

#### STEPHEN F. AUSTIN STATE UNIVERSITY

NACOGDOCHES, TEXAS

# PROCUREMENT AND PROPERTY SERVICES P. O. Box 13030 NACOGDOCHES, TX 75962

#### REQUEST FOR PROPOSAL

RFP NUMBER
CMR-BLDG PROJECTS-2018

#### ADDENDUM NO. 3

**Dated: 9/12/18** 

### PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### MAIL PROPOSAL TO:

Stephen F. Austin State University Procurement Services P. O. Box 13030 Nacogdoches, TX 75962-3030

### HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University Procurement Services 2124 Wilson Drive Nacogdoches, TX 75962

Show RFP Number, Due Date and Time on Return Envelope

**NOTE:** PROPOSAL must be time stamped at <u>Stephen F. Austin State University</u> <u>Procurement Services</u> before the hour and date specified for receipt of proposal.

#### **REFER INQUIRIES TO:**

Kay Johnson Stephen F. Austin State University Procurement Services 936-468-4037

email: johnsondk6@sfasu.edu

### STEPHEN F. AUSTIN STATE UNIVERSITY Request for Proposal #CMR-BLDG PROJECTS-2018

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### STEPHEN F. AUSTIN STATE UNIVERSITY Request for Proposal #CMR-BLDG PROJECTS-2018

#### **ADDENDUM NO. 3**

THIS ADDENDUM MUST BE ACKNOWLEDGED IN ORDER FOR THE RESPONSE TO RECEIVE CONSIDERATION. FAILURE TO ACKNOWLEDGE THE ADDENDUM WILL RESULT IN DISQUALIFICATION OF THE RESPONSE.

PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### 1.3 SCHEDULE OF EVENTS - Updates in red

	opaatoo iii roa
8/31/2018	Deadline for questions
9/5/2018	Addenda posted, if any
9/10/2018	Final Addendum posted-No posting
9/12/2018	Additional Addendum posted
09/19/2018	Response Due
10/04/2018	Finalists selected and notified
10/10/2018	List of presenters due
10/26/2018- 10/29/2018	SFA Board of Regents Meeting, receive presentations and final selection
November – December 2018	A/E Contracting
1/1/2019	Estimated start for architectural programming
TBD	Estimated schematic design approval
TBD	CMR interim pricing
TBD	Estimated start for design development
TBD	Estimated start for development approval
TBD	Working drawings due
TBD	CMR GMP due
TBD	Estimated notice to proceed
7/2021 – 11/2022	Estimated substantial completion
7/2021 - 11/2022	Estimated occupancy

<sup>\*</sup>Dates are tentative and subject to change.

Reference Exhibit H for estimated project timeline and gantt chart.

#### 1.5 HISTORICALLY UNDERUTILIZED BUSINESSES (HUB)-Updates in red

### SEE EXHIBIT D – HUB SUBCONTRACTING PLAN READ CAREFULLY

Each respondent is required to make a good faith effort to subcontract with historically underutilized businesses and shall submit a HUB Subcontracting Plan using the HUB Subcontracting Plan documents provided in Exhibit D.

Stephen F. Austin State University is committed to making a good faith effort to increase business with historically underutilized businesses (HUBs) by contracting with HUBs either directly or indirectly through subcontracting opportunities. Respondents are encouraged to actively seek to subcontract or partner with HUBs in an effort to create an environment that actively acknowledges and values diversity.

The university has determined that subcontracting opportunities are probable under this contract.

The university's HUB goal for this procurement is: 21.1% for building construction

Each HUB subcontracting plan will be evaluated independently of the response. If the HSP does not reflect a good faith effort to subcontract with HUBs, the entire response will be disqualified.

PRE-CONSTRUCTION AND CONSTRUCTION SERVICES: The University understands that subcontracting opportunities for construction services cannot be adequately identified and defined at this time. The Respondent MUST prepare a letter to the University on Respondent's letterhead (copies of this page, even with a signature, will not be acceptable) including the following:

- Acknowledgment of receipt and understanding of the HUB Subcontracting Plan documents
- Confirmation that a HUB Subcontracting Plan will be completed <u>in accordance with the attached HSP documents</u> and submitted to the University for review and approval <u>prior to the initiation of any work</u>.

All questions regarding the HUB Subcontracting Plan may be directed to the Procurement and Property Services Director/HUB Coordinator, Kay Johnson, 936-468-4037, johnsondk6@sfasu.edu

<u>Failure to submit the HUB Subcontracting Plan letter will disqualify the bid from</u> consideration.

#### 2.3 UNIFORM GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS-Updated

The Uniform General Conditions (UGC) and Supplementary General Conditions (SGC), **Exhibit E**, are an integral part of this document. The respondent is responsible for reading and being familiar with all of the requirements of the Uniform and Supplementary General Conditions. Failure to consider all the requirements of the UGC and SGC does not relieve the Contractor from the obligation to fulfill all requirements of the UGC and SGC. The Uniform General Conditions (UGC) and Supplementary General Conditions (SGC), **Exhibit E**, will include revisions to the UGC. We are planning revisions to the UGC Article 11 and Article 16.4 which will be provided to the finalists when selected and notified.

### 2.6 REIMBURSABLE GENERAL CONDITIONS/GENERAL REQUIREMENTS AND PRECONSTRUCTION COSTS - Updated

The following items will be considered as reimbursable preconstruction, general conditions and general requirements of the contract and will not be included as art of the Construction Manager's (CMR) fees. As part of the RFP, SFA is requesting an itemized estimate of which will be negotiated with a total overall Not-To-Exceed Limit for these costs. This Not-To-Exceed Limit will be subject to mutually agreed adjustments for scope or project duration. Please note that all estimated reimbursable personnel costs will include estimated costs for a for payroll taxes, applicable cost of worker's compensation insurance, and actual cost of allowable fringe benefits as defined in the 2018 Standard Form of Agreement with Owner and Construction Manager:

- a. Project Executive
- b. Senior Project Manager
- c. Project Manager
- d. Project Manager Vehicle and/or Allowance/Mileage
- e. General Superintendent
- f. Superintendent
- g. Superintendent Vehicle and/or Allowance/Mileage
- h. Assistant Superintendent
- i. Project/Cost Engineer
- j. Office/Technology Engineer
- k. Project Expediter/Asst. PM
- 1. Field Office Manager/Secretary
- m. Field Engineering/Layout
- n. Deleted
- o. Deleted
- p. Quality Control Manager
- q. General Purpose Labor
- r. Deleted
- s. Mileage/Travel (for reimbursable personnel only)
- t. CPM Schedule
- u. Field Engineering & Equipment
- v. Record set of plans and specs
- w. CMR Office Trailers
- x. Architect/Owner Trailer
- y. CMR Storage Sheds
- z. CMR Job Office Expense
- aa. CMR Job Office Equipment
- bb. First Aid Supplies
- dd. Project Documentation
- ff. Building Permits/Fees
- gg. Equipment Rental, Maintenance and Insurance
- hh. Job Signage
- ii. Payroll Taxes on Reimbursable Labor
- jj. Mobilization/Demobilization
- mm. Ice, Cups and Water

- nn. Delivery Service/Postage
- oo. Progress Photography
- pp. Shop Drawings
- qq. Stationery and Supplies
- rr. Fencing
- ss. Temporary Weather Protection
- tt. Temporary Partitions
- uu. Temporary Roads
- vv. Temporary Plumbing
- ww. Plans/Surveys/Blue Prints
- yy. Chemical Toilets
- zz. Cellular Telephones/Pagers
- bbb. Tractor
- ccc. Generators portable
- ddd. Barricades
- eee. Gas, Oil and Grease for reimbursable equipment or vehicles
- ggg. Clean Streets
- hhh. Cleanup Periodical
- iii. Continuous Jobsite Clean-up
- ijj. Dumpsters/Trash Haul (Note: These costs are not considered taxable.)
- kkk. Final Cleaning
- Ill. Building and Site dewatering
- mmm.Safety Equipment
- nnn. Safety Coordinator
- ooo. Job Safety Training
- ppp. Fire Protection/Fire Extinguishersqqq. Project Cameras (approved by Owner) such as MultiVista, OxBlue, or EarthCam
- sss. Deleted
- rrr. The cost of hoisting/or vertical transportation equipment and operators unless such costs are provided by trade contractors under com

Note: The following is a partial listing of non-reimbursable costs which should be considered to be covered by CMR fee:

- 1. Bonuses or incentive compensation of any kind paid to CMR personnel
- 2. any costs originating from Construction Manager's home office such as home office hardware and software, home office accounting payroll processing, and administrative support of any kind
- 2. software licenses or usage fees for any software of on-line programs used by any CMR personnel whether stationed in the CMR's home office or at the site field offices
- 3. AGC/ABC Fees of any kind
- 4. Cost of pensions plans (defined benefit plans, ESOP plans, phantom stock plans, etc.) other than the direct costs of 401K matching contributions directly related to reimbursable employee wages
- 5. Costs related to any insurance claims including the cost of deductibles covered by any insurance required by the terms of the 2018 SFA UGC

- 6. Costs related to any insurance not specifically required by the 2018 SFA UGC
- 7. Costs of employee relocation expenses, per diem or subsistence.

#### ADDITIONS: Section 2.7 - 2.16.1

- 2.7 REIMBURSABLE COSTS FOR PERFORMANCE AND PAYMENTS BONDS REQUIRED TO BE PURCHASED BY CONSTRUCTION MANAGER
- 2.7.1 SFA will reimburse the CMR for the direct costs of the premiums paid for Performance and Payment bonds.
- 2.7.2 SFA will require the CMR to issue a credit for any bond premium returns, and/or bond dividends to be received by the CMR from the surety.
- 2.8 REIMBURSABLE COSTS FOR COMMERCIAL GENERAL LIABILITY INSURANCE REQUIRED BY Article 5.2.2.1.2 of the UGC.
- 2.8.1 SFA will reimburse the CMR's actual allocable costs of the required insurance Not-To-Exceed a total of .5% of the Reimbursable Cost of Work Not Including the CM's cost of all required Liability Insurance or Builder's Risk Insurance or CM Fee
- 2.8.2 SFA will require the CMR to issue a credit for any premium returns, and/or policy dividends to be received by the CMR.
- 2.9 REIMBURSABLE COSTS FOR ASBESTOS ABATEMENT LIABILITY INSURANCE REQUIRED BY Article 5.2.2.1.3 of the UGC.
- 2.9.1 SFA will reimburse the CMR's actual allocable costs of the required insurance
- 2.9.2 SFA will require the CMR to issue a credit for any premium returns, and/or policy dividends to be received by the CMR.
- 2.10 REIMBURSABLE COSTS FOR COMMERCIAL AUTO LIABILITY INSURANCE REQUIRED BY Article 5.2.2.1.4 of the UGC.
- 2.10.1 SFA will reimburse the CMR's actual allocable costs of the required insurance
- 2.10.2 SFA will require the CMR to issue a credit for any premium returns, and/or policy dividends to be received by the CMR.
- 2.11 REIMBURSABLE COSTS FOR SPECIAL FORM BUILDER'S RISK INSURANCE REQUIRED BY Article 5.2.2.1.5 of the UGC.
- 2.11.1 SFA will reimburse the CMR's actual allocable costs of the required insurance
- 2.11.2 SFA will require the CMR to issue a credit for any premium returns, and/or policy dividends to be received by the CMR.
- 2.12 REIMBURSABLE COSTS FOR UMBRELLA LIABILITY INSURANCE REQUIRED BY Article 5.2.2.1.6 of the UGC.
- 2.12.1 SFA will reimburse the CMR's actual allocable costs of the required insurance
- 2.12.2 SFA will require the CMR to issue a credit for any premium returns, and/or policy dividends to be received by the CMR.
- 2.13 REIMBURSABLE COSTS FOR ANY PROPOSED CONSTRUCTION MANAGER CONTROLLED INSURANCE PROGRAM (CCIP)
- 2.13.1 If CMR proposes to utilize CCIP for this project rather than purchase conventional worker's compensation insurance coverage for the CMR and the subcontractors' on-site employees, SFA's obligation to reimburse CMR for such worker's compensation insurance will be limited to a maximum of 1% of Cost of Work (Not Including the CM's cost of any CCIP Insurance or CM Fee.

- 2.13.2 If CMR proposes to utilize CCIP for this project rather purchase conventional liability insurance coverage for the CMR and the subcontractors, SFA's obligation to reimburse CMR for such insurance will be limited to a maximum 1% of Cost of Work (Not Including the CM's cost of any CCIP Insurance or CM Fee
- 2.13.3 The costs of any claims and/or deductibles covered by the any CCIP insurance provided will not be considered reimbursable.
- 2.14 REIMBURSABLE COSTS FOR THE USE OF SUBCONTRACTOR DEFAULT INSURANCE (SDI OR SUBGUARD®)
- 2.14.1 In the event that the contractor elects to utilize a subcontractor default insurance program (sometimes referred to as SUBGUARD), the maximum amount to be considered reimbursable costs under this contract will be .75% of the total amount of subcontracts enrolled in such an insurance program. Enrollment in any such program will be limited to subcontracts in excess of \$100,000. Any contractor costs incurred in connection with the contractor's elected subcontractor default insurance program that exceeds the amount reimbursed by the Owner under the formula in this paragraph will be considered to be covered by the Contractor's FEE. In the event the Contractor elects to bond selected subcontractors rather than enroll them in the subcontractor default insurance program, the net cost to purchase any such bonds will be reimbursed in lieu of the .75% Note: Contractor will not be reimbursed for any deductibles stated in the Subguard policy. The deductible is considered covered by the .75% and/or the Contractor FEE.

#### 2.15 CONSTRUCTION MANAGER FEE

- 2.15.1 It is the intent of SFA to pay the CMR a FEE that will be equal to a single agreed upon percentage(%) of the actual Final Reimbursable Cost of Work which will include actual contractually defined reimbursable costs (subject to agreed upon Not- To-Exceed Limits) for preconstruction services, general conditions, general requirements, trade subcontractor work, project related insurance costs, and the next costs of performance and payment bonds.
- 2.15.2 For agreed upon increases and decreases to the overall agreed upon Guaranteed Maximum Price for the projects, it is anticipated that the actual agreed upon costs of the change orders will include increases or decreases to the CMR Fee computed at the same single agreed upon CMR Fee percentage.

### 2.16 SELF-PERFORMED TRADE CONTRACTOR WORK BY CONSTRUCTION MANAGER

2.16.1 If the CMR elects to submit a competitive proposal to -self-perform work normally performed by a trade contractor (such as concrete, carpentry, masonry), the CMR may submit a competitive bid as a proposed Guaranteed Maximum Price for the work to be self-performed. The maximum Fee allowable to be charged by the CMR on self-performed trade contractor work will be limited to 7.5% of the actual costs of performing the self-performed work. Note: Work normally performed by a Trade Contractor does not include work generically referred to as General Trades or Hoisting. (Self-Performed work eligible for the 7.5% Self-performed work Fee will only apply if at least 80% of the direct cost of the self-performed work is not performed by sub-subcontractors.) The actual costs to be reimbursed under the Self-Performed work GMP will follow the same contract terms as the primary CM contract with all the corresponding limitations and contract provisions.

- 3.7.2 Respondent shall also submit one (1) complete electronic copy of the printed copy of the Qualifications on electronic media (e.g., USB Drive [SFA's preference], CD-ROM, or DVD-ROM) in a Microsoft Office (Word, Excel, Project and PowerPoint files) version 2003 or later format, or <a href="mailto:searchable">searchable</a> Adobe .PDF files. . Respondents shall divide the electronic copy into TWO (2) separate electronic files, one of which shall contain Respondent's General Submittal Information and Qualifications and the other of which shall contain Exhibits A-D.
- 3.7.2.1 Respondents will also be required to submit one-electronic workbook with their Not-to-Exceed Estimate for General Conditions/General Requirements and Preconstruction services in the format provided by SFA. Reference Exhibit C and attached excel file workbook.
- 3.7.3 Proposal should include the following information and is to be submitted in the following order:-Revised section a)
  - a) Required Submittal- failure to provide any of the following documents will result in disqualification of the proposal from further consideration
    - i. Exhibit A Signed Execution of Offer
    - ii. Exhibit B Acknowledgement of Addenda, if any
    - iii. Exhibit C Pricing Proposal including electronic submittal of excel formatted workbook labeled "CMR Pricing Proposal Form and Cost Estimates"
    - iv. Exhibit D- HUB Subcontracting Plan Letter

**EXHIBIT C-UPDATED** 

### EXHIBIT C-Revised PRICING PROPOSAL AND COSTING METHODOLOGIES

Having carefully reviewed the requirements of this RFP and related documents to provide construction manager at risk services for building construction projects on the campus of Stephen F. Austin State University, the undersigned submits the following Financial Proposal in accordance with the Request for Proposal documents.

Respondent Name:	
Authorized Signature:	

Using the estimated project cost for the building projects of One Hundred Ten Million Five Hundred Thousand Dollars (\$110,500,000), which includes hard and soft costs, respondent shall identify project costs and submit electronically with this signed page labeled as Exhibit C and the attached completed excel formatted workbook labeled "CMR Pricing Proposal Form and Cost Estimates" with submittals.

The following is an example of a completed CMR Pricing Proposal Form and Cost Estimates: This Form is attached to this addendum as an excel formatted workbook.

		Calculate						П					
	Calculate	d % as a						١	Welcome				
	d % as a	% of Cost							Center &				
	% of	of Work							Student				
	total	Not	Per	forming Arts	Residence				Services	Athletic	Т	otal of All	
Pricing Proposal Components	GMP	Including		Center	Hall	Dir	ning Facility		Building	Facilities		Projects	Example Only
Estimated General Conditions/General Requirements													
and Preconstruction Costs based on the Gantt Chart													
provided by SFA in Exhibit "H".	7.919%	8.197%	\$	2,343,891	\$ 1,552,036	\$	950,226	\$	823,529	\$ 1,330,317	\$	7,000,000	Example Only
Estimated Cost of Trade Subcontract Work (Note: For													
this Pricing Proposal, this is a plugged number only.													
Actual Amounts to Be Determined after Design and													
Subcontract Buy-Out when Individual Project GMP's													
are Submitted )	87.331%	90.399%	\$	25,850,042	\$17,116,919	\$	10,479,747	\$	9,082,447	\$ 14,671,645	\$	77,200,800	Example Only
Estimated Maximum Cost of CMR's Performance &													
Payment Bond	0.700%	0.725%	\$	207,200	\$ 137,200	\$	84,000	\$	72,800	\$ 117,600	\$	618,800	Example Only
Estimated Cost of Commercial Liability Insurance	0.300%	0.311%	\$	88,800	\$ 58,800	\$	36,000	\$	31,200	\$ 50,400	\$	265,200	Example Only
Estimated Cost of Special Form Builder's Risk													
Insurance	0.200%	0.207%	\$	59,200	\$ 39,200	\$	24,000	\$	20,800	\$ 33,600	\$	176,800	Example Only
Estimated Cost of Umbrella Liability Insurance	0.100%	0.104%	\$	29,600	\$ 19,600	\$	12,000	\$	10,400	\$ 16,800	\$	88,400	Example Only
Estimated Cost of Project Employee Auto Liability Insu	0.057%	0.059%	\$	16,742	\$ 11,086	\$	6,787	\$	5,882	\$ 9,502	\$	50,000	Example Only
Estimated Cost of Asbestos Abatement Liability Insura	0.000%	0.000%	\$	-	\$ -	\$	-	\$	-	\$ -	\$	-	Example Only
Subtotal Estimated Cost of Work	96.606%		\$	28,595,475	\$18,934,842	\$	11,592,760	\$	10,047,059	\$ 16,229,864	\$	85,400,000	Example Only
Proposed CM Fee	3.394%	3.513%	-	\$ 1,004,525	\$ 665,158	\$	407,240	\$	352,941	\$ 570,136	\$	3,000,000	Example Only
Total Estimated GMP (Based on SFA Estimated													
Construction Cost) at 80% of the Project Budget	100.000%		\$	29,600,000	\$19,600,000	\$	12,000,000	\$	10,400,000	\$ 16,800,000	\$	88,400,000	Example Only
Estimated Soft Cost & Owner Contingency			\$	7,400,000	\$ 4,900,000	\$	3,000,000	\$	2,600,000	\$ 4,200,000	\$	22,100,000	
Total Published Project Budget			\$	37,000,000	\$24,500,000	\$	15,000,000	\$	13,000,000	\$ 21,000,000	\$	110,500,000	

### EXHIBIT C-Revised PRICING PROPOSAL AND COSTING METHODOLOGIES

Please provide Construction Manager Pricing Proposal Form electronically in the attached Excel Workbook in the format provided by SFA. (one tab for the Price Proposal Summary and additional tabs for the Estimated General Conditions/General Requirements and Preconstruction Costs) The additional tabs are not required for proposal submittals but will be required if selected as a finalist.

Pricing Proposal Components	Calculate d % as a % of total GMP	Calculate d % as a % of Cost of Work Not Including	Performing Arts Center	Residence Hall	Dining Facility	Welcome Center & Student Services Building	Athletic Facilities	Total of All Projects	
Estimated General Conditions/General Requirements			Center	11011	Dinning r demicy	Dunung	racinties	110,000	
and Preconstruction Costs based on the Gantt Chart									
									CAAD to Complete this line
provided by SFA in Exhibit "H".  Estimated Cost of Trade Subcontract Work (Note: For									CMR to Complete this Line
,									
this Pricing Proposal, this is a plugged number only.									
Actual Amounts to Be Determined after Design and									This Should be a Plug Calculation
Subcontract Buy-Out when Individual Project GMP's									after deducting other lines in
are Submitted )									this cost proposal.
Estimated Maximum Cost of CMR's Performance &									
Payment Bond as a % of total GMP									CMR to Complete this Line
Estimated Cost of Commercial Liability Insurance									CMR to Complete this Line
Estimated Cost of Special Form Builder's Risk									
Insurance									CMR to Complete this Line
Estimated Cost of Umbrella Liability Insurance									CMR to Complete this Line
Estimated Cost of Project Employee Auto Liability Insu	rance								CMR to Complete this Line
Estimated Cost of Asbestos Abatement Liability Insura	nce								CMR to Complete this Line
Subtotal Estimated Cost of Work			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	CMR to Complete this Line
Proposed CM Fee as a Percentage of Reimbursable									
Cost of Work	l								CMR to Complete this Line
Total Estimated GMP (Based on SFA Estimated									
Construction Cost less an estimated for Soft Cost and									
Owner Contingency )			\$ 29,600,000	\$19,600,000	\$ 12,000,000	\$ 10,400,000	\$ 16,800,000	\$ 88,400,000	

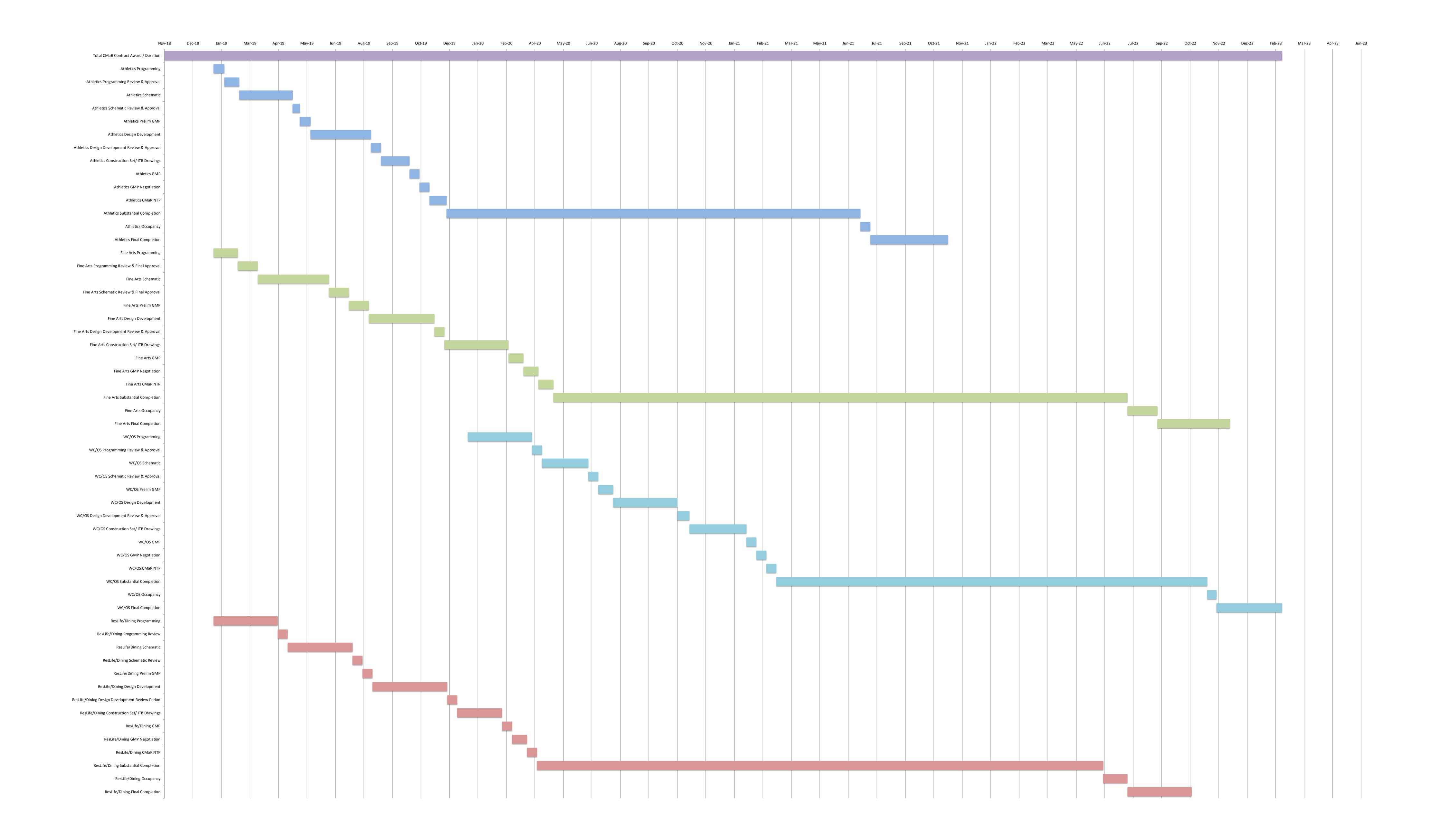
#### **EXHIBITS**

#### **EXHIBIT H-Added**

Estimated Projects timeline and gantt chart

# EXHIBIT H

			Duration	1
Task Name	Start*	End*	(days)	Duration Convert
Total CMaR Contract Award / Duration	11/1/2018	2/17/2023	1569	4 years 3 months 17 day
Athletics Programming	1/9/2019	1/24/2019	15	0 years 0 months 15 day
Athletics Programming Review & Approval	1/24/2019	2/14/2019	21	0 years 0 months 21 day
Athletics Schematic	2/14/2019	4/30/2019	75	0 years 2 months 15 day
Athletics Schematic Review & Approval	4/30/2019	5/10/2019	10	0 years 0 months 10 day
Athletics Prelim GMP	5/10/2019	5/25/2019	15	0 years 0 months 15 day
Athletics Design Development	5/25/2019	8/18/2019	85	0 years 2 months 25 day
Athletics Design Development Review & Approval		9/1/2019	14	0 years 0 months 14 day
Athletics Construction Set/ ITB Drawings	9/1/2019	10/11/2019	40	0 years 1 months 9 days
Athletics GMP	10/11/2019	10/25/2019	14	0 years 0 months 14 day
Athletics GMP Negotiation	10/25/2019	11/8/2019	14	0 years 0 months 14 day
Athletics CMaR NTP	11/8/2019	12/2/2019	24	0 years 0 months 24 day
Athletics Substantial Completion	12/2/2019	7/5/2021	581	1 years 7 months 3 days
Athletics Occupancy	7/5/2021	7/19/2021	14	0 years 0 months 14 day
Athletics Final Completion	7/19/2021	11/5/2021	109	0 years 3 months 18 day
Fine Arts Programming	1/9/2019	2/12/2019	34	0 years 1 months 3 days
Fine Arts Programming Review & Final Approval	2/12/2019	3/12/2019	28	0 years 0 months 28 day
Fine Arts Schematic	3/12/2019	6/20/2019	100	0 years 3 months 9 days
Fine Arts Schematic Review & Final Approval	6/20/2019	7/18/2019	28	0 years 0 months 28 day
Fine Arts Prelim GMP	7/18/2019	8/15/2019	28	0 years 0 months 28 day
Fine Arts Design Development	8/15/2019	11/15/2019	92	0 years 3 months 1 days
Fine Arts Design Development Review & Approval		11/29/2019	14	0 years 0 months 14 day
Fine Arts Construction Set/ ITB Drawings	11/29/2019	2/27/2020	90	0 years 2 months 30 day
Fine Arts GMP	2/27/2020	3/19/2020	21	0 years 0 months 21 day
Fine Arts GMP Negotiation	3/19/2020	4/9/2020	21	0 years 0 months 21 day
Fine Arts CMaR NTP	4/9/2020	4/30/2020	21	0 years 0 months 21 day
Fine Arts Substantial Completion	4/30/2020	7/15/2022	806	2 years 2 months 16 day
Fine Arts Occupancy	7/15/2022	8/26/2022	42	0 years 1 months 11 day
Fine Arts Final Completion	8/26/2022	12/6/2022	102	0 years 3 months 11 day
WC/OS Programming	1/1/2020	3/31/2020	90	0 years 2 months 30 day
WC/OS Programming Review & Approval	3/31/2020	4/14/2020	14	0 years 0 months 14 day
WC/OS Schematic	4/14/2020	6/18/2020	65	0 years 2 months 5 days
WC/OS Schematic Review & Approval	6/18/2020	7/2/2020	14	0 years 0 months 14 day
WC/OS Prelim GMP	7/2/2020	7/23/2020	21	0 years 0 months 21 day
WC/OS Design Development	7/23/2020	10/21/2020	90	0 years 2 months 30 day
WC/OS Design Development Review & Approval	10/21/2020	11/7/2020	17	0 years 0 months 17 day
WC/OS Construction Set/ ITB Drawings	11/7/2020	1/26/2021	80	0 years 2 months 20 day
WC/OS GMP	1/26/2021	2/9/2021	14	0 years 0 months 14 day
WC/OS GMP Negotiation	2/9/2021	2/23/2021	14	0 years 0 months 14 day
WC/OS CMar NTP	2/23/2021	3/9/2021	14	0 years 0 months 14 day
WC/OS Substantial Completion	3/9/2021	11/4/2022	605	1 years 7 months 27 day
WC/OS Occupancy	11/4/2022	11/17/2022	13	0 years 0 months 13 day
WC/OS Final Completion	11/17/2022	2/17/2023	92	0 years 3 months 1 days
ResLife/Dining Programming	1/9/2019	4/9/2019	90	0 years 2 months 30 day
ResLife/Dining Programming Review	4/9/2019	4/23/2019	14	0 years 0 months 14 day
ResLife/Dining Schematic	4/23/2019	7/23/2019	91	0 years 2 months 31 day
ResLife/Dining Schematic Review	7/23/2019	8/6/2019	14	0 years 0 months 14 day
ResLife/Dining Prelim GMP	8/6/2019	8/20/2019	14	0 years 0 months 14 day
ResLife/Dining Design Development	8/20/2019	12/3/2019	105	0 years 3 months 14 day
ResLife/Dining Design Development Review Perio		12/17/2019	14	0 years 0 months 14 day
ResLife/Dining Construction Set/ ITB Drawings	12/17/2019	2/18/2020	63	0 years 2 months 3 days
ResLife/Dining GMP	2/18/2020	3/3/2020	14	0 years 0 months 14 day
ResLife/Dining GMP Negotiation	3/3/2020	3/24/2020	21	0 years 0 months 21 day
ResLife/Dining GMaR NTP	3/24/2020	4/7/2020	14	0 years 0 months 14 day
ResLife/Dining Substantial Completion	4/7/2020		795	· '
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ResLife/Dining Occupancy ResLife/Dining Final Completion	6/11/2022 7/15/2022	7/15/2022 10/13/2022	90	0 years 1 months 3 days
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#### STEPHEN F. AUSTIN STATE UNIVERSITY

NACOGDOCHES, TEXAS

# PROCUREMENT AND PROPERTY SERVICES P. O. Box 13030 NACOGDOCHES, TX 75962

#### REQUEST FOR PROPOSAL

RFP NUMBER
CMR-BLDG PROJECTS-2018

#### ADDENDUM NO. 2

**Dated: 9/05/18** 

### PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### **MAIL PROPOSAL TO:**

Stephen F. Austin State University Procurement Services P. O. Box 13030 Nacogdoches, TX 75962-3030

### HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University
Procurement Services
2124 Wilson Drive
Nacogdoches, TX 75962

Show RFP Number, Due Date and Time on Return Envelope

**NOTE:** PROPOSAL must be time stamped at <u>Stephen F. Austin State University</u> <u>Procurement Services</u> before the hour and date specified for receipt of proposal.

#### **REFER INQUIRIES TO:**

Kay Johnson Stephen F. Austin State University Procurement Services 936-468-4037

email: johnsondk6@sfasu.edu

### STEPHEN F. AUSTIN STATE UNIVERSITY Request for Proposal #CMR-BLDG PROJECTS-2018

#### **ADDENDUM NO. 2**

THIS ADDENDUM MUST BE ACKNOWLEDGED IN ORDER FOR THE RESPONSE TO RECEIVE CONSIDERATION. FAILURE TO ACKNOWLEDGE THE ADDENDUM WILL RESULT IN DISQUALIFICATION OF THE RESPONSE.

PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### PRE-PROPOSAL SIGN-IN SHEETS

The sign-in sheets from the recommended site visit held on 08/28/2018 at 10:00 AM are attached.

#### Please note the following responses to questions received:

- Q. Do you know when the revenue bonds will be issued?
- A. Not at this time. The approval to issue revenue bonds will be presented at the October 2018 board meeting. There will also be a proposed resolution to reimburse project expenditures from bond proceeds presented for board approval in October 2018.
- Q. Will all five buildings be on separate contracts?
- A. The plan is to have one CMR agreement with separate amendments related to building projects.
- Q. How do respondents structure proposal response related to general conditions and will all projects start at the same time?
- A. The design stages for each project are at different stages at this time. Not all projects will most likely start at the same time. Start dates are pending funding approval and are expected to be different for each project with one or more beginning simultaneously. Per the schedule of events, the anticipated start date(s) are within FY19.
- Q. Is there a campus priority for the building projects?
- A. No, not at this time.
- Q. Are there any fund raising activities in place for Athletics facility?
- A. No, none at this time.
- Q. Will SFA need 80% funding in place before proceeding with projects?
- A. No, the plan is to submit a resolution to reimburse project expenditures from bond proceeds presented for board approval in October 2018.
- Q. How does SFA want relevant experience submitted for all five projects in the proposal response?
- A. Respondents should submit experience with similar types of projects and project management related to simultaneous workloads.

- Q. Will there be any supplemental conditions included in request for proposal?
- A. Yes, See section 2.3 of the request for proposal.
- Q. Can you clarify Exhibit C, B.2).- Proposed cost for home office personnel for project management staff included in fee? Is there a red flag if the amount and percent is zero?
- A. Home office is main facility only. No, there is not a red flag if the amount and percent is zero.
- Q. Is SFA interested in commercial experience as well as institutional experience?
- A. Yes.
- Q. Does SFA have a vision on projects and what looking for?
- A. Copies of the Campus Master Plan and the Campus Space Assessment can be accessed at the following link: <a href="http://www.sfasu.edu/vpfa/">http://www.sfasu.edu/vpfa/</a>

The university's Strategic Plan can be accessed at the following link: http://www.sfasu.edu/strategicplan/120.asp

A specific vision for the Fine Arts project is included with this addendum as **Exhibit G**.

- Q. Is there an athletics assessment completed yet?
- A. No, not at this time.
- Q. Can SFA provide a definition of burdened or unburdened labor costs? Are you referring to Exempt or non-exempt?
- A. This will be fully addressed in the final contract.
- Q. Is a HUB plan required for pre-construction?
- A. Yes, if there will be pre-construction service fees. Reference Section 1.5 of the request for proposal.
- Q. Will a HUB plan be required for each project?
- A. Yes.

#### 1.3 SCHEDULE OF EVENTS - Updates in red

8/31/2018	Deadline for questions
9/5/2018	Addenda posted, if any
9/10/2018	Final Addendum posted
09/19/2018	Response Due
10/04/2018	Finalists selected and notified
10/10/2018	List of presenters due
10/26/2018- 10/29/2018	SFA Board of Regents Meeting, receive presentations and final selection
November – December 2018	A/E Contracting
1/1/2019	Estimated start for architectural programming
TBD	Estimated schematic design approval
TBD	CMR interim pricing
TBD	Estimated start for design development
TBD	Estimated start for development approval
TBD	Working drawings due
TBD	CMR GMP due
TBD	Estimated notice to proceed
7/31/2021	Estimated substantial completion
8/31/2021	Estimated occupancy

<sup>\*</sup>Dates are tentative and subject to change.

#### 2.3 UNIFORM GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS-Revisions to be posted in final addendum on September 10, 2018.

The attached Uniform General Conditions (UGC) and Supplementary General Conditions (SGC), **Exhibit E**, are an integral part of this document. The respondent is responsible for reading and being familiar with all of the requirements of the Uniform and Supplementary General Conditions. Failure to consider all the requirements of the UGC and SGC does not relieve the Contractor from the obligation to fulfill all requirements of the UGC and SGC.

**EXHIBIT C-**Revisions to be posted in final addendum on September 10, 2018

#### **EXHIBIT G-Added**

Reference attached Exhibit G for assessment report on Fine Arts



Company Name: Key Co	systruction		Email: hfshoemak	er BKey C	a) struction com	
Representative Name: Fra	nkie Shoema	kerPhone:	682-261-122	4Fax:_		
Address: 3960 Sandshe	II Dr.	City: Fort Wax	·th	St/Zip:_ <u>_7`</u> ×	76137	
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Representative Name:						
Address:						
CONTACT FOR HUB PAPERWORK (name, phone, email):						

### REQUEST FOR PROPOSAL #CMR-BLDG PROJECTS-2018



Company Name: OMNIPLAN	Email:_	abuckley Conniplan. con				
Representative Name: Amanda Budde	Phone: 214	1,240.3632 Fax: -				
Address: 1845 Woodall Rodgers Fu	Ucity: Dallas	St/Zip:X 7530				
CONTACT FOR HUB PAPERWORK (name, phone, email): Same as war						
Company Name: KDW, Ltd.	Email:_	jsmith @ jekcc.com				
Representative Name: Jack Smith	Phone:9	jsmith @ jekcc.com 36-564-3329 Fax: 936-569-7544				
Address: 312 Old Tyler Rd.	_City: Nacogdoche	esSt/Zip:				
CONTACT FOR HUB PAPERWORK (name, phone, em	ail): Janie Andress	5 936-564-3329				
Company Name:	Email:_					
Representative Name:	Phone:	Fax:				
Address:	City:	St/Zip:				
CONTACT FOR HUB PAPERWORK (name, phone, email):						
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### REQUEST FOR PROPOSAL #CMR-BLDG PROJECTS-2018



Representative Name: Ptgen BERRY	Contest.	_Email:	vogen berry	e spanglass.c
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Address: 1200 WEST ED.	City: House		St/Zip:	77584
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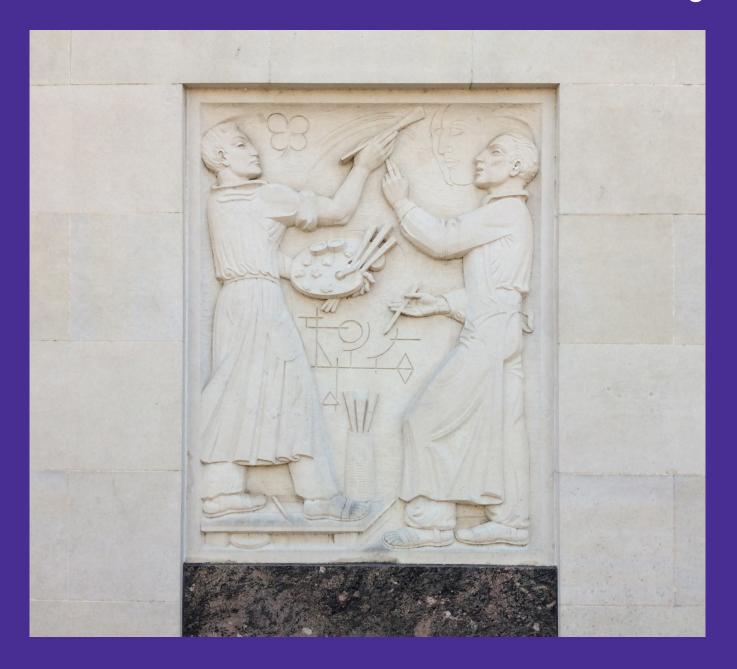
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CONTACT FOR HUB PAPERWORK (name, phone, email):							



Company Name: Hok	- AREHATELTS	Email:	ROBERT BORNS	@ HOK. com
-	ROB BURNS			
Address: 717 N. Hacu	City:City:	DALLAS	St/Zip:_	7×, 7520/
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CONTACT FOR HUB PAPE	RWORK (name, phone, email):		<del></del>	

# **EXHIBIT G**

# Stephen F. Austin State University L. E. Griffith Jr. Fine Arts Building



# **Project Team**

Kirksey Architecture Steve Durham, AIA Architecture & Design

Ensight/Cardno Haynes Whaley
Doug Antwiler, P.E.
Structural Engineer

Jones/DBR Inc.
Tim Kilby, CxA, LEED ® AP BD+C
Mechanical Engineer

Addleman Engineering PLLC Nat Addleman Life Safety

The Winning Way

Bill Winning

Accessibility

Schuler Shook Alex Robertson Theater Planning

Wrightson, Johnson, Haddon & Williams, Inc.
Chris Purpura
Acoustics and Lighting

J.E. Kingham Construction Company
John Kingham
Cost Consulting

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#### 03 Assessments

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- 3.2 Architectural Assessment
- 3.3 Structural Assessment
- 3.4 MEP Assessment
- 3.5 Life Safety Assessment
- 3.6 TAS Assessment
- 3.7 Theater Planning Assessment
- 3.8 Lighting and Acoustics Assessment

#### 04 Existing Facility

- 4.1 Plans
- 4.2 Diagrams of Departmental Areas
- 4.3 Diagrams of Space Use

#### 05 Conceptual Proposal

- 5.1 Plans
- 5.2 Renderings

#### 06 Construction Estimate

#### **Forward**

This document is structured as follows:

#### **Executive Summary**

This section is a brief overview of the entire project including history, descriptions of current spaces, issues to be addressed and recommendations for the future.

#### **Code Analysis**

This section lists the standards and constraints that will control the project.

#### **Assessment Report with Photos**

This section describes and documents existing conditions and recommendations for the facility. Below are the consultants involved in assessing the facility:

- · Architectural Kirksey Architecture
- Structural Ensight/Cardno Haynes Whaley
- MEP Jones/DBR, Inc.
- Life Safety/Code Addleman Engineering
- Accessibility The Winning Way
- Theater Planning Schuler Shook
- · Acoustic & Lighting Wright Johnson Haddon & Williams

#### **Plans of Existing Facility**

This section provides plans of the existing facility, as well as plans describing department area use and space use.

#### **Concept Plans and Renderings**

This section provides conceptual plans of the proposed renovation and new addition, as well as renderings for promotional and fundraising use.

#### **Construction Estimate**

This section outlines the estimated construction cost of proposed renovations and a new addition.

## **Executive Summary**

#### **Architecture**

The Campus Master Plan Update 2020 (see description in Exhibit A) offers a concise and limited review and approach to address the growing needs of the College of Fine Arts and the many programs it supports. As part of a deeper study into the departmental needs of the college in 2016, this assessment indicates how the existing facilities, known as the L.E. Griffith Fine Arts Building, could be transformed and adapted to support a larger population of students if renovated in concert with a new addition that would add new performance spaces for students and faculty, modify existing classroom spaces to more effectively aid in teaching, and reorganize the wide variety of storage and support spaces required to uphold a growing theatrical program.

The L.E. Griffith Fine Arts Building was originally constructed in 1958 and designed by Shirley Simons & Sons Architects. The limestone and brick building was later extensively remodeled by F&S Partners, Inc., which added new floors, a large balcony, new mechanical equipment, and included excavations underneath the building to enlarge storage space for props and scenery. As a result, the building contains approximately 77,000-square feet on three levels and includes a, 1,100-seat auditorium with balcony seating, a large stage, and fly-loft.

In general, the building has been well maintained and is in serviceable condition given its age. Noticeable signs of wear and tear are evident given the understanding that building usage occurs during the day and evenings, and that performance spaces have been "made to fit", or customized to address larger than expected numbers. Additionally, overcrowding of storage spaces exists throughout the building, especially in the lower floor level. Typical elements like sealant failure at brick joints, discolored ceiling tile, weathered door and window frames, poor lighting conditions, MEP systems nearing the end of their lifespan, and various worn finishes are expected, but could easily be addressed in future maintenance programs.

Beyond superficial upgrades to the entire building, several major upgrades are recommended to ensure the entire facility can address all the needs of all the programs for years to come.

#### **Life Safety Improvements**

While a change in building occupancy is not expected, it would be recommended that a full fire suppression system be installed in the facility. Currently, only partial areas of the building are covered by a sprinkler system which are located through the first level. This system should be expanded to cover all floors. This would allow designers to 1) "open up" or "unzip" the building interior to create more transparency and contiguous space throughout the facility, 2) would give proper fire-protection coverage that would allow seamless transitions for a future addition and that is consistent with university standards, and 3) allow vertical openings within the building for sightlines and stairways that will visually and physically connect more students, faculty, and guests as they navigate the facility.

### 2 Executive Summary

#### Reconfiguration of Level One

A complete redesign of the first level to more effectively allow for efficient storage of scenery, stage props, and ancillary spaces required to support a large theater program. Currently, several storage rooms have dirt floors, a result from the 1984 renovation project that included the removal of several feet of earthen dirt. This removal allowed additional head space and room to store a vast amount for scenery and props. Further excavations should occur to allow a new concrete slab to be installed as well as make room for a new freight elevator to connect the first floor level storage areas to the stage level. A reconfiguration of the first floor level would also provide new efficiencies in storage, proper functioning dressing rooms, and enhanced costume development areas and green room space for performers.

#### **Reconfigured Space Planning for Level Two & Three**

The focus on floors two and three should be directed at creating new performance and practice spaces, creating larger classroom space, and reorganizing department office space to support a larger student population. Along with these developments, the creation of student collaboration spaces and hang-out areas would be critical to the final upgrades of the building.

#### **Improve Vertical Movement**

The final and maybe one of the more critical recommendations is to improve service and vertical movement to and within the facility. This can be achieved improving access to and reconfiguring the existing service dock located on the west side of the building along North Street. A new access driveway should be considered off of Alumni Drive which would allow truck traffic to pull alongside the service dock instead of blocking traffic on North Street while backing in to the service area. Additionally, adding a new freight elevator to address the vertical transportation of scenery and props from the lower storage area to the stage level would greatly enhance the theater operations and put less strain on the existing orchestra pit lift, which is currently serving as the main vertical transportation for these items. And lastly, a new elevator bank located in future new construction would easily allow building users and patrons to easily access all areas of the facility, and more specifically, could connect the main lobby with the primary building entrance, if planned correctly.

It would be recommended as well to consider a more in-depth study on the structural system, especially at the foundation level, if the decision is to move forward with renovations of the facility. This could prove to be an important bit of information if any work is commenced on the first floor level as suggested in this document. Further assessment studies can be found throughout this document as well as more specific detailed summaries for structure, MEP, life safety, accessibility, theater planning and AV and acoustics systems.

#### **Structure**

Considering the age of the Griffith Fine Arts Building and the large amount of use the facility is experiencing, the structure is in good condition. The largest structural concern observed is detailed in observation S1. The metal roof deck over the stage area has corroded through at several locations around the perimeter due to previous leaks. This has compromised the capacity of the deck in this area and may create an unsafe condition for maintenance work on the roof in these areas. In addition, construction materials have been placed on top of the roof in this area adding load to this already compromised area. Three other high priority observations are noted in the report. Observations S5 and S10 relate to the safety of fixed ladders on the roof of the structure used by maintenance workers. Observation S11 refers to a decorative stone that appears to have disbonded from the adjacent stones near the roof line at the North West corner of the north entrance element. Because of its height above the ground it is important to verify that this stone is secured.

#### Mechanical

The HVAC system is a mixture of components that are original, have been replaced in the past or are recently replaced. The chilled water system equipment, with the exception of the recently replaced cooling towers, is at the end of the projected service life and should be considered for replacement. The heating water system, with the exception of the recently replaced boilers, is at the end of the projected service life and should be considered for replacement. The air distribution equipment (air handling units, duct, terminal units and air devices) is near the end of the projected service life and should be considered for replacement. The ventilation system consisting of outside air intakes and exhaust fans should be evaluated during the air distribution equipment replacement and upgraded to current ventilation standards. The exhaust fans are in need of replacement. The piping system should be spot checked in some of the concealed areas where it is the original piping and cut open to examine the condition.

#### **Electrical**

The electrical system consists of replaced main switch gear that is in good condition, and original distribution equipment that is at the end of its projected service life. The distribution system should be considered for replacement. The grounding system for the building is the conduit system which is code compliant but not the best practice. Installing grounding conductors should be considered for safety and power quality. Lighting has been upgraded in the spaces around the auditorium to energy efficient fluorescent but upgrading to LED should be considered for maintenance reduction and energy usage reduction. Lighting in the auditorium should be considered for upgrade to dimmable LED also. The stand-by generator was recently installed and is in good condition but the feeder circuit to the building should be upgraded.

#### 2 Executive Summary

#### **Plumbing**

The first level plumbing system has not been replaced since the original construction and is in poor condition, needing replacement. The second and third floor systems are in good condition. The restroom fixtures appear to be in good condition but the electric drinking fountains are not and should be considered for replacement. The domestic water heating is accomplished by a gas water heater on the first level that is in need of replacement, and by small 4 gallon electric water heaters in the restrooms. The electric water heaters are accessible by the public and should be considered for relocation. There are three lift stations within the building, one for sanitary sewer and two for subsurface drainage. All three stations are reported to be operational but at the service age, should be considered for replacement.

#### Life Safety

The Griffith Building is a steel and masonry flat roof structure housing classrooms, offices, a theater, storage rooms and other support utility rooms. The nearly 60-year old building is of mixed occupancy containing business, assembly and storage occupancies and is in need of upgrades to bring the facility up to code. Upgrades would include changes to building exits, rated corridors, and most importantly, the fire sprinkler system.

The existing first floor level currently has a working sprinkler system for most of the floor area. It would be recommended to install an additional fire sprinkler system to complete the entire building giving it full coverage. This coverage would allow changes in construction that would benefit the proposed modifications mentioned in the Architecture Executive Summary above.

#### Accessibility

The Texas Accessibility Standards Assessment was performed to determine conformance with Elimination of Architectural Barriers; Administrative Rules of the Texas Department of Licensing and Regulations; 16 Texas Administrative Code; Chapter 68; Texas Accessibly Standards (TAS). This report does not address the Federal Americans with Disabilities Act (ADA) or its requirements. The building has many issues in regards to accessibility, beginning with the parking, the exterior accessible route from parking to the only public accessible entrance level one. The restrooms on level two are generally compliant with some minor violation. Restrooms on level one and three have greater issues and will required more work to achieve compliance. In addition, the theater seating will require reconfiguration. Refer to report for additional specific violations.

#### **Theater Planning**

While many components of the overall theatrical system including lighting, may be reused, there is a substantial amount of basic equipment used to support a university theatrical program such as this, that should be replaced. Replacement may be for age reasons, but primarily replacement is for safety reasons. Basic systems such the orchestra pit lift, major components of the rigging system, and theater seating within the auditorium should all be considered for replacement.

#### **Audio & Visual Technology**

The following assessment includes the Audio & Visual (AV) technical systems operating within the Griffith Fine Arts Building. The facilities included are Turner Auditorium, the Downstage Theater, Recording Studio, and the Sound Lab.

Technology changes constantly and each small advancement renders an existing audio or video system a little older. In the case of the Griffith Fine Arts Building, the permanent sound system in Turner Auditorium was installed when analog devices were the norm but as we all know, the world has gone digital. The recommendation for both Turner and Downstage Theater is to upgrade their sound systems to a common digital platform and to relocate the Turner's core elements to improve their operation as well as the enhance audience experience. Additionally, Turner Auditorium does not have a permanent video presentation system and adding one would greatly expand the room's usage and capabilities.

The audio systems operating in the Recording Studio and Sound Lab are already digital but in need of some equipment updates. The Recording Studio major need is a permanent and purpose built 3-room studio. An additional recommendation for the Sound Lab is to be networked to the other Griffith Hall facilities thereby expanding its capabilities and allowing content sharing. However, if new construction is considered, relocating this entire department to a newly designed customize space would be recommended.

#### Conclusion

A significant investment into the existing Griffith Building is recommended if the desire is to continue utilizing the facility for many years to come. This assessment indicates the "bones" of the existing structure are solid and in good working order and backbone of the MEP systems are fully functional, operating sufficiently and serving its purpose. Investment into the facility would allow greater use of all the spaces opening the building up to new user experiences, allowing for current programs to operate more effectively, and to prepare the facility to accept and mesh with a new facility addition that would have an overall impact of increasing enrollment and student retention in the program. A conceptual plan for proposed changes to the existing facility and for a new building addition can be found at the end of this report in the Concept Plans and Rendering section followed by a conceptual cost estimate in the Estimate section.

## Code Assessment

**Project Information** 

BUILDING PERMIT NO: PERMIT#

TDLR PROJECT#: TDLR #

PROJECT ADDRESS: GRIFFITH BUILDING

NACOGDOCHES TX 75962

PROJECT DESCRIPTION

3 STORY ACADEMIC BUILDING CONTAINING CLASSROOMS, THEATER, OFFICES AND STORAGE ROOMS.

#### **APPLICABLE CODES INCLUDE:**

- 2012 INTERNATIONAL BUILDING CODE
- 2012 NFPA 101 LIFE SAFETY CODE
- 2012 NFPA 1 FIRE CODE
- 2012 UNIFORM MECHANICAL CODE
- 2012 INTERNATIONAL FUEL GAS CODE
- 2012 INTERNATIONAL PLUMBING CODE
- 2014 NATIONAL ELECTRICAL CODE, NEC 90.4
- 2015 NFPA 70E ELECTRICAL SAFETY CODE
- 2013 NFPA 13 FIRE SPRINKLER CODE
- 2013 NFPA 72 FIRE ALARM CODE
- NFPA 45 STANDARD ON FIRE PROTECTION FOR LABORATORIES USING CHEMICALS
- TEXAS ACCESSIBILITY STANDARDS (TAS) 2012
- ENERGY CODE: ASHRAE 90.1-2010

**Use and Occupancy Classification: Chapter 3** 

**CLASSIFICATION: IBC SECTION 302** 

**OCCUPANCY TYPE(S):** 

MAJOR USE OF BUILDING

Business Group B

OTHER LARGE AREAS Assembly Group A-1, Storage S-1

**CLASSIFICATION: LSC CHAPTER 6** 

**OCCUPANCY TYPE(S):** 

MAJOR USE OF BUILDING Business

OTHER LARGE AREAS Assembly, Storage

#### 3.1 Code Assessment

### Special Requirements Based on Use and Occupancy: Chapter 4

HIGH-RISE BUILDINGS: IBC SECTION 403

THIS PROJECT IS NOT A HIGH RISE

#### General Building Heights and Areas: Chapter 5

#### **GENERAL BUILDING HEIGHT AND AREA LIMITATION:**

Note: Height and area limitation are based on group A-1 in accordance with section 508.3.2 (non-separated occupancies)

	TABLE 503	MODIFIED (504/506)	ACTUAL
BUILDING HEIGHT	160'	180'	69'-4"
NO. OF STORIES	5 STORY	6 STORY	3 STORIES
MAX. AREA PER STORY	UL	UL	32,540
AREA TOTAL	UL	UL	101,910

#### **BUILDING AREA MODIFICATIONS:**

Area Modifications:

Note: Sprinkler increase taken, frontage increase not considered.

 $Aa={At + [At x ls]}$ 

Aa={15,500 + [15,500 x 2]}

Aa=15,500 + 31,000

Aa=46,500 S.F./ story

#### **IBC & LSC MIXED USE AND OCCUPANCY:**

NON-SEPARATED OCCUPANCIES

REQUIRED SEPARATION OF OCCUPANCIES (HOURS): N = No separation required

**Types of Construction: Chapter 6** 

**CONSTRUCTION CLASSIFICATION: 602** 

BUILDING TYPE Type IB

#### FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:

PRIMARY STRUCTURAL FAME 2 HOUR

**BEARING WALLS** 

EXTERIOR 2 HOUR INTERIOR 2 HOUR

NONBEARING WALLS & PARTITIONS

EXTERIOR (T 602) 0 HOUR
INTERIOR 0 HOUR
FLOOR CONSTRUCTION 2 HOUR
ROOF CONSTRUCTION 1 HOUR

The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.

Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

# FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE: TABLE 602

EXTERIOR WALL RATING: 0 HOUR

Fire and Smoke Protection Features: Chapter 7

#### **EXTERIOR WALLS:**

#### **MAXIMUM AREA OF EXTERIOR WALL OPENINGS:**

DISTANCE OF BUILDING FROM (1) LOT LINE (2) CENTERLINE OF A STREET OR (3) ASSUMED PROPERTY

LINE BETWEEN BUILDINGS: 30' OR GREATER

ALLOWABLE OPENING %: No Limit

CLASSIFICATION OF OPENING: Unprotected

#### 3.1 Code Assessment

#### **Interior Finishes: Chapter 8**

#### **WALL AND CEILING FINISHES:**

INTERIOR WALL AND CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E 84 OR UL 723.

CLASS A: FLAME SPREAD 0-25; SMOKE-DEVELOPED 0-450 CLASS B: FLAME SPREAD 26-75; SMOKE-DEVELOPED 0-450 CLASS C: FLAME SPREAD 76-200; SMOKE-DEVELOPED 0-450

#### INTERIOR WALL AND CEILING FINISH REQ'S BY OCCUPANCY

INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS AND EXIT PASSAGEWAYS: Class B COORIDORS AND ENCLOSURE FOR EXIT ACCESS STARIWAYS AND EXIT ACCESS RAMPS: Class B ROOMS AND ENCLOSED SPACES: Class C

#### **INTERIOR FLOOR FINISHES:**

#### Fire Protection Systems: Chapter 9

#### **AUTOMATIC SPRINKLER SYSTEMS:**

AUTOMATIC SPRINKLER PROTECTION IS REQUIRED THROUGHOUT.

#### **STANDPIPE SYSTEMS: SECTION 905**

THIS BUILDING IS EQUIPED WITH A STANDPIPE SYSTEM FOR ONLY LEVEL 1.

REFER TO MECHANICAL DRAWINGS FOR LOCATION AND CLASSIFICATION INFORMATION OF STANDPIPES IN THE BUILDING.

#### **PORTABLE FIRE EXTINGUISHERS:**

FIRE EXTINGUISHERS LOCATED IN ACCORDANCE WITH NFPA 10, 2013.

SEE LIFE SAFETY PLANS FOR EXTINGUISHER LOCATIONS.

#### Means of Egress: Chapter 10

#### OCCUPANCY LOAD (NFPA 101, 7.3.1):

#### TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT.

REFER TO LIFE-SAFETY PLANS FOR OCCUPANCY LOAD CALCULATIONS.

ASSEMBLY CONCENTRATED (CHAIRS ONLY-NON FIXED) 7 NET
ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS) 15 NET

ASSEMBLY FIXED SEATING NUMBER OF FIXED SEATS

ACCESSORY STORAGE, MECH EQUIPMENT ROOMS 300 GROSS
BUSINESS 100 GROSS
EDUCATIONAL - CLASSROOM 20 NET

EDUCATIONAL - CLASSROOM 20 NET

EDUCATIONAL - SHOPS / VOCATIONAL ROOM 50 NET

STAGES AND PLATFORMS 15 NET

#### MEANS OF EGRESS SIZING (NFPA 101, 7.3.2):

STAIRWAYS. EGRESS CAPACITY FACTOR:

• 0.3 INCH / OCCUPANT

LEVEL COMPONENTS & RAMPS. EGRESS CAPACITY FACTOR:

0.2 INCH / OCCUPANT

## DOORS, GATES AND TURNSTILES:

PANIC AND FIRE EXIT HARDWARE. THE FOLLOWING AREAS ARE REQUIRED TO HAVE PANIC AND FIRE HARDWARE.

- GROUP A OR E WITH OCCUPANT LOAD OF 50 OR MORE
- ELECTRICAL ROOMS WITH >1,200 AMPERES AND OVER 6 FEET WIDE THAT CONTAIN OVERCURRENT DEVICES,
- WHERE SERVING A ROOM OR AREA WITH AN OCCUPANT LOAD OF 50 OR MORE, DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL.

#### **EXIT ACCESS:**

COMMON PATH OF EGRESS TRAVEL (NFPA 12.2.5.1.2 & 38.2.5.3)

MAXIMUM COMMON PATH OF EGRESS TRAVEL: GROUP A: 20 FEET

GROUP B: 100 FEET

#### 3.1 Code Assessment

#### **EXIT ACCESS TRAVEL DISTANCE (NFPA 12.2.6 & 38.2.6):**

1016.2 LIMITATIONS. MAXIMUM EXIT ACCESS TRAVEL DISTANCE: GROUP A: 250 FEET

GROUP B: 300 FEET

#### **CORRIDOR:**

1018.1 CONSTRUCTION. IF REQUIRED, SHALL BE FIRE PARTITIONS:

FIRE-RESISTANCE RATING WITH AUTOMATIC SPRINKLER PROTECTION: 0 HOURS

1018.2 WIDTH AND CAPACITY. MINIMUM CORRIDOR WIDTH:

OTHER 44 INCHES

ACCESS TO MEP EQUIPMENT 24 INCHES

OCCUPANT LOAD <50 36 INCHES

1018.4 DEAD ENDS. MAXIMUM DEAD END CORRIDOR DISTANCE:

GROUP A 20 FEET

GROUP B (WITH AUTOMATIC SPRINKLER PROTECTION) 50 FEET

#### NUMBER OF EXITS AND EXIT ACCESS DOORWAYS:

MINIMUM NUMBER OF EXITS / STORY:

2 EXITS (1-500)

3 EXITS (501-1000) IBC 1006.2.1.1, LSC 7.4

4 EXITS (>1000 OCC) IBC 1006.2.1.1, LSC 7.4

#### **INTERIOR EXIT STAIRWAYS AND RAMPS:**

CONSTRUCTION. ENCLOSURES FOR INTERIOR EXIT STAIRWAYS AND RAMPS SHALL BE

CONSTRUCTED AS FIRE BARRIERS

FIRE-RESISTANCE RATING 2 HOURS

#### **EXIT PASSAGEWAYS:**

1023.2 WIDTH. 44 INCHES MINIMUM

36 INCHES MINIMUM IF OCCUPANT LOAD IS LESS THAN 50

REFER TO LIFE-SAFETY PLAN(S) FOR EXIT PASSAGEWAY WIDTH, PARTITION RATINGS AND TERMINATION.

## Plumbing Systems: Chapter 29

## MINIMUM NUMBER OF PLUMBING FACILITIES:

GROUP		IPANT AD	CLO	TER SET EN	WATER CLOSET WOMEN		LAVATORIES MEN		LAVATORIES WOMEN		DRINKING FOUNTAINS		SERVICE SINK	
	MEN	WOM'N	REQ'D	PRV'D	REQ'D	PRV'D	REQ'D	PRV'D	REQ'D	PRV'D	REQ'D	PRV'D	REQ'D	PRV'D
A-1	63	63	.5	-	1	-	.3	-	.3	-	.25	-	-	-
A-3	247	247	2	-	3.8	-	1.25	-	1.25	-	1	-	-	-
В	563	563	12.26	-	12.26	-	8	-	8	-	11.26	-	-	-
TOTAL	-	-	15	24	18	24	10	16	10	16	13	8	1	4

3.2 Architectural Assessment

## **Architectural Assessment**

#### **Exterior Envelope**

As noted by Haynes Whaley's assessment, there are several areas of the brick façade that require repair. Some areas (refer to item S-11) pose safety issues due to the decorative stone's height above the ground. Others are more cosmetic. Areas of cracked brick and loose stonework should be repointed and/or reattached (A-1).

The screen to surround and hide the top of the air conditioning unit on the West side of Griffith was never installed. Installation of the remaining screen to hide this equipment is recommended (A-2).

#### **Loading Dock**

The existing loading dock size is not compatible with the theater's needs. A larger loading dock with a height adjustment feature and driveway should be considered to better serve the school's productions. Trucks currently have to back in from North Street, a busy 4-lane public street. The drive and dock should also be relocated or the drive should be given a paved area in which to change directions (A-3).

#### Roof

The roof appears to have ponding although it does not appear to be overly excessive throughout the entire roof. As noted by several consultants, including DBR (refer to item P-4) and Haynes Whaley (refer to item S-2), the existing scuppers are few and far apart. Number and size of scuppers and roof drains should be evaluated and if necessary, redesigned or enlarged to better suit the building's drainage requirements (A-4).

#### Wayfinding

In general, the sequence of wayfinding for a theater-going patron attending a performance at Griffith needs improvement. The sequence from arrival to the box office to the theater should be clarified through wayfinding techniques such as improved signage or more prominent street frontage. A sign change for the box office is recommended (A-5). If new construction is an option, relocating the box office to a prominent location should be considered.

#### **Exterior Doors & Windows**

A replacement of all exterior doors and windows with an aluminum frame storefront system is recommended (A-6). If new construction is an option, the use of new curtainwall may serve areas like a new lobby more effectively.

#### **Entrance**

The entrance to Griffith Auditorium lacks the grandeur ideal for the lobby to such a large performance space. A general enhancement of the building entrance/lobby is recommended (A-7). If new construction is an option, enlarging the floor area as well as the volume of the lobby should be considered.

#### Storage

As mentioned in Haynes-Whaley's assessment, during the 1984 renovation areas of the basement, which were formerly crawlspaces, were excavated to create full-height spaces. The building's main mechanical and electrical systems were moved from the roof to be housed in some of these spaces (rooms 139 and 140). The other spaces were left unfinished with only dirt floors and have become storage for props and scenery (refer to item S-17). A concrete slab on grade is recommended to better serve productions and to better preserve scenery and prop stock (A-8).

#### **Interior Finishes and Fixtures**

As noted by DBR's assessment of the electrical systems, all fluorescent lighting should be upgraded to LED fixtures (refer to item E-5) to reduce energy consumption and bulb replacements (A-9). A full replacement of floor and wall tile, countertops and toilet partitions of all restrooms is recommended (A-10). All lay-in ceilings should be replaced (A-11). All painted walls should be repainted and wall coverings and corner guards should be replaced (A-12). All floors finishes should be replaced (A-13).

#### **New Construction**

The existing Downstage Theater, a black box theater that seats 80, is inadequate for the department's current needs. An addition including a new black box theater that seats 150 people with flexible seating, a control room, restrooms for the public and performers, dressing rooms and connection to the lobby is recommended (A-14).

Likewise, it is recommended to add new elevators to serve the main lobby connecting all floors. Further, it is recommended to add a new freight elevator and new exit stairs on the south side elevation allowing an improved exit strategy from the existing Griffith Hall building's 2nd and 3rd floor (A-15). The new freight elevator should connect the first floor with the stage-level of the building to improve the movement of scenery and props. In concert with this idea, a new exit stair on the north side elevation allowing an improved exit strategy from the existing Griffith Hall 3rd floor, would also be recommended (A-16). The addition of both new stairs would greatly add to the flexibility of classroom design on the 3rd floor of the existing facility

Concept plans and building views can be seen in the Concept Plan section of this report.

3.2 Architectural Assessment

# **Architectural Condition Survey**

Item No. A-1



**Description** Exterior brick and stone work

Action Repoint and reattach all damaged exterior brick and stone work.

