpose of relocating such monuments or markers.
- H. Each Contractor shall lay out his work and shall be responsible for the accuracy of all lines, elevations and measurements, grading, utilities, and other work executed by him under his Trade Contract. He must exercise proper precaution to verify figures shown on drawings before laying out work and will be held responsible for any error resulting from his failure to exercise such precaution.

13. Communications

- A. The Contractor shall forward all communications to the Owner and Architect or Engineer through Galveston County's authorized Representative.
- B. The Contractor shall promptly return telephone calls or respond to any other form of communication initiated by Galveston County's authorized Representative. Failure to promptly do so shall be considered lack of performance on the part of the Contractor.
- C. All written correspondence to Galveston County's authorized Representative shall be dated, and signed by the Contractor or his authorized representative.

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D. Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

14. Sub-Contractors

A. Definition

- A Sub-Contractor is a person or entity who has a direct or indirect contract with a Contractor to
 perform any of the Work at the site. The term Sub- Contractor is referred to throughout the
 Contract Documents as if singular in number and masculine in gender and means a SubContractor or his authorized representative.
- Nothing in the contract documents shall create any contractual relationship between the Owner, the Architect or Engineer or Galveston County's authorized Representative and any Sub-Contractor of the Contractor.
- B. Award of Sub-trade Contracts and other Contract for Portions of the Work
 - Unless otherwise required by the Contract Documents the Contractor shall furnish to Galveston County's authorized Representative in writing, for acceptance by the Owner and Galveston County's authorized Representative in writing, the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Contractor is encouraged to use Local vendors wherever possible. Galveston County's authorized Representative will promptly reply to the Contractor in writing if either the Owner or Galveston County's authorized Representative, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Galveston County's authorized Representative to reply shall constitute notice of no reasonable objection.
 - 2. The Contractor shall not contract with any such proposed person or entity to whom the Owner or Galveston County's authorized Representative has made reasonable objection under the provision of Subparagraph 14.B.1. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.
 - 3. If the Owner or Galveston County's authorized Representative refuses to accept any person or entity on a list submitted by the Contractor in response to the requirements of the Contract Documents, the Contractor shall submit an acceptable substitute; however, no increase in the Contract Sum shall be allowed for any such substitution.
 - 4. The Contractor shall make no substitution for any Sub-Contractor, person or entity previously selected if the Owner or Galveston County's authorized Representative makes reasonable objection to such substitution.

C. Sub-trade Contractual Relations

- 1. By an appropriate written agreement, the Contractor shall require each Sub-Contractor to the extent of the work to be performed by the Sub-Contractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these documents, assumes toward the Owner, Galveston County's authorized Representative, or the Architect or Engineer. Said agreement shall preserve and protect the rights of the Owner, Galveston County's authorized Representative and the Architect or Engineer under the Contract Documents with respect to the work to be performed by the Sub-Contractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Sub-Contractor, unless specifically provided otherwise in the Contractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner.
- Where appropriate, the Contractor shall require each Sub- Contractor to enter into similar agreements with his Sub-Contractors. The Contractor shall make available to each proposed Sub-Contractor, prior to the execution of the Sub-trade contract, copies of the Contract Documents to which the Sub- Contractor will be bound by this Paragraph 14.C.1 and shall identify to the Sub-Contractor any terms and conditions of the proposed Sub-trade contract which may be at a

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variance with the Contract Documents. Each Sub-Contractor shall similarly make copies of such Documents available to his Sub-Contractors.

15. Separate Contractors

- A. The Contractor shall afford Galveston County's authorized Representative and other Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his Work with others under the general direction of Galveston County's authorized Representative.
- B. If any part of the Contractor's Work depends, for proper execution or results, upon the work of Galveston County's authorized Representative or any separate Contractor, the Contractor shall, prior to proceeding with the Work, promptly report to Galveston County's authorized Representative any apparent discrepancies of defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acceptance of the other Contractor's or Galveston County's authorized Representative's work as fit and proper to receive his Work, except as to latent defects which may subsequently become apparent in such work by others.
- C. Copies of Drawings and Project Manual relating to these separate contracts will be available to the Contractor, upon request, for his information in carrying out the above provisions. The Contractor shall be held responsible for any damage or misfit resulting from his neglect to comply with the foregoing.
- D. All Contractors on the project shall have equal rights on the premises for the performance of their work, but shall follow the sequence established by the progress schedule and/or instruction issued by Galveston County's authorized Representative.
- E. If the Contractor notifies Galveston County's authorized Representative, in writing, that another contractor on this project is failing to coordinate his work with the Work of this contract, as directed, Galveston County's authorized Representative will promptly investigate the charge. If he finds it to be true, he will promptly issue such directions to the other contractor with respect thereto as the situation may require. Galveston County's authorized Representative or Owner shall not, however, be liable for any damages suffered by this Contractor by reason of the other contractor's failure to promptly comply with the directions so issued by Galveston County's authorized Representative or by reason of another contractor's default in performance; it being understood that Galveston County's authorized Representative does not guarantee the responsibility or continued efficiency of any contractor. Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.
- F. Should the Contractor wrongfully cause damage to the work or property of the Owner, any separate Contractor or other Contractor, the Contractor shall, upon due notice, promptly attempt to settle with the Owner, the separate Contractor or other Contractor by agreement, or otherwise resolve the dispute. If such separate Contractor or other Contractor sues the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall defend such proceedings at the Contractor's expense, and if any judgment or award against the Owner arises therefrom, the Contractor. shall pay or satisfy it and shall reimburse the Owner for all attorney's fees and court costs which the Owner has incurred.
- G. Should the Contractor sustain any damage through any act or omission of any other contractor having a contract with the Owner for the performance of work upon the site or of work which may be necessary to be performed for the proper prosecution of the work to be performed hereunder, or through any act of omission of a subcontractor of such contractor, the Contractor shall have no claim against the Owner, Architect or Engineer, Galveston County's authorized Representative or the Owner's consultants for such damage, but shall have a right to recover such damage from the other contractor under the provision similar to the following provisions that have been or will be inserted in the contracts with such other contractors.
- H. Should any other contractor having or who shall hereafter have a contract with the Owner for the performance of work upon the site sustain any damage through any act or omission of a Sub-Contractor of the Contractor, the Contractor agrees to reimburse such other contractor for all such damages and to indemnify and hold the Owner, Architect or Engineer and Galveston County's authorized Representative harmless from all claims.
- I. The Contractor shall indemnify and hold the Owner, Architect or Engineer and Galveston County's authorized Representative harmless from any and all claims or judgments for damages and from costs and

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expenses to which the Owner and/or Galveston County's authorized Representative may be subjected or which either may suffer or incur by reason of the Contractor's failure to comply with the Galveston County's authorized Representative's directions promptly. If the Contractor installs any work prior to proper coordination, or in such manner as to cause interference with work of others, he shall arrange for removal of or arrange for necessary modifications to the work. Any such action is subject to the approval of Galveston County's authorized Representative and shall be at no additional cost.

- J. The Contractor shall cooperate with the Owner, Architect or Engineer and Galveston County's authorized Representative and other Contractors working on this project in order to avoid interference, inconvenience or damage. To aid in avoiding conflicts, the Contractor, without additional charge, shall make all reasonable modifications in the work as may be directed by Galveston County's authorized Representative. In the event of the Contractor's operations causes any damage, interference, or inconvenience to work being carried out under any other Trade Contract, the Contractor shall restore, replace, rectify, or otherwise make good any damage to the satisfaction of Galveston County's authorized Representative or to the other Contractors. Should the responsible Contractor fail to comply with this provision, the work will be done by others at the expense of the responsible Contractor.
- K. Contractor agrees that he has become familiar with the site, has reviewed the plans and Project Manual covering the work of his and other trades and thereby accepts responsibility for all necessary coordination of his Work with the work of other trades affected.

16. Governing Law and Venue

- A. The Contract shall be governed by the law of the place where the Project is located. Any action arising from or relating from this Contract shall be instituted in a court of competent jurisdiction in Galveston County, Texas.
- B. Contractor shall at all times observe and comply with all Federal, State and Local Laws, ordinances and regulations which in any manner effect the contract or the work.
- C. Contractor shall comply with all city, county, and state codes, laws, and ordinances in force at the time of award of Contract and applicable to such work.
- D. Contractor shall obtain, at Contractor's own expense such permits, certificates, and licenses as may be required in the performance of the specified work.
- E. Contractor shall be responsible for obtaining and furnishing all necessary permits and licenses, City, County, State or Federal as are required for the performance of this Contract.

17. Claims for Damages

- A. Should either party to the Trade Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his employees, agents or others for whose acts he is legally liable, claim shall be made, in writing, to such other party within a reasonable time after the first observance of such injury or damage.
- B. Notwithstanding the event of any claim, dispute, or other matter in question arising out of or relating to this Agreement or the breach thereof, the Contractor shall carry on the work and maintain the Substantial Completion Date and Galveston County's authorized Representative shall continue to make payments in accordance with this Agreement.
- C. All damage to the work from the action of the elements, or from any unforeseen circumstances in the prosecution of the work shall be repaired by the Contractor at his own costs.

18. Indemnification

The Contractor shall agree to assume all risks and responsibility for, and agrees to indemnify, defend, and save harmless, the County of Galveston, its elected and appointed officials and department heads, and its agents and employees from and against all claims, demands, suits, actions, recoveries, judgments, and costs and expenses including reasonable attorney's fees for the defense thereof in connection therewith on account of the loss of life, property or injury or damage to the person which shall arise from Contractor's operations under this Contract, its use of County facilities and/or equipment or from any other breach on the part of the Contractor, its employees, agents or any person(s) in or about the County's facilities with the expressed or

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implied consent of the County. Contractor shall pay any judgment with cost which may be obtained against Galveston County resulting from contractor's operations under this Contract.

Contractor agrees to indemnify and hold the County harmless from all claims of subcontractors, laborers incurred in the performance of this contract. Contractor shall furnish satisfactory evidence that all obligations of this nature herein above designated have been paid, discharged or waived. If Contractor fails to do so, then the County reserves the right to pay unpaid bills of which County has written notice direct and withhold from Contractor's unpaid compensation a sum of money reasonably sufficient to liquidate any and all such lawful claims.

19. Rights and Remedies

- A. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.
- B. No action or failure to act by the Owner, Construction Manager, Architect or Engineer or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

20. Tests

- A. If the Contract Documents, laws, ordinances, rules, regulations or order of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give Galveston County's authorized Representative timely notice of its readiness so the Architect or Engineer and Galveston County's authorized Representative may observe such inspection, testing or approval. The Contractor shall bear all costs of such site visits, tests or approvals unless otherwise provided.
- B. If the Architect or Engineer or Galveston County's authorized Representative or Owner determines that any Work requires special inspection, testing or approval which Subparagraph 19.A does not include, he will, through Galveston County's authorized Representative, instruct the Contractor to order such special inspection, testing or approval and the Contractor shall give notice as in Subparagraph 19.A. If such special inspection or testing reveals a failure of the work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect or Engineer's and Galveston County's authorized Representative's additional services made necessary by such failure. If the Work complies, the Owner shall bear such costs and an appropriate Amendment shall be issued
- C. Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him through Galveston County's authorized Representative to the Architect or Engineer.
- D. If the Architect or Engineer or Galveston County's authorized Representative is to observe the site visits, tests or approvals required by the Contract Documents, he will do so promptly and, where practicable, at the source of supply.
- E. Neither the observations of the Architect or Engineer or Galveston County's authorized Representative, in their Administration of the Construction Contract, nor site visits, test or approvals by persons other than the Contractor, shall relieve the Contractor from his obligation to perform the Work in accordance with the Contract Documents.
- F. The Contractor shall deliver test samples of any of the materials specified in any of the Sections of his Specifications to an independent testing laboratory selected and approved by the Owner and Construction Manager, if so required. This may apply to materials proposed for use, materials already delivered to the job, or materials already incorporated into the construction.
- G. The Contractor shall maintain a file of all test reports. At the completion of the project, these reports will be submitted as an Appendix to the Operations and Maintenance Manual described above.
- H. Any materials, which fail to meet the requirements of these Specifications, shall not be used whether or not previously approved by the Architect or Engineer. If they have been delivered to the job, they shall be removed. If they have already been incorporated into the construction, Galveston County's authorized Representative or the Architect or Engineer may order them removed, or, at the discretion of the Owner, through Galveston County's authorized Representative they may be permitted to remain in place providing

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the Contractor agrees to a proper deduction from the contract sum.

I. The services of a testing and inspection engineer selected by the Owner and Architect or Engineer shall be provided and paid for by the Owner for the tests required in the paragraph 20.F unless specifically stated otherwise or due to deficient work.

21. Interest

A. Payments due and unpaid under the Contract Documents shall bear interest in accordance with applicable law

22. Time

A. Definitions

- 1. Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for the Substantial Completion of the Work as defined in Subparagraph (22.A.3) including authorized adjustments thereto.
- 2. The date of commencement of the Work shall be the date of the Notice to proceed.
- 3. The date of Substantial Completion of the Work, for each Contractor, or designated portion thereof is the Date certified by the Architect or Engineer when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion for the use for which it is intended.
- The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

B. Progress and Completion

With the Galveston County's authorized Representative's approval, the Contractor shall suspend any work that may be subject to damage by climatic conditions. Under such conditions, the Contractor shall take measures to protect his work and to minimize the impact on progress of the work.

C. Delays and Extension of Time

- If the Contractor is delayed at anytime in the progress of the Work by any act or neglect of the Owner, Construction Manager, or the Architect or Engineer, or by any employee of either, or by any separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties or any causes beyond the Contractor's control, and without his fault or negligence, or by any other cause which Galveston County's authorized Representative determines may justify the delay, then the Contract Time shall be extended by Contract Amendment for such reasonable time as Galveston County's authorized Representative may determine.
- 2. Any claim for extension of time shall be made in writing to Galveston County's authorized Representative not more than ten (10) days after the commencement of the delay; otherwise, it shall be waived. Any claim for extension of time shall state the cause of the delay and the number of days extension requested. If the cause of the delay is continuing, only one claim is necessary, but the Contractor shall report the termination of the cause for the delay within ten (10) days after such termination; otherwise, any claim for extension of time based upon that cause shall be waived.
- 3. In the event of a delay attributable in part to the Contractor and in part to causes or parties for which the Contractor is not responsible, then provided the Contractor has given proper and timely notice hereunder, the delay shall be equitably apportioned among the parties causing the delay and the Contractor shall remain liable for the portion not so excused.
- 4. If no agreement is made stating the dates upon which interpretations shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen days after written request is made for them, and not then unless such claim is reasonable.
- 5. No claim for an increase in the Contract Sum for either acceleration or delay will be allowed for extensions of time pursuant to this Paragraph 22.C or for other changes in the Construction Schedules.

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- 6. There are no Liquidated damages for this project.
- 7. The permitting of the Contractor or the surety on the performance bond to proceed to complete any work or any part of it after the date of completion or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the Owner of any of its rights hereunder.
- 8. Neither the Owner nor the Architect or Engineer nor Galveston County's authorized Representative shall have liability to the Contractor or to any other Contractor or Sub-Contractor for delay, hindrance, or interference in the performance of the Work, however caused, except for delay or hindrance resulting from active interference of Owner or its representatives in such Contractor's execution of the Work, and except for delay or hindrance resulting from defective plans and specifications not reasonably discoverable by the Contractor prior to Contract award.
- 9. The Contractor shall be liable to the Owner for any other damages sustained as the result of the Contractor's refusal or failure to perform the Work, provided, however, that such refusal or failure is not the result of a justifiable delay as defined in Subparagraph 22.C.1.

23. Payments and Completion

A. Progress Payments

- 1. Contractor shall make application to Owner by submittal of Pay Request to Galveston County's authorized Representative for payment utilizing forms provided by Owner for that purpose. Contractor shall state the percentage or the limits of the work performed and request payment for the amount of acceptable work performed. Applications for payment shall be made monthly by Contractor on a regular date set by Galveston County's authorized Representative.
- 2. Upon approval of the request for payment by Galveston County's authorized Representative and Architect or Engineer the Owner shall then pay the Contractor on or before 30 days thereafter, the total amount of the request, less 5% of the amount thereof, which 5% shall be retained until final payments, and further less all previous payments, and further sums that may be retained by the County under the terms of this agreement
- 3. Upon the attainment of substantial completion, payment will be made so that the sum of all payments made under the contact equals Ninety Five Percent (95%) of the total contract amount
- 4. Galveston County's authorized Representative may request As-Built Drawings, schedule updates, payrolls for all labor, and other data supporting payment to subcontractors and/or materials suppliers before processing the requisition..
 - 5. Except in case of bona fide disputes, or where the Contractor has some other justifiable reason for delay, the Contractor shall pay for all transportation and utility services not later than the end of the calendar month following that in which services are rendered and for all materials, tools and other expendable equipment to the extent of ninety five percent (95) of the cost thereof not later than the end of the calendar month following that in which such materials, tools and equipment are delivered at the site of the Project and in compliance with Texas Law. The Contractor shall pay to each of his Sub-Contractors, not later than the end of the calendar month in which each payment is made to the Contractor, the representative amount allowed the Contractor on account of the work performed by his trade subcontractors, to the extent of each Sub-Contractor's interest therein and in compliance with Texas Law. The Contractor shall, by an appropriate agreement with each Sub-Contractor, also require each Sub-Contractor to make payments to his suppliers and Sub-Contractors in a similar manner.
 - 6. Materials, equipment and associated components that are in compliance with the approved submittals and will be incorporated into the structure, may be taken into consideration in computing progress payments, provided the material is delivered on the project site, or is delivered to the Contractor and the material is properly stored in a warehouse, storage yard or similar suitable place as may be approved by Galveston County's authorized Representative. The Contractor shall remain responsible for all such stored materials.
 - a. Payment for materials, equipment and associated components stored on-site shall be 100% of a valid invoice less 5% retainage, indicating the unit quantity, description of the material or equipment and cost.

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- b. Payment for materials, equipment and associated components stored off-site shall be 100% percent of a valid invoice, less 5% retainage, indicating the unit quantity, description of the material or equipment and costs. Before such payment is made, the Contractor shall furnish Galveston County's authorized Representative with a certified statement giving the exact location of the materials or equipment, that such material or equipment is properly stored and protected, and that it will not be diverted for use or installation at a different project. The Contractor shall furnish Galveston County's authorized Representative properly executed bills of sale and a certificate of insurance coverage for the material upon which payment is being made.
- 7. All material and work covered by payments made shall thereupon become the sole property of the Owner but Contractor shall remain responsible to protect same.

B. Payments withheld

- Galveston County's authorized Representative may decline to approve an Application for Payment if in his opinion the application is not adequately supported. If the Contractor and Galveston County's authorized Representative cannot agree on a revised amount, Galveston County's authorized Representative shall process the Application for the amount he deems appropriate. Galveston County's authorized Representative may also decline to approve any Applications for Payment or, because of subsequently discovered evidence or subsequent site visits, he may nullify in whole or in part any approval previously made to such extent as may be necessary in his opinion because of:
 - defective work not remedied;
 - b. third party claims filed or reasonable evidence indicating probable filing of such claims:
 - c. failure of the Contractor to make payments properly to Sub-Contractors or for labor, materials or equipment;
 - reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
 - e. damage to the Owner, or another contractor working at the Project;
 - f. reasonable evidence that the Work will not be completed within the Contract Time; or
 - g. persistent failure to carry out the Work in accordance with the Contract Documents.
 - h. no payment shall be made to the Contractor until certificates of insurance or other evidence of compliance by the Contractor with all the requirements of Article 30 have been filed with the Owner and Galveston County's authorized Representative. Further, no payments on the basis of work performed by a Sub-Contractor shall be paid until copies of all bonds required and any certificates of insurance required of the Sub-Contractors under Article 30 have been filed with the Owner and Construction Manager.
 - i. the filing of a claim against the Project, which claim, is caused by the act or inaction of the Contractor or his Sub-Contractors;
 - j. refusal to follow the Project Safety Program issued as a contract document or Contractors Safety Program;
 - k. failure to maintain record drawings as specified;
 - 1. failure to comply with HUB requirements;
 - m. failure to comply with EEO Requirements;
 - failure to properly submit a response to an RFP (Request for Proposal) within thirty
 (30) days of receipt thereof.
- 2. When the above grounds in subparagraph 22.B.1 are removed, payment shall be made for amounts withheld because of them.

C. Failure of Payment

I. If the Contractor is not paid and is approved for payment by Galveston County's authorized Representative and has become due and payable, then the Contractor may, upon seven additional days written notice to the Owner and Construction Manager, stop the Work until payment of the amount due has been received. The Contract Sum shall be increased by the amount of the

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Contractor's reasonable costs of shutdown, delay and startup, which shall be effected by appropriate Contract Amendment in accordance with Paragraph 27.C.

D. Substantial Completion

- 1. On or about the end of the project, the Contractor shall perform the following in order to achieve Substantial Completion.
 - a. When in the opinion of the Contractor the work is substantially complete,.
 - b. The Contractor shall notify Galveston County's authorized Representative, in writing, that the work will be ready for review and test on a definite date.
 - c. Notice shall be given at least fifteen (15) days in advance of said date.
 - d. Galveston County's authorized Representative shall forward the notice to the Architect or Engineer and will attach his endorsement as to whether or not he concurs with the Contractor's statement that the work will be ready for review or test on the date given, but such endorsement shall not relieve the Contractor of his responsibility in the matter.
 - e. If the Architect or Engineer concurs that the Work will be ready for review or test on the date given, the Architect or Engineer and Galveston County's authorized Representative will make such review after Contractor submits a thorough list of items to be completed or corrected (Punch List).
 - f. The Contractor is required to furnish access for the substantial Completion review.
 - g. Contractor shall have all systems fully functional and operational for the review.
 - h. The Architect or Engineer/Engineer and Galveston County's authorized Representative will inspect the project utilizing the Contractor's prepared Punch List, noting completed or incomplete items, and prepare a supplemental list of items that have been omitted or incomplete items that were not previously noted. The Architect or Engineer, at his discretion, may attend and assist in the preparation of the Contractor's punch list.
 - Contractor completes corrections, and Architect or Engineer and Galveston County's authorized Representative re-inspect to establish Date of Substantial Completion.
 Note: Any items remaining on date of Substantial Completion are appended to Certificate (AIA G-704).
 - j. Architect or Engineer may issue a Certificate of Substantial Completion at this point.
 - k. Certain warranties and insurances are dependent on the date of Substantial Completion from the above certification. No other date of Substantial Completion will be recognized by the Owner or Contractor.
 - After the Certificate of Substantial Completion has been executed by all parties, it is returned to Galveston County's authorized Representative. Items on the appended Punch List are to be completed or corrected within the time limits established in the Certificate of Substantial Completion.
- 2. The project may be considered substantially complete if the work has been completed to the point where the work can be utilized for the general purpose for which it was undertaken and has been certified by the Architect or Engineer.
- 3. Progress payment request may not be submitted for more than 95% of the overall contract value at Substantial Completion.

E. Final Completion and Payment

- 1. Contractor shall be responsible for and make good without extra charge any defects due to faults in labor or material on all parts of the Contract for one year (and longer where noted) after Substantial Completion of the Work as defined in Article 22 in the General Conditions.
- Property not in the Contract but damaged due to defects, shall be repaired or replaced by the Contractor without extra charge.
- 3. When notified by the Owner or Architect or Engineer that a defect exists and there is a doubt that the defect might be normal maintenance or a result of lack of normal maintenance, the Owner will send a representative with the Contractor's representative to determine responsibility. Owner will not pay for such service calls if the defect is judged to be normal maintenance or a result of a lack of normal maintenance.

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- 4. Neither the Final Certificate of Payment or payment of same, nor provision in the Contract Documents shall relieve the Contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by law and upon written notice, he shall remedy any defects due thereto and pay all expenses for any damage to other Work resulting there from. This guarantee of Work shall not relieve the Contractor of obligations of any Work not according to Plans and Specifications regardless of time of discovery.
- 5. No final payment will be considered until all deficiencies listed with the Certificate of Substantial Completion have been remedied.
- 6. Contractor submits written notice to Galveston County's authorized Representative that work is ready for final review and acceptance, and shall specifically note each item on the Punch List as being complete or the status of any incomplete item.
- 7. Notice shall be given at least fifteen (15) days in advance of said date.
- 8. Galveston County's authorized Representative shall forward the notice to the Architect or Engineer and will attach his endorsement as to whether or not he concurs with the Contractor's statement that the work will be ready for final review or test on the date given, but such endorsement shall not relieve the Contractor of his responsibility in the matter.
- If the Architect or Engineer concurs that the Work will be ready for final review or test on the
 date given, the Architect or Engineer and Galveston County's authorized Representative will
 make such review with the Contractor and Owner.
- 10. The Contractor is required to furnish access for the final review.
- 11. Neither application for final payment nor for the remaining retained percentage shall be made until the Contractor submits to Galveston County's authorized Representative the following:
 - an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied,
 - b. consent of surety, if any, to final payment,
 - c. properly executed "General Release and Claim Waiver and General Guarantee" on forms acceptable to Galveston County's authorized Representative,
 - d. specified warranties and guarantees,
 - e. other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of bond claims arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any Sub-Contractor refuses to furnish a release or waiver required by the Owner the Contractor may furnish a bond satisfactory to the Owner to indemnify them against any such claim. If any such claim remains unsatisfied after all payments are made, the Contractor shall refund to the Owner or Galveston County's authorized Representative all moneys that the latter may be compelled to pay in discharging such claim, including all costs and reasonable attorneys' fees.
- 12. Contractor submits Final Application for Payment and a Certificate of Compliance, which indicates the following:
 - a. All Permit Numbers
 - b. Utility Release Dates
 - The building has been duly inspected and found to comply with all code requirements and ordinances.
 - d. A Certificate of Occupancy has been issued.
 - e. Architect and Engineer (with Owner's authorized Representative) make final inspection
 - f. Contractor submits additional final items:
 - g. Consent of Surety to Final Payment (AIA G-707)
 - h. Contractor's Affidavit of Payment of Debts and Claims (AIA G-706)
 - i. Contractor's Affidavit of Release of Liens (AIA G-706A with contractors, subcontractors and suppliers separate releases)
 - j. Contractor's Guarantee
 - k. Subcontractors' Guarantees.
 - Maintenance and Instruction Manuals. All manuals will contain an index listing the information submitted. The index sections will be divided and identified by tabbing each section as listed in the index.

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- m. Record Drawings (reproducible sepias)
- n. Final List of Subcontractors (AIA G-805)
- o. Affidavits from Contractor, Subcontractors, and suppliers stating that no asbestos products have been installed in this project.
- p. Furnish written warranties to the Owner including specific items in each product warranty stipulated for individual sections.
- q. Documents identified as "affidavit" must be notarized.
- Contractor has documented the turnover of spare stock of materials, spare parts accessories and special tools to the Owner through Galveston County's authorized Representative,
- s. Final Cleaning:
 - a. The work area shall be thoroughly cleaned inside and outside. Cleaning includes removal of smudges, marks, stains, fingerprints, soil, dirt, spots, dust, lint, and other foreign materials from finished and exposed surfaces.
 - Remove all temporary facilities.
- 13. If the Work is found acceptable under the Contract Documents and the Contract fully performed, and Galveston County's authorized Representative, upon receipt of a correct final Application for Payment, recommends to the Owner that such payment be made.
- 14. The making of final payment shall constitute a waiver of all claims by the Owner or Galveston County's authorized Representative except those arising from:
 - a. unsettled claims;
 - b. faulty or defective Work appearing after Substantial Completion;
 - c. failure of the Work to comply with the requirements of the Contract Documents; or
 - d. terms of any special warranties required by the Contract Documents.
- 15. The acceptance by the Contractor of the final payment shall be, and operate as, a release to the Owner and to Galveston County's authorized Representative of all claims and of all liability to the Contractor for all things done or furnished in connection with this Contract.
- 16. Final Payment to Contractor **does not include** payment of **retainage**. Payment of **retainage will be made after project completion and in accordance** with Article 3 of Agreement between
 Galveston County and Contractor.

24. Protection of Persons and Property

- A. Safety Precautions and Programs
 - The Contractor expressly undertakes, both directly and through his Sub-Contractors to take every precaution at all times for the protection of persons, including employees and property. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.
 - 2. If the Contractor fails to maintain the safety precautions required by law or directed by Galveston County's authorized Representative, Galveston County's authorized Representative may take such steps as necessary and charge the Contractor therefore.
 - 3. The failure of Galveston County's authorized Representative to take any such action shall not relieve the Contractor of his obligations in Subparagraph 24.A.1.
- B. Safety of Persons and Property
 - 1. The Contractor shall submit his safety program to Galveston County's authorized Representative prior to mobilizing to the job, and shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods and for any damage, which might result from failure or improper construction, maintenance, or operation. The Contractor shall provide a safety report to Galveston County's authorized Representative on a weekly basis.
 - 2. The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:
 - a. all employees on the work and all other persons who may be affected thereby;
 - all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Sub-Contractors;
 - c. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or

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replacement in the course of construction.

- Contractor shall not permit any construction technique or activity, which decreases building security or safety. Contractors shall cooperate fully with the Galveston County's authorized Representative's and Owner's requirements regarding security and safety of the building.
- 4. The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.
- 5. The Contractor shall provide, erect, maintain, dismantle and remove, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying the Owners and users of adjacent utilities to the work. He shall protect the Owner's property from injury or loss arising in connection with this Contract. He shall adequately protect adjacent property as provided by law and the Contract Documents. He shall provide and maintain all passageways, guard fences, light and other facilities for protection required by public authority, local conditions, or any of the Contract Documents. At no time remove, alter or render ineffective any barricades, railings or cover on the project without written permission of Galveston County's authorized Representative. Where these safety devices are to be turned over to others, upon completion of the work, the devices shall be repaired or replaced so that they meet the required standards prior to turnover.
- 6. When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel. Fuel for cutting and burning torches shall be stored in locations and protected as directed by Galveston County's authorized Representative. No volatile liquids shall be used for cleaning agents or as fuels for motorized equipment or tools within a building except with the express approval of Galveston County's authorized Representative. Bulk storage of volatile liquids shall be outside the building at locations directed by Galveston County's authorized Representative and only so much volatile liquid shall be allowed within the building at any given time.
- 7. The Contractor shall promptly remedy all damage or loss (other than damage or loss insured under Paragraph 26.B to any property referred to in Clauses 24.B.2.b and 24.B.2.c caused in whole or in part by the Contractor, his Sub-Contractors, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Clauses 24.B.2.b and 24.B.2.c except damage or loss attributable to the acts or omissions of the Owner or Architect or Engineer or anyone directly or indirectly employed by either of them or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor are in addition to his obligations under Article 5 in the Trade Contract.
- 8. The Contractor shall take all precautions required to prevent fires as a result of his operations. Where flame cutting torches, blow torches, or welding tools are required to be used within an existing building, their use shall be as approved by Galveston County's authorized Representative at the site. When welding tools or torches of any type are in use, the Contractor shall have available, in the immediate vicinity of the work, a fire extinguisher of the CO2 type. The fire extinguisher shall be provided and maintained by the Contractor.
- 9. The Contractor shall advise Galveston County's authorized Representative, in writing, of all unusual flammable or toxic materials which the Contractor plans to store and use on site.
- 10. Shielding or similar precautions will be taken adjacent to welding operations
- 11. The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to Galveston County's authorized Representative, and shall attend all project safety meetings scheduled by Galveston County's authorized Representative.

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- 12. Every employee will be dressed for the work he performs. Minimum dress will consist of long pants, tee shirt, hardhat, safety glasses and work shoes. Shorts, cut-offs, "tank-top" shirts or soft-toed shoes will not be permitted.
- 13. Each Contractor shall, in a readily visible manner, identify all of his tools, equipment and similar materials, either by paint color or label. The Contractor shall provide his employees with a hard hat bearing his first initial, last name, and his Company name. This information shall be clearly visible at all times.
- 14. The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.
- 15. Weather protection shall be supplied by the Contractor and shall include any enclosure, supplemental heating, and furnishing and *any* other features (insulation, etc.) for meeting conditions required by Galveston County's authorized Representative or by the Project Manual relative to the Contractor's work.

25. Emergencies

A. In an emergency affecting the safety or life of individuals, or of the Work, or of adjoining property, the Contractor, without special instruction or authorization from the Owner or Galveston County's authorized Representative or Architect or Engineer, shall act, at his discretion, to prevent such threatened loss or injury. Also, should he, to prevent threatened loss or injury, be instructed or authorized to act by the Owner or Galveston County's authorized Representative or Architect or Engineer he shall so act, without appeal. Any additional compensation or extension of time claimed by the Contractor on account of any emergency work shall be determined as provided by Article 27 - Changes in Work.

26. Insurance

- A. Contractor shall purchase from and maintain in a company lawfully authorized to do business in the State of Texas and which carry a Best's rating of A-VII o9r higher such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under this Agreement and for which the Contractor may be legally liable.
 - 1. claims under workers compensation, disability benefit and other similar employee benefit acts which are applicable to the operations to be performed:
 - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees or;
 - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
 - 4. claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by any other person;
 - 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
 - 6. claims for damages because of bodily injury, death or property damage arising out of ownership, maintenance or use of a motor vehicle;
 - claims involving contractual liability insurance applicable to the Contractor's obligations under

B. Contractors Liability Insurance

- 1. Contractor shall keep in full force and effect, a policy of public liability and property damage insurance issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by the Board of Insurance Commissioners' of the State of Texas, with coverage provision insuring the public from any loss or damage that may arise to any person or property by reason of services rendered by successful Proposer and providing that the amount by reason of services limits of not less than the following sums:
 - Workmen's Compensation
 - 1) State Statutory limits
 - Comprehensive General Liability (including Premises Operations; Independent Contractor's Protective; Products and Completed Operations; Broad Form Property Damage
 - 1) Bodily Injury

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- i. \$100,000.00 each person, each occurrence
- ii. \$300,000.00 Aggregate, each occurrence
- c. Property Damage including loss of use
 - 1) \$100,000.00 Each occurrence
- d. Products and Completed Operations to be maintained for one (1) year after Final Payment
- e. Property Damage Liability Insurance will provide X, C or U coverage as applicable
- C. Contractual Liability
 - 1. Bodily Injury
 - a. \$100,000.00 Each Person
 - b. \$300,000.00 Each occurrence
 - 2. Property Damage
 - a. \$100,000.00 Each occurrence
- D. Personal injury, with Employment Exclusion deleted:
 - a. \$100,000.00 Each occurrence
- E. Comprehensive Automobile Liability (including owned, non-owned and hired motor vehicles):
 - Bodily Injury
 - a. \$100,000.00 Each Person
 - b. \$300,000.00 Each occurrence
 - 2. Property Damage
 - a. \$100,000.00 Each occurrence
- F. Umbrella Liability Coverage:
 - 1. \$1,000,000.00 to provide excess liability coverages required above.
- G. Professional Liability Coverage:
 - 2. \$1,000,000.00 to Abatement and Associated work or minimum State law.
- H. Galveston County, Construction Manager, and Architect or Engineer shall be named as "additional insured" on such policies as are specified above and shall be notified of any changes to the policy during the contractual period.
- I. The above requirements do not establish limits of Contractor's liability.
- J. Such insurance is to be provided at the sole cost of Contractor.
- K. All policies of insurance shall waive all rights of subrogation against Galveston County, its officers, employees and agents.
- L. Galveston County reserves the right to require additional insurance should it be deemed necessary.
- M. This insurance required by Subparagraph 26.B-G shall be written for not less than limits of liability listed or required by law, whichever is greater.
- N. The insurance required by Subparagraph 26.B-G shall include premises operations (including explosion, collapse and underground coverage), elevators, independent contractors, products and/or completed operations, and contractual liability insurance (on a "blanket basis" designating all written contracts), all including broad form property damage coverage. Liability insurance may be arranged under Commercial General Liability policies for the full limits required or by a combination of underlying policies for lesser limits with the remaining limits provided by an Excess or Umbrella Liability Policy.
- O. The insurance required by Subparagraph 26.B-G shall include contractual liability insurance applicable to the Contractor's obligations under Article 5 in the Trade Contract
- P. Property Insurance
 - Unless otherwise provided, the Owner will purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of the Owner, Galveston County's authorized Representative, the Contractors and Sub-Contractor in the Work and shall insure against the perils of fire and extended coverage, and shall include "all risk" insurance for physical loss or damage. This coverage carries a deductible per occurrence, which will be paid by the Contractor or Sub-Contractor responsible for each loss. This insurance coverage does not cover the Contractor's or Sub-Contractor's tools and equipment.
 - The Owner will effect and maintain such boiler and machinery insurance as may be necessary and/or required by law. This insurance shall include the interest of the Owner, Galveston County's authorized Representative, the Contractors, and Sub-Contractors in the Work.

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- 3. Any loss insured under Paragraph 26.B-G is to be adjusted with the Owner and made payable to the Owner as trustees for the insured's, as their interests may appear, subject to the requirements of any applicable mortgage clause.
- 4. The Owner, Galveston County's authorized Representative, the Architect or Engineer, the Contractors, and the Sub-Contractors waive all rights against each other and any other contractor or subcontractor engaged in the Project for damages caused by fire or other perils to the extent covered by insurance provided under Paragraph 30.2, or any other property or consequential loss insurance applicable to the project, equipment used in the Project, or adjacent structures, except such rights as they may have to the proceeds of such insurance. If any policy of insurance requires an endorsement to maintain coverage with such waivers, the owner of such policy will cause the policy to be so endorsed. The Owner will require, by appropriate agreement, written where legally required for validity, similar waivers in favor of the Contractors and Sub-Contractors by any separate contractor and his subcontractors.
- The Owner shall deposit in a separate account any money received as trustees, and shall distribute it in accordance with such agreement as the parties in interest may reach.
- 6. The Owner as trustees shall have power to adjust and settle any loss with the insurers.
- The Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy shall not commence prior to a time mutually agreed to by the Owner and Galveston County's authorized Representative and to which the insurance company or companies providing the property insurance have consented by endorsements to the policy or policies. This insurance shall not be cancelled or lapsed on account of such partial occupancy.

27. Changes in the Work

- A. Change Authorization/Contract Amendments
 - 1. Changes in the Work may be accomplished after execution of the contract, and without invalidating the Contract, by Change Order, or order for a minor change in the work, subject to the limitations stated in this Article 27 and elsewhere in the contract Documents. A Change Authorization is a written order to the Contractor signed by Owner, in the form of an Agreement Amendment issued after the execution of the Contract, authorizing a Change in the Work or an adjustment in the Contract Sum and/or the Contract Time. The Contract Sum and the Contract Time may be changed only by Written Amendment. An Amendment signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum and/or the Contract Time. Contractor agrees that the dollar amount and time extensions, as applicable, in each Change Order constitutes full compensation to the Contractor for all costs, expenses and damages to the Contractor, whether direct, consequential or otherwise, in anyway incidental to or arising out of, or resulting, directly or indirectly from the work performed or modified by the Contractor. Amendments not formally rejected within ten (10) days after receipt shall be deemed accepted.
 - 2. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change In The Work that application of the agreed unit prices to the quantities of work proposed will cause substantial inequity to the Owner or the Contractor, the applicable unit prices shall be equitably adjusted.

B. Concealed Conditions

- Should concealed conditions be encountered in the performance of the Work below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contractor must report the conditions to Galveston County's authorized Representative before the conditions are disturbed. Galveston County's authorized Representative shall thereupon notify the Architect or Engineer.
 - a. Upon such notices, or upon his own observation of such conditions, the Architect or

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Engineer shall promptly make such changes in the Drawings and Project Manual as he finds necessary to conform to the different conditions. Any change in the cost of the work or the time needed for completion resulting from concealed conditions shall be determined in accordance with Article 8 in the Trade Contract provided a notice there of is made within ten (10) days after the first observance of the conditions.

C. Claims for Additional Cost

- A change in the work may be initiated in one of two ways:
 - a. A "Request for Proposal" Form (RFP) from Galveston County's authorized Representative to the Contractor describing the revision to the work desired. Usually, it is accompanied by revised drawings, sketches or other data.
 - b. Formal notification from the Contractor documenting a "concealed condition" requesting investigation by Galveston County's authorized Representative and Architect or Engineer which causes changes in the Drawings and Project Manual (and a subsequent Request for Proposal on the revised documents).
- 2. If the Contractor claims that any instructions given to him by Galveston County's authorized Representative, by drawings or otherwise, involve extra work not covered by the Contract, he shall give Galveston County's authorized Representative written notice of the additional cost within ten (10) days after the receipt of such instructions and before proceeding to execute the work, except in emergencies endangering life or property, in which case the Contractor shall proceed in accordance with Article 27. Should it not be clear to the Contractor that a change will involve extra work, written notice given within five (5) days that the change may involve extra work will be considered sufficient notice. If it is later determined that the work involved in such instruction shall be recognized as an extra, the amounts of additional compensation to be paid therefore, should be determined in accordance with Article 8 in the Trade Contract. Failure to respond as noted shall waive the Contractor's claim for additional compensation.
- 3. Timely submittal (Return) of Requests for Proposal is mandatory. RFP's shall be answered and returned within ten (10) days of receipt. Failing to return RFP's within thirty (30) days may constitute basis for withholding progress payments.
- 4. Galveston County's authorized Representative will inform the Contractors, and the Contractor will inform Galveston County's authorized Representative when either party recognizes a proposed change (RFP) may affect the progress of the work as scheduled.
- Any claim for damages of any character, delays for which the Owner is liable under the Contract Documents, extra work or extra compensation of any other nature, shall be waived unless notice thereof is given to Galveston County's authorized Representative, in writing, within 10 days after the occurrence of the event which is relied upon to justify the claim or within such time as the event should have reasonably been discovered by the Contractor, and in any event, before extra cost is incurred.

D. Minor Changes in the Work

The Architect or Engineer will have authority to order through Galveston County's authorized Representative minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and such changes shall be binding on the Owner, Galveston County's authorized Representative, and the Contractor. The Contractor shall carry out such written orders promptly.

28. Uncovering and Corrections of Work

- A. Uncovering of Work
 - If any portion of the Work should be covered contrary to the request of Galveston County's authorized Representative or Architect or Engineer, or to requirements specifically expressed in the Contract Documents, it must, if required in writing by Galveston County's authorized Representative, be uncovered for their observation and replaced, at the Contractor's expense.
 - 2. If any other portion of the Work has been covered which neither Galveston County's authorized Representative nor the Architect or Engineer has specifically requested to observe prior to being

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covered, the Architect or Engineer or Galveston County's authorized Representative may request to see such Work and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner or Construction Manager, as the case may be. If such Work were found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by a separate Contractor employed as provided in Article15, and in that event, the separate Contractor shall be responsible for the payment of such costs.

B. Correction of Work

- The Contractor shall promptly correct all Work rejected by the Architect or Engineer or Galveston County's authorized Representative as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed complete. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect or Engineer's and/or Galveston County's authorized Representative's additional services made necessary thereby.
- 2. If, within one year after the Date of Substantial Completion of Work or designated portion thereof, or within one year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, the Contractor is notified of defective work he shall correct it promptly. This obligation shall survive the termination of the Contract. The Owner or Galveston County's authorized Representative shall give such notice promptly after discovery of the condition.
- 3. The Contractor shall remove from the site all portions of the Work which are defective or nonconforming and which have not been corrected under Subparagraphs 8.1, 28.B.1 and 28.B.2, unless removal has been waived by the Owner.
- 4. If the Contractor fails to correct defective or nonconforming Work as provided in Subparagraphs 8.1, 28.B.1 and 28.B.2, the Owner or Galveston County's authorized Representative may correct it in accordance with Article 9 in the Trade Contract.
- 5. If the Contractor does not proceed with the correction of such defective or nonconforming work within a reasonable time fixed by written notice from Galveston County's authorized Representative, the Owner or Galveston County's authorized Representative may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner or Galveston County's authorized Representative may upon ten additional days' written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Galveston County's authorized Representative's additional services made necessary thereby. If such proceeds of sale do not cover all costs, which the Contractor should have born, the difference shall be charged to the Contractor and an appropriate Contract Amendment shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner or Galveston County's authorized Representative.
- The Contractor shall bear the cost of making good all work of other contractors destroyed or damaged by such removal or correction.
- 7. Nothing contained in this Article shall be construed to establish a period of limitation with respect to any other obligation, which the Contractor might have under the Contract Documents. The establishment of the time period of one year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents, relates only to the specific obligation of the Contractor to correct the Work, and has no relation- ship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings maybe commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

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29. Termination of the Contract

- A. Termination by the Contractor
 - If the Work is stopped, under an order of any court or other public authority having jurisdiction, for a period of three (3) months, through no fault of the Contractor or a Sub-Contractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, or if Galveston County should fail to pay the Contractor in accordance with Article 3 of the Trade contract, the Contractor may, upon thirty (30) additional days written notice terminate the contract and recover from the Owner payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery.

B. Termination by the Owner

- 1. If the Contractor is adjudged a bankrupt, or if he makes a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he fails to make prompt payment to Sub-Contractors or suppliers, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, then the Owner without prejudice to any right or remedy and after giving the Contractor and his surety, if any, ten days written notice, terminate the Contract and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the work by whatever method he may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.
- 2. If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Architect or Engineer or Galveston County's authorized Representative's additional services made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner.

C. Termination for Convenience

- 1. The Owner reserves the right, for its convenience, to terminate the Work of the Contractor(s), in whole or in part, at any time by providing written or telegraphic notice to the Contractor stating the extent and effective date of such termination; whereupon such Contractor(s) shall: (i) stop all work and place no further orders or subcontracts for materials, services, equipment or supplies, except as may be necessary to complete portions of the Work not terminated; (iii) terminate work orders, purchase orders and subcontracts outstanding to the extent that they relate to the terminated portion of the Work; (iv) take any action necessary to protect property in Contractor's possession in which the Owner has or may acquire an interest; (v) complete performance of the un-terminated portion of the Work; and (vi) take any other action toward termination of the Work which Galveston County's authorized Representative may direct.
- 2. In the event that all or a portion of the Work of the Contractor(s) is terminated pursuant to Subparagraph 29.C.1 Contractor(s) shall be entitled to payment of those costs relating to the terminated portion of the Work as hereinafter defined. The Owner shall thereafter pay to the Contractor(s), subject to the limitations herein set forth, the sum of the following costs which represent the respective interest of the Contractor(s) to the terminated portion of the Work:
 - Portion of the Contract Sum related to the work completed by the Contractor immediately prior to Notice of Termination.
 - b. Expenses incurred or for which the Contractor is liable as the result of termination by Contractor of respective work orders, purchase orders or subcontracts related to the Notice of Termination including overhead and profit or completed work.
 - c. No payment shall be made for work not actually performed. Deductions will be made by Owner for amounts previously paid to Contractor and for any amounts which may be due Owner, or which Owner may offset or withhold by the terms hereof. The total amount of all payments to Contractor shall not exceed in any event, the proportion of

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the total Contract Sum that the Work actually performed (including materials delivered to the project site minus credits for returned goods or cancelled orders) at the date of termination bears to the entire Work to be performed hereunder.

d. After receipt of a Notice of Termination, Contractor shall submit to Galveston County's authorized Representative its written termination claim in the form and with the certification which the Owner or Galveston County's authorized Representative may require. Such claims shall be submitted promptly, but in no event more than ninety (90) days after the effective date of termination.

30. Temporary Services and Systems

A. General

- Galveston County's authorized Representative will provide temporary toilets, excluding Contractor's trailer hookup.
- Galveston County's authorized Representative will provide temporary fire safety equipment for general use. Each Contractor shall provide their own fire extinguishers for their trailers, and for use, as required when cutting and burning are performed.
- 3. Galveston County's authorized Representative will provide rubbish containers and rubbish disposal service unless noted otherwise in the Proposal Form. The Contractor must not use these containers for the disposal of earth, surplus or slop concrete, hazardous materials, and/or steel stock. Each Contractor must dispose of these elements at his own expense.
- 4. For further description and location of temporary services and system, refer to the Site Utilization Plan and the following paragraphs. Each Contractor shall be responsible for furnishing, installing or otherwise providing any or all of the following temporary facilities, structures or services as they may be necessary or required for or during, performance of the work of his Contract
 - a) Temporary field office facilities complete, including all furniture, heat, cooling, lighting, telephone, plumbing and toilet fixtures as he may require for his exclusive use. (Site location and number are subject to approval of Galveston County's authorized Representative).
 - b) Temporary storage facilities, sheds or buildings as may be required for the proper protection or storage of materials and/or equipment. (Site location and number are subject to approval of Construction Manager).
 - c) Temporary extension from, and hookup to, all temporary utilities which have been provided to a common point for use by the Contractors during construction.
 - d) Maintenance, cleanup and removal of all temporary facilities provided by the Contractor for his exclusive use.
 - e) Furnishing, erection, maintenance and removal of all temporary hoists and scaffolding as may be required by the Contractor for the performance of the work of his Contract.
 - f) Temporary drainage and dewatering measures including all pumping, drainage, erosion control or other work required to protect the work of the Contractor while in progress.
 - g) All temporary facilities, structures, services or items of work specifically required or defined in the Scope of Work of the Contract (Proposal Package) or otherwise required by the Contract Documents for his work.
 - h) Distribution of drinking water for his construction personnel.
 - i) At the end of the day's work, all work subject to damage by adverse weather conditions shall be covered or otherwise protected as required. Weather protection shall be adequate to permit each Contractor to work on a continuous basis without shutdown due to temperature or weather conditions as far as possible.
 - No temporary service shall be removed or disconnected until the new parts have been installed to replace them, properly connected and ready for use. The changing over from temporary to permanent work shall be done expeditiously, and if possible so that no part of the building or premises shall be without adequate service. If this is not possible, the procedure must be planned and submitted to Galveston County's

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authorized Representative for approval.