Item No. A-2



**Description** Brick wall surrounding air conditioning unit on west side of building

Action Install missing screen around air conditioning unit to conceal equipment

Item No. A-3



**Description** Loading dock on west side

Action Consider enlarging and relocating loading dock and driveway to better suit production needs

Item No. A-4



**Description** Close-up of roof scupper and drain

Action Evaluate roof drainage requirements and consider additional and/or larger scuppers and/or roof drains

## 3.2 Architectural Assessment

Item No. A-5



**Description** Signage

Action Improve wayfinding for theater patrons

Item No. A-6

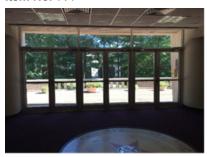




**Description** Exterior doors and windows

Action Replace with aluminum storefront system

Item No. A-7









**Description** Lobby

Action Renovation and general enhancement of the lobby

Item No. A-8

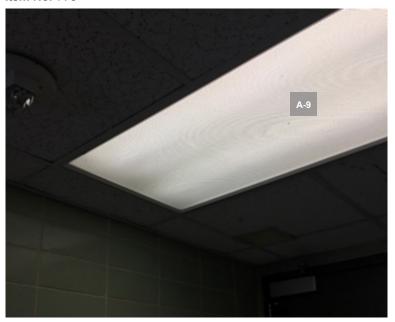


**Description** Prop and scenery storage

Action Install concrete slab on grade to all spaces with dirt floors

## 3.2 Architectural Assessment

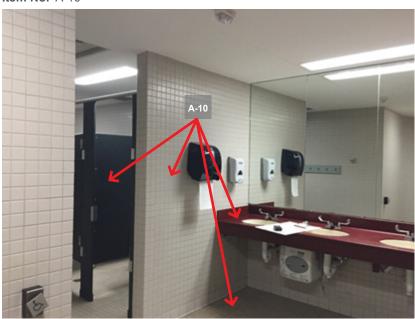
Item No. A-9



**Description** Fluorescent lighting

Action Replace all fluorescent lighting with LED

Item No. A-10



**Description** Restrooms

Action Replacement of floor and wall tile, countertops and toilet partitions

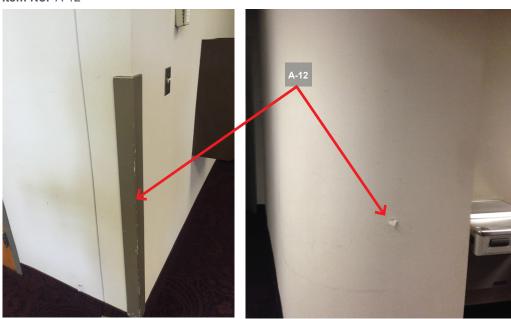
Item No. A-11



**Description** Lay-in ceiling

Action Replace all lay-in ceilings

Item No. A-12



**Description** Painted walls and wall coverings

Action Repaint walls and replace wall coverings and corner guards

## 3.2 Architectural Assessment

Item No. A-13



**Description** Floor finishes

**Action** Replace all floor finishes

Item No. A-14: No photo, see spreadsheet.

Item No. A-15: No photo, see spreadsheet.

Item No. A-16: No photo, see spreadsheet.

# **Architectural Assessment Scope**

KEY	ITEM	CONDITION	DESCRIPTION
	ARCHITECTURAL		
A-1	Exterior brick and stone work	Poor	Repoint and reattach all damanged exterior brick and stone work
A-2	Brick wall surrounding air conditioning unit on west side of building	N/A	Install missing screen around air conditioning unit to conceal equipment
A-3	Loading dock on west side	Poor	Consider enlarging and relocating loading dock and driveway to better suit production needs
A-4	Close-up of roof scupper and drain	Poor	Evaluate roof drainage requirements and consider additional and/or larger scuppers and/or roof drains
A-5	Signage	Poor	Improve wayfinding for theater patrons
A-6	Exterior doors and windows	Fair	Replace with aluminum storefront system
A-7	Lobby	N/A	Renovation and general enhancement of the lobby
A-8	Prop and scenery storage	Poor	Install concrete slab on grade to all spaces with dirt floors
A-9	Flourescent lighting	Fair	Upgrade to LED fixtures
A-10	Restrooms	Poor	Replacement of floor and wall tile, countertops and toilet partitions
A-11	Lay-in Ceiling	Poor	Replace all lay-in ceilings
A-12	Painted walls and wall coverings	Fair	Repaint walls and replace wall coverings and corner guards
A-13	Floors	Poor	Replace all floor finishes
A-14	New construction	N/A	Addition including a new black box theater that seats 150 people with flexible seating, a control room, restrooms for the public and performers, dressing rooms and connection to the lobby is recommended
A-15	New construction	N/A	New freight elevator and new exit stairs on the south side elevation
A-16	New construction	N/A	New exit stair on the north side elevation

3.3 Structural Assessment

## Structural Assessment

The L. E. Griffith Fine Arts Building was built around 1956 and dedicated in 1958. The structure has a central auditorium, balcony and full stage space. Two levels of classroom and practice space surround the auditorium on three sides. The building has a basement that is divided between prop storage for the theater and mechanical systems for the overall building. Based on the information available, it appears that the building has undergone one large renovation in 1984 and several minor renovations over the life of the structure. Original construction drawings were not available at the time of this report, but drawings of the 1984 renovation were available. Because there is not good documentation on the existing structure, much of the structural information and system descriptions in this report are based on visual observations made during the site visit on September 22, 2016 by Mr. Doug Antwiler PE.

The center auditorium portion of the building has a galvanized roof deck supported by steel joists. These joists are in turn supported by deep steel trusses spanning across the short dimension of the auditorium that mount to the face of wide flange columns. A significant catwalk and ceiling system was added in this area during the 1984 renovation. The balcony has concrete cast in place risers that were modified with steel framing during the 1984 renovation to improve access. The stage area has painted metal deck supported by steel joists that are in turn supported by wide flange beams and columns. A significant "grid" appears to have been added during the 1984 renovation over the flyloft to allow for rigging over the entire stage area. Around the perimeter of the auditorium, the classroom and practice areas have shallow cast in place concrete joist floor and roof systems. The building originally had a partial basement on the north end of the building and at the stage with crawl spaces in the remaining areas. During the 1984 renovation significant areas of the basement were excavated to create full height spaces. Some of these spaces were repurposed to hold the main mechanical and electrical systems for the building (which were originally housed on the roof of the building). Other excavated areas do not appear to have been intended to be used (because the floor was left as bare earth. However, these areas are currently being used for prop storage for the stage. Based on the excavated areas, the building is founded on drilled shaft piers. Information on the depth of piers and their reinforcement is not known. The outside walls of the building have a combination of brick and stone façade that are backed by unreinforced clay tile masonry and CMU walls (in the areas that were renovated). It appears that the original clay tile masonry walls are intended to be the lateral system for the building. On top of the building is a tower element. This originally housed the cooling tower for the building and a series of bells at the top. The cooling tower has been removed from the tower element and although the bells are stored within the tower element they are not currently in place due to ongoing replacement of the bell structure. The building has an asphalt and gravel roof with scuppers that connect to exterior copper downspouts around the perimeter of the building.

#### **Priorities of Observed Conditions**

In order to assist in planning and scheduling of ongoing maintenance and required remedial work for the building, the conditions discussed in this report are prioritized into three categories according to the perceived immediacy of performing repairs. During the course of the onsite condition survey a few conditions were observed that are not technically structural in nature but may have an impact on the ongoing performance and condition of the building. Descriptions of these items will be identified as Non-Structural with no priority designation. The category designation for each condition is indicated in parentheses at the end of the discussion for that item. Descriptions of these different categories are as follows:

High Priority - This includes items of a present severity that foster immediate structural or life safety concerns or
if left unaddressed, may develop into serious structural conditions or promote significant damage or deterioration
to other structural elements. Repairs in these areas should be performed in the immediate or very near future.

- Medium Priority This includes items that should be repaired to prevent future damage and ongoing deterioration
  of structural and/or architectural elements, but do not appear to have an immediate adverse impact on the
  structural integrity of the building. Minor safety issues related to the structural aspects might also be included in
  this category. Repairs in these areas can probably be deferred for a reasonable period of time without significant
  detriment but should be included in a scheduled maintenance program to maintain the long-term structural
  integrity of the building.
- Low Priority This includes items that may have been previously repaired (with only periodic monitoring suggested to verify the continuing success of the repairs), items described for information only, and minor conditions that do not appear to be structurally significant. Repairs, when recommended, are primarily for cosmetic considerations or to enhance the serviceability of the building and may be performed as funds permit or not at all.
- Non-Structural This includes items that are not technically structural in nature but may have an impact on the
  ongoing performance and condition of the garage. Minor safety issues unrelated to the structural aspects might
  also be included in this category. Descriptions of these items are included in this report for information only and
  may require the involvement of architects, contractors or consultants in other areas of expertise to determine the
  actual significance and appropriate remedial actions necessary, if any.

#### **Limitations of Survey**

This review is cursory in nature and is not intended to be comprehensive in scope. Conditions may exist that were not observed, reviewed or reported. Although no evidence was observed to indicate that other defects, deterioration, or areas of distress were present, it must be noted that this report is based primarily on visual observations made on the exteriors and interiors of the building where the structure is not concealed by finishes. Repair methods referred to in this report are of a general nature only. Specific repair procedures and materials should be determined and specified for each individual condition prior to implementing repairs. The responsibility of our firm is limited to reporting field observed conditions and providing general recommendations and opinions. No responsibility by our firm for verifying that indicated repairs or additional investigations have been performed shall be assumed or considered implied. The investigation performed was focused only on the structural adequacy of the building. No effort was made to investigate mechanical, plumbing or electrical systems of these structures and no environmental testing was performed on these structures.

Several of the described conditions were observed in numerous locations and, unless stated otherwise, can be considered as occurring throughout the building.

3.3 Structural Assessment

# **Structural Condition Survey**

Item No. S-1



**Description** Underside of roof above stage South West and North Wall. Existing roof deck has corroded through in a few areas along the wall due to roof leaks in the past. This has compromised the structural capacity of the deck in these areas.

**Action** Remove and replace existing metal deck in this area. (High Priority)

Item No. S-2



**Description** Roof of building (general). The scuppers on the roof of the building are small, widely spaced and in general do not have overflow drains or scuppers. This can lead to standing water on the roof that can cause roof leaks and higher roof loads in areas where the drain is blocked.

Action Review current roof drainage and consider adding additional drainage. (Medium Priority)

Item No. S-3



**Description** North East corner of upper parapet at back of auditorium. Corner has cracked and appears to have been caulked instead of mortared back in place.

Action Have a mason repoint this corner to restore structural integrity. (Medium Priority)

Item No. S-4

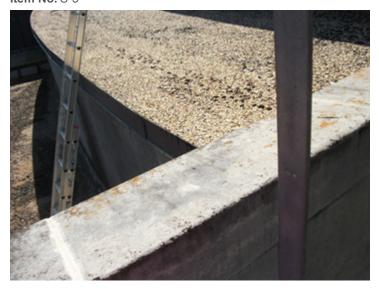


**Description** Roof over North entrance. Roof has inadequate drainage, signs of long term standing water and debris. This can lead to roof leaks and excessive roof loading in this area.

Action Review current roof drainage and provide adequate slope/drainage. (Medium Priority)

#### 3.3 Structural Assessment

Item No. S-5



**Description** North West side of main entrance on roof. Fixed ladder on wall exits over depressed area instead of adjacent roof. This does not appear to meet current safety guidelines. Also no permanent ladder to lower roof.

**Action** Verify position of ladder meets current access/safety guidelines and relocate if necessary. (High Priority) Consider providing ladder to lower roof area (Non-structural)

Item No. S-6



**Description** Inside bell tower. Spalled concrete and corroded reinforcement at slab edge.

Action Clean reinforcement and repair with polymer modified Portland cement mortar. (Medium Priority)

Item No. S-7



**Description** Bell tower. Top flange of wide flange beams supporting bell tower are corroding.

Action Clean and paint existing structural steel with good quality paint. (Medium Priority)

Item No. S-8



**Description** Bell tower. Daylight visible through seam at top of tower, roof of tower leaks.

Action Seal roof of tower to prevent future water intrusion. (Medium Priority)

#### 3.3 Structural Assessment

Item No. S-9



**Description** Roof over stage near bell tower. Construction materials stored on roof over stage in area where the deck is compromised due to corrosion.

**Action** Although the weight of these materials would normally be within what the roof could safely support with the corrosion damage observed on the roof deck below, this material needs to be removed. (High Priority)

Item No. S-10



**Description** Roof Ladder from roof over stage to roof over auditorium. Several of the embeds anchoring this ladder are either missing or disengaged.

**Action** Reattach ladder to the existing wall. (High Priority)

Item No. S-11



**Description** North West corner of north entrance near roof level. Piece of stone veneer appears to have shifted outward.

**Action** Repoint/reattach stone veneer at this location. (High Priority)

Item No. S-12



**Description** The "Grid" area over the main auditorium stage. The access up to the grid area does not appear to comply with current safety practices and the mesh on the grid area itself has several openings in it that larger than 6 inches x 6 inches.

**Action** We recommend that a theater and/or access consultant review this area to verify that the safety measures in place in these areas comply with current industry norms. (Medium Priority)

### 3.3 Structural Assessment

Item No. S-13



**Description** West side of building at stair down to mechanical area. Guardrail has corroded through.

Action Replace guard rail. (Medium Priority)

Item No. S-14



**Description** West side of building at stair down to mechanical area. Slack cables in safety barrier.

Action Tighten cables. (Medium Priority)

Item No. S-15



**Description** West side of building at stair down to mechanical area. Open light fixture with exposed wires. **Action** (Non-structural)

Item No. S-16



**Description** West side of building at stair down to mechanical area. Corroded door frame.

Action (Non-structural)

### 3.3 Structural Assessment

Item No. S-17



**Description** Basement in prop storage area. Several rooms in the basement that are being used for prop storage have dirt floors.

**Action** Consider adding a concrete slab on grade in these rooms to improve operations and access. (Non-structural)

Item No. S-18



**Description** Horizontal hatch door into mechanical area on West side of building. Hatch has significant corrosion around the perimeter due to water intrusion.

**Action** Consider replacing hatch and detailing new hatch to prevent water intrusion (Medium Priority) Re: Photo M-1 in MEP Systems Assessment.

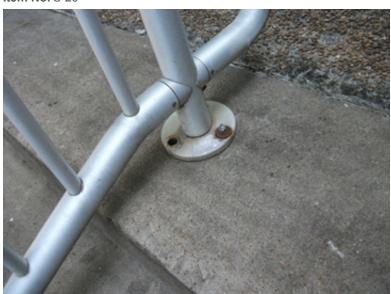
Item No. S-19



**Description** West side of building at dock. Broken stonework.

Action Replace broken stonework. (Non-structural)

Item No. S-20



**Description** Handrails on North side of building. Carbon steel bolts have been used to secure aluminum handrails. Several of these bolts are heavily corroded and some bolts are missing.

Action Replace missing and/or corroded bolts with new post installed stainless steel anchors. (Medium Priority)

# 3.3 Structural Assessment

Item No. S-21



**Description** East side of building near elevator lobby. Deteriorated mortar in joint in stonework.

Action Repoint joint. (Non-structural)

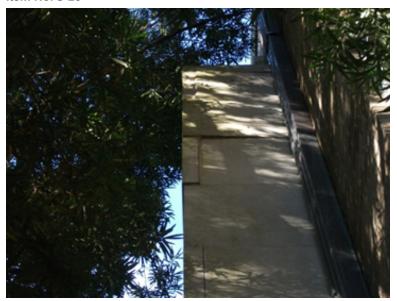
Item No. S-22



**Description** East side of building near elevator lobby. Spalling of patch on decorative stonework.

Action Remove spalled material and patch to match adjacent (Non-structural)

Item No. S-23



**Description** East side of building near covered entrance. Decorative stone seems to have shifted and be out of alignment.

Action Mason to verify that stones are secure. (Medium Priority)

# Structural Assessment Scope

KEY	ITEM	CONDITION	DESCRIPTION
	STRUCTURAL Underside of roof above stage South West and North		
S-1	Wall. Existing roof deck has corroded through in a few areas along the wall due to roof leaks in the past. This has compromised the structural capacity of the deck in these areas.	Poor	Remove and replace existing metal deck in this area. (High Priority)
S-2	Roof of building (general). The scuppers on the roof of the building are small, widely spaced and in general do not have overflow drains or scuppers. This can lead to standing water on the roof that can cause roof leaks and higher roof loads in areas where the drain is blocked.	N/A	Review current roof drainage and consider adding additional drainage. (Medium Priority)
S-3	North East corner of upper parapet at back of auditorium. Corner has cracked and appears to have been caulked instead of mortared back in place.	Fair	Have a mason repoint this corner to restore structural integrity. (Medium Priority)
S-4	Roof over North entrance. Roof has inadequate drainage, signs of long term standing water and debris. This can lead to roof leaks and excessive roof loading in this area.	Fair	Review current roof drainage and provide adequate slope/drainage. (Medium Priority)
S-5	North West side of main entrance on roof. Fixed ladder on wall exits over depressed area instead of adjacent roof. This does not appear to meet current safety guidelines. Also no permanent ladder to lower roof.	N/A	Verify position of ladder meets current access/safety guidelines and relocate if necessary. (High Priority) Consider providing ladder to lower roof area (Non-structural)
S-6	Inside bell tower. Spalled concrete and corroded reinforcement at slab edge.	Fair	Clean reinforcement and repair with polymer modified Portland cement mortar. (Medium Priority)
S-7	Bell tower. Top flange of wide flange beams supporting bell tower are corroding.	Fair	Clean and paint existing structural steel with good quality paint. (Medium Priority)
S-8	Bell tower. Daylight visible through seam at top of tower, roof of tower leaks.	N/A	Seal roof of tower to prevent future water intrusion. (Medium Priority)
S-9	Roof over stage near bell tower. Construction materials stored on roof over stage in area where the deck is compromised due to corrosion.	N/A	Although the weight of these materials would normally be within what the roof could safely support with the corrosion damage observed on the roof deck below, this material needs to be removed. (High Priority)
S-10	Roof Ladder from roof over stage to roof over auditorium. Several of the embeds anchoring this ladder are either missing or disengaged.	N/A	Reattach ladder to the existing wall. (High Priority)
S-11	North West corner of north entrance near roof level. Piece of stone veneer appears to have shifted outward.	N/A	Repoint/reattach stone veneer at this location. (High Priority)
S-12	The "Grid" area over the main auditorium stage. The access up to the grid area does not appear to comply with current safety practices and the mesh on the grid area itself has several openings in it that larger than 6 inches x 6 inches.	N/A	We recommend that a theater and/or access consultant review this area to verify that the safety measures in place in these areas comply with current industry norms. (Medium Priority)
S-13	West side of building at stair down to mechanical area. Guardrail has corroded through.	Poor	Replace guard rail. (Medium Priority)
S-14	West side of building at stair down to mechanical area. Slack cables in safety barrier.	N/A	Tighten cables. (Medium Priority)
S-15	West side of building at stair down to mechanical area.  Open light fixture with exposed wires.	N/A	(Non-structural)
S-16	West side of building at stair down to mechanical area. Corroded door frame.	N/A	(Non-structural)
S-17	Basement in prop storage area. Several rooms in the basement that are being used for prop storage have dirt floors.	N/A	Consider adding a concrete slab on grade in these rooms to improve operations and access. (Non-structural)
S-18	Horizontal hatch door into mechanical area on West side of building. Hatch has significant corrosion around the perimeter due to water intrusion.	Poor	Consider replacing hatch and detailing new hatch to prevent water intrusion (Medium Priority)
S-19	West side of building at dock. Broken stonework.  Handrails on North side of building. Carbon steel bolts	Poor	Replace broken stonework. (Non-structural)
S-20	have been used to secure aluminum handrails. Several of these bolts are heavily corroded and some bolts are missing.	Fair	Replace missing and/or corroded bolts with new post installed stainless steel anchors. (Medium Priority)
S-21	East side of building near elevator lobby. Deteriorated mortar in joint in stonework.	Fair	Repoint joint. (Non-structural)
S-22	East side of building near elevator lobby. Spalling of patch on decorative stonework.	Fair	Remove spalled material and patch to match adjacent (Non-structural)
S-23	East side of building near covered entrance. Decorative stone seems to have shifted and be out of alignment.	N/A	Mason to verify that stones are secure. (Medium Priority)

# MEP Assessment

#### **HVAC System Summary**

Plant: The central plant is housed on level 1 (basement below grade) of the facility. The original location of the plant was on this level and the access to it is through a single door. This level was expanded in the 1984 renovation. The chillers have been replaced since 1984 and are located in the expansion area. There is an equipment access opening at grade near the cooling towers. This access door is approximately 6 feet wide and 15 feet long. There are two spring, assisted doors that do not completely close and are missing the weather proofing. Due to the deterioration of the weather proofing and the poor condition of the doors, the central plant floor is subject to flooding during heavy rains (M-1). The floor drain under the large access door, in the floor of the plant, is not sufficient for the amount of water coming in. The exhaust fan (3000 cfm, .5 hp) that serves the plant not functioning (M-2).

The cooling is provided by two water cooled electric, water chillers, two primary chilled water pumps, two cooling towers, two condenser water pumps, AHU coils and a chilled water piping system. The chillers are 145 ton, Carrier screw chillers, installed in 1998 (serial number indicates they were manufactured in 1996) and are in fair condition but are nearing the end of their projected service life (M-3). The chilled water pumps are 20 HP, installed in 1998 in conjunction with the chillers and are in poor condition (M-4). The cooling towers are stainless steel, 435 gpm, with separate basins, installed in 2012 and are in excellent condition. The condenser water pumps are 20 HP, installed in 1998 and are in fair condition (M-5). They are near the end of their projected service life. The chilled water coils are part of the AHUs that were installed in 1984. The coils observed appeared to be in fair condition. The piping system within the building consists of "visible" piping that is readily accessible and "hidden' piping that is concealed by construction or elements of the building. The "visible" piping has been replaced as renovations occurred but the "hidden" piping is original. The original piping's insulation is fiberglass with mastic on the joints. Refrigerant leak detection system could not be located (M-6).

The heating is provided by two condensing boilers with fractional horsepower circulation pumps, two primary hot water pumps, AHU coils and a heating water piping system. The boilers are Camus DynaFlame 1,250,000 btu condensing boilers that were installed in 2014 and in excellent condition. The primary hot water pumps are 10 HP, installed in 1984 and with the exception of the insulation, are in poor condition and at the end of their projected service life (M-7). The AHU coils are part of the AHUs that were installed in 1984. The coils observed appeared to be in fair condition. The piping system within the building consists of "visible" piping that is readily accessible and "hidden' piping that is concealed by construction or elements of the building. The "visible" piping has been replaced as renovations occurred but the "hidden" piping is original. The piping insulation is fiberglass with mastic on the joints. The boiler and gas water heater vents are combined into a single stack which is routed through the original boiler vent chase. The original boiler venting was not designed for the newer style boilers and the connection between the newer vents and the original vent shows signs of condensation which may compromise the existing vent (M-23). The boiler venting should be replaced with modern materials and routed to a new termination point at the

Air distribution: The air distribution is accomplished through five air handlers in three different configurations. There is a multizone unit with electric reheat, serving the scene shop and support spaces on level one. There are three single zone units (2 on level one and one on a platform above level three) that serve the auditorium and stage spaces. To serve the remaining classrooms, meeting rooms, office, etc. there is a dual duct air handler serving terminal units in each space. The duct work is constructed of sheetmetal and the majority of it has been internally lined and wrapped with lead lined vinyl for sound attenuation (M-12). There was some externally insulated duct observed (M-13). None of the duct joints observed showed signs of joint sealing compound that is typically part of modern duct installation. There may be significant, cumulative duct leakage creating inefficiencies in the system (M-8). The air handlers were

#### 3.4 MEP Assessment

installed in the mid-90s. There is an underground duct in the black box that should be cleaned and leak tested (M-22). The air handlers have very small access panels for maintenance (M-9) and exhibit some microbial growth in the drain pans (M-10). The air handlers are at the end of their service life. The duct is 32 years old and near the end of its service life. The duct should be cleaned if not replaced (M-11). There is a 3 ton fan coil unit serving the piano storage room on level 1 that was installed in 1984 and is near the end of the service life and should be considered for replacement (M-21). There is a 5 ton, DX, split system serving the control room booth in the auditorium that is marked as installed in 2011 and is reported in poor condition (M-18). The AHU serving the stage will disturb the curtains when active and should be addressed by installing different air diffusers to spread the air flow (M-20). There is a Liebert DX system serving the gallery, installed in 1995, in fair condition but nearing end of service life (M-19).

Ventilation: The outside air supply is ducted to the air handlers in level one (basement) from a large louver that is in the wall of the central plant, below grade. There is a pit to allow air flow below grade to the intake louver. The grate over this pit appears to be recently replaced. The outside air for the other units is similarly ducted from a louver or roof mounted intake to the air handling unit. Exhaust for restrooms on level one is provided by a suspended exhaust fan in the central plant that is in poor condition (M-14). The exhaust for restrooms, breakrooms and closets on levels 2 and 3 is ducted to roof mounted fans. These fans appear to be in fair condition but are near the end of their expected service life and should be considered for replacement (M-15). During our walk of the building, we observed lint traps installed on clothes dryer exhaust. This should be replaced with new exhaust ducts to the outside (M-16).

Controls: The building controls are a combination of pneumatic space temperature control and DDC control of equipment. The DDC controlled equipment is visible on the campus master control system but the pneumatic space temperature controls are not. The equipment is controlled via control modules that are on the local BAS network. The space temperature control is accomplished via pneumatic thermostats in the space that controls the dual duct terminal units and/or zone controls dampers. These pneumatic controls are not part of the campus DDC system and cannot be monitored or adjusted remotely and should be considered for full replacement with a DDC system.

#### **HVAC System Assessment**

Chillers: The chillers are 18 years old typically have a life span of 20 years. They are in fair condition but are nearing the end of the service life.

Chilled water pumps: The pumps are 18 years old and typically have a life span of 20 years. The insulation on the pumps has deteriorated and in result have condensation forming on them. This condensation appears to affect the pump housing and the pumps are in poor condition.

Cooling towers: The cooling towers are 4 years old and in excellent condition. There are no reported issues with them and the anticipated service life is another 20 years.

Condenser water pumps: The pumps are 18 years old and typically have a life span of 20 years.

Boilers: The boilers are 2 years old and are in excellent condition. Replace vent stack.

Hot water pumps: The pumps are possibly the original pumps, typically have a life span of 20 years and should be replaced.

Piping: The visible piping that has been replaced 32 years ago is in good condition but the original piping in the concealed areas of the building is 60 years old and at the end of its anticipated service life. The original piping

system should be considered for replacement.

Air distribution: The air handlers are nearing the end of their service life and are do not have adequate access for cleaning. The system should be considered for replacement. The dual duct terminal units have a typical service life of 20 years and are near the end of that service life and should be considered for replacement.

Ventilation: The exhaust fans are near the end of service life and should be considered for replacement. Dryer exhaust booster fans and ducts to the outdoor should be installed for clothes dryers.

Controls: There have been complaints regarding the ability to control space temperature. These complaints aren't addressable in an efficient manner with the current, pneumatic control system. The building control system should be upgraded so that all equipment is controlled by DDC and put on the LAN so that all may be monitored and controlled remotely by the university environmental staff (M-17).

NOTE: Refer to ASHRAE Service Life of Equipment table below for more information.

### **ASHRAE Service Life of Equipment Table**

Equipment Item	Median Years	Equipment Item	Median Years	Equipment Item	Median Years
Air conditioners		Air terminals		Air-cooled condensers	20
Window unit Residential single or Split	10	Diffusers, grilles, and registers Induction and fan coil units	20	Evaporative condensers	20
Package Commercial through-the wall	15 15	VAV and double-duct boxes	20	Insulation	
Water-cooled package	15	Air washers	17	Molded Blanket	20 24
Heat Pumps		Ductwork	30		
Residential air-to-air	15	Damasa	20	Pumps	
Commercial air-to-air	15	Dampers	20	Base-mounted	20
Commercial water-to-air	19	Fans		Pipe-mounted Sump and well	10 10
Roof-top air conditioners		Centrifugal Axial	25 20	Condensate 15	10
Single-zone Multi-zone	15 15	Propeller Ventilating roof-mounted	15 20	Reciprocating engines	20
Boilers, hot water (steam)		Ü		Steam turbines	30
Steel water-tube	24 (30)	Coils			1.0
Steel fire-tube	25 (25)	DX, water, or steam	20	Electric motors	18
Cast iron Electric	35 (30) 15	Electric	15	Motor starters	17
_		Heat Exchangers		Electric transformers	30
Burners	21	Shell-and-tube	24	Electric transformers	00
Furnaces		Decision of the control of the contr	00	Controls	
Gas- or oil-fired	18	Reciprocating compressors	20	Pneumatic	20
das- or on-med	10	Packaged chillers		Electric	16
Unit heaters		Reciprocating	20	Electronic	15
Gas or electric	13	Centrifugal	23	Valve actuators	
Hot water or steam	20	Absorption	23	Hydraulic	15
Radiant Heaters		Cooling towers		Pneumatic	20
Electric	10	Galvanized metal	20	Self-contained	10
Hot water or steam	25	Wood	20		
	_5	Ceramic	34		

3.4 MEP Assessment

#### **Electrical System Summary**

Service: The electrical service is provided via the University owned 12.5 kV, campus distribution system. A 12.5 kV circuit originating at the adjacent Music Building feeds a 15.5kV/120-208V pad mounted transformer. The pad mounted transformer supplies 120/208 volt, three phase power to the 4000 A main switchboard located on level one (basement) (E-1).

Distribution: The 4000A main switchboard was replaced in 2003 and is in very good condition. There is capacity and spare spaces for future needs. The main switchboard feeds two motor control centers (one installed in 2003 and one installed during original construction E-9) that power the auditorium dimmer panel, electric duct heaters, panel boards, automatic transfer switch, Liebert unit and other loads throughout the building. The panel boards serving the branch circuits are located throughout the building in what seem to be random locations, such as corridors, classrooms and offices. The typical method of the layout of electrical panels, at the time this building was constructed, was to place panel boards conveniently near the loads served (E-2). New buildings have dedicated rooms to house electrical equipment to keep unauthorized persons away and safe.

Lighting: Lighting is accomplished using fluorescent lay-ins, recessed "can" lights (CFL & incandescent), surface mounted fluorescent strip fixtures, surface mounted wall hung fixtures in the auditorium and recessed exterior soffit fixtures. The fluorescent lay-ins are basically two types, 2x2 with parabolic lens at the main entrance and 2x4 with prismatic lens in the corridors, restrooms, classrooms and office spaces. The recessed "can" lights are predominantly located in the auditorium with some in the coves around the main lobby. The surface mounted strip fixtures are utilized in the mechanical spaces, storage spaces and utility spaces. The fluorescent fixtures are all modern types with T-8 lamps and electronic ballasts. The auditorium lighting is incandescent for dimming purposes. There is a dimmer panel in the auditorium for control of the auditorium lighting. There are exterior stair way lights that were installed during the last renovation are in poor condition and should be replaced (E-10).

Power: The distribution of branch circuits is accomplished through the original electrical panels. These panels are near the end of their service life and should be replaced when renovations are performed. They are manufactured by ITE and are rated for 225 A (typical). (E-3). The grounding system in the building consists of the conduit system, as was the case when the building was constructed. Current methods utilize a grounding conductor pulled in the conduit with the power conductors. A grounding conductor will provide a solid and reliable path for fault current and typically raises the power quality at the user devices (E-4).

Stand-by power: Stand-by power is provided through an automatic transfer switch that is fed by a Cummins, 85 kW, natural gas fired generator that was recently installed and in excellent condition. The automatic transfer switch is located on level one, and in good condition. The original conduit from the generator to the transfer switch was reused which limited the conductor size and thus the emergency power capacity that can be delivered to the ATS.

Egress lighting: Egress lighting in the auditorium is provided by the normal lighting fixtures and powered by the natural gas, stand-by generator. Egress lighting in the corridors, classrooms and other spaces within the building is provided by "bug-eye" battery powered lights or battery powered ballasts (E-7).

#### **Electrical System Assessment**

Service: The service is in good condition and has no reported issues.

Distribution: The Main Switchboard is in excellent condition, as it was replaced in 2004 but the electrical panels are original and at the end of their service life. Replace electrical panels and provide grounding conductors.

Lighting: Fluorescent lighting is up to date but the upgrade to LED lighting may be considered due to the energy savings opportunity. Consider changing the auditorium lighting to LED dimmable to reduce energy consumption, heat generation (reduced cooling load) and eliminate changing of incandescent lamps (E-5). Consider upgrading all lighting to LED to reduce maintenance requirements and energy usage (E-5a).

Stand-by power: The generator and transfer switch are in good condition but the circuit capacity is limited due to existing conduit size. Recommend installing new conduit and wiring to utilize full capacity of generator (E-6).

Egress Lighting: Egress lighting can be upgraded from battery packs to the generator once generator capacity has been upgraded (E-8).

#### **Plumbing System Summary**

Supply: The domestic water supply piping consists of copper piping. The building has undergone several renovations but the piping on the level 1 (basement) has not been touched during these renovations. The supply piping on level 1 is the original piping and is in poor condition (P-1). Levels 2 and 3 have been renovated and the supply piping replaced and is in good condition. Insulation appears to be in fair condition.

Sanitary Drainage: The building has undergone several renovations but the sanitary drain piping on the level 1 (basement) has not been touched during these renovations. The sanitary drain piping on the level 1 is the original piping and is in poor condition (P-2). Levels 2 and 3 have been renovated and the sanitary drain piping replaced and is in good condition. The building drain system terminates on level 1 and drains to a sanitary lift station. The drain piping to the lift station is in poor condition but the lift station pumps and components were replaced in 1997 and are reported in good condition, but close to the end of service life (P-3).

Storm Drainage: Storm drainage appears to be accomplished through scuppers on the roof with a few roof drains. A roofing consultant should review the scupper size and design to evaluate the capacity. The roof drains are original (P-4) and should be thoroughly inspected and cleaned to find and remove any debris build up that may have occurred over the years.

Water Heating: The lower level domestic hot water is supplied by a 91 gallon, 199,900 btu input gas fired water heater located on the first level (basement). This gas water heater is reported in poor condition (P-5). The domestic water heating for the restrooms on levels 2 and 3 is accomplished by a small, 4 gallon electric water heater that is installed underneath the lavatory counter top. The units are exposed to the restroom users. Recommend the water heater is relocated to a space above the ceiling so it is not exposed to users (P-6).

Fixtures: The building has undergone several renovations with plumbing fixtures replaced during these renovations. Levels1, 2 and 3 have been renovated and the plumbing fixtures replaced and in good condition with the exception of the copper nipple between the urinal and sanitary drainage system. The material is rotting in several locations and should be replaced (P-10). The electric drinking fountains were replaced in the late 80s, are in poor condition and should be replaced (P-7). A suggestion was brought up during our interview to upgrade the existing flush valves to

### 3.4 MEP Assessment

automatic flush valves to conserve water and maintain fixture traps.

Sub-surface Drainage: There are two lift stations for subsurface drainage that are original. They are functional but the underground piping is in questionable condition due to materials and age. The pumps should be replaced due to age and the piping should be inspected and replaced as necessary (P-8, P-9).

### **Plumbing System Assessment**

Supply: Replace level one water piping and insulation.

Sanitary Drainage: Replace level one sanitary piping and lift station components.

Storm drainage: Inspect and rod out storm drain piping, replace roof drains as necessary, and consider a roof and roof drainage report that may clarify the need for additional drainage for the roof.

Water heating: Replace gas water heater and small electric water heaters.

Fixtures: Replace electric drinking fountains with proper ADA water fountains.

Sub-surface drainage: Replace pumps and controls as indicated.

# **MEP Condition Survey**

Item No. M-1



Description 6' x 15' steel access door to level 1 basement, mechanical room

Action Access door needs to be replaced

Item No. M-2



**Description** Prop and scenery storage

Action Install concrete slab on grade to all spaces with dirt floors

# 3.4 MEP Assessment

Item No. M-3



**Description** Existing chillers

Action Replace chillers (2)

Item No. M-4



**Description** Chilled water pumps

Action Replace chilled water pumps (2)

Item No. M-5



**Description** Condenser water pumps

Action Replace condenser water pumps (2)

Item No. M-6: No photo, see spreadsheet.

Item No. M-7



**Description** Hot water system pumps

Action Replace hot water pumps (2)

# 3.4 MEP Assessment

Item No. M-9



**Description** Very small access panels that don't facilitate maintenance and cleaning **Action** Replace air handlers

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**Description** Apparent microbial growth

Action Refurbish air handlers

Item No. M-11: No photo, see spreadsheet.

Item No. M-12



**Description** Lead lined vinyl coating on duct.

Item No. M-13



**Description** External duct insulation.

# 3.4 MEP Assessment

Item No. M-14: No photo, see spreadsheet.

Item No. M-15



**Description** Roof mounted exhaust fan

Action Replace roof mounted exhaust fans

Item No. M-16



**Description** Dryer lint trap

Action Provide boosert fan and exhaust duct for clothes dryers

Item No. M-17: No photo, see spreadsheet.

Item No. M-18: No photo, see spreadsheet.

Item No. M-19: No photo, see spreadsheet.

Item No. M-20: No photo, see spreadsheet.

Item No. M-21: No photo, see spreadsheet.

Item No. M-22: No photo, see spreadsheet.

Item No. M-23



**Description** Boiler venting

Action Replace boiler vent stacks (3)

# 3.4 MEP Assessment

Item No. E-1



**Description** Switchboard

Item No. E-2



**Description** Panel located in corridor

Item No. E-3: No photo, see spreadsheet.

Item No. E-4: No photo, see spreadsheet.

Item No. E-5: No photo, see spreadsheet.

Item No. E-6: No photo, see spreadsheet.

Item No. E-7



**Description** Battery powered egress lighting

Item No. E-8: No photo, see spreadsheet.

Item No. E-9: No photo, see spreadsheet.

# 3.4 MEP Assessment

Item No. E-10



**Description** Stair lighting in poor condition

Action Replace stairlighting on exterior stairs

Item No. P-1: No photo, see spreadsheet.

Item No. P-2: No photo, see spreadsheet.

Item No. P-3



**Description** Sanitary lift station

Action Replace lift station components

Item No. P-4



**Description** Roof drain

Action Inspect and clean roof drain piping

Item No. P-5: No photo, see spreadsheet.

Item No. P-6



**Description** Under counter water heater

**Action** Replace water heaters

# 3.4 MEP Assessment

Item No. P-7



**Description** Electric drinking fountains

**Action** Replace drinking fountains

Item No. P-8: No photo, see spreadsheet.

Item No. P-9: No photo, see spreadsheet.

# MEP Assessment Scope

KEY	ITEM	CONDITION	DESCRIPTION
	MEP		
M-1	Replace the 6' x 15' steel access door to level 1 basement, mechanical room	Poor	Leaks during rain resulting in flooding of room
M-2	Replace non functioning exhaust fan in central plant	Poor	1/2 hp, 3000 cfm, propeller fan
M-3	Replace chillers (2)	Fair	Close to end of projected service life - 145 ton, water cooled chillers
M-4	Replace chilled water pumps (2)	Poor	20 hp pump package
M-5	Replace condenser water pumps (2)	Fair	20 hp pump package
M-6	Provide refrigerant leak detection system	N/A	New refrigerant leak detection system interlocked with BAS
M-7	Replace hot water pumps (2)	Poor	10 hp pump package
M-8	Inspect ductowrk for leakage and repair	N/A	Inspect ducts for visible or audible leakage and repair
M-9	Replace air handlers	Fair	(5) units at 40,000 cfm, 10,000 cfm, 23,000 cfm, 21,000 cfm and 3000 cfm.
M-10	Refurbish air handlers	Fair	(5) air handlers
M-11	Clean duct work	Poor	Provide access points and clean duct work
M-14	Replace suspended exhaust fan	Poor	Replace 1 hp, propeller fan, suspended from structure
M-15	Replace roof mounted exhaust fans	Fair	Replace (12) 1/2 hp roof mounted exhasut fans
M-16	Provide boosert fan and exhaust duct for clothes dryers	Poor	(2) dryers on level one
M-17	Upgrade building controls to full DDC.	N/A	Add DDC controls to terminal units and zone damper controls.
M-18	Replace control room DX system	Poor	Replace 5 ton split system with electric heat
M-19	Replace gallery DX system	Fair	Replace 7.5 ton split system with electricl heat and dehumidification.
M-20	Install new diffusers for auditorium unit serving stage to prevent curtain movement	N/A	Provide new diffusers (8) 36x20
M-21	Replace piano room fan coil unit	Poor	3 ton, DX fan coil unit.
M-22	Clean underground duct work in black box.	Poor	Clean approximately 60 feet of duct.
M-23	Replace boiler vent stacks (3)	Poor	Replace stacks (3) with vents that are compatible with new boilers
E-3	Replace electrical panels	Poor	Replace 16, 225 amp panels and refeed circuits
E-4	Install grounding conductors	Poor	Install grounding conductors in conduits.
E-5	Change auditorium lighting to LED	Poor	Replace existing lighting
E-5a	Replace all lighting with LED	Fair	Provide LED lighting for all spaces.
E-6	Replace generator conduit and wiring	N/A	Provide new conduits and conductors for 300A circuit.
	· · · · · · · · · · · · · · · · · · ·		Provide conduit and wiring system for emergency power and wire egress
E-8	Upgrade egress lighting	N/A	fixtures to it.
E-9	Replace original motor control center	Poor	Replace 800 amp motor control center
E-10	Replace stairlighting on exterior stairs	Poor	Replace 30 lights
P-1	Replace copper supply piping	Poor	Replace level one piping
P-2	Replace original sanitary piping	Poor	Sawcut floor and replace sanitary piping on level one
P-3	Replace lift station components	Fair	Replace two submersible grinder/pumps (2hp)
P-4	Inspect and clean roof drain piping	Poor	Rod out roof drain piping
P-5	Replace gas water heater	Poor	Replace 199,000 btu, 91 gallon, gas fired water heater
P-6	Replace water heaters	Fair	Replace (6) 4 gallon, electric water heaters and relocate to plenum space.
P-7	Replace drinking fountains	Poor	Replace (18) electric drinking fountains with all stainless steel models.
P-8	Replace subsurface drainage pumps	Poor	Replace (4) 5 hp submersible pumps and controls
	Inspect and replace subserface drainage piping as	_	
P-9	necessary	Poor	Run camera through piping and replace as needed
P-10	Replace waste nipple on urinals	Poor	14 urinals
P-11	Replace flush valves with automatic flush valves	Upgrade	30 flush valves (Sloan EBV-89A-M)

3.5 Life Safety Assessment

# Life Safety Assessment

#### **Life Safety Summary**

The Griffith Building is a building of steel and masonry structure housing classrooms, offices, a theater, storage rooms and other support utility rooms. The building is of mixed occupancy containing business, assembly and storage occupancies, as defined in NFPA 101 Life Safety Code (2012) and the 2012 International Building Code (IBC), Chapter 3. Observations of the construction visible appear consistent with Type IA or Type IB, as defined in Chapter 6 of the IBC.

#### **Egress**

The building is provided with two stairs for egress from levels two and three. Due to sloping terrain, Stair A discharges on Level Two at A2. Stair B discharges in the interior of Level 1 at B1, the level of exit discharge. Stair B discharges through what appears to be an exit passageway that is provided with construction that appears to have a one-hour fire resistance separation, as required by Chapter 10 of the IBC. However, the building elevator opens into the exit passageway and there is combustible furniture in the passage.

The allowance for one of the interior exit stairs to discharge inside the building at the level of exit discharge only applies if the level of exit discharge is provided with complete automatic sprinkler protection. It is not. The addition of automatic sprinkler protection throughout the building will address this situation.

The elevator opening into the Stair B exit passageway at B1 is not allowed. Only normally occupied areas, (not shafts) are allowed to open into an exit enclosure (exit passageway). It appears it may be possible to construct an enclosed elevator lobby between the stair discharge and the elevator. Such construction would address this situation. (IBC Chapter 10)

The furniture in the exit passageway is not allowed. Only noncombustible items necessary for the proper functioning of an exit are allowed in the enclosure. (IBC Chapter 10)

#### **Corridors**

Unless the building is provided with automatic sprinkler protection throughout, the corridors are required to be separated from other floor areas by one-hour fire resistive construction. While the wall construction of the corridors could not be determined, not all doors leading into the corridors have labels indicating the doors have the required fire resistance rating. The Ticket Office (Rm 206) on Level 2 has an unprotected window opening.

Providing automatic sprinkler protection throughout the building will preclude the need for a fire resistance rating for the corridor. (IBC Chapter 10)

#### Construction

In Room 300, Upstage Theater, there is a "Sound Booth". Sound Booth, 300A, contains a platform approximately 37" high fabricated from wood with no fire protection under the platform and storage in the enclosed space under the platform.

Automatic sprinkler protection is needed under the platform, as required by NFPA 13.

Drawings indicate the ceiling of the stage is over 50 feet high. Therefore, the stage proscenium wall is required to have a two-hour fire resistance rating. (LSC Section 12.4.5.6) While the construction of the wall appears to be of a type that will provide the required two-hour fire resistance rating, holes were observed in the wall that will need to be repaired to restore the fire resistance rating of the wall.

#### **Automatic Sprinkler Protection**

Automatic sprinkler protection is provided throughout Level 1. Automatic sprinkler protection is required by the Life Safety Code for an assembly occupancy having an occupant load of over 300. The assembly area (theater) of the building has an occupant load of over 1,000, based on the number of fixed seats.

Providing automatic sprinkler protection throughout the building, besides being required for the assembly occupancy, will also obviate the need for fire resistance separation of the corridors (IBC Chapter 10), allow the current situation of one of the exit stairs discharging through Level 1 (IBC Chapter 10) and allow occupancy separations of one-hour between the theater and the rest of the building as required by the Life Safety Code and the storage rooms and the rest of the building. (LSC Chapter 6) Otherwise, a two-hour fire resistance separation is required between some of the occupancies. (IBC Chapter 5; LSC Chapter 6) It should be noted, the IBC would allow non-separated occupancies in the building if the building meets the requirements of the most stringent occupancy. (IBC Chapter 5) It appears this would be the case.

3.5 Life Safety Assessment

# Life Safety Condition Survey

Item No. LS-1



**Description** Combustible furniture in exit passageway

Action Remove furniture

Item No. LS-2



**Description** Box office window in corridor

Action Remove window, provide fire shutter or provide automatic sprinkler protection

# 3.5 Life Safety Assessment

Item No. LS-3



**Description** Combustible platform in Room 300 Sound Booth

Action Replace with noncombustible construction or provide automatic sprinkler protection

Item No. LS-4: No photo, see spreadsheet.

Item No. LS-5: No photo, see spreadsheet.

Item No. LS-6: No photo, see spreadsheet.

Item No. LS-7: No photo, see spreadsheet.

Item No. LS-8: No photo, see spreadsheet.

# Life Safety Assessment Scope

KEY	ITEM	CONDITION DESCRIPTION
	LIFE SAFETY	
LS-1	Exit passageway for Stair B deficient at B1	Elevator opens into the exit passageway. Combustible furniture is in the exit passageway.
LS-2	Corridors do not have required one-hour fire resistance rating.	Most doors not labled indicating a fire resistance rating. Ticket office window opening into corridor is not protected.
LS-3	Room 300 Sound Booth combustible platform unprotected.	Combustible construction requires changing to noncombustible or provide automatic sprinkler protection.
LS-4	Improper Stair A discharge at A2.	Stair A at A2 discharges into Level 2 and floor is not provided with automatic sprinkler protection.
LS-5	Required fire protection not provided.	Building with the current assembly area (theater) is required to be provided with automatic sprinkler protection throughout. Providing automatic sprinkler protection throughout the building addresses all but LS-1 above.
LS-6	The theater does not appear to have a fire resistive separation from the rest of the building.	A one-fire resistive separation is required between the theater and the rest of the building by Chapter 6 of the Life Safety Code. However, the IBC will allow nonseparated occupancies if the building is provided with automatic sprinkler protection throughout.
LS-7	Confirm the storage rooms are separated from the theater areas by one-hour fire resistance construction	While there appears to be proper construction providing the required separation, this should be confirmed.
LS-8	Holes were observed in the stage proscenium wall.	The holes were observed in the that require repair to restore the fire resistance rating.

3.6 TAS Assessment

# Texas Accessibility Standards (TAS) Assessment

#### Texas Accessibility Standards (TAS) Summary

The following report addresses findings observed during site inspection performed on September 22, 2016. The site inspection was performed to determine conformance with Elimination of Architectural Barriers; Administrative Rules of the Texas Department of Licensing and Regulations; 16 Texas Administrative Code; Chapter 68; Texas Accessibly Standards (TAS). This report does not address the Federal Americans with Disabilities Act (ADA) or its requirements.

#### **Corrective Action**

The report will document a noncompliant element as well as describe when corrective action is required (if any) as it pertains to Scenario 2 and 3. Below are the following corrective actions:

#### **Corrective Action A**

An element is found to not meet the TAS 1994 or TAS 2012 Standards; however the element would not be required to be corrected due to a renovation. The element would be allowed to remain in noncompliance indefinitely unless that element is altered or modified in any way. For example; an existing noncompliant break room sink.

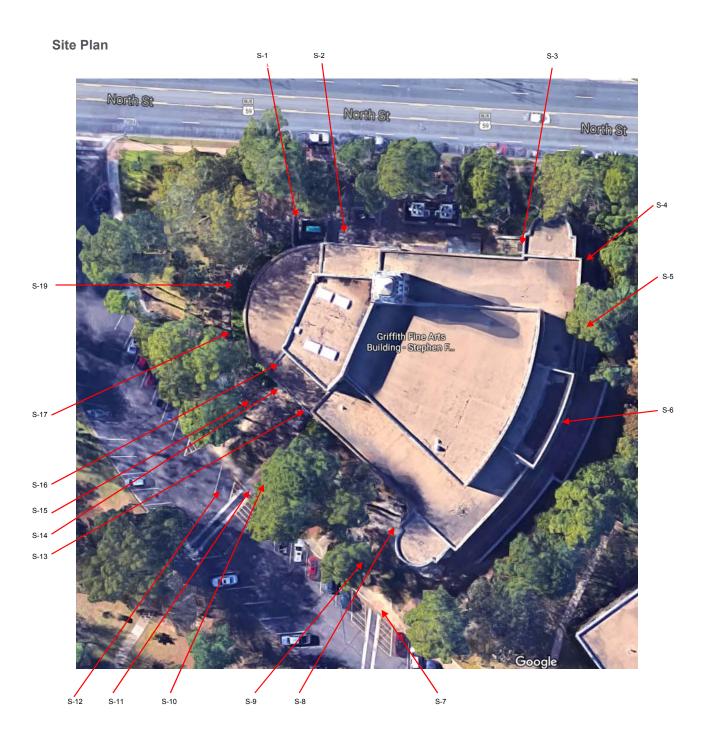
#### **Corrective Action B**

An element is found to not meet the TAS 1994 or TAS 2012 Standards and would be required to be corrected if a renovation occurred within the vicinity or in route of the noncompliant element. For example, if an area was renovated, the restroom(s) that would serve the renovation would be required to be corrected and brought into compliance. The owner shall determine what restroom serves the altered area, however the proximity of the restroom to the renovation must be considered and a user may not pass by a noncompliant restrooms to get to a compliant one.

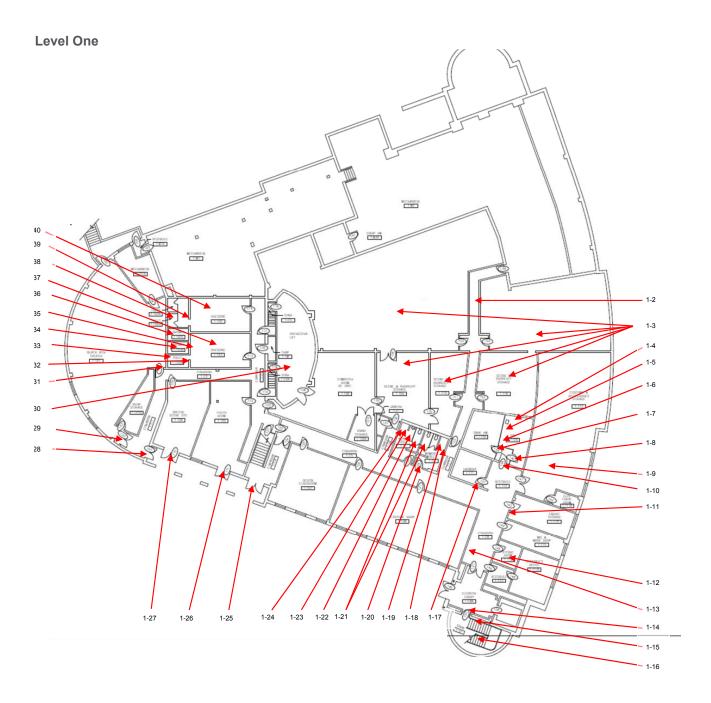
#### **Corrective Action C**

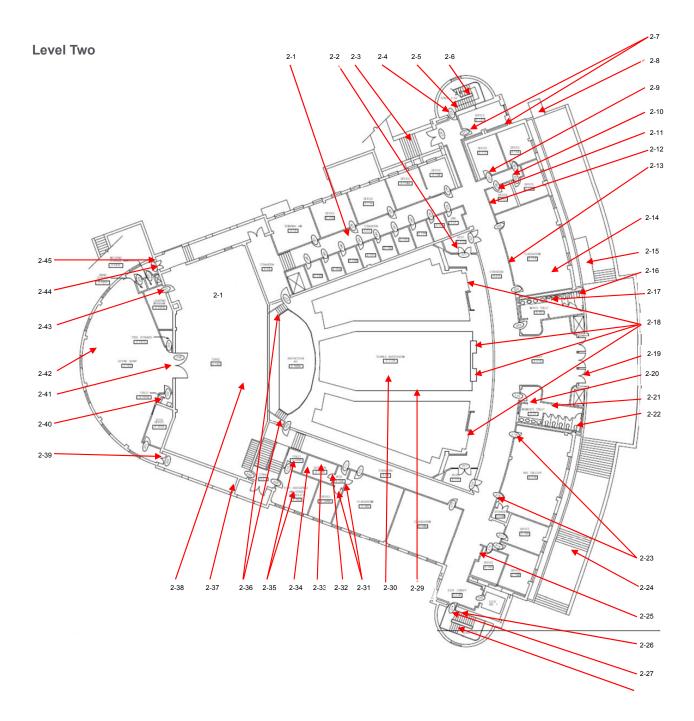
An element is found to not meet the TAS 2012 Standards; however it did meet the TAS 1994 Standards. The element would be allowed to remain in noncompliance indefinitely unless that element is altered or modified in any way.

# **TAS Condition Survey**

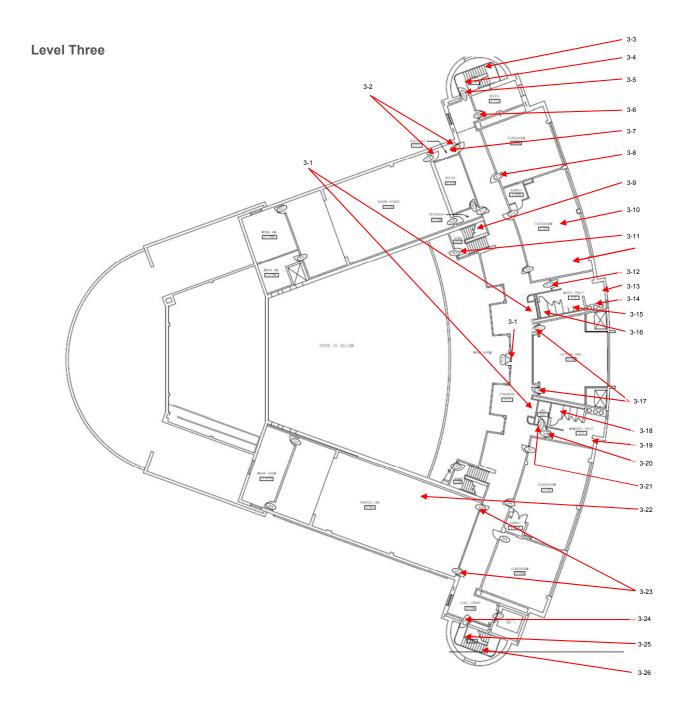


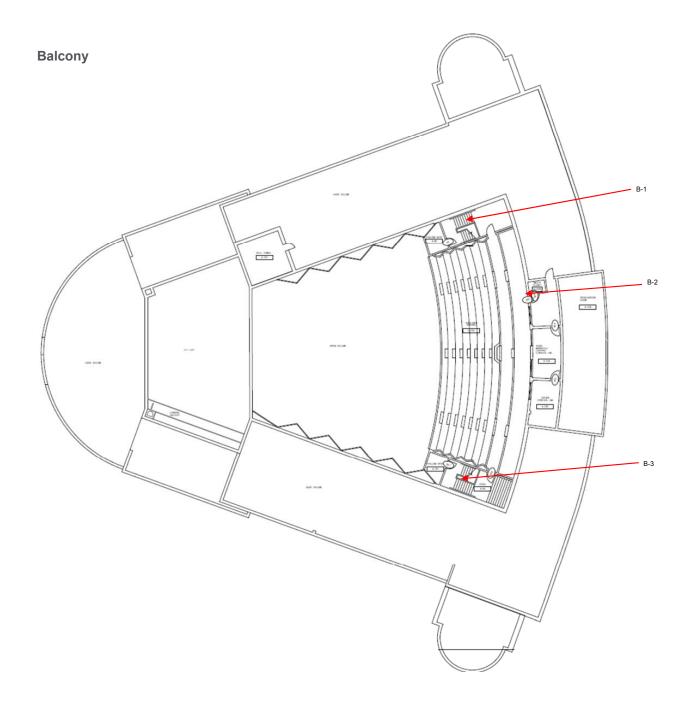
# 3.6 TAS Assessment





# 3.6 TAS Assessment





# TAS Assessment Scope

ITEM	ACTION	DESCRIPTION
TEXAS ACCESSIBILITY STANDARDS Site Plan		
Non accessible Exit.	А	This door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
No-compliant ramps.	А	This door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
See 2-3 for detailed plan and comment.		·
See 2-8 for detailed plan and comment		
See 2-15 for detailed plan and comment.		
See 2-19 for detailed plan and comment.		
Non-compliant curb ramp.	В	Slope at curb ramp too great. 11.2%.
Unfilled wide expansion joint.	В	Sidewalk has a large unfilled expansion joint greater than 1/2". This is the only route from accessible parking to the facility's only accessible entrance.
Sloping walkway.	В	Sidewalk has a slope too great, 6.1% This is the only route from the accessible parking to the facility's only accessible entrance.
Cross slope at circulation path.	В	The curb ramp protrudes into the sidewalk reducing the level walk-way to less than 36" which requires users to travel a across the curb ramp creating a cross slope greater than 2%.
Non-compliant curb ramp.	В	Slope at curb ramp too great. 10.4%.
Non-compliant accessible parking space.	В	Parking space does not have and adjacent access aisle, but denoted as handicapped with decal and signage.
See 2-25 for detailed plan and comment.		
See 2-27 for detailed plan and comment.		
	A	Asphalt has large bump running the entire width of surface.
		011 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		Sidewalk has a slope too great, 6.5%.
, ,		Sidewalk has a slope too great, 6.7%.
	A	Sidewalk has cross slope too great, 4.2%.
	D	All interior door have knob type door hardware.
		Interior corridor slopes greater than 5%.
		Dirt floors are not level and have many holes and bumps.
Washer controls.	A	Washer controls are outside the reach range. It is assumed the washer is for student use and therefore shall be compliant.
Non-compliant sink.	А	Sink does not have knee clearance and is too high, eyewash does not have clearance.
Non-compliant stove.	Α	Controls at stove require users to reach across burners.
Non-compliant door.	В	Door is only 32" wide and has insufficient maneuvering clearance on the pull side; 36" perpendicular to the doorway.
Non-compliant door.	В	Door is only 32" wide and has insufficient maneuvering clearance on the pull side.
Controls outside reach range	Δ	The controls at the mechanized clothing rack are located too high.
· · ·		Door is only 32" wide and has insufficient maneuvering clearance on the pull
Non-compliant door.	В	side.
Non-compliant door.	В	Door has insufficient maneuvering clearance on the pulls side; 13" past the latch.
Dressing Room		Dressing room does not have an accessible bench and hooks are too high.
Lockers	А	No accessible locker provided. No unit provided that has both a shelf and a hook at an accessible height within the same unit.
Non-compliant door.	А	Door has insufficient maneuvering clearance on the pull side, 0" past the latch Door opening force and closing speed too great.
Handrail extension.	Α	Handrail extension at one side at bottom does not extend past the bottom tread.
Handrail height.	А	Handrails are too low, 30".
Non-compliant door.	В	Door is only 32" wide and has insufficient maneuvering clearance on the pull side, 39" perpendicular to doorway.
Lavatory Clear Floor Space (CFS).	В	Paper towel dispenser is located within the required CFS for the lavatory.
Lavatory Olcar Floor Opace (Or O).		Dings at loyatory are synosod
Lavatory pipes.	В	Pipes at lavatory are exposed.
, , ,	B B	Room signage is mounted on the door.
Lavatory pipes. Room signage. Toilet compartments.	В	Room signage is mounted on the door.  No accessible toilet compartments provided in either Men's or Women's Restrooms.
Lavatory pipes. Room signage.	В	Room signage is mounted on the door.  No accessible toilet compartments provided in either Men's or Women's
	Site Plan  Non accessible Exit.  No-compliant ramps. See 2-3 for detailed plan and comment. See 2-8 for detailed plan and comment. See 2-15 for detailed plan and comment. See 2-19 for detailed plan and comment. Non-compliant curb ramp.  Unfilled wide expansion joint.  Sloping walkway.  Cross slope at circulation path.  Non-compliant curb ramp.  Non-compliant accessible parking space. See 2-25 for detailed plan and comment. See 2-27 for detailed plan and comment. Change in level at sidewalk. See 2-28 for detailed plan and comment. Sloping walkway. Sloping walkway. Non-compliant cross slope at walkway  Level One  Non compliant door hardware. Sloping walking surface. Non-compliant surface. Washer controls.  Non-compliant stove. Non-compliant door.  Controls outside reach range. Non-compliant door.  Controls outside reach range. Non-compliant door.  Dressing Room  Lockers  Non-compliant door.  Handrail extension. Handrail height.	TEXAS ACCESSIBILITY STANDARDS Site Plan  Non accessible Exit.  A  No-compliant ramps.  See 2-3 for detailed plan and comment. See 2-8 for detailed plan and comment. See 2-19 for detailed plan and comment. See 2-19 for detailed plan and comment. Non-compliant curb ramp.  B  Unfilled wide expansion joint.  B  Sloping walkway.  B  Cross slope at circulation path.  B  Non-compliant curb ramp.  B  Non-compliant accessible parking space.  See 2-25 for detailed plan and comment. See 2-27 for detailed plan and comment. Change in level at sidewalk.  A  See 2-28 for detailed plan and comment. Sloping walkway.  A  Non-compliant cross slope at walkway  A  Level One  Non compliant door hardware.  B  Non-compliant surface.  Washer controls.  A  Non-compliant stove.  A  Non-compliant door.  B  Controls outside reach range.  A  Non-compliant door.  B  Dressing Room  Lockers  A  Non-compliant door.  A  Handrail extension.  A  Handrail leight.  A

1-25	Non-compliant door.	А	Non-compliant ramp located within the door maneuvering clearance on the pull side. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
1-26	Non-compliant door.	А	Step located at door threshold. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
1-27	Non-compliant door.	В	Non-compliant ramp located within the door maneuvering clearance on the pull side. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
1-28	Non-compliant door.	В	Non-compliant ramp located within the door maneuvering clearance on the pull side. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
1-29	Non-compliant door.	В	Two 24" double doors do not provide compliant clear width at single opening.
1-30	Orchestra Pit.	Α	No accessible route to the Orchestra Pit.
1-31	Non-compliant door.		Insufficient maneuvering clearance on the push side; 2" past the latch with closer and a latch.
1-32	No accessible route to shower room.	В	Step located at opening into the shower room.
1-33	No accessible toilet compartment/water closet.	В	No accessible toilet compartment/water closet within the Dressing Room.
1-34	No accessible shower.	А	Shower has a large curb at threshold, no grab bars, and no compliant controls.
1-35	Mirror too high.	В	Mirror at lavatory mounted too high.
1-36	No accessible shower.	Α	Shower has a large curb at threshold, no grab bars, and no compliant controls.
			Dressing counter have non-compliant knee space, 24" high. No accessible
1-37	Men's Dressing Room	А	bench provided. Clothes rods too high. Entry door opening force and closing speed too great.
1-38	No accessible toilet compartment/water closet.	В	No accessible toilet compartment/water closet within the Dressing Room.
1-39	No accessible route to shower room.	В	Step located at opening into the shower room.
1-40	Women's Dressing Room	А	Dressing counter have non-compliant knee space, 24" high. No accessible bench provided. Clothes rods too high. Entry door opening force and closing speed too great.
	Level Two		opood too groati
2-1	Office doors.	В	All interior doors to Offices in corridor do not provide compliant clear width and have knob type hardware.  Two 30" double doors do not provide proper clear width at a single opening.
2-2	Theater Doors.	В	Automatic door opener not working. Closing speed and opening force too great.
2-3	No accessible route/entrance.	А	Steps at entrance. Sign on door denotes a wheelchair implying this is an accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
2-3	No accessible route/entrance.  Non-compliant door.	A B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.
			accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom
2-4 2-5 2-6	Non-compliant door.  Handrail extension.  Handrail height.	B A A	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".
2-4 2-5 2-6 2-7	Non-compliant door.  Handrail extension.  Handrail height.  Non-compliant door hardware.	B A A B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.
2-4 2-5 2-6 2-7 2-8	Non-compliant door.  Handrail extension.  Handrail height.  Non-compliant door hardware.  Non-compliant ramp.	B A A B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.
2-4 2-5 2-6 2-7 2-8 2-9	Non-compliant door.  Handrail extension.  Handrail height.  Non-compliant door hardware.  Non-compliant ramp.  Non-compliant door.	B A A B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware.  Door is only 32" wide, has knob type hardware and had insufficient
2-4 2-5 2-6 2-7 2-8 2-9 2-10	Non-compliant door.  Handrail extension. Handrail height. Non-compliant door hardware. Non-compliant ramp. Non-compliant door. Non-compliant door.	B A A B B B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware.  Door is only 32" wide, has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.
2-4 2-5 2-6 2-7 2-8 2-9 2-10 2-11	Non-compliant door.  Handrail extension.  Handrail height.  Non-compliant door hardware.  Non-compliant ramp.  Non-compliant door.  Non-compliant door.  Non-compliant door.	B A A B B B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware.  Door is only 32" wide, has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.  Door is only 32" wide and has knob type hardware.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor,
2-4 2-5 2-6 2-7 2-8 2-9 2-10	Non-compliant door.  Handrail extension. Handrail height. Non-compliant door hardware. Non-compliant ramp. Non-compliant door. Non-compliant door.	B A A B B B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.  Door is only 32" wide and has knob type hardware.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor,
2-4 2-5 2-6 2-7 2-8 2-9 2-10 2-11 2-12	Non-compliant door.  Handrail extension. Handrail height. Non-compliant door hardware. Non-compliant ramp. Non-compliant door. Non-compliant door. Non-compliant door. Ticket window.	B A A B B B B A A	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.  Door is only 32" wide and has knob type hardware.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.
2-4 2-5 2-6 2-7 2-8 2-9 2-10 2-11 2-12 2-13	Non-compliant door.  Handrail extension. Handrail height. Non-compliant door hardware. Non-compliant ramp. Non-compliant door. Non-compliant door. Non-compliant door. Ticket window.  Ticket window.	B A A B B B B A A A A	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.  Door is only 32" wide and has knob type hardware.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.
2-4 2-5 2-6 2-7 2-8 2-9 2-10 2-11 2-12 2-13 2-14	Non-compliant door.  Handrail extension. Handrail height. Non-compliant door hardware. Non-compliant ramp. Non-compliant door. Non-compliant door. Non-compliant door. Ticket window. Ticket window. Non-compliant door hardware.	B A A B B B A A B B B B B B B B B B B B	accessible entrance. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.  Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.  Handrail extension at one side at bottom does not extend past the bottom tread.  Handrails are too low, 30".  Doors have knob type hardware.  Slope is too great, 9.1%.  Door is only 32" wide and has knob type hardware and had insufficient maneuvering clearance on the pull side. 3" past the latch.  Door is only 32" wide and has knob type hardware.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.  Ticket window is too high, 43". Counter is a protruding hazard in the corridor, protrudes 6" at 37" high.  Doors to all offices have knob type hardware.

# 3.6 TAS Assessment

2-18	Assembly area wheelchair spaces.	А	10 wheelchair spaces are required and only 4 spaces are provided. Openings for wheelchair spaces are only 60" wide which will only accommodate one wheelchair; 66" wide is required for two wheelchairs. All wheelchair spaces in Theater do not offer shoulder to shoulder alignment and are not located at the same level as the adjacent companion seats.
2-19	Non-compliant entrance.	А	Entry doors have a step at the threshold. This is a public entrance to the facility; 60% of entrances are required to be accessible. In addition, this door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
2-20	Non-compliant door.	В	Door opening force and closing speed it too great.
2-21	Non-compliant storage.	В	Coat hooks are mounted too high, 52"
2-22	Non-compliant water closet	В	Water closet in accessible toilet compartment is located too far from the side wall, 20.5" CL. Water closet seat too high, 20".
2-23	Non-compliant door hardware.	В	Doors have knob type hardware.
2-24	No accessible route.	А	This is the main public entrance of the building and no accessible route provided to the accessible parking.
2-25	Drinking Fountain.	В	No drinking fountain provided for standing users. All fountains are at a spout height of 36".
2-26	Non-compliant door.	А	Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.
2-27	Handrail extension.	А	Handrail extension at one side at bottom does not extend past the bottom tread.
2-28	Handrail height.	А	Handrails are too low, 30".
2-29	Seats with folding armrests.	А	No seats provided with retractable or folding armrests.
2-30	Assistive Listening System.	Α	No assistive listening system provided in Theater.
2-31	Non-compliant door hardware.	В	Doors have knob type hardware.
2-32	Non-compliant door.	В	Door has knob hardware and has insufficient maneuvering clearance on the pull side, 40" perpendicular.
2-33	Non-compliant stove.	А	Controls at stove require users to reach across burners.
2-34	Non-compliant sink.	А	Sink does not have knee clearance and is too high, 36" AFF.
2-35	Non compliant route and bathroom.	А	Non compliant door hardware at restroom door, water closet, lavatory, and bath tub. Step into Dressing Room from corridor
2-36	Non-accessible stairs.	В	Tread and riser dimensions not compliant. No handrails provided.
2-37	Non-accessible route.	А	Step located at opening to exit access.
2-38	Stage Access.	Α	No accessible route to the stage from the seating area when a circulation path exists.
2-39	Non-compliant door.	В	Double 24" doors do not provide sufficient clear width at single opening.
2-40	Non-compliant restroom.	В	Non-compliant restroom. Water closet, lavatory, door and room clearance all non-compliant.
2-41	Stage Shop.	В	No accessible route to Stage Shop. Non compliant steps only.
2-42	Light Loft.	Α	No accessible route to Light Loft. Non-compliant steps only.
2-43	No accessible route.	А	Large drop off into storage room. No route into room.
2-44	Non-compliant door.	В	Insufficient maneuvering clearance on the push and pull side of the door.
2-45	Non accessible Exit.	А	Steps at exit door. This door is designated with an Exit sign. Min 2 accessible means of exit are required from a facility.
	Balcony Level		
B-1	No accessible stairs.	A	Stair treads are 10" deep.
B-2	No accessible route.	А	Stairs to control booth do not have compliant handrails. It is assumed this area is used by students and therefore shall have a compliant route.
B-3	No accessible stairs.	Α	Stair treads are 10" deep.
	Level Three		
3-1	Drinking fountain.	В	No drinking fountain provided for standing users. All fountains are at a spout height of 36".
3-2	Non-compliant door.	Α	Doors have knob hardware. Opening force and closing speed too great. Insufficient maneuvering clearance on push and pull side of doors.
3-3	Handrail height.	А	Handrails are too low, 30".
3-4	Handrail extension.	А	Handrail extension at one side at bottom does not extend past the bottom tread.
3-5	Non-compliant door.	В	Door has insufficient maneuvering clearance on the pull side, 0" past the latch.  Door opening force and closing speed too great.
3-6	Non-compliant door hardware.	В	Door has knob type hardware.
3-7	Non-compliant maneuvering clearance.	В	Maneuvering clearance at door not level. Floor slopes 8.3% within the required maneuvering clearance.
3-8	Non-compliant doors in series.	В	Doors have opening force and closing speed too great. Doors in series do not have sufficient clearance between doors.
3-9	Vertical hazard.	В	Area under stairs create a vertical hazard where head height is less than 80".

# 3.6 TAS Assessment

3-10	No Accessible Sound Booth	В	No accessible route into sound booth. Ramp is located in the maneuvering
3-11	Non-compliant door hardware.	В	clearance of the sound booth door.  Door has knob type hardware.
	Non-compilant door nardware.		Door has insufficient maneuvering clearance on the push and pull side. Door
3-12	Non-compliant door.	В	opening force and closing speed too great.
3-13	Non-compliant storage.	В	Coat hooks are mounted too high, 62"
3-14	Non-compliant lavatory.	В	Paper towel dispenser within the required clear floor space. Lavatory adjacent to the paper towel dispenser is the only lavatory that can be considered accessible since there is a water tank located within the knee clearance of the other lavatory.
3-15	Non-compliant urinal.	В	Urinal is too high, 23" AFF. Urinal does not have sufficient clear width, 24" wide.
3-16	Toilet compartments.	В	No accessible toilet compartments provided in Men's Restrooms.
3-17	Non-compliant door.	В	Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.
3-18	Toilet compartments.	В	No accessible toilet compartments provided in Men's Restrooms.
3-19	Non-compliant storage.	В	Coat hooks are mounted too high, 66"
3-20	Non-compliant door.	В	Door has insufficient maneuvering clearance on the push and pull side. Door opening force and closing speed too great.
3-21	Non-compliant door hardware.	В	Door has knob type hardware.
3-22	Non-compliant doors.	В	Slopes located within the door maneuvering clearance. Opening force and closing speed too great.
3-23	Wheelchair spaces.	А	No wheelchair spaces located in assembly area with fixed seats.
3-24	Non-compliant door.	А	Door has insufficient maneuvering clearance on the pull side, 0" past the latch. Door opening force and closing speed too great.
3-25	Handrail extension.	А	Handrail extension at one side at bottom does not extend past the bottom tread.
3-26	Handrail height.	A	Handrails are too low, 30".

3.7 Theater Planning Assessment

# **Theater Planning Assessment**

### Turner Auditorium - Orchestra Pit Lift

The orchestra pit lift is vital for the functions of the auditorium and the theatre department. The lift connects the stage, audience floor, orchestra pit level, and basement storage. It is used on a daily basis for moving equipment vertically in the building. The lift platform, lifting columns, and controls are out of service warranty and are maintained by local elevator company when needed. Safety door interlocks will only stop the lift when triggered. It is possible to open doors when the lift is not at the proper levels. When working below the lifting platform in the mechanical pit, there is no way to verify the motors have been disconnected. With the lift controller it is difficult to stop the platform at the proper levels. There are missing safety systems that a new orchestra pit lift system would require.

#### Recommendations:

Remove the existing and install a new orchestra pit lift system. This work will need to be designed and documented for a general contractor to bid. The scope of work will require electrical service to various lift control panels, motors, and control stations. In addition to the resurfacing of orchestra pit walls.

### **Turner Auditorium - Rigging System**

The stage system is comprised of double purchase counterweight linesets with spot lines for cable management of stage electrics operated from an elevated locking rail backstage right. A fire curtain is installed on the proscenium wall, controlled by a system of out of balance counterweight. It is manually reset at the stage and gridiron levels. A counterweighted paint frame is installed backstage left (currently being used as storage). A loading gallery is located above the locking gallery. The gridiron extends from wall to wall above the stage.

There are additional rigging systems used to support the lighting structures above the orchestra and audience areas. Two drum winches are used to lower lighting structures above the orchestra. A third drum winch is used to lower a lighting structure above the audience. A counterweight system is used for power cable management to all three locations.

The stage rigging system has been repaired as needed over time. Rigging hardware has been added by various individuals without regard to rating or safety factors for overhead lifting. This makes it difficult to trace equipment back to a manufacturer should a failure occur. Pieces of rigging hardware show signs of rust. Head blocks, loft blocks, and mule blocks were made of a cast or cut metal. Pieces of steel framing for mounting additional rigging equipment are mounted to the gridiron atop of rigid electrical conduit and have not been properly painted to prevent the current amount of rusting. Due to the nature of a double purchase counterweight system, twice as much weight needs to be loaded onto the rigging arbor to achieve balance. This increases the amount of time and effort needed to reweight a lineset during production change overs. This can become problematic at certain times of year when the temperature at this level becomes too high. The stage right wall (rigging wall) is not perpendicular to the proscenium wall. At the gridiron this results in needing additional muling blocks for every lineset. The loft blocks, at the gridiron level, have been moved multiple times, creating liftline fleet angle issues between the head block, mule block and the loft block on several linesets.

The lighting rigging system has required some scavenging of parts to keep essential operations. Control components have been taken from one of the working winches to repair the essential winch above the orchestra pit area. The counterweighed cable management has required frequent inspections to check for damaged cable. The cable has been replaced several times. The limit switches on the winches have been difficult to set after cable repairs. When limits are not properly set, cables can be stretched and pulled out of connection. This damage is not known until the cable in energized.

#### Recommendations:

The stage rigging requires replacing counterweight arbors, head blocks, muling blocks, loft blocks, tension blocks, and all fiber and wire rope. Identify the most frequently used linesets and replace counterweight rigging for motorized. Install a motorized rigging control system. Remove the existing fire curtain and determine if adding architectural enhancements can reduce the height of the stage house to an elevation that would not require a fire curtain. Remove the existing paint frame and all rigging components.

The lighting rigging system control can be tied into the stage rigging motorized control. The user will be able to set limits at the control console. Remove counterweighted cable management and install sprung cable reels. Remove the lighting truss and cable management above the audience and install liftline terminations that allow for quick connection to future equipment.

### **Turner Auditorium - Performance and House Lighting System**

The lighting system consists primarily of conventional dimming racks for performance and house lighting. This system has been recently updated. Lighting circuits are distributed to overhead stage electrics, four side slot positions on the audience walls and two catwalk positions. There are locations that are difficult to access and often cables are used to redistribute the circuits to other locations. The lighting control network has distribution to all areas of the auditorium. Emergency lighting for the stage and audience was changed during some of the upgrade work.

### Recommendations:

Review emergency lighting levels with electrical engineer and ensure the dimmer rack responds properly in emergency power conditions. Add entry panel to catwalk location to control work lighting at this level.

## **Turner Auditorium - Auditorium Seating**

Auditorium seating is on two levels. The orchestra seating level has three sections, left, center, and right. There is no cross aisle. The orchestra seating is on a single slope. Potential wheelchair locations are at the back of the orchestra in all three sections. Although the first row is accessible there were no apparent wheelchair locations. Balcony seating is accessed from a pair of stair wells from the third floor. The balcony seating is split into four sections. Seats at this level are riser mounted. There are no wheelchair locations as there is no elevator or lift accessing the area. Two rows of seating do not have padded backs. The seat back is formed plywood with an upholstered foam cushion. The seat pan is metal with upholstered foam cushion.

The conditions of the seats are fair to poor. There is cosmetic damage to most of the seats. Various methods have been used to re-secure the seats to the orchestra floor. The seats have considerable noise when operated.

#### Recommendations:

Replacing existing seats with new self-rising seats. Add aisle lighting on end standards where needed. In the event that a new Control Booth (see page 90, under "Turner Auditorium" section) is added to the front edge of the Balcony, then a new elevator will be required to access the balcony area and control area.

#### **Turner Auditorium - Orchestra Shell Enclosure**

At the time of observation, the theatre department was on the stage and the enclosure could not be evaluated.

# 3.7 Theater Planning Assessment

# **Downstage Theatre - Seating**

Approx. 100 loose upholstered folding chairs located on seating platforms. The chairs have no armrests and are not easily connected together.

### Recommendations:

In the event a new Black Box theater is not added to the project, replace existing seating with new upholstered folding loose seating. New seating will be gangable and provide armrests.

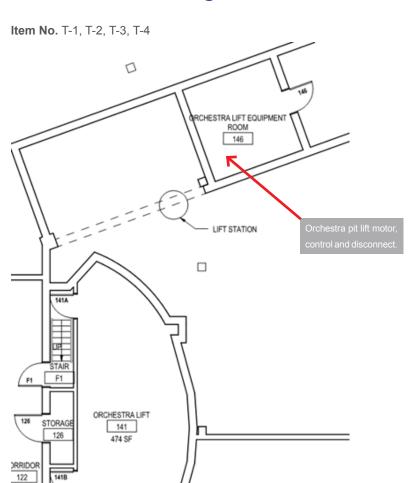
# **Downstage Theatre - Platforming**

Seating platforms are built from plywood tops on 2x4 wooden frames. There are three sections with three levels. Each level has chair stops to prevent the chair from being slid off the platform. There are no hand rails or guards around the platform.

### Recommendations:

Return the existing platforms to the theatre department. Install new seating platforms with chair stops and railings.

# **Theater Planning Condition Survey**

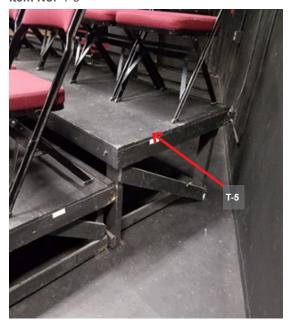


**Description** Orchestra Lift 141 and Equipment Room 146

**Action** Abandon the existing orchestra pit lift motors, controls, and disconnect. Install new orchestra pit lift platform, motors, controls, disconnects, and interlocks

# 3.7 Theater Planning Assessment

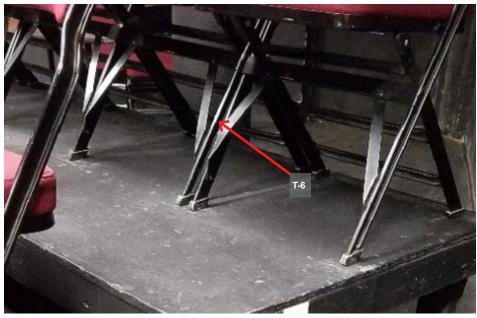
Item No. T-5



**Description** Black Box Theater 132

Action Demo existing audience seating risers and install new equipment with railings

Item No. T-6



**Description** Black Box Theater 132

Action Loose audience chairs are not gangable. Replace with new audience chairs that are gangable and have arm rests

Item No. T-7



**Description** Black Box Theater 132

Action Demo existing incandescent performance lighting. Install new LED performance lighting system

# 3.7 Theater Planning Assessment

Item No. T-8



**Description** Stage 250, Locking Gallery

Action Replace hardware rope with rated fiber rope

Item No. T-8

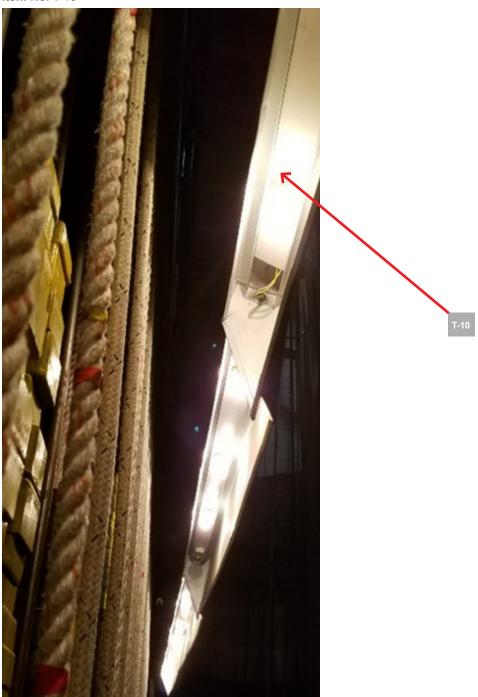


**Description** Stage 250, Locking Gallery

Action Replace all purchase lines

# 3.7 Theater Planning Assessment

Item No. T-10



**Description** Stage 250, Locking Gallery

Action Demo existing lighting fixture. Install two color LED index strip light

Item No. T-10

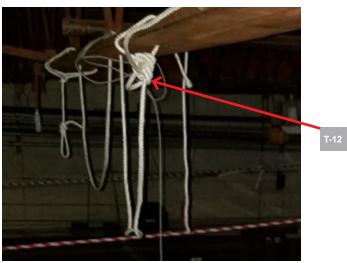


**Description** Stage 250, Gridiron

Action Replace head blocks, loft blocks, and multi-line mule blocks

Item No. T-11: No photo, see spreadsheet

Item No. T-12

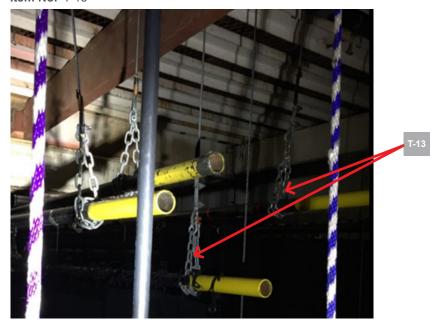


**Description** Stage 250, Gridiron

Action Add rigging rope loft blocks as necessary

# 3.7 Theater Planning Assessment

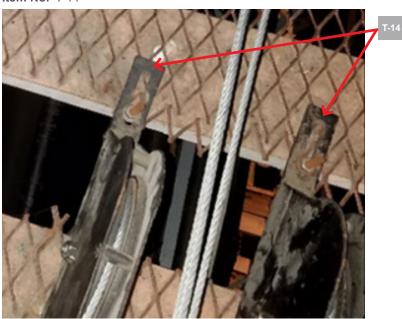
Item No. T-13



**Description** Stage 250, Gridiron

Action Replace all utility wire rope and terminations

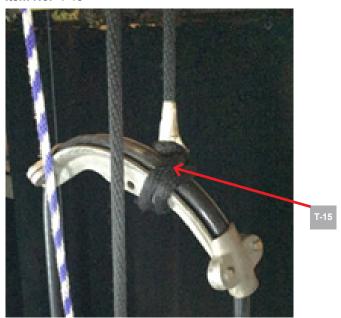
Item No. T-14



**Description** Stage 250, Gridiron

Action Replace all rigging hardware that shows signs of corrosion

Item No. T-15



**Description** Stage 250, Gridiron

Action Replace cable saddles and lifting terminations

Item No. T-16

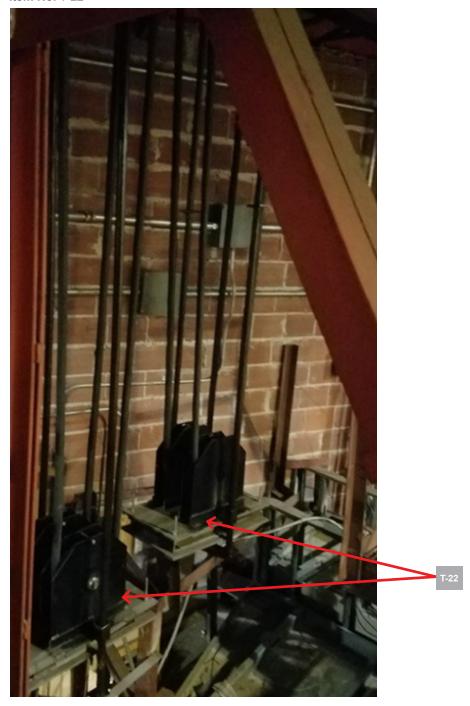


**Description** Stage 250, Gridiron

Action Replace rigging mounting

# 3.7 Theater Planning Assessment

Item No. T-22



**Description** Catwalk Access 408

Action Demo existing cable management. Install cable reels

Item No. T-24



**Description** Catwalk Access 408

Action Demo existing Rigging motor controllers and add to new stage rigging system

# Theater Planning Assessment Scope

# Action Key

- 1 Items of Immediate Safety Concern
- 2 Items of Normal Concern
- 3 Items of No Safety Concern or Operational in Nature

KEY	ITEM	ACTION	LOCATION
	THEATER PLANNING		
	Level One		
TP-1	Inadequate size for six people, a rolling costume rack, a dressing area, and fitting area.	4	Fitting room 104
TP-2	Door swings into space taking up sqft.	4	Fitting room 104
TP-3	Portions of the room currently being used for storage.	3	Fitting room 104
TP-4	Needs private drapable area for dressing.	4	Fitting room 104
TP-5	Fluorescent lighting is adequate for tasks, not for color rendition of fabrics	2	Fitting room 104
TP-6	Ventilation is not sized for six people. This room gets stuffy quickly	4	Fitting room 104
TP-7	Room is being used for instruction, production, and storage.	3	Hat room 105
TP-8	Insufficient area for the production and teaching of wig styling and construction.	4	Hat room 105
TP-9	Fluorescent lighting is adequate for tasks, not for modeling wigs	2	Hat room 105
TP-10	Areoles are used frequently.	2	Hat room 105
TP-11	Shelving is in adequate to correctly store fabrics in bins and on bolts.	3	Fabric room 106
TP-12	The single row of moving costume rack allows for longer gowns to drag across the floor	3	Costume and Accessories Storage 107
TP-13	Some areas of room are not adequately lit for tasks.	3	Costume and Accessories Storage 107
TP-14	Exhaust vents passively pull air out of room.	2	Dye Room 110
TP-15	Fluorescent lighting adequate for task lighting, not for color rendition of fabrics.	2	Dye Room 110
TP-16	This is a wet room. Floor should drain.	4	Dye Room 110
TP-17	There is a lack of room to allow for air drying of fabrics.	4	Dye Room 110
TP-18	This is a wet room. Floor should drain.	4	Laundry 112
TP-19	Clothes dryer vents into room.	2	Laundry 112
TP-20	Room has exposed piping and hvac ductwork through out.	2	Hat Prop Storage 136
TP-21	Lighting is not adequate in task areas.	2	Hat Prop Storage 136
TP-22	Room is not enclosed and dust is able to collect on to stored items.	2	Hat Prop Storage 136
TP-23	This room is used for production and storage.	2	Scene & Prop Storage 137
TP-24	Large air duct divides the space and is only 5' above the floor.	2	Scene & Prop Storage 137
TP-25	The room is not enclosed. There is exposed ceiling structure and sprinkler pipes.	2	Scene & Prop Storage 137
TP-26	Room is created from digging out the ground.	4	Scene Storage 142
TP-27	HVAC ducts create obstacles in the room.	2	Scene Storage 142
TP-28	Room is not enclosed and dust is able to collect on to stored items.	2	Scene Storage 142
TP-29	Room is created from digging out the ground.	4	Scene Storage 143
TP-30	HVAC ducts create obstacles in the room.	2	Scene Storage 143
TP-31	Room is not enclosed and dust is able to collect on to stored items.	2	Scene Storage 143
TP-32	Sump Pump is open and running water is audible	1	Scene Storage 143
T-1	Orchestra pit lift disconnect is not in sight of the lift motors. Install new orchestra pit lift motors, frame, controls, and safety devices.	1	Mechanical A 144
T-2	Orchestra pit lift controls are not fully functional. Same as T-1.	1	Mechanical A 144
TP-33	HVAC ducts create obstacles in the room.	2	Scene & Prop Storage 138
TP-34	Room is not enclosed and dust is able to collect on to stored items.	2	Scene & Prop Storage 138
TP-35	Wiring going to the dimmer rack is exposed and not isolated from the storage areas.	1	Storage 139
TP-36	HVAC ducts create obstacles in the room.	2	Storage 139

TP-36	HVAC ducts create obstacles in the room.	2	Storage 139
TP-37	Room is not enclosed and dust is able to collect on to stored items.	2	Storage 139
T-3	Orchestra pit door open when pit lift is not at the level of the door. Same as T-1.	1	Storage 139
TP-38	Fluorescent lighting is damaged.	1	Orchestra Lift 141
TP-39	Opening in floor is not properly secured.	1	Orchestra Lift 141
T-4	Orchestra lift is frequently used to move items from storage to the stage. Same as T-1.	1	Orchestra Lift 141
TP-40	Orchestra pit access is not ADA accessible.	1	Stair F1
TP-41	Stair has no emergency lighting.	1	Stair F1
TP-42	Orchestra pit access is not ADA accessible.	1	Stair E1
TP-43	Stair has no emergency lighting.	1	Stair E1
TP-44	Dressing rooms are not adequately sized for number of performers.	3	Men and Women Dressing, Restroom and Shower 127 and 125
TP-45	Dressing rooms are not ADA accessible.	1	Men and Women Dressing, Restroom and Shower 127 and 125
TP-45	Make-up mirror only allows for a single person in front of each station.	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-46	Make-up mirror lights go along the top and sides.	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-47	Countertop is highly reflective.	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-48	Countertop storage is under the countertop and does not have adequate height	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-49	There is no storage above the make-up mirrors.	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-50	Make-up room HVAC is not sufficient for the number of	2	Men and Women Dressing, Restroom and Shower 127 and 125
TP-51	people. Often a box fan is used in the room.  Room lighting is not sufficient for task lighting. Make-up	2	Men and Women Dressing, Restroom and Shower 127 and 125
TP-52	mirror lights are often used when not necessary.  Restrooms and showers are not ADA accessible	1	Men and Women Dressing, Restroom and Shower 127 and 125
TP-53	Storage for classroom and production supplies is in	4	Men and Women Dressing, Restroom and Shower 127 and 125
TP-54	outside the room.  Dressing rooms, shower, and toilets are not adequate for	1	Men and Women Dressing, Restroom and Shower 127 and 125
	the capacity of the productions.	2	
TP-55 TP-56	No way to communicate from green room to stage.	3	Green Room 124 Green Room 124
	Full length mirrors along one wall can be distracting.  Corridor and stairs to stage are to narrow for large		
TP-57	costumes.	3	Stair D
TP-58	The drafting tables are seating two people per table. The room is not large enough for the required class size.	3	Design Studio 120
TP -59	This room is trying to be a design studio and production lab space. This requires the movement of drafting tables when needed as a production lab space.	3	Design Studio 120
TP-60	There is little space for an instructor to stand and no space to setup demonstrations.	3	Design Studio 120
TP-61	The windows have shades and are always pulled down. The location of this room is not well suited in the building.	3	Design Studio 120
TP-62	There is only a small built-in shelving unit. Students have to bring all supplies and store nothing in the classroom.	3	Design Studio 120
TP-63	Dimming unit sitting on shelf in corner of room. Has items	2	Design Studio 120
TP-64	stored on top.  Electrical power receptacles only runs along the perimeter of the room. Electrical cords for sewing machines are laying across travel paths. This is a trip	1	Costume Shop 117
	hazard.		
TP-65	This space is used for classroom and production activities. All the equipment is tightly packed into the room with little space to move around.	2	Costume Shop 117
TP-66	Space under cutting tables is not maximized for storage.	4	Costume Shop 117
TP-67	Only 120v power is available. Some sewing equipment	4	Costume Shop 117
TP-68	could use 220v power.  There is only one small full length mirror.	4	Costume Shop 117
TP-69	Storage bins are stacked atop of each other. Difficult to	4	Costume Shop 117
	get to bottom bin without unstacking.  Room is not adequately sized for stage and number of		·
TP-70	desired audience.	3	Black Box Theater 132

# 3.7 Theater Planning Assessment

TP-71	The room configuration doesn't allow for FOH production operation.	3	Black Box Theater 132
TP-72	The ceiling is low and production lighting fixtures are	1	Black Box Theater 132
T-5	directly above audience members heads.  Audience seating platforms do not have railing. Install	1	Black Box Theater 132
1-5	seating riser platform system with railings.  Audience seating chairs are not gangable. Install portable	1	DIACK DOX THEATER 132
T-6	seating system with hardware that allows connection between seats, include arm rests.	1	Black Box Theater 132
T-7	Incandescent production lighting is not appropriate for this ceiling height. Add circuits, data distribution, and fixtures for LED production lighting.		Black Box Theater 132
TP-73	The room is not ADA accessible.	1	Black Box Theater 132
TP-74	HVAC ducts are right at door height.	1	Black Box Theater 132
TP-75	The floor was covered with a hard board sheet good.  Need to determine if the subfloor is sprung.	2	Black Box Theater 132
	Level Two		
TP-76	Recessed down lighting did not cover all areas of the	3	VIP Dressing Room 247
TP-77	room.  Room feels like a dressing room/storage room	4	VIP Dressing Room 247
TP-78	Make-up mirror and lights are out of date.	2	VIP Dressing Room 247
TP-79	Restroom is not ADA accessible.	1	VIP Dressing Room 247
TP-80	Dressing Room is not ADA accessible to the stage.	1	VIP Dressing Room 247
TP-81	Dressing Room needs intercom connection to stage.	4	VIP Dressing Room 247
TP-82	Dressing Room needs an interior design.	4	VIP Dressing Room 247
TP-83	Downstage right door exits to a corridor with direct access to outside. This allows sounds from the exterior to bleed onto the stage when doors are open.	3	Stage 250
TP-84	Downstage right door has a step down inside the threshold.	1	Stage 250
TP-85	Shop floor elevation is lower than the stage elevation. This requires steps in the door ways. This is not ADA compliant.	3	Stage 250
T-8	At the loading gallery, some ropes used for drop boxes are not properly rated for overhead lifting. Replace all rigging equipment.	2	Stage 250
T-9	The purchase line on the counterweight rigging	1	Stage 250
TP-86	There are no guards at ladder openings.	1	Stage 250
T-10	Index strip light uses A-lamps. Replace with two color	3	Stage 250
T-11	LED fixture. Head blocks and multi-line mule blocks are cast or cut	1	Stage 250
T-12	steel. Same as T-8.  Nylon rope is being used as purchase line sag bar. Same	2	Stage 250
	as T-8.  Many batten liftline terminations are not properly	_	
T-13	terminated. Same as T-8.	1	Stage 250
T-14	Loft block attachment shows rust on bolt. Same as T-8.	1	Stage 250
TP-87	The last rung of ladder access to gridrion is blocked by steel kick plate	1	Stage 250
T-15	Cable saddles for SO cable management are not properly secured to purchase line. Same as T-8.	2	Stage 250
TP-88	The rigging system for the paint frame needs to be replaced. Determine if the Owner wants to keep this or if all equipment can be demoed.		Stage 250
T-16	Structures for mounting rigging equipment are sitting atop rigid electrical equipment. Same as T-8.	2	Stage 250
TP-89	At several locations the steel mesh for the gridiron surface has been cut away and not replaced.	1	Stage 250
T-17	Verify that all chains and shackles used for over head rigging is rated for overhead lifting. Same as T-8.	1	Stage 250
	Over the years, conduits have been added to the wall		
TP-90	around the back stage areas. This has hidden many devices that were previously mounted to the wall.	1	Stage 250
TP-91	Verify the need for a proscenium fire curtain. The fire curtain rigging system will need to be updated to a motorized operation.	1	Stage 250
TP-92	Stage floor elevation is not same as receiving area.	2	Stage 250

T-18	Loading and un-loading counterweight on rigging arbors is difficult and hazardous if not done properly. Reduce the amount of times personnel is required to perform task. Demo counterweight rigging for the line sets that get most use and replace with a motorized rigging system. These would include the stage electrics and orchestra shell battens.		Stage 250
TP-93	No sound isolation between shop and stage. No loud activity can happen in shop when rehearsals or performances are on the stage.	2	Scene Shop 251
TP-94	The scene shop is used for dual purposes. Small scenic work and lighting storage.	4	Scene Shop 251
TP-95	The sink in the restroom is used to clean out paint brushes.	3	Scene Shop 251
TP-96	Provide proper sawdust collection from built-in equipment.	2	Scene Shop 251
TP-97	Built-in stairs for stage access will require a ramped access for the stage. An able bodied person can go from the audience to the stage, so will a person with disability, within the room.	1	Orchestra Pit Lift
TP-98	Larger items can fall into the orchestra pit mechanical spaces below.	1	Orchestra Pit Lift
TP-99	The exits on the left and right of the pit do not exit to a sound and light lock, this requires crash bar hardware on the auditorium side of the door. This can be a distraction if exiting during a performance.	1	Orchestra Pit Lift
T-18	Audience seats are showing wear and tear. Some of the cushion foam has flatten. Replace all auditorium seating and end standard aisle lighting.	2	Turner Auditorium 204
TP-100	Wheelchair spaces in the back of the auditorium don't meet the spirit of the ADA code.	1	Turner Auditorium 204
TP-101	The second side lighting slot is inaccessible and not used for production lighting.	2	Turner Auditorium 204
T-19	Lighting circuits that are in the second side lighting slot	3	Turner Auditorium 204
TP-102	The lighting truss closest to the catwalk is inoperable.  The truss can be seen from the balcony seats	3	Turner Auditorium 204
T-20	The lighting circuits on the lighting truss closest to the catwalks are not used. Repurpose the lighting circuits elsewhere in the building. Demo existing cable management.	3	Turner Auditorium 204
TP-103	Emergency lighting has been changed after equipment upgrades. Verify what house lighting fixtures are used in emergency lighting systems.	1	Turner Auditorium 204
TP-104	Some auditorium house lighting fixtures are lighting the walls and not the walking paths below.	2	Turner Auditorium 204
TP-105	Architectural lighting fixtures are dated and would benefit from an update, possibly and LED color changing fixture.	4	Turner Auditorium 204
TP-106	The auditorium floor tile and carpet is showing wear.  Door at the back of the auditorium have door stoppers	4	Turner Auditorium 204
TP-107	installed at bottom of the door. This will prevent door from proper closing.	1	Turner Auditorium 204
TP-108	Move electrical outlet, under the seats in the rehearsal position, into floor box.	2	Turner Auditorium 204
TP-109	Vestibules should be lit at proper levels at all times.	1	Turner Auditorium 204
TP-110	Lobby is not adequately sized for audience capacity.  Restroom facilities are not proportional to the audience	3	Lobby 201
TP-110	capacity. This creates long lines between breaks in performances.	3	Lobby 201
	Level Three		
TP-111	The audience capacity is not sufficient for a main stage or student production.	3	Theatre Lab 303
TP-112	The temporary tables and make-up stations should be replaced with built-in facilities.	3	Theatre Lab 303
TP-113	Control room platform needs railings.	2	Theatre Lab 303
TP-114	The room does not allow for the following: actor movement classes, rehearsal space for stage productions, stage combat classes, storage of rehearsal props or furniture.	2	Studio/Seminar 306

# 3.7 Theater Planning Assessment

TP-115	The floor is not sprung for proper support for actor movement classes.	2	Studio/Seminar 306
TP-116	The ceiling is to low for full movement rehearsals.	2	Studio/Seminar 306
TP-117	The room is not sound isolated for many of the vocal and movement exercises.	2	Studio/Seminar 306
TP-118	Tiered seating risers doesn't allow for group classroom activities.	3	Lecture 309
	Level Four Front face of balcony is large enough for a fixed		
TP-119	production lighting position and video projector.	3	Balcony Seating 400
TP-120	There are various empty electrical boxes along the wall of the first row.	_	Balcony Seating 400
TP-121	Verify the railing at the end of the aisle on the balcony rail meets code.	3	Balcony Seating 400
TP-122	There is NO ADA access to balcony seating and control booth.	1	Balcony Seating 400
T-21	Same notes as auditorium chairs. Same as T-18.	2	Balcony Seating 400
TP-123	Balcony exits to a corridor stair case. This requires crash bar hardware on the door. This can be a distraction when exiting during a performance.	1	Balcony Seating 400
TP-124	Verify the down lighting in this area is part of emergency lighting.	1	Balcony Seating 400
TP-125	First three rows used as in house mix position above seats. This requires limited balcony seating when in use.	1	Balcony Seating 400
TP-126	Replace aisle step lighting. Verify these fixtures are on emergency power.	1	Balcony Seating 400
TP-127	Provide proper electrical receptacle for follow spot light on the front wall.	2	Follow Spot 401 and 402
TP-128	Change recessed lighting fixture for track mounted LED lighting fixtures.	3	Follow Spot 401 and 402
TP-129	All rooms - replace recessed task lighting with dimmable LED track lighting	3	Stage Manager/Lighting Control Rm 403, 404 and 405
TP-130	Control booth access door faces the stage. Move door.	3	Stage Manager/Lighting Control Rm 403, 404 and 405
TP-131	Access to catwalks requires going outside building and on to the roof. Catwalk access is necessary at all times of the day and should not require going outside the building.	1	Stage Manager/Lighting Control Rm 403, 404 and 405
TP-132	Required clearances around electrical equipment should be indicated on the floor to prevent equipment from being stacked in these areas.	3	Bell Tower 407 and Catwalk Access 408
T-22	FOH truss electric cable management requires constant inspection and repair. Demo existing cable management and install cable reels.	1	Bell Tower 407 and Catwalk Access 408
TP-133	Side lighting slot is accessible by wooden ladder mounted to the wall.	1	Bell Tower 407 and Catwalk Access 408
TP-134	Over the years, conduits have been added. Verify that all cables and conduit connections are properly connected.	2	Bell Tower 407 and Catwalk Access 408
T-23	During equipment upgrades, some electrical receptacles have been abandoned. Remove all plug box receptacles that are abandoned.	2	Bell Tower 407 and Catwalk Access 408
T-24	Rigging controllers for the FOH truss lighting systems have been pieced together over time to keep them operational. Replace rigging motor controls.	1	Bell Tower 407 and Catwalk Access 408
T-25	Catwalk lighting is controlled from stage lighting system in the auditorium. This can leave staff on the catwalks without the ability to turn on lights. Add local control to each catwalk.	1	Bell Tower 407 and Catwalk Access 408
TP-135	This area will require emergency lighting.	1	Bell Tower 407 and Catwalk Access 408

# **Lighting and Acoustics Assessment**

### Overview

The following is an assessment of the technical systems currently installed in the Griffith Fine Arts Building. The facilities include in this assessment include: Turner Auditorium, the Downstage Theater, Recording Studio, Sound Lab, and the Griffith Fine Arts Building.

The technical systems in use in the Griffith Fine Arts Building have been in service for several years while their current configurations should be reviewed to improve their operational and overall performance.

### **Turner Auditorium**

The audio system currently installed in Turner Auditorium is fundamentally an analog design that has received component add-on's over the years resulting in today's hybrid design. The other two elements that need to be considered is a reorganized system configuration and the addition of a permanent video presentation system.

The Audio Control Booth: The existing audio control booth houses a 20-year old analog audio console, support equipment, playback speakers, and two equipment racks that house the sound systems audio amplifiers and support electronics. Considering the high level of amplifier fan noise present in the Audio Booth, it is almost impossible for the operator to hear issues like the onset of feedback before it occurs. Therefore, our first assessment recommendation is to remove the audio console and associated equipment from the Audio Booth and to convert this space into the Theater's AV Equipment Room. Given the current sound system infrastructure, this change would be cost effective and provide Turner Auditorium with a much need technology hub for Turner Auditorium.







The New Audio Booth: When the existing Audio Booth and AV Equipment are separated, it will be necessary to establish a new permanent location for the theater's audio console and other audio equipment. Our assessment recommendation would be to create a permanent front-of-house position in the balcony. This would allow the audio engineer to be located within the same acoustic space as the sound system and dramatically improve the audio systems performance quality for the audience.

The existing Theater's analog audio console is approximately 20-years old and although it is still operating correctly, our assessment recommendation would be to retire this console and replace it with a new digital audio console. The key reasons for this are its physical size and the level of technology that is built into the firmware of a digital console. When the digital audio console is moved out into the balcony, the size of the space will be dictated by size of the console and associated equipment racks. In the analog days, every device was unique meaning that if you wanted to add a processor for a microphone you needed a standalone box. Digital audio consoles have all the necessary audio processing built into the software for each of the 32, 40, or more input channels. This provides the audio engineer

# 3.8 Lighting and Acoustics Assessment



a complete pallet of audio tools to deliver the best sound possible but without having to buy all the individual units. Additionally, with all the audio processors being built-in, the need for several equipment racks next to the console is avoided and the footprint of the front-of-house position is reduced.

Based upon our measurements and listening tests, the Theater's existing loudspeaker speaker system does not provide uniform coverage across the audience. In addition, it lacks the dynamic range necessary to support normal theatrical and musical productions. Our assessment recommendation would be to design and virtually model a new loudspeaker system while taking into consideration any acoustical and/or architectural changes that may occur within the theater. In addition, this virtual work would allow the sound designer and architect the opportunity seamlessly blend the loudspeakers into the design. A new loudspeaker design would include main left and right speakers, front fill speakers, as well as speakers for the under-balcony, balcony, and very low-frequency.

The stage in the Turner Auditorium currently includes basic connectivity for audio and this should be maintained. Our assessment recommendation would be to expand the number and location of audio connections as part of any stage upgrades.

To assist with event and production and overall stage organization our assessment recommendation is to add a permanent Stage Manager's Position on stage right. Currently, there is an informal position on stage right but a permanent position would allow for centralized technology hub for video, lighting, audio, communications, and back-of-house. The image below shows the current position the stage Manager uses for show control.



To establish Turner Auditorium as a campus facility that can support a wider range of event types, our assessment recommendation is to add a permanent video presentation system to the facility. This would include a properly sized large format front projection screen, video projector, multiple connection locations for PC and digital media players, robotic video cameras for recording and streaming, and a control position for the video operators in the balcony. This system can be added in phases provided the proper video infrastructure and AV network are provided.

The Balcony Video & Lighting Control Room: The center section of the Balcony Control Booth is currently configured to support lighting and the event production staff. Our assessment recommendation would be to maintain the lighting and production staff and to add a video control position. The video position would control cameras, record and/or stream events, provide computer support for lectures, and generate graphics in support of events.



The Balcony Video & Lighting Control Room: The center section of the Balcony Control Booth is currently configured to support lighting and the event production staff. Our assessment recommendation would be to maintain the lighting and production staff and to add a video control position. The video position would control cameras, record and/or stream events, provide computer support for lectures, and generate graphics in support of events.

# The Downstage Theater

The Downstage Theater is an intimate 80 seat venue with a low rather low ceiling & grid. This space also has a complex set of acoustical issues. Although the Theater doesn't require a sound reinforcement system for speech and if the space is maintained in its current location, our assessment recommendation would be to install a reasonable quality sound system for special effects and production support.



3.8 Lighting and Acoustics Assessment

### The SRT Lab

The Sound Lab is a small, acoustically acceptable, easy to operate, and properly equipped. Our assessment recommendation for the Sound Lab would be to update the audio recording computers and software to maintain its current quality and to add AV network capabilities. By adding AV network capabilities, the Lab could utilize other networked spaces in the facility for voice-over work, recording tracks, or other audio for video needs. This would also mean that the Sound Lab could maintain its current space while expanding its capabilities.

### The SRT Studio

The current Recording Studio utilizes a large space that was not designed for recording. Typically, a recording studio will have excellent acoustics, higher ceilings, a very quiet HVAC system, isolated rooms for drums and vocals, excellent isolation from the outside world, and a dedicated control room.

The existing studio equipment is currently housed in portable cases as if it were used primarily for remote recording. Overall, the equipment quality is good but the studio itself needs to be reconstructed or relocated. Our assessment recommendation for the equipment would simply be to keep the firmware of the studios core devices current and to establish a proactive maintenance plan to ensure the portable equipment operates properly over the long-term.

If a permanent recording studio were to be designed, the existing equipment would provide an excellent starting point for the program. Our assessment recommendation would be to equip the new studio with the proper technical infrastructure, AV network connectivity, new control room monitors, and the necessary talkback, playback, and cue systems required in a functioning recording studio.

The space being used for the Recording Studio is not an ideal location which means there are only two ways to resolve the physical plant and that is to either 1) find a new room that can be reconfigured to fit the type of recording being done or 2) to redesign the existing space to provide a Control Room, voice-over booth, and a main studio. Having walked the building, there are spaces that could be built into a studio but cost of renovating a new or existing space should be evaluated from a financial, practical, and academic viewpoint. The best recommendation would be to move this entire department into a new customized facility suitable for flexibility and growth.

### **Griffith Fine Arts Building**

When considering the technological future of the Griffith Fine Arts Building it is important to know that AV systems are now primarily designed around a series of network based devices that use a network centric infrastructure. The second point to be considered is that the design of audio and video equipment is now firmware based thereby providing an architecture that permits equipment to be kept state-of-the-art by utilizing software updates as opposed to buying a new piece of equipment. Our assessment recommendation for the Griffith Fine Arts Building would be establish a Master Technology Specification for AV and Presentation Technology to ensure that as each of the facilities listed above is updated, it would be designed and/or reconfigured in accordance with GFAB Standards.

## **Acoustics Summary**

General acoustics assessments were completed for the existing SRT Studio (315), Turner Auditorium (204), Black Box Theater (132), and Sound Lab (111) within the Griffith Fine Arts Building on September 23, 2016. These assessments addressed the quality of the room acoustics, airborne sound isolation between the outside environment and/or adjoining spaces, and control of background noise levels from building systems – all relative to the current and intended uses of the spaces. Measurements of reverberation times (RT60s) and background noise levels were completed to support the assessment conclusions where applicable. A short summary of our findings and recommendations is presented below. These findings and recommendations address only the acoustics issues described above.

• SRT Studio (315): The current space is inadequate for its intended use as a music recording space. It would be better placed in new construction where the building design could be tailored to match the needs of the facility. In the current space, RT60s were relatively short (less than ½-second at mid-high frequencies) and the frequency spectrum was relatively flat. This condition might be effective for some recording sessions, but may be quite limiting for others. Ideally, this room would be double-height to allow for more flexibility with respect to the natural acoustics and acoustic treatments, potentially benefiting a larger cross-section of users. Additionally, the large, exterior window glass produces unwanted specular reflections in the main recording space that can adversely affect rehearsal, performance, and recording.

Background noise levels in the main recording space, associated primarily with traffic noise intrusion, exceeded NC-35 – well above the NC-25 limit. Significant design and construction efforts would be required to improve the exterior wall and glazing assemblies in order to mitigate background noise levels. Additionally, airborne sound isolation between the main recording space and adjacent uses, including offices and conference rooms directly below, is a concern, and could require significant design and construction efforts to improve.

Turner Auditorium (204): Existing RT60s ranged from 1.0-1.3 seconds at a majority of seating locations (orchestra, under-balcony, balcony) with an appropriate frequency response shape. The current acoustic character of the space is indicative of a multi-purpose auditorium suitable for a wide variety of performing arts productions – including music, dance, and theater. The acoustics are not tailored to maximize the enjoyment of any given production type over another, but are a compromise to satisfy all.

If the future uses of the auditorium are to be primarily music oriented (i.e., symphony, band, choral), and the focus will be moved toward unamplified music performance, then RT60s should be lengthened by substituting acoustic diffusion surface treatments for the existing acoustic absorption treatments at rear wall areas (orchestra and balcony). Otherwise, we have no recommendations for room acoustics improvement.

Measured background noise levels were NC 35, but only exceeded NC-30 in the 250 Hz octave band. Background noise levels were higher than the recommended maximum of NC-25, but there were no specific, elevated background noise sources observed. A review of the Auditorium HVAC systems would be appropriate to determine any potential background noise mitigation efforts.

- Black Box Theater (132): Like the recording studio discussed above, this space is inadequate for its current and
  proposed future uses; the theater would be better placed in new construction where the building design could
  be tailored to match the needs of the facility. The current theater is adjacent to a mechanical room, which was
  responsible for measured background noise levels of NC 35-40 above the maximum design criterion of NC-30.
- Sound Lab (111): This space is adequate for its intended uses, but does exhibit minor flaws with respect to background noise and room-to-room sound isolation both a function of the HVAC system design. Small changes to the supply-air ductwork design would be expected to mitigate the current acoustic deficiencies.

3.8 Lighting and Acoustics Assessment

### SRT Studio (315) Room Acoustics

The current studio space is approximately 982 sq. ft., single-story in height (approximately 10-foot ceiling height), producing an acoustic volume of approximately 9,820 cu. ft. Finishes include acoustic tile ceiling, vinyl tile floor, and gypsum board walls with some acoustic absorption/diffusion panel treatment. The exterior, north wall of the space includes a significant amount of window glazing.

The studio should exhibit relatively neutral acoustic character appropriate for the broadest spectrum of musical acts, recording techniques, etc. Given the size of the room, reverberation times in the 0.6-0.7 second range, across the entire audible sound spectrum, would be appropriate. Measured reverberation times in the existing room were in the range of 0.4-0.6 seconds, somewhat shorter that desired. This was primarily a function of the nearly 100% acoustic tile ceiling (excessive sound absorption). The frequency response of the space was relatively flat, as desired. Reflected sound energy from the large areas of exterior glass was not obvious during our measurements, but specular reflection from these surfaces could certainly be problematic during critical recording sessions.

With respect to room acoustics, the existing studio includes the following significant deficiencies.

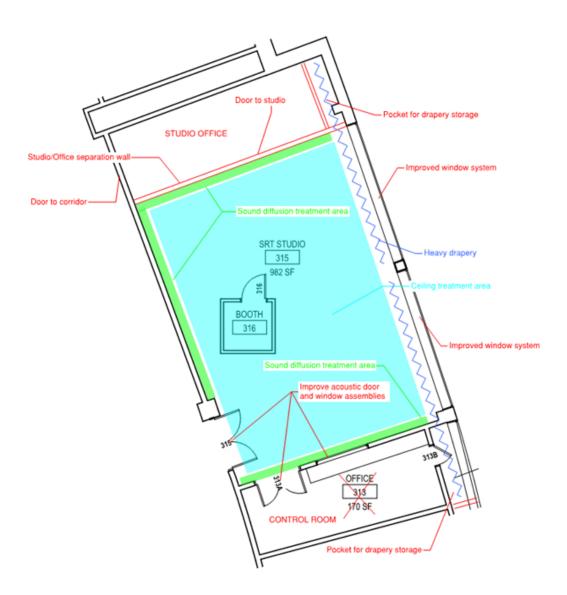
- Lack of volume/ceiling height: Additional ceiling height and room volume would provide flexibility with respect to room acoustic treatments and adjustments to the reverberation characteristics. A double-height space would be more appropriate.
- Poor room surface treatments: The room includes a nearly 100% acoustic tile ceiling which defines its acoustic character; that is, the room lacks acoustic character due to the excessive sound absorption at the ceiling. Sound absorption/diffusion wall treatments are relatively sparse, and offer relatively little benefit.
- Specular reflections from exterior window glazing: The large, north window contribute specular sound reflection of significant energy. This reflected sound energy would tend to color sound recordings in a negative way. The window reflections likely limit the recording techniques available to users.

Assuming that the current space will be retained as a music recording studio, we offer the following recommendations for improvement with respect to room acoustics.

Room volume/ceiling height: If possible, remove the suspended acoustic tile ceiling and open the space to the roof deck above. This would expose mechanical ductwork, piping, etc. to view, but would also increase the volume of the room, providing more flexibility with respect to "tuning" the room acoustics.

Acoustic surface treatments: Cover the underside of the exposed roof deck with an acoustic absorption treatment. This treatment should provide a noise reduction coefficient (NRC) of no less than 0.95. A spray-on cellulose or glass fiber insulation (e.g., K-13) of 3-inches thick would be appropriate. From the roof deck, suspend sound diffusion "clouds" over the primary recording areas. Each cloud should be 16-32 sq. ft. in area. These clouds should be arrange so that there are areas of coverage and areas open to the sound absorption at the roof deck – an overall ceiling coverage of 50-60% (approximately 500-600 sq. ft.). Consider use of two-dimensional sound diffusion products from RPG, Inc. for this application (e.g., Omniffusor, Waveform Bicubic G). At gypsum board walls, install a one-dimensional sound diffusion treatment over no less than 50% of the available wall surface in the main recording areas (i.e., no less than 250 sq. ft.). Again, many RPG, Inc. sound diffusion products would be appropriate for this application (e.g., Modffusor, Waveform Spline). Install a heavy drapery system that may be used to cover the exterior windows when needed to control reflections or add sound absorption (reduce reverberation) in the recording space. This system would have the potential to cover most of the north wall of the facility. The floor should remain a hard, sound-reflective surface, and portable floor rugs may be used to help define recording areas and absorb high-frequency sound if needed.

Please see the graphic mark-up on the following page illustrating the recommended room acoustics changes.



# **Airborne Sound Isolation**

The north wall of the facility includes a significant amount of window glazing which, due to age and composition, is a significant flanking path for traffic noise transmission into the studio. To provide an appropriate amount of sound isolation from exterior to interior, these windows should be replaced, and an additional window assembly should be installed to the inside of the exterior unit with an offset of no less than 6-inches. The window construction might include a 1" storefront-type exterior system ( $\frac{1}{4}$ " glass,  $\frac{1}{2}$ " a.s.,  $\frac{1}{4}$ " glass) combined with a  $\frac{1}{2}$ " laminated window assembly with a minimum of 6-inches between the exterior and interior glass panes. The overall window construction should provide sound transmission class (STC) 50+ sound isolation performance. Of course, the new window system would not be operable.

The studio does not currently have an isolated control room. To remedy this, we recommend establishing a control room space in the location of the existing office; the office could be relocated to the west side of the facility as shown

## 3.8 Lighting and Acoustics Assessment

above. The locations of the studio office and control room could be reversed, but we believe that the recommended layout makes the most of the existing door and interior window locations. New wall construction should provide minimum STC 55+ sound isolation performance; for example, standard 3-5/8" metal stud framing with two layers of 5/8" gypsum board on each side with acoustic batt stud cavity insulation. New or upgraded doors and windows should provide laboratory measured STC 50+ sound isolation performance. These units should be sourced from a specialty manufacturer such as Noise Barriers, LLC (www.noisebarriers.com).

Vertical sound isolation between the studio and office/conference room spaces on Level 2 below is a concern, and may have already presented scheduling difficulties regarding concurrent use of the adjacent spaces. Ideally, this problem would be mitigated with the addition of an isolated concrete floor slab within the studio. The isolated floor system would be composed of a rubber isolation layer (typically 1-inch thick) sandwiched between the structural slab and a minimum 4-inch thick concrete topping slab. However, the building has not necessarily been designed to handle the weight of such a system, and therefore an isolated flooring system of this type would not likely be appropriate. Less substantial isolated flooring systems may be considered, but may not provide adequate sound isolation improvement to warrant the expense.

## **Building Systems Noise Control**

Currently, background noise in the studio is dominated by traffic operations on North Street. It is our belief that a majority of the traffic noise energy is being transmitted through the existing exterior windows, and that the window improvements presented above would remedy the situation. This background noise mitigation measure will not make the room "soundproof", but would be expected to improve the situation significantly.

Noise from the building's mechanical systems were not audible or measureable in the studio space. That's not to say that they do not contribute to the background noise environment, but they do not generate significant noise energy relative to the North Street traffic noise source. Once the exterior window system is improved, we will have a better understanding of noise produced by the building systems. However, we do not anticipate a significant noise contribution from these systems.

#### **Turner Auditorium (204) Room Acoustics**

The project space is a fan-shaped, 1,000+ seat (650+ floor, 350+ balcony) performing arts theater that currently hosts music, dance, and theatrical productions. The estimated volume of the space is 220,000 cu. ft. This produces a volume per seat (cu. ft./seat) of approximately 220 (approximately 6.2 cu. meters/seat), which is appropriate for a concert/performance hall.

Auditorium room finishes include gypsum board sound reflectors at the ceiling, gypsum board and wood panel wall construction with a linear wood acoustic absorption treatment at rear wall areas and a "zig-zag" gypsum board sound diffusion surface at upper side walls, and concrete floors with carpet in the aisles. The dominant source of sound absorption in the space, and the surface that defines the RT60s, is the fully upholstered seating.

Existing RT60s in the vacant auditorium were measured to be in the range of 1-1.3 seconds at most seats (orchestra, under balcony, and balcony seating), with a linear frequency response curve. These measurement results are indicative of a multi-purpose auditorium suitable for the presentation and enjoyment of a wide variety of performing arts productions, and are not tailored to any one art form; in other words, the current acoustics are a compromise to satisfy the needs of a majority of the arts community. Reverberation times may be slightly shorter in the occupied space due to an incremental increase in sound absorption from the occupants, but the expected change would be relatively small. As a music concert hall or symphony hall, the acoustics of the space are a bit on the dry side (lacking reverberation); for example, RT60s desirable for symphonic music would be in the range of 1.6-2.2 seconds. This is not necessarily a deficiency with respect to the current use of the space, but could be considered one if the room is transitioned to more of

a music-only venue - especially music performance with little or no sound system support.

If the auditorium is to be transitioned as described above, we recommend a change to the rear wall sound absorption treatment in favor of a deep sound diffusion treatment. This substitution would lengthen RT60s in the space and provide for more enveloping reflected sound energy. As mentioned for the studio space, RPG, Inc. sound diffusion products would be appropriate for this application; specifically, the QRD 734 product is recommended. The chosen product or sound diffusion surface design should provide broadband sound diffusion (extending below 500 Hz), and would therefore require considerable depth (9-inches or more).

### **Airborne Sound Isolation**

No airborne sound isolation problems were documented.

# **Building Systems Noise Control**

Measured background noise levels in the auditorium were NC-35, but only exceeded NC-30 in the 250 Hz octave band. Still, background noise levels exceed the NC-25 maximum recommended value for this critical listening space. No specific building systems noise sources were obvious during our site visit and measurements, but it is likely that the auditorium HVAC system is the dominant source of background noise.

To mitigate background noise levels in the auditorium, we recommend a more thorough review of the HVAC system for the space. This review may help to identify specific sources of noise and appropriate improvements to mitigate background noise levels.

### Black Box Theater (132) Room Acoustics

The project space is a wide fan-shaped, 80- seat performance theater located on Level 1 directly below the auditorium scene shop. The theater is single-story height (as defined by the location of the scene shop), and includes no specific room acoustics treatments/surfaces.

The room does not exhibit any specific bad behavior with respect to room acoustics.

### **Airborne Sound Isolation**

The theater is located directly adjacent to a mechanical room to the west, and is directly below the auditorium scene shop – both noisy spaces. From a purely acoustics perspective, the location of the theater is incompatible with its use. The shallow nature of the room and the intervening ductwork, plumbing, conduit, etc. make significant vertical sound isolation improvements impossible. And lateral sound isolation improvements at the mechanical room wall would be very difficult given penetrations associate with ductwork, plumbing, etc., which amount to sound flanking paths between the spaces. Therefore, we cannot offer any improvement recommendations that would allow the theater to remain in its present space. We recommend moving this use to a more acoustically friendly environment.

## **Building Systems Noise Control**

Measured background noise levels in the theater were NC-35. This exceeds the NC-30 criterion. It is our opinion that the short-coupled nature of the neighboring mechanical equipment (mechanical room to the west) and the project space would make it quite difficult and expensive to mitigate mechanical systems noise levels. Like the airborne sound isolation problem discussed above, the problem associated with the control of mechanical system noise points to the relocation of this facility.

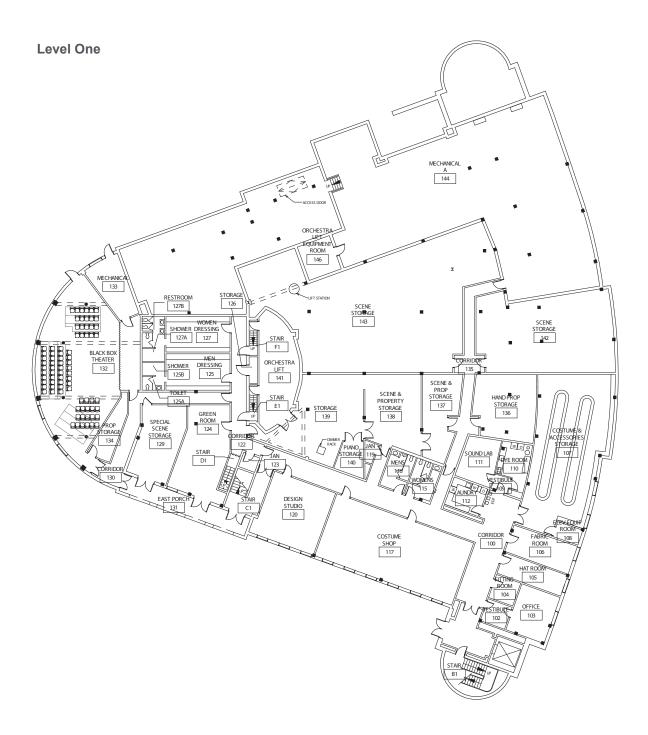
3.8 Lighting and Acoustics Assessment

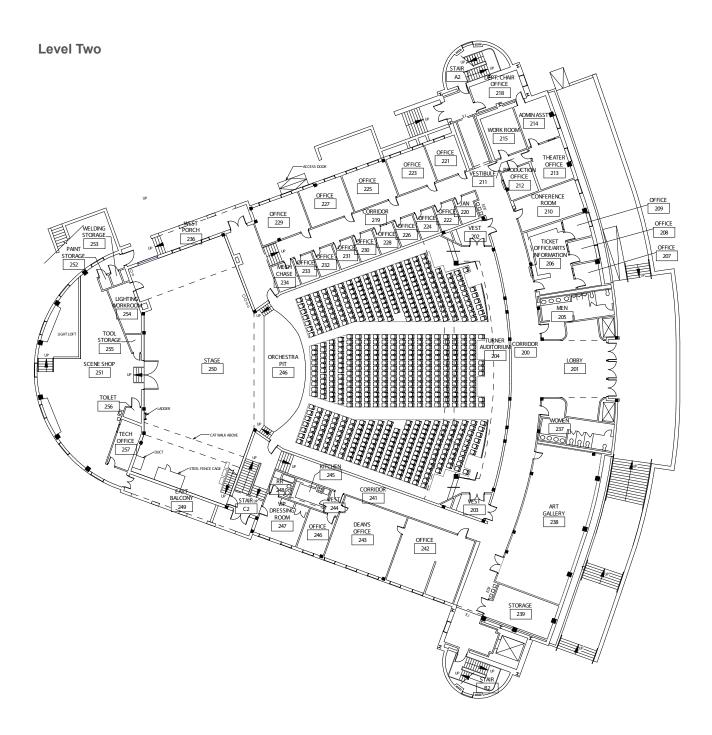
## Sound Lab (111)

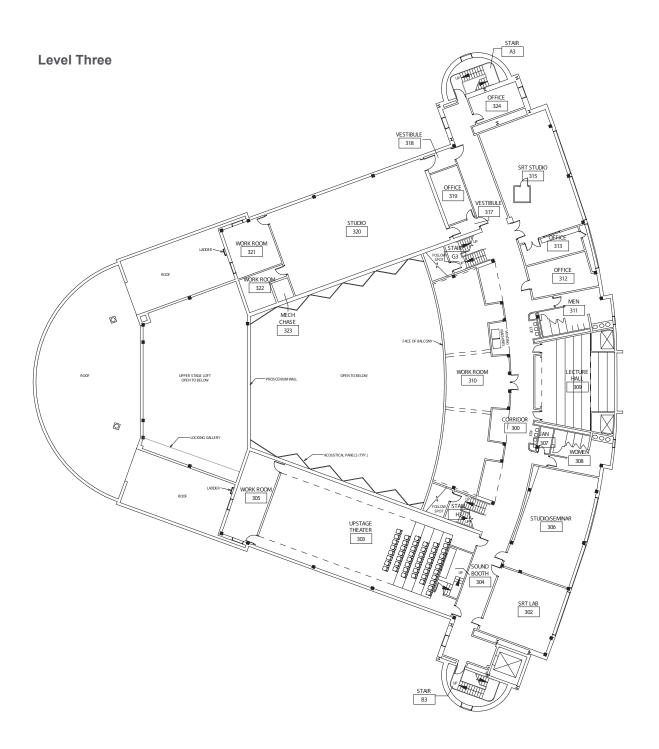
Measured background noise levels in the Lab were NC-25, but only exceeded NC-20 at the 500 Hz and 1,000 Hz octave bands; the room is very quiet. However, there have been complaints of air noise at the room's HVAC supply diffuser, in addition to cross-talk sound transmission from adjacent rooms (laundry, dye room) via the HVAC supply-air ductwork.

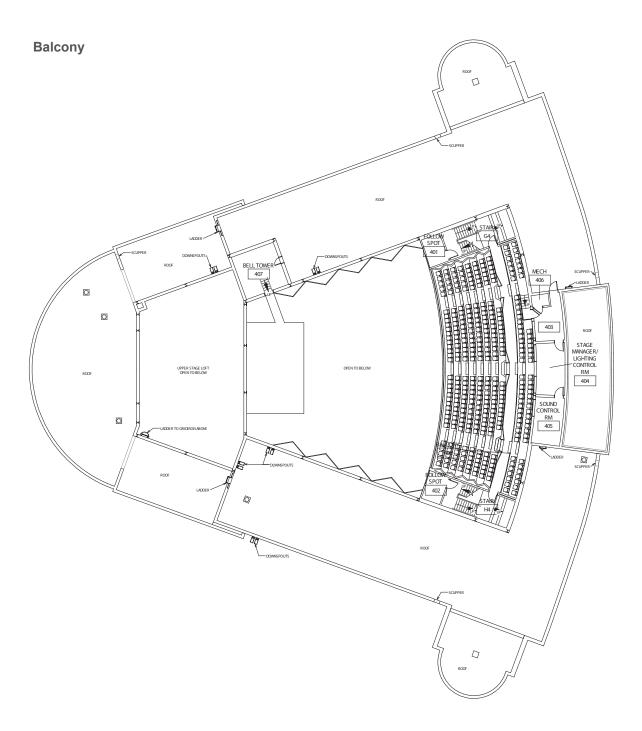
To mitigate the generated noise at the room's HVAC supply diffuser, it may be appropriate to add a second supply-air take-off and a second supply-air diffuser. This would reduce the air velocity at the individual diffusers, and therefore reduce the noise generated by the air movement over the diffuser vanes. To mitigate the cross-talk sound transmission problem, it may be appropriate to re-route supply-air ductwork so that there is significantly more duct length between the connected rooms. Sound would be "absorbed" in this additional duct length, and therefore less sound transmission between spaces would occur. It may also be possible to achieve this sound absorption/attenuation by replacing the existing supply-air ductwork connecting the adjacent rooms with an acoustically lined version (1" duct lining minimum).