B. Temporary Electric System

- 1. Electric power for use in temporary trailers shall be available to the Contractor from a central location in the trailer area. The Contractor shall furnish any required extensions from this location at his own expense.
- Electric service and distribution. The central service will be installed from the Utility Company's
 service point to the central distribution point on-site. Distribution from this point to the central
 connection point in the trailer area will be installed including any transformers, main
 disconnected switch or switches, any metering, supports, protective enclosure and grounding
 - a. Service will terminate in a panel board equipped with circuit breakers. Service characteristics available will be 120/208 volts, three phase, 4 wire web, unless otherwise specified. Total capacity to be shared shall be 400 amps. Use of electricity for basic heating of trailers will not be allowed
 - b. The distribution will be extended to the designated distribution points within the building. These distribution locations will provide:
 - Panel board for breakers for lighting and hand tool circuits throughout the area served.
 - 2. Panel board and breakers for twenty (20) 20 amp circuits for connection of bench tools, such as, pipe threaders, etc.
 - c. The distribution will be extended upward to other floors of the building as indicated.
 - d. As the work progresses, structure, and decks are constructed, the lighting/hand tool circuits will be installed throughout the building according to the following criteria
 - e. Temporary lighting shall be installed in all areas and rooms, including all platforms, levels and stairways but excluding crawl spaces, duct and riser shafts. Temporary lighting shall be a minimum of 1/4 watt per square foot. For all areas 3,200 square feet or less, 100-watt lamps spaced approximately at 20 foot centers shall be used. Each room or enclosed area shall have, at least, one lighting and one tool outlet. Where 100 watt lights are used, the outlets shall consist of double weatherproof sockets. One (1) socket shall be used for the 100-watt lamp and the other socket shall be used for portable power tools.
 - f. Any temporary lighting required beyond the foregoing shall be provided by the party requiring the same and the work will be paid for by the Contractor.
 - g. Any extension cords will be provided by the Contractor.
 - h. Connecting and disconnecting Contractor tools and equipment to (and from) the above distribution system will be performed by qualified personnel, ALL grounding as required by the National Electrical Code, OSHA or any and all local codes, including approved ground fault interrupters shall be furnished and installed at the Contractors expense.
 - i. All contractors must share the system provided and average usage is anticipated. Any contractor anticipating fabrication area or operations must coordinate his needs through Galveston County's authorized Representative. If additional distribution is required and available at the control service, it will be provided at the Contractor's expense.

3. Operations and Maintenance

- a. The system will be operated during normal work week, defined as five (5) days, including 1/2 hour before regular working hours and 1/2 hour after regular working hours for every trade.
- b. Maintenance of the electrical service beyond the duration defined above will be at the expense of the Contractor requesting the service. Charges for maintenance of the services will be made from the Operating Contractor to the Contractor and will not involve (nor occur cost to) Galveston County's authorized Representative or Owner.
- 4. Relocation to allow construction to proceed and removal when permanent power is available will be coordinated with Galveston County's authorized Representative as part of the maintenance service.

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 The Electrical Contractor may be requested in a Proposal Package to include part or all of the above described temporary service and distribution and/or maintenance. (Review Scope of Work carefully).

- 6. Payment for Electrical Energy
 - The Owner will pay for the cost of all energy consumed by all trades during the construction

C. Temporary heating

- 1. Construction Heating
- Each Contractor shall be responsible for providing his own temporary heat and weather tight
 enclosures as required for the satisfactory performance of his work and to comply with the
 construction schedule. Temporary heat systems must be approved by Galveston County's
 authorized Representative.
- 3. Temporary Use of Building System
- 4. It is not anticipated that the permanent building system will be utilized to provide "temporary heat" during the major portion of construction operations
- 5. It is anticipated that activation, testing and balancing of the building heating/cooling system will be critical to the completion and acceptance of the project and therefore actuation, of the permanent system will be scheduled for the earliest possible time.
- Within these parameters the Contractor must provide any supplemental heat required to perform his work.
- 7. In the proposal form, the Contractor may be requested to indicate and amount included for "supplemental heat" (not construction heating) as Galveston County's authorized Representative may request proposals for providing an interim heating system from the Mechanical Contractor. (Review Scope of Work Carefully).

D. Temporary Water

- 1. Potable water shall be available to the Contractor at a central location. Extensions of the water supply for Contractor's exclusive use shall be the responsibility of the Contractor.
- 2. Temporary water distribution as indicated on Site Utilization will be provided for the use of all Contractors and to provide a temporary fire protection system.
- 3. The temporary fire protection system shall be installed using the permanent standpipes and risers, and shall be installed as rapidly as construction permits.
- 4. Temporary fire standpipe connections, including pipe fittings, and valves shall be provided at the location of each permanent hose rack or station as shown on the contract drawings.
- 5. At each temporary riser connection shall be provided a temporary hose rack, 100 feet of 1-1/2" UL approved fire hose system with brass couplings and a 1-1/2" nozzle. The system shall also provide 2-1/2" valved, capped connection at each location together with 1-1/2" valved connection with a pair of hose bibs. Hose adapters on the discharge side of the 2-1/2" valve shall be compatible with hose fittings used by the local fire department.
- 6. All Contractors are responsible for providing their own hoses to bring water from the hose rack location to their work **areas**. Only heavy-duty 3/4" hose in good conditions will be permitted in use in the interior of the building. The discharge end of each hose shall be equipped with a means of positive shut off. The use of hoses, which leak at connections or elsewhere throughout their length, will not be permitted. All hoses shall be disconnected from hose bibs when not in use and before the end of each work day.
- 7. When no longer required, as determined by Galveston County's authorized Representative, the temporary systems shall be dismantled and removed.
- 8. Water will be provided to all Contractors without cost, and any billings therefore will be paid by Galveston County's authorized Representative.
- 9. The Plumbing Contractor may be requested in the Proposal Package "Scope of Work" to include furnishing installing and dismantling and removing the temporary water/temporary fire protection system described above.
- 10. In such event the temporary equipment and materials so removed shall become the property of the Plumbing Contractor. (Review Scope of Work Carefully)

General Conditions of the Contract

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E. Housekeeping - Cleaning and Rubbish Removal

- 1. Each Contractor shall be responsible for daily and final cleanup and continuous removal of all rubbish and debris from the building and site. Galveston County's authorized Representative shall provide, erect, locate, and maintain a rubbish chute and/or rubbish collection dumpster system for use of all trades. Each Contractor shall be responsible to deposit his daily rubbish into these chutes or dumpster locations as designated and provided by Galveston County's authorized Representative. Failure of a Contractor to do so will require that this be done by Galveston County's authorized Representative after proper notice to the Contractor and labor for doing so shall be charged to the responsible Contractor
- 2. The jobsite shall be maintained in a neat orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Contractor will remove all crates, cartons and other flammable waste materials or trash from the work areas at the end of each working day.
- Elevator shafts, electrical closets, pipe and duct shafts, chases, furred spaces and similar spaces
 which are generally unfinished, shall be cleaned and left free from rubbish, loose plaster, mortar
 drippings, extraneous construction materials, dirt and dust before substantial completion review.
- 4. Each Contractor shall be responsible for cleaning all surfaces as necessary to make them free of spatters or other deposits of paint, plaster, mortar, concrete, adhesives, roofing, dirt, soil, oil, or any other material foreign to the surface involved. Galveston County's authorized Representative shall back-charge to the guilty party the cost of cleaning which is required by accidental soiling or damage by another Contractor.
- 5. Each Contractor is responsible to share the task of litter cleanup (e.g., coffee cups, lunch wrappers, etc.).
- 6. However, to insure proper cleanup, notwithstanding the Contractor's obligations to cleanup any debris resulting from his own operations, and following proper notices Galveston County's authorized Representative will undertake the cleanup and disposal of litter and other debris whose source is unidentifiable. The cost of this special cleanup detail will be assessed weekly against all Contractors on a per capita basis and invoiced monthly. If any cleanup invoice is not paid within thirty (30) days, it will be back-charged against the respective Contractor's monthly payment application.
- 7. The Contractor shall be responsible to maintain his own trailer, storage and work areas in a sanitary condition to minimize the hazard of attracting vermin and breeding mosquitoes. If the Contractor fails to comply, Galveston County's authorized Representative may do so, and the cost thereof shall be charged to the Contractor. Rodent extermination materials shall be those approved by the local health department or other agency having jurisdiction.
- 8. Use only cleaning materials and methods recommended by manufacturer of surface to be cleaned. Use cleaning materials only on surfaces recommended by cleaning material manufacturer. Each Contractor shall be responsible for assuring that affected employees are provided with, and required to use, all needed personal protective devices in connection with cleaning.
- At completion of work, each Contractor shall remove tools, equipment, machinery, and surplus
 materials from the project site and perform whatever additional cleaning is specified in the
 Proposal Form.

F. Vehicle cleaning - Trucking

- 1. Galveston County's authorized Representative will designate the wash-down area to be utilized by the Contractors. The "wheel wash station" will be equipped with a hose connection and drainage area. The Contractor shall provide manpower, hose and other supplemental scrapers, brushes, etc., which may be required to satisfactorily clean his vehicles leaving the site. The construction of this temporary facility may be included in the "Scope of Work" of the excavation or site Preparation Proposal Package, Review scope of work carefully.
- All vehicles shall be cleaned of all mud and debris before leaving the site. Each Contractor shall
 be responsible for providing whatever personnel may be required to perform the required vehicle
 cleaning throughout the progress of his work. The wash-down area shall not be used for cleaning

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out of concrete mix trucks.

- 3. Cleaning of concrete equipment shall be performed at locations designated by Galveston County's authorized Representative. Cleaning shall be conducted in such a manner as to prevent spillage of fluid or concrete to the ground or penetration of existing ground soil. The responsible Contractor shall remove from the site all residues accumulated from the cleaning operations of concrete equipment..
- 4. All trucks leaving the site with earthen materials or loose debris shall be loaded in a manner that will prevent dropping of materials on streets, and when necessary, shall have suitable coverings fastened over the load before they enter surrounding paved streets. Trucks bringing earthen materials over paved streets to the site shall be similarly loaded and covered. The Contractor shall conform to all local regulations regarding load limits and be responsible for any costs due to failure to comply with the above.
- G. Site Security, Personnel and Property Protection
 - Contractor shall maintain the security of the worksite and shall restrict access to the site to the following:
 - a. its employees;
 - b. employees of subcontractors;
 - representatives of manufacturers whose goods are utilized in the work and are called to the site by either the Contractor or the Program Administrator; and
 - d. agents and/or employees of the County.
 - 2. Contractor shall provide adequate protection to persons on the worksite, adjacent properties, and utilities as is necessary to keep each free of damage or injury. Contractor shall furnish all barricades, warning lights and other safety devices necessary for the safety and protection of the public and shall remove them upon completion of the work performed on those premises under the terms of this Contract.
 - Contractor will have complete control over the work site and shall be fully responsible for any loss of
 or damage to any County property from any cause and will reimburse County in the event of any loss
 or damage to County's property from any cause.
 - 4. Contractor shall take proper means to protect adjacent or adjoining properties which might be injured or seriously affected by construction undertaken under this Agreement from any damage or injury by reason of said process of construction. Contractor shall be liable for any and all claims for such damage on account of its failure to fully protect all adjoining properties.
 - 5. At no time remove, alter or render ineffective any barricades, railings or cover on the project without written permission of Galveston County's authorized Representative. Where these safety devices are to be turned over to others, upon completion of the work, the devices shall be repaired or replaced so that they meet the required standards prior to turnover.
 - 6. The Contractor shall provide and maintain proper warnings and detour signs at all pedestrian and vehicular closures, intersections, and along detours, directing traffic around closed portions of roadways. The Contractor shall, at his own expense, wherever necessary or required, provide and maintain fences, temporary roadways, temporary cross signs, watchmen, warning lights and take such other precautions as may be necessary to protect life and property, and shall be responsible for all damages occasioned in any way by his act or neglect. All barricades and obstructions shall be illuminated at night, and all lights shall be kept on from one-half hour before sunset, until one-half hour after sunrise.
 - 7. The Contractor shall provide such openings, channels, chases, flues, etc., if any, and do such cutting, patching, finishing, etc., if any, required by the Contract Documents.
 - 8. Unless otherwise specified, the Contractor shall furnish and install all sleeves, inserts, hangers, etc., required for the execution of his work.
 - 9. When performing any cutting, removal, creating opening or holes, etc., the Contractor, by use of barricades, flagmen, or other means, shall provide protective measures to assure that other workmen or the public are not exposed to potential injury by the operation being conducted.
 - 10. The Contractor shall be responsible for handling and transporting (including lifting) his material and equipment to the location of need in a timely manner.

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General Conditions of the Contract

Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

Any vertical lifting device, whether stationary material hoist, mobile crane or other means, a Contractor plans to use will be implemented only after prior coordination and approval of Galveston County's authorized Representative.

31. Order of Precedence

- A. In the event of any conflict or discrepancy in the provisions of the contract documents, the documents shall be interpreted on the basis of the following order or priority:
 - 1. Agreement between Owner and Contractor
 - 2. Proposal Form
 - 3. Addenda, with later date having greater priority
 - 4. General Conditions
 - 5. Project Manual
 - 6. Drawings, large scale details and/or schedules
 - 7. Drawings, small scale

32. WAGE RATES

This Contract is a Public Works Contract governed by V.T.C.A., Government Code, Chapter 2258. That Act requires Contractor to pay workers not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed and not less than the general prevailing rate of per diem wages for legal holiday and overtime work.

Prevailing wage rates determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq) are used in this Contract and are incorporated and made a part hereof.

In the event other crafts or types of workers are required than are listed therein, such workers shall be paid at a rate not less than the prevailing rate for similar workers in the Galveston County area.

Contractor acknowledges that:

- A. Pursuant to V.T.C.A., Government Code §2258.022, a violation of the obligation to pay workers the prevailing wages shall result in Contractor paying the County the amount of \$60.00 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the Contract; and
- B. Contractors and Subcontractors shall be required to keep a record showing the name and occupation of each worker employed by Contractor or Subcontractor in the construction of the work called for in the contract and the actual per diem wages paid to each worker.
- C. The record shall be submitted weekly on Labor Department forms to the Galveston County Wage Compliance Officer.

Contractor represents it has read this law and the penalties provided prior to entering into this agreement.

D. Wage Rates in force for Galveston County are included in Section 01012 Wage Scale.

33. Force Majeure

If by reason of force Majeure either Party shall be rendered unable, wholly or in part, to carry out its responsibilities under this contract by any occurrence by reason of force Majeure, then the Party unable to carry out its responsibility shall give the other Party notice and full particulars of such force Majeure in writing within a reasonable time after the occurrence of the event, and such notice shall suspend the Party's responsibility for the continuance of the forced Majeure claimed, but for no longer period.

Force Majeure means acts of God, floods, hurricanes, tropical storms, tornadoes, earthquakes, or other natural disasters, acts of a public enemy, acts of terrorism, sovereign conduct, riots, civil commotion, strikes or lockouts, and other causes that are not occasioned by either Party's conduct which by the exercise of due diligence the Party is unable to overcome and which substantially interferes with operations.

34. Salvage

Any materials, equipment and fixtures specifically ordered to be salvaged under these specifications shall remain the General Conditions of the Contract

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Bid Number B151023 Bid Date August 18, 2015 Bid Time 2:00 p.m.

property of County and will be delivered to the site designated by Galveston County's authorized Representative. All other items shall be disposed of by Contractor in compliance with all applicable laws and regulations.

35. Open Records

Contractor acknowledges that County is a governmental entity and this Agreement is an open record under the Open Records Act and will be discussed and voted upon in a public meeting.

36. Performance and Payment Bond(s)

V.T.C.A., Government Code Chapter 2253, requires a Performance Bond (for contracts in the excess of \$100,000) and a Payment Bond (for contracts in excess of \$25,000), to be provided by the Contractor. Each bond required shall be equal to the total contract price and shall be issued by a satisfactory surety company. The bond(s) will remain in full force and effect until final completion and acceptance of the work.

The bond(s) are to be made payable to the County of Galveston. They shall be written on forms provided by the surety for public works projects in Texas. A surety licensed to do business in the state of Texas must execute the bond.

Proposers should familiarize themselves with the entire provisions of V.T.C.A., Chapter 2253 and the penalties provided for its violation before submitting their Proposal.

End of General Terms and Conditions of the Contract

SECTION 01010 - SUMMARY OF THE WORK

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. <u>A brief description of the project:</u>

This project is to renovate the site and building at 823 Grand Avenue in Bacliff. Texas, There is minor demolition, concrete, parking lot accessories, miscellaneous metals, metal framing with gypsum board partitioning, finish work, doors and frames, electrical, plumbing, and mechanical work.

- B. Work by Owner: None anticipated other than tele/data.
- C. Contractor use of site and premises there are no limitations on the contractor's use of the site.

1.02 SCHEDULE

A. The County has a critical need to occupy the facility in January 2016. Every effort necessary to accomplish this schedule is required.

END OF SECTION

SECTION 01012 WAGE SCALE

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

1.1 APPLICABILITY

A. The Contract is a Public Work and is governed by V.T.C.A., Government Code, Chapter 2258. Proposers are advised that in accordance with the Act's terms, a Contractor is required to pay workers not less than the general prevailing rate of per diem wages for work of similar character in the locality in which the work is performed and not less than the general prevailing rate of per diem wages for legal holiday and overtime work. A copy of the prevailing wages to be paid in the performance of the work called for herein is attached hereto and by reference, made a part hereof. The County's determination of the General Prevailing Rate of per diem wages is final.

Prevailing wage rates determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq) are used in this Contract and are incorporated and made a part hereof.

In the event other crafts or types of workers are required than are listed therein, such workers shall be paid at a rate not less than the prevailing rate for similar workers in the Galveston County area.

- B. Pursuant to V.T.C.A., Government Code 2258.022, a violation of the obligation to pay workers the prevailing wages shall result in the Contractor paying the County the amount of \$60.00 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the Contract; and.
- C. Trade Contractors and Subcontractors shall be required to keep a record showing the name and occupation of each worker employed by the Contractor or Subcontractor in the construction of the work called for in the Contract and the actual per diem wages paid to each worker. The record shall be open at all reasonable hours to inspection by the officers and agents of the County.
- D. Contractors and Subcontractors shall submit Certified Payroll Reports on U. S. Department of Labor forms (WH-327 or latest edition). The reports must be submitted weekly to the Galveston County Wage Compliance Officer by the Trade Contractor and Subcontractors. Trade Contractor's request for Payments will not be processed or checks issued until all reports are current.
- E. Davis-Bacon Wage Determinations Texas Galveston County

General Decision Number: TX150298 05/15/2015 TX298

Superseded General Decision Number: TX20140298

State: Texas

Construction Type: Building

County: Galveston County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015
1	01/30/2015
2	03/06/2015
3	05/08/2015
4	05/15/2015

ASBE0022-009 03/01/2014

ASBE0022-009 03/01/2014		
	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation)		
BOIL0074-003 01/01/2014		
	Rates	Fringes
BOILERMAKER	\$ 23.14	21.55
* CARP0551-011 04/01/2015		
	Rates	Fringes
CARPENTER (Excludes Acoustical Ceiling Installation, Drywall Finishing/Taping, Drywall Hanging, Form Work and Metal Stud Installation)	\$ 22.50	8.33
ELEC0527-002 12/29/2014		
	Rates	Fringes
ELECTRICIAN (Excludes Low Voltage Wiring and Installation of Alarms)	\$ 26.50	3%+10.25
ELEV0031-003 01/01/2015		

	Rates	Fringes
ELEVATOR MECHANIC	.\$ 38.52	28.385
FOOTNOTES: A. 6% under 5 years for all hours worked. 8% over hourly rate for all hours worked	5 years based on	
New Year's Day; Memorial Day; Thanksgiving Day; Friday after Day; and Veterans Day.		
ENGI0450-002 04/01/2014		
	Rates	Fringes
POWER EQUIPMENT OPERATOR Cranes	.\$ 34.85	9.85
IRON0084-011 06/15/2014		
	Rates	Fringes
IRONWORKER, ORNAMENTAL	.\$ 22.02	6.35
PAIN0130-002 06/01/2014		
	Rates	Fringes
PAINTER (Brush and Roller, Excludes Drywall		
Finishing/Taping) PAINTER (Drywall		7.78
Finishing/Taping Only)	.\$ 17.30 	7.78
PLAS0079-004 01/01/2010		
	Rates	Fringes
PLASTERER	.\$ 19.42	1.00
PLUM0068-012 10/01/2013		
	Rates	Fringes
PLUMBER (Excludes HVAC Pipe Installation)	.\$ 31.30	9.49
PLUM0211-010 10/01/2013		
	Rates	Fringes
PIPEFITTER (Including HVAC Pipe Installation)		10.31

SHEE0054-012 07/01/2014

	Rates	Fringes
SHEET METAL WORKER Excludes HVAC Duct and Unit Installation\$ HVAC Duct Installation Only.\$		12.39 12.39
SUTX2014-024 07/21/2014		
	Rates	Fringes
ACOUSTICAL CEILING MECHANIC\$	16.41	3.98
BRICKLAYER\$	19.86	0.00
CAULKER\$	15.36	0.00
CEMENT MASON/CONCRETE FINISHER\$	13.82	0.00
DRYWALL HANGER AND METAL STUD INSTALLER\$	17.88	5.24
ELECTRICIAN (Alarm Installation Only)\$	17.97	3.37
<pre>ELECTRICIAN (Low Voltage Wiring Only)\$</pre>	19.23	3.55
FLOOR LAYER: Carpet\$	20.00	0.00
FORM WORKER\$	12.07	0.00
GLAZIER\$	17.09	3.41
HVAC MECHANIC (Installation of HVAC Unit Only)\$	17.40	0.00
IRONWORKER, REINFORCING\$	12.10	0.00
IRONWORKER, STRUCTURAL\$	25.37	6.00
LABORER: Common or General\$	11.47	0.00
LABORER: Mason Tender - Brick\$	13.37	0.00
LABORER: Mason Tender - Cement/Concrete\$	10.50	0.00
LABORER: Pipelayer\$	12.94	0.00
LABORER: Roof Tearoff\$	11.28	0.00
LABORER: Landscape and Irrigation\$	9.49	0.00

LATHER\$ 20.11	0.00
OPERATOR: Backhoe/Excavator/Trackhoe\$ 14.10	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 13.93	0.00
OPERATOR: Bulldozer\$ 20.77	0.00
OPERATOR: Drill \$ 16.22	0.34
OPERATOR: Forklift\$ 15.64	0.00
OPERATOR: Grader/Blade\$ 13.37	0.00
OPERATOR: Loader\$ 13.55	0.94
OPERATOR: Mechanic\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)\$ 16.03	0.00
OPERATOR: Roller\$ 16.00	0.00
PAINTER: Spray (Excludes Drywall Finishing/Taping)\$ 17.43	4.43
ROOFER\$ 15.40	0.00
SPRINKLER FITTER (Fire Sprinklers)\$ 18.62	3.03
TILE FINISHER\$ 12.00	0.00
TILE SETTER\$ 16.17	0.00
TRUCK DRIVER: 1/Single Axle Truck\$ 14.95	5.23
TRUCK DRIVER: Dump Truck\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck\$ 12.50	0.00
TRUCK DRIVER: Water Truck\$ 12.00	4.11
WATERPROOFER\$ 14.39	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a

new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SECTION 01020 ALLOWANCES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

A. SCOPE

- 1. The Contractor shall include in his proposal the allowances stated in this and following Sections of the Project Manual. Allowance may pertain to purchase and delivery only, or to purchase, delivery, and installation, or to services only, or to contingency fund.
 - 2. All of the Contractor's overhead and profit (includes bond, insurance, etc) shall be included in the base proposal for listed allowance items whether such sums are used in the completion of the project or not. (example if the allowance price is \$1,000.00 and OH&P as determined by the Contractor is 14%, the 14% (\$140.00) would be included in the base price and a full \$1,000.00 in the allowance fund. If the \$1,000.00 is not spent the \$140.00 remains part of the Contractor's remuneration.)
 - 3. If the allowance is stated for purchase and delivery only, all of the Contractor's handling costs on site and other expenses contemplated for the allowance material and equipment shall be included in the allowance.
 - 4. If the allowance is stated for purchase, delivery, and installation, all of the Contractor's handling costs on site and other expenses contemplated for the allowance material and equipment shall be included in the allowance.
 - 5. If the allowance is stated for services only, all of the Contractor's handling costs on site and other expenses contemplated for the services shall be included in the allowance.
 - 6. If the allowance is stated for contingency, all of the handling costs on site and other expenses contemplated for the allowance material and equipment shall be included in the allowance.
 - 7. The Contractor shall purchase the allowance materials and equipment as directed by the Architect in writing. If the actual cost of the required work is more or less than all the allowance estimates, the Contract Sum will be adjusted accordingly by Change Order at the conclusion of the project.
 - 8. The Architect cannot certify applications for payment of any allowance item unless a fully executed Allowance Authorization is on file with the Owner, Architect, and Contractor.

PART 2 – ALLOWANCES

B. ITEMS

1. Tele/Data Allowance:

Contractor shall include in the Base Proposal the sum listed. Contractor shall proceed with the work in question only after receiving written directions executed by the Owner and the Architect. Owner will not be obligated to pay the cost of any work performed without prior written authorization.

Tele Data estimate for Renovations to 823 Grand Bacliff Texas.

Description Quantity \$ Total

Cisco Switch (2960) w/ mics cables, SmartNet 1 \$3,400.00 \$3,400.00 Cisco Router (2901) w/ misc cables, SmartNet 1 \$2,900.00 \$2,900.00

Computer 5 \$854.00 \$4,270.00

19 inch monitors 5 \$185.00 \$925.00

Cisco Wireless Access Point w/ SmartNet 1 \$755.00 \$755.00

Printer (medium sized) 1 \$700.00 \$700.00

Cisco Phone 5 \$150.00 \$750.00

Network Cabinet 1 \$450.00 \$450.00

MPLS Network Connection (10 meg) 1 \$335.00 \$335.00

Analog Phone Lines for 911 and alarm 2 \$50.00 \$100.00

Misc Conduit, Cable, etc 1 \$850.00 \$850.00

UPS w/NIC 1 \$300.00 \$300.00

Provide twenty four (24) CAT 6 cable drops 24 \$200.00 \$4,800.00

Total Estimate \$20,535.00

- The typical Work Area Outlet is CAT 6 plenum cables. Each cable will be terminated with a CAT 6 jack. The jacks will be inserted into a 2-port white faceplate at each location
- The data cables will originate from room 101 and home run to each location.
- Cable routing will be above the ceiling tiles utilizing J-hooks and/or loops for support or designated pathway instructed by customer.
- All cables will be labeled. All faceplates will be labeled with machine-generated labels.
- All horizontal station cables shall be tested in accordance with the field test specifications defined in ANSI/TIA/EIA-568-B.1 standard. Level II/III test equipment will be utilized.

2. Contingency Allowance:

Contractor shall include in the Base Proposal the sum listed as a contingency to cover the cost of items not shown on the Contract Documents. Contractor shall proceed with the work in question only after receiving written directions executed by the Owner and the Architect. Owner will not be obligated to pay the cost of any work performed without prior written authorization.

END OF SECTION

SECTION 01025 SCHEDULE OF VALUES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

Provide a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the work, as specified herein and in other provisions of the Contract Documents. The schedule of values is to be prepared in conformance with this section in order to assist the Architect with timely processing of all Application for Payments.

Related Work: Documents affecting work of this section include, but are not necessarily limited to, General Conditions and Sections in Division 1 of these Specifications.

1.2 SUBMITTALS

- 1. Prior to the first Application for Payment, submit a proposed schedule of values to the Architect, as outlined below:
 - Meet with the Architect and determine additional data, if any, required to be submitted.
 - 2. Secure the Architect's approval of the schedule of values prior to submitting the first Application for Payment. This will allow the Architect to certify the Application for Payment in the timeliest manner.

1.3 SCHEDULE OF VALUES

The Schedule of Values shall be broken down into item costs for each specification section as labor and materials as a minimum.

A. Schedule of Values - Items in addition to Specification sections.

Mobilization

Submittals and shop drawings

Temporary Facilities

Clean Up

Building Permit

Bonds, Insurance

General Contractors Fee

Misc. Mechanical Accessories

Demolition

Rough-In Labor (Electrical, Plumbing, Mechanical)

Rough-In Material (Electrical, Plumbing, Mechanical)

Finish Labor (Electrical, Plumbing, Mechanical)

Finish Material (Electrical, Plumbing, Mechanical)

Allowances (each listed separately)

Project Close-out Documents and O&M Manuals

B. The Schedule of Values must be submitted on AIA Document G703

1.4 SAMPLE SCHEDULE OF VALUES

END OF SECTION

SECTION 01045

CUTTING AND PATCHING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. Furnish all labor, materials, equipment and services necessary or incidental to completion of "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting, and patching required to restore surfaces to their original condition.
 - 1. Cutting and patching is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed, to remove and replace work not conforming to Contract requirements, or for other similar purposes.
 - Cutting and patching performed during the manufacture of products, or during the
 initial fabrication, erection, or installation processes is not considered to be "cutting
 and patching" under this definition. Drilling of holes to install fasteners and similar
 operations is also not considered to be cutting and patching.

1.2 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of the project
 - 2. Integrity of weather-exposed or moisture-resistant element
 - 3. Efficiency, maintenance, or safety of any operational element
 - 4. Visual qualities of sight-exposed elements
 - 5. Work of Owner or separate contractor
 - 6. Any work in or around any known or potential area in which asbestos or lead based products exist.
- B. Procedural Proposal for Cutting and Patching: Where prior consent for cutting and patching is required, submit proposed procedures for this work well in advance of the time work will be performed, and request consent to proceed. Include the following information, as applicable, in the submittal:
 - 1. Describe the nature of the work and how it is to be performed, indicating why cutting and patching cannot be avoided. Describe anticipated results of the work in terms of changes to and effects upon existing work, including structural, operational and visual changes, as well as other significant elements.
 - 2. List products to be used and firms that will perform work.
 - 3. Give dates when work is expected to be performed.
 - 4. List utilities that will be disturbed or otherwise be affected by work, including those that will be relocated and those that will be temporarily out of service. Indicate how long utility services will be disrupted.
 - 5. Where cutting and patching of structural work involves the additional reinforcement, submit details and engineering calculations to show how that reinforcement is integrated with the original structure to satisfy requirements.
 - 6. Consent by the Architect to proceed with cutting and patching work does not waive the Architect's right to later require complete removal and replacement of work found to be cut and patched in an unsatisfactory manner.

1.4 QUALITY ASSURANCE

- A. Requirements for Structural Work: Do not cut and/or patch structural work without the written direction of the structural engineer.
- B. Operational and Safety Limitations: Do not cut and patch operational elements or safety related components in a manner that would result in a reduction of their capacity, to perform in the manner intended, including energy performances, or that would result in increased maintenance, or decreased operational life, or decreasing safety. Before cutting and patching the following elements of work, and similar work elements where directed, obtain the Architect's consent to proceed with cutting and patching.
 - 1. Shoring, bracing, and sheeting
 - 2. Primary operational systems and equipment
 - 3. Water/moisture vapor/air/smoke barriers, membranes and flashings
 - 4. Noise and vibration control elements and systems
 - 5. Control, communication, conveying, and electrical wiring systems
- C. Visual Requirements: Do not cut and patch work exposed on the building's exterior or in its occupied spaces, in a manner that would, in the Architect's opinion, result in lessening the building's aesthetic qualities. Do not cut and patch work in a manner that would result in substantial visual evidence of cut and patch work. Remove and replace work judged by the Architect to be cut or patched in a visually unsatisfactory manner. If possible, retain the original installer or fabricator, or another recognized, experienced and specialized firm to cut and patch the following categories of exposed work:
 - 1. Architectural concrete finishes
 - 2. Brick and concrete unit masonry
 - 3. Ornamental metal
 - 4. Roofing
 - 5. Preformed metal panels
 - 6. Window system
 - 7. Gypsum or cement plaster
 - 8. Acoustical ceilings
 - 9. Carpeting
 - 10. Wall covering
 - 11. HVAC enclosure, cabinets or covers

1.5 PAYMENT FOR COSTS

- A. Cost for work necessary to accommodate installation of new work shall be borne by the Contractor or subcontractor responsible for installing new work.
- B. Costs caused by ill-timed or defective work, or work not conforming to contract documents, including costs for additional services of the Architect and other Design Consultants shall be borne by the party responsible in the judgment of Architect, for ill-timed, rejected or non-conforming work.
- C. Costs for work performed on instruction of Owner, other than the correction of defective or non-conforming work shall be responsibility of the Owner, who shall issue an appropriate Change Order for the increase in costs.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Except as otherwise indicated, or as directed by the Architect, use materials for cutting and patching that are identical to existing materials. If identical materials are not available or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible, with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics.
- B. For any change in material, submit a request for substitution under the provisions of the General Conditions.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execute cutting, fitting, and patching to complete work, and to:
 - 1. Fit several parts together which will integrate with other work.
 - 2. Uncover work to install ill-timed work.
 - 3. Remove and replace defective and non-conforming work.
 - 4. Remove samples of installed work for testing.
 - 5. Provide openings in elements of work for penetrations of mechanical and electrical work.
 - 6. Fill and refinish existing holes and damaged areas.

3.2 INSPECTION

A. Before cutting, examine the surface to be cut and patched and the conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

3.3 PREPARATION

- A. To prevent failure, provide temporary support of work to be cut.
- B. Protect other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.
- C. Take precautions not to cut existing pipe, conduit or duct serving the building, but scheduled to be relocated until provisions have been made to bypass them.

3.4 PERFORMANCE

- A. Employ skilled workmen to perform cutting and patching work. Except as otherwise indicated or as approved by the Architect, proceed with cutting and patching at the earliest feasible time and complete work without delay.
- B. Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible, review the proposed procedures with the original installer; comply with original installer's recommendations.
 - In general, where cutting is required, use hand or small power tools designed for sawing or grinding, not hammering and chipping. Cut through concrete and masonry using a cutting machine such as a carborundum saw or core drill to ensure a neat

- hole. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces. Temporarily cover the opening when not in
- 2. Comply with requirements of applicable sections of Division 2 when cutting and patching, excavating and backfilling.
- 3. Bypass utility services such as pipe and conduit, before cutting, where such utility services are shown or required to be removed, relocated or abandoned. Cut-off conduit and pipe in walls or partitions to be removed. After bypassing and cutting, cap, valve or plug, and seal tight the remaining portion of pipe and conduit to prevent entrance of moisture or other foreign matter.
- C. Patching: Patch with seams that are durable and as visible as possible. Comply with specified tolerances for the work.
- Where feasible, inspect and test patched areas to demonstrate integrity of work.
- 2. Restore exposed finishes of patched areas, and where necessary, extend finish restoration into retained adjoining work in a manner that will eliminate evidence of patching and refinishing.
- 3. Where removal of walls or partitions extend one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to achieve uniform color and appearance, remove the existing floor and wall coverings and replace with new materials.
 - a. Where a patch occurs in a smooth painted surface, extend final paint coat over the entire unbroken surface containing the patch, after the patched area has received prime and base coat.
- 4. Patch, repair or rehang existing ceilings as necessary to provide an even plane surface of uniform appearance.
- D. Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- E. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-rated material, full thickness of the construction element.
- F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

3.5 CLEANING

A. Thoroughly clean areas and spaces where work is performed or used as access to work. Completely remove paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finish is applied. Restore damaged pipe covering to its original condition.

PROJECT MEETINGS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. Contractor is required to participate in a series of regular project meetings. These meetings are scheduled by the Construction Manager for the benefit of the Owner and the project.
- B. These meetings include pre-construction conferences, progress meetings, pre-installation conferences, and close-out meetings.

1.2 PRECONSTRUCTION CONFERENCE

A. Construction Manager will administer site mobilization conference at project site for clarification of Owner and Contractor responsibilities, in use of site and for review of administration procedures.

1.3 PROGRESS MEETINGS

- A. Construction Manager shall schedule and administer all project meetings after mobilization conference throughout progress of the work at weekly intervals, plus any special called meetings, and all pre-installation conferences. Contractor is required to participate in this regular meeting.
- B. Construction Manager shall make physical arrangements for meetings, preside at meetings, record minutes, and distribute copies of minutes within two days to Owner, Architect, participants, and those affected by decisions made at meetings. Contractor is required to participate in this regular meeting.
- C. Required Attendance: Job Superintendent, Project Coordinator, Owner, and Architect as appropriate to agenda topics for each meeting.
- D. Suggested Agenda: Review of work progress, status of progress schedule and adjustments thereto, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions, and other items affecting progress of the work.

1.5 INSTALLATION CONFERENCES

- A. When required in individual Specification section, Contractor shall convene installation conferences prior to commencing work of the section.
- B. Require attendance of entities directly affecting, or affected by, work of the section.
- Review conditions of installation, preparation and installation procedures, and coordinate with related work.

SUBMITTALS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. Contractor is required to provide shop drawings, submittals, or manufacturer's data to allow the Architect to review them. The Contractor may also submit request for information (RFI). All submittals will be submitted to the Construction Manager.
- B. Each project manual section has submittal requirements listed and the time required for submittal.
- C. Contractor is required to list submittals as a separate item on their Schedule of Values and Application for Payment.
- D. The Architect cannot certify payment to the Contractor for submittals if the submittal review process is not complete in the time frame listed in the project manual or a time frame mutually agreed by the Architect, and Owner.

1.2 PROCEDURES

- A. Contractor creates shop drawings, product data, or samples as required by specific sections of the specifications. The Contractor is responsible for confirming and correcting all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating the work with that of all trades, and performing all work in a safe and satisfactory manner.
- B. Apply Contractor's stamp, signed, to each item submitted, certifying that review and verification of products, field dimensions, adjacent construction work and coordination of information is in accordance with the requirements of the work and Contract Documents.
- C. Trade Contractor transmits each item to the Construction Manager agent with approved form identifying project, contractor, subcontractor, major supplier; identify pertinent drawing sheet and detail number and specification section number, as appropriate. Identify any deviations from Contract Documents. No deviations will be allowed without prior approval through the substitution process.
- D. The CMa will not review submittals that have not been thoroughly reviewed by the Trade Contractor. If the documents have obvious errors that have not been noted by those reviews the documents will be returned to the Trade Contractor with a request to revise and resubmit from the CMa.
- E. Within 2 weeks of receipt of submittal the CMa will review the submittal for compliance with contract documents and transmit them to the Architect for review.
- F. The Architect will not review submittals that have not been thoroughly reviewed by the CMa and Trade Contractor. If the documents have obvious errors that have not been noted by those reviews the documents will be returned to the CMa with a request to revise and resubmit from the Architect. There will be no partial payments considered for submittals in the review process.
- G. Within 2 weeks of receipt of submittal the Architect and/or Engineer will review the submittal for compliance with contract documents and notify the CMa that the submittal is ready to be picked up.
- H. The CMa will notify the Trade Contractor that the review has been completed and the submittal may be picked up.

- I. The CMa will retain 1 copy of the submittals on site. The Architect will retain 2 file copies of the submittal. The Engineers will retain 1 copy of any submittals that they are required to review.
- J. One copy of the submittals retained by the Architect will be delivered to the Owner at the conclusion of the project.
- K. Contractor will revise and resubmit submittals requested to be revised and resubmitted. He will identify all changes made since the previous submittal. The process will then start over. The Architect will not certify applications for payment of submittals that are in the review process.
- L. The CMa and Architect are not obligated to review submittals that are requested to be revised and resubmitted a second time and may request additional funding from the Owner to do so. The Architect and CMa may request that the Owner claim the expense of repeated re-submittals to the Architect and CMa from the Trade Contractor for submittals resubmitted more than once.
- M. Note that most submittals are required within a short period of time of signing the contract. Refer to the specification Section to determine the exact time.

1.3 SHOP DRAWINGS AND PRODUCT DATA

- A. Provide 4 copies to be retained for the CMa, Architect, and Owner's files and any number required for the Contractor to complete his work.
- B. Manufacturer's Instructions:
 When work is specified to comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, at least two weeks prior to start of such work.
- C. All dimensions indicated on the drawings are based on the specific models and manufacturers of products, equipment, fixtures and miscellaneous items specified. If the Contractor uses an approved product by another listed manufacturer which is different than the specific model and manufacturer listed in these specifications, then the Contractor shall be solely responsible for the coordination of any dimensional changes required, including structural, relocation of walls, equipment, fixtures, ceilings and miscellaneous items. When dimensional changes are required in these situations, the Contractor shall submit a proposed modification drawing to the Architect for review prior to proceeding with the work. All causes and effects of the dimensional change shall be indicated on the Contractor's drawing submittal.

1.4 SAMPLES

- A. Submit a full range of requested manufacturer's colors, textures, and patterns for Architect's selection. Submit samples for selection of finishes in accordance with approved schedule, and in such sequence as to cause no delay in the work or in the work of any other Contractor.
- B. Submit samples to illustrate functional characteristics of the product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
- C. Submittals shall contain:
 - 1. Date of submission and dates of any previous submissions
 - 2. Project title and number
 - 3. Contract identification
 - 4. Names of Contractor, Supplier, Manufacturer
 - 5. Identification of sample, with specification section number
- D. Resubmission Requirements for Samples:
 - 1. Make any corrections or changes in the submittals required by the Architect and resubmit until approved. Refer to paragraph 1.2.I above.
 - 2. Submit new samples as required for initial submittal.

E. Submit the number specified in the respective Specification section; minimum of two, one will be retained by Architect. Reviewed samples may be used in the work if so indicated in the specification section.

1.5 MANUFACTURER'S CERTIFICATES AND WARRANTIES

A. Submit required certificates and warranties in duplicate.

CONSTRUCTION SCHEDULE

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. The construction schedule is of critical importance to Galveston County.
- B. Immediately after award of a contract the Construction Manager will work with each Contractor on the project to develop a critical path schedule. The Contractor is required to participate in and cooperate with this effort and to comply with the developed schedule.
- C. The Contractor shall coordinate his schedule with the Construction Manager Agent so that the entire work proceeds smoothly and without interruption. Refer to Article 2 of the Contract for Construction.
- D. The Contractor shall start the work upon notice to proceed and shall execute the work with diligence and dispatch so as to maintain such schedules and milestones as established in cooperation with the Construction Manager.
- E. Galveston County does not have any restrictions on the days or hours of work that are allowed or required to comply with the schedule except that the Construction Manager, Project Superintendent, or designated representative must be present whenever a Contractor is performing work on the project.
- F. The Contractor shall report progress critical to maintaining the schedule at the weekly project meeting held by the Construction Manager.
- G. If it is determined by the Construction Manager that the Contractor is falling behind schedule he will notify the Contractor at the weekly meeting and the Contractor must provide a plan of action to maintain the previously agreed schedule.
- H. The Contractor is cautioned that schedules and milestones are subject to review and revision, and in such event, such revisions will be made available for the Contractor's information at the jobsite office of the Construction Manager.
- I. It is the responsibility of the Contractor to attend regular project meetings, keep itself informed of any revisions to the schedule, and conform to any such revisions to the schedule.

NOTIFICATION OF ARCHITECT REQUIREMENTS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. The Architect and Consulting Engineers generally require 48 hours notice to plan their work and will be appreciative of your cooperation.
- B. In general, the Contractor shall notify the Architect whenever there is need of clarification or interpretation of the Contract Documents. This may be done without notice however, the Architect and/or Engineer may not be available immediately so plan ahead.
- C. The Contractor shall notify the Architect 48 hours in advance of certain stages of construction. The Contractors' Project Superintendent shall notify the Contractor on a regular basis of the ongoing work. These stages shall include, but not necessarily be limited to the following:
- 1. 02225 Demolition
- 2. 03300 Placing of all concrete
- 3. 07100 Concealment of flashing
- 4. 07200 Concealment of insulation
- 5. 07500 Roofing and sheet metal work
- 6. 07900, 08800 Installation of building and glazing sealants
- 7. 09500 Installation of ceiling grid
- 8. 09900 Painting and staining (each coat)
- 9. 09600 Installation of flooring
- 10. 15000, 16000 Completion of roughing-in of plumbing, heating, air conditioning and electrical work (prior to concealment)
- 11. 16000 Installation of all electrical fixtures
- 12. 15000 Installation of heating, ventilating and air conditioning
- 13. 15000 Installation of plumbing fixtures
- 14. 15000, 16000 Any and all testing specified for equipment, mechanical, electrical and plumbing systems

PART 2 - PROJECT MEETINGS

2.1 PRECONSTRUCTION CONFERENCE

A. The Contractor shall contact the Architect at least ten (10) days prior to commencing construction, in order to schedule a pre-construction meeting with the Architect and Owner. This meeting must occur prior to commencement of any construction.

2.2 PROGRESS MEETINGS

- A. Contractor shall schedule and administer project meetings throughout progress of the work.
- B. Contractor will make physical arrangements for meetings, preside at meetings, record minutes, and distribute copies within two (2) days to the Architect, participants, and those affected by decisions made at meetings.
- C. Required Attendance: Contractor's Project Superintendent, Contractor's Project Manager, Owner, and Architect as appropriate to agenda topics for each meeting.
- D. Suggested Agenda: Review of work progress, status of progress schedule and adjustments thereto, delivery schedules, submittals, maintenance of quality standards, pending changes

and substitutions, and other items affecting progress of work. This is a good time to review the upcoming Application for Payment.

2.3 PREINSTALLATION CONFERENCES

- A. For each individual Specification section or each subcontractor, convene a pre-installation conference prior to commencing work of that Section.
- B. Require attendance of entities directly affecting or affected by work of that section.
- C. Review conditions of installation, preparation and installation procedures, and coordinate with related work.

TEMPORARY FACILITIES AND CONTROLS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. Environmental Protection: Provide environmental protection as required by authorities having jurisdiction and as indicated in Contract Documents.

1.2 GENERAL TRADE CONTRACTOR REQUIREMENTS

- A. Contractor shall be responsible for furnishing, installing or otherwise providing any or all of the following temporary facilities, structures or services as they may be necessary or required for or during, performance of the work of his Contract
 - 1. Temporary field office facilities complete, including all furniture, heat, cooling, lighting, telephone, plumbing and toilet fixtures as he may require for his exclusive use. (Site location and number are subject to approval of the Construction Manager).
 - 2. Temporary storage facilities, sheds or buildings as may be required for the proper protection or storage of materials and/or equipment. (Site location and number are subject to approval of Construction Manager).
 - 3. Temporary extension from, and hookup to, all temporary utilities during construction.
 - 4. Maintenance, cleanup and removal of all temporary facilities.
 - 5. Furnishing, erection, maintenance and removal of all temporary hoists and scaffolding as may be required for the performance of the work of his Contract.
 - 6. All temporary facilities, structures, services or items of work specifically required or defined in the Scope of Work or otherwise required by the Contract Documents for his work.
 - 7. Distribution of drinking water for his construction personnel.
 - 8. At the end of the day's work, all work subject to damage by adverse weather conditions shall be covered or otherwise protected as required. Weather protection shall be adequate to permit Contractor to work on a continuous basis without shutdown due to temperature or weather conditions as far as possible.
 - 9. No temporary service shall be removed or disconnected until the new parts have been installed to replace them, properly connected and ready for use. The changing over from temporary to permanent work shall be done expeditiously, and if possible so that no part of the building or premises shall be without adequate service.

1.3 TEMPORARY ELECTRICITY AND LIGHTING

- A. Owner will pay cost of energy used directly to utility. Exercise measures to conserve energy. Utilize Owner's existing power service.
- B. Provide temporary electric feeder from existing building electrical service at location as directed. Do not disrupt Owner's use of service.
- C. Complement existing power service capacity and characteristics as required.
- D. Connecting and disconnecting Contractor tools and equipment to (and from) the distribution system will be performed by qualified personnel, ALL grounding as required by the National Electrical Code, OSHA or any and all local codes, including approved ground fault interrupters shall be furnished and installed at the Contractors expense.
- E. The Contract will install temporary lighting in all areas and rooms. Temporary lighting shall be a minimum of 2 watt per square foot. For all areas 3,200 or less, 100-watt lamps spaced approximately at 20 foot centers shall be used. Each room or enclosed area shall have, at least, one lighting and one tool outlet. Where 100 watt lights are used, the outlets shall consist of double weatherproof sockets. One (1) socket shall be used for the 100-watt lamp and the other socket shall be used for portable power tools. Any temporary lighting required beyond the foregoing shall be provided by the party requiring the same and the work will be paid for by the Trade Contractor.

1.4 **TEMPORARY HEATING**

- A. It is not anticipated that the permanent building system will be utilized to provide "temporary heat" during the major portion of construction operations.
- B. Within these parameters the Trade Contractor must provide any supplemental heat required to perform his work
- C. Maintain minimum ambient temperature of 50 degrees F in areas where construction is in progress, unless indicated otherwise in product sections.
- D. It is anticipated that activation, testing and balancing of the building heating/cooling system will be critical to the completion and acceptance of the project and therefore actuation, of the permanent system will be scheduled for the earliest possible time

1.5 TEMPORARY COOLING

- A. Will not be provided.
- B. It is anticipated that activation, testing and balancing of the building heating/cooling system will be critical to the completion and acceptance of the project and therefore actuation, of the permanent system will be scheduled for the earliest possible time

1.6 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Utilize existing ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

1.7 TEMPORARY WATER SERVICE

- A. Owner will pay cost of temporary water. Exercise measures to conserve energy. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing.
- C. Potable water is available to the Contractor at a central location. Extensions of the water supply for Contractor's exclusive use shall be the responsibility of the Contractor.

1.8 TEMPORARY SANITARY FACILITIES

- A. The Construction Manager will provide temporary toilets, excluding Contractor's trailer hookup.
- B. The Contract will provide rubbish containers and rubbish disposal service.

1.9 FIELD OFFICES AND SHEDS

- A. Designated existing spaces may be used for field offices and for storage:
- B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.
- C. Storage Areas And Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and for inspection of products to requirements of Section 01600.
- D. Maintenance And Cleaning: Daily janitorial services for offices; periodic cleaning and maintenance for office and storage areas. Maintain approach walks free of mud, water, and snow.
- E. Removal: At completion of Work remove buildings, foundations, utility services, and debris. Restore areas.

1.10 VEHICULAR ACCESS

- A. Provide unimpeded access for emergency vehicles. Maintain 20-foot width driveways with turning space between and around combustible materials.
- B. Provide and maintain access to fire hydrants and control valves free of obstructions.

1.11 PARKING

- A. Use of designated existing on-site streets and driveways used for construction traffic is permitted. Tracked vehicles not allowed on paved areas.
- B. Use of designated areas of existing parking facilities used by construction personnel is permitted.
- C. Do not allow heavy vehicles or construction equipment in parking areas.
- D. Maintenance:
 - Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.

2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

E. Removal, Repair:

1. Repair existing facilities damaged by use, to original condition.

1.12 PROGRESS CLEANING AND WASTE REMOVAL

- A. Salvage nonhazardous demolition and construction waste and recycle.
- B. Maintain areas free of waste materials, debris, and rubbish <u>on a daily basis</u>. Maintain site in a clean and orderly condition <u>on a daily basis</u>.
- C. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, **on a daily basis** and prior to enclosing the space.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- E. Collect and remove waste materials, debris, and rubbish from site daily and dispose off-site.

1.13 TRAFFIC REGULATION

- A. Signs, Signals, And Devices:
 - 1. Post Mounted and Wall Mounted Traffic Control and Informational Signs: As approved by local jurisdictions.
 - 2. Automatic Traffic Control Signals: As approved by local jurisdictions.
 - 3. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
 - 4. Flag-person Equipment: As required by local jurisdictions.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- D. Haul Routes: Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.

1.14 **BARRIERS**

A. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.15 ENCLOSURES AND FENCING

A. Contractor may provide fence around construction site; equipped with vehicular and pedestrian gates with locks.

1.16 **SECURITY**

A. Security Program:

- 1. Protect work, existing premises, and Owner's operations from theft, vandalism, and unauthorized entry.
- 2. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

B. Entry Control:

- 1. Restrict entrance of persons and vehicles into Project site and existing facilities.
- 2. Allow entrance only to authorized persons with proper identification.
- 3. Maintain log of workers and visitors, make available to Owner on request.
- Coordinate access of Owner's personnel to site in coordination with Owner's security forces.

C. Restrictions:

1. Do not allow cameras on site or photographs taken except by written approval of Owner.

The Contractor will provide temporary fire safety equipment for general use.

D. Site Security, Personnel and Property Protection

- 1. Contractor shall maintain the security of the worksite and shall restrict access to the site to the following:
 - a. its employees;
 - b. employees of subcontractors;
 - c. representatives of manufacturers whose goods are utilized in the work and are called to the site by either the Contractor or the Program Administrator; and
 - d. agents and/or employees of the County.
- 2. Contractor shall provide adequate protection to persons on the worksite, adjacent properties, and utilities as is necessary to keep each free of damage or injury.
- 3. Contractor shall take proper means to protect adjacent or adjoining properties which might be injured or seriously affected by construction undertaken under this Agreement from any damage or injury by reason of said process of construction. Contractor shall be liable for any and all claims for such damage on account of its failure to fully protect all adjoining properties.
- 4. When performing any cutting, removal, creating opening or holes, etc., the Contractor, by use of barricades, flagmen, or other means, shall provide protective measures to assure that other workmen or the public are not exposed to potential injury by the operation being conducted.

5. The Contractor shall be responsible for handling and transporting (including lifting) his material and equipment to the location of need in a timely manner.

1.17 **DUST CONTROL**

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.18 NOISE CONTROL

A. Provide methods, means, and facilities to minimize noise from noise produced by construction operations.

1.19 **PEST CONTROL**

A. Provide methods, means, and facilities to prevent pests and insects from entering the facility.

1.20 **POLLUTION CONTROL**

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.21 RODENT CONTROL

A. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.22 HOUSEKEEPING - CLEANING AND RUBBISH REMOVAL

- A. Contractor shall be responsible for daily and final cleanup and continuous removal of all rubbish and debris from the building and site.
- B. The jobsite shall be maintained in a neat orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Contractor will remove all crates, cartons and other flammable waste materials or trash from the work areas at the end of each working day.
- C. Electrical closets, pipe and duct shafts, chases, furred spaces and similar spaces which are generally unfinished, shall be cleaned and left free from rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt and dust before substantial completion review.
- D. Contractor shall be responsible for cleaning all surfaces as necessary to make them free of spatters or other deposits of paint, plaster, mortar, concrete, adhesives, roofing, dirt, soil, oil, or any other material foreign to the surface involved.
- E. The Contractor shall be responsible to maintain his own trailer, storage and work areas in a sanitary condition to minimize the hazard of attracting vermin and breeding mosquitoes. Rodent extermination materials shall be those approved by the local health department or other agency having jurisdiction.
- F. Use only cleaning materials and methods recommended by manufacturer of surface to be cleaned. Use cleaning materials only on surfaces recommended by cleaning material manufacturer. Each Contractor shall be responsible for assuring that affected employees are provided with, and required to use, all needed personal protective devices in connection with cleaning.

- G. At completion of work, Contractor shall remove tools, equipment, machinery, and surplus materials from the project site and perform whatever additional cleaning is required.
- B. Vehicle cleaning Trucking
- 1. Cleaning of concrete equipment shall be performed off site. Cleaning shall be conducted in such a manner as to prevent spillage of fluid or concrete to the ground or penetration of existing ground soil.

1.23 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

SECTION 01630 SUBSTITUTIONS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section

PART 1 - GENERAL

1.1 SCOPE

- A. Comply with all requirements of the Contract Documents, including, but not limited to, specified sizes, dimensions, materials, finishes, products, manufacturers, suppliers, brands, processes, procedures, tolerances, sequences, etc.
- B. If, for some reason, all the multiple requirements cannot be met and the Bidder wishes to request a substitution of products in place of those specified, the Bidder may make a formal request to the Architect for consideration.
- C. Substitution of products considered and accepted by the Owner and Architect will be included in addenda prior to the proposal date. Request must be made at least ten (10) days prior to the proposal date to be included in addenda.

1.2 BIDDER

- A. By making requests for substitutions the Bidder represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified.
- B. The Bidder represents that he will provide the same warranty for the substitute product that would have provided for the specified product.
- C. The Bidder certifies that the cost data presented is complete and includes all related costs under this Contract except the Architect's redesign cost and waives all claims for additional costs related to the substitution that subsequently become apparent.
- D. The Bidder will coordinate the installation of the accepted substitute and make such changes as may be required for the Work to be completed in all respects.
- E. The Bidder will notify the Architect of any space accommodations required by a substitution.
- F. The Bidder will notify the Architect of any known disadvantage as compared to the specified item.
- G. The Bidder will submit justifying data on which the Architect can base a decision.

1.3 ARCHITECTS DUTIES AND RESPONSIBILITIES

- A. The Architect has no obligation to entertain any proposed substitution unless the Contract can not be fulfilled under the original requirements.
- B. The Architect will analyze only proposed substitutions that he perceives likely to benefit the Owner by lower costs, improved quality or saving time.

1.4 PROPOSED SUBSTITUTIONS DURING BID PERIOD

- A. Request must be submitted to the Architect in sufficient time before the proposal date to permit evaluation and notifying Bidder, if approved. This time is a minimum of ten (10) day prior to proposal date.
- B. Substitutions, if approved, will be by written Addenda to all Bidders. No oral, telephonic, or other method will be used to acknowledge accepted substitutions. If it is not in addenda it is not acceptable to include it in a bid.

1.5 PROPOSED SUBSTITUTIONS AFTER CONTRACT AWARD

- A. Must be submitted so as not to interfere with the completion of the Work, and within 30 days after the Contract Date, except for emergencies.
- B. Substitutions, if approved, will be by Change Order.

1.6 VOLUNTARY ALTERNATE BID SUBSTITUTIONS

A. Will not be accepted. Additions of such voluntary alternate bids may make the bid void.

GUARANTEES AND CERTIFICATES AND CLOSE-OUT

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. Contractor shall be responsible for and make good without extra charge any defects due to faults in labor or material on all parts of the Contract for one year (and longer where noted) after Substantial Completion of the Work as defined in the General Conditions.
- B. Property not in the Contract but damaged due to defects, shall be repaired or replaced by the Contractor without extra charge.
- C. When notified by the Owner or Architect that a defect exists and there is a doubt that the defect might be normal maintenance or a result of lack of normal maintenance, the Owner will send a representative with the Contractor's representative to determine responsibility. Owner will not pay for such service calls if the defect is judged to be normal maintenance or a result of a lack of normal maintenance.
- D. Neither the Final Certificate of Payment or payment of same, nor provision in the Contract Documents shall relieve the Contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by law and upon written notice, he shall remedy any defects due thereto and pay all expenses for any damage to other Work resulting there from. This guarantee of Work shall not relieve the Contractor of obligations of any Work not according to Plans and Specifications regardless of time of discovery.

1.2 WARRANTY

- A. In addition to the General Contractor's one-year warranty, guarantees shall be submitted to the Architect in duplicate prior to application for final payment. Unless specified otherwise in their respective sections, all guarantees shall be for a period of one year from the date of Substantial Completion as evidenced by the Architect's Certificate of Substantial Completion. All guarantees shall include all labor, material and delivery costs required to correct defective material or installation. Guarantees include but are not limited to:
 - 2. Custom Hollow Metal
 - 3. Dampproofing and waterproofing (2-year)
 - 4. Sealants (2-year)
- B. Refer to Section 01630 for substitutions.

1.3 SUBSTANTIAL COMPLETION AND CLOSE-OUT

- A. On or about the end of the project, the following items shall be performed in order to achieve Substantial Completion and project close-out:
 - Contractor submits a thorough list of items to be completed or corrected (Punch List), along with a written request for Substantial Completion and inspection of the work.
 - 2. The Architect and Engineer will inspect the project utilizing the Contractor's prepared Punch List, noting completed or incomplete items, and prepare a supplemental list of items that have been omitted or incomplete items that were not previously noted. The Architect's Project Representative, at his discretion, may attend and assist in the preparation of the Contractor's punch list.
 - 3. Contractor completes corrections, and Architect and Engineer re-inspect (with Owner) to establish Date of Substantial Completion. **Note:** Any items remaining on date of Substantial Completion are appended to Certificate (AIA G-704).

- 4. After the Certificate of Substantial Completion has been executed by all parties, it is returned to the Architect. Items on the appended Punch List are to be completed or corrected within the time limits established in the Certificate of Substantial Completion.
- 5. Final Change Order executed (including allowance adjustments).
- 6. Contractor submits written notice that work is ready for final inspection and acceptance, and shall specifically note each item on the Punch List as being complete or the status of any incomplete item.
- 7. Contractor submits Final Application for Payment and a Certificate of Compliance, which indicates the following:
 - a. All Permit Numbers
 - b. Utility Release Dates
 - The building has been duly inspected and found to comply with all code requirements and ordinances.
 - d. A Certificate of Occupancy has been issued.
- 8. A-E (with Owner) make final inspection
- 9. Contractor submits additional final items:
 - a. Consent of Surety to Final Payment (AIA G-707)
 - b. Contractor's Affidavit of Payment of Debts and Claims (AIA G-706)
 - c. Contractor's Affidavit of Release of Liens (AIA G-706A with contractors, subcontractors and suppliers separate releases)
 - d. General Contractor's Guarantee
 - e. Subcontractors' Guarantees.
 - f. Maintenance and Instruction Manuals. All manuals will contain an index listing the information submitted. The index sections will be divided and identified by tabbing each section as listed in the index.
 - g. Record Drawings (reproducible sepias)
 - h. Final List of Subcontractors (AIA G-805)
 - i. Affidavits from Contractor Subcontractors and suppliers stating that no asbestos products have been installed in this project.
 - j. Furnish written warranties to the Owner including specific items in each product warranty stipulated for individual sections.
 - k. Documents identified as "affidavit" must be notarized.
- 10. Final Cleaning:
 - a. The work area shall be thoroughly cleaned inside and outside. Cleaning includes removal of smudges, marks, stains, fingerprints, soil, dirt, spots, dust, lint, and other foreign materials from finished and exposed surfaces.
 - b. Remove all temporary facilities.
- B. All close-out documents shall be submitted in three ring binders with index tabs, detailed Table of Contents and page numbers. The close-out documents must be neatly organized and easily useable, as determined by the Architect and Owner.
- C. Final release of retainage will not be certified by the Architect until the Contractor completes all of the above mentioned requirements.
- D. Terminal Inspection:
 - 1. Immediately prior to expiration of the one-year guarantee period, the Contractor shall make an inspection of the work in the company of the Architect and the Owner. The Architect and the Owner shall be given not less than ten (10) days notice prior to the anticipated date of terminal inspection.
 - 2. Where any portion of the work has proven to be defective and requires replacement, repair or adjustment, the Contractor shall immediately provide materials and labor necessary to remedy such defective work, and shall execute such work without delay until completed to the satisfaction of the Architect and the Owner, even though the date of completion of the corrective work may extend beyond the expiration date of the guarantee period.
 - 3. The Contractor shall not be responsible for correction of work which has been damaged because of neglect or abuse by the Owner, nor the replacement of parts necessitated by normal wear in use.

MINOR DEMOLITION FOR REMODELING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

- A. Removal of designated building equipment and fixtures; removal of designated construction; dismantling, cutting and alterations as indicated and necessary for the completion of the Work; disposal of materials identification of utilities; salvaged items; and protection of items to remain.
- B. The Owner desires that the absolute minimum of demolished materials be delivered to a landfill. Collect and deliver to a recycling facility all demolished concrete, metals, woods, and other materials where recycling facilities are available.

1.2 SUBMITTALS

- A. Shop Drawings: Indicate removal sequence and location of salvageable items; location and construction of temporary work.
- B. Project Record Documents: Accurately record actual locations of capped utilities and subsurface obstructions.
- C. Close-out documents.

1.3 SEQUENCING

- A. Sequence activities in the following order:
 - . As agreed during a preconstruction conference.

1.4 SCHEDULING

- A. Schedule Work to coincide with new construction.
- B. Describe demolition removal procedures and schedule.

1.5 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify A/E. Do not resume operations until directed.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Provide, erect, and maintain temporary safeguards, including warning signs and lights, barricades, and similar measures, for protection of the public, Owner, Contractor's employees, and existing improvements to remain.
- B. Erect and maintain weatherproof closures for exterior openings.
- C. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.
- D. Protect existing materials and existing improvements which are not to be demolished.
- E. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.
- F. Notify affected utility companies before starting work and comply with their requirements.
- G. Mark location and termination of utilities.
- H. Provide appropriate temporary signage including signage for exit or building egress.

3.2 DEMOLITION

- A. Disconnect, remove, cap, and identify designated utilities within demolition areas.
- B. Demolish in an orderly and careful manner. Protect existing improvements and supporting structural members.
- C. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- D. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- E. Remove temporary Work.

CONCRETE PAVING AND FLATWORK

CONDITIONS OF THE CONTRACT AND DIVISION 1 APPLY TO THIS SECTION.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of concrete paving, concrete walkways, and concrete flatwork.

1.3 RELATED WORK

- A. Section 01410 Testing laboratory Services
- B. Section 01420 Notification of Architect Requirements
- C. Section 02200 Earthwork

1.4 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Shop Drawings: Within four weeks of award of contract, submit:
 - Manufacturer's specifications and other data needed to prove compliance with specified requirements.
 - 03 Concrete mix designs.
 - 04 Manufacturer's installation instructions.
- C. Product Data. Manufacturer's specifications and technical data.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Compacted Sub-Base: as specified in Section 02200.
- B. Forms: steel, wood, or other suitable material(s) of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal.
 - Use straight forms free from distortion and defects. Use flexible spring steel forms or laminated boards to conform to radius bends as required.
 - Form Coating: a non-staining form release agent that will not discolor or deface surface of concrete.
- C. Reinforcing Bars: deformed billet steel bars, ASTM A-615, Grade 40, in sizes indicated.
 - O1 Comply with provisions of Section 03300
 - O2 Chairs: W.H.C. Products, Inc. Series "G" or Aztec "E-Z" with sand plates. Use type with sand cushion pads where concrete is on grade.
 - 03 Mesh:
 - a. Conform to ASTM A185
 - b. Shall be type which is fabricated and delivered to job site in flat sheets. Rolls of mesh shall not be acceptable.

D. Construction Joints

- Metal Keyway: tongue and groove joint, 5" wide, 24 gauge, galvanized with 18 gauge stake pins; Heckman Building Products, Model 95-50; or approved equal.
- H. Tooled Joint: Scored 1/4" wide x 1/4" the thickness of the concrete in depth.
- I. Concrete Materials: Comply with the requirements of Section 03300 for concrete materials, admixtures, curing materials, and others as required with the following additions and exceptions.

PART 3 - EXECUTION

3.1 SITE CONDITIONS

- A. Prior to all work of this Section, carefully inspect the installed work of all other trades, and verify all such work is complete to the point where this installation may properly commence. In the event of discrepancy, immediately notify the Architect. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.
- B. Remove all loose material from compacted sub-base immediately prior to placing concrete.
- C. Verify that forms have been set to the grades and lines required and that they are rigidly braced and secured.

3.2 ENVIRONMENTAL CONDITIONS

- A. Do not place concrete in contact with frozen earth. Do not commence concrete placement unless temperature is at least 35°F (2°C) and rising, or slabs until the temperature rises above 40°F.
- B. Discontinue concrete placement when air temperatures exceed 95°F.
- C. Do not place concrete during rain unless adequate protection is provided.

3.3 INSTALLATION

- A. Joints
 - O1 Construct expansion and construction joints true-to-line with face perpendicular to surface of concrete.
- B. Unless specifically shown on the Drawings, the Contractor shall locate joints in accordance with the following schedule:
 - Sidewalks: maximum distance between load transfer joints shall be 4 times the sidewalk width. Provide scored joints in between expansion joints in equal intervals +/- the width of the sidewalk.
 - O2 Construction joints: obtain approval of Architect for locations and types of all proposed construction joints.
 - Install flexible expansion joints at all locations where flatwork or pavement is poured against a building foundation or other structural footing / beam.
 - Tool all joints and edges to a clean rounded form using proper joint tools.
- C. Concrete Placement
 - Of General: Comply with the provisions as specified in Section 03300 Cast-In-Place Concrete.
 - Deposit and spread concrete in a continuous operation. If interrupted for more than 3/4 of an hour, place a construction joint.
- D. Finishing
 - All concrete flatwork and sidewalks shall receive trowel finish within 2" of all joints and a light broom finish with the first section perpendicular to the run of the sidewalk and then the next parallel to the run of the sidewalk.
 - O2 All concrete pavement shall receive a medium broom finish, parallel to the direction of drainage
- E. Curing
 - O1 Protect and cure finished concrete paving, complying with the requirements of Section 03300 Cast-In-Place Concrete.
 - Forms shall remain in place not less than 24 hours after concrete placing.
- F. Repairs And Protection
 - After form removal, clean ends of joints and point up any minor honey combed areas. Repair or replace broken or defective concrete, as directed by the Architect.
 - Protect concrete from damage until acceptance of Work. Exclude traffic from pavement for at least 7 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials.
 - O3 Sweep all concrete pavement and wash free of stains, discolorations, dirt, and all other foreign materials just prior to final inspection.

PAVEMENT MARKING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Striping paint for marking on existing asphalt and concrete pavements, new asphalt, coated asphalt, or for restriping; brush, roller, or spray applied.

1.2 RELATED SECTIONS

Not Used.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's printed product data sheets.
- B. Samples: Submit full range of manufacturer's color samples of actual finish 2-inch by 3-inch minimum size, not color photo representations.
- C. Manufacturer's Instructions: Submit manufacturer's printed installation instructions.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing Work of this Section with minimum three (3) years documented experience.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Apply marking paint in dry weather when pavement and atmospheric temperatures are minimum 50 degrees F and are anticipated to remain above 50 degrees F for four (4) hours after completing application.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Neyra Industries, Inc., "PermaLine, Marking Paint".

2.2 MATERIALS

- A. Marking Paint:
 - 1. High solids, water based acrylic latex, containing ultraviolet resistant pigments.
 - 2. Color: As selected.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Inspect existing pavement surfaces for conditions and defects that will adversely affect work and which cannot be put into an acceptable condition through normal preparatory work.
- B. Do not place marking over unsound pavements. If condition exists, notify A/E.
- C. Starting installation constitutes acceptance of surface as suitable for installation.
- D. Verify that new asphalt is complete, has been accepted by A/E, and cured minimum of 14 days.

3.2 PREPARATION

- A. Layout marking using guide lines, templates, and forms.
- B. Thoroughly clean surfaces free of dirt, sand, gravel, oil and other foreign matter.
- C. Protect adjacent curbs, walks, fences, and other items from receiving marking paint.
- D. Verify that pavement coating has been accepted by A/E and has cured minimum 24 hours under drying conditions in accordance with manufacturer's instructions.

3.3 APPLICATION

- A. Apply marking paint in accordance with manufacturer's instructions at rate of one gallon per 150 square feet by power spray, brush, or roller; one gallon per 450 lineal feet of 4-inch wide stripes.
- B. Apply stripes straight and even, as indicated.
- C. Apply stripes and other markings in widths and colors indicated.

3.4 CLEANING

A. Remove overspray, spills, or drips from surfaces other than those requiring marking paint.

3.5 PROTECTION

A. Barricade marked areas until marking paint is dried and ready for traffic. Area may be opened to traffic in approximately six (6) hours or in accordance with manufacturer's instructions.

PARKING BUMPERS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of Precast concrete parking bumpers and anchorage.

1.2 REFERENCES

- A. ASTM A 615 Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- B. ASTM C 33 Concrete Aggregates.
- C. ASTM C 150 Portland Cement.
- D. ASTM C 260 Air-Entraining Admixtures for Concrete.
- E. ASTM C 330 Lightweight Aggregates for Structural Concrete.

1.3 SUBMITTALS

- A. Product Data: Submit unit configuration, dimensions.
- B. Samples: Submit two concrete bumper units, illustrating surface finish.

1.4 COORDINATION

A. Coordinate the Work with pavement placement and parking striping.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Gage Brothers Concrete Products.
- B. Southern Cast Stone Co., Inc.

2.2 CONCRETE BUMPERS

Concrete and Reinforcement Materials: Specified in Section 03200 and Section 03300.

2.3 CONFIGURATION

- A. Nominal Size: 5 inches high, 7 ½ inches wide, 6 feet long.
- B. Profile: Manufacturer's standard with drainage slots.

2.4 ACCESSORIES

- A. Dowels: Steel, unfinished; 1/2-inch diameter, 18 inch long, pointed tip.
- B. Adhesive: Epoxy type.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install units without damage to shape or finish. Replace or repair damaged units.
- B. Install units in alignment with adjacent work.
- C. Fasten units in place with two dowels per unit bumper full bed of adhesive.

3.2 SCHEDULES

A. Parking Area and Driveway: Gray cement, smooth surface finish, doweled.

CONCRETE FORMS AND ACCESSORIES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of formwork for cast-in place concrete, with shoring, bracing, and anchorage; openings for other work; form accessories; and form stripping.

1.3 RELATED WORK

- A. Section 03200 Concrete Reinforcement.
- B. Section 03300 Cast-in-Place Concrete.
- C. Section 07145 Underslab Waterproofing
- D. Section 07160 Damproofing Below Grade

1.4 SUBMITTALS

- A. Shop Drawings: Submit formwork and shoring shop drawings; indicate:
 - Pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports.
 - Means of leakage prevention for concrete exposed to view in finished construction.
 - O3 Sequence and timing of erection and stripping assumed compressive strength at time of stripping, height of lift and height of drop during placement.
 - Vertical, horizontal and special loads in accordance with ACI 347, Section 2.2 and camber diagrams, if applicable.
 - Notes to formwork erector showing size and location of conduits and piping embedded in concrete in accordance with ACI 318, Section 6.3.
- B. Product Data: Submit data on void form materials and installation requirements.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347, ACI 301, and ACI 318.
- B. For wood products furnished for Work of this Section, comply with applicable provisions of AF&PA National Design Specifications for Wood Construction.
- C. Maintain one copy of each document on site.
- D. Design formwork under direct supervision of a professional engineer experienced in design of this work and licensed in the State of Texas.

1.6 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

A. Section 03300 - Cast-in-Place Concrete: Supply of concrete accessories for placement by this Section.

1.7 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Formwork (Vertical Structures):
 - 01 Basis of Measurement: By the square foot.
 - Basis of Payment: Includes form materials, placement, placing accessories, stripping.
- B. Formwork (Horizontal Supported Structures):
 - 01 Basis of Measurement: By the square foot.
 - Basis of Payment: Includes form materials, placement, placing accessories, stripping.

1.8 REFERENCES

- A. ACI 117 Tolerances for Concrete Construction and Materials.
- B. ACI 301 Structural Concrete for Buildings.
- C. ACI 318 Building Code Requirements for Reinforced Concrete.
- D. ACI 347 Recommended Practice For Concrete Formwork.

- E. AF&PA National Design Specifications for Wood Construction.
- F. ASME A17.1 Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks
- G. ASTM D 1751 Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-Extruding and Resilient Bituminous types).
- H. SPIB 1994 Standard Grading Rules for Southern Pine Lumber (and Supplements).
- I. WCLIB Rule No. 17 Standard Grading and Dressing Rules.

1.9 DESIGN REQUIREMENTS

Design, engineer and construct formwork, shoring and bracing to conform to design and code requirements; resultant concrete to conform to required shape, line and dimension.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver void forms and installation instructions in manufacturer's packaging.
- B. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.11 COORDINATION

- A. Coordinate this Section with other sections of work, which require attachment of components to formwork
- B. If formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement before proceeding, request instructions from A/E.

PART 2 - PRODUCTS

2.1 WOOD FORM MATERIALS

- A. Form Materials: At Contractor's discretion.
- B. Plywood: Douglas Fir or Spruce species; solid one side grade; sound undamaged sheets with clean, true edges.
- C. Lumber Forms: Use for edge forms and unexposed finish concrete. Boards shall be 6 inches or 8 inches in width, shiplap or tongue and groove, Standard Grade Douglas Fir, conforming to WCLIB Standard Grading and Dressing Rule No. 17. Surface boards on four sides.
- D. Plywood Forms: Use for exposed finish concrete. Forms shall conform to PS-1. Each panel shall carry the grade trademark of the APA/EWA and shall be full size 4-foot by 8-foot panels. Use release agent at exposed finish concrete.
 - O1 Plywood for surfaces to receive membrane waterproofing shall be a minimum of 5/8-inch thick and shall be APA Exterior grade.
 - O2 Plywood where Smooth Finish is required, as shown on Drawings, shall be HD Overlay Plyform Structural I Exterior grade, minimum of 3/4-inch thick.

2.2 PREFABRICATED FORMS

- A. Manufacturers:
 - 01 Aluma-Systems Inc., Burke Co.
 - 02 Economy Forms Corp.
 - 03 Molded Fiber Glass Concrete Forms Co.
 - 04 Perma Tubes.
 - 05 Sonoco Products Co.
 - 06 Symons Corp.
 - 07 Western Forms, Inc.
- B. Preformed Steel Forms: Minimum 16 gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
- C. Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- D. Pan Type: Steel of size and profile required.
- E. Steel Forms: Sheet steel, suitably reinforced, and designed for the particular use shown on Drawings.
- F. Form Liners: Smooth, durable, grainless and non-staining hardboard, unless otherwise shown on Drawings.
- G. Framing, Studding and Bracing: Stud or No. 3 structural light framing grade.

2.3 FORMWORK ACCESSORIES

- A. Spreaders: Standard, noncorrosive metal form clamp assembly, of type acting as spreaders and leaving no metal within 1 inch of concrete face. No wire ties, wood spreaders or through bolts will be permitted.
- B. Form Anchors and Hangers: Anchors and hangers used for exposed concrete shall not leave exposed metal at surface. Hangers supporting forms from structural steel shall be symmetrically arranged on supporting members to minimize twisting or rotation of member. Penetration of structural steel members will not be permitted.
- C. Form Release Agent: Colorless mineral oil which will not stain concrete, absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete.
 - 01 Arcal Chemical Corporation, "Arcal-80".
 - Nox-Crete Company, "Nox-Crete Form Coating".
 - 03 Industrial Synthetics Company, "Synthex".
- D. Corners: Chamfer; ¾ inch by ¾ inch size; maximum possible lengths.
- E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify lines, levels, and centers before proceeding with formwork. Ensure that dimensions agree with Drawings.

3.2 EARTH FORMS

A. Hand trim sides and bottom of earth forms. Remove loose soil prior to placing concrete. Trench earth forms neatly, accurately, and at least 2 inches wider than footing widths shown on Drawings, unless otherwise indicated. Construct wood edge strips at top of each side of trench to secure reinforcing and prevent trench from sloughing. Form sides of footings where earth sloughs. Tamp earth forms firm and cleaned of debris and loose material before depositing concrete.

3.3 INSTALLATION

- A. Formwork General: Sloped surfaces steeper than 1.5 horizontal to 1 vertical should be provided with a top form to hold the shape of the concrete during placement, unless it can be demonstrated that top forms can be omitted. Construct forms to the correct shape and dimensions, mortar-tight, of sufficient strength, and so braced and tied together that movement of workers, equipment, materials, or the placing and vibrating of concrete shall be strong enough to maintain their shape under all imposed loads. Camber where necessary to assure level finished soffits unless otherwise shown on Drawings. Verify horizontal and vertical positions of forms and correct inaccuracies before placing concrete in any form. Complete wedging and bracing before placing concrete.
- B. Forms for Smooth Finish Concrete: Use steel, plywood or lined board forms. Clean and smooth plywood and form liners, uniform in size, and free edges and holes from damage. Form lining shall have close-fitting square joints between separate sheets and shall not be sprung into place. Sheets of form lines and plywood shall be full size wherever possible and joints shall be taped to prevent protrusions in concrete. Use special care in forming and stripping wood forms to protect corners and edges. Level and continue all horizontal joints. Wet wood forms at all times until stripping.
- C. Forms for Surfaces to Receive Membrane Waterproofing: Use plywood or steel forms. After erection of forms, tape form joints to prevent protrusions in concrete.
- D. Framing, Studding and Bracing: Space studs at 16 inches on center maximum for boards and 12 inches on center maximum for plywood. Framing, bracing, centering, and supporting members shall be of adequate size and strength to carry safely, without deflection, all dead and live loads to which forms may be subjected, and shall be spaced sufficiently close to prevent any bulging or sagging of forms. Soffits of all beam forms shall be constructed of material a minimum of 2 inches thick. Distribute bracing loads over base area on which bracing is erected. When placed on ground, protect against undermining, settlement or accidental impact.
- E. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 301.

- F. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- G. Obtain approval before framing openings in structural members that are not indicated on Drawings.
- H. Install void forms in accordance with manufacturer's recommendations.
- I. Do not reuse wood formwork more than 3 times for concrete surfaces to be exposed to view. Do not patch formwork.

3.4 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

3.5 INSERTS, EMBEDDED PARTS, AND OPENINGS

- Provide formed openings where required for items to be embedded in passing through concrete work.
- B. Locate and set in place items that will be cast directly into concrete.
- C. Coordinate with Work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- D. Install accessories straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- E. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.
- F. Arrangement: Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.
- G. Construction Joints: Provide a surfaced pouring strip where construction joints intersect exposed surfaces to provide a straight line at joints. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage. Show no overlapping of construction joints, as closely as possible, to present the same appearance as butted plywood joints. Joints in a continuous line shall be straight, true and sharp.
- H. Embedded Items: Make provisions for pipes, sleeves, anchors, nailers, and other features. No wood, copper, or uncoated aluminum shall be embedded in concrete. Obtain any required information pertaining to embedded items to be furnished for the work specified in other sections. Securely anchor all embedded items in correct location and alignment prior to placing concrete. Conduits and pipes, including those made of coated aluminum, must meet the requirements of ACI 318, Section 6.3.
- I. Openings for Items Passing Through Concrete: Frame openings in concrete where shown on the Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections. Coordinate all work of this nature in order that there shall be no unnecessary cutting and patching of concrete. Perform any cutting and repairing of concrete required as a result of failure to provide for such openings. Provide isolation wrap on PVC passing through concrete.
- J. Screeds: Set screeds and establish levels for tops of concrete slabs and levels for finish on slabs. Slope slabs to drain where required or as shown on the Drawings. Before depositing concrete, remove all debris from the space to be occupied by the concrete and thoroughly wet all forms. Remove freestanding water.
- K. Screed Supports: For concrete over waterproof membranes and vapor barrier membranes, use screeds supports of a cradle, pad or base type which shall not puncture the membrane. Staking through the membrane will not be permitted.

3.6 FIELD QUALITY CONTROL

- A. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- B. Notify A/E after placement of reinforcing steel in the forms, but prior to placing concrete, so that review may be made.

3.7 FORM CLEANING

A. Clean forms as erection proceeds, to remove foreign matter within forms.

- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.8 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads and the removal has been approved by A/E.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- D. Forms shall be left in place for not less than the total number of days as specified in ACI 347.

3.9 ERECTION TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 301.
- B. Tolerances: Construct formwork so that concrete surfaces shall be within construction tolerances specified in ACI 117.
- C. Construct and align formwork for elevator hoistway in accordance with ANSI/ASME A17.1.
- D. Camber slabs and beams as shown on drawings.

CONCRETE REINFORCEMENT

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1- GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of reinforcing steel bars, welded wire fabric, and accessories for cast-in-place concrete.

1.3 RELATED WORK

- A. Section 03100 Concrete Forms and Accessories.
- B. Section 03300 Cast-in-Place Concrete.
- C. Section 03350 Concrete Finishing: Reinforcement for concrete floor toppings.

1.4 SUBMITTALS

- A. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and welded wire fabric, bending and cutting schedules, and supporting and spacing devices.
- B. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- C. Submit certified copies of mill test report of reinforcement materials analysis.

1.5 OUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301, ACI SP-66, ACI 318.
- B. Maintain one copy of each document on site.
- C. Provide A/E with access to fabrication plant to facilitate review of reinforcement. Provide notification of commencement and duration of shop fabrication in sufficient time to allow review.
- D. Detail reinforcement and prepare shop drawings in accordance with ACI 315.
- E. Welders' Certificates: Submit manufacturer's certificates, certifying welders employed on Work,

1.6 REFERENCES

- A. ACI 301 Structural Concrete.
- B. ACI 318 Building Code Requirements For Structural Concrete.
- C. ACI SP-66 Detailing Manual.
- D. ASTM A 82 Steel Wire, Plain, for Concrete Reinforcement.
- E. ASTM A 184 Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
- F. ASTM A 497 Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
- G. ASTM A 615 Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- H. ASTM A 617 Axle-Steel Deformed and Plain Bars for Concrete Reinforcement.
- I. ASTM A 641 Zinc-Coated (Galvanized) Carbon Steel Wire.
- J. ASTM A 704 Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
- K. ASTM A 706 Low-Alloy Steel Deformed Bars for Concrete Reinforcement.
- L. ASTM A 767 Zinc-Coated (Galvanized) Bars for Concrete Reinforcement.
- M. ASTM A 775 Epoxy-Coated Reinforcing Steel Bars.
- N. ASTM A 884 Epoxy-Coated Steel Wire and Welded Wire Fabric for Reinforcement.
- O. ASTM A 934 Epoxy-Coated Prefabricated Reinforcing Bars.
- P. ASTM A 996 Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.
- Q. ASTM D 3963 Practice for Selection of Coating Specimens for Appearance Measurements.
- R. AWS D1.4 Structural Welding Code Reinforcing Steel.
- S. CRSI Manual of Practice.

1.7 COORDINATION

A. Coordinate with placement of formwork, formed openings and other Work.

PART 2- PRODUCTS

2.1 REINFORCEMENT

A. Reinforcing Steel: ASTM A 615, 60 ksi yield grade; deformed billet steel bars, unfinished.

- B. Reinforcing Steel Plain Bar and Rod Mats: ASTM A 704, ASTM A 615, Grade 60; steel bars or rods, unfinished.
- C. Stirrups Steel: ASTM A 82, unfinished.
- D. Welded Steel Wire Fabric: ASTM A 497 Deformed Type; in flat sheets; unfinished.

2.2 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage annealed type, epoxy coated.
- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor retarder puncture.
- C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic-coated steel type; size and shape as required.

2.3 FABRICATION

- A. Fabricate concrete reinforcement in accordance with ACI SP-66, ACI 318 & ASTM A 184.
- B. Weld reinforcement in accordance with AWS D1.4.
- C. Locate reinforcement splices not indicated Drawings, at point of minimum stress. Review location of splices with A/E.

PART 3-EXECUTION

3.1 INSTALLATION

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- B. Do not displace or damage vapor barrier.
- C. Accommodate placement of formed openings.
- D. Conform to applicable code for concrete cover over reinforcement.
- E. Bond and ground reinforcement to requirements of Section 16060.

CAST-IN-PLACE CONCRETE

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of cast-in-place concrete building members, floors, foundation, and slabs; floors and slabs on grade; control, expansion and contraction joint devices associated with concrete work, including joint sealants; and equipment pads, light pole base, flagpole base, thrust blocks, and manholes.

1.3 RELATED WORK

- A. Section 03100 Concrete Forms and Accessories: Formwork and accessories.
- B. Section 03200 Concrete Reinforcement.
- C. Section 03350 Concrete Finishing.
- D. Section 03390 Concrete Curing.
- E. Section 7260 Vapor Barrier

1.4 SUBMITTALS

- A. Product Data: Submit data on joint devices, attachment accessories, and admixtures.
- B. Manufacturer's Installation Instructions: Submit installation procedures and interface required with adjacent Work.
- C. Project Record Documents: Accurately record actual locations of embedded utilities and components which are concealed from view.

1.5 **QUALITY ASSURANCE**

- A. Perform Work in accordance with ACI 301.
- B. Maintain one copy of each document on site.
- C. Acquire cement and aggregate from same source for all Work.
- D. Conform to ACI 305R when concreting during hot weather.
- E. Conform to ACI 306.1 when concreting during cold weather.

1.6 PRODUCTS FURNISHED BUT NOT INSTALLED UNDER THIS SECTION

A. Section 03100 - Concrete Forms and Accessories

1.7 REFERENCES

- A. ACI 301 Structural Concrete for Buildings.
- B. ACI 302 Concrete Floor and Slab Construction.
- C. ACI 304R Measuring, Mixing, Transporting and Placing Concrete.
- D. ACI 305R Hot Weather Concreting.
- E. ACI 306.1 Cold Weather Concreting.
- F. ACI 308 Curing Concrete.
- G. ACI 318 Building Code Requirements for Structural Concrete and Commentary.
- H. ASTM B 221 Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- I. ASTM C 33 Concrete Aggregates.
- J. ASTM C 94 Ready-Mixed Concrete.
- K. ASTM C 150 Portland Cement.
- L. ASTM C 260 Air Entraining Admixtures for Concrete.
- M. ASTM C 494 Chemicals Admixtures for Concrete.
- N. ASTM C 595M Blended Hydraulic Cements (Metric).
- O. ASTM C 618 Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.
- P. ASTM C 1017 Chemical Admixtures for Use in Producing Flowing Concrete.
- Q. ASTM C 1107 Packaged Dry, Hydraulic Cement Grout (Nonshrink).
- R. ASTM D 994 Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- S. ASTM D 1190 Concrete Joint Sealer, Hot-Poured Elastic Type.
- T. ASTM D 1751 Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- U. ASTM D 1752 Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.

1.8 FIELD SAMPLES

A. Coordinate with Section 03100.

- B. Construct and erect field sample for architectural concrete surfaces receiving special treatment or finish as result of formwork.
- C. Sample Panel: Sufficient size to indicate special treatment or finish required.

1.9 COORDINATION

 Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C 150, Type I Normal Portland type.
- B. Fine and Coarse Aggregates: ASTM C 33.
- C. Water: Clean and not detrimental to concrete.

2.2 ADMIXTURES

- A. Air Entrainment: ASTM C 260.
- B. Chemical: ASTM C 494, Type A Water Reducing.
- C. Fly Ash: ASTM C 618, Class C.
- D. Plasticizing: ASTM C 1017.

2.3 ACCESSORIES

- A. Bonding Agent: Polymer resin emulsion.
- B. Vapor Barrier: Section 7260 Vapor Barrier.
- C. Non-Shrink Grout: ASTM C 1107, Grade A; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 pounds per square inch in 48 hours and 7,000 pounds per square inch in 28 days.

2.4 JOINT DEVICES AND FILLER MATERIALS

- A. Joint Filler Type A: Asphalt impregnated fiberboard or felt, 1/4-inch thick; tongue and groove profile.
- B. Construction Joint Devices: Integral galvanized steel, formed to tongue and groove profile, with removable top strip exposing sealant trough, knockout holes spaced at 6 inches, ribbed steel spikes with tongue to fit top screed edge.

2.5 CONCRETE MIX

A. Mix concrete in accordance with ACI 301. Deliver concrete in accordance with ASTM C 94.

- B. Select proportions for normal weight concrete in accordance with ACI 301 trial mixtures.
 - C. Select aggregate proportions for light weight concrete in accordance with ASTM C 330, ACI 301 and ACI 318.
 - D. Use accelerating admixtures in cold weather only when approved. Use of admixtures will not relax cold weather placement requirements.
 - E. Use calcium chloride only when approved.
 - F. Use set retarding admixtures during hot weather only when approved.
 - G. Add air entraining agent to normal weight concrete mix for work exposed to exterior.
 - H. Provide 3,000 PSI concrete minimum for all Section 2500 Concrete and Flatwork (unless otherwise noted on drawings).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify requirements for concrete cover over reinforcement.
- B. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent.
- B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with ACI 301 and ACI 318.
- B. Notify A/E minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, and formed expansion and contraction joints are not disturbed during concrete placement.
- D. Install vapor barrier under interior slabs on grade and grade beams. Lap joints minimum 6 inches and seal watertight by sealant applied between overlapping edges and ends.
- E. Repair vapor barrier damaged during placement of concrete reinforcing. Repair with vapor barrier material; lap over damaged areas minimum 6 inches and seal watertight.
- F. Place joint filler in floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.
- G. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

- H. Apply sealants in joint devices in accordance with Section 07920.
- I. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- J. Place concrete continuously between predetermined expansion, control, and construction joints.
- K. Do not interrupt successive placement; do not permit cold joints to occur.
- L. Place floor slabs in checkerboard pattern.
- M. Saw cut joints as soon as concrete surface will support equipment but at least within 8 hours after placing. Use 3/16-inch thick blade, cut into 1/4 depth of slab thickness. Do not saw cut structural slabs. Coordinate location of saw cut joints with the Structural Engineer during submittal and at least 48 hours prior to placement of concrete. Place joints under partitions when possible.
- N. Screed floors and slabs on grade level, maintaining surface flatness of maximum 1/8-inch in 10 feet .

3.4 SEPARATE FLOOR TOPPINGS

- A. Prior to placing floor topping, roughen substrate concrete surface and remove deleterious material. Broom and vacuum clean.
- B. Place required dividers, edge strips, reinforcing and other items to be cast in.
- C. Apply bonding agent to substrate.

3.5 CONCRETE FINISHING

- A. Provide formed concrete surfaces to be left exposed with smooth rubbed finish.
- B. Finish concrete floor surfaces to requirements of Section 03350.
- C. Wood float surfaces which will receive quarry tile, ceramic tile or terrazzo with full bed setting system.
- D. Steel trowel surfaces which will receive carpeting, resilient flooring, seamless flooring, thin set quarry tile and thin set ceramic tile.
- E. Steel trowel surfaces which are scheduled to be exposed.
- F. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains as indicated on drawings.

3.6 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Cure floor surfaces in accordance with ACI 301.

- D. Ponding: Maintain 100 percent coverage of water over floor slab areas continuously for seven days.
- E. Spraying: Spray water over floor slab areas and maintain wet for seven days.

3.7 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed in accordance with ACI 301.
- B. Provide free access to Work and cooperate with appointed firm.
- C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.
- D. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
- E. Three concrete test cylinders will be taken for every 75 or less cubic yards of each class of concrete placed.
- F. One additional test cylinder will be taken during cold weather concreting, cured on job site under same conditions as concrete it represents.
- G. One slump test will be taken for each set of test cylinders taken.
- H. One air content test will be made for each set of test cylinders taken.

3.8 PATCHING

- A. Allow A/E to review concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify A/E upon discovery.
- C. Patch imperfections as directed by Architect and/or Engineer.

3.9 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by A/E.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of A/E for each individual area.

CONCRETE FINISHING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of finishing slabs-on-grade, monolithic floor slab, and separate floor toppings; and surface treatment with concrete hardener, sealer, and slip coatings.

1.3 RELATED WORK

- A. Section 03300 Cast-in-Place Concrete: Prepared concrete floors ready to receive finish.
- B. Section 03390 Concrete Curing.

1.4 SUBMITTALS

- A. Product Data: Submit data on concrete hardener, sealer, curing compounds, curing papers, and slip resistant treatment, compatibilities, and limitations.
- B. Operation and Maintenance Data: Provide data on maintenance renewal of applied coatings.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with structural concrete for building, guide for concrete floor and slab construction.
- B. Maintain one copy of each document on site.

1.6 REFERENCES

- A. ACI 301 Structural Concrete for Buildings.
- B. ACI 302 Guide for Concrete Floor and Slab Construction.
- C. ASTM E 1155 Determining Floor Flatness and Levelness Using the F-Number System (Inch-Pound Units).

1.7 MOCK-UP

- A. Construct mock-up area under conditions similar to those which will exist during actual placing, with specified finishes, and coatings applied.
- B. Locate where directed.

- C. Repeat sample panels if first ones prove unsatisfactory.
- D. Mock-up may not remain as part of the Work.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's packaging including application instructions.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Temporary Lighting: Minimum 200 W light source, placed 8 feet above the floor surface, for each 425 square feet of floor being finished.
- B. Temporary Heat: Ambient temperature of 50 degrees F minimum.
- Ventilation: Sufficient to prevent injurious gases from temporary heat or other sources affecting concrete.

1.10 COORDINATION

A. Coordinate Work with concrete floor placement and concrete floor curing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers:
 - 01 Cresset Chemical Company.
 - 02 Davis Colors.
 - 03 Dayton Superior Corp.
 - 04 Euclid Chemical Co.
 - 05 L & M Construction Chemicals.
 - 06 Master Builders Inc.
 - 07 Nox-Crete Chemicals.
 - 08 Scofield: L M Scofield Co.
 - 09 Sika Corp.

2.2 COMPOUNDS - HARDENERS AND SEALERS

A. Refer to Section 09770 Concrete Sealer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify floor surfaces are acceptable to receive the Work of this section.