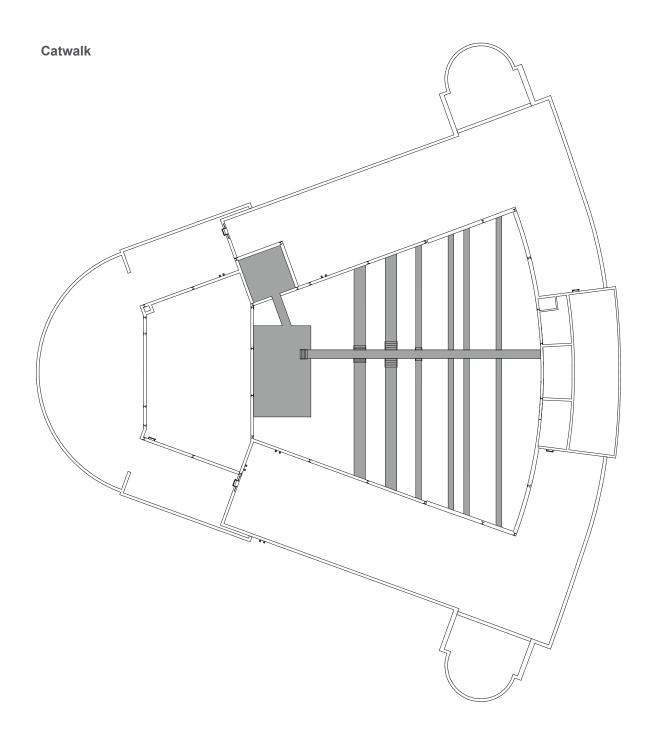
## Plans of Existing Facility

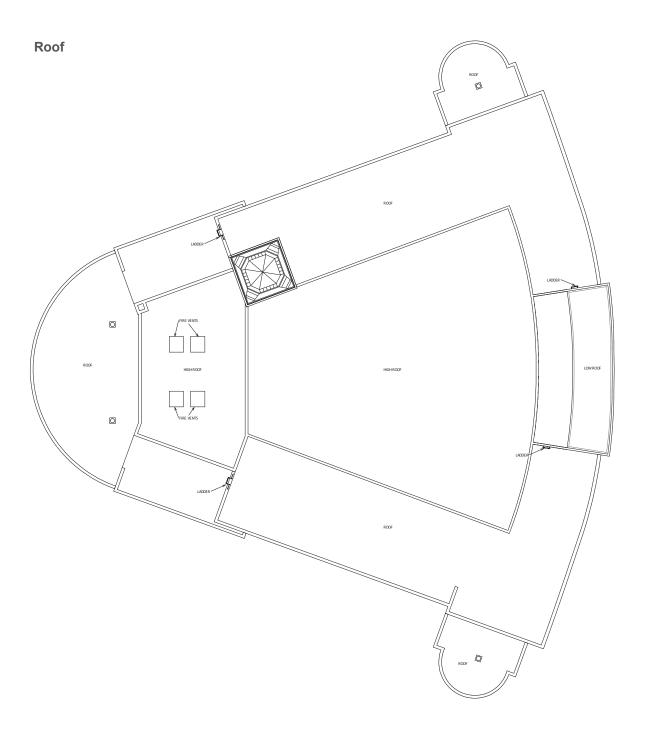




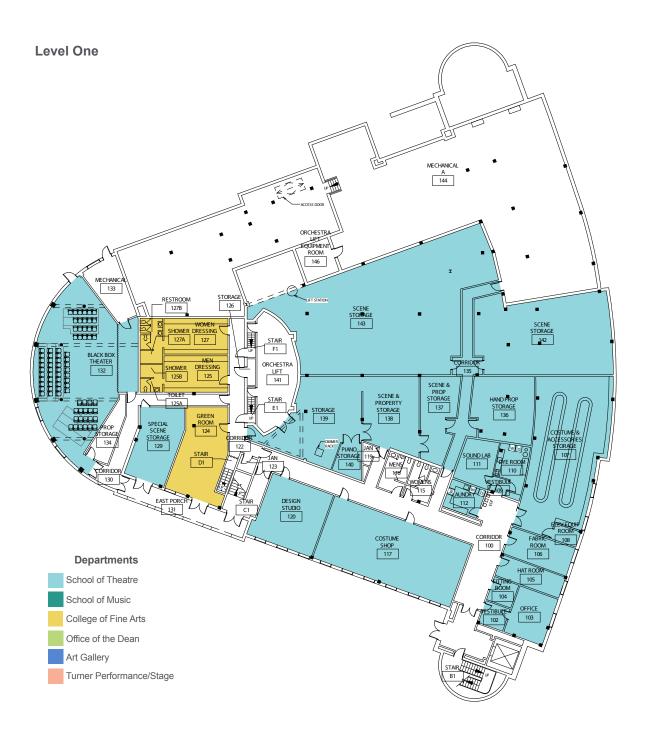




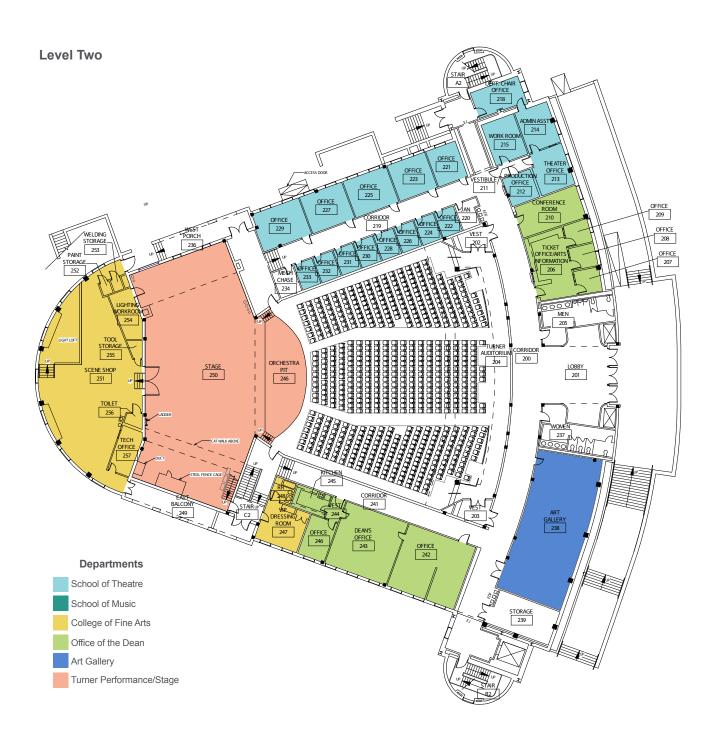


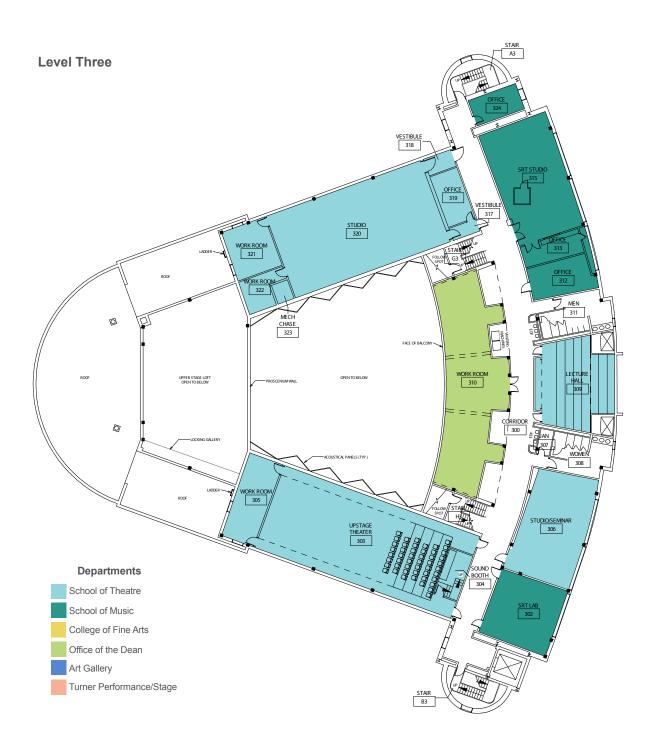


## Departmental Plan Diagrams

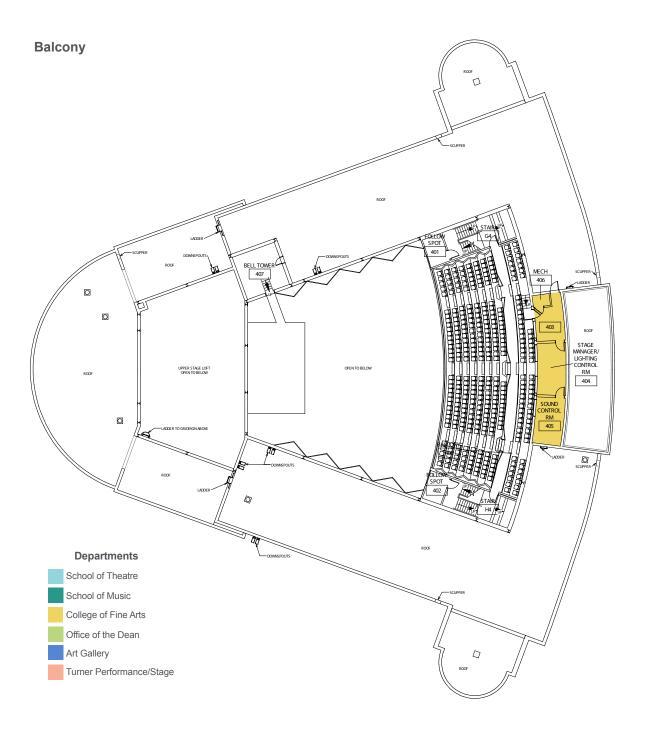


#### 4.2 Departmental Area Diagrams



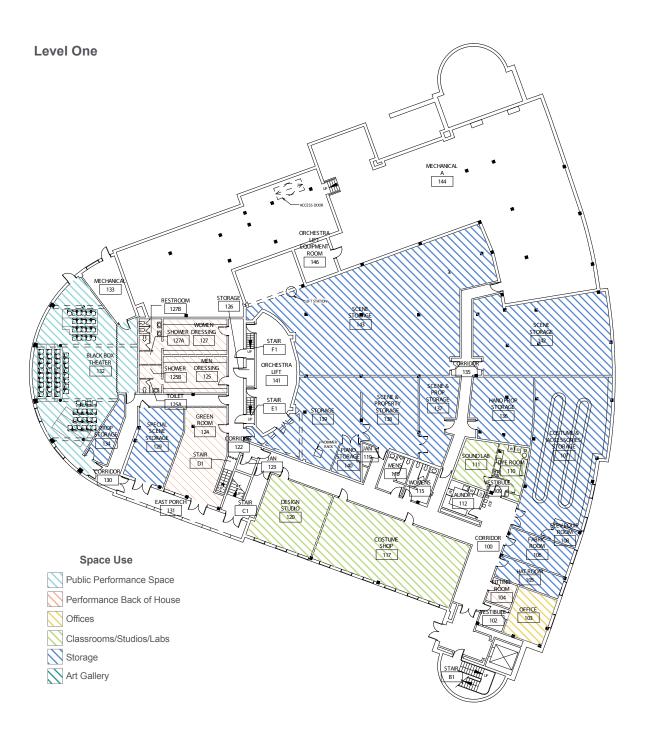


#### 4.2 Departmental Area Diagrams

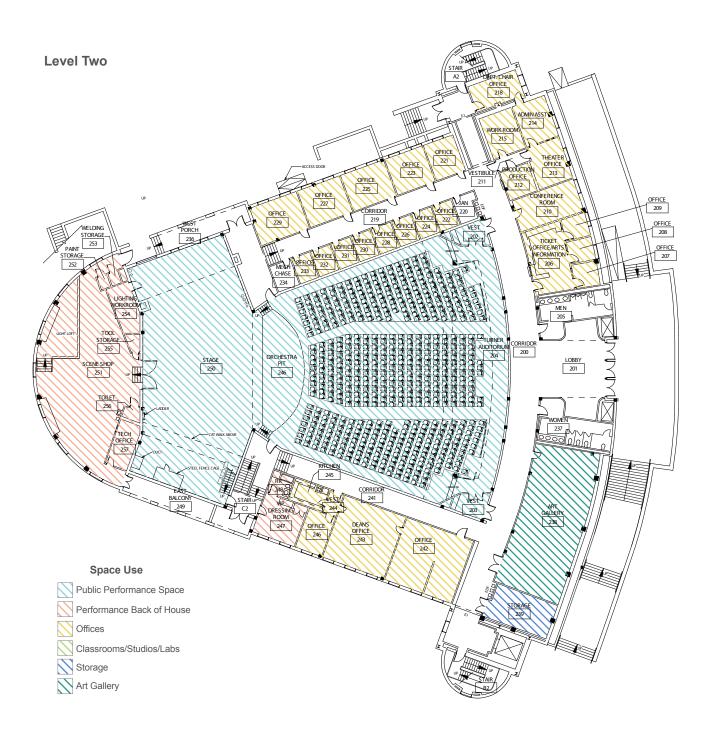


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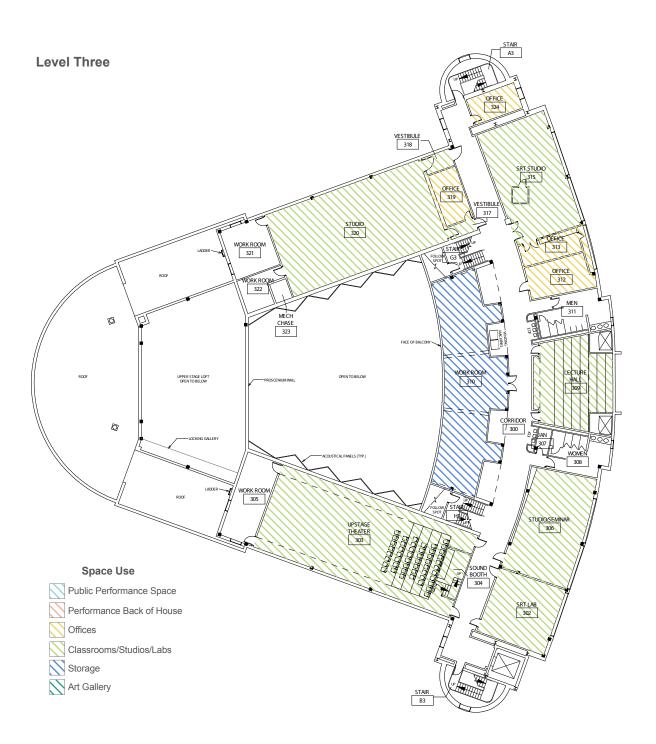
# Use Plan Diagrams



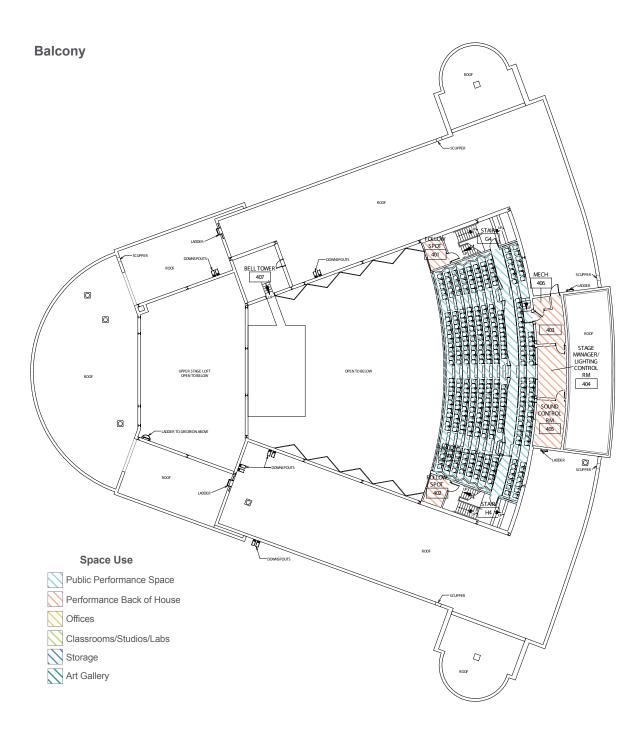
#### 4.3 Space Use Diagrams



#### 4.3 Space Use Diagrams



#### 4.3 Space Use Diagrams



# 05 CONCEPTUAL PROPOSAL

## **Plans**

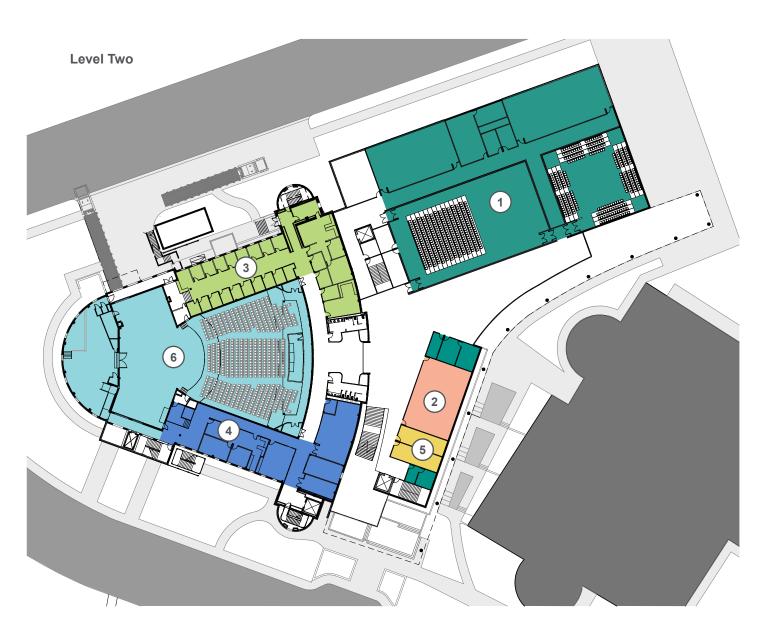
Level One



- 1 Actor Suite
- 2 SRT Suite
- (3) Prop and Scene Storage

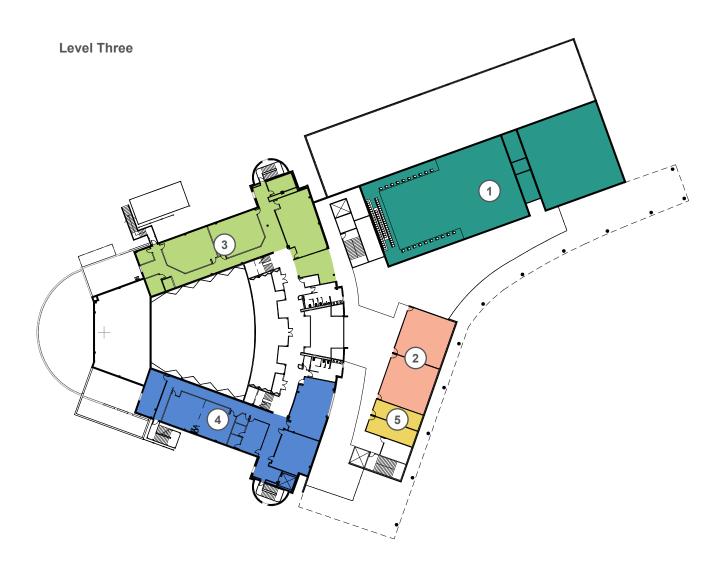
- 4) Costume and Dressing
- 5 Mech and Restrooms

## **5 Conceptual Proposal**



- 1 Theater, Support and Rehearsal
- 2 Screening/Lecture Hall
- (3) Faculty Offices

- 4 Dean's Suite and Art Gallery
- 5 Restrooms
- 6 1200-seat Auditorium



- 1 Theater
- 2 Drafting & Movement Studios
- (3) Movement Studios

- 4 Flex Classrooms
- (5) Restrooms

# Renderings













# 06 CONSTRUCTION ESTIMATE

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
01 Level 1 I	Ren						
.000		GEN CONDITIONS					
1.100	1	General Conditions General Conditions General Conditions	27,166.00	sqft	5.19 /sqft _	140,992 140,992	
1.710	10	Final Cleanup Level 1 Renovation Final Cleanup Final Cleanup 407.490 Labor hour 67.92 Equipment	27,166.00 rs	sf	0.35 /sf	9,508 9,508	
		GEN CONDITIONS 407.490 Labor hour 67.92 Equipment	rs			150,500	
2.000		SITEWORK					
2.012	10	Dispose Surplus Dispose Surplus Dispose Surplus 650.00 Labor hour 216.67 Equipment	1,300.00	cuyd	16.17 /cuyd <sub>-</sub>	21,017 21,017	
2.135	10	Fencing Chain Link Fence Fencing	4,050.00	Is	4.00 /ls	16,200 16,200	
		SITEWORK 650.00 Labor hour 216.67 Equipment	rs			37,217	
2.200		DEMOLITION					
2.300	5 16	Concrete Remove & Replace Key Note 1 Saw Concrete Wall Remove Slab On Grade Key Note 1 Remove Concrete Wall Patch Slab On Grade Concrete Remove & Replace 1,641.333 Labor hour 502.67 Equipment	35.00 7,000.00 192.00 7,000.00	If sf sqft sf	10.00 /lf 4.00 /sf 18.00 /sqft 6.00 /sf	350 28,000 3,456 42,000 73,806	
2.441	1	Remove Wall Remove Walls Remove Wall 293.50 Labor hour 97.833 Equipment	5,870.00	sf	1.30 /sf	7,631 7,631	
2.820		Rem Glass & Aluminum Rem. Glass & Aluminum Systems	343.00				

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		Rem Glass & Aluminum 34.30 Labor hours			_	893	
2.871		Remove HVAC Components					
	5	Remove Ductwork	27,166.00	sf	1.00 /sf	27,166	
		Remove HVAC Components				27,166	
2.876		Remove Electrical Components					
	2	Interior Lighting	27,166.00	ea	0.50 /ea _	13,583	
		Remove Electrical Components				13,583	
2.990	1	Debris Haul-Off	190.00	01/	30.00 /ov	E 400	
	1 1		180.00 150.00	cy cy	30.00 /cy 30.00 /cy	5,400 4,500	
	,	Debris Haul-Off	150.00	Су	30.00 /cy _	9,900	
		86.25 Labor hours				9,900	
		DEMOLITION				132,979	
		2,055.383 Labor hours				. ,	
		600.50 Equipment hours					
3.000		CONCRETE					
3.100		Concrete Subcontractor					
3.700	2	Slab On Grade	3,000.00	sqft	6.00 /sqft	18,000	
		Key Note 01 Concrete Walls & Lintel	192.00	sqft	55.00 /sqft	10,560	
		Concrete Subcontractor			<u> </u>	28,560	
		CONCRETE				28,560	
4.000		MASONRY					
4.515		Masonry Restoration					
sub		Masonry Restoration Level 1	5,967.00	sqft	2.514 /sqft	15,000	
		Masonry Restoration			· -	15,000	
		MASONRY				15,000	
5.000		STEEL					
5.106		Misc Steel					
	5	Folding Partition Support	24.00	LF	75.00 /LF	1,800	
		Wall Handrails @ Ramp	52.00	LF	40.00 /LF	2,080	
		Misc Steel			_	3,880	
		27.76 Labor hours					
		STEEL				3,880	
		27.76 Labor hours					
6.000		WOOD & PLASTICS					
6.100		Rough Carpentry					
0.700	1	Blocking	8.00	mbf	1,910.00 /mbf	15,280	
			3.00		.,510.00 ////	10,200	

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		Rough Carpentry 520.00 Labor hours 128.00 Equipment hours			_	15,280
5.502	5	Millwork Solid Surface Tops & Supports	60.00	sf	150.00 /sf	9,000
		Millwork				9,000
		WOOD & PLASTICS 520.00 Labor hours 128.00 Equipment hours				24,280
7.000		THERMAL-MOIST PR				
7.170		Building Vapor Barrier				
	8	Masonry Sealers	5,967.00	sqft	0.91 /sqft	5,430
		Building Vapor Barrier				5,430
7.241		Penetration Firestopping & Fire Resistive Joint Systems				
	10	Firestopping  Penetration Firestopping & Fire Resistive Joint	27,166.00	sqft	0.10 /sqft	2,717 2,717
		Systems				2,717
		THERMAL-MOIST PR				8,147
3.000		DOORS & WINDOWS				
3.111		Hollow Metal Doors & Frames				
		Hollow Metal Doors Prop Storage Rooms	10.00	each	303.00 /each	3,030
	2	Hollow Metal Frames Prop Storage Rooms  Hollow Metal Doors & Frames	32.00	each	203.00 /each	6,496 9,526
		126.000 Labor hours				9,520
3.140		Flush Wood Doors				
	2	Flush Wood Doors	22.00	ea	303.00 /ea	6,666
		Flush Wood Doors 66.000 Labor hours				6,666
3.149		Overhead Coiling Doors				
	1	Coiling Doors	1.00	ea	3,000.00 /ea	3,000
		Overhead Coiling Doors				3,000
3.305		Access Doors & Frames				
	02	Access Doors Access Doors & Frames	7.00	each	202.00 /each	1,414
		14.00 Labor hours				1,414
3.710		Door Hardware				
	1	Finish Hardware	32.00	leaf	819.00 /leaf	26,208
		Door Hardware 128.00 Labor hours				26,208
3.810		Glazed Aluminum Curtain Walls				
	7	Glass Glazing & Aluminum	343.00	sf	40.00 /sf	13,720
		Glazed Aluminum Curtain Walls				13,720
		DOORS & WINDOWS  334.000 Labor hours				60,534

Item		Description	Takeoff Qty		Unit Cost	Amount	
item		Description	rancon Qty		Olin Gost	Amount	
0.000		FINISHES					
9.130		Acoustical Panel Ceilings					
	1	Acoustical Ceilings Acoustical Panel Ceilings	9,215.00	sqft	2.80 /sqft	25,802 25,802	
9.300		Ceramic Tile					
		Ceramic Tile @ Toilet Floors Ceramic Tile @ Toilet Walls 9'	756.00 2,286.00	sqft sqft	10.00 /sqft 10.00 /sqft	7,560 22,860	
	•	Ceramic Tile	2,200.00	oqit	10.00 /0qit	30,420	
9.330		Drywall Systems	5.070.00	- 6	5.00 /-5	00.050	
	1	New Drywall Partitions  Drywall Systems	5,870.00	ST	5.00 /sf	29,350 29,350	
.860		Resilient Tile/Carpet					
		Resilient Base @ Prop Storage	862.00	lf 'r	1.50 /lf	1,293	
	3	Resilient Base @ LVT	1,875.00	lf ooft	1.50 /lf	2,813	
	5 10	Rubber Treads & Risers Luxury Vinyl Tile	150.00 9,215.00	sqft sqft	15.00 /sqft 4.50 /sqft	2,250 41,468	
	10	Resilient Tile/Carpet	5,213.00	oqit	4.50 /5qit _	47,823	
9.901		Concrete Floor Sealing					
	10	Seal Concrete Floor @ Prop Storage	8,915.00	sqft	2.50 /sqft	22,288	
		Concrete Floor Sealing 222.88 Labor hours				22,288	
9.940	04	Painting  Paint Congrete Walls & Cailing	17,525.00	of	1.753 /sf	30,721	
	04	Paint Concrete Walls & Ceiling  Painting	17,525.00	51	1.755751	30,721	
		500.714 Labor hours					
		FINISHES 723.59 Labor hours				186,403	
0.000		SPECL CONDITIONS					
0.005		Visual Display Units					
	4	Marker & Tackboards	768.00	sf	15.00 /sf	11,520	
		Visual Display Units			_	11,520	
0.160	1	Toilet Compartments Solid Plastic Part.	10.00	ea	865.00 /ea	8,650	
	'	Toilet Compartments	10.00	ou	_	8,650	
		55.000 Labor hours				-,	
0.430	1	Signage Graphics & Signage Allowance	27,166.00	saft	0.85 /sqft	22,965	
	'	Signage	27,100.00	oqii	0.00 /9qit	22,965	
10.435		Room Signage					
	10	Room Signage & Way Finding	32.00	ea	75.00 /ea _	2,400	
		Room Signage 64.00 Labor hours				2,400	
0.523		F.E. & Cabinets					
	20	Fire Ext. & Cabinets (Recessed)	6.00	each	325.00 /each	1,950	

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		F.E. & Cabinets 26.250 Labor hours			_	1,950	
0.605		Mesh Partitions					
	10	Mesh Partitions	100.00	sqft	15.00 /sqft	1,500	
		Mesh Partitions				1,500	
		2.00 Labor hours					
0.652		Operable Panel Partitions					
	10	Operable Panel Partitions	240.00	sqft	50.00 /sqft	12,000	
		Operable Panel Partitions				12,000	
0.675		Lockers					
	04	Lockers	82.00	ea	350.00 /ea	28,700	
		Lockers				28,700	
0.810		Toilet, Bath & Laundry Accessories					
	10	LS Toilet Access	60.00	each	110.00 /each	6,600	
		Toilet, Bath & Laundry Accessories			_	6,600	
		112.500 Labor hours					
		SPECL CONDITIONS				96,285	
		259.750 Labor hours				,	
3.000		SPECIAL CONST					
3.001		Scaffolding	E 067 00	ooft	E 00 /oaft	20.025	
sub		Perimeter Building Scaffolding Scaffolding	5,967.00	sqft	5.00 /sqft	29,835 29,835	
						23,000	
		SPECIAL CONST				29,835	
4.000		CONVEYING SYSTEM					
4.200		Elevators					
7.200	1	Elevators Renovations to Existing	1.00	sub	50,000.00 /sub	50,000	
		Elevators			_	50,000	
		CONVEYING SYSTEM				50,000	
						50,500	
5.000		MECHANICAL					
5.001		Plumbing					
sub		Plumbing	30.00	fixt	4,154.52 /fixt	124,635	
		Plumbing				124,635	
5.010		HVAC					
sub		New HVAC Duct Work in Level 1	27,166.00	sqft	5.81 /sqft	157,722	
		HVAC				157,722	
		Fire Protection System					
5.750		-	1.00	ls	20,756.51 /ls	20,757	
5. <i>750</i> sub		Fire Pump					
sub sub		Water Surge Tanks	1.00	sub	25,945.66 /sub	25,946	
sub		Water Surge Tanks Fire Protection System		sub sqft	25,945.66 /sub 2.08 /sqft	56,431	
sub sub		Water Surge Tanks	1.00				
sub sub		Water Surge Tanks Fire Protection System	1.00			56,431	

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		Testing & Balance				20,654	
		MECHANICAL				406,145	
16.000		ELECTRICAL					
16.001		Electrical					
	003	Electrical Service & Distribution	27,166.00	sqft	3.274 /sqft	88,930	
	004	Branch Wiring	27,166.00	sqft	3.274 /sqft	88,930	
	005	Lighting	27,166.00	sqft	6.55 /sqft	177,859	
		Electrical				355,719	
		ELECTRICAL				355,719	
7.000		TECHNOLOGY SYSTEMS					
17.003		Security System					
	1	Closed Circuit Security System	27,166.00	saft	1.01 /sqft	27,347	
		Intrusion & Panic Alarm System	27,166.00	sqft	0.503 /sqft	13,674	
		Security System				41,021	
		54,332.00 Labor hours					
17.007		Data & Phone System					
	9	Data & Phone System	27,166.00	sf	1.01 /sf	27,347	
		Data & Phone System				27,347	
17.008		Fire Alarm System			"		
	1	Fire Alarm Systems	27,166.00	IS	2.52 /ls	68,369	
		Fire Alarm System				68,369	
17.010		Access Controls					
	1	Access Control Station	27,166.00	sqft	1.01 /sqft	27,347	
		Access Controls				27,347	
		TECHNOLOGY SYSTEMS 54,332.00 Labor hours				164,085	
		001 Level 1 Ren			64.403/sqft	1,749,568	

**27,166.00 sqft**59,309.970 Labor hours
1,013.082 Equipment hours

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
002 Level 1	1 Add						
1.000		GEN CONDITIONS					
1.100		General Conditions					
	1	General Conditions	15,355.00	sqft	5.19 /sqft	79,692	
		General Conditions				79,692	
1.710		Final Cleanup					
	10	Level 1 Addition Final Cleanup	15,355.00	sf	0.35 /sf	5,374	
		Final Cleanup				5,374	
		230.33 Labor hours 38.39 Equipment hours					
		GEN CONDITIONS				85,067	
		230.33 Labor hours				03,007	
		38.39 Equipment hours					
2.000		SITEWORK					
2.001		Sitework					
2.007	3	Building Pad Preparation	3,325.00	су	20.00 /cy	66,500	
	14	Site Cut For Level 1 Foundation	9,000.00	су	3.79 /cy	34,094	
		Sitework				100,594	
2.105		Landscape & SubSurface Drainage					
	8	French Drain Systems	777.00	lf	50.00 /lf	38,850	
		Landscape & SubSurface Drainage				38,850	
2.115		Termite Control					
sub		Soil Poisioning	18,000.00	sqft	0.14 /sqft	2,520	
		Termite Control				2,520	
		SITEWORK				141,964	
3.000		CONCRETE					
3.100		Concrete Subcontractor					
0.100	1	Perimeter Grade Beams	2,940.00	sqft	32.00 /sqft	94,080	
	1	Elevator Pit Beams	455.00	sqft	32.00 /sqft	14,560	
	2	Slab On Grade	15,355.00	sqft	4.20 /sqft	64,491	
	3	Interior Grade Beams	622.00	sqft	16.00 /sqft	9,952	
	5	Drilled Piers Pier caps & Plinths	246.00	cuyd	350.00 /cuyd	86,100	
		Elevator Footings	23.00 15.00	cuyd cuyd	350.00 /cuyd 350.00 /cuyd	8,050 5,250	
	13	=	3,926.00	sf	32.00 /sf	125,632	
		Fill and Finish Pan Stairs	888.00	sqft	10.00 /sqft	8,880	
		Concrete Subcontractor			· <u>—</u>	416,995	
		CONCRETE				416,995	
4.000		MASONRY					
4.100		Masonry					
	1	Concrete Masonry Units Elevator & Stair Wells	5,158.00	ea	9.50 /ea	49,001	
		1st to 2nd Levels					

						Total	
Item		Description	Takeoff Qty		Unit Cost		Amount
4.100		Masonry					
	1	Concrete Masonry Units @ Ext Screen Wall	157.00	ea	9.50	/ea	1,492
	4	Stone Work	3,200.00	sf	35.00	/sf	112,000
	4	Interior Lime Stone Work	559.00	sf	40.00	/sf	22,360
	4	Lime Stone Veneer @ Screen Wall	286.00	sf	35.00	/sf	10,010
		Masonry					194,863
		MASONRY					194,863
5.000		STEEL					
5.105		Structural Steel					
	1		2.00	tons	3,350.00	/tons	6,700
	6	Steel Stairs Level 1 to Level 2	888.00	sqft	140.00		124,320
	Ū	Structural Steel	000.00	oqit	110.00	70411	131,020
5.106		Misc Steel					
	11	Wall Handrails	120.00	LF	40.00	/LF	4,800
	11	Stair Guardrails	100.00	LF	80.00		8,000
		Elevator Pit Ladders	15.00	lf	50.00		750
	۷۱		15.00		50.00	/II	
		Misc Steel 70.42 Labor hours					13,550
5.506		Ornamental Metal Stairs					
5.500	2	Ornamental Metal Stairs	438.00	eaft	200.00	/eaft	87,600
	2		430.00	sqft	200.00	/sqit	
		Ornamental Metal Stairs					87,600
5.705		Glazed Decorative Metal Railings					
	1	Ornamental Rail Systems	80.00	lf	400.00	/lf	32,000
		Glazed Decorative Metal Railings					32,000
5.805		Expansion Jnt Assemblies					
	10	Expansion Joint Assemblies	220.00	Inft	20.10	/Inft	4,422
		Expansion Int Assemblies					4,422
		62.86 Labor hours					
		STEEL					268,592
		133.273 Labor hours					
6.000		WOOD & PLASTICS					
6.100		Rough Carpentry					
	1	Blocking	5.00	mbf	1,910.00	/mbf	9,550
		Rough Carpentry			,		9,550
		325.00 Labor hours					3,500
		80.00 Equipment hours					
5.502		Millwork					
-	1		122.00	sqft	175.00	/sqft	21,350
		Solid Surface Vanity Tops W/ Supports	60.00		150.00		9,000
	3	Millwork	00.00	0.	133.00		30,350
		WOOD & PLASTICS					39,900
		325.00 Labor hours					39,900
		80.00 Equipment hours					
7.000		THERMAL-MOIST PR					
7 170		Puilding Vapor Parrier					
7.170	-	Building Vapor Barrier	4.070.00	oc.tt	0.00	/o.aft	00.050
	7	Waterproofing	4,676.00	sqn	6.00	/sqft	28,056

-						otal	
Item		Description	Takeoff Qty		Unit Cost		Amount
7.170		Building Vapor Barrier					
	8	Masonry Sealers	3,486.00	sqft	0.91 /	'saft	3,172
	10	Building Caulking	350.00	Inft	5.00 /	'Inft	1,750
		Fluid Applied Membrane Air Barriers & Testing	3,486.00	sqft	5.80 /	sqft	20,220
		Building Vapor Barrier					53,198
7.240		Applied Fireproofing					
	5	Spray-On Fireproofing	15,355.00	sqft	1.82 /	sqft	27,946
		Applied Fireproofing					27,946
7.241	40	Penetration Firestopping & Fire Resistive Joint Systems	45.055.00		0.40		4.500
	10	Firestopping	15,355.00	sqft	0.10 /	sqtt _	1,536
		Penetration Firestopping & Fire Resistive Joint Systems					1,536
		THERMAL-MOIST PR					82,680
8.000		DOORS & WINDOWS					
0.444		Hallan Matal Basin & France					
8.111	2	Hollow Metal Doors & Frames Hollow Metal Frames	13.00	each	203.00 /	leach	2,639
	2	Hollow Metal Doors & Frames	13.00	Eduli	203.00 /		2,639
		39.000 Labor hours					2,039
8.140		Flush Wood Doors					
	10	Flush Wood Doors	13.00	each	303.00 /	each _	3,939
		Flush Wood Doors 39.000 Labor hours					3,939
8.150		Sound Control Door Assemblies					
	06	Acoustical Doors and Frames	12.00	leaf	4,500.00 /	leaf	54,000
		Sound Control Door Assemblies					54,000
8.305		Access Doors & Frames					
	02	Access Doors	4.00	each	202.00 /	each _	808
		Access Doors & Frames 8.00 Labor hours					808
8.710		Door Hardware					
0.770	1	Finish Hardware	13.00	leaf	819.00 /	leaf	10,647
		Door Hardware	10.00	ioui	010.00 7	_	10,647
		52.00 Labor hours					10,047
8.810		Glazed Aluminum Curtain Walls					
	5	Glazed Aluminum Curtain Wall System Level 1 to Level 2	1,079.00	sf	60.00 /	sf	64,740
	6	Hardware For Aluminum Doors	6.00	ea	1,400.00	'ea	8,400
sub		Interior Storefront Acoustic	500.00	sf	60.00 /	sf _	30,000
		Glazed Aluminum Curtain Walls					103,140
		DOORS & WINDOWS  138.000 Labor hours					175,173
9.000		FINISHES					
9.130		Acoustical Panel Ceilings					
2.700	1	Acoustical Ceilings	7,323.00	sf	2.79 /	'sf	20,392
		Acoustical Ceilings In Sound Labs	5,100.00		5.00 /		25,500
			5,700.00		5.00 /		25,500

					_	
Item	Description	Description	Takeoff Qty		Unit Cost	Amount
		Acoustical Panel Ceilings	_		_	45,892
		•				43,092
9.300	1	Ceramic Tile Porcelain Tile @ RR Walls 10'	2,230.00	sqft	10.82 /sqft	24,121
		Porcelain Tile @ Stairs	620.00	sqft	15.452 /sqft	9,580
sub		Ceramic Floor Tile In RR	774.00	ls	10.82 /ls	8,372
		Ceramic Tile			_	42,073
9.304		Terrazzo Floor				
	10	Terrazzo Flooring	3,145.00	sqft	16.00 /sqft	50,320
		Terrazzo Floor				50,320
9.330		Drywall Systems	4.540.00		F 00 / f	00.740
	1	Drywall Interior Walls	4,548.00	sf	5.00 /sf	22,740
	1	Drywall Interior Acoustic Walls	6,695.00	sf	8.00 /sf	53,560
	1	Drywall Furr Out Wall to Existing	3,627.00	sf	4.00 /sf	14,508
	1	Drywall FurrDown @ 2nd Floor Acoustical Wall Panels	620.00 3,500.00	sf eaft	8.00 /sf 8.50 /sqft	4,960 29,750
		FRP Wall Panels @ Janitor Rooms	1,200.00	sqft sqft	8.50 /sqft 3.49 /sqft	4,186
	13	Drywall Systems	1,200.00	Sqit	5. <del>1</del> 3 /34/1	129,704
0.860		Resilient Tile/Carpet				
0.000	3	•	1.960.00	lf	1.50 /lf	2,940
	5	Rubber Treads & Risers	888.00	sqft	15.00 /sqft	13,320
	8	Carpet Tile @ Sound Studio	566.89	sy	52.00 /sy	29,478
		. •	3,541.00	sqft	5.00 /sqft	17,705
		Resilient Tile/Carpet		-	· <del>-</del>	63,443
9.901		Concrete Floor Sealing				
	10	Seal Concrete Floor	1,300.00	sqft	2.50 /sqft	3,250
		Concrete Floor Sealing 32.50 Labor hours				3,250
9.940	00	Painting	20,000,00	ماريم	1 512 (auch	40.050
	02	Paint Int Gyp Walls  Painting	30,000.00	sub	1.542 /sub	46,259 46,259
		FINISHES				380,941
		32.50 Labor hours				300,941
0.000		SPECL CONDITIONS				
10.005	4	Visual Display Units Visual Display Units	448.00	sf	15.00 /sf	6,720
		Visual Display Units			_	6,720
10.160		Toilet Compartments				
	1	Solid Plastic Part.	10.00	ea	865.00 /ea	8,650
		Toilet Compartments 55.000 Labor hours				8,650
0.200		Louvers & Vents				
70.200	10	Vents & Louvers (Metal)	3.00	each	500.00 /each	1,500
		Louvers & Vents			_	1,500
		7.50 Labor hours				.,500
0.270		Computer Access Flooring				
sub		Computer Floors	3,600.00	sqft	20.00 /sqft	72,000
		Computer Access Flooring				72,000
0.430		Signage				
	1	Graphics & Signage Allowance	15,355.00	sqft	0.85 /sqft	12,980
		= =	•	•	•	•

Item		Description	Takeoff Qty		Unit Cost	Total	Amount
			_			-	12.000
		Signage					12,980
10.435	10	Room Signage	12.00		75.00	/	075
	10	Room Signage & Way Finding  Room Signage	13.00	ea	75.00	rea _	975 975
		26.00 Labor hours					373
10.523		F.E. & Cabinets					
	20	Fire Ext. Cabinets (Recessed)	4.00	each	325.00	/each	1,300
		F.E. & Cabinets 17.500 Labor hours					1,300
10.810		Toilet, Bath & Laundry Accessories					
	10	LS Toilet Access	60.00	each	110.00	/each	6,600
		Toilet, Bath & Laundry Accessories 112.500 Labor hours					6,600
		SPECL CONDITIONS					110,725
		218.500 Labor hours					
11.000		EQUIPMENT					
11.035		Audio Visual System					
		Recording Studio Control Booth AV Presentation	1.00	ls	12,000.00		12,000
	10	Recording Studio Control Booth Production Intercom	1.00	ls	15,000.00	/ls	15,000
	10	Recording Studio Control Booth Microphones	1.00	ls	50,000.00	/ls	50,000
		Recording Studio Control Booth Audio Recording System	1.00	ls	200,000.00		200,000
	10	Editing Class Room AV Presentation	1.00	ls	25,000.00	/Is	25,000
		Editing Class Room Student Work Stations	15.00	ea	8,000.00		120,000
		Recording Studio Project Room AV Presentation	1.00	ls	12,000.00		12,000
	10	, ,	1.00	ls le	20,000.00		20,000
	10	Recording Studio Project Room Audio System  Audio Visual System	1.00	ls	100,000.00	/15	100,000 554,000
11.036		Fireman's Key Box (Knox Box)					
	1	Fireman's Key Box	1.00	ea	933.00	/ea	933
		Fireman's Key Box (Knox Box)					933
		EQUIPMENT					554,933
12.000		FURNISHINGS					
12.510		Mecho Shades					
	1	Mecho Shades	500.00	sf	20.333	/sf	10,167
		Mecho Shades					10,167
		FURNISHINGS				<u></u>	10,167
13.000		SPECIAL CONST					
13.001		Scaffolding					
sub		Perimeter Building Scaffolding	3,200.00	sqft		/sqft	16,000
sub		Scaffolding @ Lobby	2,808.00	sqft	5.00	/sqft _	14,040
		Scaffolding					30,040

				T-4-1	
Item	Description	Takeoff Qty		Unit Cost	Amount
14.000	CONVEYING SYSTEM				
14.000	CONVETING STOTEM				
14.200	Elevators			400.005.00./	004.400
sub	Elevators  Elevators	2.00	ea	132,095.00 /ea	264,190 264,190
	CONVEYING SYSTEM				264,190
15.000	MECHANICAL				
15.001	Plumbing				
sub	Plumbing	18.00	fixt	4,154.52 /fixt	74,781
	Plumbing				74,781
15.010	HVAC	45.055.00	20ft	10 044 12-4	604.044
sub	HVAC HVAC	15,355.00	sqft	40.641 /sqft	624,044 624,044
	TIVAC				024,044
15.750	Fire Protection System				
sub	Fire Protection System	15,355.00	sf	2.60 /sf	39,870
	Fire Protection System				39,870
15.990	Testing & Balance				
sub	Testing & Balance	15,355.00	sqft	0.76 /sqft	11,669
	Testing & Balance				11,669
	MECHANICAL				750,365
16.000	ELECTRICAL				
16.001	Electrical				
	03 Electrical Service & Distribution	15,355.00	sqft	4.17 /sqft	64,033
	004 Branch Wiring	15,355.00	sqft	8.34 /sqft	128,066
	005 Lighting	15,355.00	sqft	6.55 /sqft	100,531
	Electrical				292,631
	ELECTRICAL				292,631
17.000	TECHNOLOGY SYSTEMS				
17.003	Security System				
	Closed Circuit Security System	15,355.00	sqft	2.013 /sqft	30,915
	2 Intrusion & Panic Alarm System	15,355.00	sqft	0.503 /sqft	7,729
	Security System				38,644
	30,710.00 Labor hours				
17.007	Data & Phone System		,		A. A
	9 Data & Phone System	15,355.00	st	4.03 /sf	61,830
	Data & Phone System				61,830
17.008	Fire Alarm System				<b></b>
	1 Fire Alarm Systems	15,355.00	Is	4.03 /ls	61,828
	Fire Alarm System				61,828
	A O t t -				
17.010	Access Controls				

			Total	
Item	Description	Takeoff Qty	Unit Cost	Amount
	Access Controls			15,458
	TECHNOLOGY SYSTEMS 30,710.00 Labor hours			177,760
	002 Level 1 Add		259.003/sqft	3,976,985

**15,355.00 sqft** 31,787.60 Labor hours 118.39 Equipment hours

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
03 Level 2	2 Ren					
000		GEN CONDITIONS				
1.100		General Conditions				
	1	General Conditions General Conditions	26,208.00	sqft	5.19 /sqft	136,020 136,020
.710	10	Final Cleanup Level 2 Renovation Final Cleanup	26,208.00	sf	0.35 /sf	9,173
		Final Cleanup 393.120 Labor hours 65.52 Equipment hours	20,200.00	o.	0.00 1.01	9,173
		GEN CONDITIONS  393.120 Labor hours 65.52 Equipment hours				145,192
.200		DEMOLITION				
2.300		Concrete Remove & Replace				
	1	Saw Concrete	130.00	If	20.00 /lf	2,600
	4	Remove Suspended Precast Tees & Slabs Remove Suspended Precast Tees & Slabs @ Lobby	500.00 775.00	sf sf	10.00 /sf 10.00 /sf	5,000 7,750
	10	Saw Concrete  Concrete Remove & Replace  229.833 Labor hours	130.00	Inft	20.00 /Inft	2,600 17,950
		83.833 Equipment hours				
2.410	2	Masonry Remove & Replace Masonry For Opening By Hand	200.00	sf	50.00 /sf	10,000
		Masonry  16.67 Labor hours 8.333 Equipment hours				10,000
2.441	1	Remove Wall Remove Walls	13,080.00	sf	1.30 /sf	17,004
		Remove Wall 654.00 Labor hours 218.00 Equipment hours				17,004
2.820	2	Rem Glass & Aluminum Rem. Glass & Aluminum Systems	784.00	SF	2.60 /SF	2,038
		Rem Glass & Aluminum 78.40 Labor hours				2,038
.871	5	Remove HVAC Components Remove Ductwork	26,208.00	sf	1.00 /sf	26,208
		Remove HVAC Components				26,208
2.874	10	Furnishings Remove Seats	618.00	each	39.00 /each	24,102

14		Description	Take off Oto		Total	A
Item		Description	Takeoff Qty		Unit Cost	Amount
		Furnishings			_	24,102
		618.00 Labor hours 618.00 Equipment hours				
2.876		Remove Electrical Components				
	2	Remove Electrical Components Remove Electrical Components	26,208.00	ea	0.50 /ea	13,104 13,104
2.900	4	Remove Flooring	20, 200, 00		0.74 /c5	10.200
	'	Remove Flooring Remove Flooring	26,208.00	SI	0.74 /sf	19,306 19,306
		728.00 Labor hours				.,
2.944		Remove Ceiling				
	8	Remove Ceiling Finishes	26,208.00	sqft	1.00 /sqft	26,208
		Remove Ceiling 218.40 Labor hours				26,208
2.950		Temporary Shoring				
	1	Temporary Shoring @ Concrete Tees	100.00	Inft	76.00 /Inft	7,600
		Temporary Shoring 200.00 Labor hours				7,600
2.990		Debris Haul-Off				
L.000	1	Waste & Debris Removal	180.00	су	30.00 /cy	5,400
	1	Waste & Debris Removal From Concrete Floor Removal	30.00	су	30.00 /cy	900
		Debris Haul-Off 42.00 Labor hours			_	6,300
		DEMOLITION				169,820
		2,785.30 Labor hours 928.17 Equipment hours				103,020
3.000		CONCRETE				
3.100		Concrete Subcontractor				
0.700		Structural Slabs & Steps @ Handicapped Lift	500.00	sf	25.00 /sf	12,500
	14	Structural Slabs @ Lobby	775.00	sf	20.00 /sf	15,500
		Concrete Subcontractor				28,000
		CONCRETE				28,000
1.000		MASONRY				
4.100		Masonry				
	1	Concrete Masonry Units @ Handicapped Lift	250.00	ea	10.00 /ea	2,500
		Masonry				2,500
4.515 sub		Masonry Restoration	6,000.00	ooft.	2.50 /0~#	15,000
Sub		Masonry Restoration Level 2 Masonry Restoration	6,000.00	Sqit	2.50 /sqft	15,000
		MASONRY				17,500
5.000		STEEL				
		Structural Steel				
5.105						
5.105		Floor Support Steel Floor Support Steel	3.00 5.00	tons tons	5,500.00 /tons 5,500.00 /tons	16,500 27,500

					Total	
Item		Description	Takeoff Qty		Total Unit Cost	Amount
		Structural Steel			_	44,000
5.106		Misc Steel				
		Handrails & Guardrails	105.00	LF	60.00 /LF	6,300
	11	Replace Guardrail @ Stair to Mech Area	50.00	LF	100.00 /LF	5,000
		Misc Steel 46.97 Labor hours				11,300
		STEEL				55,300
		46.97 Labor hours				
6.000		WOOD & PLASTICS				
6.100		Rough Carpentry				
	1	•	8.00	mbf	1,910.00 /mbf	15,280
	22	Floor Framing @ New Stage Ramp	160.00	sqft	12.00 /sqft	1,920
		Rough Carpentry 520.00 Labor hours				17,200
		128.00 Equipment hours				
6.101	•	Interior Finish Carpentry	0.000.00	oct.	6.50 /sqft	F0 F00
	2	Finish Carpentry In Theaters Interior Finish Carpentry	9,000.00	sqft	6.50 /sqit	58,500 58,500
		9,000.00 Labor hours				38,300
6.502		Millwork				
		Base Cabinet w/ Solid Surface	300.00 60.00	sqft	175.00 /sqft 150.00 /sf	52,500 9,000
	5	Solid Surface Tops Millwork	60.00	sf	150.00 /\$1	61,500
		WOOD & PLASTICS  9,520.00 Labor hours  128.00 Equipment hours				137,200
7.000		THERMAL-MOIST PR				
7.100	•	PVC Single Ply Roofing	4.00		7.700.00 #	7.500
	3	Better Drainage for Roof Over Existing North Entrance	1.00	IS	7,500.00 /ls	7,500
		PVC Single Ply Roofing			_	7,500
7.170	0	Building Vapor Barrier	0.000.00		0.91 /saft	F 400
	0	Masonry Sealers  Building Vapor Barrier	6,000.00	sqft	0.91 /sqit	5,460 5,460
7.241		Penetration Firestopping & Fire Resistive Joint Systems				
	10	Firestopping	26,208.00	sqft	0.10 /sqft	2,621
		Penetration Firestopping & Fire Resistive Joint Systems				2,621
		THERMAL-MOIST PR				15,581
8.000		DOORS & WINDOWS				
8.111		Hollow Metal Doors & Frames				
	2	Hollow Metal Frames	52.00	oach	203.00 /each	10,556

8.149 Overhead Coiling Doors 3 Coiling Doors Overhead Coiling Doors 3 Coiling Doors Overhead Coiling Doors 8.150 Sound Control Door Assemblies 06 Acoustical Access Stage Doors and Frames 06 Acoustical Doors and Frames Sound Control Door Assemblies 8.305 Access Doors & Frames 02 Access Doors & Frames 14.00 Labor hours 8.710 Door Hardware 1 Finish Hardware Door Hardware 208.00 Labor hours 8.810 Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems 1,22 Glazed Aluminum Curtain Walls DOORS & WINDOWS 534.000 Labor hours 9.000 FINISHES	## Total   Total
### ### ##############################	2.00 each 303.00 /each 15,756  2.00 ea 3,000.00 /ea 6,000  2.00 leaf 17,500.00 /leaf 35,000 3.00 leaf 4,500.00 /leaf 13,500  48,500  7.00 each 202.00 /each 1,414 1,414  52.00 leaf 819.00 /leaf 42,588 42,588  34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
10 Flush Wood Doors	2.00 ea 3,000.00 /ea 6,000  2.00 leaf 17,500.00 /leaf 35,000 3.00 leaf 4,500.00 /leaf 13,500 48,500  7.00 each 202.00 /each 1,414 1,414  52.00 leaf 819.00 /leaf 42,588 42,588  34.00 sf 40.00 /sf 31,360 sqft 30.00 /sqft 36,750
### Flush Wood Doors	2.00 ea 3,000.00 /ea 6,000  2.00 leaf 17,500.00 /leaf 35,000 3.00 leaf 4,500.00 /leaf 13,500  7.00 each 202.00 /each 1,414 1,414  52.00 leaf 819.00 /leaf 42,588 42,588  34.00 sf 40.00 /sf 31,360 sqft 30.00 /sqft 36,750
3 Coiling Doors Overhead Coiling Doors  8.150 Sound Control Door Assemblies 06 Acoustical Access Stage Doors and Frames 06 Acoustical Doors and Frames Sound Control Door Assemblies  8.305 Access Doors & Frames 02 Access Doors & Frames 14.00 Labor hours  8.710 Door Hardware 1 Finish Hardware Door Hardware 208.00 Labor hours  8.810 Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  9.000 FINISHES  9.002 General Enhancement of The Lobby General Enhancement of The Lobby General Enhancement of The Lobby Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	2.00 leaf 17,500.00 /leaf 35,000 3.00 leaf 4,500.00 /leaf 13,500 48,500  7.00 each 202.00 /each 1,414 1,414  52.00 leaf 819.00 /leaf 42,588 42,588  34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
Sound Control Door Assemblies	2.00 leaf 17,500.00 /leaf 35,000 3.00 leaf 4,500.00 /leaf 13,500 48,500  7.00 each 202.00 /each 1,414 1,414  52.00 leaf 819.00 /leaf 42,588 42,588  34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
06 Acoustical Access Stage Doors and Frames 06 Acoustical Doors and Frames Sound Control Door Assemblies  3.305 Access Doors & Frames 02 Access Doors & Frames 14.00 Labor hours  3.710 Door Hardware 1 Finish Hardware Door Hardware 208.00 Labor hours  3.810 Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  5.000 FINISHES  9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 18,50	3.00 leaf 4,500.00 /leaf 13,500 48,500  7.00 each 202.00 /each 1,414 1,414 52.00 leaf 819.00 /leaf 42,588 42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
06 Acoustical Doors and Frames Sound Control Door Assemblies  3.305 Access Doors & Frames 02 Access Doors & Frames 14.00 Labor hours  3.710 Door Hardware 1 Finish Hardware 208.00 Labor hours  3.810 Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  5.000 FINISHES  2.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby 3.172 General Enhancement of The Lobby 4.172 General Enhancement of The Lobby 5.130 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	3.00 leaf 4,500.00 /leaf 13,500 48,500  7.00 each 202.00 /each 1,414 1,414 52.00 leaf 819.00 /leaf 42,588 42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
### Access Doors & Frames   12	7.00 each 202.00 /each 1,414 1,414 52.00 leaf 819.00 /leaf 42,588 42,588 44.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
02 Access Doors	1,414 52.00 leaf 819.00 /leaf 42,588 42,588 42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
14.00 Labor hours  Door Hardware 1 Finish Hardware 208.00 Labor hours  3.810 Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems 1,22 Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  5.000 FINISHES  General Enhancement of The Lobby 2 General Enhancement of The Lobby 3.172 General Enhancement of The Lobby 4.2002 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	32.00 leaf 819.00 /leaf 42,588 42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
1 Finish Hardware	42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
### Door Hardware ### 208.00 Labor hours  ### 8.810    Glazed Aluminum Curtain Walls   To Glass Glazing & Aluminum   To Telephone   To Interior Storefront Systems   1,22	42,588 34.00 sf 40.00 /sf 31,360 25.00 sqft 30.00 /sqft 36,750
8.810  Glazed Aluminum Curtain Walls 7 Glass Glazing & Aluminum 10 Interior Storefront Systems 1,22  Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  9.000  FINISHES  General Enhancement of The Lobby 2 General Enhancement of The Lobby General Enhancement of The Lobby  1,72 General Enhancement of The Lobby  1,72 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	25.00 sqft 30.00 /sqft36,750
7 Glass Glazing & Aluminum 78 10 Interior Storefront Systems 6 Jazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  9.000 FINISHES  9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby General Enhancement of The Lobby 1,72 General Enhancement of The Lobby 9.130 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	25.00 sqft 30.00 /sqft36,750
Glazed Aluminum Curtain Walls  DOORS & WINDOWS 534.000 Labor hours  9.000 FINISHES  9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby General Enhancement of The Lobby  1,72 General Enhancement of The Lobby  1,72 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	· · · · · · · · · · · · · · · · · · ·
DOORS & WINDOWS 534.000 Labor hours  9.000 FINISHES  9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby General Enhancement of The Lobby  9.130 Acoustical Panel Ceilings 1 Acoustical Ceilings 1 Acoustical Panel Ceilings	68,110
9.000 FINISHES  9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby 3.72 General Enhancement of The Lobby 4.72 General Enhancement of The Lobby  9.130 Acoustical Panel Ceilings 1 Acoustical Ceilings 1 Acoustical Panel Ceilings	
9.002 General Enhancement of The Lobby 2 General Enhancement of The Lobby 3.172 General Enhancement of The Lobby 4.284 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	192,924
9.130  Acoustical Panel Ceilings 1,72  Acoustical Panel Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	
9.130  Acoustical Panel Ceilings 1 Acoustical Ceilings 1 Acoustical Panel Ceilings 1 Acoustical Panel Ceilings	
9.130 Acoustical Panel Ceilings 1 Acoustical Ceilings 18,50 Acoustical Panel Ceilings	20.00 sqft 23.26 /sqft40,000
1 Acoustical Ceilings 18,50 Acoustical Panel Ceilings	40,000
Acoustical Panel Ceilings	00.00 sqft 2.80 /sqft 51,800
0.200 Coromio Tilo	51,800
	27.00 act 10.92 (act 6.900
	37.00 sqft 10.82 /sqft 6,890 50.00 sqft 10.82 /sqft 21,099
Ceramic Tile	27,989
9.304 Terrazzo Floor 10 Terrazzo Flooring 10	00.00 sqft 16.00 /sqft 1,600
Terrazzo Floor	1,600
9.330 Drywall Systems 1 Drywall Interior Walls 10,50	,,,,,,
Drywall Systems	00.00 sf 5.00 /sf 52,500
9.710 Wood Flooring sub Wood Flooring @ Stage 4,11	00.00 sf 5.00 /sf 52,500

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		Wood Flooring			_	41,120
9.860		Resilient Tile/Carpet				
	1	Carpet & Luxury Vinyl Tile	20,700.00	sqft	5.50 /sqft	113,850
	1	Carpet & Luxury Vinyl Tile	13,300.00	sqft	5.50 /sqft	73,150
	3 5	Resilient Base & Accessories Rubber Treads & Risers	4,200.00 300.00	lf sqft	1.50 /lf 15.00 /sqft	6,300 4,500
	5	Resilient Tile/Carpet	300.00	Sqit	15.00 /sqit	197,800
9.940		Painting				
	02	Paint, Caulk, Vinyl Wall Cover	54,600.00	sub	1.42 /sub	77,336
		Painting				77,336
		FINISHES				500,770
0.000		SPECL CONDITIONS				
0.005		Visual Display Units				
	4	Marker & Tackboards	768.00	sf	15.00 /sf	11,520
		Visual Display Units			_	11,520
0.160		Toilet Compartments				
	40	Toilet Partitions (Solid Plastic)	7.00	ea	865.00 /ea	6,055
		Toilet Compartments 38.500 Labor hours 12.60 Equipment hours				6,055
0.430		Signage	00.000.00		0.05 / 4	00.455
	1	Graphics & Signage Allowance	26,208.00	sqft	0.85 /sqft	22,155
		Signage				22,155
0.435	10	Room Signage Room Signage & Way Finding	52.00	ea	75.00 /ea	3,900
		Room Signage	02.00	-		3,900
		104.00 Labor hours				2,222
0.523		F.E. & Cabinets				
	20	Fire Ext. Cabinets (Recessed)	6.00	each	325.00 /each	1,950
		F.E. & Cabinets 26.250 Labor hours				1,950
0.810		Toilet, Bath & Laundry Accessories				
	10	LS Toilet Access	42.00	each	110.00 /each	4,620
		Toilet, Bath & Laundry Accessories 78.750 Labor hours			_	4,620
		SPECL CONDITIONS				50,200
		247.500 Labor hours 12.60 Equipment hours				00,200
11.000		EQUIPMENT				
11.025		Food Service Equipment				
sub		Food Service Equipment	1.00	sub	20,000.00 /sub	20,000
		Food Service Equipment				20,000
11.027	1	Stage Equipment Theatrical Sound System	1.00	ls	115,000.00 /ls	115,000
	2	Stage Dimming & Controls	1.00	ls	5,000.00 /ls	5,000
	3	Theatrical Rigging & Curtains	1.00	ls	750,000.00 /ls	750,000
	6	Demolition Stage Rigging System	1.00	ls	30,000.00 /ls	30,000

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		o				
1.027	-	Stage Equipment	4.00		050 000 00 /	050 000
	/	Orchestra Lift	1.00	each	250,000.00 /each _	250,000
		Stage Equipment				1,150,000
1.035		Audio Visual System				
	10	Turner Auditorium Audio Reinforcement System	1.00	ls	250,000.00 /ls	250,000
	10	Turner Auditorium AV Presentation System	1.00	ls	125,000.00 /ls	125,000
	10	Turner Aud Video Monitoring	1.00	ls	25,000.00 /ls	25,000
	10	Dean's Conference Room AV Presentation	1.00	Is	6,500.00 /ls	6,500
	10	Back Of House and Lobby AV Presentation	1.00	ls	12,000.00 /ls	12,000
	10	Back Of House and Lobby Video Monitoring	1.00	ls	25,000.00 /ls _	25,000
		Audio Visual System				443,500
1.452		Residential Appliances				
	10	Allowance	10.00	each	1,175.00 /each _	11,750
		Residential Appliances			_	11,750
		100.00 Labor hours				
		EQUIPMENT				1,625,250
		100.00 Labor hours				
2.000		FURNISHINGS				
12.510		Mecho Shades				
2.510	1	Mecho Shades Mecho Shades	2,587.00	ef	20.00 /sf	51,740
	'	Mecho Shades	2,307.00	31	20.00 /81	
		Mecno Snades				51,740
2.720	40	Fixed Audience Seating	770.00		404.00 /	440.000
	10	Theater Seats	773.00	ea	184.00 /ea _	142,232
		Fixed Audience Seating				142,232
		FURNISHINGS				193,972
13.000		SPECIAL CONST				
13.001		Scaffolding				
sub		Perimeter Building Scaffolding	6,000.00	sqft	5.00 /sqft	30,000
300		Scaffolding	0,000.00	Jyıı	0.00 /sqit	30,000
		Geanoluling				30,000
		SPECIAL CONST				30,000
4.000		CONVEYING SYSTEM				
4.200		Elevators				
	2	Wheel Chair Lifts	1.00	ea	54,500.00 /ea	54,500
		Elevators			_	54,500
		CONVEYING SYSTEM				54,500
						,
5.000		MECHANICAL				
15.000		Plumbing				
		Plumbing Plumbing	25.00	sub	4,154.52 /sub	103,863
5.001		Plumbing	25.00	sub	4,154.52 /sub _	103,863 103,863
5.001		Plumbing Plumbing	25.00	sub	4,154.52 /sub _	

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		HVAC				608,641
15.750		Fire Protection System				
sub		Fire Protection System	26,208.00	sub	2.08 /sub	54,441
		Fire Protection System				54,441
15.990		Testing & Balance				
sub		Testing & Balance	26,208.00	sqft	0.76 /sqft	19,925
		Testing & Balance				19,925
		MECHANICAL				786,870
16.000		ELECTRICAL				
16.001		Electrical				
	003	Electrical Service & Distribution	26,208.00	sqft	3.274 /sqft	85,794
	004	Branch Wiring	26,208.00	sqft	3.274 /sqft	85,794
(	005	Lighting	26,208.00	sqft	7.613 /sqft	199,532
		Electrical				371,119
		ELECTRICAL				371,119
17.000		TECHNOLOGY SYSTEMS				
17.003		Security System				
17.003	1	Closed Circuit Security System	26,208.00	sqft	1.01 /sqft	26,383
		Intrusion & Panic Alarm System	26,208.00	sqft	0.503 /sqft	13,192
	_	Security System	20,200.00	04.1	0.000	39,575
		52,416.00 Labor hours				33,070
17.007		Data & Phone System				
	9	Data & Phone System	26,208.00	sf	1.01 /sf	26,383
		Data & Phone System				26,383
17.008		Fire Alarm System				
	1	Fire Alarm Systems	26,208.00	ls	2.52 /ls	65,958
		Fire Alarm System				65,958
17.010		Access Controls				
	1	Access Control Station	26,208.00	sqft	1.01 /sqft	26,383
		Access Controls				26,383
		TECHNOLOGY SYSTEMS				158,298
		52,416.00 Labor hours				
		003 Level 2 Ren			172.943/sqft	4,532,497

**26,208.00 sqft**66,042.89 Labor hours
1,134.29 Equipment hours

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
004 Level 2	? Add					
1.000		GEN CONDITIONS				
1.100		General Conditions				
	1	General Conditions General Conditions	31,396.00	sqft	5.19 /sqft	162,945 162,945
1.710	10	Final Cleanup	24 206 00	of	0.2E /of	10.090
	10	Level 2 Addition Final Cleanup Final Cleanup	31,396.00	SI	0.35 /sf	10,989 10,989
		470.940 Labor hours 78.49 Equipment hours				10,303
		GEN CONDITIONS				173,934
		470.940 Labor hours 78.49 Equipment hours				
2.000		SITEWORK				
2.001		Sitework				
	3	Building Pad Preparation Sitework	3,500.00	су	20.00 /cy	70,000 70,000
2.105		Landscape & SubSurface Drainage				
	8	French Drain Systems	478.00	If	50.00 /lf	23,900
		Landscape & SubSurface Drainage				23,900
2.115		Termite Control	10,000,00		0.44 /2005	2 520
sub		Soil Poisioning Termite Control	18,000.00	sqft	0.14 /sqft	2,520 2,520
		SITEWORK				96,420
3.000		CONCRETE				
3.100		Concrete Subcontractor				
		Perimeter Grade Beams	2,008.00	sqft	32.00 /sqft	64,256
	2	Slab On Grade	16,041.00	sqft	4.20 /sqft	67,372
	3 4	Interior Grade Beams Composite Slab on Deck	650.00 15,355.00	sqft sf	16.00 /sqft 4.25 /sf	10,400 65,259
	5	Drilled Piers	257.00	cuyd	4.25 /SI 350.00 /cuyd	89,950
	6	Pier caps & Plinths	25.00		350.00 /cuyd	8,750
		Fill and Finish Pan Stairs	575.00		10.00 /sqft	5,750
		Concrete Subcontractor			_	311,737
		CONCRETE				311,737
4.000		MASONRY				
4.100		Masonry				
	1	Concrete Masonry Units Elevator & Stair Wells 1st to 2nd Levels	5,608.00	ea	9.50 /ea	53,276
		Concrete Masonry Units @ Ext Screen Wall	157.00	ea	9.50 /ea	1,492
		Modular Brick	29,500.00	ea	2.25 /ea	66,375
	2	Modular Brick @ 10' Parapet	9,030.00	ea	2.25 /ea	20,318