3.2 FLOOR FINISHING

- A. Finish concrete floor surfaces in accordance with ACI 301 and ACI 302.
- B. Wood float surfaces which will receive quarry tile, ceramic tile or with full bed setting system.

- C. Steel trowel surfaces which will receive carpeting, resilient flooring, seamless flooring, thin set quarry tile and thin set ceramic tile.
- D. Steel trowel surfaces that are scheduled to be exposed.
- E. In areas with floor drains, maintain design floor elevation at walls; slope surfaces uniformly to drains as indicated on Drawings.

3.3 FLOOR SURFACE TREATMENT

- A. Apply hardener as scheduled on floor surfaces.
- B. Apply slip resistant finish as scheduled on floor surfaces.
- C. Apply sealer as scheduled on floor surfaces.
- D. Apply retarder to troweled finish as scheduled on floor surfaces.

3.4 TOLERANCES

- A. Maximum Variation of Surface Flatness For Exposed Concrete Floors: 1/8 -inch in 10 feet.
- B. Maximum Variation of Surface Flatness Under Seamless Resilient Flooring: 1/8 -inch in 10 feet.
- C. Maximum Variation of Surface Flatness Under Carpeting: 1/8 -inch in 10 feet.
- D. Correct defects in defined traffic floor by grinding or removal and replacement of defective Work. Areas requiring corrective Work will be identified. Measure corrected areas by same process and repeat if tolerances are not met.

ROUGH CARPENTRY

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of rough carpentry including but not limited to: Roof curbs, cants, and perimeter nailers; blocking in wall and roof openings; wood furring and grounds; concealed wood blocking for support of toilet and bath accessories, wall cabinets, and wood trim; telephone and electrical panel back boards; and preservative treatment of wood.

1.3 RELATED WORK

A. Section 03100 Concrete Forms and Accessories

1.4 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Product Data. Wood treatment materials

1.5 **OUALITY ASSURANCE**

- A. All lumber used structurally shall be graded and marked with grade and trademark of a lumber grading organization approved by the Architect, except that a certification of grade from such a grading organization may be accepted in lieu of grade and trademarks when approved by the Architect. Trademark of manufacturer shall also appear on each piece.
- B. Each piece of plywood used structurally shall carry the American Plywood Association trademark.
- C. Grading Rules: Conform with all applicable requirements of American Lumber Standards "Simplified Practice Recommendations R-16" and to grading rules of manufacturer's association under whose rules the lumber is produced.
- D. Reference Standards: (Conform with all requirements)
 - 1. U.S. Dept. of Commerce Product Standards
 - 2. American Wood Preservers Assoc. Standards (as they apply)
 - 3. Architectural Woodwork Institute "Quality Standards"
 - 4. Western Wood Products Association Manual

PART 2 - PRODUCTS

2.1 RELATED WORK

A. Lumber:

- 1. Treated No. 2, S4S Southern Yellow Pine
 - a. Comply with NWMA Standards
 - b. Use for blocking, stripping, grounds, cants and miscellaneous wood items in contact with concrete, roofing, or exposed to the weather.
- 2. No.2, S4S Southern Yellow Pine: Use for framing, blocking, stripping and miscellaneous concealed interior lumber not exposed to concrete, roofing weather or moisture, when FRS lumber is not required by building code.
- 3. Fire Retardant No, 2, S4S Southern Pine: Lumber shall be pressure-impregnated with non-combustible fire retardant chemicals in accordance with U.L. FRS Fire Hazard Classification. All lumber must be dried following treatment in accordance with AWPA Standard C-20. Use for framing, plates and blocking in all walls and partitions where required by building code or noted on drawings.
- 4. "Type A" Interior fire retardant treated lumber and plywood shall have equilibrium moisture content of not over 28% when tested in accordance with ASTM D 3201 at 92% relative humidity

B. Plywood:

- 1. General: Comply with APA Standards
- 2. APA A-D, Group 1 Interior used where appearance of only one side is exposed to view for interior locations.
- 3. Exterior plywood, Group 1, APA rated sheathing. Use where miscellaneous plywood is exposed to concrete or weather.
- 4. Type A Interior Fire Retardant Treated Plywood pressure-impregnated non-combustible fire retardant chemicals in accordance with U.S. FRS Fire Hazard Classification, AWPA Standards C-27. Use when required by building code or noted on drawings.
- 5. "Type A" Interior fire retardant treated lumber and plywood shall have equilibrium moisture content of not over 28% when tested in accordance with ASTM D 3201 at 92% relative humidity

C. Rough Hardware:

- 1. Nails, Spikes, and Staples: Galvanized for exterior locations, high humidity locations, and treated wood; plain finish for other interior locations: Size and type to suit application.
- 2. Bolts, Nuts, Washers, Lags, and Screws: Medium carbon steel; size and type to suit application. Galvanize for exterior locations, high humidity locations, and treated wood. Plain finish for other interior locations.
- 3. Fasteners: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry and concrete. Bolts or power activated type for anchorage to steel.

D. Wood Treatment:

- 1. Preservative Treatment:
 - a. Pressure impregnate with Boliden CCA or Osmose K33 (Fed. Spec. TT-W-550) preservative to net retention of .23 lbs./cu.ft., in accordance with American Wood-Preservers Association, "Book of Standards", in plant licensed by manufacturer. Stamp for identification.
 - b. Brush two coats of preservative on bored or sawn surfaces of treated lumber.

PART 3 - EXECUTION

A. Wood Framing:

- Framing and blocking shall be accurately cut and fitted true to line and levels, avoiding shims and wedges.
- 2. Spiking and nailing shall be done using largest size spikes and nail practicable.
- 3. Use 2" x 4" wood studs spaced 16 inches o.c., with 4 inch face perpendicular to direction of wall or partition, unless otherwise stated. Provide single bottom plate and double-top plates 2 inches thick by width of studs.
- 4. Bolt nailers and blocking to steel, masonry or concrete members with bolts or proportionate strength of members attached from each end, except as otherwise noted on plans.
- 5. Provide blocking, bucks and framing as necessary and for other trades as required.
- 6. Provide stair framing members of size, spacing and configuration indicated and as required to support minimum uniform live load of 100 psf and minimum concentrated load of 300 lbs. applied to area of 4 square inches at center of tread.
- 7. Fabricate stair framing members to provide exact fit with treads and risers with no change in dimensions between landings.

B. Plywood:

- Install plywood over framing in accordance with instruction of American Plywood Association Construction Guide Form No. E30C.
- 2. Install underlayment plywood as shown in accordance with instructions of American Plywood Association. Space panel joints and edges 1/32 inch. Fill and sand panel edge joints, surface roughness, and damaged or open areas. Nail with four (4) ring-shank nails spaced at 6 inches at edges and 8 inches in field each way.

ARCHITECTURAL MILLWORK

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of Architectural Millwork, finish carpentry, plastic laminate work, and finish hardware installation.

1.3 RELATED WORK

A. Section 06100 Rough Carpentry

1.4 SUBMITTALS

- A. Comply with Section 01300 Submittals.
- B. Shop Drawings:
 - Indicate size, material, veneer, and AWI grade construction details. Show locations and installation procedure of each millwork item. Includes details of joints, attachments, and clearances.
 - Manufacturer's specifications and other data needed to prove compliance with specified requirements.
 - Method of anchoring all architectural woodwork items, including trim, paneling, tops, and specialty items.
- C. Samples:
 - 01 Sample of veneer-on-substrate (8"X10") illustrating expected range of component finish color and/or grain.
 - 02 Sample of solid lumber illustrating expected range of component finish color and/or grain.
 - 03 Sample of finish.
 - 04 Sample of plastic laminate.
 - 05 Sample of solid surfacing
 - 06 Sample of hardware.
- D. Mockups: Before fabricating and installing Architectural Millwork build mockups for each form of construction and finish required to verify selections made under sample submittals and to demonstrate aesthetic effects and qualities of materials and execution. Build mockups to comply with the following requirements, using, materials indicated for the completed Work:
 - 01 Build mockups in the fabrication facility.
 - 02 Notify Architect 7 days in advance of dates and times when mockups will be fabricated.
 - 03 Demonstrate the proposed range of aesthetic effects and workmanship.
 - 04 Obtain Architect's approval of mockups before starting fabrication.
 - 05 Maintain mockups during construction in an undisturbed condition as a standard for judging the completed work.
 - 06 Demolish and remove mockups when directed.
 - 07 Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with Premium Grade (AWI quality standards).
- B. Work in this section shall comply with the specified grades of Work and Sections of the current edition of the AWI/AWMAC Quality Standards Illustrated.

PART 2 - PRODUCTS

2.1 **LUMBER**

- Refer to schedules and notes on drawings for species and finish. A.
- B. Premium grade.

2.2 PANEL PRODUCTS

- Hardwood plywood: Made with Medium Density Fiberboard (MDF) core for interior use. Α.
- B. High Pressure Decorative Laminate for countertops made with MDF core at all sink and lavatory locations. Provide Horizontal General Purpose (HGS) Standard for all horizontal surfaces.
- High Pressure Decorative Laminate for countertops made with 1" MDF core at all other C. countertop locations. Provide HGS for all horizontal surfaces.
- High Pressure Decorative Laminate for shelving made with 1" veneer core. Provide HGS for all D. horizontal surfaces.
- E. High Pressure Decorative Laminate for exposed vertical surfaces made with 34" MDF core. Provide Vertical General Purpose (VGS) Standard for exposed and semi-exposed vertical surfaces. Cabinet liner or Backer may be used at concealed vertical surfaces.
 Rail Hangers shall be Z-CLIPS LP per Cabinet Makers Hardware Houston, Texas (713) 666-8586
- F.

2.3 HARDWOOD VENEER

- A. Refer to schedules and notes on drawings for species, finish, and cut.
- В. Grade A face grade

SOLID SURFACE MATERIAL 2.4

Refer to schedules and notes on drawings.

2.5 **SHOP FINISHING**

- Perform work in accordance with Custom Grade (AWI quality standards). A.
- Finish Architectural millwork at fabrication shop as specified in this section. Defer only touchup, B. cleaning, and polishing until after installation.

2.6 ARCHITECTURAL CABINETS

- Flush overlay style A.
- Materials are the same as listed in 2.2 PANEL PRODUCTS. B.
- ADA compliant guidelines: C.
 - Counter height 34" 1.
 - 2. 3. Vanity height - 34"

 - Counter depth 24" Vanity depth 22 ½" 4.
 - 5. Knee clearance – 27"

2.7 CABINET HARDWARE

- A. Hinges. Heavy-duty chrome-plated European Style hinges manufactured by Blum, Mepla, Grass, or approved substitute.
- B. Pulls. 4-1/2 inch extruded aluminum with color selected by Architect.
- C. Catches. Spring actuated, nylon roller type.
- D. Adjustable Shelf Supports. 13-gauge angle, 1/2 inch wide, with 1/4 inch diameter by 3/8 inch long pin, bright zinc-plated and all edges rounded.
- E. Locks. Keyed.
- F. Drawer pulls: Standard extension, heavy duty, positive stop, self closing.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Perform work in accordance with Custom Grade (AWI quality standards).
- B. Work in this section shall comply with the specified grades of Work and Sections of the current edition of the AWI/AWMAC Quality Standards Illustrated.
- C. Deliver to the jobsite after all painting, wet-work, grinding, and similar operations are complete.
- D. Positioning: Place level, plumb and at right angles to adjacent work.
- E. Fitting: Where field cutting or trimming is necessary, perform in a neat, accurate, professional manner without damaging the products and adjacent work.
- F. Anchorage: Attach securely so the products will perform to their maximum ability without damage from inadequate fastenings.
- G. Fasten tops to frames with concealed clips, screws and glue.

3.2 FINISH HARDWARE INSTALLATION

A. Millwork contractor shall be responsible for hardware on millwork.

BUILDING INSULATION & SOUND ATTENUATION

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of cavity wall insulation and batt insulation used in stud walls.

1.3 RELATED WORK

A. Section 07160 Dampproofing Above Grade

1.4 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Product Data. Manufacturer's specifications and technical data.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Batt or Roll Thermal Insulation:
 - 01 R-Values (minimum): R-11 at walls and R-19 at attic area and elsewhere as shown.
 - O2 Comply with Type 1 ASTM 665-84 unfaced
 - O3 Flame Spread 25 or less
 - O4 Pins and disc securement accessories as required.
- B. Batt or Roll Acoustical (Sound Attenuation) Insulation:
 - O1 Sound Attenuation Insulation: USG "Thermafiber" or Owens/Corning "R-8" noise barrier batt sound attenuation blankets, 2 inch thickness, friction fit between studs.
 - O2 Pins and disc securement accessories as required.

2.2 MANUFACTURERS

- B. Batt or Roll (thermal):
 - 01 Owens-Corning
 - 02 Manville
 - 03 Certaineed

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Batt or Roll Insulation:
 - 01 Walls:
 - a. Batts shall fit between studs and provide full coverage where indicated on drawings.
 - b. Wall Areas above Ceiling: At sidewall insulation in ceiling cavity, install adhesive-mounted spike devices with metal caps at 2'-0" vertically, and 4 inches horizontally from each side of the blankets. Install blankets with 4 foot dimensions running vertically on spikes, keeping blankets tight to exterior wall without crushing into each other.
 - Place acoustical insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions and tight to items passing through partitions.

JOINT SEALANTS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of exterior sealants and sealants for moving joints and interior caulking.

1.3 RELATED WORK

- A. Refer to Section 01420 Notification of Architect Requirements.
- B. Refer to glass and glazing section for glass sealants

1.4 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Product Data. Manufacturer's specifications and technical data
- C. On site sample for Architect's review of colors.

1.5 WARRANTY

A. Warrant the work specified herein for two years against becoming unserviceable or causing an objectionable appearance, resulting from either defective or nonconforming materials and workmanship. Warrant exterior joints against failure of the joint to effectively seal out water or moisture. Warrant interior joints against cracking, crazing separation of the material from the substrate or other joint failure.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Exterior joints around windows, glazing, entrances, soffit joints and other general sealant areas: Tremco "Mono"
- B. Caulking for exposed non-working interior locations at all hollow metal frames and abutting surfaces at ceiling, wall angles and all other locations for finished appearance: Tremco "Acrylic Latex 834"
- C. Primers, Cleaners, Top Coats: Use only materials listed as suitable in resistance to staining, compatibility and durability before proceeding
- D. Compressible Filler: Closed cell or open cell, non-gassing filler as recommended by sealant manufacturer

2.2 MANUFACTURERS

- A. Tremco
- B. Dow Chemical Co.
- C. General Electric Co.
- D. Pecora, Inc.
- E. Manufacturers of products bearing the Thiokol Corporation seal of approval. All polysulfide sealants shall bear the seal.
- F. Sonneborn

PART 3 - EXECUTION

3.1 APPLICATION

- A. Temperatures: Do not install sealants when air temperature is under 40°Fahrenheit. Sealants may be warmed to ease installation when recommended by the manufacturer.
- B. Tooling: Tool exposed joints to a slightly concave surface using slicking materials recommended by the manufacturer. The tooling procedure shall press sealant against the sides of the groove. No materials shall be left "feathered" out or smeared on the abutting materials. If necessary, protect adjacent surfaces with tape. Completed joints shall have a uniform professional appearance. Use an anti-tack compound on sealant that does not set up fast enough to avoid dust collection.
- C. Sealant Back-Up: Provide a back-up filler where groove depth is too great to fill with sealant. Review joint design with Architect.
- D. Compressive Filler: Seal vertical expansion joints with fillers. Provide compressible filler twice the width of the joint and with a depth of one and one-half times the compressed width. Lap ends a minimum of 2 inches
- E. Seal ends together in such a manner to allow natural drainage. Install filler by compressing material and sliding into joint. Align filler on one face of the joint before it expands to the full joint width.

SECTION 08100 HOLLOW METAL FRAMES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

 Furnish all labor, materials, equipment and services necessary or incidental to completion of hollow metal frames.

1.3 RELATED WORK

A. Section 05500 Miscellaneous Metals

1.4 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Product Data. Manufacturer's specifications and technical data
- C. Door and frame schedules.

1.5 REFERENCES

- A. National Fire Protection Association NFPA Pamphlet No. 80
- B. American Society for Testing Materials:
 - O1 ASTM A526 Steel sheet, zinc-coated (galvanized) by hot dip process, commercial quality
 - ASTM A366 Steel, carbon, cold-rolled sheet, commercial quality
- C. Underwriters Laboratories, Inc. Reference to fire-rated metal doors and frames.
- D. Factory Mutual: Reference to doors and frames.
- E. American National Standards Institute:
 - O1 ANSI A250.11-2001 Recommended Erection Instructions for Steel Frames
- F. NAAMM Hollow Metal Manufacturers Association

PART 2 - PRODUCTS

2.1 QUALITY STANDARDS

A. Frames:

- 01 Materials:
 - b. Frames for interior openings shall be either commercial grade, cold-rolled steel conforming to ASTM A366 or commercial grade hot rolled and pickled steel conforming to ASTM A569. Metal thickness shall be not less than 16 gauge for frames openings, 4'-0" or less in width, and not less than 14 gauge for frames at openings over 4'-0" in width.
- 02 Design and Construction:
 - a. Frames shall be custom made, welded units with integral trim of sizes and shapes shown on approved shop drawings.
 - b. Frames shall be strong and rigid, neat in appearance, square, true and free of defects, warp and buckle. Molded members shall be clean cut, straight and of uniform profile throughout their length.
 - Jamb depths, trim, profile and backbends shall be as shown on reviewed shop drawings.
 - d. Corner joints shall have contact edges closed tight, with trim faces mitered and continuously welded, and stops butted. The use of gussets shall not be permitted.
 - e. Minimum depth of stops shall be 5/8 inch.

- f. Frames for multiple openings shall have mullion and rail members which are closed tubular shapes having no visible seams or joints. Joints between faces of abutting members shall be securely welded and finished smooth.
- Hardware Reinforcements: g.
 - Frames shall be mortised, reinforced, drilled and tapped at factory for fully templated mortised hardware in accordance with approved hardware schedule and templates provided by Section 08710 - Finish Hardware. Where surface-mounted hardware is to be applied, frames shall have reinforcing plates only.
 - Minimum thickness of hardware reinforcing plates shall be as follows: 2.
 - Hinge and pivot reinforcements $(1-1/4" \times 10" \text{ minimum size})$:
 - Strike reinforcements: 12 gauge b.
 - Flush bolt reinforcements: 12 gauge c.
 - d. Closer reinforcements: 12 gauge
 - Reinforcements for surface-mounted hardware, hold-open arms, surface panic devices: 12 gauge
- h. Floor anchors shall be securely welded inside each jamb, with holes for floor anchorage.
- i. Jamb Anchors:
 - Frames for installation in wood or metal stud partitions shall be provided with steel anchors of suitable approved design, not less than 16 gauge thickness, securely <u>welded</u> inside each jamb as follows:

 - b.
 - Frames up to 7'-6" height 4 anchors
 Frames 7'-6" to 8'-0" height 5 anchors
 Frames over 8'-0" height Four anchors plus one additional c. for each 2 feet, or fraction thereof over 8 inches.
- Dust cover boxes of not less than 26 gauge steel shall be provided at all j. mortised hardware items.
- k. Frames shall be provided with steel spreader temporarily attached to bottoms of both jambs for bracing during shipping and handling.
- Loose glazing stops shall be of cold rolled steel, not less than 18 gauge 1. thickness, butted at corner joints and secured to the frame with countersunk cadmium or zinc-plated screws. Loose stops at exterior frames shall be placed on the exterior side of the frames unless otherwise shown.
- B. Finish:
 - 01 Shop paint steel (whether galvanized or non-galvanized) stops and accessories as follows:
 - Clean surfaces free of mill scale, rust, oil, grease, dirt and other foreign matter. a.
 - b. Chemically treat surfaces and apply one coat of an approved baked-on rustinhibitive primer paint to provide a minimum 0.5 mil dry film thickness.
- Labeled Doors and Frames: C.
 - Labeled doors and frames shall be provided for openings requiring fire protection ratings as scheduled. Such doors and frames shall be constructed as tested and approved by Underwriters Laboratories or other nationally recognized testing agency having a factory inspection service.
 - 02 If any door or frame scheduled to be fire rated cannot quality for appropriate labeling because of its size, design, hardware or other reason; the Architect shall be so advised before fabrication work on that item is started.
- E. Jamb Extensions: Provide structural extensions as part of Section 05500 Miscellaneous Metals at jambs as shown or required. Extensions are required for vertical members not otherwise adequately braced at top. Extension shall be C3 x 4.1 channel extending 12 inches into frame and welded. Weld to structure or provide 2" x 2" x 1/4" steel angle headers installed in structure above to form rigid assembly. Do not install frames until this item is coordinated by this section.

2.2 **MANUFACTURERS**

- Aubertin Co. A.
- B. Pearland Industries (713) 434-9898
- C. Tex-Steel Corp. (210) 423-0912
- D. Door Pro Systems, Inc. (713) 880-8488
- E. Curries
- J-Mar F.

PART 3 - EXECUTION

INSTALLATION

A. Install frames in accordance with details, drawings and approved schedules in accordance with manufacturer's recommendations.

SECTION 08200 FLUSH WOOD DOORS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fiberboard faced flush doors.
 - 2. Factory finishing.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of flush wood doors.

1.3 REFERENCES

- A. Architectural Woodwork Institute (AWI) Architectural Woodwork Quality Standards.
- B. National Fire Protection Association (NFPA) 80 Standard for Fire Doors and Fire Windows.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show locations, elevations, dimensions, ratings, and preparation for hardware.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Manufacturer's certification that doors comply with specified acoustical requirements.

1.5 QUALITY ASSURANCE

A. Flush Wood Doors: AWI Economy Grade.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Package doors in heavy plastic with identifying marks; slit plastic wrap on site to permit ventilation, but do not remove from plastic until ready to install.
- B. Do not deliver doors until building is substantially water and weather tight and HVAC system is operational.
- C. Store doors flat and level, with spacers between doors to allow for air circulation, in protected, dry area.
- D. Maintain humidity in storage areas between 25 and 55 percent.

1.7 WARRANTIES

A. Furnish manufacturer's 1 year warranty providing coverage against defects in materials and workmanship and warpage beyond specified amount.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Listed Manufacturers:

- 1. Algoma Hardwoods, Inc. (<u>www.algomahardwoods.com</u>)
- 2. Eggers Industries. (www.eggersindustries.com)
- 3. Marshfield Door Systems, Inc. (www.marshfielddoors.com)
- 4. Oshkosh Door Co. (www.oshkoshdoor.com)
- 5. VT Industries, Inc. (www.vtindustries.com)

2.2 MATERIALS

- A. Flush Wood Doors: AWI Section 1300.
 - 1. Core type:
 - a. Solid, non rated: PC Bonded Particle Core.
 - 2. Fiberboard faces: Minimum 1/8 inch thick high density fiberboard, flush.
 - 3. Adhesives: Water Resistant type.

2.3 ACCESSORIES

A. Glass and Glazing Accessories: Specified in another section.

2.4 FABRICATION

- A. Fabricate doors in accordance with AWI Section 1300.
- B. Prefitting: Factory fit doors to frames.
- C. Premachining: Factory machine doors to receive hardware specified.

2.5 FINISHES

- A. Opaque Finish System:
 - 1. Finish system: AWI Section 1500, Economy Grade, Paint
 - 2. Color: As selected by Architect.
 - 3. Sheen: Semigloss

PART 3 EXECUTION

3.1 PREPARATION

A. Condition doors to average humidity that will be encountered after installation.

3.2 INSTALLATION

- A. Install doors in accordance with AWI Section 1700.
- B. Install doors plumb and level.
- C. Field Fitting to Frames:
 - 1. Non-rated doors:
 - a. Width: Cut hinge and lock edges equally.
 - b. Height: Cut bottom edge only; maximum ¾ inch.

- 2. Edge clearances:
 - a. Jambs and head: 1/8 inch maximum between door and frame.
 - b. Sills without thresholds: 1/8 inch maximum between door and top of finish floor.
 - c. Sills with thresholds: 1/4 inch maximum between door and top of threshold.
- 3. Lock edge: Bevel 1/8 inch in 2 inches.
- 4. Do not cut doors down to opening sizes smaller than those for which they were manufactured.
- D. Seal field cut surfaces with paint.
- E. Install door hardware in accordance with Hardware Section.
- F. Installation Tolerances:
 - 1. Warp: Maximum 1/8 inch in any 3'-0" x 7'-0" portion of door, measured with taut string or straight edge on concave face of door.

END OF SECTION

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DOOR HARDWARE

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUMMARY:

- **A.** Section Includes: Finish Hardware for door openings, except as otherwise specified herein.
 - **1.** Door hardware for steel (hollow metal) doors.
 - **2.** Door hardware for wood doors.
 - 3. Keyed cylinders as indicated.
- **B.** Intent of Hardware Groups
 - 1. Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.
 - 2. Where items of hardware aren't definitely or correctly specified, are required for completion of the Work, a written statement of such omission, error, or other discrepancy to Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.

C. Alternates

1. Refer to Division 1 for Alternates and procedures.

1.2 SUBSTITUTIONS:

A. Comply with Division 1.

1.3 SUBMITTALS:

- **A.** Comply with Division 1.
- **B.** Special Submittal Requirements: Combine submittals of this Section with Sections listed below to ensure the "design intent" of the system/assembly is understood and can be reviewed together.
- C. Product Data: Manufacturer's specifications and technical data including the following:
 - 1. Detailed specification of construction and fabrication.
 - **2.** Manufacturer's installation instructions.
 - **3.** Wiring diagrams for each electric product specified. Coordinate voltage with electrical before submitting.
 - **4.** Submit 6 copies of catalog cuts with hardware schedule.
- **D.** Shop Drawings Hardware Schedule: Submit 6 complete reproducible copy of detailed hardware schedule in a vertical format.

- 1. List groups and suffixes in proper sequence.
- **2.** Completely describe door and list architectural door number.
- 3. Manufacturer, product name, and catalog number.
- **4.** Function, type, and style.
- 5. Size and finish of each item.
- **6.** Mounting heights.
- **7.** Explanation of abbreviations and symbols used within schedule.
- **8.** Detailed wiring diagrams, specially developed for each opening, indicating all electric hardware, security equipment and access control equipment, and door and frame rough-ins required for specific opening.
- **E.** Templates: Submit templates and "reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.
 - 1. Templates, wiring diagrams and "reviewed Hardware Schedule" of electrical terms to electrical for coordination and verification of voltages and locations.

F. Samples:

- 1. 1 sample of Lever and Rose/Escutcheon design, (pair).
- 2. 1 samples of metal finishes
- G. Contract Closeout Submittals: Comply with Division 1 including specific requirements indicated.
 - 1. Operating and maintenance manuals: Submit 3 sets containing the following.
 - **a.** Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
 - **b.** Catalog pages for each product.
 - **c.** Name, address, and phone number of local representative for each manufacturer.
 - **d.** Parts list for each product.
 - **2.** Copy of final hardware schedule, edited to reflect, "As installed".
 - **3.** Copy of final keying schedule
 - **4.** As installed "Wiring Diagrams" for each piece of hardware connected to power, both low voltage and 110 volts.
 - **5.** One set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

1.4 QUALITY ASSURANCE

- **A.** Comply with Division 1.
 - 1. Exterior Openings Severe Windstorm Components testing: Listed and labeled by a testing and inspecting agency acceptable to authority having jurisdiction, based on testing according to ANSI A250.13. Further compliance with Florida Building Codes for Hurricane (NOA) for Exterior Openings.
 - **2.** Statement of qualification for distributor and installers.
 - **3.** Statement of compliance with regulatory requirements and single source responsibility.
 - **4.** Distributor's Qualifications: Firm with 3 years experience in the distribution of commercial hardware.
 - **a.** Distributor to employ full time Architectural Hardware Consultants (AHC) for the purpose of scheduling and coordinating hardware and establishing keying schedule.
 - **b.** Hardware Schedule shall be prepared and signed by an AHC.

- 5. Installer's Qualifications: Firm with 3 years experienced in installation of similar hardware to that required for this Project, including specific requirements indicated.
- **6.** Regulatory Label Requirements: Provide testing agency label or stamp on hardware for labeled openings.
 - **a.** Provide UL listed hardware for labeled and 20 minute openings in conformance with requirements for class of opening scheduled.
 - **b.** Underwriters Laboratories requirements have precedence over this specification where conflict exists.
- **7.** Single Source Responsibility: Except where specified in hardware schedule, furnish products of only one manufacturer for each type of hardware.
- **B.** Review Project for extent of finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, notify the Architect in writing and furnish hardware in compliance with the Specification unless otherwise directed in writing by the Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

- **A.** Packing and Shipping: Comply with Division 1.
 - Deliver products in original unopened packaging with legible manufacturer's identification.
 - **2.** Package hardware to prevent damage during transit and storage.
 - 3. Mark hardware to correspond with "reviewed hardware schedule".
 - **4.** Deliver hardware to door and frame manufacturer upon request.
- **B.** Storage and Protection: Comply with manufacturer's recommendations.

1.6 PROJECT CONDITIONS:

- **A.** Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.
- **B.** Review Shop Drawings for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

1.7 WARRANTY:

- **A.** Refer to Conditions of the Contract
- **B.** Manufacturer's Warranty:
 - 1. Closers: Ten years
 - **2.** Exit Devices: Three Years
 - 3. Locksets & Cylinders: Three years
 - **4.** All other Hardware: Two years.

1.8 OWNER'S INSTRUCTION:

A. Instruct Owner's personnel in operation and maintenance of hardware units.

1.9 MAINTENANCE:

- **A.** Extra Service Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals Section.
 - **1.** Special Tools: Provide special wrenches and tools applicable to each different or special hardware component.
 - 2. Maintenance Tools: Provide maintenance tools and accessories supplied by hardware component manufacturer.
 - **3.** Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra service materials.
- **B.** Maintenance Service: Submit for Owner's consideration maintenance service agreement for electronic products installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. The following manufacturers are approved subject to compliance with requirements of the Contract Documents. Approval of manufacturers other than those listed shall be in accordance with Division 1.

<u>Item</u> :	Manufacturer:	Approved:
Hinges	Stanley	Bommer, Hager
Locksets and Cylinders	Best	No Substitution
Exit Devices	Precision	No Substitution
Closers	Stanley	No Substitution
Protection Plates	Trimco	Hager, Rockwood
Door Stops	Trimco	Hager, Rockwood
Flush Bolts	Trimco	Hager Rockwood
Threshold & Gasketing	National Guard	Hager, Pemko

2.2 MATERIALS:

A. Hinges:

- **1.** Template screw hole locations
- 2. Minimum of 2 permanently lubricated non-detachable bearings
- **3.** Equip with easily seated, non-rising pins
- **4.** Sufficient size to allow 180-degree swing of door
- **5.** Furnish hinges with five knuckles and flush concealed bearings
- **6.** Provide hinge type as listed in schedule.
- **7.** Furnish 3 hinges per leaf to 7 foot 6 inch height. Add one for each additional 30 inches in height or fraction thereof.
- **8.** Tested and approved by BHMA for all applicable ANSI Standards for type, size, function and finish
- **9.** UL10C listed for Fire

B. Mortise Type Locks and Latches:

- **1.** Tested and approved by BHMA for ANSI A156.13, Series 1000, Operational Grade 1, Extra-Heavy Duty, Security Grade 2 and be UL10C
- 2. Fit ANSI A115.1 door preparation

- **3.** Functions and design as indicated in the hardware groups
- **4.** Solid, one-piece, 3/4-inch (19mm) throw, anti-friction latchbolt made of self-lubricating stainless steel
- **5.** Deadbolt functions shall have 1 inch (25mm) throw bolt made of hardened stainless steel
- **6.** Latchbolt and Deadbolt are to extend into the case a minimum of 3/8 inch (9.5mm) when fully extended
- 7. Auxiliary deadlatch to be made of one piece stainless steel, permanently lubricated
- **8.** Provide sufficient curved strike lip to protect door trim
- **9.** Lever handles must be of forged or cast brass, bronze or stainless steel construction and conform to ANSI A117.1. Levers that contain a hollow cavity are not acceptable
- 10. Lock shall have self-aligning, thru-bolted trim
- 11. Levers to operate a roller bearing spindle hub mechanism
- 12. Mortise cylinders of lock shall have a concealed internal setscrew for securing the cylinder to the lockset. The internal setscrew will be accessible only by removing the core, with the control key, from the cylinder body.
- 13. Spindle to be designed to prevent forced entry from attacking of lever
- **14.** Provide locksets with 7-pin removable and interchangeable core cylinders
- 15. Each lever to have independent spring mechanism controlling it
- **16.** Core face must be the same finish as the lockset

C. Cylindere Type Locks and Latches:

D. Exit Devices shall:

- 1. Tested and approved by BHMA for ANSI 156.3, Grade 1
- **2.** Provide a deadlocking latchbolt
- 3. Non-fire rated exit devices shall have cylinder dogging.
- **4.** Touchpad shall be "T" style
- **5.** Exposed components shall be of architectural metals and finishes.
- **6.** Lever design shall match lockset lever design
- **7.** Provide strikes as required by application.
- **8.** Fire exit devices to be listed for UL10C
- 9. UL listed for Accident Hazard
- **10.** Provide vandal resistant or breakaway trim
- 11. Aluminum vertical rod assemblies are acceptable only when provide with the manufacturers optional top and bottom stainless steel rod guard protectors

E. Cylinders:

- 1. Provide the necessary cylinder housings, collars, rings & springs as recommended by the manufacturer for proper installation.
- **2.** Provide the proper cylinder cams or tail piece as required to operate all locksets and other keyed hardware items listed in the hardware sets.
- **3.** Coordinate and provide as required for related sections.

F. Door Closers shall:

- 1. Tested and approved by BHMA for ANSI 156.4, Grade 1
- 2. UL10C certified
- **3.** Closer shall have extra-duty arms and knuckles
- **4.** Conform to ANSI 117.1
- 5. Maximum 2 7/16 inch case projection with non-ferrous cover
- **6.** Separate adjusting valves for closing and latching speed, and backcheck
- Provide adapter plates, shim spacers and blade stop spacers as required by frame and door conditions
- **8.** Full rack and pinion type closer with $1\frac{1}{2}$ " minimum bore

- **9.** Mount closers on non-public side of door, unless otherwise noted in specification
- 10. Closers shall be non-handed, non-sized and multi-sized.
- **G.** Door Stops: Provide a dome floor or wall stop for every opening as listed in the hardware sets.
 - **1.** Floor stop shall be wrought bronze, brass or stainless steel.
 - 2. Provide dome stops. Provide spacers or carpet riser for floor conditions encountered
- **H.** Over Head Stops: Provide a Surface mounted or concealed overhead when a floor or wall stop cannot be used or when listed in the hardware set.
 - 1. Concealed overhead stops shall be heavy duty bronze or stainless steel.
 - 2. Surface overhead stops shall be heavy duty bronze or stainless steel.
- **I.** Door Bolts: Flush bolts for wood or metal doors.
 - Provide a set of Automatic bolts ANSI/BHMA 156.3 Type 25 for hollow metal label doors.
 - 2. Provide a set of Automatic bolts ANSI/BHMA 156.3 Type 27 at wood label doors.
 - 3. Manual flush bolts ANSI/BHMA 156.16 at openings where allowed local authority.
 - **4.** Provide Dust Proof Strike ANSI/BHMA 156.16 at doors with flush bolts without thresholds.
- **J.** Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.
- **K.** Weatherstripping: Provide at head and jambs only those units where resilient or flexible seal strip is easily replaceable. Where bar-type weatherstrip is used with parallel arm mounted closers install weatherstrip first.
 - 1. Weatherstrip shall be resilient seal of (Neoprene, Polyurethane, Vinyl, Pile, Nylon Brush, Silicone)
 - 2. UL10C Positive Pressure rated seal set when required.
- **L.** Door Bottoms/Sweeps: Surface mounted or concealed door bottom where listed in the hardware sets.
 - 1. Door seal shall be resilient seal of (Neoprene, Polyurethane, Nylon Brush, Silicone)
 - 2. UL10C Positive Pressure rated seal set when required.
- **M.** Thresholds: Thresholds shall be aluminum beveled type with maximum height of ½" for conformance with ADA requirements. Furnish as specified and per details. Provide fasteners and screws suitable for floor conditions.
- **N.** Key Control: Provide one wall mounted key cabinet complete with hooks, index and tags with hook quantity 50% over lock quantity.
- **O.** Key Control Software: Provide one, Keystone® 600N key management control software. Shall include general features
 - **1.** Password restricted logins.
 - 2. List all keys and items currently due back (or due back by any day designated)
 - **3.** Lists all cores and their location, building and doors, and cross-references people to cores, doors, building they access.
 - **4.** Comprehensive list of reports available as an on-screen menu.
 - **5.** Built-in easy to use backup program.
 - **6.** Program always displays date of last backup.

- **7.** Dynamic searching capabilities for all records.
- **8.** On-screen indicator shows when historical info. Is present for a record.
- **9.** On-screen indicator appears when notes are present on a record.
- **10.** Able to operate in an NTFS network environment with TCPIP protocol
- 11. Multiple users can access program at the same time.
- **12.** Software shall include a "Best" Automated Pin Segment Calculator and a Manual Pin Segment Calculator for authorized "Best" building lock shop facilities.
- **13.** Software program is to be compatible with Windows NT, 2000 or XP with TCPIP protocol.
- **P.** Silencers: Furnish silencers on all interior frames, 3 for single doors, 2 for pairs. Omit where any type of seals occur.

2.3 FINISH:

- **A.** Designations used in Schedule of Finish Hardware 3.5, and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 including coordination with traditional U.S. finishes shown by certain manufacturers for their products
- **B.** Powder coat door closers to match other hardware, unless otherwise noted.
- **C.** Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

2.4 KEYS AND KEYING:

- A. Provide keyed brass construction cores and keys during the construction period. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway (or key section) as the Owner's permanent keying system. Permanent cores and keys (prepared according to the accepted keying schedule) will be furnished to the Owner.
- **B.** Cylinders, removable and interchangeable core system: Best Standard 7-pin.
- C. Permanent keys and cores: Stamped with the applicable key mark for identification. These visual key control marks or codes will not include the actual key cuts. Permanent keys will also be stamped "Do Not Duplicate."
- **D.** Transmit Grand Masterkeys, Masterkeys and other Security keys to Owner by Registered Mail, return receipt requested.
- **E.** Furnish keys in the following quantities:
 - 1. 3 each Grand Masterkeys
 - **2.** 6 each Masterkeys
 - **3.** 2 each Control keys
 - **4.** 3 each Change keys each keyed core
 - **5.** 15 each Construction masterkeys
 - **6.** 2 each Construction Control keys
- **F.** The Owner, or the Owner's agent, will install permanent cores and return the construction cores to the Hardware Supplier. Construction cores and keys remain the property of the Hardware Supplier.

G. Keying Schedule: Arrange for a keying meeting, and programming meeting with Architect Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements. Furnish 3 typed copies of keying and programming schedule to Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- **A.** Verification of conditions: Examine doors, frames, related items and conditions under which Work is to be performed and identify conditions detrimental to proper and or timely completion.
 - 1. Do not proceed until unsatisfactory conditions have been corrected.

3.2 HARDWARE LOCATIONS:

- **A.** Mount hardware units at heights indicated in the following publications except as specifically indicated or required to comply with the governing regulations.
 - 1. Recommended Locations for Builder's Hardware for Standard Steel Doors and Frames, by the Door and Hardware Institute (DHI).
 - 2. Recommended locations for Architectural Hardware for flush wood doors (DHI).
 - **3.** WDMA Industry Standard I.S.-1A-04, Industry Standard for Architectural wood flush doors.

3.3 INSTALLATION:

- **A.** Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- **B.** Conform to local governing agency security ordinance.
- C. Install Conforming to ICC/ANSI A117.1 Accessible and Usable Building and Facilities.
- **D.** Installed hardware using the manufacturers fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use "Riv-Nuts" or similar products.

3.4 FIELD QUALITY CONTROL AND FINAL ADJUSTMENT

- **A.** Contractor/Installers, Field Services: After installation is complete, contractor shall inspect the completed door openings on site to verify installation of hardware is complete and properly adjusted, in accordance with both the Contract Documents and final shop drawings.
 - 1. Check and adjust closers to ensure proper operation.
 - **2.** Check latchset, lockset, and exit devices are properly installed and adjusted to ensure proper operation.
 - **a.** Verify levers are free from binding.
 - **b.** Ensure latchbolts and dead bolts are engaged into strike and hardware is functioning.

3. Report findings, in writing, to architect indicating that all hardware is installed and functioning properly. Include recommendations outlining corrective actions for improperly functioning hardware is required.

3.5 SCHEDULE OF FINISH HARDWARE:

	DOOR HARWARE											
Door Number	door thickness	hinges	Hand	lockset	lock function	BEST interchangeable core	closer	threshold	silencers	floor stop	exit device	Remarks
100	13/4	exist	RHR		exist							
101	13/4	3	LHR	1	storage	1			yes	1		
102	13/4	exist	LHR		exist		exist					
103	13/4	exist	LHR		exist		exist					
104 # not	used		•		•		•		•	•		
105	13/4	3	RH	1	office	1			yes	1		
106	13/4	3	RH	1	office	1			yes	1		
107	13/4	3	RHR	1	office	1			yes	1		
108	13/4	3	RH	1	office	1			yes	1		
109	13/4	3	LHR	1	office	1			yes	1		
110 # not	used								•			
111	13/4	3	RH	1	office	1			yes	1		
112	13/4	3	RH	1	office	1			yes	1		
113	13/4	3	RHR	1	office	1	1		yes		1	
114 # not	114 # not used											
115A	13/4	3	LHR	1	office	1			yes	1		
115B	13/4	3	RHR	1	office	1			yes	1		
116	13/4	exist		1	office	1				1		
117	13/4	3	LHR	1	passage		1		yes	1		
E100	13/4	3	RHR	1	exit	1	1	1	yes		1	
E101	13/4	exist	LHR	1	exit	1	1		yes			
E102	13/4	3	RHR	1	exit	1	1	1	yes		1	Α

Hinges	Stanley CB191 4 1/2 X 4 1/2 NRP US32D ST
Storage	CL3157 NZD 626
Office	CL3151 NZD 626
Passage	CL3110 NZD 626
Exit	CL3172 NZD 626
	•
REMARKS	
Α	Ives by Schlage - Solid Brass 190° Peephole Viewer in Satin Chrome - (U698B26D)

End of section 08710

				DC	OR HARW	/ARE						
Door Number	door thickness	hinges	Hand	lockset	lock function	BEST interchangeable core	closer	threshold	silencers	floor stop	exit device	Remarks
100	1 3/4	exist	RHR		exist							
101	1 3/4	3	LHR	1	storage	1			yes	1		
102	1 3/4	exist	LHR		exist		exist					
103	1 3/4	exist	LHR		exist		exist					
104 # not	used											
105	1 3/4	3	RH	1	office	1			yes	1		
106	1 3/4	3	RH	1	office	1			yes	1		
107	1 3/4	3	RHR	1	office	1			yes	1		
108	1 3/4	3	RH	1	office	1			yes	1		
109	1 3/4	3	LHR	1	office	1			yes	1		
110 # not	used											
111	1 3/4	3	RH	1	office	1			yes	1		
112	1 3/4	3	RH	1	office	1			yes	1		
113	1 3/4	3	RHR	1	office	1	1		yes		1	
114 # not used												
115A	1 3/4	3	LHR	1	office	1			yes	1		
115B	1 3/4	3	RHR	1	office	1			yes	1		
116	1 3/4	exist		1	office	1				1		
117	1 3/4	3	LHR	1	passage		1		yes	1		
E100	1 3/4	3	RHR	1	exit	1	1	1	yes		1	
E101	1 3/4	exist	LHR	1	exit	1	1		yes			
E102	1 3/4	3	RHR	1	exit	1	1	1	yes		1	Α

Hinges	Stanley CB191 4 1/2 X 4 1/2 NRP US32D ST
Storage	CL3157 NZD 626
Office	CL3151 NZD 626
Passage	CL3110 NZD 626
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REMA	ARKS
Α	Ives by Schlage - Solid Brass 190° Peephole Viewer in Satin Chrome - (U698B26D)

DOOR THRESHOLDS AND SEALS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 DESCRIPTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

 Furnish all labor, materials, equipment and services necessary or incidental to completion of Door Thresholds and Seals

1.3 SUBMITTALS

A. Comply with Section 01300.

1.4 INSTALLATION CONFERENCE

A. Refer to Section 01420 - Notification of Architect Requirements

PART 2 - SUBMITTALS

2.1 MANUFACTURERS

- A. A.J. May
- B. National Guard Products
- C. Pemko Manufacturing Co.
- D. Zero International

2.2 MATERIALS

- A. Thresholds at Exterior Doors: Zero International #564 aluminum or 1/2 inch maximum rise for handicapped compliance.
- B. Exterior Door Weatherstripping:
 - At all exterior hollow metal doors provide A.J. May 795-A (Aluminum and Neoprene) at sides and head of door. The seal of the door sill shall be A.J. May 357-A.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. All items shall be installed in accordance with manufacturer's printed instructions.
- B. Thresholds and Weatherstrips: Install to provide weathertight installation. Install threshold the full width of the opening. Miter end returns as required. Set in liberal amount of sealant.

GLAZED SYSTEMS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 DESCRIPTION

A. Refer to Instructions to Proposers for substitutions.

1.1 1.2 SCOPE

- A. Furnish all labor, materials, equipment and services necessary or incidental to completion of glazed systems including:
 - Glazing of hollow metal doors.
 - 2. Mirrors (excluding framed toilet accessories).
- B. Work Specified Elsewhere:
 - 1. Hollow Metal Doors and Frames
 - 2. Wood Doors

1.3 SUBMITTALS

- A. Comply with Section 01300.
- B. Shop Drawings:
 - Complete shop drawings by manufacturer, indicating elevations, sections, substrates, finishes, hardware and installation details.
 - Manufacturer's specifications and other data needed to prove compliance with specified requirements, and manufacturer's installation instructions.
 - O3 Engineers calculations of performance requirements.
- C. Samples: Show manufacturer's full range of colors
 - O1 Samples of each type of glass (12" x 12" minimum)
 - In place sample of sealant at frame perimeter for Architect's approval. Architect shall select samples for review from manufacturer's full color line.
 - Obtain hardware templates from finish hardware supplier.
 - O4 Samples of framing finish for approval and fastener types.

1.4 INSTALLATION CONFERENCE

A. Refer to Section 01420 - Notification of Architect Requirements

1.5 REFERENCES

A. American National Standards Institute:

ANSI 297.1 - 1975 Safety Performance Specification

ANSI 297.1 - 1972 Safety Glass Code

B. Federal Specifications:

Fed. Spec. DD-G-001403 B

Fed. Spec. TT-S-00230 Sealing Compound: Synthetic Rubber Base and TT-S-00203C

Fed. Spec. TT-S-001657 Sealing Compound: Butyl Rubber Base

Fed. Spec. DD-G-451d

C. AAMA HS-A2

1.6 QUALITY ASSURANCE

- A. All of the exterior glass in doors shall resist 50 psf wind pressure minimum and be impact resistant. All products must be approved by the Texas Department of Insurance and installed per their specifications.
- B. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts, and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- C. In addition to complying with pertinent codes and regulations of governmental agencies having jurisdiction, comply with pertinent recommendations contained in:
 - 1. Flat Glass Marketing Association:
 - a. Glazing Sealing Systems Manual
 - b. Glazing Manual

PART 2 - PRODUCTS

2.1 PERFORMANCE SPECIFICATIONS

- A. Requirements apply simultaneously through the most adverse conditions of each exterior application.
 - Windloads: Design system to withstand positive and negative windloads normal to the plane of the wall in excess of 50 psf.
 - Thermal Movement: Provide for noiseless expansion and contraction of all materials and assemblies due to temperature changes in a range between 10°F and 180°F, without detriment to appearance or performance.
 - Water Infiltration: Drain water entering at joints and condensation occurring within the wall construction to the exterior face of the wall. Allow no uncontrolled water other than condensation on the interior face of the wall.
 - O4 Air Filtration: Limit air leakage to maximum 0.06 cfm per square foot of wall projected area. (Curtain wall at 15 lb/sq. ft. and storefront at 8 lb./sq. ft.)

2.2 MATERIALS

A. Glass

- 01 General:
 - a. Glass shall meet the requirements of Fed. Spec. DD-G-451-d
 - b. Float Glass: Care shall be taken to minimize the tong marks and, unless indicated otherwise on the drawings, the tong marks shall occur at the bottom of the glass (after installation).

B. Glass Type

- 01 **G1** Clear Float Glass: Polished plate or float, ASTM C1036, Type I, Class 1, Quality q3, ¼" thick unless otherwise shown
- 02 **G2** Clear Tempered Glass: ASTM C1048, Type I, plate of float, flat, quality q3, fully tempered, ¹/₄" thick.
- 03 **B1** Ballistic Glass: Glass Clad Polycarbonate
 - a. Protection Level UL 752 Level 2
 - b. Threat stopped .357 Magnum 3 shot resistant
 - c. Thickness 1.075"
- C. Glazing Materials at Hollow Metal Frames:
 - General: Use glazing compound and preformed glazing sealants approved for the application, except as otherwise specified, conforming to Glazing Materials portion of the FGMA Glazing Manual.

- 02 Sealant:
 - a. One part acrylic polymer sealant conforming to Fed. Spec. TT-S-00230 or silicone, Fed. Spec. TT-S-0023-C. Use for glazing of all fixed glass. Include primer as recommended by manufacturer.
 - b. Color: Shall match frame and existing sealant
 - All sealants shall be compatible with adjacent material per manufacturer's instruction.
- O3 Setting Blocks: Hard rubber or clean grain softwood.
- Back-up Material: Foamed polyethylene or polystyrene rodstock; sizes as required by joint condition, and compatible with sealant.
- O5 Glazing Tape: DAP #1202 or as approved.
- Of Glazing Gaskets: Extruded neoprene, free of porosity, surface defects, dimensional irregularities, and conforming to physical properties of ASTM C502.
- Use of metal sash putty will not be permitted, but compound conforming to Fed. Spec. T-G-410 will be permitted. The use of nonskinning compounds, non-resilient type preformed sealers and preformed impregnated type gaskets will not be permitted.

2.3 MANUFACTURERS

- A. Glass:
 - 01 ASG Industries, Inc.
 - 02 CE Glass, Combustion Engineering, Inc.
 - 03 Ford Glass
 - 04 Libbey-Owens Ford Co.
 - 05 PPG Industries
 - 06 Texas Tempered Co.
 - 07 HGP Industries

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Clean glazing channels, stops, and rabbets to receive the glazing materials, making free from obstructions and deleterious substances which might impair the work.
 - Remove protective coatings which fail in adhesion or interfere with bond of sealants.
 - O2 Comply with manufacturer's' instructions for final wiping of surfaces immediately prior to application of primer and glazing compounds or tapes.
 - Prime surfaces to receive glazing compounds in accordance with manufacturer's recommendations.

3.2 INSTALLATION

- A. Inspect each piece of glass immediately prior to start of installation.
 - Do not install items which are improperly sized, have damaged edges, are scratched, abraded, or damaged in any other manner.
 - Do not remove labels from glass until so directed by the Architect.
 - Install glass so distortion waves, if present, run in a horizontal direction.
- B. Locate setting blocks at sills one quarter of the width of the glass in from each end of the glass, unless otherwise recommended by the glass manufacturer.
 - Use blocks of proper size to support the glass in accordance with the manufacturer's recommendations.

- Provide spacers for all glass sizes larger than 50 united inches, to separate glass from stops, except where continuous glazing gaskets or felts are provided.
 - a. Locate spacers no more than 24 inches apart, and no closer than 12 inches to a corner.
 - b. Place spacers opposite one another.
 - c. Make bite of spacer on glass 1/4 inch or more.
- C. Set glass in a manner which produces the greatest possible degree of uniformity in appearance.
- D. Do not use two different glazing materials in the same joint system, unless the joint use is approved in advance by the Architect.
- E. Mask, or otherwise protect surfaces adjacent to installation or sealants.
- F. Install all glass, gasket and aluminum framing in strict accordance with manufacturer's printed instructions.

3.3 PROTECTION

A. Protect glass from breakage after installation by promptly installing streamers or ribbons, suitably attached to the framing and held free from glass. Do not apply warning markings, streamers, ribbons, or other items directly to the glass, except as specifically directed by the Architect.

GYPSUM WALLBOARD SYSTEMS

CONDITIONS OF THE CONTRACT AND DIVISION 1 APPLY TO THIS SECTION.

PART 1 - GENERAL

1.1 DESCRIPTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

- A. Furnish all labor, materials, equipment and services necessary or incidental to completion of
 - 01 Metal framing for gypsum board construction
 - 02 Gypsum board
 - 03 Sheathing
- B. Work Specified Elsewhere:
 - 01 Light Gauge Steel Framing Section 05410
 - 02 Miscellaneous Steel Section 05500
 - 03 Building Insulation Section 07210
 - 04 Acoustical Lay-In Ceilings Section 09510
 - 05 Acoustical Insulation Section 07210

1.3 SUBMITTALS

- A. Comply with Section 01300.
- B. Product Data:
 - Manufacturer's specifications and other data needed to prove compliance with specified requirements.
 - Manufacturer's installation instructions

1.4 INSTALLATION CONFERENCE:

A. Refer to Section 01420 - Notification of Architect Requirements.

1.5 REFERENCES

- A. ANSI A97.11
- B. ASTM A570, C36, C442, C636, C-79, C630
- C. Gypsum Association Publication GA-216: "Recommended Specification for the Application and Finishing of Gypsum Board"
- D. Fed. Spec. SS-L-30

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages, containers or bundles bearing name and identification of manufacturer or supplier.
- B. Store materials inside under cover and keep dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic and other causes. Neatly stack gypsum boards flat to prevent sagging.
- C. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or damage metal corner beads and trim.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Metal Framing System:

All metal framing members shall be channel type screw type studs and runners, punched cee studs, fabricated from steel with 33 KSI minimum yield strength; minimum G-40 galvanized steel in sizes as indicated on the drawings. Gages of studs shall be based on the laterally unbraced height at each condition in accordance with the following schedule.

Stud	Gyp Bd	<u>Height</u>	<u>Height</u>
Size	Layers	20 Gage	16 Gage
2-1/2"	1 layer ea side	14'-0"	14'-1" +
3-5/8"	1 layer ea side	18'-3"	18'-4" +
6"	1 layer ea side	26'-6"	26'-7" +
2-1/2"	2 layers ea side	14'-9"	14'-9" +
3-5/8"	2 layers ea side	19'-0"	19'-1" +
6"	2 layers ea side	27'-6"	27'-7" +
2-1/2"	1 layer, 1 side only	13'-0"	13'-1" +
3-5/8"	1 layer, 1 side only	17'-3"	17'-4" +
6"	1 layer, 1 side only	25'-6"	25'-7" +

The minimum Section Modulus (Sx) value for interior metal framing members shall be:

<u>Member</u>	20 Gage Sx	16 Gage Sx
2-1/2"	0.147	0.305
3-5/8"	0.241	0.495
6"	0.487	0.990

- O3 Stud gauge, if not indicated otherwise, shall be based on a L/360 maximum deflection requirement. Studs shall meet ASTM C-645 and C-653
- O4 Stud partitions scheduled to receive ceramic tile finish shall be increased to the next higher gage for the height designated above. Example: 25 gage increased to 20 gage; 20 gage increased to 16 gage. No increase is needed for 16 gage studs.
- Studs at all hollow metal frame openings: Channel type screw studs formed from 20 gauge galvanized steel in widths indicated on drawings. Provide at least 2 per each jamb. One stud drilled and screwed to jamb anchors and the second installed after the first is connected to the hollow metal frame. (Note that structural bracing is required at each opening wider than 48" under Section 05500 Miscellaneous Metal and will be installed between the 2 studs by that section. Provide the required coordination for that installation.)
- B. Wall and Ceiling Materials:
 - General: All wallboard shall be 5/8 inch thick, Type X, tapered-edged, conforming to ASTM C36 (fire rated). Sizes shall be 4'-0" wide by longest practical length to minimize joints.
 - O2 Ceramic Tile Backer Board: <u>Dens-Shield</u> or equal. Use as wall board substrate at all ceramic tile.
 - a. 5/8 inch thick
 - b. Greatest width X longest to minimize joints.
 - c. Use joint reinforcement and fasteners in accordance with manufacturer's printed instructions.
 - 03 **Exterior Sheathing**: 5/8" thick <u>Dens-Glass Gold Sheathing</u> or equal in the largest sizes available.
 - O4 **Channels**: 16 gauge cold rolled steel channels with hot dip galvanized finish. Sizes as indicated on drawings. Use for suspended ceilings and elsewhere as indicated.
 - Furring Channels: Standard 2 3/4 inches wide, 7/8 inch deep galvanized sheet metal furring channel; minimum 20 gage.
 - Of Corner Beads: No. 28 gauge galvanized steel, 1 1/4 inch legs. Use at all exterior corners.

- Joint Compound (Taping): Standard types manufactured by gypsum wallboard manufacturer for intended use. Fire rated type must be used on fireproof systems.
- O8 **Laminating Adhesives**: Standard type manufactured or recommended by manufacturer of product to be laminated.
- O9 Ceiling Hanger and Tie Wire: 9 gauge galvanized hanger wire and 16 gauge tie wire.
- Fasteners (screws) shall be equal to 1 ½" (minimum) long U.S.G. type "S" drywall screws of length to penetrate metal components ½". Type "G" self-tapping U.S.G. screws shall be used for metal to metal fastenings.
- 11 **Control Joints**: Metal (USG #093) type with 1/4 inch open joint, perforated flanges for floating in place. Control joints shall be located every 30'-0", above each side of door frames, and along building expansion joints, unless noted otherwise on drawings.
- 12 **Wall Fixture Reinforcement**: 6 inch, 14 gauge cold rolled steel galvanized channels.
- Gypsum board reveals shall be ½" wide by 5/8" deep drywall reveals; extruded aluminum, painted finish. Gordon 'Final Forms I' Series 500; or equal by Fry Reglet or Pittcon.

2.2 MANUFACTURERS: Provide domestically manufactured gypsum wall board.

- A. Gypsum Wall Board
 - 01 U. S. Gypsum Co.
 - 02 Gold Bond
 - 03 Georgia Pacific
 - 04 Temple Inland Forest Products Co.
 - 05 Domtar Gypsum
- B. Metal Framing System
 - 01 U.S. Gypsum
 - 02 Harrison Manufacturing
 - 03 Dietrich
 - 04 Inryco, Inc.
 - 05 Unimast
 - 06 Clark

PART 3 - EXECUTION

3.1 METAL FRAMING INSTALLATION

- A. **Floor Track**: Attach to floor at 24 inch maximum centers with shoot-in pins or concrete nails.
- B. All metal framing shall extend to floor or roof structure / deck above, unless shown otherwise on the drawings.
 - Fasten tracks at 24" intervals and more often where necessary.
 - Where framing is perpendicular to joists, provide additional bracing as required.
 - At fire rated partitions, framing shall extend full height to floor or roof deck above to allow a full, tight fit and seal of gyp board to be applied.
 - Where studs are indicated to extend only above ceiling, brace to structure or other suitable framing at intervals not to exceed 32" o.c. each side and staggered.
- C. Studs:
 - O1 Single lengths positioned vertically in the runners, spaced 16 inches o.c., unless otherwise shown.
 - O2 Secure studs to stud track on one side at the top track and both sides at the bottom track prior to installation of gyp board.
- D. Wall Reinforcement:
 - O1 Provide horizontal bridging in all stud walls in accordance with the manufacturer's standards and recommendations.
 - Provide solid, 2x (2x4 min.) treated wood blocking, spanning between wall studs, at all wall mounted fixtures, finish hardware, toilet partitions, wall cabinets, toilet accessories, specialties, built-in work and similar locations as required to provide a suitable substrate for firm attachment of other work..
- E. Chasewall Bracing:

- 01 Install cross-bracing for chase wall construction; gage of bracing to equal stud gage.
- O2 Space braces a maximum of 36 inches vertically on every pair of studs.

3.2 WALLBOARD INSTALLATION

- A. Select the maximum practical length to minimize end joints. All end joints shall be neatly fitted and staggered. Joints on opposite sides of partition shall be so arranged as to occur on different studs.
- B. Install metal corner bead at external corners. Where length of the corner does not exceed standard stock lengths, use a single length.
- C. Install gypsum board 1/2 inch above surface of slab to prevent wicking of moisture.
- D. Install metal trim where indicated and all wall board not terminating under frames or behind bases shall be trimmed with galvanized "J" mold.
- E. Apply at least three coats of joint compound over beads, screw heads and trim, and each coat shall be feathered out onto panel faces. Refer to <u>Para. 3.7 Workmanship Tolerances</u> for level of finish required.
- F. Float out and sand joints to make joints invisible when painted with non-texture paint. Refer to Para. 3.6 Workmanship Tolerances for level of finish required.
- G. Caulk around pipes, ducts, structure or similar items which penetrate drywall systems.
- H. Fasten wallboard at 12 inches o.c., except at the edges/joints which shall be at 8 inches o.c.
- I. Edge-Grip Clips: Position clips on the back of the panels and drive prongs into panel edges. Space clips 16 inches o.c. Screw-attach clip to framing, furring or wall surface.
- J. At all wrap-around hollow metal frames, gyp board shall extend ½" minimum into frame throat.
- K. At all exterior metal framed walls extend gypsum wall board from floor to deck unless noted otherwise.

3.3 SHEATHING INSTALLATION – "Dens-Glass"

- A. Install sheathing in accordance with manufacturer's instructions and applicable instructions in Gypsum Association -253 and ASTM 1280.
- B. Install Dens-Glass Gold sheathing with gold side out.
- C. Install using maximum lengths possible to minimize the number of joints.
- D. Secure sheathing to metal framing with hot dip galvanized screws spaced 8 inches o.c. Do not countersink fasteners, drive them to bear flush with surface of sheathing. Locate fasteners at least 3/8" from edges.
- E. Seal fasteners using Dow Corning 795 or Borden HPPG Elmers Siliconized Acrylic Latex Caulk or equivalent.
- F. Finish joints using STOPAQ EZ wrap, Dow Corning 795, or Borden HPPG Elmers Siliconized Acrylic Latex Caulk or equivalent. Reinforce with 2" wide 10x10 glass mesh Quick Tape or equivalent.
- G. Provide sheathing at all exterior metal framed walls unless noted otherwise.
- H. Coordinate with the installation of dampproofing above grade.

3.4 CEILING FRAMING INSTALLATION

- A. Main Runners:
 - Hanger wires (9 gauge) shall be spaced not over 4'-0" in the direction of 1 1/2 inch main runner channels, not over 4'-0" in the direction of right angles to the main runners, and within 6 inches of the ends of main runners and of boundary walls, girders or similar interruptions of ceiling continuity. Do not place over 4'-0" o.c., properly positioned and leveled.
- B. Furring Channels:
 - O1 Space 16 inches o.c., and saddle-tie with two strands of 16 gauge tie wire to main runners or main support members. Do not let into or come in contact with abutting masonry walls. End splices shall be provided by nesting channels or studs no less than 8 inches and securely wire-tie.

3.5 CEILING BOARD INSTALLATION

- A. Apply gypsum board of maximum practical length with the long dimension at right angles to the furring channel and fastened with 1 inch drywall screws spaced 12 inches o.c. in the field of the board and along abutting ends.
- B. Align abutting end or edge joints over the web surface of the furring channel. Tie neatly and accurately with end joints staggered.

3.7 WORKMANSHIP TOLERANCES and REQUIRED LEVEL OF FINISH

A. Wallboard:

- 1. Visual: Correct any nicks, bumps, out-of-level or out-of-plumb areas detectable to the naked eye.
- 2. Float solid between corner beads less than 36 inches apart. Surfaces that appear concave are not acceptable.
- 3. Provide "J" mold and continuous 1/4 inch reveal wherever gypsum board directly abutts other material or when the end is exposed.
- 4. Float control joints flush with the wall surface so that ceiling wall molds that are specified separately will align flat and straight with the wall surface.
- **B.** Required Level of Gypsum Drywall Finish (refer to Gypsum Association publications for standards)
 - 1. All gypsum wallboard shall be finished to a level 4 unless specifically scheduled or noted otherwise. All joints and interior angles shall have tape embedded in joint compound and 2 separate coats of joint compound applied over all flat joints and 1 separate coat of joint compound applied over interior angles. Fastener heads and accessories shall be covered with 3 separate coats of joint compound. All joint compound shall be smooth and free of tool marks and ridges.
 - 2. For all plenum areas and areas not exposed provide a level 1 finish. All joints and interior angles shall have tape set in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable.
 - 3. All gypsum wallboard scheduled to receive a semi-gloss or glossy finish shall be finished to a level 5 unless specifically scheduled or noted otherwise. All joints and interior angles shall have tape embedded in joint compound and 2 separate coats of joint compound applied over all flat joints and 1 separate coat of joint compound applied over interior angles. Fastener heads and accessories shall be covered with 3 separate coats of joint compound. A thin coat of joint compound or a material manufactured especially for this purpose shall be applied to the entire surface. The surface shall be smooth and free of tool marks and ridges.

3.8 COMMENCEMENT RESTRICTIONS

A. Interior gypsum wallboard and ceiling board installation may not commence until all exterior sheathing and dampproofing is completed, the individual floor is dried in or roofing is complete, roof top equipment openings are covered and flashed, and exterior wall openings are protected.

3.9 PROTECTION AND CLEAN UP

- A. Coordinate with painting and make sure all gypsum board is primed and the specified texture is provided.
- B. Unless the Construction Manager gives notice otherwise, in advance. Each Trade contractor is responsible for removing his own trash from the Work area and for the initial cleaning of his own Work, while ongoing and when completed.
 - O1 GARBAGE COLLECTIONS: Provide a collection can at each location on the site used as an eating area.
 - TRASH REMOVAL: Clear the building and site of trash at least once a week. When rapid accumulation occurs, make more frequent removal. Remove highly combustible trash such a paper and cardboard daily.

- O3 DISPOSITION OF DEBRIS: Remove debris from the site and make legal disposition. Locations for disposal shall be of the Contractor's choice within the above restrictions. No debris or material may be buried or burned at the site. Take necessary precautions to prevent accidental burning of materials be avoiding large accumulations of combustible materials.
- C. The Work shall be turned over to the Construction Manager/Owner in immaculate condition. Cleaning includes removal of smudges, marks, stains, fingerprints, soil, dirt, paint spots, dust, lint, discolorations and other foreign material.
- D. Remove all temporary facilities.

SECTION 09510 ACOUSTICAL LAY-IN CEILING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Provide all required labor and materials for the completion of acoustical ceiling work for this project.

1.3 SUBMITTALS

- A. Comply with <u>Section 01300 Submittals</u>.
- B. Product Data. Manufacturer's specifications and technical data
- C. Samples of ceiling panels and ceiling grid.

1.4 RELATED WORK

- A. Section 09260 Gypsum Wallboard Systems
- B. Drawing 4/A1.2 data

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Suspension Systems:
 - Drywall Grid System for framing flat or curved drywall/wood ceilings and soffits A preengineered drywall suspension system consisting of straight main tees along with straight
 furring cross channels or cross tees, that join together to support screw-attached gypsum
 panels or wood panels, independently supported light fixtures, and air diffusers, where
 applicable.
 - a. Components: All main beams and cross tees shall be commercial quality hot-dipped galvanized as per ASTM A 653. Main beams and cross tees are double-web steel construction with type exposed flange design. Exposed surfaces chemically cleansed, capping pre-finished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.
 - b. USG Flat Drywall Suspensions Systems
 - c. Drywall Grid System as manufactured by Armstrong World Industries, Inc.
 - 2. Typical Ceiling 15/16" Acoustical Suspension System white Aluminum cap
 - a. Components: All main beams and cross tees shall be commercial quality hotdipped galvanized as per ASTM A 653. Main beams and cross tees are doubleweb steel construction with type exposed flange design. Exposed surfaces chemically cleansed, capping galvanized steel aluminum cladding.
 - b. Structural Classification: ASTM C 635 HD.
 - Color: White and match the actual color of the selected ceiling tile, unless noted otherwise.
 - d. Prelude ML 15/16" Exposed Tee as manufactured by Armstrong World Industries, Inc.

B. Hanger Wire:

- 1. Spacing at 4'-0" o.c. both directions, wrapped tightly at least 3 full turns.
- 2. 12-gauge steel wire.
- 3. Provide 4 hanger wires at each 2x4 light fixtures (one at each corner).

C. Acoustic Lay-in Panels (Typical unless otherwise noted):

- 1. USG Frost ClimaPlus or equivalent
- 2. Shadow Line Beveled Edge
- 3. 3/4" x 2' x2'
- 4. Fire Class A
- 5. White finish
- 6. Fire Resistive
- 7. Medium texture
- 8. Mineral Fiber
- 9. NRC = 0.83
- 10. CAC = 38
- 11. Light reflectance = 83

D. Accessories:

- 1. At all locations (whether detailed or not) where an acoustical lay-in ceiling abuts a wall or a gypsum board ceiling in the same plane, provide a "W" shaped reveal or "shadow" molding equal to Fry Reglet W Reveal Molding.
- Provide a Pittcon radius reveal where an acoustical ceiling abuts curved walls or curved soffits.

2.2 MANUFACTURERS

- A. Armstrong World Industries, Inc.
- B. U. S. Gypsum
- C. Celotex
- D. Conwed
- E. Capaul Ceilings
- F. Donn Products, Inc.
- G. Eurostone

PART 3 - EXECUTION

3.1 PREPARATION

- A. Ensure that walls are flat and wall corners square. Commencing work shall be construed as acceptance of preceding work performed by others, as suitable to receive work specified in this Section.
- B. Ensure that wall control joints are flat and will not cause wall mold to misalign at those locations.
- C. Coordinate all locations of cut tile with Architect in field, prior to commencing work.
- D. Do not install any ceiling tile until all above ceiling inspections and corrections have been completed.

3.2 SUSPENDED CEILING SYSTEMS

- A. Install ceiling systems by skilled workmen in accordance with manufacturer's printed instructions, the approved shop drawings and reflected ceiling plans. Exposed surfaces of acoustical units shall be level and flush, with all joints straight and true. Cutting and fitting around all items protruding through acoustical ceiling shall be done neatly. Edge moldings and runners shall have flush hairline joints, with all corners mitered.
- B. Install main beam and cross tees in accordance with reflected ceiling plans. Suspend main beams from structure above (but not bridging), by means of #12 gauge galvanized wire, located 4 feet on center. Use of powder actuated fasteners to steel deck is not permitted. Join cross tees to main

- beam with a positive interlock. At perimeter areas, secure angle molding to vertical surfaces, ends of tees to rest on bottom flange of molding.
- C. Align beams or tees with angle molding at corners, unless authorized by Architect.
- D. Attachment of grid members to wall molding with pop rivets is not permitted. Hanger wire at 45 degrees, approximately 10 inches long may be used to tie the grid to the wall above the ceiling to prevent eventual disengagement of the two components.

3.3 EXTRA CEILING BOARDS

A. Leave 20 Lay-in Boards in unopened cartons at completion of work for the use of Galveston County as attic stock. Get a receipt to attach to the last payment application as proof of delivery.

RESILIENT TILE FLOORING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Provide all labor, materials, and incidentals for the completion of Vinyl Composition Tile, Resilient Sheet Floor, and resilient base work on this project.

1.3 RELATED WORK

A. Carpet – Section 09680

1.4 SUBMITTALS

- A. Comply with Section 01300.
- B. Product Data. Manufacture's specification data and installation instructions.
- C. Samples of colors as noted on the schedules and legends in the drawings.
- D. Maintenance Data. Include in the final close-out documents the maintenance data describing the procedure to be followed in maintaining the materials.
- E. Asbestos Free Materials. Provide a written notarized statement indicating that all materials used are totally asbestos free.

PART 2 - PRODUCTS

2.1 VINYL COMPOSITION FLOOR TILE (VCT)

- A. Materials:
 - 01 Size. 12" x 12" x 1/8" thick.
 - O2 Patterns and Colors. Selected from manufacturer's standard line.
- B. Manufacturers:
 - 01 Armstrong World Industries
 - 02 Azrock Floor Products
 - 03 Tarkett Corp.
 - 04 Mannington Commercial

2.2 RESILIENT BASE (R)

- A. Materials
 - 01 Base:
 - a. Quality Standard. FS SS-W-40, Type I rubber base with matching end stops and molded corner units.
 - b. Type. Topset cove; 48 inch lengths or in roll
 - c. Height. 4 inches, unless shown otherwise
 - d. Thickness. Full 0.125
 - e. Color. As shown on finish schedule and legend in the drawings.
 - 02 Resilient Reducer Strips: 1" wide x 1/8" thick, rubber, bullnose edge, color to match base.
- B. Manufacturers:

- 01 Armstrong World Industries
- 02 Burke Floor Products, Co.
- 03 Flexco
- 04 Roppe Rubber Co.
- 05 Johnsonite

2.3 PRIMERS AND ADHESIVES

- A. Concrete Slab Primer: Non-staining type as recommended by material manufacturers.
- B. Adhesives: Waterproof, stabilized type as manufactured by resilient material manufacturer.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Subfloors:
 - Verify that substrate is smooth, level, at required finish elevation, and without more than 1/8 inch in 10'-0" variation from level or slopes shown on the drawings.
 - O2 Prior to laying materials, broom clean or vacuum the surfaces to be covered, and inspect the subfloors.

3.2 INSTALLATION

- A. General:
 - Install materials only after finishing operations (including painting), have been completed, and after permanent heating and cooling system is operating.
 - Verify that moisture content of concrete slabs, building air temperature, and relative humidity are within the limits recommended by the manufacturers of the materials used.
- B. Installing Resilient Tiles:
 - O1 Place units with adhesive cement in strict compliance with the manufacturer's recommendations.
 - b. Butt units tightly to vertical surfaces, nosings, edgings, and thresholds.
 - c. Scribe, as necessary, around obstructions and to produce neat joints.
 - d. Place tiles tightly laid, even, and in straight parallel lines.
 - e. Extend units into toe spaces, door reveals, and in closets and similar spaces.
 - O2 Lay units from center marks established with principal walls, discounting minor offsets, so that units at opposite edges of the room are of equal width.
 - a. Adjust as necessary to avoid use of cut widths less than 3 inches wide at edge of space.
 - b. Lay units square to axis of the room or space.
 - Match units for color and pattern by using materials from cartons in the same sequence as manufactured and packaged.
 - Lay in alternating pattern with grain in all units running 90 degrees from adjacent unit.
 - Place resilient edge strips tightly butted to units and secured with adhesive, providing at all unprotected edges, unless otherwise shown.
- C. Installing Base:
 - Install base on solid backing. Adhere tightly to wall and floor surfaces.
 - Use factory-preformed exterior corners, and factory preformed or job-mitered interior corners.
 - O3 Scribe and fit to doorframes and other obstructions.
 - O4 Install base on all casework as shown, unless otherwise noted.

3.3 CLEANING AND PROTECTING

A. Remove excess adhesive and other blemishes from exposed surfaces, using neutral cleaner recommended by the manufacturer of the resilient materials.

3.4 EXTRA STOCK

A. Deliver to the Owner for his future use an extra stock of two unopened boxes of each color and pattern of tile selected, and one container of base adhesive.

CARPET

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Provide all labor, materials, and incidentals for the completion of carpet work on this project with the exception that the **carpet is provided by Galveston County** from stock on hand.

1.3 SUBMITTALS

- A. Shop drawings to the Architect showing layout of all seams and cross seams, location, and type of carpet accessories.
- B. Manufacturer's product data including base adhesive.
- C. Maintenance manual.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Carpet Accessories and Adhesive (refer to Section 09660, 2.2 Resilient Materials):
 - O1 Standard accessories as recommended by the carpet manufacturer.
 - O2 Adhesive as recommended by carpet manufacturer.
 - All transition strips shall be rubber and all edges of Carpet to other finishes shall be provided with a transition strip.
 - a. Provide transition strip diagram for approval by architect prior to installation.

PART 3 - EXECUTION

3.1 PREPARATION

- A. The floor shall be clean and free of any foreign substances, such as wax, paint, oil, etc.
- B. Cracks and holes shall be filled with 4000 psi cement latex emulsion filler compatible with adhesive.
- C. Any ridges and high spots in concrete surface shall be brought to the attention of the Architect and the Construction Manager.
- D. Apply a RiSource 3300 primer coating to all floors prior to laying carpet as per the Manufacturer's recommendations.
- E. Contractor shall make a 3' x 3' full embedment tests to verify a full adhesive transfer per the manufacturer's approval.

3.2 INSTALLATION

- A. General:
 - O1 As recommended by the manufacturer.
 - O2 Scribe carpet accurately to all vertical surfaces.
 - Align lines of carpet as woven, using no fill strips less than 15 cm (6") in width, laying all carpet in same direction unless specifically otherwise directed by the Architect.
- B. Seams:
 - O1 Locate seams only where shown on approved shop drawings or where otherwise approved by Architect.

- Fabricate seams by the compression method, using a butt joint, and properly bead and seal. Do not stretch seams.
- 03 Brush out air bubbles toward seam.
- Carefully apply a bead seam adhesive to the cut edge at proper height to lock in tufts and seal edge. Do not use floor adhesive to bead cut edge. Use regular seam adhesive.

C. Clean-Up:

- Thoroughly clean all carpet surfaces prior to final acceptance of the carpeted areas by Owner. Leave work in neat, uniform condition, vacuumed and ready for use.
- Any spillage of adhesive on the face of the carpet shall be removed immediately with a clean-up solvent recommended by the manufacturer.
- O3 Avoid traffic for at least twelve hours after installation.
- O4 Carpet contractor shall repair any and all damage done by his workmen.
- Provide traffic areas with heavy Kraft paper to protect against damage and soiling. Provide such protection when directed by the Architect.

3.3 GUARANTEE

A. The carpet installer shall be required to re-lay any carpet that does not provide an attractive wrinkle-free appearance, and shall correct any condition due to faulty installation which may appear for a period of one year from date of substantial completion.

END OF SECTION

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PAINTING AND STAINING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

- A. Furnish all labor, materials, equipment and services necessary or incidental to completion of completion of all painting and staining. Refer to paragraph 3.01 for list of items to receive paint.
- B. Work Not Included:
 - O1 Shop coat of paint on metal, unless noted otherwise. Refer to Section 05500 -Miscellaneous Metals.
 - O2 Aluminum and copper, unless otherwise noted.
 - 03 Factory finished equipment.
 - 04 Plastic clad educational equipment.

1.3 SUBMITTALS

- A. Material lists: Give the supplier's name, product name, number and generic description of each proposed product and its use. Provide product data sheets if requested.
- B. Samples: Submit full range of colors, patterns, textures and finishes available for selection, including the following:
 - Ol Color Chips: Provide complete duplicate sets of color chips for color selection.
 - O2 Small Applied Samples: Provide pieces of actual material on which paint will occur with minimum dry mil thickness of specified paint.
 - O3 Sheen Samples: Provide full range of varying sheens when sheens are controllable by intermixing.
- C. Installed Samples: Provide large size samples for approval. Approved samples may be left in place as part of the work.
- D. Interior: One room and/or area, as selected by the Architect, shall be painted with materials specified or accepted and applied directly from container, unthinned. After acceptance by Architect, room and/or area shall be standard of quality of entire project.
- E. Exterior: Three samples, 4'x4' each, of all exterior finishes, provided at the job site. Samples should represent each substrate. After acceptance by Architect, samples shall be standard of quality of entire project.
- F. Certification: Furnish a letter certifying that materials submitted are truly equivalent, or better than those called out in the finish schedule.

1.4 **QUALITY ASSURANCE**

- A. Materials shall be applied directly from containers in which material is purchased. No exceptions.
- B. Subcontractor shall provide to Owner and Architect a notarized certification that paint used is as specified in writing by the Architect.
- C. Number of coats of each of several finishes shall be in accordance with detailed specifications, which will produce first quality finish if properly applied. If number of coats specified fails to produce a finish acceptable to Architect, this Contractor shall apply additional coat(s) at his own expense until an acceptable finish is achieved.
- D. Provide primers and other undercoat paints produced by same manufacturer as finish coats. Use thinners recommended by paint manufacturer's printed instructions.
- E. Deliver products to jobsite in unbroken containers bearing manufacturer's labels, intact and legible at time of use.

1.5 WARRANTY

- A. The undertaking of a painting subcontract will indicate that the subcontractor will warrant the work specified herein for <u>two years</u> against becoming unserviceable or causing an objectionable appearance, resulting from either defective or nonconforming materials and workmanship.
- B. Defects shall include by not be limited to the following:
 - 01 Discoloring noticeably by yellowing, streaking, blooming, changing color or darkening
 - 02 Mildew
 - Peeling, cracking, blistering, alligatoring or releasing from the substrate
 - O4 Chalking or dusting excessively
 - O5 Changing sheen in irregular fashion
 - Of Softening or becoming tacky
 - 07 Bubbling
- C. In the event of damage, immediately make all repairs and replacements necessary for approval of the Architect, and at no additional cost to the Owner.

1.6 RESPONSIBILITY OF COORDINATION

- A. Coordinate the work specified herein with the following work:
 - O1 Provide information to preceding trades for proper preparation of substrate.
 - O2 Inspect substrate before proceeding to verify proper preparation.
 - Notify Architect of any item to receive paint which may not be covered by a scheduled finish type. Architect will furnish appropriate specification.

1.7 PRODUCT HANDLING

- A. Store only approved materials at the jobsite, storing only in a suitable and designated area restricted to the storage of paint materials and related equipment.
- B. Temperature in the storage area shall be between 40°F and 110°F. Open and mix all materials in the storage area.
- C. Use all means necessary to protect materials before, during, and after application, and to protect the installed work and materials of all other trades.
- D. Apply water-base paints only when temperature of surfaces to be painted, and surrounding air temperatures are between 50°F (10°C) and 90°F (32°C), unless otherwise permitted by paint manufacturer's printed instructions.
- E. Apply solvent-thinned paints only when temperature of surfaces to be painted, and surrounding air temperatures are between 45°F (7°C) and 95°F (35°C), unless otherwise permitted by paint manufacturer's printed instructions.
- F. Do not paint in snow, rain, fog or mist, or when relative humidity exceeds 85%, or to damp or wet surfaces, unless otherwise permitted by paint manufacturer's printed instructions. Painting may be continued during inclement weather, if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer, during application and drying periods.

1.8 EXTRA STOCK

A. Upon completion of the work of this Section, deliver to the Owner, an extra stock equaling 10 percent or a minimum of 1 gallon, whichever is greater, of each color, type, and gloss of paint used in the work. Make sure each container is tightly sealed, clearly labeled with contents, and location where used.

PART 2 - PRODUCTS

2.1 MATERIALS – The following materials specification is based upon a company (Devoe) that no longer manufactures paint. Paragraph 2.3.C list previously approved manufacturers of paint products. The intent of the specification is for this section to provide "firstline" materials from one of the manufacturers. Firstline is a description of the finest quality paint offered by a manufacturer.

- A. The following is a specification of typical painted items and does not specifically include every item that is to receive paint. It should, however, establish type and quality of finish for all items normally included in a complete paint job.
- B. Exterior Galvanized Metal:
 - 01 1 coat Devoe Mirrolac white galvanized metal primer
 - 2 coats Devoe Mirrolac exterior alkyd urethane gloss enamel
- C. Field Weld Touch-up on Galvanized Metal:
 - 1 coat Devoe Mirrolac rust-penetrating metal primer
 - 02 2 coats Devoe Aluminum Paint
- D. Ferrous Metals:
 - 2 coats Devoe Mirrolac alkyd urethane semi-gloss enamel.
- E. Exterior Wood:
 - 1 coat Devoe All-Weather exterior alkyd house paint primer
 - 02 2 coats Devoe Regency House exterior acrylic latex flat house and trim paint
- F. Exterior Concrete Masonry Units:
 - 1 coat Devoe Bloxfil exterior acrylic latex block filler
 - 2 coats Devoe Wonder-Shield exterior acrylic latex flat house and trim paint
- G. Interior Gypsum Drywall and Ceilings:
 - 1 coat Devoe Wonder-Tones interior vinyl latex primer sealer with texture added
 - 02 2 coats Devoe Regency House interior acrylic latex flat wall paint
 - Use at all interior locations not scheduled to receive enamel paint
- H. Interior Paint:
 - 01 On Gypsum Drywall, use:
 - a. 1 coat Devoe Wonder-Tones interior vinyl latex primer-sealer with texture added
 - b. 2 coats Devoe Velour interior alkyd eggshell enamel
 - c. Use at locations scheduled to receive enamel paint.
 - 02 On Wood, use:
 - a. 1 coat Devoe Velour interior alkyd enamel undercoat
 - b. 2 coats Devoe Velour interior alkyd semi-gloss enamel
 - On Metal with Shop Coat, use:
 - a. Shop coat by others
 - b. 2 coats Devoe Velour interior alkyd semi-gloss enamel
 - c. Used for metal doors and frames and miscellaneous metal items
 - 04 On Galvanized Metals, use:
 - a. 1 coat Devoe Mirrolac galvanized metal primer
 - b. 2 coats Devoe Mirrolac Cover Up interior alkyd urethane semi-gloss enamel
 - c. Used for all exposed interior galvanized metal
 - On steel joists and wood fiber decks.
- I. Interior CMU:
 - 01 Devoe Latex Block Filler #52901 2 coats or Devoe #11502 Wonder-Pruf Filler
 - 02 Devoe #50801 Vinyl latex primer 1 coat
 - 03 Devoe #26XX Velour Interior Alkyd Semi-gloss enamel 1 coats
- J. Interior CMU and Concrete where noted as "Epoxy":
 - O1 Sherwin Williams water based catalyzed epoxy
 - 02 Surface Prep clean and dry
 - O3 SW Heavy duty block filler @ 10 -15 mils dft or Kem Cati-Coat Epoxy Filler/Sealer @ 10 -20 mils dft
 - 2 coats Water based Catalyzed Epoxy @ 2.5 3.0 mils dft/ct
- K. Interior concrete floor:
 - 01 1 coat Rust-Oleum EPOXYShield Concrete Etch
 - 02 2 coats Rust-Oleum EPOXYShield Concrete Floor Paint (1 gallon per 350 square feet per coat)

2.2 COLORS

A. Different colors may be selected for each room, and more than one color may be selected in each room.

2.3 MANUFACTURERS

- A. All paint materials selected for coating systems for each type of surface shall be the product of a single manufacturer and shall, as a system, have flame spread, fuel contribution, and smoke density test results less than 25.
- B. Paint materials listed herein, unless otherwise designated in the "Painting Schedule", are the products of Devoe Paint Division of Celanese Coating Co., and require no further approval as to manufacturer or catalogue number.
- C. Similar firstline material of one of the following manufacturers may be used subject to approval by the Architect for items indicated to be coated with Devoe materials:

PPG Industries Glidden Coatings & Resins Kelly-Moore Paint Co., Inc. DuPont (HiPerformance) Sherwin Williams(S-W) Benjamin Moore Co.(Moore) Olympic Stain Pratt & Lambert (P&L)

PART 3 - EXECUTION

3.1 ITEMS TO RECEIVE PAINT

- A. Generally, all unfinished items that are normally painted in any typical building, including but not limited to the following list:
 - 01 All ferrous metal
 - 02 All Exterior Wood:
 - a. Uniformly coat (approximately 250 square feet per gallon) with Devoe velour alkyd semi-gloss.
 - b. Color:
 - 03 All interior wood
 - O4 All exposed conduit, outlet boxes and electrical cabinets, excluding those located in mechanical rooms.
 - O5 All new pipe, plumbing and ductwork, including those located in mechanical rooms.
 - All new metal grilles, except aluminum, unless otherwise indicated.
 - O7 All new exposed gypsum board surfaces, including all mechanical rooms.
 - All exposed exterior concrete masonry units, including all mechanical rooms.
 - O9 All exposed interior concrete masonry units, including all mechanical rooms.
 - Miscellaneous other items which normally require painting or are scheduled to be painted.
 - 11 Consult plans, finish schedule, details and specifications for other trades as all items usually field painted or finish will be considered as part of the Contract.
 - 12 All new exposed mechanical equipment and electrical equipment.
 - Mechanical Room Pipes: All pipes shall be painted if insulated or not insulated.
 - Any other material that is exposed to view that is not prefinished.
- B. All work where a coat of material has been applied must be inspected and approved by the Architect, before application of succeeding specified coat, otherwise no credit for coat applied will be given. Notify Architect when a particular coat has been completed for inspection and approval. Apply coats of material in strict accordance with manufacturer's specifications, except where requirements of these specifications are in excess of manufacturer's requirements. Paint all sight exposed pipe and plumbing, only after all mechanical work and tests have been completed.

3.2 PREPARATION

- A. General: Surface must be clean to ensure adhesion. Remove oil and grease with paint thinner. Wash off dirt with warm soapy water and rinse with clean water. Remove rust by wire brushing or sanding.
- B. Unfinished Surfaces:
 - Wood: Sand smooth and apply one coat of primer undercoat. After primer has dried overnight, putty nail holes and cracks, then spot-prime putty with primer. Again, allow the primer to dry overnight, sand lightly and topcoat.
 - Masonry and Concrete: Remove efflorescence or cement dust on masonry and concrete by etching with a 10% solution or muriatic (Hydrochloric) acid. Power wash surface after etching with clean water, and paint while still damp, but within manufacturer's moisture tolerance. On surface where muriatic acid cannot be used to neutralize the efflorescence, remove the efflorescence by sanding, scraping or wire brushing, and apply a coat of masonry conditioner before painting. If efflorescence is not present, no primer is necessary on concrete and masonry surfaces. Fill voids and pores in concrete and haydite blocks with latex block filler and allow to dry overnight before topcoating.
 - 03 Iron and Steel: Prime with metal primer and allow to dry overnight before topcoating.
 - O4 Galvanized Metal: Prime with galvanized metal primer and allow to dry overnight before topcoating.

3.3 APPLICATION

- A. General: Surfaces to be finished must be clean, dry, free of dirt, oils, loose paint or any other contamination that would adversely affect adhesion, protective properties or appearance of the coating.
- B. Paint Thickness: Provide the following minimum dry film thickness per coat, unless noted otherwise:
 - Enamels on Metal: 1 mil
 - 02 Latex Paints: 1 mil
 - 03 Metal Primers: 1.5 mils
 - 04 Undercoats: 1.5 mils
 - 05 Oil Paints: 1.5 mils
 - 06 Traffic Lines: 2.5 mils
 - 07 Epoxy Coating: 2.0 mils
 - Thickness Test: Use observation gauge that measures "V" shape scratch.
- C. Allow exterior paints to dry 72 hours between coats and interior paint to dry 24 hours between coats. Allow all enamels and varnishes to dry 24 hours between coats. If enamel and varnishes are tacky after 24 hours, allow additional time until finish is dry.
- D. Leveling: Apply with proper consistency and quality so paint flows out to a level surface free of brush and roller marks, bubbles, dust, runs, sags, and holidays. Spread evenly.
- E. Appearance: Uniform color, texture and sheen.
- F. Neatness: Paint shall not be smeared, spattered or run over adjoining colors or materials. Cut-on lines shall be straight.
- G. First coat shall be white, unless otherwise specified.

SECTION 10165 PLASTIC LAMINATE TOILET PARTITIONS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of plastic laminate toilet partitions.

1.3 SUBMITTALS

- A. Shop Drawings: Within four weeks of award of contract, submit:
 - O1 Complete shop drawings for the Architect's approval, show all required field measurements, all details and elevations plans, and sections required to indicate all conditions.
 - Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 03 Manufacturer's installation instructions.
 - O4 Samples or color charts showing manufacturer's full range of colors.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All toilet partitions shall be floor mounted, overhead braced, laminated plastic in the dimensions and arrangements indicated on the drawings.
- B. Panels:
 - Doors, stiles, wall posts, panels and seats of compartments shall have a finished thickness of 1 inch nominal minimum, and shall have a uniform flush front appearance.
 - O2 Core of doors, wall posts, panels and seats shall be resin impregnated particle board.
 - O3 Stiles shall have a leveling device and be concealed by a one piece 4 inch high, type 304 satin finish stainless steel shoe.
- C. Finish: #4 Satin Brushed.
 - O1 Surface of toilet compartments shall be high pressure laminated plastic 1/16 inch thick, with matte finish, and shall be self-edged with laminated plastic. Color as selected by Architects.
 - O2 A maximum of two colors shall be selected.
 - O3 All laminating shall be done with adhesives that prevent delamination from moisture and heat.

D. Hardware:

- O1 All door hardware, mounting brackets and support brackets for seats shall be type 304 satin finish stainless steel.
- Headrails and headrail returns of overhead braced toilet compartments shall be anodized aluminum with satin finish. Locate above all doors and panels.

- Hinges shall hold door of unoccupied compartment partially open.
- 04 Locked compartment may be opened from outside by lifting door.
- Of All exposed screws to be tamperproof.
- Mounting hardware at all panels and all stiles or walls shall be stainless steel continuous channels with side flange.

2.2 MANUFACTURERS

- A. Toilet Partitions:
 - 01 General Partitions
 - 02 Robart
 - 03 SanyMetal
 - 04 Bobrick Washroom Equipment, Inc.
 - 05 Knickerbocker Partition Corp.
 - 06 Tex-Lam
 - 07 Turan Partition Corporation
- B. Plastic Laminate:
 - 01 Formica
 - 02 Micarta Westinghouse
 - 03 Wilsonart
 - 04 Nevamar
 - 05 Pionite

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in strict accordance with manufacturer's printed instructions.
- B. Install all toilet partitions where indicated on the drawings, and as indicated on the shop drawings, anchoring all components firmly in place for long life under hard use, and in complete accordance with the manufacturer's recommendations.
- C. Provide blocking/anchoring devices to secure to wall. Anchoring devices must be compatible to wall type, to ensure adequate strength.

3.2 CLEANING AND ADJUSTING

- A. Defaced finish will not be permitted. Damaged, scratched or marred defective materials will be rejected, and shall be replaced with new materials.
- B. Clean surfaces free of oil and imperfections.
- Except for compartments for the handicapped, adjust doors to remain at a uniformly open position when unlocked.

WALL & CORNER GUARDS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of wall and corner guards. Provide corner guards at all 14 outside corners on the first floor plan (re Sheet A2.1) and 4 outside corners on the second floor (re Sheet A2.2)

1.2 SUBSTITUTION

A. Refer to Section 01630 Substitutions for substitutions.

1.3 SUBMITTALS

- A. Product data for each product comply with Section 01300.
- B. Shop drawings indicating mounting details with appropriate fasteners for each substrate.
- C. Samples: Minimum 8 inches long of each product type.
- D. Color selections/samples.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Corner guards snap on covers of PVC with embossed texture.
- B. Continuous aluminum retainer.
- C. Mounting fasteners appropriate for wall substrate.
- D. End caps
- E. Color as selected by Architect.

2.2 MANUFACTURERS

Manufacturer

- A. IPC (InPro Corporation) Enviro GT G2-160FR fire rated flush mount corner guard 90 degree 2 " wing.
- B. Wallguard Defender Series 2365 2" x 90 (www.wallguard.com)
- C. Korogard G200 Series Surface Mounted Corner Guard

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Locate corenr guard as indicated above and on drawings, using mounting methods as indicated on approved shop drawings for the appropriate substrate, and in compliance with the manufacturer's instructions.
- B. Install guard level and plumb to full height of corner, with surfaces free from distortion or other defects in appearance.
- C. Cleaning: At completion of the installation, clean surfaces in accordance with manufacturer's instructions.

FIRE EXTINGUISHER AND CABINETS

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SUBMITTALS

A. Product Data: Manufacturer's specifications and installation instructions.

1.3 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of fire extinguisher and cabinets for non-secure and secure areas.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Fire Extinguisher Cabinets: (FEC) Standard cabinet (based on Larsen Architectural Series cabinet)
 - 01 24" x 9 1/2" x 6" inside box dimension
 - O2 Semi-recessed type with 2 1/2 inch return trim rolled edge
 - O3 Stainless steel door with handle and silk-screened lettering "Fire Extinguisher" with double strength vertical glass
 - 04 Hinge: Concealed
 - OF Provide a handle and roller catch.
 - 06 Finish of Exterior: Stainless steel
 - 07 Finish of Interior: Standard

2.2 MANUFACTURERS

- A. Cabinets:
 - 01 Larsen's Manufacturing Co.
 - 02 J. L. Industries "Cosmopolitan" Series
 - O3 Potter Roemer: Division of Smith Industries, Inc.
- B. Fire Extinguisher:
 - 01 Larsen's Manufacturing Co.
 - 02 J. L. Industries
 - O3 Potter Roemer: Division of Smith Industries, Inc.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install in openings prepared by others in accordance with manufacturer's printed instructions.

TOILET ROOM ACCESSORIES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SUBSTITUTION

Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.2 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of toilet room accessories listed below in the item list.:

1.3 SUBMITTALS

- A. Comply with Section 01300.
- B. Shop Drawings: Indicate size, material and finish. Show locations, installation procedures. Include details of joints, attachments, fasteners, clearances, and mounting heights and compliance with ADA.
- C. Product Data: Submit manufacturer's technical data and installation instructions. Rough in for most accessories is complete, therefore any substitutions of Bobrick must be the exact same size for rough-in.
- D. Operation and Maintenance Instructions: Provide printed or written instructions for operation and maintenance of units specified.