35.00 /sf 54,600 40.00 /sf 138,840 35.00 /sf 13,825 35.00 /sf 10,010 358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  40,00 /tons 214,936 3,350.00 /tons 214,936 3,350.00 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	35.00 /s 40.00 /s 35.00 /s 35.00 /s 35.00 /s 3,350.00 /t 3,350.00 /t 3,350.00 /t 3,350.00 /t 2.25 /s	sf sf sf sf tons tons	1,560.00 3,471.00 395.00 286.00	Description  Masonry Limestone Masonry Perimeter Wall Interior Limestone Work Level 2 Stone Work @ Parapet Lime Stone Veneer @ Screen Wall Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	100 4 4 4 4 4 4 1000
35.00 /sf 54,600 40.00 /sf 138,840 35.00 /sf 13,825 35.00 /sf 10,010 358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  40,00 /tons 214,936 3,350.00 /tons 214,936 3,350.00 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	35.00 /s 40.00 /s 35.00 /s 35.00 /s 3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	sf sf sf tons tons	1,560.00 3,471.00 395.00 286.00 32.00 64.16	Masonry Limestone Masonry Perimeter Wall Interior Limestone Work Level 2 Stone Work @ Parapet Lime Stone Veneer @ Screen Wall Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	100 4 4 4 4 4
3,350.00 /sf 13,825 35.00 /sf 13,825 35.00 /sf 10,010 358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  36,092 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 36,092 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 3,880 80.00 /LF 8,000 11,880	3,350.00 /s 35.00 /s 35.00 /s 3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	sf sf sf tons tons	3,471.00 395.00 286.00 32.00 64.16	Limestone Masonry Perimeter Wall Interior Limestone Work Level 2 Stone Work @ Parapet Lime Stone Veneer @ Screen Wall Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	4 4 4 4 0000
3,350.00 /sf 13,825 35.00 /sf 13,825 35.00 /sf 10,010 358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  36,092 214,936 3,350.00 /tons 214,936 3,350.00 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	3,350.00 /s 35.00 /s 35.00 /s 3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	sf sf sf tons tons	3,471.00 395.00 286.00 32.00 64.16	Interior Limestone Work Level 2 Stone Work @ Parapet Lime Stone Veneer @ Screen Wall Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	000 000
35.00 /sf 13,825 35.00 /sf 10,010 358,735 358,735 358,735 358,735 358,735 358,735 358,735 358,735 358,735 358,735 358,735 350.00 /tons 214,936 3,350.00 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283 40.00 /LF 3,880 80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400	3,350.00 /s 3,350.00 /t 3,350.00 /t 3,350.00 /t 3,500.01 /t 5,500.00 /t 2.25 /s	sf sf sf tons tons tons	395.00 286.00 32.00 64.16	Stone Work @ Parapet Lime Stone Veneer @ Screen Wall Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	000 000
35.00 /sf 10,010 358,735 358,735 358,735 3,350.00 /tons 107,200 3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283 40.00 /LF 3,880 80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400	3,350.00 /t 3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons tons	32.00 64.16	Lime Stone Veneer @ Screen Wall  Masonry  MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	000
358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  358,735  140,00 /tons	3,350.00 /t 3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons tons	32.00 64.16	MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	<b>000</b>
3,350.00 /tons 107,200 3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16	MASONRY  STEEL  Structural Steel Columns Level 2 to Level 3	105
3,350.00 /tons 107,200 3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16	STEEL  Structural Steel Columns Level 2 to Level 3	105
3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16	Structural Steel Columns Level 2 to Level 3	105
3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16	Columns Level 2 to Level 3	
3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16	Columns Level 2 to Level 3	
3,350.00 /tons 214,936 3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880	3,350.00 /t 3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons tons	64.16		
3,350.00 /tons 87,100 3,350.01 /tons 226,561 5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	3,350.00 /t 3,350.01 /t 5,500.00 /t 2.25 /s	tons		Floor Beams 2nd Floor	2
3,350.01 /tons	3,350.01 /t 5,500.00 /t 2.25 /s		26.00	Roof Beams Level 2	2
5,500.00 /tons 11,000 2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	5,500.00 /t 2.25 /s	tons	67.63	Roof Beams Level 3 & Balcony Level	2
2.25 /sqft 36,092 2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400	2.25 /s	tons	2.00	Misc. Steel Bracing @ Parapet	
2.25 /sqft 20,475 2.25 /sqft 13,359 140.00 /sqft 126,560 843,283  40.00 /LF 3,880 80.00 /LF 8,000 11,880  400.00 /Inft 20,400 20,400		sqft	16,041.00	Composite Floor Deck	5
2.25 /sqft 13,359 140.00 /sqft 126,560 843,283 40.00 /LF 3,880 80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400				Roof Decking Level 2	
140.00 /sqft		sqft	9,100.00	•	5 5
40.00 /LF 3,880 80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400		sqft	5,937.00	Roof Deck Over Balcony Level	
40.00 /LF 3,880 80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400	140.00 /s	sqft	904.00	Steel Stairs Level 2 to Level 3	6
80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400				Structural Steel	
80.00 /LF 8,000 11,880 400.00 /Inft 20,400 20,400	40.00 //		07.00	Misc Steel	106
11,880 400.00 /Inft 20,400 20,400		LF	97.00	Wall Rails Guardrails	
400.00 /Inft	00.00 /1	LF	100.00		11
20,400				Misc Steel 59.70 Labor hours	
20,400				Glazed Decorative Metal Railings	705
20,400	400.00 /	Inft	51.00	Ornamental Rail Systems	1
				Glazed Decorative Metal Railings	
				Expansion Jnt Assemblies	805
20.10 /Inft4,422	20.10 /	Inft	220.00	Expansion Joint Assemblies	10
4,422				Expansion Int Assemblies	
,				62.86 Labor hours	
879,985				STEEL	
				WOOD & PLASTICS	000
				Rough Carpentry	100
•	,			•	
		mbf		•	2
2.15 /sf3,623	2.15 /s	sf	1,685.00	Parapet Sheathing	4
34,313				Rough Carpentry	
				1,026.081 Labor hours 255.000 Equipment hours	
				Interior Finish Carpentry	101
6.50 /sqft 36,712		sqft	5,648.00	Finish Carpentry In Theaters	
25.00 /sqft37,700	25.00 /s	sqft	1,508.00	Wood Display Wall	7
74,412				Interior Finish Carpentry	
				5,798.80 Labor hours	
450.00 /-5			20.22	Millwork	502
150.00 /sf 12,000	450.00 /	ST	80.00	Solid Surface Vanity Tops W/ Supports	5
6.50 /sqft	3,050.00 /r 2.15 /s 6.50 /s	sf sqft	5,648.00	Rough Carpentry Blocking Roof Blocking Parapet Sheathing Rough Carpentry 1,026.081 Labor hours 255.000 Equipment hours Interior Finish Carpentry Finish Carpentry In Theaters Wood Display Wall	1 2 4 101 2

						Total	
Item		Description	Takeoff Qty		Unit Cost		Amount
		Millwork					12,000
		WOOD & PLASTICS					120,725
		6,824.881 Labor hours					,
		255.000 Equipment hours					
7.000		THERMAL-MOIST PR					
7.100		PVC Single Ply Roofing		_			
	2	PVC Single Ply Roofing	9,100.00	sqft	11.40	/sqft	103,740
		PVC Single Ply Roofing					103,740
7.170		Building Vapor Barrier					
	8	Masonry Sealers	7,756.00	sqft	0.91	/sqft	7,058
	10	Building Caulking	1,551.20	Inft	5.00	/Inft	7,756
	11	Fluid Applied Membrane Air Barriers & Testing	7,756.00	sqft	5.80	/sqft	44,988
		Building Vapor Barrier					59,801
7.240		Applied Fireproofing					
	5	Spray-On Fireproofing	31,396.00	sqft	1.82	/sqft	57,141
		Applied Fireproofing					57,141
.241		Penetration Firestopping & Fire Resistive Joint Systems					
	10	Firestopping	31,396.00	LS	0.10	/LS	3,140
		Penetration Firestopping & Fire Resistive Joint Systems					3,140
7.705		Roof Accessories (Roof Hatches)					
	10	Roof Hatch	1.00	each	5,122.00	/each	5,122
		Roof Accessories (Roof Hatches) 5.00 Labor hours					5,122
		THERMAL-MOIST PR 5.00 Labor hours					228,944
8.000		DOORS & WINDOWS					
3.111		Hollow Metal Doors & Frames					
2.111	2	Hollow Metal Frames	41.00	each	203.00	/each	8,323
	_	Hollow Metal Doors & Frames	11.00	Cuon	200.00	700011	8,323
		123.000 Labor hours					0,020
3.140		Flush Wood Doors					
	10	Flush Wood Doors	41.00	each	303.00	/each	12,423
		Flush Wood Doors			223.00		12,423
		123.000 Labor hours					. 2, . 20
3.305		Access Doors & Frames					
	02	Access Doors	8.00	each	202.00	/each	1,616
		Access Doors & Frames					1,616
		16.00 Labor hours					
.710		Door Hardware					
	1	Finish Hardware	41.00	leaf	819.00	/leaf	33,579
		Door Hardware					33,579
		164.00 Labor hours					
		Glazed Aluminum Curtain Walls					
3.810		Ciazca Alaminam Cartain Walls					
3.810		Curtain Wall System	4,524.00	sf	60.00		271,440
8.810	5 6 8		4,524.00 6.00 1.00	sf ea ea	60.00 3,200.00 3,969.85	/ea	271,440 19,200 3,970

				İ	7.4.1		
14		Description	<b></b>		Half Oant	Total	
Item		Description	Takeoff Qty		Unit Cost		Amount
8.810		Glazed Aluminum Curtain Walls					
	10	Interior Storefront Systems	920.00	sqft	30.00	/sqft	27,600
		Glazed Aluminum Curtain Walls					322,210
		DOORS & WINDOWS 426.000 Labor hours					378,151
9.000		FINISHES					
9.130		Acoustical Panel Ceilings					
3.100	1	Acoustical Ceilings	18,122.00	ls	2.80	/ls	50,742
		Acoustical Panel Ceilings	,				50,742
9.300		Ceramic Tile					
	1	Ceramic Floor Tile In RR	1,118.00	sqft	10.82	/sqft	12,097
	1	Porcelain Tile @ RR Walls 10'	3,630.00	sqft	10.82		39,277
		Ceramic Tile				•	51,374
9.304		Terrazzo Floor					
	10	Terrazzo Flooring	7,163.00	sqft	16.00	/sqft	114,608
		Terrazzo Floor					114,608
9.330		Drywall Systems					
	1	Drywall Interior Walls	17,745.00	sf	5.00		88,725
	1	Drywall Ext Wall & Parapet	7,756.00	sf	6.00		46,536
	1	Drywall Furr Out Wall to Existing	3,627.00	sf	4.00		14,508
	1	Drywall FurrDown @ 3rd Floor Acoustical Wall Panels	2,890.00 2,000.00	sf sf	8.00 8.50		23,120
	15	Drywall Systems	2,000.00	51	6.50	/51	17,000 189,889
9.710		Wood Flooring					
sub		Wood Flooring	3,992.00	sqft	10.00	/saft	39,920
ous		Wood Flooring	0,002.00	oqit	.0.00	,04.0	39,920
9.860		Resilient Tile/Carpet					
0.000	1	Carpet & Luxury Vinyl Tile	16,825.00	sqft	5.50	/sqft	92,538
		Resilient Base	2,764.00	lf .	1.50		4,146
		Resilient Tile/Carpet					96,684
9.861		Resinous Systems					
sub		Resilient Poured Floor	840.00	sqft	8.00	/sqft	6,720
		Resinous Systems					6,720
9.940		Painting					
	02	Paint,Caulk,Vinyl Wall Cover Painting	41,782.00	sub	1.543	3 /sub	64,454 64,454
		FINISHES					614,389
10.000		SPECL CONDITIONS					
10.005		Visual Display Units					
	4	Marker & Tackboards	896.00	sf	15.00	/sf	13,440
		Visual Display Units					13,440
10.160		Toilet Compartments					

					Total		
Item		Description	Takeoff Qty		Unit Cost		Amount
		Toilet Compartments 82.500 Labor hours					12,570
0.430	1	Signage Graphics & Signage Allowance	31,396.00	sqft	0.85	/sqft	26,541
		Signage					26,541
0.435	10	Room Signage Room Signage & Way Finding	41.00	ea	75.00	/ea	3,075
		Room Signage 82.00 Labor hours					3,075
0.523		F.E. & Cabinets					
	20	Fire Ext. Cabinets (Recessed)  F.E. & Cabinets  30.63 Labor hours	7.00	each	325.00	/each	2,275 2,275
0.810		Toilet, Bath & Laundry Accessories					
	10	LS Toilet Access  Toilet, Bath & Laundry Accessories  168.750 Labor hours	90.00	each	110.00	/each	9,900 9,900
		SPECL CONDITIONS					67,801
1.000		363.88 Labor hours  EQUIPMENT					
11.025 sub		Food Service Equipment Food Service Equipment	1.00	sub	20,000.00	/eub	20,000
Sub		Food Service Equipment	1.00	Sub	20,000.00	/Sub	20,000
11.027		Stage Equipment					
		Theatrical Sound System	1.00	ls	115,000.00		115,000
		Theatrical Lighting, Dimming & Controls System Black Box Theatrical Lighting Dimming & Controls	1.00 1.00	ls Is	345,000.00 240,000.00		345,000 240,000
	2	System Lighting Lab Theatrical Lighting Dimming &	1.00	ls	110,000.00	/Is	110,000
	•	Controls System	4.00		050 000 00		050 000
		Theatrical Rigging & Curtains System	1.00	ls	250,000.00		250,000
	3	Black Box Theatrical Rigging & Curtains	1.00	ls	95,000.00		95,000
	б	Lighting Lab Stage Rigging & Drapery Stage Equipment	1.00	ls	100,000.00	/IS	1,255,000
		EQUIPMENT					1,275,000
2.000		FURNISHINGS					
12.510		Mecho Shades					
	1	Mecho Shades  Mecho Shades	4,000.00	sf	20.00	/sf	80,000
2.711	1	Portable Platform System Portable Platform System By Owner NIC					
12.720	4.5	Fixed Audience Seating	0.17.65		700	1	050 000
	10	Theater Seats @ Flexible Theater Loose Seating @ Black Box Theater NIC	315.00	ea	793.651		250,000
	10	Balcony Theater Seats @ Flexible Theater	79.00	ea	746.84	/ea	59,000

				Total		
Item		Description	Takeoff Qty		Unit Cost	Amount
		Fixed Audience Seating				309,000
		FURNISHINGS				389,000
13.000		SPECIAL CONST				
13.001		Scaffolding				
sub		Scaffolding @ Lobby	8,151.00	sqft	5.00 /sqft	40,755
sub		Perimeter Building Scaffolding Scaffolding	12,300.00	sqft	5.00 /sqft	61,500 102,255
		SPECIAL CONST				102,255
14.000		CONVEYING SYSTEM				
14.200		Elevators				
	1	Elevators	1.00	sub	100,000.00 /sub	100,000
		Elevators				100,000
		CONVEYING SYSTEM				100,000
15.000		MECHANICAL				
15.001		Plumbing				
sub		Roof Drains	3.00	sub	3,635.20 /sub	10,906
sub		Plumbing	45.00	fixt	4,154.52 /fixt	186,953
		Plumbing				197,859
15.010		HVAC				
sub		HVAC	31,396.00	sqft	40.641 /sqft	1,275,967
		HVAC				1,275,967
15.750		Fire Protection System				
sub		Fire Protection System	31,396.00	sub	3.64 /sub	114,131
		Fire Protection System				114,131
15.990		Testing & Balance				
sub		Testing & Balance	31,396.00	sqft	0.76 /sqft	23,870
		Testing & Balance				23,870
		MECHANICAL				1,611,826
16.000		ELECTRICAL				
16.001		Electrical				
		Electrical Service & Distribution	31,396.00	sqft	3.274 /sqft	102,777
		Branch Wiring	31,396.00	sqft	6.55 /sqft	205,554
	005	Lighting	31,396.00	sqft	8.73 /sqft	274,072
		Electrical				582,403
		ELECTRICAL				582,403
17.000		TECHNOLOGY SYSTEMS				
17.003		Security System				
		Closed Circuit Security System	31,396.00 31,396.00	sqft	2.013 /sqft	63,211
		Intrusion & Panic Alarm System		sqft	1.01 /sqft	31,606

					Total	
Item		Description	Takeoff Qty	Unit Cos	t	Amount
		Security System 62,792.00 Labor hours				94,817
17.007	9	Data & Phone System Data & Phone System Data & Phone System	31,396.00	sf	4.03 /sf	126,423 126,423
17.008	1	Fire Alarm System Fire Alarm Systems Fire Alarm System	31,396.00	Is	2.52 /ls	79,014 79,014
17.010	1	Access Controls Access Controls Access Controls	31,396.00	ea	1.01 /ea	31,606 31,606
		TECHNOLOGY SYSTEMS 62,792.00 Labor hours				331,860
		004 Level 2 Add			242.81 /sqft	7,623,164

**31,396.00 sqft** 71,005.25 Labor hours 333.490 Equipment hours

				Total		
Item		Description	Takeoff Qty		Unit Cost	Amount
05 Level 3	Ren					
.000		GEN CONDITIONS				
1.100		General Conditions				
	1	General Conditions	16,110.00	sqft	5.19 /s	•
		General Conditions				83,611
.710		Final Cleanup				
	10	Level 3 Renovation Final Cleanup	16,110.00	sf	0.35 /s	
		Final Cleanup 241.650 Labor hours				5,639
		40.28 Equipment hours				
		GEN CONDITIONS				89,249
		241.650 Labor hours				
		40.28 Equipment hours				
2.200		DEMOLITION				
.300		Concrete Remove & Replace				
.500	1	Saw Concrete	100.00	If	20.00 /	f 2,000
	1	Saw Concrete	92.00	lf	20.00 //	
	4	Remove Structural Tees & Topping Slabs	775.00	sf	10.00 /s	,
	4	Remove Structural Tees & Topping Slabs	205.00	sf	10.00 /s	
		Concrete Remove & Replace				13,640
		176.133 Labor hours 60.844 Equipment hours				
2.410		Masonry				
	1	Saw Masonry	60.00	If	7.50 /	f 450
	2	Remove Masonry For Opening By Hand	120.00	sf	5.00 /s	
	4	Tooth Brick Jambs	60.00	lf	30.00 /	
		Masonry				2,850
		16.00 Labor hours 5.00 Equipment hours				
		Damara Mall				
2.441	1	Remove Wall Remove Walls	6,266.00	ef	1.30 /s	sf 8,146
	,	Remove Wall	0,200.00	Ji	1.50 /8	8,146
		313.30 Labor hours				3,140
		104.433 Equipment hours				
2.820		Rem Glass & Aluminum				-
	2	Rem. Glass & Aluminum Systems	259.00	SF	2.60 /5	
		Rem Glass & Aluminum 25.90 Labor hours				673
.871		Remove HVAC Components				
	5	Remove Ductwork	16,110.00	sf	1.00 /s	of 16,110
		Remove HVAC Components				16,110
.876	_	Remove Electrical Components	40.440.55		0.50	
	2	Interior Lighting	16,110.00	ea	0.50 /6	
		Remove Electrical Components				8,055
2.900		Remove Flooring Remove Flooring	16,110.00		0.74 /s	sf 11,873

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		•	_		_	
		Remove Flooring 447.50 Labor hours				11,873
2.944		Remove Ceiling				
	8	Remove Ceiling Finishes  Remove Ceiling	16,110.00	sqft	1.00 /sqft	16,110 16,110
		134.25 Labor hours				10,110
2.990	1	Debris Haul-Off Waste & Debris Removal	120.00	01/	30.00 /cy	3,600
		Debris Haul-Off	120.00	Cy		3,600
		24.00 Labor hours				
		DEMOLITION				81,057
		1,137.083 Labor hours 170.28 Equipment hours				
3.000		CONCRETE				
3.100		Concrete Subcontractor				
		Composite Slab For New Ramp	205.00	sf	7.561 /sf	1,550
	14	Structural Beam @ Lobby  Concrete Subcontractor	130.00	Inft	75.00 /Inft	9,750
		Concrete Subcontractor				11,300
		CONCRETE				11,300
4.000		MASONRY				
4.515		Masonry Restoration				
sub		Masonry Restoration Level 3	7,191.00	sqft	2.503 /sqft	18,000
sub		Concrete Roof, & Steel Restoration in Bell Tower  Masonry Restoration	350.00	sqft	28.571 /sqft	10,000 28,000
		MASONRY				28,000
5.000		STEEL				
5.105		Structural Steel				
		Floor Support Steel For New Opening Floor Support Steel For New Ramp	5.00 1.50	tons tons	5,500.00 /tons 5,500.00 /tons	27,500 8,250
	3	Structural Steel	1.50	toris	3,300.00 710113	35,750
5.106		Misc Steel				
		Guardrail @ New Ramp	82.00	LF	80.00 /LF	6,560
	17	ů <b>3</b> ,	2,270.00	sf	40.00 /sf	90,800
	28	Roof Access Ladders Misc Steel	25.00	II	68.00 /lf	1,700 99, <i>0</i> 60
		503.85 Labor hours				33,000
5.705		Glazed Decorative Metal Railings				
	1	Ornamental Rail Systems	40.00	lf	400.00 /lf	16,000
		Glazed Decorative Metal Railings				16,000
		STEEL 503.85 Labor hours				150,810
6.000		WOOD & PLASTICS				

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
6.100	10	Rough Carpentry	F 00	la-f	4.700.00 /mhf	0.500
	10	Blocking Rough Carpentry	5.00	mbi	1,700.00 /mbf	8,500 8,500
		333.333 Labor hours				6,500
6.502		Millwork				
	5	Solid Surface Tops	60.00	sf	150.00 /sf	9,000
		Millwork				9,000
		WOOD & PLASTICS 333.333 Labor hours				17,500
7.000		THERMAL-MOIST PR				
7.100	4	PVC Single Ply Roofing	24 750 00	on#	2.50 /0-9	64 075
	1	PVC Single Ply Roofing	24,750.00	sqit	2.50 /sqft	61,875 61,875
		PVC Single Ply Roofing				01,875
7.170	_	Building Vapor Barrier	7.404.00		2011	25
	8	Masonry Sealers	7,191.00	sqtt	0.91 /sqft	6,544
		Building Vapor Barrier				6,544
7.241	10	Penetration Firestopping & Fire Resistive Joint Systems Firestopping	16,110.00	saft	0.10 /sqft	1,611
	10	Penetration Firestopping & Fire Resistive Joint	10,110.00	oqit	0.10 70qit	1,611
		Systems				,,,,,
		THERMAL-MOIST PR				70,030
8.000		DOORS & WINDOWS				
8.111		Hollow Metal Doors & Frames				
0.111	2	Hollow Metal Frames	32.00	each	203.00 /each	6,496
		Hollow Metal Doors & Frames				6,496
		96.000 Labor hours				
8.140	40	Flush Wood Doors	20.00	!-	000.00 /	0.000
	10	Flush Wood Doors Flush Wood Doors	32.00	each	303.00 /each	9,696
		96.000 Labor hours				9,696
8.305		Access Doors & Frames				
	02	Access Doors	5.00	each	202.00 /each	1,010
		Access Doors & Frames 10.00 Labor hours				1,010
8.710		Door Hardware				
	1	Finish Hardware	32.00	leaf	819.00 /leaf	26,208
		Door Hardware 128.00 Labor hours				26,208
0.040						
		Glazed Aluminum Curtain Walls	4,400.00	sqft	10.00 /sqft	44,000
8.810	າ					
8.810		Mirrors @ Studios & Flex Areas Glass Glazing & Aluminum				
8.810	7		259.00 294.00	sf sqft	40.00 /sf 30.00 /sqft	10,360 8,820

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		DOORS & WINDOWS				106,590
		330.000 Labor hours				,
.000		FINISHES				
9.130		Acoustical Panel Ceilings				
	1	Acoustical Ceilings Acoustical Panel Ceilings	14,450.00	ls	2.80 /ls	40,460 40,460
.300		Ceramic Tile				
	1	Ceramic Floor Tile In RR	672.00	sqft	10.82 /sqft	7,271
	1	Porcelain Tile @ RR Walls 10'	2,020.00	sqft	10.82 /sqft	21,856
		Ceramic Tile			_	29,127
0.330		Drywall Systems	0.000.00	-4	E 00 /-E	04.000
	1	Drywall Interior Walls	6,266.00	sf	5.00 /sf	31,330
		Drywall Systems				31,330
.860	3	Resilient Tile/Carpet Resilient Base	2,272.00	lf	1.50 /lf	3,408
	5	Rubber Treads & Risers	735.00	Sqft	15.00 /Sqft	11,025
	3	Resilient Tile/Carpet	700.00	~4n	.o.oo /oqii _	14,433
.940		Painting				
	02	Paint, Caulk, Vinyl Wall Cover	38,500.00	sub	1.543 /sub	59,391
		Painting				59,391
		FINISHES				174,741
0.000		SPECL CONDITIONS				
0.005		Visual Display Units				
10.005		visuai Dispiay Offics				
		Marker & Tackhoards	449.00	cf	15.00 /cf	6 720
	4	Marker & Tackboards	448.00	sf	15.00 /sf	
	4	Visual Display Units	448.00	sf	15.00 /sf	
0.160		Visual Display Units  Toilet Compartments			_	6,720
0.160		Visual Display Units  Toilet Compartments Solid Plastic Part.	448.00 8.00	sf ea	15.00 /sf	6,720 6,704
0.160		Visual Display Units  Toilet Compartments			_	6,720 6,720 6,704 6,704
	1	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage	8.00	ea	838.00 /ea _	6,720 6,704 6,704
	1	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance			_	6,720 6,704 6,704 13,619
	1	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage	8.00	ea	838.00 /ea _	6,720 6,704 6,704 13,619
0.430	1	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage	8.00 16,110.00	ea sqft	838.00 /ea 0.85 /sqft	6,720 6,704 6,704 13,619
0.430	1	Visual Display Units  Toilet Compartments Solid Plastic Part. Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage Room Signage & Way Finding	8.00	ea sqft	838.00 /ea _	6,720 6,704 6,704 13,619 13,619
0.430	1	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage	8.00 16,110.00	ea sqft	838.00 /ea 0.85 /sqft	6,720 6,704 6,704
0.430 0.435	1 1 10	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage Room Signage & Way Finding Room Signage 64.00 Labor hours  F.E. & Cabinets	8.00 16,110.00 32.00	ea sqft ea	838.00 /ea	6,720 6,704 6,704 13,619 13,619 2,400 2,400
0.430 0.435	1 1 10	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage Room Signage & Way Finding Room Signage 64.00 Labor hours  F.E. & Cabinets Fire Ext. Cabinets (Recessed)	8.00 16,110.00 32.00	ea sqft	838.00 /ea 0.85 /sqft	6,720 6,704 6,704 13,619 13,619 2,400 2,400
0.430	1 1 10	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage Room Signage & Way Finding Room Signage 64.00 Labor hours  F.E. & Cabinets	8.00 16,110.00 32.00	ea sqft ea	838.00 /ea	6,720 6,704 6,704 13,619 13,619
0.430 0.435 0.523	1 1 10	Visual Display Units  Toilet Compartments Solid Plastic Part. Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage Room Signage Room Signage & Way Finding Room Signage 64.00 Labor hours  F.E. & Cabinets Fire Ext. Cabinets (Recessed) F.E. & Cabinets	8.00 16,110.00 32.00	ea sqft ea	838.00 /ea	6,720 6,704 6,704 13,619 13,619 2,400 2,400
10.160 10.430 10.435 10.523	1 10 20	Visual Display Units  Toilet Compartments Solid Plastic Part.  Toilet Compartments 44.000 Labor hours  Signage Graphics & Signage Allowance Signage  Room Signage Room Signage & Way Finding Room Signage 64.00 Labor hours  F.E. & Cabinets Fire Ext. Cabinets (Recessed) F.E. & Cabinets 17.500 Labor hours	8.00 16,110.00 32.00	ea sqft ea each	838.00 /ea	6,720 6,704 6,704 13,619 13,619 2,400 2,400

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		SPECL CONDITIONS 125.500 Labor hours				42,743	
13.000		SPECIAL CONST					
13.001		Scaffolding					
sub		Special Construction	7,191.00	saft	5.00 /sqft	35,955	
		Scaffolding	,		_	35,955	
		SPECIAL CONST				35,955	
15.000		MECHANICAL					
15.010		HVAC					
sub		HVAC	16,110.00	sub	23.223 /sub	374,130	
		HVAC	,			374,130	
15.990		Testing & Balance	40.440.00		0.70 ( )	40.040	
sub		Testing & Balance Testing & Balance	16,110.00	each	0.76 /each	12,248 12,248	
		MECHANICAL				386,378	
16.000		ELECTRICAL				000,010	
10.000		ELECTRICAL					
16.001		Electrical					
		Electrical Service & Distribution	16,110.00	sqft	3.274 /sqft	52,737	
	004	Branch Wiring Lighting	16,110.00 16,110.00	sqft sqft	3.274 /sqft 7.613 /sqft	52,737 122,652	
	003	Electrical	10,110.00	Sqit	7.01079qit	228,126	
		ELECTRICAL				228,126	
17.000		TECHNOLOGY SYSTEMS					
17.003		Security System					
	1	Closed Circuit Security System	16,110.00	sqft	1.01 /sqft	16,218	
	2	Intrusion & Panic Alarm System	16,110.00	sqft	0.503 /sqft	8,109	
		Security System 32,220.00 Labor hours				24,326	
17.007		Data & Phone System					
	9	Data & Phone System	16,110.00	sf	1.01 /sf	16,218	
		Data & Phone System				16,218	
17.008		Fire Alarm System	40 440 00	la.	0.50 //-	40.511	
	1	Fire Alarm Systems Fire Alarm System	16,110.00	IS	2.52 /ls	40,544 40,544	
17.010		-				.0,011	
17.010	1	Access Controls Access Control Station	16,110.00	ea	0.252 /ea	4,054	
	•	Access Controls	10,110.00		<u> </u>	4,054	
		TECHNOLOGY SYSTEMS				85,142	
		32,220.00 Labor hours					

			Total	
Item	Description	Takeoff Qty	Unit Cost	Amount
	005 Level 3 Ren		93.583/saft	1.507.623

**16,110.00 sqft** 34,891.42 Labor hours 210.553 Equipment hours

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
006 Level 3	3 Add					
JOU LEVEL C	- Auu					
1.000		GEN CONDITIONS				
1.100		General Conditions				
	1	General Conditions	21,665.00	sqft	5.19 /sqft	112,441
		General Conditions				112,441
1.710		Final Cleanup				
	10	Level 3 Addition Final Cleanup	21,665.00	sf	0.35 /sf	7,583
		Final Cleanup 324.98 Labor hours				7,583
		54.163 Equipment hours				
		GEN CONDITIONS				120,024
		324.98 Labor hours				·,- <b>-</b>
		54.163 Equipment hours				
3.000		CONCRETE				
3.100		Concrete Subcontractor				
	4	Composite Slab on Deck	10,000.00	sf	4.25 /sf	42,500
		Concrete Subcontractor				42,500
		CONCRETE				42,500
4.000		MASONRY				
4.100		Masonry				
	1	Concrete Masonry Units @ Ext Screen	164.450	ea	10.033 /ea	1,650
	1		3,453.450	ea	10.14 /ea	35,000
	2	3rd to 4th Levels Modular Brick Exterior Level 3	39,300.00	ea	2.25 /ea	88,425
	4	Limestone Masonry Perimeter Wall	830.00	sf	35.00 /sf	29,050
	4		455.00	sf	35.00 /sf	15,925
		Masonry				170,050
		MASONRY				170,050
5.000		STEEL				
5.105		Structural Steel				
			40.02	tons	3,350.00 /tons	134,067
	3 5		5.00 10,000.00	tons sqft	5,500.00 /tons 2.25 /sqft	27,500 22,500
	5		17,733.00	sqit	2.25 /sqft 2.25 /sqft	39,899
		Structural Steel	.,			223,966
5.705		Glazed Decorative Metal Railings				
	1	Ornnamental Metal Balcony Rail	145.00	lf	250.00 /lf	36,250
	1	,	142.00	lf	400.00 /lf	56,800
		Glazed Decorative Metal Railings				93,050
5.805		Expansion Jnt Assemblies	440.00		20.10 /Inft	8,844

Amount
8,844
325,860
13,370
22,570
2,626
38,566
36,712
39,000
75,712
0.000
9,000 9,000
123,278
202,156
202,156
5,865
6,445
37,381
49,691
00.400
39,430
39,430
2,167
2,167
2,101
10,344
10,344
303,788
•

Item		Description	Takaoff Oty		Unit Cost	otal	Amount
item		Description	Takeoff Qty		Onit Cost		Amount
.000		DOORS & WINDOWS					
3.111	2	Hollow Metal Doors & Frames Hollow Metal Frames Hollow Metal Doors & Frames	12.00	each	203.00 /	each	2,436 2,436
		36.000 Labor hours					
3.140		Flush Wood Doors					
	10	Flush Wood Doors Flush Wood Doors 36.000 Labor hours	12.00	each	303.00 /	each	3,636 3,636
3.305		Access Doors & Frames					
	02	Access Doors Access Doors & Frames	6.00	each	202.00 /	each	1,212 1,212
		12.00 Labor hours					1,212
3.710		Door Hardware					
	1	Finish Hardware	12.00	leaf	819.00 /	leaf	9,828
		Door Hardware 48.00 Labor hours					9,828
3.810		Glazed Aluminum Curtain Walls					
		Curtain Wall System	2,408.00	sf	60.00 /		144,480
	10	Interior Storefront Systems Glazed Aluminum Curtain Walls	340.00	sqft	30.00 /	sqπ	10,200 154,680
		DOORS & WINDOWS					171,792
		132.000 Labor hours					
0.000		FINISHES					
0.130		Acoustical Panel Ceilings					
		Acoustical Ceilings	9,388.00	ls	2.80 /		26,286
	1	APC-4 Eurospan Ceiling System  Acoustical Panel Ceilings	3,310.00	ls	18.00 /		59,580 85,866
.300		Ceramic Tile					
		Ceramic Floor Tile In RR	782.00	sqft	10.82 /		8,461
	1	Porcelain Tile @ RR Walls 10'	1,970.00	sqft	10.82 /	sqft	21,315
		Ceramic Tile					29,777
.330	1	Drywall Systems Drywall Int Partitions 3rd Level	10,530.00	sf	5.00 /	cf	52,650
	1	•	6,445.00	sf	6.00 /		38,670
	1	Drywall Furr Out Wall to Existing	3,731.00	sf	4.00 /	sf	14,924
	9	Suspended Gyp Board Ceilings @ Theater Ceiling	3,310.00	sqft	5.104 /	sqft	16,893
		Drywall Systems					123,137
9.711	1	Wood Ceiling Systems Wood Ceiling Systems	6,288.00	ef	25.00 /	<b>e</b> f	157,200
	•	Wood Ceiling Systems	0,200.00	O.	20.00 /		157,200
9.860		Resilient Tile/Carpet					
		Carpet & Luxury Vinyl Tile	9,400.00	sqft	5.50 /	•	51,700
	3	Resilient Base Resilient Tile/Carpet	1,010.00	lf	1.50 /		1,515 53,215
9.940		Painting					
	02	Paint, Caulk, Vinyl Wall Cover	37,600.00	sub	1.543 /	sub	58,003

					Total		
Item		Description	Takeoff Qty		Unit Cost	Total	Amount
		Painting					58,003
		FINISHES					507,197
10.000		SPECL CONDITIONS					
10.005		Visual Display Units					
	4	Marker & Tackboards	128.00	sf	15.00	/sf	1,920
		Visual Display Units					1,920
10.160		Toilet Compartments					
	1	Solid Plastic Part.	10.00	ea	838.00	/ea	8,380
		Toilet Compartments					8,380
		55.000 Labor hours					
10.430		Signage					
	1	Graphics & Signage Allowance	21,665.00	sqft	0.85	/sqft	18,315
		Signage				·	18,315
10 105		Pages Simons					
10.435	10	Room Signage Room Signage & Way Finding	12.00	ea	75.00	1/00	900
	10	Room Signage	12.00	Са	75.00	/ea	900
		24.00 Labor hours					300
40.500		55.004: 4					
10.523	20	F.E. & Cabinets Fire Ext. Cabinets (Recessed)	5.00	each	325.00	/each	1,625
	20	F.E. & Cabinets	5.00	Cacii	323.00	/eacii	1,625
		21.88 Labor hours					,,020
10.536		Protective Covers					
10.550	3	Louver Screen Wall	1,540.00	sf	32.47	/sf	50,000
	· ·	Protective Covers	1,010.00	0.	<b>52</b>		50,000
10.810	10	Toilet, Bath & Laundry Accessories LS Toilet Access	60.00	each	110.00	/each	6,600
	10	Toilet, Bath & Laundry Accessories	00.00	Cacii	110.00	/eacii	6,600
		112.500 Labor hours					0,000
		SPECL CONDITIONS 213.38 Labor hours					87,740
		210.00 Labor Hours					
12.000		FURNISHINGS					
12.510		Mecho Shades					
	1	Mecho Shades	340.00	sf	20.00	/sf	6,800
		Mecho Shades					6,800
		FURNISHINGS					6,800
13.000		SPECIAL CONST					
13.001		Scaffolding					
sub		Interior Scaffolding @ Lobby & Black Box Theater	9,598.00	sqft	12.00	/sqft	115,176
sub		Interior Scaffolding @ Flex Theatre	5,810.00	sqft		/sqft	92,960
		0 #-   -   -					
		Scaffolding					208,136

					T-4-1		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		= <b>.h</b> .	runcon aty			. 41104111	
15.000		MECHANICAL					
15.001		Plumbing					
sub		Roof Drains	6.00	sub	3,635.202 /sub	21,811	
sub		Plumbing	27.00	fixt	3,635.201 /fixt	98,150	
		Plumbing				119,962	
15.010		HVAC					
sub		HVAC	10,200.00	Sqft	70.66 /Sqft	720,688	
		HVAC				720,688	
15.750		Fire Protection System					
sub		Fire Protection System	17,733.00	sqft	2.60 /sqft	46,045	
		Fire Protection System				46,045	
15.990		Testing & Balance	04.005.00	00-6	0.70 /2225	40 474	
sub		Testing & Balance	21,665.00	each	0.76 /each _	16,471	
		Testing & Balance				16,471	
		MECHANICAL				903,166	
16.000		ELECTRICAL					
16.001		Electrical					
10.001	003	Electrical Service & Distribution	21,665.00	sqft	3.274 /sqft	70,922	
		Branch Wiring	21,665.00	sqft	6.55 /sqft	141,844	
		Lighting	21,665.00	sqft	6.55 /sqft	141,844	
		Electrical				354,609	
		ELECTRICAL				354,609	
17.000		TECHNOLOGY SYSTEMS					
17.003		Security System					
	1	Closed Circuit Security System	21,665.00	sqft	2.013 /sqft	43,619	
	2	Intrusion & Panic Alarm System	21,665.00	sqft	0.503 /sqft	10,905	
		Security System 43,330.00 Labor hours				54,524	
17.007		Data & Phone System					
	9	Data & Phone System	21,665.00	sf	4.03 /sf	87,239	
		Data & Phone System			_	87,239	
17.008		Fire Alarm System					
	1	Fire Alarm Systems	21,665.00	ls	2.52 /ls	54,524	
		Fire Alarm System				54,524	
17.010		Access Controls					
	1	Access Control Station	21,665.00	ea	0.252 /ea	5,452	
		Access Controls				5,452	
		TECHNOLOGY SYSTEMS				201,740	

			Total	
Item	Description	Takeoff Qty	Unit Cost	Amount
	006 Level 3 Add		162.782/sqft	3,526,680

**21,665.00 sqft**51,020.333 Labor hours
351.163 Equipment hours

					Total		
Item	D	escription	Takeoff Qty		Unit Cost	Amount	
07 Balcony R	en						
.000		GEN CONDITIONS					
.100	1 G	General Conditions eneral Conditions General Conditions	5,046.00	sqft	5.19 /sqft	26,189 26,189	
.710		Final Cleanup alcony Level Renovation Final Clean Up Final Cleanup 75.69 Labor hours 12.62 Equipment hours	5,046.00	sf	0.35 /sf	1,766 1,766	
		GEN CONDITIONS 75.69 Labor hours 12.62 Equipment hours				27,955	
.200		DEMOLITION					
.441	1 R	Remove Wall smove Walls Remove Wall 11.70 Labor hours 3.90 Equipment hours	234.00	sf	1.30 /sf	304 304	
.500		Metals emove Metal Roof Deck  Metals  15.23 Labor hours  15.23 Equipment hours	2,284.00	sqft	1.50 /sqft	3,426 3,426	
.700		Roofing & Sheet Metal emove Built Up Roof Roofing & Sheet Metal 114.20 Labor hours 22.84 Equipment hours	2,284.00	sf	1.23 /sf	<u>2,800</u> 2,800	
.871		Remove HVAC Components emove Ductwork Remove HVAC Components	5,046.00	sf	1.00 /sf	5,046 5,046	
2.874		Furnishings emove Seats Furnishings 358.00 Labor hours 358.00 Equipment hours	358.00	each	39.00 /each	13,962 13,962	
.876		Remove Electrical Components terior Lighting Remove Electrical Components	5,046.00	ea	0.50 /ea	2,523 2,523	
2.900	1 R	Remove Flooring	5,046.00	sf	0.74 /sf	3,734	

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
	Remove Flooring				3,734
	140.17 Labor hour	3			
2.944	Remove Ceiling				
	8 Remove Ceiling Finishes	9,129.00	sqft	1.00 /sqft	9,129
	Remove Ceiling				9,129
	76.08 Labor hour	5			
2.990	Debris Haul-Off	00.00		00.00	4.000
	Waste & Debris Removal     Debris Haul-Off	60.00	су	30.00 /cy	1,800 1,800
	12.00 Labor hour	3			1,800
		•			
	DEMOLITION				42,724
	727.37 Labor hour				
	399.97 Equipment	nours			
4.000	MASONRY				
4.515	Masonry Restoration				
sub	Masonry Restoration Balcony Level	17,721.00	sqft	2.50 /sqft	44,303
sub	Masonry Restoration Bell Tower	3,256.00	sqft	2.50 /sqft	8,140
	Masonry Restoration				52,443
	MASONRY				52,443
5.000	STEEL				
5.105	Structural Steel				
0.700	5 Steel Decking	2,284.00	sqft	3.00 /sqft	6,852
	Structural Steel	,			6,852
	STEEL				6,852
6.000	WOOD & PLASTICS				
6.100	Rough Carpentry				
0.700	1 Blocking	1.70	mbf	1,910.00 /mbf	3,247
	10 Roof Nailers	1.00	mbf	1,780.00 /mbf	1,780
	Rough Carpentry				5,027
	177.17 Labor hour				
	27.20 Equipment	nours			
6.101	Interior Finish Carpentry				
	2 Finish Carpentry In Theaters	3,452.00	sqft	6.50 /sqft	22,438
	Interior Finish Carpentry	_			22,438
	3,452.00 Labor hour	3			
	WOOD & PLASTICS				27,465
	3,629.17 Labor hour				
	27.20 Equipment	hours			
7.000	THERMAL-MOIST PR				
7.100	PVC Single Ply Roofing				
7.100	2 Replace Roof Over Stage in Existin	g 2,284.00	sqft	12.00 /sqft	27,408
	- Replace Real Over Glage in Existin	2,204.00	oqit	12.00 /34It	21,700

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
		PVC Single Ply Roofing			-	27,408
7.170		Building Vapor Barrier				
	8	Masonry Sealers  Building Vapor Barrier	17,721.00	sqft	0.91 /sqft _	16,126 16,126
7.241		Penetration Firestopping & Fire Resistive Joint Systems				
	10	Firestopping	5,046.00	sqft	0.10 /sqft _	505
		Penetration Firestopping & Fire Resistive Joint Systems				505
		THERMAL-MOIST PR				44,039
8.000		DOORS & WINDOWS				
8.111		Hollow Metal Doors & Frames				
	2	Hollow Metal Frames	7.00	each	203.00 /each	1,421
		Hollow Metal Doors & Frames 21.00 Labor hours				1,421
3.140	40	Flush Wood Doors	7.00		000.00 /	0.404
	10	Flush Wood Doors Flush Wood Doors	7.00	each	303.00 /each _	2,121 2,121
		21.00 Labor hours				2,121
3.305	0.2	Access Doors & Frames Access Doors	1.00	each	202.00 /each	202
	02	Access Doors & Frames	1.00	eacii	202.00 /eacii _	202
		2.00 Labor hours				
8.710	1	Door Hardware	7.00	loof	910.00 /loof	E 700
	1	Finish Hardware  Door Hardware	7.00	leaf	819.00 /leaf _	5,733 5,733
		28.00 Labor hours				5,755
		DOORS & WINDOWS				9,477
		72.000 Labor hours				
9.000		FINISHES				
9.130		Acoustical Panel Ceilings				
		Acoustical Ceilings APC-4 Eurospan Ceiling System	1,633.00 7,497.00	ls Is	2.80 /ls 19.501 /ls	4,573 146,200
	•	Acoustical Panel Ceilings	7,407.00	13	10.001710	150,773
9.330	4	Drywall Systems	224.00	sf	5.00 /sf	1 170
	ı	Drywall Drywall Systems	234.00	3I	3.00 /81	1,170 1,170
9.860	1	Resilient Tile/Carpet Carpet & Luxury Vinyl Tile	3,558.00	eaft	5 50 /caft	10 500
	3		490.00	sqft If	5.50 /sqft 1.50 /lf	19,569 735
	5	Rubber Treads & Risers	587.00	lf	15.00 /lf	8,805
		Resilient Tile/Carpet				29,109
9.940	02	Painting Paint,Caulk,Vinyl Wall Cover	8,437.00	sub	1.753 /sub	14,790
		Painting			-	14,790

					Total		
Item		Description	Takeoff Qty		Unit Cost		Amount
		FINISHES					195,842
10.000		SPECL CONDITIONS					
10.430	1	Signage Graphics & Signage Allowance	5,046.00	sqft	0.85	/saft	4,266
		Signage	3,040.00	Sqit	0.00	, sqit _	4,266
10.435	10	Room Signage Room Signage & Way Finding	7.00	ea	75.00	/ea _	525
		Room Signage 14.00 Labor hours					525
10.523	20	F.E. & Cabinets Fire Ext. Cabinets (Recessed)	1.00	each	325.00	/each	325
		F.E. & Cabinets 4.38 Labor hours		000.	020.00	_	325
		SPECL CONDITIONS  18.38 Labor hours					5,116
12.000		FURNISHINGS					
12.720		Fixed Audience Seating					
	10	Theater Seats Fixed Audience Seating	359.00	ea	184.00	/ea _	66,056 66,056
		FURNISHINGS					66,056
13.000		SPECIAL CONST					
13.001		Scaffolding					
sub		Interior Scaffolding @ Theatre	7,200.00	sqft	16.00		115,200
sub		Special Construction Scaffolding	20,977.00	sqft	5.00	/sqit _	104,885 220,085
		SPECIAL CONST					220,085
15.000		MECHANICAL					
15.010		HVAC					
sub		HVAC HVAC	5,046.00	sub	23.223	/sub _	117,186 117,186
15.990 sub		Testing & Balance Testing & Balance	5,046.00	each	0.76	/each	3,836
300		Testing & Balance	3,040.00	eacii	0.70	reacii _	3,836
		MECHANICAL					121,022
16.000		ELECTRICAL					
16.001		Electrical					
16.001	003 004	Electrical Service & Distribution	5,046.00 5,046.00	sqft sqft	3.274 3.274		16,518 16,518

				Total		
Item	Description	Takeoff Qty	Unit Co	est	Amount	
	Electrical			-	71,454	
	ELECTRICAL				71,454	
17.000	TECHNOLOGY SYSTEMS					
17.003	Security System					
	1 Closed Circuit Security System	5,046.00 so	qft	1.01 /sqft	5,080	
	2 Intrusion & Panic Alarm System	5,046.00 so	qft	0.503 /sqft	2,540	
	Security System				7,620	
	10,092.00 Labor hours					
17.007	Data & Phone System					
	9 Data & Phone System	5,046.00 st		1.01 /sf	5,080	
	Data & Phone System				5,080	
17.008	Fire Alarm System					
	1 Fire Alarm Systems	5,046.00 ls		2.52 /ls	12,699	
	Fire Alarm System				12,699	
17.010	Access Controls					
	1 Access Control Station	5,046.00 ea	а	0.252 /ea	1,270	
	Access Controls				1,270	
	TECHNOLOGY SYSTEMS 10,092.00 Labor hours				26,668	
	007 Balcony Ren			181.77 /sqft	917,197	

**5,046.00 sqft**14,614.60 Labor hours
439.782 Equipment hours

Item		Description	Takeoff Qty		Unit Cost	Amount
008 Balcon	y Add					
1.000		GEN CONDITIONS				
		<u> </u>				
1.100	1	General Conditions General Conditions	1,162.00	sqft	5.19 /sqft	6,031
		General Conditions				6,031
1.710	10	Final Cleanup Balcony Level Addition Final Clean Up Final Cleanup	1,162.00	sf	0.35 /sf	407 407
		17.43 Labor hours 2.91 Equipment hours				
		GEN CONDITIONS 17.43 Labor hours 2.91 Equipment hours				6,437
4.000		MASONRY				
4.100		Masonry				
	2	Modular Brick @ Balcony Level  Masonry	37,200.00	ea	2.25 /ea	83,700 83,700
		MASONRY				83,700
5.000		STEEL				
5.105	1	Structural Steel Columns Balcony Level to Balcony Level Roof	17.00	tons	3,350.00 /tons	56,950
		Structural Steel	17.00	10113	3,330.00 710113	56,950
5.106		Misc Steel				
		Catwalk Support Steel Handrails & Guardrails @ Catwalk	7.00 634.00	tons LF	5,500.00 /tons 60.00 /LF	38,500 38,040
		Steel Bar Grating @ Catwalk	1,161.00	sf	34.95 /sf	40,573
		Misc Steel 576.50 Labor hours				117,113
		STEEL 576.50 Labor hours				174,063
6.000		WOOD & PLASTICS				
6.100		Rough Carpentry				
		Blocking Roof Blocking	1.00 2.50	mbf mbf	1,910.00 /mbf 3,050.00 /mbf	1,910 7,625
		Parapet Sheathing	644.00	sf	2.02 /sf	1,301
		Rough Carpentry 287.311 Labor hours 78.500 Equipment hours			_	10,836
6.101		Interior Finish Carpentry				

						Total	
Item		Description	Takeoff Qty		Unit Cost		Amount
		Interior Finish Carpentry				_	36,712
		5,648.00 Labor hours					30,712
		WOOD & PLASTICS 5,935.311 Labor hours					47,548
		78.500 Equipment hours					
7.000		THERMAL-MOIST PR					
7.100		PVC Single Ply Roofing					
7.100	2	Single-Ply Roofing	5,937.00	sqft		11.40 /sqft	67,682
		PVC Single Ply Roofing	,	•		. –	67,682
7.170		Building Vapor Barrier					
	8		5,315.00	sqft		0.91 /sqft	4,837
	10		1,063.00	Inft		5.00 /Inft	5,315
	11	Fluid Applied Membrane Air Barriers & Testing	5,315.00	sqft		5.80 /sqft	30,827
		Building Vapor Barrier				_	40,979
7.240		Applied Fireproofing					
	5	Spray-On Fireproofing	5,937.00	sqft		1.82 /sqft	10,805
		Applied Fireproofing				_	10,805
7.241		Penetration Firestopping & Fire Resistive Joint Systems					
	10	Firestopping	5,937.00	sqft		0.10 /sqft	594
		Penetration Firestopping & Fire Resistive Joint Systems					594
		THERMAL-MOIST PR					120,060
8.000		DOORS & WINDOWS					
9 205		Access Doors & Frames					
8.305	02	Access Doors Access Doors	1.00	each		202.00 /each	202
	02	Access Doors & Frames	1.00	Cacii			202
		2.00 Labor hours					202
		DOORS & WINDOWS					202
		2.00 Labor hours					
9.000		FINISHES					
0.130		Acquatical Panel Cailings					
9.130	ာ	Acoustical Panel Ceilings APC-4 Eurospan Ceiling System	5,810.00	sqft		19.50 /sqft	113,295
	2	Acoustical Panel Ceilings	3,010.00	oqit		10.50 /sqit	113,295
9.330		Drywall Systems					
	1	Drywall Ext Wall & Parapet	5,315.00	sf		6.00 /sf	31,890
	9	Suspended Gyp Board Ceilings @ Theater Ceiling	5,810.00			5.00 /sqft	29,050
		Drywall Systems		•		• –	60,940
9.940		Painting					
9.940	02	Painting Paint,Caulk,Vinyl Wall Cover	5,315.00	sub		1.753 /sub	9,317
9.940	02		5,315.00	sub		1.753 /sub	9,317 9,317

0.000 0.430	1	Description	Takeoff Qty		Total Unit Cost	Amount
0.000		Description	гакеоп Цту		LIDIT COST	
					Sinc Sout	Amount
0.430		SPECL CONDITIONS				
	1 (	Signage Graphics & Signage Allowance	1,162.00	sqft	0.85 /sqft	982
		Signage				982
0.435	10	Room Signage Room Signage & Way Finding				
0.523	20 1	F.E. & Cabinets	1.00		225 00 /aaah	225
	20 1	Fire Ext. Cabinets (Recessed)  F.E. & Cabinets	1.00	each	325.00 /each	325 325
		4.38 Labor hours				
		SPECL CONDITIONS 4.38 Labor hours				1,307
5.000		MECHANICAL				
5.001		Plumbing				
sub	ı	Roof Drains	2.00	sub	3,635.20 /sub	7,270
		Plumbing				7,270
5.010		HVAC				
sub	ı	HVAC	1,162.00	sqft	116.12 /sqft	134,928
		HVAC				134,928
5.750		Fire Protection System	5.007.00		0.00 / /	15.440
sub	ı	Fire Protection System Fire Protection System	5,937.00	sub	2.60 /sub	15,416 15,416
						10,110
5.990 sub	-	Testing & Balance Testing & Balance	1,162.00	each	0.76 /each	883
Sub		Testing & Balance	1,102.00	Cacii	0.70 /eacii	883
		MECHANICAL				150 400
		MECHANICAL				158,498
6.000		ELECTRICAL				
6.001		Electrical				
		Electrical Service & Distribution Branch Wiring	1,162.00 5,648.00	sqft sqft	3.274 /sqft 6.55 /sqft	3,804 36,978
		Lighting	5,648.00	sqft	6.55 /sqft	36,978
		Electrical				77,760
		ELECTRICAL				77,760
7.000		TECHNOLOGY SYSTEMS				
7.003		Security System				
		Closed Circuit Security System	1,162.00	sqft	2.013 /sqft	2,340
	2 1	Intrusion & Panic Alarm System Security System	1,162.00	sqft	0.503 /sqft	585 2,924
		2,324.00 Labor hours				2,324
7 007		Data & Phone System				
.007	9 1	Data & Phone System  Data & Phone System	1,162.00	sf	1.01 /sf	1,170
7.007		Security System 2,324.00 Labor hours  Data & Phone System	,		_	

					Total	
Item		Description	Takeoff Qty	Uı	nit Cost	Amount
		Data & Phone System			-	1,170
17.008		Fire Alarm System				
	1	Fire Alarm Systems	1,162.00	ls	2.52 /ls	2,924
		Fire Alarm System				2,924
17.010		Access Controls				
	1	Access Control Station	1,162.00	ea	0.252 /ea	292
		Access Controls				292
		TECHNOLOGY SYSTEMS 2,324.00 Labor hours				7,311
		008 Balcony Add			740.481/sqft	860,439

**1,162.00 sqft** 8,859.611 Labor hours 81.41 Equipment hours

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
009 Site De	evelo						
1.000		GEN CONDITIONS					
1.100		General Conditions					
	1	General Conditions General Conditions	1.00	ls	69,452.00 /ls	69,452 69,452	
1.710	20	Final Cleanup	45,000,00	of	0.15 /sf	6.750	
	20	Clean Streets Final Cleanup 315.00 Labor hours	45,000.00	SI	U.15 /SI	6,750 6,750	
1.750		Job Sign					
	1	Site Signage  Job Sign	2.00	ea	750.00 /ea	1,500 1,500	
		GEN CONDITIONS 315.00 Labor hours				77,702	
2.000		SITEWORK					
2.001		Sitework					
		Clearing & Grubbing	2.79	acre	757.63 /acre	2,114	
	8	Remove Topsoil	2,340.00	cuyd	2.652 /cuyd	6,205	
	9	Replace Topsoil Topsoil @ New Planting Areas	2,000.00 340.00	cy cy	2.652 /cy 12.793 /cy	5,303 4,350	
	11	Finish Grading	126,392.00	sf	0.084 /sf	10,560	
	14	Site Cut	6,561.30	cy	2.09 /cy	13,705	
		Site Fill	6,561.00	cy	2.09 /cy	13,705	
	17	Remove Spoils	5,700.00	су	6.061 /cy	34,548	
	22	Restoration & Cleanup	30,000.00	sf	0.19 /sf	5,682	
	26	Soil Stabilization	3,334.00	sqyd	5.013 /sqyd	16,714	
	27	Site Demolition	30,000.00	sqft	1.32 /sqft	39,474	
		Sitework				152,361	
		156.00 Labor hours 156.00 Equipment hours					
2.018	2	Erosion Control	1.00	la.	4 500 00 //-	4.500	
	3 4	Stormwater Polution Prevention Plan Stormwater Prevention Field Trips	1.00 12.00	ls ea	1,500.00 /ls 75.00 /ea	1,500 900	
	6	Siltation Fence	1,100.00	lf	1.50 /lf	1,650	
	8	Construction Exit	663.00	sy	11.50 /sy	7,624	
		Erosion Control		- ,		11,674	
2.025	1	Asphalt Paving Patch Asphalt Paving at Existing Streets	2,108.00	sqft	6.00 /sqft	12,648	
		Asphalt Paving	,	.,.		12,648	
2.036	2	Parking Lines Emblems & Cross Hatch Areas	1.00	ls	500.00 /ls	500	
		Handicapped Parking Signs	5.00	ea	286.302 /ea	1,432	
	08	Wheel Stops	12.00	ea	28.63 /ea	344	
		All Types Parking Lines	1.00	ls	500.00 /ls	500	
		Parking Lines				2,775	
2.040	1	Site Utilities Excavation, Back Fill & Dispose Waste	1,500.00	Inft	100.00 /Inft	150,000	
	9	Manholes & Vaults	5.00	ea	5,000.00 /ea	25,000	
	3		3.00		2,200.00 /00	20,000	

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
2.040		Site Utilities				
2.070	14	Trench Safety System	1,500.00	lf	35.00 /lf	52,500
		Fire Lines	500.00	if	50.00 /lf	25,000
		Sanitary Sewer Line	500.00	if	40.00 /lf	20,000
	17	Domestic Water Line	500.00	if	50.00 /lf	25,000
	19	Gas Lines & Taps	1.00	ls	7,500.00 /ls	7,500
	13	Site Utilities	1.00	13	7,500.00 715	305,000
		1,500.00 Labor hours				303,000
2.041		Storm Drainage				
	1	Storm Drainage System	750.00	Inft	100.00 /lnft	75,000
	6	Excavation, Back Fill & Dispose Waste	750.00	Inft	100.00 /lnft	75,000
		Inlets, Junction Boxes, and Oufalls	10.00	each	5,000.00 /each	50,000
		Storm Drainage			_	200,000
		60.000 Labor hours				200,000
2.105		Landscape & SubSurface Drainage				
	8	French Drain Systems	500.00	lf	50.00 /lf	25,000
	3	Landscape & SubSurface Drainage	000.00			25,000
		Lanuscape & Зирзинасе Diamaye				25,000
2.138	1	Site Furnishings Exterior Benches	6.00	93	2,088.333 /ea	12,530
				ea If		
	2	Bicycle Racks	25.00	11	104.52 /lf	2,613
		Site Furnishings				15,143
		41.67 Labor hours 8.333 Equipment hours				
2.140		Landscaping				
	1	Planting	50.00	ea	600.00 /ea	30,000
	3	Tree Preservation & Protection	1,000.00	lf	7.00 /lf	7,000
	7	Landscape Ground Maintenance	30,000.00	sf	0.10 /sf	3,000
	9	Decomposed Granite	12.00	tons	166.67 /tons	2,000
	17	Grass	30,000.00	sqft	0.45 /sqft	13,500
		Landscaping			_	55,500
2.142		Irrigation & Sleeves				
	02	Irrigation Sleeves	190.00	lf	15.00 /lf	2,850
sub		Lawn Irrigation System	30,000.00	sqft	0.80 /sqft	24,000
		Irrigation & Sleeves	,	•	· –	26,850
		79.17 Labor hours				20,000
		SITEWORK				806,951
		1,836.833 Labor hours				
		164.333 Equipment hours				
2.200		DEMOLITION				
2.300		Concrete Remove & Replace				
	24	Remove Paving @ Alumni Drive	24,134.00	sf	1.80 /sf	43,441
		Replace Paving @ Alumni Drive	24,134.00		6.25 /sf	150,838
		Concrete Remove & Replace	,		<u> </u>	194,279
		DEMOLITION				194,279
3.000		CONCRETE				
3.100		Concrete Subcontractor				
5.100	2	Dock Slab	500.00	eaft	5.25 /caft	2.045
			580.00	sqft	5.25 /sqft	3,045
		Spread Footings	85.00	cuyd	350.00 /cuyd	29,750
		Walks, Pavers & Hardscapes	30,479.00	sf	11.00 /sf	335,269
	12	Walk Accent Allowance	300.00	sf	160.00 /sf	48,000

					Total		
lás:		Description	Tales off Co		Total	A	
Item		Description	Takeoff Qty		Unit Cost	Amount	
3.100		Concrete Subcontractor					
	13	Seat Walls & Steps	752.00	sf	105.00 /sf	78,960	
	20	Light Pole Bases	10.00	ea	1,000.00 /ea	10,000	
	22	Concrete Walls & Ret Walls	3,350.00	sqft	45.00 /sqft	150,750	
	22	Dock Walls	560.00	sqft	26.322 /sqft	14,740	
		Fill and Finish Pan Stairs	881.00	sqft	10.00 /sqft	8,810	
		Concrete Subcontractor	001.00	oqit	10.00 70410 _	679,324	
3.760 sub		Sand Blast Sand Blasting	2,000.00	sqft	5.00 /sqft	10,000	
Sub		Sand Blast	2,000.00	Sqit	3.00 /sqit _	10,000	
		CONCRETE				689,324	
4.000		MASONRY					
4.100		Masonry					
	2	Raise Mech Screen Wall Modular Brick	9,000.00	ea	2.25 /ea _	20,250	
		Masonry			_	20,250	
		MASONRY				20,250	
5.000		STEEL					
5.105		Structural Steel					
5.705	6	Steel Stairs	881.00	caft	140.00 /sqft	123,340	
	0		001.00	sqft	140.00 /Sqit		
		Structural Steel				123,340	
5.106		Misc Steel					
	11	Handrails & Guardrails	270.00	LF	75.00 /LF _	20,250	
		Misc Steel				20,250	
		81.82 Labor hours					
5.215		Cold Formed Metal Framing					
3.210	1	Framing @ Metal Screen Wall	620.00	Inft	7.50 /Inft	4,650	
		Cold Formed Metal Framing	020.00			4,650	
		Cold Formed Wetar Framing				4,030	
5.540		Step Nosing					
	10	Step Nosing	280.00	Inft	32.25 /Inft _	9,029	
		Step Nosing			_	9,029	
		135.27 Labor hours				-,-=	
5.705		Glazed Decorative Metal Railings					
0.,00	1	Ornamental Rail Systems @ North Wall	110.00	If	400.00 /lf	44,000	
	1	Glazed Decorative Metal Railings	110.00	"		44,000	
		STEEL 217.084 Labor hours				201,269	
7.000		THERMAL-MOIST PR					
7.822		Metal Composite Material Wall Panels					
7.822		Composite Fascia @ Overhang Canopy	924.00	ls	30.00 /ls	27,720	
7.822	2	Composite Fascia @ Overhang Canopy Composite Wall Panels @ Metal Screen Wall	924.00 2,550.00	ls sf	30.00 /ls 25.00 /sf	27,720 63,750	
7.822	2	Composite Fascia @ Overhang Canopy					

					Total		
Item		Description	Takeoff Qty		Unit Cost	Amount	
		THERMAL-MOIST PR				166,920	
8.000		DOORS & WINDOWS					
8.305		Access Doors & Frames					
	01	Floor Hatch	1.00	Ea	7,500.00 /Ea _	7,500	
		Access Doors & Frames 6.67 Labor hours				7,500	
		DOORS & WINDOWS				7,500	
		6.67 Labor hours					
10.000		SPECL CONDITIONS					
10.430		Signage					
	12	Graphics & Signage Allowance	1.00	ea	28,178.33 /ea	28,178	
		Signage				28,178	
10.536	2	Protective Covers	105.00		25.00 /cf	C 475	
		Dock Canopy Roof Overhang Canopy	185.00 6,432.00	sf sf	35.00 /sf 40.00 /sf	6,475 257,280	
	_	Protective Covers	0,402.00	31	40.00 /31	263,755	
		SPECL CONDITIONS				291,933	
14.000		CONVEYING SYSTEM					
14.200		Elevators					
	2	Hydraulic Dock Lift	106.00	sqft	250.00 /sqft _	26,500	
		Elevators			_	26,500	
		CONVEYING SYSTEM				26,500	
15.000		MECHANICAL					
15.155		Chilled Water Piping					
	1	Underground Pre-Insulated Piping	4,000.00	lf	51.931 /lf	207,726	
		Chilled Water Piping				207,726	
		MECHANICAL				207,726	
16.000		ELECTRICAL					
16.001		Electrical					
		Lighting @ Canopies	6,617.00	sqft	7.64 /sqft	50,543	
	006	Ext Pole Lights	10.00	ea	4,364.76 /ea	43,648	
	006	Misc Site Lighting  Electrical	25.00	ea	872.952 /ea	21,824 116,014	
		Licotifical				110,014	

			Total		
Item	Description	Takeoff Qty	Unit Cost	Amount	
	009 Site Develo		19.474/saft	2.806.368	

**144,108.00 sqft**2,375.584 Labor hours
164.333 Equipment hours

Item		Description	Takeoff Qty	Total Unit Cost	Amount
* unassigi	ned *				
11.000		EQUIPMENT			
11.035		Audio Visual System			
	10	Audio Video & Projector Systems Rehearsal & Flex Class Rooms	8.00 room	27,500.00 /room	220,000
		Audio Visual System		<del>-</del>	220,000
		EQUIPMENT			220,000
		* unassigned *			220,000

#### **Estimate Totals**

Des	scription Am	ount Cuts/Add	ds Net Amount	Totals	
Labor	5	82,309	582,309		
Material	4	47,336	447,336		
Subcontract	26,3	87,534	26,387,534		
Equipment	1	81,933	181,933		
Other	1:	21,409	121,409		
	27,72	0,521		27,720,521	
VC&Pavroll Tax	2	44.570			
Suretv Bond	2	21.718			
AGC Fees		17.685			
iability Insurance	1	19.696			
Builder's Risk		74.810			
Project Contingend	v 10	0 055			0.352 %
CM Fee	1 42	4 953			5 000 %
	2,20	3,487		29,924,008	
Total				29.924.008	

Standard Estimate Report SFA Griffith Fine Arts Bu

J.E. KINGHAM CONSTR

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T 0.33% T 4.76%

207.650 /sf





#### STEPHEN F. AUSTIN STATE UNIVERSITY

NACOGDOCHES, TEXAS

## PROCUREMENT AND PROPERTY SERVICES P. O. Box 13030 NACOGDOCHES, TX 75962

#### REQUEST FOR PROPOSAL

RFP NUMBER
CMR-BLDG PROJECTS-2018

#### ADDENDUM NO. 1

**Dated: 8/22/18** 

## PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### MAIL PROPOSAL TO:

Stephen F. Austin State University Procurement Services P. O. Box 13030 Nacogdoches, TX 75962-3030

## HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University
Procurement Services
2124 Wilson Drive
Nacogdoches, TX 75962

Show RFP Number, Due Date and Time on Return Envelope

**NOTE:** PROPOSAL must be time stamped at <u>Stephen F. Austin State University</u> <u>Procurement Services</u> before the hour and date specified for receipt of proposal.

#### **REFER INQUIRIES TO:**

Kay Johnson Stephen F. Austin State University Procurement Services 936-468-4037

email: johnsondk6@sfasu.edu

## STEPHEN F. AUSTIN STATE UNIVERSITY Request for Proposal #CMR-BLDG PROJECTS-2018

#### **ADDENDUM NO. 1**

THIS ADDENDUM MUST BE ACKNOWLEDGED IN ORDER FOR THE RESPONSE TO RECEIVE CONSIDERATION. FAILURE TO ACKNOWLEDGE THE ADDENDUM WILL RESULT IN DISQUALIFICATION OF THE RESPONSE.

## PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM, WEDNESDAY, SEPTEMBER 19, 2018

#### PRE-PROPOSAL MEETING

There is a recommended pre-proposal meeting to be held on Tuesday, August 28, 2018 at 10:00 am in the Physical Plant Training room located at 2124 Wilson Drive, Nacogdoches, Texas on the campus of Stephen F. Austin State University.

#### Please note the following responses to questions:

- Q. Will Geotechnical and/or construction materials testing be needed for this RFP?
- A. Yes, Geotechnical and construction materials testing will be required, where appropriate for each project.
- Q. What is the planned start date?
- A. Start dates are pending funding approval are expected to be different for each project with one or more beginning simultaneously. Per the schedule of events, the anticipated start date(s) are within FY19.
- Q. Is the expectation for all projects to start all at one time or at different dates? (This info is needed to determine superintendent's needed for projects and to determine general conditions costs.)
- A. Start dates are pending funding approval are expected to be different for each project with one or more beginning simultaneously. Per the schedule of events, the anticipated start date(s) are within FY19

#### 1.3 SCHEDULE OF EVENTS - Updates in red

8/31/2018	Deadline for questions
9/5/2018	Addenda posted, if any
09/19/2018	Response Due
10/04/2018	Finalists selected and notified
10/10/2018	List of presenters due
10/26/2018- 10/29/2018	SFA Board of Regents Meeting, receive presentations and final selection
November –	
December 2018	A/E Contracting
1/1/2019	Estimated start for architectural programming
TBD	Estimated schematic design approval
TBD	CMR interim pricing
TBD	Estimated start for design development

TBD	Estimated start for development approval	
TBD	Working drawings due	
TBD	CMR GMP due	
TBD	Estimated notice to proceed	
7/31/2021	Estimated substantial completion	
8/31/2021	Estimated occupancy	

<sup>\*</sup>Dates are tentative and subject to change.

#### 3.2 SUBMITTAL DEADLINE AND LOCATION CHANGE IN RED:

All proposals must be received by SFA no later than 5:00pm, Wednesday, September 19, 2018.

Proposals are to be submitted to:

#### **MAIL PROPOSAL TO:**

## HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University Procurement and Property Services P.O. Box 13030, SFA Station Nacogdoches, TX 75962-3030 Stephen F. Austin State University Procurement and Property Services 2124 Wilson Drive Nacogdoches, TX 75962

All U.S. Mail addressed to any component of SFA is delivered to a central mailroom and redistributed by SFA personnel to the addressee's on-campus post office box. Consequently, there is a possibility of delay between receipt of mail at the central mailroom and receipt in the Procurement and Property Services Department. Proposals must be in the office of the Procurement and Property Services Department by the time set for RFP closing in order to be considered, and receipt by SFA at the central mailroom will not be deemed sufficient. The University shall not be responsible for responses received after the due date and time. Late responses will not be considered under any circumstances. Properly identified late responses will be returned to the Respondent unopened.

Proposals will be publicly opened Thursday, September 20, 2018 at 8:00 am in the office of the Director of Procurement, 2124 Wilson Drive. Only the names of the Respondents will be read aloud.

Proposals received after the time for closing will be returned to Respondent unopened regardless of the circumstance. It is the responsibility of the Respondent to get the proposals delivered in a timely manner, regardless of delivery method or circumstances.

Faxed or electronically mailed proposals will **not** be accepted.

Proposals may be withdrawn at any time prior to the time and date set for proposal closing.

Stephen F. Austin State University reserves the right to accept or reject any or all proposals and to waive irregularities or technicalities provided such waiver does not substantially change the offer or provide a competitive advantage to any Respondent in the judgment of Stephen F. Austin State University.



## STEPHEN F. AUSTIN STATE UNIVERSITY

NACOGDOCHES, TEXAS

PROCUREMENT SERVICES
P. O. Box 13030
NACOGDOCHES, TX 75962

#### **REQUEST FOR PROPOSAL**

## RFP NUMBER CMR-BLDG PROJECTS-2018

## PROPOSAL MUST BE RECEIVED BEFORE: 5:00PM CST, WEDNESDAY, SEPTEMBER 5, 2018

#### **MAIL PROPOSAL TO:**

Stephen F. Austin State University Procurement and Property Services P. O. Box 13030, SFA Station Nacogdoches, TX 75962-3030

## HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University Procurement and Property Services 2124 Wilson Drive Nacogdoches, TX 75962

Show RFP Number, Due Date and Time on Return Envelope

NOTE: PROPOSAL must be time stamped at <u>Stephen F. Austin State University</u>

<u>Procurement and Property Services</u> before the hour and date specified for receipt of proposal.

#### **REFER INQUIRIES TO:**

Kay Johnson Stephen F. Austin State University Procurement Services 936.468.4037

email: johnsondk6@sfasu.edu

## STEPHEN F. AUSTIN STATE UNIVERSITY Request for Proposal #CMR-BLDG PROJECTS-2018

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1.12

Exhibit A	Execution of Offer
Exhibit B	Acknowledgment of Addenda
Exhibit C	Pricing Proposal and Costing Methodologies
Exhibit D	Historically Underutilized Business (HUB) Subcontracting Plan
Exhibit E	Uniform General Conditions and Supplementary General Conditions
Exhibit F	Prevailing Wage Rates

#### REQUEST FOR PROPOSAL #CMR-BLDG PROJECTS-2018 FOR CONSTRUCTION MANAGEMENT-AT-RISK SERVICES

#### 1.1 SCOPE OF PROPOSAL

Stephen F. Austin State University, hereafter referred to as "SFA" or "the University", is seeking proposals for a Construction Manager at Risk (CMR) for building construction projects on the campus of Stephen F. Austin State University. The estimated construction cost for the building projects are One Hundred Ten Million Five Hundred Thousand Dollars (\$110,500,000).

This Request for Proposals (RFP) is the process for selecting a CMR firm for projects included herein as provided by Texas Education Code 51.782(e). The RFP provides the information necessary to prepare and submit proposals including fee proposals and general conditions prices.

The successful respondent shall have experience producing multiple simultaneous projects of similar scope and size as described herein. The CMR will be selected at the same time as an Architect (or Architects) to allow the firms to work together throughout the design process.

The proposed projects include:

**Performing Arts Center** – Renovate approximately 63,355 square feet of the existing Griffith Fine Arts facility built in 1959, and the addition of approximately 38,000 square feet of new space to house a theater with support and rehearsal facilities as well as a screening/lecture hall. The estimated construction cost of this project is Thirty-Seven Million Dollars (\$37,000,000).

**Residence Hall** – Construction of a new residence hall of approximately 100,000 – 125,000 square feet and approximately 400 beds and possible demolition of an existing structure consisting of approximately 70,000 square feet that was constructed in 1966. The estimated construction cost of this project is Twenty-Four Million Five Hundred Thousand Dollars (\$24,500,000).

**Dining Facility** – This project will consist of either major renovations or demolition and construction of a new facility, to replace the existing 42,480 square foot East College Cafeteria built in 1968. The estimated construction cost of this project is Fifteen Million Dollars (\$15,000,000).

Welcome Center Building & Student Services Building – Renovate/re-purpose the existing Kennedy Auditorium building (1968 - 14,268 square feet) to create a welcome center and "one stop" shop for student recruitment, enrollment, and associated services, as well as performing phased renovation work on portions of the Rusk Building (1926 - 42,332 square feet) that are necessary to re-organize support services offered by departments providing various student services. The estimated construction cost of this project is Thirteen Million Dollars (\$13,000,000).

**Athletic Facilities** – This project will consist of major renovation of an existing athletics facility including a building addition. The estimated construction cost of this project is Twenty-One Million Dollars (\$21,000,000).

#### 1.2 SFA INFORMATION

SFA is an institution of higher education operated as an agency of the State of Texas. SFA employs approximately 1600 full and part-time faculty and staff members. SFA had an enrollment of 12,614 full and part-time students during the Fall 2017 semester. Most staff positions are based on a 12-month appointment coinciding with the fiscal year (9/1 - 8/31). Contracts are executed only for faculty members, and limited other appointments. A nine-member Board of Regents is appointed by the governor of Texas, with each regent serving staggered six-year terms.

#### 1.3 SCHEDULE OF EVENTS

09/05/2018	Response Due
10/04/2018	Finalists selected and notified
10/10/2018	List of presenters due
10/26/2018- 10/29/2018	SFA Board of Regents Meeting, receive presentations and final selection
November – December 2018	A/E Contracting
1/1/2019	Estimated start for architectural programming
TBD	Estimated schematic design approval
TBD	CMR interim pricing
TBD	Estimated start for design development
TBD	Estimated start for development approval
TBD	Working drawings due
TBD	CMR GMP due
TBD	Estimated notice to proceed
7/31/2021	Estimated substantial completion
8/31/2021	Estimated occupancy

<sup>\*</sup>Dates are tentative and subject to change.

#### 1.4 OPEN RECORDS

SFA anticipates that the review of the responses will be completed in October 2018, and recommended to the Stephen F. Austin State University Board of Regents at their regularly scheduled meeting in October 2018. Due to the nature of the responses, the parties understand the information exchanged in the negotiation process is confidential to the fullest extent permitted by law, and neither party will disclose such information to anyone other than representatives of the negotiating parties except as required by Texas law. Final awards and agreements, after all negotiations are completed, may be subject to the Texas Open Records Act. Additionally, state law requires each contract for the purchase of goods or services to be posted on the University's website. By entering into a contract with the university, the firm acknowledges and accepts the university will comply with all applicable laws regarding the public posting of contracts

#### 1.5 HISTORICALLY UNDERUTILIZED BUSINESSES (HUB)

## SEE EXHIBIT C – HUB SUBCONTRACTING PLAN READ CAREFULLY

Each respondent is required to make a good faith effort to subcontract with historically underutilized businesses and shall submit a HUB Subcontracting Plan using the HUB Subcontracting Plan documents provided in Exhibit D.

Stephen F. Austin State University is committed to making a good faith effort to increase business with historically underutilized businesses (HUBs) by contracting with HUBs either directly or indirectly through subcontracting opportunities. Respondents are encouraged to actively seek to subcontract or partner with HUBs in an effort to create an environment that actively acknowledges and values diversity.

The university has determined that subcontracting opportunities are probable under this contract.

The university's HUB goal for this procurement is: 21.1% for building construction

Each HUB subcontracting plan will be evaluated independently of the response. If the HSP does not reflect a good faith effort to subcontract with HUBs, the entire response will be disqualified.

**PRE-CONSTRUCTION SERVICES:** If the Respondent proposes fees that include a charge for pre-construction services, the respondent <u>MUST</u> complete a HUB Subcontracting Plan <u>in accordance with the attached HSP</u> <u>documents</u>. If the Respondent proposes no fee for pre-construction services, a HUB Subcontracting response addressing pre-construction services is not required.

**CONSTRUCTION SERVICES:** The University understands that subcontracting opportunities for construction services cannot be adequately identified and defined at this time. The Respondent MUST prepare a letter to the University **on Respondent's letterhead** (copies of this page, even with a signature, will not be acceptable) including the following:

- Acknowledgment of receipt and understanding of the HUB Subcontracting Plan documents
- Confirmation that a HUB Subcontracting Plan will be completed in accordance with the attached HSP documents and submitted to the University for review and approval prior to the initiation of any work.

All questions regarding the HUB Subcontracting Plan may be directed to the Procurement and Property Services Director/HUB Coordinator, Kay Johnson, 936-468-4037, johnsondk6@sfasu.edu

Failure to submit the HUB Subcontracting Plan will disqualify the bid from consideration.

#### 1.6 U.S. DEPARTMENT OF HOMELAND SECURITY'S E-VERIFY SYSTEM

By entering into this Contract, the Contractor certifies and ensures that it utilizes and will continue to utilize, for the term of this Contract, the U.S. Department of Homeland Security's E-Verify system to determine the eligibility of:

- 1. All persons employed to perform duties within Texas, during the term of the Contract; and
- 2. All persons (including subcontractors) assigned by the Contractor to perform work pursuant to the Contract, within the United States of America.

The Contractor shall provide, upon request of SFA, an electronic or hardcopy screenshot of the confirmation or tentative non-confirmation screen containing the E-Verify case verification number for attachment to the Form I-9 for the three most recent hires that match the criteria above, by the Contractor, and Contractor's subcontractors, as proof that this provision is being followed.

If this certification is falsely made, the Contract may be immediately terminated, at the discretion of SFA and at no fault to SFA, with no prior notification. The Contractor shall also be responsible for the costs of any re-solicitation that SFA must undertake to replace the terminated Contract.

#### 1.7 BONDS AND INSURANCE

#### **Payment and Performance Bonds**

Performance bonds are required on contracts exceeding \$100,000. Payment bonds are required on contracts exceeding \$25,000. Refer to Article 5.1 in the Uniform General Conditions.

Performance and Payment bonds must be furnished each in the amount of one hundred percent (100%) of the Guaranteed Maximum Price (GMP) including executed Change Orders. They must be provided at the time of the signing of the amended contract and prior to the start of any work.

#### Insurance

Certificates of Insurance are to be provided as required in Article 5.2 of the Uniform General Conditions and Supplementary General Conditions.

#### 1.8 ISRAEL NON-BOYCOTT VERIFICATION

Pursuant to Section 2270.002, *Texas Government Code*, Contracting Party hereby represents, verifies, and warrants that it does not boycott Israel and will not boycott Israel during the term of the Agreement, as that term is defined by Section 808.001(1), *Texas Government Code*.

#### 1.9 CONTRACTS WITH FOREIGN TERRORIST ORGANIZATIONS PROHIBITED

Pursuant to Section 2252.152, Texas Government Code, and to the extent applicable, Contracting Party hereby represents, verifies, and warrants that it does not do business with Iran Sudan, or any foreign terrorist organization identified on a list prepared and maintained under Section 806.051, 807.051, or 2252.153, Texas Government Code.

#### 1.10 PARKING ON CAMPUS

All vehicles parked on the University campus must properly display a valid parking permit and comply with all University parking rules. The Parking and Traffic Office supervises and coordinates all parking transportation and traffic related functions on the campus. Permits expire each August 31.

Contractor shall be responsible for obtaining parking permits from the Parking and Traffic Office and for resolving, should they arise, any parking regulation disputes and violations. The Parking and Traffic Office telephone number is 936-468-7275.

#### 1.11 TITLE IX

Stephen F. Austin State University strictly adheres to Title IX of the Education Amendments of 1972, the federal Campus Sexual Violence Elimination Act; United States Department of Education regulations and directives; and the university's sexual harassment policy and procedures ("Regulations"). Specifically, the Regulations apply to all students, employees, visitors, and other third parties on Stephen F. Austin State University-controlled property, including institutions and entities with whom Stephen F. Austin State University places its students. Further, such Regulations prohibit unequal treatment on the basis of sex as well as sexual harassment and sexual misconduct. As a condition of employment, enrollment, doing business, or being permitted on the campus, the abovementioned individuals, organizations, and entities must agree to: 1) Report immediately to the Title IX coordinator any and all claims of sex discrimination or sexual misconduct; 2) Cooperate with Stephen F. Austin State University's Title IX investigation; and, 3) Cooperate fully with all sanctions that Stephen F. Austin State University may impose against such individual, organization, or entity, who is found to have violated the Regulations. If the individual, organization, or entity fails to adhere to any of the aforementioned requirements, Stephen F. Austin State University reserves the right to take appropriate action, including but not necessarily limited to, immediate removal from campus; discipline of employees and students (including termination of employment and/or expulsion from school); and termination of business or contractual relationships.

#### 1.12 SMOKING, VAPING AND USE OF TOBACCO PRODUCTS

Stephen F. Austin State University is a tobacco and vape free campus.

#### SECTION 2 STATEMENT OF WORK

#### 2.1 SCOPE OF SERVICES

Stephen F. Austin State University, hereafter referred to as "SFA" or "the University", is seeking proposals for a Construction Manager at Risk (CMR) for building construction projects on the campus of Stephen F. Austin State University. Generally, the CMR will provide all services necessary to complete projects and meet the University's schedule. Services will include review of design, direction of bidding for subcontractors, recommendation of awards to subcontractors and supervision of construction including setting a Guaranteed Maximum Price (GMP) price for the project after bids are taken. Additionally the CMR will provide the University a written statement regarding the adequacy of the building plans prior to receiving a notice to proceed with construction.

The CMR will also be responsible for insuring that the University is continually updated and apprised of all items related to the project.

Projects include the following:

**Performing Arts Center** – Renovate approximately 63,355 square feet of the existing Griffith Fine Arts facility built in 1959, and the addition of approximately 38,000 square feet of new space to house a theater with support and rehearsal facilities as well as a screening/lecture hall. The estimated construction cost of this project is Thirty-Seven Million Dollars (\$37,000,000).

**Residence Hall** – Construction of a new residence hall of approximately 100,000 – 125,000 square feet and approximately 400 beds and possible demolition of an existing structure consisting of approximately 70,000 square feet that was constructed in 1966. The estimated construction cost of this project is Twenty-Four Million Five Hundred Thousand Dollars (\$24,500,000).

**Dining Facility** – This project will consist of either major renovations or demolition and construction of a new facility, to replace the existing 42,480 square foot East College Cafeteria built in 1968. The estimated construction cost of this project is Fifteen Million Dollars (\$15,000,000).

Welcome Center Building & Student Services Building – Renovate/re-purpose the existing Kennedy Auditorium building (1968 - 14,268 square feet) to create a welcome center and "one stop" shop for student recruitment, enrollment, and associated services, as well as performing phased renovation work on portions of the Rusk Building (1926 - 42,332 square feet) that are necessary to re-organize support services offered by departments providing various student services. The estimated construction cost of this project is Thirteen Million Dollars (\$13,000,000).

**Athletic Facilities** – This project will consist of major renovation of an existing athletics facility including a building addition. (To be determined). The estimated construction cost of this project is Twenty-One Million Dollars (\$21,000,000).

Questions regarding specific projects should be directed to Ron Watson, Director of Physical Plant, (936) 468-3906 or e-mail rewatson@sfasu.edu.

#### 2.2 STANDARD FORM OF CONTRACT

By submitting a proposal, the Respondent agrees to accept a contract including the specifications, terms and conditions, Uniform General Conditions, Supplementary General Conditions herein and attached to this Request for Proposal.

After award, the University will issue a General Contract Manger document. The base contract document will be in the form of SFA's Standard Form of Agreement between Owner and Construction Manager to comply with the Uniform and Supplementary General Conditions and state law.

#### 2.3 UNIFORM GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS

The attached Uniform General Conditions (UGC) and Supplementary General Conditions (SGC), **Exhibit E**, are an integral part of this document. The respondent is responsible for reading and being familiar with all of the requirements of the Uniform and Supplementary General Conditions. Failure to consider all the requirements of the UGC and SGC does not relieve the Contractor from the obligation to fulfill all requirements of the UGC and SGC.

#### 2.4 LIQUIDATED DAMAGES

The liquidated damages are standard in our contract document at \$1000 per calendar day.

#### 2.5 PREVAILING WAGE RATES

In accordance with Texas Gov't Code 2258.022, Stephen F. Austin State University completed a determination of wage rates for Nacogdoches County. The attached "Minimum Wage Rate Determination" provides additional documentation about the determination and requirements for compensation. The total hourly compensation to each worker must equal or exceed the minimum wage rates stated in the "2015 SFA Prevailing Wage" attachment, Total Column. See Exhibit F.

The attached "Worker Wage Rate Form" is to be used by the construction manager and all subcontractors engaged in this project. The completed notice must be accepted by all workers involved in the project and delivered to the Physical Plant prior to substantial completion or with pay applications. Separate Worker Wage Rates Forms are to be completed for each worker engaged in multiple classifications. See **Exhibit F**.

For additional information regarding the applicability of Prevailing Wage Rates, refer to Uniform General Conditions, Article 2, and Paragraph 2.2.

#### 2.6 GENERAL CONDITION ITEMS

The following items will be considered as general conditions of the contract and will not be included as part of the Construction Manager's fees. The cost of these General Conditions will be negotiated with the recommended Construction Manager as part of the overall GMP. Please note that all personnel costs are to be fully burdened.

- a. Project Executive
- b. Senior Project Manager
- c. Project Manager
- d. Project Manager Vehicle and/or Allowance/Mileage
- e. General Superintendent
- f. Superintendent
- g. Superintendent Vehicle and/or Allowance/Mileage
- h. Assistant Superintendent
- i. Project/Cost Engineer
- j. Office/Technology Engineer
- k. Project Expediter/Asst. PM
- 1. Field Office Manager/Secretary
- m. Field Engineering/Layout
- n. Accounting
- o. Secretary/Administrative Personnel
- p. Quality Control Manager
- q. General Purpose Labor
- r. Subsistence/Per Diem
- s. Mileage/Travel
- t. CPM Schedule
- u. Field Engineering & Equipment

- v. Record set
- w. CMR Office Trailers
- x. Architect/Owner Trailer
- y. CMR Storage Sheds
- z. CMR Job Office Expense
- aa. CMR Job Office Equipment
- bb. First Aid Supplies
- dd. Project Documentation
- ff. Building Permits/Fees/Licenses/Dues
- gg. Equipment Rental, Maintenance and Insurance
- hh. Job Signage/Advertising
- ii. Payroll Taxes on General Conditions
- ij. Mobilization/Demobilization
- mm. Ice, Cups and Water
- nn. Delivery Service/Postage
- oo. Progress Photography
- pp. Shop Drawings
- qq. Stationery and Supplies
- rr. Fencing
- ss. Temporary Weather Protection
- tt. Temporary Partitions
- uu. Temporary Roads
- vv. Temporary Plumbing
- ww. Plans/Surveys/Blue Prints
- yy. Chemical Toilets
- zz. Cellular Telephones/Pagers
- bbb. Tractor
- ccc. Generators portable
- ddd. Labor Burden Barricades
- eee. Gas, Oil and Grease
- ggg. Clean Streets
- hhh. Cleanup Periodical
- iii. Continuous Jobsite Clean-up
- iii. Dumpsters/Trash Haul
- kkk. Final Cleaning
- Ill. Building and Site dewatering
- mmm. Safety Equipment
- nnn. Safety Coordinator
- ooo. Job Safety Training
- ppp. Fire Protection/Fire Extinguishers
- qqq. General Liability, Builders Risk
- rrr. Insurance/Performance & Payment Bonds
- sss. AGC & ABC Fees

## SECTION 3 INSTRUCTIONS TO RESPONDENTS

#### 3.1 CONTACT INFORMATION

All questions regarding the RFP or response must be forwarded to the Director of Procurement and Property Services:

Kay Johnson P.O. Box 13030, SFA Station Nacogdoches, TX 75962 Phone: 936.468.4037 Fax: 936.468.4282

Email: johnsondk6@sfasu.edu

#### 3.2 SUBMITTAL DEADLINE AND LOCATION

All proposals must be received by SFA no later than 5:00pm, Wednesday, September 5, 2018.

Proposals are to be submitted to:

#### **MAIL PROPOSAL TO:**

## HAND DELIVER AND/OR EXPRESS MAIL TO:

Stephen F. Austin State University Procurement and Property Services P.O. Box 13030, SFA Station Nacogdoches, TX 75962-3030 Stephen F. Austin State University Procurement and Property Services 2124 Wilson Drive Nacogdoches, TX 75962

All U.S. Mail addressed to any component of SFA is delivered to a central mailroom and redistributed by SFA personnel to the addressee's on-campus post office box. Consequently, there is a possibility of delay between receipt of mail at the central mailroom and receipt in the Procurement and Property Services Department. Proposals must be in the office of the Procurement and Property Services Department by the time set for RFP closing in order to be considered, and receipt by SFA at the central mailroom will not be deemed sufficient. The University shall not be responsible for responses received after the due date and time. Late responses will not be considered under any circumstances. Properly identified late responses will be returned to the Respondent unopened.

Proposals will be publicly opened Thursday, September 6, 2018 at 8:00 am in the office of the Director of Procurement, 2124 Wilson Drive. Only the names of the Respondents will be read aloud.

Proposals received after the time for closing will be returned to Respondent unopened regardless of the circumstance. It is the responsibility of the Respondent to get the proposals delivered in a timely manner, regardless of delivery method or circumstances.

Faxed or electronically mailed proposals will **not** be accepted.

Proposals may be withdrawn at any time prior to the time and date set for proposal closing.

Stephen F. Austin State University reserves the right to accept or reject any or all proposals and to waive irregularities or technicalities provided such waiver does not substantially change the offer or provide a competitive advantage to any Respondent in the judgment of Stephen F. Austin State University.

#### 3.3 SUBMITTAL INSTRUCTIONS

All proposals must be submitted in the format prescribed in Section 3.7.

Each Respondent must submit at least <u>one (1) original printed proposal</u> with original signatures on the Execution of Offer.

The printed copy shall (1) be unbound; (2) contain divider sheets or tabs; (3) be printed on 8-1/2 in. x 11 in. white paper to enable copying, if needed; and (4) be a complete copy of all information submitted with Respondent's Proposal. Colors must reproduce in a legible manner on a black-and-white copier.

Respondent shall also submit one (1) complete electronic copy of the printed copy of the Proposal on electronic media (e.g., USB Drive [SFA's preference], CD-ROM, or DVD-ROM) in a Microsoft Office (Word, Excel, Project and PowerPoint files) version 2003 or later format, or <u>searchable</u> Adobe .PDF files. Respondents shall divide the electronic copy into **TWO (2)** separate electronic files, one of which shall contain Respondent's General Submittal Information and Qualifications and the other of which shall contain **Exhibits A-D**.

All proposals must be complete and convey all of the information requested to be considered responsive. If the proposal fails to conform to the essential requirements of the RFP, SFA alone will determine whether the variance is significant enough to consider the proposal susceptible to being made acceptable and therefore a candidate for further consideration, or not susceptible to being made acceptable and therefore not considered for award.

Each Respondent, by submitting a proposal, represents that the Respondent has read and completely understands the request for proposal documents and agrees to abide by the terms of this RFP and any resulting agreement. Failure of the selected contractor to fulfill the provisions of this request for proposal shall in no way relieve the obligation of the Contractor to furnish all services necessary to carry out the provisions of the agreement.

A legally authorized representative of the Respondent shall sign proposals. Unsigned proposals (**Exhibit A**) will be rejected as a material failure.

#### 3.4 ACCEPTANCE AND FORMATION OF AGREEMENT

No recommendation for award will be made until Stephen F. Austin State University is fully satisfied that the Respondent is professionally competent and properly equipped to render the specified service.

The University reserves the right to negotiate further with any respondent that submits a proposal, once proposals have been opened. SFA may award a contract(s) based on initial proposals received without any discussion of such proposals. Therefore, each proposal should be submitted on the most favorable and complete price and terms possible.

SFA reserves the right to enter into an agreement not based only on the cost to the University, but which, in the sole opinion of SFA, is deemed to represent the best value to SFA. The University shall be the sole judge of determining which proposal represents the best value to the University.

The SFA Board of Regents will confer in an open and public meeting and make the award decision based upon its determination of the best value to the university after considering the evaluation team recommendation and oral presentations. The Board of Regents reserves the right to reject any or all responses or to make an award based on information from the presentations that may not have been considered in the original evaluation criteria. By submitting a response, respondent accepts that best value will be solely determined by the SFA Board of Regents, and the original evaluation criteria will be used for determining which companies will make presentations to the board.

Award of an agreement from this Request For Proposal is contingent upon final approval by the Attorney General for Revenue Finance System Bonds (Revenue Bonds). If the Revenue Bonds are not approved, this RFP will be cancelled, and no award will be made.

#### 3.5 PRESENTATIONS

The information for presentations is informational only. Finalist will receive specific instructions. Information will include date, time and location of presentation. Additional project information, the project program, site map, and other University information deemed appropriate will be included.

- A. If requested, presentations and interviews will be scheduled somewhere between October 26-29, 2018.
- B. If your firm is selected as a finalist, the presentation should include your:
  - i. Approach to preconstruction services
  - ii. List of construction services
  - iii. Standard practices regarding a team approach to construction management-at-risk project delivery
  - iv. Examples of ability to perform multiple projects simultaneously
  - v. Other relevant material that CMR wishes to present
  - vi. Presentation should include key personnel that will be assigned to the SFA projects

#### 3.6 EVALUATION CRITERIA

Award will be based on a comprehensive review and analysis based on weighted value of averaged evaluation scores and negotiation of the proposal that best meets the needs of the University. Submission of a proposal represents concurrence with this method of evaluation and award. Furthermore, Respondents will not, under any circumstances, dispute any award made using this method.

An evaluation committee representing Stephen F. Austin State University will perform evaluation of the proposals. Proposals will be evaluated using the following criteria, which are listed below in no particular order. Stephen F. Austin State University reserves the right to award an agreement not based only on lowest cost to the University, but on the criteria that best meet the university's requirements and goals. The university shall be the sole judge of determining which proposal represents the best value to the University.

#### **Evaluation Criteria**

- A. 30% Overall Construction Experience
- B. 10% Fees
- C. 20% Experience of Firm
- D. 20% Past Performance on Similar Projects
- E. 10% Past Performance on Multiple Simultaneous Projects
- F. 10% Commitment and Ability

#### 3.7 PROPOSAL FORMAT

- 3.7.1 Proposals shall be prepared simply and economically, providing a straightforward concise description, of the ability to meet the requirements of the RFP. Emphasis should be placed on the RFP requirements, completeness, clarity of content, responsiveness to the requirements and an understanding of SFA's needs. Respondents shall organize their proposal in a point-by-point format according to section 3.7.3. Failure to follow point-by-point presentation could be grounds for disqualification. . As a minimum the following categories should have a divider sheet:
  - a. Required Submittals
  - b. General Submittal Information
  - c. Qualification Submittal Information

- i. Overall Construction Experience
- ii. Fees
- iii. Experience of Firm
- iv. Past Performance on Similar Projects
- v. Past Performance on Multiple Simultaneous Projects
- vi. Commitment and Ability

Respondents shall carefully read the information contained in this RFP and submit a complete response to all requirements as directed. The awarded vendor agrees to abide by the terms of this RFP and any resulting agreement. Failure of the selected contractor to fulfill the provisions of this request for proposal shall in no way relieve the obligation of the Contractor to furnish all services necessary to carry out the provisions of the agreement. Incomplete Proposals will be considered non-responsive and subject to rejection.

Separate and identify each submittal requirement response to Section 3.7.3 of this RFP by use of a divider sheet with an integral tab for ready reference.

Proposals shall be printed on letter-size (8-1/2" x 11") paper and unbound. DO NOT USE METAL-RING HARD COVER BINDERS.

Submittals shall include a "Table of Contents" and give page numbers for each part of the Proposal.

Number all pages of the Proposal submittal sequentially using Arabic numerals (1,2,3,etc); the Proposal is not required to number the pages of the Hub Subcontracting Plan.

- 3.7.2 Respondent shall also submit one (1) complete electronic copy of the printed copy of the Qualifications on electronic media (e.g., USB Drive [SFA's preference], CD-ROM, or DVD-ROM) in a Microsoft Office (Word, Excel, Project and PowerPoint files) version 2003 or later format, or searchable Adobe .PDF files. Respondents shall divide the electronic copy into TWO (2) separate electronic files, one of which shall contain Respondent's General Submittal Information and Qualifications and the other of which shall contain Exhibits A-D.
- 3.7.3 Proposal should include the following information and is to be submitted in the following order:
  - a) Required Submittal- failure to provide any of the following documents will result in disqualification of the proposal from further consideration
    - i. Exhibit A Signed Execution of Offer
    - ii. Exhibit B Acknowledgement of Addenda, if any
    - iii. Exhibit C Pricing Proposal
    - iv. Exhibit D HUB Subcontracting Plan
  - b) General Submittal Information
    - i. Name of firm, address, phone, fax, e-mail, web page, year founded, previous name(s) of firm and contact person
    - ii. Type of business organization
    - iii. Locations of other offices or main office
    - iv. How many continuous years of operated in Texas
    - v. Has the company operated under other or former names?
    - vi. Is the company part of a holding company, if so what are its other businesses
    - vii. List jurisdiction and trade categories, year organization is legally qualified to do business
    - viii. Years of experience working on CMR projects
    - ix. Year Experience with higher education projects

#### c) Qualification Submittals

- 1. Overall Construction Experience
  - a. General Construction Experience (10%)
    - Experience as general contractor
    - ii. Experience as a CMR with infancies on state university projects in Texas
    - iii. Years organization has been in business
    - iv. Categories of construction that the firm is capable of self-performing
  - b. Specific Construction Experience (15%)
    - i. Construction experience with projects similar to that described herein
    - ii. Experience as a CMR on similar projects with infancies on state universities in Texas
    - iii. Categories of construction that CMR firm has self-performed on similar projects
  - c. Safety Record (5%)
    - Firm's Experience Modification Rate (EMR) identified for each of the past three years
    - ii. Safety procedures as applied to this project

#### 2. Fees

- a. Construction Base Fees (5%)
  - i. Base fee for preconstruction services with an enumeration of the proposed services
  - ii. Base fee for construction phase and with an enumeration of the proposed services
  - iii. Home office personnel and percent time assigned to this project that will be included in the base fee
- b. General Conditions (5%)
  - i. List of anticipated cost for general conditions based on the project schedule and project estimates
  - ii. All unburdened personnel assigned to the project and being charged as a general condition item and what percent of their time will be on job site and what percent of their time is being charged to this project
  - iii. Estimated total monthly cost of general conditions based on the project schedule and project estimate ITEMIZE the following items separate from this estimated total monthly cost
    - Estimated bonding cost
    - 2. Builder's Risk Insurance cost
    - GL Insurance cost
    - 4. Labor cost, burdened and unburdened
    - AGC fees

#### 3. Experience of Firm

- a.. Proposed Personnel (10%)
  - i.. Home office personnel and percent time on projects
  - ii. Field personnel assigned to project and percent of time assigned to these projects
  - iii. Experience of personnel assigned to these projects
  - iv. Length of service with proposing CMR

#### b. Methodology (10%)

- i. Firm's described approach to the projects that indicates a successful completion of the proposed projects.
- ii. Firm's willingness to be a part of construction team of CMR, Owner, Architect.
- iii. Firm's management assets that indicate ability to provide a quality end project.
- iv. List of construction trades that firm intends to bid for self-performance

- 4. Past Performance on Similar Projects (20%)
  - a. List five (5) higher education construction projects similar in type, size, scope and time to that described herein; provide contact name, phone number and brief description of the project; and
  - b. Identify the personnel that will be assigned to the project and their experience in general construction, including specific examples of projects similar in size, scope and time to that described herein.
- 5. Past Performance on Multiple Simultaneous Projects (10%)
  - a. Describe two (2) recent simultaneously constructed projects of multiple type, size,scope similar to that described herein; provide contact name, phone number and brief description of the project; and
  - b. Identify the personnel that will be assigned to the project and their experience in general construction, including specific examples of projects similar in size, scope and time to that described herein.
- 6. Commitment and Ability (10%)
  - a. Combination of all experience, commitment, and assets that indicate an ability to finish projects on schedule and within budget. Include how you will develop, maintain and update the projects schedule during design and construction.
  - b. Financial Capability of Firm
    - i. Total bonding capacity name, address of bonding company
    - ii. Name and address of agent
    - iii. Amount currently bonded and amount of bonding currently pending
    - Iv. Name, address, phone number of bank references

Stephen F. Austin State University reserves the right to check references prior to award. Any Negative responses received may be grounds for disqualification of the bid. SFA reserves the Right to enter into an agreement not based only on lowest cost to the University, but which, in the Sole opinion of SFA, is deemed to represent the best value to SFA.

## EXHIBIT A EXECUTION OF OFFER

#### RFP #CMR-BLDG PROJECTS-2018

In compliance with this RFP, and subject to all the conditions herein, the undersigned offers and agrees to furnish any or all commodities or services and to comply with all terms, conditions and requirements set forth in the RFP documents and contained herein.

By signature hereon, Respondent affirms that he/she has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted Qualifications. Failure to sign the response, or signing it with a false statement, shall void the submitted response or any resulting contracts, and the Respondent may be removed from all bid lists.

By the signature hereon affixed, the Respondent hereby certifies that neither the Respondent nor the firm, corporation, partnership, or institution represented by the Respondent or anyone acting for such firm, corporation, or institution has violated the antitrust laws of this State or the Federal antitrust laws nor communicated directly or indirectly the response made to any competitor or any other person engaged in such line of business.

By signature hereon, Respondent certifies that if a Texas address is shown as the address of the Respondent, Respondent qualifies as a Texas Resident Bidder as defined in Rule 34 TAC 20.38.

#### Certifications:

<u>Texas Family Code Child Support Certification.</u> By signature hereon, Respondent certifies as follows: "Under Section 231.006, Texas Family Code, the Contractor certifies it is not ineligible to receive the payments specified in the Agreement and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate."

Sales Tax Certification. By signing the Agreement, the Respondent certifies as follows: "Under Section 2155.004, Texas Government Code, the Contractor certifies that the individual or business entity named in this Agreement is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate."

<u>Franchise Tax Certification.</u> By signing the Agreement, a corporate or limited liability company, Respondent certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the Texas Tax Code, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the corporation or limited liability company is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable. Contractor acknowledges and agrees that if this certification is false or inaccurate, at University's option, the Agreement may be terminated and payment withheld.

<u>Payment of Debts to the State of Texas.</u> That pursuant to Section 403.0551, Texas Government Code, the Respondent agrees that any payments owing to the Contractor under this contract may be applied towards any debt or delinquent taxes that the Contractor owes the State of Texas or any agency of the State of Texas, until such debt or delinquent taxes are paid in full.

The person signing the Response should show title or authority to bind his/her firm in contract.

Sederal Employer's Identification Number:
ole Owner should also enter Social Security No.:
Respondent/Company:
signature (INK):
Name (Typed/Printed):
itle:
treet:
City/State/Zip:
elephone No/Fax No:
Email.:

THIS SHEET MUST BE COMPLETED, SIGNED, AND RETURNED WITH RESPONDENT'S PROPOSAL. FAILURE TO SIGN AND RETURN THIS SHEET MAY RESULT IN THE REJECTION OF YOUR RESPONSE.

## EXHIBIT B ACKNOWLEDGEMENT OF ADDENDA

Addenda No	Dated	<del>_</del>
Addenda No	Dated	<del>_</del>
Addenda No	Dated	<del>_</del>
Addenda No	Dated	_
Respondent/Company:		

Receipt is hereby acknowledged of the following addenda to this RFP.

Refer to the SFA Procurement and Property Services Department website to confirm all addenda issued: http://www.sfasu.edu/purchasing/122.asp

## EXHIBIT C PRICING PROPOSAL AND COSTING METHODOLOGIES

Having carefully reviewed the requirements of this RFP and related documents to provide construction manager at risk services for building construction projects on the campus of Stephen F. Austin State University, the undersigned submits the following Financial Proposal in accordance with the Request for Proposal documents.

thoriz	zed Signature:		
I	Using the estimated construction cost for the build Five Hundred Thousand Dollars (\$110,500,000), wand anticipated Guaranteed Maximum Price, respo	which includes the Pre-Co	onstruction Phase Fee
A.	Pre-Construction Phase Fee	<u>\$</u>	Percent
	(Contractor's fee for the construction contractor's p design phases)	articipation in the pre-const	ruction phase (Includes a
B.	1) Proposed Construction Phase Fee	\$	Percent
	For construction phase services, based on the antic Owner shall pay Contractor a stipulated Construction decrease in the GMP, the Construction Phase Fee  2) Proposed Cost for Home office personnel project management staff included in Fee	on Phase Fee. If the owner	agrees to an increase or
C.	General Conditions Costs		
	General Conditions Percentage	<u></u> %	
	Estimated monthly general conditions costs	\$	
	Estimated bonding costs	\$	
	Builder's Risk insurance costs	\$	
	General Liability insurance costs	\$	
	Labor cost, burdened and unburdened	\$	
	American General Contractor (AGC) Fees	\$	
	<b>Total General Conditions Costs</b>	\$	
D. 1	Total Construction Duration (Notice to proceed for construction to final		months

completion of building projects)

# EXHIBIT D HUB SUBCONTRACTING PLAN (HSP)

Rev. 2/17



## HUB Subcontracting Plan (HSP) QUICK CHECKLIST

While this HSP Quick Checklist is being provided to merely assist you in readily identifying the sections of the HSP form that you will need to complete, it is very important that you adhere to the instructions in the HSP form and instructions provided by the contracting agency.

- If you will be awarding all of the subcontracting work you have to offer under the contract to only Texas certified HUB vendors, complete:
  - Section 1 Respondent and Requisition Information
  - Section 2 a. Yes, I will be subcontracting portions of the contract.
  - Section 2 b. List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors.
  - Section 2 c. Yes
  - Section 4 Affirmation
  - GFE Method A (Attachment A) Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2 b.
- If you will be subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors, and the aggregate percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you do not have a continuous contract\* in place for more than five (5) years meets or exceeds the HUB Goal the contracting agency identified in the "Agency Special Instructions/Additional Requirements", complete:
  - Section 1 Respondent and Requisition Information
  - Section 2 a. Yes, I will be subcontracting portions of the contract.
  - Section 2 b. List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors and Non-HUB vendors.
  - Section 2 c. No
  - Section 2 d. Yes
  - Section 4 Affirmation
  - GFE Method A (Attachment A) Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2 b.
- If you will be subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors or only to Non-HUB vendors, and the aggregate percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you do not have a continuous contract\* in place for more than five (5) years does not meet or exceed the HUB Goal the contracting agency identified in the "Agency Special Instructions/Additional Requirements", complete:
  - Section 1 Respondent and Requisition Information
  - Section 2 a. Yes, I will be subcontracting portions of the contract.
  - Section 2 b. List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors and Non-HUB vendors.
  - Section 2 c. No
  - Section 2 d. No
  - Section 4 Affirmation
  - GFE Method B (Attachment B) Complete an Attachment B for each of the subcontracting opportunities you listed in Section 2 b.
- If you will not be subcontracting any portion of the contract and will be fulfilling the entire contract with your own resources (i.e., employees, supplies, materials and/or equipment), complete:
  - Section 1 Respondent and Requisition Information
  - Section 2 a. No, I will not be subcontracting any portion of the contract, and I will be fulfilling the entire contract with my own resources.
  - Section 3 Self Performing Justification
  - Section 4 Affirmation

\*Continuous Contract: Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service, to include under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.

Rev. 2/17



c. Requisition #:

## **HUB Subcontracting Plan (HSP)**

In accordance with Texas Gov't Code §2161.252, the contracting agency has determined that subcontracting opportunities are probable under this contract. Therefore, all respondents, including State of Texas certified Historically Underutilized Businesses (HUBs) must complete and submit this State of Texas HUB Subcontracting Plan (HSP) with their response to the bid requisition (solicitation).

NOTE: Responses that do not include a completed HSP shall be rejected pursuant to Texas Gov't Code §2161.252(b).

The HUB Program promotes equal business opportunities for economically disadvantaged persons to contract with the State of Texas in accordance with the goals specified in the 2009 State of Texas Disparity Study. The statewide HUB goals defined in 34 Texas Administrative Code (TAC) §20.284 are:

- 11.2 percent for heavy construction other than building contracts,
- 21.1 percent for all building construction, including general contractors and operative builders' contracts,
- 32.9 percent for all special trade construction contracts,
- · 23.7 percent for professional services contracts,
- · 26.0 percent for all other services contracts, and
- 21.1 percent for commodities contracts.

#### - - Agency Special Instructions/Additional Requirements - -

its su agend which to be	cordance with 34 TAC §20.285(d)(1)(D)(iii), a respondent (prime contractor) may demonstrate good faith of bcontracting opportunities if the total value of the respondent's subcontracts with Texas certified HUBs meets by specific HUB goal, whichever is higher. When a respondent uses this method to demonstrate good faith effort it will subcontract. If using existing contracts with Texas certified HUBs to satisfy this requirement, only the agg subcontracted to HUBs with which the respondent does not have a continuous contract* in place for more the goal. This limitation is designed to encourage vendor rotation as recommended by the 2009 Texas Disparity Studies.	or exceeds the statewide HUB goal or the the respondent must identify the HUBs with regate percentage of the contracts expected an five (5) years shall qualify for meeting the
SEC	TION 1: RESPONDENT AND REQUISITION INFORMATION	
a.	Respondent (Company) Name:	State of Texas VID #:
	Point of Contact:	Phone #:
	E-mail Address:	Fax #:
b.	Is your company a State of Texas certified HUB? — - Yes — - No	

Bid Open Date:

(mm/dd/yyyy)

Enter your company's name here:	Requisition #:
	<del>-</del>

## SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS

After dividing the contract work into reasonable lots or portions to the extent consistent with prudent industry practices, and taking into consideration the scope of work to be performed under the proposed contract, including all potential subcontracting opportunities, the respondent must determine what portions of work, **including contracted staffing, goods and services will be subcontracted**. Note: In accordance with 34 TAC §20.282, a "Subcontractor" means a person who contracts with a prime contractor to work, to supply commodities, or to contribute toward completing work for a governmental entity.

- a. Check the appropriate box (Yes or No) that identifies your subcontracting intentions:
  - Yes, I will be subcontracting portions of the contract. (If Yes, complete Item b of this SECTION and continue to Item c of this SECTION.)
  - □ *No*, I will not be subcontracting <u>any</u> portion of the contract, and I will be fulfilling the entire contract with my own resources, including employees, goods and services. (If *No*, continue to SECTION 3 and SECTION 4.)
- b. List all the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

		HU	Bs	Non-HUBs
Item #	Subcontracting Opportunity Description	Percentage of the contract expected to be subcontracted to HUBs with which you do not have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to HUBs with which you have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to non-HUBs.
1		%	%	%
2		%	%	%
3		%	%	%
4		%	%	%
5		%	%	%
6		%	%	%
7		%	%	%
8		%	%	%
9		%	%	%
10		%	%	%
11		%	%	%
12		%	%	%
13		%	%	%
14		%	%	%
15		%	%	%
	Aggregate percentages of the contract expected to be subcontracted:	%	%	%

(Note: If you have more than fifteen subcontracting opportunities, a continuation sheet is available online at https://www.comptroller.texas.gov/purchasing/vendor/hub/forms.php).

- **c.** Check the appropriate box (Yes or No) that indicates whether you will be using **only** Texas certified HUBs to perform **all** of the subcontracting opportunities you listed in SECTION 2, Item b.
  - Yes (If Yes, continue to SECTION 4 and complete an "HSP Good Faith Effort Method A (Attachment A)" for each of the subcontracting opportunities you listed.)
  - No (If No, continue to Item d, of this SECTION.)
- d. Check the appropriate box (Yes or No) that indicates whether the aggregate expected percentage of the contract you will subcontract with Texas certified HUBs with which you do not have a continuous contract\* in place with for more than five (5) years, meets or exceeds the HUB goal the contracting agency identified on page 1 in the "Agency Special Instructions/Additional Requirements."
  - Yes (If Yes, continue to SECTION 4 and complete an "HSP Good Faith Effort Method A (Attachment A)" for each of the subcontracting opportunities you listed.)
  - No (If No, continue to SECTION 4 and complete an "HSP Good Faith Effort Method B (Attachment B)" for each of the subcontracting opportunities you listed.)

\*Continuous Contract: Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.

Enter your company's name here:	Requisition #:
	-

## SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS (CONTINUATION SHEET)

This page can be used as a continuation sheet to the HSP Form's page 2, Section 2, Item b. Continue listing the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

		HUBs		Non-HUBs	
Item #	Subcontracting Opportunity Description	Percentage of the contract expected to be subcontracted to HUBs with which you do not have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to HUBs with which you have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to non-HUBs.	
16		%	%	%	
17		%	%	%	
18		%	%	%	
19		%	%	%	
20		%	%	%	
21		%	%	%	
22		%	%	%	
23		%	%	%	
24		%	%	%	
25		%	%	%	
26		%	%	%	
27		%	%	%	
28		%	%	%	
29		%	%	%	
30		%	%	%	
31		%	%	%	
32		%	%	%	
33		%	%	%	
34		%	%	%	
35		%	%	%	
36		%	%	%	
37		%	%	%	
38		%	%	%	
39		%	%	%	
40		%	%	%	
41		%	%	%	
42		%	%	%	
43		%	%	%	
	Aggregate percentages of the contract expected to be subcontracted:	%	%	%	

\*Continuous Contract: Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.

Enter your company's name here:		Requisition #:	
SECTION 3: SELF PERFORMING JUSTIFIC responded "No" to SECTION 2, Item a, in the space materials and/or equipment.			
SECTION 4: Affirmation			
As evidenced by my signature below, I affirm that I supporting documentation submitted with the HSP is	·		
contract. The notice must specify at a minim subcontracting opportunity they (the subcontra- the total contract that the subcontracting oppor	s practical to all the subcontractors (HUBs and N num the contracting agency's name and its point ctor) will perform, the approximate dollar value of trunity represents. A copy of the notice required to (10) working days after the contract is awarded.	nt of contact for the contract, the subcontracting opportunity	he contract award number, the and the expected percentage of
compliance with the HSP, including the u	ance reports (Prime Contractor Progress Asses se of and expenditures made to its subcorlocs/hub-forms/ProgressAssessmentReportForm.	tractors (HUBs and Non-HUE	
subcontractors and the termination of a subcon	contracting agency prior to making any modific stractor the respondent identified in its HSP. If the cement remedies available under the contract or c	HSP is modified without the con	tracting agency's prior approval,
The respondent must, upon request, allow the are being performed and must provide documer	contracting agency to perform on-site reviews of ntation regarding staffing and other resources.	the company's headquarters ar	nd/or work-site where services
Signature	Printed Name	Title	Date (mm/dd/yyyy)

## Reminder:

- If you responded "Yes" to SECTION 2, Items c or d, you must complete an "HSP Good Faith Effort Method A (Attachment A)" for <u>each</u> of the subcontracting opportunities you listed in SECTION 2, Item b.
- If you responded "No" SECTION 2, Items c and d, you must complete an "HSP Good Faith Effort Method B (Attachment B)" for <u>each</u> of the subcontracting opportunities you listed in SECTION 2, Item b.

## HSP Good Faith Effort - Method A (Attachment A)

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Enter your company's name here:	Requisition #:
	<del>-</del>

*IMPORTANT*: If you responded "*Yes*" to **SECTION 2, Items c** or **d** of the completed HSP form, you must submit a completed "HSP Good Faith Effort - Method A (Attachment A)" for <u>each</u> of the subcontracting opportunities you listed in **SECTION 2, Item b** of the completed HSP form. You may photo-copy this page or download the form at <a href="https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-a.pdf">https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-a.pdf</a>

## SECTION A-1: SUBCONTRACTING OPPORTUNITY

Enter the item number and description of the subcontracting opportunity you listed in SECTION 2, Item b, of the completed HSP form for which you are completing the attachment.

Item Number: Description:

## SECTION A-2: SUBCONTRACTOR SELECTION

List the subcontractor(s) you selected to perform the subcontracting opportunity you listed above in SECTION A-1. Also identify whether they are a Texas certified HUB and their Texas Vendor Identification (VID) Number or federal Employer Identification Number (EIN), the approximate dollar value of the work to be subcontracted, and the expected percentage of work to be subcontracted. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas' Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <a href="http://mvcpa.cpa.state.tx.us/tpasscmblsearch/index.jsp.">http://mvcpa.cpa.state.tx.us/tpasscmblsearch/index.jsp.</a> HUB status code "A" signifies that the company is a Texas certified HUB.

Company Name	Texas certified HUB	Texas VID or federal EIN Do not enter Social Security Numbers. If you do not know their VID / EIN, leave their VID / EIN field blank.	Approximate Dollar Amount	Expected Percentage of Contract
	- Yes - No	·	\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No	_	\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No	·	\$	%
	- Yes - No		\$	%
	- Yes - No	_	\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%
	- Yes - No		\$	%

**REMINDER:** As specified in SECTION 4 of the completed HSP form, if you (respondent) are awarded any portion of the requisition, you are required to provide notice as soon as practical to <u>all</u> the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity they (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract <u>no later than ten (10) working days</u> after the contract is awarded.

## HSP Good Faith Effort - Method B (Attachment B)

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Enter your company's name here:	Requisition #:

**IMPORTANT:** If you responded "**No**" to **SECTION 2**, **Items c** and **d** of the completed HSP form, you must submit a completed "HSP Good Faith Effort - Method B (Attachment B)" for <u>each</u> of the subcontracting opportunities you listed in **SECTION 2**, **Item b** of the completed HSP form. You may photo-copy this page or download the form at <a href="https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-b.pdf">https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-b.pdf</a>.

## SECTION B-1: SUBCONTRACTING OPPORTUNITY

Enter the item number and description of the subcontracting opportunity you listed in SECTION 2, Item b, of the completed HSP form for which you are completing the attachment.

Item Number: Description:

## SECTION B-2: MENTOR PROTÉGÉ PROGRAM

If respondent is participating as a Mentor in a State of Texas Mentor Protégé Program, submitting its Protégé (Protégé must be a State of Texas certified HUB) as a subcontractor to perform the subcontracting opportunity listed in **SECTION B-1**, constitutes a good faith effort to subcontract with a Texas certified HUB towards that <u>specific</u> portion of work.

Check the appropriate box (Yes or No) that indicates whether you will be subcontracting the portion of work you listed in SECTION B-1 to your Protégé.

- Yes (If Yes, continue to SECTION B-4.)
- No / Not Applicable (If No or Not Applicable, continue to SECTION B-3 and SECTION B-4.)

## SECTION B-3: NOTIFICATION OF SUBCONTRACTING OPPORTUNITY

When completing this section you <u>MUST</u> comply with items <u>a</u>, <u>b</u>, <u>c</u> and <u>d</u>, thereby demonstrating your Good Faith Effort of having notified Texas certified HUBs <u>and</u> trade organizations or development centers about the subcontracting opportunity you listed in SECTION B-1. Your notice should include the scope of work, information regarding the location to review plans and specifications, bonding and insurance requirements, required qualifications, and identify a contact person. When sending notice of your subcontracting opportunity, you are encouraged to use the attached HUB Subcontracting Opportunity Notice form, which is also available online at <a href="https://www.comptroller.texas.gov/purchasing/docs/hub-forms/HUBSubcontractingOpportunityNotificationForm.pdf">https://www.comptroller.texas.gov/purchasing/docs/hub-forms/HUBSubcontractingOpportunityNotificationForm.pdf</a>.

Retain supporting documentation (i.e., certified letter, fax, e-mail) demonstrating evidence of your good faith effort to notify the Texas certified HUBs <u>and</u> trade organizations or development centers. Also, be mindful that a working day is considered a normal business day of a state agency, not including weekends, federal or state holidays, or days the agency is declared closed by its executive officer. The initial day the subcontracting opportunity notice is sent/provided to the HUBs <u>and</u> to the trade organizations or development centers is considered to be "day zero" and does not count as one of the seven (7) working days.

- a. Provide written notification of the subcontracting opportunity you listed in SECTION B-1, to three (3) or more Texas certified HUBs. Unless the contracting agency specified a different time period, you must allow the HUBs at least seven (7) working days to respond to the notice prior to you submitting your bid response to the contracting agency. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas' Centralized Master Bidders List (CMBL) Historically Underutilized Business (HUB) Directory Search located at <a href="http://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp">http://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp</a>. HUB status code "A" signifies that the company is a Texas certified HUB.
- b. List the <a href="three">three</a> (3) Texas certified HUBs</a> you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the company's Texas Vendor Identification (VID) Number, the date you sent notice to that company, and indicate whether it was responsive or non-responsive to your subcontracting opportunity notice.

Company Name	(Do not en	Texas VID ter Social Security Numbers.)	Date Notice Sent (mm/dd/yyyy)	Did the HUB F	Respond?
				- Yes	- No
				- Yes	- No
		•		- Yes	- No

- c. Provide written notification of the subcontracting opportunity you listed in SECTION B-1 to two (2) or more trade organizations or development centers in Texas to assist in identifying potential HUBs by disseminating the subcontracting opportunity to their members/participants. Unless the contracting agency specified a different time period, you must provide your subcontracting opportunity notice to trade organizations or development centers at least seven (7) working days prior to submitting your bid response to the contracting agency. A list of trade organizations and development centers that have expressed an interest in receiving notices of subcontracting opportunities is available on the Statewide HUB Program's webpage at <a href="https://www.comptroller.texas.gov/purchasing/vendor/hub/resources.php">https://www.comptroller.texas.gov/purchasing/vendor/hub/resources.php</a>.
- d. List two (2) trade organizations or development centers you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the date when you sent notice to it and indicate if it accepted or rejected your notice.

Trade Organizations or Development Centers	Date Notice Sent (mm/dd/yyyy)	Was the Notice	Accepted?
		- Yes	- No
		- Yes	- No

## HSP Good Faith Fffort - Method B (Attachment B) Cont.

nter your company's name here:			Requisition #	<u></u>	
ter the item number and description of the subcontracting opportunity you lise attachment.  a. Enter the item number and description of the subcontracting opportunity for Item Number:  Description:   for which you a ortunity you list mplioyer Identi d. When search CMBL) - Hist	re comple ed in <b>SE</b> 6 fication N ning for To prically U	cting this Attachment B conting this Attachment B conting the cont	nuation page.  whether they are a late dollar value of rifying their HUB stauus	Texas certifice the work to atus, ensure t	
http://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp. HUB status code  Company Name	"A" signifies th		Texas VID or federal EIN Do not enter Social Security Numbers. If you do not know their VID / EIN,	Approximate Dollar Amount	Expected Percentage
	- Yes	- No	leave their VID / EIN field blank.	\$	%
	- Yes	- No		\$	9
	- Yes	- No		\$	9
	- Yes	- No		\$	Ç
	- Yes	- No		\$	Ç
	- Yes	- No		\$	Q
	- Yes	- No		\$	9
	- Yes	- No		\$	Q
	- Yes	- No		\$	Ç
	- Yes	- No		\$	Q
If any of the subcontractors you have selected to perform the subcontract justification for your selection process (attach additional page if necessar	- Yes - Yes	- No - No	in SECTION P. 1 is not a	\$	3. provide v

**REMINDER:** As specified in SECTION 4 of the completed HSP form, if you (respondent) are awarded any portion of the requisition, you are required to provide notice as soon as practical to all the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity it (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.

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## **HUB Subcontracting Opportunity Notification Form**

In accordance with Texas Gov't Code, Chapter 2161, each state agency that considers entering into a contract with an expected value of \$100,000 or more shall, before the agency solicits bids, proposals, offers, or other applicable expressions of interest, determine whether subcontracting opportunities are probable under the contract. The state agency I have identified below in Section B has determined that subcontracting opportunities are probable under the requisition to which my company will be responding.

34 Texas Administrative Code, §20.285 requires all respondents (prime contractors) bidding on the contract to provide notice of each of their subcontracting opportunities to at least <a href="https://exas.certified-HUBs">https://exas.certified-HUBs</a> (who work within the respective industry applicable to the subcontracting opportunity), and allow the HUBs <a href="https://exas.certified-HUBs">at least seven (7)</a> working days to respond to the notice prior to the respondent submitting its bid response to the contracting agency. In addition, <a href="https://exas.certified-HUBs">at least seven (7)</a> working days prior to submitting its bid response to the contracting agency, the respondent must provide notice of each of its subcontracting opportunities to <a href="https://exas.certified-HUBs">two (2)</a> or more trade organizations or development centers (in Texas) that serves members of groups (i.e., Asian Pacific American, Black American, Hispanic American, Native American, Woman, Service Disabled Veteran) identified in Texas Administrative Code §20.282(19)(C).

We respectfully request that vendors interested in bidding on the subcontracting opportunity scope of work identified in Section C, Item 2, reply no later than the date and time identified in Section C, Item 1. Submit your response to the point-of-contact referenced in Section A.

dentified in Section C, Item 1. Submit your response to the point-of-contact reference	ed in Section A.				
SECTION A: PRIME CONTRACTOR'S INFORMATION					
Company Name:			State of 1	Texas VID #:	
Point-of-Contact:			-	Phone #:	
E-mail Address:			-	Fax #:	
SECTION B: CONTRACTING STATE AGENCY AND REQUISITION	INFORMATION				
Agency Name:					
Point-of-Contact:				Phone #:	
Requisition #:			Bid (	Open Date:	
<u></u>				_	(mm/dd/yyyy)
SECTION C: SUBCONTRACTING OPPORTUNITY RESPONSE DUE  1. Potential Subcontractor's Bid Response Due Date:  If you would like for our company to consider your company	y's bid for the subco	ontracting			
we must receive your bid response no later than		on			
	Central Time		Date (mm/dd/yyyy)		
least seven (7) working days to respond to the notice prior to submitting our bit to us submitting our bid response to the contracting agency, we must proorganizations or development centers (in Texas) that serves members of American, Woman, Service Disabled Veteran) identified in Texas Administration (A working day is considered a normal business day of a state agency, not if by its executive officer. The initial day the subcontracting opportunity notice is considered to be "day zero" and does not count as one of the seven (7) when the seven (8) we have the subcontracting opportunity notice is considered to be "day zero" and does not count as one of the seven (9) when the seven (10) we have the seven (11) when the seven (12) when the seven (13) when the seven (13) we have the seven (13) when the seven (13) when the seven (14) when the seven (15) whave (15) when the seven (15) when the seven (15) when the seven (	rovide notice of each groups (i.e., Asian ative Code, §20.282 including weekends is sent/provided to	th of our of Pacific A (19)(C).	subcontracting oppo American, Black Ame or state holidays, or d	rtunities to two erican, Hispanic lays the agency i	(2) or more trade American, Native
2. Subcontracting Opportunity Scope of Work:					
3. Required Qualifications:					- Not Applicable
4. Bonding/Insurance Requirements:					- Not Applicable
5. Location to review plans/specifications:					- Not Applicable

## EASY HUB LOOKUP on the CMBL

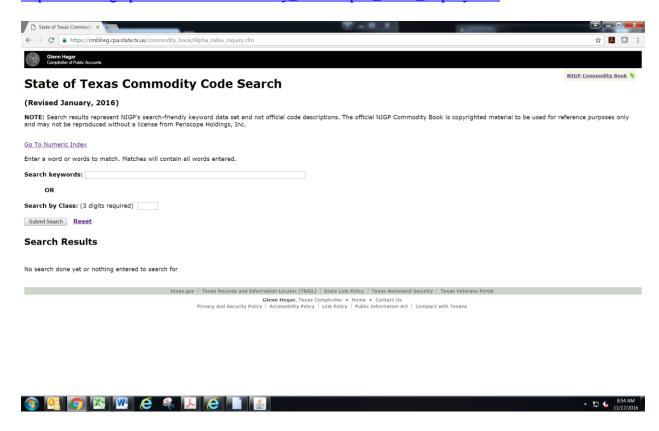
In accordance with Texas Administrative Code 20.14, the following HUB lookup procedures have been developed utilizing the Comptroller of Public Accounts website to identify possible HUB Vendors for subcontracting opportunities.

To that end the following easy step by step instructions to identify NIGP codes and search for potential HUB subcontractors is provided by Stephen F. Austin State University. In addition, the University may have already completed searches that may be beneficial and include a list of potential HUB subcontractors that may be used by the Respondent. If you have a hard time reading the webpages cited, increase the page view to 200% or better.

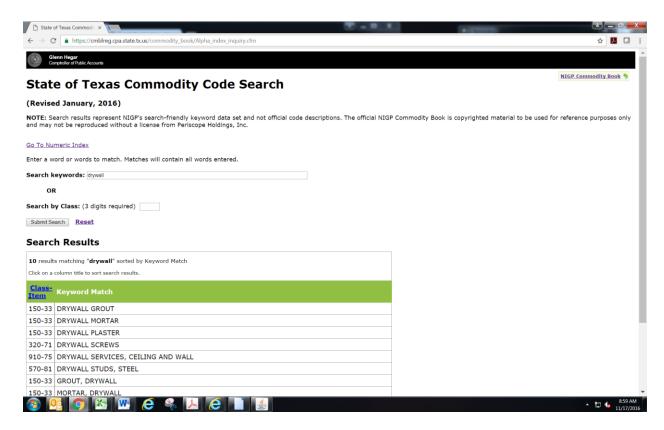
For assistance with this instruction or further assistance in identifying potential HUB subcontractors, please contact Manny Guerrero, Vendor Relations Manager at 936-468-4529.

**STEP 1:** After identifying what areas that are going to be subcontracted for the project go to the following web address at Comptroller of Public Accounts:

https://cmblreg.cpa.state.tx.us/commodity\_book/Alpha\_index\_inquiry.cfm



At this point type in the item you are looking for in Search keywords: (for this example we are looking for drywall services). Press Submit Search and the results will appear. See example below:



The page will list Keyword Match for drywall. In this example the Class-Item for Drywall Services, Ceiling and Wall is 910-75. Remember to write down the Class and Item numbers. You will do the same for other items that you will be subcontracting on the project. Once you have completed collecting all Class and Item numbers for sub-contracting opportunities you can precede to Step 2

**STEP 2:** With the Class and Item numbers you can search for HUB Vendors on the Centralized Master Bidders List – HUB Directory Search. Go to the following web address at Texas Comptroller of Public Accounts:

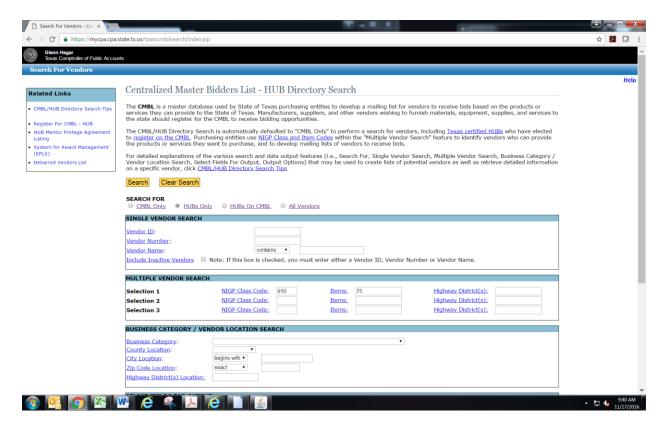
https://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp

Under **SEARCH FOR** mark <u>HUBs Only</u> (you are looking for HUB vendors)

The EXAMPLE below is how the form should be filled out. Search for HUBs on CMBL; Selection 1: Class-Item; Select Fields For Output (Vendor ID, Company Name, Contact Person, City, Email, Phone, Business Description, HUB Eligibility, HUB Gender)

In the example below we are searching for NIGP Class Code 910, Items 75 (Drywall Services).

Once all the information needed has been marked. Click: **SEARCH.** 



Once the search is completed, a page like the one below will appear listing all the HUB companies that are Class 910 and Item 75.

The search found 222 vendors where are HUB's.

At this point you should look at the Business Description to confirm that the company does indeed provide drywall services. Note that the first company listed 1DZ ENTERPRISE, L.L.C. does not list drywall services, instead the company business description list Janitorial Service – if at all possible you should not use this company in your Good Faith Efforts as there are other companies that list dry wall in their business description.

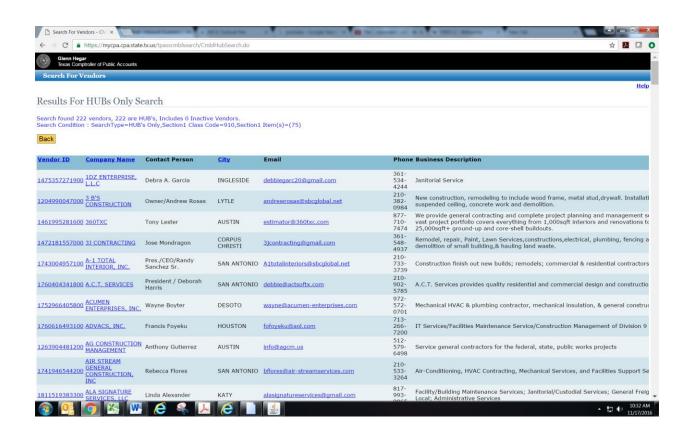
3 B'S CONTSTRUCTION does list drywall and is a good candidate for sending a request to bid the project.