1.4 MINIMUM COMPLIANCE STANDARDS

Comply with ANSI A117.1

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Stainless Steel:
 - 01 Alloy: AISI, Type 302 or 304 (18-08) ASTM A167
 - 02 Finish: No. 4 satin, unless otherwise specified
 - 03 Thickness: US Stainless 22 gauge minimum
- B. Aluminum:
 - 01 Extruded: 6463-T5 alloy, anodized
 - 02 Cast: 356 or 356-T6 alloy
- C. Chromium Plating:
 - 01 Method: Over nickel
 - 02 Standard: ASTM C456, Type SC 2
- D. Brass:
 - 01 Cast or forged
 - 02 QQ-B-626C
- E. Mirrors: (Framed)
 - O1 Standard: FS DD-G-451-C, silvering quality No. 1 float or plate
 - 02 Thickness: 1/4 inch
 - 03 Backing: Electrolytic cooper
 - 04 Protection: Padding and filler strips

2.2 MANUFACTURERS

- A. A & J Washroom Accessories
- B. Bobrick Dispensers, Inc.
- C. Bradley Washfountain Co.
- D. Charles Parker Co.
- E. Watrous, Inc.
- F. GAMCO, General Accessory Mfg. Co.
- G. American Specialties

2.3 QUALITY STANDARDS

- A. Design, finish and keying of items shall be the same.
- B. Furnish items from one manufacturer only, unless otherwise specified or directed by Architect.

PART 3 - EXECUTION

3.1 MOUNTING LOCATIONS

- A. Refer to drawings for mounting locations. When not shown, submit supplier's recommendations for locations and mounting height before proceeding.
- B. Contractor shall be responsible for supplying all opening, blocking, and other components necessary for installation of all toilet accessories.
- C. Use approved theft-resistant type fasteners.
- D. Comply with ADA requirements.

PART 4 - SCHEDULES

4.1 As a standard, model numbers shown are American Specialties, Inc. Other manufacturers are approved but must provide equivalent products to those listed.

TA01	Recessed Paper Towel Dispenser model 0457
TA02	Recessed Paper Towel Dispenser and Waste Receptacle model 20469
TA03	Lavatory Mounted Soap Dispensers model 0332
TA04	Recessed twin roll Toilet Paper Dispenser model 74022
TA05	Not used this project - Heavy Duty Shower Curtain Rod model 1214 and Curtain model 1200-V
TA06	Single Robe Hook
TA07	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 1 - 36" wide
TA08	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 1 - 42" wide
TA09	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 2 - 54" wide
TA10	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 56 - 36" & 54" 2 wall
	mount
TA11	Stainless Steel Framed tempered Glass Mirror w/ shelf model 20655 24" wide and 45" tall
TA12	Stainless Steel Framed tempered Glass Mirror model 20650 36" wide and 60" tall
TA13	Surface Mounted Sanitary Waste Receptacle model 20852
TA14	Recessed Stainless Steel Baby Changing Station model 9013
TA15	Shelf w/ Utility Hooks and Mop Strip model 1308
TA16	Surface mounted paper towel dispenser model 0215

TELE DATA CABLING

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.1 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion tel data cabling

1.2 SUBSTITUTION

A. Refer to <u>Section 01630 Substitutions</u> for substitutions.

1.3 SUBMITTALS

- A. Product data for each product comply with Section 01300.
- B. Shop drawings indicating mounting details with appropriate fasteners for each substrate.
- C. Samples: Minimum 8 inches long of each product type.
- D. Color selections/samples.

PART 2 - PRODUCTS

2.1 MATERIALS

Provide the typical Work Area Outlet with a CAT 6 plenum cable terminated with a CAT 6 jack. Provide the jacks inserted into a 2-port white faceplate.

The data cables will originate from room 101 and home run to each location.

Route cable above the ceiling tiles utilizing J-hooks and/or loops for support or along alternate pathways approved by Owner. Maximum spacing for supports is 48"

Label all cables.

Label all faceplates with machine-generated labels.

Test all horizontal station cables in accordance with the field test specifications defined in ANSI/TIA/EIA-568-B.1 standard. Level II/III test equipment will be utilized.

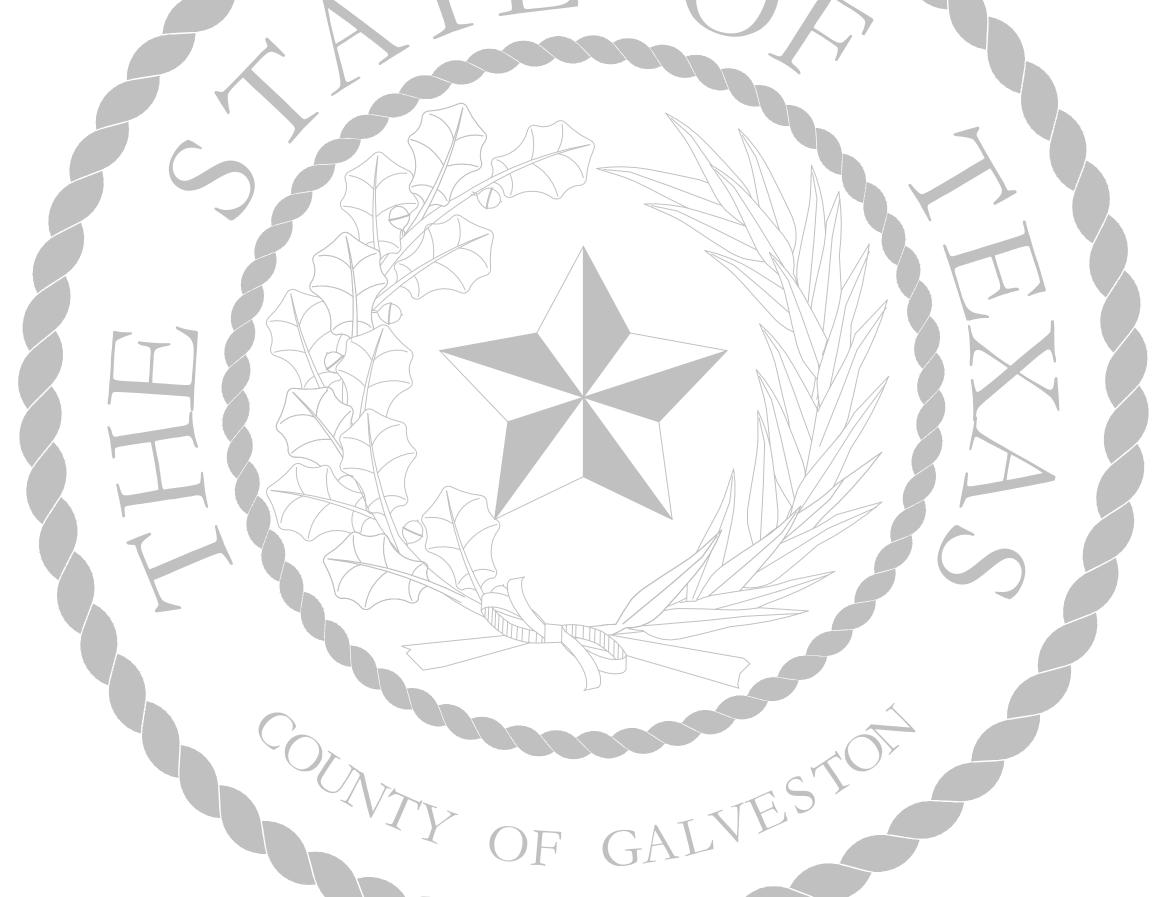
PART 3 - EXECUTION

3.1 INSTALLATION

 Cleaning: At completion of the installation, clean surfaces in accordance with manufacturer's instructions.

Renovations for Sheriff and Constable Offices

823 Grand Avenue - Bacliff



Mark Henry
Ryan Dennard
Commissioner, Pct. 1
Joe Giusti
Stephen D. Holmes
Commissioner, Pct. 3
Ken Clark
Commissioner, Pct. 4

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING SCOPE OF WORK: SOME MINOR SITE RENOVATIONS AND INTERIOR RENOVATION TO AN EXISTING 3046 s.f. BUILDING TO HOUSE OFFICES FOR LAW ENFORCEMENT IN THE BACLIFF COMMUNITY. THE WORKS INCLUDES ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING WORK.

BUILDING CODES:	
BUILDING	2009 IBC
PLUMBING	2009 INT. PLUMBING CODE
MECHANICAL	2009 INT. MECHANICAL CODE
FIRE	2009 INT. FIRE CODE
ELECTRICAL	NAT. ELECTRICAL CODE, 2008
ENERGY CONSERVATION	2009 INT. ENERGY CODE

ARCHITECT

COUNTY OF GALVESTON, COUNTY ARCHITECT 722 MOODY ST., 6TH FLOOR GALVESTON, TX 77550 (409)770-5330 CONTACT: J. DUDLEY ANDERSON

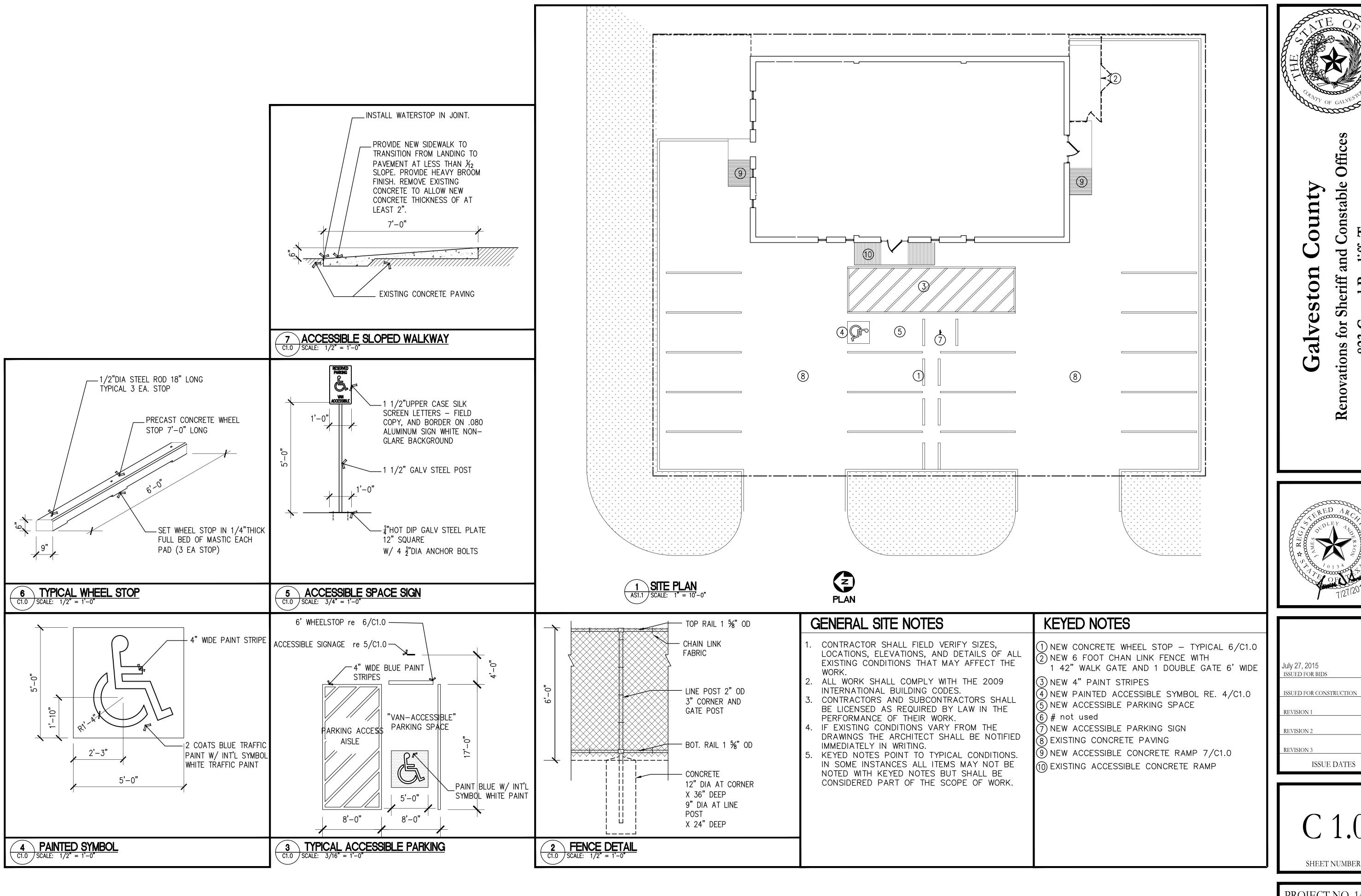
BURY, Inc. 7660 WOODWAY DR., SUITE 400 HOUSTON, TX 77063

MEP ENGINEER

HOUSTON, TX 77063 (713) 212-0011 CONTACT: MARK COURVILLE

KEY MAP (N.T.S.) Ba Cliff Johnson Bar & Grill A Johnson Bar & Gril

DRAWING INDEX COVER SHEET C1.0 SITE PLAN D1.0 DEMOLITION PLAN A1.0 FLOOR PLAN A2.0 REFLECTED CEILING PLAN A4.0 DETAILS A5.0 DETAILS M2.0 MECHANICAL PLAN M3.0 HVAC SCHEDULES M3.1 HVAC DETAILS M3.2 MECHANICAL SPECIFICATIONS E0.0 ELECTRIC GENERAL E0.1 ELECTRIC NOTES ETC. E1.0 POWER PLAN E2.0 LIGHTING PLAN P1.0 PLUMBING PLAN, NOTES, RISER

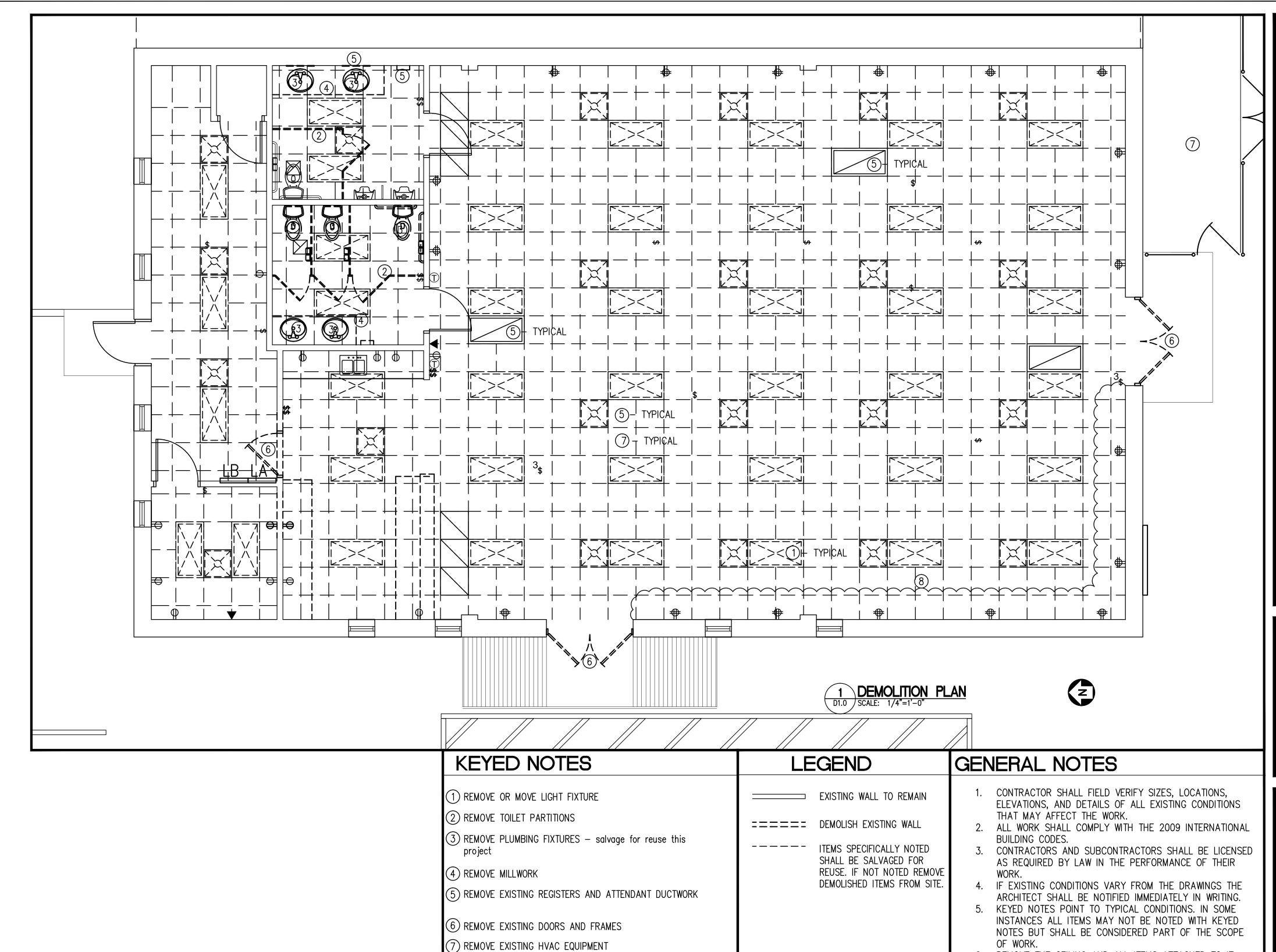


PROJECT NO. 14-007

Constable

Bacliff,

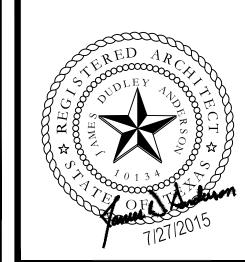
82



(8) REMOVE BOTTOM 4 FOOT OF GYPSUM WALL BOARD,

INSULATION, AND ANY WET MATERIALS.

Galveston County
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REVISION 1

REVISION 2

REVISION 2

REVISION 3

6. REMOVE THE CEILING AND ALL ITEMS ATTACHED TO IT.

EQUIPMENT ABOVE THE CEILING.

8. REMOVE EXISTING WALL BASE.

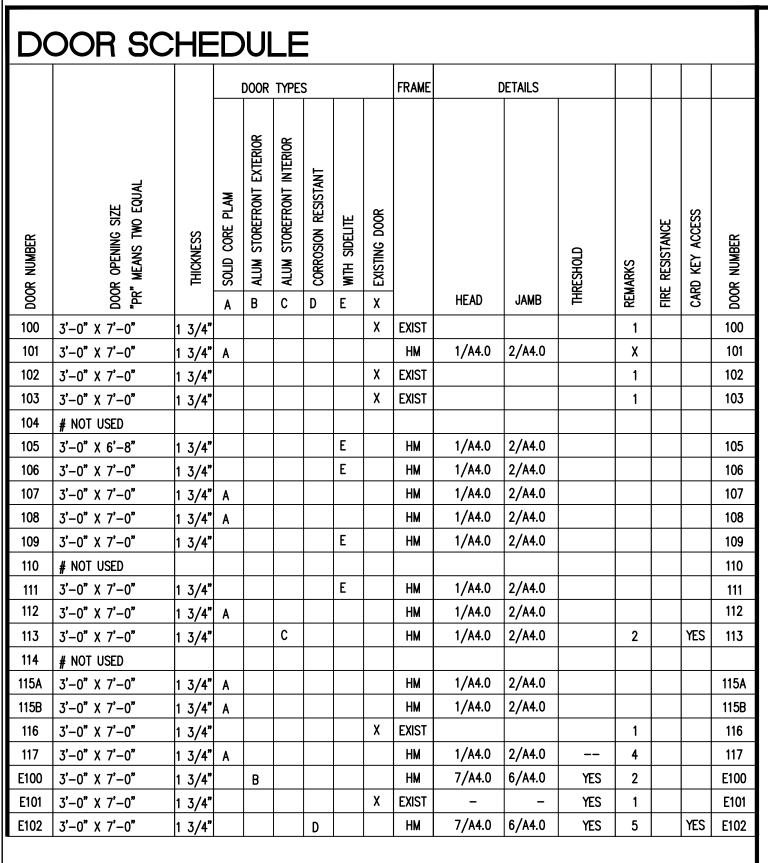
REMOVE THE EXISTING DUCTWORK, REGISTERS, AND HVAC

ISSUE DATES

D1.0

PROJECT NO. 14-007

SHEET NUMBER



<u>REMARKS</u>

- 1. PAINT EXISTING DOOR
- 2. BALLISTIC GLAZING
- 3. REKEY ALL EXISTING DOORS TO NEW "BEST" SYSTEM
- 4. REUSE EXISTING DOOR (PAINT)

Ω

1/4"TEMPERED GLASS

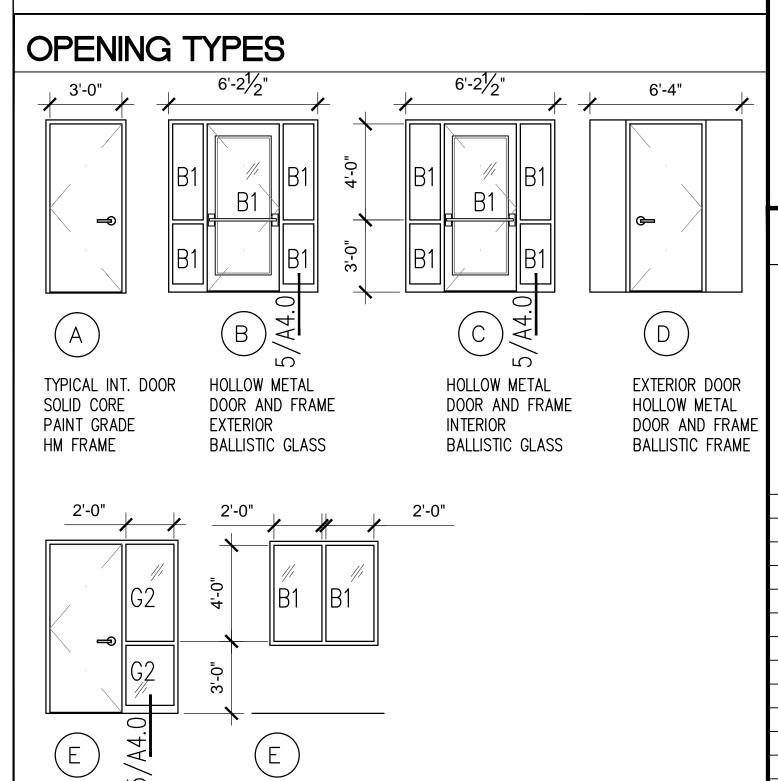
INTERIOR DOOR

SOLID CORE

PAINT GRADE

HM FRAME

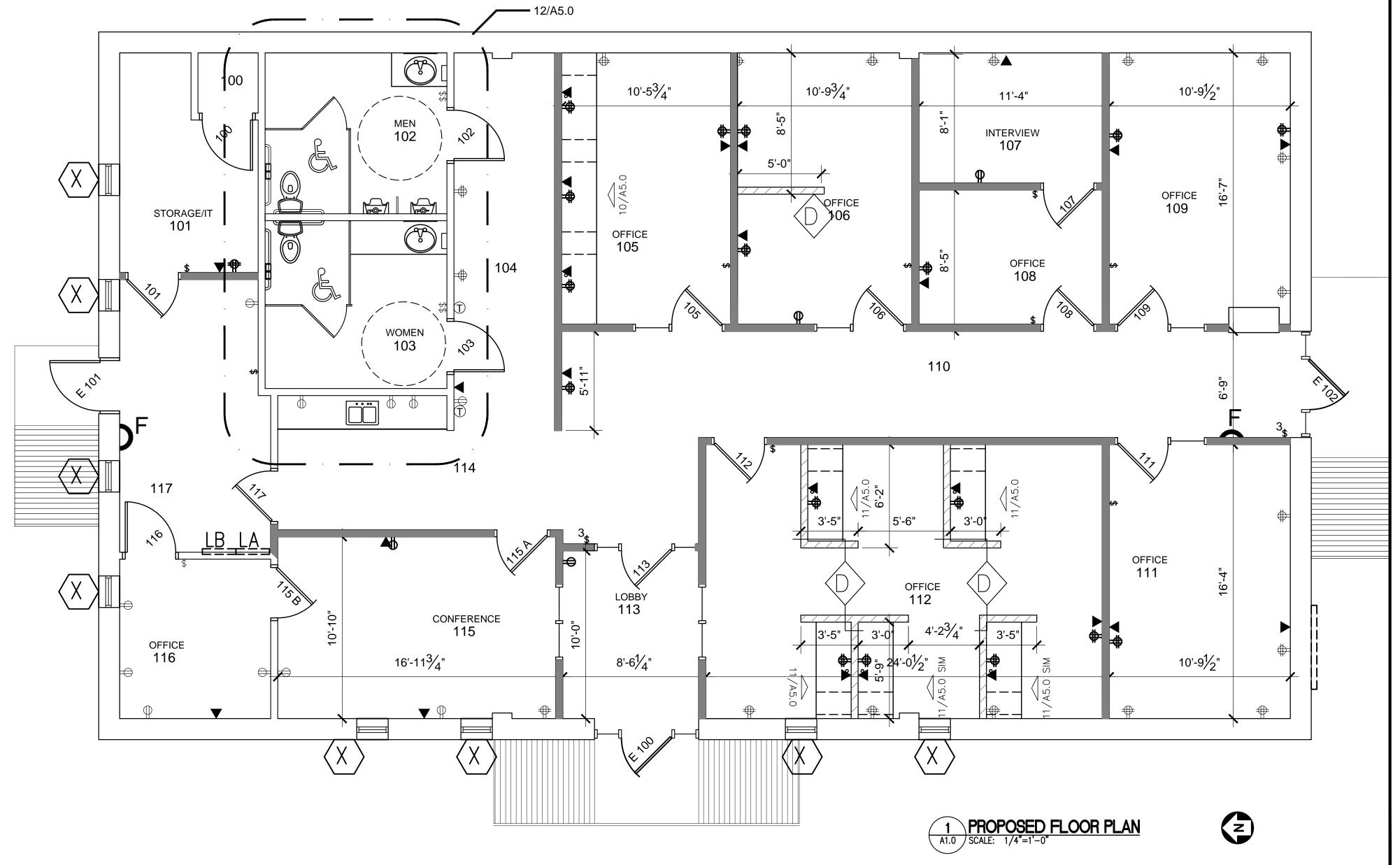
5. PEEPHOLE



INTERIOR WINDOW

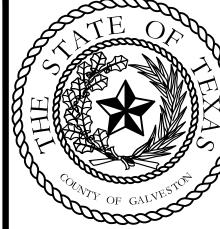
BALLISTIC GLASS

HM FRAME

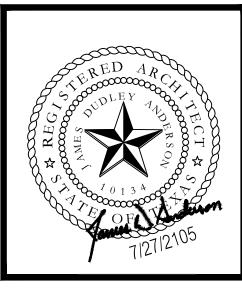


LEGEND GENERAL NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY SIZES, LOCATIONS, ELEVATIONS, AND DETAILS OF ALL EXISTING CONDITIONS THAT MAY AFFECT THE WORK.
- 2. ALL WORK SHALL COMPLY WITH THE 2009 INTERNATIONAL BUILDING CODES CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED AS REQUIRED BY LAW IN THE PERFORMANCE OF THEIR
- 4. IF EXISTING CONDITIONS VARY FROM THE DRAWINGS THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IN WRITING.
- 5. KEYED NOTES POINT TO TYPICAL CONDITIONS. IN SOME INSTANCES ALL ITEMS MAY NOT BE NOTED WITH KEYED NOTES BUT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK.
- DIMENSIONS ARE TO FINISH FACE. UNLESS SPECIFICALLY NOTED DOORS ARE INSTALLED WITH THE EDGE OF THE DOOR 6" AWAY FROM ADJACENT PERPENDICULAR WALLS.
- 8. PROVIDE A DOOR STOP AT ALL DOORS TO PREVENT THE DOOR OR HARDWARE FROM TOUCHING THE ADJACENT PERPENDICULAR WALL.



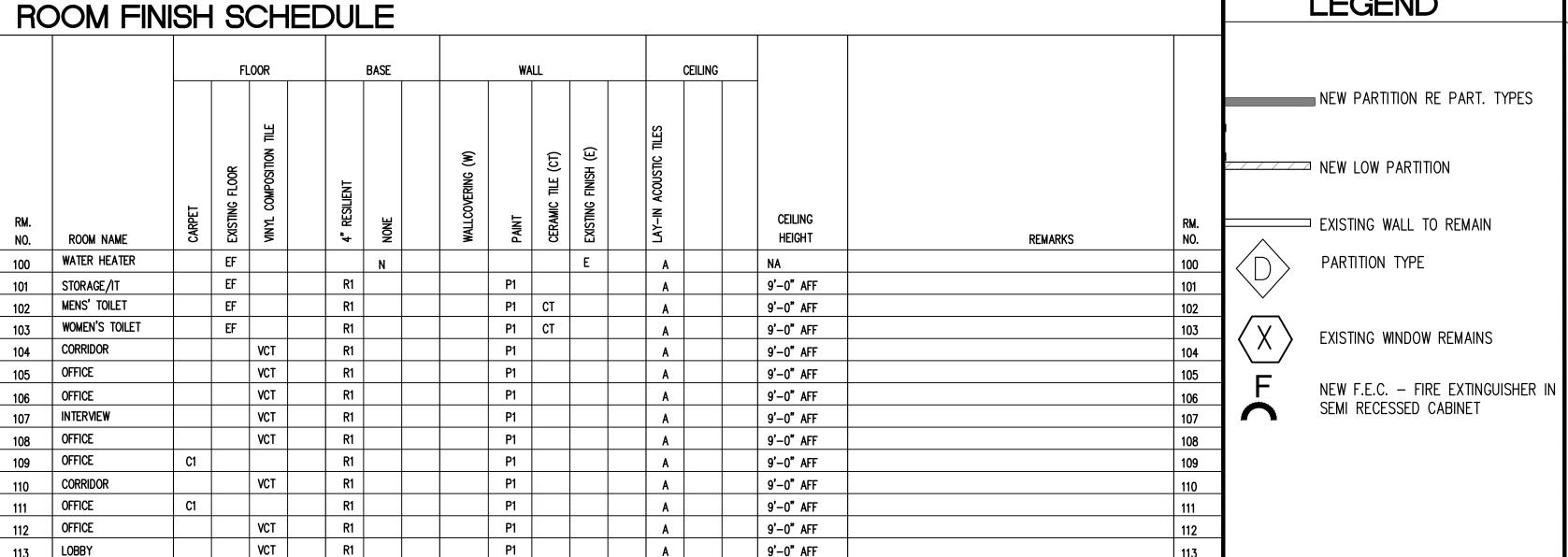
Offices Constable acliff, and Sheriff



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VISION 3	
ISSUE DATES	

SHEET NUMBER

PROJECT NO. 14-007



9'-0" AFF

9'-0" AFF

9'-0" AFF

9'-0" AFF

VCT

C1

C1

EF

CORRIDOR

OFFICE

CORRIDOR

CONFERENCE

R1

R1

R1

P1

P1

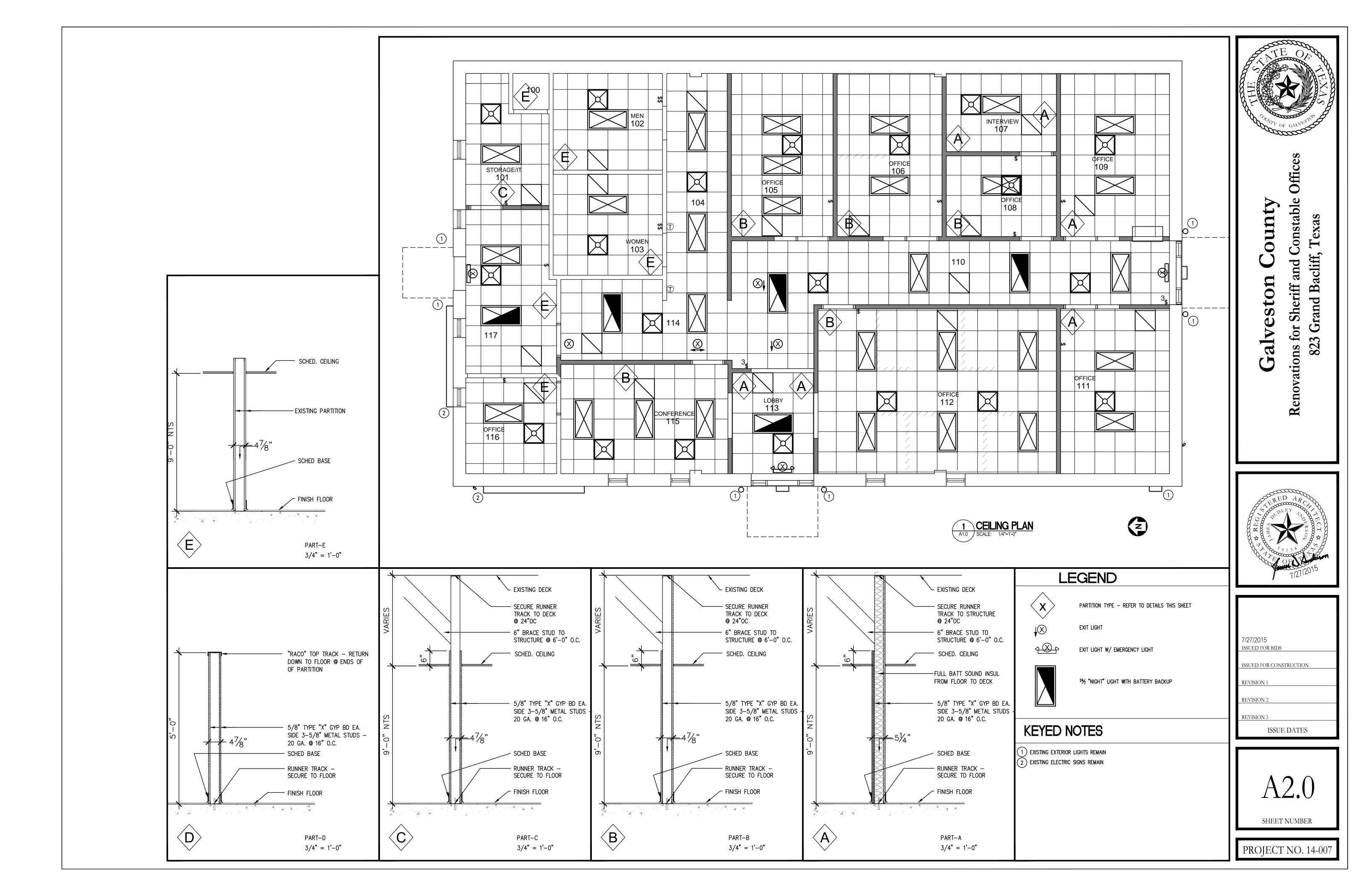
P1

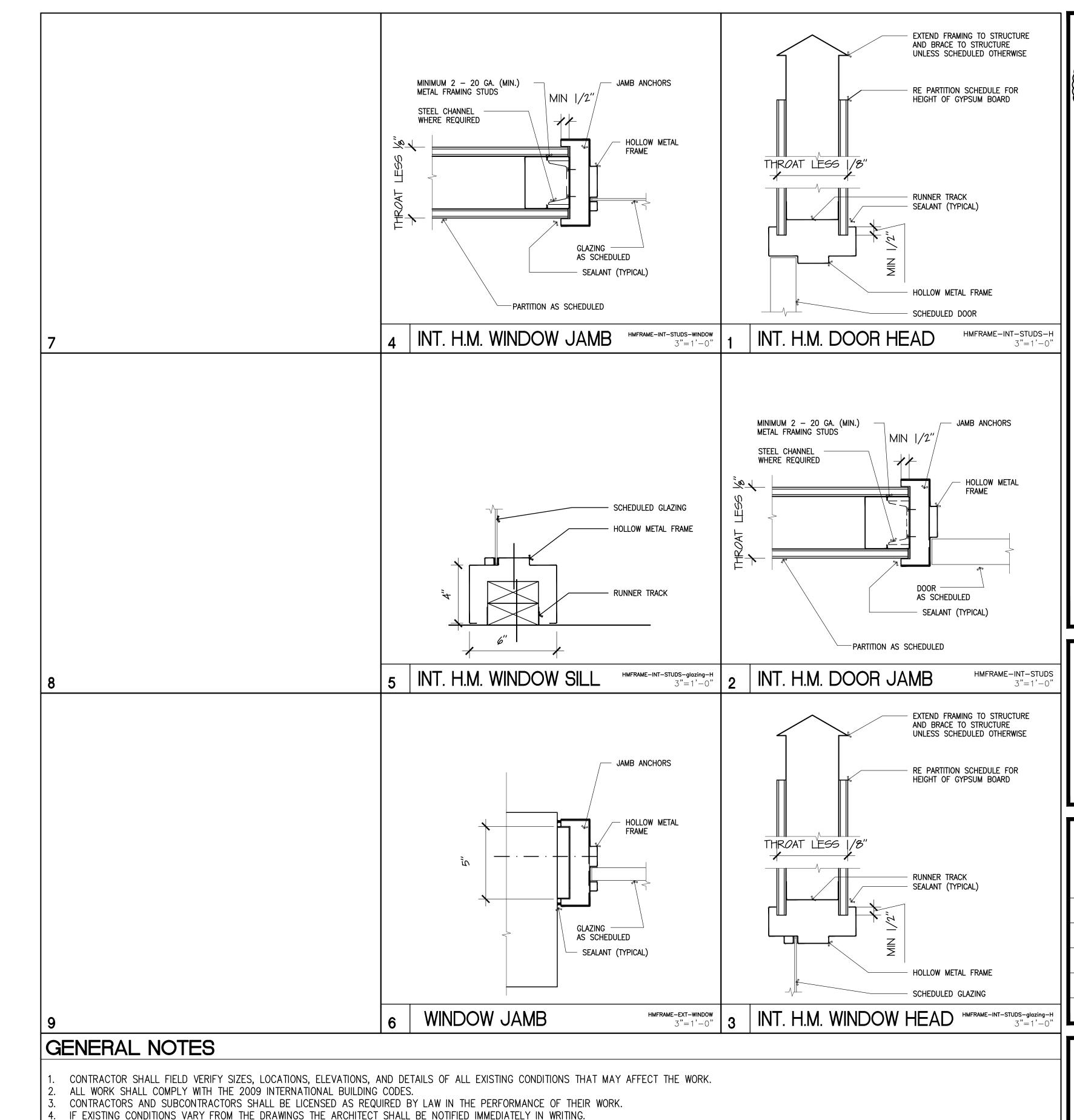
113

114

115

116





5. KEYED NOTES POINT TO TYPICAL CONDITIONS. IN SOME INSTANCES ALL ITEMS MAY NOT BE NOTED WITH KEYED NOTES BUT SHALL BE CONSIDERED PART OF THE SCOPE OF

7. UNLESS SPECIFICALLY NOTED DOORS ARE INSTALLED WITH THE EDGE OF THE DOOR 6" AWAY FROM ADJACENT PERPENDICULAR WALLS. 8. PROVIDE A DOOR STOP AT ALL DOORS TO PREVENT THE DOOR OR HARDWARE FROM TOUCHING THE ADJACENT PERPENDICULAR WALL.

6. DIMENSIONS ARE TO FINISH FACE.

Galveston County
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823 Grand Bacliff, Texas

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REVISION 1

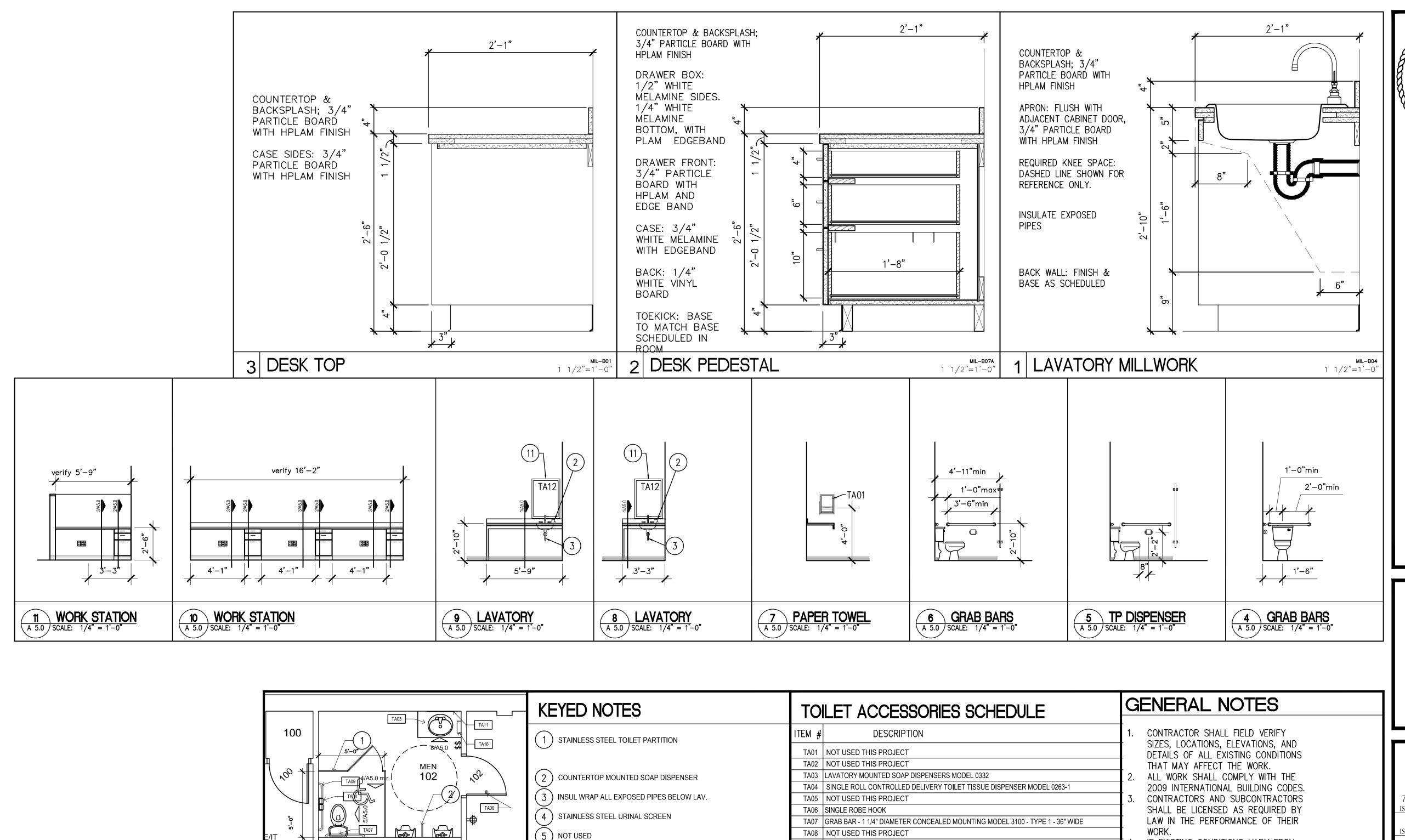
REVISION 2

REVISION 3

A4.0

ISSUE DATES

SHEET NUMBER



(6) NOT USED

(8) NOT USED

(9) NOT USED

(10) NOT USED

(7) GYP. BD. WALL - PAINTED P1

MIRROR MOUNTED WITH BOTTOM REFLECTIVE SURFACE A MAXIMUM 40" AFF

9/A5.0

WOMEN 103

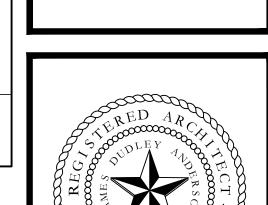
TA13

12 TOILET PLAN
A 5.0 SCALE: 1/4" = 1'-0"

TA16 104

TA06

114



Offices

and Constable

Sheriff

for

Renovations

rand Bacliff,

4. IF EXISTING CONDITIONS VARY FROM THE DRAWINGS THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IN WRITING. KEYED NOTES POINT TO TYPICAL CONDITIONS. IN SOME INSTANCES ALL ITEMS MAY NOT BE NOTED WITH KEYED NOTES BUT SHALL BE CONSIDERED PART OF THE SCOPE OF

TA09 GRAB BAR - 1 1/4" DIAMETER CONCEALED MOUNTING MODEL 3100 - TYPE 2 - 54" WIDE

TA11 STAINLESS STEEL FRAMED TEMPERED GLASS MIRROR 24" WIDE AND 45" TALL

TA13 SURFACE MOUNTED SANITARY WASTE RECEPTACLE MODEL 20852

TA16 SURFACE MOUNTED PAPER TOWEL DISPENSER MODEL 0215

TA10 NOT USED THIS PROJECT

TA12 NOT USED THIS PROJECT

TA14 NOT USED THIS PROJECT

TA15 NOT USED THIS PROJECT

DIMENSIONS ARE TO FINISH FACE. UNLESS SPECIFICALLY NOTED DOORS ARE INSTALLED WITH THE EDGE OF THE DOOR 6" AWAY FROM ADJACENT

PERPENDICULAR WALLS. 8. PROVIDE A DOOR STOP AT ALL DOORS TO PREVENT THE DOOR OR HARDWARE FROM TOUCHING THE ADJACENT PERPENDICULAR WALL.

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REVISION 2

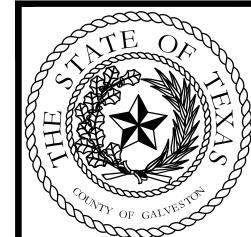
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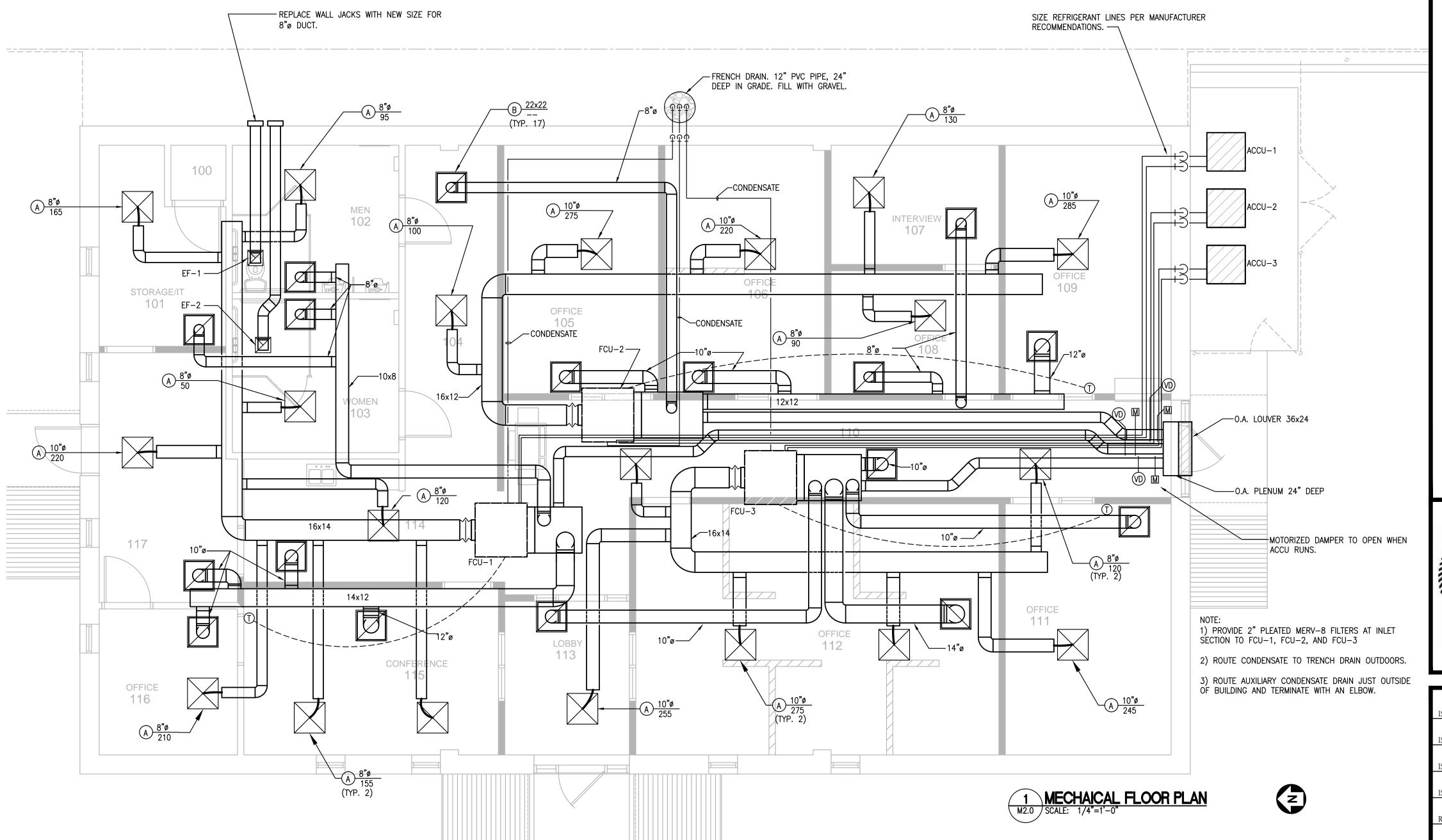
ISSUE DATES

PROJECT NO. 14-007

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Offices Constable Sheriff and for zations fo 823

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MARCH 24, 2015 ISSUED FOR REVIEW ISSUED FOR PERMIT REVIEW ISSUED FOR BIDS ISSUED FOR CONSTRUCTION **REVISION 1** REVISION 2 **REVISION 3** ISSUE DATES

SHEET NUMBER

FAN COIL UNITS			
DESIGNATION	FCU-1	FCU-2	FCU-3
SERVICE	OFFICE / CONF.	OFFICE	OFFICE
CONFIGURATION	Н	Н	Н
SYSTEM DESCRIPTION	SZ	SZ	SZ
KEYED NOTES	1,2,3,4	1,2,3,4	1,2,3,4
BLOWER DATA			
TOTAL CFM	1170	1100	1290
OUTSIDE AIR CFM	150	150	150
EST. EXT. S.P." W.G.	0.5	0.5	0.5
MOTOR H.P. (MIN.)	1/2	1/2	1/2
FAN TYPE	FC	FC	FC
FAN POSITION	DT	DT	DT
COOLING COIL DATA			
CFM OVER COIL	1170	1100	1290
MAX. FACE VEL. (FPM)	500	500	500
GRAND SENSIBLE BTUH	25200	24500	25900
GRAND TOTAL BTUH.	35800	34400	39000
EAT (D.B./.W.B.)	75.3/64.1	75.0/64.0	75.2/64.0
LAT (D.B.) MAX	55	55	55
GPM			
EWT/LWT (*F D.B.)	/	/	/
HEATER DATA			
CAPACITY (KW)	6.5	5	6
STEPS	1	1	1

- A. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
- ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH DUCTWORK, AIR DEVICES, ETC.
- FCU INTERNAL STATIC PRESSURE SHALL INCLUDE LOSSES THROUGH COILS, CASING, INTERNAL DAMPERS, AND 0.3" W.G. FOR DIRTY FILTERS. COOLING COILS SHALL HAVE A MINIMUM OF 4 ROWS AND A MAXIMUM OF 10 FINS PER INCH. PRESSURE DROP
- THROUGH COIL SHALL NOT EXCEED 15 FEET AT SCHEDULES
- PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT.
- KEYED NOTES FOR FCU SCHEDULE 1. FORWARD CURVED FANS 16" DIAMETER AND LARGER SHALL BE LIMITED TO 1000 RPM MAXIMUM.
- RE: SPECIFICATIONS FOR FAN TYPE AND ACOUSTICAL CHARACTERISTICS.
- SUSPEND UNIT FROM STRUCTURE.
- DX COOLING COILS SHALL HAVE A MINIMUM OF 4 ROWS AND A MAXIMUM OF 10 FINS PER INCH.
- ELECTRICAL CHARACTERISTICS: COORDINATE WITH ELECTRICAL DRAWINGS. INDOOR UNITS SUPPLIED WITH ETL LISTED INTEGRAL ELECTRIC HEATER. SINGLE POINT ELECTRICAL CONNECTION.MINIMUM EFFICIENCY IS 13.0 SEER.