YOU ARE REQUIRED TO SELECT THREE (3) HUB VENDORS TO CONTACT.

When looking for HUB Vendors to support you at SFA look for these vendors that are close to Nacogdoches and East Texas. If none can be found in our area, expand your search to the Dallas/Fort Worth area, Austin and Houston market areas.

### **NOTES:**

- 1) SELECTING HUBS THAT ARE FROM EL PASO, AND FAR WEST TEXAS DOES NOT SHOW GOOD FAITH IN YOUR SELECTION PROCESS.
- 2) IF YOU DO NOT UNDERSTAND THESE DIRECTIONS OR NEED ASSITANCE PLEASE CONTACT THE SFA PROCUREMENT OFFICE FOR HELP.



## POTENTIAL HUB SUBCONTRACTORS PROVIDED WITH

Request For Proposals: #CMR-BLDG PROJECTS-2018

Issued by Stephen F. Austin State University Closing Date/Time: September 5, 2018 at 5:00pm

A complete list of State certified HUBs can be searched on-line at <a href="https://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp">https://mycpa.cpa.state.tx.us/tpasscmblsearch/index.jsp</a>

The Respondent is responsible for compliance with the Good Faith Effort requirements outlined in the Request For Proposals and HUB Subcontracting Plan documents.

NIGP Class Code – vendors in the following commodity class codes are identified on the following pages. The vendor is responsible to identify all commodity classes that may represent subcontracting opportunities.

909-27 - Building Construction, Educational

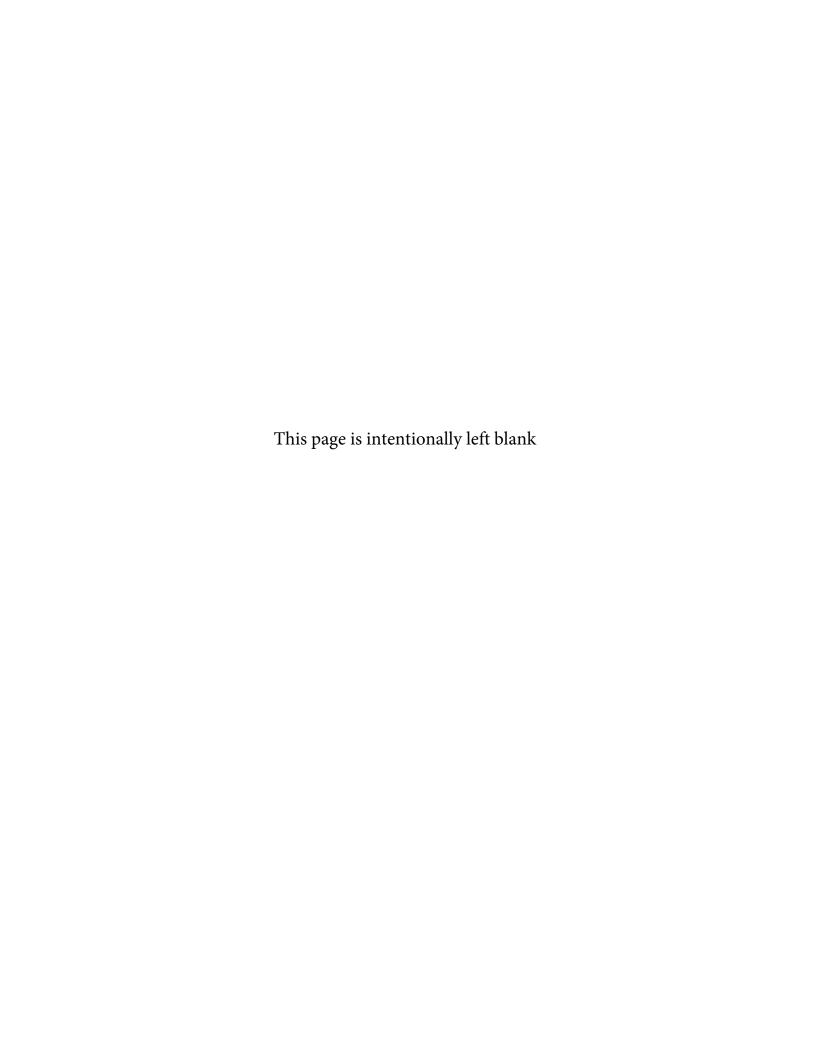
909-30 - Building Construction, (Not Otherwise Classified)

## EXHIBIT E UNIFORM GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS



## STEPHEN F. AUSTIN STATE UNIVERSITY

NACOGDOCHES, TEXAS



# 2015 Uniform General Conditions for Construction Contracts

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## **Article 1. Definitions**

Unless the context clearly requires another meaning, the following terms have the meaning assigned herein.

- 1.1 Addendum/Addenda means formally issued written or graphic modifications and/or interpretations of the Construction Documents that may add to, delete from, clarify or correct the description and/or scope of the Work. Addenda are issued during the bidding phase of the project.
- 1.2 Application for Payment means Contractor's monthly partial invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted and performed in accordance with the requirements of the Contract Documents. The Application for Payment accurately reflects the progress of the Work, is itemized based on the Schedule of Values, bears the notarized signature of Contractor, and shall not include subcontracted items for which Contractor does not intend to pay.
- 1.3 Application for Final Payment means Contractor's final invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of remaining Contractor's retainage.
- 1.4 Architect/Engineer (A/E) means a person registered as an architect pursuant to Tex. Occ. Code Ann., Ch. 1051, as a landscape architect pursuant to Tex. Occ. Code Ann., Ch. 1052, a person licensed as a professional engineer pursuant Tex. Occ. Code Ann., Ch. 1001, and/or a firm employed by Owner or Design-Build Contractor to provide professional architectural or engineering services and to exercise overall responsibility for the design of a Project or a significant portion thereof, and to perform the contract administration responsibilities set forth in the Contract.
- 1.5 Authority Having Jurisdiction means a federal, state, local, or other regional department, or an individual such as a fire marshal, building official, electrical inspector, utility provider or other individual having statutory authority.
- 1.6 Baseline Schedule means the initial time schedule prepared by Contractor for Owner's information and acceptance that conveys Contractor's and Subcontractors' activities (including coordination and review activities required in the Contract Documents to be performed by A/E and ODR), durations, and sequence of work related to the entire Project to the extent required by the Contract Documents. The schedule clearly demonstrates the critical path of activities, durations and necessary predecessor conditions that drive the end date of the schedule. The Baseline Schedule shall not exceed the time limit current under the Contract Documents.
- 1.7 *Certificate of Final Completion* means the certificate issued by A/E that documents, to the best of A/E's knowledge and understanding, Contractor's completion of all

- Contractor's Punchlist items and pre-final Punchlist items, final cleanup and Contractor's provision of Record Documents, operations and maintenance manuals, and all other closeout documents required by the Contract Documents.
- 1.8 Certificate of Substantial Completion means the certificate executed by the A/E, ODR and Contractor that documents to the best of A/E's and ODR's knowledge and understanding, Contractor's sufficient completion of the work in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.9 *Change Order* means a written modification of the Contract between Owner and Contractor, signed by Owner, Contractor, and A/E.
- 1.10 *Close-out Documents* mean the product brochures, submittals, product/equipment maintenance and operations instructions, manuals, and other documents/warranties, record documents, affidavit of payment, release of lien and claim, and as may be further defined, identified, and required by the Contract Documents.
- 1.11 *Contract* means the entire agreement between Owner and Contractor, including all of the Contract Documents.
- 1.12 *Contract Date* is the date when the agreement between Owner and Contractor becomes effective.
- 1.13 *Contract Documents* mean those documents identified as a component of the agreement (Contract) between Owner and Contractor. These may include, but are not limited to, Drawings; Specifications; General, Supplementary General, and Special Conditions; and all pre-bid and/or pre-proposal addenda.
- 1.14 *Contract Sum* means the total compensation payable to Contractor for completion of the Work in accordance with the terms of the Contract.
- 1.15 *Contract Time* means the period between the start date identified in the Notice to Proceed with construction and the Substantial Completion date identified in the Notice to Proceed or as subsequently amended by a Change Order.
- 1.16 *Contractor* means the individual, corporation, limited liability company, partnership, firm, or other entity contracted to perform the Work, regardless of the type of construction contract used, so that the term as used herein includes a Construction Manager-at-Risk or a Design-Build firm as well as a general or prime Contractor. The Contract Documents refer to Contractor as if singular in number.
- 1.17 *Construction Documents* mean the Drawings, Specifications, and other documents issued to build the Project. Construction Documents become part of the Contract Documents when listed in the Contract or any Change Order.
- 1.18 Construction Manager-at-Risk, in accordance with Tex. Gov't Code, Ch. 2166, means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for construction, rehabilitation, alteration, or repair of a facility at the

- contracted price as a general contractor and provides consultation to Owner regarding construction during and after the design of the facility.
- 1.19 *Date of Commencement* means the date designated in the Notice to Proceed for Contractor to commence the Work.
- 1.20 Day means a calendar day unless otherwise specifically stipulated.
- 1.21 *Design-Build* means a project delivery method in which the detailed design and subsequent construction is provided through a single contract with a Design-Build firm; a team, partnership, or legal entity that includes design professionals and a builder. The Design-Build Project delivery shall be implemented in accordance with Tex. Gov't Code § 2166.2531.
- 1.22 *Drawings* mean that product of A/E which graphically depicts the Work.
- 1.23 *Final Completion* means the date determined and certified by A/E and Owner on which the Work is fully and satisfactorily complete in accordance with the Contract.
- 1.24 *Final Payment* means the last and final monetary compensation made to Contractor for any portion of the Work that has been completed and accepted for which payment has not been made, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of Contractor's retainage.
- 1.25 Historically Underutilized Business (HUB) pursuant to Tex. Gov't Code, Ch. 2161, means a business that is at least 51% owned by an Asian Pacific American, a Black American, a Hispanic American, a Native American and/or an American Woman; is an entity with its principal place of business in Texas; and has an owner residing in Texas with proportionate interest that actively participates in the control, operations, and management of the entity's affairs.
- 1.26 *Notice to Proceed* means written document informing Contractor of the dates beginning Work and the dates anticipated for Substantial Completion.
- 1.27 *Open Item List* means a list of work activities, Punchlist items, changes or other issues that are not expected by Owner and Contractor to be complete prior to Substantial Completion.
- 1.28 Owner means the State of Texas, and any agency of the State of Texas, acting through the responsible entity of the State of Texas identified in the Contract as Owner.
- 1.29 Owner's Designated Representative (ODR) means the individual assigned by Owner to act on its behalf and to undertake certain activities as specifically outlined in the Contract. ODR is the only party authorized to direct changes to the scope, cost, or time of the Contract.

- 1.30 *Project* means all activities necessary for realization of the Work. This includes design, contract award(s), execution of the Work itself, and fulfillment of all Contract and warranty obligations.
- 1.31 *Progress Assessment Report (PAR)* means the monthly compliance report to Owner verifying compliance with the HUB subcontracting plan (HSP).
- 1.32 *Proposed Change Order (PCO)* means a document that informs Contractor of a proposed change in the Work and appropriately describes or otherwise documents such change including Contractor's response of pricing for the proposed change.
- 1.33 *Punchlist* means a list of items of Work to be completed or corrected by Contractor after Substantial Completion. Punchlists indicate items to be finished, remaining Work to be performed, or Work that does not meet quality or quantity requirements as required in the Contract Documents.
- 1.34 *Record Documents* mean the drawing set, Specifications, and other materials maintained by Contractor that documents all addenda, Architect's Supplemental Instructions, Change Orders and postings and markings that record the as-constructed conditions of the Work and all changes made during construction.
- 1.35 Request for Information (RFI) means a written request by Contractor directed to A/E or ODR for a clarification of the information provided in the Contract Documents or for direction concerning information necessary to perform the Work that may be omitted from the Contract Documents.
- 1.36 Samples mean representative physical examples of materials, equipment, or workmanship used to confirm compliance with requirements and/or to establish standards for use in execution of the Work.
- 1.37 *Schedule of Values* means the detailed breakdown of the cost of the materials, labor, and equipment necessary to accomplish the Work as described in the Contract Documents, submitted by Contractor for approval by Owner and A/E.
- 1.38 *Shop Drawings* mean the drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data prepared by Contractor or its agents which detail a portion of the Work.
- 1.39 Site means the geographical area of the location of the Work.
- 1.40 Special Conditions mean the documents containing terms and conditions which may be unique to the Project. Special Conditions are a part of the Contract Documents and have precedence over the Uniform General Conditions and Supplementary General Conditions.
- 1.41 *Specifications* mean the written product of A/E that establishes the quality and/or performance of products utilized in the Work and processes to be used, including testing and verification for producing the Work.

- 1.42 Subcontractor means a business entity that enters into an agreement with Contractor to perform part of the Work or to provide services, materials, or equipment for use in the Work.
- 1.43 Submittal Register means a list provided by Contractor of all items to be furnished for review and approval by A/E and Owner and as identified in the Contract Documents including anticipated sequence and submittal dates.
- 1.44 Substantial Completion means the date determined and certified by Contractor, A/E, and Owner when the Work, or a designated portion thereof, is sufficiently complete, in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.45 Supplementary General Conditions mean procedures and requirements that modify the Uniform General Conditions. Supplementary General Conditions, when used, have precedence over the Uniform General Conditions.
- 1.46 *Unit Price Work* means the Work, or a portion of the Work, paid for based on incremental units of measurement.
- 1.47 *Unilateral Change Order (ULCO)* means a Change Order issued by Owner without the complete agreement of Contractor, as to cost and/or time.
- 1.48 *Work* means the administration, procurement, materials, equipment, construction and all services necessary for Contractor, and/or its agents, to fulfill Contractor's obligations under the Contract.
- 1.49 *Work Progress Schedule* means the continually updated time schedule prepared and monitored by Contractor that accurately indicates all necessary appropriate revisions as required by the conditions of the Work and the Project while maintaining a concise comparison to the Baseline Schedule.

## Article 2. Wage Rates and Other Laws Governing Construction

- 2.1 Environmental Regulations. Contractor shall conduct activities in compliance with applicable laws and regulations and other requirements of the Contract relating to the environment and its protection at all times. Unless otherwise specifically determined, Owner is responsible for obtaining and maintaining permits related to stormwater run-off. Contractor shall conduct operations consistent with stormwater run-off permit conditions. Contractor is responsible for all items it brings to the Site, including hazardous materials, and all such items brought to the Site by its Subcontractors and suppliers, or by other entities subject to direction of Contractor. Contractor shall not incorporate hazardous materials into the Work without prior approval of Owner, and shall provide an affidavit attesting to such in association with request for Substantial Completion inspection.
- 2.2 <u>Wage Rates.</u> Contractor shall not pay less than the wage scale of the various classes of labor as shown on the prevailing wage schedule provided by Owner in the bid or proposal specifications. The specified wage rates are minimum rates only. Owner is

not bound to pay any claims for additional compensation made by any Contractor because the Contractor pays wages in excess of the applicable minimum rate contained in the Contract. The prevailing wage schedule is not a representation that qualified labor adequate to perform the Work is available locally at the prevailing wage rates.

- 2.2.1 <u>Notification to Workers.</u> Contractor shall post the prevailing wage schedule in a place conspicuous to all workers on the Project Site When requested by Owner, Contractor shall furnish evidence of compliance with the Texas Prevailing Wage Law and the addresses of all workers.
  - 2.2.1.1 Pursuant to Tex. Gov't Code § 2258.024, Contractor shall keep, on site, true and accurate records showing the name and occupation of each worker employed by the Contractor or subcontractors and the actual per diem wages paid to each worker. The record shall be open to inspection by the ODR and their agents at all reasonable hours for the duration of the contract.
  - 2.2.1.2 With each application for progress payment, Contractor shall make available upon request certified payroll records, including from subcontractors of any tier level, on Form WH-347 as promulgated by the U.S. Department of Labor, as may be revised from time to time and in unlocked and unprotected Excel format, along with copies of any and all Contract Documents between Contractor and any Subcontractors. Pursuant to Tex. Penal Code §§ 37.02 and 37.10, Employees of Contractor and subcontractors, including all tier levels, shall be subject to prosecution for submitting certified payroll records that contain materially false information.
  - 2.2.1.3 The prevailing wage schedule is determined by Owner in compliance with Tex. Gov't Code, Ch. 2258. Should Contractor at any time become aware that a particular skill or trade not reflected on Owner's prevailing wage schedule will be or is being employed in the Work, whether by Contractor or by Subcontractor, Contractor shall promptly inform ODR of the proposed wage to be paid for the skill along with a justification for same and ODR shall promptly concur with or reject the proposed wage and classification.
  - 2.2.1.4 Contractor is responsible for determining the most appropriate wage for a particular skill in relation to similar skills or trades identified on the prevailing wage schedule. In no case, shall any worker be paid less than the wage indicated for laborers.
  - 2.2.1.5 Pursuant to Tex. Labor Code § 214.008, Misclassification of Workers; Penalty. The Owner requires Contractor and all subcontractors properly classify individuals as Employees or Independent Contractors.

2.2.2 <u>Penalty for Violation.</u> Contractor, and any Subcontractor, will pay to the State a penalty of sixty dollars (\$60) for each worker employed for each day, or portion thereof, that the worker is paid less than the wage rates stipulated in the prevailing wage schedule

## 2.2.3 <u>Complaints of Violations.</u>

- 2.2.3.1 Owner's Determination of Good Cause. Upon receipt of information concerning a violation, Owner will conduct an investigation in accordance with Tex. Gov't Code, Ch. 2258 and make an initial determination as to whether good cause exists that a violation occurred. Upon making a good cause finding, Owner will retain the full amounts claimed by the claimant or claimants as the difference between wages paid and wages due under the prevailing wage schedule and any supplements thereto, together with the applicable penalties in accordance with Tex. Gov't Code § 2258.023, such amounts being subtracted from successive progress payments pending a final decision on the violation.
- 2.2.3.2 <u>No Extension of Time.</u> If Owner's determination proves valid that good cause existed to believe a violation had occurred, Contractor is not entitled to an extension of time for any delay arising directly or indirectly from the arbitration procedures.
- 2.2.3.3 <u>Cooperation with Owner's Investigation.</u> Contractor shall cooperate with Owner during any investigations hereunder. Such cooperation shall include, but not necessarily be limited to, timely providing the information and/or documentation requested by Owner, which may include certified payroll records on Form WH-347 as promulgated by the U.S. Department of Labor, as may be revised from time to time and in unlocked and unprotected Excel format; and copies of any and all Contract Documents between Contractor and any Subcontractors.
- 2.2.3.4 <u>Notification to Owner.</u> In the event Contractor or Subcontractor elect to appeal an initial determination made pursuant to Paragraph 2.2.3.1, the Contractor and/or Subcontractor, as applicable, shall deliver notice thereof to Owner.
- 2.3 <u>Venue for Suits.</u> The venue for any suit arising from the Contract will be in a court of competent jurisdiction in Travis County, Texas, or as may otherwise be designated in the Supplementary General Conditions.
- 2.4 <u>Licensing of Trades.</u> Contractor shall comply with all applicable provisions of State law related to license requirements for skilled tradesmen, contractors, suppliers and or laborers, as necessary to accomplish the Work. In the event Contractor, or one of its Subcontractors, loses its license during the term of performance of the Contract, Contractor shall promptly hire or contract with a licensed provider of the service at no additional cost to Owner.

- 2.5 Royalties, Patents, and Copyrights. Contractor shall pay all royalties and license fees, defend suits or claims for infringement of copyrights and patent rights, and shall hold Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications or other documents prepared by Owner or A/E. However, if Contractor has reason to believe that the required design, process, or product is an infringement of a copyright or a patent, Contractor shall be responsible for such loss unless such information is promptly furnished to A/E.
- 2.6 <u>State Sales and Use Taxes.</u> Owner qualifies for exemption from certain State and local sales and use taxes pursuant to the provisions of Tex. Tax Code, Ch. 151. Upon request from Contractor, Owner shall furnish evidence of tax exempt status. Contractor may claim exemption from payment of certain applicable State taxes by complying with such procedures as prescribed by the State Comptroller of Public Accounts. Owner acknowledges not all items qualify for exemption. Owner is not obligated to reimburse Contractor for taxes paid on items that qualify for tax exemption.

## Article 3. General Responsibilities of Owner and Contractor

- 3.1 <u>Owner's General Responsibilities.</u> Owner is the entity identified as such in the Contract and referred to throughout the Contract Documents as if singular in number.
  - 3.1.1 <u>Preconstruction Conference.</u> Prior to, or concurrent with, the issuance of Notice to Proceed with construction, a conference will be convened for attendance by Owner, Contractor, A/E and appropriate Subcontractors. The purpose of the conference is to establish a working understanding among the parties as to the Work, the operational conditions at the Project Site, and general administration of the Project. Topics include communications, schedules, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, maintaining required records and all other matters of importance to the administration of the Project and effective communications between the Project team members.
  - 3.1.2 Owner's Designated Representative. Prior to the start of construction, Owner will identify Owner's Designated Representative (ODR), who has the express authority to act and bind Owner to the extent and for the purposes described in the various Articles of the Contract, including responsibilities for general administration of the Contract.
    - 3.1.2.1 Unless otherwise specifically defined elsewhere in the Contract Documents, ODR is the single point of contact between Owner and Contractor. Notice to ODR, unless otherwise noted, constitutes notice to Owner under the Contract.

- 3.1.2.2 All directives on behalf of Owner will be conveyed to Contractor and A/E by ODR in writing.
- 3.1.2.3 Owner will furnish or cause to be furnished, free of charge, the number of complete sets of the Drawings, Specifications, and addenda as provided in the Supplementary General Conditions or Special Conditions.
- 3.1.2.4 The ODR will establish the protocol for planning, scheduling and documenting progress meetings with provisions for absence of various project team members that have a key role in these duties.

## 3.1.3 Owner Supplied Materials and Information.

- 3.1.3.1 Owner will furnish to Contractor those surveys describing the physical characteristics, legal description, limitations of the Site, Site utility locations, and other information used in the preparation of the Contract Documents.
- 3.1.3.2 Owner will provide information, equipment, or services under Owner's control to Contractor with reasonable promptness.
- 3.1.4 Availability of Lands. Owner will furnish, as indicated in the Contract, all required rights to use the lands upon which the Work occurs. This includes rights-of-way and easements for access and such other lands that are designated for use by Contractor. Contractor shall comply with all Owner identified encumbrances or restrictions specifically related to use of lands so furnished. Owner will obtain and pay for easements for permanent structures or permanent changes in existing facilities,

## 3.1.5 Limitation on Owner's Duties.

- 3.1.5.1 Owner will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, technologies, sequences or procedures of construction or the safety precautions and programs incident thereto. Owner is not responsible for any failure of Contractor to comply with laws and regulations applicable to the Work. Owner is not responsible for the failure of Contractor to perform or furnish the Work in accordance with the Contract Documents. Except as provided in Section 2.5, Owner is not responsible for the acts or omissions of Contractor, or any of its Subcontractors, suppliers or of any other person or organization performing or furnishing any of the Work on behalf of Contractor.
- 3.1.5.2 Owner will not take any action in contravention of a design decision made by A/E in preparation of the Contract Documents, when such actions are in conflict with statutes under which A/E is licensed for the protection of the public health and safety.

3.2 <u>Role of Architect/Engineer.</u> Unless specified otherwise in the Contract between Owner and Contractor, A/E shall provide general administration services for Owner during the construction phase of the project. Written correspondence, requests for information, and Shop Drawings/submittals shall be directed to A/E for action. A/E has the authority to act on behalf of Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument, which will be furnished to Contractor by ODR, upon request.

## 3.2.1 Site Visits.

- 3.2.1.1 A/E will make visits to the Site at intervals as provided in the A/E's Contract with Owner, to observe the progress and the quality of the various aspects of Contractor's executed Work and report findings to Owner.
- 3.2.1.2 A/E has the authority to interpret Contract Documents and inspect the Work for compliance and conformance with the Contract. Except as referenced in Paragraph 3.1.5.2, Owner retains the sole authority to accept or reject Work and issue direction for correction, removal, or replacement of Work.
- 3.2.2 <u>Clarifications and Interpretations.</u> It may be determined that clarifications or interpretations of the Contract Documents are necessary. Upon direction by ODR, such clarifications or interpretations will be provided by A/E consistent with the intent of the Contract Documents. A/E will issue these clarifications with reasonable promptness to Contractor as A/E's supplemental instruction ("ASI") or similar instrument. If Contractor believes that such clarification or interpretation justifies an adjustment in the Contract Sum or the Contract Time, Contractor shall so notify Owner in accordance with the provisions of Article 11.
- 3.2.3 <u>Limitations on Architect/Engineer Authority.</u> A/E is not responsible for:
  - 3.2.3.1 Contractor's means, methods, techniques, sequences, procedures, safety, or programs incident to the Project, nor will A/E supervise, direct, control or have authority over the same;
  - 3.2.3.2 The failure of Contractor to comply with laws and regulations applicable to the furnishing or performing the Work;
  - 3.2.3.3 Contractor's failure to perform or furnish the Work in accordance with the Contract Documents; or
  - 3.2.3.4 Acts or omissions of Contractor, or of any other person or organization performing or furnishing any of the Work.
- 3.3 <u>Contractor's General Responsibilities.</u> Contractor is solely responsible for implementing the Work in full compliance with all applicable laws and the Contract Documents and shall supervise and direct the Work using the best skill and attention

to assure that each element of the Work conforms to the Contract requirements. Contractor is solely responsible for all construction means, methods, techniques, safety, sequences, coordination, procedures and protection of the installed work as part of the contract until substantial completion of the project. Contractor remains responsible for the care and protection of materials and Work in the areas where punch list items are completed until Final Completion.

- 3.3.1 Project Administration. Contractor shall provide Project administration for all Subcontractors, vendors, suppliers, and others involved in implementing the Work and shall coordinate administration efforts with those of A/E and ODR in accordance with these general conditions and other provisions of the Contract, and as outlined in the preconstruction conference. Contractor's Project Administration includes periodic daily reporting on weather, work progress, labor, materials, equipment, obstructions to prosecution of the work, accidents and injuries in accordance with the Contract and transmitted no less frequently than on a weekly basis.
- 3.3.2 <u>Contractor's Management Personnel.</u> Contractor shall employ a competent person or persons who will be present at the Project Site during the progress of the Work to supervise or oversee the work. The competent persons are subject to the approval of ODR. Contractor shall not change approved staff during the course of the project without the written approval of ODR unless the staff member leaves the employment of Contractor. Contractor shall provide additional quality control, safety and other staff as stated in the Supplementary General Conditions.
- 3.3.3 <u>Labor.</u> Contractor shall provide competent, suitably qualified personnel to survey, lay-out, and construct the Work as required by the Contract Documents and maintain good discipline and order at the Site at all times.
- 3.3.4 <u>Services, Materials, and Equipment.</u> Unless otherwise specified, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities, incidentals, and services necessary for the construction, performance, testing, start-up, inspection and completion of the Work.
- 3.3.5 <u>Contractor General Responsibility.</u> For Owner furnished equipment or material that will be in the care, custody, and control of Contractor, Contractor is responsible for damage or loss. Owner shall deliver to Contractor a complete list and respective values of such materials or equipment and make an equitable adjustment to the contract amount for any increase in cost of Builder's Risk insurance.
- 3.3.6 Non-Compliant Work. Should A/E and/or ODR identify Work as non-compliant with the Contract Documents, A/E and/or ODR shall communicate the finding to Contractor, and Contractor shall correct such Work at no additional cost to the Owner. The approval of Work by either A/E or

ODR does not relieve Contractor from the obligation to comply with all requirements of the Contract Documents.

- Subcontractors. Contractor shall not employ any Subcontractor, supplier or 3.3.7 other person or organization, whether initially or as a substitute, against whom Owner shall have reasonable objection. Owner will communicate such objections in writing within ten (10) days of receipt of Contractor's intent to use such Subcontractor, supplier, or other person or organization. Contractor is not required to employ any Subcontractor, supplier or other person or organization to furnish any of the work to whom Contractor has reasonable objection. Contractor shall not substitute Subcontractors without the acceptance of Owner. Pursuant to Tex. Gov't Code § 2269.256(b), if the Contractor reviews, evaluates and recommends that the Owner accept a bid or proposal from a Subcontractor but the Owner requires another bid or proposal to be accepted. Owner shall compensate the Contractor by a change in price. time or guaranteed maximum cost for any additional cost or risk the Contractor will incur because of Owner's requirement to select another bid or proposal rather than the one recommended.
  - 3.3.7.1 All Subcontracts and supply contracts shall be consistent with and bind the Subcontractors and suppliers to the terms and conditions of the Contract Documents including provisions of the Contract between Contractor and Owner.
  - Contractor shall be solely responsible for scheduling and 3.3.7.2 coordinating the Work of Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor. Require all Subcontractors, suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner only through Contractor. Contractor shall furnish to Owner a copy, at Owner's request, of each first-tier subcontract promptly after its execution. Contractor agrees that Owner has no obligation to review or approve the content of such contracts and that providing Owner such copies in no way relieves Contractor of any of the terms and conditions of the Contract, including, without limitation, any provisions of the Contract which require the Subcontractor to be bound to Contractor in the same manner in which Contractor is bound to Owner.
- 3.3.8 <u>Continuing the Work.</u> Contractor shall carry on the Work and adhere to the progress schedule during all disputes, disagreements, or alternative resolution processes with Owner. Contractor shall not delay or postpone any Work because of pending unresolved disputes, disagreements or alternative resolution processes, except as Owner and Contractor may agree in writing.

- 3.3.9 <u>Cleaning.</u> Contractor shall at all times, keep the Site and the Work clean and free from accumulation of waste materials or rubbish caused by the construction activities under the Contract. Contractor shall ensure that the entire Project is thoroughly cleaned prior to requesting Substantial Completion inspection and, again, upon completion of the Project prior to the final inspection.
- 3.3.10 Acts and Omissions of Contractor, its Subcontractors, and Employees. Contractor shall be responsible for acts and omissions of his employees and all its Subcontractors, their agents and employees. Owner may, in writing, require Contractor to remove from the Project any of Contractor's or its Subcontractor's employees whom ODR finds to be careless, incompetent, unsafe, uncooperative, disruptive, or otherwise objectionable.
- 3.3.11 Acts or Omissions. Contractor shall indemnify and hold harmless the State of AND/OR Texas and Customers, THEIR OFFICERS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEY FEES, AND EXPENSES arising out of, or resulting from any acts or omissions of Contractor or its agents, employees, subcontractors, Order Fulfillers, or suppliers of subcontractors in the execution or performance of the Contract and any Purchase Orders issued under the Contract. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL. CONTRACTOR AND OWNER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.

## 3.3.12 <u>Infringements.</u>

3.3.12.1 Contractor shall indemnify and hold harmless the State of Texas and Customers, AND/OR **THEIR** EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES from any and all third party claims involving infringement of United States patents, copyrights, trade and service marks, and any other intellectual or intangible property rights in connection with the PERFORMANCES OR ACTIONS OF CONTRACTOR **PURSUANT** TO THIS CONTRACT. CONTRACTOR AND THE CUSTOMER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM. CONTRACTOR SHALL BE LIABLE TO PAY ALL COSTS OF DEFENSE INCLUDING ATTORNEYS' FEES. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN

ANY LAWSUIT AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL.

- 3.3.12.2 Contractor shall have no liability under this section if the alleged infringement is caused in whole or in part by: (i) use of the product or service for a purpose or in a manner for which the product or service was not designed, (ii) any modification made to the product without Contractor's written approval, (iii) any modifications made to the product by Contractor pursuant to Customer's specific instructions, (iv) any intellectual property right owned by or licensed to Customer, or (v) any use of the product or service by Customer that is not in conformity with the terms of any applicable license agreement.
- 3.3.12.3 If Contractor becomes aware of an actual or potential claim, or Customer provides Contractor with notice of an actual or potential claim, Contractor may (or in the case of an injunction against Customer, shall), at Contractor's sole option and expense; (i) procure for the Customer the right to continue to use the affected portion of the product or service, or (ii) modify or replace the affected portion of the product or service with functionally equivalent or superior product or service so that Customer's use is non-infringing.
- 3.3.12.4 <u>Taxes/Workers' Compensation/Unemployment Insurance-Including Indemnity.</u>
  - CONTRACTOR 3 3 12 4 1 **AGREES** AND ACKNOWLEDGES **THAT DURING** THE **EXISTENCE** OF **THIS** CONTRACT. CONTRACTOR SHALL BE**ENTIRELY** RESPONSIBLE FOR THE LIABILITY AND **PAYMENT** OF **CONTRACTOR'S AND** CONTRACTOR'S EMPLOYEES' TAXES OF WHATEVER KIND, ARISING OUT OF THE PERFORMANCES IN THIS CONTRACT. CONTRACTOR AGREES TO COMPLY WITH ALL STATE AND **FEDERAL** LAWS APPLICABLE TO ANY SUCH PERSONS, INCLUDING LAWS REGARDING WAGES. TAXES, INSURANCE, AND WORKERS' COMPENSATION. THE CUSTOMER AND/OR THE STATE SHALL NOT BE LIABLE TO CONTRACTOR, ITS EMPLOYEES, AGENTS, OR OTHERS FOR THE PAYMENT OF TAXES OR THE PROVISION OF UNEMPLOYMENT **INSURANCE** AND/OR WORKERS' COMPENSATION OR ANY BENEFIT

AVAILABLE TO A STATE EMPLOYEE OR EMPLOYEE OF ANOTHER GOVERNMENTAL ENTITY CUSTOMER.

- CONTRACTOR AGREES TO INDEMNIFY 3.3.12.4.1 AND HOLD HARMLESS OWNER, THE STATE OF **TEXAS** AND/OR **THEIR** EMPLOYEES, AGENTS, REPRESENTATIVES, CONTRACTORS. AND/OR ASSIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEYS' FEES, AND EXPENSES, RELATING TO TAX LIABILITY, UNEMPLOYMENT INSURANCE **ITS** WORKERS' COMPENSATION IN PERFORMANCE UNDER THIS CONTRACT. CONTRACTOR SHALL BE LIABLE TO PAY ALL COSTS OF DEFENSE INCLUDING ATTORNEYS' FEES. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND VENDOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL. CONTRACTOR AND OWNER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.
- 3.3.12.5 The provisions of this indemnification are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.
- 3.3.12.6 Contractor shall promptly advise Owner in writing of any claim or demand against Owner or against Contractor which involves Owner and known to Contractor and related to or arising out of Contractor's activities under this Contract
- 3.3.13 <u>Ancillary Areas.</u> Operate and maintain operations and associated storage areas at the site of the Work in accordance with the following:
  - 3.3.13.1 Confine all Contractor operations, including storage of materials and employee parking upon the Site of Work, to areas designated by Owner.

- 3.3.13.2 Contractor may erect, at its own expense, temporary buildings that will remain its property. Remove such buildings and associated utility service lines upon completion of the Work, unless Contractor requests and Owner provides written consent that it may abandon such buildings and utilities in place.
- 3.3.13.3 Use only established roadways or construct and use such temporary roadways as may be authorized by Owner. Do not allow load limits of vehicles to exceed the limits prescribed by appropriate regulations or law. Provide protection to road surfaces, curbs, sidewalks, trees, shrubbery, sprinkler systems, drainage structures and other like existing improvements to prevent damage and repair any damage thereto at the expense of Contractor.
- 3.3.13.4 Owner may restrict Contractor's entry to the Site to specifically assigned entrances and routes.
- 3.3.14 <u>Separate Contracts.</u> Owner reserves the right to award other contracts in connection with other portions of the Project under these same or substantially similar contract conditions, including those portions related to insurance and waiver of subrogation. Owner reserves the right to perform operations related to the Project with Owner's own forces.
- 3.3.15 Under a system of separate contracts, the conditions described herein continue to apply except as may be amended by change order.
- 3.3.16 Contractor shall cooperate with other contractors or forces employed on the Project by Owner, including providing access to Site and Project information as requested.
- 3.3.17 Owner shall be reimbursed by Contractor for costs incurred by Owner which are payable to a separate contractor because of delays, improperly timed activities, or defective construction by Contractor. Owner will equitably adjust the Contract by Change Order for costs incurred by Contractor because of delays, improperly timed activities, damage to the Work or defective construction by a separate contractor.

## Article 4. Historically Underutilized Business (HUB) Subcontracting Plan

- 4.1 <u>General Description.</u> The purpose of the Historically Underutilized Business (HUB) program is to promote equal business opportunities for economically disadvantaged persons (as defined by Tex. Gov't Code, Ch. 2161) to contract with the State of Texas in accordance with the goals specified in the State of Texas Disparity Study. The HUB program annual procurement utilization goals are defined in 34 T.A.C. § 20.13(b).
  - 4.1.1 State agencies are required by statute to make a good faith effort to assist HUBs in participating in contract awards issued by the State. 34 T.A.C. §

- 20.13(b) outlines the State's policy to encourage the utilization of HUBs in State contracting opportunities through race, ethnic and gender neutral means.
- 4.1.2 A Contractor who contracts with the State in an amount of \$100,000 or greater is required to make a good faith effort to award subcontracts to HUBs in accordance with 34 T.A.C. \$ 20.14(a)(2)(A) by submitting a HUB subcontracting plan within twenty-four (24) hours after the bid or response is due and complying with the HUB subcontracting plan after it is accepted by Owner and during the term of the Contract.
- 4.2 <u>Compliance with Approved HUB Subcontracting Plan.</u> Contractor, having been awarded this Contract in part by complying with the HUB program statute and rules, hereby covenants to continue to comply with the HUB program as follows:
  - 4.2.1 Prior to adding or substituting a Subcontractor, promptly notify Owner in the event a change is required for any reason to the accepted HUB subcontracting plan.
  - 4.2.2 Conduct the good-faith effort activities required and provide Owner with necessary documentation to justify approval of a change to the approved HUB subcontracting plan.
  - 4.2.3 Cooperate in the execution of a Change Order or such other approval of the change in the HUB subcontracting plans as Contractor and Owner may agree to.
  - 4.2.4 Maintain and make available to Owner upon request business records documenting compliance with the accepted HUB subcontracting plan.
  - 4.2.5 Upon receipt of payment for performance of Work, submit to Owner a compliance report, in the format required by Owner that demonstrates Contractor's performance of the HUB subcontracting plan.
    - 4.2.5.1 Progress Assessment Report (PAR): monthly compliance reports to Owner (contracting agency), verifying their compliance with the HUB subcontracting plan, including the use/expenditures they have made to Subcontractors. (The PAR is available in the Index Forms Library on the Facilities Design & Construction page of the Texas Facilities Commission website.
  - 4.2.6 Promptly and accurately explain and provide supplemental information to Owner to assist in Owner's investigation of Contractor's good-faith effort to fulfill the HUB subcontracting plan and the requirements under 34 T.A.C. § 20.14(a)(1).
- 4.3 <u>Failure to Demonstrate Good-Faith Effort.</u> Upon a determination by Owner that Contractor has failed to demonstrate a good-faith effort to fulfill the HUB subcontracting plan or any Contract covenant detailed above, Owner may, in addition to all other remedies available to it, report the failure to perform to the Comptroller of

Public Accounts, Texas Procurement and Support Services Division, Historically Underutilized Business Program and may bar Contractor from future contracting opportunities with Owner.

## **Article 5. Bonds and Insurance**

- 5.1 <u>Construction Bonds.</u> Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Tex. Gov't Code, Ch. 2253. On Construction Manager-at-Risk and Design-Build Projects the Owner shall require a security bond, as described in Subsection 5.1.2 below.
  - 5.1.1 <u>Bond Requirements.</u> Each bond shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to Owner, on Owner's form, and in compliance with the relevant provisions of the Texas Insurance Code. If any bond is for more than ten (10) percent of the surety's capital and surplus, Owner may require certification that the company has reinsured the excess portion with one or more reinsurers authorized to do business in the State. A reinsurer may not reinsure for more than ten (10) percent of its capital and surplus. If a surety upon a bond loses its authority to do business in the State, Contractor shall, within thirty (30) days after such loss, furnish a replacement bond at no added cost to Owner.
    - 5.1.1.1 A Performance bond is required if the Contract Sum is in excess of \$100,000. The performance bond is solely for the protection of Owner. The performance bond is to be for the Contract Sum to guarantee the faithful performance of the Work in accordance with the Contract Documents. The form of the bond shall be approved by the Office of the Attorney General of Texas. The performance bond shall be effective through Contractor's warranty period.
    - 5.1.1.2 A Payment bond is required if the Contract price is in excess of \$25,000. The payment bond is to be for the Contract Sum and is payable to Owner solely for the protection and use of payment bond beneficiaries. The form of the bond shall be approved by the Office of the Attorney General of Texas.
  - 5.1.2 <u>Security Bond.</u> The security bond provides protection to Owner if Contractor presents an acceptable guaranteed maximum price ("GMP") to Owner and 1) fails to execute the GMP; or 2) fails to deliver the required payment and performance bonds within the time period stated below.

## 5.1.3 When Bonds Are Due.

5.1.3.1 Security bonds are due within ten (10) days of signing a Construction Manager-at-Risk or Design-Build Contract.

- 5.1.3.2 Payment and performance bonds are due within ten (10) days of Contractor's receipt of a fully executed GMP on a Construction Manager-at-Risk project or the Contract Sum for a Design-Build project, or within ten (10) days of Contractor's receipt of a fully executed Contract on competitively bid or competitive sealed proposal projects.
- 5.1.4 <u>Power of Attorney.</u> Each bond shall be accompanied by a valid power of attorney (issued by the surety company and attached, signed and sealed with the corporate embossed seal, to the bond) authorizing the attorney-in-fact who signs the bond to commit the company to the terms of the bond, and stating any limit in the amount for which the attorney can issue a single bond.
- 5.1.5 <u>Bond Indemnification.</u> The process of requiring and accepting bonds and making claims there under shall be conducted in compliance with Tex. Gov't Code, Ch. 2253. IF FOR ANY REASON A STATUTORY PAYMENT OR PERFORMANCE BOND IS NOT HONORED BY THE SURETY, CONTRACTOR SHALL FULLY INDEMNIFY AND HOLD OWNER HARMLESS OF AND FROM ANY COSTS, LOSSES, OBLIGATIONS OR LIABILITIES IT INCURS AS A RESULT.
- 5.1.6 <u>Furnishing Bond Information.</u> Owner shall furnish certified copies of the payment bond and the related Contract to any qualified person seeking copies who complies with Tex. Gov't Code § 2253.026.
- 5.1.7 Claims on Payment Bonds. Claims on payment bonds must be sent directly to Contractor and his surety in accordance with Tex. Gov't Code § 2253.041. All payment bond claimants are cautioned that no lien exists on the funds unpaid to Contractor on such Contract, and that reliance on notices sent to Owner may result in loss of their rights against Contractor and/or his surety. Owner is not responsible in any manner to a claimant for collection of unpaid bills, and accepts no such responsibility because of any representation by any agent or employee.
- 5.1.8 Payment Claims when Payment Bond not Required. The rights of Subcontractors regarding payment are governed by Tex. Prop. Code §§ 53.231 53.239 when the value of the Contract between Owner and Contractor is less than \$25,000.00. These provisions set out the requirements for filing a valid lien on funds unpaid to Contractor as of the time of filing the claim, actions necessary to release the lien and satisfaction of such claim.
- 5.1.9 <u>Sureties.</u> A surety shall be listed on the US Department of the Treasury's Listing of Approved Sureties maintained by the Bureau of Financial Management Service (FMS), www.fms.treas.gov/c570, stating companies holding Certificates of Authority as acceptable sureties on Federal bonds and acceptable reinsuring companies (FMS Circular 570).

- Insurance Requirements. Contractor shall carry insurance in the types and amounts indicated in this Article for the duration of the Contract. The insurance shall be evidenced by delivery to Owner of certificates of insurance executed by the insurer or its authorized agent stating coverages, limits, expiration dates and compliance with all applicable required provisions. Upon request, Owner, and/or its agents, shall be entitled to receive without expense, copies of the policies and all endorsements. Contractor shall update all expired policies prior to submission for monthly payment. Failure to update policies shall be reason for withholding of payment until renewal is provided to Owner.
  - 5.2.1 Contractor shall provide and maintain all insurance coverage with the minimum amounts described below until the end of the warranty period unless otherwise stated in Supplementary General Conditions or Special Conditions. Failure to maintain insurance coverage, as required, is grounds for suspension of Work for cause pursuant to Article 14.
  - 5.2.2 Contractor shall deliver to Owner true and complete copies of certificates and corresponding policy endorsements prior to the issuance of any Notice to Proceed.
  - 5.2.3 Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
  - 5.2.4 The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.
  - 5.2.5 The insurance coverage and limits established herein shall not be interpreted as any representation or warranty that the insurance coverage and limits necessarily will be adequate to protect Contractor.
  - 5.2.6 Coverage shall be written on an occurrence basis by companies authorized and admitted to do business in the State of Texas and rated A or better by A.M. Best Company or similar rating company or otherwise acceptable to Owner.

#### 5.2.2.1 <u>Insurance Coverage Required.</u>

5.2.2.1.1 <u>Workers' Compensation.</u> Insurance with limits as required by the Texas Workers' Compensation Act, with the policy endorsed to provide a waiver of subrogation in favor of Owner, employer's liability insurance of not less than:

\$1,000,000 each accident;

\$1,000,000 disease each employee; and

\$1,000,000 disease policy limit.

5.2.2.1.2 Commercial General Liability Insurance. Including premises, operations, independent contractor's liability, products and completed operations and contractual liability, covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, fully insuring Contractor's liability for bodily injury (including death) and property damage with a minimum limit of:

\$1,000,000 per occurrence;

\$2,000,000 general aggregate;

\$5,000 Medical Expense each person;

\$1,000,000 Personal Injury and Advertising Liability;

\$2,000,000 products and completed operations aggregate;

\$50,000 Damage to Premises Rented to You; and

Coverage shall be on an "occurrence" basis.

The policy shall include coverage extended to apply to completed operations and explosion, collapse, and underground hazards. The policy shall include endorsement CG2503 Amendment of Aggregate Limits of Insurance (per Project) or its equivalent.

If the Work involves any activities within fifty (50) feet of any railroad, railroad protective insurance as may be required by the affected railroad, written for not less than the limits required by such railroad.

5.2.2.1.3 <u>Asbestos Abatement Liability Insurance</u>, including coverage for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos containing materials. \*This requirement applies if the Work or the Project includes asbestos containing materials.

The combined single limit for bodily injury and property damage will be a minimum of \$1,000,000 per occurrence.

\*Specific requirement for claims-made form: Required period of coverage will be determined by the following formula: continuous coverage for life of the Contract, plus one (1) year (to provide coverage for the warranty period), and an extended discovery period for a minimum of five (5) years which shall begin at the end of the warranty period.

Employer's liability limits for asbestos abatement will be:

\$500,000 each accident:

\$500,000 disease each employee; and

\$500,000 disease policy limit.

If this Contract is for asbestos abatement only, the Special Form builder's risk or Special Form installation floater (e) is not required.

5.2.2.1.4 <u>Comprehensive Automobile Liability Insurance</u>, covering owned, hired, and non-owned vehicles, with a minimum combined single limit for bodily injury (including death) and property damage of \$1,000,000 per accident. No aggregate shall be permitted for this type of coverage.

Such insurance is to include coverage for loading and unloading hazards.

- 5.2.2.1.5 Special Form Builder's Risk Insurance, if applicable (or Special Form installation floater for instances in which the project involves solely the installation of material and/or equipment). Coverage shall be Special Form, including, but not limited to, fire, extended coverage, vandalism and malicious mischief, theft and, if applicable, flood, earth movement and named storm. Builder's risk and installation floater limits shall be equal to 100 percent of the Contract Sum plus, if any, existing property and Owner-furnished equipment specified by Owner. The policy shall be written jointly in the names of Owner and Contractor. Subcontractors shall be named as additional insureds. The policy shall have endorsements as follows:
  - 5.2.2.1.5.1 This insurance shall be specific as to coverage and not contributing insurance with any permanent insurance maintained on the property.

- 5.2.2.1.5.2 This insurance shall not contain an occupancy clause suspending or reducing coverage should Owner partially occupy the Site and before the parties have determined Substantial Completion.
- 5.2.2.1.5.3 Loss, if any, shall be adjusted with and made payable to Owner as trustee for the insureds as their interests may appear. Owner shall be named as loss payee.
- 5.2.2.1.5.4 For renovation projects or projects that involve portions of Work contained within an existing structure, refer to Supplementary General and Special Conditions for possible additional builder's risk insurance requirements.
- 5.2.2.1.5.5 For Owner furnished equipment or materials that will be in care, custody or control of Contractor, Contractor will be responsible for damage and loss.
- 5.2.2.1.5.6 For those properties located within a Tier 1 or 2 windstorm area, named storm coverage must be provided with limits specified by Owner.
- 5.2.2.1.5.7 For those properties located in flood prone areas, flood insurance coverage must be provided with limits specified by Owner.
- 5.2.2.1.5.8 Builder's risk insurance policy shall remain in effect until Substantial Completion.
- 5.2.2.1.6 "Umbrella" Liability Insurance. Contractor shall obtain, pay for and maintain umbrella liability insurance during the Contract term, insuring Contractor for an amount of not less than amount specified in the Supplementary General Conditions or Special Conditions that provides coverage at least as broad as and applies in excess and follows form of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted.

## 5.2.3 Policies must include the following clauses, as applicable:

- 5.2.3.1 This insurance shall not be canceled, materially changed, or non-renewed except after thirty (30) days written notice has been given to Owner.
- 5.2.3.2 It is agreed that Contractor's insurance shall be deemed primary with respect to any insurance or self insurance carried by Owner for liability arising out of operations under the Contract with Owner.
- 5.2.3.3 Owner, its officials, directors, employees, representatives, and volunteers are added as additional insureds as respects operations and activities of, or on behalf of the named insured performed under Contract with Owner. The additional insured status must cover completed operations as well. This is not applicable to workers' compensation policies.
- 5.2.3.4 A waiver of subrogation in favor of Owner shall be provided in all policies.
- Without limiting any of the other obligations or liabilities of Contractor, 5.2.4 Contractor shall require each Subcontractor performing work under the Contract, at Subcontractor's own expense, to maintain during the term of the Contract, the same stipulated minimum insurance including the required provisions and additional policy conditions as shown above. As an alternative. Contractor may include its Subcontractors as additional insureds on its own coverage as prescribed under these requirements. Contractor's certificate of insurance shall note in such event that Subcontractors are included as additional insureds and that Contractor agrees to provide workers' compensation for Subcontractors and their employees. Contractor shall obtain and monitor the certificates of insurance from each Subcontractor in order to assure compliance with the insurance requirements. Contractor must retain the certificates of insurance for the duration of the Contract plus five (5) years and shall have the responsibility of enforcing these insurance requirements among its Subcontractors. Owner shall be entitled, upon request and without expense, to receive copies of these certificates.
- 5.2.5 Workers' compensation insurance coverage must be provided for all workers at all tier levels and meet the statutory requirements of Tex. Lab. Code § 401.011(44) and specific to construction projects for public entities as required by Tex. Lab. Code § 406.096.

# Article 6. Construction Documents, Coordination Documents, and Record Documents

## 6.1 <u>Drawings and Specifications.</u>

- 6.1.1 <u>Copies Furnished.</u> Contractor will be furnished, free of charge, the number of complete sets of the Drawings, Specifications, and Addenda as provided in the Supplementary General Conditions or Special Conditions. Additional complete sets of Drawings and Specifications, if requested, will be furnished at reproduction cost to the entity requesting such additional sets. Electronic copies of such documents will be provided to Contractor without charge.
- 6.1.2 Ownership of Drawings and Specifications. All Drawings, Specifications and copies thereof furnished by A/E are to remain A/E's property. These documents are not to be used on any other project, and with the exception of the Contract record set and electronic versions needed for warranty operations, are to be returned to the A/E, upon request, following completion of the Work.
- 6.1.3 <u>Interrelation of Documents.</u> The Contract Documents as referenced in the Contract between Owner and Contractor are complimentary, and what is required by one shall be as binding as if required by all.
- 6.1.4 Resolution of Conflicts in Documents. Where conflicts may exist within the Contract Documents, the documents shall govern in the following order: (a) Change Orders, addenda, and written amendments to the Contract; (b) the Contract; (c) Drawings; (d) Specifications (but Specifications shall control over Drawings as to quality of materials and workmanship); and (e) other Contract Documents. Among categories of documents having the same order of precedence, the term or provision that includes the latest date shall control and more specific requirements shall govern over general requirements. Contractor shall notify A/E and ODR for resolution of the issue prior to executing the Work in question.
- 6.1.5 Contractor's Duty to Review Contract Documents. In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Contract Documents, prior to commencing the Work, Contractor shall examine and compare the Contract Documents, information furnished by Owner, relevant field measurements made by Contractor and any visible or reasonably anticipated conditions at the Site affecting the Work. This duty extends throughout the construction phase prior to commencing each particular work activity and/or system installation.

## 6.1.6 <u>Discrepancies and Omissions in Drawings and Specifications.</u>

- 6.1.6.1 Promptly report to ODR and to A/E the discovery of any apparent error, omission or inconsistency in the Contract Documents prior to execution of the Work.
- 6.1.6.2 It is recognized that Contractor is not acting in the capacity of a licensed design professional, unless it is performing as a Design-Build firm.
- 6.1.6.3 It is further recognized that Contractor's examination of Contract Documents is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations, unless it is performing as a Design-Build firm or a Construction Manager-at-Risk.
- 6.1.6.4 When performing as a Design-Build firm, Contractor has sole responsibility for discrepancies, errors, and omissions in the Drawings and Specifications.
- 6.1.6.5 When performing as a Construction Manager-at-Risk, Contractor has a shared responsibility with A/E for discovery and resolution of discrepancies, errors, and omissions in the Contract Documents. In such case, Contractor's responsibility pertains to review, coordination, and recommendation of resolution strategies within budget constraints.
- 6.1.6.6 Contractor has no liability for errors, omissions, or inconsistencies unless Contractor knowingly failed to report a recognized problem to Owner or the Work is executed under a Design-Build or Construction Manager-at-Risk Contract as outlined above. Should Contractor fail to perform the examination and reporting obligations of these provisions, Contractor is responsible for avoidable costs and direct and/or consequential damages.

#### 6.2 Requirements for Record Documents. Contractor shall:

6.2.1 Maintain at the Site one copy of all Drawings, Specifications, addenda, approved submittals, Contract modifications, and all Project correspondence. Keep current and maintain Drawings and Specifications in good order with postings and markings to record actual conditions of Work and show and reference all changes made during construction. Provide Owner and A/E access to these documents.

- 6.2.2 Maintain the Record Documents including Drawings, Specifications and other materials which reflect the actual field conditions and representations of the Work performed, whether it be directed by addendum, Change Order or otherwise. Make available all records prescribed herein for reference and examination by Owner and its representatives and agents.
- 6.2.3 Update the Record Documents at least monthly prior to submission of periodic partial pay estimates. Failure to maintain current Record Documents constitutes cause for denial of a progress payment otherwise due.
- 6.2.4 Prior to requesting Substantial Completion inspection Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalog, wiring diagrams, spare parts, specified written warranties and like publications, or parts for all installed equipment, systems, and like items and as described in the Contract Documents. (Unexecuted samples of the aforementioned documentation may be reviewed by ODR when the absence of substantial completion transactions preclude execution; however, Contractor remains obligated to provide fully executed copies of such materials prior to final payment.)
- 6.2.5 Once determined acceptable by ODR with input from A/E, provide one (1) reproducible copy and one (1) electronic media copy of all Record Documents, unless otherwise required by the Supplementary General Conditions or Special Conditions.
- 6.2.6 Contractor shall be responsible for updating the Record Documents for all Contractor initiated documents and changes to the Contract Documents due to coordination and actual field conditions, including RFIs.
- 6.2.7 A/E shall be responsible for updating the Record Documents for any addenda, Change Orders, A/E supplemental instructions and any other alterations to the Contract Documents generated by A/E or Owner.

# **Article 7. Construction Safety**

- General. It is the duty and responsibility of Contractor and all of its Subcontractors to be familiar with, enforce and comply with all requirements of Public Law No. 91-596, 29 U.S.C. § 651 et. seq., the Occupational Safety and Health Act of 1970, (OSHA) and all amendments thereto. Contractor shall prepare a safety plan specific to the Project and submit it to ODR and A/E prior to commencing Work. In addition, Contractor and all of its Subcontractors shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property to protect them from damage, injury or loss and erect and maintain all necessary safeguards for such safety and protection.
- 7.2 <u>Notices.</u> Contractor shall provide notices as follows:

- 7.2.1 Notify owners of adjacent property including those that own or operate utility services and/or underground facilities, and utility owners, when prosecution of the Work may affect them or their facilities, and cooperate with them in the protection, removal, relocation and replacement, and access to their facilities and/or utilities.
- 7.2.2 Coordinate the exchange of material safety data sheets (MSDSs) or other hazard communication information required to be made available to or exchanged between or among employers at the site in connection with laws and regulations. Maintain a complete file of MSDSs for all materials in use on site throughout the construction phase and make such file available to Owner and its agents as requested.
- 7.3 <u>Emergencies.</u> In any emergency affecting the safety of persons or property, Contractor shall act to minimize, mitigate, and prevent threatened damage, injury or loss.
  - 7.3.1 Have authorized agents of Contractor respond immediately upon call at any time of day or night when circumstances warrant the presence of Contractor to protect the Work or adjacent property from damage or to take such action pertaining to the Work as may be necessary to provide for the safety of the public.
  - 7.3.2 Give ODR and A/E prompt notice of all such events.
  - 7.3.3 If Contractor believes that any changes in the Work or variations from Contract Documents have been caused by its emergency response, promptly notify Owner within seventy-two (72) hours of the emergency response event.
  - 7.3.4 Should Contractor fail to respond, Owner is authorized to direct other forces to take action as necessary and Owner may deduct any cost of remedial action from funds otherwise due Contractor.
- 7.4 <u>Injuries.</u> In the event of an incident or accident involving outside medical care for an individual on or near the Work, Contractor shall notify ODR and other parties as may be directed promptly, but no later than twenty-four (24) hours after Contractor learns that an event required medical care.
  - 7.4.1 Record the location of the event and the circumstances surrounding it, by using photography or other means, and gather witness statements and other documentation which describes the event.
  - 7.4.2 Supply ODR and A/E with an incident report no later than thirty-six (36) hours after the occurrence of the event. In the event of a catastrophic incident (one (1) fatality or three (3) workers hospitalized), barricade and leave intact the scene of the incident until all investigations are complete. A full set of incident investigation documents, including facts, finding of cause, and remedial plans shall be provided within one (1) week after occurrence, unless otherwise directed by legal counsel. Contractor shall provide ODR with

written notification within one week of such catastrophic event if legal counsel delays submission of full report.

- 7.5 <u>Environmental Safety.</u> Upon encountering any previously unknown potentially hazardous material, or other materials potentially contaminated by hazardous material, Contractor shall immediately stop work activities impacted by the discovery, secure the affected area, and notify ODR immediately.
  - 7.5.1 Bind all Subcontractors to the same duty.
  - 7.5.2 Upon receiving such notice, ODR will promptly engage qualified experts to make such investigations and conduct such tests as may be reasonably necessary to determine the existence or extent of any environmental hazard. Upon completion of this investigation, ODR will issue a written report to Contractor identifying the material(s) found and indicate any necessary steps to be taken to treat, handle, transport or dispose of the material.
  - 7.5.3 Owner may hire third-party Contractors to perform any or all such steps.
  - 7.5.4 Should compliance with ODR's instructions result in an increase in Contractor's cost of performance, or delay the Work, Owner will make an equitable adjustment to the Contract Sum and/or the time of completion, and modify the Contract in writing accordingly.
- 7.6 Trenching Plan. When the project requires excavation which either exceeds a depth of four (4) feet, or results in any worker's upper body being positioned below grade level, Contractor is required to submit a trenching plan to ODR prior to commencing trenching operations unless an engineered plan is part of the Contract Documents. The plan is required to be prepared and sealed by a professional engineer registered in the State of Texas, and hired or employed by Contractor or Subcontractor to perform the work. Said engineer cannot be anyone who is otherwise either directly or indirectly engaged on this project.

# **Article 8. Quality Control**

8.1 <u>Materials & Workmanship.</u> Contractor shall execute Work in a good and workmanlike matter in accordance with the Contract Documents. Contractor shall develop and provide a quality control plan specific to this Project and acceptable to Owner. Where Contract Documents do not specify quality standards, complete and construct all Work in compliance with generally accepted construction industry standards. Unless otherwise specified, incorporate all new materials and equipment into the Work under the Contract.

## 8.2 <u>Testing.</u>

8.2.1 Owner is responsible for coordinating and paying for routine and special tests required to confirm compliance with quality and performance requirements, except as stated below or otherwise required by the Contract Documents. Contractor shall provide the following testing:

- 8.2.1.1 Any test of basic material or fabricated equipment included as part of a submittal for a required item in order to establish compliance with the Contract Documents.
- 8.2.1.2 Any test of basic material or fabricated equipment offered as a substitute for a specified item on which a test may be required in order to establish compliance with the Contract Documents.
- 8.2.1.3 Preliminary, start-up, pre-functional and operational testing of building equipment and systems as necessary to confirm operational compliance with requirements of the Contract Documents.
- 8.2.1.4 All subsequent tests on original or replaced materials conducted as a result of prior testing failure.
- 8.2.2 All testing shall be performed in accordance with standard test procedures by an accredited laboratory, or special consultant as appropriate, acceptable to Owner. Results of all tests shall be provided promptly to ODR, A/E, and Contractor.
- 8.2.3 <u>Non-Compliance (Test Results).</u> Should any of the tests indicate that a material and/or system does not comply with the Contract requirements, the burden of proof remains with Contractor, subject to:
  - 8.2.3.1 Contractor selection and submission of the laboratory for Owner acceptance.
  - 8.2.3.2 Acceptance by Owner of the quality and nature of tests.
  - 8.2.3.3 All tests taken in the presence of A/E and/or ODR, or their representatives.
  - 8.2.3.4 If tests confirm that the material/systems comply with Contract Documents, Owner will pay the cost of the test.
  - 8.2.3.5 If tests reveal noncompliance, Contractor will pay those laboratory fees and costs of that particular test and all future tests, of that failing Work, necessary to eventually confirm compliance with Contract Documents.
  - 8.2.3.6 Proof of noncompliance with the Contract Documents will make Contractor liable for any corrective action which ODR determines appropriate, including complete removal and replacement of noncompliant work or material.
- 8.2.4 <u>Notice of Testing.</u> Contractor shall give ODR and A/E timely notice of its readiness and the date arranged so ODR and A/E may observe such inspection, testing, or approval.

- 8.2.5 <u>Test Samples.</u> Contractor is responsible for providing Samples of sufficient size for test purposes and for coordinating such tests with their Work Progress Schedule to avoid delay.
- 8.2.6 <u>Covering Up Work.</u> If Contractor covers up any Work without providing Owner an opportunity to inspect, Contractor shall, if requested by ODR, uncover and recover the work at Contractor's expense.

#### 8.3 Submittals.

- 8.3.1 <u>Contractor's Submittals.</u> Contractor shall submit with reasonable promptness consistent with the Project schedule and in orderly sequence all Shop Drawings, Samples, or other information required by the Contract Documents, or subsequently required by Change Order. Prior to submitting, Contractor shall review each submittal for general compliance with Contract Documents and approve submittals for review by A/E and Owner by an approval stamp affixed to each copy. Submittal data presented without Contractor's stamp will be returned without review or comment, and any delay resulting from failure is Contractor's responsibility.
  - 8.3.1.1 Contractor shall within twenty-one (21) days of the effective date of the Notice To Proceed with construction, submit to ODR and A/E, a submittal schedule/register, organized by specification section, listing all items to be furnished for review and approval by A/E and Owner. The list shall include Shop Drawings, manufacturer's literature, certificates of compliance, materials Samples, materials colors, guarantees, and all other items identified throughout the Specifications.
  - Contractor shall indicate the type of item, Contract requirements reference, and Contractor's scheduled dates for submitting the item along with the requested dates for approval answers from A/E and Owner. The submittal register shall indicate the projected dates for procurement of all included items and shall be updated at least monthly with actual approval and procurement dates. Contractor's Submittal Register must be reasonable in terms of the review time for complex submittals. Contractor's submittal schedule must be consistent with the Work Progress Schedule and identify critical submittals. Show and allow a minimum of fifteen (15) calendar days duration after receipt by A/E and ODR for review and approval. If resubmittal required, allow a minimum of an additional fifteen (15) calendar days for review. Submit the updated Submittal Register with each request for progress payment. Owner may establish routine review procedures and schedules for submittals at the preconstruction conference and/or elsewhere in the Contract Documents. If Contractor fails to update and provide the Submittal Register as required, Owner may, after seven (7) days notice to Contractor withhold a reasonable sum of money that would otherwise be due Contractor.

- 8.3.1.3 Contractor shall coordinate the Submittal Register with the Work Progress Schedule. Do not schedule Work requiring a submittal to begin prior to scheduling review and approval of the related submittal. Revise and/or update both schedules monthly to ensure consistency and current project data. Provide to ODR the updated Submittal Register and schedule with each application for progress payment. Refer to requirements for the Work Progress Schedule for inclusion of procurement activities therein. Regardless, the Submittal Register shall identify dates submitted and returned and shall be used to confirm status and disposition of particular items submitted, including approval or other action taken and other information not conveniently tracked through the Work Progress Schedule.
- 8.3.1.4 By submitting Shop Drawings, Samples or other required information, Contractor represents that it has determined and verified all applicable field measurements, field construction criteria, materials, catalog numbers and similar data to the extent possible from existing conditions and design information provided by A/E prior to fabrication; and has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and the Contract Documents.
- 8.3.2 Review of Submittals. A/E and ODR review is only for conformance with the design concept and the information provided in the Contract Documents. Responses to submittals will be in writing. The approval of a separate item does not indicate approval of an assembly in which the item functions. The approval of a submittal does not relieve Contractor of responsibility for any deviation from the requirements of the Contract unless Contractor informs A/E and ODR of such deviation in a clear, conspicuous, and written manner on the submittal transmittal and at the time of submission, and obtains Owner's written specific approval of the particular deviation.
- 8.3.3 <u>Correction and Resubmission.</u> Contractor shall make any corrections required to a submittal and resubmit the required number of corrected copies promptly so as to avoid delay, until submittal approval. Direct attention in writing to A/E and ODR, when applicable, to any new revisions other than the corrections requested on previous submissions.
- 8.3.4 <u>Limits on Shop Drawing Review.</u> Contractor shall not commence any Work requiring a submittal until review of the submittal under Subsection 8.3.2. Construct all such work in accordance with reviewed submittals. Comments incorporated as part of the review in Subsection 8.3.2 of Shop Drawings and Samples is not authorization to Contractor to perform extra work or changed work unless authorized through a Change Order. A/E's and ODR's review, if any, does not relieve Contractor from responsibility for defects in the Work resulting from errors or omissions of any kind on the submittal, regardless of any approval action. A/E or ODR shall not make formal changes to the Contract Documents via the submittal process. Changes

to the Construction Documents shall be accomplished via Section 3.2.2 and Article 11 Changes.