AIR COOLED CONDENSING UNITS				
DESIGNATION	ACCU-1	ACCU-2	ACCU-3	
SERVICE	FCU-1	FCU-2	FCU-3	
KEYED NOTES	1	1	1	
CAPACITY (TONS)	3.5	3.5	3.5	
SEER	13	13	13	
REFRIGERANT	RE: SPECIFICATIONS	RE: SPECIFICATIONS	RE: SPECIFICATIONS	
AMBIENT TEMP. (*F)	105	105	105	
COMPRESSORS (NO./HP)	1/2.7	1/2.7	1/2.7	
FAN (NO./HP)	1/0.125	1/0.125	1/0.125	

GENERAL NOTES FOR AIR COOLED CONDENSING UNITS SCHEDULE

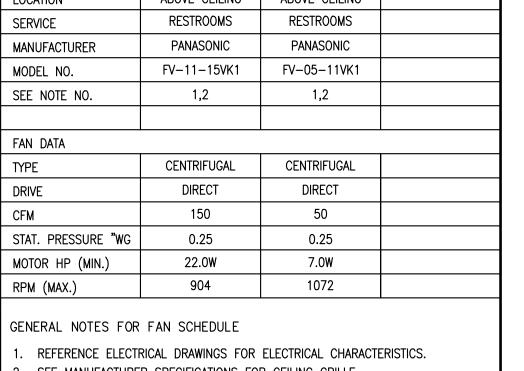
- A. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS. B. EFFICIENCY LISTED IS SEER, TESTED IN ACCORDANCE WITH ARI 210/240.
- C. COORDINATE ELECTRICAL CHARACTERISTICS WITH ELECTRICAL DRAWINGS.

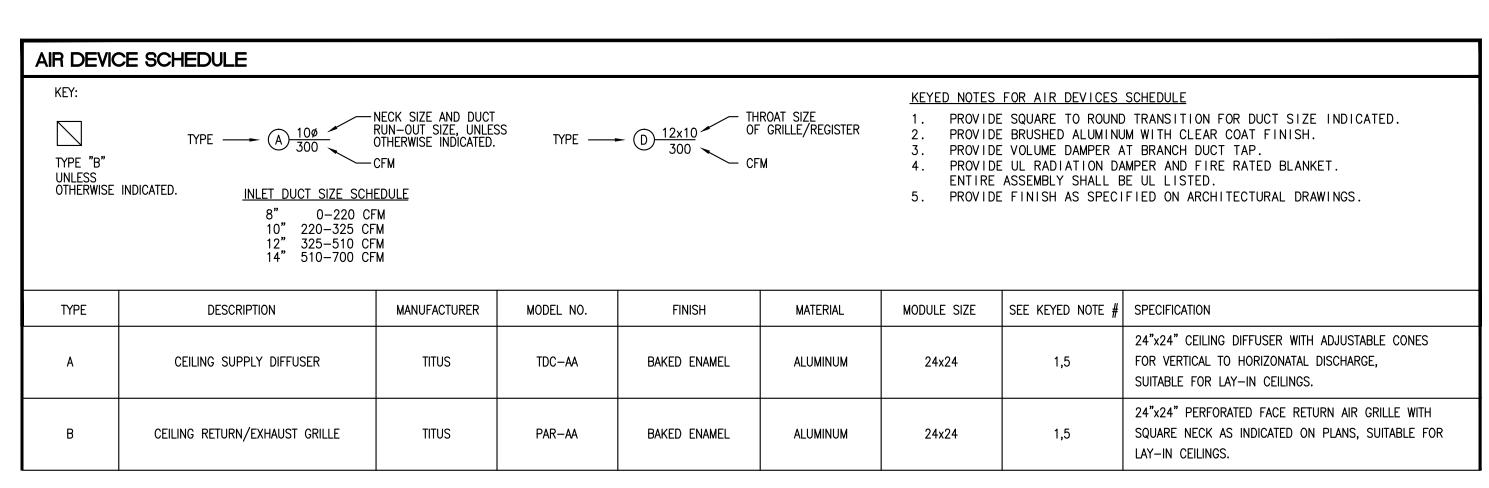
KEYED NOTES FOR ACCU'S 1. REFER TO SPECIFICATIONS FOR MANUFACTURER'S.

FANS			
DESIGNATION	EF-1	EF-2	
LOCATION	ABOVE CEILING	ABOVE CEILING	
SERVICE	RESTROOMS	RESTROOMS	
MANUFACTURER	PANASONIC	PANASONIC	
MODEL NO.	FV-11-15VK1	FV-05-11VK1	
SEE NOTE NO.	1,2	1,2	
FAN DATA			,
TYPE	CENTRIFUGAL	CENTRIFUGAL	
DRIVE	DIRECT	DIRECT	
CFM	150	50	
STAT. PRESSURE "WG	0.25	0.25	
MOTOR HP (MIN.)	22.0W	7.0W	
RPM (MAX.)	904	1072	

- 2. SEE MANUFACTURER SPECIFICATIONS FOR CEILING GRILLE.

PIPING , DUCTWORK AND INSULATION SCHEDULE				
SYSTEM	PIPING AND/OR DUCT MATERIAL	INSULATION MATERIAL		
SUPPLY & R/A DUCTWORK INSIDE BUILDING ENVELOPE	GALVANIZED SHEETMETAL, SMACNA GAGES EXCEPT 26 GA. MIN. SEAL CLASS A	2" THICK, EXTERNAL FIBERGLASS DUCT INSULATION (MIN. R-6, INSTALLED), WITH FACTORY ADHERED REINFORCED FOIL FACED FLAME RESISTANT VAPOR BARRIER. FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 AND UL 723. R VALUE SHALL BE PRINTED ON THE OUTSIDE SURFACE AT THE FACTORY.		
DUTSIDE AIR DUCTWORK	GALVANIZED SHEETMETAL, SMACNA GAGES EXCEPT 26 GA. MIN. SEAL CLASS A	2" THICK (MIN. R-6, INSTALLED) EXTERNAL DUCT INSULATION. FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 AND UL 723. R VALUE SHALL BE PRINTED ON THE OUTSIDE SURFACE AT THE FACTORY.		
FLEXIBLE DUCTWORK INSIDE BUILDING ENVELOPE	ALUMINUM SEMI-RIGID CORE DUCT	FLEXIBLE DUCT LOCATED BETWEEN THE FAN AND VAV TERMINALS SHALL BE INSULATED TYPE, WITH ALUMINUM SEMI-RIGID CORE DUCT, FIBERGLASS (R-6) INSULATION MINIMUM 1 1/2" THICK AND OUTER VAPOR BARRIER JACKET.		
FLEXIBLE DUCTWORK INSIDE BUILDING ENVELOPE	ALUMINUM HELICAL WOUND DUCT	FLEXIBLE DUCT TO AIR DEVICES SHALL BE HELICAL WOUND DUCT WITH VINYL INNER JACKET, FIBERGLASS (R-6) INSULATION AND ALUMINUM OUTER JACKET. 8" ROUND MINIMUM SIZE.		
CONDENSATE DRAINS (INSIDE BUILDING ENVELOPE)	TYPE "L" HARD DRAWN COPPER	0.75" MINIMUM THICK, CONDUCTIVITY (k) NOT HIGHER THAN 0.27 AT 75°F MEAN TEMPERATURE DIFFERENCE. SIMILAR TO AP ARMAFLEX 2000 WITH "ARMAFLEX FINISH" COAT. FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84-91A AND CAN/ULC-S202. THICKNESS BASED ON CONTROLLING OUTER INSULATION SURFACE CONDENSATION AT 85°F AND 70% RH.		
REFRIGERANT SUCTION PIPE	TYPE "L" COPPER ARC TUBING	1" THICK, CONDUCTIVITY (k) NOT HIGHER THAN 0.27 AT 75°F MEAN TEMPERATURE DIFFERENCE. SIMILAR TO AP ARMAFLEX 2000 WITH "ARMAFLEX FINISH" COAT. FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84-91A AND CAN/ULC-S202.		



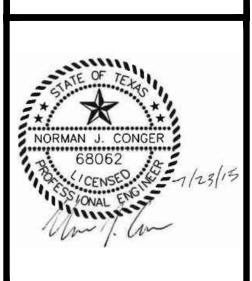




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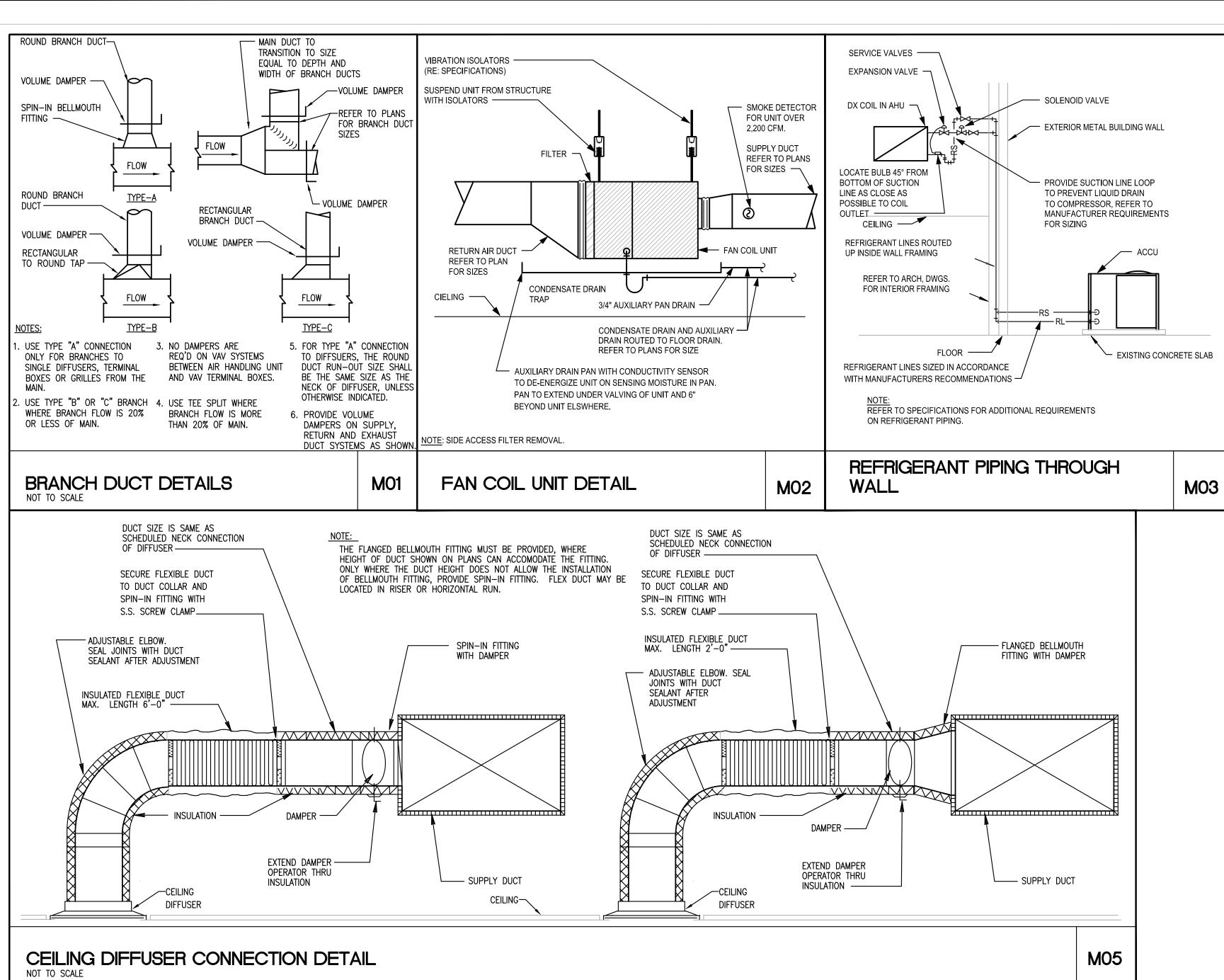
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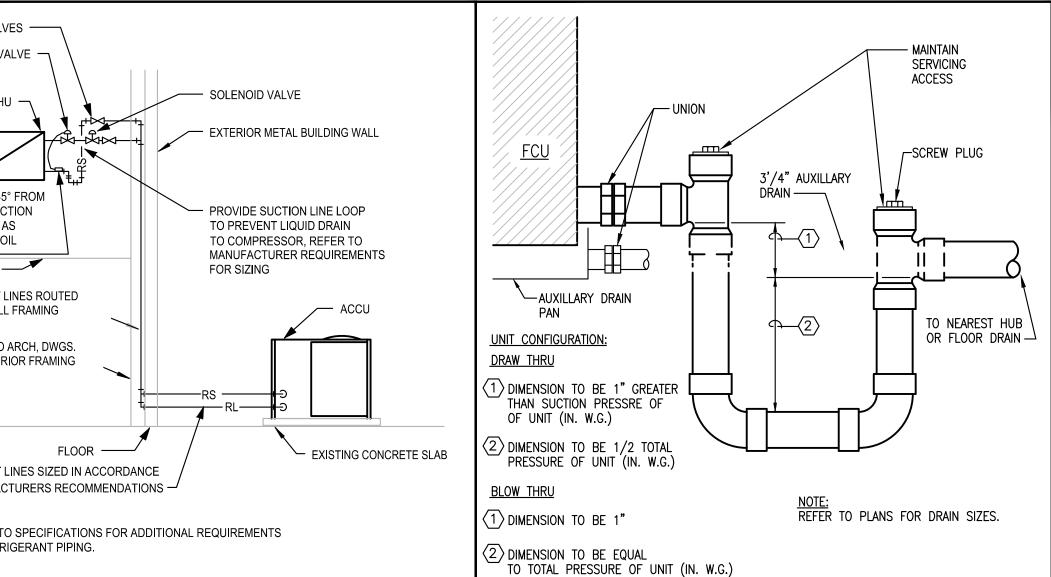


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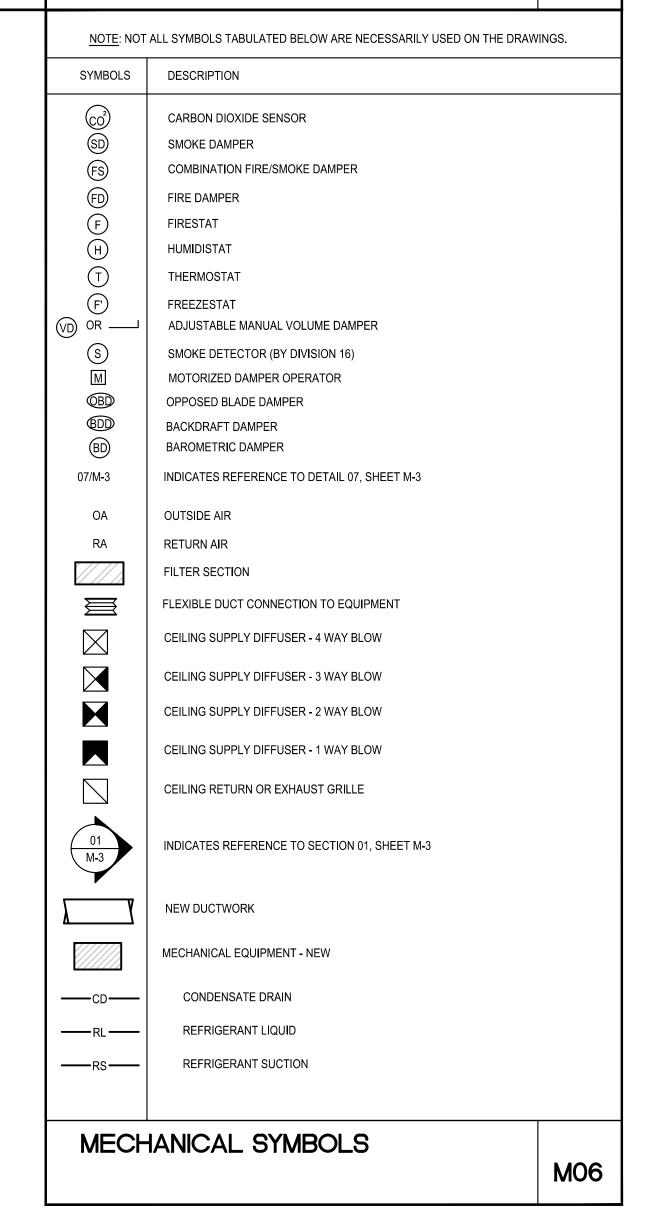


CAPACITY (BTUH)		DRAIN SIZE
FROM	ТО	
1	120,000	3/4"
121,000	360,000	1"
360,001	840,000	1 1/4"
840,001	1,200,000	1 1/2"
1,200,001	2,400,000	2"
	N COIL UNITS SHALL HAVE A CONDI DRAIN TO CLOSEST FLOOR DRAIN.	ENSATE



CONDENSATE DRAIN WITH

AUXILLARY PAN



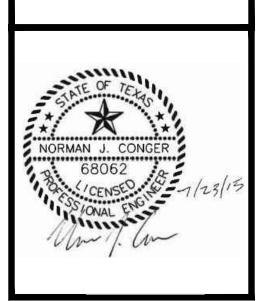


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SHEET NUMBER

MECHANICAL GENERAL NOTES:

- 1. ALL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENT OF THE MOST RECENTLY REVISED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATION, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL AUTHORITIES, WHETHER
- 2. ADHERE TO THE DRAWINGS WHEN REQUIREMENTS ARE STRICTER THAN CODE REQUIREMENTS AND ARE PERMITTED UNDER THE CODE.
- 3. REPORT ANY ALTERATION TO AND/OR DEVIATIONS FROM THE DRAWINGS AS REQUIRED BY THE ABOVE AUTHORITIES TO THE ARCHITECT AND SECURE HIS APPROVAL BEFORE STARTING ALTERATIONS.
- 4. THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT IN ALL CASES OF DOUBT AS TO THE WORK INTENDED, OR IF ADDITIONAL EXPLANATION IS NEEDED.
- 5. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITION PRIOR TO CONSTRUCTION. ALL WORK AND SCHEDULING DURING CONSTRUCTION SHALL BE COORDINATED WITH THE TENANT BELOW AND BUILDING OWNER/ENGINEER.
- 6. ALL DUCT SIZES INDICATED ON THE DRAWINGS ARE THE CLEAR INSIDE NET DIMENSIONS
- 7. INSULATED FLEXIBLE DUCT SHALL BE PROVIDED IN DUCTWORK CONNECTED TO VARIOUS AIR OUTLETS, ETC., AS SHOWN ON THE DRAWINGS. MAXIMUM LENGTH SHALL BE 10'-0" AND SHALL REQUIRE NO MORE THAN TWO ELBOWS WHEN INSTALLED. A HARD DUCT SHALL BE INSTALLED AND EXTENDED BEFORE THE FLEXIBLE DUCT TO A POINT WHERE THE MAX. LENGTH REQUIREMENT CAN BE ACHIEVED.
- 8. PROVIDE VOLUME DAMPERS AT EACH BRANCH TAKE-OFF FROM LOW PRESSURE MAINS, END OF RUN DUCT AFTER LAST TRANSITION WHERE TERMINATION IS A SINGLE AIR DEVICE, AND ALSO WHERE SHOWN ON THE PLANS.
- 9. COORDINATE ALL DUCTWORK ROUTING AND MECHANICAL EQUIPMENT INSTALLATION WITH OTHER TRADES AND EXISTING CONDITIONS BEFORE CONSTRUCTION BEGINS. IF EXISTING CONDITION INTERFERES WITH NEW WORK, REROUTE / REWORK EXISTING OR NEW DUCTWORK / PIPE WHICHEVER HAVE LESS WORK AND LESS COST.
- 10. ALL PIPE PENETRATIONS THROUGH WALLS AND FLOORS SHALL BE PROVIDED WITH SLEEVES AND ESCUTCHEON PLATES. PIPES SHALL BE CENTERED TO ALLOW FOR EXPANSION AND CONTRACTION; ALSO PROVIDE CAULKING AND WATERPROOFING WHERE REQUIRED. PENETRATIONS THROUGH RATED WALLS SHALL BE IN ACCORDANCE WITH U.L. LISTED DETAILS AS SHOWN IN THESE DRAWINGS.
- 11. ALL THERMOSTATS (AND SIMILAR DEVICES) SHALL BE MOUNTED 48" ABOVE FINISH FLOOR UNLESS NOTED. DO NOT INSTALL THERMOSTAT ABOVE A DIMMER.

MECHANICAL SPECIFICATIONS:

1. <u>SHEET METAL DUCTWORK:</u>

- A. MEDIUM PRESSURE SUPPLY, RETURN, AND EXHAUST AIR DUCTWORK SHALL BE GALVANIZED SHEET METAL, LOCK-FORMING QUALITY CONSTRUCTED AS FOLLOWS:
- 1. CONSTANT VOLUME SYSTEMS STATIC PRESSURE RATING: 2", EXHAUST DUCTWORK 1".
- B. SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH LATEST EDITIONS OF ASHRAE AND SMACNA DUCT STANDARD. INSIDE RADIUS OF ALL CURVES AND BENDS SHALL NOT BE LESS THAN THE WIDTH OF DUCTS IN PLANE OF BEND. BELOW THIS RADIUS, SQUARE ELBOWS SHALL BE USED.
- 1. THE FOLLOWING MINIMUM CONSTRUCTION MUST BE PROVIDED. NO EXCEPTIONS TO THE FOLLOWING WILL BE
- a. LONGITUDINAL SEAMS SHALL BE PITTSBURGH OR SNAPLOCK SEAM WITH SEALANT.
- b. DUCT JOINTS UP TO 18" SHALL BE DRIVE SLIP; OVER 18" SHALL BE STANDINGS SLIP, STANDING SEAM
- POINT OR POCKET LOCK ALL WITH SEALANT. c. SHEET METAL TRANSITIONS SHALL BE MADE WITH SLOPES NOT EXCEEDING ONE (1) TO SEVEN (7)
- C. THE DUCT SHALL BE SUPPORTED AT FITTINGS, ELBOWS, AND TRANSITIONS AND AT A MAXIMUM OF 8' ON CENTER. NOT MORE THAN ONE TRANSVERSE JOINT SHALL OCCUR BETWEEN HANGERS. HANGERS ARE TO BE A MINIMUM 1" x 2" x 1" x 22 GAUGE CHANNEL SUPPORTED BY 1" WIDE x 22 GAUGE OR HEAVIER STRAPS, 1/4" NODES. ALL HANGER SYSTEMS MUST BE CAPABLE OF WITHSTANDING A LOAD OF 5 TIMES THE ANTICIPATED LOAD.
- D. PROVIDE DUCT WRAP AS SPECIFIED BELOW FOR ALL MEDIUM PRESSURE SUPPLY AIR DUCT. RETURN AIR DUCTING SHALL BE ACOUSTICALLY LINED EXCEPT IN VERTICAL CHASES FOR DUCT SERVING 1ST FLOOR.
- E. DUCT INSULATION SHALL BE GLASS FIBER WITH REINFORCED FOIL—FACED VAPOR BARRIER. INSTALL AS PER MANUFACTURER'S RECOMMENDATION. R-8 INSULATION VALUE.
- F. EXHAUST DUCTWORK SHALL BE SEALED WITH U.L. 181 LISTED MASTIC.
- G. WRAP SUPPLY, RETURN, AND EXHAUST DUCT.

3. <u>FLEXIBLE CONNECTIONS:</u>

- A. PROVIDE FLEXIBLE DUCT CONNECTION AT THE INTAKE AND DISCHARGE SIDES OF ALL AIR HANDLERS AND FANS. FLEXIBLE CONNECTORS SHALL BE MADE OF VINYL COVERED GLASS FIBER MATERIAL. CONNECTORS SHALL BE NOT LESS THAN 6" LONG OR MORE THAN 10" LONG.
- 4. INSULATED FLEXIBLE DUCTS:
- A. PROVIDE INSULATED DUCT FLEXIBLE CONNECTIONS FROM DUCTWORK TO DIFFUSERS, MEETING REQUIREMENTS OF U.L. 181 AND NFPA 90A. THE CONNECTORS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS 1 AND 2. ACCEPTABLE MANUFACTURERS: CLEAVAFLEX, FLEXMASTER, FLEX-EAZE OR EQUAL.
- B. CONNECTION BETWEEN THE FLEXIBLE DUCT AND UNIT SHALL BE SEALED WITH PERMACEL E2-4719 OR EQUAL RECOMMENDATION. A NYLON (PANDUIT) CLAMP SHALL BE PLACED OVER THE CONNECTIONS, SIMILAR TO IDEAL TYPE 52
- C. FLEXIBLE DUCT SHALL BE OF METALIZED POLYESTER CONSTRUCTION, MECHANICALLY CORRUGATED FOR STRENGTH AND FLEXIBILITY. PRODUCTS SHALL BE ATCO, THERMAFLEX OR EQUAL.
- D. PROVIDE PANDUIT CLAMPS AT FLEXIBLE DUCT CONNECTIONS.
- E. R-8 INSULATION VALUE.

5. <u>VOLUME CONTROL DAMPER:</u>

- A. AT EACH NEW MAIN BRANCH TAKE-OFF, PROVIDE VOLUME DAMPERS OF THE OPPOSED BLADE, MULTI-LOUVERED TYPE, OPERATED BY INDICATING QUADRANTS AND SET SCREWS. VOLUME DAMPERS AND ALL MANUAL DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA AND ASHRAE STD.
- B. PROVIDE 45 DEG. CLINCH COLLARS AT MAIN TAKEOFFS.

6. ACCESS PANEL:

- A. PROVIDE SUITABLY SIZED ACCESS DOORS BEFORE DUCT ELECTRIC HEATERS AND FOR FIRE DAMPERS. MINIMUM SIZE OF ACCESS DOORS SHALL BE 12" x 12" OR 12" x FULL DEPTH OF DUCT IF SMALLER THAN 12".
- B. ACCESS DOORS IN DUCTWORK HANDLING CONDITIONED AIR SHALL BE OF THE DOUBLE PANEL TYPE, WITH INSULATION THICKNESS SAME AS DUCT INSULATION. PRODUCT SHALL BE RUSKIN OR EQUAL.

7. HANGERS AND SUPPORTS:

- A. WHERE HANGERS STRAPS ARE USED THEY SHALL BE 1" X 22GA. MIN., GALVANIZED STEEL. BAND IRONS ARE NOT ACCEPTABLE.
- B. DUCTS OVER 60 INCHES WIDE SHALL BE SUSPENDED ON A TRAPEZE TYPE HANGER. THE DUCT SHALL NOT BE SECURED TO THE HANGER
- C. PROVIDE INSERTS, FISHPLATES AND OTHER METHODS RECOMMENDED BY SMACNA, AND AS APPROVED, FOR SUPPORTING HANGER STRAPS AND TRAPEZE HANGERS.
- D. HANGERS AND FASTENERS SHALL HAVE A SAFETY FACTOR OF 5 TIMES SUPPORTED WEIGHT

8. AIR DIFFUSING EQUIPMENT:

- A. PRODUCTS SHALL BE KRUEGER, TITUS, PRICE OR APPROVED EQUAL
- B. DIFFUSER FIGURES NOS.: SHOWN ON SCHEDULE, DIFFUSER FINISH SHALL MATCH CEILING COLOR UNLESS OTHERWISE NOTED, COORDINATE WITH PROJECT ARCHITECT.
- C. ALL DIFFUSERS, GRILLES, AND REGISTERS SHALL BE SUITABLE FOR THE CEILING CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING CONSTRUCTION. COORDINATE LOCATION WITH ARCHITECT'S REFLECTED CEILING DRAWING.
- 9. PRODUCT DATA TO BE SUBMITTED SHALL BE PUBLISHED BY THE MANUFACTURERS AND SHALL CONTAIN COMPLETE AND DETAILED ENGINEERING AND DIMENSIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA AS DESCRIBED
- A. PRODUCT DATA SUBMITTED SHALL CONTAIN ONLY INFORMATION RELEVENT TO THE PARTICULAR EQUIPMENT OR MATERIAL TO BE FURNISHED. THE CONTRACTOR SHALL NOT SUBMIT CATALOGS WHICH DESCRIBE SEVERAL DIFFERENT ITEMS IN ADDITION TO THOSE ITEMS TO BE USED, UNLESS ALL IRRELEVANT INFORMATION IS CLEARLY MARKED. PRODUCT DATA FROM EACH MANUFACTURER SHALL BE IDENTIFIED AND SUBMITTED SEPARATELY. SUBMIT SHOP DRAWINGS IN BOUND FORM. LOOSE SHEETS ARE NOT ACCEPTABLE.
- 10. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO COMMENCING ANY WORK. SHOP DRAWINGS SHALL INCLUDE COMPLETE DATA AND APPLICABLE PROCEDURES FOR THE FOLLOWING EQUIPMENT AND MATERIAL (WHERE APPLICABLE):
- A. ALL VALVES.
- B. VIBRATION ISOLATORS (MOUNTING, HANGERS, AND BASES)
- C. ALL INSULATION MATERIALS.
- D. ALL FANS. E. AIR DISTRIBUTION SPECIALTIES (FILTERS, VOLUME DAMPERS, FIRE AND SMOKE DAMPERS, GRILLES, REGISTERS, DIFFUSERS,
- AND LOUVERS). COMPLETE TEST AND AIR BALANCE REPORT.
- G. CONTROL SYSTEMS.
- H. PIPING MATERIALS.
- ALL MECHANICAL EQUIPMENT: AIR TERMINALS, ROOFTOP UNITS, PACKAGE UNITS, ETC.

11. SUPPLY AND RETURN AIR SYSTEM INSTALLED SHALL BE BALANCED AND ADJUSTED AS FOLLOWS:

- A. AFTER DUCT SYSTEM HAS BEEN INSTALLED COMPLETE WITH ALL GRILLES, DAMPERS, DUCTS, AND OTHER ITEMS SPECIFIED OR SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL MAKE ADJUSTMENTS, AS REQUIRED, TO DELIVER THE VOLUME OF AIR AT EACH AIR OUTLET WITHIN 10% OF DESIGN FLOWS AS SHOWN ON THE DRAWINGS. AFTER THE FINISHED AREA IS OCCUPIED, THE AIR VOLUMES SHALL BE READJUSTED, IF REQUIRED, TO PROPERLY BALANCE THE COOLING AND HEATING LOADS THROUGHOUT THE CONDITIONED SPACE.
- B. AIR OUTLETS SHALL BE BALANCED WITH AIR PATTERNS AS SHOWN ON THE DRAWINGS.
- C. CONTRACTOR SHALL SUBMIT A CERTIFIED AIR BALANCE REPORT TO THE PROJECT ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO ACCEPTANCE OF THE HVAC SYSTEM BY THE OWNER.

12. BALANCING - ADJUSTING AND TEST:

- A. BALANCING OF SYSTEM GENERAL
- 1. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, EQUIPMENT & SERVICES NECESSARY FOR TESTING AND REBALANCING THE AIR AND WATER CONDITIONING SYSTEMS. THE CONTRACTOR SHALL BE A MEMBER OF EITHER ASSOCIATED AIR BALANCE COUNSEL (AABC). OR NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) AND PROCEDURES SHALL BE IN ACCORDANCE WITH THOSE PUBLISHED BY THE ASSOCIATED AIR BALANCE COUNCIL (AABC) AND NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).
- 2. SUBMIT NAME OF TEST AND BALANCE AGENCY WITHIN 15 DAYS AFTER RECEIPT OF CONTRACT APPROVAL FOR APROVAL BY THE ARCHITECT.
- 3. BALANCING RESULT SHALL BE GUARANTEED FOR 90 DAYS. BALANCING CONTRACTOR SHALL BE SUBJECT TO RECALL TO THE SITE TO VERIFY RESULTS BEFORE APPROVAL OF BALANCING REPORT BY OWNER. CONTRACTOR SHALL SUBMIT CERTIFICATION WITH BALANCE REPORT. CONTRACTOR RECALL TO SITE SHALL BE AT NO ADDITIONAL COST TO OWNER.

B. FINAL REPORT:

1. CONTRACTOR SHALL SUBMIT FOUR COPIES OF FINAL BALANCE AND TEST REPORT. REPORT TO INCLUDE LISTING OF APPARATUS USED, CALIBRATION DATES, AND CERTIFICATION OF TEST TECHNICIAN, ALSO INCLUDED SHALL BE REPRODUCIBLE AS-BUILT DRAWINGS WHICH INDICATE THE TEST POINTS AND ASSOCIATED REFERENCE POINTS NOTED IN THE BALANCE REPORT. FINAL REPORT SHALL BE SUBMITTED TWO WEEKS AFTER COMPLETING THE BALANCING. NO FINAL PAYMENTS WILL BE MADE UNTIL RECEIPT & APPROVAL OF FINAL REPORT.

13. CLEANING DUCT AND EQUIPMENT:

- A. THOROUGHLY CLEAN ALL DUCTWORK OF ALL FOREIGN SUBSTANCES, INSIDE AND OUT, BEFORE BEING TESTED OR OPERATED.
- B. IF PART OF A SYSTEM SHOULD BE STOPPED BY FOREIGN MATTER AFTER BEING PLACED IN OPERATION, THAT PART SHALL BE DISCONNECTED, CLEANED, AND RECONNECTED WHEREVER NECESSARY TO LOCATE AND REMOVE OBSTRUCTION. ANY WORK DAMAGED IN THE COURSE OF REMOVING OBSTRUCTION SHALL BE REPAIRED OR REPLACED WHEN THE SYSTEM IS RECONNECTED, AT NO ADDITIONAL COST TO THE OWNER.
- C. DURING THE COURSE OF CONSTRUCTION, ALL DUCTS SHALL BE CAPPED IN AN APPROVED MANNER TO INSURE ADEQUATE PROTECTION AGAINST THE ENTRANCE OF FOREIGN MATTER.
- D. THE HVAC AIR SYSTEM SHALL NOT BE BROUGHT INTO OPERATION FOR TESTING PURPOSE WITHOUT NEW FILTERS INSTALLED IN ALL APPLICABLE AIR-HANDLING DEVICES. PRIOR TO ACCEPTANCE OF THE SYSTEM BY THE OWNER, HVAC CONTRACTOR SHALL PROVIDE COMPLETE NEW SETS OF FILTERS.

14. TESTING:

- A. ALL TESTS SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED REPRESENTATIVE OF THE OWNER OR WITNESSED BY TEST AND BALANCE. CONTRACTOR SHALL PROVIDE NOT LESS THAN TEN (10) DAYS NOTICE TO THE ARCHITECT BEFORE MAKING ANY TESTS.
- B. CLEANING:
- 1. THE CONTRACTOR SHALL, AFTER SATISFACTORY COMPLETION OF ALL PRESSURE TESTS, AND AFTER TEMPORARY OPERATION. PROPERLY CLEAN EVERY PIECE OF APPARATUS FURNISHED UNDER THIS CONTRACT UPON COMPLETION OF

15. CONDENSATE DRAINS:

- A. PROVIDE CONDENSATE DRAIN PIPE FROM FAN COIL UNIT TO FLOOR DRAIN. ROUTE AS REQUIRED TO MAINTAIN 1/8" PER FOOT SLOPE.
- B. CONDENSATE DRAIN PIPING SHALL BE TYPE 'L' HARD DRAWN COPPER SWEAT OR SCHEDULE 40 PVC. PROVIDE TRAP OF HEIGHT REQUIRED FOR AIR SEAL AS SHOWN ON MECHANICAL DETAIL DRAWING. PROVIDE SCREW PLUG CLEANOUT AT

16. <u>RECORD DRAWINGS:</u>

- A. OBTAIN, AT CONTRACTOR'S EXPENSE, A SET OF WHITE PRINTS AND KEEP THESE ON JOBSITE DURING CONSTRUCTION. DURING COURSE OF CONSTRUCTION, MARK ON THESE PRINTS ANY CHANGES WHICH ARE MADE, NOTING PARTICULARLY LOCATIONS OF THOSE ITEMS WHICH WILL NEED TO BE LOCATED FOR SERVICING.
- B. AT THE COMPLETION OF THE JOB, OBTAIN A SET OF CAD DISKS AND INCORPORATE ALL CHANGES ON THE WORK PRINTS. THIS MUST BE DONE BY A SKILLED DRAFTSMAN. MARK EACH SHEET "RECORD DRAWING", WITH DATE AND DELIVER ONE FULL SET OF REPRODUCABLE DRAWING PLOTS AND THE CAD DISKS TO THE ARCHITECT.

18. FAN COIL UNITS SEQUENCE OF OPERATION:

- A. ON-OFF: AUTOMATIC FROM PROGRAMMABLE THERMOSTAT LOCATED IN SPACE. THERMOSTAT SHALL PERFORM TIME CLOCK FUNCTION FOR START/STOP CONTROL AND NIGHT SETBACK OF FCU'S. THERMOSTAT SHALL BE APPROVED BY THE FCU MANUFACTURER.
- B. SYSTEM OPERATION: ENERGIZE SUPPLY AIR FAN MOTOR WHEN UNIT IS COMMANDED ON BY PROGRAMMABLE THERMOSTAT. MAINTAIN SPACE TEMPERATURE SETPOINT. SHOULD SPACE CONDITIONS BE SATISFIED, SHUT-OFF UNIT. PROVIDE 5°F DEADBAND BETWEEN COOLING AND HEATING CYCLES. SHOULD SPACE TEMPERATURE CONTINUE TO FALL, DE-ENERGIZE UNIT COOLING AND ENERGIZE SUPPLEMENTAL ELECTRICAL HEAT TO MAINTAIN SETPOINT IN SPACE. WHEN UNIT IS OFF. MOTORIZED O.A. DAMPER SHALL BE CLOSED. MOTORIZED O.A. DAMPER SHALL BE OPEN WHEN ASSOCIATED ACCU IS OPFRATING.



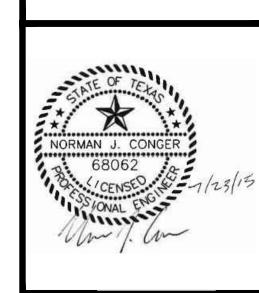
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SHEET NUMBER

ELECTRICAL SYMBOL LEGEND													
CAT	EGORY	SYMBOL											
Α	CIRCUIT RELATED				[2	(]	(4	O 5	0	# SH#/7	- - 8		
В	LIGHTING		2	<u> </u>	4	<u>5</u>	6						
С	CONTROL	\$	\$ _D	\$ _T	®	H) 5	H••	H•••	⊙ 8	¹ وي	10		
D	POWER OUTLETS	+	⊕	\	⊙ 4	• 5	H	= 7	0 8	9			
E	TELEPHONE/ DATA	4	② 2	3	\triangleleft	⊘ 5		Ⅲ	∢ CS		9		
F	EQUIPMENT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		<u> </u>	⊠ 4	∑ ^J [5		7	8	T 9	[X]	다 11	
G	SOUND SYSTEM	(S)	©	Svc	M 4	₩ 5	¥ [6	□0 7					
Н	CLOCK SYSTEM	ď	Ŏ	© [2									
	GENERAL	1	+42"										

ELECTRICAL SYMBOL LEGEND —

- EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. MATCH SYMBOL ROW AND NUMBER WITH TEXT DESCRIPTION BELOW FOR SYMBOL DESCRIPTION.
- DASHED ELECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.
- 4. DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING IN OR BELOW SLAB OR GRADE
- 5. DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING.
- 6. HEAVY LINE WITH LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.
- A1 LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE EQUIPMENT GROUNDING CONDUCTOR(S), SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT. "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF NINE THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED, PER NOTE (5) NEC TABLE 310.16.
- A2 TELEPHONE RACEWAY SYSTEM; "D" INDICATES DATA. A3 JUNCTION BOX. "J" MAY NOT APPEAR IF BOX IS WITHIN OR ATTACHED TO FLUORESCENT LUMINAIRE
- A4 JUNCTION BOX ABOVE CEILING FOR CONNECTION OF 277V LUMINAIRE. A5 JUNCTION BOX ABOVE CEILING FOR CONNECTION OF 120V LIGHTING AND POWER CIRCUITS.
- A6 POINT OF BRANCH CIRCUIT SPLICE FOR SEPARATELY SWITCHED LUMINAIRE GROUP OR OTHER BRANCH CIRCUIT ELECTRICAL OUTLETS. REFERENCE CATEGORY "B" LIGHTING SYMBOLS FOR FURTHER INFORMATION.
- A7 ELECTRICAL MATCH POINT AT CONNECTING BREAK LINE BETWEEN DRAWINGS. TOP #: MATCH POINT NUMBER.
- BOTTOM #: DRAWING SHEET NUMBER.
- A8 GROUNDING ELECTRODE.
- B1 FLUORESCENT LUMINAIRE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, CROSS HATCHING INDICATES LUMINAIRE ON EMERGENCY SYSTEM, FOR SOLID CIRCLE AT LUMINAIRE SYMBOL REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL.
- B2 STRIP TYPE FLUORESCENT LUMINAIRE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE AT LUMINAIRE SYMBOL REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL.
- B3 INCANDESCENT OR HID LUMINAIRE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL.
- B4 LUMINAIRE ON EMERGENCY SYSTEM. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE AT LUMINAIRE SYMBOL REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL.
- B5 SYMBOL WITH FOOT INDICATES WALL OR BRACKET MOUNTED LUMINAIRE OR DEVICE. B6 FXIT SIGN WITH LED LAMPS AND FPA ENERGY STAR LABEL, SURFACE CEILING MOUNT UNLESS INDICATED FOR SURFACE WALL MOUNT. LETTER INDICATES TYPE, NUMBER INDICATES CIRCUIT, NUMBER AND LOCATION OF SHADED TRIANGLE SECTIONS INDICATES NUMBER OF EXIT SIGN FACES AND DIRECTION OF EACH FACE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS. INSTALL EDGE-LIT SIGNS BY SURFACE CEILING MOUNT OR SURFACE WALL MOUNT OVER OUTLET BOX FLUSH IN CEILING/WALL.
- WEATHERPROOF, "K" INDICATES KEY OPERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "2" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER, "L" INDICATES LOCATOR SWITCH(HANDLE ILLUMINATED WHEN OFF).
- C2 WALL BOX DIMMER SWITCH. "MARK" INDICATES WATTAGE IF OTHER THAN 1000, "3D" INDICATES 3-WAY DIMMER.

C1 SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED. "P" INDICATES PILOT LIGHT. "WP" INDICATES

- C3 WALL BOX TIMER SWITCH. C4 PHOTOELECTRIC CONTROL.
- C5 EMERGENCY POWER OFF (EPO) PUSHBUTTON.
- C6 REMOTE STOP/START MOTOR CONTROL STATION. "MARK" INDICATES MOTOR CONTROLLED.
- C7 PUSH BUTTON; UP, DOWN, STOP C8 PUSH BUTTON.
- C9 OCCUPANCY SENSOR. SMALL LETTER INDICATES FIXTURES CONTROLLED, "1" INDICATES PASSIVE INFRARED, "2" INDICATES ULTRASONIC, "3" INDICATES DUAL TECHNOLOGY TYPES. C10 CONTACTOR
- D1 15A-125V DUPLEX RECEPTACLE EXCEPT 20A WHEN INDICATED OR IF BRANCH CIRCUIT SERVES ONLY SINGLE DUPLEX RECEPTACLE. "GF" INDICATES GROUND FAULT CIRCUIT INTERRUPTER, "GFP" INDICATES STANDARD DUPLEX RECEPTACLE GROUND FAULT PROTECTED BY GFCI RECEPTACLE UPSTREAM ON SAME BRANCH CIRCUIT, "IG" INDICATES ISOLATED GROUNDING RECEPTACLE, "TR" INDICATES TAMPER RESISTANT.
- D2 15A-125V FOURPLEX RECEPTACLE. 20A WHEN INDICATED. D3 SPECIAL PURPOSE SIMPLEX RECEPTACLE, NEMA CONFIGURATION AS INDICATED (IF NO CONFIGURATION INDICATED,
- RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE SIZE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED). "C" INDICATES CLOCK OUTLET TYPE.
- D4 20A-125V FLUSH FLOOR DUPLEX RECEPTACLE. 15A WHEN INDICATED. PROVIDE TAPERED CARPET FLANGE WHERE APPLICABLE. D5 20A-125V FLOOR DUPLEX RECEPTACLE IN SURFACE PEDESTAL. 15A WHEN INDICATED. "T" INDICATES TWO DUPLEX
- RECEPTACLES IN ONE BOX.
- D6 RANGE OUTLET D7 SAME AS D1 EXCEPT ISOLATED GROUND TYPE RECEPTACLE.
- D8 DUPLEX RECEPTACLE. HALF SWITCHED, HALF HOT.
- D9 SAME AS D8 EXCEPT ENTIRE RECEPTACLE IS SWITCHED.