- 8.3.5 No Substitutions Without Approval. ODR and A/E may receive and consider Contractor's request for substitution when Contractor agrees to reimburse Owner for review costs and satisfies the requirements of this section. If Contractor does not satisfy these conditions, ODR and A/E will return the request without action except to record noncompliance with these requirements. Owner will not consider the request if Contractor cannot provide the product or method because of failure to pursue the Work promptly or coordinate activities properly. Contractor's request for a substitution may be considered by ODR and A/E when:
  - 8.3.5.1 The Contract Documents do not require extensive revisions; and
  - 8.3.5.2 Proposed changes are in keeping with the general intent of the Contract Documents and the design intent of A/E and do not result in an increase in cost to Owner; and
  - 8.3.5.3 The request is timely, fully documented, properly submitted and one or more of the following apply:
    - 8.3.5.3.1 Contractor cannot provide the specified product, assembly or method of construction within the Contract Time;
    - 8.3.5.3.2 The request directly relates to an "or-equal" clause or similar language in the Contract Documents;
    - 8.3.5.3.3 The request directly relates to a "product design standard" or "performance standard" clause in the Contract Documents;
    - 8.3.5.3.4 The requested substitution offers Owner a substantial advantage in cost, time, energy conservation or other considerations, after deducting additional responsibilities Owner must assume;
    - 8.3.5.3.5 The specified product or method of construction cannot receive necessary approval by an authority having jurisdiction, and ODR can approve the requested substitution;
    - 8.3.5.3.6 Contractor cannot provide the specified product, assembly or method of construction in a manner that is compatible with other materials and where Contractor certifies that the substitution will overcome the incompatibility;

- 8.3.5.3.7 Contractor cannot coordinate the specified product, assembly or method of construction with other materials and where Contractor certifies they can coordinate the proposed substitution; or
- 8.3.5.3.8 The specified product, assembly or method of construction cannot provide a warranty required by the Contract Documents and where Contractor certifies that the proposed substitution provides the required warranty.
- 8.3.5.3.9 The manufacture of the specified product has been removed from production due to cancellation or obsolescence.
- 8.3.6 <u>Unauthorized Substitutions at Contractor's Risk.</u> Contractor is financially responsible for any additional costs or delays resulting from unauthorized substitution of materials, equipment or fixtures other than those specified. Contractor shall reimburse Owner for any increased design or contract administration costs resulting from such unauthorized substitutions.

## 8.4 <u>Field Mock-up.</u>

- 8.4.1 Mock-ups shall be constructed prior to commencement of a specified scope of work to confirm acceptable workmanship.
  - 8.4.1.1 As a minimum, field mock-ups shall be constructed for roofing systems, exterior veneer / finish systems, glazing systems, and any other Work requiring a mock-up as identified throughout the Contract Documents. Mock-ups for systems not part of the Project scope shall not be required.
  - 8.4.1.2 Mock-ups may be incorporated into the Work if allowed by the Contract Documents and if acceptable to ODR. If mock-ups are freestanding, they shall remain in place until otherwise directed by Owner.
  - 8.4.1.3 Contractor shall include field mock-ups in their Work Progress Schedule and shall notify ODR and A/E of readiness for review sufficiently in advance to coordinate review without delay.

## 8.5 <u>Inspection During Construction.</u>

8.5.1 Contractor shall provide sufficient, safe, and proper facilities, including equipment as necessary for safe access, at all reasonable times for observation and/or inspection of the Work by Owner and its agents. "Reasonable times" of inspection allow for sufficient monitoring of the quality of materials and installation without substantially impeding the progress of the Work.

- 8.5.2 Contractor shall not cover up any Work with finishing materials or other building components prior to providing Owner and its agents an opportunity to perform an inspection of the Work.
  - 8.5.2.1 Should corrections of the Work be required for approval, Contractor shall not cover-up corrected Work until Owner indicates approval.
  - 8.5.2.2 Contractor shall provide notification of at least five (5) working days or otherwise as mutually agreed, to ODR of the anticipated need for a cover-up inspection. Should ODR fail to make the necessary inspection within the agreed period, Contractor may proceed with cover-up Work, but is not relieved of responsibility for Work to comply with requirements of the Contract Documents.

#### **Article 9. Construction Schedules**

- 9.1 Contract Time. TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT. The Contract Time is the time between the dates indicated in the Notice to Proceed for commencement of the Work and for achieving Substantial Completion. The Contract Time can be modified only by Change Order. Failure to achieve Substantial Completion within the Contract Time as otherwise agreed to in writing will cause damage to Owner and may subject Contractor to liquidated damages as provided in the Contract Documents. If Contractor fails to achieve Final Completion within thirty (30) calendar days after Substantial Completion or a mutually agreed upon longer period of time between Contractor and Owner, Contractor shall be responsible for Owner's additional inspection, project management, and maintenance cost to the extent caused by Contractor's failure to achieve Final Completion.
- 9.2 <u>Notice to Proceed.</u> Owner will issue a Notice to Proceed which shall state the dates for beginning Work and for achieving Substantial Completion of the Work.
- 9.3 Work Progress Schedule. Refer to Supplementary General Conditions or Special Conditions for additional schedule requirements. Unless indicated otherwise in those documents, Contractor shall submit their initial Work Progress Schedule for the Work in relation to the entire Project not later than twenty-one (21) days after the effective date of the Notice to Proceed to ODR and A/E. Unless otherwise indicated in the Contract Documents, the Work Progress Schedule shall be computerized Critical Path Method (CPM) with fully editable logic. This initial schedule shall indicate the dates for starting and completing the various aspects required to complete the Work, including mobilization, procurement, installation, testing, inspection, delivery of Close-out Documents and acceptance of all the Work of the Contract. When acceptable to Owner, the initially accepted schedule shall be the Baseline Schedule for comparison to actual conditions throughout the Contract duration.
  - 9.3.1 <u>Schedule Requirements.</u> Contractor shall submit electronic and paper copy of the initial Work Progress Schedule reflecting accurate and reliable representations of the planned progress of the Work, the Work to date if any, and of Contractor's actual plans for its completion. Contractor shall organize

and provide adequate detail so the schedule is capable of measuring and forecasting the effect of delaying events on completed and uncompleted activities.

- 9.3.1.1 Contractor shall resubmit initial schedule as required to address review comments from A/E and ODR until such schedule is accepted as the Baseline Schedule.
- 9.3.1.2 Submittal of a schedule, schedule revision or schedule update constitutes Contractor's representation to Owner of the accurate depiction of all progress to date and that Contractor will follow the schedule as submitted in performing the Work.
- 9.3.2 Schedule Updates. Contractor shall update the Work Progress Schedule and the Submittal Register monthly, as a minimum, to reflect progress to date and current plans for completing the Work, while maintaining original schedule as Baseline Schedule and submit paper and electronic copies of the update to A/E and ODR as directed, but as a minimum with each request for payment. Owner has no duty to make progress payments unless accompanied by the updated Work Progress Schedule. Show the anticipated date of completion reflecting all extensions of time granted through Change Order as of the date of the update. Contractor may revise the Work Progress Schedule when in Contractor's judgment it becomes necessary for the management of the Work. Contractor shall identify all proposed changes to schedule logic to Owner and to A/E via an executive summary accompanying the updated schedule for review prior to final implementation of revisions into a revised Baseline Schedule. Schedule changes that materially impact Owner's operations shall be communicated promptly to ODR and shall not be incorporated into the revised Baseline Schedule without ODR's consent.
- 9.3.3 The Work Progress Schedule is for Contractor's use in managing the Work and submittal of the schedule, and successive updates or revisions, is for the information of Owner and to demonstrate that Contractor has complied with requirements for planning the Work. Owner's acceptance of a schedule, schedule update or revision constitutes Owner's agreement to coordinate its own activities with Contractor's activities as shown on the schedule.
  - 9.3.3.1 Acceptance of the Work Progress Schedule, or update and/or revision thereto does not indicate any approval of Contractor's proposed sequences and duration.
  - 9.3.3.2 Acceptance of a Work Progress Schedule update or revision indicating early or late completion does not constitute Owner's consent, alter the terms of the Contract, or waive either Contractor's responsibility for timely completion or Owner's right to damages for Contractor's failure to do so.
  - 9.3.3.3 Contractor's scheduled dates for completion of any activity or the entire Work do not constitute a change in terms of the Contract.

Change Orders are the only method of modifying the Substantial Completion Date(s) and Contract Time.

- 9.4 Ownership of Float. Unless indicated otherwise in the Contract Documents, Contractor shall develop its schedule, pricing, and execution plan to provide a minimum of ten (10) percent total float at acceptance of the Baseline Schedule. Float time contained in the Work Progress Schedule is not for the exclusive benefit of Contractor or Owner, but belongs to the Project and may be consumed by either party as needed on a first-used basis.
- 9.5 <u>Completion of Work.</u> Contractor is accountable for completing the Work within the Contract Time stated in the Contract, or as otherwise amended by Change Order.
  - 9.5.1 If, in the judgment of Owner, the work is behind schedule and the rate of placement of work is inadequate to regain scheduled progress to insure timely completion of the entire work or a separable portion thereof, Contractor, when so informed by Owner, shall immediately take action to increase the rate of work placement by:
    - 9.5.1.1 An increase in working forces.
    - 9.5.1.2 An increase in equipment or tools.
    - 9.5.1.3 An increase in hours of work or number of shifts.
    - 9.5.1.4 Expedite delivery of materials.
    - 9.5.1.5 Other action proposed if acceptable to Owner.
  - 9.5.2 Within ten (10) days after such notice from ODR, Contractor shall notify ODR in writing of the specific measures taken and/or planned to increase the rate of progress. Contactor shall include an estimate as to the date of scheduled progress recovery and an updated Work Progress Schedule illustrating Contractor's plan for achieving timely completion of the Project. Should ODR deem the plan of action inadequate, Contractor shall take additional steps or make adjustments as necessary to its plan of action until it meets with ODR's approval.
- 9.6 Modification of the Contract Time.
  - 9.6.1 Delays and extension of time as hereinafter described are valid only if executed in accordance with provisions set forth in Article 11.
  - 9.6.2 When a delay defined herein as excusable prevents Contractor from completing the Work within the Contract Time, Contractor is entitled to an extension of time. Owner will make an equitable adjustment and extend the number of days lost because of excusable delay or Weather Days, as measured by Contractor's progress schedule. All extensions of time will be granted in calendar days. In no event, however, will an extension of time be granted for

delays that merely extend the duration of non-critical activities, or which only consume float without delaying the project Substantial Completion date(s).

- 9.6.2.1 A "Weather Day" is a day on which Contractor's current schedule indicates Work is to be done, and on which inclement weather and/or related site conditions prevent Contractor from performing seven (7) continuous hours of Work on the critical path between the hours of 7:00 a.m. and 6:00 p.m. Weather days are excusable delays. When weather conditions at the site prevent work from proceeding, Contractor shall immediately notify ODR for confirmation of the conditions. At the end of each calendar month, submit to ODR and A/E a list of Weather Days occurring in that month along with documentation of the impact on critical activities. Based on confirmation by ODR, any time extension granted will be issued by Change Order. If Contractor and Owner cannot agree on the time extension, Owner may issue a ULCO for fair and reasonable time extension.
- 9.6.2.2 <u>Excusable Delay.</u> Contractor is entitled to an equitable adjustment of the Contract Time, issued via change order, for delays caused by the following:
  - 9.6.2.2.1 Errors, omissions and imperfections in design, which A/E corrects by means of changes in the Drawings and Specifications.
  - 9.6.2.2.2 Unanticipated physical conditions at the Site, which A/E corrects by means of changes to the Drawings and Specifications or for which ODR directs changes in the Work identified in the Contract Documents.
  - 9.6.2.2.3 Failure of Owner to have secured property, right-of-way or easements necessary for Work to begin or progress.
  - 9.6.2.2.4 Changes in the Work that effect activities identified in Contractor's schedule as "critical" to completion of the entire Work, if such changes are ordered by ODR or recommended by A/E and ordered by ODR.
  - 9.6.2.2.5 Suspension of Work for unexpected natural events, Force Majeure (sometimes called "acts of God"), civil unrest, strikes or other events which are not within the reasonable control of Contractor.
  - 9.6.2.2.6 Suspension of Work for convenience of ODR, which prevents Contractor from completing the Work within the Contract Time.

- 9.6.2.2.7 Administrative delays caused by activities or approval requirements related to an Authority Having Jurisdiction.
- 9.6.3 Contractor's relief in the event of such delays is the time impact to the critical path as determined by analysis of Contractor's schedule. In the event that Contractor incurs additional direct costs because of the excusable delays other than described in Subparagraph 9.6.2.2.4 and within the reasonable control of Owner, the Contract price and Contract Time are to be equitably adjusted by Owner pursuant to the provisions of Article 11.
- 9.7 <u>No Damages for Delay.</u> Contractor has no claim for monetary damages for delay or hindrances to the work from any cause, including without limitation any act or omission of Owner.
- 9.8 <u>Concurrent Delay.</u> When the completion of the Work is simultaneously delayed by an excusable delay and a delay arising from a cause not designated as excusable, Contractor may not be entitled to a time extension for the period of concurrent delay.
- Other Time Extension Requests. Time extensions requested in association with changes to the Work directed or requested by Owner shall be included with Contractor's proposed costs for such change. Time extensions requested for inclement weather are covered by Paragraph 9.6.2.1 above. If Contractor believes that the completion of the Work is delayed by a circumstance other than for changes directed to the Work or weather, they shall give ODR written notice, stating the nature of the delay and the activities potentially affected, within five (5) days after the onset of the event or circumstance giving rise to the excusable delay. Contractor shall provide sufficient written evidence to document the delay. In the case of a continuing cause of delay, only one claim is necessary. State claims for extensions of time in numbers of whole or half days.
  - 9.9.1 Within ten (10) days after the cessation of the delay, Contractor shall formalize its request for extension of time in writing to include a full analysis of the schedule impact of the delay and substantiation of the excusable nature of the delay. All changes to the Contract Time or made as a result of such claims is by Change Order, as set forth in Article 11.
  - 9.9.2 No extension of time releases Contractor or the Surety furnishing a performance or payment bond from any obligations under the Contract or such a bond. Those obligations remain in full force until the discharge of the Contract.
  - 9.9.3 <u>Contents of Time Extension Requests.</u> Contractor shall provide with each Time Extension Request a quantitative demonstration of the impact of the delay on project completion time, based on the Work Progress Schedule. Contractor shall include with Time Extension Requests a reasonably detailed narrative setting forth:

- 9.9.3.1 The nature of the delay and its cause; the basis of Contractor's claim of entitlement to a time extension.
- 9.9.3.2 Documentation of the actual impacts of the claimed delay on the critical path indicated in Contractor's Work Progress Schedule, and any concurrent delays.
- 9.9.3.3 Description and documentation of steps taken by Contractor to mitigate the effect of the claimed delay, including, when appropriate, the modification of the Work Progress Schedule.
- 9.9.4 Owner's Response. Owner will respond to the Time Extension Request by providing to Contractor written notice of the number of days granted, if any, and giving its reason if this number differs from the number of days requested by Contractor.
  - 9.9.4.1 Owner will not grant time extensions for delays that do not affect the Contract Substantial Completion date.
  - 9.9.4.2 Owner will respond to each properly submitted Time Extension Request within fifteen (15) days following receipt. If Owner cannot reasonably make a determination about Contractor's entitlement to a time extension within that time, Owner will notify Contractor in writing. Unless otherwise agreed by Contractor, Owner has no more than fifteen (15) additional days to prepare a final response. If Owner fails to respond within forty-five (45) days from the date the Time Extension Request is received, Contractor is entitled to a time extension in the amount requested.
- 9.10 Failure to Complete Work Within the Contract Time. TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT. Contractor's failure to substantially complete the Work within the Contract Time or to achieve Substantial Completion as required will cause damage to Owner. These damages shall be liquidated by agreement of Contractor and Owner, in the amount per day as set forth in the Contract Documents.
- 9.11 <u>Liquidated Damages.</u> Owner may collect liquidated damages due from Contractor directly or indirectly by reducing the Contract Sum in the amount of liquidated damages stated in the Supplementary General Conditions or Special Conditions.

# Article 10. Payments

10.1 <u>Schedule of Values.</u> Contractor shall submit to ODR and A/E for acceptance a Schedule of Values accurately itemizing material and labor for the various classifications of the Work based on the organization of the specification sections and of sufficient detail acceptable to ODR. The accepted Schedule of Values will be the basis for the progress payments under the Contract.

- 10.1.1 No progress payments will be made prior to receipt and acceptance of the Schedule of Values, provided in such detail as required by ODR, and submitted not less than twenty-one (21) days prior to the first request for payment. The Schedule of Values shall follow the order of trade divisions of the Specifications and include itemized costs for general conditions, costs for preparing close out documents, fees, contingencies, and Owner cash allowances, if applicable, so that the sum of the items will equal the Contract price. As appropriate, assign each item labor and/or material values, the subtotal thereof equaling the value of the work in place when complete.
  - 10.1.1.1 Owner requires that the Work items be inclusive of the cost of the Work items only. Any contract markups for overhead and profit, general conditions, etc., shall be contained within separate line items for those specific purposes which shall be divided into at least two(2) lines, one (1) for labor and one (1) for materials.
- 10.1.2 Contractor shall retain a copy of all worksheets used in preparation of its bid or proposal, supported by a notarized statement that the worksheets are true and complete copies of the documents used to prepare the bid or proposal. Make the worksheets available to ODR at the time of Contract execution. Thereafter Contractor shall grant Owner during normal business hours access to said copy of worksheets at any time during the period commencing upon execution of the Contract and ending one year after final payment.
- 10.2. Progress Payments. Contractor will receive periodic progress payments for Work performed, materials in place, suitably stored on Site, or as otherwise agreed to by Owner and Contractor. Payment is not due until receipt by ODR or his designee of a correct and complete Pay Application in electronic and/or hard copy format as set forth in Supplementary General Conditions, Special Conditions, and certified by A/E. Progress payments are made provisionally and do not constitute acceptance of work not in accordance with the Contract Documents. Owner will not process progress payment applications for Change Order Work until all parties execute the Change Order.
  - 10.2.1 <u>Preliminary Pay Worksheet.</u> Once each month that a progress payment is to be requested, the Contractor shall submit to A/E and ODR a complete, clean copy of a preliminary pay worksheet or preliminary pay application, to include the following:
    - 10.2.1.1 Contractor's estimate of the amount of Work performed, labor furnished and materials incorporated into the Work, using the established Schedule of Values;
    - 10.2.1.2 An updated Work Progress Schedule including the executive summary and all required schedule reports;
    - 10.2.1.3 HUB subcontracting plan Progress Assessment Report as required in Paragraph 4.2.5.1;

- 10.2.1.4 Such additional documentation as Owner may require as set forth in the Supplementary General Conditions or elsewhere in the Contract Documents; and
- 10.2.1.5 Construction payment affidavit.
- 10.2.2 Contractor's Application for Payment. As soon as practicable, but in no event later than seven (7) days after receipt of the preliminary pay worksheet. A/E and ODR will meet with Contractor to review the preliminary pay worksheet and to observe the condition of the Work. Based on this review, ODR and A/E may require modifications to the preliminary pay worksheet prior to the submittal of an Application for Payment, and will promptly notify Contractor of revisions necessary for approval. As soon as practicable, Contractor shall submit its Application for Payment on the appropriate and completed form, reflecting the required modifications to the Schedule of Values required by A/E and/or ODR. Attach all additional documentation required by ODR and/or A/E, as well as an affidavit affirming that all payrolls, bills for labor, materials, equipment, subcontracted work and other indebtedness connected with Contractor's Application for Payment are paid or will be paid within the time specified in Tex. Gov't Code, Ch. 2251. No Application for Payment is complete unless it fully reflects all required modifications, and attaches all required documentation including Contractor's affidavit.
- 10.2.3 <u>Certification by Architect/Engineer.</u> Within five (5) days or earlier following A/E's receipt of Contractor's formal Application for Payment, A/E will review the Application for Payment for completeness, and forward it to ODR. A/E will certify that the application is complete and payable, or that it is incomplete, stating in particular what is missing. If the Application for Payment is incomplete, Contractor shall make the required corrections and resubmit the Application for Payment for processing.
- 10.3 Owner's Duty to Pay. Owner has no duty to pay the Contractor except on receipt by ODR of: 1) a complete Application for Payment certified by A/E; 2) Contractor's updated Work Progress Schedule; and 3) confirmation that Contractor's record documentation at the Site is kept current.
  - 10.3.1 Payment for stored materials and/or equipment confirmed by Owner and A/E to be on-site or otherwise properly stored is limited to eighty-five (85) percent of the invoice price or eighty-five (85) percent of the scheduled value for the materials or equipment, whichever is less.
  - 10.3.2 <u>Retainage.</u> Owner will withhold from each progress payment, as retainage, five (5) percent of the total earned amount, the amount authorized by law, or as otherwise set forth in the Supplementary General Conditions or Special Conditions. Retainage is managed in conformance with Tex. Gov't Code, Ch. 2252, Subch. B.

- 10.3.2.1 Contractor shall provide written consent of its surety for any request for reduction or release of retainage.
- 10.3.2.2 At least sixty-five (65) percent of the Contract, or such other discrete Work phase as set forth in Subsection 12.1.6 or Work package delineated in the Contract Documents, must be completed before Owner can consider a retainage reduction or release.
- 10.3.2.3 Contractor shall not withhold retainage from their Subcontractors and suppliers in amounts that are any percentage greater than that withheld in its Contract with Owner under this subsection, unless otherwise acceptable to Owner.
- 10.3.3 <u>Price Reduction to Cover Loss.</u> Owner may reduce any Application for Payment, prior to payment to the extent necessary to protect Owner from loss on account of actions of Contractor including, but not limited to, the following:
  - 10.3.3.1 Defective or incomplete Work not remedied;
  - 10.3.3.2 Damage to Work of a separate Contractor;
  - 10.3.3.3 Failure to maintain scheduled progress or reasonable evidence that the Work will not be completed within the Contract Time;
  - 10.3.3.4 Persistent failure to carry out the Work in accordance with the Contract Documents:
  - 10.3.3.5 Reasonable evidence that the Work cannot be completed for the unpaid portion of the Contract Sum;
  - 10.3.3.6 Assessment of fines for violations of prevailing wage rate law; or
  - 10.3.3.7 Failure to include the appropriate amount of retainage for that periodic progress payment.
- 10.3.4 Title to all material and Work covered by progress payments transfers to Owner upon payment.
  - 10.3.4.1 Transfer of title to Owner does not relieve Contractor and its Subcontractors of the sole responsibility for the care and protection of materials and Work upon which payments have been made until substantial completion, responsibility for the care and protection of materials and Work in areas where punch list items are completed until final completion or the restoration of any damaged Work, or waive the right of Owner to require the fulfillment of all the terms of the Contract.

- 10.4 <u>Progress Payments.</u> Progress payments to Contractor do not release Contractor or its surety from any obligations under the Contract.
  - 10.4.1 Upon Owner's request, Contractor shall furnish manifest proof of the status of Subcontractor's accounts in a form acceptable to Owner.
  - 10.4.2 Pay estimate certificates must be signed by a corporate officer or a representative duly authorized by Contractor.
  - 10.4.3 Provide copies of bills of lading, invoices, delivery receipts or other evidence of the location and value of such materials in requesting payment for materials.
  - 10.4.4 For purposes of Tex. Gov't Code § 2251.021(a)(2), the date the performance of service is complete is the date when ODR approves the Application for Payment.
- 10.5 <u>Off-Site Storage.</u> With prior approval by Owner and in the event Contractor elects to store materials at an off-site location, abide by the following conditions, unless otherwise agreed to in writing by Owner.
  - 10.5.1 Store materials in a commercial warehouse meeting the criteria stated below.
  - 10.5.2 Provide insurance coverage adequate not only to cover materials while in storage, but also in transit from the off-site storage areas to the Project Site. Copies of duly authenticated certificates of insurance, made out to insure the State agency which is signatory to the Contract, must be filed with Owner's representative.
  - 10.5.3 Inspection by Owner's representative is allowed at any time. Owner's inspectors must be satisfied with the security, control, maintenance, and preservation measures.
  - 10.5.4 Materials for this Project are physically separated and marked for the Project in a sectioned-off area. Only materials which have been approved through the submittal process are to be considered for payment.
  - 10.5.5 Owner reserves the right to reject materials at any time prior to final acceptance of the complete Contract if they do not meet Contract requirements regardless of any previous progress payment made.
  - 10.5.6 With each monthly payment estimate, submit a report to ODR and A/E listing the quantities of materials already paid for and still stored in the off-site location.
  - 10.5.7 Make warehouse records, receipts and invoices available to Owner's representatives, upon request, to verify the quantities and their disposition.

- 10.5.8 In the event of Contract termination or default by Contractor, the items in storage off-site, upon which payment has been made, will be promptly turned over to Owner or Owner's agents at a location near the jobsite as directed by ODR. The full provisions of performance and payment bonds on this Project cover the materials off-site in every respect as though they were stored on the Project Site.
- 10.6 Time for Payment by Contractor Pursuant to Tex. Gov't Code § 2255.022.
  - 10.6.1 Contractor who receives a payment from a governmental entity shall pay Subcontractor the appropriate share of the payment not later than the tenth (10<sup>th</sup>) day after the date Contractor receives the payment.
  - 10.6.2 The appropriate share is overdue on the eleventh (11<sup>th</sup>) day after the date Conrtactor receives the payment.

# Article 11. Changes

- 11.1 <u>Change Orders.</u> A Change Order issued after execution of the Contract is a written order to Contractor, signed by ODR, Contractor, and A/E, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time can only be changed by Change Order. A Change Order signed by Contractor indicates his agreement therewith, including the adjustment in the Contract Sum and/or the Contract Time. ODR may issue a written authorization for Contractor to proceed with Work of a Change Order in advance of final execution by all parties in accordance with Section 11.9.
  - 11.1.1 Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, and the Contract Sum and the Contract Time will be adjusted accordingly. All such changes in the Work shall be authorized by Change Order or ULCO, and shall be performed under the applicable conditions of the Contract Documents. If such changes cause an increase or decrease in Contractor's cost of, or time required for, performance of the Contract, an equitable adjustment shall be made and confirmed in writing in a Change Order or a ULCO.
  - 11.1.2 It is recognized by the parties hereto and agreed by them that the Specifications and Drawings may not be complete or free from errors, omissions and imperfections or that they may require changes or additions in order for the Work to be completed to the satisfaction of Owner and that, accordingly, it is the express intention of the parties, notwithstanding any other provisions in this Contract, that any errors, omissions or imperfections in such Specifications and Drawings, or any changes in or additions to same or to the Work ordered by Owner and any resulting delays in the Work or increases in Contractor's costs and expenses arising out of such errors, shall not constitute or give rise to any claim, demand or cause of action of any nature whatsoever in favor of Contractor, whether for breach of Contract, or otherwise; provided, however, that Owner shall be liable to Contractor for the

sum stated to be due Contractor in any Change Order approved and signed by both parties, it being agreed hereby that such sum, together with any extension of time contained in said Change Order, shall constitute full compensation to Contractor for all costs, expenses and damages to Contractor, as permitted under Tex. Gov't Code, Ch. 2260.

- 11.1.3 Procedures for administration of Change Orders shall be established by Owner and stated in Supplementary General Conditions, Special Conditions, or elsewhere in the Contract Documents.
- 11.1.4 No verbal order, verbal statement, or verbal direction of Owner or his duly appointed representative shall be treated as a change under this article or entitle Contractor to an adjustment.
- 11.1.5 Contractor agrees that Owner or any of its duly authorized representatives shall have access and the right to examine any directly pertinent books, documents, papers, and records of Contractor. Further, Contractor agrees to include in all its subcontracts a provision to the effect that Subcontractor agrees that Owner or any of its duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers and records of such Subcontractor relating to any claim arising from the Contract, whether or not the Subcontractor is a party to the claim. The period of access and examination described herein which relates to appeals under the Disputes article of the Contract, litigation, or the settlement of claims arising out of the performance of the Contract shall continue until final disposition of such claims, appeals or litigation.
- 11.2 <u>Unit Prices.</u> 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 Order that application of the agreed unit prices to the quantities of work proposed will cause substantial inequity to Owner or Contractor, the applicable unit prices shall be equitably adjusted as provided in the Supplementary General Conditions or Special Conditions or as agreed to by the parties and incorporated into a Change Order.

#### 11.3 Claims for Additional Costs.

11.3.1 If Contractor wishes to make a claim for an increase in the Contract Sum not related to a requested change, they shall give Owner and A/E written notice thereof within twenty-one (21) days after the occurrence of the event giving rise to such claim, but, in any case before proceeding to execute the Work considered to be additional cost or time, except in an emergency endangering life or property in which case Contractor shall act in accordance with Subsection 7.2.1. No such claim shall be valid unless so made. If Owner and Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined as set forth under Article 15. Any change in the Contract Sum resulting from such claim shall be authorized by a Change Order or a ULCO.

- 11.3.2 If Contractor claims that additional cost is involved because of, but not limited to, 1) any written interpretation of the Contract Documents, 2) any order by Owner to stop the Work pursuant to Article 14 where Contractor was not at fault, or 3) any written order for a minor change in the Work issued pursuant to Section 11.4, Contractor shall make such claim as provided in Subsection 11.3.1.
- 11.3.3 Should Contractor or his Subcontractors fail to call attention of A/E to discrepancies or omissions in the Contract Documents, but claim additional costs for corrective Work after Contract award, Owner may assume intent to circumvent competitive bidding for necessary corrective Work. In such case, Owner may choose to let a separate Contract for the corrective Work, or issue a ULCO to require performance by Contractor. Claims for time extensions or for extra cost resulting from delayed notice of patent Contract Document discrepancies or omissions will not be considered by Owner.
- 11.4 <u>Minor Changes.</u> A/E, with concurrence of ODR, will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time. Such changes shall be effected by written order which Contractor shall carry out promptly and record on as-built record documents.
- Concealed Site Conditions. 11.5 Contractor is responsible for visiting the Site and being familiar with local conditions such as the location, accessibility, and general character of the Site and/or building. If, in the performance of the Contract, subsurface, latent, or concealed conditions at the Site are found to be materially different from the information included in the Contract Documents, or if unknown conditions of an unusual nature are disclosed differing materially from the conditions usually inherent in Work of the character shown and specified, ODR and A/E shall be notified in writing of such conditions before they are further disturbed or subsequent related work proceeds. Upon such notice, or upon its own observation of such conditions, A/E, with the approval of ODR, will promptly make such changes in the Drawings and Specifications as they deem necessary to conform to the different conditions, and any increase or decrease in the cost of the Work, or in the time within which the Work is to be completed, resulting from such changes will be adjusted by Change Order, subject to the prior approval of ODR.
- 11.6 <u>Extension of Time.</u> All changes to the Contract Time shall be made as a consequence of requests as required under Section 9.6, and as documented by Change Order as provided under Section 11.1.
- 11.7 <u>Administration of Change Order Requests.</u> All changes in the Contract shall be administered in accordance with procedures approved by Owner, and when required, make use of such electronic information management system(s) as Owner may employ.
  - 11.7.1 Routine changes in the construction Contract shall be formally initiated by A/E by means of a PCO form detailing requirements of the proposed change for pricing by Contractor. This action may be preceded by communications

between Contractor, A/E and ODR concerning the need and nature of the change, but such communications shall not constitute a basis for beginning the proposed Work by Contractor. Except for emergency conditions described below, approval of Contractor's cost proposal by A/E and ODR will be required for authorization to proceed with the Work being changed. Owner will not be responsible for the cost of Work changed without prior approval and Contractor may be required to remove Work so installed.

- 11.7.2 All proposed costs for change order Work must be supported by itemized accounting of material, equipment and associated itemized installation costs in sufficient detail, following the outline and organization of the establish Schedule of Values, to permit analysis by A/E and ODR using current estimating guides and/or practices. Photocopies of Subcontractor and vendor proposals shall be furnished unless specifically waived by ODR. Contractor shall provide written response to a change request within twenty-one (21) days of receipt.
- 11.7.3 Any unexpected circumstance which necessitates an immediate change in order to avoid a delay in progress of the Work may be expedited by verbal communication and authorization between Contractor and Owner, with written confirmation following within twenty-four (24) hours. A limited scope not-to-exceed estimate of cost and time will be requested prior to authorizing Work to proceed. Should the estimate be impractical for any reason, ODR may authorize the use of detailed cost records of such work to establish and confirm the actual costs and time for documentation in a formal Change Order.
- 11.7.4 Emergency changes to save life or property may be initiated by Contractor alone (see Section 7.3) with the claimed cost and/or time of such work to be fully documented as to necessity and detail of the reported costs and/or time.
- 11.7.5 The method of incorporating approved Change Orders into the parameters of the accepted Schedule of Values must be coordinated and administered in a manner acceptable to ODR.
- 11.8 <u>Pricing Change Order Work.</u> The amounts that Contractor and/or its Subcontractor adds to a Change Order for profit and overhead will also be considered by Owner before approval is given. The amounts established hereinafter are the maximums that are acceptable to Owner.
  - 11.8.1 For Work performed by its forces, Contractor will be allowed their actual costs for materials, the total amount of wages (including benefits) paid for labor, plus the total cost of State and Federal payroll taxes and of worker's compensation and comprehensive general liability insurance, plus additional bond and builders risk insurance cost if the change results in an increase in the premium paid by Contractor. To the total of the above costs, Contractor will be allowed to add a percentage as noted below to cover overhead and profit combined. Allowable percentages for overhead and profit on any specific change shall not exceed fifteen (15) percent for the first \$10,000 of

value for self-performed work or portion thereof, ten (10) percent for the second \$10,000 of value for self-performed work or portion thereof and seven and a half (7.5) percent for any value of the self-performed work that exceeds \$20,000.

- 11.8.2 For subcontracted Work each affected Subcontractor shall figure its costs, overhead and profit as described above for Contractor's Work, all Subcontractor costs shall be combined, and to that total Subcontractor cost Contractor will be allowed to add a maximum mark-up of ten (10) percent for the first \$10,000 of subcontracted Work value or portion thereof, seven and half (7.5) percent for the second \$10,000 of subcontracted Work value or portion thereof, and five (5) percent for any value of the subcontracted Work exceeding \$20,000.
- 11.8.3 On changes involving both additions and deletions, percentages for overhead and profit will be allowed only on the net addition. Owner does not accept and will not pay for additional Contract cost identified as indirect or consequential damages.
- 11.8.4 For Contracts based on a Guaranteed Maximum Price (GMP), the Construction Manager-at-Risk or Design Builder shall NOT be entitled to a percentage mark-up on any Change Order Work unless the Change Order increases the Guaranteed Maximum Price.
- 11.9 <u>Unilateral Change Order (ULCO).</u> Owner may issue a written ULCO directing a change in the Work prior to reaching agreement with Contractor on the adjustment, if any, in the Contract price and/or the Contract Time.
  - 11.9.1 Owner and Contractor shall negotiate for appropriate adjustments, as applicable, to the Contract Sum or the Contract Time arising out of a ULCO. As the changed Work is performed, Contractor shall submit its costs for such Work with its Application for Payment beginning with the next Application for Payment within thirty (30) days of the issuance of the ULCO. The Parties reserve their rights as to the disputed amount, subject to Article 15.
- 11.10 <u>Final Resolution of Changes.</u> Upon execution of a Change Order and /or a ULCO by Owner, Contractor and A/E, all costs and time issues regarding that change are final and not subject to additive adjustments.

# Article 12. Project Completion and Acceptance

- 12.1 <u>Closing Inspections.</u>
  - 12.1.1 <u>Substantial Completion Inspection.</u> When Contractor considers the entire Work or part thereof Substantially Complete, it shall notify ODR in writing that the Work will be ready for Substantial Completion inspection on a specific date. Contractor shall include with this notice Contractor's Punchlist to indicate that it has previously inspected all the Work associated with the request for inspection, noting items it has corrected and included all remaining

work items with date scheduled for completion or correction prior to final inspection. The failure to include any items on this list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. If any of the items on this list prevents the Project from being used as intended, Contractor shall not request a Substantial Completion Inspection. Owner and its representatives will review the list of items and schedule the requested inspection, or inform Contractor in writing that such an inspection is premature because the Work is not sufficiently advanced or conditions are not as represented on Contractor's list.

- 12.1.1.1 Prior to the Substantial Completion inspection, Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalog, wiring diagrams, spare parts, specified written warranties, and like publications or parts for all installed equipment, systems, and like items as described in the Contract Documents. Delivery of these items is a prerequisite for requesting the Substantial Completion inspection.
- 12.1.1.2 On the date requested by Contractor, or as mutually agreed upon pending the status of the Open Items List, A/E, ODR, Contractor, and other Owner representatives as determined by Owner will jointly attend the Substantial Completion inspection, which shall be conducted by ODR or their delegate. If ODR determines that the Work is Substantially Complete, ODR will issue a Certificate of Substantial Completion to be signed by A/E, Owner, and Contractor establishing the date of Substantial Completion and identifying responsibilities for security, maintenance, insurance and utilities. A/E will provide with this certificate a consolidated list of Punchlist items (the pre-final Punchlist including all items noted by the various inspecting parties) for completion prior to final inspection. This list may include items in addition to those on Contractor's Punchlist, which the inspection team deems necessary to correct or complete prior to final inspection. The failure to include any items on this list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. If Owner occupies the Project upon determination of Substantial Completion, Contractor shall complete all corrective Work at the convenience of Owner, without disruption to Owner's use of the Project for its intended purposes.
- 12.1.2 <u>Final Inspection.</u> Contractor shall complete the list of items identified on the pre-final Punchlist prior to requesting a final inspection. Unless otherwise specified, or otherwise agreed in writing by the parties as documented on the Certificate of Substantial Completion, Contractor shall complete and/or correct all Work within thirty (30) days of the Substantial Completion date. Upon completion of the pre-final Punchlist work, Contractor shall give written notice to ODR and A/E that the Work will be ready for final inspection on a specific date. Contractor shall accompany this notice

with a copy of the updated pre-final Punchlist indicating resolution of all items. On the date specified or as soon thereafter as is practicable, ODR, A/E and Contractor will inspect the Work. A/E will submit to Contractor a final Punchlist of open items that the inspection team requires corrected or completed before final acceptance of the Work.

- 12.1.2.1 Correct or complete all items on the final Punchlist before requesting Final Payment. Unless otherwise agreed to in writing by the parties, complete this work within seven (7) days of receiving the final Punchlist. Upon completion of the final Punchlist, notify A/E and ODR in writing stating the disposition of each final Punchlist item. A/E, Owner, and Contractor shall promptly inspect the completed items. When the final Punchlist is complete, and the Contract is fully satisfied according to the Contract Documents ODR will issue a certificate establishing the date of Final Completion. Completion of all Work is a condition precedent to Contractor's right to receive Final Payment.
- 12.1.3 <u>Annotation.</u> Any Certificate issued under this Article may be annotated to indicate that it is not applicable to specified portions of the Work, or that it is subject to any limitation as determined by Owner.
- 12.1.4 <u>Purpose of Inspection.</u> Inspection is for determining the completion of the Work, and does not relieve Contractor of its overall responsibility for completing the Work in a good and competent fashion, in compliance with the Contract. Work accepted with incomplete Punchlist items or failure of Owner or other parties to identify Work that does not comply with the Contract Documents or is defective in operation or workmanship does not constitute a waiver of Owner's rights under the Contract or relieve Contractor of its responsibility for performance or warranties.

#### 12.1.5 Additional Inspections.

- 12.1.5.1 If Owner's inspection team determines that the Work is not substantially complete at the Substantial Completion inspection, ODR or A/E will give Contractor written notice listing cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective work acceptable to ODR. Contractor shall complete or correct all work so designated prior to requesting a second Substantial Completion inspection.
- 12.1.5.2 If Owner's inspection team determines that the Work is not complete at the final inspection, ODR or A/E will give Contractor written notice listing the cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective work acceptable to ODR. Contractor shall complete or correct all Work so designated prior to again requesting a final inspection.

- 12.1.5.3 The Contract contemplates three (3) comprehensive inspections: the Substantial Completion inspection, the Final Completion inspection, and the inspection of completed final Punchlist items. The cost to Owner of additional inspections resulting from the Work not being ready for one or more of these inspections is the responsibility of Contractor. Owner may issue a ULCO deducting these costs from Final Payment. Upon Contractor's written request, Owner will furnish documentation of any costs so deducted. Work added to the Contract by Change Order after Substantial Completion inspection is not corrective Work for purposes of determining timely completion, or assessing the cost of additional inspections.
- 12.1.6 <u>Phased Completion.</u> The Contract may provide, or Project conditions may warrant, as determined by ODR, that designated elements or parts of the Work be completed in phases. Where phased completion is required or specifically agreed to by the parties, the provisions of the Contract related to closing inspections, occupancy, and acceptance apply independently to each designated element or part of the Work. For all other purposes, unless otherwise agreed by the parties in writing, Substantial Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Substantial Completion certificate.

Final Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Final Completion certificate.

Owner's Right of Occupancy. Owner may occupy or use all or any portion of the Work following Substantial Completion, or at any earlier stage of completion. Should Owner wish to use or occupy the Work, or part thereof, prior to Substantial Completion, ODR will notify Contractor in writing and identify responsibilities for security, maintenance, insurance and utilities. Work performed on the premises by third parties on Owner's behalf does not constitute occupation or use of the Work by Owner for purposes of this Article. All Work performed by Contractor after occupancy, whether in part or in whole, shall be at the convenience of Owner so as to not disrupt Owner's use of, or access to occupied areas of the Project.

# 12.3 <u>Acceptance and Payment</u>

- 12.3.1 Request for Final Payment. Following the certified completion of all work, including all final Punchlist items, cleanup, and the delivery of record documents, Contractor shall submit a certified Application for Final Payment and include all sums held as retainage and forward to A/E and ODR for review and approval.
- 12.3.2 <u>Final Payment Documentation.</u> Contractor shall submit, prior to or with the Application for Final Payment, final copies of all close out documents, maintenance and operating instructions, guarantees and warranties, certificates, Record Documents and all other items required by the Contract.

Contractor shall submit evidence of return of access keys and cards, evidence of delivery to Owner of attic stock, spare parts, and other specified materials. Contractor shall submit consent of surety to Final Payment form and an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, are paid, will be paid, after payment from Owner or otherwise satisfied within the period of time required by Tex. Gov't Code, Ch. 2251. Contractor shall furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims and liens arising out of the Contract. Contractor may not subsequently submit a claim on behalf of Subcontractor or vendor unless Contractor's affidavit notes that claim as an exception.

- 12.3.3 <u>Architect/Engineer Approval.</u> A/E will review a submitted Application for Final Payment promptly but in no event later than ten (10) days after its receipt. Prior to the expiration of this deadline, A/E will either: 1) return the Application for Final Payment to Contractor with corrections for action and resubmission; or 2) accept it, note their approval, and send to Owner.
- 12.3.4 Offsets and Deductions. Owner may deduct from the Final Payment all sums due from Contractor. If the Certificate of Final Completion notes any Work remaining, incomplete, or defects not remedied, Owner may deduct the cost of remedying such deficiencies from the Final Payment. On such deductions, Owner will identify each deduction, the amount, and the explanation of the deduction on or by the twenty-first (21st) day after Owner's receipt of an approved Application for Final Payment. Such offsets and deductions shall be incorporated via a final Change Order, including a ULCO as may be applicable.
- 12.3.5 <u>Final Payment Due.</u> Final Payment is due and payable by Owner, subject to all allowable offsets and deductions, on the thirtieth (30<sup>th</sup>) day following Owner's approval of the Application for Payment. If Contractor disputes any amount deducted by Owner, Contractor shall give notice of the dispute on or before the thirtieth (30<sup>th</sup>) day following receipt of Final Payment. Failure to do so will bar any subsequent claim for payment of amounts deducted.
- 12.3.6 <u>Effect of Final Payment.</u> Final Payment constitutes a waiver of all claims by Owner, relating to the condition of the Work except those arising from:
  - 12.3.6.1 Faulty or defective Work appearing after Substantial Completion (latent defects);
  - 12.3.6.2 Failure of the Work to comply with the requirements of the Contract Documents;
  - 12.3.6.3 Terms of any warranties required by the Contract, or implied by law; or

- 12.3.6.4 Claims arising from personal injury or property damage to third parties.
- 12.3.7 <u>Waiver of Claims.</u> Final payment constitutes a waiver of all claims and liens by Contractor except those specifically identified in writing and submitted to ODR prior to the application for Final Payment.
- 12.3.8 <u>Effect on Warranty.</u> Regardless of approval and issuance of Final Payment, the Contract is not deemed fully performed by Contractor and closed until the expiration of all warranty periods. Issuance of Final Payment does not alter Contractor's contractual obligations during the warranty period.

# Article 13. Warranty and Guarantee

- 13.1 Contractor's General Warranty and Guarantee. Contractor warrants to Owner that all Work is executed in accordance with the Contract, complete in all parts and in accordance with approved practices and customs, and of the required finish and workmanship. Contractor further warrants that unless otherwise specified, all materials and equipment incorporated in the Work under the Contract are new. Owner may, at its option, agree in writing to waive any failure of the Work to conform to the Contract, and to accept a reduction in the Contract price for the cost of repair or diminution in value of the Work by reason of such defect. Absent such a written agreement, Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute and is not waived by any inspection or observation by Owner, A/E or others, by making any progress payment or final payment, by the use or occupancy of the Work or any portion thereof by Owner, at any time, or by any repair or correction of such defect made by Owner.
- 13.2 <u>Warranty Period.</u> Except as may be otherwise specified or agreed, Contractor shall repair all defects in materials, equipment, or workmanship appearing within one year from the date of Substantial Completion of the Work. If Substantial Completion occurs by phase, then the warranty period for that particular Work begins on the date of such occurrence, or as otherwise stipulated on the Certificate of Substantial Completion for the particular Work.
- 13.3 <u>Limits on Warranty.</u> Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  - 13.3.1 Modification or improper maintenance or operation by persons other than Contractor, Subcontractors, or any other individual or entity for whom Contractor is not responsible, unless Owner is compelled to undertake maintenance or operation due to the neglect of Contractor.
  - 13.3.2 Normal wear and tear under normal usage after acceptance of the Work by Owner.

- 13.4 Events Not Affecting Warranty. Contractor's obligation to perform and complete the Work in a good and workmanlike manner in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of defective Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  - 13.4.1 Observations by Owner and/or A/E;
  - 13.4.2 Recommendation to pay any progress or final payment by A/E;
  - 13.4.3 The issuance of a certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents;
  - 13.4.4 Use or occupancy of the Work or any part thereof by Owner;
  - 13.4.5 Any acceptance by Owner or any failure to do so;
  - 13.4.6 Any review of a Shop Drawing or sample submittal; or
  - 13.4.7 Any inspection, test or approval by others.
- 13.5 <u>Separate Warranties.</u> If a particular piece of equipment or component of the Work for which the Contract requires a separate warranty is placed in continuous service before Substantial Completion, the warranty period for that equipment or component will not begin until Substantial Completion, regardless of any warranty agreements in place between suppliers and/or Subcontractors and Contractor. ODR will certify the date of service commencement in the Substantial Completion certificate.
  - 13.5.1 In addition to Contractor's warranty and duty to repair, Contractor expressly assumes all warranty obligations required under the Contract for specific building components, systems and equipment.
  - 13.5.2 Contractor may satisfy any such obligation by obtaining and assigning to Owner a complying warranty from a manufacturer, supplier, or Subcontractor. Where an assigned warranty is tendered and accepted by Owner which does not fully comply with the requirements of the Contract, Contractor remains liable to Owner on all elements of the required warranty not provided by the assigned warranty.
- Owner designated as responsible for management of the warranty period, of the discovery of a defect, Contractor shall promptly remedy the defect(s), and provide written notice to Owner and designated agent indicating action taken. In case of emergency where delay would cause serious risk of loss or damage to Owner, or if Contractor fails to remedy within thirty (30) days, or within another period agreed to in writing, Owner may correct the defect and be reimbursed the cost of remedying the defect from Contractor or its surety.

13.7 <u>Certification of No Asbestos Containing Materials or Work.</u> Contractor shall ensure compliance with the Asbestos Hazard Emergency Response Act (AHERA–40 C.F.R § 763-99(7)) from all Subcontractors and materials suppliers, and shall provide a notarized certification to Owner that all equipment and materials used in fulfillment of their Contract responsibilities are non-Asbestos Containing Building Materials (ACBM). This certification must be provided no later than Contractor's application for Final Payment.

## **Article 14. Suspension and Termination**

- 14.1 <u>Suspension of Work for Cause.</u> Owner may, at any time without prior notice, suspend all or any part of the Work, if after reasonable observation and/or investigation, Owner determines it is necessary to do so to prevent or correct any condition of the Work, which constitutes an immediate safety hazard, or which may reasonably be expected to impair the integrity, usefulness or longevity of the Work when completed.
  - 14.1.1 Owner will give Contractor a written notice of suspension for cause, setting forth the reason for the suspension and identifying the Work suspended. Upon receipt of such notice, Contractor shall immediately stop the Work so identified. As soon as practicable following the issuance of such a notice, Owner will initiate and complete a further investigation of the circumstances giving rise to the suspension, and issue a written determination of the findings.
  - 14.1.2 If it is confirmed that the cause was within the control of Contractor, Contractor will not be entitled to an extension of time or any compensation for delay resulting from the suspension. If the cause is determined not to have been within the control of Contractor, and the suspension has prevented Contractor from completing the Work within the Contract Time, the suspension is an excusable delay and a time extension will be granted through a Change Order.
  - 14.1.3 Suspension of Work under this provision will be no longer than is reasonably necessary to remedy the conditions giving rise to the suspension.
- 14.2 <u>Suspension of Work for Owner's Convenience.</u> Upon seven (7) days written notice to Contractor, Owner may at any time without breach of the Contract suspend all or any portion of the Work for a period of up to thirty (30) days for its own convenience. Owner will give Contractor a written notice of suspension for convenience, which sets forth the number of suspension days for which the Work, or any portion of it, and the date on which the suspension of Work will cease. When such a suspension prevents Contractor from completing the Work within the Contract Time, it is an excusable delay. A notice of suspension for convenience may be modified by Owner at any time on seven (7) days written notice to Contractor. If Owner suspends the Work for its convenience for more than sixty (60) consecutive days, Contractor may elect to terminate the Contract pursuant to the provisions of the Contract.

## 14.3 Termination by Owner for Cause.

- 14.3.1 Upon written notice to Contractor and its surety, Owner may, without prejudice to any right or remedy, terminate the Contract and take possession of the Site and of all materials, equipment, tools, construction equipment, and machinery thereon owned by Contractor under any of the following circumstances:
  - 14.3.1.1 Persistent or repeated failure or refusal, except during complete or partial suspensions of work authorized under the Contract, to supply enough properly skilled workmen or proper materials;
  - 14.3.1.2 Persistent disregard of laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, including ODR;
  - 14.3.1.3 Persistent failure to prosecute the Work in accordance with the Contract, and to ensure its completion within the time, or any approved extension thereof, specified in the Contract;
  - 14.3.1.4 Failure to remedy defective work condemned by ODR;
  - 14.3.1.5 Failure to pay Subcontractors, laborers, and material suppliers pursuant to Tex. Gov't Code, Ch. 2251;
  - 14.3.1.6 Persistent endangerment to the safety of labor or of the Work;
  - 14.3.1.7 Failure to supply or maintain statutory bonds or to maintain required insurance, pursuant to the Contract;
  - 14.3.1.8 Any material breach of the Contract; or
  - 14.3.1.9 Contractor's insolvency, bankruptcy, or demonstrated financial inability to perform the Work.
- 14.3.2 Failure by Owner to exercise the right to terminate in any instance is not a waiver of the right to do so in any other instance.
- 14.3.3 Should Owner decide to terminate the Contract under the provisions of Section 14.3, it will provide to Contractor and its surety thirty (30) days prior written notice.
- 14.3.4 Should Contractor or its surety, after having received notice of termination, demonstrate to the satisfaction of Owner that Contractor or its surety are proceeding to correct such default with diligence and promptness, upon which the notice of termination was based, the notice of termination may be rescinded in writing by Owner. If so rescinded, the Work may continue without an extension of time.

- 14.3.5 If Contractor or its surety fails, after written notice from Owner to commence and continue correction of such default with diligence and promptness to the satisfaction of Owner within thirty (30) days following receipt of notice, Owner may arrange for completion of the Work and deduct the cost of completion from the unpaid Contract Sum.
  - 14.3.5.1 This amount includes the cost of additional Owner costs such as A/E services, other consultants, and contract administration.
  - 14.3.5.2 Owner will make no further payment to Contractor or its surety unless the costs to complete the Work are less than the Contract balance, then the difference shall be paid to Contractor or its surety. If such costs exceed the unpaid balance, Contractor or its surety will pay the difference to Owner.
  - 14.3.5.3 This obligation for payment survives the termination of the Contract.
  - 14.3.5.4 Owner reserves the right in termination for cause to take assignment of all the Contracts between Contractor and its Subcontractors, vendors, and suppliers. ODR will promptly notify Contractor of the contracts Owner elects to assume. Upon receipt of such notice, Contractor shall promptly take all steps necessary to effect such assignment.
- 14.4 <u>Conversion to Termination for Convenience.</u> In the event that any termination of Contractor for cause under Section 14.3 is later determined to have been improper, the termination shall automatically convert to a termination for convenience under Section 14.5 and Contractor's recovery for termination shall be strictly limited to the payments allowable under Section 14.5.
- 14.5 <u>Termination for Convenience of Owner.</u> Owner reserves the right, without breach, to terminate the Contract prior to, or during the performance of the Work, for any reason. Upon such an occurrence, the following shall apply:
  - 14.5.1 Owner will immediately notify Contractor and A/E in writing, specifying the reason for and the effective date of the Contract termination. Such notice may also contain instructions necessary for the protection, storage or decommissioning of incomplete work or systems, and for safety.
  - 14.5.2 Upon receipt of the notice of termination, Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due at that point in the Contract:
    - 14.5.2.1 Stop all work.
    - 14.5.2.2 Place no further subcontracts or orders for materials or services.
    - 14.5.2.3 Terminate all subcontracts for convenience.

- 14.5.2.4 Cancel all materials and equipment orders as applicable.
- 14.5.2.5 Take action that is necessary to protect and preserve all property related to the Contract which is in the possession of Contractor.
- 14.5.3 When the Contract is terminated for Owner's convenience, Contractor may recover from Owner payment for all Work executed. Contractor may not claim lost profits on other work or lost business opportunities.
- 14.6 Termination By Contractor. If the Work is stopped for a period of ninety (90) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of Contractor or Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with Contractor, then Contractor may, upon thirty (30) additional days written notice to ODR, terminate the Contract and recover from Owner payment for all Work executed, but not lost profits on other work or lost business opportunities. If the cause of the Work stoppage is removed prior to the end of the thirty (30) day notice period, Contractor may not terminate the Contract.
- 14.7 <u>Settlement on Termination.</u> When the Contract is terminated for any reason, at any time prior to one hundred eighty (180) days after the effective date of termination, Contractor shall submit a final termination settlement proposal to Owner based upon recoverable costs as provided under the Contract. If Contractor fails to submit the proposal within the time allowed, Owner may determine the amount due to Contractor because of the termination and pay the determined amount to Contractor.

## **Article 15. Dispute Resolution**

- 15.1 <u>Unresolved Contractor Disputes.</u> The dispute resolution process provided for in Tex. Gov't Code, Ch. 2260 or Tex. Civ. Prac. & Rem. Code, Ch. 114, shall be used by Contractor to attempt to resolve any claim for breach of Contract made by Contractor that is not resolved under procedures described throughout the Uniform General Conditions, Supplementary Conditions, or Special Conditions of the Contract.
- 15.2 <u>Alternative Dispute Resolution Process.</u> Owner may establish a dispute resolution process to be utilized in advance of that outlined in Tex. Gov't Code, Ch. 2260 or Tex. Civ. Prac. & Rem. Code, Ch. 114.
- 15.3 Nothing herein shall hinder, prevent, or be construed as a waiver of Owner's right to seek redress on any disputed matter in a court of competent jurisdiction.
- 15.4 Nothing herein shall waive or be construed as a waiver of the State's sovereign immunity.

## Article 16. Miscellaneous

- 16.1 <u>Supplementary General and Special Conditions.</u> When the Work contemplated by Owner is of such a character that the foregoing Uniform General Conditions of the Contract cannot adequately cover necessary and additional contractual relationships, the Contract may include Supplementary General and Special Conditions as described below:
  - 16.1.1 Supplementary General Conditions may describe the standard procedures and requirements of contract administration followed by a contracting agency of the State. Supplementary General Conditions may expand upon matters covered by the Uniform General Conditions, where necessary, provided the expansion does not weaken the character or intent of the Uniform General Conditions. Supplementary General Conditions are of such a character that it is to be anticipated that a contracting agency of the State will normally use the same, or similar, conditions to supplement each of its several projects.
  - 16.1.2 Special Conditions shall relate to a particular Project and be unique to that Project but shall not weaken the character or intent of the Uniform General Conditions.
- 16.2 <u>Federally Funded Projects.</u> On Federally funded projects, Owner may waive, suspend or modify any Article in these Uniform General Conditions which conflicts with any Federal statue, rule, regulation or procedure, where such waiver, suspension or modification is essential to receipt by Owner of such Federal funds for the Project. In the case of any Project wholly financed by Federal funds, any standards required by the enabling Federal statute, or any Federal rules, regulations or procedures adopted pursuant thereto, shall be controlling.
- 16.3 <u>Internet-based Project Management Systems.</u> At its option, Owner may administer its design and construction management through an Internet-based management system. In such cases, Contractor shall conduct communication through this media and perform all Project related functions utilizing this database system. This includes correspondence, submittals, Requests for Information, vouchers or payment requests and processing, amendment, Change Orders and other administrative activities.
  - 16.3.1 Accessibility and Administration.
    - 16.3.1.1 When used, Owner will make the software accessible via the Internet to all Project team members.
    - 16.3.1.2 Owner shall administer the software.
  - 16.3.2 <u>Training.</u> When used, Owner shall provide training to the Project team members.
- 16.4 <u>Administrative Inspections and Audits.</u> Contractor agrees that all relevant records related to this Contract or any work product under this Contract, including practices of its Subcontractors, shall be subject, at any reasonable time, to inspection, examination, review, audit, and copying at any office or location of Contractor where such records

may be found, with or without notice by the Texas State Auditor's Office ("SAO"), the contracting agency or its contracted examiners, or the Office of the Texas Attorney General, and with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, or any of their authorized representatives. All Subcontracts shall reflect the requirements of this section. In addition, pursuant to Tex. Gov't Code§ 2262.003 the SAO may conduct an audit or investigation of any entity receiving funds under this Contract, including direct payments to Contractor and indirect payments under a Subcontract to this Contract; acceptance of such monies acts as acceptance of SAO authority, under legislative audit committee direction, to audit and investigate related to those funds and the entity subject to the audit or investigation must provide SAO with access to any information SAO considers relevant to the scope of the audit or investigation.

# **End of Uniform General Conditions**

## 2018 SUPPLEMENTARY GENERAL CONDITIONS TO THE STATE OF TEXAS 2015 EDITION OF THE UNIFORM GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS

The following Supplementary General Conditions amend and/or supplement the 2015 edition of the Uniform General Conditions for Construction Contracts.

#### **Article 5. Bonds and Insurance**

## 5.2 <u>Insurance Requirements.</u>

Subsection 5.2.4 is supplemented to add the following new paragraphs:

- 5.2.4.1 Contractor shall deliver to Owner true and complete copies of the General Contractor's certificates prior to the issuance of any Notice to Proceed.
- 5.2.4.2 Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 5.2.4.3 The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.
- 5.2.4.4 The insurance coverage and limits established in the Uniform General Conditions, Supplementary General Conditions, or Special Conditions shall not be interpreted as any representation or warranty that the insurance coverage and limits necessarily will be adequate to protect Contractor.

#### **Article 2. Wage Rates and Other Laws Governing Construction**

Add Section 2.7 as follows:

2.7 <u>Buy America Requirements for Iron and Steel Used in Construction.</u> In accordance with Texas Government Code 2252, Section 2252.202, all iron or steel products (i.e., rolled structural shapes including wide flange beams and columns, angles, bars, plates, sheets, hollow structural sections, pipe, etc.) shall be produced, manufactured and fabricated in the United States.

# **End of Supplementary General Conditions**

# EXHIBIT F PREVAILING WAGE RATES

# Stephen F. Austin State University MINIMUM WAGE RATE DETERMINATION

Stephen F. Austin State University (SFA) is the contracting agency for this construction project. The following statute requires the contracting agency to specify the general minimum rates of wages in contracts that are bid.

Government Code 2258 "Construction of Public Works in State and Municipal or Political Subdivisions; Prevailing Wage Rates to be maintained"; and

The Uniform General and Supplementary General Conditions for Stephen F. Austin State University Construction Contracts.

Pursuant to the requirements of this statute, SFA has determined that the attached rates of wages are paid to various classifications of workers in Nacogdoches County. Total hourly compensations to each worker must equal or exceed the minimum wage rates stated in the "2015 SFA Prevailing Wage" attachment, Total Column. Contributions by worker toward health, pension, vacation, and the like are part of the worker's pay; contributions by the employer are not. Any dollar amounts shown in the column titled "Fringe" may be paid either in cash or in kind. Workers in classifications where rates are not identified shall be paid not less than the minimum rate of "General Laborer".

All hours of work over 40 hours per week are overtime and will be compensated at the rate of 1 and ½ times the regular wage.

A contractor who violates these prevailing wage rules shall be required to pay to SFA \$60 for each worker employed for each calendar day or part of the day that worker is paid less than the wage rates stipulated by the contract.

Wage Rate Determination Appeal procedures can be found on the SFA website, <a href="http://www.sfasu.edu/purchasing/721.asp">http://www.sfasu.edu/purchasing/721.asp</a>.



# STEPHEN F. AUSTIN STATE UNIVERSITY

#### **Physical Plant Department**

P.O. Box 13031, SFA Station • Nacogdoches, Texas 75962-3031 Phone (936) 468-3906 • Fax (936) 468-4446

#### **Worker Wage Rate Form**

This form shall be used by all construction managers, contractors, sub-contractors engaged in the execution of SFA construction contracts in accordance with the Prevailing Minimum Wage Rate guidelines and the Uniform General and Supplementary Conditions. This completed notice must be delivered to the Physical Plant and accepted by all workers involved in the project prior to substantial completion or with pay applications. The employer shall submit separate Worker Wage Rate Forms for workers engaged in multiple classifications.

wage rate rorms for workers engaged in multiple classifications	•		
Physical Plant Project No Project Nar	me		
SECTION 1			
Print entire form.			
Employee Name:			
Employer Name:			
Worker Classification is shown on Prevailing Wage Rate Schedule	e: Yes No		
Worker Classification:  (Refer to Minimum Prevailing Wage Pate sche	dule contained within the Agreement for the project.)		
(nejer to william rrevailing wage nate sene	Hourly Rate		
SFA Minimum Prevailing Wage Rate:	\$		
Actual Wage Rate:	\$ \$		
Actual Employer Fringe Benefit Rate:	\$ \$		
(Contributions by a worker toward health, pension, vacation and the like are a pa	rt of the Actual Wage Rate contributions by the Employer shown below.)		
As the Employee Named Above, I hereby acknowledge receipt of agreement with both the Classification of work I have been assig to me for such work.	· · · · · · · · · · · · · · · · · · ·		
Employee Signature:	Date:		
SECTIO	N 2		
To the "Actual Wage Rate" above, the Employer shall indicate th Unemployment, Social Security, Medicare, Health Insurance and (Burden does not include per diem, travel expense, small tools or other is Department, Construction Services.)	Retirement.		
	\$		
	Total Hourly Rate		
Total Hourly Rate for Contract: Actual Wage Rate + Hourly Burde	n Cost \$		
Employer Signature or Seal:			

January 14, 2016 - Revised 0

# 2015 SFA Prevailing Wage Rate

Craft /Classification	Base	Fringe	Total
Glass Glazier	\$12.00	\$0.00	\$12.00
Glass Common Laborer/Helper	\$8.00	\$0.00	\$8.00
HVAC Journeyman Technician	\$16.75	\$0.00	\$16.75
HVAC Common laborer/Helper	\$9.00	\$0.00	\$9.00
Fencing Journeyman Installer	\$14.00	\$0.00	\$14.00
Fencing Common Laborer/Helper	\$9.00	\$0.00	\$9.00
Exavating/Dirtwork Backhoe Operator	\$13.00	\$0.50	\$13.50
Exavating/Dirtwork Bulldozer Operator	\$14.00	\$0.00	\$14.00
Exavating/Dirtwork Front End Loader Operator	\$12.00	\$0.00	\$12.00
Exavating/Dirtwork Trackhoe Operator	\$14.00	\$0.00	\$14.00
Exavating/Dirtwork Truck Driver	\$13.00	\$0.00	\$13.00
Exavating/Dirtwork Common Laborer/Helper	\$11.00	\$0.00	\$11.00
Asbestos Abatement Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Concrete Finisher	\$12.50	\$0.00	\$12.50
Concrete Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Roofing Journeyman	\$16.00	\$0.00	\$16.00
Roofing Common Laborer/Helper	\$13.00	\$0.00	\$13.00
Insulation Insulator	\$12.00	\$0.00	\$12.00
Insulation Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Drywall/ Metal Stud Installer	\$14.00	\$0.00	\$14.00
Drywall Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Landscaping Journeyman	\$12.00	\$0.00	\$12.00
Landscaping Foreman	\$16.00	\$2.51	\$18.51
Landscaping Service Technician	\$17.00	\$2.67	\$19.67
Landscaping Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Millwork Cabinet Maker	\$16.00	\$2.03	\$18.03
Millwork Apprentice Carpenter	\$15.00	\$0.00	\$15.00
Millwork Journeyman Carpenter	\$16.00	\$0.00	\$16.00
Millwork Common Laborer/Helper	\$9.00	\$0.00	\$9.00
Site Utilites Foreman	\$18.00	\$0.00	\$18.00
Site Utilities Equipment Operator	\$12.00	\$0.00	\$12.00
Site Utilities Truck Driver	\$11.25	\$0.00	\$11.25
Site Utilities Journeyman	\$11.00	\$0.00	\$11.00
Site Utilities Common Laborer/Helper	\$8.50	\$0.00	\$8.50
Electrical Journeyman Electrician	\$21.00	\$0.00	\$21.00
Electrical Common Laborer/Helper	\$12.00	\$1.17	\$13.17
Plumbing Journeyman	\$20.00	\$0.00	\$20.00
Plumbing Apprentice	\$12.50	\$2.50	\$15.00
Plumbing Common Laborer/Helper	\$8.00	\$2.00	\$10.00
Acoustical Ceiling Journeyman Installer	\$13.00	\$0.00	\$13.00
Acoustical Ceiling Common Laborer/Helper	\$9.00	\$0.00	\$9.00
Painting Journeyman Painter	\$10.50	\$1.37	\$11.87
Lead Painter	\$13.00	\$0.00	\$13.00

# 2015 SFA Prevailing Wage Rate

Craft /Classification	Base	Fringe	Total
Painting Common Laborer/Helper	\$9.00	\$0.00	\$9.00
Steel Erection Journeyman/Iron Worker	\$18.00	\$0.00	\$18.00
Steel Erection Truck Driver	\$18.50	\$0.00	\$18.50
Steel Erection Ironworker - Structural	\$20.00	\$0.00	\$20.00
Steel Erection Welder	\$15.00	\$0.00	\$15.00
Steel Erection Common Laborer/Helper	\$10.00	\$0.00	\$10.00
Flooring Journeyman Installer	\$13.88	\$2.19	\$16.07
Floor Tile Setter	\$20.00	\$0.00	\$20.00
Floor Layer	\$18.00	\$0.00	\$18.00
Flooring Common Laborer/Helper	\$9.00	\$0.00	\$9.00
Mason	\$18.00	\$0.00	\$18.00
Masonry Common Laborer/Helper	\$8.50	\$0.00	\$8.50
Mason Tender	\$9.50	\$0.00	\$9.50
Asphalt/Paving Journeyman	\$25.00	\$0.00	\$25.00
Asphalt/Paving Equipment Operator (Asphalt Pav	\$15.00	\$0.00	\$15.00
Asphalt/Paving Common Laborer/Helper	\$15.00	\$0.00	\$15.00
Asphalt/Paving Truck Driver	\$15.00	\$0.00	\$15.00
Plastering/EIFS Laborer (Tender)	\$11.00	\$0.00	\$11.00
Plastering/EIFS Journeyman	\$16.00	\$0.00	\$16.00
Plasterer	\$20.00	\$0.00	\$20.00
Fire Alarm Systems Low Voltage System Technicia	\$20.10	\$3.29	\$23.39
Fire Alarm Systems Low Voltage System Helper (L	\$12.00	\$2.60	\$14.60
Elevator Mechanic	\$37.33	\$0.00	\$37.33
Elevator Helper	\$18.67	\$0.00	\$18.67
Elevator Foreman	\$42.00	\$0.00	\$42.00
Technology/Network Installer	\$12.00	\$3.00	\$15.00
General Laborer	\$9.00	\$0.00	\$9.00