- E1 WALL TELEPHONE OUTLET. "P" INDICATES PAY TYPE, "W" INDICATES WALL MOUNTED PHONE. PROVIDE NEMA
- 5-15R OUTLET FOR EACH TTY, TDD OR OTHER SCREEN OR CARD-ACCESS TELEPHONE. E2 FLUSH FLOOR TELEPHONE OUTLET WITH TAPERED CARPET FLANGE WHERE APPLICABLE.
- E3 FLOOR TELEPHONE OUTLET IN SURFACE PEDESTAL. "T" INDICATES TWO OUTLETS IN ONE BOX. E4 WALL DATA OUTLET. LETTER DESIGNATES TYPE.
- E5 FLUSH FLOOR DATA OUTLET. LETTER DESIGNATES TYPE. PROVIDE TAPERED CARPET FLANGE WHERE
- E6 FLOOR DATA OUTLET IN SURFACE PEDESTAL. LETTER DESIGNATES TYPE.
- E7 TV CABLE OUTLET. COMBINATION CABLE AND DUPLEX RECEPTACLE IN 2 GANG BARRIERED BOX WITH 2 GANG COVER PLATE, FLUSH MOUNTED.
- E8 CALL STATION FOR 2-WAY COMMUNICATION FROM AREA OF REFUGE. E9 TELEPHONE TERMINAL BOARD
- F2 DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED; "NF" INDICATES NON-FUSIBLE. 30A/NF/3P UNLESS OTHERWISE NOTED. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS SHOWN ON BUSWAY.
- F3 SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE. PROVIDE BUSWAY CONNECTOR STABS WHEN BREAKER IS
- F4 MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE; NEMA SIZE 1 UNLESS OTHERWISE NOTED. F5 COMBINATION DISCONNECT SWITCH/MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE; NEMA SIZE 1 UNLESS
- F6 COMBINATION CIRCUIT BREAKER (THERMAL MAGNETIC)/MOTOR CONTROLLER. "MCP" INDICATES COMBINATION MOTOR CIRCUIT PROTECTOR (MAGNETIC ONLY C.B.)/MOTOR CONTROLLER, "LA/MCP" INDICATES LIMITER ASSISTED COMBINATION MOTOR CIRCUIT PROTECTOR/MOTOR CONTROLLER, FRAME SIZE/POLES AS INDICATED.
- F8 PANELBOARD, FLUSH MOUNT. FLANGE INDICATES FRONT.
- F9 TRANSFORMER F10 STARTER INSTALLED BY DIVISION ELECTRICAL; FURNISHED BY OTHER THAN DIVISION ELECTRICAL.
- F11 INCLUDE ELECTRICAL INTERLOCK IN DISCONNECT SWITCH. WIRE OUT WITH 1/2" C. AND 4#12 TO REMOTE VARIABLE SPEED DRIVE ASSOCIATED WITH MOTOR. REMOTE SPEED DRIVE SHALL TURN OFF WHEN LOCAL MOTOR DISCONNECT IS SWITCHED OFF.
- G1 SPEAKER, FLUSH MOUNTED IN CEILING

G7 BELL. "WP" INDICATES OUTDOOR RATED.

- G2 SPEAKER, WALL MOUNTED G3 SPEAKER VOLUME CONTROL, FLUSH MOUNTED IN WALL
- G4 FLUSH FLOOR MICROPHONE OUTLET. PROVIDE CARPET FLANGE WHERE APPLICABLE.
- G5 WALL MICROPHONE OUTLET G6 LINE LIFT JACK
- H2 DOUBLE FACE CLOCK
- 11 FOOT ADDED TO ANY SYMBOL INDICATES WALL MOUNTED.
- 12 A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE.

DESCRIPTION

GO6 EXIT SIGNS AND OTHER LUMINAIRES SHALL NOT BE SUPPORTED BY CEILING TILE. PROVIDE MOUNTING FRAME

OR HANGERS TO SECURELY FASTEN IN PLACE ALL LUMINAIRES MOUNTED IN CEILING TILE. FRAMING MEMBERS

OF A SUSPENDED CEILING SYSTEM MAY BE USED WHERE DESIGNED FOR THE PURPOSE AND INSTALLED PER NEC

2X4 LED HIGH EFFICIENCY TROFFER

2X4 LED HIGH EFFICIENCY TROFFER

ULTRASONIC CEILING OCC SENSOR W/ INTELLIDAPT

LED THERMOPLASTIC EXIT SIGN

PIR OCC SENSOR SWITCH

Z1

GENERAL ELECTRICAL NOTES

1. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT, ELECTRICAL OUTLETS SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED:

WALL SWITCHES WALL CONVENIENCE RECEPTACLES WALL DATA/TELEPHONE OUTLETS WALL OUTLETS FOR WALL MTD. WALL CLOCK OUTLETS MANUAL FIRE ALARM PULL STATIONS * FIRE ALARM SPEAKER/HORN INTERIOR BELLS, BUZZERS, HORNS SPECIAL PURPOSE WALL OUTLETS

15" AFF TO BOTTOM OF BOX 15" AFF TO BOTTOM OF BOX

7'-0" AFF (OR ABOVE CHALKBOARDS WHERE REQUIRED) 1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED

PUSH BUTTONS

TOP OF BOX SHALL BE 48" AFF MAX. FOR WHEELCHAIR FRONTAL APPROACH AND FOR SIDE APPROACH. VERIFY EXACT HEIGHT WITH ARCHITECT.

1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED

15" AFF TO BOTTOM OF BOX (OR HIGHER AS REQUIRED TO

80" AFF TO BOTTOM OF LENS OR 6" BELOW CEILING, DA VISUAL ALARM WHICHEVER IS LOWER. ENTIRE LENS TO BE WITHIN 80" TO 96"

SERVE EQUIPMENT)

AFF = ABOVE FINISHED FLOOR AFG = ABOVE FINISHED GRADE

LUMINAIRE SCHEDULE

VOLT

WATT

56

56

3

LAMP

LED

LED

LED

MOUNTING

RECESSED

RECESSED

SURFACE

WALL

SURFACE

- 2. UNLESS SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS. OUTLETS LOCATED AT COUNTERS AND CABINETS SHALL BE MOUNTED AS SHOWN ON ARCHITECTURAL DETAILS AND ELEVATIONS, OR AS DIRECTED
- COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO ELECTRICAL DIVISION ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH ELECTRICAL DIVISION SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN
- APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE. 4. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
- BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT MC IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR "OCTOPUS (EMT WITH FLEXIBLE WHIPS)" TYPE LIGHTING BRANCH
- WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANEL
- SCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS AND SHARING COMMON NEUTRALS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO ELECTRICAL DIVISION SPECIFICATIONS SECTION "ELECTRICAL WIRING" FOR REQUIREMENTS.
- MULTIWIRE BRANCH CIRCUITS: FURNISH AND INSTALL AN IDENTIFIED HANDLE TIE OR MULTIPOLE COMMON TRIP CIRCUIT BREAKER TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS IN EACH MULTIWIRE BRANCH CIRCUIT. HANDLE TIES SHALL NOT COVER OR BLOCK VIEW OF THE BREAKER AMPACITY RATING ON THE BREAKER HANDLE. UPDATE PANEL SCHEDULES TO SHOW ACTUAL CIRCUIT BREAKER TYPES AND ARRANGEMENT IN EACH PANELBOARD AND SUBMIT SCHEDULES IN RECORD DRAWINGS.
- THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.

MANUFACTURER

COLUMBIA

COLUMBIA

DUAL-LITE

HBA

HBA

CATALOG

LEPC24-40LWG-LL-U-BJD

LEPC24-40LWG-LL-U-BJD

LXURWE

LHIRS1-G-WH

OMNIUS500

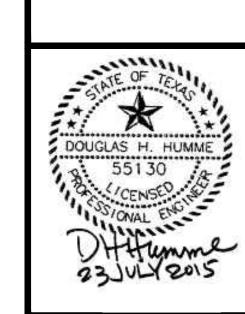
PREPARED BY: BRETT DONNELLY OF LIGHTING ASSOCIATES

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1	
	MARCH 24, 2015
	ISSUED FOR REVIEW
	ISSUED FOR PERMIT REVIEW
	ISSUED FOR BIDS
	ISSUED FOR CONSTRUCTION
	REVISION 1
	REVISION 2
	REVISION 3
	ISSUE DATES
	ISSUE DATES

SHEET NUMBER

ELECTRICAL SPECIFICATIONS:

- 1. COMPLY WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE CITY OF GALVESTON BUILDING, ELECTRICAL AND FIRE CODES.
- 2. ELECTRICAL CONTRACTOR SHALL VISIT AND REVIEW THE JOB SITE BEFORE SUBMITTING BID. INCLUDE IN BID COSTS FOR ALL NEW WORK AND REPAIR, RELOCATION, MODIFICATIONS, AND REMOVAL OF EXISTING ELECTRICAL ELEMENTS AS REQUIRED FOR COMPLETE, PROPER INSTALLATION OF ELECTRICAL SYSTEMS. CONTRACTOR, BY SUBMITTING BID, AGREES TO ACCEPT ALL EXISTING SITE CONDITIONS UNLESS SPECIFIC WRITTEN EXCEPTION IS MADE. SUBMIT ALL DISCREPANCIES AND EXCEPTIONS IN WRITING WITH BID FORM TO THE ARCHITECT AND
- 3. VERIFY ALL DIMENSIONS AT THE JOB SITE BEFORE ELECTRICAL ROUGH-INS.
- 4. PROTECT THE EXISTING FACILITIES. REPAIR, AT NO COST TO OWNER, ALL DAMAGE TO THE EXISTING FACILITIES CAUSED BY CONTRACTOR.
- 5. MAINTAIN ELECTRICAL SERVICES TO OTHER OCCUPIED AREAS OF THE BUILDING DURING CONSTRUCTION.
- 6. INFORM OWNER AND OBTAIN WRITTEN PERMISSION BEFORE MAKING CONNECTIONS TO EXISTING SERVICES AND BUILDING UTILITIES. ALL SUCH CONNECTIONS SHALL BE PLANNED AND SCHEDULED TO MINIMIZE THE LENGTH OF SERVICE INTERRUPTION REQUIRED. REQUEST FOR SHUTDOWN SHALL BE MADE TO OWNER AT LEAST (3) BUSINESS DAYS BEFORE DESIRED DOWN TIME. INCLUDE DETAILED WRITTEN SCHEDULE OF ACTIVITIES DURING SHUTDOWN AND LIST OF MATERIALS REQUIRED FOR CONNECTION AND RENEWAL OF SERVICE. ALL SUCH SERVICE INTERRUPTIONS SHALL BE MADE AT THE OWNER'S CONVENIENCE, NOT THE CONTRACTOR'S; BID PROPOSAL SHALL INCLUDE COSTS FOR PREMIUM TIME OR INEFFICIENCY OF OPERATIONS THAT MAY RESULT.
- 7. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, EX. LUMINAIRES, SMOKE DETECTORS, EXIT SIGNS, SPEAKERS. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS AND ELEVATIONS OF ELECTRICAL OUTLETS. COORDINATE INSTALLATION OF ELECTRICAL DEVICES AND APPLIANCES IN THESE AREAS WITH WORK OF OTHER TRADES.
- 8. SUBMITTALS: PROVIDE ELECTRONIC SUBMITTALS FOR ALL NEW EQUIPMENT. OBTAIN OWNER AND ENGINEER APPROVAL PRIOR TO ORDERING NEW EQUIPMENT. INCLUDE A FULL SET OF APPROVED SUBMITTALS IN THE RECORD DRAWINGS.
- 9. INSTALL ELECTRICAL SYSTEMS IN NEAT AND PROPER MANNER.
- 10. PROVIDE A NEW TYPED PANEL DIRECTORY FOR THE EXISTING PANELBOARDS THAT HAVE ANY NEW OR REVISED CIRCUITS. LABEL UNUSED CIRCUIT BREAKERS AS SPARE. INDICATE PANEL POSITIONS THAT ARE EMPTY SPACE.
- 11. RECORD DRAWINGS: SUBMIT ONE SET OF ELECTRICAL RECORD DRAWINGS ON CD OR DVD PLUS ONE SET OF PRINTS/PLOTS TO ARCHITECT. ELECTRONIC DRAWING FILES SHALL BE PDF OR OTHER FILE TYPE THAT CAN BE OPENED AND VIEWED WITHOUT AUTOCAD OR OTHER ORIGINAL SOFTWARE USED TO CREATE THE DRAWING FILES. COPY TRANSMITTAL AND ONE SET OF PRINTS/PLOTS TO CONSTRUCTION MANAGER. EVERY WIRING DEVICE, LUMINAIRE AND ELECTRICAL OUTLET SHALL BE SHOWN WITH BRANCH CIRCUIT NUMBER AND PANEL FOR CIRCUIT HOMERUN. INDICATE SWITCH CONTROL OF EVERY LUMINAIRE, WALL OUTLET AND OTHER SWITCHED APPLIANCES. IDENTIFY LIGHTING CONTROL ZONES AND LOCATION OF SCHEDULE CONTROLLER.
- 12. KEEP MECHANICAL, ELECTRICAL AND TELECOM ROOMS AND SPACES CLEAN AT ALL TIMES. THERE SHALL BE NO STORAGE OF MATERIALS IN THESE AREAS.
- 13. ALL NEW CONDUCTORS TO BE THHN/THWN COPPER. CONDUCTORS AWG NO. 10 AND SMALLER SHALL BE SOLID; LARGER SHALL BE STRANDED. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT OR EMT RACEWAY.
- 14. INSTEAD OF RACEWAY AND WIRE, TYPE MC CABLE MAY BE INSTALLED FOR BRANCH CIRCUITS HAVING CONDUCTOR SIZE OF AWG #10 OR SMALLER. MINIMUM MC SHALL BE AWG #12, 3-WIRE (PHASE, NEUTRAL & GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR). MC SHALL NOT BE HOMERUN INTO PANELS. PROPERLY SUPPORT ENTIRE RUN OF MC FROM BUILDING STRUCTURE; DO NOT FASTEN TO CEILING SYSTEMS, DUCTWORK, PIPING, ELECTRICAL RACEWAYS, NOR OTHER INSTALLED SUSPENDED SYSTEMS.

- 15. BRANCH CIRCUITS AND MULTI-WIRE CIRCUITS TO ELECTRICAL FURNITURE SYSTEMS SHALL BE AWG #10 MINIMUM WIRE SIZE, LARGER AS REQUIRED BY CIRCUIT AMPACITY, PANEL SCHEDULE OR WHEN INDICATED ON THE DRAWINGS.
- 16. INSTALL GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR WITH EVERY BRANCH CIRCUIT AND
- 17. 120V, 20A BRANCH CIRCUITS LONGER THAN 100 FEET SHALL BE AWG #10 MINIMUM.
- 18. REMOVE CONDUIT, WIRING AND ELECTRICAL DEVICES SERVING ABANDONED OUT-OF-SERVICE ELECTRICAL EQUIPMENT. CLOSE OUTLET WITH BLANK COVER PLATE WHERE CEILING, WALL OR FLOOR IS NOT DEMOLISHED.
- 19. FIRESTOP ALL ELECTRICAL PENETRATIONS OF FIRE-RATED PARTITIONS AND FLOORS.
- 20. FUSES SHALL BE DUAL-ELEMENT CLASS J SIMILAR TO BUSSMAN LOW-PEAK OR EQUIVALENT BY MERSEN (FORMER FERRAZ SHAWMUT) OR LITTLEFUSE. ALL FUSES SHALL BE FURNISHED FROM SINGLE MANUFACTURER. WHEN EXISTING FUSED DEVICES ARE CLASS R AND REMAIN IN USE, THEN REPLACE EXISTING FUSES WITH NEW MATCHING CLASS R DUAL-ELEMENT FUSES.
- 21. NEW PANELBOARDS SHALL HAVE AT LEAST 10,000 AMPERE RMS SYMMETRICAL FAULT CURRENT INTERRUPTING RATING FOR 120/208 VOLT AND 14,000 A FOR 277/480 VOLT.
- 22. NEW CIRCUIT BREAKERS INSTALLED INTO EXISTING EQUIPMENT SHALL HAVE FAULT CURRENT RATING EQUAL OR GREATER THAN THE EXISTING PANELBOARD, MOTOR CONTROL OR SWITCHBOARD.
- 23. ACCEPTABLE MANUFACTURERS FOR NEW PANELBOARDS AND TRANSFORMERS: EATON, GE, SCHNEIDER SQUARE D, AND SIEMENS.
- 24. OBTAIN WIRING DEVICE COLOR DESIGNATION FROM ARCHITECT.
- 25. COVER PLATES SHALL EXACTLY MATCH WIRING DEVICE.
- 26. FLOOR OUTLET: SUBMIT CATALOG DATA SHEET FOR EACH TYPE OF SERVICE FITTING TO BE INSTALLED IN A FLOOR BOX. FOR POKE-THRU TYPE, INDICATE FIRE-RATING PROVISIONS OF THE DEVICE. INCLUDE A DIMENSIONED DRAWING. CLEARLY MARK ALL OUTLET TYPES AND COVER PLATES PROPOSED. SUBMIT CATALOG PAGE AND MARK EACH TYPE OF DATA JACK TO BE INSTALLED. IDENTIFY COVER MATERIAL AND COLOR. SUBMIT EVIDENCE OF LISTING WITH UL 514A SCRUB WATER EXCLUSION TESTING.
- 27. OCCUPANCY SENSORS FOR LIGHTING CONTROL: LUTRON. THE WATT STOPPER BY LEGRAND, HUBBELL BUILDING AUTOMATION INC., GREENGATE BY COOPER CONTROLS, SQUARE D BY SCHNEIDER ELECTRIC, OR PRE-APPROVED EQUAL.
- 28. NEW TIME CLOCK: INTERMATIC ET8015C 7-DAY ASTRONOMIC ELECTRONIC TIME SWITCH OR EQUIVALENT.
- 29. NEW LIGHTING CONTACTOR: ASCO. SCHNEIDER. GE OR SIEMENS. PROVIDE ASCO 918 WITH 12 POLES FOR LIGHTING BRANCH CIRCUITS TO BE SWITCHED. INCLUDE NEMA 1 ENCLOSURE AND ASCO 47 ACCESSORY FOR SEPARATE TIME CLOCK CONTROL OF ON/OFF SCHEDULE OF LIGHTING CONTACTOR. INSTALL ACCESSORY WITH CONTROL POWER VOLTAGE FROM THE PANELBOARD SUPPLYING SWITCHED
- 30. ACCEPTABLE WIRING DEVICE MANUFACTURERS: COOPER WIRING DEVICES, HUBBELL, LEVITON, OR LEGRAND PASS & SEYMOUR.
- 31. LIGHTING WALL SWITCHES: 20A-120-277V AC CONTACTS. ROCKER TYPE, QUIET ACTION. CONTACTS SHALL BE FORMED OF SILVER ALLOY. ROCKER SHALL BE ENCLOSED WITH A FULL FRAME THAT FITS INSIDE THE SWITCH OPENING IN THE WALL PLATE. PROVIDE SINGLE POLE, SINGLE THROW, UNLESS DRAWINGS INDICATE 3-WAY, 4-WAY, DOUBLE POLE, SPDT MOMENTARY, OR ANY OTHER SPECIAL FEATURES. LEVITON DECORA PLUS 562X-2 SERIES, PASS AND SEYMOUR DECORATOR 2621 SERIES.

- 32. SWITCHES FOR SPECIAL PURPOSES: SPECIAL SWITCHES USED FOR DISCONNECTION PURPOSES (EX. SMALL APPLIANCES, FRACTIONAL HORSEPOWER MOTORS) SHALL BE RATED AS SPECIFIED ABOVE FOR "WALL SWITCHES". WHERE REQUIRED PROVIDE 30A CONTACTS. WHERE MOTORS ARE SWITCHED, THE SWITCH SHALL HAVE A HORSEPOWER RATING ADEQUATE FOR THE MOTOR.
- 33. ROCKER-STYLE STANDARD CONVENIENCE OUTLET: 15A/125V/2 POLE/3 WIRE DUPLEX. NEMA 5-15R. ROCKER-STYLE TO MATCH WALL SWITCH. RECEPTACLE SHALL HAVE PROVISIONS FOR BACK WIRING FROM EIGHT SEPARATE WIRING OPENINGS WITH SCREW ACTUATED CLAMP TYPE TERMINALS AND SIDE WIRING WITH CAPTIVE—HELD BINDING SCREWS. RECEPTACLE FACE SHALL BE IMPACT-RESISTANT NYLON. BODY SHALL BE THERMOPLASTIC POLYESTER WITH WRAP-AROUND STEEL STRAP. LEVITON DECORA PLUS 16262 SERIES, PASS AND SEYMOUR DECORATOR SERIES 26252, OR APPROVED
- 34. PROVIDE SPECIAL POWER RECEPTACLES WHERE INDICATED ON THE DRAWINGS. SPECIAL RECEPTACLES SHALL BE SIMILAR TO THOSE SPECIFIED ABOVE IN QUALITY. DETERMINE NEMA PIN CONFIGURATION FROM THE ACTUAL APPLIANCE TO BE INSTALLED.
- 35. GFCI RECEPTACLES SHALL BE PROVIDED IN ALL ELEVATOR PITS, ELEVATOR MACHINE ROOMS AND MACHINERY SPACES, TOILETS, ROOFTOP AND KITCHEN AS REQUIRED PER NEC, SECTION 210.8
- 36. PROVIDE GFCI RECEPTACLES FOR ALL OUTDOOR 15A AND 20A, 125 VOLT RECEPTACLES.
- 37. PROVIDE GFCI RECEPTACLES FOR ALL CORD-AND-PLUG CONNECTED VENDING MACHINES, UNLESS THE VENDING MACHINE HAS GFCI AS AN INTEGRAL PART OF THE ATTACHMENT PLUG OR IN THE POWER CORD [NEC 422.51].
- 38. ELECTRIC DRINKING FOUNTAINS SHALL BE CONNECTED TO A GFCI-PROTECTED OUTLET.
- 39. JUNCTION AND SWITCH BOXES SHALL HAVE AT LEAST 2-1/8" DEPTH.
- 40. TEST ALL INSTALLED CONDUCTORS FOR SHORTS AND CONTINUITY. TEST ALL INSULATION FOR SUFFICIENT OHMS RESISTANCE IN CABLE SIZES LARGER THAN AWG #6.
- 41. USE TORQUE WRENCH TO TIGHTEN ALL FEEDER LUGS LARGER THAN AWG #8 AT PANELBOARD AND LOADCENTER BREAKERS, APPLIANCE AND DEVICE DISCONNECTS, AND FUSED SWITCHES.
- 42. WIRE COLOR CODING TAPE LABELS SHALL [MATCH EXISTING FOR ADDITIONS AND CHANGES TO EXISTING WIRING SYSTEMS] [CONFORM TO CITY ELECTRICAL CODE FOR NEW BUILDINGS].
- 43. THE ACCESSIBLE PORTION OF ABANDONED LOW VOLTAGE CABLES AND COMMUNICATIONS CABLES SHALL BE REMOVED.

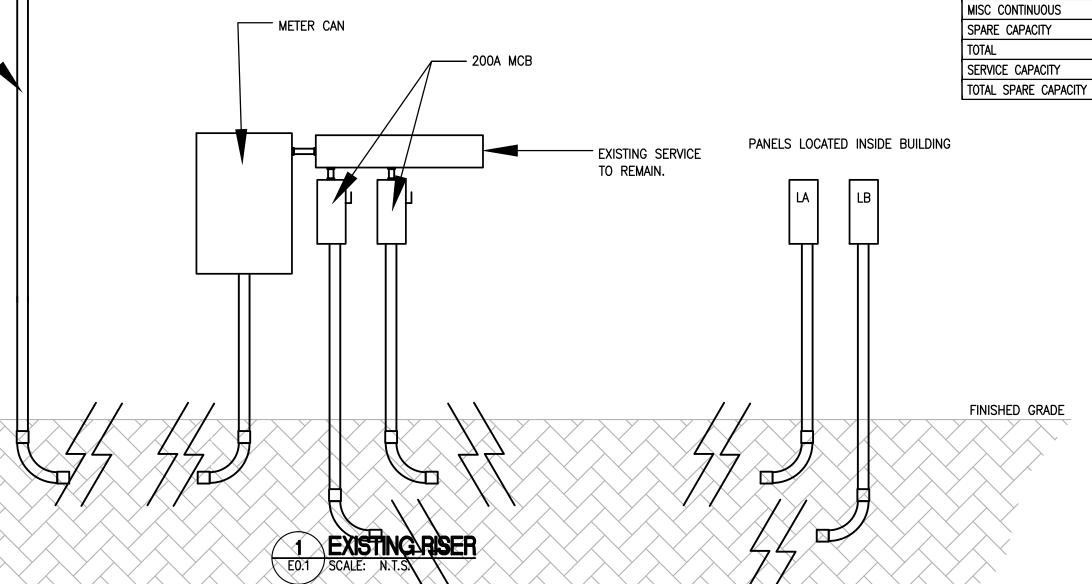
EXISTING OVERHEAD SERVICE DROP.	

LIGH	TING CLASS	PA	NEL	BOAR)	LA	(EX	ISTING)	
240/120 1PH 3W 200 AMP MLO MOUNTING: FLUSH SINGLE LUGS									JSH
LOAD VA	SERVES	WIRE	СВ	CKT PHASE (СКТ	СВ	WIRE	SERVES	LOAD VA
5000	AC - 1	6	50/2	1 A	2	20/1	10	3 RECS	540
_			/2	3 B	4	20/1	10	3 RECS	540
5000	AC - 2	6	50/2	5 A	6	20/1	10	5 RECS	900
_			/2	7 B	8	20/1	10	4 RECS	720
5000	AC - 3	6	50/2	9 A	10	20/1	10	3 RECS	540
-			/2	11 B	12	20/1	10	6 RECS	1080
5000	WATER HEATER (EXISTING)		40/2	13 A	14	20/1	10	8 RECS	1440
ı	(TO REMAIN)		/2	15 B	16	20/1	10	COPIER	1000
1440	8 RECS	10	20/1	17 A	18	20/1	10	8 RECS	1440
900	50 RECS	10	20/1	19 B	20	20/1	10	4 RECS	720
1440	8 RECS	10	20/1	21 A	22	20/1	10	8 RECS	1440
1440	8 RECS	10	20/1	23 B	24	20/1	10	8 RECS	1440
1225	INTERIOR LTG	10	20/1	25 A	26	20/1	10	EXT. LTG	850
250	EGRESS LTG	10	20/1	27 B	28	40/2	8	FCU 1	5000
750	EXHAUST FANS	10	20/1	29 A	30	/2	1		_
6000	FCU 2	8	40/2	31 B	32	50/2	10	FCU 3	6500
_			/2	33 A	34	/2	1		_
250	SERVICE REC	10	20/1	35 B	36	-/-	1	-	_
	-	_	-/-	37 A	38	-/-	_	-	_
_	-	_	-/-	39 B	40	-/-	1	-	
ı	-	_	-/-	41 A	42	-/-	_	-	_

Load Summary: Conn KVA = 57.6 NEC KVA = 38.4 NEC Amp = 92

LIGHTING CLASS PANELBOARD LB (EXISTING)										
240/120 1PH 3W SINGLE LUGS			200 AMP MLO					MOUNTING: FLUSH		
LOAD VA	SERVES	WIRE	СВ	CKT PHASE	CKT	СВ	WIRE	SERVES	LOAD VA	
_	SPARE	-	20/1	1 A	2	20/1	_	SPARE	_	
1	SPARE	1	20/1	3 B	4	20/1	_	SPARE	_	
ı	SPARE	1	20/1	5 A	6	20/1	_	SPARE	_	
-	SPARE	_	20/1	7 B	8	20/1	_	SPARE	_	
-	SPARE	_	20/1	9 A	10	20/1	_	SPARE	_	
-	SPARE	_	20/1	11 B	12	20/1	_	SPARE	_	
-	SPARE	_	20/1	13 A	14	20/1	_	SPARE	_	
-	SPARE	_	20/1	15 B	16	20/1	_	SPARE	_	
-	SPARE	-	20/1	17 A	18	20/1	_	SPARE	_	
-	SPARE	_	20/1	19 B	20	20/1	_	SPARE	_	
1	SPARE	-	20/1	21 A	22	20/1	_	SPARE	_	
_	SPARE	_	20/1	23 B	24	20/1	_	SPARE	_	
ı	SPARE	1	20/1	25 A	26	20/1	_	SPARE	_	
-	SPARE	_	20/1	27 B	28	20/1	_	SPARE	_	
-	SPARE	_	20/1	29 A	30	20/1	_	SPARE	_	
_	SPARE	-	20/1	31 B	32	20/1	_	SPARE	_	
_	SPARE	1	20/1	33 A	34	20/1	_	SPARE	_	
_	SPARE	_	20/1	35 B	36	20/1	_	SPARE	_	
_	SPARE	-	20/1	37 A	38	20/1	_	SPARE	_	
-	SPARE	_	20/1	39 B	40	20/1	_	SPARE	_	
_	SPARE	_	20/1	41 A	42	20/1	-	SPARE		

Load Summary: Conn KVA = 0 NEC KVA = 0 NEC Amp = 0





Houston, Texas 77063 Tel. (713) 212-0011 Fax (713) 212-0010 TBPE # F-1048 TBPLS # F-10107503 Copyright © 2015

LOAD ANALYSIS FOR LA

| (KVA) | (AMPS)| (AMPS)

0 0 0 0

58 | 38 | 92 | 42 |

400 | 400 |

CONN | NEC | PHASE | NEUT | | REMARKS ON NEC COMPUTATION

| Indoor + Nondiv CONN - SQFT

NEC 220-11 > SQFT frm NEC

div as Office Buildings from

220-3(b), then mult. by

| Quantity = 95 at 180VA per

applied NEC table 220-13

Less than AC: NEC 220-21

0 | 100% Conn + 25% Last - NEC

125% Connected - NEC

220-11 dmd factor NOT

220-10(b) NOT compared to saft KVA;

1 2 2 1 100% Conn - NEC 430-24

0 0 0 No Commercial Kitchen Equip

0 0 0 No Misc Noncontinuous Load

0 | 0 | No Misc Continuous Load

308 | 358 | Service Capacity less NEC Load

0 | 0 | No Computer Load

0 | 0 | No Water Heating

compared to 0 at 1

SERVICE VOLTAGE: 240/120 1P 3W

SERVED

LIGHTING

RECEPTACLES

ELECTRIC HEAT

MISC MOTORS

WATER HEATING

KITCHEN EQUIP

MISC NONCONTINUOUS

COMPUTERS

NONDIVERSIFIED LIGHTING

AC REFRIGERATION

LIGHTED AREAS SERVED: SQFT AS Office Buildings



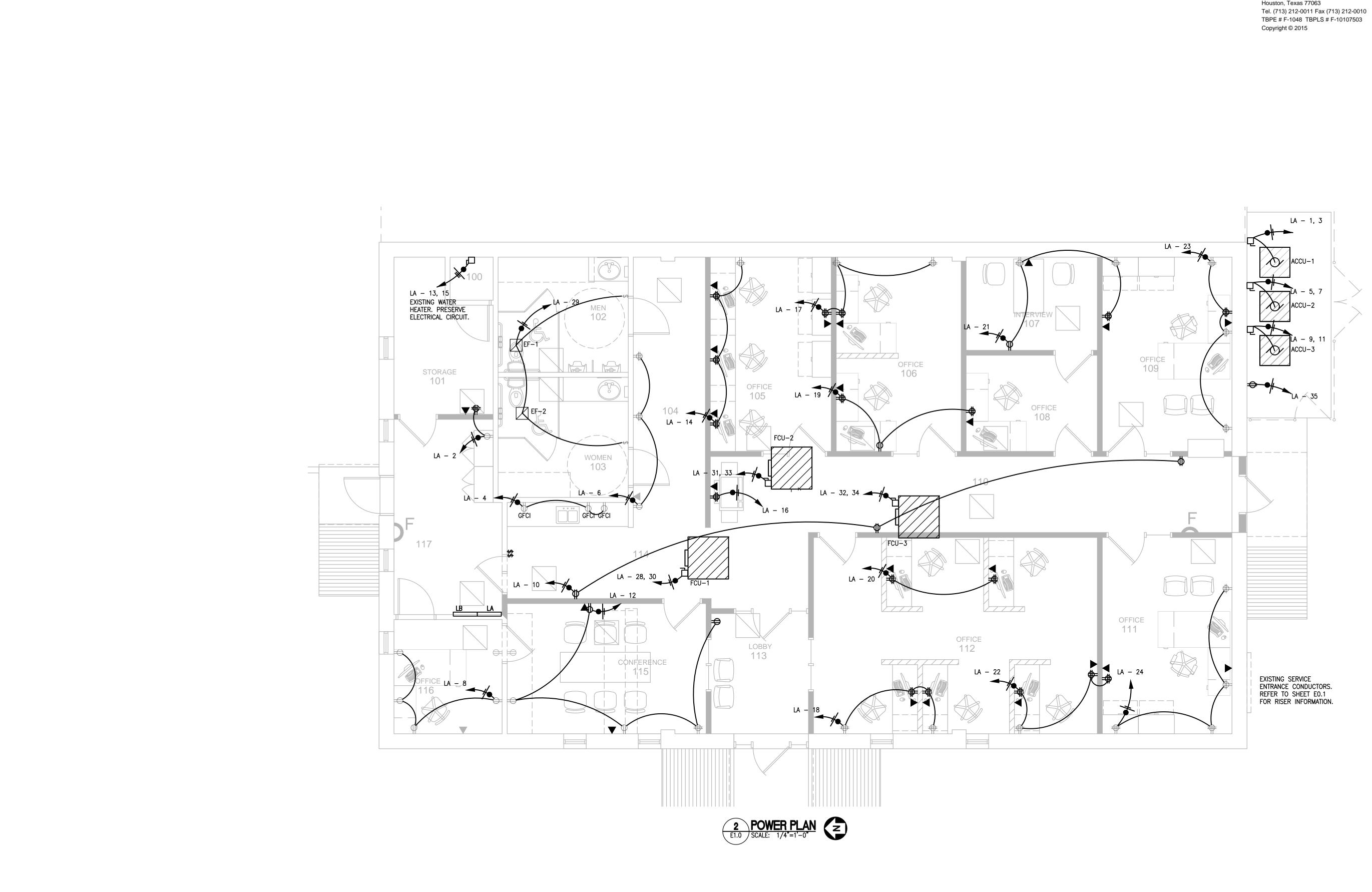
Offfi onstable (C) acliff, ਰ eriff B rand Sh **(1) SU**

****** DOUGLAS H. HUMME 55130 CENSO DE STONAL ENG HHumme 23JULY 2015

MARCH 24, 2015 SUED FOR REVIEW SSUED FOR PERMIT REVIEW SSUED FOR BIDS SSUED FOR CONSTRUCTION REVISION 2 REVISION 3 **ISSUE DATES**

PROJECT NO. 14-007

SHEET NUMBER







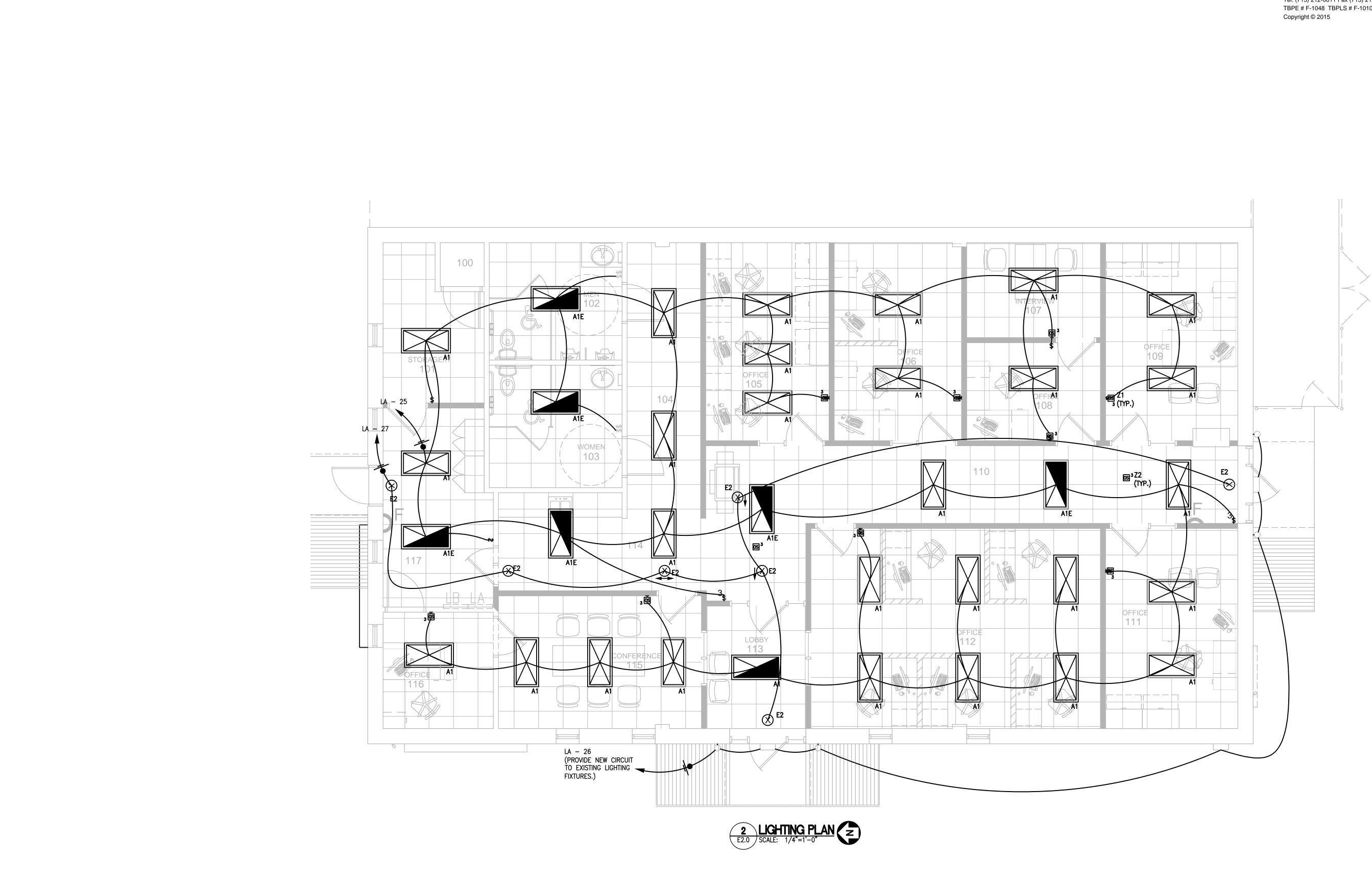


Renovations for Sheriff and Constable ounty 823 Grand Bacliff, Texas Galveston



MARCH 24, 2015 SSUED FOR REVIEW SSUED FOR PERMIT REVIEW ISSUED FOR BIDS ISSUED FOR CONSTRUCTION REVISION 2 REVISION 3 ISSUE DATES

> E1.0 SHEET NUMBER







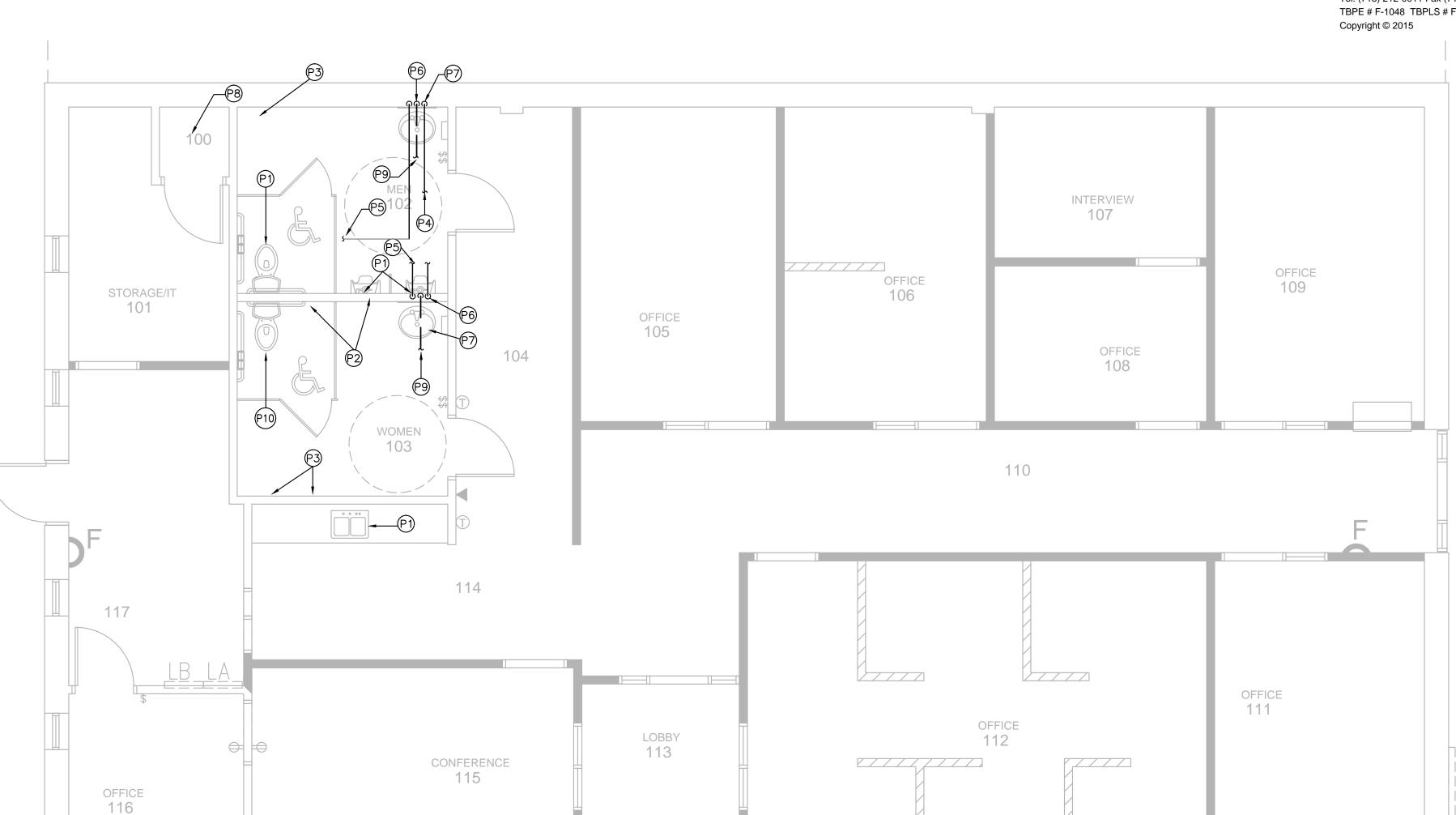




MARCH 24, 2015
ISSUED FOR REVIEW
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ISSUED FOR CONSTRUCTION
REVISION 1
REVISION 2
REVISION 3
ISSUE DATES

E2.0

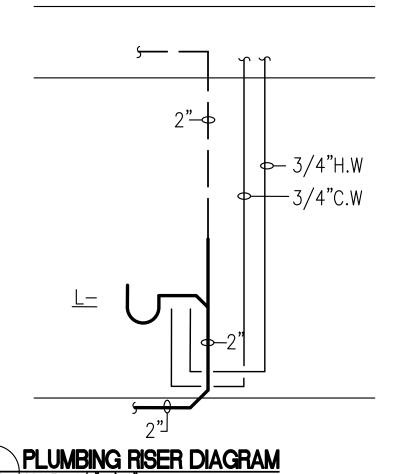
SHEET NUMBER



1 PLUMBING FLOOR PLAN



PLUMBING RISER



PLUMBING KEYED NOTES:

- (P1) EXISTING PLUMBING FIXTURE TO REMAIN.
- P2) REMOVE EXISTING WATER CLOSET IN THIS AREA.
 CAP AND PLUG LINES THAT BECOME IN ACTIVE. (REUSE EXISTING ACCESSIBLE HEIGHT WATER CLOSET.)
- (P3) REMOVE EXISTING LAVS, IN THIS AREA CAP AND PLUG LINES THAT BECOME INACTIVE.
- (P4) CONNECT NEW 3/4" C.W LINE TO EXISTING C.W LINE CONTRACTOR FIELD VERIFY EXACT LOCATION.
- P5 CONNECT NEW 3/4" H.W LINE TO EXISTING H.W LINE CONTRACTOR FIELD VERIFY EXACT LOCATION.
- P6 NEW 2" WASTE DOWN, 2" VENT UP, AND 3/4" H.W AND C.W. DOWN
- (P7) INSTALL LAV AND FAUCET. (REUSE EXISTING.)
- (P8) EXISTING ELECTRICAL WATER HEATHER TO REMAIN
- (P9) CONNECT NEW 2" VENT LINE TO EXISTING NEW LINE CONTRACTOR FIELD VERIFY EACH LOCATION.
- (P10) REINSTALL EXISTING ACCESSIBLE HEIGHT WATER CLOSET IN THIS LOCATION.



Constable Sheriff tions

NORMAN J. CONGER 68062 CCENSED 1/23/12

MARCH 24, 2015 ISSUED FOR REVIEW ISSUED FOR PERMIT REVIEW ISSUED FOR BIDS ISSUED FOR CONSTRUCTION REVISION 1 REVISION 2 **REVISION 3** ISSUE DATES

SHEET NUMBER

PROJECT NO. 14-007

PLUMBING GENERAL NOTES:

- REFER TO THE BUILDING STANDARDS FOR MEANS, METHODS AND MATERIALS
- 2. SANITARY WASTE PIPING SHALL BE NO HUB CAST IRON OR BELL AND SPIGOT CAST IRON. DOMESTIC WATER PIPING SHALL BE TYPE "L" COPPER OR SCHEDULE 40 GALVANIZED STEEL. THE NEW PIPING SHALL BE THE SAME MATERIAL AS THE EXISTING PIPING THAT IT CONNECTS TO.
- 3. COORDINATE EXACT LOCATION OF ALL PLUMBING SYSTEMS AND DEVICES IN CABINETS AND AT FIXTURE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- 4. COORDINATE PLUMBING LOCATIONS WITH EXISTING EQUIPMENT AND NEW MECHANICAL AND ELECTRICAL ITEMS.
- 5. CONTRACTOR TO VERIFY EXACT LOCATIONS OF WASTE, VENT, AND COLD WATER LINES AT JOB SITE PRIOR TO INSTALLATION. COORDINATE NEW ROUTING WITH EXISTING HVAC DUCTWORK AND OTHER EXISTING MECHANICAL/ELECTRICAL SYSTEMS.
- 6. ALL EXISTING PLUMBING LINES THAT ARE INACTIVE OR BECOME INACTIVE DUE TO NEW WORK SHALL BE CAPPED AND PLUGGED AT LINES THAT WILL REMAIN ACTIVE. REMOVE ALL PIPE ACCESSORIES AND DEVICES THAT ARE INACTIVE OR BECOME INACTIVE DUE TO NEW WORK.
- 7. OBTAIN ALL NECESSARY PERMITS, PAY LEGAL FEES, AND COMPLY WITH ALL NATIONAL, STATE, AND MUNICIPAL LAWS, CODES, AND ORDINANCES RELATING TO BUILDING AND
- 8. PROTECT EQUIPMENT AND WORK FROM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION.
- 9. REMOVE ALL EXCESS MATERIAL AND DEBRIS AND CLEAN ALL EQUIPMENT UPON COMPLETION ON WORK.
- 10. ALL SYSTEMS SHALL BE COMPLETE AND WORKING AT COMPLETION OF CONSTRUCTION. 11. GUARANTEE ALL WORK AND MATERIALS FURNISHED UNDER THIS CONTRACT FOR A
- PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER AND
- 12. ALL CONNECTIONS BETWEEN PIPES OF DISSIMILAR MATERIALS SHALL BE MADE WITH DIELECTRIC UNIONS. 13. CONTRACTOR SHALL NOTIFY OWNER OF ANY REQUIRED SHUT DOWNS AND COORDINATE
- THESE WITH OWNER. DOWNTIME SHALL BE AS MINIMUM AS POSSIBLE. 14. ALL EXISTING FACILITIES SHALL BE PROTECTED DURING THE CONSTRUCTION ACTIVITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE AND STORE ITEMS WHICH ARE SUBJECT TO BREAKAGE OR DAMAGE. 15. SUBMIT SHOP DRAWINGS OF PROPOSED NEW DEVICES PRIOR TO INSTALLATION.
- 16. FURNISH OWNER WITH COMPLETE OPERATION MANUALS AND INSTRUCTIONS FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
- 17. INSULATE ALL NEW HOT WATER SUPPLY PIPING PER BUILDING STANDARDS. 18. EACH WATER SUPPLIED FIXTURE AND PIECE OF EQUIPMENT SHALL BE PROVIDED WITH
- ITS OWN INDIVIDUAL AND ACCESSIBLE SHUT-OFF/STOP VALVE. 19. PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE LAVATORY AND SINK
- FAUCETS SHALL INCLUDE 1.5 GPM FLOW CONTROL. 20. ALL FLOOR DRAINS/SINKS, WHEN INSTALLED TO RECEIVE COLD WATER WASTE FROM
- ICE MAKERS, SHALL BE INSULATED. INCLUDING THE P-TRAP AND PIPING FROM THE P-TRAP, UNTIL THE PIPING CONNECTS INTO ANOTHER PIPE.
- 21. BY SUBMITTING A PROPOSAL, CONTRACTOR CERTIFIES THAT HE HAS REVIEWED THE DRAWINGS AND SPECIFICATIONS, VISITED THE SITE AND HAS INFORMED HIMSELF IN DETAIL AS TO ALL EXISTING CONDITIONS AS THEY MAY EFFECT THE NEW WORK. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.